

General

- ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS, ARCHITECTURAL AND SPECIALISTS DRAWINGS AND SPECIFICATIONS.
- ARCHITECTS AND SPECIALISTS DRAWINGS SHOULD BE REFERRED TO FOR VERIFICATION OF ALL SETTING OUT DIMENSIONS AND FOR LOCATION OF ANY SERVICES.
- SETTING OUT COORDINATES TO BE PROVIDED BY THE ARCHITECT.
- THE CLIENTS, DESIGNERS AND CONTRACTORS ARE TO BE AWARE OF THEIR DUTIES UNDER THE CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015. REFER TO THE HEALTH AND SAFETY EXECUTIVE FOR FURTHER INFORMATION (WWW.HSE.GOV.UK) FOR FURTHER INFORMATION IF IN DOUBT.
- STRUCTURAL ARRANGEMENTS SHOWN ARE TYPICAL AND LOCATIONS OF EXISTING STRUCTURAL ELEMENTS MAY VARY FROM THOSE INDICATED. WHERE SUCH VARIATIONS REQUIRE ALTERATIONS TO THE NEW STRUCTURE, BC STRUCTURAL DESIGN MUST BE CONSULTED.
- THE EXISTING STRUCTURE IS TO BE SURVEYED BY THE MAIN CONTRACTOR TO OBTAIN THE SETTING OUT OF THE PROPOSED STRUCTURE RELATIVE TO THE EXISTING.
- ALL LEVELS ARE IN METRES ABOVE ORDINANCE DATUM. ALL DIMENSIONS ARE IN mm, UNLESS NOTED OTHERWISE.
- DO NOT SCALE FROM THE DRAWINGS. WORK TO FIGURES/DIMENSIONS ONLY. ANY DISCREPANCIES IN DIMENSIONS ARE TO BE REFERRED TO THE ENGINEER BEFORE WORK COMMENCES.
- ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE BY THE CONTRACTOR PRIOR TO PREPARING ANY WORKING DRAWINGS OR COMMENCING ON SITE.
- ALL WORK BY THE CONTRACTOR MUST BE CARRIED OUT IN SUCH A WAY THAT ALL CURRENT HEALTH AND SAFETY REQUIREMENTS ARE SATISFIED.
- ALL WORK BY THE CONTRACTOR MUST BE CARRIED OUT IN COMPLIANCE WITH THE REQUIREMENTS OF THE RELEVANT STATUTORY AUTHORITIES AND REGULATIONS.
- THE CONTRACTOR MUST IDENTIFY ANY DISCREPANCIES BETWEEN THE ARCHITECTS AND ENGINEERS DRAWINGS. ANY DISCREPANCIES DISCOVERED SHALL BE REFERRED TO THE ARCHITECT FOR DETERMINATION OVER WHICH WILL TAKE PRECEDENCE.
- ALL PROPRIETARY PRODUCTS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
- ALL EXISTING FOOTINGS ARE TO BE CHECKED FOR DEPTH AND WIDTH WHERE NEW LOADS ARE BEING APPLIED ONTO EXISTING WALLS AS PER THE NOTES ON THE PLANS.
- ALL EXISTING LINTELS ARE TO BE CHECKED PRIOR TO INSTALLATION OF ANY STRUCTURE AS PER THE NOTES ON THE PLANS.
- INSULATION, TANKING, FIREPROOFING AND WATERPROOFING ARE TO THE ARCHITECTS DETAILS

Temporary Works/ Demolition

- ALL DEMOLITION SHALL BE CAREFULLY PLANNED AND CARRIED OUT IN ACCORDANCE WITH BS6187 – CODE OF PRACTICE FOR DEMOLITION, BS5228 PARTS 1 AND 2 – NOISE AND VIBRATION CONTROL ON BUILDING SITES AND THE CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015
- THE CONTRACTOR IS RESPONSIBLE FOR THE DEVELOPMENT OF ALL DEMOLITION SEQUENCES AND METHOD STATEMENTS.
- PRIOR TO THE REMOVAL OF ANY LOAD BEARING OR SUPPORTING WALLS, THE EXISTING STRUCTURE MUST BE FULLY INVESTIGATED AND ADEQUATELY PROPPED. NO WALL OR PART OF THE STRUCTURE SHALL BE LEFT IN A DANGEROUS OR UNSTABLE STATE AT ANY TIME.
- THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE BUILDING/ STRUCTURE/ PARTY WALLS/ EXCAVATIONS ETC. DURING THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY DESIGN CALCULATIONS AND DRAWINGS FOR ALL TEMPORARY STRUCTURES AND WHERE NECESSARY DETAILED MEMBER CHECKS. ALL ELEMENTS RELATING TO TEMPORARY WORKS ARE TO BE REMOVED FROM SITE ON COMPLETION OF THE PERMANENT WORKS.
- IF THE CONDITION OR CONSTRUCTION OF THE BUILDING DIFFERS FROM THE DRAWINGS THE CONTRACTOR IS TO NOTIFY THE ENGINEER.
- DEMOLITION WORKS SHALL BE UNDERTAKEN IN A MANNER THAT AVOIDS DAMAGE TO ADJACENT BUILDINGS AND PAVEMENTS. ANY DAMAGE SHALL BE REPORTED TO THE CONTRACT ADMINISTRATOR AND MADE GOOD ACCORDINGLY.
- WHERE TEMPORARY WORKS ARE REQUIRED, THE CONTRACTOR SHALL ALLOW FOR APPOINTING A COMPETENT TEMPORARY WORKS ENGINEER TO DESIGN ALL NECESSARY SUPPORTS FOR THE EXISTING STRUCTURE DURING THE COURSE OF THE WORKS.

CDM

- THE CLIENT MUST APPOINT A PRINCIPAL DESIGNER AND THEY MUST INFORM THE HEALTH AND SAFETY EXECUTIVE OF THE WORKS BY FILLING IN AND SUBMITTING AN F10 FORM PRIOR TO STARTING WORK ON SITE WHERE A PROJECT IS NOTIFIABLE.
- THE CONTRACTOR MUST ENSURE THAT THE CONTRACT ADMINISTRATOR HAS AGREED ALL NECESSARY PARTY WALL NOTICES PRIOR TO CARRYING OUT WORKS UNDER, ON OR ADJACENT TO A PARTY WALL.
- THE CONTRACTOR IS TO ENSURE THAT THE BUILDING CONTROL OFFICER AND STRUCTURAL ENGINEER ARE NOTIFIED TO CARRY OUT INSPECTIONS OF ANY STRUCTURAL WORK PRIOR TO COVERING UP WITH FINISHES.
- USE PROPRIETARY PRODUCTS IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS. REPORT IN ADVANCE ANY CONFLICT WITH THIS SPECIFICATION OR WITH THE DRAWINGS. ADJOINING BUILDING

Foundations

- THE SOIL AT THE UNDERSIDE OF FOUNDATIONS TO OBTAIN A MINIMUM BEARING PRESSURE OF 100KN/m2 TO THE SATISFACTION OF THE BCO STRUCTURAL ENGINEER UNLESS STATED IN THE CALCULATIONS PACKAGE. FOUNDATIONS TO BE A MINIMUM OF 1.0m BELOW GROUND LEVEL UNLESS NOTED OTHERWISE.
- IF SUITABLE BEARING STRATA IS NOT FOUND AT THE DEPTH/LEVEL INDICATED ON THE DRAWINGS, EXCAVATION SHALL BE TAKEN DEEPER AS DIRECTED BY THE ENGINEER.
- ALL FOUNDATIONS TO BE FORMED UNLESS THE ENGINEER APPROVES USE OF THE SOIL AS SHUTTERING.
- PRIOR TO COMMENCING ANY EXCAVATIONS ADJACENT TO EXISTING STRUCTURES, THE FORMATION LEVEL OF THE EXISTING FOUNDATIONS WILL NEED TO BE CONFIRMED.
- ALL EXISTING DRAINAGE AND SERVICES SHALL BE EXPOSED LOCALLY TO NEW FOUNDATIONS TO VERIFY EXACT LOCATION AND DEPTH.
- EXISTING FOUNDATIONS SHALL NOT BE UNDERMINED BY NEW EXCAVATION UNLESS PERMITTED BY THE ENGINEER.
- ALL BASES TO BE SYMMETRICAL ABOUT COLUMNS UNLESS NOTED OTHERWISE.
- WHERE NO SITE INVESTIGATION HAS TAKEN PLACE AND WHERE TREES ARE ADJACENT TO THE SITE IN THE PRESENCE OF CLAY SOILS THE CONTRACTOR SHALL INFORM THE STRUCTURAL ENGINEER BCO AND ALLOW FOR THE FOUNDATIONS TO BE DESIGNED IN ACCORDANCE WITH NHBC PRACTICE NOTE 4.2 RECOMMENDATIONS.
- ALL MASS CONCRETE FOUNDATIONS ARE TO BE MINIMUM STRENGTH CLASS RC 25/30. U.N.O., REINFORCED CONCRETE FOR FOUNDATIONS TO BE OF DESIGN FND-2, SULPHATE CLASS DS-1 AND ACEC CLASS AC-2S IN ACCORDANCE WITH BRE SPECIAL DIGEST 1.
- ALL REINFORCED CONCRETE FOUNDATIONS ARE TO BE MINIMUM STRENGTH CLASS RC32/40 AND COMPLY WITH ACEC CLASS AC-2S, IN ACCORDANCE WITH BRE SPECIAL DIGEST 1 UNLESS STATED WITH THE MINIMUM COMPRESSIVE STRENGTH STATED ON THE PLANS.
- WHERE SERVICE INVERT LEVELS ARE BELOW THE FOUNDATION FORMATION LEVEL, THE FOOTINGS MUST BE INCREASED TO A MINIMUM OF 300mm BELOW THE INVERT OF THE PIPE AND PROVIDE 300mm SURROUND TO THE PIPE. THE PIPE MUST BE SLEEVED WITH A MINIMUM OF 25mm CLEARANCE TO ANY FACE OF THE PIPEWORK BY EITHER LOW-DENSITY POLYSTYRENE OR UPVC SLEEVE.
- NEW FOUNDATIONS TO BE CAST IMMEDIATELY AFTER PREPARATION OF FOUNDATION EXCAVATIONS OR, ALTERNATIVELY, MATERIAL AT FORMATION LEVEL MAY BE PROTECTED USING A BLINDING LAYER OF CONCRETE.
- FORMATION TO BE INSPECTED AND APPROVED BY THE BCO OR STRUCTURAL ENGINEER PRIOR TO PLACING OF CONCRETE.
- ALL UNSUITABLE MATERIAL AT FORMATION LEVEL TO BE REMOVED AT REPLACED WITH COMPACTED HARDCORE OR LEAN MIX CONCRETE AS DIRECTED BY THE BCO OR STRUCTURAL ENGINEER.
- GROUND BEARING SLABS TO BE AS FOLLOWS UNLESS STATED OTHERWISE AND IN STRICT ACCORDANCE WITH THE SOILS INVESTIGATION:
150mm THICK WITH A142 MESH TOP (40mm COVER) WITH 300mm MINIMUM LAPS ON 1200 GAUGE DAMP PROOF MEMBRANE, ON SAND/ CEMENT BLINDING, ON MINIMUM 150mm HARDCORE COMPACTED FREE FROM IMPURITIES.
- ALL FOUNDATIONS ADJACENT TO EXISTING FOOTINGS SHALL HAVE A DISPERSAL ANGLE OF 45 DEGREES TO THE UNDERSIDE OF THE FOOTING OR AT THE SAME LEVEL AS THE EXISTING. ON NO ACCOUNT SHALL THE NEW FOOTINGS SURCHARGE THE EXISTING FOUNDATIONS OR DRAINS. WHERE THIS OCCURS REFER TO THE ENGINEER FOR FURTHER INSTRUCTIONS.
- THE USE OR HIGH ALUMINA CEMENT OR MARINE DREDGED AGGREGATE SHALL NOT BE PERMITTED.
- ALL REINFORCED CONCRETE IN THE GROUND TO BE CAST UPON 50mm THICK GEN 1 BLINDING CONCRETE.
- ALL BACKFILLING IS TO BE D.O.T. TYPE 1 FULLY COMPACTED IN 150 THICK LAYERS. RECOMPACTED CLAY AND OTHER DUG MATERIAL WILL NOT BE PERMITTED BELOW NEW GROUND SLABS.
- DETAILS OF EXISTING FOUNDATIONS AND DRAINAGE INDICATED ON THE DRAWINGS ARE TAKEN FROM ORIGINAL CONSTRUCTION DRAWINGS. EXACT SIZE AND LOCATION ETC. TO BE CONFIRMED ON SITE BY TRIAL EXCAVATIONS.

Concrete

- THE SUPPLY AND INSTALLATION OF ALL CONCRETE WORKS SHALL BE IN ACCORDANCE WITH BS EN 13670
- ALL REINFORCED CONCRETE FOUNDATIONS ARE TO BE MINIMUM STRENGTH CLASS RC 32/40. U.N.O.
- COVER TO REINFORCEMENT TO BE 40mm, U.N.O.
- ALL MASS CONCRETE FOUNDATIONS TO BE CAST IN ONE CONTINUOUS POUR, UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO INSTALL THE CAST-IN HOLDING BOLTS FOR THE COLUMNS IN TUBES ETC, IN ACCORDANCE WITH THE FABRICATORS DRAWINGS.
- ALL REINFORCEMENT TO BE INSTALLED AND FIXED IN ACCORDANCE WITH BS 8666: 2005
- MINIMUM BAR LAP LENGTH TO BE IN ACCORDANCE WITH BS-EN-1992.
- THE CONTRACTOR IS TO PROVIDE PROPRIETARY CHAIR BARS ANDSPACERS TO ADEQUATELY SUPPORT AND MAINTAIN COVER TOREINFORCEMENT THROUGH OUT CONSTRUCTION.
- CONCRETE FOR PADSTONES IS TO BE 2:3:6 (CEMENT:FINE SAND:COARSE SAND) NOMINAL MIX, WITH OPC AND 10mm MAX AGGREGATE.
- READY MIXED CONCRETE MUST BE OBTAINED FROM A PLANT WHICH HOLDS A CURRENT CERTIFICATE OF ACCREDITATION UNDER THE QUALITY SCHEME FOR READY MIXED CONCRETE.
- SITE-MIXED CONCRETE MAY BE USED WHEN AGREED WITH THE ENGINEER. AN AGREED PRE-BATCHED AND BAGGED PROPRIETARY CONCRETE MUST BE USED UNLESS AN ALTERNATIVE SITE BATCHED CONCRETE HAS BEEN AGREED WITH THE ENGINEER.

Steelwork

- ALL STEELWORK TO COMPLY WITH THE NATIONAL STRUCTURAL STEELWORK SPECIFICATION FOR BUILDING CONSTRUCTION.
- OVERALL STRUCTURE AND ALL INDIVIDUAL STEELWORK COMPONENTS TO COMPLY WITH BS:EN1090-2/EXECUTION CLASS EXC2.
- ALL STEELWORK (EXCEPT HOLLOW SECTIONS) TO BE GRADE S355 TO BS EN10025-2:2003 (INCLUDING LATEST AMENDMENTS). ALL HOLLOW SECTIONS TO BE GRADE S355 TO BS EN10210-1:2006 (INCLUDING LATEST AMENDMENTS) UNLESS NOTED OTHERWISE. STEEL SUB GRADE TO BE DETERMINED BY CONTRACTOR IN ACCORDANCE WITH BS5950-1 TO PREVENT BRITTLE FRACTURE.
- STEELWORK CONNECTIONS SHALL BE AS DETAILED ON THE DRAWINGS. DETAILS AND CALCULATIONS FOR ANY VARIATIONS TO CONNECTIONS SHOWN, OR ANY NOT SHOWN NOT SHOWN OR THE DRAWINGS SHOULD BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION.
- ALL BOLTS TO BE GRADE 8.8 AND SHERADIZED.
- ALL WELDS TO BE A MINIMUM 6mm FULL PROFILE FILLET U.N.O.
- ALL INTERNAL STEELWORK IS TO BE BLAST CLEANED TO SA 2½ AND PAINTED WITH 75 MICRONS ZINC PHOSPHATE PRIMER.
- NON-SHRINK GROUT UNDER BASE PLATES IS TO BE 40N/mm² MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS.
- COPIES OF STEELWORK FABRICATION DRAWINGS ARE TO BE FORWARDED TO THE ENGINEER FOR INSPECTION PRIOR TO FABRICATION.
- BEAM BEARINGS ON MASONRY TO HAVE MINIMUM 100mm BEARING.
- ANY BEAM SPLICE IS TO BE CONSTRUCTED USING THE GENERAL GRADE HIGH STRENGTH FRICTION GRIP BOLTS (HSFG) TORQUED TO THEIR SPECIFIED PRE-LOAD. CONTACT FACES BETWEEN ATTACHED ELEMENTS ARE TO BE BLAST CLEANED AND LEFT UNPAINTED.
- HOT ROLLED STEELWORK DESIGNATED TO BE GALVANISED SHALL BE HOT DIP GALVANISED IN ACCORDANCE WITH BS EN ISO 1461, WITH A MINIMUM MEAN COATING TO BE 85 MICRONS. STEELWORK IN EXTERNAL CAVITY TO BE HOT DIP GALVANISED TO 85 MICRONS
- NEW STEEL BEAMS OR FRAMES BELOW EXISTING WALLS ARE TO BE INSTALLED ON THE CENTRELINE OF THE WALL UNLESS NOTED OTHERWISE ON THE DRAWINGS. DRY PACK TO BE 3:1 SHARP SAND:CEMENT WELL RAMMED IN. BOX FRAMES TO BE BOLTED TO EXISTING MASONRY RESIN FIXED USING M12 BOLTS AT 500mm C-C VERTICALLY
- UNO RESIN TO BE HITLI HIT HY 270-A INTO MASONRY AND HILTI HIT HY 200-A INTO CONCRETE
- ALL STEELWORK TO BE BURIED BELOW GROUND LEVEL SHALL BE ENCASED IN CONCRETE WITH A MINIMUM CONCRETE COVER OF 100mm.
- ALL STEELWORK BUILT INTO PERIMETER WALLS OR POTENTIALLY DAMP LOCATIONS SHALL BE COATED ADDITIONALLY WITH 2 COATS OF BITUMINOUS PAINT.
- REFER TO THE ARCHITECTURAL DRAWINGS AND SPECIFICATION FOR THE FIRE PROTECTION REQUIREMENTS.
- LOCATION OF STEEL SPLICES TO BE AGREED WITH BC STRUCTURAL DESIGN

Underpinning

- THE EXISTING FOUNDATION DIMENSIONS ARE TO BE CONFIRMED BY TRIAL HOLE INVESTIGATION PRIOR TO CONSTRUCTION. IF THERE ARE DISCREPANCIES BETWEEN THE ON SITE FINDINGS AND THE DRAWINGS THE CONTRACTOR MUST CONTACT THE ENGINEER.
- THE EXISTING WALLS ARE TO BE UNDERPINNED TO THE DEPTHS SHOWN ON THE DRAWINGS.
- UNDERPINNING SHALL BE CARRIED OUT IN LENGTHS NOT EXCEEDING 1m, ON A 1 IN 4 HIT AND MISS ARRANGEMENT, UNLESS AGREED OTHERWISE WITH THE ENGINEER.
- OVERDIG FOR ACCESS PURPOSE IS ONLY PERMITTED FROM ONE DIRECTION. ADDITIONAL EXCAVATION OF ANY KIND, WHICH MAY UNDERMINE THE EXISTING FOUNDATIONS IS STRICTLY FORBIDDEN DURING UNDERPINNING OPERATIONS.
- THE UNDERSIDE OF EXISTING FOUNDATIONS TO BE UNDERPINNED IS TO BE THOROUGHLY CLEANED TO EXPOSE SOUND CONCRETE/BRICKWORK. NEW FORMATION LEVEL IS TO BE INSPECTED PRIOR TO POURING NEW CONCRETE. THE FOUNDATIONS ARE TO BE CONCRETED UP TO WITHIN 75mm OF UNDERSIDE OF EXISTING FOUNDATION.
- AFTER A MINIMUM CURING TIME OF 48 HOURS THE 75mm GAP IS TO PINNED BY MACHINE RAMMING IN DRY PACK GROUT. GROUT TO BE 2:1 SHARP SAND:CEMENT MIX WITH JUST SUFFICIENT WATER TO ALLOW BALLING IN THE HAND.
- SUBSEQUENT EXCAVATIONS UNDER THE SAME WALL SHALL NOT COMMENCE FOR A MINIMUM PERIOD OF 48 HOURS AFTER PINNING OF A SECTION. THE SEQUENCE SHALL BE AGREED WITH THE ENGINEER AND SHALL BE STRICTLY ADHERED TO.
- THE DEPTH OF UNDERPINNING MAY VARY FROM THOSE SHOWN ON THE DRAWINGS TO SUIT SITE GROUND CONDITIONS, AND ARE TO BE CONFIRMED ONCE OPENING UP WORKS COMMENCE.
- ALL CONCRETE IS TO BE MINIMUM STRENGTH CLASS C32/40 AND DESIGNED AS FND-2, SULPHATE CLASS DS-1 AND ACEC CLASS AC-2S IN ACCORDANCE WITH BRE SPECIAL DIGEST 1.

Masonry/ Blockwork

- ALL MASONRY WALLS SHOWN ON THE STRUCTURAL DRAWINGS ARE TO BE CONSIDERED LOAD BEARING UNLESS NOTED OTHERWISE AND ARE TO BE CONSTRUCTED BEFORE THE NEXT FLOOR LEVEL. FOR ALL WALLS, INCLUDING NON LOAD BEARING, REFER TO THE ARCHITECTS SPECIFICATION.
- CONCRETE MASONRY UNITS: TO CONFORM TO BS.EN 771-3, WITH A MINIMUM COMPRESSIVE STRENGTH OF 7N/mm²
- BRICKWORK: TO CONFORM TO BS EN 1996, WITH A MINIMUM CRUSHING STRENGTH OF 15N/mm². WATER ABSORPTION 12%.
- ALL MORTAR ABOVE GROUND TO BE M4 IN ACCORDANCE WITH BS EN 1995-1-1, MORTAR BELOW GROUND TO BE M6 TO BS EN 1995-1-1

Masonry/ Blockwork cont.

- IN COLD WEATHER, CONTRACTOR IS TO TAKE THE NECESSARY PRECAUTIONS TO PREVENT FROST
- DAMAGE TO FRESHLY LAID MASONRY BY PROVIDING INSULATED COVERS, ETC.
- UNLESS NOTED OTHERWISE ON THE ENGINEERS OR ARCHITECTS DRAWINGS, VERTICAL MOVEMENT JOINTS SHALL BE PROVIDED AT A MAXIMUM OF 6m CENTRES.
- CAVITY TIES TO BE AT MAXIMUM 900mm CENTRES HORIZONTALLY AND 450mm CENTRES VERTICALLY FOR CAVITIES UP TO 75mm. REDUCE HORIZONTAL SPACING TO 750mm FOR CAVITIES OVER 75mm. STAGGERED PATTERN TO BE ADOPTED. USE TWO-PART TIES FOR CAVITIES EXCEEDING 150mm WITH A MINIMUM EMBEDMENT OF 75mm. AT OPENINGS TIES TO BE AT 225mm CENTRES VERTICALLY. CAVITY TIES TO BE STAINLESS STEEL WITH A MINIMUM EMBEDMENT OF 50mm.
- PADSTONES ARE TO BE GRADE C35 CONCRETE, SIZE AS INDICATED ON THE STRUCTURAL DRAWINGS.
- WALLS TO BE RESTRAINED AT GROUND FLOOR CEILING AND GABLE WALLS BY THE PROVISION OF 30x5 x1000mm LATERAL RESTRAINT STRAPS AT MAXIMUM 1.2m CENTRES CARRIED ACROSS AT LEAST 3 JOISTS OR RAFTERS, ETC, WITH A MINIMUM OF 38mm WIDE x 3/4 DEPTH NOGGINS.
- MATERIALS FOR WALL TIES, SUPPORT ANGLES, RESTRAINT FIXINGS ETC. TO BE 304 STAINLESS STEEL.
- LINTELS, WINDPOSTS, WALL TIES, SUPPORT ANGLES, RESTRAINT FIXINGS ETC TO BE INSTALLED AS PER MANUFACTURERS / SUPPLIERS SPECIFICATIONS AND INSTRUCTIONS
- SEE ARCHITECTS DRAWINGS FOR:
A) SETTING OUT DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
B) DETAILS OF ALL DAMP-PROOFING, WATERPROOFING AND SEALANTS.
- PROVIDE 2 LINES OF BRICKFORCE BEDJOINT REINFORCEMENT IN ALL MASONRY SKINS ABOVE & BELOW ALL OPENINGS EXTENDING 500mm BEYOND THE OPENING.
- THE TERM DRY PACK IS A SITE PREPARED MIXTURE OF 1:1 SAND:CEMENT WITH SUFFICIENT WATER TO ALLOW THE MIXTURE TO BEMOULDED INTO A DRY DOUGH LIKE MIXTURE.
- ALL BRICKWORK WITHIN THE GROUND OR WITHIN 150 OFF GROUND LEVEL SHOULD BE LAID WITH SULPHATE RESISTING MORTAR
- ALL MASONRY BELOW THE DPM SHOULD BE 7N/mm2 BLOCK OR FROST RESISTANT BRICKWORK
- TIES AT BLOCKWORK MOVEMENT JOINTS TO HAVE ONE END DEBONDED USING A DEBONDING SLEEVE. TIE TO BE AT LEAST 200 LONG SPACED AT 450mm VERTICAL CENTRES.
- ALL BRICKWORK IS TO BE LAID WITH FROGS, IF ANY, FACING UPWARDS

Structural Timber

- ALL STRUCTURAL TIMBER SHALL BE PLAIN SAWN AND IN ACCORDANCE WITH BS5268: PART 2: 2002 AND BS EN338: 2003.
- ALL STRUCTURAL TIMBER SHALL BE STRENGTH CLASS C24 MINIMUM U.N.O. IN ACCORDANCE WITH BS5268:PART 2: 2002 AND BS EN338: 2003.
- STRUCTURAL TIMBER MEMBERS MAY ONLY BE DRILLED OR CUT FOR SERVICES WHERE SPECIFIED ON BC STRUCTURAL DESIGN DRAWINGS. IN NO CIRCUMSTANCES SHALL THE TOP OR BOTTOM OF JOISTS BE CUT OR NOTCHED WITHOUT THE WRITTEN APPROVAL OF BC STRUCTURAL DESIGN.
- THE WORKMANSHIP SHALL NOT BE LESS THAN THAT SET OUT IN THE RELEVANT CLAUSES OF BS5268: PART2: 2002
- PLYWOOD TO BE SCREWED TO JOISTS AND RAFTERS WITH 3MM DIAMETER SCREWS, MIN 70MM EMBEDMENT. INTERNAL JOINTS SCREWS AT 300mm SCREWS, PERIMETER JOINTS SCREWS AT 150mm CENTRES. JOINTS IN PLYWOOD TO BE STAGGERED.
- EXTERNAL GRADE PLYWOOD TO BE USED OVER ROOFS.
- JOIST HANGERS ARE TO BE MADE FROM WELDED AND GALVANISED MILD STEEL STRAPS, UNO – MAXI SPEEDY, ADJUSTABLE TOP HUNG HANGERS OR SIMILAR. FULLY NAILED.
- TIMBER TRUSSED RAFTERS TO BE DESIGNED BY THE CONTRACTOR TO THE LOADS GIVEN ON THE DRAWING AND TO BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH BS5268: PART 3: 2006.
- GLULAM BEAMS SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH BS EN 1194: 1999.
- ALL TIMBER CONNECTIONS TO BE DESIGNED BY THE CONTRACTOR TO THE REACTIONS GIVEN ON THE DRAWINGS AND IN ACCORDANCE WITH BS5268: PART 2: 2002. DESIGN CALCULATIONS AND SHOP DRAWINGS TO BE SUBMITTED TO BC STRUCTURAL DESIGN FOR COMMENTS. 2 No. COPIES ARE TO BE MADE AVAILABLE
- WORKING DAYS PRIOR TO COMMENCING SHOP WORKS. 1 COPY WILL BE RETURNED WITH COMMENTS.
- ALL FLOOR JOISTS ARE TO HAVE FULL DEPTH SOLID STRUTTING AT SUPPORTS AND 1/3 POINTS U.N.O.
- ALL TIMBER FIXINGS ARE TO BE HOT DIP GALVANIZED AND TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.
- THE CONTRACTOR IS TO PROVIDE ALL PACKS, STRAPS, BLOCKING PIECES ETC NECESSARY TO RESTRAIN THE TIMBER ELEMENTS.
- ALL NEW STUD WALLS TO HAVE SOLID BLOCKING UNDER WHERE WALL RUNS ACROSS JOISTS AND DOUBLE JOISTS BOLTED TOGETHER UNDER WHERE PARALLEL.
- ALL NEW TIMBER JOISTS TO HAVE NOGGINS BETWEEN JOISTS AT EACH END AND AT SPACINGS NOT EXCEEDING 30 X JOIST WIDTH.
- ALL BOLTS INTO TIMBER ARE TO HABE 50SQ X 3 THK MILD STEEL WASHERS BELOW NUT.
- DOUBLE JOISTS BOLTED TOGETHER WITH 12MM DAI BOLT AT 500mm C-C
- TRUSS ROOF TRUSSES AND BRACING TO BE DESIGNED AND DETAILED BY SPECIALIST SUBCONTRACTOR. TRUSSES TO BE DESIGNED AND FABRICATED IN ACCORDANCE WITH BS 5268: PARTS 2 AND 3.
- ALL TRUSSES TO BE CONNECTED TO TIMBER WALL PLATE BY MEANS OF APPROVED TRUSS CLIPS.
- BC STRUCTURAL DESIGN TO BE INFORMED OF ANY EXISTING ROTTING OR DAMAGED TIMBERS TO BE REPLACED LIKE FOR LIKE W/ C24 TIMBERS OF THE SAME SIZE

Project:

31 Milton Park

Drawing Number:
J373-BC-SK-1000

Drawing Title:
General Notes

Issued:
04.24

Drawn by:
DJC

Rev:
P5

Scale:
NTS



Nearby Trees

Site lined with large trees. Site to fall within root zones. Contractor to follow guidance set out by Aborculturist to ensure protection of roots. Contractor to avoid cutting any significant root systems and are to notify the Structural Engineer if roots impact proposals

Site to be locally excavated and new opening saw cut through existing retaining wall.

02

B

Prop joists above prior to demolition of pier

Exg ground slab

Exg ground slab



Existing structure assumptions based on assumptions. Existing structure to be verified on site. Contractor to notify engineer if the existing arrangements vary from that shown.



Extent of demolition TBC by Architect, extent shown is indicative. Refer to Architects drawings for exact demolition extent



All temporary works to Contractor design. To be submitted and reviewed by Baker Chatterton prior to installation

Demolition Ground Floor Plan

Symbols Key	
	Denotes moment connection
	Denotes floor span
	Denotes rafter span
	Denotes cranked beam

Abbreviations
J"x" - Timber Joists
DJ - Double Joists bolted together
TrJ - Triple Joists bolted together
TB"x" - Timber Beam
TC"x" - Timber Column
W"x" - Wall type
SB"x" - Steel Beam
SC"x" - Steel Column
L"x" - Lintel over
PS"x" - Concrete padstone
CU - Column Under

- Notes:**
1. Do not scale from these drawings
 2. All dimensions to be checked on site by contractor
 3. Drawing to be read in conjunction with general notes drawing
 4. Where discrepancy occurs between specification and drawing, Engineer to be notified immediately
 5. Temporary words design, method statement and construction sequence to be determined by contractor
 6. Where discrepancy occurs between drawings and findings on site, Engineer to be notified immediately
 7. Contractor may allow for splicing of steelwork to aid erection if necessary, final design by contractor, to be coordinated with BC Structural Design.
 8. Refer to architects details for fire protection of all elements
 9. All foundations assumed to be founded a minimum of 1.0m BGL on natural undisturbed ground – to be checked by Building Control or an Approved Inspector – assumed bearing capacity – 100kN/m2. If adjacent to existing foundation, excavation to be stepped at 45degrees to avoid undermining. Foundations to be 450mm deep MC and a minimum of 450mm wide UNO.
 10. All setting out to Architects information

BAKER STRUCTURAL DESIGN
CHATTERTON

Email:
Alex@BCStructural.co.uk
Dylan@BCStructural.co.uk

WEB:
www.BCStructural.co.uk

Project:

31 Milton Park

Drawing Number:

J373-BC-SK-2090

Drawing Title:

Demolition Basement Floor

Issued:

04.24

Rev:

P5

Drawn by:

DJC

Scale:

NTS



Existing garage to be demolished. Garage structure dilapidated and not structurally sound. Contractor to take great care working around and should stabilise structure prior to demolition to ensure safe working.



Nearby Trees
Site lined with large trees. Site to fall within root zones. Contractor to follow guidance set out by Aborculturist to ensure protection of roots. Contractor to avoid cutting any significant root systems and are to notify the Structural Engineer if roots impact proposals



Existing load bearing spine wall to be party demolished. Contractor to provide temporary propping to wall and floors above.



Opening to be made in load bearing external wall. Contractor to prop above.



Existing structure assumptions based on assumptions. Existing structure to be verified on site. Contractor to notify engineer if the existing arrangements vary from that shown.



Extent of demolition TBC by Architect, extent shown is indicative. Refer to Architects drawings for exact demolition extent



All temporary works to Contractor design. To be submitted and reviewed by Baker Chatterton prior to installation

Project:

31 Milton Park

Drawing Number:

J373-BC-SK-2100

Drawing Title:

Demolition Ground Floor Plan

Issued:

04.24

Drawn by:

DJC

Rev:

P5

Scale:

NTS

Demolition Ground Floor Plan

Symbols Key	
	Denotes moment connection
	Denotes floor span
	Denotes rafter span
	Denotes cranked beam

Abbreviations	
J"x"	- Timber Joists
DJ	- Double Joists bolted together
TrJ	- Triple Joists bolted together
TB"x"	- Timber Beam
TC"x"	- Timber Column
W"x"	- Wall type
SB"x"	- Steel Beam
SC"x"	- Steel Column
L"x"	- Lintel over
PS"x"	- Concrete padstone
CU	- Column Under

Notes:	
1.	Do not scale from these drawings
2.	All dimensions to be checked on site by contractor
3.	Drawing to be read in conjunction with general notes drawing
4.	Where discrepancy occurs between specification and drawing, Engineer to be notified immediately
5.	Temporary words design, method statement and construction sequence to be determined by contractor
6.	Where discrepancy occurs between drawings and findings on site, Engineer to be notified immediately
7.	Contractor may allow for splicing of steelwork to aid erection if necessary, final design by contractor, to be coordinated with BC Structural Design.
8.	Refer to architects details for fire protection of all elements
9.	All foundations assumed to be founded a minimum of 1.0m BGL on natural undisturbed ground – to be checked by Building Control or an Approved Inspector – assumed bearing capacity – 100kN/m2. If adjacent to existing foundation, excavation to be stepped at 45degrees to avoid undermining. Foundations to be 450mm deep MC and a minimum of 450mm wide UNO.
10.	All setting out to Architects information

Project:

31 Milton Park

Drawing Number:
J373-BC-SK-3090

Drawing Title:
Proposed Basement Floor

Issued:
04.24

Rev:
P5

Drawn by:
DJC

Scale:
NTS

Symbols Key	
	Denotes moment connection
	Denotes floor span
	Denotes rafter span
	Denotes cranked beam

Abbreviations	
J"x"	- Timber Joists
DJ	- Double Joists bolted together
TrJ	- Triple Joists bolted together
TB"x"	- Timber Beam
TC"x"	- Timber Column
W"x"	- Wall type
SB"x"	- Steel Beam
SC"x"	- Steel Column
L"x"	- Lintel over
PS"x"	- Concrete padstone
CU	- Column Under

Notes:	
1.	Do not scale from these drawings
2.	All dimensions to be checked on site by contractor
3.	Drawing to be read in conjunction with general notes drawing
4.	Where discrepancy occurs between specification and drawing, Engineer to be notified immediately
5.	Temporary words design, method statement and construction sequence to be determined by contractor
6.	Where discrepancy occurs between drawings and findings on site, Engineer to be notified immediately
7.	Contractor may allow for splicing of steelwork to aid erection if necessary, final design by contractor, to be coordinated with BC Structural Design.
8.	Refer to architects details for fire protection of all elements
9.	All foundations assumed to be founded a minimum of 1.0m BGL on natural undisturbed ground – to be checked by Building Control or an Approved Inspector – assumed bearing capacity – 100kN/m2. If adjacent to existing foundation, excavation to be stepped at 45degrees to avoid undermining. Foundations to be 450mm deep MC and a minimum of 450mm wide UNO.
10.	All setting out to Architects information

Proposed Member Reference Table:	
Beam Schedule	
SB1	- 203x203x46 UC S355
SB2	- 152x89x16UB S355
SB3	- 203x102x23 UB S355
SB4	- 178x102x16 UB S355
SB5	- 152x152x23 UC S355
SB6	- 125x65 PFC S355
TB1	- 195x97 C24 Timber Beam
TB2	- 145x97 C24 Timber Beam
Lintel & Padstone Schedule	
PS1	- 440x215x140 concrete padstone
PS2	- 330x100x140h concrete padstone
PS3	- 440x100x215h concrete padstone
PS4	- 215x215x140h concrete padstone
L1	- Standard Duty Catnic lintel - TS150/100
L2	- Naylor 140x100 precast lintel
Column and Wall Schedule	
SC1	- 152x152x23 UC S355
SC2	- 100x100x5 SHS S355
SC3	- 200x100x5 RHS S355
SC4	- 120x80x8 RHS S355
TC1	- 95x95 C24 Timber Stud
TC2	- 145x95 C24 Timber Stud
W1	- Min 300mm thick RC retaining wall (C32/40)
Floor Schedule	
J1	- 145x45 C24 timber joists @ 400mm centres
J2	- 170x45 C24 timber joists @ 400mm centres
All internal floor joists to have 18mm ply over.	
All flat roof joists to have 12mm external grade ply over	

NOTE ON FOUNDATIONS
+ All new foundations to not undermine existing footings.
+ Internal foundations to be a minimum of 1m deep UNO, and bearing on virgin ground - **expect Clay**.
+ Perimeter foundations to be cast below zone of influence of nearby trees - approx 2.5m BGL. (Based on ~20m high water demand tree noted within 2m of proposed external footings, with high plasticity soil). Depths to be agreed with and verified by Building Control on site.
+ Building Control officer to inspect excavation for foundations prior to Contractor casting.

ADDITIONAL GENERAL NOTES
+ Refer to General Notes drawing for steel finishes
+ If splices are required by the Contractor, the Contractor is to agree location with engineer.
+ All timber wall plates to new walls to be strapped to masonry wall with 1.2m long 30x5mm engineering restraint strap at 1.2m centres
+ All new timber joists to be supported on joist hangers UNO - Simpson Strong tie, adjustable top hung hangers or similar. Fully nailed.
+ A timber studs to be doubled up adjacent to openings and bolted together with M10 bolts @ 400mm centres
+ All new masonry infill to be fully toothed in to adjacent masonry UNO.
+ Beams are specified for installation at low level
+ External grade plywood to be used over roofs
+ All resin anchors into masonry to use Hilti HIT-HY 270 resin,
+ All resin anchors into concrete to use Hilti HIT-HY 200 resin

Reinforced Concrete Retaining Walls
New RC retaining walls to abut existing walls. Allow for dowelling resin anchors into masonry at 300mm vertical centres where they abut. Base to match depth of existing footings and resin dowelled along base to masonry footing. Excavation to be backfilled with granular material. Waterproofing by others.

Ground Bearing Base AND Top Slab
If new base slab sits below required FFL, allow for bringing up to level with compacted granular fill to be placed over with 150mm thk concrete slab poured over to match existing basement SSL. Top slab reinforced with A393 mesh in top face. Refer to Reinforcement Requirements table for Base Slab.

Making Good Brick Piers
Existing piers to be rebuilt above ground off existing footings with 20N brickwork in M4 mortar - size to match existing.

Existing Walls to Be Re-used
Contractor to review condition of existing wall when on site. Any damaged masonry to be made good and loose mortar repointed

Lintels over new opening to support full width of wall over

Proposed Basement Floor Plan



Nearby Trees
Site lined with large trees. Site to fall within root zones. Contractor to follow guidance set out by Arboriculturist to ensure protection of roots. Contractor to avoid cutting any significant root systems and are to notify the Structural Engineer if roots impact proposals.

Root Protection for Buried Structure
Below ground structure to be lined in Root Barrier membrane by Safe Fence or similar approved

Cavity Wall on Suspended Beams
100mm block (7.3N), 100mm brick (20N)
Ties in accordance with general notes. Wall leaves to be supported on steel beams encased in concrete with 225mm heave board placed beneath. Beams to span between discrete pad footings.

Compressive Boards
50mm compressive boarding to be placed to internal face of mass concrete footings in accordance with NHBC guidance.

Suspended Timber Floor
New suspended timber floor to span between perimeter walls with masonry joist hangers. Minimum 300mm floor void with 50mm sand-cement blinding to cover formation level.

Beam to be supported over on existing wall below - 20mm non shrink bedding mortar.

Proposed Member Reference Table:

Beam Schedule
SB1 - 203x203x46 UC S355
SB2 - 152x89x16UB S355
SB3 - 203x102x23 UB S355
SB4 - 178x102x16 UB S355
SB5 - 152x152x23 UC S355
SB6 - 125x65 PFC S355
TB1 - 195x97 C24 Timber Beam
TB2 - 145x97 C24 Timber Beam

Lintel & Padstone Schedule
PS1 - 440x215x140 concrete padstone
PS2 - 330x100x140h concrete padstone
PS3 - 440x100x215h concrete padstone
PS4 - 215x215x140h concrete padstone
L1 - Standard Duty Catnic lintel - TS150/100
L2 - Naylor 140x100 precast lintel

Column and Wall Schedule
SC1 - 152x152x23 UC S355
SC2 - 100x100x5 SHS S355
SC3 - 200x100x5 RHS S355
SC4 - 120x80x8 RHS S355
TC1 - 95x95 C24 Timber Stud
TC2 - 145x95 C24 Timber Stud
W1 - Min 300mm thick RC retaining wall (C32/40)

Floor Schedule
J1 - 145x45 C24 timber joists @ 400mm centres
J2 - 170x45 C24 timber joists @ 400mm centres
All internal floor joists to have 18mm ply over.
All flat roof joists to have 12mm external grade ply over



NOTE ON FOUNDATIONS

- + All new foundations to not undermine existing footings.
- + Internal foundations to be a minimum of 1m deep UNO, and bearing on virgin ground - **expect Clay**.
- + Perimeter foundations to be cast below zone of influence of nearby trees - approx 2.5m BGL. (Based on ~20m high water demand tree noted within 2m of proposed external footings, with high plasticity soil). Depths to be agreed with and verified by Building Control on site.
- + Building Control officer to inspect excavation for foundations prior to Contractor casting.

Ancon stafix starter bar to connect new masonry to existing. Ties 225mm verticle centres.

Existing beam to be replaced with new beams. Existing joists to be connected to face with joist hangers

Proposed Ground Floor Plan

Oriel Window

Contractor to allow for new oriel window to be built off new cantilever steel base frame. Final details TBC following coordination with oriel window supplier. External steelwork to be galvanised. Assumed timber infill floor to be protected from moisture

Beam to be supported over line of existing wall below - 20mm non shrink bedding mortar below. Beam to concrete encased with 75mm surrounds. Existing joists to be resupported on beam where intersects.

Chimney Removal Making Good Works

Existing masonry to be made good, cracked or broken brickwork replaced and mortar re-pointed where chimney breasts are to be removed

Load Bearing Timber Wall

97mmx45 timber studs C24 @400mm centres. 12mm ply to face of studs to be installed directly below existing load bearn stud wall at 1st Floor

Load Bearing Timber Wall

Existing load bearing stud wall to be strengthened with 95mmx95 timber studs at edges of openings. Secured at head and base with Simpson Strong Tie Reinforced Angle Bracket

Timber beam to bear min 100mm onto pier

New stud wall formed of 100x50 C24 studs at 400mm centres rebuilt directly below wall above. Wall to be packed tight to existing.

Beams to be supported centred over existing wall below. Provide 140mm thick concrete padstone below beam bearing. Existing beams to be resupported on beam where intersects.

Flue Recess

Channel recessed through chimney breast at high level to fit new chimney flue. Refer to architects information for setting out. New steel beam above - see 1st Floor Plan for beam size.

Lateral Ties

Beam to be tied across joists with 1.2m long 30x5mm galvanised restraint straps at 1.2m centres along length. Blocking installed where across joists.

Column to have M12 resin anchors fixed into wall behind, 85mm embedment at 500mm centres. Recessed into wall by 50mm and surrounded with free flowing grout

ADDITIONAL GENERAL NOTES

- + Refer to General Notes drawing for steel finishes
- + If splices are required by the Contractor, the Contractor is to agree location with engineer.
- + All timber wall plates to new walls to be strapped to masonry wall with 1.2m long 30x5mm engineering restraint strap at 1.2m centres
- + All new timber joists to be supported on joist hangers UNO - Simpson Strong tie, adjustable top hung hangers or similar. Fully nailed.
- + A timber studs to be doubled up adjacent to openings and bolted together with M10 bolts @ 400mm centres
- + All new masonry infill to be fully toothed in to adjacent masonry UNO.
- + Beams are specified for installation at low level
- + External grade plywood to be used over roofs
- + All resin anchors into masonry to use Hilti HIT-HY 270 resin,
- + All resin anchors into concrete to use Hilti HIT-HY 200 resin

Symbols Key

- Denotes moment connection
- Denotes floor span
- Denotes rafter span
- Denotes cranked beam

Abbreviations

J"x" - Timber Joists
DJ - Double Joists bolted together
TrJ - Triple Joists bolted together
TB"x" - Timber Beam
TC"x" - Timber Column
W"x" - Wall type
SB"x" - Steel Beam
SC"x" - Steel Column
L"x" - Lintel over
PS"x" - Concrete padstone
CU - Column Under

Notes:

- Do not scale from these drawings
- All dimensions to be checked on site by contractor
- Drawing to be read in conjunction with general notes drawing
- Where discrepancy occurs between specification and drawing, Engineer to be notified immediately
- Temporary words design, method statement and construction sequence to be determined by contractor
- Where discrepancy occurs between drawings and findings on site, Engineer to be notified immediately
- Contractor may allow for splicing of steelwork to aid erection if necessary, final design by contractor, to be coordinated with BC Structural Design.
- Refer to architects details for fire protection of all elements.
- All foundations assumed to be founded a minimum of 1.0m BGL on natural undisturbed ground - to be checked by Building Control or an Approved Inspector - assumed bearing capacity - 100kN/m2. If adjacent to existing foundation, excavation to be stepped at 45degrees to avoid undermining. Foundations to be 450mm deep MC and a minimum of 450mm wide UNO.
- All setting out to Architects information

BAKER STRUCTURAL DESIGN
CHATTERTON

Email:
Alex@BCStructural.co.uk
Dylan@BCStructural.co.uk

WEB:
www.BCStructural.co.uk

Project:

31 Milton Park

Drawing Number:

J373-BC-SK-3100

Drawing Title:

Proposed Ground Floor

Issued:

04.24

Rev:

P5

Drawn by:

DJC

Scale:

NTS

All steel beams and columns Grade S355
All steel plate grade S275
All welds 6mm cfw
All bolts grade 8.8
All steel heights shown indicatively - Refer to architects drawings



Cavity Wall

100mm block (7.3N), 100mm brick (20N)
Ties in accordance with general notes. All masonry below DPM to be frost and sulphate resistant

30x5 galv restraint strap installed as per spec

12mm external grade ply

J2 rafters

Detail 01-01



Nearby Trees

Site lined with large trees. Site to fall within root zones. Contractor to follow guidance set out by Aborculturist to ensure protection of roots. Contractor to avoid cutting any significant root systems and are to notify the Structural Engineer if roots impact proposals

Min 450mm

Cavity wall ties as spec'd

Masonry joist hangers

18mm ply

J2 joists

300mm vent and heave zone

100mm concrete blinding

SB4

SB3

Beams encased in 75mm concrete surrounds and reinforced with D49 wrapping mesh

2No. M12 resin anchors per beam to secure to pad foundations, 150mm ebedment

750L x 750w mass concrete pad formed min 2.5m BGL. TBC by Building Control

50mm compressive board to inside face in accordance with NHBC guidance

Detail 00-04

Proposed Member Reference Table:
Beam Schedule
SB1 - 203x203x46 UC S355
SB2 - 152x89x16UB S355
SB3 - 203x102x23 UB S355
SB4 - 178x102x16 UB S355
SB5 - 152x152x23 UC S355
SB6 - 125x65 PFC S355
TB1 - 195x97 C24 Timber Beam
TB2 - 145x97 C24 Timber Beam

Lintel & Padstone Schedule
PS1 - 440x215x140 concrete padstone
PS2 - 330x100x140h concrete padstone
PS3 - 440x100x215h concrete padstone
PS4 - 215x215x140h concrete padstone
L1 - Standard Duty Catnic lintel - TS150/100
L2 - Naylor 140x100 precast lintel

Column and Wall Schedule
SC1 - 152x152x23 UC S355
SC2 - 100x100x5 SHS S355
SC3 - 200x100x5 RHS S355
SC4 - 120x80x8 RHS S355
TC1 - 95x95 C24 Timber Stud
TC2 - 145x95 C24 Timber Stud
W1 - Min 300mm thick RC retaining wall (C32/40)

Floor Schedule
J1 - 145x45 C24 timber joists @ 400mm centres
J2 - 170x45 C24 timber joists @ 400mm centres
All internal floor joists to have 18mm ply over.
All flat roof joists to have 12mm external grade ply over

Project:

31 Milton Park

Drawing Number:

J373-BC-SK-3304

Drawing Title:

Proposed Details Sheet 04

Issued:

04.24

Drawn by:

DJC

Rev:

P5

Scale:

NTS

Symbols Key

- Denotes moment connection
- Denotes floor span
- Denotes rafter span
- Denotes cranked beam

Abbreviations

J"x" - Timber Joists
DJ - Double Joists bolted together
TrJ - Triple Joists bolted together
TB"x" - Timber Beam
TC"x" - Timber Column
W"x" - Wall type
SB"x" - Steel Beam
SC"x" - Steel Column
L"x" - Lintel over
PS"x" - Concrete padstone
CU - Column Under

Notes:

- Do not scale from these drawings
- All dimensions to be checked on site by contractor
- Drawing to be read in conjunction with general notes drawing
- Where discrepancy occurs between specification and drawing, Engineer to be notified immediately
- Temporary words design, method statement and construction sequence to be determined by contractor
- Where discrepancy occurs between drawings and findings on site, Engineer to be notified immediately
- Contractor may allow for splicing of steelwork to aid erection if necessary, final design by contractor, to be coordinated with BC Structural Design.
- Refer to architects details for fire protection of all elements
- All foundations assumed to be founded a minimum of 1.0m BGL on natural undisturbed ground – to be checked by Building Control or an Approved Inspector – assumed bearing capacity – 100kN/m2. If adjacent to existing foundation, excavation to be stepped at 45degrees to avoid undermining. Foundations to be 450mm deep MC and a minimum of 450mm wide UNO.
- All setting out to Architects information

BAKER STRUCTURAL DESIGN
CHATTERTON

Email:
Alex@BCStructural.co.uk
Dylan@BCStructural.co.uk

WEB:
www.BCStructural.co.uk