

## 1.0 GENERAL

- 1.1 Drawings shall be referred to for structural engineering work only unless otherwise stated and read in conjunction with the main Structural and Civil Specification and Architect's, Service Engineer's and Subcontractor's drawings and any other relevant contract documentation.
- 1.2 Materials and workmanship shall not be inferior to the requirements of the relevant British Standard, Building Regulations and/or other relevant documentation referred to in the specification and as indicated in BS8000: 'Workmanship on Building Sites'. All materials shall be CE marked where appropriate.
- 1.3 Construction tolerances to be in accordance with BS5606: 'Guide to accuracy in building' or the NCS or NSSS whichever is more onerous. The contractor is to ensure that sufficient tolerances are provided and integrated throughout all elements of the works.
- 1.4 Reference made to any British Standard, Specification, Code of Practice or other document shall be taken to refer to the edition current on 11.03.16, unless another edition is specifically referred too. All Eurocodes are to be read in conjunction with the relevant UK National Annex.
- 1.5 The contractor shall maintain the stability of all existing structures and earthworks on and adjacent to the site from the date of possession of the site until practical completion of the contract. The contractor shall take all necessary precautions to prevent damage to existing buildings on and adjacent to the site.
- 1.6 The contractor shall ensure that the stability and structural integrity of the existing structure are maintained during the Contract. He shall design, install and maintain all necessary temporary works to comply with this. If requested, the contractor shall submit details of temporary works proposals together with the proposed sequence and method of construction. These proposals shall consider all structural engineering aspects of the construction sequence.
- 1.7 The contractor shall not overload any completed or partially completed elements of the structure. The drawings of the existing structure indicate the assumed structural arrangement. If the contractor needs to rely on this information, he is to carry out all further investigations to comply with this requirement and to allow the detailed design of temporary supports where necessary.
- 1.8 Where storage of materials is proposed by the contractor on the existing floors, the floors are not to be overloaded. The contractor shall take in to account the historic use of the floors and is to carry out all further investigations as necessary to comply with this requirement.
- 1.9 Structural alterations are to be carried out using methods of structural dismantling, tools and other equipment which are suitable for the task without causing unnecessary disturbance and damage to the existing structure or finishes.
- 1.10 The Contractor shall check all levels and dimensions, any errors or omissions are to be reported at once to the Engineer.
- 1.11 The Contractor is to take all necessary site measurements necessary for offsite fabrication/ preformed and proprietary elements, including but not limited too; steelwork balconies, Juliette balconies, special lintels, steelwork, Precast concrete, masonry support, windposts, etc.
- 1.12 The setting out is shown on the architects drawings. The structural engineer's drawings show supporting information to this.
- 1.13 For details of damp proofing, DPC/DPM, floor insulation, fire stopping & sound insulation see Architects drawings & specification.
- 1.14 All work undertaken prior to receiving Building Control, Premier, Highways, Water Authority, EA etc approval is at the Contractors risk.

## 2.0 FOUNDATIONS/GROUNDWORKS

- 2.1 Foundations have been designed in accordance with the Geotechnical report provided by Soiltechnics report ref: STL 2813D-G01 dated September 2015.  
  
Foundations are to be trench fill mass concrete bearing into the loadbearing stiff clay by at least 300mm. Anticipated depths of foundations are shown on drawings.
- 2.3 The foundations have been designed for an allowable ground bearing pressure of 80kN/m<sup>2</sup>
- 2.4 Trench fill foundations to be lowered locally to allow drains to pass over. (See also clause 3.1(b))
- 2.5 NOTE: This is a redevelopment site and underground obstructions may be encountered. They are to be removed from new foundation and service run positions before foundations and services are formed. This drawing is based on the assumption that demolition will remove all underground constructions associated with any construction formerly on the site.
- 2.6 Mass concrete blinding 50mm min. thickness shall be quality controlled concrete as Note 4.2(b) placed onto foundation excavations soon as is reasonably practicable to prevent deterioration of the soils if trenches are to be exposed overnight.
- 2.7 Excavations are to be carried out as shown on the drawings. Give sufficient notice to the Building Control Inspector to allow for excavations to be inspected. Place concrete as soon as possible after inspection to prevent deterioration due to water, frost or other causes.

## 3.0 SERVICES

- 3.1 Where Existing and/or New services exit the building they shall be protected from the influence of building movement as follows:
  - (a) Where drains pass through the foundations they are to be cast in and provided with flexible couplings to allow for movement at the edge of the foundation.
  - (b) Where the top of foundations are lowered locally to allow for drains to pass over they shall have a lintel placed over and be wrapped in 100mm thk. low density expanded polystyrene or similar approved so that no load or movement is transferred to the drain run.
  - (c) Ducts shall be cast into the foundations as necessary for any incoming services.
  - (d) Should situations occur not covered above, the Engineers advice should be sought prior to proceeding.
- 3.2 Carry out all necessary inquiries to the appropriate Authorities & undertake investigations to establish extent & depth of any services potentially affected by the works. Where services are affected arrange with the appropriate authorities for them to be temporarily removed, diverted or disconnected as necessary. Protect all services from damage, including manholes and drains. Prevent debris from entering drains at all times. Make good any damage caused to services as a result of the works.

## 4.0 CONCRETE – INSITU

- 4.1 All concrete frame work is to be in accordance with all relevant parts of BS-EN-1992 'Design of Concrete structures' & 'The National Structural Concrete Specification for Building Construction' and as noted below. Reinforcement fabrication and supply to be CARES certified.
- 4.2 All concrete to be quality controlled designed mixes & in accordance with the specification. In addition to this all buried concrete shall be designed in accordance with the requirements of BRE Special Digest 1:2005 & BS 8500 pt1:2006. The Concrete supplier is to have QSRMC or similar approved certification.
  - (a) Reinforced concrete in foundations and ground floor and all below ground work.  
(Excluding piles & as below.)  
Min. cube strength of 40 N/mm<sup>2</sup> @ 28 days  
Max. aggregate size=20mm  
Design Sulphate Class: DS-1, ACEC Class: AC-22, Design Chemical Class: DC-22  
Recommended Cement & Combination Group=A to G inclusive.  
NOTE:- Not withstanding the above, concrete to have a minimum cement content of 325 Kg/m<sup>3</sup> and a max free water/cement ratio of 0.55.
  - (b) Mass Concrete excluding Underpinning.  
Min. cube strength of 20 N/mm<sup>2</sup> @ 28 days  
Max. aggregate size=20mm  
Design Sulphate Class: DS-1, ACEC Class: AC-22, Design Chemical Class: DC-22  
Recommended Cement & Combination Group=A to G inclusive.  
NOTE:- Not withstanding the above, concrete to have a minimum cement content of 320 Kg/m<sup>3</sup>.
  - (c) Mass Concrete Underpinning.  
Min. cube strength of 30 N/mm<sup>2</sup> @ 28 days  
Max. aggregate size=20mm  
Design Sulphate Class: DS-1, ACEC Class: AC-22, Design Chemical Class: DC-22  
Recommended Cement & Combination Group=A to G inclusive.  
NOTE:- Not withstanding the above, concrete to have a minimum cement content of 320 Kg/m<sup>3</sup>.
  - (d) Reinforced concrete in upper floors.  
Min. cube strength of 40 N/mm<sup>2</sup> @ 28 days  
Max. aggregate size= 20mm  
Cement type to be= CEM1\*\*  
Min. cement content= 325 Kg/m<sup>3</sup>  
Max. free water/cement ratio= 0.55  
\*\* Alternative cement combinations to be approved by the Engineer prior to use.
  - (e) Padstones  
Concrete for new padstones to be 1:1½:3 by volume, CEM 1 (Portland) cement :sand : aggregate mix cast in situ.

- 4.3 Concrete cover to reinf't shall be noted on detail drawings. Underground concrete to have a min. of 50mm to all reinf't on permanently exposed concrete surfaces – (For concrete cast against soil faces a minimum cover of 75mm shall be used). NOTE: Ground beams, pile caps etc shall be widened from the widths indicated on the drawings to achieve this additional cover see necessary.
- 4.4 For information regarding fixings, pockets or holes through concrete members see reinf't details and/or Architect's and Subcontractor's drawings. No holes other than those indicated on the Engineer's drawings shall be formed without prior permission of the Engineer. Fixings for brickwork are to be cast into concrete members as detailed on the structural drawings.

- 4.5 Mass concrete blinding 50mm min. thickness shall be quality controlled concrete as Note 4.2(b) placed under reinf't. concrete in contact with the ground and shall be laid onto foundation excavations as soon after the reduced dig and piling activities are complete or soon as is reasonably practicable to prevent deterioration of the soils.
- 4.6 Internal and exposed concrete finishes shall be as per the Employers Requirements and Contract. Test panels shall be provided and agreed and surface finishes shall be in accordance with the Quality of finish and type of surface finish defined in Eurocodes.

## 5.0 UNDERPINNING

- 5.1 The scope of underpinning is shown on the structural engineering drawings.
- 5.2 The underpinning will comprise trench fill concrete strip footings. These are to be formed in short lengths bearing a minimum 300mm in the natural ground and as noted on the drawings. Underpinning to be carried out in short sections not exceeding 1.0m to the depth as indicated on the drawings.
- 5.3 The Underpinning Contractor for the works is to be a member of the Association of Specialist Underpinning Contractors.
- 5.4 The drawings show the sequence of construction assumed in the design of the underpinning works. The contractor is to prepare his own sequence of works for which they will remain entirely responsible.
- 5.5 The contractor shall ensure the stability and structural integrity of the existing structure and adjoining structure are maintained during the underpinning works. The contractor shall take all necessary precautions to prevent damage to the existing buildings and structures within and adjacent to the works. The contractor shall design, install and maintain all necessary temporary works to comply with this.
- 5.6 Do not overload any completed or partially completed elements of works.
- 5.7 The Contractor shall allow for all necessary shuttering to construct the underpinning to the profiles shown on the drawings.
- 5.8 The materials for underpinning shall be as follows:
  - Mass concrete to be in accordance with Clause 4.2 (c) of this General Notes Drawing.
  - Dry Pack to consist of 1:3 by volume, sulphate resisting cement (SRC) aggregate. Use graded from 10mm down to fine sharp sand. Use a semi-dry mix with a maximum water/cement ratio of 0.35.
  - Reinforcement to be in accordance with Section 4.1 of this General Notes drawing. Dowel bars to be H16mm bars, 600mm long between adjacent pours. Allow 1No. dowel for every 0.25m2 of underpinning strip cross section.
- 5.9 Carry out, where practical, excavation and concreting of any section of underpinning on the same day. Keep un-concreted sections free of water ingress.
- 5.10 Pour mass concrete to a level 75mm under existing foundations after compaction.
- 5.11 Dry pack between mass concrete and foundation a minimum of 24 hours and a maximum of 48 hours after pouring. Dry pack to be well rammed in to full depth of 75mm void.
- 5.12 Backfill excavations with excavated material and compact in layers not exceeding 150mm. No excavation is to commence until the dry pack for the previous stage has been completed.

## 6.0 STEELWORK

- 6.1 All Structural Steelwork is to be Drawn, Fabricated, Erected, etc. in accordance with 'The National Structural Steelwork Specification for Building Construction 5th Edition (CE marking Version)', and as noted below.
- 6.2 All fabricated steelwork is to be CE marked in accordance with BS EN 1090. An Execution Class of EXC2 will apply.
- 6.3 All steelwork has been designed in accordance with all relevant parts of BS-EN-1993. Steelwork to be BS EN 10025 grade S275JR, excluding hollow box sections, which is to be to BS EN 10210, Hot Rolled grade S355JH unless noted otherwise on the drawings. (Cold rolled and Grade S235 will not be accepted for any structural members).
- 6.4 Steelwork shall be corrosion and/or fire protected in accordance with the following: (NOTE: Alternative protection systems can be specified, see 'Standard corrosion protection systems for buildings published by Steelconstruction.info)  
SYSTEM 1-C2-Low Risk, Interior & hidden within the building.  
Blast clean to Sa 2½ to BS EN ISO 8501-1 and paint, post fabrication with 85µm of Zinc Phosphate epoxy Primer.  
SYSTEM 2a, C3-Medium Risk, steel in perimeter wall exposed within the cavity but not in contact with outer leaf.  
Blast clean to Sa 2½ to BS EN ISO 8501-1 & paint, post fabrication with 85µm of Zinc Phosphate epoxy Primer. Faces exposed within the cavity shall be additionally painted with 150µm of High Build Bitumen after erection.  
SYSTEM 2b, C3-Medium Risk, steel in perimeter wall and in contact with outer leaf.  
Blast clean to Sa 2½ to BS EN ISO 8501-1 and hot-dip galvanize to BS EN ISO 1461 with a minimum average coating thickness of 85µm after fabrication. Two coats heavy duty bitumen with a total coating thickness of 200µm.  
SYSTEM 3a, C3-Medium Risk, Exterior of building.  
Blast clean to Sa 2½ to BS EN ISO 8501-1 & hot-dip galvanize to BS EN ISO 1461 with a minimum average coating thickness of 85µm after fabrication. NOTE: should Architectural paint finishes be required additionally treat steel with a mordant wash followed by a 40µm vinyl primer. Recommended Architectural Finish:-60µm Recoatable Polyurethane. The Fabricator is to ensure compatibility of the primer with the Architect's chosen finish.  
SYSTEM 3b, C3-Medium Risk, Exterior of building.  
TO BE USED WHERE GALVANIZING IS NOT APPROPRIATE e.g. curved members, complicated assemblies etc.. (As advised by the Fabricator). Blast clean to Sa 2½ to BS EN ISO 8501-1 and paint protect with 80µm of Zinc Phosphate Epoxy Primer followed by 100µm of High Build Epoxy MIO. Recommended Architectural finish:-60µm Recoatable Polyurethane. The Fabricator is to ensure compatibility of the primer with the Architect's chosen finish.

- SYSTEM 3c  
C3-Medium Risk, Interior of building but exposed within unheated areas.  
Blast clean to Sa 2½ to BS EN ISO 8501-1 and paint protect with 80µm of Zinc Phosphate Epoxy Primer. Recommended Architectural finish:-60µm Recoatable Polyurethane. The Fabricator is to ensure compatibility of the primer with the Architect's chosen finish.
- SYSTEM 4 C4-High Risk Interior of building (swimming pools etc)  
Blast clean to Sa 2½ to BS EN ISO 8501-1 and paint protect with 80µm Zinc Phosphate Epoxy Primer, High Build Epoxy MIO 100µm and sealed with a recoatable polyurethane finish to 60µm.

- WHERE INTUMESCENT FIRE PROTECTION IS REQUIRED TO STEELWORK  
System to be developed with paint specialist to suit situation. Note different point systems apply for interior and exterior use. System also varies if finish colour coat is required.
- 6.5 Where steel beams bear on padstones, they shall be mechanically fastened, (unless otherwise noted), with minimum 2No. M12 Chemical anchors, one at each end on alternative sides to prevent over turning or as noted on the drawings.
  - 6.6 All steelwork connections to comply with the following and as detailed on drawings unless noted otherwise.
    - (a) Bolts to be grade 8.8 and not less than 16mm diameter, unless specifically noted otherwise on the drawings. Not less than two bolts to be used on any connection. All bolts to have washers.
    - (b) H.S.F.G. bolts shall NOT be used.
    - (c) Minimum weld size to be 6mm continuous fillet weld unless specifically noted otherwise.
    - (d) All butt welds to be full penetration. Where required by the Architect exposed full and partial penetration welds to be ground flush.
    - (e) Site welding is not permitted unless specifically agreed with the Engineer.
    - (f) Seal ends of all hollow sections, ensuring that the inside faces of the sections are dry and clear of debris before sealing ends and openings.
    - (g) When finishing, remove surface laminations, shelling, cracks, inclusions & other surface flaws by chipping and/or grinding. Do not exceed the limits specified in current standards. Remove burrs & sharp edges by grinding. Carefully dress welds to remove slag & weld spatter by grinding.
    - (h) All members to be marked as part of the fabrication so that positions can be checked after erection.
  - 6.7 Before commencing erection, check foundations and other structures to which steelwork will be attached for accuracy of setting out, and holding down bolt for position, protruding length, condition and slackness. Report any inaccuracies and defects without delay.
  - 6.8 Set out and erect steelwork in accordance with the NSSS. Design and provide all temporary bracing necessary to ensure the stability of the steel frame and the structure upon which the steelwork is to be erected at all times during erection. Do not distort steelwork and do not exceed stress limits during erection.
  - 6.9 Where steel to steel connections are indicated on the Structural drawings, these shall be designed and detailed by the Fabricator in accordance with the Ultimate/Factored loads as indicated on the drawings. (Where no loads are shown the connection is to be designed for a minimum ultimate shear of 75kN plus an axial tension of 25kN). Designs and Fabrication drawings shall be submitted to the Engineer and Architect a minimum of 2 weeks prior to fabrication commencement for comment. When instructed, submit calculations before preparing detailed fabrication drawings.
  - 6.10 No holes other than those shown on the drawings are to be formed through steelwork without the approval of the Engineer.
  - 6.11 Steel to be cased/fire protected in accordance with the Architects details. Unless noted otherwise on these or Architects drawings, the steelwork is to be fire protected to achieve a minimum fire resistance of 1.0 hr or period as required in the Architects fire strategy.

## 7.0 TIMBER

- 7.1 Structural timber shall be Graded softwood complying with BS EN1995. Structural timber shall be a minimum of grade C24 unless otherwise noted on these drawings, and/or required by a specialist manufacturer. Timber to be preservative treated by organic solvent vacuum process or similar subject to approval.
- 7.2 All proprietary products are to be used strictly in accordance with the manufacturer's recommendations and instructions and as shown on the drawings.
- 7.3 JOIST HANGERS, NAIL PLATES, STRAPS, FRAMING ANCHORS, ANGLE BRACKETS AND TRUSS CLIPS: to be manufactured by Expanet Building Products Ltd, or equal approved. All components to be manufactured from hot-dip pre-galvanised mild steel.
- 7.4 Notches and holes in new solid timber structures to be avoided wherever possible and to be the minimum sizes needed to accommodate services. Position well away from knots or other defects which significantly affect the strength of the timber. The following parameters are to be adhered to in forming new notches and holes:
  - (a) Notches to be at the top of timber members and located between 0.1 and 0.25 of the span from the support. Notches must not exceed 0.125 times the depth of the rafter or joist.
  - (b) Holes to be drilled horizontally through the timber member and located equidistant from the top and bottom of the member. Hole diameters to be no more than 0.25 times the depth of the joist, spaced not less than three times the larger diameter apart and located between 0.25 and 0.4 of the span from the support.

- 7.5 Timber blocking is to be incorporated in all floor, ceiling and roof members. Blocking to match depth of floors, to be incorporated in all floor, ceiling joists and 50mm shelling over lean rafters. Fix blocking to rafters/joist within 100mm of supports for spans up to 2.5m, within 100mm of supports and at mid-span for spans between 2.5m and 4.5m, and within 100mm of supports and at one-third span positions for spans above 4.5m. Fix all blocking tightly to timber joists and rafters by skew-nailing with a minimum four nails each end. Provide folding wedges between joists and adjacent construction unless otherwise noted on the drawings.

## 8.0 MASONRY (Brick cladding, metal stud inner leaf and stud party walls)

- 8.1 Materials and workmanship shall comply with the recommendations of BS EN 1996, part 1 and 2 including the relevant National Annex.
- 8.2 Clay Bricks shall comply with all relevant parts of BS EN 771 & 772 and to be F2/S2 or F2/S1 quality and shall have a minimum compressive strength of 20N/mm<sup>2</sup>. Refer to the Architects Specification for additional facade requirements. Where Engineering bricks are specified on the drawings they shall comply with all relevant parts of BS EN 771-1, Table NA.6 with the following minimum compressive strengths, Class A 125N/mm<sup>2</sup>, Class B 75N/mm<sup>2</sup>.
- 8.3 Concrete blocks shall comply with all relevant parts of BS EN 771 & 772 and shall have the following performance requirements:
  - (a) Unless noted otherwise on the structural drawings all blockwork within the building envelope shall have a minimum crushing strength of 7.3N/mm<sup>2</sup>.
  - (b) Blockwork below DPC level shall be of suitable quality to Design Sulphates Class DS-1.
  - (c) Blocks are to be removed from wrapping and spaced to allow air to circulate prior to bulding into the works.
  - (d) See Architects drawings/details for sound insulation/block Density requirements to party walls.
- 8.4 Protect masonry units at all times from the weather both when in storage & once built into the works.
- 8.5 Masonry below DPC to be set in 1:3 (Class M12) cement/sand mortar, above DPC 1:1:6 (Class M4) cement/lime/sand mortar.
- 8.6 Brickwork and blockwork to be laid properly bonded as agreed with the Architect. Where new solid 215mm solid brickwork is specified, it is to be laid in a Flemish bond unless agreed otherwise with the Architect. Where new masonry abuts existing masonry, new work is to be fully tooled and bonded in to existing work or tied using a Wall Starter Systems where noted on the drawings.
- 8.7 Wall ties to comply with BS EN 845-1. Provide S.S. wall ties at 450 vertical and 900 max horizontal centres. Ties to be type 4 for external walls (Type B acoustic performance) and type 4 for cavity party walls (Type A acoustic performance) in accordance with the requirements of the and Building Regulations Part E. Tie centres to be decreased at openings – all as indicated in PD6697 and in accordance with the NHBC's enhanced requirements for ties above and below openings and at window & door reveals.

## 9.0 LINTELS

- 9.1 Concrete lintels are to be precast lintels supplied by Supreme. Alternative lintels may be acceptable provided details are supplied for comment. Minimum bearing on to masonry of 150mm. Propping to be in accordance with the lintel manufacturer's technical manual and propping requirements. Lintels relying on composite action with the masonry over are not structurally acceptable.

## 10.0 TEMPORARY WORKS

- 10.1 The Contractor shall be responsible for the design, installation & maintenance of all temporary works, whether or not the need for said temporary works is indicated on the drawings and for the safety and stability of the new works and any adjoining existing structure.

## 12.0 HEALTH & SAFETY / CDM REGULATIONS 2007

- 12.1 All drawings are to be read in conjunction with the Health and Safety plan & all risk assessments.
- 12.2 The drawings and specification of the works shall be read in conjunction with the Architect & third party drawings and the following documentation:
  - 1) Soiltechnics Site investigation report ref: STL2813D-G01, dated September 2015.
  - 2) Murphy Surveys topographical surveys
  - 3) Subscan – existing services records drawings
  - 4) BT & Virgin Media – Existing infrastructure drawings.
  - 5) National Grid – existing service drawings.
  - 6) Thames water – existing services/infrastructure drawings.
  - 7) UKPN – existing services records.
  - 8) Opening up works reports by ESG Ltd.
- 12.3 Prior to the commencement of foundation works the contractor shall undertake trial pits to acquaint themselves with the soils investigation and ground conditions, and where necessary provide temporary shoring where excavations are undertaken.
- 12.4 The existing floors have been asseses and new floors have been designed for the following loads:  
FLOORS  
Houses/Flats 1.5kN/m<sup>2</sup>  
New Balconies/Terraces 3.0kN/m<sup>2</sup>  
LWSF/Timber partitions 1.0kN/m<sup>2</sup>

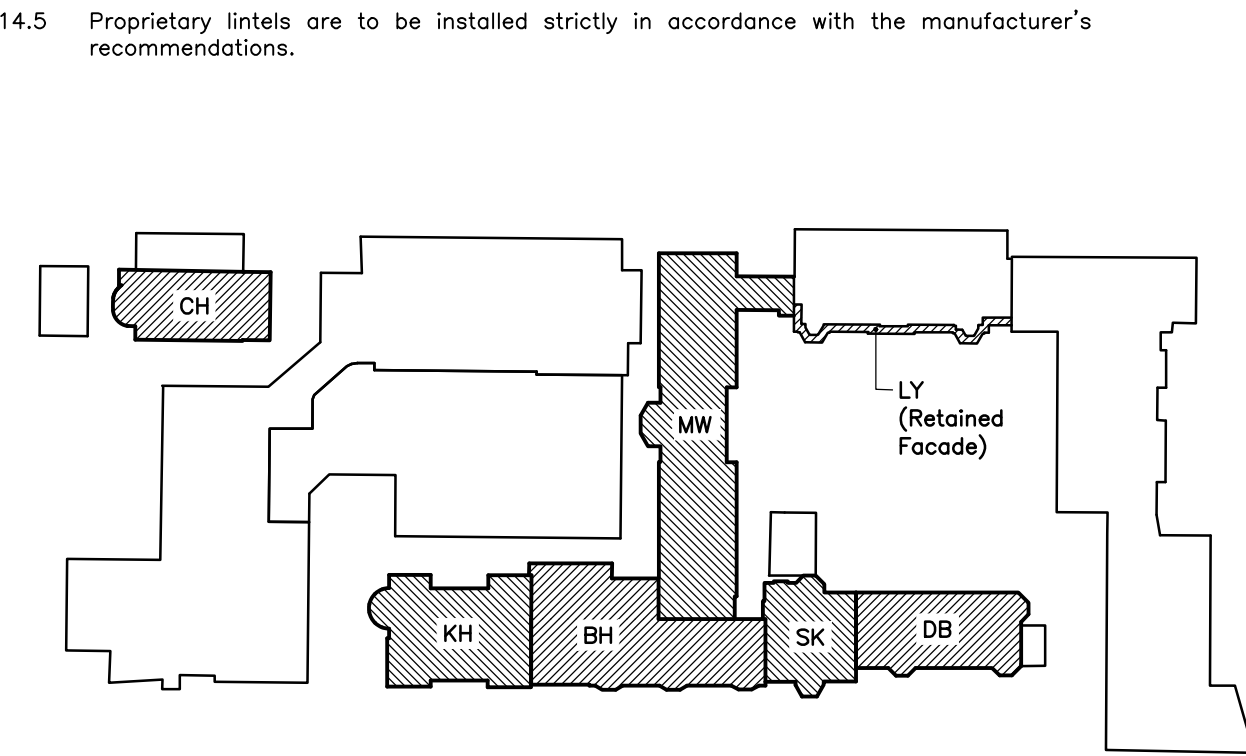
## 13.0 OPENING UP WORKS AND OTHER INVESTIGATIONS

- 13.1 The working drawings show the expected scope of structural works. This is based on only limited opening up works and investigations to localised parts of the building. The full scope of structural works cannot be confirmed until further opening up works and investigations have been carried out. The preliminary requirements for these are shown on the drawings. The contractor is to allow in his programme for phased opening up works and to allow the Design Team to assess the findings, and prepare final working details.
- 13.2 The contractor is to confirm in writing when each area is fully opened up and is available to inspect. Safe access for inspection is to be provided by the contractor. The area will be inspected by a member of the design team who will advise if further opening up works is required. Do not open up any areas not instructed in writing. All opening up works are to be protected at all times. After full opening up has been completed, allow 10 working days before issue of final repair details.
- 13.3 All floorboards are to be lifted by hand and lifted whole unless agreed otherwise in writing with Mount Anvil. Avoid damage to services within floor voids. The contractor is to take all necessary precautions to avoid splitting floorboards, and is to retain historic fixings for reinstatement where practicable. If floor boards are found to be tongue and grooved, boards are to be carefully cut with the tongues intact. Set aside floorboards and protect for future replacement.
- 13.4 Where skirting boards and panelling are to be removed, they are to be removed whole unless it has been agreed in writing with the architect that they can be cut. Set aside skirting boards and panelling and protect for future replacement.
- 13.5 Where plaster finishes on walls are to be removed, they are to be removed by hand and without damage to existing services and the masonry or studwork structure behind.
- 13.6 Before trial pits are excavated, the contractor is to satisfy himself as to the location of all existing services. Trial pits shall need to be left open overnight are to be properly protected to prevent rainwater ingress in to the pit, and to have effective barriers to protect passers by. Before the engineer visits, brush and clean all surfaces of the structure exposed. After the engineer has recorded the findings of a trial pit, the pit is to be backfilled as required on the drawings.

## 14.0 BUILDERSWORK PROPOSALS FOR NEW SERVICES INTEGRATION

- 14.1 Refer to the Services Engineer's drawings for the location and size of all builderswork holes, unless noted otherwise.
- 14.2 Unless noted otherwise, the builderswork details shown on structural engineering drawing (reference tbc) provide the contractor with a range of builderswork details and guidelines about where each detail can be used. These have been devised with reference to the Services Engineer's drawings. The contractor is to notify the structural engineer if the maximum dimensions given will be exceeded, or if the minimum distances given between adjacent holes cannot be met.

- 14.3 The contractor is to submit details of the proposed builderswork openings identifying clearly the size of sleeves and lintels to be used in each location, and the associated builderswork detail to be used.
- 14.4 Where core-drilling is proposed, accurately survey each drilling location (both entry and exit points). Setting out of each hole must be arranged to achieve the maximum accuracy. Tolerances on drilling positions to be +/- 10mm. The contractor is to ensure that there are no services in the wall where core-drilling is proposed.
- 14.5 Proprietary lintels are to be installed strictly in accordance with the manufacturer's recommendations.



## Key.

- CH The Chapel
- BH Bay House
- DB Dudin Brown
- KH Kidderpore Hall
- LY Lady Chapman Hall
- MW Maynard Wing
- SK Skeel Library

## General Notes

1. This drawing relates to the Existing buildings/structures only, (as indicated by hatched buildings in key below) inclusive of Kidderpore Hall, Bay House, Skeel Library, Dudin Brown, Maynard Wing, Lady Chapman (Retained Facade only) and the Chapel. For notes specific to buildings/structures refer to notes on the relevant drawings.

REV	DATE	DESCRIPTION	BY	CHK'D
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TITLE: General Notes Refurbishment of Existing Structures.			
PROJECT:  Project No. 11581 Kidderpore Avenue			
SCALE: N.T.S	DATE: June '16	DRAWN: DA	CHK'D: AT
JOB NO.	DRG NO.	REV.	
9100-DRG-99YY-GN002			

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