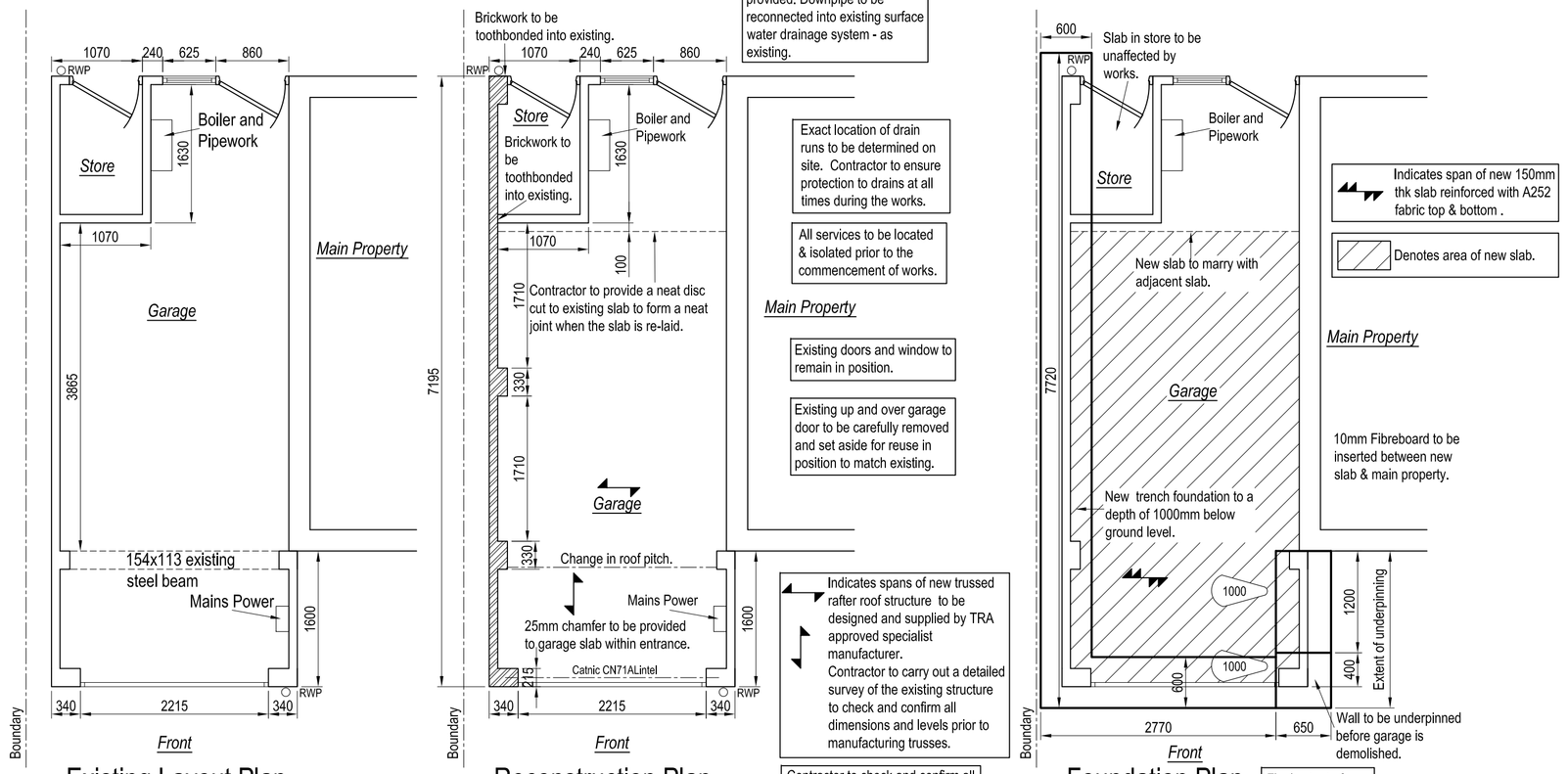


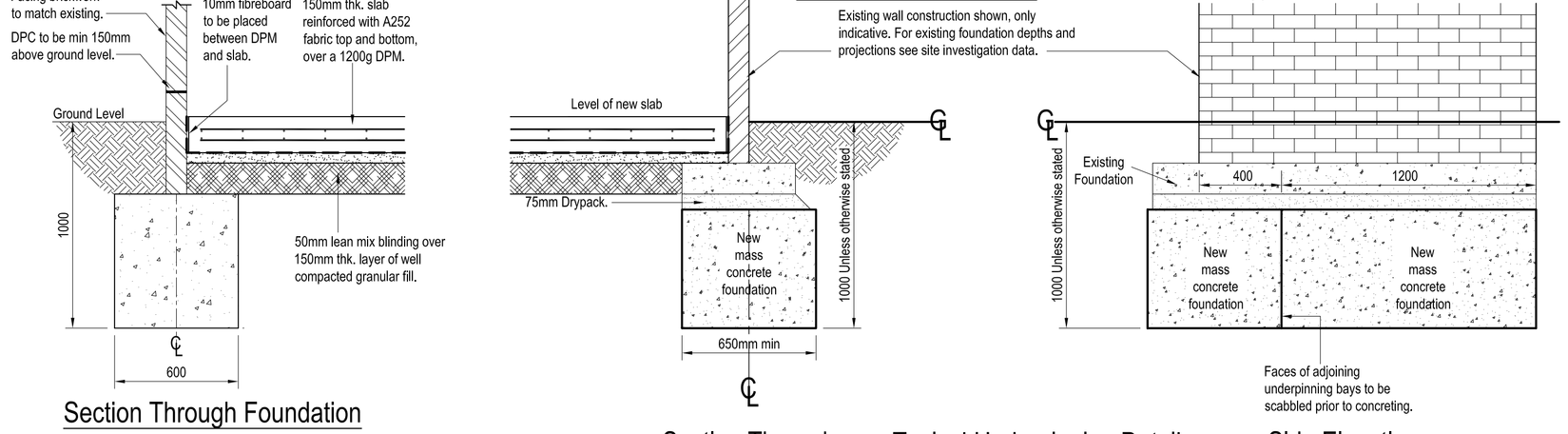
Existing Layout Plan
Scale 1:50

Reconstruction Plan
Scale 1:50

Foundation Plan
Scale 1:50

0.0m 1.0m 2.0m 3.0m 4.0m 5.0m

Scale 1:50.

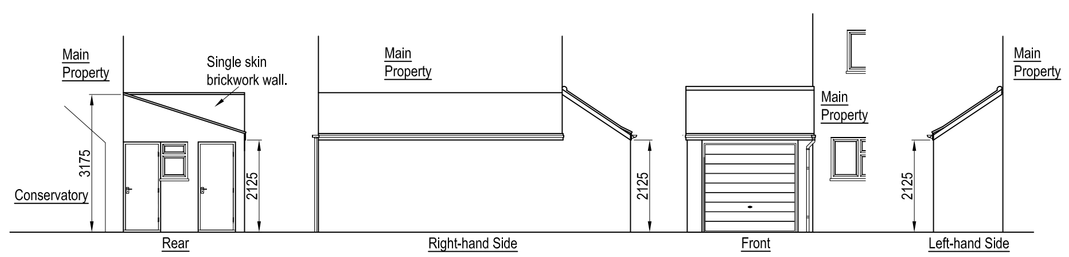


Section Through Foundation
Scale 1:20

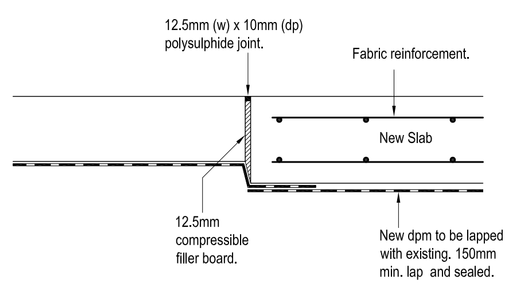
Section Through

Typical Underpinning Details
Scale 1:20

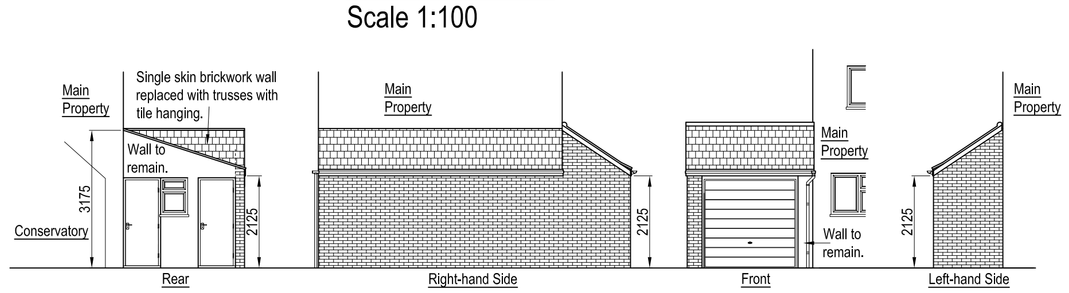
Side Elevation



Existing Elevations
Scale 1:100



Existing to New Slab Abutment Joint Detail
Scale 1:10



Proposed Elevations
Scale 1:100

0.0m 1.0m 2.0m 3.0m 4.0m 5.0m

Scale 1:100.

Drainage

Rainwater goods to be carefully removed and set aside for re-use in positions to match existing. Downpipes to be re-connected to the existing surface water drainage system. Existing surface water drainage system to be tested in presence of BC Officer to prove suitability.

Electrical System

To be designed and installed by a suitably qualified Electrical Engineer.

Proper design, installation, inspection and testing of electrical installations is required to protect persons from fire or injury.

Electrical installations to be inspected and tested during and at the end of installation, before they are taken into service.

Design and installations shall comply with Part P of the Building Regulations, and BS 7671.

All sockets and switches are to be situated at appropriate heights between 450mm and 1200 above the finished floor level.

Concrete

All work to be in accordance with BS 8110. All mass concrete for foundations to be minimum C25/30.

All reinforced concrete to be Grade C32/40 with 20mm max aggregate, minimum cement content of 325 kg / m³, and to have Class 2 sulphate resistance. The water:cement ratio to be 0.55 (ratio may change depending on the requirements of BS EN 206-1 / BS 8500). All concrete shall be vibrated.

All spacers required for the correct installation of the reinforcement are to be proprietary spacers and shall be supplied by the Contractor.

No site batching unless authorised by Contract Administrator and the Design Engineer.

The foundation design is based on a Gross Ground Bearing Capacity of 100 kN/m² and it has been assumed that there is no substantial variation in soil quality over the area of the site. Depths of foundations shown may be subject to variation on site once the subsoil has been exposed.

It must not be inferred that on completion of the work any of the foundations will comply with the Building Regulations (or the NHBC) requirements for new buildings.

No holes may be formed through any concrete member without written approval from the Design Engineer.

No reinforcement may be cut or bent without written approval from the Design Engineer.

All dimensions to be verified on site by the Contractor and any discrepancies shall be immediately notified to the Contract Administrator and the Design Engineer. The layout of the works is to remain unaltered unless otherwise agreed with the Contract Administrator and the Design Engineer.

Underpinning

General
Underpinning is to be carried out in bays as indicated.

Prior to concreting, the underside of the existing foundation shall be carefully cleaned of all soil. The sides of the excavation and formation shall be protected form heavy rain and frost.

Concrete shall be placed with care avoiding loose soil or rubbish from falling into the excavation. The concrete shall be carefully compacted by means of a mechanical poker vibrator.

The proposed underpinning works have been designed to improve the stability of the sections of foundations that have suffered structural movement only, and are not intended to include preventative underpinning to other areas. It must not be inferred that on completion of the work any of the foundations comply with the requirements of the Building Regulations (or the NHBC) requirements for new buildings.

The underpinning depths shown are for tendering purposes only. The final depth should be agreed on site with the Contract Administrator and Building Control Officer.

1000

Indicates the direction from which the underpinning is to be carried out, and the formation depths below ground level.

The width and position of the underpinning bays relative to the wall above shown on the layout plan are indicative only - their final alignment must be agreed on site between the Contract Administrator and the Building Control Officer.

Sequence Rules
The Contractor shall agree the sequence of works on site with the Contract Administrator prior to commencement of the works. The agreed sequence must be such that:

A) Not more than 25% of the total area to be underpinned is to be left in an unsupported condition at any one time.

B) Not more than 1.5m of wall is to be left in an unsupported condition at any one time in any one location.

C) Deeper pads are to be excavated and installed before adjoining shallower pads (if applicable - ie if depth varies).

D) Maximum lengths of bays are as specified on the drawings.

E) 24 hours (min) is to elapse between concreting the bay and dry packing. The drypack shall be 75mm thick 3:1 sand:cement mix with an expanding agent, (eg 'Febgrout' or similar) with only enough water to hold the mix together. It is to be well rammed between the underside of the existing foundation and the top surface of the underpinning bay.

F) No adjacent bays are to be excavated until at least 24 hours after the dry packing to any adjoining completed bay.

G) No departure from these rules shall be permitted.

H) Wall to be underpinned before garage is demolished.

Lintels

All external wall lintels to have a minimum of 60 years life guarantee.

Unless noted otherwise on the drawing, Catnic CN71A lintels (or equal approved by the Engineer) to be used over all internal openings, with minimum of 150mm end bearings.

Masonry

External leaf: 102.5mm facing brickwork to match existing.

Cavity trays to be provided above all openings and where a roof abuts a cavity wall. They should also be provided where the cavity is bridged by air bricks, meter boxes etc., extending minimum 150mm beyond the ends of the bridging. In areas of very severe exposure to driving rain a vertical dpm shall be provided behind meter boxes.

Unless noted otherwise on the drawing masonry construction locally below lintel bearings to be minimum of 27.5 N/mm² bricks or 7.3 N/mm² blocks laid in class M4 (1:6) mortar in accordance with BS 5628.

All masonry below dpc level to be constructed in 27.5 N/mm² bricks designation FL, or 7.3 N/mm² blocks, laid in M6 (1:4) mortar.

General

This drawing is to be read in conjunction with Cunningham Lindsey / Oriel standard contract documentation and all other relevant documents, unless alternative arrangements have been agreed with the Contract Administrator.

Do not scale this drawing, except for Planning purposes. The Contractor shall check all dimensions and levels on site prior to demolition of the existing structure. Any discrepancies shall be notified immediately to the Contract Administrator and the Design Engineer.

Layout of the works is to remain unaltered unless otherwise agreed with the Contract Administrator and the Design Engineer.

Contractor shall locate all services (including overhead) prior to commencement of any works on site and liaise with the Contract Administrator.

All temporary works are to be designed and detailed by the Contractor, including the provision for pumping, shoring & propping.

All excavations and exposed foundations are to be adequately supported and protected by the Contractor at all times in accordance with Health & Safety requirements.

All works to be in accordance with current Building Regulations.

All proprietary products are to be installed strictly in accordance with the manufacturers recommendations.

On completion of the works the Contractor shall be responsible for reinstating the surrounding ground finished surfaces to their original state.

Roof

Trussed rafter roof structure to be designed and supplied by TRA approved specialist manufacturer.

Contractor to carry out a detailed survey of the existing structure to check and confirm all dimensions and levels prior to manufacturing trusses.

All calculations and construction details are to be submitted to Building Control for approval a minimum of 21 days prior to commencement of the construction process.

Roof covering to match the existing and to be approved by the Contract Administrator prior to installation.

All 100x25 longitudinal, diagonal and chevron bracing shall be fixed throughout the roof in accordance with BS 5268 Part 3.

Reinforcement

Unless noted otherwise all cover is to be 50mm to all steel to all faces.

All steel denoted 'H' to be deformed bars type 2, high yield Grade B500 A, B or C to BS 4449 and, if required, bent in accordance with BS 8666.

Minimum laps to fabric to be 400mm minimum.

Lead Work

All lead work to be in accordance with all LSA requirements current at time of installation.

REV	DRAWN	DATE	DESCRIPTION
C	DP	27.05.2010	Drawing amended left hand elevation added
B	DP	18.05.2010	Drawing amended length of garage amended
A	LDS	14.5.2010	Drawing approved by Lead Office

SUBJECT TO LOCAL PLANNING AUTHORITY APPROVAL
NOT FOR CONSTRUCTION

SUBJECT TO LOCAL BUILDING CONTROL APPROVAL
NOT FOR CONSTRUCTION

THIS DRAWING WAS PRODUCED AT A1

Oriel
1st Floor Design Office, Solent House,
Solent Business Park, Whiteley,
FAREHAM, Hampshire PO15 7AF

JOB ID: Davis

SITE ADDRESS: 16 Hill Rise, Burbage, Hinckley, Leicester, LE10 2UA

PROJECT: Demolition & Reconstruction of Garage

DRAWING TITLE: Plans, Sections, Details & Elevations

INITIAL DRG DATE	DRAWN BY
April 2010	Lee Swain
SCALE: As Shown	CHECKED BY: DP

REFERENCE: 3253148 | DRG No.: 101 | Rev.: C