

Electrical System

To be designed and installed by a suitably qualified Electrical Engineer. Design and installation shall comply with Building Regulations Part P, and BS 7671, arrangements have been agreed with the Contract Administrator.

Proper design, installation, inspection and testing of electrical installations is 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. All dimensions shown include finishes, 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. Test certificate to be issued to Contract Administrator and the Design Engineer.

Building Control on completion of the works.

All sockets and switches are to be situated at appropriate heights between 450mm and 1200mm above finished floor level. Socket and switch boxes are not to be situated back-to-back.

Public Sewers

Before commencing works on site, CL and contractor to ensure that there are no adopted lateral drains or sewers within 3m of the proposed works.

If any are found, CL to advise the Design Engineer immediately as a Building Over agreement will be required with the Local Water Authority and approval must be obtained before the works are started.

Drainage

All underground uPVC drainage systems are to be manufactured in accordance with BS EN 752.

Backfill should be placed in layers not exceeding 300mm, and should be well compacted. Mechanical compaction should only be used when backfill is at least 450mm above the crown of the pipe, otherwise hand compacting should be used.

Backfill material must be free from boulders, building rubble, timber, vegetable matter and other deleterious material.

General

This drawing is to be read in conjunction with Seagryck / 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. All dimensions shown include finishes, Layout of the works is to remain unaltered unless otherwise agreed with the Design Engineer.

Contractor shall locate all services (including overheads) 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 advice provision for pumping, shoring & propping. Design to be undertaken by a suitably qualified professional.

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 materials to be fit for purpose and all works, whether specified or implied, to be in accordance with current Building Regulations, British Standards, Codes of Practice and accepted good building practice.

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.

The structural design has been prepared in accordance with the CDM Regulations. In addition to the usual risks associated with building works and materials the Contractor should also ensure:

- that demolition, excavation, drilling, cutting etc into existing structures or materials be carried out carefully in case there are any hidden services that all items to be demolished or removed, eg walls, beams, slabs etc, are assessed for any loadbearing or stability function and temporary propping provided as necessary
- that any existing structure or materials to be drilled, cut, or otherwise disturbed, be checked for asbestos content and appropriate action taken

Concrete Topping Specification

Concrete mix specification for insitu reinforced concrete topping

Minimum thickness of topping 65mm
Compressive Strength Class of Concrete C25 / 30
Minimum cement content : - 260 kg/m³
Minimum free water / cement ratio 0.65
Maximum aggregate size : - 10mm
Chloride content class : - C0/20
Consistence Class : - S2
Class of Cement : - CEM I 42.5R
Additive : (see Engineers Specification Note Min. / Max temperature of fresh Concrete : - 5 / 30
Intended Working Life of Structure : - 50 years
Nominal Cover to all reinforcement : - 25mm
Exposure Class : - XC1

Reinforcement
A142 steel mesh Grade B500B conforming to BS 4449:2005 placed centrally within thickness of topping, fits less than 50mm topping used, or with 50mm top cover if topping is more than 50mm thick.

Alternative use of polypropylene fibres at a density of 0.91kg/cub.m of concrete instead of the A142 steel mesh.

Surface Finish of topping

The required finish of the top surface of the topping can be achieved by travelling to an even texture with no ridges or steps. Sudden irregularities of levels is not permitted and a maximum deviation of level of 5mm over a 3m straight edge to be achieved.

The topping should be cured in accordance with the recommendations of BS4110 part 1:1997 cl.6.2.3.

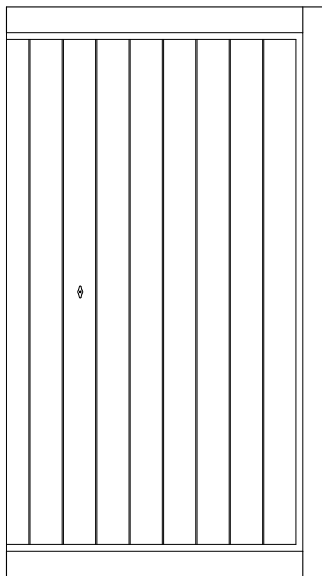
On completion of placing the topping, curing and protection of the finished top surface has to be allowed to take place before any construction loads are placed on the floor or the floor is used as a working surface.

On average 4 days should be allowed for curing of the topping, depending on site surface temperature being maintained between 5 and 10 degrees C.

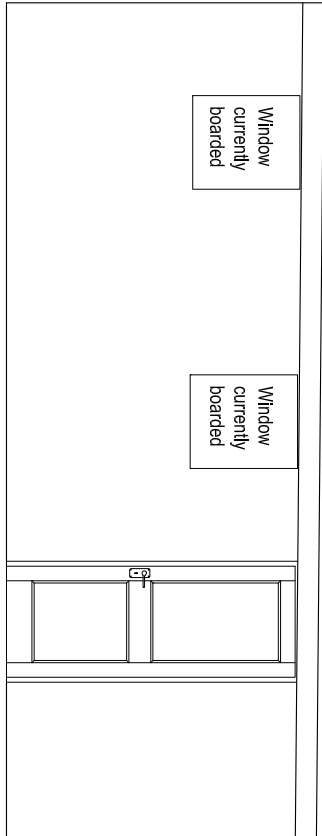
Protection to the surface of the topping during this curing time can be by an impermeable membrane (Polythene) or spraying the surface with an efficient curing membrane or a damp absorbent material (fessian or similar).

Building Regulations not required as long as:

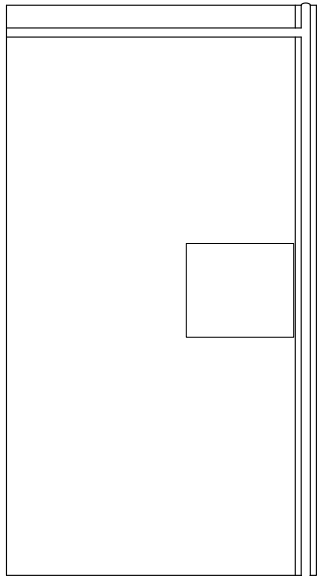
- structure is under 30m² in plan
- structure is built of predominantly non-combustible material
- structure is used for storage and not habitable space



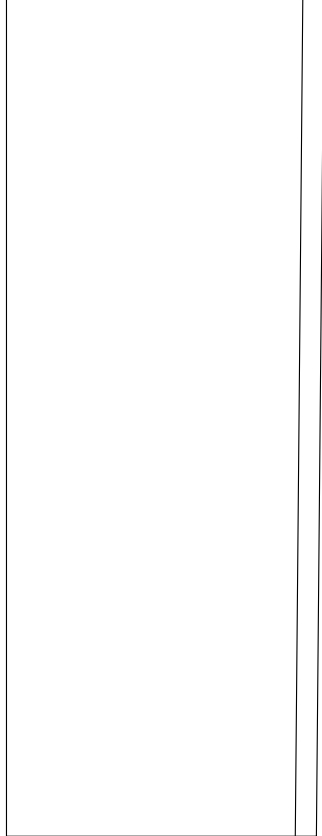
Front



Right

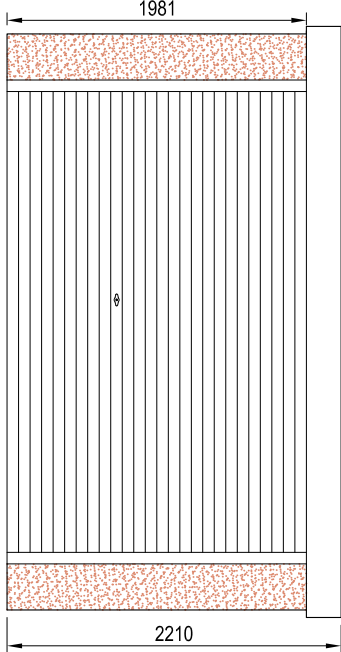


Rear

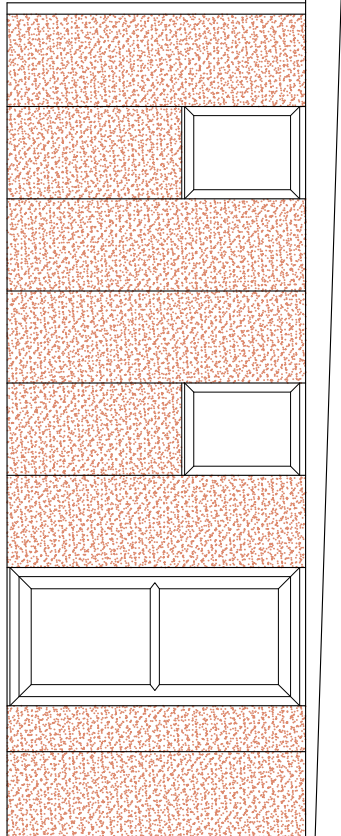


Left

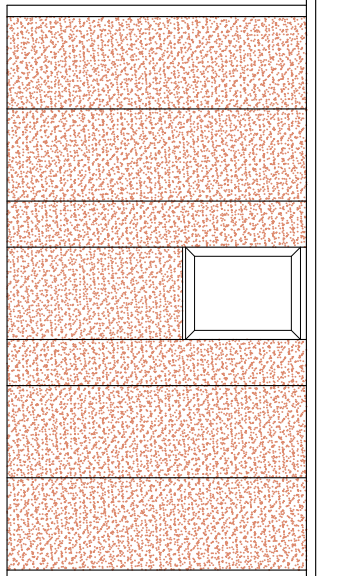
Existing Elevations



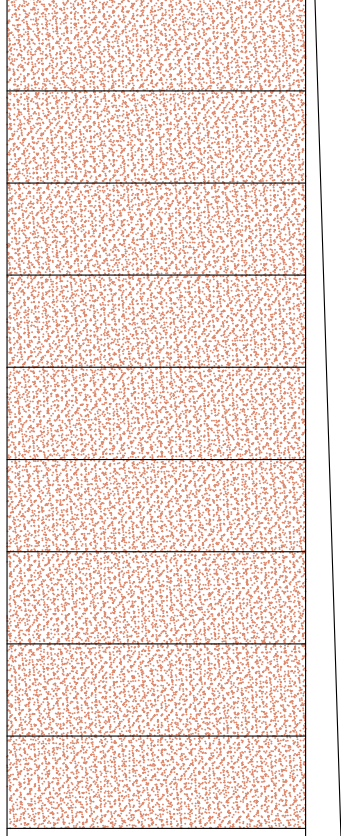
Front



Right

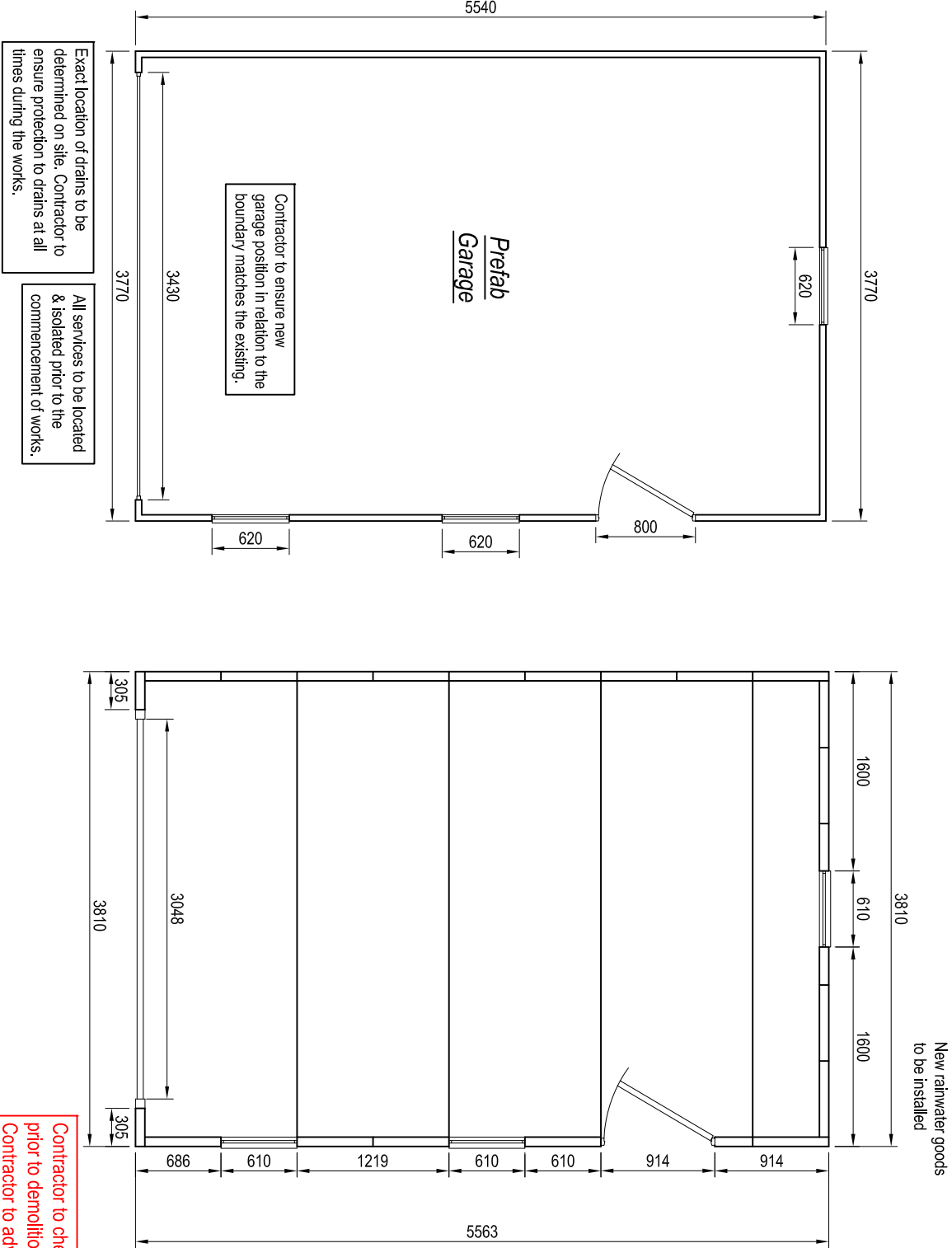


Rear



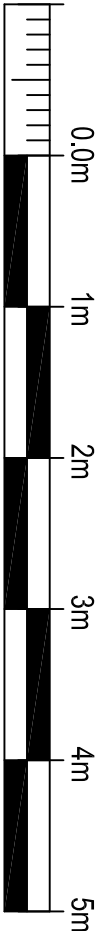
Left

Proposed Elevations



Existing Plan

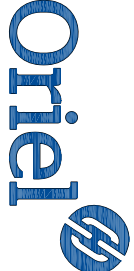
Proposed Plan



Scale 1:50

SUBJECT TO
LOCAL PLANNING
AUTHORITY APPROVAL
NOT FOR
CONSTRUCTION

A	M/S	26/06/19	Drawing approved by Seagryck
REV	DRAWN	DATE	DESCRIPTION
JOB ID			
Stem			
PROJECT			
Demolition and Rebuild of Prefabricated Double Garage on new Piled Raft			
DRAWING TITLE			
Layout Plans and Elevations			
INITIAL DRG DATE		DRAWN BY	
May 2019		HD	
SCALE		DRG SIZE	
1:50 1:20		A2	
REFERENCE		REV.	
6938744		101 A	



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