R. A. M. S.

REF: PP18-116

R Lowndes
Plumbing & Heating Ltd

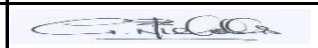
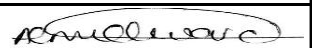
Construction of New 4 Bed Dwelling

at Bell View Road, Leek, Staffordshire, ST13 8ER

for Corner Stone Developments (Leek) Ltd

Start Date 02 January 2018

Duration 22 WEEKS

APPROVAL FOR ISSUE				PREPARED BY	GARY NICHOLLS
JOB TITLE	**NAME**	**SIGNATURE**	**DATE**	**POSITION**	**H & S ADVISOR**
Engineer				**DATE**	**01 January 2018**
Company H & S Advisor	Gary Nicholls		**20 December 2017**	**CHECKED BY**	**CRAIG LOWNDES**
Production Manager	Amy Millward		**20 December 2017**	**POSITION**	**Supervisor**
Client				**DATE**	**01 January 2018**

REVISIONS					
REVISION	**DATE**	**REVISION BY**	**APPROVED BY**	**DATE**	**ISSUED TO**
A	**13/01/2018**	G. Nicholls	C. Lowndes	**15/01/2018**	Main Contractor/Planners

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This Method Statement:	has been compiled in accordance with the Management of Safety and Health at Work Regulations 1999 and the Construction (Design and Management) Regulations 2015 and this document should be read in conjunction with enclosed specific risk assessments and COSHH assessments.			
Work Consists of:	Site Clearance, Formation of site compound and assoicated temporary buildings, the construction of plot foundations, installation of parking and sewers, the construction of the proposed property, installation of services and all associated external works including plot drains, site paving, fencing and landscaping.			
Access Considerations and Traffic Management:	Access/Egress, Pedestrian Access, Vehicular Traffic, Containers / Plant and Equipment. On site parking is not available. Note - Parking is limited and away from the site, cars shall not be parked in positions that block access routes and prevent the delivery of materials or prevent access by emergency vehicles.			
Person in Charge / Key People & Key Representatives:	**Position / Role**	**Name**	**Mobile Number**	**Office Number**
	Contracts Manager -	Craig Lowndes	0753-461-2925	
	Supervisor -	P.Hare	07738 - 683072	
	First Aider -	TBA	TBA	
	Client Representative -	TBA	TBA	
	Site Contact -	TBA	TBA	
Site Trades People, Operatives and Specialists:	**Position / Role**	**Name**	**Position / Role**	**Name**
	Plumber	John Wardman	Supervisor	Craig Lowndes
	Plumber	Adam Bloor		
	Plumber	D. Elken		
	Plumber			

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Specific Staff and Operative Training Requirements:		(ie. Confined Spaces / Abrasive Wheels / Working at Height / Plant Operations / etc.) All operatives have received training on Manual Handling, Work at Height, First Aid Awareness and general H&S Awareness. All operatives to receive site specific induction prior to commencement of work on site. (to be recorded and documented in the site file).
Key Materials Required:		Identify key materials that may have time delays on deliveries or design implications: Fuel
Key Plant and Tools Required:		Prior to starting, All equipment to be thoroughly inspected/checked to ensure it is in good working order including PAT testing if applicable. Mini Excavator / Tractor and Trailer
Other Essential Equipment:		(ie. Access Platforms / Winches / Ladders / etc.) PPE as detailed, Cat Scan and Genny
Good House Keeping	**Generic**	1) Before any work commences, all personnel will be inducted and receive instruction on contents of this document. 2) As a general rule, all operatives MUST sign in and out when they arrive or depart from site including any client records. 3) All personnel MUST comply at all times with any third party site rules where we are working on their sites. 4) The site is to be kept clean and tidy at all times to avoid unnecessary accidents through slips, trips or falls.
	Site Specific	1) Adhere to designated walkways and access routes 2) Welfare facilities are available within 500 yards of the site 3) No smoking on site 4) Minimise noise whereever possible 5)

Sequence of Operations:		WORK DESCRIPTION AND METHODOLOGY (Specifying methods of working, tools, materials and equipment utilised)	Risk Codes			
HOUSE KEEPING		**~ General Operations:**	**1**	**2**	**3**	**4**
	1)	On arrival a site induction will be carried out by the Site Manager to all operatives involved in the works. Necessary tool box talks to be given as work progresses, especially in respect of most properties being occupied whilst work progresses.	SAE	SOP	TSF1	
	2)	Operatives as a minimum before stepping on site shall be wearing a high-viz vest, approved safety boots or shoes and a hard hat. A main contractor may provide and request operatives to wear their corporate safety wear whilst working on their site.	PPE			
	3)	The operatives will then be given a list of site rules and the risk and method statements will be explained to all operatives. This will include making reference to the asbestos register and identifying and further additional risks or hazards.	SUA	SVA	SWL	SNS
	4)	The works will be carried out to a specific programme where possible and in the first stage it will be necessary for redundant materials or any strip out waste to be carted away, this will be achieved by	OIW	SNS	OKN	
PREAMBLES	**0B.1**	**~ SITE SET UP ~ General House Keeping:**	**1**	**2**	**3**	**4**
	1)	Prior to commencement, areas to be excavated shall be pegged out and cat scanned for services. Area to be fenced off to prevent access from the public or site users.	SOH	SSC	SSU	
	2)	Mud control should be effected at all time as lorries leave the main site. This will be effected by the washing of vehicle wheels prior to it leaving the site and entering the carriageway.	TEW			
	3)	Conversely, in dry conditions, dust is to be suppressed by use of water spray. Banksman to be instructed as part of his duties to monitor dust creation and to ensure, if required, that areas are damped down prior and during both excavation and site movement operations.	ODU	OID		
	4)	Road sweepers to be used, as required, to keep adjacent roads clean and free of mud / dust. Provide operatives with training re: the environmental procedures to be followed.	EBC			
PRELIMINARIES	**0B.2**	**~ SITE SET UP ~ Temporary Roads / Hardstanding / Etc.:**	**1**	**2**	**3**	**4**
	1)	Initially, areas earmarked for use as compounds, temporary roads, hardstandings, etc. are to be cleared and stripped of vegetation and all services, supplies, drains, trees, etc. protected at all times.				
	2)	Once stripped of vegetation, the area intended for use to be excavated to formation level and spoil stockpiled in an agreed location for re-use upon removal of the temporary surface.	SOH	SSC	SSU	
	3)	Imported stone will be tipped, spread and compacted to areas previously prepared in forming hardstandings and temporary access routes.				
	3)	Imported stone will be tipped, spread and laid along side the boundary of the 132 kV substation to link our Trackwork compound to the new Substation Compound.				

	3)	Material to consist of recycled 6F5 stone 75mm down, rolled and compacted to allow access for plant, lorries, visitor's transport and in forming hardstanding for contractor's cabins and welfare facilities.				
	4)	Once temporary use of road completed, material to be excavated and stockpiled and then removed by grab wagon to an approved recycling plant.				
	5)	Excavate from stock pile and spread and level spoil previously set aside to fill area previously used for temporary surface. Spread and lay and make good surfaces including turf/seeding if required.				
	7)	Through the period of use, especially in areas encountering large volumes of in and out traffic, regular inspections should be made and any damaged areas made good immediately.				
PRELIMINARIES	**0B.2**	**Site Prep ~ Permanent Site Set Up:**	**1**	**2**	**3**	**4**
	1)	The site is currently secured via a gated entrance and this is to be maintained at all times. Herras fencing is to be employed to secure and areas of danger or ongoing work.	SOH	SSC	SSU	
	2)	A groundhog unit will be provided throughout the duration of the works to provide welfare and toilet facilities for all operatives, staff and site visitors.				
	3)	Safety signs will be obtained relevant to the works and fixed and displayed in prominent positions in order to forewarn potential visitors and encourage them not to enter the site.	SOP	SUA		
PRELIMINARIES	**0C.1**	**~ SITE SECURITY ~ Site Protection:**	**1**	**2**	**3**	**4**
	1)	The site will be securely fenced and members of the public will be excluded from construction activities. However unauthorised persons entering the site is a possibility and therefore should anyone approach the current works all construction activities will cease and the person will be escorted from the site at the nearest convenient point.	SOH	SOP	SSC	
	2)	Herras style fencing will be delivered to site and offloaded by hand within the proposed working area. Fencing to be erected by hand and all panels will be secured using the proprietary clips.				
	3)	Once the metal fence / hoarding is in place all safety signs are to be posted (Warning of no access & works to be carried out listed) and all materials are placed inside this area.				
	4)	Safety signs will be obtained relevant to the works and fixed and displayed in prominent positions in order to forewarn potential visitors and encourage them not to enter the site.	SOP	SUA		
	5)	All plant, tools and materials to be stored in secure herras fenced compound or lockable container, position to be agreed on site.				
PRELIMINARIES	**0D.2**	**~ HEALTH AND SAFETY - Potential for Needle stick Injuries:**	**1**	**2**	**3**	**4**
	1)	A safe system of work has been developed and "MUST" be followed at all times with regard to the potential of needle stick injuries;	NSI1	NSI2	NSI3	NSI4
	2)	If you suspect the presence of exposed "Sharps", you must STOP work immediately and alert your line manager or site representative.				
	3)	Do not put your unprotected hands anywhere you cannot see. If you cannot see what you are going to touch, wear appropriate protective gloves. Cover any cuts or abrasions with waterproof plasters.				

	4)	Under no circumstances should any worker be expected to touch a discarded needle with their bare hands. Where needles are found there must be a procedure for safe disposal.				
	5)	It is normally recommended that if a needle-stick injury arises the bleeding should be encouraged (on no account suck the wound) and the wound washed in cold running water with soap and covered with a dry dressing. Notify your line manager immediately.				
	6)	Attend the nearest A&E hospital immediately. (A protective injection against hepatitis B can be given but this must be administered within 48 hours after the injury).				
	7)	Needle-stick injuries are reportable to the Health and Safety Executive under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).				
PRELIMINARIES	**0D.5**	**~ HEALTH AND SAFETY - Working Outside - SunBurn:**	**1**	**2**	**3**	**4**
	1)	Sunburn is a form of radiation burn that affects living tissue, such as skin, that results from an overexposure to ultraviolet (UV) radiation, commonly from the sun.	SUB			
	2)	Common symptoms in humans and other animals include red or reddish skin that is hot to the touch, pain, general fatigue, and mild dizziness.				
	3)	An excess of UV radiation can be life-threatening in extreme cases. Exposure of the skin to lesser amounts of UV radiation will often produce a suntan.				
	4)	Excessive UV radiation is the leading cause of primarily non-malignant skin tumors. Sunscreen is widely agreed to prevent sunburn and some types of skin cancer.				
	5)	Clothing, including hats, is considered the preferred skin protection method. Moderate sun tanning without burning can also prevent subsequent sunburn, as it increases the amount of melanin, a photoprotective pigment that is the skin's natural defense against overexposure.				
	6)	Sunscreen is effective and thus recommended for preventing melanoma and squamous cell carcinoma. There is little evidence that it is effective in preventing basal cell carcinoma. Other advice to reduce rates of skin cancer includes: avoiding sunburning, wearing protective clothing, sunglasses and hats, and attempting to avoid sun exposure or periods of peak exposure.				
	7)	Site Induction will identify current risks, especially in the summer months with some sites actually banning the wearing of shorts and encouraging the use of high protection sun cream especially to nose, tops of ears, arms and back of neck.				
PRELIMINARIES	**0E.1**	**~ USE OF POWER TOOLS - House Keeping**	**1**	**2**	**3**	**4**
	1) **2)**	DO disconnect the tool before adjusting or working on it DO disconnect the tool when not in use	OAW	PFE	UEL	SEC
	3) **4)**	DO report any defects immediately DO keep tools clean	PDC	PES		
	5) **6)**	DO wear appropriate protective equipment - goggles, ear muffs, helmet etc. DO check for existing services within concealed areas before cutting or drilling	PET	PFM	PPT	

	7) DO NOT carry the tool by its cable **8)** DO NOT use any “makeshift” cable.	PNO	PVI	SEC	TCM
	9) DO NOT try to repair a defective tool - report it				
	10) All power tools to be PAT tested every 3 months **11)** Inspect power tools every day prior to first use to ensure fit for purpose	OFP	PCU	PIN	PCB
PRELIMINARIES	**0F.2**	**~ ACCESS - Specialist Scaffolder**	**1**	**2**	**3**	**4**
	1) Please refer to attached RAMS provided by appointed / approved scaffold contractor. RAMS have been checked and approved by the H&S Manager.				
PRELIMINARIES	**0F.5.1**	**~ CRANEAGE - House Keeping**	**1**	**2**	**3**	**4**
	1) Using a crane can eliminate, or substantially reduce site risks related to manual handling and mobile plant. However, lifting operations often present severe risks in themselves, which must be controlled.	PLE	PMP		
	2) Lifting operations involving a crane require a trained operator, a trained slinger/signaller, and a lifting plan drawn up by a competent person.	LMO	OCB		
	3) Initial lifting plan to be prepared by a competent person following a pre-arranged site visit. At this visit, competent person to agree site preparation to eliminate risks where possible.				
	4) All lifting accessories should have a certificate or marking indicating they have been thoroughly examined in the last 6 months				
PRELIMINARIES	**0F.5.2**	**~ CRANEAGE - Site Preparation**	**1**	**2**	**3**	**4**
	1) Ensure everyone involved in the lift and, those affected, are properly briefed				
	2) Double check that safety precautions are in place before the lifting starts				
	3) Define exclusion zones around lifting operations, and make sure people stay out of them.	SOP	SWL		
	4) Ensure that the lifting operations are properly co-ordinated, so all trades working on site know about the operation, and not put to risk.	LMO			
	5) Safe access to the work area to be provided by full external scaffold constructed by specialist in the employ of the main contractor	ZCS	ZFE		
	6) Fall arrest to be provided internally and beneath work area in the form of TRAD decking, constructed on behalf of the main contractor by TRAD Structures Ltd.				
PRELIMINARIES	**0F.5.3**	**~ CRANEAGE - Roof Trusses:**	**1**	**2**	**3**	**4**
	1) Crane and lifting crew to be hired from AKA Cranes Limited. AKA to develop and pre-agree with both the main contractor and the Carpentry Manager a workable lifting plan including site specific RAMS. (copy of RAMS to be included with this document)	LMO	OCB	PLE	PMP
	2) Take the time to check the lifting plan against what you actually see on site				
	3) Check the method of work with your supervisor and raise any concerns				

	4)	Work to the standard hand signals, and ensure that you understand your role in the operation				
	5)	The lifting operation should be appropriately supervised				
PREAMBLES	**1A.1**	**~ EXCAVATION ~ Controlled Disposal of Excavated Material:**	**1**	**2**	**3**	**4**
	1)	In seeking quotations and prior to final sellection, all companies tendering for the contract to dispose of all surplus arisings from the site will be supplied with both Type 1 and Type 2 Site Investigation Reports and the orders will be placed in line with the successful contractors guidance and recommendations.				
		Prior to commencement on site, RAMS documentation will be sought from the successful haulage contractor, checked, approved and annexed to this document. Part of this appointment will be for the successful contractor to remove all waste under controlled and managed arrangements, providing information and records to substantiate and document same.				
	2)	All surplus excavated material to be loaded into wagons by our groundworkers machines under the direct control of our approved waste handler and removed to their elected point of controlled disposal.				
PREAMBLES	**1C.1**	**~ MASONRY ~ Cutting Masonry with Stihl Saw** (Only with face fitted masks):	**1**	**2**	**3**	**4**
	1)	Where bricks are to be purposely cut to size for laying such as arches, nibs, closers, cut ups, etc. the cutting will take place at the point of laying. If the place of laying is via access scaffold, sacrificial timbers or backing materials are to be provided to ensure no damage occurs to any scaffold boards or adjacent equipment.	OAW	PFE		
	2)	A template will be constructed to fit on top of the sacrificial material to hold the brick in place. Once placed and held measurements will then be taken from the area of use and the brick shall be marked up with clear lines using a waterproof marker.	OCB	ODU	OID	
	3)	Cutting will be carried out by a trained and experience operative using a Stihl saw. The saw is to be checked on a regular basis and regularly returned for servicing as deemed appropriate.	PDC	PES	PET	PFM
	4)	Correct PPE to be worn at all times including Gloves, Eye Goggles, Ear Defenders and Face Fitted Dust Masks. Equipment is not to be tampered with and maintained in good condition.	DDD	OFP		
	5)	Diamond tip blades are to be employed in cutting bricks, blocks, stone, etc. and they must only be removed and fitted by a skilled and trained operative.				
	6)	Dust suppression whilst cutting is to be achieved by the use of a portable pressurised bottle system supplied by the manufacture comprising of approx. 8 litres of water. The bottle is connected by narrow plastic tubing and water flow achieved by pressuring the tank by hand.				
	7)	Even with the use of water suppression or extraction, suitable RPE with an assigned protection factor of at least 20 will still be needed, for example either FFP3 filtering facepieces or orinasal respirators with P3 filters. Wearers should be appropriately trained and face fit tested for the equipment.5 A qualitative fit test is acceptable.6 Nuisance-grade dust masks do not protect your lungs. Emptying vacuum cleaners will also require the wearing of suitable RPE.				

PREAMBLES	1C.2	~ MASONRY ~ Work in Cold Weather	1	2	3	4
	1)	Fortunately there are relatively few periods in the UK when the daytime air temperature remains below 4 degreesC and if it is below freezing it may be impractical to continue with masonry work in any case; not least because the outdoor water supply will freeze.	OIW	ZEN		
	2)	However, during the winter months all stocks of bricks and blocks should be covered to provide protection against rain, frost and snow. Bricks or blocks that become saturated should not be used until they have dried out and in cold weather they risk damage if they freeze.				
	3)	Mortar likewise needs protection during very cold weather. If mortar freezes during storage any frozen material must be discarded. Neither should mortar be laid on frozen surfaces. Anti freeze agents for mortar are not recognised in British or European Standards.				
	4)	As mortar hardens and develops strength more slowly in cold weather, new masonry, or areas under construction, should be covered and protected from the elements. This is likely to require two layers - thermal protection such as hessian or some form of quilting and a waterproof sheet to stop the under layer getting wet.				
	5)	Protective covers should not be in contact with the face of the wall to avoid ‘sweating' and consequent staining. The covers should be secure and kept in place until the mortar dries.				
PREAMBLES	**1C.3**	**~ MASONRY ~ Carrying Bricks, Blocks, Stones and Tiles**	**1**	**2**	**3**	**4**
	1)	Wherever it is reasonably practicable, materials will be lifted mechanically by forklift, handlers, cranes or hoists.	OIF	OLM		
	2)	Where it is not reasonably practicable and materials need to be moved from one level to another, staircases are to be provided not ladders.	SAE	TSF1		
	3)	Materials must not be carried whilst using a ladder.				
	4)	Specific assessments must be prepared where repetitive manual handling is required, twisting, turning or where operatives are required to lift large or bulky items.	MEM	MHB		
PREAMBLES	**1C.3.1**	**~ MASONRY ~ BRICKS AND BLOCKS - Site Preparation**	**1**	**2**	**3**	**4**
	1)	Brickwork and blockwork, wall ties, damp proof membranes, cavity details, openings and lintels will be in accordance with Architectural and/or engineers drawings.				
	2)	Materials to be ordered by the main contractor delivered directly to site and offloaded in packs by vehicle grab or site forklift and placed on a solid base for distribution. Bricks/blocks to be covered by tarpaulin to avoid adverse water saturation.	OCB	OPT		
	3)	Bricks/blocks to be distributed across site by forklift or other mechanical means by main contractor and loaded in positions of work. If foot scaffolds are provided, check and test that they are adequately stable to support both labour and materials. For 1st lift and then onto scaffold loading bay for subsequent lifts.	WH4	WFE		
	4)	Once unpacked, bricks/blocks are to be selected and used to suit condition and location. Chips are not acceptable where a facework finish is required.				

	5)	Materials are to be collected from drop off positions and manually distributed to the areas of laying. Avoid overloading when carrying and ensure walkways are kept clean to avoid tripping.	MEM	SEC	TSF1	MHB
	6)	The distribution of materials across the scaffold is to be closely monitored to avoid excessive point loads and excessive manual handling requirements.	ODU	ISI		
SITE CLEARANCE	**2B.1**	**~ Site Strip - Remove Vegetation:**	**1**	**2**	**3**	**4**
	1)	Clearance of all vegetation and shrubs shall be completed using a 360deg excavator or similar. The surplus vegetation shall be stockpiled in appropriate piles throughout the site. The surplus vegetation shall then be disposed of appropriately.	EBC	SAE	SWL	
	2)	Initial site strip and reduction of levels to formation will be excavated by mechanical means. When near or parallel to service trenches and sewers the trench support will be installed as the excavation progresses applying positive ground support at all times.	EBC	PMP	OCB	
SUBSTRUCTURES	**3A.1**	**~ EXCAVATION ~ House Keeping ~ Generally**	**1**	**2**	**3**	**4**
	1)	The site supervisor will supervise all excavations. Main Contractor's Site Manager to witness ground breaking activity and record photographs with marking out etc., A daily diary will be kept by the Site Supervisor & briefings held with staff daily.	SAE			
	2)	A permit to dig will be issued by the Main Contractor where required. A permit to enter the confined space or trench will be issued by the Main Contractor where required or at least, prior to persons entering the excavation, inspection should be carried out and recorded by a competent person to deem safe.	CSO	CSW		
	3)	CAT and genny survey of the area will be carried out prior to starting by a trained operative Consider the proximity of services to the works area; should the services be within 1m of the works area consider the use of insulated tools, flame retardant PPE – including long sleeves etc.	EUS			
	4)	Where excavations are to be carried out by machine, a suitable tracked excavator shall be employed ensuring a firm working base and adequate room for swing of excavating arm. Should room for work be restricted, then excavations will be carried out by hand.	SWL	PMP		
SUBSTRUCTURES	**3A.4**	**~ EXCAVATION - Excavating foundation trenches:**	**1**	**2**	**3**	**4**
	1)	Foundations will be excavated by mechanical means to full depth. When near or parallel to service trenches and sewers the trench support will be installed as the excavation progresses applying positive ground support at all times.	EBS	PMP	OCB	EBC
SUBSTRUCTURES	**3D.2**	**~ HARDCORE ~ Hardcore Beds and General Fill:**	**1**	**2**	**3**	**4**
	1)	Hardcore will be ordered and delivered to site in vehicles suited to access, location and quantity of material ordered.				
	2)	Once on site, material will be tipped / stored in areas agreed, ensuring that position is as near to final placing as is practicable.	OIF			

	3)	Following ground preparation, specified hardcore will be used to provide the required construction sub-base.				
	4)	Hardcore will be moved and placed using a mechanical excavator, spread and levelled and then compacted using a vibrating plate.	OID			
	5)	Bulk hardcore fill shall be placed and compacted in layers, each not exceeding 150mm per layer.	PVR2			
	6)	Hardcore to be sand blinded with the material transported and laid as for the hardcore. Where required a visqueen damp proof membrane placed and lapped in accordance with the specification.				
	7)	The dpm if required shall be laid in one continuous sheet where possible, laps to be min. 150mm and care taken to avoid damage or punctures.				
SUBSTRUCTURES	**3E.1**	**~ CONCRETE ~ Concrete in Foundations:**	**1**	**2**	**3**	**4**
	1)	The base of the excavation will be levelled and compacted and blinded with lean mix concrete to a depth of 100mm.	BCC	BCE		
	2)	The concrete will be delivered to site in a volumetric concrete wagon and will be poured directly into the excavation if access is possible.			PMP	PFE
	3)	If direct access is not possible, concrete is to be transported and placed using a mechanical excavator and compacted with a vibrating poker.	BCC	BCE		
	4)	Concrete for the structural slab/screed will be structural concrete (ensure adherence to client strength specification) and placed to agreed tolerances.				
	5)	Concrete shall be poured along to distribute the load evenly. To level the concrete to its correct level shall be by Concrete poker, rake or shovel low vibration pokers shall also be used to compact the concrete and remove all the air.	MEM			
	6)	The concrete shall then be screeded level by beam screed of timber tamp. Surface of finished concrete to be trowelled smooth by power float or by hand as deemed appropriate.				
SUBSTRUCTURES	**3I.1**	**~ MASONRY TO DPC**	**1**	**2**	**3**	**4**
	1)	Operatives are to work alongside groundworkers in setting out and forming openings for drain entry / exits and service feeds.	TEW			
	2a	*Mortar for the works will be ordered to site pre-mixed as and when required and periodic tests will be made for consistency and strength.*	BCE			
	2b	*Mortar for the works will be mixed on site via a silo installation as and when required and periodic tests will be made for consistency and strength.Silo to be provided and maintained by main contractor.*	BCE			
	3)	Setting out is to be agreed with the site agent and gauge rods prepared and used to give consistency of joint width and level. Work to be level and plumb at all times with regular checks being made.				
	4)	Damp proof courses to be inserted in all positions as indicated on design drawings and where applicable overlapped with dpm.				

	5)	Bricks/Blocks are to be laid in such a manner that no one portion is raised more than 1.2m above another at any one time.	OCB	TOR	FLR5	OID
	6)	Facing bricks are to be laid and bonded to match where an existing structure exists, tied every fourth course if practicable.				
	7)	Both leaves of the cavity wall shall be raised at the same time and tied together with the specified wall ties. (Care to be taken to ensure minimum mortar spillage in cavity).				
	8)	Cavities are to be left clean for groundworkers to fill with lean mix concrete up to ground level and tied by specified wall ties.				
	9)	Where indicated on drawings, expansion joints are to be formed and proprietary flexible material inserted in the joint pointed with mastic.				
	10)	Openings are to be formed for drain pipes or services. Ensure lintols have adequate bearing at both ends are bedded on a full bed of mortar.				
	11)	Areas of work are to be kept clean and tidy at all times and surplus / waste materials either taken to a skip as indicated or placed in an agreed area ready for collection. (Recycling rules to be adhered to).	ZCS			
SUBSTRUCTURES	**3J.1**	**~ GROUND FLOORS ~ Beam and Block / Jetfloor Flooring Systems**	**1**	**2**	**3**	**4**
	1)	The walls that are to receive the beams will be checked for dimensions and levels by a competent person prior to work commencing.				
	2)	The beams will be placed in a suitable area when delivered to the site to enable a short or zero distance to transport to their final place of fixing.	BCC	OIF		
	3)	If available, a propriety lifting device will be used, if not, a certified sling/s will be used, this sling is to be checked frequently by trained staff.	MEM	OLM		
	4)	Each beam will be laid in accordance with the design and manufacturers installation guide.				
	5)	Line and level of each beam is to be checked as positioned.				
	6)	Blocks/Infills will be installed at each end of the beams to check fitting of blocks as per the specification.				
	7)	Only a trained slinger will attach and detach beams from the lifting device.				
	8)	The beams will be laid in sequence to allow check blocks to be added to confirm item 6.				
	9)	Once beams have been laid, blocks will be inserted as per the specification, care and attention to ensure no cracked or damaged blocks are used.				
	10)	Once blocks are in place, the screed will be laid according to project design details.				
SUPERSTRUCTURE	**4A.1.1**	**~ MASONRY ~ Brickwork and Blockwork**	**1**	**2**	**3**	**4**
	1)	Operatives are to work alongside groundworkers in setting out and forming openings for drain entry / exits and service feeds.				
	2a	*Mortar for the works will be ordered to site pre-mixed as and when required and periodic tests will be made for consistency and strength.*	BCE			

	2b	*Mortar for the works will be mixed on site via a silo installation as and when required and periodic tests will be made for consistency and strength. Silo to be provided and maintained by main contractor.*	BCE			
	3)	Setting out is to be agreed with the site agent and gauge rods prepared and used to give consistency of joint width and level. Work to be level and plumb at all times with regular checks being made.				
	4)	Damp proof courses to be inserted in all positions as indicated on design drawings and where applicable overlapped with dpm.				
	5)	Bricks/Blocks are to be laid in such a manner that no one portion is raised more than 1.2m above another at any one time.	OCB	TOR	FLR5	OID
	6)	Facing bricks are to be laid and bonded to match where an existing structure exists, tied every fourth course if practicable.				
	7)	Internal walls are to be tied into the inner skin of the cavity wall or connected using prefabricated starter sets.				
	8)	Both leaves of the cavity wall shall be raised at the same time and tied together with the specified wall ties. (Care to be taken to ensure minimum mortar spillage in cavity).				
	9)	Cavities are to be closed at all openings with either returns and dpc or by using prefabricated cavity closer systems.				
	10)	Cavities are to be filled with insulation as specified, formed to design width and skins of cavity walls tied by specified tie bars.				
	11)	Facework joints are to be finished to specified technique and left rough where surface is to receive plaster or similar finish. (snots to be removed).				
	12)	Where indicated on drawings, expansion joints are to be formed and proprietary flexible material inserted in the joint pointed with mastic.				
	13)	Openings are to be formed as work proceeds either by building in final component or by using dummy frames. Ensure lintols have adequate bearing at both ends and that any padstones built in are bedded on a full bed of mortar.				
	14)	When working off scaffolds, only prescribed routes to be used and access should be made via secure ladders, trap doors and safety gates. Ensure all secure shut after use.	WH2	WH3	WH5	WH1
	15)	DO NOT ALTER SCAFFOLDS - Even if operatives are trained to erect, dismantle and alter scaffold, NO alterations should be carried out unless under any circumstances.	ZFE	ZOF	ZSH	ZUA
	16)	Areas of work are to be kept clean and tidy at all times and surplus / waste materials either taken to a skip as indicated or placed in an agreed area ready for collection. (Recycling rules to be adhered to).	ZCS			
SUPERSTRUCTURES	**4A.1.2**	**~ MASONRY ~ Laying and pointing up Bricks / Blocks to gable ends and in roof spaces:**	**1**	**2**	**3**	**4**
	1)	Main contractor to provide full access systems to enable bricklayers to work on gables, party walls and associated cut ups to suit required roof pitches. Access systems to include mixed height staging to suit cut ups.	WH1	WH3	WH5	ZCS

	2)	Full area fall arrest systems such as "Trad-Deck" to be provided by the main contractor to minimise depth of fall should a slip occur. This system should also prevent the fall of materials such as loose bricks and off-cuts.	WH2	WH4	WH6	ZOF
	3)	All access to be made by safely tied and secured ladder units.				
	4)	Bricks / Blocks to be cut and laid as detailed in other sections to match main construction.				
SUPERSTRUCTURES	**4A.2**	**~ MASONRY ~ Lintels and Support Steel Work (Lifting and Positioning):**	**1**	**2**	**3**	**4**
	1)	All lifting work will be properly planned and supervised. Craneage or other available plant to be used for lifting heavy items into position. (Liaise with main contractor).	MEM	OLM		
	2)	Slinging work is to be carried out by a competent person and loads will have a hand line attached to control and assist in placing lintols/steels into their final position.	PLE			
	3)	Standard lintels such as Catnic or similar to be lifted into position by hand and shall be placed in position by a minimum of 2 operatives working together. Adequate bearing to be ensured.	MHL			
SUPERSTRUCTURE	**4B.5**	**~ CARPENTER - First Fix - Structural Timbers**	**1**	**2**	**3**	**4**
	1)	Timbers are to be ordered giving adequate time for delivery and production.				
	2)	Special attention is to be given to Manual Handling requirements and mechanical assistance provided following assessment during any off-loading operations.				
	3)	Timbers are to be offloaded by hand/ forklift or craneage, depending on size and manageability. They can be immediately lifted onto their place of construction or stored in the site compound. Ensure that				
	4)	Timbers are to be fixed in accordance with structural/Architect's drawings.				
	5)	Timbers are to be secured at their end-bearing using detailed fixing method (Every timber to be secured). Timbers to be fixed at spacings shown on the drawing. All cut intersections are to be firmly spiked as				
	6)	All timbers are to be SC3 or SC4 structural grade as Structural Engineer's details and design.	BHA			
	7)	Should works involve the replacement of existing types of constructions, it should be ensured that adequate packing, needling and propping is inserted prior to the start of the installations.	OWD			
	8)	Such supports should not be removed until all installations are complete.				
	9)	All timbers treated prior to delivery shall have all clean site cut surfaces treated prior to fixing in position.				
	10)	All waste materials will be collected up and moved to an agreed collection point for disposal.				
SUPERSTRUCTURE	**4B.1**	**~ CARPENTER - First Fix - Timber Floors**	**1**	**2**	**3**	**4**
	1)	Timbers are to be offloaded by hand/ forklift or craneage, depending on size and manageability. They can be immediately lifted onto their place of construction or stored in the site compound. Ensure that				
	2)	Timbers are to be fixed in accordance with structural/Architect's drawings. Timbers are to be secured at their end-bearing using detailed fixing method (Every timber to be secured). Timbers to be fixed at spacings shown on the drawing. All cut intersections are to be firmly spiked as detailed.	OWD	WH7		

	3)	All timbers are to be SC3 or SC4 structural grade as Structural Engineer's details and design.	BHA			
	4)	Should works involve the replacement of existing floor constructions, it should be ensured that adequate packing, needling and propping is inserted prior to the start of the installations.				
	5)	Such supports should not be removed until all installations are complete.				
	6)	Should installations be required in multi-floor situations, it should be ensured that temporary supports continue throughout all floors to provide adequate support from ground level.				
	7)	In refurbishment situations, all existing members should be inspected and any defective / unsuitable members should be identified and renewed at the Structural Engineer's instruction.				
	8)	Lay all new joists, boards, straps, etc. in accordance with working drawings and work specifications.				
SUPERSTRUCTURE	**4B.2.3**	**~ CARPENTER - Roof Trusses:**	**1**	**2**	**3**	**4**
	1)	Trusses are to be designed and fabricated to BS 5268 pt 3. Manufactured by a member of the TRADA Trussed Rafter Quality assurance Scheme. Trusses are to be ordered giving adequate time for delivery and manufacture.	BHA			OIF
	2)	Trusses are to be offloaded by hand / forklift or craneage, depending on size and manageability. They can be immediately lifted onto their place of construction or stored in the site compound. Ensure that care is taken in storing to prevent damage and warping.	PLE	PMP	WH5	WH6
	3)	If trusses are placed in their final position at the unloading stage, ensure that they are stacked correctly and that temporary support is given to avoid damage to the structure by collapse.	INW	MEM	WH1	MFE
	4)	Trusses are to be fixed in accordance with structural/Architect's drawings.	PET			
	5)	Trusses are to be secured to the wallplate using "BAT" or similar truss clips nailed through all holes. Trusses to be fixed at spacings shown on the drawing and all longitudinal, lateral and cross bracing are to be nailed to each truss at passing points.	TOR	WH2	WH3	WH4
	6)	Ends of trusses at eaves are to be plumb cut to receive fascias with support battening being fitted to support soffit boards.	ODU	OWD		
	7)	Infill truss members with sawn SC3 grade timbers at hips and valleys to complete construction.				
	8)	Ensure that wallplate and lateral restraint straps are secured and fixed as soon as is practicably possible to ensure full stabilisation.	WFE			
	9)	All waste materials will be collected up and moved to an agreed collection point for disposal.	WTP			
SUPERSTRUCTURE	**4B.3**	**~ CARPENTER - Install Timber Stairs:**	**1**	**2**	**3**	**4**
	1)	Joinery is to be ordered to allow sufficient time for design, setting out, manufacture and delivery.				
	2)	Joinery manufacturer to be provided with architect's drawings and specification and site dimensions.				
	3)	Staircase to be manufactured in accordance with BS1186.				

	4)	Manufactured joinery to be off-loaded by hand, forklift or craneage depending upon size and				
	5)	Staircase to be immediately placed in to position or stored internally to prevent damage.				
	6)	Staircase to be properly fixed into trimmed stairwell. Fixings to comply with BS1210, BS 1202 and BS 916.				
	7)	All timbers treated prior to delivery shall have all clean site cut surfaces treated prior to fixing in position.				
SUPERSTRUCTURE	**4C.1**	**~ SPECIALIST - UPVC Windows and Doors:**	**1**	**2**	**3**	**4**
	1)	Please refer to attached RAMS provided by appointed / approved UPVC installation contractor. RAMS have been checked and approved by the H&S Manager.				
SUPERSTRUCTURE	**4B.6**	**~ JOINERY - 2nd Fix Works**	**1**	**2**	**3**	**4**
	1)	Joinery and ironmongery is to be ordered to allow sufficient time for design, manufacture and delivery.				
	2)	Timbers are to be carefully offloaded by our operatives and held in the allocated storage area ensuring protection from the elements.				
	3)	Ensure that care is taken in storing to prevent damage and warping.				
	4)	Materials are to be distributed to or near to their final place of fixing by our support operatives.				
	5)	All timbers treated prior to delivery shall have all clean site cut surfaces treated prior to fixing in position.				
	6)	Skirtings and architraves should be selected from the stockpile and should be free from damage, shakes, excessive knotting and dirt. All joints and intersections should be properly mitred and scribed to the fixing	OWD			
	7)	Battens, bearers, framing timbers, pipe boxings and the like should be pre-treated and fixed with appropriate, nails, screws, etc.				
	8)	All labour assisting mechanical tools such as power planers, drills etc. shall be provided by the operative with relevant PAT test certification.				
	9)	All waste materials will be collected up and moved to an agreed collection point for disposal.				
SUPERSTRUCTURE	**4C.?**	**~ JOINERY - Timber Doors and Frames:**	**1**	**2**	**3**	**4**
	1)	Doors and door frame to be delivered to site pre-primed and frame braced to suit required dimensions. (Doors to be supplied loose).				
	2)	Door frame to be presented to opening and set square and upright. Jambs to be secured to brickwork using proprietary fixings at 450ccs.	OWD			
		Whilst ensuring all frames are plumb, timber packers should be used at fixing points to ensure no bowing or twisting takes place at final fix.				
	3)	Once secure, each leaf of door to be presented to frame, marked and measured and adapted to suit. Hinge pockets to be cut, 100mm hinges to be secured to door edge, door represented and hinges				
	4)	Should doors be too heavy to be carried by one person, assistance is to be sought in carrying, presenting and hanging the doors together with general handling. Care to be taken to avoid damage.				

	5)	Once doors have been swung, edges to be aligned, faces to be squared and ironmongery to be fitted to maintain security.				
	6)	Doors shall be swung and locks/latches only fitted. Painter to treat all newly sawn/planed edges immediately to prevent excessive swelling in changing climatic conditions.				
	7)	Pre-finished doors shall be hung with their protective coverings left on wherever possible.				
	8)	All shavings, waste material etc. to be gathered up and removed from site and area left clean and tidy.				
SUPERSTRUCTURES	**4G.1**	**~ PLUMBING - UPVC Rainwater and Waste Goods:**	**1**	**2**	**3**	**4**
	1)	During the slab work necessary sleeves must be provided as per the approved drawings.				
	2)	Before start of the work ensure the clearance from the contractor for the area, where the piping works are to be carried out.				
	3)	Remove the pipe sleeve provided for rain water outlet during the slab work.				
	4)	Check the roof waterproofing details. (especially the falls).				
	5)	Make sure the rain water outlets are approved and of correct size.				
	6a)	Install the approved quality rain water outlet as per the specification and approved drawings.				
	6b)	Measure, cut and install the approved quality rain water gutters as per the specification and approved drawings to suit roof falls.				
	7)	Fix the supports/brackets in proper intervals as per the standard or as per drawing details, with approved supporting materials for vertical rain water Pipes				
	8)	Install the vertical rain water drain pipes as per the approved drawings.				
	9)	Check with plumb level for verticality of the pipes during & after installation.				
	10)	Make all the supports rigid afterconfirming the plumb level.				
	11)	Provide clean-outs at every change of direction and as per drawing.				
	12)	In order to test the leakage close all openings and fill the pipe with water or smoke whatever is required by customer.	OCW			
	13)	Inspect the joints for any visible leakage or use soap water.				
	14)	If found any leakage repair it and retest the leakage.				
SUPERSTRUCTURES	**4G.2**	**~ PLUMBING/HEATING - New Build Properties - First Fix**	**1**	**2**	**3**	**4**
	1)	Prior to commencement, agree pipe runs with site team, carry out notches, cut outs, etc. for agreed runs and ensure any required builders work such as ducts or sleeves are fitted.	BAS	BSS	OIF	
	2)	Install new pipework and fittings ensuring floor joists are notched or drilled to take new pipes. Pipes to be secured with approved brackets/fixings at approved centres.	PES	PCB		PLI
	3)	Connect up and solder/weld the hot & cold services, feeding back to the agreed stop valve. Fit isolation valves where agreed together with sure stops or similar.	BHA	CSF	PLB	PHW
	4)	Leave pipe ends exposed for final connections				

SUPERSTRUCTURES	4G.3	~ PLUMBING/HEATING - New Build Properties - Second Fix	1	2	3	4
	1)	Connect all new pipes to radiators and valves.	PLB	PHW	PLI	PCB
	2)	Install new boiler along with flue as required (care and attention when determining location of the boiler and flue.)Connect the flue pipe and seal with plaster/sand and cement mix.	MEM			
	3)	Connect the new pipework from the radiators to the boiler.				
	4)	Liaise and work with the electrician to fit and wire up thermostats and programmers. Work with the electrician to ensure all circuits are tested and working properly.				
	5)	Pressure the new system and carry out tests for pressure drop, fill system and fully test hot, cold and radiator circuits.				
	6)	Commission the boiler to manufactures instructions and complete the appropriate paperwork.				
	7)	Heat test the system, test all controls and valves/timers etc.				
SUPERSTRUCTURES	**4G.4**	**~ PLUMBING/HEATING - New Build Properties - Final Stage:**	**1**	**2**	**3**	**4**
	1)	After the new system has been tested to be fully operational, the system will drained and refilled, flushed with cleaner refilled and the inhibitor added.				
	2)	The system and its controls will then be demonstrated to the home owner ensuring that they are aware of the gas, water, and elec isolation points.				
	3)	The site will be cleaned of any debris, waste ,material or remaining packaging at the end of each fix.				
SUPERSTRUCTURES		**~ PLUMBING - Sanitary Ware:**	**1**	**2**	**3**	**4**
	1)	Position of sanitary fixtures is determined in accordance with plans/specifications and site requirements				
	2)	Quantity and type of materials required are calculated from design drawings/specifications				
	3)	Materials and equipment are identified and ordered/collected in accordance with workplace procedures				
	4)	Materials and equipment are checked for compliance with standards, docket/order form and for acceptable condition upon arrival on site				
	5)	Set out is checked for compliance with design drawings, manufacturers' instructions and relevant authority requirements				
	6)	Fixtures are positioned and installed to comply with plans/specifications and manufacturers' requirements	MEM			
	7)	Fixtures, components and pipework are assembled, installed and tested to manufacturers' requirements, job specification and standards				
	8)	Fixtures are installed and connected without damage or distortion to fixture, pipework, the surrounding environment, or to other services				
	9)	Completed installation is checked for correct functioning and compliance with specifications				
	10)	Work area is cleared with materials disposed of or recycled in accordance with policies and local procedures				

FINISHES	5A.1	~ PLASTERING ~ House Keeping	1	2	3	4
	1)	Materials will be distributed to their respective areas for fixing by our operatives using trolleys. Where manual handling is required, this to be assessed and carried out by appropriate number of operatives	MEM	MFE	OIF	
	2)	All materials are to be treated and fixed in accordance with manufacturers instructions and directions.				
	3)	The carrying of the plaster bags should be carried out by two operatives working together and mixing shall be done mechanically where practicable.	OIF			
	4)	All areas should be protected prior to plastering and any plaster found to be falling to floors, boards, etc. should be cleaned up immediately prior to hardening off.				
	5)	All surfaces, new or existing, should be prepared, cleaned and treated to receive new finishing's.				
	6)	All temporary screens and protection barriers to be respected, maintained and kept sealed at all times to minimise the spread of airborne dirt and dust.				
FINISHES	**5A.3.1**	**~ PLASTERING ~ Plasterboard & Skim**	**1**	**2**	**3**	**4**
	1)	Plasterboards to be secured to backgrounds as specified. Cutting of boards to be carried out with appropriate tools and safety gloves to be worn.	OCM	OKN		
	2)	Where boards are to receive a plaster or similar finish, joints are to be correctly covered with scrim cloth and bonded in accordance with manufacturer's instructions.	BCE	PFE	PES	PET
	3)	Where boards are to receive a direct paint or similar finish, joints are to be correctly filled and covered with tape in accordance with manufacturer's instructions.	BCE	PFE	PES	PET
	4)	Any waste plasterboard will be deposited in designated areas and separated for correct collection and disposal.				
	5)	Where specified, walls to be skimmed with Thistle Multi Finish, mixed to a consistency suitable for application by steel trowel. Trawled when sufficiently hard enough. The same operation should be carried out to timber stud walls.	BHD			
	6)	Mix wall finish in a plastic bucket to a consistency acceptable to apply to the backing. Finishing plaster to be mixed near to place of fixing and by use of 110V mixing drills. This will be trawled up when the finish				
FINISHES	**5A.3.2**	**~ PLASTERING ~ Plasterboard to Ceilings:**	**1**	**2**	**3**	**4**
	1)	Plasterboards will be fixed to ceilings with galvanised clout nails off benches supplied by Sub-Contractor.				
	2)	They will be skimmed with Thistle Multi Finish, mixed to a consistency suitable for application by steel trowel. Trawled when sufficiently hard enough. The same operation should be carried out to timber stud				
	3)	Any waste plasterboard will be deposited in designated areas and separated for correct collection and disposal.				
	4)	It should be ensured prior to fixing of boards that adequate members / cross-members are available to enable boards to be fixed at their recommended centres and most importantly, at their abutting edges.				

	5)	Where boards are to receive a plaster or similar finish, joints are to be correctly covered with scrim cloth and bonded in accordance with manufacturer's instructions.				
	6)	Where boards are to receive a direct paint or similar finish, joints are to be correctly filled and covered with tape in accordance with manufacturer's instructions.				
FINISHES	**5A.4**	**~ PLASTERING ~ Wet Plastering**	**1**	**2**	**3**	**4**
	1)	Operatives will mix plaster backing in a plastic bath provided by Sub-Contractor. It will then be bucketed to the place of work and applied to wall by way of steel trowel and rubbed up with wooden float to receive key.	BHD			
	2)	It should be ensured that an adequate key is obtained for all layers including the use of a unibond application if called for and instructed.				
	3)	Walls and ceilings to be accessed with the use of appropriate towers, hop-ups, etc. Boards fixed to blockwork will be spot and dabbed. Boards to metal and timber studs will be screwed. Where large boards are to be fixed, this should be carried out by a minimum of 2 operatives.	WH1	WH2	WH3	WH4
	4)	Only authorised personnel with current PASMA certification will erect, modify or dismantle scaffolding towers. Check all mobile towers before use by employees to ensure they are in accordance with the relevant standards. Castor wheels, if fitted, will only be used on level ground and be fitted with brakes.	TOR	WH5	WFH	ZTC
	5)	Ladder access will be inside the tower either vertical or inclined stair types, and fixed to the narrowest side. Use of the frame members (unless specifically designed as a ladder) for climbing the tower is not permitted.				
	6)	Cementious material is to be handle with care and any resultant dust kept to a minimum. Empty packing bags are to be carefully collected up and removed to the appropriate sorting skip.	ODU	BHD	OID	ORD
	7)	Waste materials are to be cleared up on a daily basis and upon completion of work in a room, that room to be cleared before moving on to the next work location.	TSF1	SNS		
SUPERSTRUCTURE	**5B.1**	**~ SPECIALIST - Monocouche Render:**	**1**	**2**	**3**	**4**
	1)	Please refer to attached RAMS provided by appointed / approved rendering contractor. RAMS have been checked and approved by the H&S Manager.				
FINISHES		**Wall Coverings ~ Wall Tiling Installations:**	**1**	**2**	**3**	**4**
	1)	Specified tiles to be delivered as required and ensure correct adhesive for type of tiles being applied is used. (if necessary consult tile supplier).				
	2)	Fit only tiles that are in good and clean condition, no broken, chipped or cracked tiles are to be used.				
	3)	Ensure that the area has been cleaned out and free from any encumbrances and that all surfaces are dry, flat and blemish free. Fix tiles working upwards from the lowest point.				
	4)	When doing full walls, shower enclosures, etc., hang a plumb line and mark to ensure good level of finished tiles. Set out walls prior to commencement to suit tiles, pattern, openings, etc.				

	5)	Mix sufficient adhesive to cover desired application area and apply to wall using flat side of trowel. Comb the adhesive to a uniform depth using the notched side of trowel.				
	6)	Fix first run of tiles ensuring level and plumb. Fit spacers or wedges between tiles, tops of sinks, shower trays, etc. to allow 3mm. Wipe off excessive adhesive with clean wet sponge				
	7)	Ensure that all vertical and horizontal joints are equal sizes using standard wall tile spacers as necessary.				
	8)	Use the machine indoors only, on a clean dry well lit area and a clutter free, flat work surface. Switch the machine off between cuts and always use the blade guard. Disconnect from mains before cleaning or maintenance. Replace damaged blades immediately and ensure new blades are fitted correctly to run in the direction indicated on the blade.				
	9)	Lay next row of tiles. Tiles will be cut where necessary using proprietary cutting tools. Notched, curved or quarter round cuts will be done with a wet saw.				
	10)	Mix sufficient grout to cover required area, refer to manufacturers instructions. Using grout float spread grout into joints. Make sure all joints are filled.				
	11)	Allow grout to set for 20 minutes then wipe residue off with damp sponge cleaned regularly. Minimal clean-up water should be used to ensure proper grout curing and maintain colour uniformity.				
	12)	Shape grout joints with grout tool. Buff tiles with clean cloth.				
FINISHES	**5G.1**	**~ PAINTING AND DECORATING - House Keeping**	**1**	**2**	**3**	**4**
	1)	Check materials, paint system and subcontractors are approved by the Client / Main Contractor.				
	2)	All paint and equipment required will be brought to site in our company vans and any waste will similarly be removed from site by our personnel or placed in authorised waste skips on site.	PMH	OIF		
	3)	Delivered paint materials shall be checked the following things: Expiry date, original labeled containers, manufacturer's name, type of paint, brand name, color designation and instructions for mixing and/or reducing.	BHA	MEM		
	4)	Operatives will ensure that all flammable paints or materials are kept clear of any hot work that may be being undertaken in the vicinity.				
	5)	MSDS (material safety data sheet) shall be displayed at work location as appropriate.				
	6)	Prepare paint for application. i.e. mixing etc. Apply paint with brush or roller and allow to dry, do not apply too much and watch for runs, etc. Check first coat for correct coverage.	OID			
	7)	Proper working platforms and lighting arrangement shall be provided. Hop Ups / Podiums to be to approved design and erected and used to manufacturer's instructions.	PPP	SEC	TCM	TSF2
	8)	Should cutting of materials or cutting out of existing finishes prior to repairs be required, operatives must ensure that the correct tools are used in all circumstances.	OCM	TSF1		
	9)	Work on height should be properly managed and use of ladders shall be restricted at all times (see separate guidelines at the end of this document).	TOR	WH1	WH2	WH3

	10)	Hop – ups (class 1) will be required to reach areas such as the ceiling and above worktops. If use results in over-reaching, alternative arrangements to be made.	PIP	PPP	ZSF	TSF3
	11)	Erection of 'Wet Paint' signs in appropriate areas				
	12)	Ensure all walls have been prepared and levelled and Ensure that the parts not to be painted are protected prior to commence of painting works.	OKN	OW	PR	BAS
	13)	Open all windows in the work area and shut the doors to other areas not affected by work. Cover all new surfaces with dust sheets.				
	14)	Ensure work area is left clean and tidy and free of obstructions				
FINISHES	**5G.3**	**~ PAINTING AND DECORATING - Internal Painting**	**1**	**2**	**3**	**4**
	1)	Decorations are to be carried out to all rooms and all areas as per contract specification. Ultimately all paints are to be water based and no oil paints or paints with high odour levels are to be used.	PRD	PPF	PIP	
	2)	Prior to commencement and using a qualified electrician, ensure that the power has been disconnected or made safe to all sockets, and lighting. Also make sure all carpentry works are complete.	UEL	UHS	UPL	
	3)	Before commencement of work, remove electrical switch and outlet plates, surface hardware, frames of lighting fixtures and all the other obstructions and replace properly at completion of the work.				
	4)	Prior commencing, clean floors and adjacent surfaces, as well as surfaces to be painted.				
	5)	All liquid paints shall be thoroughly stirred to a uniform consistency.				
	6)	Fill and prep walls and ceiling and sand. Apply filler, decorators caulk or similar to any area of wood or plaster as required, Sand down to smooth finish.	BAS	BSS	ODU	
	7)	Apply knotting to all new woodwork				
	8)	Prepare paint for application. i.e. mixing etc. Apply paint with brush or roller and allow to dry, do not apply too much and watch for runs, etc. Check first coat for correct coverage.		OWD		
	9)	Apply primer to all new woodwork and pipe work as required. The primer shall be applied as per manufacturer's recommendation with correct thickness required.				
	10)	All priming and filler shall be rubbed down to a smooth surface with fine abrasive paper and cleaned off all dust before the application of next coat.				
	11)	Apply undercoat to all areas of woodwork and pipework				
	12)	Apply gloss paint to all woodwork and pipework, when using a spirit based paint ensure that the room is well ventilated				
	13)	Apply second coat where necessary and allow to dry.				
	14)	Apply emulsion paint to ceiling all in accordance with manufacturers instructions ensuring the correct amount of cover for each coat.				
	15)	Apply vinyl matt emulsion to walls all in accordance with manufacturers instructions ensuring the correct amount of cover for each coat.				
	16)	Always apply the required number of coats as per specification and manufacturer's recommendation.				

	17)	Where directed hang wall paper in lieu of paint (See Separate Section)				
	18)	Remove all waste materials to the skip				
	19)	All empty paint cans to be disposed as contaminated waste				
FINISHES	**5G.4**	**~ PAINTING AND DECORATING - External Painting**	**1**	**2**	**3**	**4**
	1)	The main principles covered within the Internal Painting section will apply but painting work shall not proceed in windy and rainy conditions.	PRD	PPF		
FINISHES	**5G.6**	**~ PAINTING AND DECORATING - Care of Equipment and Materials**	**1**	**2**	**3**	**4**
	1)	Material shall be stored in a cool, well ventilated and dry place, away from direct sunlight.				
	2)	All items must be thoroughly cleaned in either water or the relevant solvent at the end of each shift				
	3)	Items such as brushes and rollers should be air dried and stored				
	4)	Wash buckets, wipe inside and out and store upside down				
	5)	All items should be stored out of reach of tenants and children				
	6)	All materials must be collected and returned to the designated storage area after working hours and properly secured and locked.				
FINISHES	**5G.7**	**~ PAINTING AND DECORATING - Cleaning and Handover**	**1**	**2**	**3**	**4**
	1)	Spilled, splashed, or spattered paint shall be removed as work proceeds and upon completion.				
	2)	The area will be cleaned prior to handover; all waste and debris will be removed to the designated waste area.				
	3)	The site manager will check all work prior to handover				
SPECIALIST (6		**Specialist ~ Scaffolding:**	**1**	**2**	**3**	**4**
	1)	Please refer to attached RAMS provided by appointed / approved scaffold contractor. RAMS have been checked and approved by the H&S Manager.	WAH1	WAH2	WAH3	WAH4
SPECIALIST		**~ INSULATION ~ Fabric - Cavity Wall Installations:**	**1**	**2**	**3**	**4**
	1)	Please refer to attached RAMS provided by appointed / approved blown insulation contractor. RAMS have been checked and approved by the H&S Manager.				
SPECIALIST		**~ INSULATION ~ Fabric - Roof / Ceiling Insulation Works:**	**1**	**2**	**3**	**4**
	1)	Please refer to attached RAMS provided by appointed / approved insulation contractor. RAMS have been checked and approved by the H&S Manager.				
SPECIALIST	**4X.??**	**~ FLOORING - Soft Flooring**	**1**	**2**	**3**	**4**
	1)	Please refer to attached RAMS provided by appointed / approved electrical contractor. RAMS have been checked and approved by the H&S Manager.				
SPECIALIST	**4X.?**	**~ ROOF COVERINGS ~ Tiled Roofing Works**	**1**	**2**	**3**	**4**
	1)	Please refer to attached RAMS provided by appointed / approved roofing contractor. RAMS have been checked and approved by the H&S Manager.				
SPECIALIST	**4X.?**	**~ ROOF COVERINGS ~ Lead Works**	**1**	**2**	**3**	**4**

		Please refer to attached RAMS provided by appointed / approved roofing contractor. RAMS have been checked and approved by the H&S Manager.				
SPECIALIST	**4X.?**	**~ Electrical Installations**	**1**	**2**	**3**	**4**
	1)	Please refer to attached RAMS provided by appointed / approved electrical contractor. RAMS have been checked and approved by the Site Manager.				
SPECIALIST	**4X.?**	**~ Mechanical Installations:**	**1**	**2**	**3**	**4**
	1)	Please refer to attached RAMS provided by appointed / approved electrical contractor. RAMS have been checked and approved by the Site Manager.				
EXTERNAL WORKS	**6A.2**	**~ DRAINAGE ~ Excavation of Drain Trenches:**	**1**	**2**	**3**	**4**
	2)	Drain trenches will be excavated by mechanical means to full depth. When near or parallel to service trenches and sewers the trench support will be installed as the excavation progresses applying positive ground support at all times.	EBS	PMP	OCB	
	3)	The contractor shall carry out the excavation for the trench depending on the pipe diameter, type of ground and depth of lying. The trench bottom shall be trimmed and levelled and free from all extraneous matter that may damage the pipe.	EBC	ECE		
	4)	No excavations will be required to be deeper than 2.5m for the surface water drainage. Depth of excavations vary from 625mm to 2.5m No excavations will be required to be deeper than 2m for the foul water drainage. Depth of excavations vary from 475mm to 2m	WTP			
	5)	The excavation will be mechanical using a 3 tonne 360 excavator.				
	6)	Shallow excavations, less than 1.2m in depth, will be unsupported if ground conditions permit.				
	7)	When near or parallel to service trenches and sewers the trench support will be installed as the excavation progresses applying positive ground support at all times.	EUS			
	8)	All deep excavations will be supported using either trench sheets, hydraulic struts and walers or by trench box depending largely on ground conditions encountered and the number of service crossings	WTP			
	9)	Where excavation takes place in vehicular or pedestrian access areas, the trench line will be neatly cut using a top cutter, which will form the trench sides within the bound highway material to a maximum	PCU			
	10)	Where a floor saw / cutter is employed, dust suppression equipment or wet cut operations must be employed.	OID	ODU	PDC	
	11)	When working above or near to existing mains and services the excavation will be undertaken by hand until it reaches a depth where it is thought that no further services are present. At all times the team				
	12)	All arisings are to be either stockpiled / then loaded or immediately loaded into wagons (if available) and either tipped locally or transported to our yard (dependant on distance) for recycling. Topsoil if room allows, is to be stock piled on site for use during the landscaping operations.				

	13)	Selected material will be retained where the requirement for backfilling exists such as working space allowance.				
	14)	Any services uncovered that are deemed to require support will be suitably supported to avoid strain and stresses on the installations.				
EXTERNAL WORKS	**6A.3**	**~ DRAINAGE - Installation of New Drains and Sewers:**	**1**	**2**	**3**	**4**
	1)	Bedding for pipes shall be constructed by spreading and compacting Approved bedding material over the whole width of the pipe trench. After the pipes have been laid, additional material shall, if required, be placed and compacted equally on each side of the pipe, and where practicable, this shall be done in sequence with the removal of the trench supports.	PMP	ODU	OID	
	2)	Drainage installations are to consist of 100mm dia. Polypropelene pipes and fittings to client specification and installed to manufacturers instructions.	MEM	OLM		
	3)	Pipes and fittings shall be examined for damage and the joint surfaces and components shall be cleanded immediately before laying.				
	4)	All pipes are laid with due regard to the fall and invert levels set out on the design drawings. Where pipes require socketed joints, joint holes/spaces shall be formed in the bedding material to ensure that each pipe is smoothly and uniformly supported throughout its length.				
	5)	Suitable measures shall be taken to prevent soil or other material from entering pipes, and to anchor each pipe to prevent flotation or other movement before the works are complete.				
	6)	Wherever required, pipe cutting shall be performed by a method which provides clean square cut of pipes and then chamfered as required. Pipes ends are chamferred to approx. 15º for half the pipe wall thickness.				
	7)	For pipe sizes 82mm and above, jointing of pipes and fittings are carried out by push-fit jointing method. Before making the joint, ensure all ends and sealing ring are clean. Lubricate both the pipe ends and the sealing ring in the socket with silicone lubricant. All jointing and components to be in accordance with manufacturers instructions and recommendations.	FLR4			
	8)	Ensure that components to be joined (by push-fit method) are correctly aligned, and then push the spigot fully into the socket. To allow expansion, mark the spigotn at the socket face and the withdraw the spigot by a minimum of 12mm.				
	9)	The jointing of larger diameters is generally accomplished by applying leverage to the following socket end using a timber block to prevent damage.	PET	PFM	PLE	
	10)	Prior to covering over, the new drain shall be inspected and tested. A stopper shall be inserted at the lower invert end of the pipe within the manhole chamber and an agreed water/air test carried out. Results of such testing shall be recorded within the site records.				

	11)	After pipelaying, inspection and testing, a further covering of Approved bedding material shall be used to completely surround the pipe and to a height at least the size of the laid pipe and this is to be to the complete width of the drain trench and compacted by hand.				
	12)	The main backfill (unless specified seperately) is usually compacted infill with the original trench soil ove the layer of pipe surround. Heavy mechanical rammers shall not be used until the fill has reached a sufficient height above the top of the pipe.				
EXTERNAL WORKS	**6A.4**	**~ DRAINAGE - New Manhole Construction**	**1**	**2**	**3**	**4**
	1)	The manholes will be formed on a 100mm concrete blind base with the rings and covers lifted into place using a 360' excavator and lifting chains, clamps and eyes, a banks man will be present during the operations to co-ordinate the works.	BCC	BCE		
	2)	Plot Manholes to be pre-formed polypropelyne inspection chambers, cut to accurate depths and constructed and bedded in cement mortar during installation of plot drainage. Inlet and outlet sections to be configured to suit individual location.				
	3)	Once set, polypropelyne inspection chamber to have temporary shutter installed and new lean-mix concrete surround to be completed to a minimum of 200mm thick. Once set, shutters can be removed and re-use. Shutters to be coated with shutter oil prior to concrete placing.	OAW	PFE		
	4)	Main Site Manholes will be constructed using precast 1200mm diameter manhole rings or 675mm x 1040mm precast sections. Dependant upon depths, step irons will be built in to give access. A precast concrete coverslab will then be placed to the top of the manhole chamber and 2 courses of class B engineering bricks constructed to carry the manhole cover.				
	5)	Manhole covers are to be as specified to suit their location and are to be bedded on top of the brick raising courses in cement mortar. Prior to fitting, the access hole to the manhole should be temporarily boarded over and secured.				
	6)	All manholes will have a fixed temporary cover fitted where the permanent cover can't be fitted as the works proceed.				
EXTERNAL WORKS	**6A.5**	**~ DRAINAGE - Attenuation Tanks**	**1**	**2**	**3**	**4**
	1)	Standard preparation involves excavation to the invert level the of tank.The ground must be prepared to a level of ± 20mm. All sharp objects and protrusions should be removed and the surface should be blinded with sand if necessary. Allow for at least one metre of work space around the perimeter of the tank, depending on the depth of excavation.	EBC	EUS		
	2)	In poor soil conditions it will also be essential to make substantial provision for planks, struts and temporary shuttering and to provide for adequate pumps to keep the excavation free form groundwater at all times during the course of the work.	ECE			

	3)	A wet site is defined as one where groundwater rises above the base of the tank. Where difficult ground conditions are encountered, i.e. unstable ground or shrinking clay, it will also be necessary to allow for an additional depth (as much as deemed necessary by the supervising engineer) to be excavated below the tank to allow for hardcore and sand blinding to provide a firm base.	OCW			
	4)	Lay the protective geotextile over the excavated area ensuring enough material is prepared to completely encase the system with the minimum number of joints. Lay an impermeable membrane over the geotextile layer.	OCM			
	5)	Lay the crate units to the layout plan provided. The units are light and easy to lift and place into position, keeping labour time on site to an absolute minimum. The units are laid to a bonded pattern until the full depth of the attenuation tank has been reached.	MEM			
	6)	The distribution pipe is now installed. Install the distribution pipe and connect, via rocker pipes, to the upstream and downstream manholes (inspection chambers) situated at either end of the tank. All joints through the membrane should be made using preformed or site fabricated top hat connections.				
	7)	On completion of the crate units and distributor pipe, fold the waterproof membrane over the sides and top of the tank to completely encase it. Sealing the joints provides a watertight reservoir. Membrane should be jointed with at least a 100mm overlap and can be sealed either by double sided tape, or hot air weld (depending on the type of membrane specified). Wrap the protective geotextile over the waterproofmembrane, allowing for a 300mm overlap at the joints.				
	8)	Once the tank is completed to the layout drawing and completely encased with the appropriate membrane and geotextile (filter layer), backfilling using selected as dug type material or similar can be carefully carried out to the specification for the standard onsite drainage detail.				
	9)	After installation and prior to handover, any silt collection chamber or control manholes should be examined to ensure they are free of debris or contamination.				
	10)	Upon completion, the site manager should be advised of the location of the crate system and maximum vehicle weight which may be trafficked across the area. It may be necessary to install signage, traffic cones, barriers etc, to prevent heavy vehicles from trafficking over the the GEOlight installation, unless the system has been specifically designed for heavy loading.				
EXTERNAL WORKS	**6A.7**	**~ Drainage - Acco Drains**	**1**	**2**	**3**	**4**
	1)	The proposed trench line will be saw cut using a floor saw / stihl saw to ensure that the trench edges are neatly cut, avoiding over break and to provide positive ground support for the full depth of the excavation.				
	2)	The excavation will be broken out to a depth 100mm below the full depth of the Acco channel and to a width of approx. 350mm. At all times the operative will maintain close visual inspection of the slab during excavation.				

	3)	If the operation involves the renewal of the drain only, the existing foundation may prove of adequate support and if so, should be left insitu and keyed to receive a mortar layer for bedding purposes.				
	4)	A 100mm thick concrete bed should be provided by either maintaining an existing bed or providing a new one using site mixed structural concrete.				
	5)	Once prepared, a 20mm cement mortar bed should be laid on top of the new or existing foundation and the new channel bedded down to suit the required levels for ensuring full water run-off.				
	6)	The drain shall be laid commencing at the downstream end, at a point of connection to the main sewer. The connection to the main sewer will involve breaking into the existing sewer and constructing a pre-formed junction connection.				
	7)	Existing sewer flows are anticipated to be relatively low and due to the short duration for the connection works, and the new connection being at soffit to soffit, flows will be maintained through the existing pipe invert rather than being overpumped.				
	8)	Excavations which are left open, out of working hours, will be securely barriered off.				
	9)	Once the drainage channel has set, the gratings shall be fixed.				
	10)	In most cases, lockable grilles are to be used to prevent theft and vandalism.				
EXTERNAL WORKS	**6A.8**	**~ DRAINAGE - Drain / Sewer Connection / Repair Works:**	**1**	**2**	**3**	**4**
	1)	Connection to the existing Sewer is to be achieved by the construction of a new manhole on the line of the existing pipe. The connection work shall only commence when all the internal sewer line has been completed.	CSC	CSW	OCW	
	2)	Permission is to be sought for the half closure of one direction traffic where the connection is to be made. Approval of traffic management plan to be achieved prior to commencement.				
	3)	The existing road should be sawn cut and starting from the existing manhole excavation shall be carried out to expose the existing manhole				
	4)	Pipes will be laid commencing at the downstream end, at the point of connection to the main sewer. The connection to the main sewer will be via a new manhole.	SAE			
	5)	Manholes will be constructed using precast 1200mm diameter manhole rings or 675mm x 1040mm precast sections. The existing sewer will be uncovered and the ground beneath the pipe will be excavated for the manhole base. The existing concrete will be poured into the excavation up to springing level of the existing sewer. The existing sewer will then have the soffit saw cut off from springing level up. Flows will remain undisturbed within the existing pipe.				

	6)	A timber shutter will be made and placed into the opening within the existing pipe and the remainder of the concrete base will be poured. The manhole rings/sections will then be positioned and bedded on mortar. The rings/sections will be capped with a same sized cover slab and manhole cover. The rings/sections will be surrounded with mass concrete and a steel shutter will be used to cast the surround. The annulus between the surround the excavated ground will be either filled with compacted type 1 stone or foamcrete.				
	7)	Existing sewer flows are anticipated to be relatively low and due to the short duration for the connection works, and the new connection being at soffit to soffit, flows will be maintained through the existing pipe invert rather than being overpumped.				
	8)	During all works within the excavations the atmosphere within the excavations will be continually monitored throughout the working day.				
	9)	Pipes will be laid in a granular bed and surround, firstly the bed will be laid, then the pipe and then the surround. Backfill material shall be sand up to sub – grade level then follow by crusher run base course.				
	10)	When entering live manholes an A-frame and gas meter will be used and the operative will have confined space training, a new issue harness or tested existing harness will be used with one man at the top of the manhole at all times whilst operatives are entering the MH, the harness will be attached to the A-frame by the means of a wire.				
	11)	Upon the exposure of the existing manhole, hacking shall be carried out by using pneumatic breaker to opening for connection. Care must be taken to ensure that the opening is just sufficient to accommodate the pipe to avoid excessive patching later.				
	12)	Immediately after the first pipe has been slotted into the existing manhole, the over break in the existing manhole shall be seal with epoxy.				
	13)	Trenching and laying of the 225 mm diameter sewer pipe shall continue until a stage where after backfilling a four metre road width can be formed.				
	14)	Backfill material shall be sand up to sub – grade level then follow by crusher run base course.				
	15)	Make sure no obstruction to site traffic flow. Logistic and safety department will monitor closely				
	16)	A 25 mm thick steel plate of suitable width shall be placed on the crusher run base course and the traffic directed to this area.				
EXTERNAL WORKS	**6B.1**	**~ New or Renew Kerbs / Drop Kerbs**	**1**	**2**	**3**	**4**
	1)	Cut pavement and road finishes with floor saw or stihl saw to a depth of 150mm to 200mm to create clean cut for making good on completion.	OAW	PFE	OCB	OID

	2)	Break out existing kerbs, haunching and kerb race by mechanical means and remove from site including cleaning up bottom of excavation to receive new foundation.	PPT			
	3)	Place and lay concrete (ready mixed or hand mixed on site) in bottom of excavation and finish to required levels and make ready to receive new kerbs.	BCC			
	4)	Set new kerbs to line and level on mortar bed and once set, mix and lay concrete in haunched support to pavement side of kerb.	BCE	MEM		
EXTERNAL WORKS	**6C.1**	**~ Concrete / Pre-Cast Concrete Paving:**	**1**	**2**	**3**	**4**
	1)	Slabs are to be delivered to site prepacked, mechanically off-loaded and stored in a safe level area to prevent damage and falling over.				
	2)	Ready Mixed concrete will be delivered to site ready batched and tipped either in the areas to be cast or on a protective layer adjacent area of work.				
	3)	Formation is to be rolled and levelled ready to receive "Terram" membrane.				
	4)	A "Terram" membrane layer is then placed and lapped where specified.				
	5)	Hardcore will then be laid in beds and compacted every 150mm in layers.				
	6)	Hardcore will be moved and placed using a mechanical excavator, spread and levelled and then compacted using a vibrating plate.				
	7)	Hardcore is to be finished with a blinding layer and compacted to levels, falls and crossfalls ready to receive new slabs.				
	8)	If ready mixed concrete is specified, mesh reinforcement is to be supplied and fixed in accordance with design criteria. Spacing blocks should be employed to ensure correct coverage and levels.				
	9)	Slabs are to be maximum size 600 x 600mm laid to falls and crossfalls as terrain dictates and where applicable to match existing levels.				
	10)	Slabs are to be laid on solid bed, tamped level with joints abutted and brushed over and cleaned upon completion.				
	11)	Slabs are to be distributed across site by either mechanical means or using a trolley and should be handle as a 2 man operation.				
	12)	Slabs are to be laid on solid bed, tamped level with joints abutted and brushed over and cleaned upon completion.				
EXTERNAL WORKS	**6D.1**	**~ Brick Paving Works:**	**1**	**2**	**3**	**4**
	1)	Where applicable, ground is to be excavated to formation level, the excavated materials placed on plywood protection and then loaded and removed to our yard for recycling.				
	2)	Formation is to be rolled and levelled ready to receive sand bed.				
	3)	A suitable sand bed is to be supplied and laid to underside of brick paviors.				
	4)	If tipped away from place of work, sand is to be distributed by mechanical means such as a mechanical excavator or loaded and moved using a tracked barrow or similar mechanical equipment and then				

	5)	Paviors are then to be selected and laid in patterns as specified or to match existing paved areas.				
	6)	Finally, fine sand is to be brushed into joints, spread and levelled over area to provide clean uniform finish to area applied.				
	7)	All surplus sand blinding is then to be brushed up and removed from site.				
EXTERNAL WORKS	**6E.1**	**~ Loose Paving Works:**	**1**	**2**	**3**	**4**
	1)	Hardcore / Stone chippings / Shingle / etc. to be delivered to site direct from supplier and tipped either adjacent to the areas of work, in compound for security or directly where it is required to be spread and levelled.				
	2)	Formation is to be rolled and levelled ready to receive "Terram" membrane.				
	3)	A "Terram" membrane layer is then placed and lapped where specified.				
	4)	If tipped away from place of work, stone is to be distributed by mechanical means such as a mechanical excavator or loaded and moved using a tracked barrow or similar mechanical equipment and then compacted using a vibrating plate.				
	5)	Hardcore will then be laid in beds and compacted every 150mm in layers.				
	6)	Finally, stone finnishing to be distributed, spread and levelled over area to provide clean uniform finish to area applied.				
EXTERNAL WORKS	**6F.1**	**~ New or Renew Tarmacadam Surfaces**	**1**	**2**	**3**	**4**
	1)	All tarmacadam laying will be carried out by a specialist contractor under our supervision and a copy of his RAMS document is attached.				
	2)	The area for tarmac is to be set out and agreed both with the site supervisor and if appropriate, the client representative.	BWB			
	3)	After the setting-out work is completed, the ground is cleared and excavated to Formation Level. Assuming there is no bad ground or other complications,				
	4)	Formation Level for a typical access road or small car park would be.... (sub-base + binder course + surface course) = (225 + 70 + 30mm) = 325mm below finished paving level.				
	5)	All weeds and other unwanted organic matter, along with topsoil must be removed and any soft spots excavated and filled with compacted sub-base material. If the area is troubled with weeds, it should be treated the excavated sub-grade with a general weed killer such as Sodium Chlorate, but it is unlikely any weed will be able to penetrate the upper layers.				
EXTERNAL WORKS	**6G.1**	**~ FENCING ~ Excavation for Fence Post Holes:**	**1**	**2**	**3**	**4**
	1)	Fence post holes will be excavated by hand to full depth. Each hole should be a minimum of 600mm deep. At this depth services should be below excavation level but care should be taken at all times.	FEH			
	2)	Location and position of post holes to be determined, agreed and set out on site prior to commencement of excavations.				

	3)	Only if the ground becomes too difficult to break using hand tools, limited use of a hydraulic jigger will be made. Prior to us using the jigger, plans will be re-checked for services and a full Cat Scan of the	FFF			
EXTERNAL WORKS	**6G.2**	**~ Fencing Installations:**	**1**	**2**	**3**	**4**
	1)	The Fencing Site Engineer will issue a Permit to Dig and advise those carrying out the works of general health and safety issues and the risks associated with services in the area of excavation.	SAE			
	2)	Fence lines will be set out by a Setting Out Engineer or Surveyor. Pegs (marked PFL) will be placed at all changes in direction of the fence line and at appropriate centres for arcs in the fence line. The locations of gates will also be set out. (Line to be Cat Scanned prior to commencement).	FCS	SNS	TSF1	
	3)	Fencing supervisor to determine levels, ensure setting out and fence line is in correct position. Also, to ensure any existing service positions are known and marked on the ground for avoidance.				
	4)	Materials are to be delivered to site as agreed and either stored in a compound and protected from adverse weather conditions or if to be used immediately, off-loaded and placed adjacent final position.	MEM	MFE		
	5)	Excavate post holes by hand (mechanical device such as kango with clay spade may be used if ground condtions dictate).	BFE	EUS	FEH	FFF
	6)	Place fence post in hole, temporary prop to ensure it is upright and backfill with site mixed concrete, tamping by hand in layers and ensuring post remains upright and in required position. (Carry on in sequence until length of fence completed).	BCC	BCE		
	7)	Fix rails between upright posts and ensure level. Then hand nail boards to rails to required specification. (If posts slotted, secure any gravel boards prior to fixing fence panels).				
	8)	Gate posts to be positioned and set at same time as sequence of fencing to ensure line and level. Gates to be provisionally hung in order to allow second post to be set and fix to allow fencing sequence to continue. Once gate posts are set, remove gates to store and leave ready for final fixing.				
	9)	Remove gates from store, move to place of final fixing and lift into position and rehang using original fittings and fixtures. Fix all gate furniture.				
	10)	Note - All fencing materials to be treated and stained at works prior to delivery. Any new cuts, rebates, arrisses, etc. to receive two coats of treatment/stain prior to final fixing.	PPF	PRD		
	11)	All employees are required to keep their working areas clear and remove all rubbish at the end of the working day.				
EXTERNAL WORKS	**6H.1**	**~ LANDSCAPING ~**	**1**	**2**	**3**	**4**
	1)	Make good any grassed areas disturbed using topsoil and finishing with applied grass seed.				

	(Detail here any specific COSHH Data Sheets to be included as part of our works)

COSHH (Control of Waste and Substances Hazardous to Health)	Refer to Section 7 of the Health and Safety File

Construction of New 4 Bed Dwelling (Cont'd)	R. Lowndes Plmbg & Htg Ltd

Required personal Protective equipment									OTHER: 
	Gloves	Coverall	FFP3 Face Mask	Respirator	Goggles	Hard Hat	Face Shield	High Viz	Ear Defenders
	YES	NO	YES	Yes / No	YES	YES	Yes / No	YES	YES

Emergency Procedures	As determined at site induction. Locally of emergency A & E given below First Aider to be consulted immediately should an accident occur - IF in doubt - Dial 999 Existing evacuation procedures to be advised at site induction. All operatives to comply to such procedures. All operatives to be aware of the sound of alarm bells. Exit routes to be clearly lit, defined and marked.

First Aid Facilities	First Aid Box Location	MAIN CONTRACTORS SITE OFFICE
	Nearest Hospital with A & E Department	Macclesfield District General Hospital, Victoria Road, Macclesfield, Cheshire. SK10 3BL
	A&E Tel. No.	01625 - 421000

Fire Plan and Actions Req'd		TO BE ADVISED AT SITE INDUCTION
	Main Contractor }	Fire Risk Assessment to be carried out (See Section 7 of H&S File)
		Fire Plan to be displayed on H&S notice board and a copy in the canteen.

Method of Access and Egress to the work area:	(ie. Ladders / MEWPS / Scaffold / Trestles / Step Ladder / Etc.) Follow designated access routes as directed at site induction - routes should be clearly marked Loading Bays and Distribution Points to be pre-agreed. All vehicular and pedestrian routes to clearly defined

Construction of New 4 Bed Dwelling (Cont'd)	R. Lowndes Plmbg & Htg Ltd

Fall Protection Measures (Where work at height cannot be eliminated - consider both Personnel and Materials	(ie. Guard Rails / Toe Boards / Brick Guards / Safety Harnesses / Exclusion Zones / Etc.) Internally - Trad-deck fall arrest system to be employed Externally - Standard tube and clip scaffold to be employed, erected by specialist contractor.			
Safe Working Loads SWL's	(Detail and limits on loadings applicable to temporary plant / equipment or fixed elements of the structure where work is taking place.) Care to be taken when loading out materials Loading bays not to be overloaded when loading out bricks, blocks and mortar.			
Design of Temporary Works	(Detail here any special arrangements required to facilitate or give access to the works inc temp. lighting.) Scaffold design responsibility of scaffolding contractor			
Environmental Aspects and Impacts Evaluation:	(Mark significant aspects to the site with (✓) to identify)			**(✓)**
	Waste Paper	( )	Creation of Noise	( )
	Use and Disposal of Electronic Equipment	( )	Vibration	( )
	Energy Use	( )	General Waste Disposal	**(✓)**
	User and disposal of inks and toners	( )	Contaminated Waste Disposal	( )
	Carbon Emissions	( )	Emissions from Paints and Solvents	( )
	Creation of Dust	**(✓)**	Fumes / Gases from Welding / Hot Works	( )

Base Data Used	1) GE700. 2) Company Health and Safety Policy. 3) PUWER98 Regulations. 4) LOLER98 Regulations. 5) HS(G)47 Avoiding danger from underground services 6) HS(G)53 Respiratory Protective Equipment at Work
Responsibilities	1) Site Safety = All site staff and operatives 2) Delivering Toolbox Talks = Responsible Manager or Site Supervisor 3) All work to be undertaken by qualified competent persons with experience of the type of work. 4)
Bespoke Risk Assessments **Company Protocols and Process**	The purpose and function of our bespoke risk assessment is: 1) To identify operations, tasks and processes which may in the foreseeable future cause harm to employees or others, including members of the public (hazard); 2) To identify the potential of the hazard being realised, and the potential consequences which might then occur (risk); 3) To enable a risk assessment to be developed which will assist in eliminating or reducing the exposure of the population to the risk. When an evaluation of the risk has been considered, the principles of prevention, control and protection are applied. The 1) Avoid risks if possible; 2) Combat risks at source; 3) Change the method of work to suit the individual; 4) Make use of technological developments; 5) Incorporate control measures into procedures within an overall planned structure to reduce risks; 6) Give precedence to controls which cover the whole workforce or activity; 7) Provide information and training to employees and self -employed persons; 8) Confirm that control measures indicated by the risk assessment are in place and are effective.

Ranking Risks

In order to ensure that the greatest risks are addressed first it is necessary to be able to rank those risks. To do this takes a subjective judgement of both the likelihood of damage occurring (the likelihood) and the potential damage that would occur if the worst were to happen (the severity). By assigning a value to each task's likelihood and hazard and multiplying those together a risk value for that task is established:

A "hazard" is defined as something with the potential to cause harm. This includes injury and ill health, loss of production and damage to plant, goods, property or the environment.

"**Risk**" is the **likelihood** that the harm from a particular **hazard** is realised. **Risk** is expressed as:

Hazard Severity x Likelihood of Occurrence

RISK		SEVERITY				
		Death	Major Injury	7 Day +	Minor Injury	Trivial
LIKELIHOOD		5	4	3	2	1
Certain	5	25	20	15	10	5
Highly Likely	4	20	16	12	8	4
Likely	3	15	12	9	6	3
Possible	2	10	8	6	4	2
Remote	1	5	4	3	2	1

Thus we develop an action plan based on this simple risk-based control plan:

Risk assessment is not an end in itself. It is simply a tool that allows us to evaluate dangers to the work force and consequently take suitable measures to protect them from these hazards.

RESIDUAL RISK LEVEL	ACTION AND TIMESCALE
LOW (1 to 5)	No action is required and no documentary records need be kept. Monitoring is required to ensure that the controls remain effective.
MEDIUM (6 to 12)	Efforts must be made to reduce the risk. Risk reduction measures should be implemented within a defined time period. Where the medium risk is associated with extremely harmful consequences, further assessment may be necessary.
HIGH (15 to 25)	Work Cannot begin until the risk level has been reduced. If work is in progress it must be stopped until the risk is reduced to an acceptable level.

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SC	RC	RD	Hazard (What could cause Harm)	Consequences and Persons affected	Uncontrolled Risk			Summary of Control Measures to be included.	Residual Risk		
					S	L	RV		S	L	RV
6	BCC		Building Materials - Concrete	Direct injury to operatives - Burns to exposed skin, Splashes in eyes and damage to eyes	3	4	12	Ensure that arms and legs are covered when working with concrete and that gloves are worn to ensure that the concrete does not come into contact with bare skin. Ensure suitable wellington boots are worn to protect feet. Wherever there is the possibility of concrete entering the eyes, suitable eye protection must be worn.	3	2	6
11	BCE		Building Materials - Working with Cementitious material	Injury to Operatives, Burns and dust inhalation	4	4	16	When working with cementitious material all operatives will wear PPE as identified in the M.S., including FFP3 face fitted masks and gloves. Any cementitious contact with the skin will be washed off immediately at the nearest wash station. Cementitious contact with the eyes to be reported to the first aider who will administer treatment. Persistent discomfort to be treated at the local A & E department.	4	2	8
6	BHA		Building Materials - Flammable/ Hazardous substances. Environmental Contamination and Fire.	Fire, burns, explosions. Major injury or death, Operators, other employees, visitors, public. General public, Health Hazard.	5	5	25	Refer to relevant COSHH assessment and safety data sheets. fire risk assessment. Ensure that correct equipment and paints are used for the task. Paints and equipment not to be disposed of down public drains or general waste bins, but to be disposed of as COSHH assessment requires.	5	2	10
4	BHD		Building Materials - Plaster - Hazardous Dust / Fumes	Inhalation, ingestion, absorption. Chronic and acute health affects. To respiratory system, skin disorders etc. Fainting, coughing, breathing difficulties, falling causing injuries, Plasterers and other persons.	5	5	25	Avoid creating excessive dust when mixing plasters. Keep working areas sectioned off away from other workers and general public. Ensure that correct equipment is used for the task. Ensure plenty of ventilation in work area before & during work times. Regular breaks in fresh air for plasterers. Emergency plans in place. Correct PPE inc FFP3 face fitted masks to be worn.	5	1	5

3	BWB		Building Materials - Working with Bituminous Material	Injury to Operatives, Burns and Inhalation of fumes and discomfort to 3rd party onlookers	*3*	*4*	*12*	When working with bituminous material all operatives will wear PPE, including gloves. Any bituminous contact with the skin will be washed off immediately at the nearest wash station. Bituminous contact with the eyes will be reported to the first aider who will administer treatment. Any persistent discomfort will be treated at the local A & E department.	*3*	*2*	*6*
3	BAS		Building Materials - Working with Adhesives, Solvents, Expanding Foam, Fillers and the like.	Inhalation of vapours has a narcotising effect. May cause irritation and sensitisation to contact points, irritation to skin, eyes and respiratory system.	*3*	*4*	*12*	Follow manufacturer's instructions and use guidance as set out in associated COSHH Assessments.	*3*	*2*	*6*
2	BSS		Building Materials - Working with Silicone Sealants, Fillers and the like.	May cause irritation and sensitisation to contact points, irritation to skin, eyes and respiratory system.	*3*	*4*	*12*	Follow manufacturer's instructions and use guidance as set out in associated COSHH Assessments.	*3*	*2*	*6*
1	CSC		Confined Space - Chemical discharges or Trade Effluent entering confined space.		*5*	*4*	*20*	All operatives to wear PPE as identified in the M.S. and escape RPE to be available within culvert / manholes. Continuous atmospheric monitoring to be employed.	*5*	*2*	*10*
1	CSF		Confined Space - Flammable Gas Fire / explosion - ignition by sparking or faulty equipment.	Asphyxiation	*5*	*3*	*15*	All equipment to be tested and maintained, PUWER. All equipment to be intrinsically safe. Continuous atmospheric monitoring to be employed. No naked lights allowed.	*5*	*1*	*5*
1	CSO		Confined Space - Oxygen replaced by other gases such as Methane or Carbon Dioxide.	Asphyxiation	*5*	*3*	*15*	Distinct possibility, all operatives to wear PPE as identified in the M.S. and escape RPE to be available within culverts / manholes. Continuous atmospheric monitoring to be employed.	*5*	*1*	*5*
2	CSW		Confined Space - Sudden Ingress of Water into Void or Culvert	Drowning	*5*	*4*	*20*	All operatives must be confined space trained. All operatives will evacuate the confined space during times of heavy rainfall. Weather conditions and incoming flows will be continually monitored during working hours.	*5*	*2*	*10*
2	DDD		Demolitions - Inhalation fumes, dust. Flying debris and rubble. General cuts & abrasions	Injury to Operatives carrying out the work and potential damage to adjacent objects and structure	*3*	*4*	*12*	Use of FFP3 face fitted dust masks and safety goggles, gloves and overalls. Use dampening down methods of work.	*3*	*2*	*6*

6	EBC		Excavation - Being Struck by Excavator / Plant	Injury to Operatives by Striking or Collision - May cause serious injury	5	4	20	Ensure excavations are suitably guarded. Banksman to be present at all times during work. Plant only to be controlled by fully trained operatives with minimum CPCS qualifications.	5	2	10
2	ECE		Excavation - Collapse of excavation:	Injury to operatives by crushing / asphyxiation.	5	2	10	Ensure that the excavations are suitably guarded. Ground conditions and depth will assessed to determine if ground support is necessary and the type of ground support required. Numbers of operatives entering excavation will be kept to an absolute minimum.	5	1	5
6	EUS		Excavation - By Hand - inadvertent contact with underground services	Physical harm to operative, damage to existing services and affects on surrounding businesses	5	4	20	A CAT scan must be completed prior to the excavation work commencing. Consult service drawings prior to commencing work. Maintain continual visual inspection of dig. Ensure PPE is worn as identified in M.S.	5	2	10
1	FCS		Fencing - Clearance of site for new fencing	Injury to operatives	3	3	9	Competent operatives only with appropriate PPE. Rubbish to be cleared as work progresses, keep walkways clear and carefully stack salvaged materials. Remove from site ASAP. Plant only to be used by qualified operators.	3	2	6
2	FEH		Fencing - Open Excavations / Post Holes	Physical harm to all site personnel OR OTHERS	3	4	12	Do not leave holes open adjacent walkways or access routes. Either temp cover over or leave posts in holes awaiting concrete fill.	3	2	6
2	FFF		Fencing - Flying fragments from cutting, breaking etc. operations	Injury to operatives - Eye Injuries	4	3	12	Ensure impact grade eye protection is worn at all times. Ensure that operatives not involved are kept away from operations.	4	1	4
1	FLR4		Flooring - Building Materials - Contact with substances that may cause harm to health	Dependent on the content of the substance the results of contact could be fatal or cause long tem damage to the respiratory system, vital organs and eyes.	3	3	9	No substance is to be used in any procedure until it has been assessed in accordance with CoSHH 2002. See the attached CoSHH assessment for details of the substances that will be used in carrying out this task. All work areas are to be kept well ventilated and where required, local exhaust ventilation will be supplied. Where workplace exposure limits (WEL) are likely to be reached or exceeded an alternative product or fixing method will be used.	3	1	3

17	MEM		Manual Handling:	Manual handling - Equipment and Material	3	4	12	Ensure that any loads or materials lifted manually are under 25kg per person load. Wear appropriate PPE as identified in the M.S.. Use safe lifting techniques keeping back straight and lifting from the leg. Where possible utilise mechanical lifting machinery.	3	2	6
4	MFE		Manual Handling - Working with heavy shuttering components, long lengths of timber and large sheets of plywood	Muscular / Physical Injury to operatives	3	4	12	Ensure adequate number of operatives available to facilitate the construction of the shuttering units. Ensure adequate labour is available or use plant where possible in moving shuttering components into position and ditto for stripping shutters.	3	2	6
1	NSI1		Needles - Incurring a "Sharps" injury ("Sharps" are needles, blades [such as scalpels] and other medical instruments that could cause injury by cutting or pricking the skin).	A variety of workers are at risk of suffering from a needle stick injury during their daily activity. Workers with high risks include those working in the healthcare sector, as well as workers in the prison and probation services, police and social work.	5	5	25	Stay safe: • Do not put your unprotected hands anywhere you cannot see. • If you cannot see what you are going to touch, wear appropriate protective gloves. • Cover any cuts or abrasions with waterproof plasters. • Under no circumstances should any worker be expected to touch a discarded needle with their bare hands. • Where needles are found there must be a procedure for safe disposal.	5	2	10
1	NSI2		Needles - The main risk from a sharps injury is the potential exposure to infections such as blood-borne viruses (BBV). This can occur where the injury involves a sharp that is contaminated with blood or a bodily fluid from a patient. The blood-borne viruses of most concern are: • Hepatitis B (HBV) • Hepatitis C (HCV) • Human immunodeficiency virus (HIV)	However, construction maintenance workers and those in the demolition industry can be exposed to this hazard when needles are not properly disposed of .	5	5	25	Checklist for Safety Representatives: • Identify if there are any workers who might be at risk of needle stick injuries? • Include the company policy on needle stick injury and safe system of work within the health and safety file. • Ensure that full information and policy contents are explained and understood by all workers at risk within their individual site induction.	5	2	10
1	NSI3		Needles -	RESULTANT ACTIONS				It is normally recommended that if a needle stick injury occurs the bleeding should be encouraged and the wound washed in warm running water with soap. Following this, immediate medical treatment should be sought.			

5	OAW		Operations - Abrasive Wheels, Stihl Saw's & Disk Cutters:	Injury to Operatives.	3	4	12	Ensure that all operatives engaged in using stihl saw and abrasive wheels are trained and competent. Ensure that correct PPE as identified in the M.S. is worn including gloves and eye protection. Ensure safety guards are fitted. Check all new wheels for visible damage. Check machine speed against approved operating wheel speed. Ensure that stihl saw is well maintained, PUWER.	3	2	6
13	OCB		Operations - Cutting bricks, Masonry, Paving, etc.	Bricklayers could suffer eye injury through flying brick fragments	4	4	16	Safety goggles to be worn when cutting or breaking bricks. Use of goggles to be monitored by site agent. PPF3 face fitted mask to be used at all times.	4	2	8
3	OCM		Operations - Cutting Materials using Stanley Knife or similar (sharp blades, Blade breakages)	Severe cuts to hands, arms etc. Possible amputation of fingers. Eye injuries from blade fragments flying through the air, damage to material and to support strata. Wasting Material.	3	5	15	Use only quality bladed safety knives. Training in correct use of bladed tools. Suitable hand and eye protection. Wear suitable outer clothing e.g. overalls. Special training from manufacturer to be effected. Care to be taken when measuring and cutting.	3	1	3
3	OCW		Operations - Works in or adjacent to contaminated water	Injury to Operatives - Leptospiral Jaundice / Tetanus	4	5	20	All operatives encouraged to have Tetanus inoculation coverage . Ensure that all operatives wear PPE as identified in the M.S. and ensure that personal hygiene is practiced. All operatives to carry instruction card for work in rat infested buildings or sewers. First aid facilities on all vehicles and sites	4	2	8
9	ODU		Operations - Dust	Eye irritation, Asthma	4	5	20	Where it is possible that dust maybe created from the use of the tool then a dust suppression unit is to be fitted if practicable. If not then damping of the working area is required and a CoSHH risk assessment must be conducted. A PPF3 face fitted dust mask should be worn at all times.	4	1	4
2	OFP		Operations - Flying particles	Eye injury permanent or temporary, Puncture injury, Cuts and Abrasions	4	5	20	Check tools and associated parts that they are in good order, ensure that all guards are in place and never removed operative must wear eye protection.	4	1	4

10	OID		Operations - Inhalation of dust, stone particles	Injury to operatives including injury to eyes and nasal passages leading to breathing difficulty	*3*	*4*	*12*	PPE as identified in the M.S. to include gloves, FFP3 face fitted dust masks, overalls, etc.	*3*	*2*	*6*
8	OIF		Operations - Items Falling - Load spill at delivery or distribution to area of final fixing	Injury to operatives working around or beneath area of construction	*4*	*4*	*16*	Only fully qualified personnel to be used to secure lifting tackle to units being lifted. All lifting tackle being used to be certified.	*4*	*2*	*8*
2	OIW		Operations - Inclement Weather - Rain, Snow, Ice, Frost, Etc.	Injury to operatives carrying out the works and other on site personnel	*4*	*3*	*12*	All operatives have been made aware of the greater risk of injury when working in inclement weather. Snow and Ice to be cleared from the working area before work commences inc. all access equipment and ladders. The site manager will determine whether it is safe to work and if it is, then take account of weather conditions, Wear appropriate clothing and take warm drinks in cold weather.	*4*	*2*	*8*
3	OKN		Operations - Kneeling	Musculo/skeletal injuries to knees may occur if body weight is predominantly on knees	*3*	*5*	*15*	Provision of suitable PPE for knee protection, either in the form of work wear with integral knee protection (recommended), or independent knee pads.	*3*	*1*	*3*
4	OLM		Operations - Lifting - Mechanical Lifting Operations	Equipment failure. Operators, other persons general public crushed, seriously injured, death.	*5*	*5*	*25*	Separate Mechanical Lifting Operations risk Assessment to be carried out. Competent, trained personnel to operate and attach lifting equipment. Work area to be made secure preventing unauthorized access. Lifting operations to be adequately planned and supervised. Lifting equipment will be inspected, tested and maintained as required under current legislation. Personnel will receive adequate instruction training and supervision and be provided with relevant PPE. Safe working loads will be observed.	*5*	*2*	*10*
7	OWD		Operations - Wood Dust	Respiratory Diseases, Eye irritation and Asthma. Hardwood dust can cause cancer (particularly of the nose)	*4*	*5*	*20*	Where it is possible that dust maybe created from the use of the tool then a dust suppression unit is to be fitted if practicable. If not then damping of the working area is required and a CoSHH risk assessment must be conducted. A PPF3 face fitted dust mask should be worn at all times.	*4*	*1*	*4*

3	PPF		Painting - Paint Fumes	Inhalation, ingestion, absorption. Fainting, coughing, breathing difficulties, falling causing injuries,	5	5	25	Keep working areas sectioned off away from other workers and general public. Ensure that correct equipment and paints are used for the task. Ensure plenty of ventilation before & during work times. Regular breaks in fresh air for operators. Emergency plans in place. Correct PPE to be worn	5	1	5
3	PRD		Painting - Rubbing down non-hazardous materials - dust.	Inhalation, ingestion, absorption. Chronic and acute health affects to respiratory system, skin disorders etc. Operator, bystanders.	4	4	16	Work in a well ventilated area where possible, wear appropriate respiratory protection, damp down area if possible, wear protective clothing, FFP3 face fitted masks and gloves.	4	2	8
2	PCU		Power Tools / Plant - Compressors - Use of and operations	Injury to Operatives	3	4	12	Ensure the compressor is well maintained. Ensure that valves are closed before starting compressor. Attach equipment to compressor before opening valves. Discharge AIR from compressor on completion. When blowing condensation from compressor hoses, always ensure that the pressure is turned down and that the open ends are secure and not pointing at the body or public areas. All hoses must be fitted with whip checks to prevent hoses whipping should they accidently become uncoupled. Ensure that the operatives wear ear and eye protection when using compressor tools. Ensure that the compressor exhaust is directed away from excavations.	3	1	3
2	PLB		Plumbing - Breathing in Solder Fumes	Ill Health / Occupational Asthma When inhaled, rosin-based solder flux fume can lead to occupational asthma or make existing asghmatic conditions worse. Gthe fume can also cause irritation to the eyes and upper respiratory tract.	4	4	16	Operatives will ensure adequate natural venitaltion is avialbale at all times when working. Correct PPE as indicated to be worn at all times especially in protecting eyes, nose and mouth from splashes of fluxes, etc. All staff will follow instructions on safe working practices, including the correct use and adjustment of control measures such as local extraction ventilation.	4	1	4

2	PHW		Plumbing - Fire From Hot Works Operations (pt 1)	Physical harm to all site personnel, damage to structure and building components	5	5	25	Ensure that there is no combustible material in close proximity to the work. Suitable protection to be provided for any combustible materials that cannot be moved such as timber floors. At least one and preferably two 9 litre (13A rated) water or 6kg (ABC) powder extinguishers should be provided in the vicinity of the work.	5	1	5
2	PHW		Plumbing - Fire From Hot Works Operations (pt 2)	Serious physical harm to all site personnel even leading to death, damage to structure and building components to the point of complete destruction - ditto to emergency services that may be called to attend	5	5	25	Gas cylinders should be secured vertically and be fitted with regulators and flashback arresters. Care should be taken to ensure that the supply for electrical resistance welding apparatus is rated correctly. Work return leads should be connected as close as possible to the work place and should be free of breaks or cuts.	5	1	5
2	PLI		Plumbing - Incompetence - Operatives not following correct procedures	Serious physical harm to all site personnel even leading to death, damage to structure and building components to the point of complete destruction - ditto to emergency services that may be called to attend	5	5	25	Hot work should be completed at least an hour before the end of the working day. A thorough inspection of the area should be undertaken once the work is complete and, again, one hour after completion. Where necessary, a further check should be carried out at the end of the working day.	5	1	5
3	PCB		Plumbing - Cuts and Burns	Physical injury to operatives leading to potential serious injury	4	4	16	Suitable PPE to be worn at all times including approved safety gloves and sleeve protectors. Encourage use of approved tools and cutting equipment.	4	2	8
3	PDC		Power Tools / Plant - Use of electric power tools/equipment for drilling, cutting stone, raking out mortar	Injury to operatives and plant being used	4	3	12	All electric equipment must be tested as safe to use. Substitute power tools for battery; maintain equipment to include regular PAT testing.	4	2	8
5	PES		Power Tools / Plant - Electric shock from equipment	Injury to operative	3	4	12	Only 110V CTE equipment must be used. Operators must be competent to operate the tools & equipment.	3	2	6
8	PET		Power Tools / Plant - Use of electric hand tools	Injury to operatives -Eye and Ear Injuries, Hand Arm Vibration Syndrome.	4	4	16	Ensure eye protection is worn at all times. Ensure ear protection is worn at all times. Ensure that equipment is chosen for its anti vibration properties. Wear suitable gloves. Ensure that exposure levels are not exceeded. Rotate operatives to achieve minimum exposure.	4	2	8

1	PIN		Power Tools / Plant - Faulty or Misuse of Equipment.	Physical Harm to Operator or adjacent property	3	4	12	Ensure that all equipment has been tested, is fit for purpose/maintained. Use trained operatives. All operatives to wear required PPE as identified in the M.S.	3	2	6
3	PCB		Power Tools / Plant - Faulty or Misuse of Equipment.	Physical Harm to Operator or adjacent property	3	4	12	Ensure that all equipment has been tested, is fit for purpose/maintained. Use trained operatives. All operatives to wear required PPE as identified in the M.S.	3	2	6
5	PLE		Power Tools / Plant - Lifting Equipment Failure	Injury to operative and damage to plant, machinery and materials	2	4	8	Slinger/Signaller to ensure that all lifting accessories are in good working order and that weekly safety inspections are carried out and recorded. All pre-user checks also to be carried out. For hired plant, ensure all test certificate copies are held on site and that all are in date.	2	2	4
9	PMP		Power Tools / Plant - Contact with moving parts of machine - Overturning	Machine operator / banksman. Members of public in work area	4	3	12	Trained machine operative. Use competent banksman at all times. Secure fence to keep out public. Operatives to wear Hi vis jackets/Safety boots.	4	1	4
1	PNO		Power Tools / Plant - Noise	Tinnitus, Hearing loss temporary or permanent	4	5	20	Conduct a noise assessment and wearing of ear protection if required,	4	2	8
2	PPT		Power Tools / Plant - Use of pneumatic hand tools:	Injury to operatives - Hand Arm Vibration Syndrome, Eye Injuries & Ear Injuries	4	3	12	Ensure that equipment is chosen for its Anti-vibration properties. Wear suitable gloves. Ensure that exposure levels are not exceeded. Rotate operatives to achieve minimal exposure. Ensure impact grade eye protection is worn at all times. Ensure that operatives not involved are kept away from the breaking operations. Ensure ear protection is worn at all times. Ensure that all operatives not involved kept away from breaking operations.	4	1	4
1	PVI		Power Tools / Plant - Vibration	Hand arm vibration	4	5	20	Warm and exercise the hands and don't exceed the trigger times.	4	2	8
1	PVR1		Power Tools / Plant - Vibrating Roller - Use of "Sit on" Machine	Injury to Operatives - crushing	4	3	12	Ensue all operatives engaged on the operation wear Hi Visibility clothing and all essential PPE. Employ trained operative and well maintained roller. Ensure that the operator uses seat belt where fitted.	4	1	4

2	PVR2		Power Tools / Plant - Vibrating Roller - Use of "Hand Controlled" Machine	Injury to Operatives - Hand Arm Vibration Syndrome	3	2	6	Ensure that equipment is chosen for its Anti-vibration properties. Wear suitable gloves. Ensure that exposure levels are not exceeded. Rotate operatives to achieve minimal exposure.	3	1	3
6	SAE		Site Rules - Access and egress to / from work area	Injury to Operatives, potential damage to existing structure	4	3	12	Pre-planned, routes and storage areas. Routes to be well marked and sign posted.	4	2	8
4	SEC		Site Rules - Entanglement - Cables / Leads	Cuts and abrasions,	4	4	16	Operatives are not to wear loose clothing or jewellery and all machine guards are to be in place and never removed,	4	2	8
4	SNS		Site Rules - Stepping on nails and sharp objects	All workers could suffer foot injuries.	3	4	12	Safety boots with steel toecaps and midsoles to be worn by al workers. Waste disposed of in skips. Induct all workers on the importance of wearing correct PPE.	3	2	6
5	SOH		Site Rules - Set Up - Out of Hours - Security of Compound	Injury / harm to Operatives, Client Representatives, Members of the Public / Theft of Plant, Machinery and Materials	3	3	9	Lockable gates. Secure all huts and containers. Remove and secure ladders. Secure hazardous substances (ie. LPG). Ensure all works are stable. Secure materials stockpiles and tidy site before leaving. All plant and machinery to be immobilised and secure. Consider the Employ of a Night-watchman or Security Firm to monitor.	3	2	6
5	SOP		Site Rules- Other people entering the work area / Unauthorised Public Ingress.	Risk of injury to 3rd parties from falling objects, vehicle collision, trips, falls, etc.	4	3	12	Site to be cordoned off. Entrances to site to be controlled. To facilitate staged handovers, it may be necessary to cordon off separate areas. Banksman to be present during open excavations. All workers to be alert.	4	2	8
5	SSC		Site Rules - Set Up - Site Compound - Vehicle Movements - Collisions (especially on entry and exit to site), Pedestrian RTA	Injury / harm to Operatives, Client Representatives, Members of the Public. Damage to Vehicles and Property	4	4	16	Ensure entry / exit points from site allow for adjoining road conditions and use; signs; traffic control; visibility mirrors. Establish pedestrian & vehicle routes and where practicable demarcate with fencing if adjacent. Establish a 1 way system if practicable. Locate storage to remove or minimise reversing & handling Vehicles fitted with reversing alarms. Adequate compound lighting. Unstable ground; route away or bridge existing culverts or ducts; weak surfaces lay hardcore or other temporary surfacing.	4	2	8

4	SSU		Site Rules - Set Up - Plant, Equipment, substances, materials and site facilities	Injury / harm to Operatives, Client Representatives, Members of the Public	3	3	9	Ensure perimeter of compound is securely fenced and closed to the public. Perimeter signing "Construction Site Danger Keep Out" to be displayed. Visitors to report to site office or site representative.	3	2	6
3	SUA		Site Rules - Unauthorised access to work area by building users / residents	Risk of injury / physical harm to 3rd parties, misuse or theft of tools or materials.	4	4	16	Cordon off work area. When power tools are not in use they are to be packed away in a secure container and locked to prevent unauthorised access at work. Materials to be removed at the	4	1	4
1	SVA		Site Rules - Vandalism	Injury to Operatives, Injury to 3rd Parties, Damage to plant and equipment, Damage to Property	4	4	16	Never leave plant unattended with keys, ensure all plant is stored in the compound out of working hours. Ensure that the site is secure and that materials and tools are not left out over night / weekends. All plant and equipment to be inspected for signs of interference prior to use.	4	2	8
4	SWL	01/09/13	Site Rules - Working on a live site: Collisions and Accidents	Workers could suffer serious or even fatal injuries from vehicles and machines on site - particularly when reversing	3	4	12	Manager to agree safe route to work area with principal contractor based upon the construction phase health and safety plan. Induction to each site to be carried out for all workers on first day.	3	2	6
2	TCM		Trips, Slips and Falls - Trips from poor cable management,	Breaks, Dislocation, Cuts and Abrasions	4	5	20	Substitute power tools for battery cordless if that is not possible then cables are to be routed so they don't cross any walkways.	4	1	4
5	TOR		Trips, slips and Falls - Over Reaching	Danger of falling, Major /Minor Injuries to Operative and other persons, danger from falling tools or materials. Damage to access equipment.	5	4	20	Ensure safe access/egress. Good housekeeping. Separate risk assessment for use of ladders or other working platform. Keep working areas sectioned off away from other workers and general public. Ensure that correct equipment are used for the task. Ensure Emergency first aid plans in place. Correct PPE to be worn inc. harnessing if fastening points are available.	5	2	10
7	TSF1	01/09/13	Trips, Slips & Falls - good house keeping	Injury to operative and other site personnel	4	3	12	Pre-planned routes and storage areas. Keep area of work and surroundings clear of debris and rogue materials. Ensure good footwear and remove recognisable tripping hazards where appropriate.	4	2	8

2	UEL		Utilities - Electricity	Electric shock, death and fire	5	5	25	Substitute power tools for battery, check cables before use, maintain equipment to include regular PAT testing. Only competent and trained operatives are allowed to use power tools and not under the influence of alcohol or drugs. When operating power tools, and don't use near water and ensure that adequate lighting is provided at all times.	5	2	10
1	UHS		Utilities - Hitting hidden services	Electric, Gas leak, Water leak	4	4	16	Isolate then services and scan for hidden pipes, cables and check drawings if available	4	1	4
1	UPL		Utilities - Presence of live electric cabling / gas pipes	Electrocution, gas explosion through local gas pipes and cables being inadequately protected and identified.	4	3	12	Existing gas pipes to be isolated away from the working area. Existing power sources to be isolated away from working area, 110v working supply provided by main contractor for operative to use.	4	2	8
1	WAH1		Work At Height - Falls from height by individuals or groups of people	Serious Injury or Death to employees, visitors or members of the public	5	5	25	• All activities involving working at height are to be assessed, planned & properly organised. • Ensure that all operative are trained and competent in the use, maintenance and storage of working at height equipment, including ropes and harnesses. • Ensure correct Harness/ PPE to be worn at all times • Particular attention should be made to adverse weather conditions if working outside. • All surrounding areas to be kept free from public access, sectioned off.	5	2	10
1	WAH1		Work At Height - Falls from height by individuals or groups of people	Serious Injury or Death to employees, visitors or members of the public	5	5	25	• Ensure safe access and egress to and from the working area • Safe working platforms/scaffold used and Scaffold to be erected by trained and competent personnel • Regular inspection and maintenance of access equipment, this should be recorded. • Ensure that adequate edge protection in the form of fixed barriers will be provided in all areas where practicable, where there is a risk of falling from	5	2	10

1	WAH2		Work At Height - Tools / Materials / People falling from height	Serious injury or Death to person(s) below, employees, visitors or members of the public	5	4	20	• Ensure that there are fixed solid barriers in place where practicable to prevent items falling off the working platform • Ensure that there are toe boards, hand rails, mesh barriers or similar corrective means of edge protection. • Materials being removed from height to be dropped through appropriate covered shoot, • To ensure that no loose work tools or loose items to be left on the working platforms and working area kept clear at all times	5	1	5
1	WAH2		Work At Height - Tools / Materials / People falling from height	Serious injury or Death to person(s) below, employees, visitors or members of the public	5	4	20	• Only competent persons to construct/dismantle access equipment. Awareness of the SWL (safe working load) of the access equipment, not to be exceeded. • That any lifting equipment is suitable for the task and operated by trained and competent person and is assessed by specific separate risk assessment	5	1	5
1	WAH3		Work At Height - Incorrect choice of access equipment	Serious Injury or Death to employees, visitors or members of the public	5	5	25	• Assess each operation individually and make the choice of equipment to be used bespoke to that individual situation only. • Ensure that the access equipment chosen is suitable for the job, suitable for the loading and that it meets current legislation.	5	1	5
1	WAH4		Work At Height - Falling Personnel, Materials or Plant whilst Loading or Unloading Vehicles	Serious Injury or Death to employees, visitors or members of the public	5	4	20	• Assess each operation individually and make the choice of equipment to be used bespoke to that individual situation only. • Ensure that all personnel are fully trained in the loading and unloading of vehicles.	5	1	5
2	WFE		Work At Height - Falling equipment / materials	Serious head and other injuries to workers	4	4	16	Brick guards kept in position on scaffold lifts. Waste materials removed from scaffolds and placed in skip. All operatives to wear required PPE as identified in the M.S. Regular check to see scaffold is not overloaded.	4	2	8
1	WFH		Work At Height - Falls from Height, falls from cherry pickers, scaffolds, towers, etc.	Serious head and other injuries to workers through inadequate or inappropriate equipment, lack of care.	4	4	16	All operatives to wear safety harness and clip onto approved shackle or rail at all appropriate times, only people trained, certified and instructed to do so will operate boom, cherry pickers, etc.	4	2	8

3	WTP		Work At Height - Falls into Open Excavations	Injury to Operatives, Injury to 3rd Parties, Damage to plant and equipment, Damage to Property	*4*	*3*	*12*	Ensure that the excavations are suitably signed and guarded. Ensure that all excavations are backfilled and made good at the earliest opportunity following completion of works.	*4*	*2*	*8*

HSE Guidance on the Use of Ladders (Specifying methods of working)		**WORK DESCRIPTION AND METHODOLOGY**
	1	The Work at Height Regulations 2005 do not ban ladders. They require that ladders should only be considered where a risk assessment has shown that the use of other more suitable work equipment is not appropriate because of the low risk, and short duration of the task or considerations of where the work is located.
	2	HSC accepts the practicalities of the use of ladders for work at height, and the fact that they are commonly used in a wide variety of situations. Ladders are used in almost all employment sectors, sometimes for purposes other than those for which they were designed.
	3	Schedule 6 of the Work at Height Regulations 2005 deals with the requirements for ladders and states:
	4	1. Every employer shall ensure that a ladder is used for work at height only if a risk assessment under regulation 3 of the Management Regulations has demonstrated that the use of more suitable work equipment is not justified because of the low risk and - the short duration of use; or existing features on site which he cannot alter.
	5	2. Any surface upon which a ladder rests shall be stable, firm, of sufficient strength and of suitable composition safely to support the ladder so that its rungs or steps remain horizontal, and any loading intended to be placed on it.
	6	3. A ladder shall be so positioned as to ensure its stability during use.
	7	4. A suspended ladder shall be attached in a secure manner and so that, with the exception of a flexible ladder, it cannot be displaced and swinging is prevented.
	8	5. A portable ladder shall be prevented from slipping during use by - securing the stiles at or near their upper or lower ends; an effective anti-slip or other effective stability device; or any other arrangement of equivalent effectiveness.
	9	6. A ladder used for access shall be long enough to protrude sufficiently above the place of landing to which it provides access, unless other measures have been taken to ensure a firm handhold.
	10	7. No interlocking or extension ladder shall be used unless its sections are prevented from moving relative to each other while in use.
	11	8. A mobile ladder shall be prevented from moving before it is stepped on.
	12	9. Where a ladder or run of ladders rises a vertical distance of 9 metres or more above its base, there shall, where reasonably practicable, be provided at suitable intervals sufficient safe landing areas or rest platforms.
	13	10. Every ladder shall be used in such a way that - a secure handhold and secure support are always available to the user; and the user can maintain a safe handhold when carrying a load unless, in the case of a step ladder, the maintenance of a handhold is not practicable when a load is carried, and a risk assessment under regulation 3 of the Management Regulations has demonstrated that the use of a stepladder is justified because of - the low risk; and the short duration of use.'

Construction of New 4 Bed Dwelling (Cont'd)	R. Lowndes Plmbg & Htg Ltd

All Operatives signing on to this method statement below do so having read and understood this document together with all the information contained therein. Furthermore, they all agree to work safely, diligently and carefully, working always with the safety of others in mind.

Name	Occupation	Employed By	Signed as	Date

Construction of New 4 Bed Dwelling (Cont'd)	R. Lowndes Plmbg & Htg Ltd

METHOD STATEMENT MINOR AMENDMENTS FORM:

To be used only for a single minor amendment to the original Method Statement. For major changes to the method, or a second minor amendment, a full revision to this Method Statement will be produced and communicated to all relevant parties.

MS Address:	**MS Ref:**
Work activity affected:	

DESCRIPTION / EFFECT		**Record of persons briefed on changes:**				
Proposed Change:		**Name**	**Occupation**	**Employed By**	**Signed as Understood**	**Date**
New Risks Identified:						
Proposed New Control Measures:						
REQUESTED BY:						
DATE:	TIME:					
AGREED BY:						
DATE:	TIME:					

THIS DOCUMENT HAS BEEN PREPARED ON BEHALF OF:

Amy Louise Millward

TEL No. 07929-346376

WHO'S HEAD OFFICE IS CURRENTLY BASED AT:

Springfield, Buxton Road,
Leek,
Staffordshire.
ST13 6NF

FAX No.

EMAIL craigdlowndes@outlook.com

DIRECTOR RESPONSIBLE FOR HEALTH AND SAFETY

Amy Millward

TITLE: DIRECTOR