SCHEDULE OF WORKS

for

Re-roofing, (and photovoltaic installations) and replacement of existing porch at Yorkshire Dales National Park Malham Visitor Centre

PRELIMINARIES

DESCRIPTION OF THE WORKS
Re-roofing of the National Park's Visitor Centre, Malham incorporating in-line PV array to south elevation and replacement of the existing entrance porch

SITE
YDNPA Malham Visitor Centre, Malham, Skipton BD23 4DA
What3words///relocated.press.advances

EMPLOYER
The Yorkshire Dales National Park, Yoredale, Bainbridge, Leyburn, North Yorkshire DL8 3EL

ARCHITECT
This document and included working drawings have been prepared by Peter Harrison Architects, 8 Craiglands Gardens, Ilkley LS29 8UX .(01756 748507).

DRAWINGS
This specification is to be read in conjunction with the following drawing: **012403-01, 02, 06E and 07A.**

MEASUREMENT
Dimensions should not be scaled from drawings, only figured dimensions used. All dimensions must be checked on site and any discrepancy notified to the architect before works commence.

TENDER
This is to be a fixed price quotation. The clients do not bind themselves to accept the lowest or any other tender and will not pay tendering costs.
The tender must be returned to the agent's office by noon on the date specified in the invitation to tender.

PROGRAMME OF WORKS
The contractor should submit a proposed start and completion date on the form of tender returned to this office. This is to be confirmed prior to contract by submission of work/bar chart. The planning conditions do not allow any “External Construction Works” form being undertaken at weekends (or public holidays).

PAYMENTS
The contractor shall at suitable intervals, not generally less than one month, submit a detailed account for work carried out and provide whatever documents are necessary to support that application for payment. The Architect’s Certificates will be issued after checking of the accounts and shall be due for payment within fourteen days of the date of issue.

PROVISIONAL OR P.C. SUMS
When Provisional or P.C. Sums are included, the contractor will be allowed a discount of 5% on the nett cost where the materials are fixed by the contractor, and 2½ % when fixed by specialists.

INSURANCE COVER
The contractor shall be required to provide evidence of cover against theft of all materials, fixed or unfixed, intended for the works, for the full duration of the contract and until the date of Practical Completion.

INSPECTION
The contractor shall visit and inspect the site and acquaint himself with the nature of the work, means of access and storage space, and shall include for the supply of materials and labour to complete the works. No claim for variation, amendments or additional costs will be considered on the grounds of lack of information occasioned by default of inspection on the part of the contractor.

ACCESS TO AND USE OF THE SITE
Access can be arranged with Jon Tighe, Estates Manager YDNPA
Direct line: 01756 751655
Mobile: 07583 107976

HEALTH AND SAFETY AT WORK
Allow for providing safety, health and welfare facilities for workpeople and for complying with the current edition of the Health and Safety at Work Act, and other statutory regulations and local working rules.
Allow for ensuring the safety of all workpeople and visitors on the site, and for planning and arranging the works with safety as one of the major considerations. Display in a prominent position any warning signs.
The tender must include an allowance for all resources required to comply with relevant Health and Safety legislation.
Generally comply with Code of Welfare Conditions for the Building Industry.

THE CONSTRUCTION (DESIGN & MANAGEMENT) REGULATIONS
The regulations place duties upon the employer and upon the Principal Designer. The contractor will become the Principal Contractor.

The project is deemed to be notifiable under these regulations, and the contractor’s attention is drawn to the information about significant risks contained within these Preliminaries.

The contractor shall be responsible for carrying out the duties of the Principal Contractor as defined in the above regulations and Code of Practice, including ensuring compliance by all subcontractors and suppliers and cooperating with the Principal Designer. The contractor shall include for all the resources and costs necessary to achieve the same.

Under the terms of regulation 15(b) the Principal Contractor will be allowed (2) weeks for the preparation of the Construction Phase Plan.

CONSTRUCTION PHASE PLAN
Prior to taking possession of the site the contractor shall prepare the Construction Phase Plan and submit same to the Principle Designer for comment.

No work can begin on site until a satisfactory Plan has been prepared. The contractor shall be responsible for maintaining the Plan up to date for the full duration of the contract, including cooperating with the Principal Designer, and for ensuring the compliance of all personnel working on the site.

DESIGN AND MATERIALS

The design and materials are normal for works of this nature and should not present any hazards that a competent contractor should not foresee. The contractor's attention is drawn to the significant risks identified below, however.

SIGNIFICANT RISKS

The contractor's attention is drawn to the following significant risks associated with the works:

Hazardous Activity	Residual Hazard	Information for Hazard Control
Works in relation to site set up/ scaffolding/ access	none	The Visitor Centre will be closed for the duration of the works but the adjacent car park, public toilets and adjacent footpaths will remain open to the public and are heavily used throughout the year. Delivery and erecting and dismantling of scaffold will involve work within the public car park and areas where the public will be present.
Roofing work/flat roof stripping stripping slates	none	Attention to possible deleterious materials (YDNPA TO PROVIDE ASBESTOS REGISTER) and dust creation affecting adjacent areas/ general population around the building. It is apparent that the existing slate fixings are failing. Care to be taken to ensure slates are removed safely.
Children (and dogs)	none	Children (and dogs) will be present within the adjacent car park and the working area will need to be contained within security fencing.
Demolition of existing porch roof	none	Care required to identify load bearing elements and sequence of dismantling.
Site access/ parking	Remains after completion	Agree with the National Park where deliveries and operatives vehicles are to be parked to prevent conflict with the public (and bus services which stop close to the building)
Bats and birds	Remains after completion	Bats and birds (and their droppings) may be present within the roof especially the eaves and gable verges where there are nests. Personal hygiene standards must reflect the disease hazard associated with their presence.

ASBESTOS

The contractor should be constantly on the lookout for asbestos, especially when carrying out refurbishment work on old buildings, as this presents a significant health hazard, and removal will need to be undertaken by a contractor approved under the Asbestos Licensing Regulations. Should asbestos be discovered unexpectedly, work must cease immediately and the C.A and Principal Designer are to be informed.

THE HEALTH AND SAFETY FILE

Provide the Employer with information, certificates, guarantees etc. which may be reasonably required to complete the Health & Safety File in compliance with the Construction (Design and Management) Regulations 2015, and as listed in the appropriate Preambles to Trades.

Such information should be provided prior to completion of the work or as otherwise requested by the Principle Designer.

BUILDING SAFTEY ACT

Ensure compliance with all aspects of the Building Safety Act 2024, including but not limited to, the duties of the Principal Contractor .

CONTRACTOR'S PLANT AND STORED MATERIALS

The locations of plant and stored materials should be agreed with the architect so as not to present a hazard to members of the public, positioning warning notices as necessary. Plant and machinery is to be suitably

protected or rendered inoperative when not in use. It is to be used only by personnel properly trained and qualified in its use.

STORAGE OF MATERIALS
Allow for providing secure storage and weather protection for materials, and fire resistant storage for inflammable materials. The contractor will be held responsible for any damages to materials due to their being improperly stored on site prior to fixing. New materials and components intended for the works should not be left in the open on site.

BUILDING WATER
The private water supply to the property may be used for the works.

TEMPORARY ELECTRICITY SUPPLY
The mains supply to the property may be used for the works.

TRAFFIC REGULATIONS
Allow for complying with Police Regulations or requirements in relation to the routing, parking and unloading of vehicles, providing temporary road signs, lighting and any other special conditions arising from the works.

NOTICES AND FEES
Give all notices required to the Local Authority and Public Undertakings, and allow for payment of all fees and charges.

NOISE
The Contractor is required to meet all requirements of Sections 60 and 61 of the Control of Pollution Act 1974, with reference to the Control of Noise in relation to any of the works, and the giving of notice in relation to the same to the Local Authority.

CLEANING AND DISPOSAL OF WASTE
Remove all rubbish, debris and surplus materials including that of subcontractors from time to time and on completion and leave the whole of the works in a clean and perfect condition ready for immediate occupation and use. In addition, the contractor is to clean up any mud deposited on the surface of public and private roads or footpaths to the satisfaction of the Local Authority or architect.
No burning of accumulated rubbish will be permitted on site.
The contractor is required to comply with the requirements of the Environment Protection Act 1990, in particular Section 34 regarding the Duty of Care for the disposal of waste and is to provide evidence that waste has been disposed of correctly if so requested.

TRESPASS
The contractor will be responsible for keeping all persons under his control including those employed by subcontractors and all unauthorised persons within bounds and will be liable for all damage to adjoining property and premises, roads and footpaths by workpeople, contractor's vehicles or from any other cause whatsoever.

ADDED SECURITY
After the end of each working day access ladders are to be taken down and either removed from the site or placed in a secure position so as to prevent easy access to the scaffold and roofs. At weekends or times when the works may be left for a few days, maximum practical precautions are to be taken to prevent vandalism or theft, including informing the police of the situation.

MATERIALS AND WORKMANSHIP
The whole of the materials and workmanship are to be the best of their respective kind obtainable. All articles and materials unless otherwise described are to be in accordance with the British Standards Institute specification when such exists. The contractor shall be responsible for any loss or damage arising from defective workmanship.
Samples of materials as may be required shall be furnished by the contractor without delay. The samples approved by the architect will be retained and he will be at liberty to reject all materials and workmanship not corresponding with the approved samples. The contractor shall be responsible for any loss or damage arising from defective materials.

SETTING OUT
The contractor shall set out the works, amend any errors due to inaccuracy at his own cost, and provide all stakes, lines, rods and other instruments necessary.

FROST
No work which is likely to be damaged by frost is to be carried out when the temperature is below (or is forecast to be below during the 48 hours following critical work) $2^{O}C$/ $35^{O}F$, and during the whole of such periods work liable to be damaged by frost is to be cut out and made good at the contractor's expense.

DRYING OUT
Provide and include for drying out the buildings as may be necessary to ensure progress of the works.

MEN AND PLANT
The contractor shall provide a foreman and a sufficient number of men for the proper, expeditious and complete execution of the works, and shall erect, maintain and remove on completion all necessary scaffolding, plant, tools etc. for the use of all trades engaged upon the buildings, and shall supply any cartage, workmen and materials which although not specially mentioned may nevertheless be incidentally necessary for the proper completion of the work described herein.
None other than skilled workmen are to be employed, except apprentices and labourers. A properly qualified foreman is to be constantly in attendance whilst the work is proceeding.

DISBURSEMENTS ARISING FROM THE EMPLOYMENT OF WORKPEOPLE
Allow for holidays and public holidays with pay, National Insurance contributions, Training Board Levy, Severance Pay, Sick Pay, travelling allowances, subsistence and all other emoluments and expenses payable under national and local working rule agreements.

ADVERTISEMENTS
The contractor shall not, except with the consent in writing of the architect, allow bill posting or advertisements of any kind upon the works or upon the site or adjacent thereto.

BATS
Bats and their roosts are protected by law, and it is an offence to harm bats or their roost sites. Should a bat be discovered during the works, work must cease immediately and the C.A informed. In all cases, no work is to take place which will in any way be detrimental to bats or their habitat. No chemicals toxic to bats are to be used.
Bat surveys at all three properties have revealed no evidence of them using these buildings.

TRADE PREAMBLES

SCAFFOLDING

PREAMBLES

a Provide all external and internal scaffolding, edge protection, ladders etc. as necessary to safely complete the works, all to comply with current health & safety legislation.

b Provide edge protection/ guard rails to all boarded lifts, ladders to be no steeper than 70 degrees to the horizontal and securely fixed, adequate lighting to be provided as necessary.

c The contractor is responsible for ensuring the safety of all bearings for the scaffold. Scaffold feet to bear onto timber bearers, and fixings into the walls of the building will only be permitted with the express permission of the architect, locations and type as agreed with the architect.

d **All** tubes abutting or facing the building to have protective plastic caps fitted, unless they are well clear of the walls. Similarly, any parts of the tubing which come into close contact with the building are to have protective padding fitted to prevent damage to the masonry or finishes.

e The scaffolding is to be designed to safely carry all imposed and dead loads reasonably anticipated throughout the contract. Where temporary support of the structure is provided as part of the scaffold, such scaffolding is to safely carry the loads to the ground.

f No fixed ladders are to be provided below 3 m from the ground, and ladders below this level are to be taken down and removed to a secure location at the end of each working day. The base of external scaffolding is to be enclosed with secure steel hoarding to a height of approximately 3 m, and openings to be secured with padlocks at the end of each working day.

g The contractor must consider the safety of the General Public, providing suitable protection above public areas against objects, dust or debris falling from scaffolding. The existing access into the building, together with routes through the grounds, must be maintained for the safe use of the public at all times.

h Protect adjoining structures or properties as necessary against damage during the works and make good any damage however caused.

i Include for rubbish disposal chutes, hoists etc. which may be required for safe handling and disposal of materials and maintain in place for the duration of the works. Objects are **not** to be thrown from the scaffold.

j On completion of the works, clear away and leave all tidy.

DEMOLITION, STRIPPING OUT AND BUILDER'S WORK IN ALTERATIONS

PREAMBLES

a Demolition work shall comply with BS 6187:2011 Code of Practice for full and partial demolition, and the Construction (Design and Management Regulations) 2015.

b The term 'cart away' is used to describe removal from site without additional cost or disposal charges.

c Unless specifically forbidden, old materials are permitted to be re-used instead of new, provided either that they are of the same standard and quality as the new materials they replace, or that the Architect gives specific approval to their re-use.

d Old materials specifically required to be re-used in the work are described as 'set aside for re-use' and this description is deemed to include loading, moving, storing and protecting. Re-fixing is described elsewhere.

e Care must be taken when demolishing, breaking out or stripping out to avoid damaging adjoining parts of the building. It is the contractor's duty to arrange for all disconnection of services prior to

carrying out the work, and to include for temporary protection and/or re-routing of services, drains and the like.

f The contractor is to be responsible for the provision of all needles, shores, props and supports in the formation of openings and similar work, and for the provision of scaffolding as required, to ensure stability of the existing structure.

g The presence of any infested or rotten woodwork is to be brought to the attention of the Architect without delay.

h The term 'making good' shall mean the making out and repair of the structure, fixtures or finishes in all trades to match existing in quality, size and colour patterns, and the effective bonding and jointing of new work to existing.

BUILDER

PREAMBLES

a The cement is to be normal setting as BS12: 1996 and is to be of approved manufacture. It is to be stored in suitable dry sheds or stores.

b All materials for mortar shall be batched by volume, utilizing separate wrot softwood gauge boxes made to suit the mix proportions specified. Gauging by the shovel shall not be permitted.

c The water for the mixing of the mortar is to be clean and fresh and shall not be below 40 degrees Fahrenheit at the time of use. The quantity of water used to be the minimum required for the hydration of the cement and to produce a workable mix to the satisfaction of the architect.

d The sand shall conform to BS EN 13139:2002, Table 1 (and be to the approval of the architect).

e Hydraulic lime, where specified, to be obtained from an approved source, such as Telling Group Ltd, Primrose Avenue, Fordhouses, Wolverhampton WV10 8AW, or Womersley Associates, Walkley Lane, Heckmondwike WF16 0PG, or as otherwise approved.

f Pointing shall be finished just behind the face of the adjacent masonry and tamped with a stiff bristle brush just before the mortar starts to go off. A sample panel of approx. 2 m^2 shall be provided for approval by the architect before work proceeds.

g Where re-pointing, the joints must be raked out to a depth equal to twice their width, or back to sound mortar, or a minimum of 25 mm, whichever is the greater, then brushed and flushed out with clean water and repointed whilst joints are still damp.

h The use of mechanical grinder, disc cutter, percussion hammer or other mechanical equipment shall NOT be allowed for raking out mortar joints.

i All chases to take the metal cover flashings shall be cut out to at least a depth of 35 mm and shall be thoroughly washed out prior to the placing of the flashings and the pointing.

POINTING and RE-POINTING

a When repointing, mortar joints are to be raked out to a minimum depth of 25 mm or twice the width of the joint, whichever is the greater, with the backs cut square. Flush thoroughly with clean water to remove loose debris, dirt etc. and allow for inspection of joints by the architect prior to repointing for approval of finish. Ensure joints are damp prior to applying pointing mortar.

b Where joints are very eroded allow for filling with mortar and compacting in layers not exceeding 50mm, ensuring mortar is sufficiently dry before applying the following layer. Alternatively, a proprietary gun-applied lime mortar may be used subject to the approval of the architect.

c Pointing mortar comprising a mix of one part weakly to medium hydraulic lime (NHL 3.5) to $2^1/2$ – 3 parts well washed, well graded brown river sand with an admixture of grit is to be pressed well into the joint while still wet and finished just behind the face of the adjacent masonry. Where the

masonry is worn, the mortar is to be kept within the original mortar bed width. Do not overwork the mortar.

d Pointing of fine joints to omit the grit, or to be pointed with neat hydraulic lime mortar, if necessary, where the use of sand and/ or grit in the mortar would be impractical, subject to the architect's agreement and approval of initial pointing sample.

e After the initial set, the mortar is to be tamped with a stumpy bristle brush to remove laitence and trowel marks and expose the grit.

f The mortar is to match the oldest surviving pointing in colour and texture as closely as practicable and pointing sample panel approx. 1.5 m^2 to be prepared for architect's approval before progressing with the work. Allow for raking out and repointing sample panel as considered necessary to achieve a satisfactory result. Approved pointing sample panel to remain in place and to be constantly referred-to during the work to ensure consistency of finish.

g Include for protecting new pointing against damage by hot, cold or wet weather, until such time as the mortar has cured sufficiently. The contractor will be expected to redo work at his own expense which has been damaged as a result of his neglect to effect proper protection.

CARPENTRY AND JOINER

PREAMBLES

a The timber to be of the best quality and to comply with BS EN 13556:2003 and EN 942:2007 Part 1, to be straight, sound of matured growth, well-conditioned, properly seasoned and dried. To be clean sawn, square edged and free from splits and large loose or dead knots.

b Structural timber to have the specified strength class conforming to Eurocode 5 (EC5). The contractor shall select a suitable species and grade to be supplied stress graded to BS 4978:2017 and BS EN 14081:2016. Each piece of timber is to be marked with the grade.

c Plywood shall conform to BS 6566: 2017 and EN 636:2012 + A1:2015, WBP bond, durability 'M'. Marine plywood, when specified, to BS 1088: 2018. Exposed faces of plywood to be Grade II finish.

d Preservative treatment of structural timber shall comply with BS Code of Practice 5268: 1989, Part 5 and BS 8417:2011 + A1:2014.

e Preservative treatment of non-structural timber shall comply with BS 5589: 1989 and and BS 8417:2011 + A1:2014.

f Where over painting or staining is applied, organic solvent preservatives shall comply with EN 599-1:2009 + A1:2013 Parts 1 and 3, shall give protection against fungus and insect attack, and shall have a water repellant additive as BWPA leaflet No.13. Organic solvent preservatives for timber which is not to be painted shall comply with EN 599-1:2009 + A1:2013 Parts 2 and 3.

g Timbers treated by the double vacuum process shall be machined to their final dimensions before treatment. Any subsequent unavoidable cutting or boring of treated timber must be re-treated with a suitable preservative in accordance with the manufacturer's recommendations. Treatment is to comply with WPA standards and BS 8417: 2014 and BS EN 351-1:2007 and BS EN 351-2:2007. Preservative Treatments | The Wood Protection Association (thewpa.org.uk)

h Copper/chrome/organic preservatives shall comply with BS EN 351-1:2007 and BS EN 351-2:2007.

i Preservatives shall be sufficiently dried on completion to allow for handling of material.

j The contractor shall produce certificates of treatment to cover all timber processed, if so requested.

k Treatment is to provide a life expectancy of a minimum of 30 years.

a Where joinery work is required to fit other existing construction, the joiner shall take measurements on site and not from the architect's drawings.

b All joinery work for painting with opaque finish is to be primed before placing in position on site unless otherwise instructed.

c Steel nails to be to BS 12O2-1:2002 (and BS EN 10266:2003 Copper; BS EN 573-3:2009 Aluminium; BS EN 10088-3:2014 Stainless Steel. screws to BS 1210 and BS EN 14592:2008 + A1:2012.

d Glass to be specified sealed double-glazed units utilising clear float or toughened glass as appropriate to BS EN 1279-1:2018 +A1:2020 Glass in Buildings, free from bubbles, smoke wanes, air holes or other defects and glazed to comply with BS Code of Practice 6262.

e Glass fixing with beads shall be bedded in approved glazing compound.

f All broken or cracked glass shall be replaced during the progress of the works at the contractor's expense and all left clean.

g Provide the Principal Designer with copies of manufacturer's data sheets for timber treatment chemicals and processes, and where appropriate, COSHH assessments and any guarantees and/or test certificates offered by suppliers, for inclusion in the Health & Safety File on completion of the works.

Include any manufacturer's information relating to future maintenance requirements.

ROOFING WORK

PREAMBLES

a Sheet lead is to be best cast to the specified weights free from defects and comply with BS EN 12588:1999 if milled. All work to be in strict accordance with the current edition of the Rolled Lead Sheet 'The complete Manual'

b All work should comply with BS 5534:2014 + A2:2018 slating and tiling, subject to any qualification given.

c Sarking felt shall be Type 1F roofing membrane where required by BAT SURVEY (<u>not</u> a paper based breathable membrane- refer to Bat Survey and Method Statement) or as otherwise specified, laid strictly in accordance with the manufacturer's instructions. In warm roof construction, ensure proper seal at laps, as specified by manufacturer.

d Underlay felt to be reinforced breather felt as Tyvek Supro+, or as otherwise specified, laid strictly in accordance with the manufacturer's instructions. In warm roof construction, ensure proper seal at laps, as specified by manufacturer. (ONLY WHERE NO BATS PRESENT)

e Battens to be treated softwood and shall be nailed to each rafter with 12 gauge round stainless steel nails, minimum penetration into rafter 50mm. Battens should be sawn cut before fixing and joints made over rafters only and staggered across the roof

f The cement is to be normal setting as BS EN 197-1:2011 and is to be of approved manufacture. It is to be stored in suitable dry sheds or stores.

g The sand shall conform with BS EN 13139:2002, Table 1. Quick lime and hydrated lime for mortar shall comply with BS EN 459-1:2001 (2015 update).

h Timber used for carpentry shall be treated with a waterborne inorganic salt preservative applied by pressure impregnation, or an organic solvent-based preservative applied by double vacuum treatment.

i Organic solvent preservative treatment shall comply with EN 599-1:2009 + A1:2013 Parts 1 and 3, shall give protection against fungus and insect attack, and shall have a water repellant additive as BWPA leaflet No.13. and be harmless to bats.

j Timbers treated by the double vacuum process shall be machined to their final dimensions before treatment. Any subsequent unavoidable cutting or boring of treated timber must be retreated with a suitable preservative in accordance with the manufacturer's recommendations.
Preservatives shall be sufficiently dried on completion to allow for handling of material.

SLATER

PREAMBLES

a Slates for re-use shall be carefully sorted and graded to size and thickness. All defective slates shall be discarded.

b Additional slates necessary to complete the works, replacing defective, unsuitable, or missing slates, shall be best quality available and match those existing. Samples shall be submitted to the Architect for approval.

c All slates shall be free of curl, broken corners, laminations and cracks. Where necessary slates shall be re-dressed to bring to size. Holes for fixings shall be sound and of the correct size for type of fixing.

d All slating shall be in accordance with BS 5534 (2014), subject to any qualification given.

e Slates shall be fixed as specified in straight horizontal courses and with the width of slates selected so as to centre vertical joints as closely as possible over the slate below. The minimum side lap shall not be less than the headlap. The slates in any one course to be of the same thickness.

f Slates shall be fixed with 30 x 2.8mm copper nails to BS 1202: Part 2 through pre-punched countersunk holes approx. 25mm from the side edges of each slate, minimum 2 no. nails per slate; or as otherwise specified by slate supplier (artificial slateS) Slates wider than width and a third to be fixed with 3 no. nails. In accordance with BS 5534 (2014) all slates and ridge cappings are to be mechanically fixed in addition to being bedded in mortar. All 'perimeter' slates and cappings are to be fixed by two methods in accordance with the new BS 5534 (2014).

g At eaves lay a double course with the eaves course and undercloak 'kicked-up' to ensure slates lie flat. Eaves slates are to project into the middle third of the gutter channel below.

h At abutments to ends of slopes, finish with extra width slates to alternate courses and dress in lead soakers to receive flashings, ensuring soakers are also dressed round top of slates. Ensure underlay is turned up face of wall behind soakers.

i Ridge cappings shall secured in accordance with BS 5534 (2014), bedded in mortar, the minimum necessary to ensure adequate bedding and secure weatherproof fixing, and to form a dense, smooth and neat finish.

j At pipe penetrations cut slates to suit as necessary and dress flanges of lead slate between slates.

k The whole of the roof slating shall be left sound, clean and watertight at completion and gutters and down pipes cleaned out to the approval of the architect/ C.A.

ELECTRICIAN

PREAMBLES

a The whole of the works shall be carried out in accordance with BS 7671: 2008 + A2:2002 'The Requirements for Electrical Installations', the current edition (18th) of the Regulations of the Institute of Electrical Engineers, and the requirements of the Supply Authority.

b All materials to be used shall be new and comply with the appropriate British Standards where such apply.

c The approximate locations of the electrical equipment and accessories are indicated in the contract documentation. Cable routes and the precise locations of all outlets, luminaires, appliances, control gear and other equipment are to be agreed with the architect prior to commencing the installation.

d The cables throughout are to be concealed below wall and floor finishes where applicable. Cables which are, or are to be, concealed under plaster surfaces are to be protected by galvanised metal capping or conduit. Cables in roof and floor spaces are to be securely fixed along the sides of joists. The contractor shall allow for forming chases in walls to give adequate plaster cover to the capping or conduit.

e Cables shall run only horizontally or vertically where concealed and shall be run without jointing.

f The circuit cables shall be PVC insulated and sheathed cables, with earth conductor twin or three core as appropriate to BS 6004:2012 + A1:2020.

g Electric vehicle charging points to comply with BS EN IEC 60364-7-722:2020.

h Energy efficiency improvements to comply with BS EN IEC 60364-8-2:2021

i The contractor shall be responsible for sizing all cables in accordance with current I.E.E. regulations.

j The socket outlet circuit to be run on the ring main principle with min. 2.5mm^2 conductors and earth.

k Lighting cables shall be PVC insulated and sheathed, 250v. grade with minimum 1.0mm^2 conductors and earth wire.

l Boxes to be rust-proofed steel with lug grip entry points, with levelling adjustment for face plates and earth terminal.

m All switches, socket outlets etc. shall be to match the existing dwelling unless otherwise agreed.

n The whole of the installation shall be efficiently bonded throughout and earthed in accordance with the I.E.E. regulations.

o The contractor shall provide a comprehensive circuit list, and permanent, durable labels to identify all switch gear, distribution boards, remote switches, spur units, switch fuses etc. Outgoing circuits from all distribution boards shall be clearly identified.

p On completion of the works the whole of the electrical installation, including where relevant, the fire/ smoke alarm and emergency lighting systems, shall be tested, and the appropriate completion certificates provided.

q On completion of the works, provide the architect with the following,

i) As built record drawings of the complete installation indicating locations of all equipment, fittings and accessories, together with comprehensive circuit diagrams and where relevant routes of all underground cables.

ii) Installation and full operating/maintenance instructions for all equipment and fittings, including details of suppliers and manufacturers, and where relevant, copies of manufacturers' Health and Safety Data sheets.

iii) Copies of all guarantees offered by manufacturers and suppliers.

PAINTING AND DECORATING

PREAMBLES

a Comply with BS 6150:2019 'Painting of Buildings,' subject to any qualifications given below.

b All painting materials are to be approved by the Architect. Colours to be as BS 4800;2011 or others by agreement.

c The contractor will be allowed to use only those materials which are delivered to the site in sealed cans bearing the label of the manufacturer together with reference to type, quality and colour.

d Knotting shall be best quality shellac to BS 1336:2018.

e Stopping shall be as recommended by the paint manufacturer unless otherwise specified.

f Linseed oil shall conform to BS 6900.

g All paintwork to be rubbed down between each coat, nail holes, cracks etc, to be stopped up as necessary after priming coat is dry, and all knots twice painted with transparent knotting.

h All paintwork to be done in a dry state and to be executed in dry weather.

i All ironwork and steelwork to be free from rust, oil and dirt and primed with approved primer.

j All paintwork to be applied by brush or roller only unless otherwise directed.

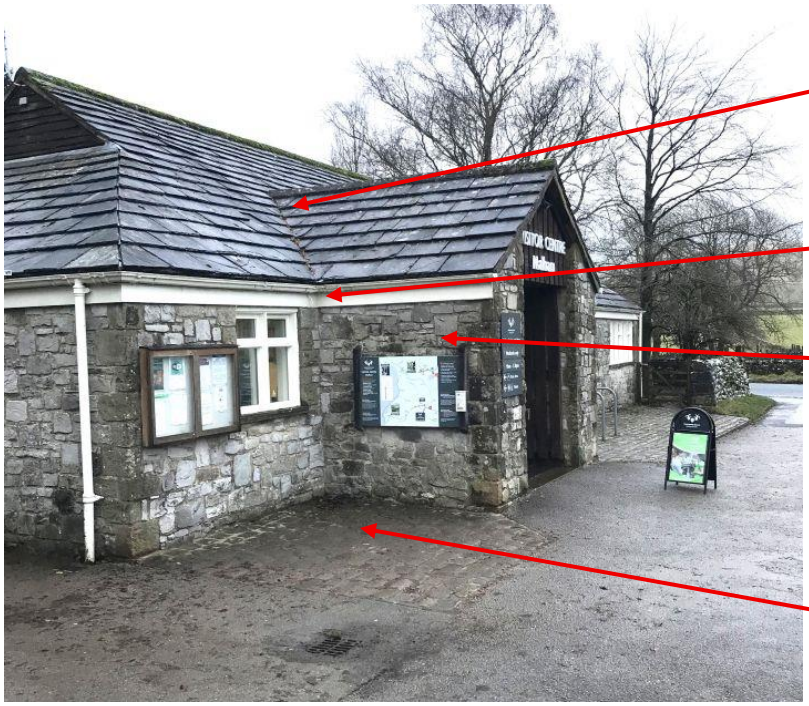
k Each coat of paint shall be a different tint from the preceding coat, and the contractor shall have each coat inspected and approved before he commences the next, except where the colour precludes such action.

l No work shall be done in dusty conditions or during wet or foggy weather, or upon surfaces that are not thoroughly dry.

m The contractor shall provide a number of dust sheets and shall cover up all fittings or other parts of the building likely to be damaged by the contractor's operations. Failing this precaution the contractor shall be held responsible for all damage arising from the same and to satisfy all claims relating thereto.

n The decorator is to include for touching up defects and shrinkage cracks in woodwork or plaster over sufficient areas to give a clear, clean finish to the work as appropriate after repairs by others at the end of the defects liability period.

SCHEDULE OF BUILDERS WORK



Carefully remove and set aside cut valley slates for re-use on the relocated porch roof.

Set aside the gutters and corner junctions etc for re-use on the relocated porch.

Retain sufficient stone on site for walling up existing openings and making good the wall where this existing porch is removed. **Surplus stone and slate to remain on site with client, for use on another project**

Protect these sets (for making good and extending on completion).

Demolition

a Ensure that the site is suitably protected and establish a secure fence or hoarding to allow for the safe stripping out and demolition described below (and for the duration of the works). The path around the visitor centre and the adjacent public car park and public toilets will remain open remain open during the works.

b Include for protecting the existing electrical and heating installations that are attached to the building and particularly any that are concealed and run within the roof voids (including smoke detectors etc.). Note also the cables running from the attached building at the rear which are to be retained and protected throughout the works. Carefully remove and store inside the building the existing notice boards and signage fixed to the stone porch and south elevation.

c Include here for protecting the existing setts to either side of the existing entrance porch.

d Provide scaffolding to provide safe access to all parts of the roof as described in the preambles.

e Provide temporary waterproof sheeting suitable for the site exposure to allow the building to be maintained watertight throughout the works; and ensure that the building can be safely sheeted and un-sheeted as required to allow works to progress.

f Assess the structural integrity of the roof prior to undertaking the following works, and notify the C.A if there are any concerns about the condition of the structural timbers.

g Carefully strip the existing ridge and roofing slates from both faces of the roof and set aside all of the natural stone slates for re-fixing. The existing ridge slates to be carted away (to be replaced by dry-fix replacement artificial stone slates described in roofer) Protect the existing lead chimney flashings and soakers. Allow credit against the existing lead valley gutters which will be replaced with new lead valley gutters unless the lead can be re-used. Allow for inspecting the existing slates as described in the preambles and discard and defective slates (and cart away). Measures should be taken to prevent slates or other debris dropping through the roof with temporary protection boarding as required.

h Carefully strip the existing battens and (Ruberquilt laid in 1972) roofing felt and cart away. Immediately report any suspicion of deleterious materials including asbestos and stop work until any risk has been eliminated. Ensure that the building's interior ceiling finishes are protected and kept dry throughout all stages of the contract.

i Porch: Carefully dismantle the existing porch walls and roof structure, fascia's etc and set aside sufficient natural facing walling stone for making good. Also set aside the existing guttering for re-use on the relocated porch. Cart away the remaining material. Break out the existing stone flagged floor and set aside stone flags for re-use. Protect the existing gulley and downpipe to

the right side of the porch (which will be re-used the drainage from the new porch). NOTE the new porch is less deep than the existing.

j Break out the existing walls sufficiently below ground level to allow for the making good of the finished ground levels on completion with matching stone setts (making good described in 'external works' below).

k Include here for breaking out and carting away the entrance door and fixed full height window (within the existing porch) and the existing windows where the new porch and entrance is being formed. Include here also for breaking out the masonry beneath the side windows to form full height vertical jambs.

l On completion of the demolition and stripping out the existing roof slates will have been carefully removed and set aside, the existing battens and roofing membranes will have been removed and the roof sheeted. The existing porch will have been dismantled and the existing windows and doors being removed/ replaced will also have been removed (subject to contractor's own programming of the works). Temporary protection will be in place to protect the retained ceilings and the furnished spaces below.

Superstructure

a **Drainage;** Prior to excavating for the foundations for the new porch timber corner posts excavate from the existing gulley to identify the line of the surface water drains and divert these as necessary to pick up drainage from the relocated porch roof and maintain drainage to the exiting roof. Agree the drainage layout with the Architect and Building Inspector.

b **Foundations (porch);** Excavate for and install two pad foundations to support the timber posts for the porch. Depth of footings to be agreed with building control officer/ structural engineer (for pricing purposes assume 2 no. 600 square pad foundations x 200mm deep footings with base of footing 750mm below ground level.)

c **Stone post bases (porch);** Build up 450mm square dense block walls from top of footings to ground floor level (to be agreed on site) and securely fix (to engineer's specification) 250mm square by 300mm high cut stone bases for the timber corner posts. Bases to have splayed tops and to be dowelled top and bottom for securely fixing to foundations and to timber posts.

d **Forming new entrance door threshold;** Allow for reducing the existing external walls as required and for supplying and installing a flush stone threshold (include for making good the internal floor finish). (external levels to fall away form this flush threshold). Threshold strip in joiner below.

e **Extend stone walls within porch to soffit of new porch**; Include here for re-using salvaged stone from demolition (and new blockwork) to build above the existing wall tops within the new porch structure to provide an extended cavity wall to extend to the underside of the sloping soffits of the open porch structure.

f **Closing up existing entrance door;** Include here for walling up the existing entrance door and fixed full height window opening (including below ground footings as required) to create a

single new window opening to match existing window opening to the office window to the left. Include for cavity closers and vertical DPCs and a new stone cill to match the adjacent opening. (Window in joiner below). Where openings walled up allow for 'toothing in' stone at sides to prevent vertical joints and match appearance of existing walling stone.

g **Timber structure (porch);** For pricing purposes supply and install green oak structural frame comprising 2 no. 175 x 175mm posts fixed with stainless steel dowels and shoes to the stone plinth bases. Roof structure above to comprise (for pricing purposes) a single oak truss formed with 250 x 100 tie beam and principle rafters, 125 x 100 king post, 100x 100 splayed props. Posts to support 150 x 100 ridge beam and 2no. eaves beams. For pricing purposes include for 100 x 50 C24 SW rafters (to match existing roof rafters) with the new porch roof built over the existing roof structure using 'layboard' construction. All in accordance with engineer's details. Include here also for fascias and all other details to match the existing roof.

h **Timber structure (making good roof where porch removed);** For pricing purposes allow for making good the rafters suitable for re-roofing where the existing porch is removed.

i **Drainage/ gutters;** Assume for pricing purposes that the new porch roof will pick up the existing surface water drainage connection at the right side of the existing porch. Allow for adjusting the existing gutters and downpipes as necessary (including new junctions/ outlets / lengths of matching gutter etc. as required) to form a complete re-fixed gutter and downpipe arrangement for the new porch. Include for re-fixing the existing gutter to the right side of the new porch to achieve falls to the rights side(away from the porch) to the existing outlet at the roadside end of the building.

j **Low flanking walls/ seating to both sides of porch;** Include here for excavating and installing nominally 700 wide x 200 deep reinforced foundations (1 layer A 393 mesh) to support natural stone faced (both sides) 400 thick cavity wall. Stone to match existing building. Bring up walling to ground level in concrete block. Include for 450mm wide cut natural stone copings to full length of each flanking wall (25mm oversail to each sode of supporting wall) with drip mould to underside both sides. Allow for cutting stone copings to curved profile for tight radius to prevent 'faceted' appearance of finished seating. Height of finished seating to be averaged at 450mm high with the seat level constant above the changing ground levels left to right (facing the building).

Joiner

a **Structural timber** described in 'Superstructure' above

b **Soffits to porch;** Include here for supplying and fixing 125mm wide T and G SW boarding (for painting) to the sloping underside of the exposed underside of the porch roof beyond the front elevation of the building.

c **External doors and fixed side lights within porch;** Include for supplying and installing rebated pair of hardwood doors to the joinery manufacturer's preferred stable species of timber (for staining to match oak posts) to be fully glazed (with 4:12:4 double glazed toughened sealed units). Door head and stiles to be formed from ex. 125mm x 44mm section with ex 175 x 44 bottom rail supported on pair and a half stainless steel hinges to suit weight of each leaf. Include a provisional sum of £250 for door closers (with hold open function) and pull/ push handles and deadlock. Include also for stainless steel flush threshold strip. Include for matching fixed side lights. Include for making good the existing floor finish up to the new door threshold and for making good the existing plastered reveals to form a completed internal finish (decorating described below).

d **Window to opening formed where existing porch removed;** Include for supplying and installing a matching hardwood windows (with 4:12:4 double glazed toughened sealed units). Include for new window board and for making good the existing plastered reveals.

Roofing

a **Rafters;** Following exposure of the roof structure allow for inspection of the rafters and other roof timbers by the contract administrator (CA). For pricing purposes assume that no rafters require replacing. The glass slates are not being re-fixed so allow for making good any existing trimmed openings to allow for full re-slating. Before commencement of tiling, survey the

supporting rafters to check the line and level. Report immediately to the CA if the structure is unsuitable to receive tiling.

b **Roof insulation;** Allow for inspection of the existing insulation (50mm was laid between the rafters in 2006?). For pricing purposes assume no work to existing insulation levels.

c **Slating;** Supply and install breathable membrane to be **Procters Air (purple)** over roof structure and draped between the rafters to ensure drainage beneath the battens strictly in accordance with manufacturer's instructions (ensure no 'tenting' to existing insulation. Include strip of DPC material dressed into eaves (UV rots breathable membrane). The re-roofing is to be undertaken with the existing re-used stone slates in diminishing courses. Include for laying the slates using 65mm galvanised nails on 50 x 25mm battens to BS 5534:2014 to be graded and marked to indicate compliance with the 2014 amendment Include for co-ordinating and matching dry fix ventilated ridge slates.
All tiling to be strictly in accordance with the BS 5534: 2014 for the exposure rating of Malham.
Include for re-fixing chimney flashings and providing new Code 5 lead soakers as required to the existing chimney.
Include for work in connection with flashings, and omitting slating within the area of the in-line PV array described below.

IN LINE ROOF PHOTOVOLTAIC INSTALLATION

a Allow for (and include within your tender) for the supply and installation of solar panels as per the survey and block plan from Yorkshire Energy Systems. Installation of a (nominally) 24 module 10.92 kW in-line PV array to the South facing roof.

b Include for works to provide the inverter and distribution board work to the existing board within the adjacent WC building (there are three spare spaces on the distribution board and space on the wall for the inverter (there is another inverter within the same room)). No batteries required.

Schedule of electrician's work;

a **Lighting;** Include for extending the existing lighting circuit to provide soffit fixed lighting within the new porch to be on a PIR and to comply with the National Park's Dark Skies policy.
- i) Lights shall be fully shielded to angle the light downward;
- ii) Lights shall be no more than 500 lumens;
- iii) Lights shall have a colour temperature less than 2700K;
- iv) Lights shall be fitted with proximity sensors so they are switched off when not needed (dusk till-dawn sensors shall not be use);
- v) Lights shall be installed at the lowest possible height to achieve lighting levels required.

a. Allow for inspection of the retained electrical and IT installations within the building and fixed to the external elevations on completion to ensure that all are functioning and comply with current electrical regulations.

b. **Making good internally:** Allow for making good consequential damage to walls and ceilings disturbed by the works (possible small cracks and loose paint).

EXTERNAL WORKS

a. Upon completion of the works include for making good all ground level finishes to match their appearance and condition at the start of the contract. Include for taking record photographs of the sett and tarmac surfaces to the front of the building before establishing the site to ensure an agreed re-instatement condition can be agreed.

b. Include here for extending the existing setts with new matching setts to the rear of the new low seating walls as the proposed site drawing and for patching and making good the tarmac finishes to the front of these walls to be continuous with the existing access road and to extend into the new porch and up to the new entrance doors.