### The Green Oak Carpentry Company Ltd. (GOCC) Terms and Conditions and Frame Information 02/04/2019

The purpose of this document is to inform and to establish a working understanding for GOCC clients. It will apply to all GOCC contracts unless agreed otherwise. Please read them carefully. In making a decision to build in Oak it may be a good idea to study existing Oak framed buildings, both old and new, to get a feeling for their style and appearance as well as the centuries old carpentry tradition to which they belong. The Weald and Downland Open Air Museum in Singleton has a well preserved collection of vernacular buildings dating from the 15th century and is a mine of useful information.

# 1. Why Green Oak?

Green or fresh sawn Oak is used for several reasons. Seasoning an 8" x 10" (200 x 250mm) beam will take over 8 years, even in a centrally heated room. The rule of thumb for drying Oak is half an inch (12.5mm) per face per annum. To set aside a stock of dry beams would be expensive, difficult and require a lot of space in order to carry enough stock over the time required. There would be no guarantee that the stock sizes carried would meet the clients requirements as the component sizes in traditional frames vary enormously, unlike in softwood. The drying process causes the beams to fissure and distort requiring re-sawing of all surfaces to true up, in order that the carpenters can work to reasonably flat and true surfaces, hence buying air dried beams will not obviate checking and fissuring of the surfaces. Finally true air dried beam sections of any quality are very hard to come by. Sawyers can make all sorts of claims as to the dryness of their stock which is difficult to verify, our experience is that at best you may get 'part air dried oak' or 'steady oak' which frankly is expensive and achieves very little. Jointing the frame and assembling it green is not only more economical and easier, but also the components are locked together in such a way so as to contain the shrinkage and distortion. Use of green Oak has been the norm for centuries and we at GOCC are convinced that this is still the best way to fabricate these structures.

# 2. Design Development

We recommend that you talk to us early in the design process, so that we can assist in the design and development process prior to planning. We often look at schemes that have got planning where it is too late to make any significant input. If you have made the decision to use an Oak frame then it would be a shame not to exploit some of the wonderful features a well-designed frame has to offer, such as galleried floors and mezzanines, integral conservatories, glazed areas of roof to create light wells, open plan living spaces, loft rooms, Juliet balconies and so on. An early meeting is free so why not take advantage of our knowledge and enthusiasm.

### 3. CDM

Under the guidelines set out in the Construction (Design & Management) Regulations 2015, we undertake a 'designer' and / or 'contractor' role but not as a 'principal' unless specifically employed to do so. For more information on duty holders please visit: <u>http://www.hse.gov.uk/construction/cdm/2015/summary.htm</u>

### 4. Statutory Requirements

It is the clients' responsibility to ensure that all local authority and other statutory requirements have been met with regard to planning and listed building consent etc., before proceeding. GOCC can accept no responsibility for costs or delays caused by lack of proper consents or other legal requirements.

### 5. Estimates

Any estimate supplied by us is valid for three months and subject to revision thereafter. Estimates are based on the information provided at tender stage and will be subject to revision after completion of the frame drawings and the precise scope of the job has been agreed. We would typically prepare a detailed list itemising any changes made to the scope during detailed design, for approval and sign off before proceeding to manufacture.

# 6. Tariffs

We reserve the right to add to our timber costs, any tariffs that may be imposed and not known about at the time of the preparation of estimate.

### 7. Discounts

The sum offered on our estimate letter does not include any main contractors discount or any other deductions unless specifically agreed with GOCC and stated as such in the estimate. GOCC does not permit the taking of deduction from our final account unless terms for so doing are agreed in writing between the parties at the time of placing the order. Some clients levy late delivery penalties on an ad-hoc basis. Whilst GOCC does all within its power to ensure programme is maintained we do not accept late delivery penalties unless agreed in writing before the works commence.

## 8. Deposit and Stage Payments

Over 90% of the work involved in the design and fabrication of an oak frame is carried out in the framing yard, the assembly often requiring only a few days for the carpentry team to complete. For this reason we require the following payment schedule: An initial 10% deposit is required to reserve a slot in our construction programme and to get fabrication drawings underway. Unfortunately we cannot reserve a slot until an order has been placed and a deposit paid. Once design and engineering work is completed a firm price can be given and timber placed on order. Please bear in mind that design changes may cause cost variations from the estimated sum as agreed at the time of placing an order. Once timber arrives, fabrication can commence and we ask for a further 30%. Two following stage payments are taken of 25% each to cover work in progress, which are to be paid prior to assembly, with the final payment of 10% due after assembly on site. Terms are strictly 21 days.

# 9. Late Payments

The majority of our clients pay very promptly however some don't, and hence we need to be clear that our terms are strictly 21 days from date of invoice, unless agreed otherwise. We reserve the right to charge interest at 8% above bank base rate on a monthly basis for all overdue payments.

### 10. VAT

In order for our invoices to be zero rated for VAT, work must be a qualifying new build dwelling which is unoccupied. For ancillary structures such as a garage or annexe we are unable to VAT exempt payments unless it forms part of a new dwelling prior to occupation. A copy of the local authority planning consent will be required before we can raise a VAT exempt invoice. Listed buildings are no longer VAT exempt as the rules on this changed in 2012. VAT on conversion of outbuildings or other non-habitable structures to a dwelling may now be charged at 5%. Please refer to www.gov.uk for the most up to date information. Please note that without satisfactory documentation we are obliged to charge VAT. Design and drawing fees and other consultancy work may only be exempted if it is part of a supply and fix package of works to follow later. We reserve the right to charge VAT retrospectively where circumstances change and we incur a VAT liability on behalf of the client.

### 11. Delays or Cancellation

We understand delays can occur on site in preparation for the Oak frame assembly. Minor delays (1-2 weeks) can typically be accommodated without issue. In the event of longer terms delays, the finished frame can be stored until required, but we reserve the right to charge for storage if necessary. During periods of hot weather, delays in bringing a frame to site can be a problem as splits may occur in the tenon ends of beams for example. We will do what we can to mitigate this, but the client should be aware of occasional quite marked end grain splitting. Additional costs may be incurred to re-fit joints affected by end grain splits and shrinkage, in the worst cases. In the unlikely event of a complete cancellation of a project, GOCC will charge the full value of works completed up to that point. This includes the cost of any design and engineering work completed, materials which we have procured and / or received into our yard and any carpentry work undertaken. Please note, materials cannot easily be re-purposed or re-stocked for other jobs.

### 12. Programme

Please try to be realistic in setting your programme. We strongly advise that you build contingencies into your schedule and in our view putting pressure on your construction team to meet tight demands on programme can be counterproductive, unless good reason exists for doing otherwise. Whilst we do our best to ensure delays do not occur we cannot accept claims made against our final account for late delivery.

There are occasionally reasons beyond our control that can cause delays (timber deliveries, reject timber, etc.), however on the whole we are able to control the progression of the job within the workshops. With regard to installation, we can be affected by the weather (high winds) and other factors, hence delays may occur in completion of the frame on site. If programme is critical please discuss.

### 13. Architects and Other Professionals

We recommend you employ an architect or other suitably qualified professional to carry out the detailed design and BC submissions stages of your project. On site project management should ideally be carried out by a suitably qualified professional. Self-builders will need to be aware of the complexity and technical aspects of construction, as well as the considerable real time demands of building. The Oak frame drawings do much to inform and set out the building but we cannot be responsible for the building design as a whole, unless employed as your architect. We would be very happy to discuss the provision of this service with you.

### 14. The frame Drawings

Our frame drawings represent an agreement between the client and GOCC as to the style and extent of the oak framing work to be carried out. As such they should be studied carefully by the client, or thier representative to ensure they meet requirements. We do not undertake second fix or non-structural items such as sprockets, tilt fillets, facias, glazing cappings etc. unless agreed otherwise. We will require that our drawings are signed off as 'for construction' before we are able to proceed to manufacture. Please note once the drawings are signed off late design changes can be expensive and difficult, especially if the frame is in manufacture, and should be avoided if at all possible.

#### 15. Raised Tie Trusses

Raised tie trusses such as the sling brace or arched collar braced truss are prone to spreading over time as the shrinkage in the beams takes place and the structure takes up load from the roof etc. Where they are tied into masonry or other hard finishes, cracking and movement may occur, hence the detailing of the truss interface to the structure should be designed so as to minimise the risk of damage to masonry etc., through spread. Their use in entire timber structures is much less problematic as the envelope is inherently flexible. If you have any doubts as to their suitability please discuss.

### 16. Panel Infilling and Exposure of Joints to the Weather

Panel infilling of the Oak frame apertures to create the look of an historic Oak frame is popular but has its drawbacks. Oak frame joints are not water tight and will be prone to leaking, especially on elevations to the weathering side of the buildings (south and west) if left exposed. Furthermore, timber shrinkage and seasonal movement will cause the breakdown of seals at the panel edges, however well they may be formed, and for this reason we do not recommend exposing the frame both externally and internally. That said there are good alternatives to create the look of an historic Oak frame, for example an external frame can be fabricated from 100mm thick beams so as to sit onto the outer leaf of construction, the panels may then be in-filled with render or brick without fear of ingress of water as the cavity maintained behind vents away any moisture, and the inner leaf gives the required air tightness and thermal performance. An internally visible, structural Oak frame may be created inside the building envelope avoiding thermal performance and weathering issues. Keeping the Oak frame structure within the envelope is good practice and should be achieved wherever possible, with the notable exception of porches and balconies.

#### **17. Engineering Oak Frames**

We supply engineer's checking for our frames and this is included in our estimates unless stated otherwise. Engineering Oak structures is a specialised field and sometimes challenging for conventional engineers who work predominantly with steel and concrete. For this reason we recommend you employ us to carry out this aspect of the work for you. We use specialist independent engineers, who have vast amounts of experience in timber structures and will not for example revert to steel unnecessarily or oversize beam sections. This not only ensures more elegant design solutions but also better value for money. For the majority of schemes we do not supply full calculations instead providing a letter of certification. This is adequate for the majority of Oak frames "of traditional styling and well tried and tested methods of construction which have been employed over a long time." (BS 5268). More complex or unusual structures will require full calculations, if unsure as to the best route, talk to us. Should full calculations be required retrospectively, there will be an additional charge for this service.

### 18. Sourcing Timber

All our timber is sourced from forests that adopt the highest standards in environmental management and predominantly where PEFC accreditation can be provided. We buy most of our timber from France where quality and price are better than that available from home grown sources. The sustainability of the French forest management system is outstanding; France has the third largest standing wood volume in Europe behind Germany and Sweden, and has long established roots dating back to the 14<sup>th</sup> century. Talking of 'wood miles' a sea crossing is much more environmentally friendly than road miles which are comparatively low from Normandy to our yard on the Hampshire Sussex borders.

### 19. Timber Quality

Timber quality is vital in producing frames of high quality. In general we use best quality QPA / QP1 grade timber throughout our frames, occasionally to a higher specification where required. We don't require joinery grade timber which would be wasteful, but knot size, ring shake, heart rot etc., can cause difficulties and in most cases should be carefully controlled. An awareness of where each component fits into the building is important, columns have different structural requirements to beams, which should be of better quality. Some sapwood is allowable but should be kept within reasonable limits; see notes below.

#### 20. Sapwood

The sapwood is the outer living part of the tree which is found beneath the bark and is usually 2" wide (50mm). All the nutrients of the living tree are carried within this zone, hence it is not durable and may be prone to insect attack. In externally exposed structures we generally avoid sapwood as it is perishable and can decay in a few years, however, in interior situations some should be tolerated. Bear in mind that economic conversion of square beams from round logs makes the inclusion of some sapwood inevitable, so this may occur on the corners (arris') and outer faces of the larger beams.

#### 21. Satellite Workshops

In order to offer greater flexibility in our fabrication output, it is sometimes necessary to use externally based satellite workshops, to undertake specific or smaller jobs for us. These craftsmen are generally previously employed and trained carpenters who now work for themselves. Any external provider will have been vetted over many years and works strictly in accordance with our agreed standard practises.

### 22. Access to Site for Assembly – Trucks and Cranes

Our quotation assumes close access and suitable hard standing to the site for delivery of timber and adequate siting of the crane for assembly. Soft or made up ground must have sufficient hard-core well compacted into it to allow the safe setting up of a crane. If in doubt, please raise the issue and we will check for you. We need to be informed of the location of any drainage runs, cesspools etc., liable to damage by heavy machinery. Power cables must be moved or made safe by others before erection begins. Space will be required around the site for timber prior to assembly. It is the client's or their representative's responsibility to ensure that access to the site and the operational area is suitable for these machines. In exceptional circumstances we reserve the right to hire additional crane pads or track for the safe operation of these machines if the ground conditions are unsuitable. These costs are to be borne by the client. GOCC cannot accept any responsibility for damage to drainage or other underground services where not made aware of their existence prior to commencing assembly.

### 23. Scaffold and Other Site Provisions

It is the responsibility of the client or builder to supply access scaffold for assembly. This may take the form of a ring scaffold and/or a bird-cage scaffold, mobile alloy towers or staging. Costs associated with this remain the client's responsibility. All access equipment must conform to current safety requirements and be tagged accordingly. By law, we cannot use noncompliant scaffold and will not put our staff at risk by doing so. Any modifications to incorrectly installed scaffold should be made by the provider and may add cost if delays are caused. Typically any scaffold will also serve your following on trades and will form a necessary package for the whole project not only the Oak frame assembly. We also assume supply of Acrows, timber for shoring and temporary ply boarding for safe access to unfinished floors for assembly works, etc., unless agreed otherwise. We assume the provision of normal site welfare, power and water to be supplied FOC by others.

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#### 24. Setting Out on Site – Who Checks

It is the client (or their representative) who is responsible for ensuring the accurate setting out and construction of plinths, post feet pads, etc. GOCC will clearly state the dimensions of the completed frame in our workshop drawings. These should be checked and double checked against the as built dimensions. GOCC will not expect to make site visits to check others have correctly worked to drawings. If inaccuracies or errors in the masonry become apparent once the frame erection begins, we are unable to stop progress to make changes, unless additional costs can be agreed in writing with the client on the day. Where posts sit onto a brick or stone pier we advise that the pier be built up after the frame is assembled to allow for any necessary fine adjustment in alignment to be made. Likewise staddlestones should be in place but not fixed down to allow for adjustment.

#### 25. Supporting the Frame

It is our experience that occasionally cavity work can be inadequate to support the oak frame, therefore we request that cavity work should be closed, or otherwise robustly constructed to allow adequate support for the oak frame sills or plates. We will take all due care but cannot accept responsibility for damage to fragile cavity work. We will require all cut outs in existing masonry, and any other support structures pre-prepared prior to attending site for the assembly. All support structure is deemed to be adequate to support the oak frame and remains the client's responsibility.

#### 26. Materials on Site

Materials not fixed into the building, remain the property of GOCC and will be taken off site on completion unless agreed otherwise.

#### 27. Insurance of the Frame on Site

It is the client and/or the builder's responsibility to insure the timber and the frame as soon as delivered to site, as site conditions and security are beyond the control of GOCC.

#### 28. Grouting Beneath Sills after Assembly

Your builder will need to grout beneath the sills and post feet of our frames once we have finished assembly, as we will leave the frame on packing as required. This tolerance is typically 10mm and enables us to make adjustments to the levels of the sills and / or posts as necessary.

### 29. Tannic Acid

Tannin is a natural product contained within green oak and contributes to its durability. It cannot be removed or sealed in and will leach out when exposed to moisture. After the frame is assembled tannic acid may leach onto brick piers, stone plinth etc. in wet weather. This can be unsightly and whilst it generally weathers off external exposed faces after some months, it may leave a slight residual stain. If you are using a pale coloured limestone, marble or other similar material either internally or externally that is prone to staining, then it is essential that adequate protection is in place prior to commencing the assembly of the frame. Do bear in mind that during periods of extreme wet weather, this protection could be compromised and GOCC will accept no responsibility for damage to masonry or other surfaces caused by tannic acid run-off.

#### 30. Finishing the Frame

Even with the most diligent care and attention, your assembled Oak frame will show various markings caused during the fabrication process, from water staining, haulage and the assembly procedure. There is a strong reaction between the steel of the band saw at the mill and the tannins in the Oak, which causes an unsightly blue staining, along with brown tidemarks of water staining where the timber is stored externally and general fabrication marks such as carpenters pencil and chalk lines. We strongly recommend sandblasting the finished frame to remove any residual dirt and stains, giving an attractive uniform pale straw colour throughout. The ideal time to sandblast is after covering in and before the completion of other finishes susceptible to damage by this process. You may also wish to consider beam planing the frame members which we can do whilst the frame is in the workshops, however we would still suggest making some allowance for cleaning after the assembly of the frame and the building envelope has been completed. These costs are not included in our estimate unless stated otherwise. Where exposed externally, the Oak will

weather naturally to a silver-grey colour and hence we do not generally recommend sandblasting of external structures.

## **31.** Are Other Finishes Required?

Sometimes clients wax or oil the frame after assembly, but the vast majority prefer to leave the surface in its natural state. Sand blasting raises the grain and gives the surface an attractive pale straw colour that fits well into most schemes. Be careful if you do decide to oil a frame as the colour can be rather strong, so we would advise trying out some samples first. We would be happy to discuss this with you.

### 32. Glazing Oak Frames

Oak frames make wonderful structures combined with glazing, but care needs to be taken to ensure the glass panels can accommodate the movement of the frame. We have acquired much experience over the years and have created working details for you or your architect to adopt. Please note that whilst we offer these details in a spirit of cooperation we cannot accept liability arising from their use. There are numerous companies who offer Oak Frame Glazing and suggest you seek advice from them with regard to your proposals. We are happy to discuss the options.

### 33. Drying of Oak Frames

The timber in Oak frames shrinks as it dries and will continue to do so once in service. Beams will move and develop surface checking during this drying process, however the gentler the drying process, the better it will be for your frame, as surface checks and splits will develop more evenly over the surfaces. Occasionally frames are assembled and left in the weather for some years before being covered in, this does them no harm at all, quite the opposite in fact, as it allows the frame to air-dry gently. Shoulders of joints will tend to open and show gaps as the drying process develops, especially at the brace joints where fresh sawn. We accurately fit and draw-bore all our mortice and tenons to mitigate this and do not take short cuts.

### 34. Wood-boring Beetles

We do not recommend treatment of our oak frames, as the timber is very durable and resistant to wood boring insects. However occasionally wood-boring beetles may infect the sapwood of an oak frame, most commonly Powder Post (Lyctus Brunneus). It must be emphasised that they do not eat the Oak heartwood of the frame (or your furniture or structural softwood!) and therefore will not affect the structure of the frame. If holes and dust appear, talk to us before taking further action. On no account have the frame completely treated by a specialist, as local brush treatment of affected areas is all that may be required. If in doubt talk to us first.

### 35. Finished Building Insurance

Sometimes it is a condition of a mortgage provider that NHBC, Premier, Zurich, Building Life Plans or similar, underwrite the building. This can present difficulties depending on whom you are dealing with, however most insurers accept the use of green oak within certain parameters. The surest route is to employ a qualified architect to design and supervise the construction and hence cover is provided under their Pl insurance.

These Terms and Conditions and Frame Information will be incorporated into any contract between the client and GOCC Ltd unless agreed otherwise.

I have read, understood and agree to these terms and conditions and the frame information.