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CONDITIONS OF APPOINTMENT

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The following Conditions of Appointment are applicable to all organisations and/or individuals making use of Landpac Impact Compactors or any other plant and equipment.

1. **PARTIES AND APPLICABILITY**

- 1.1 These Conditions of Appointment are applicable to Landpac (hereinafter referred to as "Landpac") and the client who has placed a worksorder on Landpac for the purposes of ground improvement (hereinafter referred to as "The Client").
- 1.2 These Conditions of Appointment shall be deemed as having been read, understood and agreed to by the client/customer upon placement of an order on Landpac.

2. **INTERPRETATIONS AND OTHER APPLICABLE DOCUMENTATION**

- 2.1 Clause headings are used in this agreement for convenience only and shall be ignored in interpreting it.
- 2.2 If the Landpac Impact Compactors are on a hire contract, the Contractor's Plant Hire Association's Terms and Conditions for Hire (General Plant) (Document Number PLF/NR/Id/Oe/110497) is also applicable. A copy of the document is available on request.

3. **DEFINITIONS**

- 3.1 "pass" - a pass shall be defined as two runs of the compactor over a 4 meter wide lane such as one drum of the compactor, during its second run, travels in the inter drum space created by the first passage of the impact compactor.
- 3.2 "impact compactor" – compaction plant using non-circular compacting masses delivering high energy blows; also termed "impact roller"
- 3.3 "mini dynamic compactor" – a truck mounted dynamic compactor, involving the dropping of a heavy weight from a considerable height; abbreviated "MDC".
- 3.4 "continuous impact response" – a system capable of measuring the soil response to every impact of the roller, resulting in a direct measurement of soil stiffness, which is a function of the soil density; abbreviated "CIR"
- 3.5 "area preparation" – this refers to clearing the site to a standard required by Landpac for the use of their plant and equipment; it also includes cleaning and grubbing, removal of topsoil, etc.
- 3.6 "blinding layer" – this is normally applicable to rock fills and includes the placement of fine crushed stone and/or selected material to cover the rock layer in order to prevent the compactor's mass from contacting directly with any protruding rocks. Blinding layers are generally in the range of 100 to 150mm thick, depending on the nature of the rock.
- 3.7 "worksorder" – (also simply referred to as "order") this refers to an order that has been received by Landpac from the client for Landpac's services on ground improvement (compaction, testing and certification) projects. Such orders may be transmitted by fax, via e-mail or may be hand delivered.

4. **SCOPE OF WORK**

- 4.1 Landpac is to carry out ground improvement on the project as identified on the estimate to the client and/or the order from the client using either of the Landpac compaction plant. All earthworks related to the site are excluded from the scope of work and the site is to be cleared and prepared prior to Landpac's plant arriving on site.
- 4.2 The requirement is to compact the in-situ and bulk fill materials in order to remove the bulk of the plastic deformation and to improve the subgrade stiffness. Landpac is available for discussion to determine the final number of passes required to remove the bulk of the potential plastic deformation.
- 4.3 In many instances, Landpac and the client shall identify the need for a trial on site to determine the average end result and the number of passes required for maximum effectiveness. Such trial requirements shall be for the account of the client, with an estimate supplied by Landpac.

5. **GENERAL PRICING**

- 5.1 Landpac's rates for doing the work as per the relevant items are as detailed on Landpac's estimate to the client. As new and/or different requirements are identified, new revisions of the estimate will be forwarded to the client. The client must ensure that the order is placed against the final revision estimate as supplied by Landpac.

5.2 Mobilisation/Demobilisation of the Plant & Equipment

5.2.1 Plant and Equipment being mobilised by the client will have to fit in with the operational start expectations. Delays, which may be caused due to breakdowns, issuing of permits, border post delays, etc, may result in Landpac charging a daily standing rate.

5.2.2 Landpac reserves the right to redeploy plant and equipment that may be standing and not earning income at the time of redeployment.

5.3 Any additional compaction requirements identified either by the client or Landpac shall only be performed upon written request of the client. This is especially applicable where trials are needed to confirm the number of passes required to achieve the client's specification and when the lack of information has forced Landpac to estimate generically. The costs of additional compaction requirements due to the above shall be for the client's account.

5.4 All special requirements by the client shall be for the account of the client and should be communicated to Landpac prior to final estimation. Such requirements may include the following:

- Medical Testing requirements.
- Induction courses.
- Border costs.
- Special duties and taxes.

5.5 All rates quoted exclude VAT or any other form of sales (or similar) tax that may be applicable.

5.6 All rates quoted exclude duties that may be applicable in some countries and, if not refundable, such duties must be borne by the client.

5.7 When operating outside the borders of SA, the onus is on the customer to advise Landpac of any additional company and/or legislative/legal requirements so that these can be included in the quote prior to final approval. All quotes must, however, be read to exclude any additional requirements unless otherwise stated. Costs related to such requirements have to be quoted for separately and will be for the customer's account.

Typical requirements include special induction requirements, vaccinations, work permits, visas, etc.

5.8 Landpac's rates may either be estimated as a dry or wet rate and the client is to ensure that the order is specific to the rate estimated. Generally, dry rates are applicable unless otherwise stated.

5.9 If a rate is given for watering, Landpac will supply the water truck but the water shall be supplied by the client. At the time of estimating, Landpac assumes that watering points shall be within a 2km radius of compaction and an increase in this distance may result in an increase in costs as well. The client is advised to indicate the distance to Landpac prior to the final estimate being drafted. Operational requirements outside the borders of South Africa will exclude watering, which shall be supplied by the client as and when required during the impact compaction process.

5.10 General Estimating

5.10.1 The onus is on the client to ensure that all relevant and accurate information is supplied to Landpac before the drafting of an estimate. Estimates are generally prepared based on some basic assumptions and Landpac therefore reserves the right to modify such an estimate should some of the basic assumptions not be sound.

5.10.2 At the time of generating an estimate, certain information that has an influence in the pricing structure to the client may not have been disclosed. Such information may include special permits, licenses, medicals, duties, etc. Possible related costs shall be for the client's account.

5.10.3 Site medical and induction costs, including operator time, that may have been omitted from the estimate, shall be for the client's account.

5.10.4 Landpac requests that copies of original geotechnical reports be supplied prior to the preparation of an estimate.

5.10.5 It is understood by Landpac that the placement of an order, following an estimate from Landpac, is an indication that the client/customer accepts the conditions as detailed in this document.

5.11 Accommodation and Basic Essentials

5.11.1 For all projects outside the borders of South Africa, the following shall be supplied to all Landpac personnel:

- Reasonable, comfortable, safe and “fitting” accommodation. “Fitting” refers to adequately acceptable environment for personnel in different organisational positions. Whereas, for example, a machine operator is expected to reside within specially set up site accommodation, technicians and engineers, for example, would be expected to reside in clean, safe and functional hotels with the right facilities.
- Electricity.
- Bathroom and toilet facilities.
- Daily food and beverages.

5.12 Guarantees and Payments

- 5.12.1 For operations outside the borders of South Africa, the client is expected to arrange for the necessary payment guarantees that cover the expected project income and the safe return of all of Landpac's plant and equipment. Such bonds/guarantees shall be made payable to Landpac in South Africa. Values of such bonds/guarantees are to be determined if this proposal is to be approved by the client.
- 5.12.2 Payment is strictly 30 days from the date of invoice. Note, however, that 50% of the project value (related to impact compaction and related technologies) is to be paid prior to the release of the equipment for shipment from South Africa.
- 5.12.3 The client needs to reassure Landpac that their personnel will not be working in unsafe and hostile environments and that they have the necessary contingency plans in place to assist should any problems be encountered.
- 5.13 The pricing has been calculated based on a 9.5-hour shift and 22 working days per month. Extra shift hours and working outside normal working days, including weekends and South African public holidays, will be charged.
- 5.14 Also excluded from the pricing are the following:
- 5.14.1 Plant oil and tyres.
- 5.14.2 Transport of special spares required due to the use of the plant in material not originally disclosed.
- 5.14.3 Transport of personnel to and from the site due to ill health and/or site injury.

6. AREA SETTING AND PREPARATION

- 6.1 The area to be treated with impact compaction or dynamic compaction shall be as defined in the drawings. The contractor shall control the compaction operations by employing appropriate setting out markers to ensure that all areas designated for impact compaction or dynamic compaction receive the specified number of impact compactor passes or dynamic compaction blows.
- 6.2 Compaction shall be carried out as soon as possible after clearing and grubbing operations to exploit any moisture available in the road bed material, which will facilitate the compaction process.
- 6.3 The area being compacted shall be pre-wetted to ensure moisture penetration of at least 50mm on the compaction area and at least 100mm at the turning circle of the impact compactor. Water shall be applied in sufficient quantities to the surface as compaction proceeds to prevent the crumbling of the surface, to promote efficient compaction and to contain dust.
- 6.4 Where rock fill compaction is applicable, the client shall be responsible for ensuring that a “blinding” layer is placed prior to impact compaction.
- 6.5 Landpac shall specify the compaction production rate to the client for programming purposes, so as to ensure that adequate preparation is performed prior to Landpac arriving on site.
- 6.6 The client shall be responsible for marking the area out clearly. Failure of clear site demarcation generally leads to quantity discrepancies and Landpac shall not be held responsible for such discrepancies.

7. **SPECIAL TESTING and CERTIFICATION**

7.1 All soil testing and classification that is required of Landpac shall be contracted out to specialised testing organisations.

7.2 **Vibration Monitoring**

7.2.1 Landpac shall be able to conduct vibration monitoring on site and will make such results available to the client for record. All related costs shall be on the estimate from Landpac. If they have been omitted and there is a requirement for such testing, the client is requested to contact Landpac to make the necessary arrangements.

7.2.2 Because of the vibrations, special trenches may be required to eliminate potential problematic vibrations. Such requirements will be identified between the client and Landpac and the necessary arrangement thereof shall be done by the client.

7.3 **Crack Surveys**

7.3.1 Because of the impact nature of the ground improvement process offered by Landpac, a crack survey on adjoining properties may be identified as a requirement either by the client or by Landpac.

7.3.2 Landpac will be able to conduct such a survey. All related costs shall be on the estimate from Landpac. If they have been omitted and there is a requirement for such testing, the client is requested to contact Landpac to make the necessary arrangements.

7.3.3 Landpac shall supply a letter explaining the vibrations that will be felt during the compaction process to a client that will be distributed to the adjoining property owners by the client.

7.3.4 The client shall be responsible for arranging a schedule for the crack survey in the identified properties. Such crack surveys shall be conducted by Landpac's personnel and shall be conducted during the day. Night surveys will not be conducted. Crack surveys will be conducted before and after compaction.

7.3.5 Where possible, Landpac will photograph and detail the crack before and after compaction. Difficult areas of assessment due to furniture placements, for example, shall be noted as such and Landpac will not be held responsible for cracks that an owner claims emanated as a result of the compaction process.

7.3.6 The crack survey conducted by Landpac will be for the main house only and will not be for other items on the property, including swimming pools.

7.3.7 Landpac will not be held responsible for property that was not made available for inspection by the owners thereof.

7.4 **Other Soil Tests**

7.4.1 Landpac has the ability to administer and analyse the results of the following tests:

- Plate Load Tests
- Troxler Density Tests
- DCP (2m)

7.4.2 It should never be assumed that Landpac will automatically carry out any testing on site. Testing will only be carried out if clearly requested on the customer order.

7.5 **Continuous Impact Response (CIR) System**

7.5.1 The Continuous Impact Response system employs an accelerometer, which is fitted to the axle between the two masses. Deceleration is measured on a continuous basis, and peak deceleration with each impact is recorded. While the material is still in a loose state, most of the initial compaction energy will lead to plastic deformation of the soil. At this stage, the soil has a soft response to the load applied and relatively low decelerations of the compaction mass are measured. Decelerations in the order of three to five g's are normally measured. Further compaction of the subgrade results in densification of the material. Since the stiffness of the subgrade is a function of the material's density, a more rigid subgrade response is experienced as the material moves towards the elastic state. Higher decelerations (in the order of 6-10 g's) will therefore be measured as the soil reaches the elastic stage.

7.5.2 The Global Positioning System (GPS) is a satellite-based navigation system made up of a network of satellites placed into orbit by the U.S. Department of Defence. The CIR employs a GPS receiver to locate the position of the impact roller.

Each of the peak decelerations is recorded relative to its position on site as determined by an integrated GPS receiver. It is thus possible to produce a "map" of the deceleration values over the entire site.

7.5.3 Landpac has the capability to conduct such a certification process and have the results correlated to DCP measured results. Negotiations between the client and Landpac will generally result in measurements being taken every 10 passes or measurements being taken at the first and final three passes of the project.

7.5.4 This system is not available when the machines are hired out and not available for hire to any other contractor with impact compactors. This unique system is solely reserved for use on Landpac's Impact Compactors.

8. UNDERGROUND SERVICES

8.1 Impact compaction must be carried out before services, drainage pipes or culverts are installed. If these are already installed, the client shall indicate, in advance, the position of all underground culverts, pipes or other services so that these may be avoided during compaction of the site. Landpac shall not be held responsible for any damage whatsoever failing the above.

9. LIABILITY

9.1 Landpac shall not be liable for any claims for loss or damage, including consequential loss which may be sustained by the client, or any third party, and the client shall indemnify and hold Landpac harmless against any claim of whatsoever nature, including all costs relating to such claim, which may be made or instituted against Landpac by any Third Party, as a consequence of the use of the impact compaction plant on site.

10. FAVOURABLE CONDITIONS FOR IMPACT COMPACTION

10.1 Landpac reserves the right to operate the impact compactor only on ground conditions for which the equipment is suitable and which will not result in damage to the equipment. Landpac does not warrant that a specific result will be achieved as a result of the use of the impact compactor on site.

11. WORKING TIME

11.1 Landpac shall be entitled to work continuously whilst on site, with working times to be negotiated at the start of the contract. If no special requirement has been negotiated, the applicable working times are as follows: Monday to Friday, from 07h00am to 17h00pm.

11.2 Any overtime and/or other special requirements due to delays from the client and/or any other third party shall be for the client's account.

11.3 If additional shifts are required, Landpac shall duly quote for any additional operational and manpower costs.

12. ACCESS TO SITE and SITE SECURITY

12.1 Landpac shall be given unrestricted access to the site to ensure continuity of the compaction process.

12.2 Landpac shall be given the opportunity to store and maintain their plant and equipment on the client's premises, which shall be well secured and safe from any vandalism and/or theft.

13. DELAYS

13.1 Should any event, which is in the nature of an accidental occurrence or an act of God, create a delay in the performance of the contract by Landpac, then Landpac shall not be held accountable in any way for such delay.

13.2 If the client is to make use of several contractors for different operational requirements, Landpac will not be held responsible for any late starting that may be caused by other contractors or the client.

13.3 Any delays that have been caused by any person(s) and/or organisation(s) other than Landpac themselves shall be duly noted and any additional costs that may be incurred shall be for the account of the client. Landpac will not get involved in any disputes with other contractors on/off the site.

13.4 Standing Time rates shall apply for plant and equipment being held up by the customer for whatever reason.

14. **HIRING OF PLANT**

14.1 **Minimum Hire Rates**

14.1.1 A minimum of 9.5 hours daily hire rate applies.

14.2 All hire rates exclude fuel, which is to be supplied by the client.

14.3 All hire rates exclude watering, which is to be supplied by the client.

14.4 Standing rates shall apply.

14.5 Unless otherwise specified, all accommodation requirements are excluded from the estimate and the client will be held responsible for arranging and covering the cost of reasonable and acceptable accommodation.

15. **DISPUTES**

15.1 Any dispute arising between the client and Landpac in respect of the interpretation of these terms or the performance of any of the work done by Landpac in terms of this agreement or any contract resulting there from, shall be referred to litigation in the High Court.

15.2 Landpac will not get involved in any disputes with other contractors on/off the site with regards to issues such as delays, payments, etc. These issues are to be resolved by the client.

16. **GOVERNING LAW**

16.1 This agreement shall be governed in all aspects by the Laws of the Republic of South Africa.

17. **SURETIES**

17.1 No provision has been made in the above quoted rates for the provision of a performance guarantee or for the deduction of retention moneys or the provision of sureties. Should this be required, a relevant surety can be arranged and the cost thereof added to the quoted rates.

18. **COMMENCEMENT OF WORK**

18.1 Landpac will only establish and commence work on site once:

18.1.1 An official order has been received from the client in writing, and

18.1.2 The appropriate bonds/guarantees have been arranged (if required, as highlighted in the estimate).

19. **PAYMENT and QUERIES**

19.1 Hire payment by the client shall be deposited in the Landpac's account within 30 days of date of invoice; date of invoice being the last day of the month, with the final settlement invoice being immediately after the completion date.

Landpac's bank details

Account Name : Compaction Technology (Pty) Ltd t/a Landpac
Bank & Branch : First National Bank, Nigel Branch
Bank Code : 251042
Account No : 51320152005

(Kindly fax copy of deposit slip once payment has been made.)

At Landpac's request, payment for work performed outside the borders of South Africa may be paid into an alternative bank account in the country of operation. This shall be clarified by Landpac before mobilisation.

- 19.2 Customers/Clients are requested to address all queries within 7 days of receiving the invoice from Landpac.
- 19.3 Interest will be charged on all overdue accounts at the current South African bank rates.
- 19.4 Under no circumstances must the client automatically assume that discount structures are applicable.
- 19.5 All invoices shall exclude VAT, sales tax, duties or any other form of tax payable in the country of operation. If these requirements exist, the client is expected to increase the total values by the correct percentages and not deduct them from the estimate supplied by Landpac.
- 19.6 No percentage of project value can be withheld from the supplier by the client.
- 19.7 Penalties that may be referred to in any other contract shall not be applicable to the services offered by the supplier.

Thus approved for : _____

Full Name : _____

Designation : _____

Signature : _____
(Fully Authorised)

Date : _____

If an order has been received by the supplier (Compaction Technology (Pty) Ltd t/a LANDPAC), it is understood that the client has read, understood and approves the agreement.