

Dip. Str. Engr. Tech.

ENGINEERING AND ARCHITECTURAL SERVICES

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Your ref:

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**GLAMPING DEVELOPMENT COMPRISING OF FOUR GLAMPING CABINS WITH
HOT TUBS CENTRAL COMMON MEETING AREA , BIN STORAGE AREA,AN
ONSITE WASTEWATER TREATMENT SYSTEM AND POLISHING FILTER AND
ALL NECESSARY AND ASSOCIATED SITE WORKS PIN,**

AT

**BILBO HILL
BALLINABRANNAGH
BILBOA
CO. CARLOW R93 XR53**

FOR

BILBO HILLS LTD.

**Leslie Colton, Dip.Str.Engr.Tech.
Underhill,
Rathmore,
Stradbally,
Co. Laois.**

Dated: 24 th AUGUST 2026

PRELIMINARIES:

1.01 DESCRIPTION OF WORK.

The works consist of clearing the topsoil to the access road service area parking and the footprints of the pods and central building and lay road and surface same. Bringing the services to the buildings Water, sewage , ground water ,surface water and ESB. Digging out the bases for the buildings using the dug out soil to form berms between the buildings for privacy. Installing the treatment system . Assembling the pods and central building constructing the decking and handrails . The Plumbing , Electrical and fitting out of the buildings.

1.02 VISITS TO SITE. The contractor shall visit the site of the works to acquaint himself with the nature of the work to be carried out, the approach to the site and the nature of the existing structures, as no claim will be recognised on the grounds of want of knowledge of the works involved.

1.03 BYE LAWS. The contractor shall comply with Garda regulations, and in particular, keep the roadway unobstructed and free from materials, or debris arising from the works. Contractor to ensure that copies of pyrite free certificates and delivery dockets for concrete products delivered to the site are available for inspection by the BCA or assigned certifier.

1.04 INCLEMENT WEATHER. During wet or frosty weather, all exposed portions of the works shall be properly protected.

1.05 INSURANCE. The contractor will insure the works and building against all loss or damage by fire. The insurance will extend to all structural and decorative damage to the property as well as to all adjoining tenants. The Contractor shall also insure. The works and buildings in respect of employer's liability, public liability during the course of the works and certificates of insurance in relation to the above matters will be produced to the employer before the commencement of the works. The contractor shall undertake to personally indemnify the employer in the event of any default by the contractor of this clause.

1.06 KEEP SITE CLEAN. The contractor shall clear and cart away from site all rubbish and debris as it accumulates and on completion of the works leaves the site clean, neat and tidy to reasonable satisfaction of the supervisor.

1.07 DRAWINGS. A set of drawings and a copy of this specification shall be kept on site for use and reference on site at all times.

1.08 OMISSION OF DRAWINGS. Everything shown on the drawing and omitted in the specification is to be taken as forming part of the contract, as is everything mentioned in the specification and omitted on the drawings

1.09 SETTING OUT. The contractor shall be responsible for the true and proper setting out of the works and for the corrections of the position levels, dimensions and alignment of all works, errors in setting out shall be rectified at the contractor's expense. Establish a master bench mark on the site, at the finished floor level for the duration of the contract. Do not scale the drawing; use the figured dimensions for setting out the works. In the case of any difficulty about these, the matter should be referred for a decision to the supervisor before proceeding further. Figured dimensions shown on drawing, indicate the measurements to the rough concrete surface.

- 1.10 PLANT.** The contractor shall provide all and every kind of scaffolding, platforms, ladders, tools, tackle, hoists, machinery rods and everything else of the nature of plant, he shall also pay all freightage duties, costs, charges, and expenses incidental to the complete performance of the works, unless special exemption has been made. The scaffolding used throughout the works is to be of the safest kind.
- 1.11 PAYMENTS.** Payments will be made at the rate of ninety per cent of the value of the works actually done and fixed on the building. The balance of ten per cent will be retained by the employer until the works are certified as practically complete by the supervisor when one Fifth of this sum will be paid the other half, together with any other sum due to the contractor at the final adjustment of accounts, will be paid on the expiration of the period of maintenance, i.e. 90days. A certificate to be accompanied by detailed approximate statement showing the amount of work executed.
- 1.12 CLEANING.** The contractor shall include in his tender for thoroughly cleaning all floors and paving included or affected by the works, sanitary fittings, gullies, gutters, and glazing both sides on completion and leaving all clean and perfect to the satisfaction of the supervisor.
- 1.13 BUILDING REGULATIONS:** In the execution of these works all details shall comply with the Building Regulations 2014, as set out in twelve Technical Guidance Documents A, B, C, D, E, F, G, I, J, K, L and M and responsibility for so complying shall rest with the Contractor. Note NZEB is now in operation since the 1st of November 2019 for New Builds. **The Contractor shall also ensure that starting of the works complies with Commencement Notice.**

2 SPECIFICATION

2.01 SITE CLEARANCE:

- 2.02 Road and Parking area :** Clear the topsoil to a depth of 300mm x4.5 wide store to use for screening between the pods lay 100mm down hardcore to a dept 225 mm and surface with plant waste. Dig our bases of pods and form a raft bases for same. Bring all services to the bases , and central building
- 2.03 INSPECTION:** The Contractor must not under any circumstances, pour any concrete into the trenches until same have been inspected, tested and approved by the Adviser.
- 2.04 PLANKING AND STRUTTING:** The Contractor will be held responsible for upholding the sides of all excavations and will be required to plank and strut as may be necessary and no claim for expenses incurred in this connection will be considered.
- 2.05 DRAIN TRENCHES.** Excavate for lines of drains as shown on drawings, all trenches to be at least 610 mm wider than pipes and to depths necessary to give required falls but in no case less than 610mm deep. 100mm diameter pipes to have fall of 1 in 60.with exception of rain water and polishing filter which is to be 1:180
- 2.06 BACKFILLING TRENCHES AND FOOTINGS:** Backfill foundation trenches and isolated footings with suitable earth filling and compact in 225mm layers.

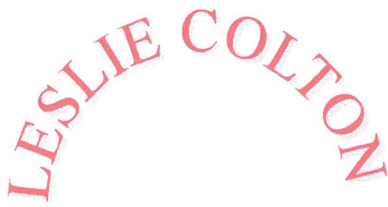
- 2.07 HARDCORE:** Lay hardcore in 225mm thick layers of S.R. 21 Annex E T2 perm hardcore and with a 50mm thick top blinding layer of sand or gravel. Consolidate to an even surface and to the required levels and contours with a 3 tonne roller or with a mechanical pumper capable of equivalent compaction. Compact hardcore under paths and paving for pedestrian traffic with a similar roller and compact hardcore under paving for vehicular traffic with a 10 tonne roller
- 2.08 MORTAR:** Cement mortar shall consist of one part cement to three parts of sand by volume (1:3) Cement-sand mortar shall consist of one part cement to one part lime to six parts sand by volume (1:6) for cement-sand-plasticiser mortar the proportions and method of adding plasticiser shall be in accordance with the manufacturer's written instructions. Mix cement, sand, plasticiser and water to a workable consistency.
- 2.09 FOUNDATIONS.** Pour foundations to dimensions shown on drawings. Mix (C28/35) 35N compressive strength with a 20mm aggregate D20, a consistence class of S2 75mm slump, and exposure class XC2; C28/35-D20-S2-XC2 by approved supplier. **Fit reinforcing steel all around as directed by advisor and ensure certifier is present at pouring of concrete to comply with TGD.Part A 2022**
- 2.10 FLOOR LEVELS.** To be 300mm over Existing GL ground level.
- 2.11 STEPS AND RAMP.** Steps where shown to have nosing slightly rounded, to be undercut 30mm and to have outward fall of 1 in 40 for surface water runoff. Fit eco drains to patio doors and front and back doors. **Ramp to decking from parking area with a rise of 1:20 minimum width of 1200mm wide to comply with TGD K..& M. 2022.**
- 2.12 BLOCKLAYER.** It may be necessary to use blockwork to bring the pods to a desirable level. **to comply with TGD.Parts A; B; C; D. & J. 2017.**
- 2.13 D.P.C.** At levels shown on drawings provide and fit damp proof course of polyethylene to I.S. 57, D.P.C. must also conform to B.S. 743. Lay to full thickness of wall leaves and give 225mm laps to all joints along the run and a full lap at all corners. Damp proof course must be inserted under all cills and turned up at back and sides of same and in all lintels opes in cavity walls over opes as shown on drawings. Vertical damp proof course at jambs of openings in cavity wall to be provided between outer leaf of cavity and the insulated slab. **to comply with TGD.Parts C. & D. 2017**
- 2.19 CARPENTER & JOINER.** The pods are to be supplied in kit form to facilitate transport
Note: All roof timbers to be Class "SC C16 " or greater, kiln dried and pressure treated and all fresh end cuts to be treated on site before fitting. **to comply with TGD.Parts A; B; C. & D. 2022**
- 2.20 EAVES.** Fit Pvc gutters and downpipes **To comply with TGD.Parts A; C. & D. 2022.**
- 2.22 WINDOWS.** To sizes and pattern shown on drawings in UPVC if double glazed with a U value of 1.2 Wm²K or less and if treble glazed a U value of .9 Wm²K or less . 2 no. SO6 velux windows and flashing.
All windows below 800mm to have toughened glass fitted.. All Windows to comply with Building Control Regulation 1997 S.I. 496 of 1997 and S.I. 497 of 1997.
Window sash opes to be a minimum of 860mm x 558mm as means of fire escape. **to comply with TGD.Parts A; C; D. & L. 2022**

BH4

- 2.23 PLASTERER.** External: : not decided yet . Fit all internal and external plastering angles and expanding metal strips. **to comply with TGD.Parts A; C; D & L. 2017.**
- 2.25 PLUMBING AND HEATING** Lay on water supply from existing well.
Underground pipe to min 750mm below finished surface.
Copper service pipes to BS 2871 with fittings to BS 864. Plastic pipes to BS 6700
Leave external water supply at back door and in garden.
All drains and plumbing work to be tested to the entire satisfaction of the supervisor and the Local Authority. to comply with TGD.Parts A; B; C; D; E; F; H; J. & L 2017.

RS/7

- 2.25 DRAINAGE.** Sewer pipe and soil vent pipe in 100mm PVC wavin or marley. Provide gully traps and manholes where indicated on drawings. PVC. gratings to be used and gully traps are to be set in concrete. Provide vents, bends, fittings, cleaning eyes and all as necessary for the satisfactory completion of the work. Rain water and surface water to be piped to a central location and then to soakaway BRE 365 and to allow for rainwater harvesting in the future. Sewerage pipe work to be 100mm PVC pipe to central waste water treatment system as shown on the site plan **to comply with TGD.Part H 2022.**
- 2.28 SEWERAGE.** Decommission existing septic tank and install a Batch pur wastewater treatment system supplied by Corcoran Precast Tank Ltd. as per the Site Characterisation prepared Mark Kelly dated 24 August 2022. Install 45sq.m. pressurised soil polishing filter. Invert level -0.60m.
All to comply with the E.P.A code of practice: Waste water Treatment and disposal Systems Serving Single Houses. (p.e.≤10) 2009. **to comply with TGD.Parts A; D; G. & H. 2022.**
- 2.29 INSULATION AS SPECIFIED BY MANUFACTURER OF PODS**
All to comply with TGD.Parts A; B; D;E; F & L 2022
- 2.28 DUCTING.** Excavate and lay 100mm PVC pipe with pull wires in trench for phone and ESB cables from position at boundary of site to the house. **To comply with TGD.Parts A; C. & D 2022.**
- 2.29 SITEWORKS.** to be discussed with clients all **to comply with TGD.Parts A; C& M. 2022**
- 2.30 ELECTRICAL.** All works must comply with the M7e consultant and with the with E.S.B. specification and regulations. Provide and fix complete electrical installation providing separate circuits for light and power points. All light fittings,.



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3 June 2026

Glamping Development
Bilboa Hill
Ballinabrannagh
Bilboa
Co Carlow R93 XR53

Materials list:

Item	Materials	quantity	
Access Roads	Excavate earth for base & stock pile for future use	450cu m	
	100mm down of hardcore (base)	300cu m	
	804 hard core (top surface)	150cum	
Access to Pods	Excavate earth (dig out) $75\text{m}^2 \times 3 = 23 \text{ cu.m.} \times 5$	115 cu.m.	
	Hardcore base 100mm down	80cu.m.	
	804 hardcore surface	35 cu.m.	
Parking, EV points & bin storage	Dig out 20 spaces $\times 15\text{m}^2 = 300\text{m}^2 \times 0.3$	100 cu.m.	
	Hardcore 100mm down	65 cu.m.	
	804	35 cu.m.	
	Dressing to paths	15 cu.m.	
Pods (per pod)	Dig out earth	25 cu.m.	
	Hardcore 100mm down	4 cu.m.	
	804 hardcore	2 cu.m.	
	Concrete slab $10 \times 6 \times 0.175 = 10.5\text{m}^3 + 10\%$ of 35N	12cu.m.	X 4 =48m
Service building	Dig out	30 cu.m.	
	100mm down hardcore	20cu.m.	
	804 hardcore	10 cu.m.	
	Concrete $12.5\text{m} \times 10\text{m} = 125\text{m}^2 \times 0.175 + 10\%$ 35N concrete	22 cu.m.	
Service Area	E.V. charging	1 no	
	Parking spaces	8 no.	
	Bin storage	6 no.	
Lighting	Driveway low level and Paths Lamp Standards @ 20m c/c ducting = A.Js. Lamp standards Low level ducting Pillar lights	280m 16 no 16 no. 210m 22 no.	
Fencing	To be discussed		

