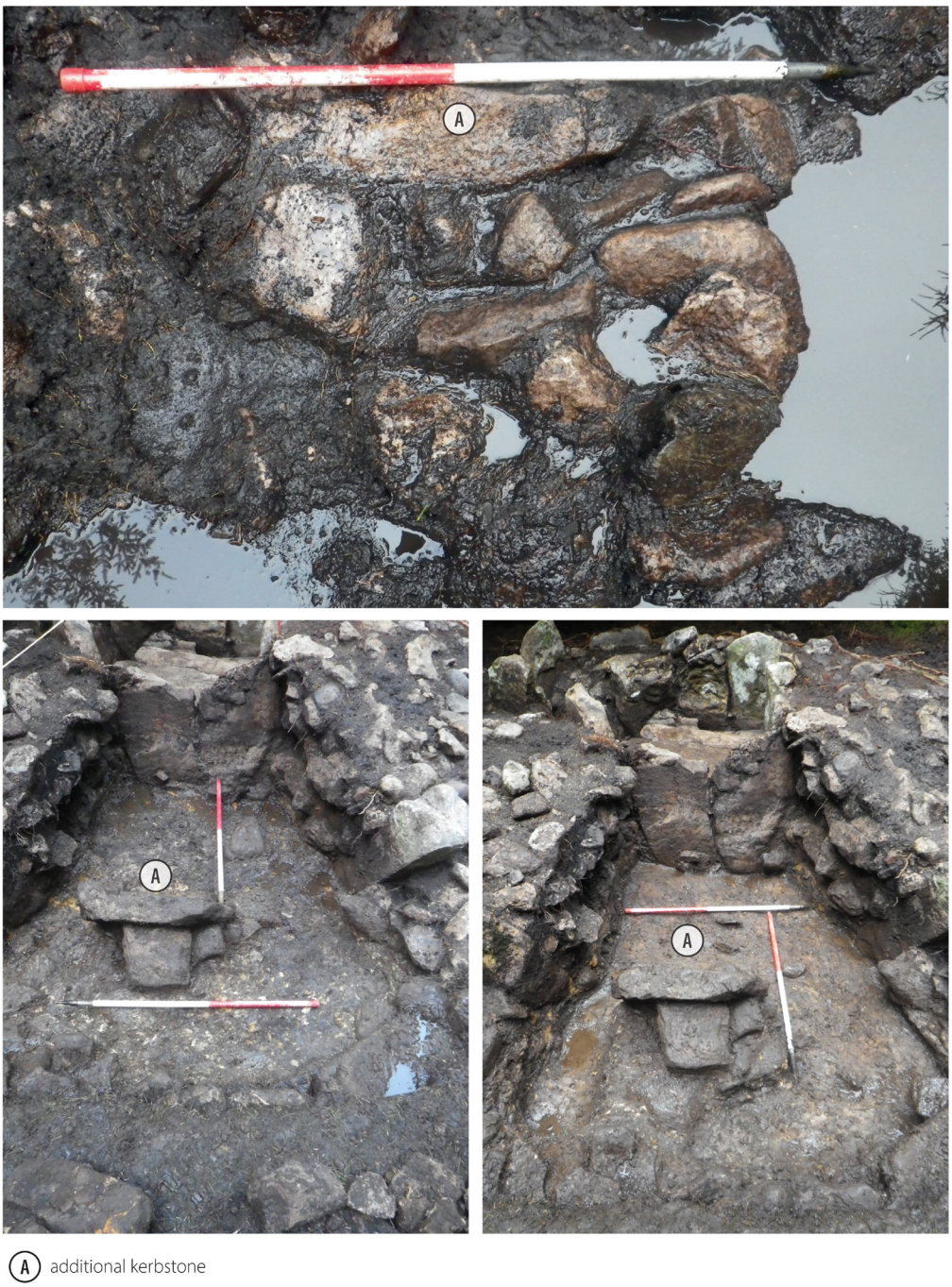
7. INITIAL ACTIVITY AND CONSTRUCTION

The stratigraphically earliest burial comprised a small deposit (6.1g) of fragmentary cremated cranial bone and a single fragment of molar tooth (037) (Appendix 2) placed within a small irregular kidney-shaped pit (038) that was located just off the centre of the chamber (Illus 7). Two attempts were made at dating the cremated bone but due to insufficient carbon both samples failed. However, a piece of hazel charcoal recovered from the fill of the pit returned a date of 2900–2690 cal BC (SUERC-122889) (Table 1). The pit was sealed by a dark brown to black soft silt loam (036) and mixed soil and crushed sandstone deposit (034). These deposits are interpreted as the remains of a disturbed soil into which small clasts of sandstone had been added to form the 'floor' of the chamber. The disturbed soil lapped up against the chamber orthostats (004) but it did not extend below them, rather these rested directly upon the surface of the natural red silt, demonstrating that the original topsoil had been removed from the intended footprint of the chamber orthostats before they were placed in position. Furthermore, no socket had been cut for the orthostats, but with the passage of time their weight had created shallow indentations into the surface of the natural red silt. The rear of the orthostats was packed with a few small stones and the previously removed soil with fragments of sandstone used to infill and level the ground immediately adjacent to them. A single piece of cremated bone (033) was trodden into the surface of (034) and a single fragment of burnt soil, presumably brought in with the cremated bone, was recovered from the surface; otherwise, the bulk of this surface was remarkably clean.

Located on the northern side of the chamber was a small deposit of cremated human bone (012) which had been pressed into the side of the chamber and up against the chamber orthostat. This deposit was located under two later floor packing cobbles which lay flush with the elongated flagstone (005). The deposit of cremated remains contained a high proportion of cranial vault fragments, one tooth root of a molar, fragments of a small patella, and of a femoral shaft and pieces of toe phalanges including an unfused proximal epiphysis. The skull fragments included some which appeared adult and at least one fragment which was probably juvenile. The deposit may therefore comprise the remains of at least two individuals. This deposit of cremated remains (012) has been dated to 3030–2890 cal BC (SUERC-122890), earlier than the date obtained for deposit (037) despite the latter stratigraphically pre-dating (012) (Table 1). Comparison of the dates for the deposits of cremated remains, (037) and (012), indicates that these are likely to have occurred within a few generations of each other. Other small fragments of cremated bone, (032) and (035), survived in brown silt found adjacent to the internal orthostat.

Fragments of the original topsoil/ground surface (022) survived outside the entrance but only in patches within the passage. Mostly the passage floor comprised trampled natural red silt into which the occasional small stones had been trampled. A deposit of cremated bone (017) was recovered from this floor. It was found on the north side of the passage hard up against the orthostat where presumably it had escaped disturbance during the use of the tomb. Radiocarbon dating indicates that this deposit may be more or less contemporary with that located within the chamber (012) (Table 1).

The Late Neolithic buried soil had been cut into and removed to make way for the chamber orthostats and the ring of kerbstones. The kerbstone in the west facing section sat within a shallow scoop or indentation in the soft red silt, while the smaller kerbstone in the east facing section sat within the disturbed buried soil (020b). The upper buried soil (020b) and (20a) had been removed from the ground surface outside of the kerbstones and was probably incorporated into the body of the cairn. An additional kerbstone was discovered within the slot trench; it was not visible from the surface of the cairn (Illus 11). This kerbstone had been packed with a turf-like material (024). Turf and stone (018) were roughly stacked between the chamber orthostats and the kerbstones to form the bulk of the cairn material. Smaller stones had been stacked slanting away from the newly revealed kerbstone to prevent it from collapsing outwards and other stones had clearly been stacked against the eastern kerbstones, also to prevent them from collapsing outward. The pressure of the cairn fill against the kerbstones, coupled with the absence of (020a/b) on the outside of these, may account for their outward-leaning nature. It is possible that in the original



Illus 11 The additional kerbstone identified within the slot trench through the cairn material. (image: Forestry and Land Scotland)

design the outer face of the kerbstones was meant to be visible but imminent collapse necessitated their packing with stone.

A radiocarbon date was obtained on a piece of carbonised hazel recovered from the lower turf of the cairn (018) and this is surprisingly late, 2400–2150 cal BC (SUERC- 122898), given the otherwise Late Neolithic dates associated with the monument (Table 1). The monument definitely saw re-use in the Chalcolithic period (see below for further discussion) and it is probable that the dated charcoal had worked down through the cairn material by means of roots, soil biota, or even water percolation. The charcoal content of the sampled cairn soil (018) is also significantly different from that of the buried soils, with oak being the dominant species, a surprising result as no oak pollen was recorded in the Late Neolithic buried soils, (020) and (021)

(Table 1 and 3). This may indicate that additional turf was carried from afar and incorporated into the monument during the Chalcolithic re-use of the monument. The upper stone and turf cairn material (019) became more stone-rich towards the top of the cairn, perhaps a consequence of the loss of soil down through the profile, or perhaps a result of later Chalcolithic repair and re-stocking of the body of the cairn. An alternative explanation, and one favoured by the first two named authors, is that cremated bone and ash collected from funerary pyres – oak being the fuel of choice for funerary pyres as it produces the hottest temperature – were subsequently deposited within the pre-existing cairn material or scattered over the top of the cairn. Although no cremated bone was observed in the cairn material this is not surprising given the open nature of the cairn and the susceptibility of bone to leaching, as attested by the nature of the soil within the cairn.