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NATIVE NEIGHBOURS

LOCAL SETTLEMENT SYSTEM AND SOCIAL STRUCTURE IN THE ROMAN
PERIOD AT OSS (THE NETHERLANDS)



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enclosed separately:

appendix II – IV Maps of the four Roman period settlements (scale 1:550)

2. The Vijver settlement

The first Roman period settlement-traces in Ussen were discovered in 1976, when a pond (Dutch: *vijver*) was being dug. The features of what was to be called the Vijver settlement are scattered over an area of approximately 500 x 350 m, situated in the north-west corner of the Ussen excavations (figs. 3 and 12).¹ Only c. 1.3 ha of this area was excavated by means of regular excavation trenches, the rest of the information was supplied by local archaeologists. Their observations included the excavation of a large number of pits and wells found in road and cable trenches.

The Vijver settlement is far from complete. Because of its fragmentary nature, it is difficult to establish the boundaries of the settlement and the structures that form part of it. Documented structures include six house plans, 30 granaries and 34 pits and wells. However, a number of granaries and wells probably have to be dated to the Iron Age, since house plans from this period were found in the direct vicinity of the Roman period settlement. No outbuildings, palisades or fences were found, or at least not documented.

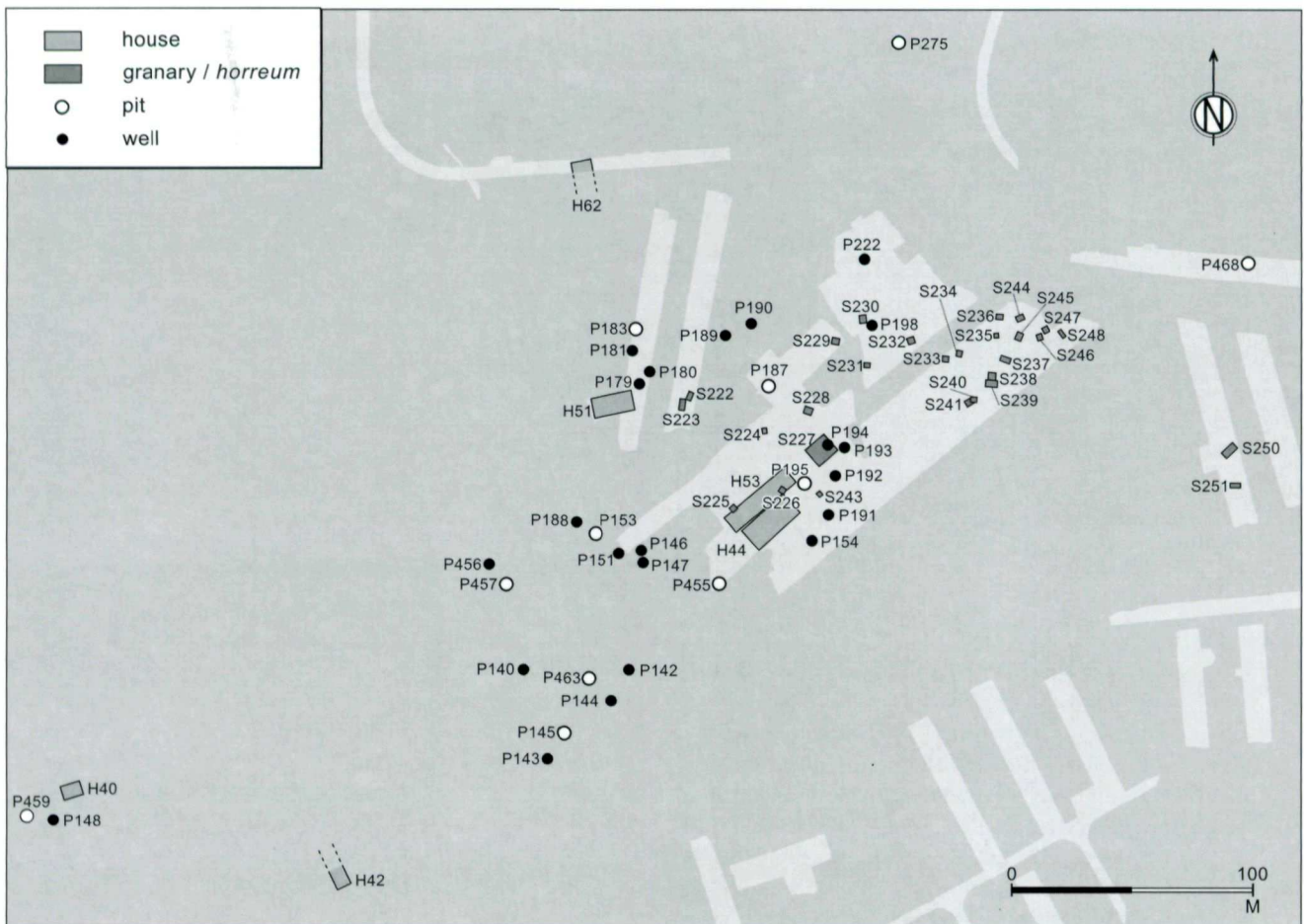


Figure 12. The Vijver settlement.

2.1 HOUSE PLANS

In the following section, six house plans (table 4) will be described, including two that are situated somewhat further away and are of uncertain date (H40 and H42). However, since these plans do not form part of any other known settlement, the Vijver settlement appears to be the best context within which to discuss them.

House 40

Apart from posts outside the short walls, the plan of H40 has all the characteristics of type 8B, in this case with a roof-bearing post in the eastern short wall (fig. 13). With a length of only 9.4 m this plan is the shortest complete house plan from Oss. As the features of H40 yielded no finds, its precise date remains uncertain. However, since the other

No.	type	length (m)	width (m)	orientation	date
H40	8B	9.4	6.3	W-E	RP
H42	6A	> 10.2	6.2	NW-SE	RP
H44	6B	20.3	8.7	SW-NE	pre-Flavian
H51	7B	15.9	7.0	W-E	Id-IIa
H53	5A	> 31.5	5.9	SW-NE	LIA/RP IA
H62	7A	> 8.9	> 3.7	W-E	IIA

Table 4. House plans from the Vijver settlement. Date: LIA = Late Iron Age, RP = Roman period.

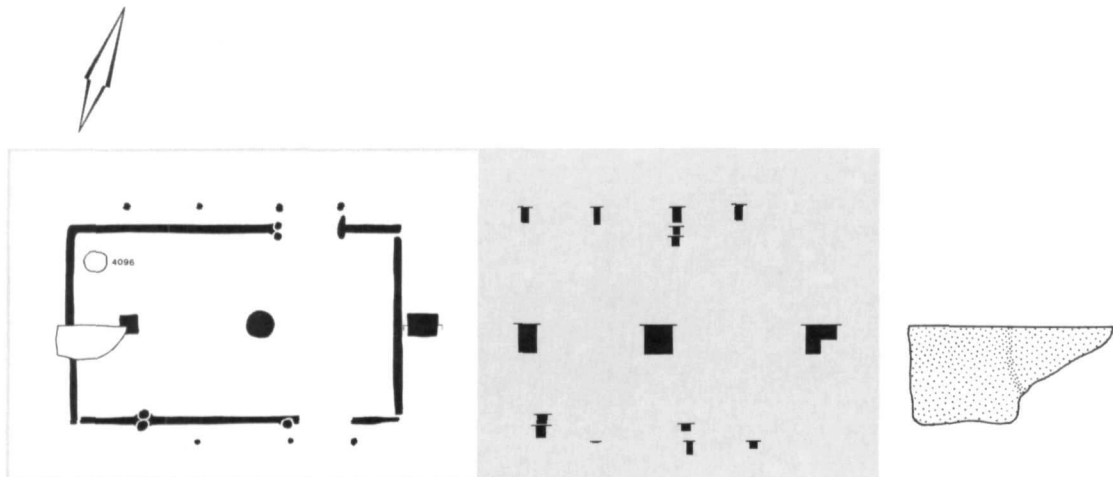


Figure 13. House 40. Scale: plan 1:200, posthole depths 1:100.

four type 8B house plans from Oss-Ussen are all dated to the Roman period, and two wells from the same period (P148 and P459) are situated next to H40, a Roman period date seems likely.

House 42

H42 is incomplete: at least half of it could not be excavated (fig. 14). Its orientation is northwest to southeast, which is rather uncommon in Ussen (Schinkel 1994, part II, 274-275). The excavated part forms the only known specimen of type 6A. Like H40, H42 yielded no finds, although the excavation report mentions pottery 'of Roman origin'.

House 44

A remarkable feature of H44 is a set of trenches on the outside of the plan (fig. 15). It is possible that the external

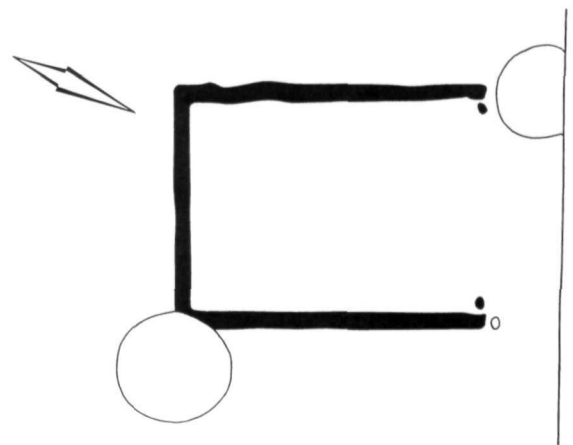


Figure 14. House 42. Scale 1:200.

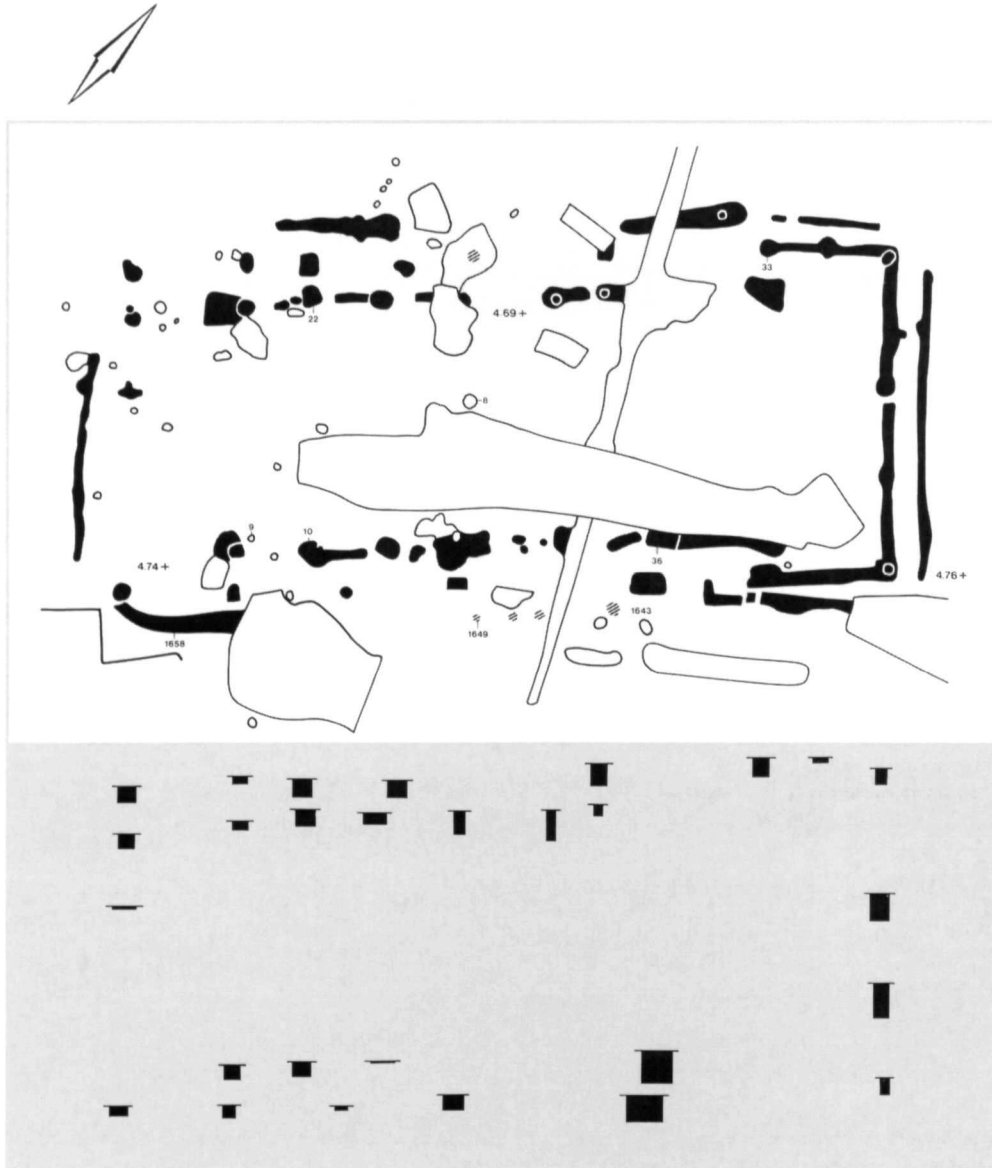


Figure 15. House 44. Scale: plan 1:200, posthole depths 1:100.

posts on the northeastern side were placed in one of them. The function of the second, outer trench is uncertain; it is too deep to have been a so-called drip-gully. It may have served as a drainage ditch, or it may have contained a fence.² The finds include ten fragments of handmade pottery and one sherd of wheel-thrown pottery.

House 51

The plan of H51 can be classified as possibly belonging to type 7B, although the external posts are not visible as such: their presence is indicated by a number of extensions to the

foundation trench (fig. 16). A stabilising construction was found at the bottom of the posthole of the central roof-bearing post. It consisted of three small wooden planks lying at right angles to the long walls, with a second set of three wooden planks lying parallel to the long walls on top of them. Remnants of the roof-bearing post were found on top of this construction.³ The trenches and postholes yielded a relatively large number of finds: 84 fragments of handmade pottery, including three decorated ones (comb, fingertip and groove). Another 31 fragments could be identified as wheel-thrown pottery.

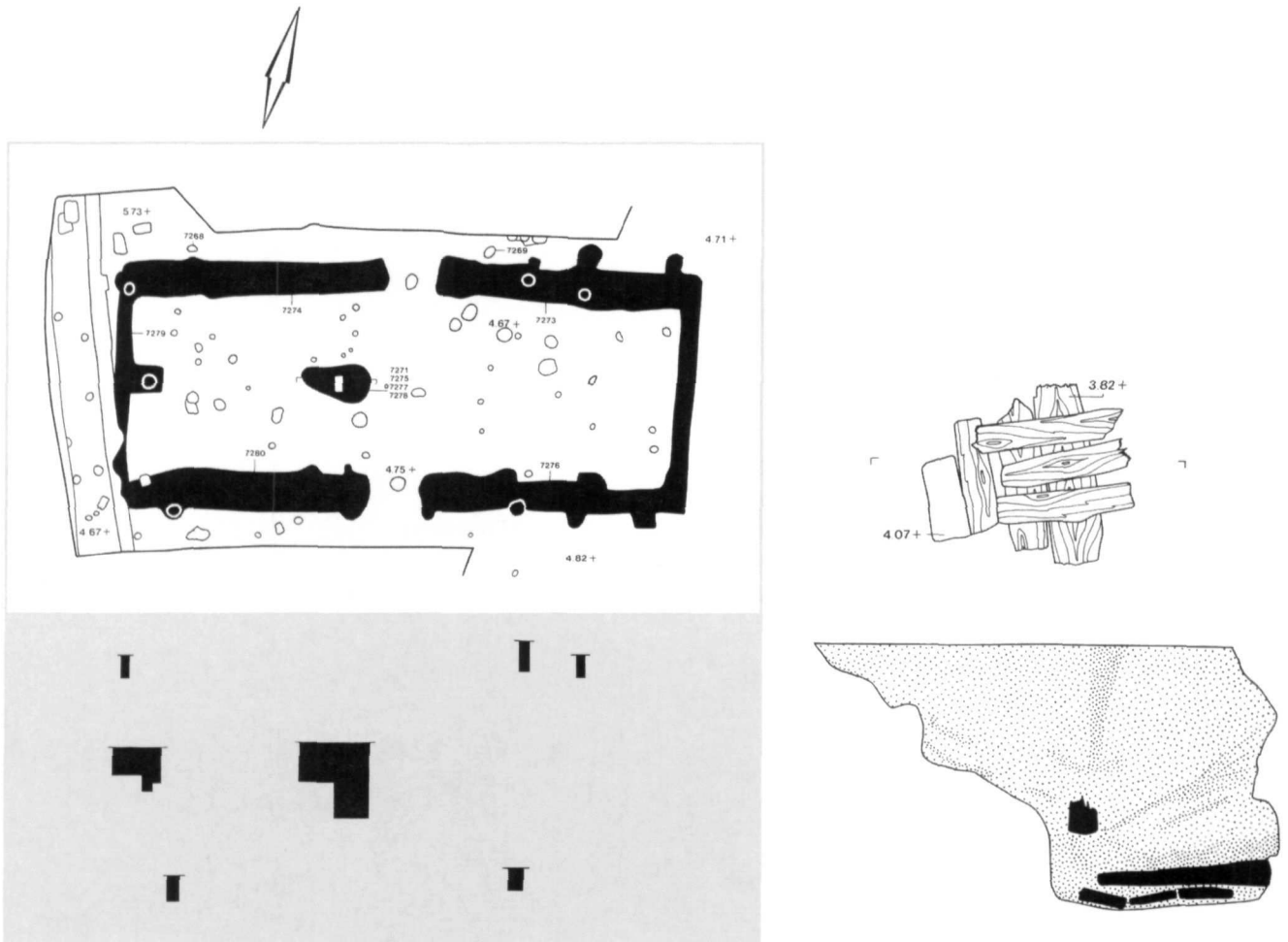


Figure 16. House 51. Scale: plan 1:200, posthole depths 1:100, sections 1:30.

House 53

Taking into account the considerable length of H53, the possibility that this plan represents two houses cannot be dismissed (fig. 17). The finds include 20 fragments of handmade pottery and three sherds of Roman ware. Two of these were identified as cork urn (dated IA), one of which was *dolium*-shaped. A fragment of the spring of an iron brooch, dated before AD 50, was also found in one of the postholes (fig. 28). Nevertheless, the dating of this plan remains complicated. Typologically, the two-aisled plan with paired wall-posts is a type 5A. Plans of this type, more of which were found in the vicinity of the Roman period Vijver settlement, are usually dated to the Late Iron Age. However, some of the finds from H53 indicate a date in the early Roman period. A relative date is provided by H44, which lies alongside H53 at the relatively short distance of c. 1 m,

and could thus not have been in use at the same time. H53 would then be the older one of the two and is thus dated in the first half of the first century AD at its latest. However, it is possible that the cork-urn fragments ended up in the postholes of H53 when it was already out of use, especially if the derelict farm was demolished to clear the yard for H44. H53 could then date to the last decades of the Late Iron Age, which would fit in with the type of building.

House 62

The plan of H62 is fragmentary (fig. 18). The scant remains that could be excavated show that the plan should probably be attributed to type 7A. Finds include four fragments of handmade pottery, and 31 fragments of wheel-thrown pottery, including 22 fragments of one colour-coated beaker (technique b, type Stuart 2).

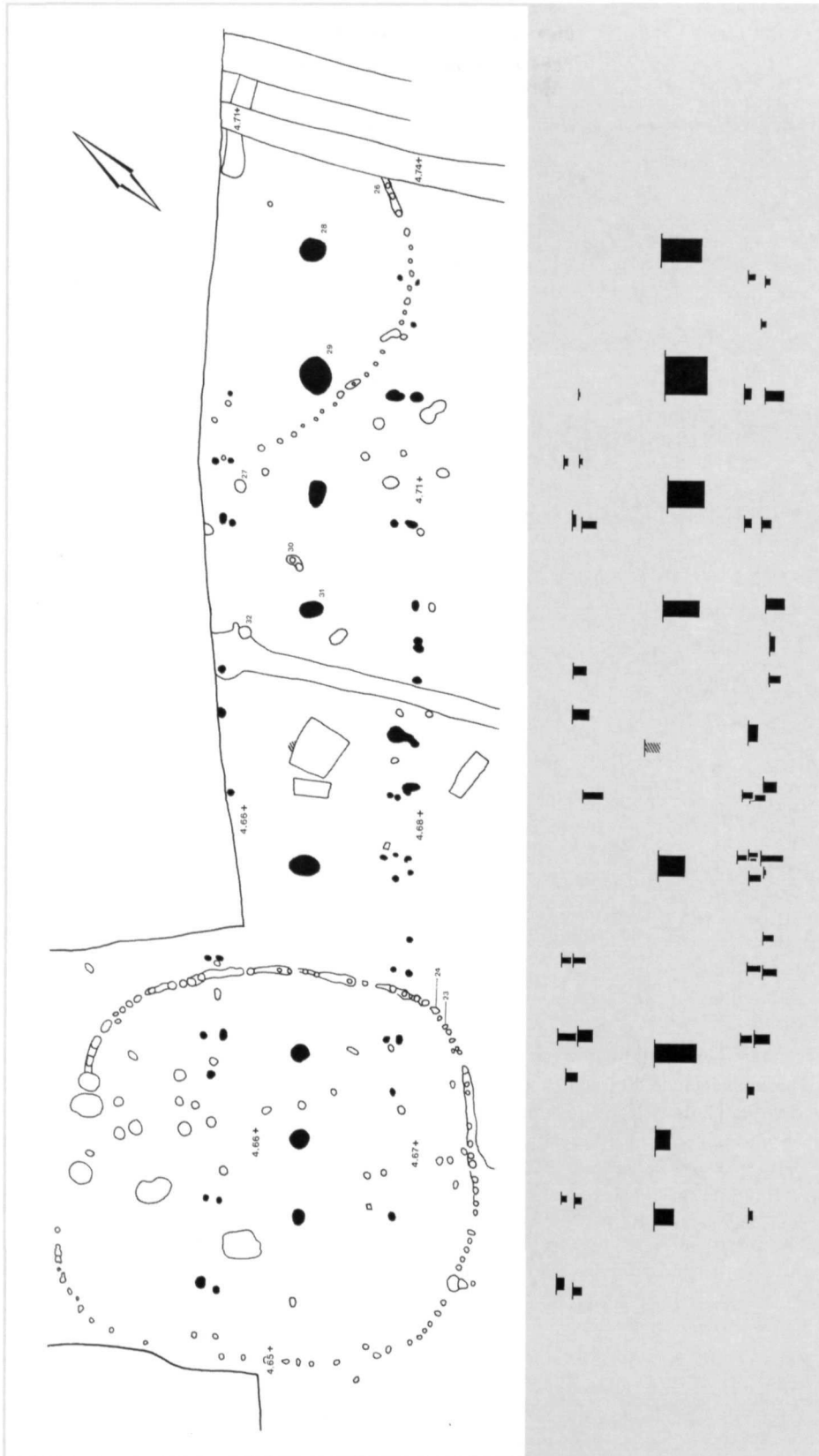


Figure 17. House 53. Scale: plan 1:200, posthole depths 1:100.

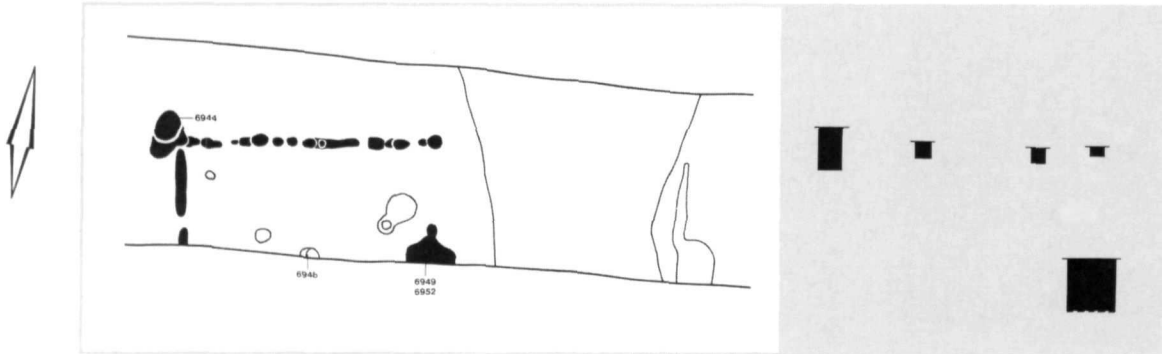


Figure 18. House 62. Scale: plan 1:200, posthole depths 1:100.

2.2 GRANARIES AND HORREA

In the area around the Roman period houses a total of 28 small buildings, interpreted as granaries, were documented (table 5). Only two of these, situated in the direct vicinity of H44 and H53, could be dated to the Roman period on the basis of finds. S243 is a four-post building (type IA), dated to the second century AD, while S227 (fig. 19) is dated Id-

No.	type	length/width (cm)	date
S222	IB	300/120	-
S223	IB	410/170	-
S224	IA	170/140	-
S225	IC	180/190	-
S226	IA	190/150	-
S227	IIIB	900/790	Id-IIa
S228	IC	220/250	-
S229	IA	220/190	-
S230	IC	190/270	-
S231	IB	200/150	-
S232	IA	230/210	-
S233	IB	160/160	-
S234	IA	180/150	-
S235	IA	140/140	-
S236	IA	240/170	-
S237	IB	340/160	-
S238	IIA	290/230	-
S239	IIA	420/190	-
S240	IA	180/150	-
S241	IB	350/220	-
S243	IA	170/140	II
S244	IA	250/200	-
S245	IB	300/250	-
S246	IC	170/230	-
S247	IIA	180/170	-
S248	IC	190/320	-
S250	IB	510/230	-
S251	ID	360/110	-

Table 5. Storage buildings from the Vijver settlement.

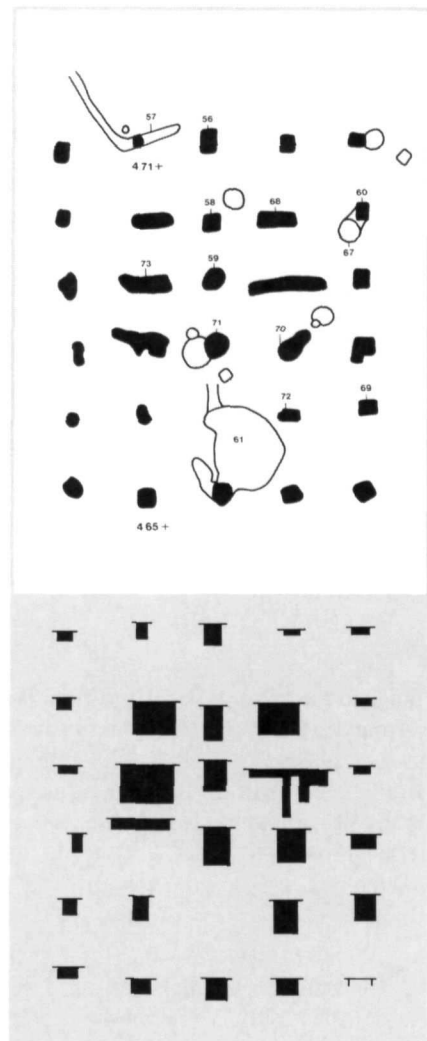


Figure 19. Granary S227. Scale: plan 1:200, posthole depths 1:100.

No.	type	depth (cm)	diameter (cm)	diameter lining	wood	date
P140	A1	120	-	-	-	pre-Flavian
P142	A5	110	-	35x70	-	IId-IIIc
P143a	A1	-	-	90	-	II-IIIc
P143b	A1	-	-	95	-	II-IIIc
P144	A1	-	-	125	-	pre-Flavian
P145	G	90	165	-	-	IIA
P146	A1	140	-	95	-	IIB (-IIIc)
P147	A1	120	-	90	-	IId-IIIc
P148	A1	120	-	-	-	Ib-c
P151	A1	125	-	40x80	-	II
P153	C	80	145	-	-	pre-Flavian
P154	A1	-	350	75x110	A Q S	IId-IIIc
P179	A1	170	400	90x110	A S	IIB
P180	A	100	230	-	-	IIA
P181	A1	175	450	100	F Q S	Id-IIa
P183	E-I	15	130	-	-	Id-IIb
P187	E	40	180	-	-	pre-Flavian
P188	A1	150	-	80	S	IIB-d
P189	A1	-	-	80x100	-	pre-Flavian
P190b	A1	-	-	110x140	-	pre-Flavian
P191	A1	150	340	80	A Q S	pre-Flavian
P192	A5	185	350	100	-	IIB
P193	A1	135	230	80	-	RP
P194	A-I	-	230	-	-	IB
P195	E-I	50	135	-	-	IIB
P198	A1	80	190	80	Q S	IB
P222	A1	130	100	-	A Q	IIA
P275	E	60	270	-	-	IIB-IIIc
P455	B-D	90	450	-	-	pre-Flavian
P456	A1	105	-	110	-	IId
P457	E	-	-	-	-	II
P459	E	65	-	-	-	II
P463	E-I	20	-	-	-	II
P468	E-I	20	180	-	-	II

Table 6. Pits and wells from the Vijver settlement. Wood: A = *Alnus* (alder), F = *Fraxinus* (ash), Q = *Quercus* (oak), S = *Salix* (willow).

Ila and belongs to the larger type IIB (a floor supported by 12 posts, surrounded by walls). The Latin name *horreum* is often used for these larger storage buildings from the Roman period (Oss-Ussen type III). Since two other granaries in the same area (S242 and S249, see Schinkel 1994) were dated to the Early and Middle Iron Age, the exact date of the remaining 26 small storage buildings is uncertain.

2.3 PITS AND WELLS

A total of 34 pits and wells are found in and around the Vijver settlement (table 6). Compared to the number of houses and data from other settlements at Oss, the amount of pits is

quite large. Considering the shorter life-span of wells (see 1.3.2) it is quite possible that four wells to one house was the normal proportion. The large number in the Vijver area is due mainly to the fact that local archaeologists documented a number of pits and wells in construction trenches in an unexcavated area, directly to the south-west of the clustered houses.⁴ Of 34 pits, 21 contained a form of wooden lining, and were therefore interpreted as wells. In 18 cases the construction consisted of wattlework (type A1), horizontal planks were found twice (type A5), and in one case the construction was uncertain (type A). Wattlework linings are present through the whole period, while the two wells with horizontal planks both date from AD 150 and later.

	whole area		structures only	
<i>terra sigillata</i>	60	2	47	2
Belgic ware	139	5	121	5
cork urn	19	1	19	1
colour-coated ware	169	6	150	6
smooth-walled pottery	373	12	335	13
<i>mortaria</i>	84	3	74	3
<i>dolia</i>	305	10	241	10
<i>amphorae</i>	256	8	216	8
<i>Waaslands</i>	87	3	79	3
coarse ware	689	23	606	24
grey ware	777	26	644	25
indeterminable	29	1	11	+
total	2987	100%	2543	100%

Table 7. Roman wheel-thrown pottery from the Vijver settlement: number of sherds and percentages.

<i>terra sigillata</i>	47	1
Belgic ware	121	3
cork urn	19	+
colour-coated ware	150	3
smooth-walled pottery	335	7
<i>mortaria</i>	74	2
<i>dolia</i>	241	5
<i>amphorae</i>	216	5
<i>Waaslands</i>	79	2
coarse ware	606	13
grey ware	644	14
handmade pottery	2126	45
indeterminable	11	+
total	4669	100%

Table 8. Wheel-thrown and handmade pottery from the structures of the Vijver settlement: number of sherds and percentages.

2.4 FINDS

2.4.1 Pottery

The structures from the Roman period in the Vijver area contained a total of 4669 pottery sherds; of which 54% (N = 2543) are wheel-thrown and 46% (N = 2126) handmade. If we add the pottery that was found in the area, but as stray finds or from features that could not be attributed to Roman period structures, the total number of Roman wheel-thrown sherds comes to 2987. For handmade sherds the total number is not known since most of the surface finds are without context and many of the native-Roman handmade wares cannot be distinguished from prehistoric handmade pottery (see 1.3). Table 7 shows that the relative proportions of the various wheel-thrown types from structures only differ slightly from those which represent the whole area. In order

to be able to include the handmade pottery I will use the data set from the structures only.

Looking at the percentages in table 8, it should be kept in mind that this list represents the pottery use during a period of at least 200 years. More handmade pottery will have been used in the 1st century AD, whereas the majority of the coarse and grey wares date to the later phases of the settlement. Together these three groups make up almost three-quarters of all the pottery found. Only small amounts of tableware (*terra sigillata*, Belgic ware and colour-coated pottery⁵), slightly more smooth-walled and thick-walled sherds, and a few fragments of *Waaslands* and cork urn were present. The Vijver settlement yielded several fragments of *dolia* made in cork urn ware.

Table 9 shows the pottery from each of the structures. The majority of buildings and pits contain less than 40 pottery fragments, which makes conclusions on dates or comparisons between structures difficult. It seems that the use of handmade pottery continues even in the last phases of the settlement, although it is uncertain as to how many of the handmade sherds found in late structures are residual.⁶ Although handmade ware did not go out of use, a gradual decline in numbers is visible. In wells dated to before AD 100 the amount of handmade material is 78%, while after AD 100 it accounts for only 38%. This could be expected as wheel-thrown pottery became more widely available from the later 1st century onwards. An exception is P154: dated to the last quarter of the 2nd century AD and later, it nevertheless contained almost 90% of handmade pottery.⁷ This might be a question of depositional processes (see 1.1.2), but large amounts of handmade ware in the 2nd century AD are not unusual.

Higher percentages of tableware, which could say something about social stratification, are found in a couple of wells (P143, P151, P188 and P275). However, they were all dated to the (second half of the) second century AD, when imported pottery was widely available and not a true status symbol anymore. Since only one of the house plans yielded a reasonable amount of material it is impossible to detect social differences there. P143 contained the staggering number, for Oss, of nearly a thousand pottery fragments including a fair amount of tableware. When combined with the other refuse from the same pit (metal, glass, roof-tiles, see below), these could point to the nearby presence of a higher status compound. Unfortunately the pit was discovered in a modern construction trench and the surrounding area remained unexcavated.⁸ Without an associated building that stands out in more than one way, the finds from a single well are not enough evidence for an 'elite' resident.

Most of the *sigillata* was of second-century production from Eastern Gaul, but the Vijver settlement yielded a small

No.	1	2	3	4	5	6	7	8	9	10	11	12	13	total number of sherds
H44	-	-	-	15	-	-	-	-	-	-	8	77	-	13
H51	-	4	-	-	-	4	6	4	-	1	7	74	-	113
H53	-	-	9	-	-	-	4	-	-	-	-	87	-	23
H62	-	-	-	63	-	-	14	-	6	-	6	11	-	35
S227	-	-	-	-	-	-	-	-	-	-	6	94	-	17
S231	-	-	-	-	-	-	-	-	-	-	-	100	-	1
S239	-	-	-	-	-	-	-	-	-	-	-	100	-	5
S240	-	-	-	-	-	-	-	-	-	-	-	100	-	4
S241	-	-	-	-	-	-	-	-	-	-	-	100	-	3
S242	-	-	-	-	-	-	-	-	-	-	-	100	-	5
S243	-	-	-	-	-	-	-	-	-	-	100	-	-	1
S245	-	-	-	-	-	-	-	-	-	-	-	100	-	9
S246	-	-	-	-	-	-	-	-	-	-	-	100	-	5
S249	-	-	-	-	-	-	-	-	-	-	-	100	-	6
P140	-	-	-	-	22	-	3	-	-	-	-	75	-	36
P142	-	2	-	2	7	-	2	7	-	7	24	46	-	41
P143	2	2	-	5	13	1	10	4	3	32	3	22	1	1097
P144	-	-	-	-	17	6	-	-	-	6	-	72	-	18
P145	-	8	-	-	15	-	-	-	-	8	-	69	-	13
P146	-	1	1	3	16	1	1	7	-	18	24	25	-	67
P147	-	-	-	1	10	1	10	4	1	5	22	47	-	103
P148	-	2	+	+	8	-	3	1	-	1	1	84	-	462
P151	1	9	-	7	1	1	6	10	3	26	26	10	-	179
P152	100	-	-	-	-	-	-	-	-	-	-	-	-	2
P153	-	-	-	-	-	-	-	-	-	-	-	100	-	17
P154	+	+	-	-	1	+	1	1	+	5	3	88	-	243
P179	1	3	+	4	7	4	3	7	3	12	37	18	-	516
P180	1	5	-	5	8	1	4	17	-	-	39	20	-	100
P181	-	1	1	1	3	1	5	4	+	4	16	64	-	415
P183	-	-	-	4	4	13	-	13	-	4	8	54	-	24
P187	-	-	-	-	-	-	-	-	-	-	-	100	-	23
P188	5	5	-	2	5	1	11	8	2	17	33	10	-	242
P189	-	4	12	-	-	-	12	-	-	-	4	64	4	25
P190b	-	3	-	-	6	-	-	-	-	-	-	90	-	31
P191	-	1	3	-	3	-	1	1	-	-	-	91	-	139
P192	-	2	-	2	6	11	-	6	1	13	28	30	-	177
P193	-	-	50	-	-	-	50	-	-	-	-	-	-	2
P194	-	-	-	-	7	-	-	-	-	7	-	87	-	15
P195	-	-	-	14	21	-	-	-	14	7	-	43	-	14
P198	-	-	-	-	6	6	-	-	-	-	-	89	-	18
P222	20	20	-	-	-	-	-	20	-	-	-	40	-	5
P275	2	10	-	4	5	3	2	15	10	8	42	-	-	113
P455	-	-	1	-	4	-	1	-	-	2	-	92	-	118
P456	-	-	-	1	-	-	1	2	-	-	6	89	-	81
P457	-	-	-	-	6	-	11	11	-	6	6	61	-	18
P459	-	-	-	-	-	-	-	100	-	-	-	-	-	1
P463	3	-	-	-	7	-	-	-	2	10	14	64	-	59
P468	-	7	-	-	-	-	-	7	-	13	13	60	-	15
total %	1	3	+	3	7	2	5	5	2	13	14	45	+	4669 = 100%

Table 9. Pottery (percentages) from each structure of the Vijver settlement. 1. *terra sigillata*, 2. Belgic ware, 3. cork urn, 4. colour-coated ware, 5. smooth-walled pottery, 6. *mortaria*, 7. *dolia*, 8. *amphorae*, 9. *Waaslands* 10. coarse ware, 11. grey ware, 12. handmade pottery, 13. indeterminate.

	type	number of sherds	total
undecorated			
South Gallic?	Drag.37	4	5
	indet	1	
East Gallic	Drag.27	1	18
	Drag.31	9	
	Drag.32	2	
	Drag.33	2	
	Drag.37	1	
	Drag.45	1	
	bowl	1	
	indet	1	
South/East Gallic	Drag.31	2	2
indet	Drag.18/31	1	28
	Drag.33	2	
	Drag.37	7	
	Drag.45	2	
	plate	1	
	indet	15	
decorated			
South Gallic	Drag.37	1	1
South or Central Gallic	Drag.37	1	1
East Gallic	Drag.37	4	5
La Madeleine	Drag.37	1	
total			60

Table 10. Fabric, region and types of *terra sigillata* pottery from the Vijver settlement.

number of other early pottery imports. Nineteen fragments of cork urn could be distinguished. This handmade imported pottery is usually dated to the first half of the first century AD, but cork urn which is similar in fabric to grey ware can be of a later date (Haalebos 1990, 154). Another early vessel is a smooth-walled jug (type Stuart 101), a fragment of



Figure 20. Fragment of *terra sigillata* with a *graffito* (P179). Scale 1:1.

which was found in P148, and possibly also in P190b. Furthermore, there was a fragment of a grey beaker (type Stuart 204 decorated with scales) in P143, and several pieces of a Belgic beaker (type Holwerda 1941, 9 decorated with lines) in P148. The latter also yielded a fragment of an early jug-*amphora* (type Hofheim 77).

An exceptional find is a fragment of a Dressel 1 *amphora*, found in P191.⁹ This Italian *amphora*, originally a carrier of wine, is dated to the first century BC and the earliest Roman period (Haselgrove 1996, 168/169). Such an *amphora*, especially when filled with wine, was undoubtedly a prestige item. It is one of the earliest finds of this kind in all of Oss, and a rare example in the Netherlands.¹⁰ Usually Dressel 1 *amphorae* are found on or near sites with a military character (Fitzpatrick 1985). The excavated part of the Vijver settlement does not show any signs of early social stratification which fit in with this particular find. Possibly



Figure 21. Fragment of mortar with two stamps (P179). Scale 1:1.

the *amphora* was not used in Vijver but belonged to an inhabitant of the Westerveld settlement, or ended up in P191 after a long life elsewhere (e.g. Nijmegen).

Terra sigillata

A total of 60 fragments of *terra sigillata* were found in the Vijver area, with more than half of the fragments from only two wells: P143 (20 sherds) and P188 (13 sherds). Seven fragments, all from bowls type Dragendorff 37, were decorated. Table 10 shows that most of the (identified) *terra sigillata* was made in Eastern Gaul during the second century AD, when this type of pottery was widely available in our region.

A wall-fragment, found in P179, showed a *graffito* (fig. 20). The pottery was made in Eastern Gaul, but the sherd was too small to determine the form of the vessel. The inscription, which reads N SPI, is probably a fragment of two names, for instance [GERMA]N(I) SPI[CVLI] (property of Germanus, son of Spiculus). There is also a possibility that it is a military text, for instance [>SILA]N(I) SPI[CVLI], which would mean '(property) of Spiculus, from the centuria headed by Silanus'.¹¹ *Sigillata* with name graffiti is rare outside military camps, where soldiers tagged their property to be able to distinguish it from similar objects in the possession of others. If the text was indeed a military one, the sherd must originate from Nijmegen or another camp. Like the Dressel 1 fragment it points to contact with (Roman) soldiers, but whether this was structural or a single event is uncertain.

Stamped mortaria

Among the mortar fragments was one stamped specimen (type Stuart 149B), found in P179 (fig. 21). This displayed two stamps of the well known potter Brariatus, who worked in the area around Pont-sur-Sambre during the period IB-II.

2.4.2 Clay objects

The majority of the clay finds consisted of undefined lumps, baked and unbaked. Some fragments of unbaked clay could be recognised by the wattle impressions as parts of wattle and daub walls or floors (H51?, P148, P181, P191 and P468). Artefacts made of baked clay include loomweights,

spindle whorls and sling pellets. P179 contained one of each. A fragment of a spindle whorl was found in the foundation ditch of H51, another in P143. Four more sling pellets were documented (P143, P153, and two in P181). A stray find from the Vijver area (found in an undocumented ditch) consists of a fragment of a terracotta figurine (fig. 22). It could be of medieval date but does have a parallel with a Roman figure (*Fortuna*, signed by Alfius).¹²



Figure 22. Terracotta figurine (stray find). Scale 1:1.

2.4.3 Tephrite objects

Tephrite, imported from the German Eifel, was mainly used for quernstones. In the Vijver area tephrite was found in 24 features, but in only 15 cases could a fragment of a (rotary) quern be recognised. These included seven fragments of a top stone (P181, P188, three from P143 and two from P179), one fragment of a bottom stone (P181) and one complete top stone with a socket for the spindle and a double-conical hole for the handle (P193, fig. 23). P179 also contained a fragment that might have been part of a 'cocked hat' shaped quern (Van Heeringen 1985 type c), a type of saddle quern that was in use until phase K.

2.4.4 Stone objects

Stone frequently occurs in small quantities, but only in a few cases were stone artefacts documented. Three times fragments of whetstone were found, one made of quartzite (P151), the other two of sandstone. Two wells (P148 and P188) yielded whetstones made of schist. From P456 came a



Figure 23. Quernstone (P193)

fragment of quernstone made of coarse-grained quartzite. A small lump of granite was found in one of the features of H62. Slate (unworked) was present in six wells.

2.4.5 Building materials

Although there is no evidence for any buildings (even partially constructed) of stone in the Vijver settlement, there are a few finds that can be interpreted as Roman building materials (see fig. 24). In three wells a fragment of a roof-tile was found: twice of a *tegula* (P143a/b and P180, weighing 237 g and 543 g respectively) and one indefinable fragment (P179, 205 g). Other possible roofing materials are three fragments of perforated slate (P147, P154 and P188). All building materials were found in pits and wells dated to after the Flavian period. Both slate and clay roof-tiles were probably used secondarily as, for example, floor coverings or drain linings (Lammers 1994, 166-167). It is unlikely that tiles were used as foundation supports for central roof-

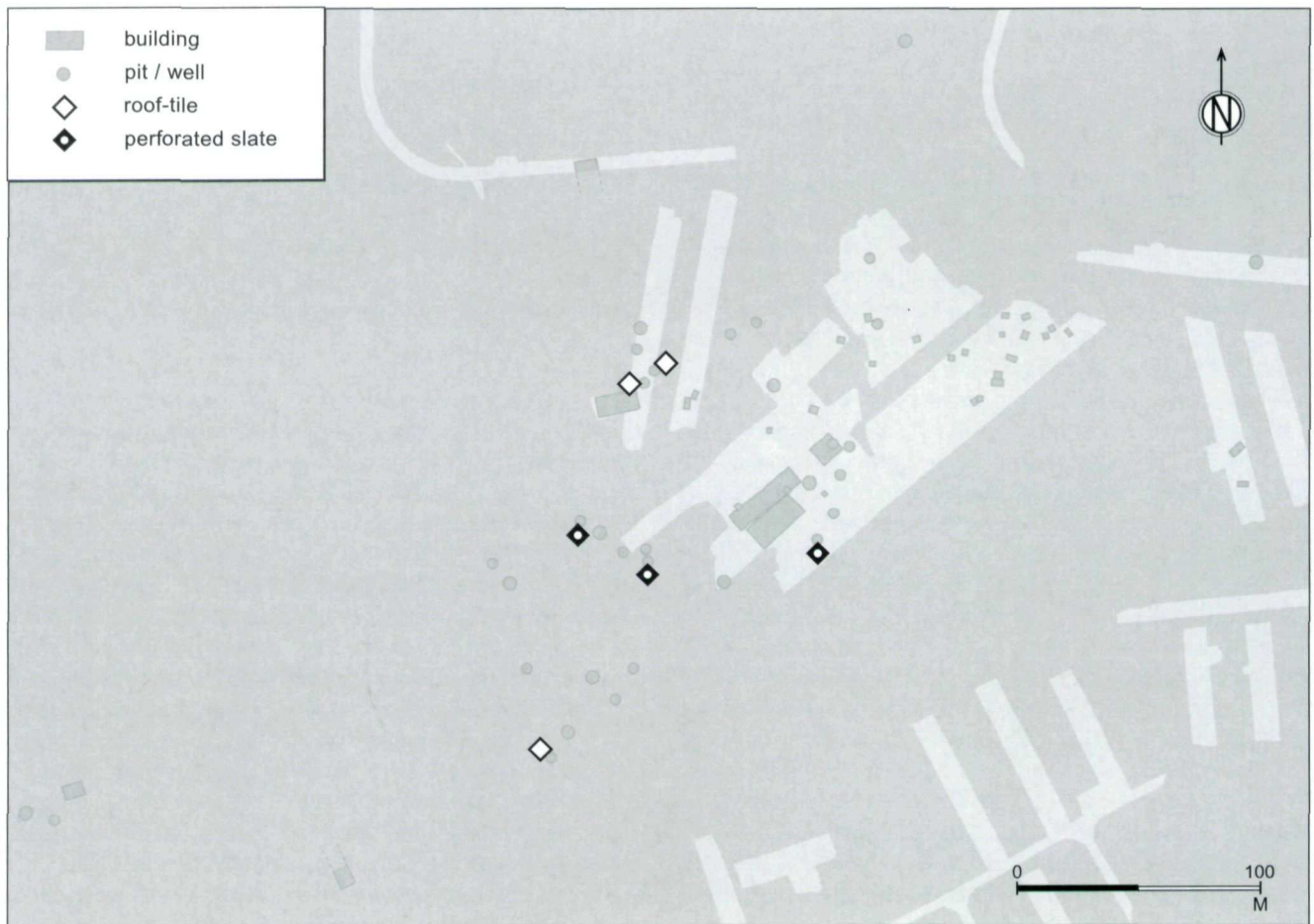


Figure 24. Distribution of building materials in the Vijver settlement.



Figure 25. Fragment of a glass vessel (*trulla*) (P143). Scale 1:2.

bearing posts, as was the case in Houten-Molenzoo (Van Dockum/Hessing 1994, 223-224 and fig. 184), since no tiles were found at the bottom of postholes. Instead, wooden planks seemed to have fulfilled that function (see 2.4.9).

2.4.6 Glass objects

Four fragments of glass vessels were found, all in wells. The upper layers of P143a/b contained two fragments of blue-green glass, possibly from the same vessel. One was a rim fragment,



Figure 26. Gaming counter made of glass paste (stray find). Scale 1:1.

perhaps from a small cup or a *trulla*, the other a fragment of the handle of a *trulla* (Isings type 75, dated I-III, fig. 25). A base-fragment from a blue-green pillar-mounted bowl (Isings type 3) was found in P179. P181 contained a small, flat fragment of green glass. A gaming counter, made of black glass paste and plano-convex in section, was documented as a surface find from the Vijver area (fig. 26). Contrary to the other settlements at Oss, the Roman period features of the Vijver settlement did not contain fragments of glass *La Tène* bangles.

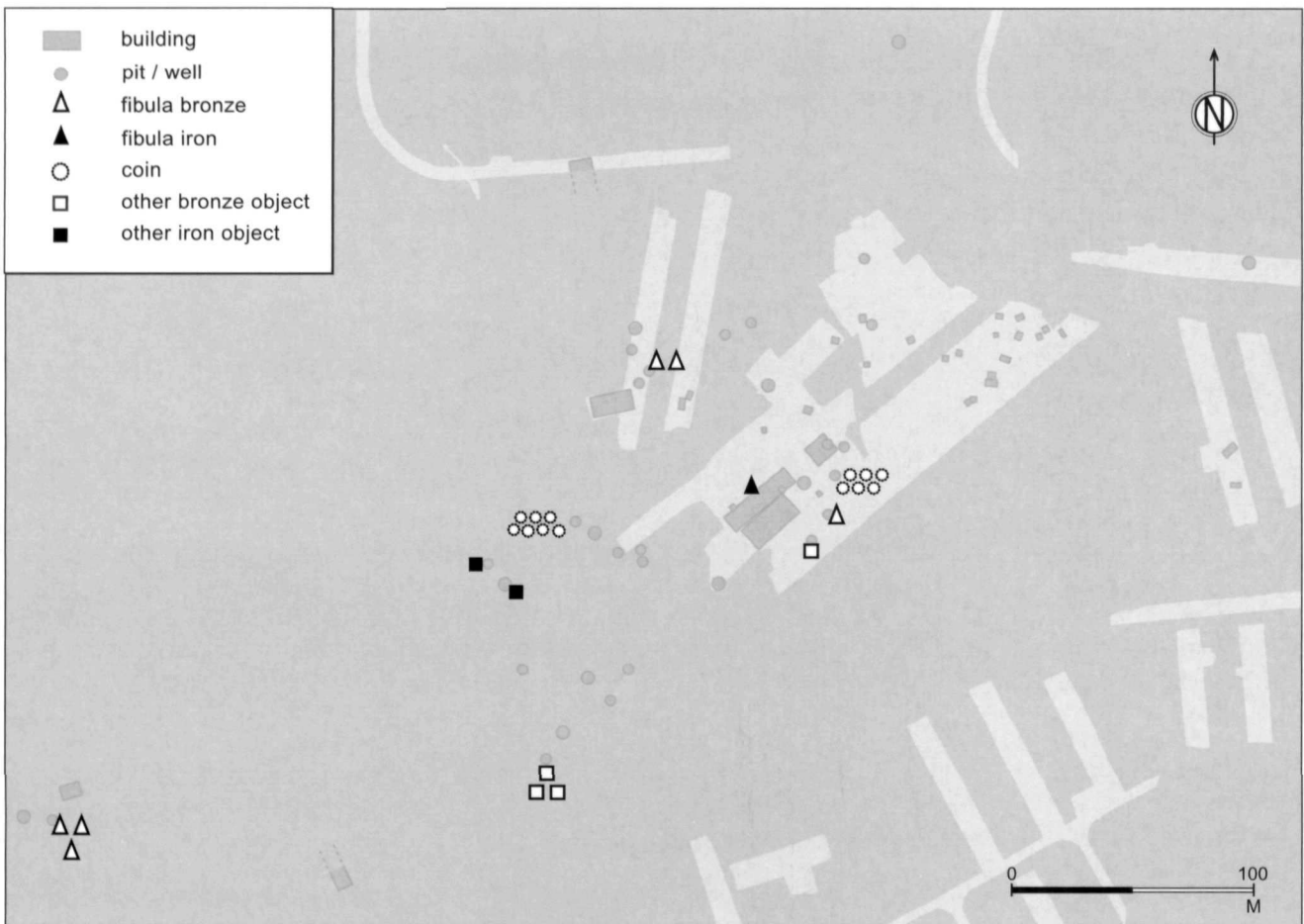


Figure 27. Distribution of bronze and iron objects in the Vijver settlement.



Figure 28. Iron brooch (H53). Scale 1:1.

2.4.7 Metal objects

Metal finds from the Vijver area consist of bronze and iron brooches, bronze coins, iron nails, various other bronze and iron objects, a sheet of lead, and several pieces of iron slag. A total of seven distinct brooch fragments were found (fig. 27), six made of bronze and one iron specimen. The iron brooch was found in H53, and is too fragmented to be able to say anything about the type or dating (fig. 28). The fact that it is made of iron points to an early date (possible Iron Age or early first century AD). Six bronze wire-brooches were all found in wells (P191, three in P148, two in P180, fig. 29). This type of brooch, dated AD 50 -150, was widespread in the Rhineland, especially after AD 70.

The coin finds were in two groups (table 11, fig. 27). P192 contained six bronze coins including four *asses* and two indeterminate coin fragments (fig. 30). The exact location was not documented, but at least two of the coins were situated at the bottom of the well. Seven other bronze coins

were found in a road trench by a local archaeologist using a metal detector (fig. 31). All seven came from more or less the same spot close to P456, but they could not be associated with a feature. Table 11 shows that six of the 13 coins were indeterminate. Since the Vijver settlement was only partly excavated and metal detectors were not used systematically, no conclusions can be drawn about the use of money in the Vijver settlement. It is possible that both groups of coins were deposited around the end of the second century AD, when German raids caused a great deal of social unrest.

At least nine iron nails were found, all in pits and wells. P187 yielded approximately 21 heavily corroded iron hobnails from a shoe, partly stuck together in their original rows (Van Driel-Murray 1987, 147-152, fig. 1.4). Other iron objects (fig. 27) include a large nail or bar with a hammer-shaped end (P456, fig. 32), a buckle (?) (stray find, fig. 33), and an arrow-shaped object (P457, fig. 34).

Besides the brooches and coins, seven other bronze objects were found (fig. 27). From P143a/b came a fragmented bronze rod (a belt-hanger?) (fig. 35) and two bronze acorns, possibly originally part of a chest or box-grip (fig. 36). Since all three objects were taken off of some other object, they were probably intended for use as scrap metal. A bronze disc with a diameter of 53 mm (P154) may have been part of an

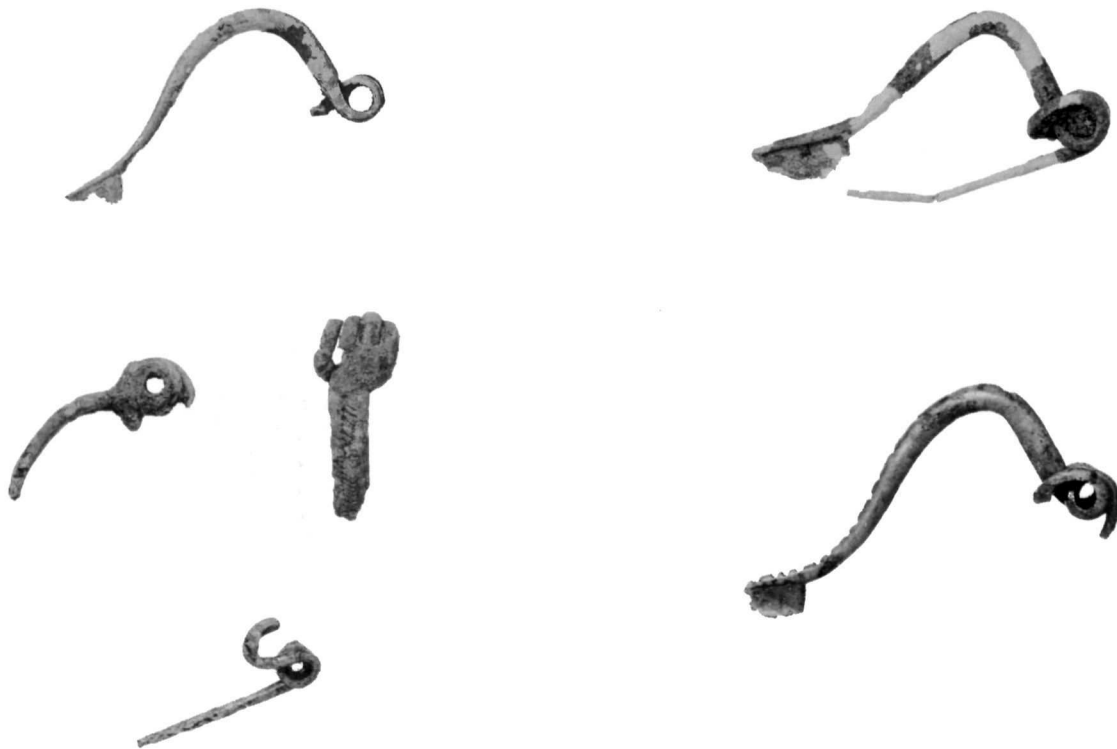


Figure 29. Bronze wire-brooches (P148, P180, P191). Scale 1:1.



Figure 30. Three bronze coins (front and back) found in P192: from the reign of Nero; with M. Aurelius Caesar (from the reign of Antoninus Pius); from the reign of M. Aurelius. Scale 1:1.

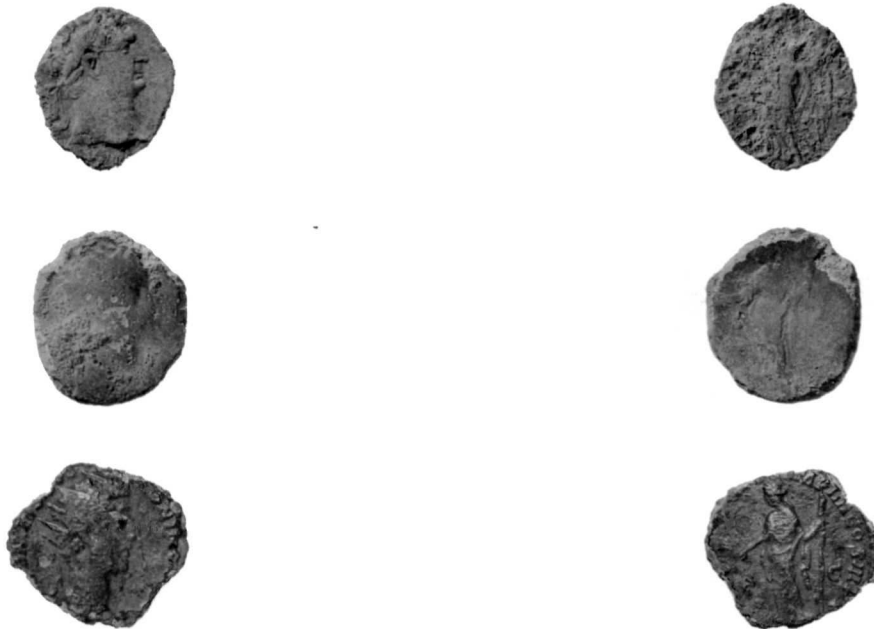


Figure 31. Three bronze coins (front and back) (stray finds): from the reign of Trajan; *dupondius* from the Antoninian period; *dupondius* from the reign of Commodus. Scale 1:1.

denom.	authority	date	RIC/BMC	find spot	remarks
as	Nero	AD 64-68	cf. RIC 318 and further	P192	
as	Trajan	AD 98-117	cf. BMC pl.27, no.9	near P456	
as	Antoninus Pius	AD 140-144	cf. RIC 1240a	P192	M. Aurelius
as	Antoninian period	AD 140-190		P192	
dup.	Antoninian period	AD 140-190		near P456	
as	M. Aurelius	AD 161	cf. RIC 801	P192	
dup.	Commodus	AD 181-182	cf. BMC pl.103, no.8	near P456	
?				P192	fragment of bronze coin
?				P192	fragment of bronze coin
?				near P456	fragments of 4 bronze coins

Table 11. Coins from the Vijver settlement.

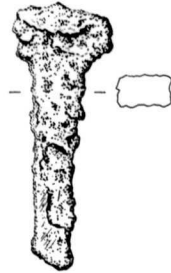


Figure 32. Iron nail or bar (P456). Scale 1:2.

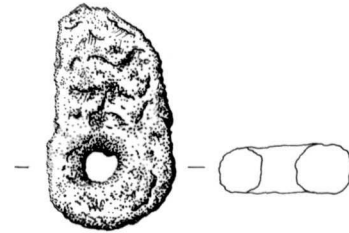


Figure 33. Iron buckle (?). Scale 1:2.

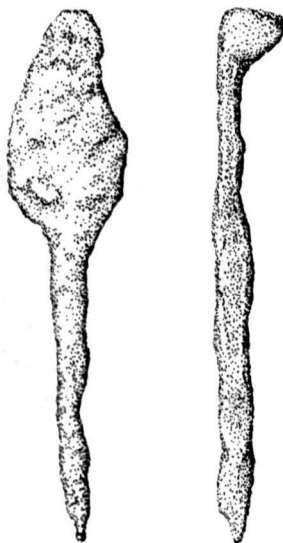


Figure 34. Iron arrow-shaped object (P457). Scale 1:2.



Figure 35. Bronze rod (P143). Scale 1:1.



Figure 36. Bronze acorns (P143). Scale 1:1.

ornamented mounting (probably 2nd century AD). It was silver-plated originally, and the loop to attach it with was broken off, again creating scrap metal (fig. 37). A small bronze rod was found in well P181. Two other bronze objects, a corroded mass (part of a knife?) and the enamelled lid of a small box (fig. 38), were documented as stray finds from the Vijver area.

P148 yielded a small flat fragment of lead. At least ten find numbers contained small quantities of iron slag, but they were not concentrated enough to indicate one place where iron was being smelted.

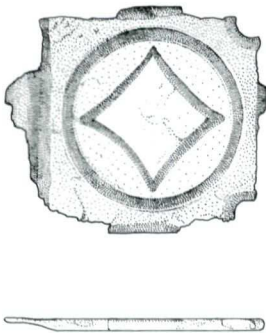


Figure 38. Enamelled lid (stray find). Scale 1:1.

2.4.8 Leather objects

Besides the hobnails mentioned under 2.4.7, evidence for footwear was also present in the form of shoe fragments made of cow's leather (fig. 39; see Van Driel-Murray 1987). P143b contained a complete heel-piece belonging to a simple type of shoe with hobnails. Four fragments of one shoe of



Figure 37. Bronze silver-plated disc (P154). Scale 1:1.

the same type were found in P147. The sole of this shoe shows signs of repair.

2.4.9 Wooden objects

Wood was present in deep pits and wells, but apart from the well-linings none of it was worked. The central roof-bearing posthole of H51 contained the remains of the oak post itself with planking underneath (see Schinkel 1994 part I, 82 and 121). The same situation was present in H62, where the wood type of the plank could not be determined.

2.4.10 Faunal remains

The Vijver settlement yielded 27 bone fragments, with a total weight of c. 320 g (Lauwerier/IJzereef 1994, 238-243). Only 22 fragments could be identified, including cattle (N = 17), pig (N = 3), dog (N = 1) and a fragment of red deer antler (N = 1). These numbers are too small to allow conclusions about animal husbandry in this settlement to be drawn. The antler fragment could have been cast off by the animal itself, and is thus no indication of hunting.

2.4.11 Botanical remains

Samples for botanical research were taken from two house plans (H51 and H62) and from seven larger pits. Since H62 was not considered to be a part of the settlement, the botanical sample has not been studied. The results of the botanical research (Van Amen 1995) show that several grains were grown, such as barley, emmer and spelt. Other cultivated crops include flax, millet and beet, the latter being a Roman introduction. The crop weeds point to well-stocked fields. Wild plants, such as leafy vegetables and fruit and nuts, complemented the food range, while some other wild plants may have been used as dyes or perhaps for medicinal purposes (Kuijper 1987). Many of the seeds stem from plants

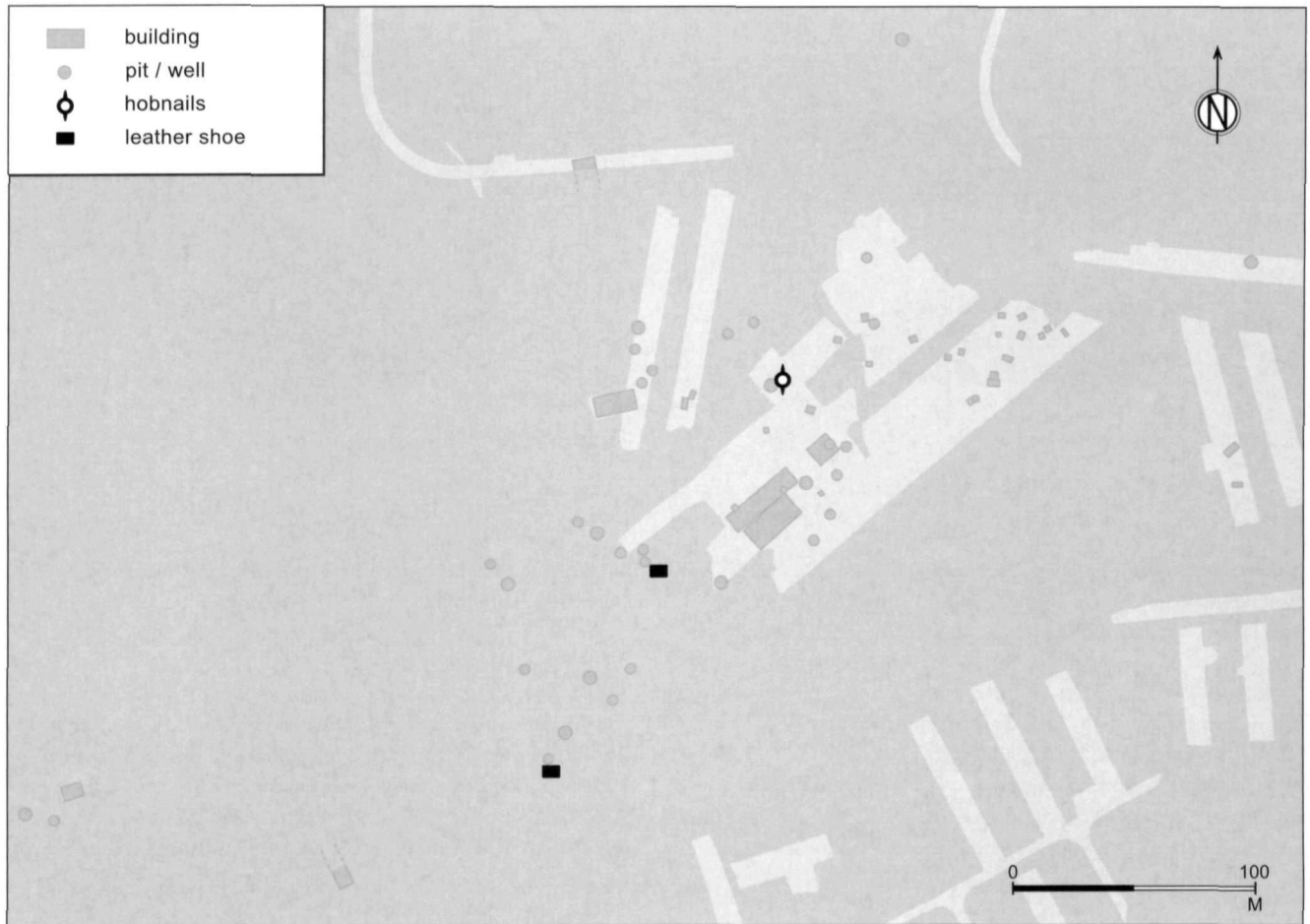


Figure 39. Distribution of (finds connected with) leather shoes in the Vijver settlement.

that were growing in farmyards and around wells. Some of the plants were originally found near the borders of the Meuse, but brought into the settlement for various purposes (clay sods, roof and floor covering, wattlework).

2.5 ANALYSIS

2.5.1 *Size and date*

Due to the fragmentary nature of the Vijver excavation and the lack of any form of settlement boundary, it is difficult to give an indication of the exact size of the settlement. Six house plans, 33 pits and wells and a maximum of 28 small outbuildings cover an area of *c.* 500 x 350 m, of which large parts were not excavated (fig. 12). More than 17 ha seems far too large a territory for one settlement. However, not all of the area will have been inhabited at the same time. Following what was said on the definition of a settlement (see 1.3), the two southern houses (H40 and H42) are situated outside the hailing distance of 150 metres. Strictly

speaking they would comprise a second cluster next to the settlement containing H44, H51 and H53. However, the lack of periodisation and the unexcavated area between the two supposed settlements prevents us from reaching a conclusion. The settlement as a whole could have shifted, and judging by the number of wells it is likely that more houses were situated in the area between the two clusters.

A valid argument to regard this group of features as an entity considers the observed distance between the Roman period settlements within Ussen. Looking at a map of Oss in the Roman period, an almost regular patterning of settlements appears (figs. 4 and 205). Van der Sanden (1990, 102) has already remarked on these distances and the fact that they agree with the distances between settlements in the Dutch Eastern River Area as noted by Willems (1986, 283). It is generally thought that the distance between settlements in this area lies between 500 and 1000 m. Roughly situated between the Westerveld and Zomerhof settlements, and at

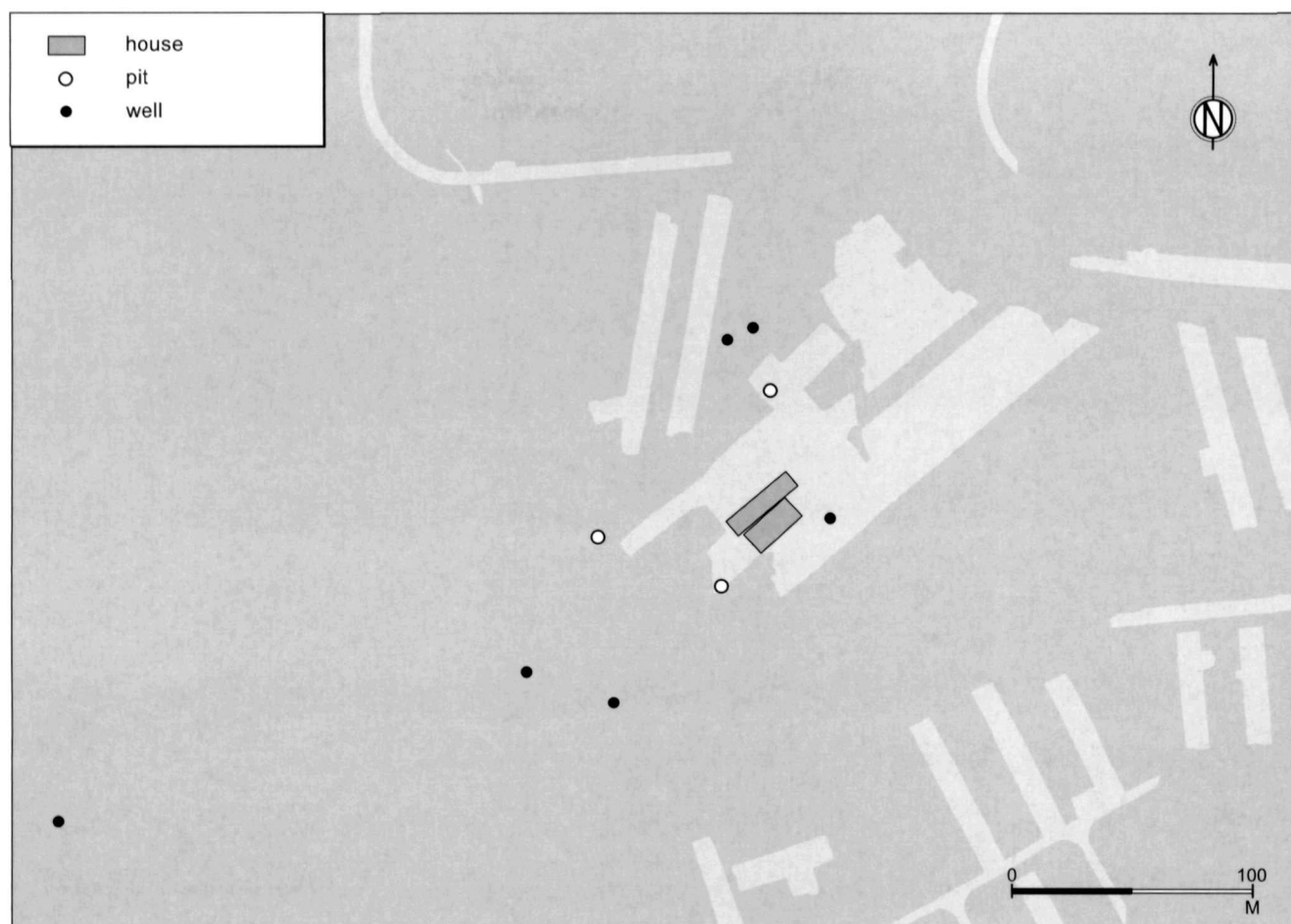


Figure 40. The Vijver settlement: phase 1 (pre-Flavian/Flavian).

the same distance from the cemetery, the Vijver cluster occupies a space that, following Willems, would not allow for more than one clustered settlement.

The dating of the settlement as a whole poses another problem. The occurrence of fragments of cork urn in one of the house plans (H53) as well as in eight pits and wells indicates a date in the first half of the first century AD for the start of the settlement. However, not many other finds can be dated (strictly) to this period. It is possible though that some of the handmade material, which is harder to date, should be placed in the first half of the first century AD. According to Schinkel (1994, part I, 265) the Vijver area shows continuity in occupation from the Late Iron Age to the Roman period. The preceding occupation, cluster XVII, is a single-farm settlement which shows a possible second compound during the last phases of the Late Iron Age (phase K-L). Even though none of the house plans could be dated strictly to phase L (75 - 0 BC), the fragmented nature of the Vijver excavations has left so many unexcavated patches that

continuity in occupation is still possible. The fact that the earliest Roman period house plan is of a type that occurs mostly during the Late Iron Age suggests that the Vijver settlement was a direct successor of the Iron Age occupation in the same area.

Material from the fourth quarter of the second century AD and later was derived from a number of wells. This includes colour-coated beakers (shiny grey, type Niederbieber 33), *terra sigillata mortaria* (type Dragendorff 45), a flat bowl in *sigillata* (type Dragendorff 32), and plates in smooth-walled pottery and 'smoked' Belgian ware (type Holwerda 1941, 81). Another late find is the *dupondius* from the reign of Commodus. Although no buildings could be ascribed to this period there must have been some activity. It is possible that late second-century farms were present but remained undiscovered. But since dating house plans in Oss is problematic (see 1.3.2) there is also the possibility that at least one of the farms should be dated to a slightly later period. Whether there

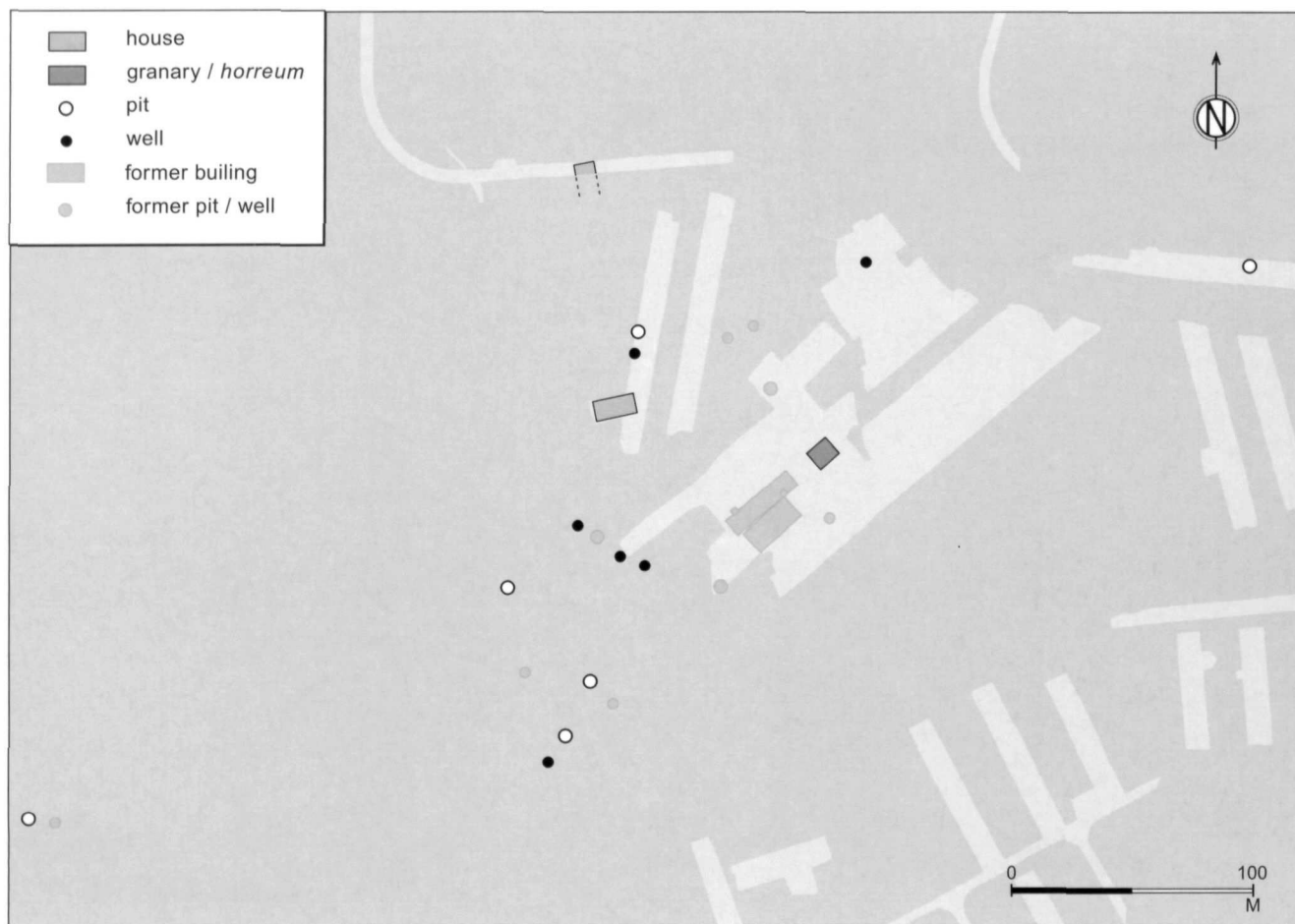


Figure 41. The Vijver settlement: phase 2 (post-Flavian).

was still occupation in Oss later in the third century AD is uncertain, although the pottery types mentioned can occur until AD 270. The settlement as a whole is thus dated in the period I-IIIa.

2.5.2 *Layout and periodisation*

Again the incomplete excavation of the settlement prevents definite conclusions on its layout or any phasing in the occupation. Only two house plans (H44 and H53) are situated close to one another, suggesting that they succeeded each other in time. Based on the finds material, H53 would be the first farm of the settlement, accompanied by several pits, at least one well and some small outbuildings. After *c.* 30 years H44 was built in the same yard. In the remainder of the settlement there are no indications of rebuilding on the same spot or of clearly defined farmyards. The large number of wells suggests that the original number of houses was greater than those excavated. H51 was built after the Flavian period and H62 seems to be the youngest house present, it was in

use during the first half of the second century AD. Whether H40 and H42 formed a separate yard at the same time is uncertain. Only a broad periodisation is possible, separating structures from before/during the Flavian period, after the Flavian period, and after AD 150 (figs. 40, 41 and 42).

2.5.3 *Development and nature of the settlement*

The first farmhouse at Vijver, built during the first few decades of the 1st century AD, has a light construction of a type that was already common during the preceding Late Iron Age (fig. 40). It is replaced by a shorter and sturdier building after *c.* 30 years (fig. 40). The farms are accompanied by pits and wells, the latter lined with wattlework. Perhaps there is a second farm *c.* 200 m to the southwest, with a well nearby. Next to the farmhouses there are a number of small outbuildings, mostly serving as granaries. A fragment from a rare wine-*amphora* ends up in a well on the farmyard. Other Roman material includes bronze brooches.

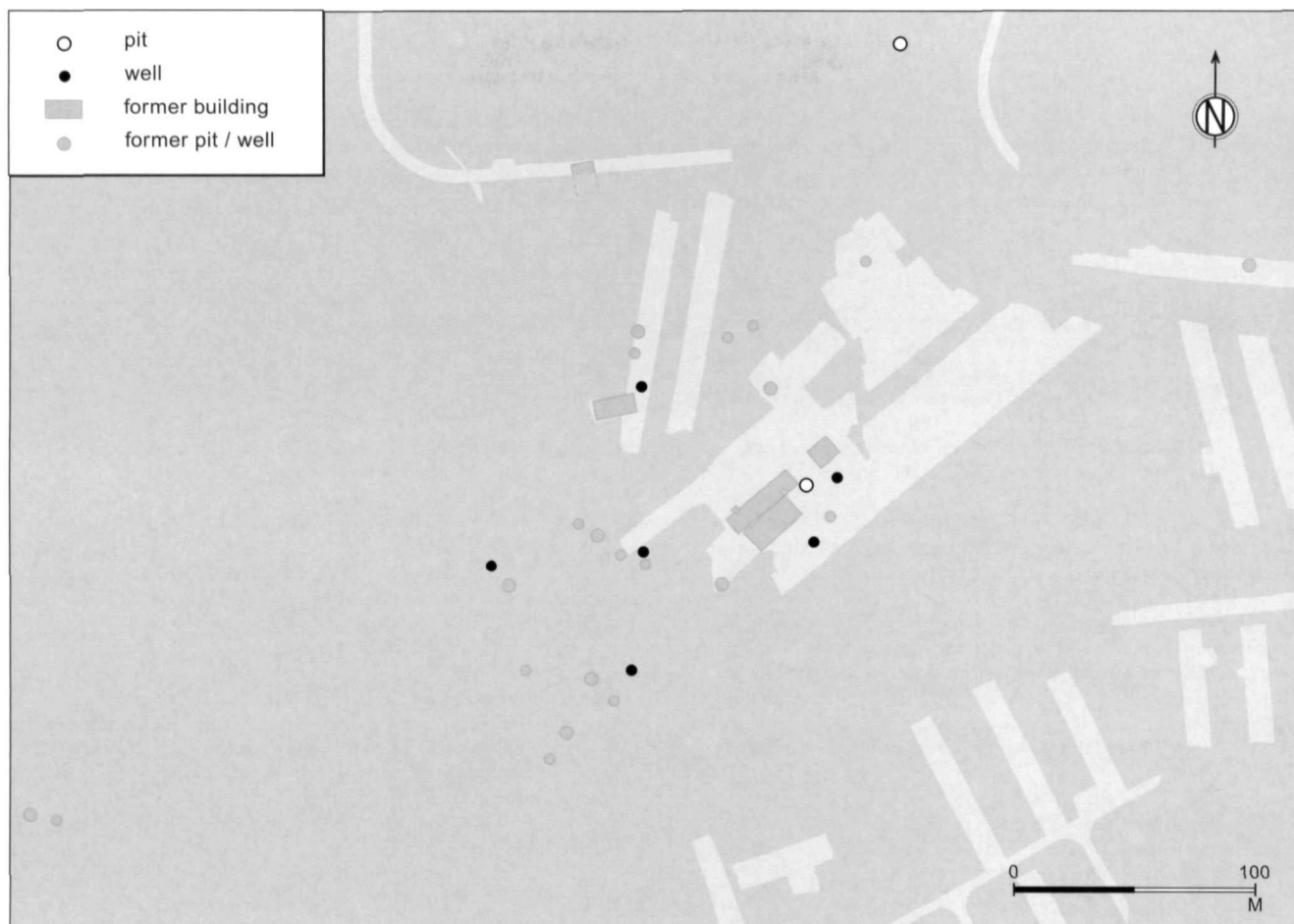


Figure 42. The Vijver settlement: phase 3 (after AD 150).

Just after AD 70 the northern farm is rebuilt again, although not in the same farmyard (fig. 41). A large granary could belong to the same compound. There may have been more farmhouses, to which the numerous wells belong. Somewhat later another farm is built slightly further to the north. More Roman material is available now: leather shoes, glassware and tableware from Gaul. Some of the objects are re-used: bronze fittings are turned into scrap-metal, roof-coverings such as roof-tiles and slate serve other purposes. Some of this material concentrates in the southern half of the settlement and ends up in one well. Perhaps it belongs to a large farm, which was not excavated.

After AD 150 there is still activity, and probably a farm (fig. 42). Two wells from this period have a new type of construction: they are lined with horizontally placed planks. A bronze, silver-enamelled disc, removed from a horses mounting, is found in one of the wells. Towards the end of the second century two small groups of coins are buried, one in a well. At some point after AD 200, the farms are

not rebuilt anymore and the Vijver area ceases to be occupied.

Even though the evidence is fragmented, the excavated structures give an indication of the kind of settlement we are dealing with. In a fairly large area, part of which has been occupied since the Iron Age, one or two farmsteads are rebuilt a number of times during a period of approximately 200 years. No indications are found for clearly marked farmyards, frequent rebuilding on the same spot or in the same farmyard, nor for any other form of structuring of the settlement, such as a surrounding ditch. The occupants of the Vijver settlement form a small, mainly self-supporting community, but they probably have close contacts with the inhabitants of neighbouring settlements. They practice mixed farming, with crops including barley, emmer and spelt, but also beetroot, a Roman introduction. Although one of the wells yielded a large amount of wheel-thrown pottery, the settlement structure does not point to social stratification. The early presence of a fragment of a rare Roman wine

amphora is an exception and difficult to fit in with the egalitarian 'native' impression that the Vijver settlement otherwise creates. It should probably be regarded as an indication of close contacts with the neighbouring Westerveld settlement, where such products were more abundant.

notes

- 1 Co-ordinates 162.48/420.06 (Topographical map of the Netherlands, sheet 45E).
- 2 Even though *Vijver* is situated in the lowest lying part of Ussen, the conditions were probably not so wet that the buildings needed drainage (cf. Raemaekers 1993, 6-7: according to this study the mean groundwater table around the beginning of the era was 3.95 + NAP).
- 3 Similar constructions serving to stabilise the upright posts in wet conditions were found in peat areas. It is not clear whether these constructions had the same function in dry, sandy areas (see note 2).
- 4 During rescue-excavations, the number of pits and wells is often biased: not only do they show easily in an unshovelled construction trench, because of their dark fill, but they tend to hold the more interesting finds and are thus popular with (amateur) archaeologists.
- 5 Third-century smooth-walled plates should also be considered as tableware.
- 6 Four structures in the *Vijver* settlement contain wheel-thrown pottery only. Three occasions (S243, P152 and P193) concern only one or two sherds. P275 yielded 113 fragments of wheel-thrown pottery, but this pit is situated somewhat farther off and may not belong to the settlement.
- 7 A few sherds of handmade ware found in this well show typical early decoration. The material is clearly mixed with much older debris, indicating that the feature must have filled up slowly.
- 8 These find conditions may account for the large amount of material. The pit was excavated by local (amateur) archaeologists, who probably started collecting material as soon as the upper layers of the pit were visible in the building trench. In Oss most of these 'higher' finds get lost because a mechanical excavator takes off the upper layers. Further down, P143 turned out to consist of two separate wells (P143a and P143b), which also accounts for the numerous finds.
- 9 It is a fragment of the lower wall, 19.5 – 23.5 mm thick, weighing 315 g. In section the colour is orange-brown (Munsell 2.5 YR 6/6) with fine white inclusions. The analysis (by H. van Enckevort) was mainly based on similarity with Dressel 1 finds at Nijmegen-Kops Plateau.
- 10 Fragments of Dressel 1 *amphorae* in the Netherlands have so far only been found at Nijmegen-Kops Plateau, Velsen and Groesbeek (pers. comm. H. van Enckevort).
- 11 I should mention that the late prof.dr. J.E. Bogaers, who interpreted the *graffito*, specifically requested that the military variant should be ignored, since 'military stuff in Oss-Ussen would be rather exceptional'. Including it anyway is therefore my own responsibility.
- 12 Determination G. van Boekel.