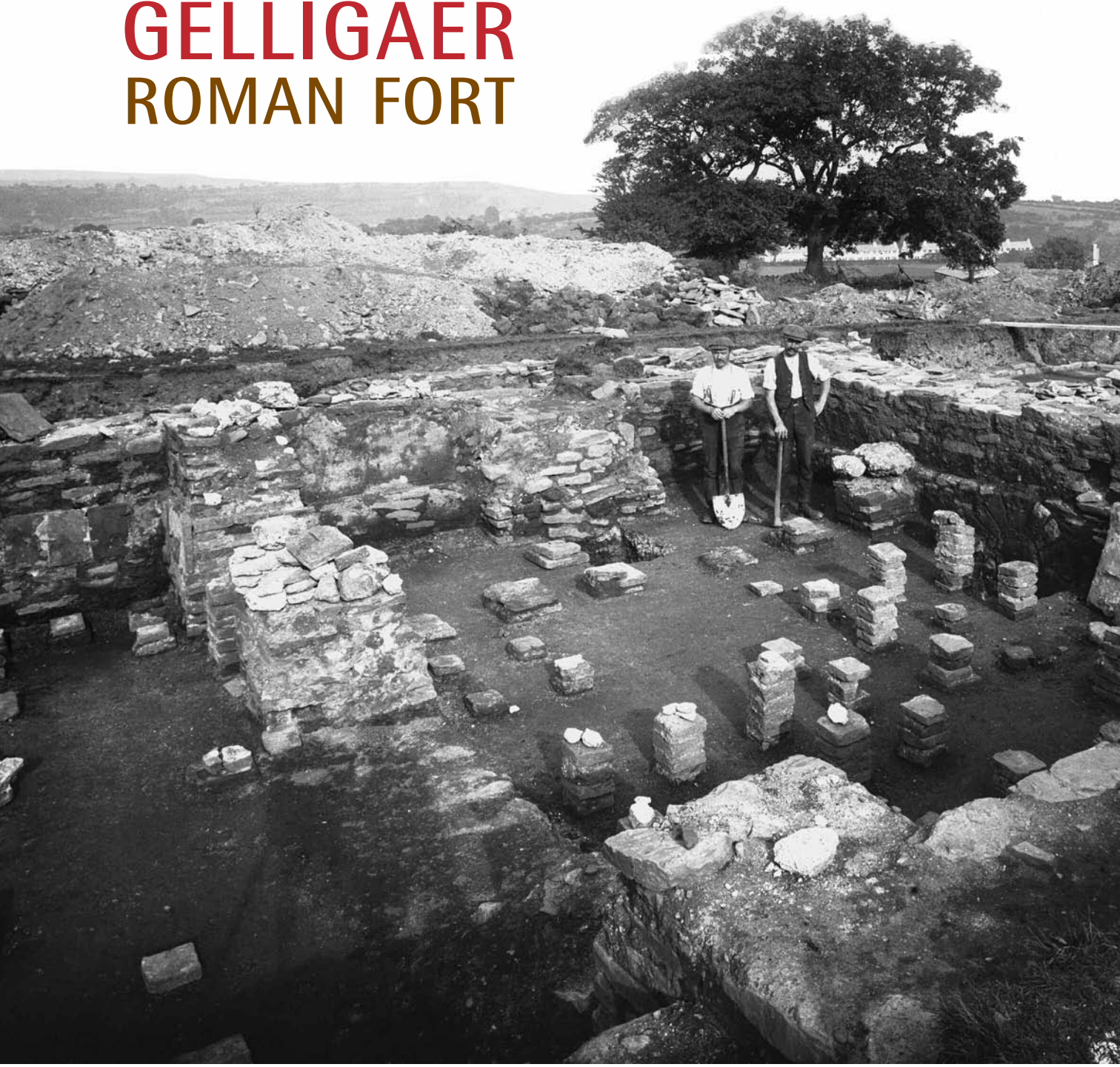
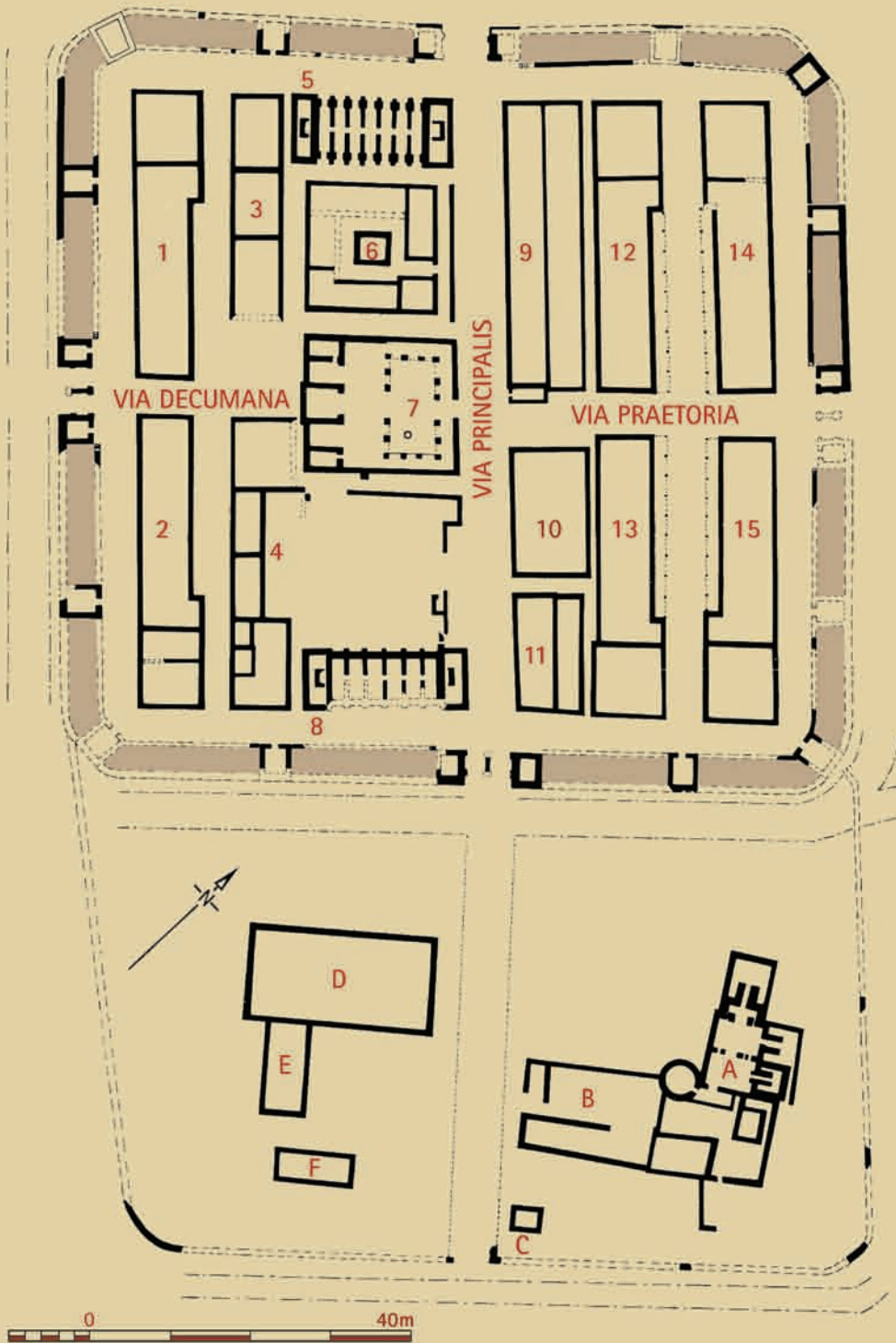


# CAER RUFENIG GELLIGAER ROMAN FORT



By Richard J Brewer, Amgueddfa Cymru – National Museum Wales



Plan of the stone fort as revealed by excavations undertaken at Gelligaer between 1899 and 1913.

**Buildings in the fort:**

Barracks	1-2 & 12-15
Stores	3, 10 & 11
Workshop and yard	4
Granaries	5 & 8
Commander's house	6
Headquarters	7
Stable	9

**The annexe:**

Bath-house	A
Bath-house exercise yard	B
Guard-chamber	C
Yard	D
Workshop	E
Unknown	F

Cover: Workmen uncovering the hot room of the bath-house during John Ward's excavations in 1909.



# Gelligaer: The Legacy of Rome

The Roman Empire was one of the greatest that the world has ever known. The strength and prestige of the Roman armies have never been forgotten. At its largest, in the 100s A.D., the Roman Empire covered much of Europe, North Africa and the Near East. Britain was a relatively late addition to the Empire, becoming its most north-western province. Gelligaer is part of that history.

## A Frontier Fort

The fort at Gelligaer, of which the Roman name is lost, occupies a position on a long broad ridge between the Taff and Rhymney valleys. It commanded an extensive view of the countryside, which in Roman times would have been heavily wooded. It was one of a line of forts, generally set on the higher land between the river valleys, running from Cardiff to Y Gaer (Brecon). The fort (Gelligaer 2), which was constructed in stone, is about 117 m square, 1.4 hectares in extent. It lies to the north-west of the Parish church of St Catwg. No masonry is now visible,

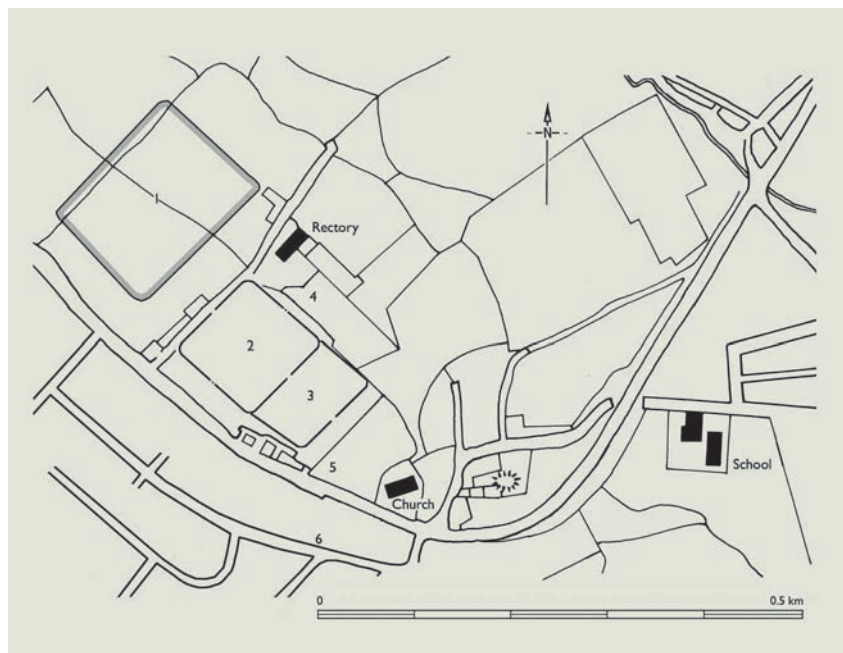
but the defences can still be seen as a low broad bank, best preserved on the south-west side, where the ditch is also visible. Depressions in this bank mark the sites of the four gateways, of which that on the north-east side is the most pronounced. Three inscriptions found near the south-east and north-west gates date the construction of the fort to the period A.D. 103–11, during the reign of the Emperor Trajan.

Adjoining the fort on the south-east was an annexe of which nothing now

remains to be seen. Half of the annexe was occupied by the regimental bath-house, one of the finest known at any such fort in Wales. Other features that have been uncovered include a parade-ground on the north-east side of the fort and a Roman tile-kiln in what is now the churchyard. Roman cremation urns containing burnt bones were found in 1910, and would seem to indicate a cemetery beside the road leading south-east from the fort.

The stone fort was not the first Roman military establishment at Gelligaer. A large rectangular earthwork to the north-west, 2.2 hectares in extent, is an earlier earth and timber fort (Gelligaer 1), probably built at the time of the Roman conquest of Wales in A.D. 74–78. This enclosure is still outlined in parts by a faint bank.

To prevent any interference with the site of the fort, it has been listed as a scheduled ancient monument, and is protected by the Ancient Monuments Acts 1979.



Location of Roman features at Gelligaer.

1. Earth and timber fort
2. Stone fort
3. Annexe
4. Parade-ground
5. Tile-kiln
6. Cremation burials

## Exploration of the Site

Archaeological interest in the site began in July 1894, when the Cardiff Naturalists' Society visited the fort. The possibility of an excavation was discussed, but it was not until October 1899 that a trial exploration began. Results proved promising and large-scale excavations were carried out by the Society for much of 1900 and 1901. The main aim was to recover the plan of the internal buildings and to examine the defences of the stone fort. To find the position of the buildings, labourers dug parallel trenches diagonally across the interior of the fort. When they came across a wall, its course could be followed by digging along the top of it. Not all the buildings were planned in this manner: some were more extensively examined, in particular the two granaries which were uncovered completely. The walls of all these buildings rarely survived to a greater height than one metre above the Roman level, and quite often only the foundations remained.

At this time, excavation techniques were in an early stage of development and much of the work was carried out in a haphazard fashion. The number of

labourers employed on the site varied between two and twelve, and they were supervised by interested members of the Society, working on a weekly rota basis. These supervisors were often businessmen who were unable to devote more than a few hours to the excavations during their allotted week, and this led to much confusion. Very few notes were kept, and all the finds were mixed together. Despite all this, a brilliant account of the work was written by John Ward, who was then the Curator of the Municipal Museum and Art Gallery in Cardiff. The results still provide a textbook example of the layout of a Roman fort.

From 1908–13, John Ward undertook excavations of his own outside the defences of the fort. His work revealed the annexe, parade-ground and the large rectangular earthwork to the north-west of the fort, which he suggested was a temporary camp, used to accommodate the soldiers during the construction of the stone fort. However, a more recent excavation conducted in 1963 by the late Professor M G Jarrett of Cardiff University in the south angle of this

enclosure has shown it to be an earlier fort.

The excavation, in 1913, of the Roman tile-kiln, which was found accidentally during the digging of a grave in the churchyard, was undertaken by the Rev. T J Jones, the Rector of Gelligaer.

Geophysical survey – that can reveal buried features without disturbing the ground – and trial excavations were undertaken in 2003–4 immediately to the north-east of the earlier fort (Gelligaer 1), but the results were largely negative. However, some evidence of Roman occupation was uncovered and may be associated with extra-mural activity connected with the stone fort (Gelligaer 2).

Reports on all the early excavations have been published in *The Transactions of the Cardiff Naturalists' Society*. The finds are in the care of Amgueddfa Cymru – National Museum Wales and some objects are displayed in the Winding House, Caerphilly.

The excavations on the site of the stone fort in progress, 1900.



# Roman Wales: Part of the Empire

When the Romans invaded Britain in A.D. 43 it is possible that their plans for conquest did not extend much beyond the south-east of England. However, within five years the Roman army was fighting in what is now Wales.

At this time, south-east Wales was inhabited by a powerful and warlike tribe, known as the Silures. Their hostility towards the Romans increased when the defeated British leader Caratacus sought refuge among them. Under his leadership they carried out a series of raids into the new province, which opened a chapter of some thirty years' campaigning in the west of Britain. The fighting was often bitter, even after the capture of Caratacus in A.D. 51. In the following year the Roman army suffered its greatest defeat in Britain, losing a large part of a legion in a battle with the Silures. Despite this setback, the Romans were soon to gain the upper hand, and by the mid-50s they had pushed the frontier forward to the River Usk and in places beyond. Control of the area devolved upon a legionary fortress at Usk and a series of forts creating a frontier stretching from Cardiff to the lower Usk Valley and north into the middle Wye. From bases such as these, the Roman army could mount campaigns into Wales. They did not penetrate the heavily-wooded river valleys, but followed routes over the more lightly-wooded uplands. During these advances the battle-groups would have been accommodated in temporary (marching) camps, each large enough to contain the whole force. The defences of these camps were slight, consisting of a low bank surmounted by a palisade and fronted by a small ditch. Several of these camps have been found in the Glamorgan uplands.



Roman Wales: the military network soon after the conquest in A.D. 74-78.

- Legionary fortress
- Fort
- Fortlet



By A.D. 60 the Roman army was close to victory, after the governor Suetonius Paulinus had carried out successful campaigns in both south and north Wales. But a devastating revolt led by Boudicca, queen of the Iceni in Norfolk, brought the conquest to a temporary halt. The work required in restoring the province prevented further campaigns for over a decade. Although plans for the occupation of Wales may have been developed over several years, it was only on the arrival of a new governor, Julius Frontinus, in A.D. 74 that large-scale military operations began. The Second Augustan Legion moved to a new fortress built at Caerleon (*Isca*) in A.D. 74/75, from which the Silures were subdued. Frontinus was responsible for overcoming much of the remainder of Wales, but it was left to his successor Agricola to complete the task. During these combative years, many men will have been killed in battle, others in the aftermath. Women, children and elders will also have suffered from the damage that armies inflict before and after battle.

Following the conquest a substantial number of soldiers, perhaps as many as 25,000, were stationed across Wales. A network of roads and regularly-spaced forts stopped native forces from gathering: a policy of divide and rule. The forts were usually sited upon estuaries for ease of supply by sea, or lay at strategic valley-junctions in the interior or on lonely upland roads to maintain the passage of supplies. They were garrisoned by auxiliary troops under the command of one of two legions, the Second Augustan based at Caerleon (*Isca*) and the Second Adiutrix – replaced by the Twentieth in about A.D. 87 – at Chester (*Deva*).

This intensive military occupation of Wales lasted for nearly fifty years or two generations. However, the cost of maintaining such a large garrison was enormous. There were also difficulties

in supplying the army in some of the more remote forts and, furthermore, manpower was limited. The whole history of the military occupation of Wales is one, therefore, of reduction in the garrisons wherever possible – either by abandoning forts completely or, if this were not possible, by introducing smaller units in place of larger ones. The latter indeed happened at Gelligaer, where the smaller stone fort replaced the large earth and timber fort. By A.D. 130 a substantial number of units, including that based at Gelligaer, had been withdrawn from south Wales, many for service on Hadrian's Wall.

By the late second century, there had been a radical reduction in the size of the garrison in Wales. In Glamorgan it would appear that none of the forts, apart probably from that at Cardiff, remained in commission, with the Silures having over time adopted Romanised ways and more peaceful conditions prevailing. It had previously been thought that soldiers continued to occupy the fort at Gelligaer until very late in the second century. However, a review of the pottery evidence – indicating a noticeable fall off after about A.D. 120/30 – casts considerable doubt on this, though alterations to several buildings, perhaps indicating prolonged occupation, remain to be explained. By the third century it was possible to police the whole of Wales from half a dozen forts in addition to the legionary bases, probably by using mobile rather than stationary forces.

For the greater part of the Roman period, the territory of the Silures was essentially a civilian zone. Following their defeat, the Silures would have been treated as a surrendered people with no rights, to be dealt with as the Romans pleased. However, as we have seen, the Roman administration had good reason for showing moderation. The more successful the attempt to mollify and encourage the local population to adopt Romanised ways,

the quicker their military commitment could be reduced. It is against this background that the Silures were granted, under close Roman supervision, a form of self-government, probably in the earlier part of the second century. Caerwent (*Venta Silurum*) served as the capital of the *Civitas Silurum*, and it is here where the tribal council would meet, law courts could be set up and other administrative duties carried out. The streets of the town were laid out in grid-fashion on either side of the main Roman road to Caerleon. In the centre was the *forum-basilica* (market-place and civic hall). No doubt Caerwent was a busy market town, being a favourite centre for troops on leave; the facilities provided included public baths, temples and a variety of shops. The basis of its economy was agriculture – there were several farms within the town – petty manufacturing and the retail trade. Other civilian settlements grew up outside the legionary fortress at Caerleon and at some of the auxiliary forts. At Cowbridge, on the road between Cardiff and Carmarthen, a 'small town' developed, probably as a market centre for farms in the Vale of Glamorgan. Farming was extensive on the southern coastal fringe, and both cereal cultivation and grazing were important parts of the economy. In the countryside there was a diversity of settlement types, ranging from substantial villas and Romanised farmsteads, such as Ely, Llantwit Major, Llandough, and Whitton Crossroads, to those of more humble character with few Roman trappings. The Gwent Levels, which provided excellent grazing for cattle, sheep and horses, were also utilised extensively. The uplands of Silurian territory may have been used seasonally for grazing livestock – transhumance – but evidence for any occupation is slight. The existence of auxiliary forts in the uplands, such as Gelligaer, indicates the presence of a native population. Also,



An auxiliary soldier of about A.D. 100 (Ermine Street Guard).

at Gelligaer there is slight evidence for a civil settlement near the site of the early fort.

To the west of the Silures lay the Demetae, the only other tribe in Wales to be granted self-government, with Carmarthen (*Moridunum*) probably serving as its capital. Within their tribal area, there appear to have been fewer country villas than in the south-east, and some of the old Iron Age hillforts were still inhabited. Throughout the rest of Wales, under more or less permanent military surveillance, there were no further towns. A few small settlements grew up around the important copper- and lead-mining districts, for example at Ffrith and Pentre in the north-east. There were also civil settlements outside several of

the forts, such as Caersws and Segontium. The native population generally appears to have lived either in their old hill-top settlements, or in small isolated hut-groups, typical of the north-west. Some of these native settlements produce a fair number of Roman coins, pottery and other artefacts, demonstrating that they developed, to some extent at least, a money economy trading with the army, merchants and each other.

By the late third century, there was a growing danger, especially in the coastal areas, from sea-borne raiders. The withdrawal of the Second Augustan Legion from Caerleon, probably towards the end of the third century, created the need to reorganise the defences of south Wales to combat

this threat from the sea. A new fort was built at Cardiff, possibly the base for a fleet patrolling the Bristol Channel. Its design was a departure from that of the earlier forts, the defences being much stronger, with the provision of projecting towers for the use of archers. There were also defensive roles for pre-existing forts at Loughor and Neath. An army garrison may also have been maintained at the Roman town of Caerwent in the fourth century. At Gelligaer itself, there is slight evidence in the form of late third- and fourth-century pottery for late activity at the fort. The growing insecurity in the countryside appears to have resulted in the gradual running down of farms along the southern coastal belt. Doubtless, some farmers and their families sought the relative safety of Caerwent, while others appear to have taken refuge behind the defences of several Iron Age hillforts.

During the final years of the fourth century the Roman government was faced with a series of disasters on the Continent. Troops serving in Britain were needed urgently elsewhere. The economic consequences of the resulting chaotic conditions were spectacular. Roman coinage stopped reaching Britain and the infrastructure that provided access to Romanised goods and services collapsed. The Roman authorities had lost control of Britain and by 410 it was clear that that the Emperor could not provide further help. The end of Roman rule in Britain had come.

In the aftermath in Wales, small British kingdoms emerged to fill the power vacuum. Each competed to control people, land and resources. People experienced great changes in society, politics and religion. Regional loyalties and power dominated all aspects of their lives. These changes shaped a Welsh cultural identity different from that of the rest of the British Isles.

# The Roman Army

The troops stationed in Wales were drawn from the two main branches of the Roman army, the legions and the *auxilia*. The legionaries, recruited from Roman citizens, were the crack troops of the army – the heavy infantry, sent out for campaigns of conquest or to suppress revolt within the Empire. To supplement this force, auxiliary units made up of non-citizens were raised from the provinces and newly-conquered areas of the Empire. The role of the auxiliary units was to support the legions in the battle-line, but for much of the time they were tasked with defending and policing the frontier zones.

There were three types of auxiliary unit – light infantry (a *cohors* or cohort), mixed cavalry and infantry (a *cohors equitata*) and front-line cavalry (an *ala*). They were organised into units of nominally 500 (*quingenaria*) or 1000 (*milliaria*). The infantry units were divided up into centuries, 80 strong under the command of a centurion; the cavalry units were divided into troops (*turmae*) of about 30–40 men, commanded by a decurion. Each unit was commanded by a Roman officer, either a prefect (*praefectus*) or a tribune who answered to the legionary commanders. The stone fort at Gelligaer is thought to have accommodated an infantry unit of '500' men, whilst the early fort is of a size that may have been garrisoned by a cavalry or larger infantry unit.

The annual pay of an auxiliary soldier was probably only one-third that of a legionary. Their reward, after serving in the army for 25 years, was to receive, on retirement, a grant of Roman citizenship which also extended to their children. An auxiliary would have spent much of his long service far from his homeland. Once retired he might

return 'home' or remain in the area where he had been posted, having possibly developed family links through a wife from the locality.

New recruits to the *auxilia* would have to pass a medical test before being assigned to a unit, where they underwent basic training. They had to be fit, so they ran, jumped, learnt to swim, as well as being taught to march. The main training was in the use of weapons and this involved practising with dummy weapons against wooden posts. Much of this training would have taken place on the fort's parade-ground. Auxiliaries were also taught the techniques of ditch digging and turf-building, tasks they would have to perform when on campaign. These essential skills were gained by constructing practice camps, small earthworks which reproduce the essential features – rounded corners and devices for the protection of the gates – of a marching camp, built to protect an army on campaign. Five practice camps have been identified on the common a mile or so to the north of Gelligaer, and such siting within a short march of a fort is common.

Some auxiliaries wore no armour, but those who did wore either mail or scale shirts over their tunic perhaps with trousers of wool or leather. Mail was made of alternate lines of punched iron rings joined by riveted rings, while scale-armour was made by sewing overlapping rows of metal scales onto a linen support. For the protection of the head a helmet of iron or bronze was worn, similar to but less elaborate than the legionary types. For lightness and agility they carried an oval shield, made of laminated wood covered in leather – often brightly decorated – with a circular metal boss. An infantryman carried a spear (*hasta*) for throwing or



Auxiliary cavalryman (Ermine Street Guard).

thrusting, as well as a sword and dagger. A cavalryman's fighting equipment included a spear, used for throwing as a javelin or for thrusting as a lance, and a long slashing sword (*spatha*).

The soldier was expected to maintain physical fitness and keep up basic weapon skills by daily training. Besides this he had to carry out routine duties, which included mounting guard on the headquarters building and at the gates, cleaning the centurion's kit, and cleaning out the latrines. He also had to maintain his own weapons and armour, and gather fuel for cooking and the baths. Much of the soldier's leisure time would have been spent in the bath-house which was used as a recreational club as well as for bathing.



# The Early Fort

The first fort (Gelligaer 1) was probably established as a result of the Roman conquest in 74–78, to police the upland area of the road between the forts at Cardiff and Brecon. All the forts built at this time were constructed from earth and timber. The defences consisted of a rampart of turf and clay which was derived from the broad ditch outside; the gateways, turrets and breastwork of the rampart were all of timber, as were the buildings of the interior.

At Gelligaer, the early fort lies to the north-west of its stone successor and is now outlined by only a faint bank. It is of a playing-card shape, 174 m long by 120 m wide (2.2 hectares), considerably larger than the later fort. Trenching by John Ward carried out in 1913 revealed an earthen bank, fronted by two V-shaped ditches. At the time, Ward suggested that it was a temporary camp occupied during the construction of the stone fort. However, it is clear from the excavation carried out in 1963 that it was of a more permanent nature, built to accommodate a large unit. This excavation revealed internal buildings of timber which subsequently had to be rebuilt, probably owing to the decay of the original timber-work. The size of the camp suggests that it was intended for a garrison of 1000 infantry or possibly 500 cavalry. Only further excavations will reveal the layout of its internal buildings, and so give a clue to the type of unit it housed. A re-examination of the pottery from the site would support its construction as part of the Flavian conquest (mid-70s), but an earlier date cannot be totally precluded. It is possible that there may have been a small civil settlement outside the camp, on the site subsequently occupied by the stone



Aerial view of Gelligaer from the south. © Crown copyright: RCAHMW.

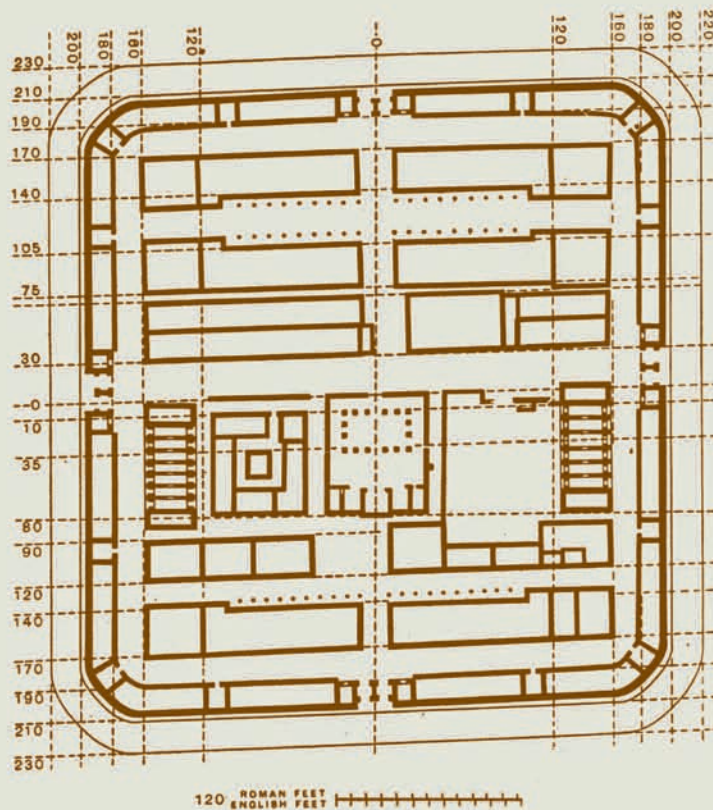
fort. It has been suggested that Gelligaer 1 was decommissioned just shortly before the construction of the stone fort. The dating is, however, inconclusive and it is possible that

there was a gap in occupation between the two forts. There is evidence that the buildings of Gelligaer 1 may have been destroyed by fire in the end, to clear the site.

# The Stone Fort

During the first decade of the second century, probably owing to the arrival of a new garrison, a smaller fort was required. Instead of rebuilding on the site of the earth and timber fort, they chose a new site further towards the end of the spur. The building of this new fort in masonry coincided with the policy of gradually rebuilding in stone at the other forts in Wales.

The most important finds from the site are the fragments of three inscriptions, set up to record the completion of the fort. Two were found in 1909 in the ditch fill near the south-east gate, and a further portion of the larger stone was discovered near by in 1957. The third inscription was found in 1913 near the north-west gate. It seems likely that a dedication was placed at each of the four gates; the second inscription found at the south-east gate could easily have come from the headquarters building, and been lost in the ditch when stone was being removed from the dismantled building.

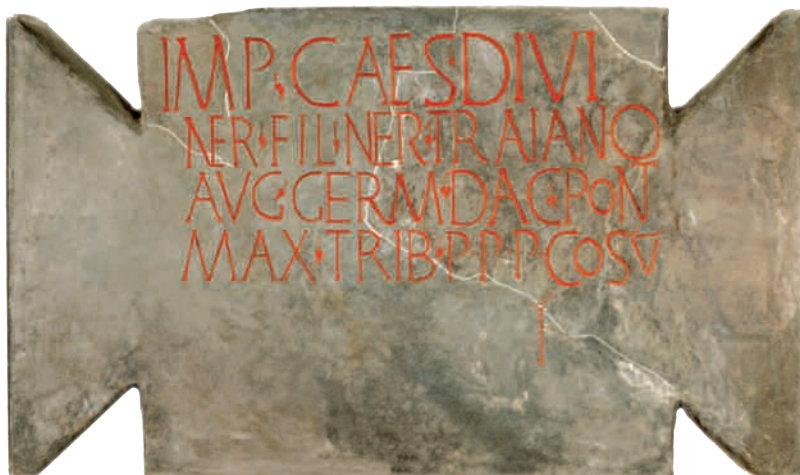


Plan of the stone fort, with measurements in Roman feet (John Ward).

All three inscriptions appear to be similar and the largest of these has been restored.

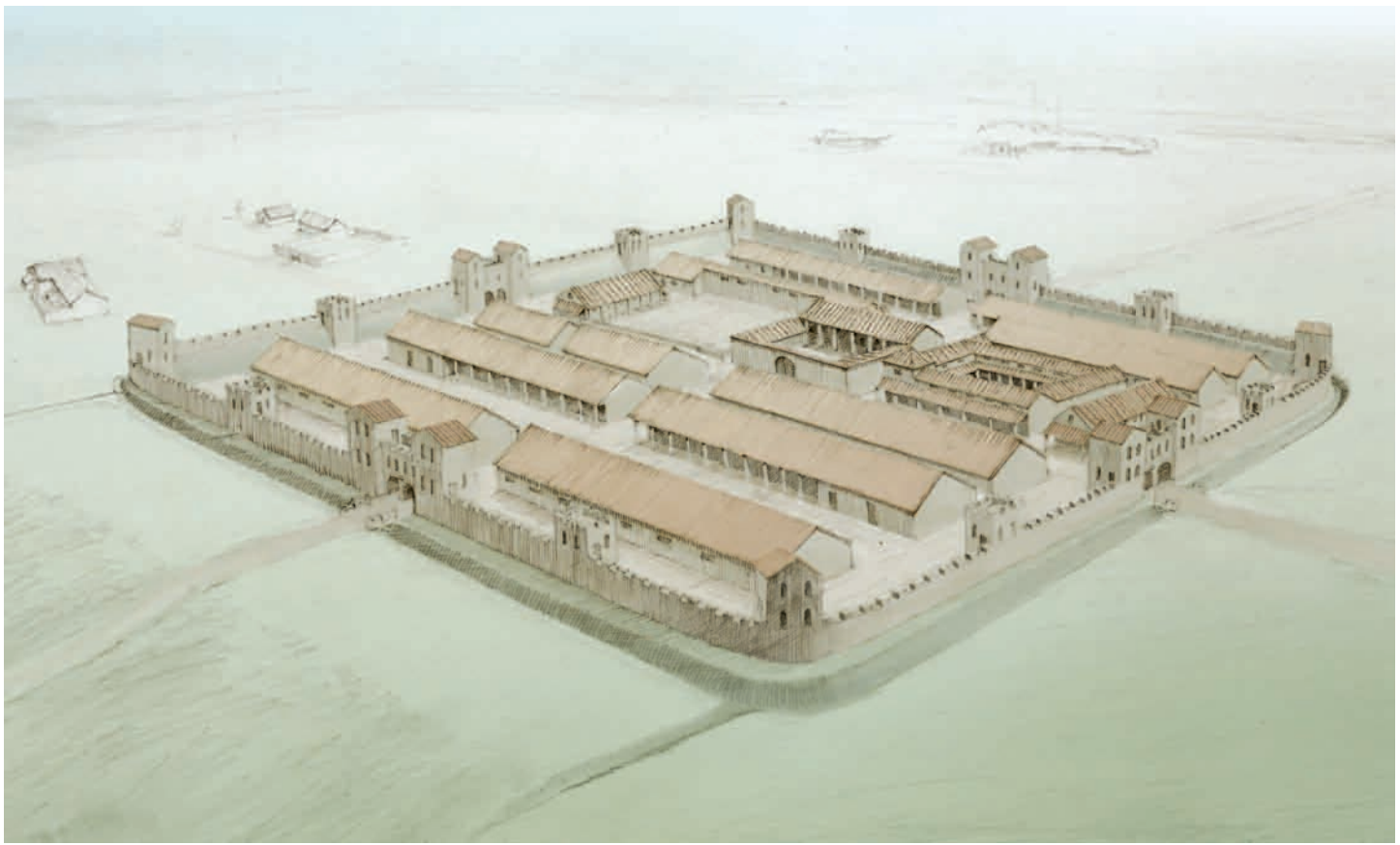
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P(atri).P(atriae).CO(n)S(uli)V  
[IMP(eratori)III]I  
[LEG(io) II AUG(usta)]*

'For the Emperor Caesar Nerva Trajan Augustus, conqueror of Germany, conqueror of Dacia, son of the deified Nerva, high priest, with tribunician power, father of his country, five times consul, four times acclaimed Imperator, the Second Legion Augusta (built this)'



Trajanic building inscription from the south-east gate, recording the construction of the fort some time between A.D. 103 and 111.





Imaginative reconstruction of the stone fort soon after its completion (drawn by Paul Hughes and updated by Jackie Chadwick).

The reference to the fifth consulship of the Emperor Trajan, which he held in A.D.103, is generally accepted as indicating the approximate date when the stone fort was built. However, it could have been constructed at any time between 103 and 111, for Trajan did not hold his sixth consulship until A.D. 112.

At this time, the plans of Roman forts both large and small were broadly standard, and Gelligaer was no exception. The defensive enclosure was almost square with rounded corners, and four gateways symmetrically placed, one on each side. The interior was organised into three divisions. The central zone lay on one side of the main road (*via principalis*) – connecting the south-east (*porta principalis dextra*) and the north-west (*porta principalis sinistra*) gates – and was occupied by the headquarters (*principia*), commander's house (*praetorium*), a

work-shop yard and two granaries, one at either end of the range. Behind this, in the rear zone (*retentura*), there were two barracks, a workshop and store building, disposed on either side of the street (*via decumana*) leading to the rear gate (*porta decumana*). On the other side of the main street the front zone (*praetentura*) was occupied by two pairs of barracks divided by a road (*via praetoria*) leading from the front gate (*porta praetoria*) to the entrance of the headquarters. The remaining space was occupied by storage buildings and what may have been a stable for the baggage animals of the unit.

The layout was not perfectly rectangular, and this was undoubtedly owing to the faulty setting out of the work at the start. To obtain right-angles the surveyor would have used an instrument known as the *groma*, a cross-staff with plumb-lines, which was

notoriously inaccurate especially in high winds, thus causing an error. John Ward demonstrated that the Roman surveyors probably used a standard ten-foot measuring staff in laying out the fort. He worked out all the dimensions of the fort and buildings in Roman feet (one pes =  $11\frac{2}{3}$  inches or 0.296 m) and they correspond to multiples of ten or five feet.

The size and layout provide a perfect example of accommodation for the smaller type of infantry unit in the auxiliary forces, a *cohors quingenaria*. The name and origin of the garrison are lost. In the past it has been mistakenly claimed that one of the inscribed fragments contained the letters PAN (*Pannoniorum* or *Hispanorum*) suggesting that the garrison was of Pannonian (a province bordered by the Danube) or Spanish origin. The identity of the units based at Gelligaer 1 and 2 still remains a mystery.



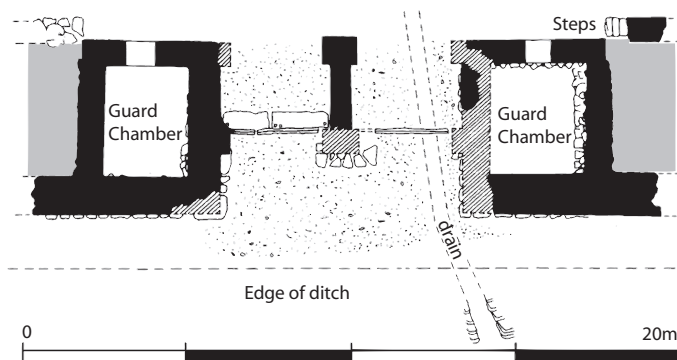
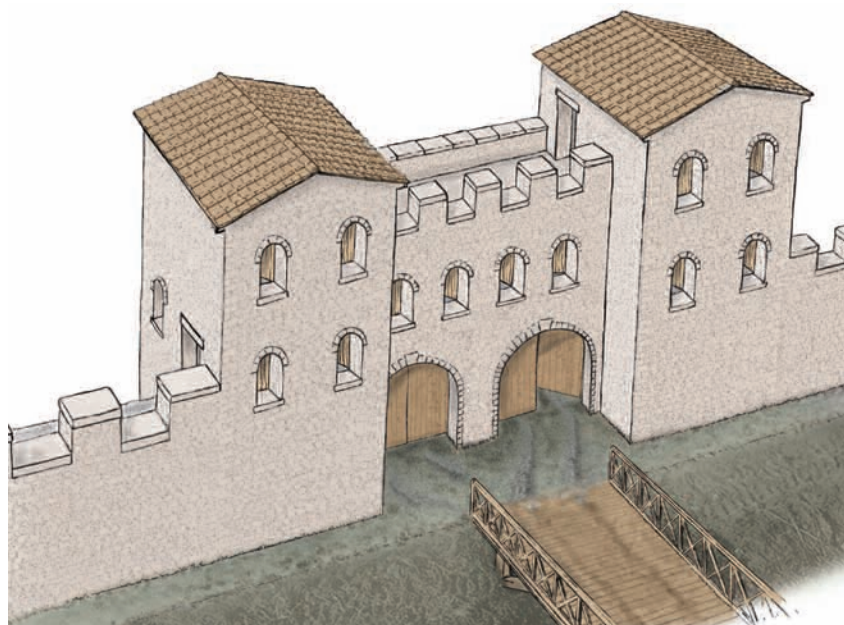
## The Defences

The Roman army was essentially a mobile force trained to fight in the open, but a fort in potentially hostile territory had to be provided with defences in case of an assault by the enemy. At Gelligaer, the fortifications would have presented a formidable obstacle, and consisted of the following elements:

- an outer ditch
- earthen rampart with stone revetments
- four gateways
- corner and interval towers.

In general the ditch, where excavated, was of a typical Roman form, being V-shaped, and approximately 5.8 m wide and 2.1 m deep. However, on the south-west side the ditch resembled more of a W in section, but was of no greater depth or width than elsewhere. The ditch would have been an effective obstacle in any attempt to scale the wall. Between the inner face of the ditch and the fort wall there was a berm 1.5 m wide, to maintain the stability of the rampart.

The rampart was the principal barrier, and had to be both difficult to scale and hard to break through. Wherever the rampart was excavated it was found to be of earth faced with masonry on both sides, and in all it was about 6 m wide. Earth for the construction of the bank was dug from the ditch and the foundation trenches for the retaining walls. The top of the earthen bank would have been flat, probably with a gravel surface, and would have been used as a patrol-track as well as a fighting platform from which the defenders could hurl missiles in the unlikely event of coming under attack. Ward calculated that in its original state the bank would have been about 11 or 12 ft (4 m) high. Fronting this was a stone revetment, which constituted the fort wall, varying in thickness from 0.9–1.2 m. The front



Reconstruction and plan of the south-west gate (drawn by Tony Daly).

was faced with large well dressed blocks, but the back was rough, being built against the earth bank; and the whole wall was founded on layers of large rough stones. It seems likely that the wall would have been about 5 m high, and furnished with battlements to provide protection for soldiers on top of the earthen bank. The inner retaining wall was of a thinner and rougher construction than the outer wall, being only 0.9 m wide. Behind the rampart there was a road (*via sagularis*) running all around the fort to allow ease of movement and unimpeded access to the defences.

At the corners of the fort, and between them and the gates, were found the remains of twelve towers, which were built flush with the front wall and extended to the rear. These were externally of the same depth as the rampart and approximately 4.9 m wide, with walls just over 0.6 m thick. It was noted that the side walls of the towers were not bonded to the fort-wall, which was a method possibly used to allow for differential sinkage of the two structures. The room at ground level, normally used as a store or the like, was entered by a narrow doorway in the middle of the back wall. The



The north-west gate during excavation, showing one of the guard-chambers and the wall (*spina*) dividing the two roadways.

upper story of each tower stood above the level of the rampart walk and may have been roofed. They will have served as look-out towers and possibly fighting platforms from which arrows or other missiles could be discharged.

There were four entrances to the fort, symmetrically placed, one on each of the four sides. Each gateway contained two arched roadways separated by an intervening wall (*spina*). The arches were built from calcareous tufa – possibly from the Merthyr area – a favourite material for this kind of construction owing to its lightness combined with strength; the remainder of the gates were constructed in mortared rubble faced with small blocks of the local pennant sandstone, as used in the fort wall. The outer arches of the gate were slightly set back from the rampart face, and

flanked by guard-chambers to control traffic in and out of the fort. The front of each passage would have been provided with a stout wooden door of two leaves, which swung upon pivots and were bolted when closed. These doors, in closing, stopped against a stone sill which crossed the threshold, and in opening they swung back into recesses in the side of each passage. In one of the passages of the south-west gate, the sill, pivot and bolt holes were all found intact, and the sill showed signs of being worn by the wheels of carts. The flanking guard-chambers were oblong, 3.4 m by 2.9 m, the front being flush with the fort-wall, and were entered by a narrow doorway in their rear wall. Their walls would have been carried up above the height of the rampart to form towers, and they were connected by the rampart-walk

which was carried across the arches spanning the portals. The gate-towers probably had gabled roofs. Access to the upper storey and the rampart-walk was provided by steps at the side of each guard-chamber. There is evidence to suggest that one of the passages of the south-west gate was blocked at some time in the later history of the fort. This may be a key indicator for some form of occupation on the site of the fort in the late third or fourth centuries A.D.

Immediately in front of the south-west and north-east gates the sides of the ditch were stepped, presumably to receive the timber supports of a bridge, so that a road could cross and enter the fort. Trenches in front of the south-east and north-west gates revealed the opposite arrangement, whereby the ditch was interrupted for the roadway.



# The Headquarters Building

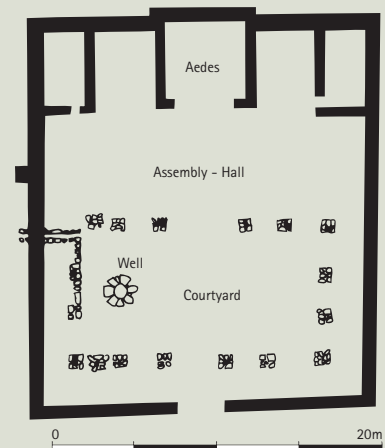
The headquarters building (*principia*) was the administrative and religious focus of the fort. It stood in the centre of the fort (building 7), at the junction of the two main streets, the *via principalis* and *via praetoria*. Rectangular in plan it measured 24.4 m by 21 m and was divided into three main sections: an open courtyard surrounded by a portico, an inner high roofed cross-hall, and a row of five small rooms at the back. This basic plan appears on a much larger scale in the great legionary fortresses.

As might be expected, the headquarters was an imposing building, entered from the main road (*via principalis*) probably by an arched doorway in the centre of the front wall. This gave access to an open courtyard with a gravelled surface, which was surrounded by a portico on three sides. The excavations revealed a number of stone bases where columns probably stood to support the tiled lean-to roof of this

covered walk. This part of the *principia* probably served as a meeting place and the orders for the day and other notices may have been posted on the walls at the back of the portico. A circular, stone-lined well was provided in the corner of the courtyard to ensure a supply of water in an emergency. The well was filled with quantities of broken pottery, tile and stone when the building was abandoned.

Beyond the courtyard lay the roofed cross-hall, extending the full width of the building. It is here that the commanding officer would have been able to address his officers and men, issue orders and perform military and religious ceremonies. The entrance to this hall from the outer court was open, the roof being supported by a row of large stone columns. In 1909 when the ditch by the south-east gate was being excavated, two column bases and a capital, probably from this building, were discovered.

At the back of the building there were five rooms, each entered from the cross-hall. The central room, somewhat larger than the others, had a special significance as the regimental shrine (*aedes*). Its importance was emphasised by its position opposite the entrance to the *principia*, which made it the main focus of the building. It is here that the emperor's statue would have stood between the standards of the unit. It was also usual for the pay-chest and the troops' savings to be locked safely in the shrine. The foundations of this room were thicker than the others, suggesting that it was probably higher, standing above the roof-line with windows in the upper sidewalls lighting the interior. On either side were two rooms, normally interpreted as offices for the administrative staff of the unit, two for the senior clerk (*cornicularius*) and his staff and two for the standard bearers, who also acted as pay clerks. A huge amount of 'paperwork' was involved in the administration of an auxiliary fort and its garrison. With the exception of the shrine these rear rooms were heated, either from an open hearth or a brazier.



The headquarters building, looking from the rear rooms across the assembly hall and courtyard.



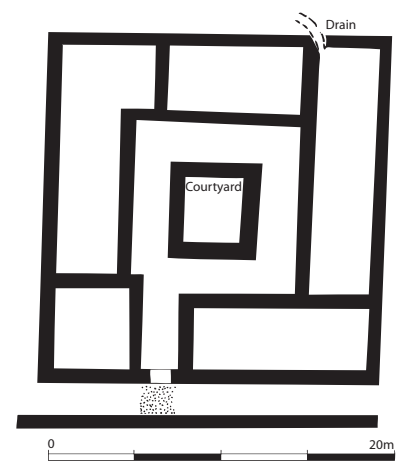
## The Commander's House

To one side of the *principia*, also in the central range of buildings, was the commander's official residence (*Praetorium* – building 6), with amenities befitting his status. The commander would probably have been a young member of the upper class (*equites*) and this post, a short-term

commission, would have been an early step in his career. He was unlikely to have seen military service before this posting and he would have had to rely heavily on the advice of the centurions. The house would have provided accommodation for the officer, his family, guests, and domestic servants.

At Gelligaer, this building was fairly small, 22.6 m by 19.5 m, compared with those uncovered at other Welsh forts. The rooms were arranged around a small courtyard or garden with a veranda on all four sides, a practice of the Mediterranean world to give shade; here it provided shelter. When excavated only the foundations remained, so the uses to which the different parts of the building were put are uncertain. From debris found on the site, it is known that the building had a tiled roof and glazed windows.

In front of the building there was a portico with a gravelled surface, bordering the main road (*via principalis*), from which the house was entered. The range of rooms behind the portico seems to have comprised the entrance-vestibule and main reception room. A drain leading from the north-west range may indicate that this was the service quarters including the kitchen; the accommodation for the slaves would also be here. The rest of the house would have been used as the living quarters, including the dining room, bedrooms and probably an office.



The commander's house during excavation in 1901, with the small courtyard in the centre.

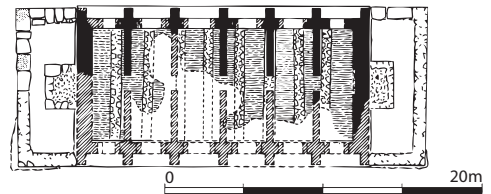
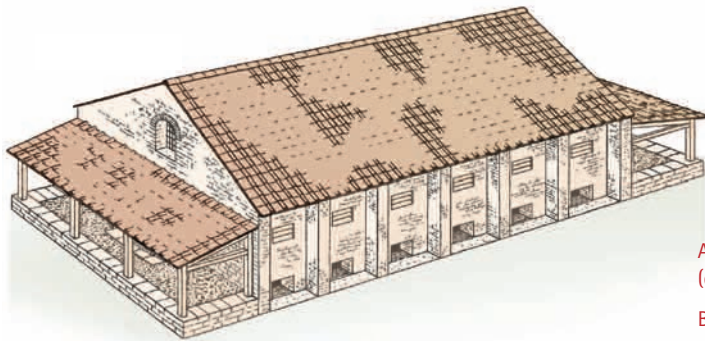
# The Granaries

The central range of buildings was completed at each end by a granary (*horreum*), placed next to the south-east and north-west gates for the ease of access when unloading deliveries of grain. It was the normal Roman army practice to keep a year's supply of grain – an important element in the soldier's diet – in each fort; the two granaries at Gelligaer would have held what was necessary. For the proper storage of grain and probably other perishables – such as vegetables and meat – the granaries had to be kept dry and free of rodents and birds.

Unlike most of the buildings within the fort, the granaries were completely excavated. They were found to have the

distinctive ground-plan of massive buttressed walls, founded on stone rafts. The floors of the granaries were raised off the ground on a series of cross-walls. The timber floor of the north-west granary (5) was supported by six cross-walls; that of the south-east (8) by eight, though at some stage in its history this was reduced to five. Air vents at the bottom of the external side walls and a central break in the cross-walls, produced a cool through-draught which helped to maintain the best conditions for grain storage. It was also noted that large quantities of red roofing tiles were recovered from both granaries. The weight of the heavy tiled roofs would have been carried by the

buttresses, which would also have allowed them to be carried out well beyond the side walls, so that rain water would not trickle down the walls and spoil the grain inside. The rain water was subsequently carried away from the vicinity by a series of drains. To achieve a good circulation of air within the granary, there would doubtless have been louvred vents near the top of the side-walls between the buttresses; the wooden slats prevented small animals and birds from entering. At each end of both granaries there was a roofed loading-platform onto which sacks of grain could be unloaded directly from carts without the need to carry it up steps or a ramp.



Above: Reconstruction and plan of the south-east granary (drawing Paul Hughes and updated by Tony Daly).

Below: The north-west granary during excavation.

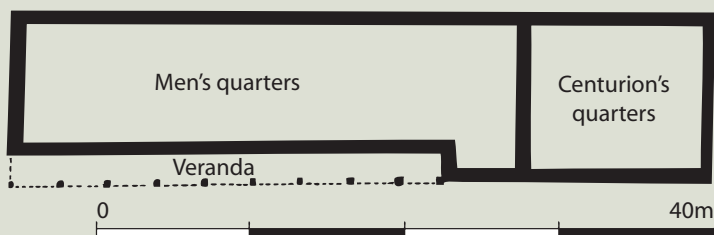




## The Barracks

Six barrack-blocks (*centuriae*) – four in the front part of the fort (12–15) and two in the rear (1 and 2) – provided living accommodation for the men. These six barracks complete the requirements for the housing of the six centuries of eighty men which formed the nominal complement of a *cohors quingenaria*. They were long, L-shaped buildings, 44.2 m long by 9.1 m wide at the narrow end. From the remains found it appears likely that they were largely constructed from timber with only the foundations and lowest courses of the walls being of stone. An absence of any roofing tiles probably indicates that the roofs were either of wooden shingles or thatch. A row of holes each packed with stones, in front of the narrow section of the barrack-block, would have held the wooden posts which in turn supported the roof of a veranda.

Each barrack housed a century of about 80 men with its centurion. All the barracks were divided into two unequal parts: the broader end section provided fairly comfortable accommodation for the centurion, while the longer, narrow portion was devoted to the men. No



Plan of a barrack-block.

partitions which would have divided the men's quarters were found. However, this section was nearly a hundred Roman feet in length, so it is possible that it was divided into the standard ten barrack-rooms; each housing eight men (a *contubernium*). Each barrack-room would have been divided into a front room, probably used for the storage of arms and equipment, and a larger, inner room used for sleeping. All the front rooms were entered from the veranda. The stone partitions recorded within the broader end of the barrack-blocks may mark off the quarters allotted to the three junior officers in the century, namely the second in command (*optio*), standard bearer (*signifer*) and clerk (*tesserarius*).



Glass gaming counters. The soldiers would have played board games when off-duty.

## Stable, Workshop and Stores

Little is known about the remaining buildings except for their plans. Opposite the commander's house there was a long building (9), divided down the centre, 44.2 m long by 12.5 m wide. At its south-eastern end there was a stone-built tank, with a lead-outlet pipe which entered a stone-lined drain. This building has been interpreted as a stable, which would have been needed for the baggage animals belonging to the unit as well as the commander's and centurions' horses. The remaining area of the *praetentura* was taken up by two small

rectangular buildings (10 and 11), which were probably used as stores. In the rear of the fort, a narrow building with a wing at either end (4) probably served as the unit's workshop (*fabrica*). It is here that the weapons, tools and equipment needed by the unit could be repaired or perhaps even made. The workshop was divided into four rooms, and in one of these there were two small, rectangular, stone structures which could have been water tanks. Evidence for some industrial activity – areas of burnt clay and fragments of walling possibly belonging to a series

of furnaces – was found in the walled yard fronting the *fabrica*. This workshop-yard, next to the headquarters building, was entered from the *via principalis*. The entrance was flanked by a small chamber, which may have been the fort's latrine. Adjacent to the workshop, on the other side of the *via decumana*, there was another rectangular building (3) divided into approximately three equal sections. It has been suggested that this might have been a secure store for weapons and other items of military equipment.



# The Annexe

Adjoining the fort on the south-east was a walled annexe, measuring approximately 119 m by 65 m. As seen at other Roman forts in Britain, such an enclosure could contain buildings providing extra storage, facilities such as workshops and the bath-house, as well as affording protection for animals and wagons with goods in transit. The defences of the Gelligaer annexe were not as strong as those of the fort, consisting of a stone wall 0.9 m thick and backed with earth, beyond which was a V-shaped ditch 4.6 m wide. This enclosure was entered by a single

gateway on the south-east side. A small building (C) 3.7 m wide by 2.8 m just within the north-east angle may have acted as a guard-chamber. A trench cut by John Ward outside the east corner of the fort revealed that the annexe-wall had been carried across the fort ditch, after a considerable amount of silt and rubble had been allowed to accumulate. It has been suggested, therefore, that the annexe-defences were constructed at a much later date than those of the fort.

The road running from the annexe gate to the south-east gate of the fort

divided the enclosure in two, the northern half being occupied by the bath-house (A) and its exercise yard (B). To the south of the road, the most notable structure was a large rectangular yard (D) 27.5 m by 13.4 m with a small building (E) attached to its south-east wall. An interesting feature of the yard was the large quantity of iron slag, coal and charcoal scattered over the site, presumably indicating it was used in some industrial activity. The only other structure was a small rectangular building (F) 11 m by 3.7 m the purpose of which is unknown.

## The Bath-house

It was normal for the bath-house (*balneum*) to be sited outside the fort, for safety reasons (they were a fire risk), and also because of the shortage of space within the fort. The bath-house was an essential feature in Roman everyday life, providing facilities for a soldier to bathe and cleanse his body, exercise and recreation. It was a place to meet friends and relax – gossip, gamble, play games, have a snack and drink – when off duty. At Gelligaer the bath-house, measuring 33.5 m by 19.8 m, comprised the usual suite of hot, warm and cold rooms, a circular sweating chamber and exercise yard. The hot and warm rooms were provided with under-floor heating (*hypocausts*). The building had a tiled roof, tile fragments being found in abundance all over the site. Some of the rooms were also decorated with painted wall-plaster, and the windows were glazed.

The Roman method of bathing was totally different from ours. The bather undressed in a changing room (*apodyterium*), which at Gelligaer also acted as the cold room (*frigidarium*).



He then proceeded into a room which was kept at a warm, humid temperature (*tepidarium*). Having raised the body temperature the bather entered the last room where a very high temperature was maintained (*caldarium*). The soldier could also have a hot bath in this room. Once the pores had been opened the body would be anointed with oil which, after a massage perhaps, was scraped off along with the sweat and dirt using a curved

Excavation of the bath-house in 1909. William Clarke of Llandaff (Cardiff) – who was entrusted with the excavations and provided the workforce – and the Rector of Gelligaer, Rev T J Jones, on the site of the circular sweating chamber.

scraper (*strigil*). After this he made his way back to the cold room where he immersed himself in the cold plunge bath, to close the pores of the skin to prevent a chill. As an alternative to all this, the bather might prefer to go into



the sweating room (*laconicum*) which was heated to a high temperature without any water or steam.

Roman bath-houses invariably showed signs of constant alteration and improvement, the baths at Gelligaer being no exception. The first phase of the building presumably coincided with the construction of the fort, but it was never completed, its plan being modified. When the second stage (phase 2) of the building was finished, the bathers entered a combined changing room and cold room (G) with a flagged floor. A sunken bath (Q) lay in the south-east corner. Lined with waterproof plaster, it had three quadrant-shaped steps leading down into the cold water. The central feature of the cold room was a

shower bath or douche, which some bathers preferred to the plunge bath; it would have taken the form of a circular, ornamentally perforated flagstone placed over the main drain. Beyond the *frigidarium* was the warm room (D), and then the hot room (C) with its hot bath. On the east side of each of these rooms was a furnace; the heat from their fires circulated under a raised floor and was then ducted up the walls through a series of pipes, hot air being discharged into the open from just below the roof level. The provision of two furnaces was unusual (normally the heat was provided by one boiler-house situated at the end of the hot room) and was undoubtedly owing to a change of plan.

Top: Baths: view of the warm room (D) from the hot room (C): note the rows of tile pillars to support the raised floor.

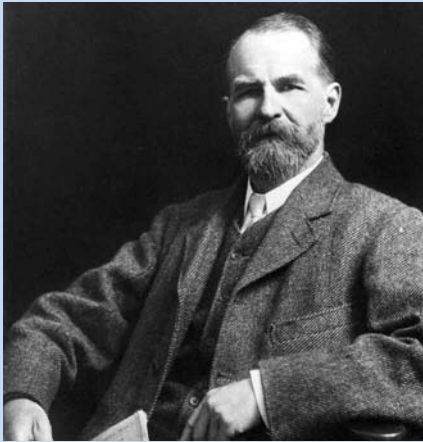
Above left: General view of the bath-house, as seen from the church tower.

Above right: Baths: the cold plunge-bath (Q) in the *frigidarium*.

At some date, the floors of the warm and hot rooms and the two furnaces were dismantled and then rebuilt at a higher level. This reconstruction (phase 3) was probably necessary because water was collecting under the raised floors, since the builders appear to have misjudged the water-level.

The next development (phase 4) was a general enlarging and complete reorganisation of the building. The two





furnaces were dismantled and the openings were blocked up. They were replaced by a new boiler-house (A), which showed the effects of fierce heat, built at the north end of the hot room. Arched openings were inserted below the floor level between the hot and warm rooms to allow the heat to circulate. Between the new boiler-house and the hot room a new plunge bath was built (B), the hot water being supplied from a leaden, or perhaps a sheet-iron tank which was supported above the furnace. Another addition, in the corner of the cold room, was the construction of the *laconicum*, a circular, hot, dry room (F) with its own furnace. The cold room was also equipped with a larger plunge bath (T), which discharged its water through a lead outlet into a stone-lined drain. Also at this time, a stone-lined culvert, with a flagged bottom and stone covers, was built around three sides of the baths to help drainage. This drain passed under the annexe-gate, and

discharged through an arched opening into the ditch.

A final reorganisation (phase 5) included a modification of the cold room, and an even larger plunge bath (H). A heated corridor (E) was inserted to provide a warm passage between the cold room and the hot, circular room. At this time a new latrine (L) was built on the south side over the main drain.

To the west of the bath-house projected a courtyard, which was roughly paved here and there, and formed the exercise yard (*palaestra*). In the centre of the yard there were two horse-shoe shaped ovens probably used for cooking.

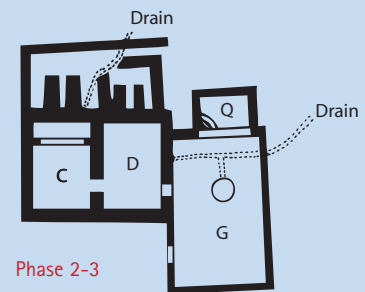
The latest coin from the bath-house was of the Emperor Hadrian (A.D. 117–38), and from this Ward came to the conclusion that the baths had a fairly short life. However, the many structural alterations would indicate otherwise, and that the baths were used over a much longer period of

time. As it stands, the evidence is inconclusive, for most of the pottery from the bath-house dates no later than early/mid second century, with just a handful of later sherds, some of late third- to fourth-century date, suggesting a subsequent phase of use.

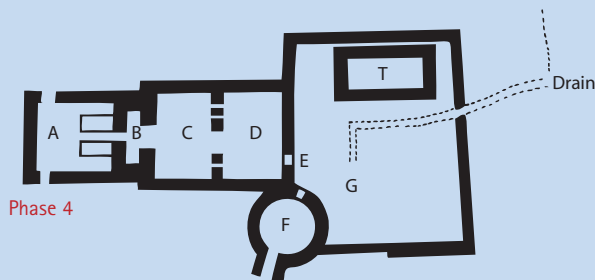
Above left: John Ward (1856–1922). He directed the excavation of the bath-house in 1909, when Curator of the Municipal Museum and Art Gallery, Cardiff.

Above right: Baths – the circular sweating chamber or *laconicum* (F), with the remains of its furnace in the foreground.

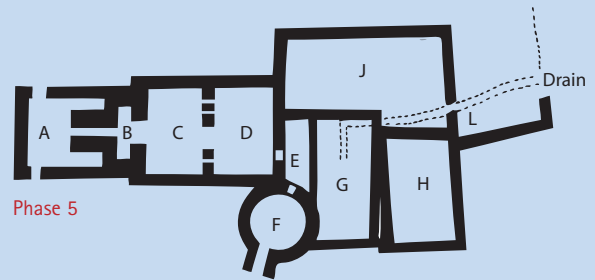
Below: Development of the bath-house.



Phase 2-3



Phase 4



Phase 5





# Parade-ground

Another military feature was the parade-ground attached to the north-east side of the fort. This was simply a levelled area, some 116 m long from north-west to south-east by 49 m wide between the fort ditch and the crest of the falling ground to the north-east. Excavation in 1913 revealed a uniformly gravelled surface, bounded on the south-east side by a V-shaped ditch, 3.7 m wide and 1.5 m deep. It was required not only for parades, but also for drill, weapon training and religious ceremonies performed by the unit on important dates in the military calendar.



Auxiliary soldiers being taught to march in step (Ermine Street Guard).

## Tile-kiln

This was discovered in 1913 just outside the annexe during the digging of a grave in the churchyard. As found, the kiln consisted of a small, square, masonry structure sunk into the ground. It had a brick floor, which was supported on a centrally vaulted main flue which had six cross-flues on either side. At the mouth of the main flue, which was on the western side of the kiln, there would have been a stoke-hole, but it was not possible to dig this, for there was another grave in the way.

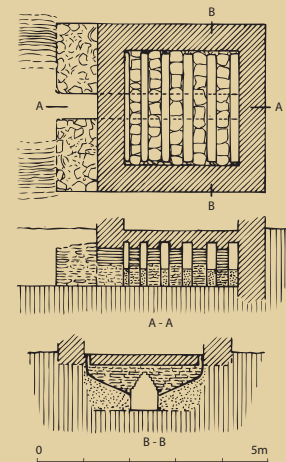
When the kiln was in use, air-dried tiles would have been stacked on the kiln floor, and then the whole structure would have been covered with clay or turves. A fire was then lit in the stoke-hole, and hot air from this passed into the main flue and the smaller cross-flues and eventually upwards through holes in the floor to fire the load.

Many fragments of tile (*tegulae* and *imbrices*) were found near the kiln, a number of them over-fired and



Above: Excavation of the tile-kiln nearly completed. Below: Tile and pottery kiln.

distorted or broken. This kiln would have provided the many thousands of tiles used in the fort and its environs. Fragments of waste *mortaria* – large bowls with a rough surface used for grinding and mixing foods – were also found near the tile-kiln. This pottery may have been fired in the tile-kiln; alternatively another pottery / *mortarium* kiln may have existed near by, perhaps even sharing a stoking area, the pottery waste being dumped around the tile-kiln once it went out of use.



# The Cemetery

Roman law strictly forbade the burial of the dead within an inhabited area. During the first and second centuries cremation was in fashion, the ashes

being placed in a container (a pottery urn, glass jar, or lead canister) before burial. Roman cinerary urns containing burnt bones were found in 1910 to the

south of the fort. This would seem to indicate the presence of a cemetery beside the road leading south-east from the fort.

## Later History of the Stone Fort



The chronology of the fort has always been a matter of much debate. In 1903, after the main work on the site had finished, John Ward held the opinion that the fort was established during, or soon after, the time of Frontinus in A.D. 74–78 as one of a network to hold the newly-conquered region, and was abandoned in about A.D.100. This belief was based on the recovery of late first-century pottery and seven coins, five of which were dateable to the period 69–98. There was also at this time an apparent absence of rebuilding within the fort, which pointed towards a short occupation. However, the subsequent discovery of the Trajanic building inscriptions (in 1909 and 1913) and further coins – the latest being that of the Emperor Hadrian – led to a revision of the fort's history. It was now

thought that the fort was built in the period 105–10 and that the garrison did not depart until 130.

This view was held until the 1950s, when the late Dr Grace Simpson re-examined the evidence. This led her to suggest a completely different history for the site. The construction of the stone fort in the very early second century is not disputed, but it is in fact the only fixed point in the history of Gelligaer. The first-century pottery and coins which led Ward to presume an early foundation for the fort can now be associated with the occupation of the earth and timber fort. Dr Simpson drew attention to some pottery which is undoubtedly later than 130 and to traces of alterations in several of the buildings – including the south-west granary and bath-house – which are

indicative of a prolonged period of occupation. As a result, she proposed that the fort was occupied until the end of the second century A.D., and that alterations to the granary and bath-house may have belonged to a reoccupation in the late third or earlier half of the fourth century A.D. It should be added that other alterations were noted to the south-west gateway where one of the passageways was blocked and the north corner tower where a roughly built wall was inserted, but some caution is required for not all these works need be Roman in date.

Recent research by Dr Peter Webster has shown that the vast majority of the pottery found at Gelligaer dates no later than the early/mid second century A.D., pointing to the withdrawal of the garrison by A.D. 130. The study confirmed the presence of a small amount of later pottery, including several pieces of late third- to mid fourth-century date from both the fort and bath-house, which suggests a reoccupation of the site some time within that period. However, the evidence is so scanty that it is not possible to determine the nature or extent of this activity. No doubt the story of Roman Gelligaer will continue to unravel and change.

View of the site of the stone fort and annexe today. The answers to many questions about Gelligaer's Roman past lie beneath these fields.  
© Gelligaer & Pen-y-Bryn Partnership and Gelligaer Community Council.



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