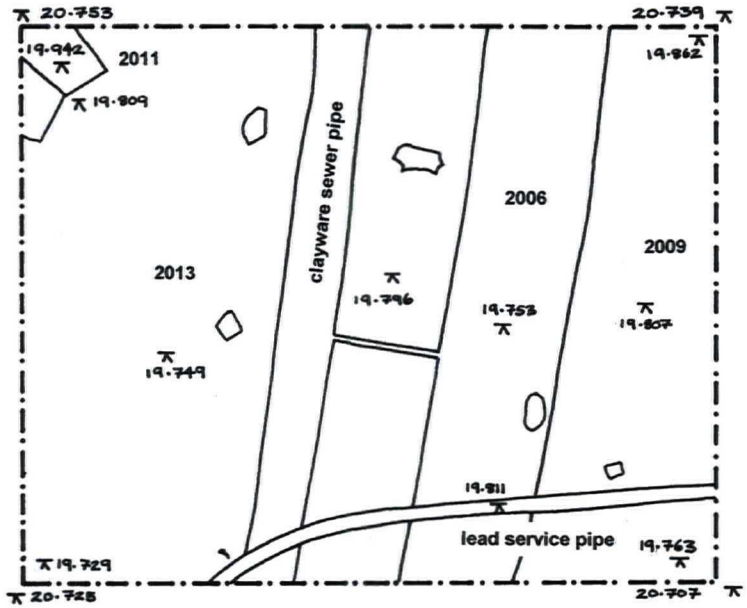
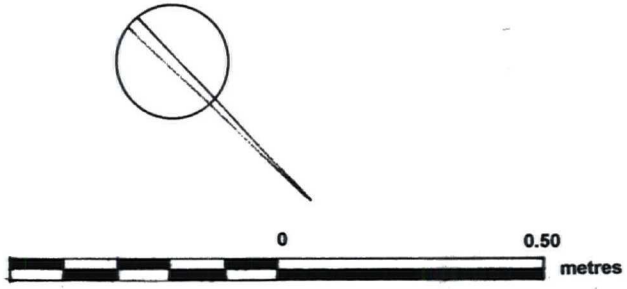
Trial Trench No.1, ceramic drain and lead water service.

Trial Trench No.2, ceramic drain and branch.

FIGURE 1 TRIAL TRENCH NO.1

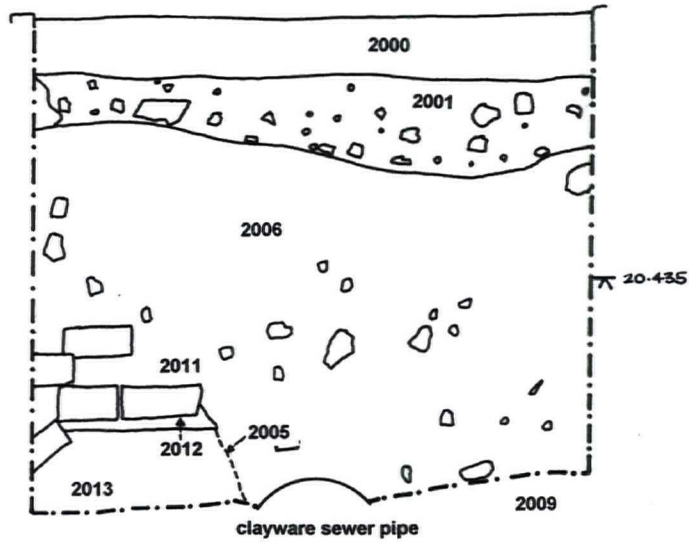
Plan





All heights are given in metres AOD

North Facing Section



East Facing Section

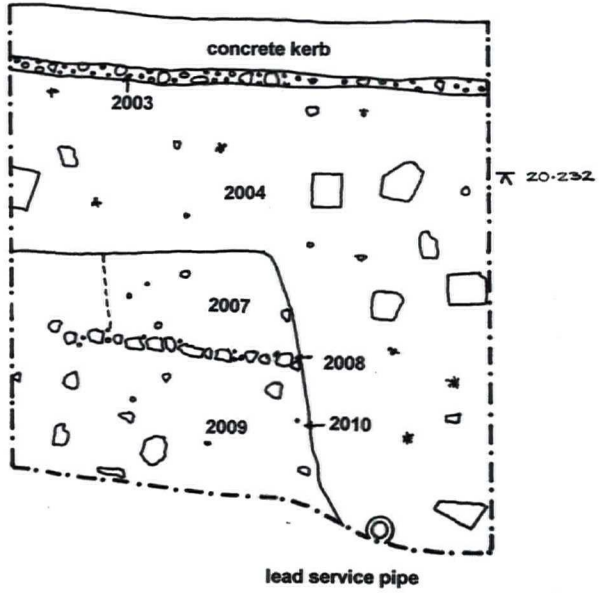
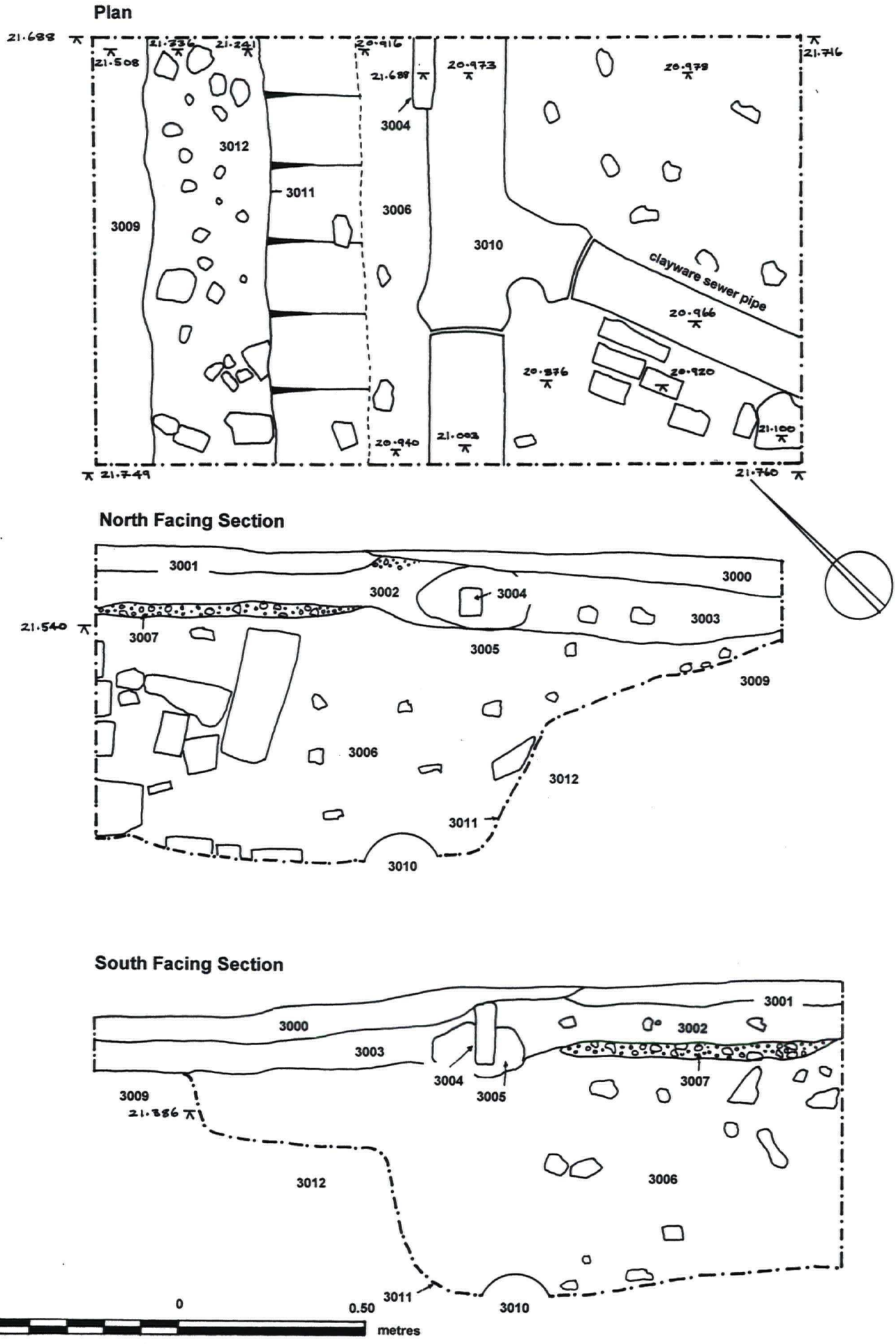


FIGURE 2 TRIAL TRENCH NO.2



The tarmac (context 3001) and sub-base (context 3002) of the existing footway were broken and loosened by a compressed air jackhammer and then removed. The turf (context 3000) was cut and removed from the adjacent verge.

A buried topsoil (context 3003) was identified beneath the grass verge, the layer contained modern and late 19th century finds. This layer of sandy loam had been cut by the construction trench (context 3011) that had been excavated for the instatement of the ceramic sewer pipe.

The construction trench was aligned north east and contained a single fill of loamy sand (context 3006) within the base of which the salt glazed sewer pipe (context 3010) and branch connection from Brogden House was exposed. The invert of the sewer measured 22.016 m AOD. The surrounding fill contained a high quantity of broken brick and occasional fragments of broken sandstone flag. It was later established that this rubble was in fact the remains of an earlier brick and sandstone culverted sewer. The fill contained modern, Late 19th century and Roman pottery.

Within the western extent of the trench a layer of clayey loamy sand (context 3006) was identified, sealed by the buried topsoil and cut by the construction trench of the existing sewer. The layer was heavily compacted and from the nature and quantity of it's inclusions would appear to be 18th century made up ground.

Trial Trench No.3

Type:	Exploratory Excavation:hand
N.G.R:	440658 466351
Length:	1.76 metres
Width:	1.16 metres
Depth:	1.2 metres
Planform:	Rectangular
Aligned:	East South East
Area:	2.04 square metres
Context No's:	1000 - 1011
Plate No:	3, 6
Fig. No:	3 and Site Location Plan

The trial trench was excavated so as to ascertain the nature of the buried ground levels within the central section of the study area and is situated adjacent to the garden boundary wall of Green Lea. The trial trench was excavated into the highway and tarmac footway. The existing ground levels slope very gently downwards to the north. The ground levels to the east of the red sandstone garden wall of Green Lea are elevated by approximately 0.57 metres above the footway.

The tarmac (context 1000) and sub-base (context 1001) of the existing footway were broken and loosened by a compressed air jackhammer and then removed.

A buried gravel surface (context 1006) was identified beneath the sub base, the layer was well compacted and sloped downwards, gently to the north. This former ground level passed beneath the red sandstone foundations (context 1005) of the garden wall. The layer contained no finds but would appear to be a early 19th century surface, at 21.239 m AOD, overlying a layer of loamy sand (context 1007).

This layer of loamy sand appears to have been deposited as a sub-base for the for the gravel surface, and in an attempt to make up ground levels over and above the recently constructed brick culvert. The layer sealed the capping stones of the sewer culvert (context 1008) and it's construction trench (context 1011).

The construction trench was aligned south and contained a single fill of sandy clayey loam (context 1010) within which 18th century and early 19th century pottery was recovered. The upper level of this fill had been disturbed during the installation of a Early 20th century water service. The trench had been excavated into a layer sand (context 1012).

The sewer culvert had been constructed out of a well bedded and tightly jointed arrangement of limestone sets that form the base of the structure and upon which the opposing brick sides had been constructed, these elevations were five courses in height and a single brick's width. The bricks were hand made, of a clamp type, in a soft pink orange fabric that contained a low quantity of inclusions. The brick size was unusual 0.23 m x 0.12m x 0.05 m, and are indicative of 18th century brickwork. The bricks were bedded on a soft, light grey, lime based mortar. The structure was capped with large slab-like fragments of roughly shaped Sandstone, the joints between which were earth filled. The internal dimensions of the culverted sewer measures 0.25m wide x 0.35m deep.

The invert of the sewer was identified at 21.818 m AOD.

PLATE 3

Trial Trench No.3, surface of culvert.

Trial Trench No.3, invert of culvert.

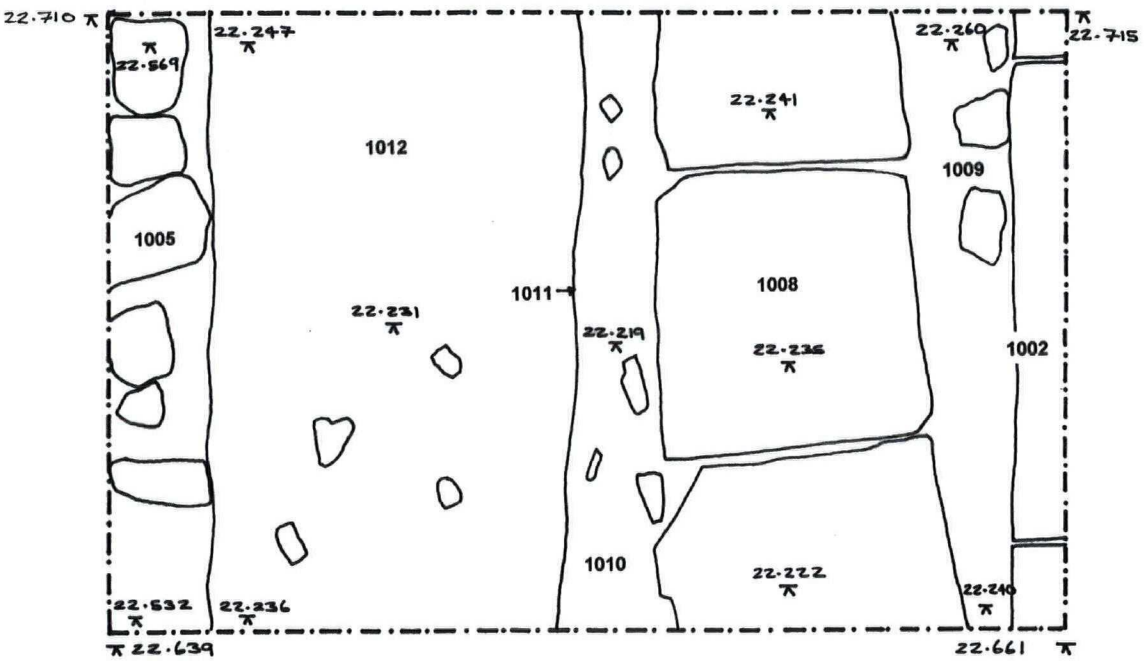
PLATE 6

Trial Trench No.3 Detail of internal elevation of culvert

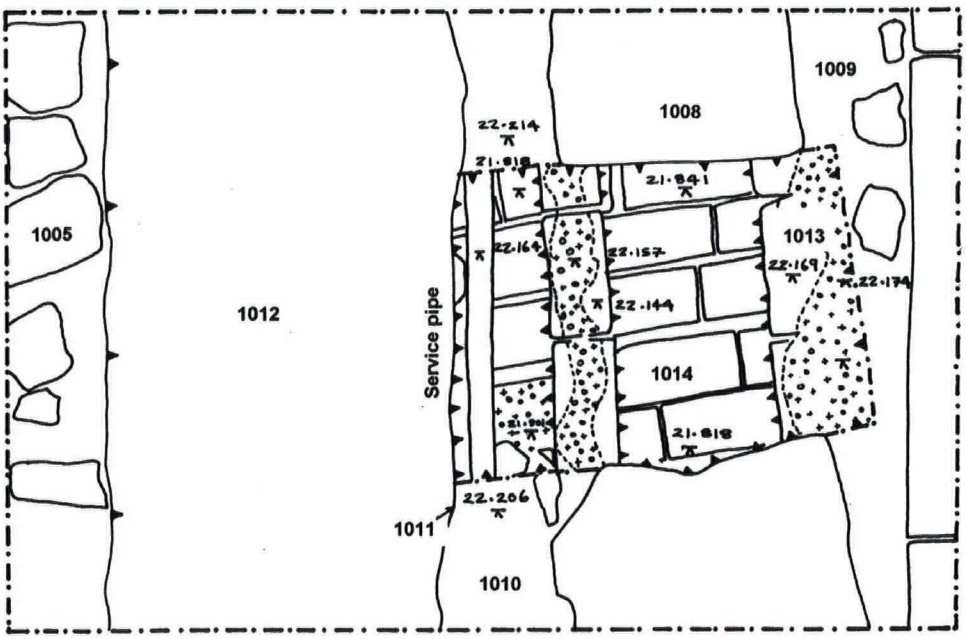
Trial Trench No.4 Internal elevation of culvert

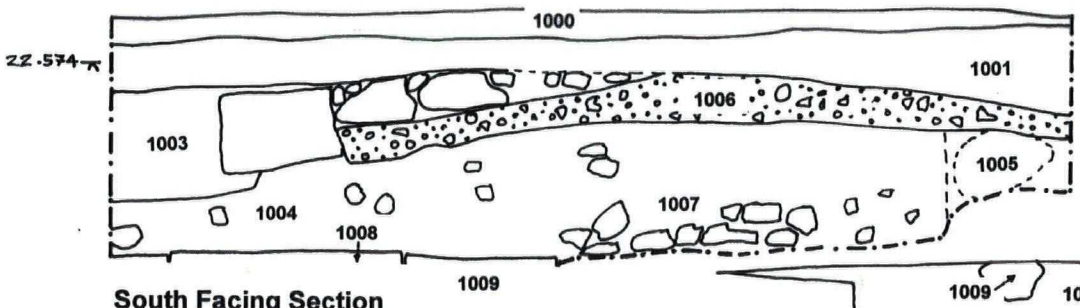
FIGURE 3 TRIAL TRENCH NO.3

Plan A

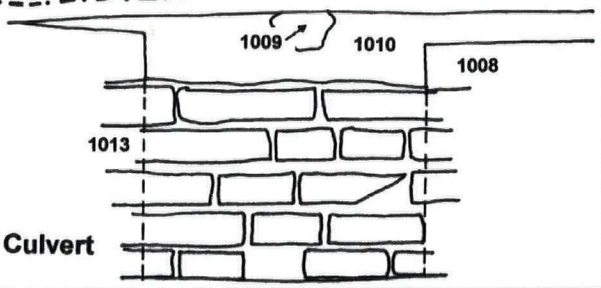


Plan B





South Facing Section



0 0.50 metres

All heights are given in metres AOD

East Facing Section of Culvert

Trial Trench No.4

Type:	Exploratory Excavation:hand
N.G.R:	440648 466309
Length:	2.0 metres
Width:	1.0 metre
Depth:	1.2 metres
Planform:	Rectangular
Aligned:	East South East
Area:	2.0 square metres
Context No's:	4000 - 4012
Plate No:	4, 6
Fig. No:	4 and Site Location Plan

The trial trench was excavated so as to ascertain the nature of the buried ground levels within the central southern section of the study area and is situated adjacent to the garden boundary wall of Rose Cottage. The trial trench was excavated into the highway and tarmac footway. The existing ground levels slope very gently downwards to the north north east.

The tarmac (context 4000) and sub-base (context 4001) of the existing footway were broken and loosened by a compressed air jackhammer and then removed.

Within the central and eastern extent of the trench the modern sub base was reduced directly down onto sand (context 4006), the secondary fill of the construction trench for the sewer. It was noted that this fill passed beneath the brick foundations (context 4005) of the adjacent garden wall, this would indicate that the installation of the sewer predates the construction of this wall. The fill contained a mixed assemblage of finds that included 19th century and Roman pottery. The fill appeared to have been displaced and was not confined by the construction trench for the sewer. The fill had been heavily disturbed by Rat burrowing.

Within the western extent of the trench the modern sub base was reduced onto a layer of heavily disturbed ground (context 4009) this layer of sandy loam had been cut and displaced during the installation of electric and water services. The layer contained 19th century and modern finds.

The primary fill of the construction trench for the sewer was identified as a sandy loam (context 4011), this fill was clearly contained by the cut of the sewer trench (context 4007) on it's western side, the western side of the cut passed beneath the foundations of the garden wall. The primary fill sealed the capping stones of the sewer culvert (context 4008).

The construction trench was aligned south and had been excavated into a layer sand (context 4012) that has been taken to be the natural sub soil, the surface of which was identified at 23.893 m ADO.

The sewer culvert had been constructed out of a well bedded and tightly jointed arrangement of clamp bricks that form the base of the structure and upon which the opposing brick sides had been constructed, these elevations were five courses in height and a single brick's width. The bricks were hand made, of a clamp type, in a soft pink orange fabric that contained a low quantity of inclusions. The brick size was unusual 0.23 m x 0.12m x 0.05 m, and are indicative of 18th century brickwork. The bricks were bedded on a soft, light grey, lime based mortar. The structure was capped with large slab-like fragments of roughly shaped Magnesian Limestone, the joints between which had been pointed with a hard, light grey mortar. The internal dimensions of the culverted sewer measures 0.31m wide x 0.35m deep.

The invert of the sewer was identified at 23.361m AOD.

Trial Trench No.5

Type:	Exploratory Excavation:hand
N.G.R:	440641 466272
Length:	2.0 metres
Width:	1.0 metre
Depth:	0.94 metres
Planform:	Rectangular
Aligned:	East
Area:	2.0 square metres
Context No's:	5000 - 5019
Plate No:	5, 7
Fig. No:	5 and Site Location Plan

The trial trench was excavated so as to ascertain the nature of the buried ground levels within the southern section of the study area and is situated adjacent to the garden boundary wall of Hall Farm. The trial trench was excavated into the highway and tarmac footway. The existing ground levels slope gently downwards to the north north west.

The tarmac (context 5000) and sub-base (context 5001) of the existing footway were broken and loosened by a compressed air jackhammer and then removed.

It was revealed that the upper levels within the trial trench had been heavily disturbed during the installation of modern electric and water services. The water pipe had been placed within a large trench (context 5012) that bisected the study area on a northern alignment, the installation of the electric cable (context 5010) had displaced the south and south eastern extent of the trench. Within the north western corner of the trench the water service track had been excavated into a layer of sand (context 5017) it is likely that this layer was the natural sub soil the surface of which was situated at 25.568m AOD. The surface of the sand was cleaned and a narrow slot like cut (context 5016) was identified, this feature had the appearance of a beam slot and was filled by a sandy loam (context 5015). This feature was not excavated as it was not threatened by the proposed works, however, it is suspected that it may be structural component of a Medieval or possible Roman building.

The single fill of the sewer culvert was identified within the eastern extent of the trench, this sand (context 5014) and it's construction trench (context 5012) had been cut by the installation of services and during the erection of a wrought iron boundary fence. This fill sealed the capping stones of the sewer culvert (context 5013).

The sewer culvert had been constructed out of a well bedded and tightly jointed arrangement of limestone sets that form the base of the structure and upon which the opposing brick sides had been constructed, these elevations were five courses in height and a single brick's width. The bricks were hand made, of a clamp type, in a soft pink orange fabric that contained a low quantity of inclusions. The brick size was unusual 0.23 m x 0.12m x 0.05 m, and are indicative of 18th century brickwork. The bricks were bedded on a soft, light grey, lime based mortar. The structure was capped with large slab-like fragments of roughly shaped Magnesian Limestone, the joints between which were pointed with a hard light grey coloured, lime based, mortar. The internal dimensions of the culverted sewer measures 0.33m wide x 0.34m deep.

The invert of the sewer was identified at 24.721 m AOD.

Trial Trench No.4, surface of culvert.

Trial Trench No.4, detail of surface.

PLATE 5

Trial Trench No.5, surface of culvert and modern services.

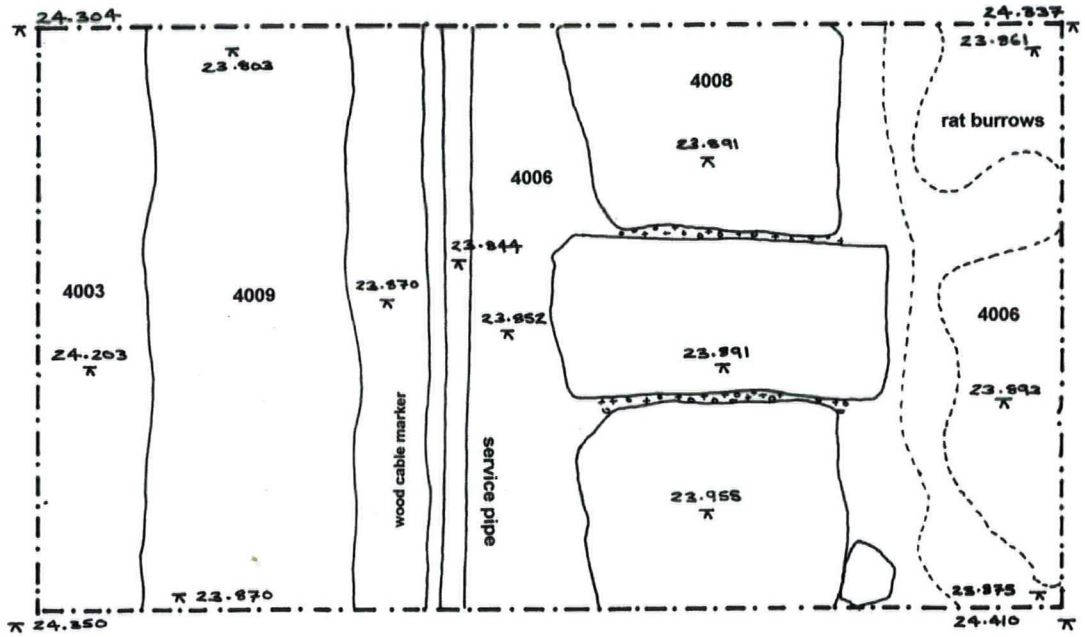
PLATE 7

Trial Trench No.5 Internal elevation of culvert

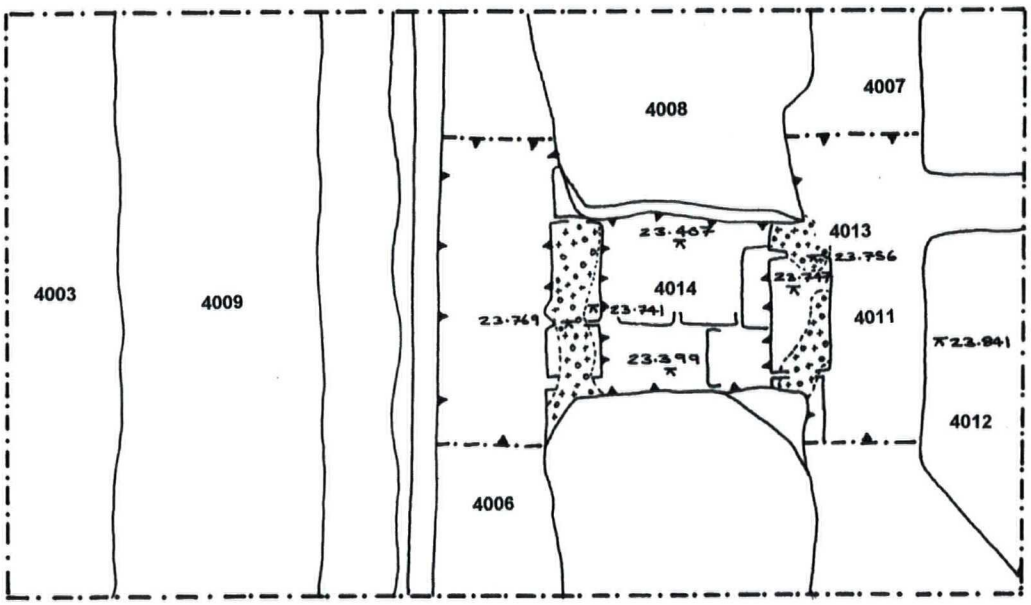
Trial Trench No.5 Detail of internal elevation of culvert

FIGURE4 **TRIAL TRENCH NO.4**

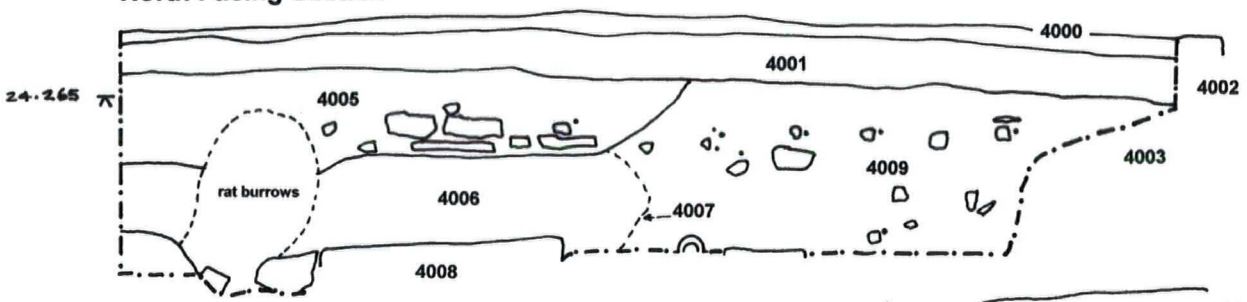
Plan A

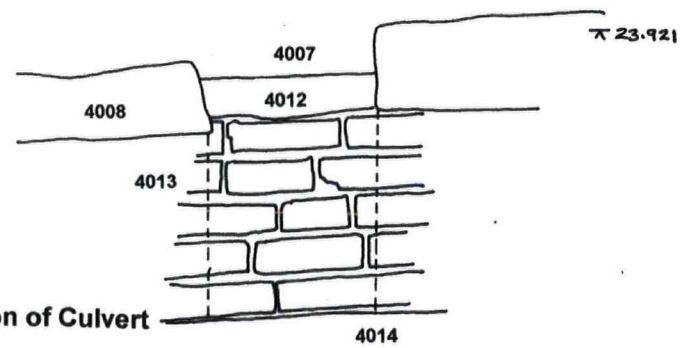


Plan B



North Facing Section



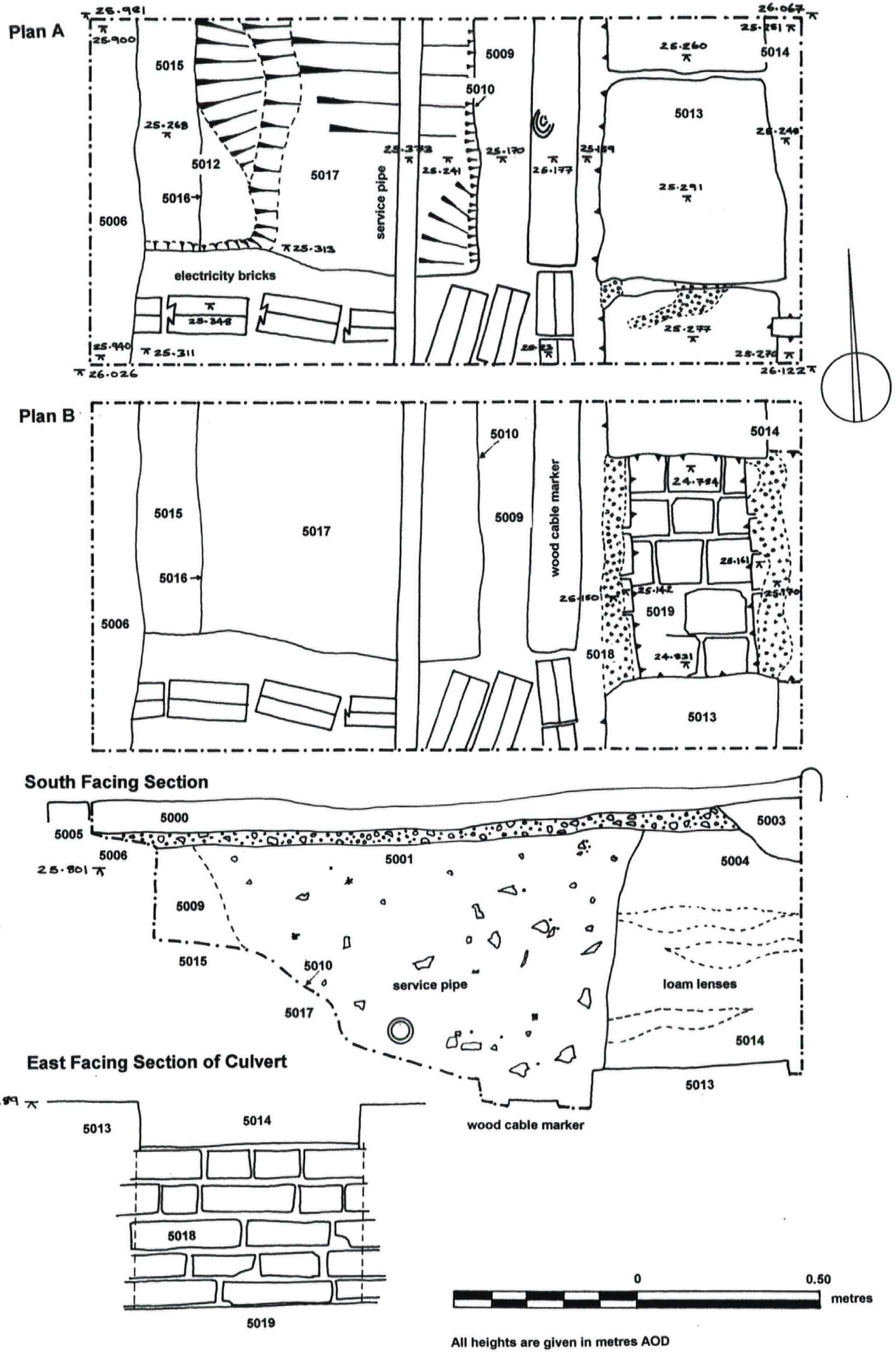


0 0.50 metres

All heights are given in metres AOD

East Facing Section of Culvert

FIGURE 5 **TRIAL TRENCH NO.5**



APPENDIX B

Watching Brief on Repair Hole Excavations

Repair Hole No.1

Type:	Excavation:hand
N.G.R:	440641 466283
Length:	1.10 metres
Width:	0.96 metre
Depth:	0.72 metres
Planform:	Rectangular
Aligned:	East
Area:	1.056 square metres
Context No's:	6000 - 6002
Plate No:	-
Fig. No:	-

The repair hole was excavated so as to consolidate a clayware connection to the culverted main. The excavation was located within the southern extent of the study area and is situated adjacent to the vehicular entrance to Castle House. The Repair Hole was excavated into the tarmac footway. The existing ground levels slope gently downwards to the north west.

The tarmac surface (context 6000) showed evidence of recent patching which suggested that the area had been recently excavated. The tarmac and sub-base (context 6001) of the existing footway were broken and loosened by a compressed air jackhammer and then removed.

It was confirmed that the site had been recently excavated and back filled, it would appear that these works were related to Yorkshire Water's emergency repairs. These excavations had heavily disturbed the stratigraphy and the sand fill (context 6002) of the earlier excavations was reduced down on to the surface of the culvert.

The sewer culvert had been constructed out of a well bedded and tightly jointed arrangement of limestone sets that form the base of the structure and upon which the opposing brick sides had been constructed, these elevations were five courses in height and a single brick's width. The bricks were hand made, of a clamp type, in a soft pink orange fabric that contained a low quantity of inclusions. The brick size was unusual 0.23 m x 0.12m x 0.05 m, and are indicative of 18th century brickwork. The bricks were bedded on a soft, light grey, lime based mortar. The structure was capped with large slab-like fragments of roughly shaped Magnesian Limestone, the joints between which were pointed with a hard light grey coloured, lime based, mortar. The internal dimensions of the culverted sewer measures 0.31m wide x 0.33m deep.

Repair Hole No.2

Type:	Excavation:hand
N.G.R:	440641 466280
Length:	1.0 metre
Width:	0.88 metre
Depth:	0.66 metres
Planform:	Rectangular
Aligned:	East
Area:	0.88 square metres
Context No's:	7000 - 7008
Plate No:	-
Fig. No:	-

The repair hole was excavated so as to consolidate a clayware connection to the culverted main. The excavation was located within the southern extent of the study area and is situated adjacent to the vehicular entrance to Hall Farm. The Repair Hole was excavated into the tarmac footway. The existing ground levels slope gently downwards to the north west.

The tarmac surface (context 7000) and sub-base (context 7001) of the existing footway were broken and loosened by a compressed air jackhammer and then removed.

A loamy sand fill (context 7004) was identified beneath the sub base, this context contained a high quantity of inclusions including brick and broken fragments of Magnesian Limestone together with modern and 19th century pottery, upon

excavation it was confirmed that this was a secondary fill overlying a primary sand fill (context 7005). The sand was directly surrounding the culvert (context 7006).

The sewer culvert had been constructed out of a well bedded and tightly jointed arrangement of limestone sets that form the base of the structure and upon which the opposing brick sides had been constructed, these elevations were five courses in height and a single brick's width. The clayware service connection had broken through the west facing elevation of the culvert, this had resulted in damaging and destabilising the brickwork. The bricks were hand made, of a clamp type, in a soft pink orange fabric that contained a low quantity of inclusions. The brick size was unusual 0.23 m x 0.12m x 0.05 m, and are indicative of 18th century brickwork. The bricks were bedded on a soft, light grey, lime based mortar. The structure was capped with large slab-like fragments of roughly shaped Magnesian Limestone, the joints between which were pointed with a hard, grey blue coloured mortar. This mortar differed from that noted elsewhere on the culvert and is indicative of the breaking into the culvert to repair a branch connection. The internal dimensions of the culverted sewer measures 0.29m wide x 0.33m deep.

Within the east facing elevation of the culvert a branch culvert (context 7008) was identified, this structure was of a similar size and form to the main, the branch was aligned west south west and appeared to pass beneath Back Lane towards the Old Court House. There was evidence to suggest that the junction between the two culverts had been previously repaired and stabilised with a hard, grey blue coloured mortar. At the time of inspection the invert of this branch culvert was dry and showed no indication of recent use.

Repair Hole No.3

Type:	Excavation:hand
N.G.R:	440643 466301
Length:	1.0 metre
Width:	0.90 metres
Depth:	0.60 metres
Planform:	Rectangular
Aligned:	East
Area:	0.90 square metres
Context No's:	8000 - 8004
Plate No:	-
Fig. No:	-

The repair hole was excavated so as to consolidate a clayware connection to the culverted main. The excavation was located within the central southern section of the study area and is situated adjacent to the north western corner of Castle House. The Repair Hole was excavated into the tarmac footway. The existing ground levels slope moderately downwards to the north west.

The tarmac surface (context 8000) and sub-base (context 8001) of the existing footway were broken and loosened by a compressed air jackhammer and then removed.

A loamy sand fill (context 8002) was identified beneath the sub base, this context contained a high quantity of inclusions including brick and broken fragments of Magnesian Limestone together with modern, 19th century and Roman pottery, upon excavation it was confirmed that this was a single fill surrounding the culvert (context 8003), this fill had been heavily disturbed during the installation of a water service pipe.

The sewer culvert had been constructed out of a well bedded and tightly jointed arrangement of limestone sets that form the base of the structure and upon which the opposing brick sides had been constructed, these elevations were five courses in height and a single brick's width. The clayware service connection had broken through the west facing elevation of the culvert, this had resulted in damaging and destabilising the brickwork. The bricks were hand made, of a clamp type, in a soft pink orange fabric that contained a low quantity of inclusions. The brick size was unusual 0.23 m x 0.12m x 0.05 m, and are indicative of 18th century brickwork. The bricks were bedded on a soft, light grey, lime based mortar. The structure was capped with large slab-like fragments of roughly shaped Magnesian Limestone, the joints between which were pointed with a hard, grey blue coloured mortar. This mortar was similar to that used on the repairs to the culvert identified within Repair Hole No.2. The internal dimensions of the culverted sewer measures 0.31m wide x 0.30m deep.

Repair Hole No.4

Type:	Excavation:hand
N.G.R:	440642 466284
Length:	1.80 metres
Width:	0.80 metres
Depth:	0.78 metres
Planform:	Sub-Rectangular
Aligned:	North
Area:	1.44 square metres
Context No's:	9000 - 9007
Plate No:	-
Fig. No:	-

The repair hole was excavated so as to consolidate a clayware connection to the culverted main. The excavation was located within the southern section of the study area and is situated adjacent to the south western corner of Castle House. The Repair Hole had been largely excavated by the Contractors presently engaged on alterations to the above property in order to install a new water service. The Repair Hole was excavated into the tarmac footway. The existing ground levels slope gently downwards to the north west.

The tarmac surface (context 9000), sub-base (context 9001) and loamy sand (context 9004) of had been excavated by the contractors prior to the arrival of the Harrogate Borough Councils Labour Crew.

The loamy sand fill surrounding the culvert (context 9005) had been heavily disturbed during the installation of a water service pipe.

The sewer culvert had been constructed out of a well bedded and tightly jointed arrangement of bricks that form the base of the structure and upon which the opposing brick sides had been constructed, these elevations were five courses in height and a single brick's width. Two clayware service connections had been broken through the west facing elevation of the culvert, this had resulted in damaging and destabilising the brickwork. The bricks were hand made, of a clamp type, in a soft pink orange fabric that contained a low quantity of inclusions. The brick size was unusual 0.23 m x 0.12m x 0.05 m, and are indicative of 18th century brickwork. The bricks were bedded on a soft, light grey, lime based mortar. The structure was capped with large slab-like fragments of roughly shaped Magnesian Limestone and Sandstone, the joints between which were earth filled. The internal dimensions of the culverted sewer measures 0.31m wide x 0.40m deep.

Within the west facing elevation of the culvert a branch culvert (context 9007) was identified, this structure was of a similar size and form to the main, the branch was aligned north east leading towards Castle House. At the time of inspection the invert of this branch culvert was dry and showed no indication of recent use.

Repair Hole No.5

Type:	Excavation:hand
N.G.R:	440656 466347
Length:	1.21 metres
Width:	0.86 metres
Depth:	0.60 metres
Planform:	Rectangular
Aligned:	West
Area:	1.04 square metres
Context No's:	10000 - 10005
Plate No:	-
Fig. No:	-

The repair hole was excavated so as to consolidate a clayware connection to the culverted main. The excavation was located within the central section of the study area and is situated adjacent to the garden wall of Green Lea. The Repair Hole was excavated into the tarmac footway. The existing ground levels slope gently downwards to the north west.

The tarmac surface (context 10000), sub-base (context 10001) of the existing footway were broken and loosened by a compressed air jackhammer and then removed.

A well compacted sand layer (context 10002) was identified beneath the sub base, the layer had the characteristics of decayed red-orange sandstone (a context that is frequently encountered throughout the village), it is possible that the sand

was deposited during the construction of the garden walls of Green Lea and Rose Cottage. Upon excavation the layer was found to be sealing the silty sand fill (context 10003) of the construction trench for the culvert, this fill contained a small quantity of 18th century pottery.

The sewer culvert (context 10004) was exposed beneath the above fill. The structure had been constructed out of a well bedded and tightly jointed arrangement of bricks that form the base of the structure and upon which the opposing brick sides had been constructed, these elevations were five courses in height and a single brick's width. A single clayware service connection had been broken through the west facing elevation of the culvert, this had resulted in damaging and destabilising the brickwork. The bricks were hand made, of a clamp type, in a soft pink orange fabric that contained a low quantity of inclusions. The brick size was unusual 0.23 m x 0.12m x 0.05 m, and are indicative of 18th century brickwork. The bricks were bedded on a soft, light grey, lime based mortar. The structure was capped with large slab-like fragments of roughly shaped Sandstone, the joints between which were pointed with a white grey coloured lime based mortar. The internal dimensions of the culverted sewer measures 0.28m wide x 0.35m deep.

Repair Hole No.6

Type:	Excavation:hand
N.G.R:	440659 466358
Length:	1.24 metres
Width:	0.88 metres
Depth:	0.48 metres
Planform:	Rectangular
Aligned:	West
Area:	1.09 square metres
Context No's:	11000 - 11005
Plate No:	-
Fig. No:	-

The repair hole was excavated so as to consolidate a connection to the culverted main. The excavation was located within the central section of the study area and is situated adjacent to the garden wall of Green Lea. The Repair Hole was excavated into the tarmac footway. The existing ground levels slope gently downwards to the north west.

The tarmac surface (context 11000), sub-base (context 11001) of the existing footway were broken and loosened by a compressed air jackhammer and then removed.

The loamy sand fill (context 11002) that surrounds sewer culvert was identified directly beneath the sub base, upon excavation it was revealed that the fill contained 19th and 18th century pottery. The fill had been heavily disturbed during the installation of a water service pipe.

The sewer culvert (context 11003) was constructed out of a well bedded and tightly jointed arrangement of bricks that form the base of the structure and upon which the opposing brick sides had been constructed, these elevations were five courses in height and a single brick's width. A single, minor culvert connection had been broken through the west facing elevation of the culvert, this had resulted in damaging and destabilising the brickwork. The bricks were hand made, of a clamp type, in a soft pink orange fabric that contained a low quantity of inclusions. The brick size was unusual 0.23 m x 0.12m x 0.05 m, and are indicative of 18th century brickwork. The bricks were bedded on a soft, light grey, lime based mortar. The structure was capped with large slab-like fragments of roughly shaped Sandstone, the joints between which were earth filled. The internal dimensions of the culverted sewer measures 0.26m wide x 0.34m deep.

Within the western extent of the excavation a branch surface water drain (context 11005) was noted, this structure was found to be emerging from beneath the shallow foundations of the red sandstone garden wall. The drain had been constructed from fired clay tiles that had been set edge to edge to form the invert and upon which further tiles had been arranged to form the opposing sides of the structure, the drain had been capped with sandstone slabs, the surface of which was level with that of the main culvert. At it's eastern extent the structure had been forced in to the main culvert, these works had dislodged the brickwork of same. The internal dimensions of this minor culvert measured 0.11m x 0.08m deep. At the time of inspection the drain was in disuse and partially blocked by root.

Repair Hole No.7

Type:	Excavation:hand
N.G.R:	440654 466341
Length:	1.14 metres
Width:	0.88 metres
Depth:	0.46 metres
Planform:	Rectangular
Aligned:	West
Area:	1.0 square metres
Context No's:	11000 - 11005
Plate No:	-
Fig. No:	-

The repair hole was excavated so as to consolidate a clayware connection to the culverted main. The excavation was located within the central section of the study area and is situated adjacent to the gravel driveway of Rose Cottage. The Repair Hole was excavated into the tarmac footway. The existing ground levels slope gently downwards to the north west.

The tarmac surface (context 12000), sub-base (context 12001) of the existing footway were broken and loosened by a compressed air jackhammer and then removed.

The loamy sand fill (context 12002) that surrounds sewer culvert was identified directly beneath the sub base, upon excavation it was revealed that the fill contained modern and 19th century pottery. The fill had been heavily disturbed during the installation of a water service pipe.

The sewer culvert (context 12003) was constructed out of a well bedded and tightly jointed arrangement of bricks that form the base of the structure and upon which the opposing brick sides had been constructed, these elevations were five courses in height and a single brick's width. A single, clayware drain connection had been broken through the west facing elevation of the culvert, this had resulted in damaging and destabilising the brickwork. The bricks were hand made, of a clamp type, in a soft pink orange fabric that contained a low quantity of inclusions. The brick size was unusual 0.23 m x 0.12m x 0.05 m, and are indicative of 18th century brickwork. The bricks were bedded on a soft, light grey, lime based mortar. The structure was capped with large slab-like fragments of roughly shaped Sandstone, the surface of which were partially obscured by a concretion of modern brick and cement, it would appear that this had been deposited in order to stabilise the culvert following the installation of the clayware connection. The internal dimensions of the culverted sewer measures 0.28m wide x 0.35m deep.

APPENDIX C

Watching Brief on Service Trench Excavations

Trench A

Type:	Excavation:hand
N.G.R:	440697 4663401
Length:	17.40 metres
Width:	0.88 metres
Depth:	1.05 metres
Planform:	Linear
Aligned:	North East
Area:	15.31 square metres
Context No's:	13000 - 13007
Plate No:	8
Fig. No:	Site Location Plan

The trench was excavated so as to renew the existing clayware sewer. The trench was located within the northern extent of the study area between manhole 7401 and Trial Trench No.1. The trench was excavated into the tarmac footway. The existing ground levels slope gently downwards to the north north east.

The tarmac surface (context 13000), sub-base (context 13001) of the existing footway were broken and loosened by a compressed air jackhammer and then removed. The sub-base increased in depth towards the south, this together with the increased quantity of pea gravel within this layer would indicate a buried gravel walkway.

The loamy sand fill (context 13004) that surrounds the sewer pipe was identified directly beneath the sub base, upon excavation it was revealed that the fill contained modern and 19th century pottery. The fill had been heavily disturbed by rat burrowing. The fill did not contain the inclusions of brick, Sandstone and Magnesian Limestone that have been associated elsewhere with the demolition of the 18th century culverted sewer, this may suggest that the culvert did not extend this far north on this particular alignment.

The remains of a former surface (context 13006) was identified within the central area of the west facing section of the trench at 19.993m AOD. This surface consisted of a linear arrangement of sandstone sets, these were bedded relatively level, rising gradually towards the south and were a single course in depth. The surface had been excavated during the installation of the existing sewer. The sets were irregular in shape and had not been faced or edged. Whilst it is acknowledged that these remains are consistent with the alignment and general location of the Roman service road it was noted that the surface was bedded on a layer of loamy silty sand (context 13007). This layer contained small fragments of brick together with Medieval and Post Medieval pottery, this would suggest a 17th century date of construction for the above surface.

Towards the northern extent of the trench the sewer was identified as a salt glazed clayware pipe this was replaced with a fired clay land drain.

Trench B

Type:	Excavation:hand
N.G.R:	440697 4663401
Length:	14.0 metres
Width:	0.73 metres
Depth:	1.05 metres
Planform:	Linear
Aligned:	North East
Area:	10.22 square metres
Context No's:	14000 - 14005
Plate No:	8
Fig. No:	Site Location Plan

The trench was excavated so as to renew the existing clayware sewer. The trench was located within the northern extent of the study area between Trial Trench No.1 and the road crossing Trench E. The trench was excavated into the tarmac footway. The existing ground levels slope gently downwards to the north north east.

PLATE 8

Service Trench A as excavated

C.C.T.V Unit

The tarmac surface (context 14000) and sub-base (context 14001) of the existing footway were broken and loosened by a compressed air jackhammer and then removed.

A loamy sand fill (context 14002) was identified surrounding the partially demolished remains of the brick sewer culvert (context 14003), the layer was situated directly beneath the sub base, upon excavation it was revealed that the fill contained modern ,19th century, Post Medieval, Medieval and Roman pottery. The pottery assemblage includes at least two interesting fragments of Samian Ware, one being decorated with a zooamorphic scene depicted includes the torso of a bounding lion, the second with a makers manufacture stamp on it's base with the text **S T A**

The remains of the sewer culvert was identified within the west facing section of the trench and these consisted of the eastern internal elevation of the brick culvert, up to five courses of brickwork survives within the southern extent of the trench. Towards the northern extent of the trench the invert of the brick culvert is situated at a comparable depth with the buried surface (context 13006) identified within Trench A, the two structures are bedded on the same loamy silty sand (context 14005 / 13007) The invert of this disused sewer was established at 19.993m AOD. This invert is situated approximately 0.28m above the invert of the existing sewer.

The existing sewer was identified as a 7" fired clay land drain.

Trench C

Type:	Excavation:hand
N.G.R:	440671 466375
Length:	7.60 metres
Width:	0.66 metres
Depth:	0.82 metres
Planform:	Linear
Aligned:	North East
Area:	5.01 square metres
Context No's:	15000 - 15007
Plate No:	-
Fig. No:	Site Location Plan

The trench was excavated so as to renew the existing clayware sewer. The trench was located within the centre north section of the study area between Trench E and Trench D. The trench was excavated into the tarmac surface of the existing footway and the grass verge. The existing ground levels slope gently downwards to the north.

The tarmac surface (context 15001) and sub-base (context 15002) of the existing footpath were broken and loosened by a compressed air jackhammer and then removed.

Within the central section of the trench a linear arrangement of sandstone blocks (context 15005) were identified beneath the sub-base. This structure was identified within the west facing section of the trench and was aligned north east and consisted of a roughly dressed, yellow, sandstone fragments arranged end to end, the size and form of which varied with the average size measuring 0.44m x 0.30m x 0.13m. The stonework was dry jointed and had the appearance of a buried kerbline. The structure was bedded level at 21.725 m AOD and was centred at NGR 440672 466376.

The structure was bedded on a layer of loamy sand (context 15007) that was identified within the west facing section of the trench. The layer was almost identical to the fill surrounding the existing sewer (context 15006) with the exception that the brick and sandstone inclusions were absent, this may indicate that the layer was deposited as the fill surrounding the brick culverted sewer.

A loamy sand fill (context 15006) was identified along the entire length of the trench and surrounded the existing clayware sewer pipe. The fill was situated directly beneath the sub base and butted the kerb like feature within the west facing section of the trench, upon excavation it was revealed that the fill contained modern ,19th century, Medieval and Roman pottery. The fill also contained a moderate to high quantity of broken brick fragments together with sandstone paving fragments these are consistent with the material generated from the demolition of the former culverted sewer.

The northern extent of the trench had been heavily disturbed associated with recent emergency works to repair a water main (for further details on these works see Appendix D)

The existing sewer was identified as a 150mm clayware pipe.

Trench D

Type:	Excavation:hand
N.G.R:	440663 466367
Length:	11 metres
Width:	0.68 metres
Depth:	0.80 metres
Planform:	Linear
Aligned:	North East
Area:	7.48 square metres
Context No's:	16000 - 16007
Plate No:	-
Fig. No:	Site Location Plan

The trench was excavated so as to renew the existing clayware sewer. The trench was located within the central section of the study area between Trench C and manhole 6302. The trench was excavated into the tarmac surface of the existing footway and the grass verge. The existing ground levels slope gently downwards to the north.

The tarmac surface (context 16001) and sub-base (context 16002) of the existing footpath were broken and loosened by a compressed air jackhammer and then removed.

A loamy sand fill (context 16005) was identified along the entire length of the trench and surrounded the existing clayware sewer pipe. The fill was situated directly beneath the sub base and contained modern ,19th century, Medieval and Roman pottery. The fill also contained a moderate to high quantity of broken brick fragments together with sandstone paving fragments these are consistent with the material generated from the demolition of the former culverted sewer.

The fill sealed a layer of loamy sand (context 16006) that was identified within the base of the trench, beneath the existing sewer pipe, the layer was similar to context 15007 within Trench C and would appear to be the fill of the earlier culverted sewer.

The stratigraphy within the southern extent of the trench had been heavily disturbed associated with the installation of four modern service pipes.

The existing sewer was identified as a 7" fired clay land drain.

Trench E

Type:	Excavation:hand
N.G.R:	440663 466367
Length:	9.50 metres
Width:	0.60 metres
Depth:	0.80 metres
Planform:	Linear
Aligned:	North East
Area:	5.7 square metres
Context No's:	17000 - 17003
Plate No:	-
Fig. No:	Site Location Plan

The trench was excavated so as to renew the existing clayware sewer. The trench was located within the centre north section of the study area between Trench C and Trench B. The trench was excavated into the tarmac surface of the existing service road. The existing ground levels slope gently downwards to the north.

The tarmac surface (context 17000) and sub-base (context 17001) of the service road were broken and loosened by a compressed air jackhammer and then removed

A loamy sand fill (context 17002) was identified along the entire length of the trench and surrounded the existing clayware sewer pipe. The fill was situated directly beneath the sub base and contained modern ,19th century, Medieval and Roman pottery together with an assemblage of Tesera (cubes of fired clay that were used by the Romans to construct a mosaic pavement / floor surface), the latter were concentrated within the centre north of the trench at NGR 440677 466380. The fill also contained a moderate to high quantity of broken brick fragments together with sandstone paving fragments these are consistent with the material generated from the demolition of the former culverted sewer. Unfortunately, the fill

had been heavily disturbed in recent years during the installation of services, the trench's for which had been back filled with concrete and by the excavation of two emergency repair holes on the line of the sewer.

The fill sealed a layer of loamy sand (context 17003) that was identified within the base of the trench, beneath the existing sewer pipe, the layer was similar to contexts 15007 and 14005 within Trench C/B and would appear to be the fill of the earlier culverted sewer.

The existing sewer was identified as a 7" fired clay land drain.

Trench F

Type:	Excavation:hand
N.G.R:	440656 466358
Length:	7 metres
Width:	0.56 metres
Depth:	0.75 metres
Planform:	Linear
Aligned:	North North East
Area:	3.92 square metres
Context No's:	18000 - 18003
Plate No:	-
Fig. No:	Site Location Plan

The trench was excavated so as to renew the existing clayware sewer and consolidate the connection between the pipe and the culvert. The trench was located within the centre section of the study area between manhole 6302 and Trial Trench No.3. The trench was excavated into the tarmac surface of the existing service road and footway. The existing ground levels slope gently downwards to the north north east.

The tarmac surface (context 18000) and sub-base (context 18001) of the service road and footpath were broken and loosened by a compressed air jackhammer and then removed.

A loamy sand fill (context 18002) was identified along the entire length of the trench and surrounded the existing clayware sewer pipe. The fill was situated directly beneath the sub base and contained modern ,19th century pottery. The fill also contained a moderate to high quantity of broken brick fragments together with sandstone paving fragments these are consistent with the material generated from the demolition of the former culverted sewer. The fill had been heavily disturbed in recent years during the installation of services.

The existing sewer was identified as a 7" fired clay land drain that had been situated inside the partially demolished culvert, in order to replace this section of pipe it was necessary to remove this small section of culvert. Unfortunately the ground directly beneath the invert of the culvert was heavily saturated with sewage and it was impossible to note the nature of the soil layers beneath this structure.

Trench G

Type:	Excavation:hand
N.G.R:	440657 466365
Length:	12 metres
Width:	0.58 metres
Depth:	0.60 metres
Planform:	Linear
Aligned:	North West
Area:	5.8 square metres
Context No's:	19000 - 19003
Plate No:	-
Fig. No:	Site Location Plan

The trench was excavated so as to renew the existing clayware sewer . The trench was located within the centre section of the study area between manholes 6302 and 6301. The trench was excavated into the tarmac surface of the existing service road. The existing ground levels slope gently downwards to the north east.

The tarmac surface (context 19000) and sub-base (context 19001) of the service road was broken and

loosened by a compressed air jackhammer and then removed.

A loamy sand fill (context 19002) was identified along the entire length of the trench and surrounded the existing clayware sewer pipe. The fill was situated directly beneath the sub base and contained modern ,19th century pottery.

The existing sewer was identified as a 7" fired clay land drain.

APPENDIX D

Watching Brief on Yorkshire Pipeline Services Emergency Repairs

Repair Hole A

Type:	Excavation:hand
N.G.R:	440677 466376
Length:	1.20 metres
Width:	0.80 metres
Depth:	1.20 metres
Planform:	Triangular
Aligned:	North East
Context No's:	20000 - 2000
Plate No:	-
Fig. No:	Site Location Plan

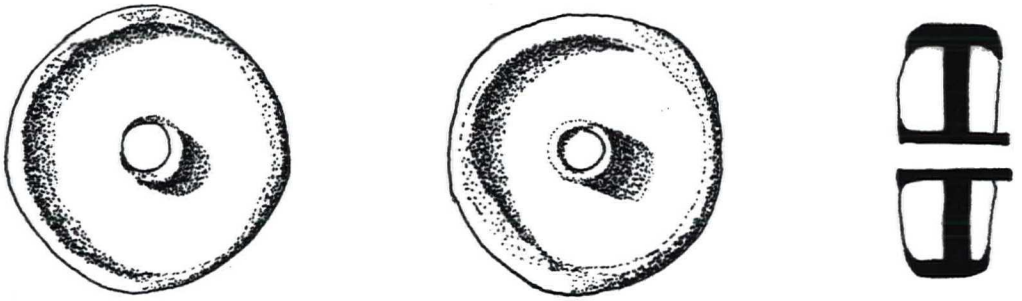
The repair hole was excavated on 4th July 1997 as emergency works by Yorkshire Pipeline Services in order to identify and repair a leaking water main. An archaeological watching brief was maintained by Linda Smith, North Yorkshire County Council. The excavation was located within the centre north section of the study area, adjacent and to the immediate north of Service Trench C. The Repair Hole was excavated into the tarmac footway. The existing ground levels slope gently downwards to the north east.

The tarmac surface (context 20000), sub-base (context 20001) of the existing footway were broken and loosened by a compressed air jackhammer and then removed.

The limestone / hard-core fill (context 20002) that surrounds the existing water main was excavated exposing the leaking section of pipe. Within the south east facing section of the excavation and situated directly beneath the concrete foundations for the existing vehicular kerbline a linear arrangements sandstone fragments (context 20003)). This structural feature consisted of roughly dressed fragments of red and yellow sandstone the size of each fragment measures approximately 0.38 x 0.24 x 0.18 m, these were bedded relatively level. The feature appears to be a former kerbline and is the east facing aspect of context 15005 identified within Trench C.

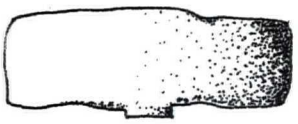
FIGURE 6 **ILLUSTRATION OF SELECTED FINDS**

Scale 1:1

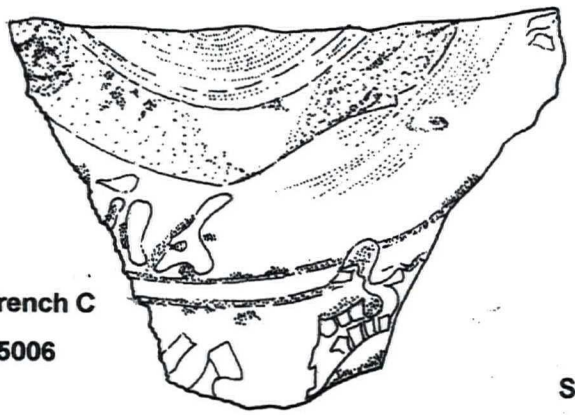


Bronze Caster

Trial Trench No.2 **context 3006**



Decorated Samian Ware

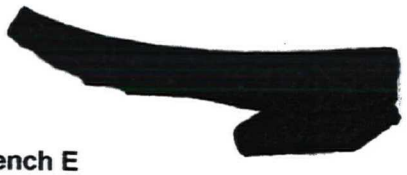


Service Trench C

context 15006

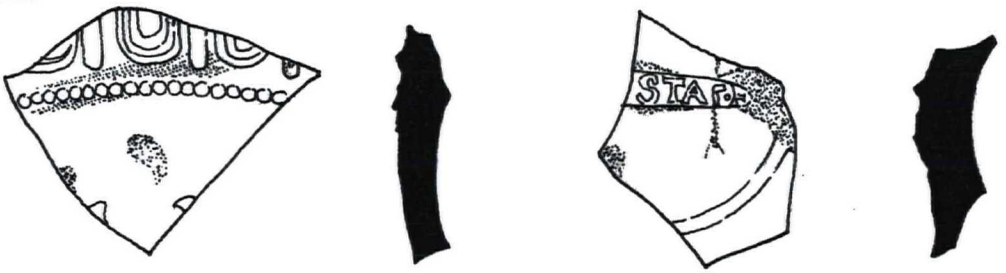
Service Trench B

context 14002



Service Trench E

context 17003



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