



**Package C136 – Farringdon Station
ADDENDUM TO WRITTEN SCHEME OF
INVESTIGATION: DETAILED EXCAVATION &
WATCHING BRIEF – EASTERN TICKET HALL (XTE12)**

Document Number: C136-SWN-T1-XAP-M123_WS098-00001

Document History:

Revision:	Date:	Prepared by:	Checked by:	Approved by:	Reason for Issue:
5.0	03-10-12	[REDACTED]	[REDACTED]	[REDACTED]	Updated to include Charterhouse Square grout shaft
		[REDACTED]	[REDACTED]	[REDACTED]	

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Document History continued:

Revision:	Date:	Prepared by:	Checked by:	Approved by:	Reason for Issue:
1.0	12-10-10	██████████	██████████	██████████	First Issue
2.0	05-07-11	██████████	██████████	██████████	Update to include grout shaft design
3.0	24-04-12	██████████	██████████	██████████	Update for final mitigation
4.0	15-05-12	██████████	██████████	██████████	Updated with clarifications to Table 1 and sections 4 to 6.

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1 Introduction

- 1.1.1 This document provides details of the scope, specification and programme of archaeological investigation required to mitigate the impact of construction works on archaeological deposits at Farringdon Station, Eastern Ticket Hall.
- 1.1.2 This document is an addendum to the Written Scheme of Investigation (C136-SWN-C2-JLT-M123-00001) and should be read in conjunction with that document.
- 1.1.3 This document sets out the requirements of the Principal Contractor (C435 – Bam Nuttal, Ferrovial Agroman, Kier) and the requirements of the C257 Archaeology Contractor – MoLA.

2 Scope of Works

2.1 Aims and objectives of the investigation

- 2.1.1 The aim of archaeological mitigation is to investigate and report on surviving archaeological deposits within the footprint of the Eastern Ticket Hall. In particular, medieval and early post-medieval remains which have been positively identified by recent archaeological evaluation fieldwork carried out by Crossrail (XSF10).
- 2.1.2 Mitigation will be achieved through a programme of archaeological investigation to be conducted by the C257 Archaeology Contractor in liaison with the C435 Principal Contractor.
- 2.1.3 In addition to the Eastern Ticket Hall, Crossrail works comprising the construction of compensation grout shafts located at the Moorgate Spur (beneath Smithfield's Market) and in the south-west corner of Charterhouse Square; and ground lowering in the basement of 33-37 Charterhouse Square will also require archaeological mitigation.
- 2.1.4 The overall objective of the archaeological investigation is to mitigate the impact of Crossrail construction through a programme of archaeological works carried out in accordance with the Crossrail Generic WSI (document number CR-PN-LWS-EN-SY-00001) and the standards listed therein.
- 2.1.5 A summary of the archaeological work carried out to date and the scope of further work is set out in Table 1 below:

Event Type	Event Code	Progress	Principal Contractor	C257 Report Reference
<i>Non-listed built heritage recording at structures within the Eastern Ticket Hall</i>	<i>XRS10</i>	<i>Complete</i>	<i>C136</i>	<i>C136-SWN-T1-RGN-M123-50002</i>
<i>General Watching Brief at slip trenches in Charterhouse Square in advance of utilities corridor</i>	<i>XSF10</i>	<i>Complete</i>	<i>JB Riney</i>	<i>C257 Weekly Progress Report 007 – week ending 06/11/10</i> <i>C257 Weekly Progress Report 008 – week ending 19/11/10</i>

General watching brief at structural test pits in basement of 33-37 Charterhouse Sq (4 test pits).	XSF10	Complete	C209	C257 Weekly Progress Report 013 – week ending 04/02/11- C257-MLA-X-RGN-CRG03-50002
Trial trench evaluation at the Eastern Ticket Hall (7 trenches).	XSF10	Complete	C430	C257-MLA-X-RGN-CRG02-50060
Targeted watching brief at the Charterhouse Square/RBS pit.	XSF10	Complete	C430	C257-MLA-X-RGN-CRG02-50073
General and targeted watching brief at utility diversions.	XSF10	Complete	C240 McNicholas	C257-MLA-X-RGN-CRG02-50117
General watching brief at test pit survey in footprint of Smithfields grout shafts (9 pits and 3 trenches).	XSF10	Complete	C430	Report in preparation.
Targeted watching brief at the Charterhouse Square grout shaft.	XTE12	Not started	C435	Report to be delivered upon completion of works.
Targeted watching brief at ground reduction at 10 Hayne Street.	XTE12	Not started	C435	Report to be delivered upon completion of works.
Detailed archaeological excavation at 8-9 Hayne Street.	XTE12	Not started	C435	Report to be delivered upon completion of works.
General watching brief at ground reduction at 20-23 Long Lane and 2 Lindsey Street.	XTE12	Not started	C435	Report to be delivered upon completion of works.
General watching brief at ground lowering at 33-37 Charterhouse Square.	XTE12	Not started	C435	Report to be delivered upon completion of works.
General watching brief at initial excavation of compensation Grout Shafts – 1, 2 and 3.	XTE12	Not started	C435	Report to be delivered upon completion of works.

Table 1 Summary of archaeological events at the Eastern Ticket Hall and grout shaft worksites

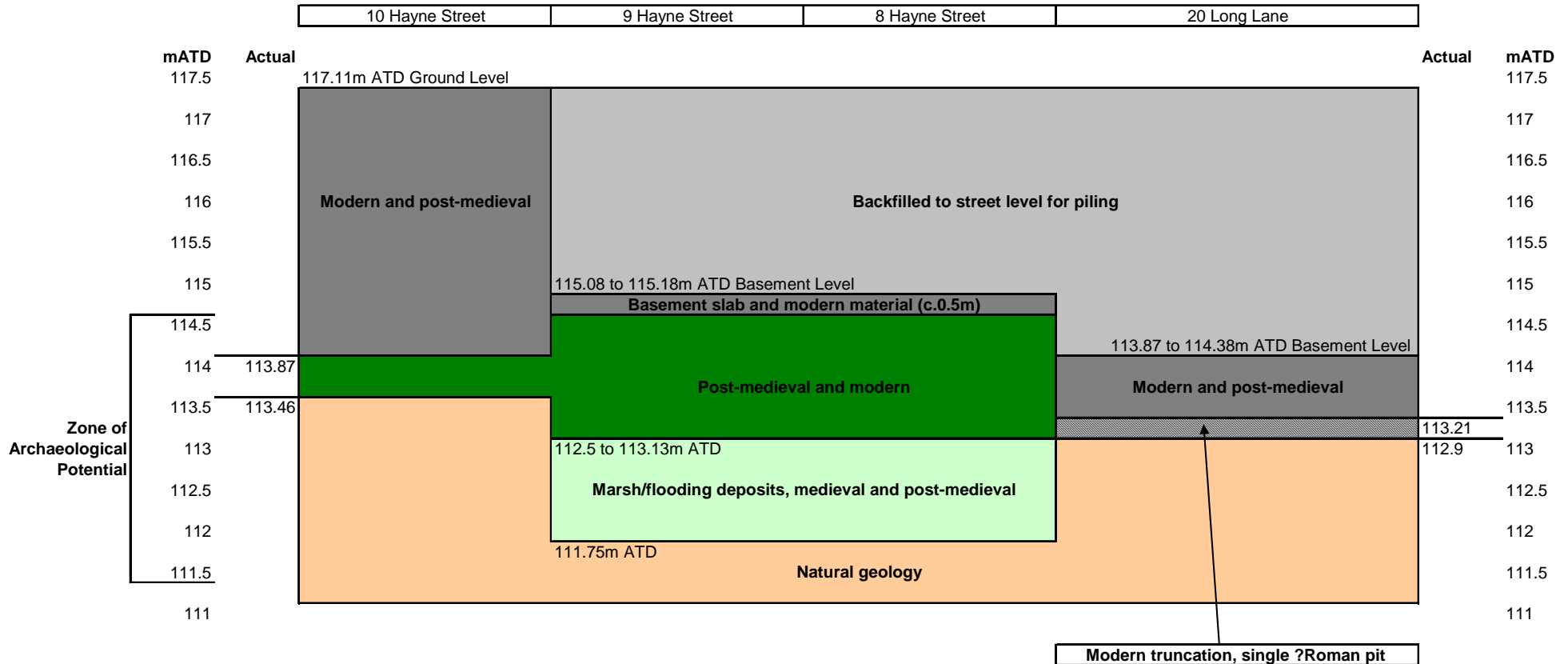
2.2 Summary of results from Trial Trench Evaluation

- 2.2.1 The trial trench evaluation at the Eastern Ticket Hall was completed in September 2011. Refer to C257 Fieldwork Report: C257-MLA-X-RGN-CRG02-50060.
- 2.2.2 Seven trial trenches were excavated in the footprint of the Eastern Ticket Hall, beneath the basements of former buildings at 2 Lindsey Street/20-23 Long Lane and 8-10 Hayne Street. Refer to drawing CRL1-XRL-DDA-CR088-00015 (Appendix A) for the location of trial trenches.
- 2.2.3 The ground level varied across the site according to the depths of the basements of former buildings. The southern half of the site was significantly truncated to about 114m ATD (street level is approximately 117.10m ATD), however, shallower basements at 8-9 Hayne Street resulted in truncation to only 115m ATD.
- 2.2.4 Roman archaeology was limited to residual pottery finds and a heavily truncated ditch in Trench 7.
- 2.2.5 Trenches 1, 2 and 3 contained deposits and associated artefacts dating to the medieval period probably representing the Faggesswell Brook, a former tributary of the river Fleet mentioned in Stow's Survey of London (1603).
- 2.2.6 Post-medieval remains dating from the 16th to the 20th centuries were identified across the site.
- 2.2.7 Although located adjacent to the railway retaining walls, archaeological deposits were identified in trench 1 at 113.87m ATD. These were partially truncated by construction of the retaining walls.
- 2.2.8 No human remains were encountered during the archaeological evaluation. The identification of a historically marshy area beneath 8-9 Hayne Street suggests that it is unlikely that the Outer Cemetery of Charterhouse (BG207) would extend into the Eastern Ticket Hall site.

Table 2 Trial trench evaluation - deposit depths

	Trench 1 (mATD)	Trench 2 (mATD)	Trench 3 (mATD)	Trench 4 (mATD)	Trench 5 (mATD)	Trench 6 (mATD)	Trench 7 (mATD)
Slab surface	117.11	115.08	115.18	113.91	113.87	113.96	114.38
Post-medieval deposits (surface)	113.87	114.58	114.58	113.61	112.37	112.76	112.88
Medieval deposits (surface)		112.5	113.13	Not present	Not present	Not present	Not present
Roman deposits (surface)	Not present	Not present	Not present	Not present	Not present	Not present	113.21?
Natural geology (surface)	113.87	111.75	113.17	112.9	113.22	113.15	113.87
Base of archaeology/trench	113.46	111.24	112.66	112.4	112.32	111.9	113.54

Figure 1 Archaeological sequence, facing east.



nb. The above diagram is intended to be a simplified visual reference of the archaeological sequence based on the levels from the trial trench evaluation. The diagram is not to scale and the locations of deposits are approximated.

2.2.9 Table 2 and figure 1 demonstrate that the potential for good survival of archaeological deposits dating to the medieval and post-medieval periods in the Eastern Ticket Hall is restricted to the area formally occupied by 8-9 Hayne Street. There is a moderate potential for medieval and post-medieval archaeology to survive at 10 Hayne Street beneath construction debris relating to the retaining walls, while 20-23 Long Lane retains a limited potential for occasional surviving deposits between extensive modern truncation.

2.2.10 The results of the general watching brief in the basement of 33-37 Charterhouse Square (table 3) demonstrates that most archaeological deposits at that location have been truncated, with the exception of Test Pit H5, which contained possible post-medieval pit fills cut into the natural gravel. Truncated terrace gravel was identified at surface elevations of between 0.35m and 1.26m below ground level. The archaeological potential of the Terrace Gravel deposits is considered to be very low.

Table 3 Depths recorded during watching brief at 33-37 Charterhouse Sq

Test Pit/Window Sample	Natural gravel (bgl)	Made ground (bgl)	Archaeology (bgl)	Truncation (bgl)	Slab thickness (mm)
H1	0.8	0.45	-	0.6	260
H2	1.26	0.2	-	0.76	200
H3	0.35	0.2	-	0.9	200
H4	0.6	0.2	-	0.6	200
H5	1.08	0.2	0.56 & 0.22	0.48	200
WS1	1	-	-	-	-
WS2	-	-	-	-	-

2.2.11 The Charterhouse Square grout shaft (Figure 2), located in the southwest corner of the square in an area of car-parking bays is located within the burial ground BG207 as indicated on English Heritage data, however, the precise location of the burial ground is probably limited to the gardens within Charterhouse Square. As such, the proximity of the grout shaft to the gardens means that there is a risk of encountering human remains. The model below (Figure 3) is extrapolated from borehole F30R and data from nearby archaeological watching briefs.

Figure 2 Location of the grout shaft and worksite

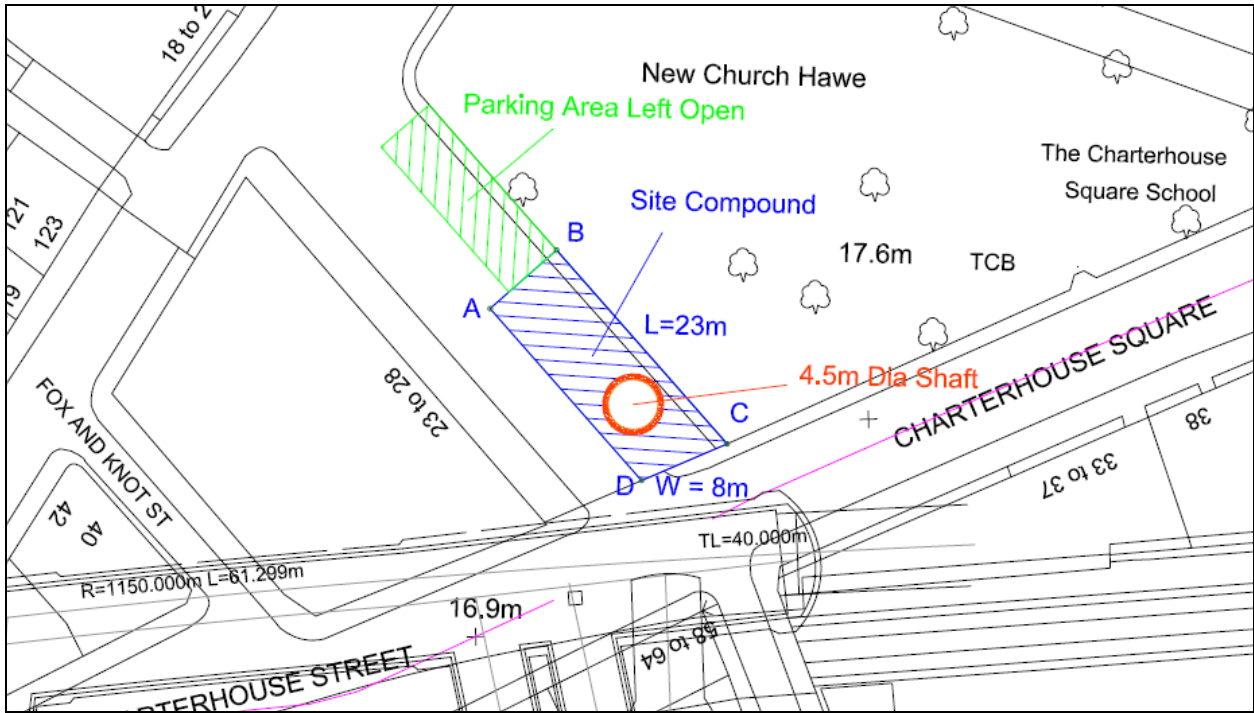
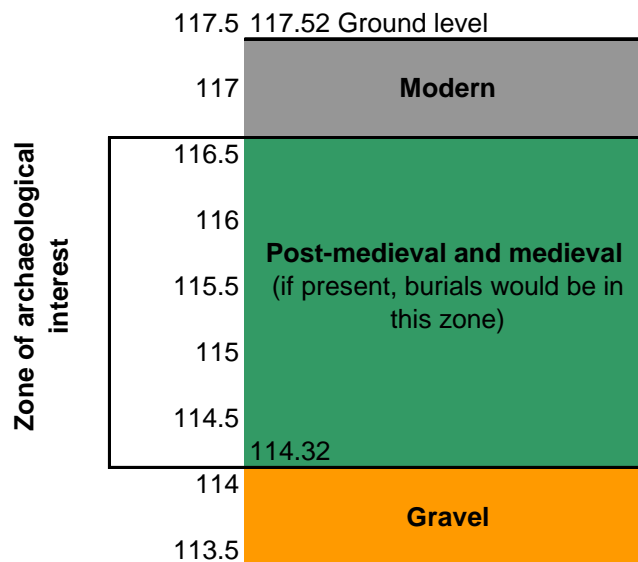


Figure 3 Estimated levels at the Charterhouse Square grout shaft



(NOTE: this indicative model is based on a single borehole (F30R) extrapolated data from nearby archaeological observations – it does not represent an accurate depiction of the below ground situation)

3 General requirements for the Principal Contractor (C435)

- 3.1.1 In addition to the Specific Requirements for the Principal Contractor set out in section 4 the Principal Contractor must provide and maintain the following attendances and facilities at all times (including additional working hours if necessary) for the duration of and in relation to the specialist archaeological works.
- 3.1.2 Identify all live underground services that exist in areas of excavation.
- 3.1.3 The Principal Contractor will carry out works adjacent to LU assets in accordance with relevant LU permissions and in liaison with the Crossrail team.
- 3.1.4 Use of excavators or other plant within the area and depths shown on drawing CRL1-XRL-U-DDA-CR088-00015 (Appendix A) shall only be undertaken with the agreement and under the observation of the C257 Archaeology Contractor.
- 3.1.5 Design and provide temporary works to support excavations for personnel access to the investigation by all operatives as required.
- 3.1.6 Provide appropriate plant and trained operatives to remove hand excavated spoil from the excavation area (e.g. a hoist, conveyor or other appropriate method) and ensure that all equipment is regularly inspected.
- 3.1.7 Provide drainage in excavations where required.
- 3.1.8 Provide the following services and facilities to the C257 Archaeology Contractor.
- Lighting (in deep excavations and if night working is required);
 - Small plant and tools for C435 use, as required to complete the works.
- 3.1.9 Provide further technical advice to the C257 Archaeology Contractor as maybe required to safely complete the works.
- 3.1.10 Manage safety and inter alia provide regular toolbox talks to all site staff including the C257 Archaeology Contractor.
- 3.1.11 Provide any traffic management measures that may be required for the works.
- 3.1.12 Manage the storage and removal of spoil from the site.
- 3.1.13 Provide the following site accommodation and welfare facilities for the use of archaeological operatives, inclusive of any hardstanding and services required:
- Changing and mess areas for male and female staff
 - Toilets for both male and female staff, with drying and washing facilities;
 - First Aid;
 - Temporary office space (single desk); and
 - Secure storage for tools and soil samples.

3.2 Procedure for the discovery of *in-situ* human remains

- 3.2.1 Should any *in situ* burials be discovered these will be archaeologically excavated by the C257 Archaeology Contractor.
- 3.2.2 Should a large quantity/area of *in situ* burials be discovered it is envisaged that mitigation will comprise detailed archaeological excavation by the C257 Archaeology Contractor. **Note: the evaluation works did not identify any in-situ burials in the Eastern Ticket Hall site, however the location of the Charterhouse Square grout shaft is an area of higher risk in terms of encountering human remains.**
- 3.2.3 The strategy for the archaeological sampling of burials will be determined by the Employers Archaeologist and communicated to the Principal Contractor.
- 3.2.4 Following the excavation of human remains by the C257 Archaeology Contractor, the Principal Contractor will facilitate the further excavation of archaeological deposits by the C257 Archaeology Contractor until the full sequence of deposits has been excavated in accordance with section 4.4 of this document and the Method Statement.
- 3.2.5 In the event of the discovery of human remains, the Principal Contractor will provide covering for the exposed area to prevent public observation of the works, these should be:
- large enough to allow safe working;
 - waterproof;
 - translucent (to provide sufficient light);
 - sufficient to prevent observation of the site from the upper floors of adjacent buildings; and
 - be of a type that can be quickly erected and removed to facilitate machine access when required.

4 Specific Requirements for Main Works Contractor (C435)

- 4.1.1 The Principal Contractor will be responsible for facilitating the following archaeological works at Farringdon Station:
- Targeted watching brief at the excavation of the Charterhouse Square grout shaft.
 - Targeted watching brief during main works ground reduction at 10 Hayne Street.
 - Detailed archaeological excavation at 8-9 Hayne Street.
 - General watching brief during main works ground reduction in the Eastern Ticket Hall at 2 Lindsey Street/20-23 Long Lane.
 - General watching brief at the initial excavation of compensation grout shafts 2, 3, and 4.
 - General watching brief at ground lowering in the basement of 33-37 Charterhouse Square.
- 4.1.2 Refer to section 3 for general attendances and facilities to be provided by the Principal Contractor to achieve the above objectives.
- 4.1.3 Refer to drawing CRL1-XRL-DDA-CR088-00015 (Appendix A) for the locations of the above archaeological activities.

4.2 Interfaces

- 4.2.1 The Principal Contractor will have the following additional interfaces for the specialist archaeological works:
- 4.2.2 C257 Archaeology Contractor: Museum of London Archaeology (MoLA)
Elaine Eastbury - Contract Manager
M: 07730 646063 | E: eeastbury@museumoflondon.org.uk
Nick Elsden - Assistant Contract Manager
M: 07872 127296 | E: nelsden@museumoflondon.org.uk
- 4.2.3 Employers Archaeologist: Crossrail Ltd
Jay Carver – Project Archaeologist
M: 07870 191705 | E: jaycarver@crossrail.co.uk
Mike Court – Assistant Project Archaeologist
M: 07745 428117 | E: mikecourt@crossrail.co.uk
- 4.2.4 The Principal Contractor will ensure that a clear communication mechanism is in place with the C257 Archaeology Contractor.

4.3 C435 Procedure for archaeological targeted watching brief

Eastern Ticket Hall (10 Hayne Street)

- 4.3.1 The Principal Contractor will, under archaeological observation, remove modern overburden in the area shown on drawing CRL1-XRL-DDA-CR088-00015 (Appendix A), which corresponds approximately with 10 Hayne Street, until the archaeological level is reached (to be advised by the attending C257 Archaeology Contractor but expected to be at approximately 113.94m ATD).
- 4.3.2 When the archaeological level is reached the Principal Contractor will facilitate archaeological deposits to be cleaned and hand-excavated by the C257 Archaeology Contractor. The base of archaeological deposits is expected to be at approximately 113.46m ATD.
- 4.3.3 The Principal Contractor will allow for 2 No. archaeologists to be on site during the targeted watching brief activity.

Charterhouse Square grout shaft

- 4.3.4 The Principal Contractor will, under archaeological observation, remove modern overburden within the footprint of the grout shaft until the archaeological level is reached (to be advised by the attending C257 Archaeology Contractor but expected to be at approximately 116.5m ATD).
- 4.3.5 When the archaeological level is reached the Principal Contractor will facilitate archaeological deposits to be cleaned and hand-excavated by the C257 Archaeology Contractor. The base of archaeological deposits is expected to be at approximately 114.32m ATD.
- 4.3.6 The Principal Contractor will allow for up to 4 No. archaeologists to be on site during the targeted watching brief activity.
- 4.3.7 If in-situ burials are identified the C257 archaeological excavation process will take considerably longer as the burials will be hand excavated. Please refer to section 3.2 for the Human Remains procedure.

4.4 C435 Procedure for archaeological excavation

- 4.4.1 The Principal Contractor will reduce the level of the area shown on drawing CRL1-XRL-DDA-CR088-00015 (Appendix A) to the former basement level (approximately 115.18 to 115.08m ATD) and break out the basement slabs at 8-9 Hayne Street. These activities can take place without archaeological observation.
- 4.4.2 The Principal Contractor will remove modern overburden and post-medieval deposits of low significance in spits of 200mm by machine using a flat bladed ditching bucket under archaeological supervision by the C257 Archaeology Contractor to the surface level of archaeological deposits - to be advised by the attending C257 Archaeology Contractor (the surface depth of archaeology varies within the excavation area, but will fall between 112.5m and 114.5mATD).
- 4.4.3 The Principal Contractor will facilitate the detailed excavation of archaeological deposits by the C257 Archaeology Contractor until the full sequence of deposits has been excavated in accordance with the method statement. Detailed excavation will

comprise hand excavation by the C257 Archaeology Contractor and possibly the use of a small machine with a graded ditching bucket (Principal Contractor under archaeological supervision). The base of archaeological deposits was observed at 111.24mATD in Trench 2 – Drawing CRL1-XRL-DDA-CR088-00015 (Appendix A).

- 4.4.4 The Principal Contractor will allow for up to 10 No. archaeologists to be on site during detailed excavation.
- 4.4.5 Upon completion of the archaeological excavation the C257 Archaeology Contractor will issue a signed completion form countersigned by the Employers Archaeologist to the Principal Contractor to allow C435 to continue work.

4.5 C435 Procedure for archaeological general watching brief

- 4.5.1 The Principal Contractor will allow the C257 Archaeology Contractor to rapidly record significant archaeological/historical/architectural deposits and features which may be encountered during ground reduction.
- 4.5.2 The Principal Contractor will allow for 2 archaeologists to be on site during each of the following activities:

Eastern Ticket Hall (2 Lindsey Street/20-23 Long Lane)

- 4.5.3 The general watching brief will be in place during ground lowering within the area shown on drawing CRL1-XRL-DDA-CR088-00015 (Appendix A) and will be required to approximately 112mATD.

33-37 Charterhouse Square

- 4.5.4 The general watching brief will be in place during ground lowering behind the existing retaining wall to 110.00m ATD.
- 4.5.5 Further excavation to form the lift pit, estimated to be up to 107.00m ATD, will not require archaeological mitigation as it is within the London Clay.

Compensation Grout Shafts 2; 3; and 4

- 4.5.6 General watching brief is required at the excavation of grout shafts 2, 3 and 4, at the approximate depths in Table 4.
- 4.5.7 No archaeological investigation is required at the ETH grout worksite; the Butcher's Ramp grout shaft; and the WTH grout shaft as they are located in areas where no archaeology survives - track level in the Eastern Ticket Hall, track level and the basement of Cardinal House.

Table 4 Archaeological general watching brief at the grout shaft locations

Grout shaft	Location	Potential deposits	Estimated general watching brief depths
ETH grout worksite	Eastern Ticket Hall (Lindsey Street worksite)	No archaeological investigation required	
1, 2 and 3	<i>Within the Moorgate Spur in disused rail tunnel beneath Smithfield's Market</i>	<i>Listed building elements / railway archaeology</i>	<i>108.50m (ground level) to 107.75m ATD</i>



Butcher's Ramp grout shaft	LU sidings	No archaeological investigation required
WTH grout shaft	Within the Western Ticket Hall (Cardinal House worksite)	No archaeological investigation required

5 Instructions to C257 Archaeological Contractor and Specification

5.1 Detailed excavation and general watching brief

- 5.1.1 A programme of archaeological investigation comprising detailed archaeological excavation, targeted and general watching brief will be carried out at the Farringdon Eastern Ticket Hall, the Moorgate Spur (in the basement of Smithfield's Market), Charterhouse Square grout shaft and in the basement of 33-37 Charterhouse Square.
- 5.1.2 Further details on the required standards for the Archaeological Contractor are to be found in the Site Specific WSI: C136-SWN-C2-JLT-M123-00001.
- 5.1.3 The C257 Archaeology Contractor will undertake discussions with the Ministry of Justice and obtain a burial license in a suitable time prior to the works and ensure that the license is kept updated.
- 5.1.4 The C257 Archaeology Contractor will provide a team of suitably qualified archaeologists, experienced in archaeological site investigation and the nature of archaeological deposits which are expected on this site. An osteologist shall also be provided if required.
- 5.1.5 The C257 Archaeology Contractor will shall provide a buildings archaeologist as required.
- 5.1.6 The C257 Archaeology Contractor will provide a Method Statement inclusive of risk assessment and safe method of working, prepared in liaison with the Principal Contractor and approved by Crossrail.
- 5.1.7 During detailed excavation and targeted watching brief, following the initial overall strip and clean, individual features are to be hand cleaned and defined by the C257 Archaeology Contractor, sufficient to determine type, plan form and relationships (e.g. for structures and rebuilds); and recorded. Sufficient archaeological features/structures are to be sample excavated either using a smaller machine with graded digging bucket (by the Principal Contractor under archaeological supervision) or hand dug if appropriate.
- 5.1.8 The C257 Archaeology Contractor will archaeologically excavate burials relating to the burial ground BG207, if they are encountered during the Targeted Watching Brief on the Charterhouse Square grout shaft.
- 5.1.9 The C257 Archaeology Contractor will develop a strategy for archaeological science in liaison with EH Regional Science advisor and the CoL archaeologist as appropriate. The strategy will be presented in the Method Statement and approved by the Employers Archaeologist.
- 5.1.10 The Archaeology Contractor will ensure that all site staff attend the Principal Contractor's site induction a suitable period of time prior to the start of site works.

5.2 Deliverables

5.2.1 The following fieldwork activities will be incorporated into a single fieldwork report upon the completion of the works:

- Targeted watching brief (Charterhouse Square Grout Shaft)
- Detailed archaeological excavation (beneath 8-9 Hayne Street).
- Targeted watching brief (ground reduction at 10 Hayne Street).
- General watching brief (ground reduction at 2 Lindsey Street/20-23 Long Lane).
- General watching brief (Compensation Grout Shafts 1, 2 and 3).

5.2.2 Due to the activity taking place considerably later in the construction programme the general watching brief at ground lowering at 33-37 Charterhouse Square will require a stand-alone fieldwork report.

5.2.3 Refer to the following sections of the Written Scheme of Investigation (C136-SWN-C2-JLT-M123-00001) for further information regarding the following report types:

- Weekly progress reports – WSI section 9.
- Fieldwork report – WSI section 8.6.

5.3 Site Archives

5.3.1 The site archive shall be organised to be compatible with other archaeological archives in London. Refer to section 8.2 in the Site Specific Written Scheme of Investigation, document reference number: C136-SWN-C2-JLT-M123-00001.

5.4 Post-excavation

5.4.1 Refer to the detail set out within the CRL/Crossrail Archaeological Contract and the Written Scheme of Investigation for Farringdon Station (C136-SWN-C2-JLT-M123-00001).

6 Provisional Timetable

Table 5 Provisional Timetable

Activity	Principal Contractor	Construction Phase	Duration
C257 to obtain Burial License and update as required.	C257	To be reviewed regularly through the works.	n/a
Charterhouse Square grout shaft excavation - Targeted watching brief.	C435	Q-4 2012	10 work days archaeology only
			If in-situ burials are present: 20 work days archaeology only
Ground reduction (10 Hayne Street). - Targeted watching brief.	C435	Q-4 2012	(Estimate 1 – 5 work days archaeology only TWB)
Detailed archaeological excavation (8-9 Hayne Street).	C435	Q-4 2012	20 work days archaeology only. Nb. Weekend working and shift working can be utilised to shorten this period.
Ground reduction (2 Lindsey Street/20-23 Long Lane). - General watching brief.	C435	Q-4 2012	10 Weeks (Estimate 5-10 days GWB)
Construction of grout shafts 1, 2 and 3. – General watching brief.	C435	Q-3 2012	11 Weeks (Estimate 5-10 days GWB)
Ground reduction in basement of 33-37 Charterhouse Square. - General watching brief.	C435	Q-1 2015	8 weeks (Estimate 5 days GWB)

nb. The above durations were extracted from the C435 programme available at the time of writing.



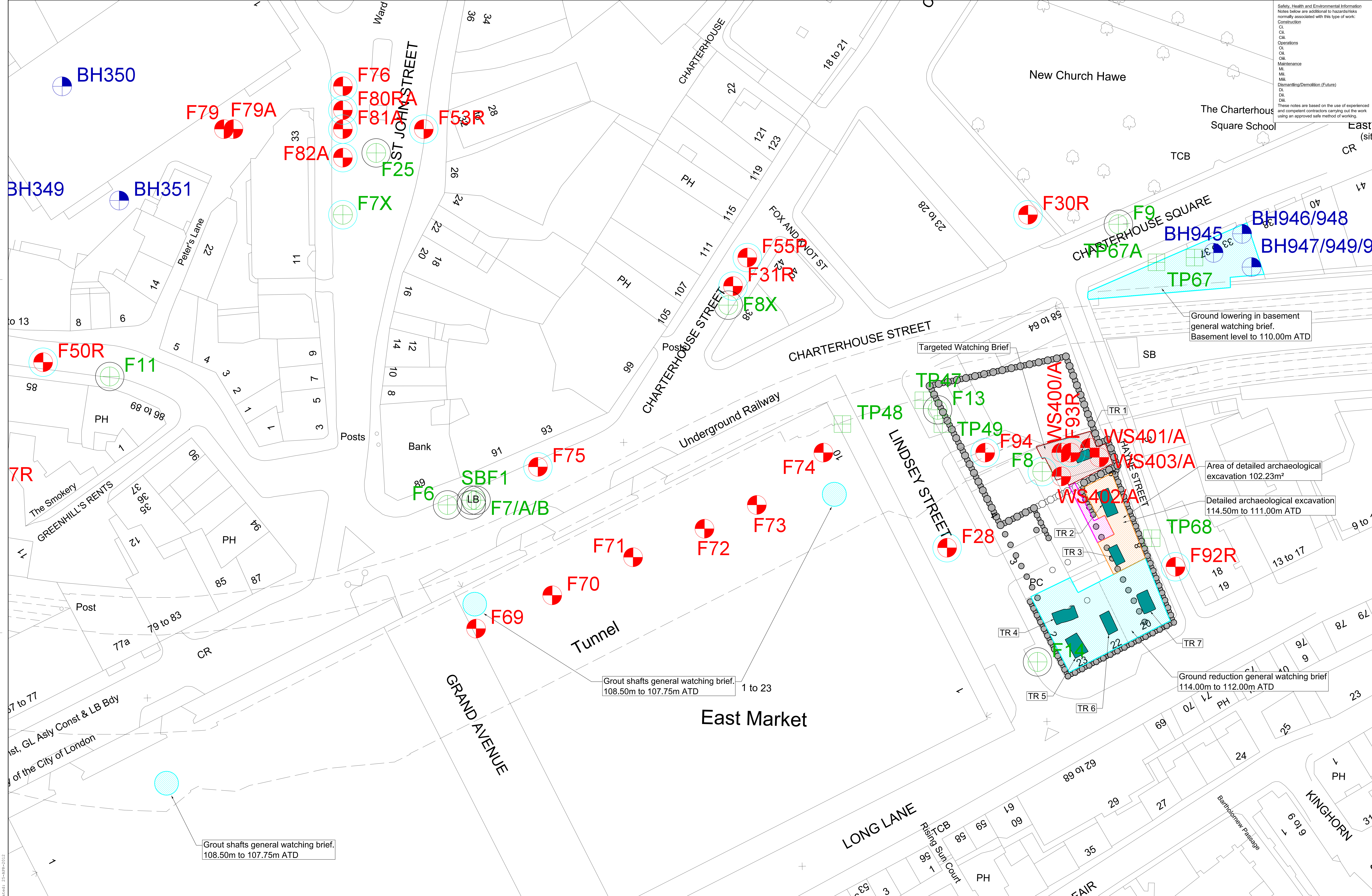
Appendix A – Archaeological Mapping Information

Drawing Number	Title
CRL1-XRL-DDA-CR088-00015	Farringdon Station Eastern Ticket Hall Archaeological Mitigation
C435-BFK-C-XSK-M123-50073	Charterhouse Square grout shaft and boundary fence location

Safety, Health and Environmental Information
 Notes below are additional to hazards/risks normally associated with this type of work:

- Construction
- CL
- CI
- CO
- Operations
- OL
- OH
- Maintenance
- ME
- MI
- MI
- MI
- MI
- Dismantling/Demolition (Future)
- DI
- DI
- DI

These notes are based on the use of experienced and competent contractors carrying out the work using an approved safe method of working.



Copy Approved for Issue - Comments: 201408-2012

Rev.	Date	Description	By	Chk	App	Auth
P01	29/02/2012	First Issue	MH	HC	-	-
P02	25/04/2012	Minor Note Change	MH	MC	-	-

Notes

- Confirmation of all survey data must be obtained from the Crossrail survey team.
- Coordinates to the London Survey Grid. All levels to Ordnance Datum Newlyn. See Crossrail standard CR-STD-010.
- All dimensions are in metres unless specified otherwise.

Key:	Description
	General watching brief
	Detailed archaeological excavation. Up to 3.5m thickness of archaeological deposits. Varies across the excavation area
	Evaluation Trenches 2011
	Approximate extent of disturbance from former lift shaft
	Targeted Watching Brief
	Crossrail pre 2000 trial pit
	Crossrail pre 2000 borehole
	Third party borehole
	Crossrail post 2000 borehole
	Boreholes with working piezo(s)
	Boreholes with damaged piezo(s)

Scale: 1:250 @ A0

Drawing and CAD File No.: CRL1-XRL-U-DDA-CR088-00015

Rev: P02

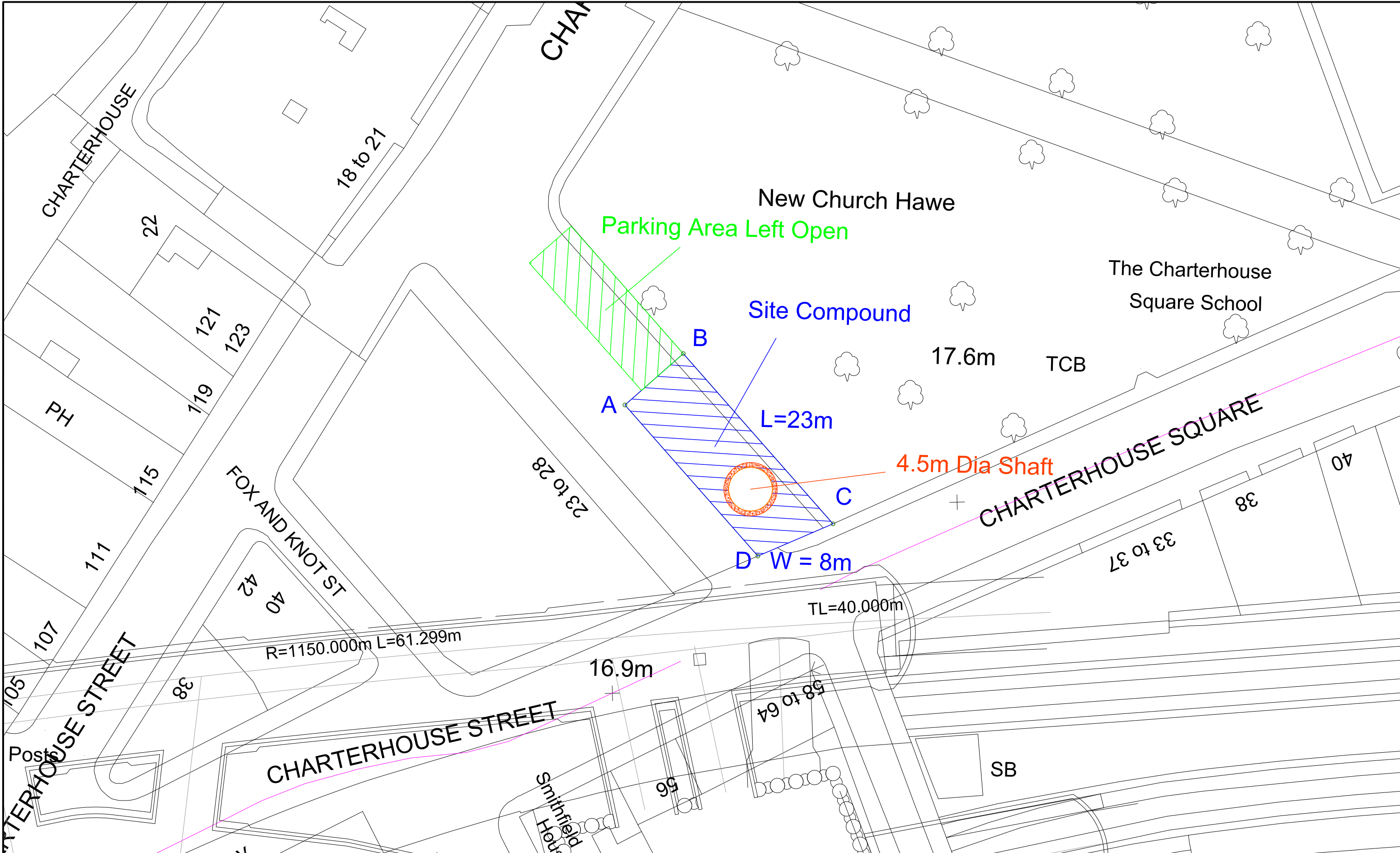
Subsity: S4

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Project: Crossrail Line 1 Programme
 Location: Crossrail Ltd
 Title: Farringdon to Liverpool Street
 Eastern Ticket Hall
 Archaeological Mitigation

Author: M.HOPPER
 Checker: M.CASEY
 Date: 25/04/12

RESTRICTED



Rev.	Date	Description	By	Chkd	App

Notes:

	Easting	Northing
Center of Grout Shaft	= 82292.474m	36585.476m
Site Boundary Corner A	= 82279.551m	36594.145m
Corner B	= 82285.558m	36599.427m
Corner C	= 82300.964m	36581.913m
Corner D	= 82293.228m	36578.595m

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Contract :	C435 FARRINGTON STATION	By :	SRM
Originator :	BFK BAM Ferrovial Kier	Chk :	SRM
Location :	CHARTERHOUSE SQUARE AREA	App :	
Title :	Charterhouse Square Grout Shaft and Boundary fence location	Rev :	01
Scale :	@ A3	Suitability :	
Drawing No :	C435-BFK-C-XSK-M123-50073		