

CLIENT	UK REAL ESTATE
CONTRACT TITLE	KINGS CROSS BRIDGE
CONTRACT NUMBER	LBU0147
OPERATING UNIT	S4 Construction & Development

METHOD STATEMENT

PHASED DEMOLITION OF 1-5 KINGS CROSS BRIDGE, ABOVE GROUND LEVEL WORKS.

Michael Monaghan

Project Manager

29/05/2017

Sean Cronin

Commercial Manager

30/5/2017

Bryan McNamee

Operational Manager

30/05/2017

AUTHOR	REVIEWER	APPROVER	ACCEPTED BY CLIENT (if applicable)
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Contents

1	Introduction – Scope of Works	4
2	Reference Documents.....	4
3	Pre-commencement Requirements.....	4
4	Resources – Materials, Plant and Labour	4
4.1	Materials	4
4.2	Plant.....	5
4.3	Personnel and Labour	5
5	Methodology.....	5
5.1	Enabling Works.....	4
5.2	Sequence.....	5
5.3	Potential Impact to Party Wall.....	5
6	Programme.....	6
7	Quality	6
8	Safety	6
8.1	Safety Records	6
8.2	PPE.....	7
8.3	Emergency Contact Details	7
8.4	First Aider & Fire Warden Details	7
9	Environmental.....	8
9.1	Environmental Records	8
9.2	Environmental Inspections & Audits	8
9.3	Plant / Material / Chemical Storage & Use	9
9.4	Noise & Vibration	9
9.5	Air Quality & Dust	9
9.6	Environmental Contact List.....	9
10	Appendices	10
10.1	Appendix A - Safety Risk Assessments	11
10.2	Appendix B - Inspection and Test Plan	17
10.3	Appendix C –Demolition Sequence	18
10.4	Appendix D –Temporary Works Design	26
10.5	Appendix E –Operatives Briefing Attendance Sheets	42

1 Introduction – Scope of Works

This method statement details the procedures required to enable the demolition of Disused Kings Cross Bridge, while still giving access to London Underground during demolition and construction of new building. This is so they can access East and West bound platforms of the Metropolitan Line. As works progress access to Disused Platform/West Bound will cease as this will be achieved from St Chads Place entrance. East bound needs to be maintained to enable access to signal box on East bound platform.

2 Reference Documents

Health and Safety at Work Act 1974

Manual Handling operations Regs. 1992

COSHH Regs. 2002

PUWER Regs. 1998

LOLER

CDM Regs. 2015

3 Pre-commencement Requirements

LU to approve the access sequence is acceptable.

Disconnection/termination of all services.

Waterproofing of Basement slab will be agreed, and acceptable removal of standing water agreed.

All operatives to be full site inducted.

All operatives to be briefed on the sequencing works.

All to understand the importance and needs of London Underground to have segregated access to stairs to be able to access and egress from basement.

4 Resources – Materials, Plant and Labour

4.1 Materials

- Hand tools.
- Hose pipes

- Plywood and timber.

4.2 Plant

- Hiab Lorry
- Petrol Saws
- Grinders
- Concrete breakers.
- Electric Breakers.
- Compressors.
- ETC

4.3 Personnel and Labour

- Demolition Contractors.
- J Murphy and Sons(management, engineers and general operatives)

5 Methodology

To enable access to be maintained for London Underground during the works of demolition and construction the sequence of works to follow are:

- Hoarding will be erected to agreed location with TfL to create site boundary.
- Demolition scaffold will be erected to outer perimeter of the building, leaving access to existing door to basement used by London Underground. *Refer to Appendix C for perimeter scaffold drawing.*
- Crash deck to underside of roof will be installed on the ground floor slab as shown in attached drawings. *Refer to Appendix C for temporary works drawings.*
- The building will be then demolished in a sequence, leaving the roof and wall areas to the existing access staircase in place. *Refer to Appendix B for demolition sequence drawings*
- The demolition will be done in an agreed sequence with the demolition contractor.
- They will saw cut areas of the roof slab. This will be done by installing packing timbers of crash deck.
- A pallet truck will be used to lift the cut slab and move towards the perimeter scaffold.
- A Hiab Crane will then lift the slab and place on back of it trailer.
- Where this is not possible the slab will be broken by using concrete breakers. This will then be cleared into rubble bags that are placed on pallets, so pallet truck can then lift and move towards the perimeter scaffold for again lifting with the Hiab.
- Steel work will be deal with buy cutting up into manageable pieces and again moved towards perimeter scaffold for lifting by Hiab.
- Walls and columns will be broken down and cleared once scaffold is adapted to create a safe working platform.
- Once demolition of the roof area and walls to the rest of the structure is down to ground floor slab level, the need to create a new access will begin.
- Firstly to be installed is a partition to the bottom and door to both the East and West platform levels.

- Once installed the crash deck between underside of ground floor slab and basement slab will begin. Making sure a safe access is provided to both platforms while the install of scaffold progresses.
- Once scaffold and protected walk way zone is formed under the crash deck the slab will be removed as per Ramboll sequence drawing. This area will have temporary lights fitted. These will have a battery backup system due to any possible power failure.
- Once the slab is removed, the new temporary staircase will be installed, and a protected enclosure made to protect London Underground staff accessing the basement area.
- Access will be terminated to westbound platform as the access to this platform will be from rear of Scala building.
- Demolition will then continue.
- This will be approached in a similar sequence to the removal of roof slab and walls.
- Walls and columns are to be cut down to an agreed level by structural engineer.
- All works will be done in a safe and controlled manner.
- This will be done in an operation of evenly taking the building down.
- No over loading of crash decks will be allowed. So as works progress, removal of demolition materials will progress.
- Once demolition is fully complete, and process of new build starts. The works will continue in sequence till the basement area is formed and building is made watertight.
- Once achieved the new partitions to basement erected. Access back to West bound platform will be given.
- If any of the sequences needs to change for any unknown reason works will stop and London Underground will be informed, and a new agreed approach to works will need to be approved.

This Methodology may change once an approved Demolition Contractor is given the contract.

New Method Statement will be issued with any new amendments then.

6 Programme

T.B.C

7 Quality

Please refer to the Quality Plan and Inspection and Test Plan.

8 Safety

8.1 Personal Protective Equipment (PPE)

Safety Records the following safety records will be maintained:

- Signing in sheets
- Site Induction
- Operatives Training/CSCS/CPCS cards
- Toolbox Talks
- PPE Issue Records
- Weekly portable plant inspections
- Weekly lifting equipment inspections

- Weekly Scaffold inspections
- Weekly Ladder Inspections
- Equipment Certification
- Method Statements and Risk Assessments including briefing records
- COSHH Assessments
- Permits to Dig
- Hot Works Permits
- Permit to load
- Permit to strike

8.2 Personal Protective Equipment (PPE)

The minimum PPE requirements for these works are as following:

Hard Hat to EN 397
 Hi-vis vest or Jacket to EN 471
 Steel toe-capped safety boots to EN 345
 Eye protection to EN 166
 Gloves to EN 388
 Masks to EN 149 FFP3

All PPE shall meet the requirements of the relevant legislation and shall be suitable for the task in hand

8.3 Emergency Contact Details

Emergency Services	999, or 112 (on mobile phones)
Local Police	2 Tolpuddle Street, London N1 0YY
Local Hospital	University College Hospital 235 Euston Road, London, NW1 2BU.
Local Doctor	999 (Ambulance Service)

8.4 First Aider and Fire Warden Details

First Aider	Michael Monaghan	07834 496176
Fire Warden	Michael Monaghan	07834 496176

9 Environmental

9.1 Environmental Records

- Environmental Management Plan (EMP) – Prior to commencing the works on site JMS will issue the client representative with an EMP for approval.
- Site Waste Management Plan - All waste will be properly segregated and disposed of in the appropriate bins or skips. The disposal of onsite material will go to a registered tip and the documentation required for complying with local bylaws and statutory requirements in line with the Environmental Protection Act (EPA) 1990 will be adhered to. Material ordering is to be kept to a minimum for what is required to ensure limited wastage. Materials to be correctly stored to again avoid damage therefore limiting waste.
- Licensing Records
- Waste Transfer Notes
- Environmental Toolbox Talks
- Site Inspections
 - COSHH Assessments
 - Petrol
 - Cement
 - Paint
 - Wood dust

9.2 Environmental Inspections and Audits

Environmental inspections will be made daily by the Site Manager/supervisors as they are supervising the works. Weekly yard checks will be made and documented for record purposes and kept in the site folders.

9.3 Plant / Material / Chemical Storage and Use

- All non-operated plant and any chemicals (e.g. petrol, diesel, plasticisers etc.) are to have drip trays placed underneath. Drip trays to be kept intact and free from water.
- All chemicals are to be locked in a COSHH store when not in use. COSHH sheets available in the site office.
- Chemical/material application/storage/use and guidelines are to be carried out to the COSHH assessments and data sheets.
- Do not allow any substances, i.e. cement, diesel, oil etc. to enter into watercourses. Notify any leaks from tanks, plant etc. If a problem occurs, report it to your foreman/supervisor immediately. Remove leaking containers from site as soon as possible.
- Diesel fuel storage tanks for onsite plant are to comply with the Control of Pollution (Oil Storage) Regulations 2001, using a tank that complies with either BS799 (steel tanks) or OFS T100 (plastic tanks).
- When re-fuelling, park away from any watercourse or drain. If re-fuelling by hand use a funnel or container with a spout to prevent spillage. Where possible, use drip trays under non-operated plant.
- Never leave a vehicle unattended whilst refuelling.
- Spill kits to be readily available to ensure spillages can be treated immediately.
- The specified PPE will be issued to operatives whilst they are working with chemicals or substances hazardous to health.
- Storage of Flammable liquids, or combustible materials are not to be stored in the buildings. They must be stored in suitable lockable containers, in designated area.

9.4 Noise and Vibration

Noise and vibration will be kept to a minimum as far as reasonably practicable. All plant and equipment will be operated and maintained in such a way as to reduce or eliminate noise and vibration nuisance.

9.5 Air Quality and Dust

Damping down will be used if necessary to control dust.

9.6 Environmental Contact List

Environment Agency Local Office	0845 9333111	0800 807060
Local Authority Environmental Health Officer	0800 807060	0800 807060
Environment Agency 24 hour Emergency Hotline	0800 80 70 60	0800 807060
Sewerage Undertaker	Thames Water	0800 145145
Water supplier	Thames Water	0800 145145
Gas supplier	National Grid	0800 111999
Electricity supplier	UK Power Networks	0800 3163105
Cable supplier	UK Power Networks	0800 3163105
Waste disposal contractor	J O'Doherty Haulage	020 8807 7722
Specialist Clean-Up Contractors	J Murphy & Sons Ltd	020 7267 4366

10 Appendices

10.1 Appendix A - Safety Risk Assessments

Risk Assessment 0001 – Specific Risks Assessment will done once approved contractor appointed.



RISK ASSESSMENT: Strip out, demolition, temporary propping & associated works.

PRINCIPLE CONTRACTOR: J Murphy & Sons Ltd								
POTENTIAL HAZARD	Persons at Risk	How may they be harmed	RISK ASSESSMENT			CONTROL MEASURES	Residual Risk	
			L	M	H			
Stability of structure before demolition								
Stability of structure during demolition	Site personnel	Struck by falling debris				Careful, controlled top, down, sectional demolition, carried out remotely, strictly adhering to Method Statement	L	
Stability of structure after demolition						Check the remaining structures after demolition to ensure that there are no signs of an damage or instability.	L	
Stability of adjacent structures before demolition								
Stability of adjacent structures during demolition	Occupant of adjacent property					Install temporary propping works as detailed in the method statement. Carefully separate the buildings prior to structural demolition. Careful, controlled top, down, sectional demolition, carried out remotely, strictly adhering to Method Statement	L	
Stability of adjacent structures after demolition						The installed temporary propping works will secure the stability of the adjacent structures until the permanent works have been completed by others.	L	
Uncontrolled Collapse	Site personnel	Struck by falling debris				Careful, controlled top, down, sectional demolition, carried out remotely, strictly adhering to Method Statement. Form exclusion zones around the demolition works.	L	
Pre-stressed concrete within structure				n / a				
Post-tensioned concrete within structure				n / a				
Facade Retention				n / a				
Reinforced concrete Frames				n / a				
Large precast Concrete Panels				n / a				
Live Services within the site.	Site personnel & persons near the site.	Electricity - electrocution. Gas - possible explosion.				The electricity & gas supplies WILL BE terminated by others. J Murphy & Sons have supplied termination certificates for the demolition works. We will be in possession of final termination certificates for the gas and electricity supplies prior to structural demolition works starting to any building. will carry out a Cat & Genny scan of the area prior to removing any floor slabs or foundations.	L	
Storage Vessels, Tanks, Chambers etc				n / a				



RISK ASSESSMENT: Strip out, demolition, temporary propping & associated works.

PRINCIPLE CONTRACTOR: J Murphy & Sons Ltd									
POTENTIAL HAZARD	Persons at Risk	How may they be harmed	RISK ASSESSMENT			CONTROL MEASURES	Residual Risk		
			L	M	H				
Confined Spaces	Site personnel	Possible noxious, toxic or explosive gases.	.			None anticipated, tool box talk to warn of danger	L		
Trip Hazards	Site personnel	Falls to ground			.	Debris to be cleared as demolition progresses	L		
						If possible any cables should be lifted off floors and hooked up to minimise any trip hazards.			
Asbestos	Site personnel & people near the site.	Exposure to harmful asbestos fibres			.	Asbestos present in will be removed as detailed in a method statement. Asbestos in other buildings have been removed by others & J Murphy & Sons will provide evidence that there is no asbestos present before works commence to those buildings.	L		
						Our operatives have asbestos awareness training.			
						If asbestos not in the asbestos survey is found or suspected during the demolition works, work in the affected area will be suspended and our site supervisor is to be informed immediately. Our site supervisor will then inform J Murphy site staff and the Contracts Manager, who will between them determine how to proceed.			
Fluorescent Tubes	Operatives involved in the works	Exposure to hazardous waste if the tubes are broken.	.			Fluorescent tubes will be carefully taken down intact & stored separately. They will be removed from site by a specialist disposal company.	L		
Dust	Site personnel & people near the site.	Breathing possibly harmful dust.	.			Damp down demolition and loading works. Site operatives to wear dust masks with P2 filters.	L		
Vibration	Owners of adjacent properties	Possible minor cosmetic building damage.	.			As far as possible demolition works will be carried out using munchers rather than hydraulic breakers to minimise the generation of any ground vibration.	L		
Hand - Arm Vibration	Operators of vibrating tools.	Long term "white finger"	.			As detailed in the Method Statement operatives using breakers and other vibrating plant are to alternate jobs and take breaks to prevent prolonged usage of such plant to prevent "white finger". Wear appropriate PPE as detailed in the Method Statement.	L		



RISK ASSESSMENT: Strip out, demolition, temporary propping & associated works.

PRINCIPLE CONTRACTOR: J Murphy & Sons Ltd									
POTENTIAL HAZARD	Persons at Risk	How may they be harmed	RISK ASSESSMENT			CONTROL MEASURES	Residual Risk		
			L	M	H				
Noise	Site personnel.	Possible hearing damage.		.		All plant fitted with silencers, obey site hours etc. Noise assessment details expected noise levels & the necessary actions to be taken. Wear appropriate PPE as detailed in the Method Statement.	L		
	Site personnel & people near the site.	Noise nuisance.		.					
Falls from Height	Site personnel	Possible major or fatal injuries.			.	Access to soft strip / asbestos removal areas not reachable from floor level will be using mobile scaffold towers erected & inspected by PASMA certificated personnel.	L		
						Scafftags will be placed on the mobile towers to confirm the last inspection date.			
						No leading edges are anticipated during these works.			
Falls through Holes	Site personnel	Possible major or fatal injuries.		.		Edge protection to be placed around any holes through slabs. No holes through slabs are anticipated for these works.	L		
Machine work at height	Site personnel & site visitors.	Possible major or fatal injuries.			.	During the main demolition works the site hoarding will be used as an exclusion zone. Warning signs will be placed on the outside of the hoarding. All machine demolition works will be supervised by a banksman.	L		
Manual Handling	Operatives carrying out manual lifting & carrying.	Possible musculo-skeletal disorders.			.	Operatives instructed in manual handling techniques	L		
						Wherever possible manual handling is to be minimised by the use of mechanical methods.			
						Mechanical Aids to be used wherever possible in place of manual handling.			



RISK ASSESSMENT: Strip out, demolition, temporary propping & associated works.

PRINCIPLE CONTRACTOR: J Murphy & Sons Ltd							
POTENTIAL HAZARD	Persons at Risk	How may they be harmed	RISK ASSESSMENT			CONTROL MEASURES	Residual Risk
			L	M	H		
Struck by falling debris	Site personnel	Possible major or fatal injuries.			·	Exclusion zones to be set up around machine/stripout work at height. Banksmen to supervise all machine work at height.	M
Falling debris close to the site boundaries	Persons outside but near the site boundaries	Struck by debris			·	The 1 storey sections of the buildings are far enough away from the site boundaries for it not to be necessary to provide any protection scaffolding. Yet scaffold to be installed.	L
						Where necessary watchmen will be provided if there is a risk of any debris falling close to the site boundaries.	L
Fire	Site personnel	Smoke inhalation or getting trapped by a fire.			·	Operatives are to familiarise themselves with the Fire Plan and adhere to it.	L
Working Alone	Site personnel	Any accident may not be noticed by others & the alarm may not be raised.			·	Not allowed	L
Cutting, Burning, Hot Works	Site personnel.	Causing a fire. Inhalation of fumes. Burnt by hot materials.			·	A hot work permit system will be operated by Demolition Contractor	L
						During gas burning or saw cutting works using an angle grinder/ disc cutter a suitable fire extinguisher will be provided by GLD.	
						Operatives hot cutting materials that may emit noxious fumes will wear suitable breathing masks. If necessary additional ventilation will be provided.	
						Operatives involved in hot works will wear suitable PPE as detailed in the method statement.	
Use of Hand Tools for Strip Out works.	Operatives using the tools	Injuries from using faulty or poorly maintained tools.			·	Ensure that the correct tool is used for the job.	L
						Maintain tools in a serviceable condition - where unserviceable either repair or replace the tool.	
						Check tools every day before use.	
						Control & protect tools with obvious risks - such as Stanley Knives & Chisels.	



RISK ASSESSMENT: Strip out, demolition, temporary propping & associated works.

PRINCIPLE CONTRACTOR: J Murphy & Sons Ltd												
POTENTIAL HAZARD	Persons at Risk	How may they be harmed	RISK ASSESSMENT			CONTROL MEASURES	Residual Risk					
			L	M	H							
Use of mobile scaffold towers & podium steps to access soft strip & asbestos removal works.	Site personnel	Falls from or collapses of incorrectly erected access equipment.				Mobile scaffold towers are to be erected & inspected by PASMA certificated operatives.						
						Scafftags will be placed on the mobile towers to confirm the last inspection date.						
Movement of vehicles & plant on Site	Site personnel	Struck by vehicles.				All plant and vehicle manoeuvring on site is to be supervised by a banksman.	L					
						Traffic routes will be agreed on site to minimise or eliminate the need for lorries to reverse whilst on site.						
Spillage of fuel during re-fuelling operations	Environment	Spillage of pollutant.				Procedure to be followed as detailed in the method statement. Fuel to be stored in a bunded tank and spill kits to be provided by GLD.	L					
<u>Loading plant on & off the transport</u>												
Machine tipping, sliding	Machine operator	Thrown from the machine.				Machine to be driven onto transport by certificated operator. Banksman to direct the loading operation.	L					
Accidental fall of accessories	Persons near the lorry	Struck by falling equipment				Loose accessories to be secured or removed before transport moves.	L					
Contact with overhead power line.	Machine operator	Electrocution				Machine to be loaded in unrestricted area. Foreman to assess & confirm on site hazard.	L					
Adverse ground conditions.	Machine operator	Thrown from the machine.				Foreman to confirm that the ground is adequate. Further site preparation to be undertaken if necessary.	L					
<u>Loading / Unloading of Skips & Bins.</u>												
Trapping / crushing injuries to operatives during loading.	Site personnel	Crushing injuries				Skip & bin loading operations are to be carried out in an exclusion zone where operatives are kept out during the operation.	L					
Slips trips & falls to operatives & lorry drivers.	Site personnel	Fall injuries				The exclusion zone / skip exchange area is to be kept free from obstructions.	L					



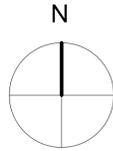
RISK ASSESSMENT: Strip out, demolition, temporary propping & associated works.

PRINCIPLE CONTRACTOR: J Murphy & Sons Ltd										
POTENTIAL HAZARD	Persons at Risk	How may they be harmed	RISK ASSESSMENT			CONTROL MEASURES	Residual Risk			
			L	M	H					
Operation of plant for demolition works.	Site personnel	Being struck or trapped by plant.			·	Demolition plant is to be operated by certificated plant operators. Demolition plant operations are to be supervised by a banksman. Exclusion zones are to be set up around machine demolition works using block & mesh fencing, to keep unauthorised personnel away from the works.	L			
Site Access/Egress	Persons crossing the site entrances.	Struck by vehicles entering.			·	Access will be via the gate off Pentonville Road . There is room to turn vehicles around within the site - therefore vehicles will drive into the site & drive out , both under the supervision of banksmen with vehicle marshalling training. All lorry movements into and out of the site will be controlled by traffic marshalls.	L			
Unauthorised Access	Non site personnel entering the site.	Accidents due to lack of knowledge of the site.			·	J Murphy and Sons will erect block & mesh fencing as necessary and timber site hoardings to ensure that the site is kept secure at all times. Post warning signs.	L			
COMPILED BY:		DATE								
REVIEWED BY:		DATE								

10.2 Appendix B - Inspection and Test Plan

Hold points to be added to ITPs, so works are accessed before proceeding.

10.3 Appendix C – Demolition Sequence



GENERAL NOTES

Drawing to be read in conjunction with all information by architects, structural engineer & service consultants.

The contractor is not to scale from this drawing. All written dimensions to be checked on site before work commences. Discrepancies, where identified, must be reported to the architect immediately.

This drawing is the property of Latitude Architects and Designers and must not be reproduced or disclosed to any unauthorised person either wholly or in part without written consent.

KEY:

- EXISTING BUILDING FABRIC TO BE REMOVED
- EXISTING COLUMNS & POCKETS IN EXISTING WALLS TO BE CUT DOWN. REFER TO STRUCTURAL ENGINEERS DRAWINGS FOR LEVELS.
- RETAINING WALLS TO BE CUT DOWN. REFER TO STRUCTURAL ENGINEERS DRAWINGS FOR LEVELS.

NOTE:

The information shown on this drawing indicates the scope of demolition, but not the method or sequence.

Building to be demolished in accordance with Ramboll Structural Engineer's method statements and construction sequence plan.

Refer to Ramboll Structural Engineer's specification C20.

Refer to Pure Structures for temporary works arrangements.

Existing building to be removed down to top of basement slab level and finished to waterproofing requirements. No damage to existing slab permitted.

Where columns are cut down, surrounding brick/concrete pier to be broken out fully a further 350mm below cut down top of column.

Basement floor slab to be retained subject to further investigations.

S.E. to advise on load bearing walls in basement.

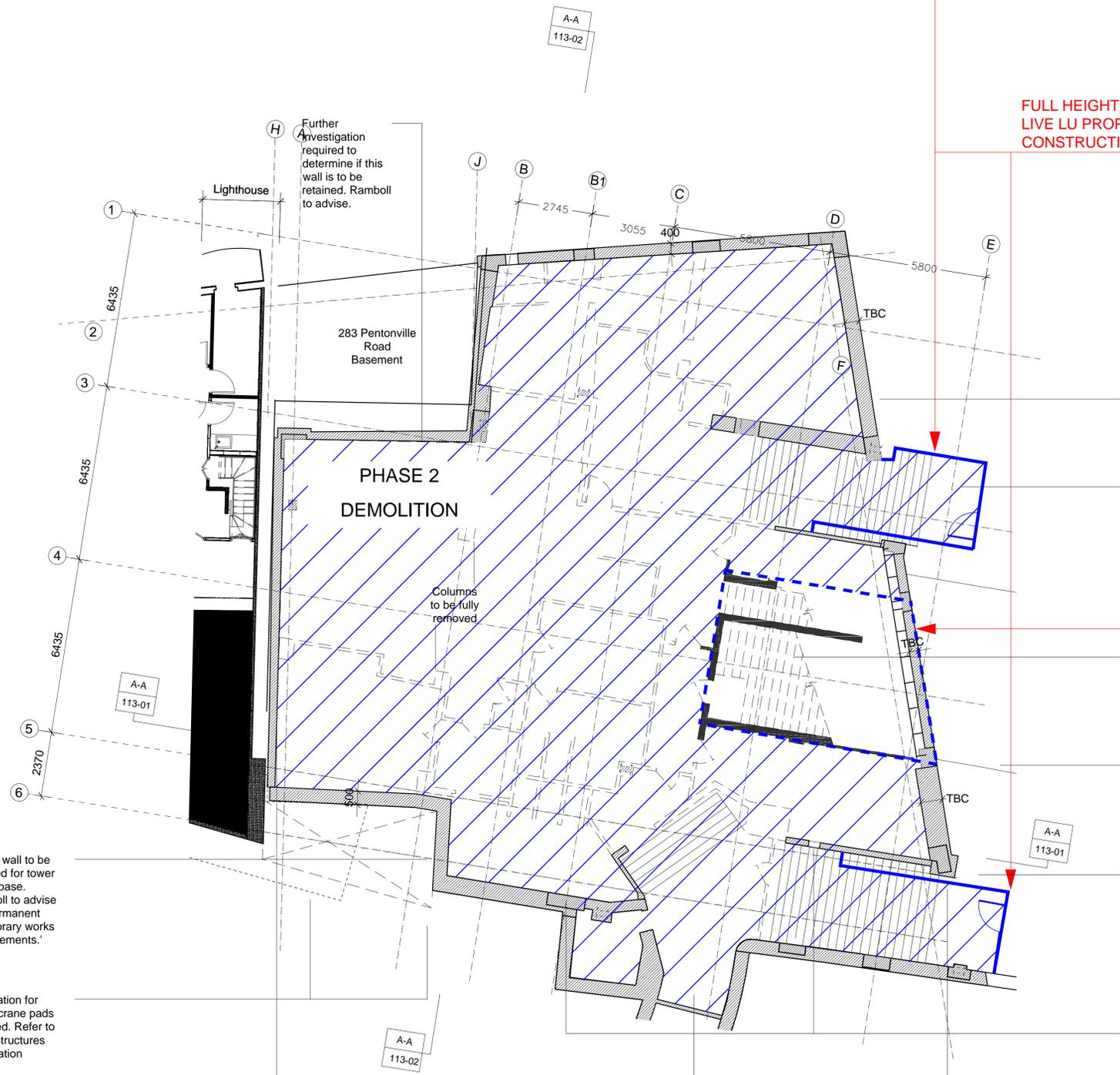
Condition of the basement to be reviewed post strip out.

Remove all services and sanitaryware and cap off in accordance with M & E specification.

FIRE PROTECTED SCREEN (2HOUR) TO BOTTOM OF STAIRCASE AND SIDE OF STAIRCASE WITH ACCESS CONTROL DOOR

FULL HEIGHT SCREEN WILL SEPARATE LIVE LU PROPERTY FROM FUTURE CONSTRUCTION SITE

STAIRCASE FROM STREET TO BE LEFT IN PLACE. AREA DETERMINED BY GRID STRUCTURE.



Further investigation to understand construction in this area.

TFL 24/7 Access stair to remain in use during the works.

Existing concrete stair to be demolished.

Track level below.

Hoarding installed prior to demolition by others to allow demolition of slab over tracks.

Existing columns to be corrosion protected to SE spec.

Top of wall to be reduced for tower crane base. Ramboll to advise on 'Permanent Temporary works arrangements.'

Excavation for tower crane pads required. Refer to Pure Structures information

Adjacent wall to Lighthouse to be demolished.

Indicative location of blocking up already done by LUL.

Column location TBC. Ramboll to advise.

LEGEND:

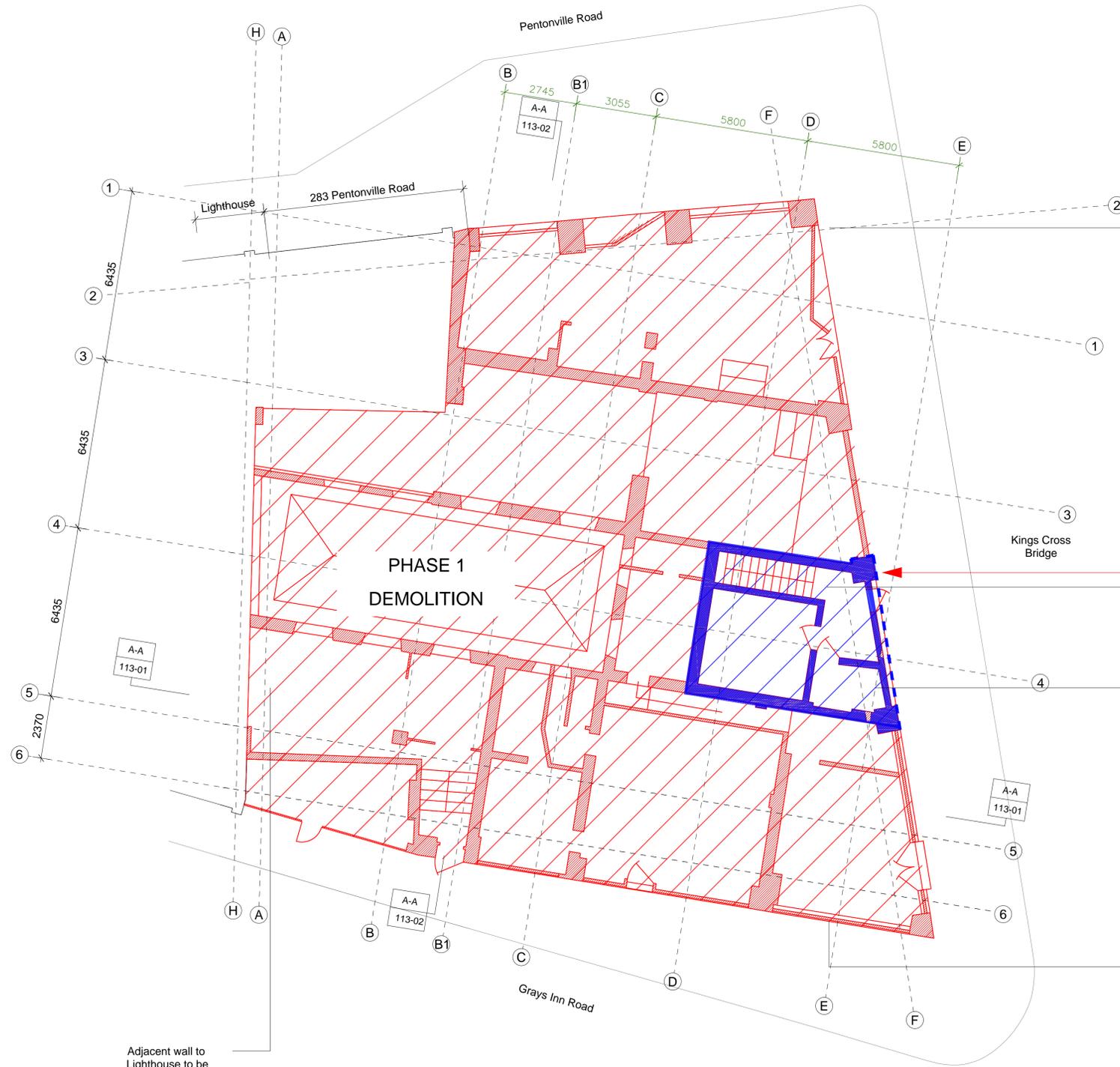
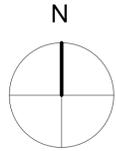
- PHASE 1 DEMOLITION AREA
- PHASE 2 DEMOLITION AREA

Issue	Chkd/Drawn	Date	Description
D	AG/AV	30.04.17	Stage 4 issue
C	AG/AV	20.02.17	Stage 3 issue
B	DOR/GT	21/12/14	Initial Tender
A	DOR	08/09/14	Preliminary issue

Status	Job No.	Drwg No.	Issue
TENDER	1209	111-01	D

Drawing DEMOLITION - BASEMENT PLAN 1:200@A3 1:100@A1

Project KINGS CROSS BRIDGE



All masonry at Ground Floor level to be demolished.

Existing concrete stair to be demolished

All existing services in this room to be stripped out and removed.

All shopfronts to be removed.

Adjacent wall to Lighthouse to be demolished

GENERAL NOTES

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 The contractor is not to scale from this drawing. All written dimensions to be checked on site before work commences. Discrepancies, where identified, must be reported to the architect immediately.
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KEY:

--- EXISTING BUILDING FABRIC TO BE REMOVED

NOTE:

The information shown on this drawing indicates the scope of demolition, but not the method or sequence.

Building to be demolished in accordance with Ramboll Structural Engineer's method statements and construction sequence plan.

Refer to Ramboll Structural Engineer's specification C20.

Remove all services and sanitaryware and cap off in accordance with M & E specification.

For works required to maintain TFL 24/7 access refer to Ramboll Structural Engineers sequence of temporary works drawings.

EXISTING CONCRETE STAIR TO BE DEMOLISHED -

ONLY WHEN NEW TEMPORARY STAIRCASE FROM STREET LEVEL IS IN PLACE

LEGEND:

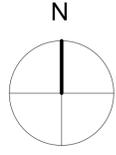
- PHASE 1 DEMOLITION AREA
- PHASE 2 DEMOLITION AREA

Issue	Chkd/Drawn	Date	Description
C	AG/AV	28/04/17	Stage 4 issue
B	AV/BM	10/02/17	Stage 3 Tender Issue
A	DOR/GT	21/01/15	Initial Tender

Status	Job No.	Drwg No.	Issue
TENDER	1209	111-02	C

Drawing 1:200@A3 1:100@A1
DEMOLITION - GROUND FLOOR PLAN

Project
KINGS CROSS BRIDGE



GENERAL NOTES

Drawing to be read in conjunction with all information by architects, structural engineer & service consultants.

The contractor is not to scale from this drawing. All written dimensions to be checked on site before work commences. Discrepancies, where identified, must be reported to the architect immediately.

This drawing is the property of Latitude Architects and Designers and must not be reproduced or disclosed to any unauthorised person either wholly or in part without written consent.

KEY:

--- EXISTING BUILDING FABRIC TO BE REMOVED

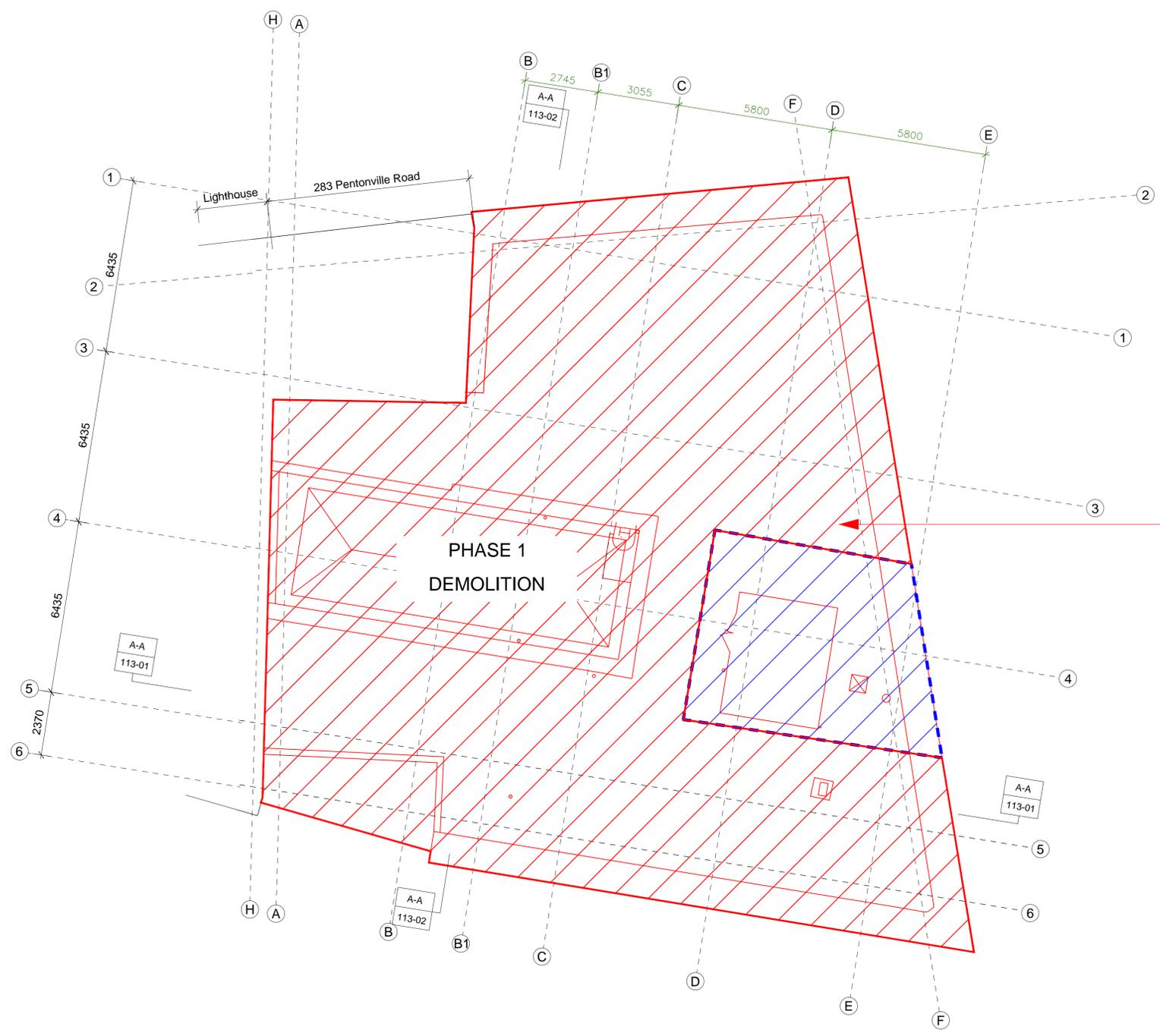
NOTE:

The information shown on this drawing indicates the scope of demolition, but not the method or sequence.

Building to be demolished in accordance with Ramboll Structural Engineer's method statements and construction sequence plan.

Refer to Ramboll Structural Engineer's specification C20.

Remove all services and sanitaryware and cap off in accordance with M & E specification.



APPROX AREA OF ROOF ABOVE STAIRCASE TO REMAIN IN PLACE UNTIL NEW TEMPORARY STAIRCASE FROM STREET LEVEL IS IN PLACE.

AREA DETERMINED BY EXISTING GRID STRUCTURE.

LEGEND:

PHASE 1 DEMOLITION AREA

PHASE 2 DEMOLITION AREA

Issue	Chkd/Drawn	Date	Description
C	AG/AV	28/04/17	Stage 4 Issue
B	AV/BM	10/02/17	Stage 3 Tender Issue
A	DOR/GT	xx/01/15	Preliminary Issue

Status	Job No.	Drwg No.	Issue
TENDER	1209	111-03	C

Drawing DEMOLITION - ROOF PLAN
 1:200@A3 1:100@A1

Project
 KINGS CROSS BRIDGE

GENERAL NOTES

Drawing to be read in conjunction with all information by architects, structural engineer & service consultants.

The contractor is not to scale from this drawing. All written dimensions to be checked on site before work commences. Discrepancies, where identified, must be reported to the architect immediately.

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KEY:

--- EXISTING BUILDING FABRIC TO BE REMOVED

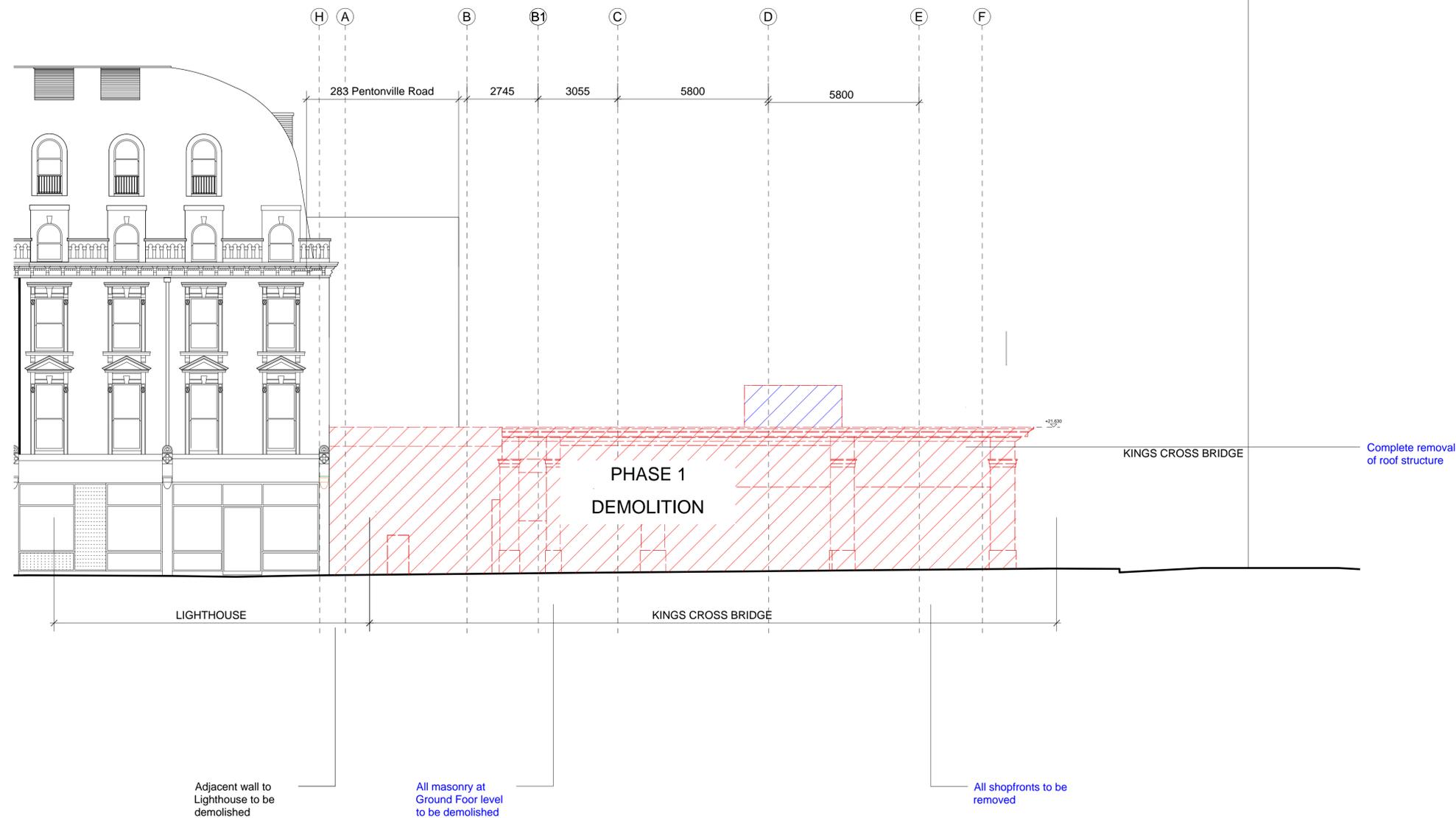
NOTE:

The information shown on this drawing indicates the scope of demolition, but not the method or sequence.

Building to be demolished in accordance with Ramboll Structural Engineer's method statements and construction sequence plan.

Refer to Ramboll Structural Engineer's specification C20.

Remove all services and sanitaryware and cap off in accordance with M & E specification.



LEGEND:

PHASE 1 DEMOLITION AREA

PHASE 2 DEMOLITION AREA

Issue	Chkd/Drawn	Date	Description
C	AG/AV	28/04/17	Stage 4 Issue
B	AV/BM	10/02/17	Stage 3 Tender Issue
A	DOR/GT	xx/01/15	Preliminary Issue

Status	Job No.	Drwg No.	Issue
TENDER	1209	112-01	C

Drawing 1:200@A3 1:100@A1
DEMOLITION - GRAYS INN ROAD ELEVATION

Project
KINGS CROSS BRIDGE

GENERAL NOTES

Drawing to be read in conjunction with all information by architects, structural engineer & service consultants.

The contractor is not to scale from this drawing. All written dimensions to be checked on site before work commences. Discrepancies, where identified, must be reported to the architect immediately.

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KEY:

--- EXISTING BUILDING FABRIC TO BE REMOVED

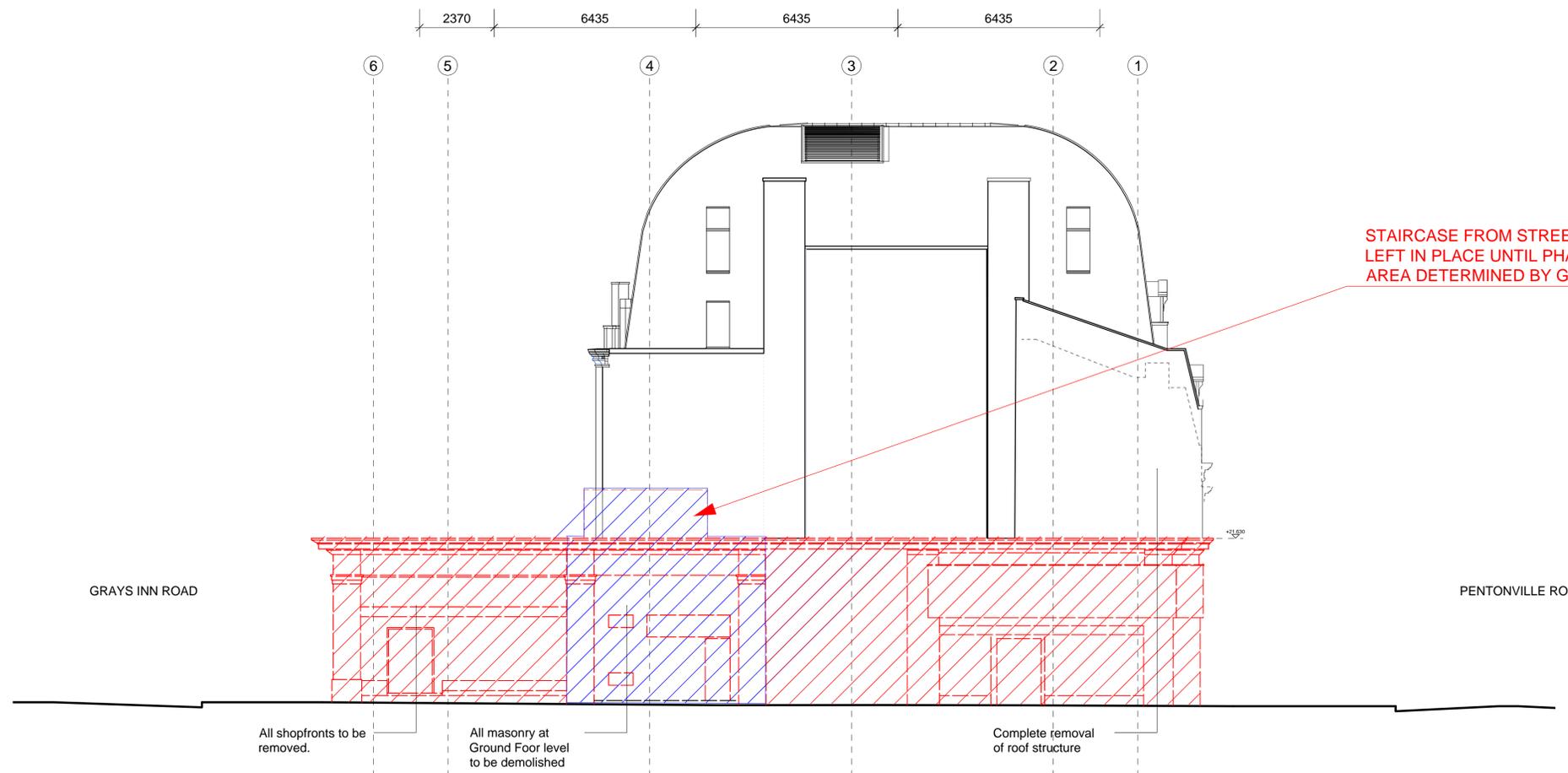
NOTE:

The information shown on this drawing indicates the scope of demolition, but not the method or sequence.

Building to be demolished in accordance with Ramboll Structural Engineer's method statements and construction sequence plan.

Refer to Ramboll Structural Engineer's specification C20.

Remove all services and sanitaryware and cap off in accordance with M & E specification.



LEGEND:

PHASE 1 DEMOLITION AREA

PHASE 2 DEMOLITION AREA

Issue	Chkd/Drawn	Date	Description
C	AG/AV	28/04/17	Stage 4 Issue
B	AV/BM	10/02/17	Stage 3 Tender Issue
A	DOR/GT	21/01/15	Initial Tender

Status	Job No.	Drwg No.	Issue
TENDER	1209	112-02	C

Drawing 1:200@A3 1:100@A1
DEMOLITION - KINGS CROSS BRIDGE ELEVATION

Project
KINGS CROSS BRIDGE

GENERAL NOTES

Drawing to be read in conjunction with all information by architects, structural engineer & service consultants.

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KEY:

--- EXISTING BUILDING FABRIC TO BE REMOVED

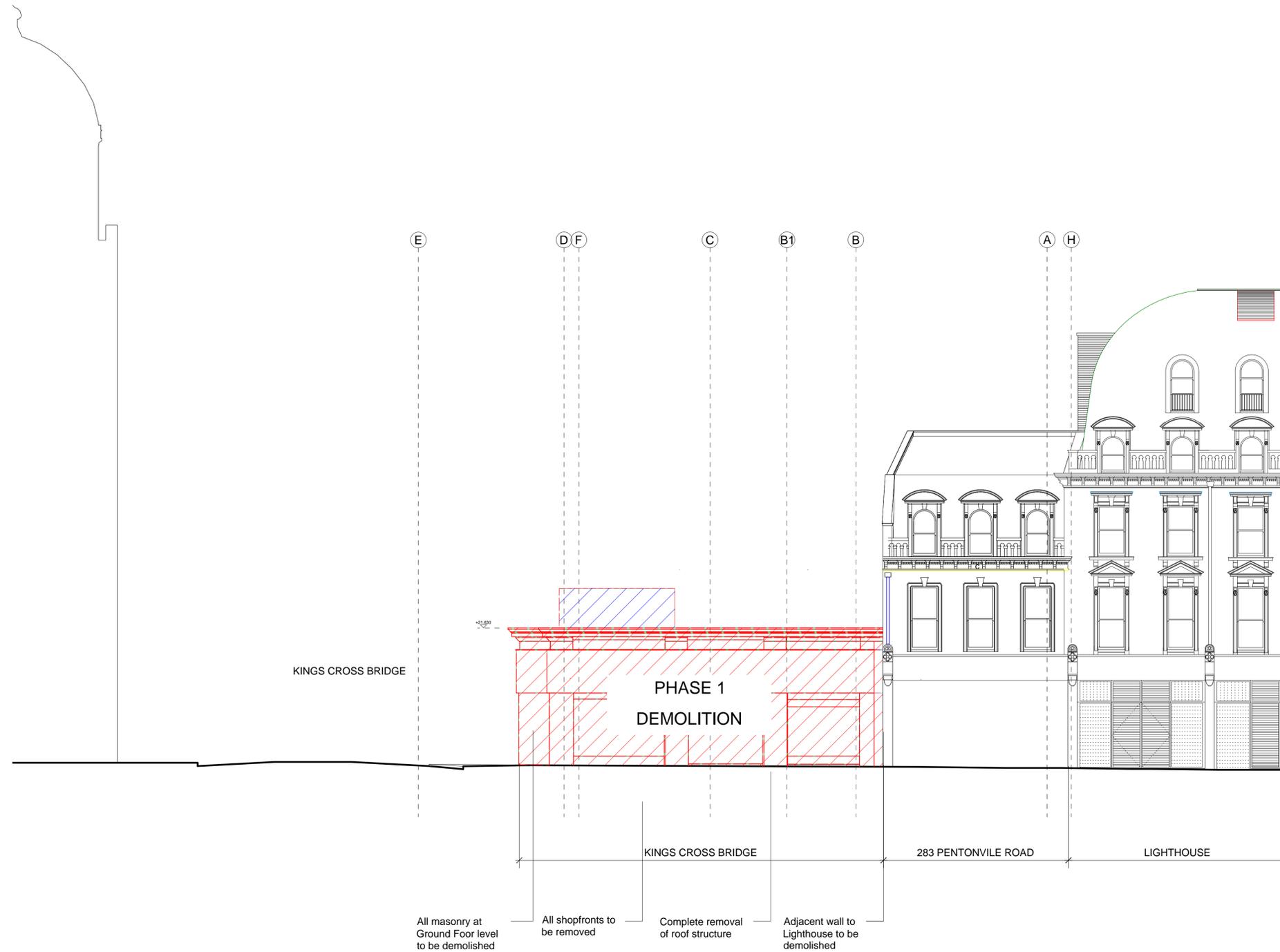
NOTE:

The information shown on this drawing indicates the scope of demolition, but not the method or sequence.

Building to be demolished in accordance with Ramboll Structural Engineer's method statements and construction sequence plan.

Refer to Ramboll Structural Engineer's specification C20.

Remove all services and sanitaryware and cap off in accordance with M & E specification.



LEGEND:

PHASE 1 DEMOLITION AREA

PHASE 2 DEMOLITION AREA

Issue	Chkd/Drawn	Date	Description
B	AG/AV	28/04/17	Stage 4 Issue
A	DOR/GT	21/01/15	Initial Tender

Status	Job No.	Drwg No.	Issue
TENDER	1209	112-03	B

Drawing 1:200@A3 1:100@A1
DEMOLITION - PENTONVILLE ROAD ELEVATION

Project
KINGS CROSS BRIDGE

GENERAL NOTES

Drawing to be read in conjunction with all information by architects, structural engineer & service consultants.

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KEY:

- EXISTING BUILDING FABRIC TO BE REMOVED
- RETAINING WALLS TO BE CUT DOWN. REFER TO STRUCTURAL ENGINEERS DRAWINGS FOR LEVELS.

NOTE:

The information shown on this drawing indicates the scope of demolition, but not the method or sequence.

Building to be demolished in accordance with Ramboll Structural Engineer's method statements and construction sequence plan.

Refer to Ramboll Structural Engineer's specification C20.

Refer to Pure Structures for temporary works arrangements.

Existing building to be removed down to top of basement slab level and finished to waterproofing requirements. No damage to existing slab permitted.

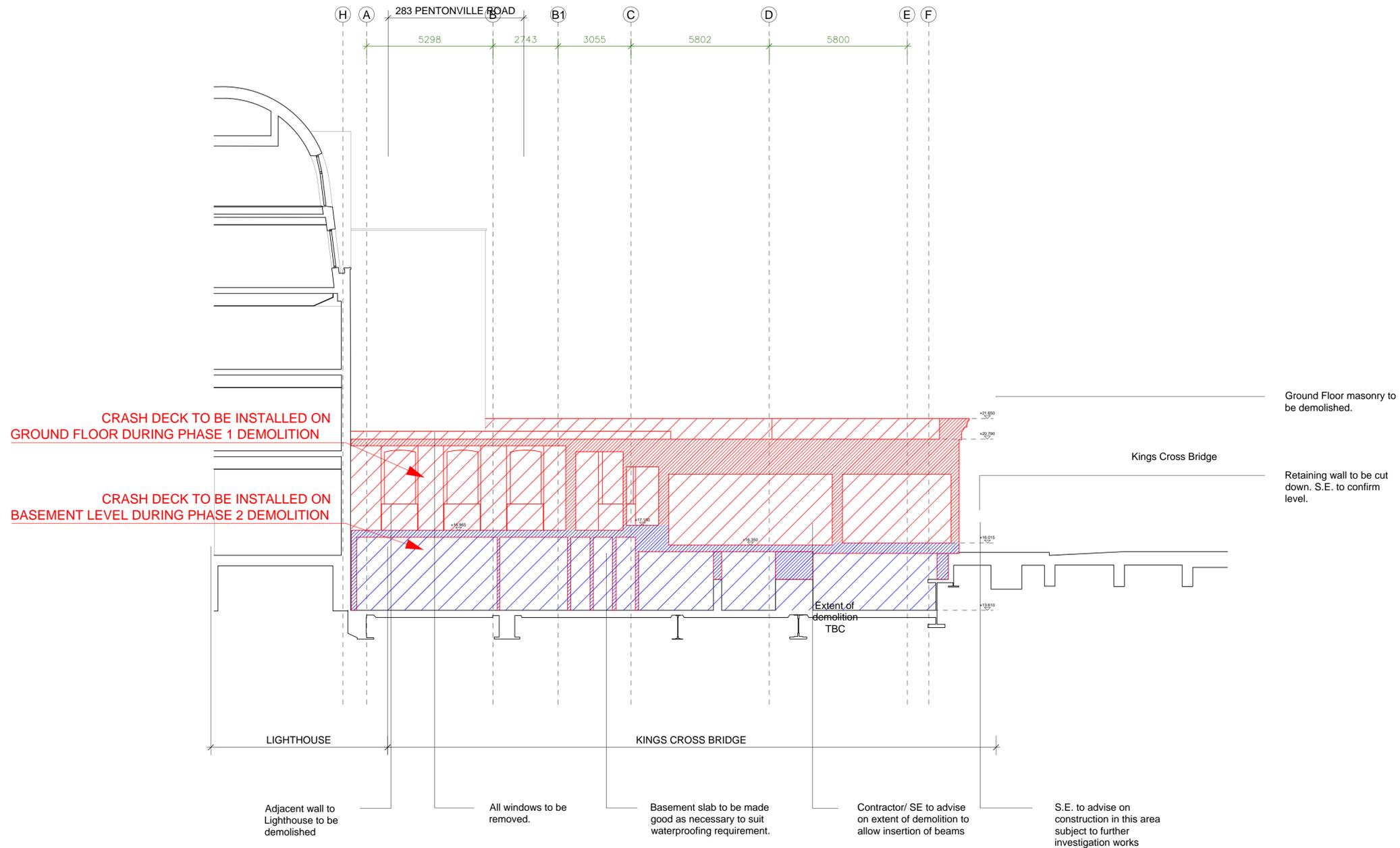
Where columns are cut down, surrounding brick/concrete pier to be broken out fully a further 350mm below cut down top of column.

Basement floor slab to be retained subject to further investigations.

S.E. to advise on load bearing walls in basement.

Condition of the basement to be reviewed post strip out.

Remove all services and sanitaryware and cap off in accordance with M & E specification.



LEGEND:

- ▨ PHASE 1 DEMOLITION AREA
- ▨ PHASE 2 DEMOLITION AREA

Issue	Chkd/Drawn	Date	Description
C	AG/AV	28/04/17	Stage 4 Issue
B	AV/BM	10/02/17	Stage 3 Tender Issue
A	DOR/GT	21/01/15	Initial Tender

Status	Job No.	Drwg No.	Issue
TENDER	1209	113-01	C

Drawing DEMOLITION - SECTION A - A 1:200@A3 1:100@A1

Project KINGS CROSS BRIDGE

GENERAL NOTES

Drawing to be read in conjunction with all information by architects, structural engineer & service consultants.

The contractor is not to scale from this drawing. All written dimensions to be checked on site before work commences. Discrepancies, where identified, must be reported to the architect immediately.

This drawing is the property of Latitude Architects and Designers and must not be reproduced or disclosed to any unauthorised person either wholly or in part without written consent.

KEY:

- EXISTING BUILDING FABRIC TO BE REMOVED
- RETAINING WALLS TO BE CUT DOWN. REFER TO STRUCTURAL ENGINEERS DRAWINGS FOR LEVELS.

NOTE:

//// The information shown on this drawing indicates the scope of demolition, but not the method or sequence.

Building to be demolished in accordance with Ramboll Structural Engineer's method statements and construction sequence plan.

Refer to Ramboll Structural Engineer's specification C20.

Existing building to be removed down to top of basement slab level and finished to waterproofing requirements. No damage to existing slab permitted.

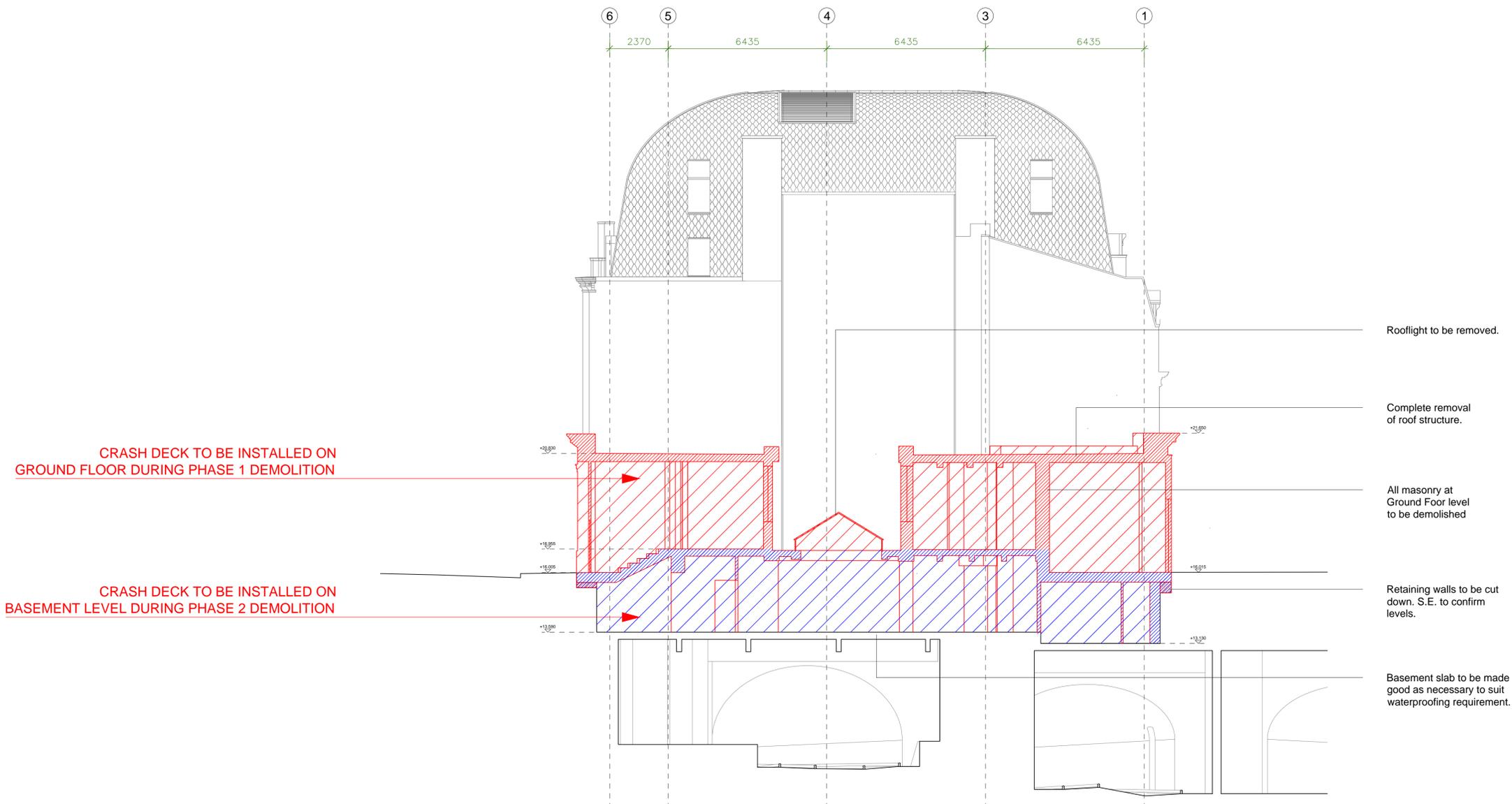
Where columns are cut down, surrounding brick/concrete pier to be broken out fully a further 350mm below cut down top of column.

Basement floor slab to be retained subject to further investigations.

S.E. to advise on load bearing walls in basement.

Condition of the basement to be reviewed post strip out.

Remove all services and sanitaryware and cap off in accordance with M & E specification.



LEGEND:

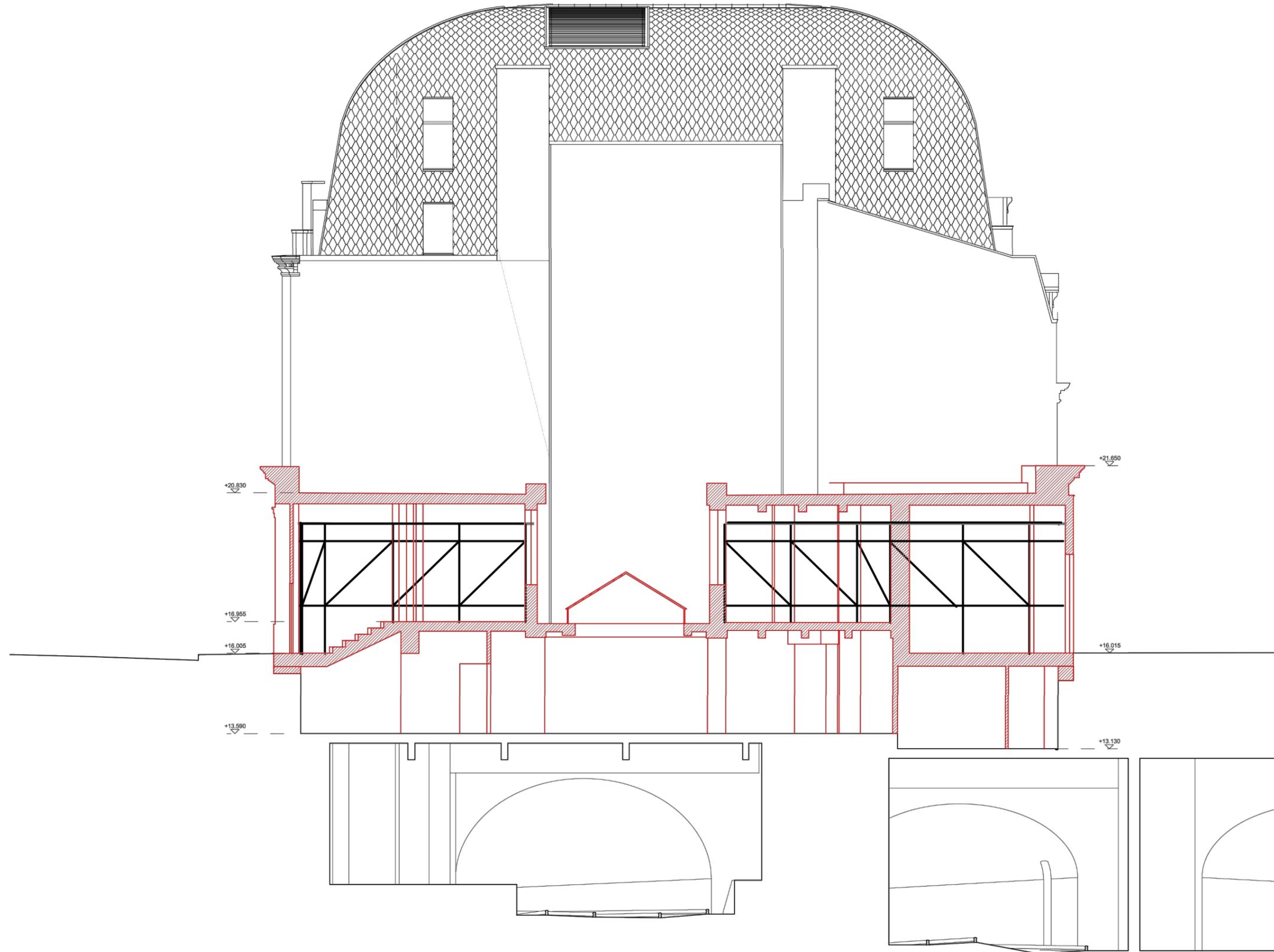
- //// PHASE 1 DEMOLITION AREA
- //// PHASE 2 DEMOLITION AREA

Issue	Chkd/Drawn	Date	Description
C	AG/AV	28/04/17	Stage 4 Issue
B	AV/BM	10/02/17	Stage 3 Tender Issue
A	DOR/GT	21/01/15	Initial Tender

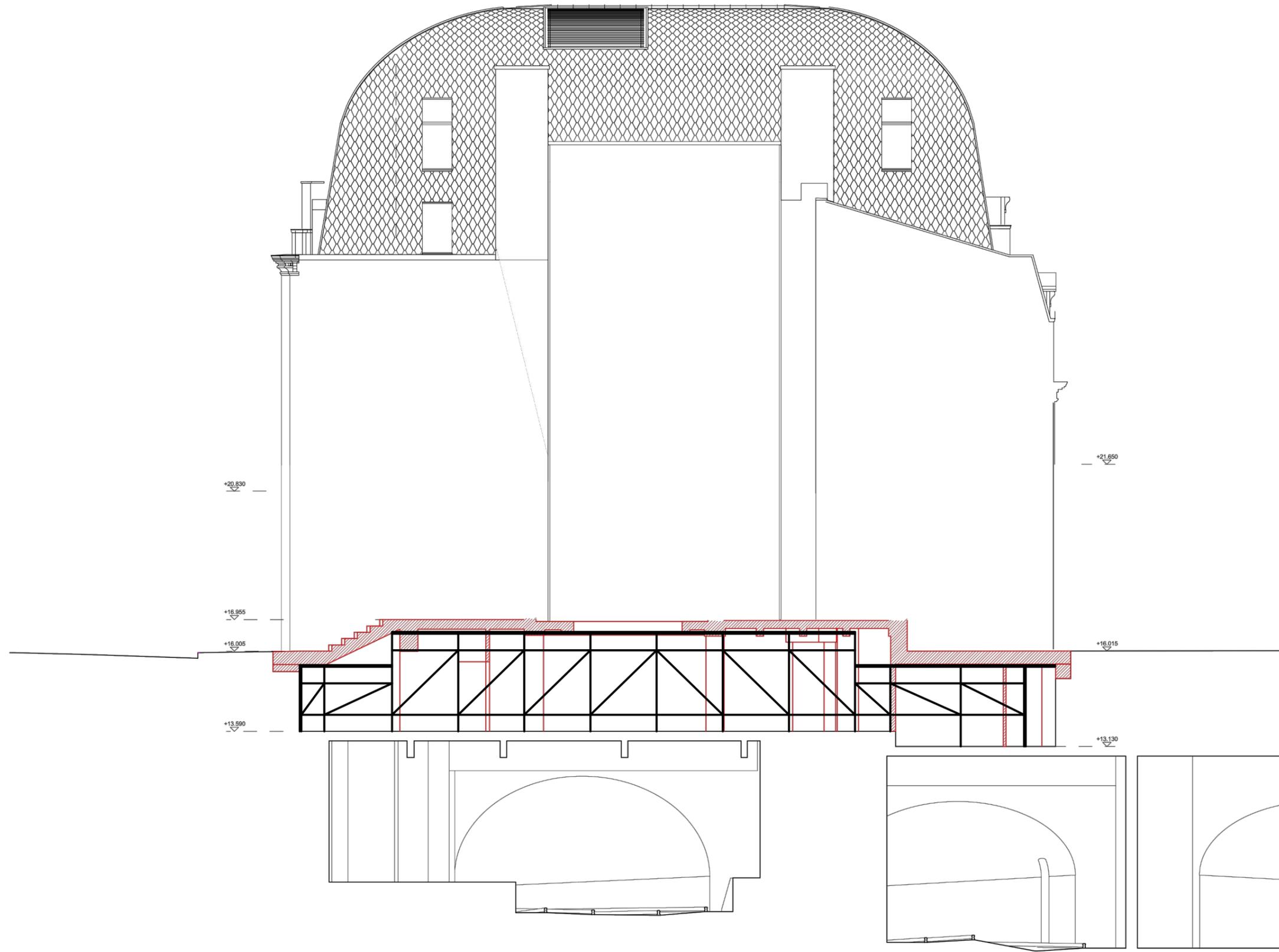
Status	Job No.	Drwg No.	Issue
TENDER	1209	113-02	C

Drawing DEMOLITION - SECTION B - B 1:200@A3 1:100@A1

Project KINGS CROSS BRIDGE

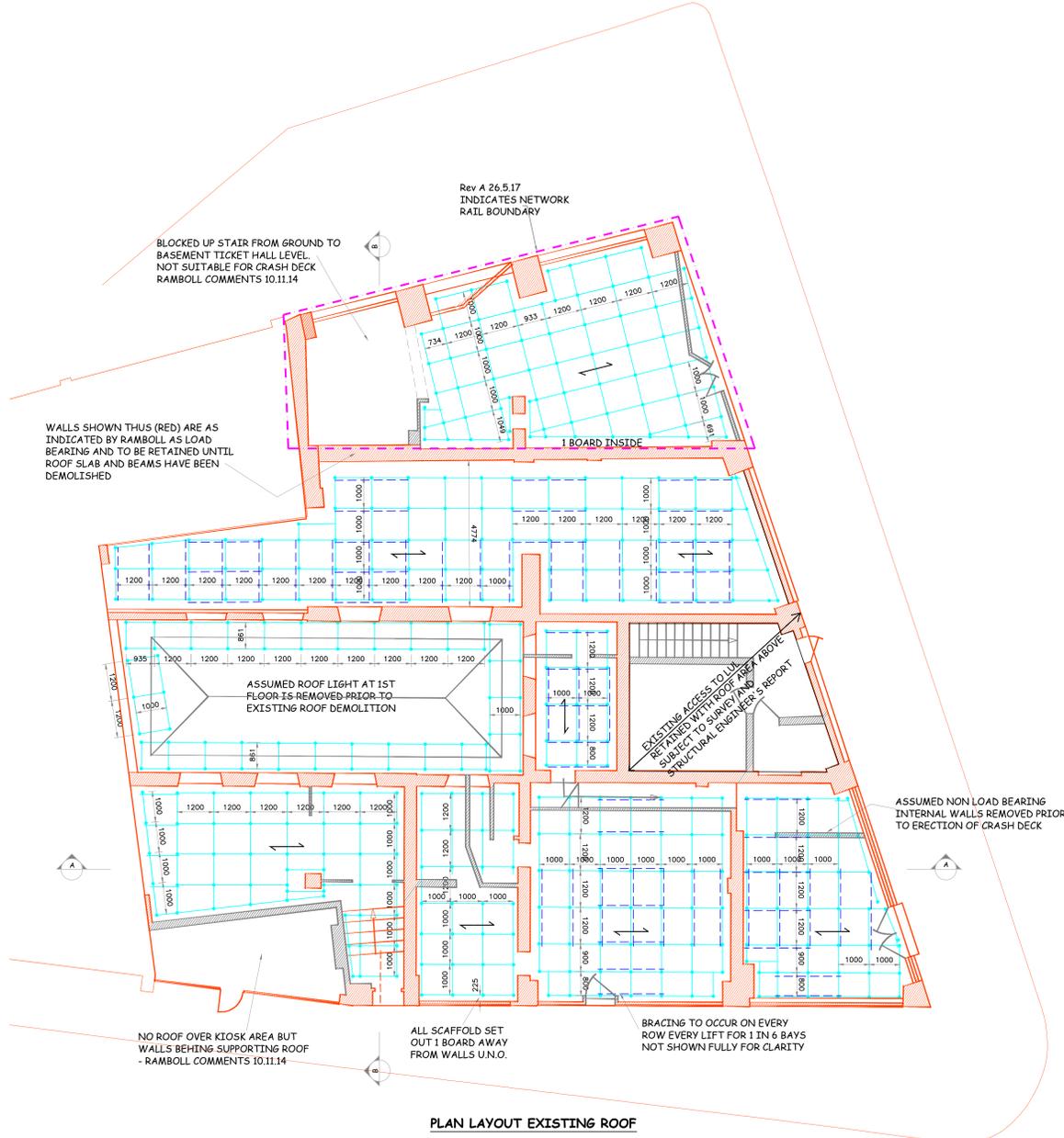


**DEMOLITION CRASH
DECK SCAFFOLDING
PHASE 1**
(Indicative layout)



**DEMOLITION CRASH
DECK SCAFFOLDING
PHASE 2**
(Indicative layout)

10.4 Appendix D - Temporary Works Design



DESIGN PRODUCED FROM 3RD PARTY DRAWINGS DIMENSIONS TO BE CONFIRMED ON SITE

ALL LOADS SHOWN ARE UNFACTORED

ALL SCAFFOLDS TO BE CONSTRUCTED USING SG4:15 SAFE SYSTEMS OF WORK

GENERAL NOTES

BRACING TO OCCUR FULL HEIGHT ON EVERY ROW OF SCAFFOLD IN BOTH DIRECTIONS

FACE BRACING TO OCCUR FOR 1 IN SIX BAYS OF SCAFFOLD

FACE BRACING TO BE FIXED WITHIN 300MM OF NOSE

MAXIMUM SPAN OF SCAFFOLD BOARDS = 1200MM

ALL EXPOSED EDGES MUST HAVE MINIMUM OF DOUBLE GUARDRAILS AND TOEBOARDS

MAXIMUM LIFT HEIGHT 2.0M

SCAFFOLD IS DESIGNED FOR 1 IN 6 WORKING LIFT @ 6.50KN/M²

TRANSOMS & LEDGERS TO BUTT WALLS

MATERIALS MUST BE REMOVED DURING PROGRESSION OF DEMOLITION AND NOT ALLOWED TO HEAP ON DECK

N.B. ALL DIMENSIONS HAVE BEEN SCALED AND THEREFORE CANNOT BE TAKEN AS TRUE

TFL, HIGHWAYS & LUL TO APPROVE ALL LOADS OVER TUNNELS, ARCHES, SERVICE TRENCH ETC.

LOADINGS

ROOF SLAB LOAD GIVEN = 4.93KN/m²
LIVE LOAD = 1.5KN/m²
∴ TOTAL W = 6.43KN/m² SAY 6.50 KN/m²

- GENERAL NOTES**
- This drawing is confidential and the exclusive property of MURPHY GROUP
 - It must not be used except under a contract with MURPHY GROUP relating to the job in connection with which the drawing was issued.
 - Components manufactured in accordance with the drawing must not be used for any purpose other than the intention of the drawing.
 - It must not be copied or exhibited without written permission of MURPHY GROUP
 - Scaffold built with load bearing fittings, except intermediate bearers below platform level and boards fixed with non-load bearing fittings.
 - All services, plant, equipment and materials supplied are subject to our conditions of Contract, Hire or Sale as applicable.
 - This drawing has been prepared from details supplied to us by the enquirer/client, who should check that we have correctly interpreted his requirements and that all loadings, dimensions, details, erection and striking sequences are correct and practicable. No alteration in the loading may be made without prior reference to MURPHY GROUP
 - Should additional materials be added to this scheme at the request or instruction of the customers main Contractor, Architect, Engineer, Consultant or local authorities then an additional charge for the same will be made.
 - CODES AND SPECIFICATIONS**
General scaffold specifications to TG 20:13
General material specifications to EN 39:2001, BS EN 12811-1.
 - The customer is to ensure that the ground and/or base provided for our scaffold is adequate to support the loads to be applied without settlement and must provide any necessary spreaders.
 - If foundation levels are indicated on this drawing, the customer must set out and strictly adhere to the same.
 - Where equipment is supported or suspended from an existing structure, (e.g. roofs, beams, balconies, upper floors etc.) the customer must ensure that the structure is of adequate strength to safely support the additional imposed loads.
 - SCAFFOLDING: DIMENSIONS AND LOADING:-**
Lift heights not to exceed 2.0M MAX u.n.o.
Bay lengths not to exceed 1.2M u.n.o.
Platform loading not to exceed 6.50 Kn/m²
Scaffold designed for 1 no. simultaneously working lifts.
Also -- no. of additional boarded lifts.
Maximum calculated leg load 9.60 Kn.
Wind loadings where applicable have been calculated in accordance with BS 6399: PART 2.
Maximum wind pressure allowed in the design shown on this drawing is:- N/A
Main contractor's attention is drawn to the fact that the loading in this scheme is axial to the tubes or is otherwise specially provided for and that no eccentric loads are applied to the structure without specific reference to MURPHY GROUP
 - It is the responsibility of the client/enquirer to ensure that adequate facilities for tying the scaffold are made available and that the building or structure is capable of withstanding the loads applied to it by the scaffold and its working load.
 - Spacing of ties not to exceed N/A horizontally and N/A vertically.
 - Anchorage for ties to be provided by client at points shown * on the drawing and should preferably be of the cast in or drilled in socket type.
 - All ties must be secured with right angle couplers and to the standards whenever possible.
 - All dimensions are as stated or as calculated. Drawings must not be scaled.

GENERALLY SCAFFOLD SET OUT 1 BOARD AWAY FROM EXISTING WALLS UNLESS SHOWN OTHERWISE

Special Notes :

DRAWINGS IN THIS SERIES :

FOR APPROVAL

REV.	DESCRIPTION	CDS	CCS	26.5.17
A	NETWORK RAIL BOUNDARY ADDED			
		CHANGED	CHECKED	DATE



J Murphy and Sons Limited, Hiview House, Highgate Road, London NW5 1TN
T: +44(0) 20 7267 4366 F: +44(0) 20 7482 3107
www.murphygroup.co.uk

TITLE
PROPOSED DEMOLITION CRASH DECK
ROOF SLAB
KINGS CROSS BRIDGE

CLIENT
UK REAL ESTATES

THIS DRAWING HAS BEEN PRODUCED BY
CONTRACT DESIGN SERVICE Ltd
4 SWAN CLOSE
WALTON ON THAMES
SURREY
KT12 2FH
TEL: 01372 745217 e-mail: con@contract-design.co.uk

DRAWN BY	CHECKED BY	APPROVED BY
CDS	19.05.17	
SCALE	DRAWING No.	REV.
1:75@A0	MG/7387/01	A

POSSIBLE SUPPORT TO JACK ARCH REQUIRED - 450 x 450 TOWER SUGGESTED BY BALFOUR BEATTY

LINE OF HOARDING TO BE CONFIRMED. SCAFFOLD BEAMS TO CANTILEVER OVER HOARDING

DESIGN PRODUCED FROM 3RD PARTY DRAWINGS DIMENSIONS TO BE CONFIRMED ON SITE

ALL LOADS SHOWN ARE UNFACTORED

ALL SCAFFOLDS TO BE CONSTRUCTED USING SG4:15 SAFE SYSTEMS OF WORK

GENERAL NOTES
 LEDGER BRACING TO OCCUR FULL HEIGHT ON ALTERNATE BAYS
 FACE BRACING TO OCCUR FULL HEIGHT FOR EVERY SIX BAYS OF SCAFFOLD AND EXTEND ACROSS 2 BAYS BETWEEN LEDGER BRACING
 FACE BRACING TO BE FIXED WITHIN 300mm OF NODE
 MAXIMUM SPAN OF SCAFFOLD BOARDS: 1500mm
 ALL EXPOSED EDGES MUST HAVE MINIMUM OF DOUBLE GUARDRAILS AND TOEBOARDS
ACCESS SCAFFOLD:
 ERECTED IN 2.0M LIFTS 5 BOARDS WIDE - 2nd INSIDE BOARDS
 SCAFFOLD IS DESIGNED FOR THE MAIN WORKING LIFT @ 1.0KN/M² - 2nd MAIN WORKING LIFT @ 1.0KN/M² - 2nd INSIDE BOARDS @ 0.75KN/M²
BUILDING TIES
 MAX ANTICIPATED TIE LOAD OF 5.90KN BASED ON A 4.0M x 4.0M H GRID FOR SHEETED SCAFFOLD - USE STANDARD DUTY TIES SWL 5.9 KN
 TIES TO BE TESTED IN ACCORDANCE WITH HAKI RECOMMENDATIONS
TFL, HIGHWAYS & LUL TO APPROVE ALL LOADS OVER TUNNELS, ARCHES, SERVICE TRENCH ETC.

DEMOLITION
 BUILDING TO BE DEMOLISHED BY HAND WITH MATERIALS TAKEN AWAY PROGRESSIVELY AND NOT ALLOWED TO BUILD UP ON SCAFFOLD.

- GENERAL NOTES**
- This drawing is confidential and the exclusive property of MURPHY GROUP
 - It must not be used except under a contract with MURPHY GROUP relating to the job in connection with which the drawing was issued.
 - Components manufactured in accordance with the drawing must not be used for any purpose other than the intention of the drawing.
 - It must not be copied or exhibited without written permission of MURPHY GROUP
 - Scaffold built with load bearing fittings, except intermediate bearers below platform level and boards fixed with non-load bearing fittings.
 - All services, plant, equipment and materials supplied are subject to our conditions of Contract, Hire or Sale as applicable.
 - This drawing has been prepared from details supplied to us by the enquirer/client, who should check that we have correctly interpreted his requirements and that all loadings, dimensions, details, erection and striking sequences are correct and practicable. No alteration in the loading may be made without prior reference to MURPHY GROUP
 - Should additional materials be added to this scheme at the request or instruction of the customers main Contractor, Architect, Engineer, Consultant or local authorities then an additional charge for the same will be made.
 - CODES AND SPECIFICATIONS**
 General scaffold specifications to TG 20:13
 General material specifications to EN 39:2001, BS EN 12811-1.
 - The customer is to ensure that the ground and/or base provided for our scaffold is adequate to support the loads to be applied without settlement and must provide any necessary spreaders.
 - If foundation levels are indicated on this drawing, the customer must set out and strictly adhere to the same.
 - Where equipment is supported or suspended from an existing structure, (e.g. roofs, beams, balconies, upper floors etc.) the customer must ensure that the structure is of adequate strength to safely support the additional imposed loads.
 - SCAFFOLDING: DIMENSIONS AND LOADING:**
 Lift heights not to exceed 2.2 m MAX u.n.o.
 Bay lengths not to exceed 2.0m u.n.o.
 Platform loading not to exceed 2.0 Kn/m²
 Scaffold designed for 1.5 no. simultaneously working lifts. Also -- no. of additional boarded lifts.
 Maximum calculated leg load 26.39 Kn.
 Wind loadings where applicable have been calculated in accordance with BS 6399: PART 2.
 Maximum wind pressure allowed in the design shown on this drawing is: - 0.40 Kn/m²
 Main contractor's attention is drawn to the fact that the loading in this scheme is axial to the tubes or is otherwise specially provided for and that no eccentric loads are applied to the structure without specific reference to MURPHY GROUP
 - It is the responsibility of the client/enquirer to ensure that adequate facilities for tying the scaffold are made available and that the building or structure is capable of withstanding the loads applied to it by the scaffold and its working load.
 - Spacing of ties not to exceed 4.0m horizontally and AS SHN vertically.
 - Anchorage for ties to be provided by client at points shown * on the drawing and should preferably be of the cast in or drilled in socket type.
 - All ties must be secured with right angle couplers and to the standards whenever possible.
 - All dimensions are as stated or as calculated. Drawings must not be scaled.

GENERALLY SCAFFOLD SET OUT 1 BOARD AWAY FROM EXISTING WALLS UNLESS SHOWN OTHERWISE

Special Notes :

DRAWINGS IN THIS SERIES :

REV.	DESCRIPTION	CDS	CCS	26.5.17
A	NETWORK RAIL BOUNDARY ADDED			
		CHANGED	CHECKED	DATE



J Murphy and Sons Limited, Hiview House, Highgate Road, London NW5 1TN
 T: +44(0) 20 7267 4366 F: +44(0) 20 7482 3107
 www.murphygroup.co.uk

TITLE
 PROPOSED DEMOLITION ACCESS SCAFFOLD KINGS CROSS BRIDGE

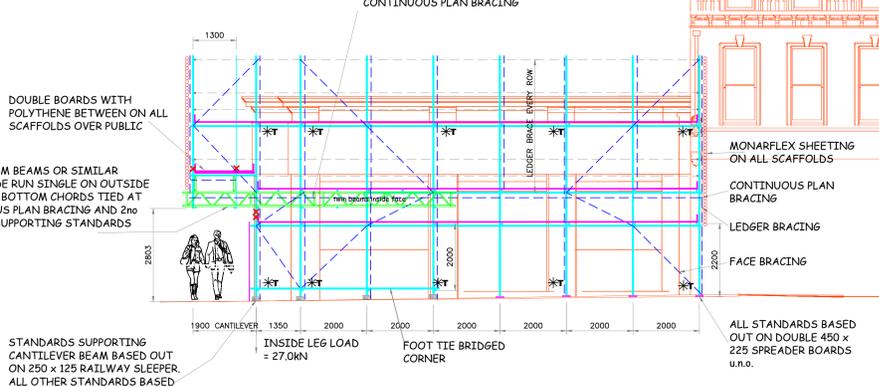
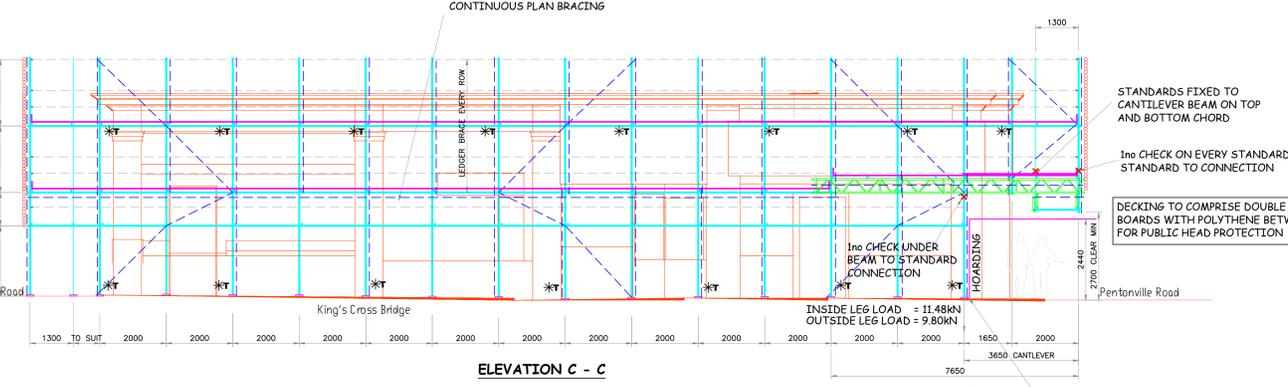
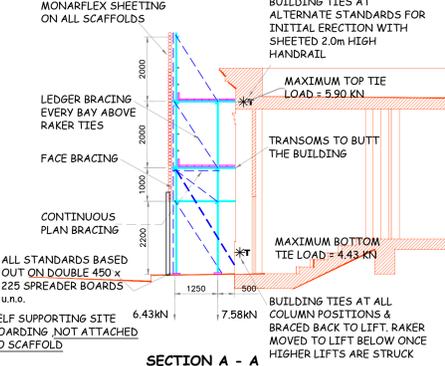
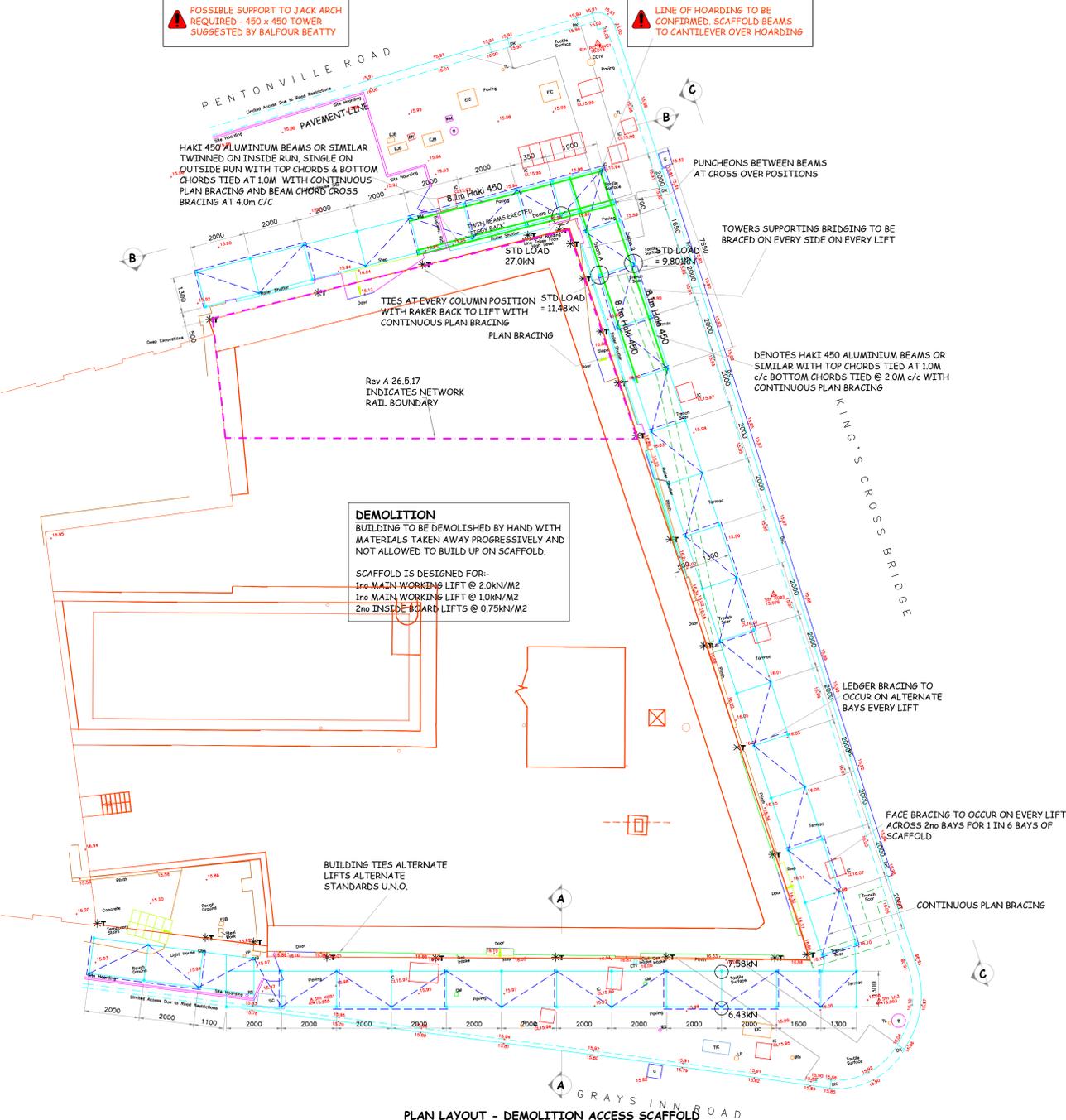
CLIENT
 UK REAL ESTATES

THIS DRAWING HAS BEEN PRODUCED BY
CONTRACT DESIGN SERVICE Ltd

4 SWAN CLOSE
 WALTON ON THAMES
 SURREY
 KT12 2FH
 TEL: 01372 745217 e-mail: cor@contract-design.co.uk

DRAWN BY	CHECKED BY	APPROVED BY
CDS	19.05.17	

SCALE	DRAWING No.	REV.
1: 75@A0	MG/7387/02	A



FOR APPROVAL

10.5 Appendix E – Operative’s Briefing Attendance Sheet

Operative’s Briefing Attendance Sheet

Project: Kings Cross Bridge.	Project No.: LBU0147	Date:
		Time:
Division: S4	Location: Site	Duration:
Briefing type (tick as appropriate)	Ref. No.	Title: Access to Kings Cross Bridge Basement
Method Statement	LBU0147	
	MST-0002	

N.B. – Signing of this form constitutes a declaration that you have fully understood the contents of the briefing given.

Name (Print)	Signature	Date
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		

This is a complete list of all the persons who attended the briefing given by me.

Name (Print): Michael Monaghan Signature: _____
 Company: J Murphy & Sons Ltd. Date: _____