

Site Name	St Giles Circus	Job No.	14/2669	HOLE	TPG-5
Carried out for	Consolidated Developments Limited	Date		Photograph	01 & 02



Photograph No 01



Photograph No 02

Site Name	St Giles Circus	Job No.	14/2669	HOLE	TPG-6
Carried out for	Consolidated Developments Limited	Date		Photograph	01 & 02



Photograph No 01



Photograph No 02

Site Name	St Giles Circus	Job No.	14/2669	HOLE	TPG-6
Carried out for	Consolidated Developments Limited	Date		Photograph	03 & 04

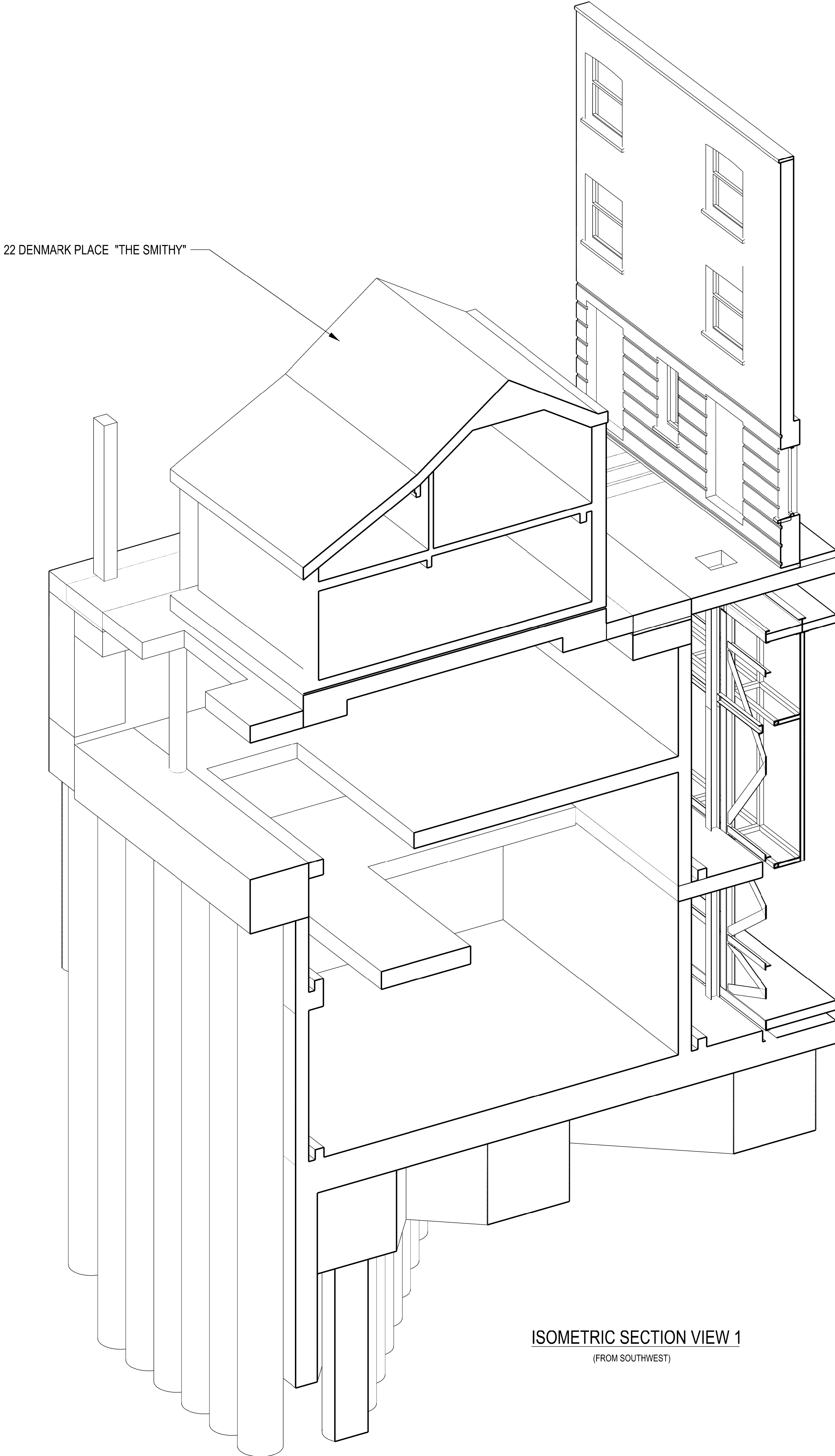


Photograph No 03



Photograph No 04

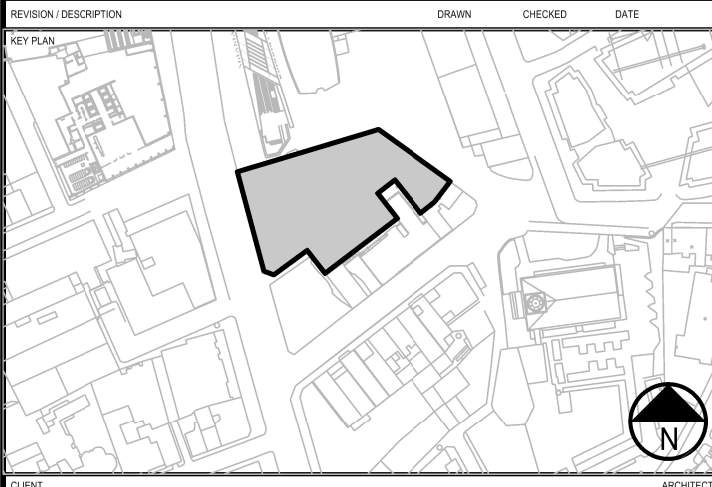
APPENDIX E – Proposed Structural Drawings



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NOTES

B2	PLANNING MMA	NA	CF	17/11/15
B1	PLANNING MMA	NA	CF	19/06/15



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PROJECT SITE ST GILES CIRCUS, LONDON WC1			
DRAWING TITLE ZONE 1 SMITHY OPTION ISOMETRICS		SCALE N/A @ A1 @ A3	
PROJECT NUMBER 029		DATE 24.09.15	
DRAWING NO. SGC-ENG-ZZ-XX-VS-S-01016		REVISION B2	

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 ATTENTION OF ENGENIUM AT THE ADDRESS SHOWN BELOW.

PLANING/MMA	NA	CF	17/1
PLANING/MMA	NA	CF	18/0
10/00000000	10/00000000	10/00000000	10/00000000

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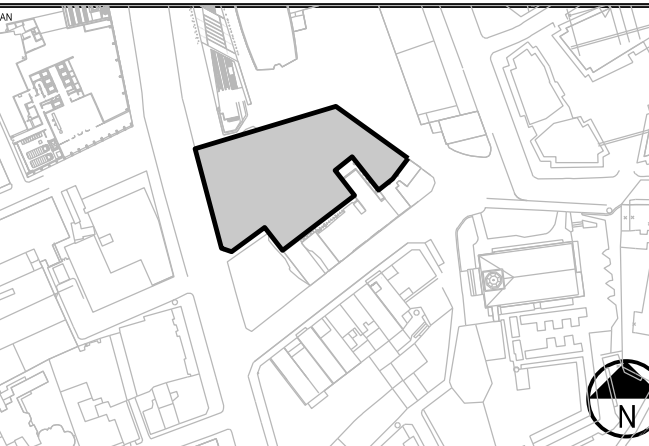
**55-71 GILES CIRCUS,
LONDON WC1**

DATE	REVISION	SCALE
29/01/2023	1	1:100
29/01/2023	2	24.00

PROPOSED DEVELOPMENT

SCC-ENG-ZZ-F-DR-S-01031

B



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T GILES CIRCUS,
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ONE 1	SCALE 1:100 @ @
ILING LAYOUT	DATE 24.09.15
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29	SGC-ENG-ZZ-F-DR-S-01031	B2
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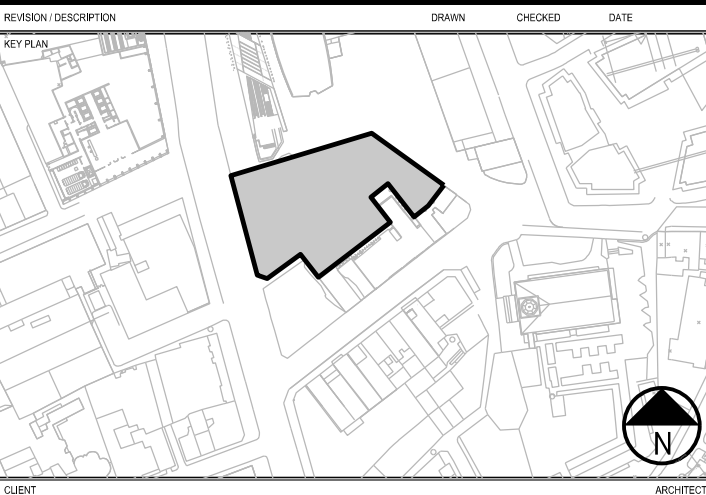
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NOTES

			TEMPORARY	PERMANENT	HIGHEST ALLOWABLE	LOWEST ALLOWABLE		MINIMUM REQUIREMENTS (2)	LINKS (2)	SHEAR CONNECTION TO ADJACENT WALLS/BEAMS	COUPLERS	MINIMUM COVER			POSITION	VERTICALITY			PERMANENT	VARIABLE	VARIABLE (TENSION)	VARIABLE			
	(mm)		(m)	(m)	(m)	(m)						(mm)		(YEARS)	(mm)	(mm)	(mm)		(N)	(N)	(N)	(N)			
A1	900 HARD/ 600 FIRM	RC900	+123.980	+123.980	+97.500* HARD +116.000 FIRM	+96.000* (NO BENTONITE)	PILE CENTRE 1000mm FROM HOARDING/SHORING	BH32 FROM 123.780 TO TOE	CONTRACTOR CHOICE	SHEAR/TENSION CONNECTORS POST DRILLED AS PART OF LINING WALL CONSTRUCTION	CONTRACTOR CHOICE	75	NA	60	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER	1100	550	3000	RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.	900mm FIRM PILE ASSUMED AT CORNERS. PILES SPAN BETWEEN FLOOR PLATES.		
A1-B	900 HARD/ 600 FIRM	RC900	CONTRACTOR CHOICE	+120.875	+97.500* HARD +116.000 FIRM	+96.000* (NO BENTONITE)	PILE CENTRE 1000mm FROM HOARDING/SHORING	BH32 FROM 123.780 TO TOE	CONTRACTOR CHOICE	SHEAR/TENSION CONNECTORS POST DRILLED AS PART OF LINING WALL CONSTRUCTION	CONTRACTOR CHOICE	75	NA	60	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER	1100	550	3000	RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.	900mm FIRM PILE ASSUMED AT CORNERS REDUCED CUT OFF LEVEL TO ACCOMMODATE ZONE II WORKS. PILES SPAN BETWEEN FLOOR PLATES OR 7500 LAYINGS.		
A1-C	900 HARD/ 600 FIRM	RC900	+124.555 (ASSUMED TEMPORARY WORKS LEVEL)	+114.175	+97.500* HARD +116.000 FIRM	+96.000* (NO BENTONITE)	PILE CENTRE 1000mm FROM HOARDING/SHORING	BH32 FROM 123.780 TO TOE	CONTRACTOR CHOICE	SHEAR/TENSION CONNECTORS POST DRILLED AS PART OF LINING WALL CONSTRUCTION	CONTRACTOR CHOICE	75	NA	60	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER	1100	550	3000	RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.	900mm FIRM PILE ASSUMED AT CORNERS. PILES SPAN BETWEEN FLOOR PLATES.		
A3	900 HARD/ 600 FIRM	RC900	+123.980	+123.980	+97.500* HARD +116.000 FIRM	+96.000* (NO BENTONITE)	PILE CENTRE 1000mm FROM HOARDING/SHORING	BH32 FROM 123.780 TO TOE	160MM DIA HELICAL LINKS AT 250mm SPACING NEAR POINTS OF SUPPORT	SHEAR/TENSION CONNECTORS POST DRILLED AS PART OF LINING WALL CONSTRUCTION	CONTRACTOR CHOICE	75	NA	60	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER	1100	550	3000	RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.	900mm FIRM PILE ASSUMED AT CORNERS. PILE SPANS BETWEEN BASEMENT MEZ AND GROUND FLOOR IN PERMANENT CASE.		
A3-B	900 HARD/ 600 FIRM	RC900	+123.330	+123.330	+97.500* HARD +116.000 FIRM	+96.000* (NO BENTONITE)	PILE CENTRE 1000mm FROM HOARDING/SHORING	14000mm ² , ASSUMING MINIMUM ALLOWABLE COVER (H52) (Ø120mm) FROM CUT OFF TO +106.000 MIN BH32 FROM 126.000 TO TOE	160MM DIA HELICAL LINKS AT 250mm SPACING NEAR POINTS OF SUPPORT	SHEAR STEEL 1400mm ² /m LENGTH OF PILE BETWEEN PILE AND LINING WALL	CONTRACTOR CHOICE	75	NA	60	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER	1100	550	3000	RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.	900mm FIRM PILE ASSUMED AT CORNERS PILE TO ACT COMPOSITELY WITH THE LINING WALL TO RESIST LATERAL EARTH AND WATER PRESSURES IN THE PERMANENT CASE, SPANNING VERTICALLY FROM BL TO LOWER GROUND FLOOR. GRID A5-B1 VERTICAL BARS H28Ø100mm (BOTH INSIDE AND OUTSIDE FACES) SPECIFIED IN LINER WALL TO ACHIEVE MAX STRESS AT S15 QUASI-PERMANENT CASE OF 131 MPa NECESSARY FOR CRACK WIDTH CONTROL.		
A4	1200 HARD/ 600 FIRM	RC1200	CONTRACTOR CHOICE	+120.875	+97.500* HARD +116.000 FIRM	+96.000* (NO BENTONITE)	PILE CENTRE 850mm FROM HOARDING/SHORING	12800mm ² , ASSUMING MINIMUM ALLOWABLE COVER (H52) (Ø100mm) FROM CUT OFF TO +106.000 MIN BH32 FROM 126.000 TO TOE	160MM DIA HELICAL LINKS AT 250mm SPACING NEAR POINTS OF SUPPORT	SHEAR STEEL CONNECTION 4300mm ² /m LENGTH OF PILE, BETWEEN PILE AND LINING WALL	CONTRACTOR CHOICE	75	NA	60	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER	1100	550	3000	RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.	PILE TO ACT COMPOSITELY WITH THE LINING WALL TO RESIST LATERAL EARTH AND WATER PRESSURES IN THE PERMANENT CASE, SPANNING VERTICALLY FROM BL TO LOWER GROUND FLOOR. GRID C2-C3 VERTICAL BARS H28Ø100mm (BOTH INSIDE AND OUTSIDE FACES) SPECIFIED IN LINER WALL TO ACHIEVE MAX STRESS AT S15 QUASI-PERMANENT CASE OF 144 MPa NECESSARY FOR CRACK WIDTH CONTROL. GRID C3-C4 VERTICAL BARS H28Ø100mm (BOTH INSIDE AND OUTSIDE FACES) SPECIFIED IN LINER WALL TO ACHIEVE MAX STRESS AT S15 QUASI-PERMANENT CASE OF 144 MPa NECESSARY FOR CRACK WIDTH CONTROL. REDUCED CUT OFF LEVEL TO ACCOMMODATE ZONE II WORKS.		
B1	900 HARD/ 600 FIRM	RC900	+123.980	+123.980	+113.700 HARD +116.000 FIRM	+113.600	PILE CENTRE 1000mm FROM HOARDING/SHORING	CONTRACTOR CHOICE	CONTRACTOR CHOICE	SHEAR/TENSION CONNECTORS POST DRILLED AS PART OF LINING WALL CONSTRUCTION	CONTRACTOR CHOICE	75	NA	60	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER				RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.	PILE TOE LIMITED BY EASTBOUND CROSSRAIL TUNNEL, CROWN AT APPROX +107.8m. 900mm FIRM PILE ASSUMED AT CORNER.		
B2	900 HARD/ 600 FIRM	RC900	+123.980	+123.980	+113.700 HARD +116.000 FIRM	+113.600	PILE CENTRE 1000mm FROM HOARDING/SHORING	CONTRACTOR CHOICE	CONTRACTOR CHOICE	SHEAR/TENSION CONNECTORS POST DRILLED AS PART OF LINING WALL CONSTRUCTION	CONTRACTOR CHOICE	75	NA	60	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER				RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.	PILE TOE LIMITED BY EASTBOUND CROSSRAIL TUNNEL, CROWN AT APPROX +107.8m. 900mm FIRM PILE ASSUMED AT CORNER. PILE SPANS BETWEEN BASEMENT MEZ AND GROUND FLOOR IN PERMANENT CASE, BETWEEN SINGLE FLOOR PLATES ELSEWHERE.		
B3	900 HARD/ 600 FIRM	RC900	+123.980	+123.980	+113.700 HARD +116.000 FIRM	+113.600	PILE CENTRE 1000mm FROM HOARDING/SHORING	CONTRACTOR CHOICE	CONTRACTOR CHOICE	SHEAR/TENSION CONNECTORS POST DRILLED AS PART OF LINING WALL CONSTRUCTION	CONTRACTOR CHOICE	75	NA	60	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER				RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.	PILE TOE LIMITED BY EASTBOUND CROSSRAIL TUNNEL, CROWN AT APPROX +107.8m. 900mm FIRM PILE ASSUMED AT CORNER. PILE TO ACT COMPOSITELY WITH THE LINING WALL TO RESIST LATERAL EARTH AND WATER PRESSURES IN THE PERMANENT CASE, SPANNING VERTICALLY FROM BL TO LOWER GROUND FLOOR. GRID D1-D2+1 PILE VERTICAL BARS H28Ø100mm (BOTH INSIDE AND OUTSIDE FACES) SPECIFIED IN LINER WALL TO ACHIEVE MAX STRESS AT S15 QUASI-PERMANENT CASE OF 131 MPa NECESSARY FOR CRACK WIDTH CONTROL.		
C	900 HARD/ 600 FIRM	RC900	+123.980	+123.980	+113.700 HARD +116.000 FIRM	+113.500	PILE CENTRE 1000mm FROM HOARDING/SHORING	CONTRACTOR CHOICE	CONTRACTOR CHOICE	SHEAR/TENSION CONNECTORS POST DRILLED AS PART OF LINING WALL CONSTRUCTION	CONTRACTOR CHOICE	75	NA	60	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER				RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.	PILE TOE LIMITED BY LUL LOWER CONCOURSE TUNNEL, CROWN AT APPROX +106m. TEMPORARY WATERPROOFING CONNECTION REQUIRED TO NUBS		
G	900 HARD/ 600 FIRM	RC900	+124.555 (ASSUMED TEMPORARY WORKS LEVEL)	+114.175	+75.400 HARD +116.000 FIRM	NA	ADJACENT TO CROSSRAIL TUNNEL. IN SOME CASES IMMEDIATELY ADJACENT TO "SMITHY".	160H40 FROM +115m TO TOE CAST IN SHEAR COUPLERS PROVIDED FROM +114.100 TO +112.400	CONTRACTOR CHOICE	PROVIDE COUPLERS TO TRANSFER SHEAR BETWEEN ADIT BEAMS AND TYPE PILES. CONSISTS OF 12 No. COUPLERS (25mm dia BARS) EVENLY SPACED AROUND PERIMETER OF PILE AT 200mm VERTICAL CENTRES. EACH CAPABLE OF TRANSFERRING 120kN (ULL) SHEAR. TO BE CAST INTO PILE AND PROTECTED SO THAT THEY CAN BE EASILY LOCATED AND CONNECTED INTO DURING ADIT CONSTRUCTION.	HERBEC EASY LOCK. ADDITIONAL COUPLERS REQUIRED AT +114.300	75	BENTONITE	120	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER, STRAIN GAUGES	3760.00	1555.00	5600	RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.	TENSION PILES TO ADIT BEAMS. ALLOW FOR TEMPORARY STEEL CASING TO INVERT OF CROSSRAIL TUNNEL. TEMPORARY WATERPROOFING CONNECTION REQUIRED TO CR2. DESIGN LOADS PROVIDED ASSUME PILE IS STAND-ALONE WITH NO INTERACTION. DESIGN OF STRUCTURE ABOVE ASSUMES INTERACTION BETWEEN PILES RESULTING IN 50% CAPACITY REDUCTION. TEMPORARY CAPPING BEAM UNDER GROUND FLOOR LEVEL ASSUMED TO CONSIST OF 4A30X100X600FC MEMBERS, 2 EACH SIDE OF PILE LINE, BOLTED TO AND BETWEEN PILES.		
G2	1200 PLUNGE	RC1200	+124.555 (ASSUMED TEMPORARY WORKS LEVEL)	+114.175	+75.400	NA	ADJACENT TO CROSSRAIL TUNNEL. IN SOME CASES IMMEDIATELY ADJACENT TO "SMITHY".	160H40 FROM +115m TO TOE CAST IN SHEAR COUPLERS PROVIDED FROM +114.100 TO +112.400	CONTRACTOR CHOICE	PROVIDE COUPLERS TO TRANSFER SHEAR BETWEEN ADIT BEAMS AND TYPE PILES. CONSISTS OF 12 No. COUPLERS (25mm dia BARS) EVENLY SPACED AROUND PERIMETER OF PILE AT 200mm VERTICAL CENTRES. EACH CAPABLE OF TRANSFERRING 120kN (ULL) SHEAR. TO BE CAST INTO PILE AND PROTECTED SO THAT THEY CAN BE EASILY LOCATED AND CONNECTED INTO DURING ADIT CONSTRUCTION.	HERBEC EASY LOCK. ADDITIONAL COUPLERS REQUIRED AT +114.300	75	BENTONITE	120	+/- 25 PILE +/- 10 COLUMN	1 IN 200 PILE 1 IN 400 COLUMN	+/- 100mm PILE +/- 10mm COLUMN	INCLINOMETER, STRAIN GAUGES	0.00	0.00	5600	RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.	TENSION PILES TO ADIT BEAMS. ALLOW FOR TEMPORARY STEEL CASING TO INVERT OF CROSSRAIL TUNNEL. TEMPORARY WATERPROOFING CONNECTION REQUIRED TO CR2. DESIGN LOADS PROVIDED ASSUME PILE IS STAND-ALONE WITH NO INTERACTION. DESIGN OF STRUCTURE ABOVE ASSUMES INTERACTION BETWEEN PILES RESULTING IN 50% CAPACITY REDUCTION. TEMPORARY CAPPING BEAM UNDER GROUND FLOOR LEVEL ASSUMED TO CONSIST OF 4A30X100X600FC MEMBERS, 2 EACH SIDE OF PILE LINE, BOLTED TO AND BETWEEN PILES. PILE IS IN MOST CASES INCORPORATE A PLUNGE COLUMN. SEE PILING AND COLUMN LAYOUTS FOR PLUNGE COLUMN SIZES. PLUNGE COLUMNS ASSUMED TO EXTEND 4m BELOW PERMANENT CUT OFF LEVEL, TO CONTRACTOR DESIGN.		
G-B	900 HARD/ 600 FIRM	RC900	+124.555 (ASSUMED TEMPORARY WORKS LEVEL)	+114.175	+75.400 HARD +116.000 FIRM	NA	ADJACENT TO CROSSRAIL TUNNEL. IN SOME CASES IMMEDIATELY ADJACENT TO "SMITHY".	160H40 FROM +115m TO TOE "SOFT" SECTION REQUIRED FROM +114.100 TO +112.400. REINFORCING BARS TO FACILITATE BRACING FOR ADIT BEAM CONSTRUCTION.	CONTRACTOR CHOICE	SHEAR/TENSION CONNECTORS POST DRILLED AS PART OF LINING WALL CONSTRUCTION.	HERBEC EASY LOCK. ADDITIONAL COUPLERS REQUIRED AT +114.300	75	BENTONITE	120	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER, STRAIN GAUGES	0.00	0.00	5600	RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.	TENSION PILES TO ADIT BEAMS. ALLOW FOR TEMPORARY STEEL CASING TO INVERT OF CROSSRAIL TUNNEL. TEMPORARY WATERPROOFING CONNECTION REQUIRED TO CR2. DESIGN LOADS PROVIDED ASSUME PILE IS STAND-ALONE WITH NO INTERACTION. DESIGN OF STRUCTURE ABOVE ASSUMES INTERACTION BETWEEN PILES RESULTING IN 50% CAPACITY REDUCTION. TEMPORARY CAPPING BEAM UNDER GROUND FLOOR LEVEL ASSUMED TO CONSIST OF 4A30X100X600FC MEMBERS, 2 EACH SIDE OF PILE LINE, BOLTED TO AND BETWEEN PILES.		
G-C	900 PLUNGE	RC900	+124.555 (ASSUMED TEMPORARY WORKS LEVEL)	+114.175	+75.400 HARD +116.000 FIRM	NA	ADJACENT TO CROSSRAIL TUNNEL. IN SOME CASES IMMEDIATELY ADJACENT TO "SMITHY".	160H40 FROM +115m TO TOE CAST IN SHEAR COUPLERS PROVIDED FROM +114.100 TO +112.400	CONTRACTOR CHOICE	PROVIDE COUPLERS TO TRANSFER SHEAR BETWEEN ADIT BEAMS AND TYPE PILES. CONSISTS OF 12 No. COUPLERS (25mm dia BARS) EVENLY SPACED AROUND PERIMETER OF PILE AT 200mm VERTICAL CENTRES. EACH CAPABLE OF TRANSFERRING 120kN (ULL) SHEAR. TO BE CAST INTO PILE AND PROTECTED SO THAT THEY CAN BE EASILY LOCATED AND CONNECTED INTO DURING ADIT CONSTRUCTION.	HERBEC EASY LOCK. ADDITIONAL COUPLERS REQUIRED AT +114.300	75	BENTONITE	120	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER, STRAIN GAUGES	0.00	0.00	5600	RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.	TENSION PILES TO ADIT BEAMS. ALLOW FOR TEMPORARY STEEL CASING TO INVERT OF CROSSRAIL TUNNEL. PILE INCORPORATES A PLUNGE COLUMN. SEE PILING AND COLUMN LAYOUTS FOR PLUNGE COLUMN SIZES. PLUNGE COLUMNS ASSUMED TO EXTEND 4m BELOW PERMANENT CUT OFF LEVEL, TO CONTRACTOR DESIGN. DESIGN LOADS PROVIDED ASSUME PILE IS STAND-ALONE WITH NO INTERACTION. DESIGN OF STRUCTURE ABOVE ASSUMES INTERACTION BETWEEN PILES RESULTING IN 50% CAPACITY REDUCTION. TEMPORARY CAPPING BEAM UNDER GROUND FLOOR LEVEL ASSUMED TO CONSIST OF 4A30X100X600FC MEMBERS, 2 EACH SIDE OF PILE LINE, BOLTED TO AND BETWEEN PILES.		
H	2400	RC2400	+123.780 (TEMPORARY STEEL CASING FROM UNDERSIDE OF B2 SLAB TO GROUND)	+106.975	+75.400 HARD	NA	ADJACENT TO CROSSRAIL TUNNEL AND TO "SMITHY"	420H40 FROM +156m TO TOE	CONTRACTOR CHOICE	SHEAR/TENSION CONNECTORS POST DRILLED AS PART OF LINING WALL CONSTRUCTION	HERBEC EASY LOCK. ADDITIONAL COUPLERS REQUIRED AT +114.300	75	BENTONITE	120	+/- 25	1 IN 200	+/- 100mm TOE		8860.00	8867.40	14000.00	NA	TENSION PILES TO ADIT BEAMS. ALLOW FOR TEMPORARY STEEL CASING UNDERSIDE OF B2 SLAB. REINFORCING BARS TO EXTEND TO ADIT SLAB. DESIGN LOADS PROVIDED ASSUME PILE IS STAND-ALONE WITH NO INTERACTION. DESIGN OF STRUCTURE ABOVE ASSUMES INTERACTION BETWEEN PILES RESULTING IN 50% CAPACITY REDUCTION.		
H-B	2400	RC2400	+122.780	+122.780	+75.400 HARD	NA	ADJACENT TO CROSSRAIL TUNNEL AND TO "SMITHY"	420H40 FROM +156m TO TOE	CONTRACTOR CHOICE	SHEAR/TENSION CONNECTORS POST DRILLED AS PART OF LINING WALL CONSTRUCTION	HERBEC EASY LOCK. ADDITIONAL COUPLERS REQUIRED AT +114.300	75	BENTONITE	120	+/- 25	1 IN 200	+/- 100mm TOE		18660.00	7775.40	14000.00	NA	TENSION PILES TO ADIT BEAMS. ALLOW FOR TEMPORARY STEEL CASING UNDERSIDE OF B2 SLAB. REINFORCING BARS TO EXTEND TO ADIT SLAB.		
M1	1200 PLUNGE	RC1200	+112.000 (CONCRETE) BACKFILLED WITH LEAN MIX OR GRAVEL FROM +112.000 TO +124.555, TO CONTRACTORS DETAIL	+109.975 PILE +123.900 COLUMN	+80.750*	NA	PILED FROM PLUNG MAT AT GRADE	160H32 FROM +113m TO TOE	CONTRACTOR CHOICE	NA	CONTRACTOR CHOICE	75	BENTONITE	60	+/- 25 PILE +/- 10 COLUMN	1 IN 200 PILE 1 IN 400 COLUMN	+/- 100mm PILE +/- 10mm COLUMN		3605	2230	1500	350	PILE IS IN MOST CASES INCORPORATE A PLUNGE COLUMN. SEE PILING AND COLUMN LAYOUTS FOR PLUNGE COLUMN SIZES. PLUNGE COLUMNS ASSUMED TO EXTEND 4m BELOW PERMANENT CUT OFF LEVEL, TO CONTRACTOR DESIGN.		
M2	1200 PLUNGE	RC1200	+112.000 (CONCRETE) BACKFILLED WITH LEAN MIX OR GRAVEL FROM +112.000 TO +124.555, TO CONTRACTORS DETAIL	+109.975 PILE +123.900 COLUMN	+86.000*	NA	PILED FROM PLUNG MAT AT GRADE	160H32 FROM +113m TO TOE	CONTRACTOR CHOICE	NA	CONTRACTOR CHOICE	75	BENTONITE	60	+/- 25 PILE +/- 10 COLUMN	1 IN 200 PILE 1 IN 400 COLUMN	+/- 100mm PILE +/- 10mm COLUMN		3230	1755	1500	270	PILE IS IN MOST CASES INCORPORATE A PLUNGE COLUMN. SEE PILING AND COLUMN LAYOUTS FOR PLUNGE COLUMN SIZES. PLUNGE COLUMNS ASSUMED TO EXTEND 4m BELOW PERMANENT CUT OFF LEVEL, TO CONTRACTOR DESIGN.		
M3	1200 PLUNGE	RC1200	+112.000 (CONCRETE) BACKFILLED WITH LEAN MIX OR GRAVEL FROM +112.000 TO +124.555, TO CONTRACTORS DETAIL	+109.975 PILE +123.900 COLUMN	+91.500*	NA	PILED FROM PLUNG MAT AT GRADE	160H32 FROM +113m TO TOE	CONTRACTOR CHOICE	NA	CONTRACTOR CHOICE	75	BENTONITE	60	+/- 25 PILE +/- 10 COLUMN	1 IN 200 PILE 1 IN 400 COLUMN	+/- 100mm PILE +/- 10mm COLUMN		2825	955	1500	200	PILE IS IN MOST CASES INCORPORATE A PLUNGE COLUMN. SEE PILING AND COLUMN LAYOUTS FOR PLUNGE COLUMN SIZES. PLUNGE COLUMNS ASSUMED TO EXTEND 4m BELOW PERMANENT CUT OFF LEVEL, TO CONTRACTOR DESIGN.		
M4	1200 PLUNGE	RC1200	+112.000 (CONCRETE) BACKFILLED WITH LEAN MIX OR GRAVEL FROM +112.000 TO +124.555, TO CONTRACTORS DETAIL	+109.975 PILE +123.900 COLUMN	+96.400*	+96.000* (NO BENTONITE)	PILED FROM PLUNG MAT AT GRADE	160H32 FROM +113m TO TOE	CONTRACTOR CHOICE	NA	CONTRACTOR CHOICE	75	NA	60	+/- 25 PILE +/- 10 COLUMN	1 IN 200 PILE 1 IN 400 COLUMN	+/- 100mm PILE +/- 10mm COLUMN		1600	710	1500	150	PILE IS IN MOST CASES INCORPORATE A PLUNGE COLUMN. SEE PILING AND COLUMN LAYOUTS FOR PLUNGE COLUMN SIZES. PLUNGE COLUMNS ASSUMED TO EXTEND 4m BELOW PERMANENT CUT OFF LEVEL, TO CONTRACTOR DESIGN.		
M5	1200 PLUNGE	RC1200	+112.000 (CONCRETE) BACKFILLED WITH LEAN MIX OR GRAVEL FROM +112.000 TO +124.555, TO CONTRACTORS DETAIL	+114.075 PILE +123.900 COLUMN	+96.000*	NA	PILED FROM PLUNG MAT AT GRADE	160H32 FROM +113m TO TOE	CONTRACTOR CHOICE	NA	CONTRACTOR CHOICE	75	BENTONITE	60	+/- 25 PILE +/- 10 COLUMN	1 IN 200 PILE 1 IN 400 COLUMN	+/- 100mm PILE +/- 10mm COLUMN		740	410	1500		PILE IS IN MOST CASES INCORPORATE A PLUNGE COLUMN. SEE PILING AND COLUMN LAYOUTS FOR PLUNGE COLUMN SIZES. PLUNGE COLUMNS ASSUMED TO EXTEND 4m BELOW PERMANENT CUT OFF LEVEL, TO CONTRACTOR DESIGN.		
M6	1200 HANGING PLUNGE	RC1200	BACKFILLED WITH LEAN MIX OR GRAVEL FROM +112.700 TO +124.555, TO CONTRACTORS DETAIL	+123.905 COLUMN	+112.700*	+112.500*	PILED FROM PLUNG MAT AT GRADE	NA	CONTRACTOR CHOICE	NA	CONTRACTOR CHOICE	75	NA	60	+/- 25 PILE +/- 10 COLUMN	1 IN 200 PILE 1 IN 400 COLUMN	+/- 100mm PILE +/- 10mm COLUMN					NA	NOTE: HANGING PLUNGE COLUMN, PLACED PRIOR TO INSTALLATION OF GROUND FLOOR LONG SPAN BEAMS. COLUMN EXPOSED DURING ADIT CONSTRUCTION AND INCORPORATED INTO ADIT		
N	600	RC600	+112.000 (CONCRETE) BACKFILLED WITH LEAN MIX OR GRAVEL FROM +112.000 TO +124.555, TO CONTRACTORS DETAIL	+106.975	+96.00*	+96.000* (NO BENTONITE)	PILED FROM PLUNG MAT AT GRADE	120H32 FROM +113m TO TOE	CONTRACTOR CHOICE	NA	CONTRACTOR CHOICE	75	NA	60	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER					100	TENSION PILES TO B2 SLAB	
O	900	RC900	+112.000 (CONCRETE) BACKFILLED WITH LEAN MIX OR GRAVEL FROM +112.000 TO +124.555, TO CONTRACTORS DETAIL	+114.075	+106.000*	+96.000* (NO BENTONITE)	PILED FROM PLUNG MAT AT GRADE	CONTRACTOR CHOICE	CONTRACTOR CHOICE	SHEAR/TENSION CONNECTORS POST DRILLED AS PART OF LINING WALL CONSTRUCTION	CONTRACTOR CHOICE	75	NA	60	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER							RETAINING WALL. SEE SITE INVESTIGATION AND PILING SPECIFICATION FOR LOADING.
P	900	RC900	+112.000 (CONCRETE) BACKFILLED WITH LEAN MIX OR GRAVEL FROM +112.000 TO +124.555, TO CONTRACTORS DETAIL	+106.975	+96.400*	+96.000* (NO BENTONITE)	PILED FROM PLUNG MAT AT GRADE	120H32 FROM +113m TO TOE	CONTRACTOR CHOICE	NA	CONTRACTOR CHOICE	75	NA	60	+/- 25	1 IN 200	+/- 100mm TOE	INCLINOMETER	1060	595	3000		100	TENSION PILES	

NOTES
(1) Instrumentation layout is subject to minimum reinforcement is
(2) Suggested value. Contractor may submit alternative levels for approval by the engineer.

B2 PLANNING MMA NA CF 17/11/15
B1 PLANNING MMA NA CF 19/06/15



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PROJECT TITLE
ST GILES CIRCUS,
LONDON WC1
DRAWING TITLE
ZONE 1
PILING SCHEDULE
SHEET 1
PROJECT NUMBER
029
DRAWING NUMBER
SGC-ENG-ZZ-F-DR-S-01032
SCALE
1:100 @ A1
@ A3
DATE
24.09.15
REVISION
B2

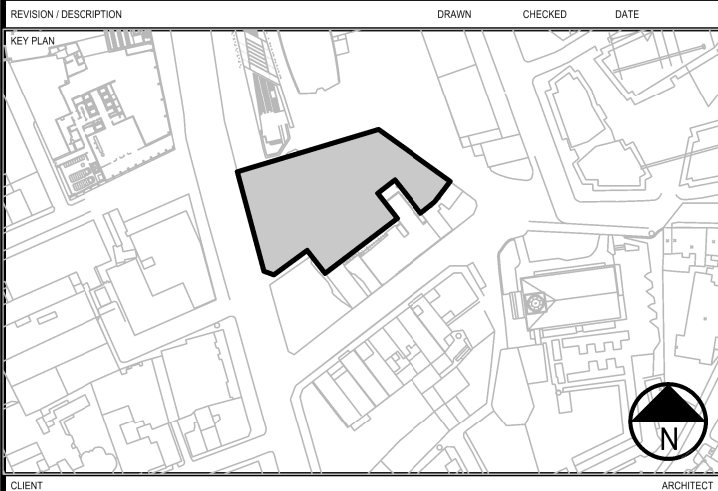
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NOTES

PILE ID	PILE TYPE	HARD/FIRM	DIAMETER (mm)	NORTHING (mm)	EASTING (mm)
CP01	CONSOLIDATED PILE	HARD	EXISTING	EXISTING	EXISTING
CP02	CONSOLIDATED PILE	HARD	EXISTING	EXISTING	EXISTING
CP03	CONSOLIDATED PILE	HARD	EXISTING	EXISTING	EXISTING
CP04	CONSOLIDATED PILE	HARD	EXISTING	EXISTING	EXISTING
CP05	CONSOLIDATED PILE	HARD	EXISTING	EXISTING	EXISTING
CP06	CONSOLIDATED PILE	HARD	EXISTING	EXISTING	EXISTING
CP07	CONSOLIDATED PILE	HARD	EXISTING	EXISTING	EXISTING
P1	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P2	M3	HARD	1200	36074406.9	80208757.27
P3	P	HARD	900	36072214.97	80207126.59
P4	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P5	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P6	N	HARD	600	36071812.13	80212104.12
P7	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P8	M3	HARD	1200	36075528.85	80214430.28
P9	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P10	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P11	M4	HARD	1200	36071274.62	80217495.11
P12	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P13	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P14	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P15	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P16	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P17	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P18	M3	HARD	1200	36075455.74	80223298.84
P19	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P20	M3	HARD	1200	36076534.58	80228230.36
P21	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P22	M4	HARD	1200	36072005.77	80229945.78
P23	M3	HARD	1200	36079627.29	80228893.92
P24	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P25	M4	HARD	1200	36075362.06	80234604.58
P26	N	HARD	600	36072275.98	80233758.86
P27	N	HARD	600	36075187.04	80237799.65
P28	M4	HARD	1200	36071877.22	80237300.00
P29	M4	HARD	1200	36073139.81	80240113.11
P30	M3	HARD	1200	36070204.01	80243231.97
P31	M1	HARD	1200	36055229.78	80206624.91
P32	M2	HARD	1200	36052836.76	80208348.89
P33	M3	HARD	1200	36048464.51	80206041.61
P34	M4	HARD	1200	36050130.42	80208354.03
P35	M4	HARD	1200	36052676.39	80211453.89
P36	M2	HARD	1200	36054310.81	80213722.6
P37	M4	HARD	1200	36049370.12	80211227.01
P38	M2	HARD	1200	36051998.4	80215388.51
P39	M2	HARD	1200	36045300.15	80208321.28
P40	M3	HARD	1200	36046844.36	80210721.37
P41	M4	HARD	1200	36045344.91	80211801.6
P42	P	HARD	900	36046204.3	80213507.73
P43	M2	HARD	1200	36049319.4	80217318.51
P44	P	HARD	900	36052156.49	80219763.04
P45	M3	HARD	1200	36054253.06	80222031.7
P46	P	HARD	900	36043690.15	80213143.42
P47	P	HARD	900	36045443.74	80215577.54

PILE ID	PILE TYPE	HARD/FIRM	DIAMETER (mm)	NORTHING (mm)	EASTING (mm)
P48	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P49	P	HARD	900	36048830.27	80220278.31
P50	P	HARD	900	36050614.48	80222754.94
P51	P	HARD	900	36052398.69	80225231.57
P52	P	HARD	900	36040781.72	80214782.95
P53	M3	HARD	1200	36041912.53	80216421.34
P54	M4	HARD	1200	36042939.94	80217855.3
P55	M2	HARD	1200	36045833.96	80221872.43
P56	P	HARD	900	36048206.63	80223743.72
P57	M3	HARD	1200	36049633.34	80225667.45
P58	M4	HARD	1200	36053470.87	80231037.01
P59	N	HARD	600	36038347.73	80216536.71
P60	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P61	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P62	M4	HARD	1200	36047221.29	80227220.27
P63	P	HARD	900	36049305.97	80229600.73
P64	M4	HARD	1200	36051137.63	80232656.46
P65	M4	HARD	1200	36037668.05	80221653.27
P66	M2	HARD	1200	36042428.23	80224325.99
P67	M3	HARD	1200	36045438.56	80228504.58
P68	P	HARD	900	36047196.67	80231120.31
P69	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P70	M3	HARD	1200	36079976.76	80225750.17
P71	M4	HARD	1200	36082456.96	80229192.35
P72	NOT USED	HARD	NOT USED	NOT USED	NOT USED
P73	M3	HARD	1200	36079014.77	80231672.55
P74	P	HARD	900	36074919.75	80211603.8
P75	M3	HARD	1200	36073635.55	80216287.25
P76	P	HARD	900	36077889.74	80221545.08
P77	P	HARD	900	36073482.09	80220559.25
P78	N	HARD	600	36073021.75	80225052.6
P101	G-B	HARD	900	36069550.08	80201671.18
P102	G	HARD	900	36069472.12	80202868.64
P103	G	HARD	900	36069394.16	80204066.11
P104	G	HARD	900	36069316.21	80205263.57
P105	G-B	HARD	900	36069238.25	80206461.04
P106	G	HARD	900	36069160.29	80207658.5
P107	G	HARD	900	36069082.33	80208855.97
P108	G-B	HARD	900	36069004.37	80210053.43
P109	G	HARD	900	36068926.41	80211250.9
P110	G	HARD	900	36068848.45	80212448.36
P111	G-B	HARD	900	36068770.49	80213645.83
P112	G	HARD	900	36068692.53	80214843.29
P113	G	HARD	900	36068614.57	80216040.76
P114	G-B	HARD	900	36068536.62	80217238.22
P115	G	HARD	900	36068458.66	80218435.69
P116	G	HARD	900	36068380.7	80219633.15
P117	G-B	HARD	900	36068302.74	80220830.62
P118	G	HARD	900	36068224.78	80222028.08
P119	G	HARD	900	36068146.82	80223225.55
P120	G-B	HARD	900	36068068.86	80224423.01
P121	G	HARD	900	36067990.9	80225620.48
P122	G	HARD	900	36067912.94	80226817.94
P123	G-B	HARD	900	36067834.98	80228015.41

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LONDON WC1**

PROJECT TITLE ZONE 1 PILING SCHEDULE OPTION 2 SHEET 2	SCALE 1:100 @ A1 @ A3
PROJECT NUMBER 029	DATE 24.09.15
PROPOSED BY SGC-ENG-ZZ-F-DR-S-01033	REVISION B2