

Underpinning

Notes:

- 1 Concrete to be Grade C35 min cement content 325kg/cu.m.
- 2 Dry pack mortar 3:1 sand cement plus Conbex 100. Mix to have sufficient water to be mouldable by hand.
- 3 The underpinning at the base is to be the same width as the existing footings at base level. The inside face is to line through with the existing wall face above footing level. On completion of the underpinning trim away existing footings back to wall face.
- 4 Underpins are reinforced to short lengths and cast in. Bent bars are to be cast in for bending into the next pin.
- 5 Install as the excavation proceeds and as necessary pre-cast poling boards to ensure no loss of ground.
- 6 Ensure faces of cast underpins are cleaned off and wetted prior to casting adjacent pin.
- 7 It envisaged that the underpinning will be carried out in two stages, the first depth of underpinning will be cast to approximately half the total depth. This underpinning will subsequently be underpinned, offset lower pins by 300 to ensure staggered construction joints.
- 8 Before commencing underpinning carry out sufficient trial excavations to determine the depth of existing foundations.
- 9 Before commencing work prepare a method statement and submit Contractor Designed Temporary Works proposals for retaining the excavated faces and structures over.
- 10 The inside face of pins are to be cast to ensure they are true to line and level and the face is suitable for the damp proof membrane specified by the architect.

Sequence for Two Stage Dig Underpins:

(Pin Sequence similar except lettered)

Two stage underpinning will only be carried out when the depth exceeds 4 metres

Stage 1

- 1 Excavate Pins 1 down to approx 2.0m below ground level and clean off underside of footing.
- 2 Cast Pins 1 to within 75mm of underside of brickwork over
- 3 After 3 day's dry pack ensuring the void is filled with mortar.
- 4 After 24 hours commence remaining Pins 2 repeating the above sequence before commencing remaining pins also to be sequenced as numbered.
- 5 Either before or as general excavation proceeds install Contractor Designed lateral supports.

Stage 2

- 1 Excavate for Pins 1 including foundation base (offset by 300) down to formation level and clean off underside of previously cast underpinning.
- 2 Cast Foundation base and Cast Pins 1 to within 75mm of underside of Pin over.
- 3 After 3 day's dry pack ensuring void is filled with mortar.
- 4 After 24 hours commence Pin 2 and remaining in their numbered sequence.
- 5 Either before or as general excavation proceeds install Contractor Designed lateral supports.
- 6 Trim off footing to inside face of wall, note this activity can be carried out following completion of Stage 1.

Note: Pins may be constructed in one stage if preferred.

FOR PLANNING					
				DATE	OCTOBER_2015
				PRODUCED BY	CM
				SCALE	A1_1:50 A3_1:100
				CHECKED	SOH
				CAD REF	APPROVED
2	28/10/15	For planning	CM	SOH	
1	22/10/15	For planning	CM	SOH	
REV	DATE	DESCRIPTION	BY	CHKD	
ORIGINAL DRAWING SIZE A3					
Quadrant Harmon Consulting Ltd.					
Consulting Civil & Structural Engineers					
Morley House 320 Regent Street London W1B 3BD Tel. 020 7637 2770 Fax. 020 7436 7823					
CLIENT AMEK_PROPERTY_INVESTMENT_LLP			JOB No.		
PROJECT 1_WADHAM_GARDENS LONDON_NW3_3DN			DRAWING No.		
TITLE NOTES PIN_&_UNDERPINNING_SEQUENCE			REV.		
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