

Project CANNON HALL, CAWTHORNE.	Job No. 19365 Y -	Calc Sheet No. SK01
Part of Structure ORCHARD WALL REBUILD : DETAILS.	Date AUG '21	Calc By AIE

Ref	Calculations	Output 1: 50
-----	--------------	--------------

STONE COPING.

FRONT LEAF: $1\frac{1}{2}$ BRICKS, ENGLISH GARDEN BOND (BUT WITH HEADERS EVERY FIFTH COURSE). NO APPARENT TIE TO MASONRY AT REAR. MODERATE MORTAR LOSS GENERALLY.

FOUNDATIONS: 750mm DEEP TOTAL, FINAL 100mm INTO STIFF CLAY. TOP SOIL AND STONE SLABS ABOVE.

450 MAX

1.8m

3.4m

LARGE ASH TREE

REAR LEAF: DRY STONE WALLING 150-350 THK. NOT TIED TO BRICKWORK. STONEWORK AT BASE OF WALL (AND OVERALL WALL THICKNESS UNKNOWN).

EXISTING SECTION WITH GREATEST LEAN.

The diagram is a hand-drawn cross-section of a wall on a grid background. The wall is shown leaning to the right. The front leaf is a brick wall, and the rear leaf is a dry stone wall. The wall is topped with stone coping. The foundation is shown at the base, with a total depth of 750mm and the final 100mm in stiff clay. The front leaf is 1.5 bricks thick in English Garden Bond, with headers every fifth course. The rear leaf is dry stone walling, 150-350mm thick, not tied to the brickwork. The stone work at the base of the wall and the overall wall thickness are unknown. Dimensions are given: 3.4m for the height of the front leaf, 450mm max for the base width, and 1.8m for the distance from the base to a point of interest. A large ash tree is shown to the right of the wall. The text 'EXISTING SECTION WITH GREATEST LEAN.' is written at the bottom left.

CAREFULLY DISMANTLE + RE-USE APPROX $\frac{2}{3}$ OF ALL MASONRY. REBUILD IN SAME BOND BUT WITH ADDITIONAL WALL TIES AT 450 c/c VERT., 900 c/c HORIZ. FILL CORE WITH RUBBLE + LEAN MIX LIME MORTAR. FULLY KEY INTO ADJACENT RETAINED MASONRY. BUILD WITH SLIGHT LEANS TO PRESERVE EXISTING CHARACTER.

RETAIN LOWER PORTIONS WITH
LEAN $< 120\text{mm}$. FULLY REPOINT,
FILL JOINTS, CONSOLIDATE CORE
AND FILL WITH LEAN MIX
LIME MORTAR AS NECESSARY.

ANTICIPATED REBUILD.

REMOVE TREES WITHIN 3M OF
WALL OVER AFFECTED AREA.
REDUCE BANK LEVEL BY 750mm

TERRAIN-WRAPPED GRAVEL
LAND DRAIN WITH CUTOFF
BY GATES/PATH. REQUIREMENT
FOR FOLLOWING REMOVAL OF
TREE.

T8C - ALLOW FOR NEW 440TIN
BLOCKWORK TO LOWER REAR.