

STRUCTURAL CALCULATIONS and DETAILS

for

REINFORCED CONCRETE BLOCKWORK GARDEN RETAINING WALLS.

at

9, THE HIGHLANDS,
NEATH ABBEY,
NEATH,
NEATH PORT TALBOT COUNTY
SA10 6PF.

for

Mr & Mrs JONES.

NEATH PORT TALBOT
COUNTY BOROUGH COUNCIL.

SEPTEMBER 2019.

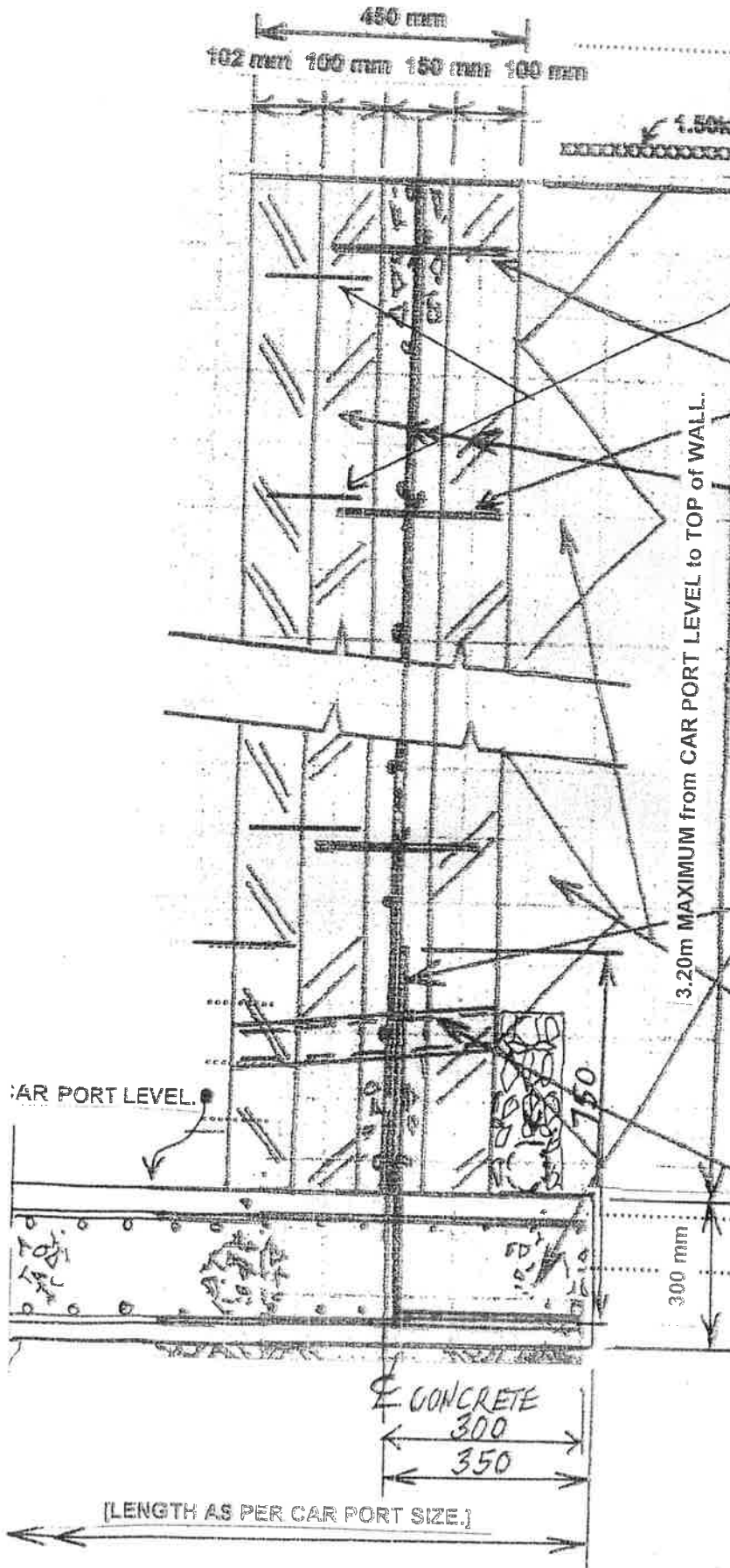
STRUCTURAL CALCULATIONS and DETAILS for:-

PROPOSED GARDEN RETAINING WALLS at:-

SHEET No:- 8.

9. THE HIGHLANDS, NEATH ABBY, NEATH, SA10 6PF.
Mr & Mrs JONES / NEATH PORT TALBOT C.B.C.

DATE: SEPT 2019.



CONSTRUCTION NOTES

WALL TIES.

WALL TIES or SIMILAR at
450mm CENTRES VERTICAL
and 750mm HORIZONTAL.

WALL SECTION.

450mm REINFORCED BLOCKWORK WALL.
10.4N STRENGTH CONCRETE BLOCKWORKS.
100mm BLOCKWORK, EARTH SIDE,
200mm BLOCKWORK HOUSE SIDE / FACE
BRICKWORK AS REQUIRED BY OWNERS.
150mm MINIMUM 35N STRENGTH CONCRETE
"B503" MESH REINFORCEMENT IN MIDDLE OF
CONCRETE. MINIMUM 35N CONCRETE INFILL
MAXIMUM 10mm AGGREGATE.

FOUNDATIONS.

"A503" MESH TOP & BOTTOM- 50mm COVER.
T16 STARTER BARS 750mm x 350mm
at 200mm CENTRES.
300 mm DEEP FOUNDATION
[LENGTH AS PER CAR PORT SIZE.]
FOUNDATION TO BE FOUNDED ON
VIRGIN GROUND WITH A MINIMUM
BEARING CAPACITY OF 100kN/m²

BACKFILL.

BACKFILL TO BE FREE DRAINING GRANULAR
MATERIAL I.E. MAX % PASSING A 200 SIEVE
NOT TO EXCEED 5% BY WEIGHT.
ANGLE OF INTERNAL FRICTION TO BE NOT
LESS THAN 35°

WALL DRAINAGE.

50 mm DIAMETER WEEP HOLES.
100mm LAID DRAIN MINIMUM 300mm COVER
WITH 64mm STONE TO SURFACE: WATER
DRAIN or SOAKAWAY.

EXPANSION / MOVEMENT JOINTS [IF REQUIRED]

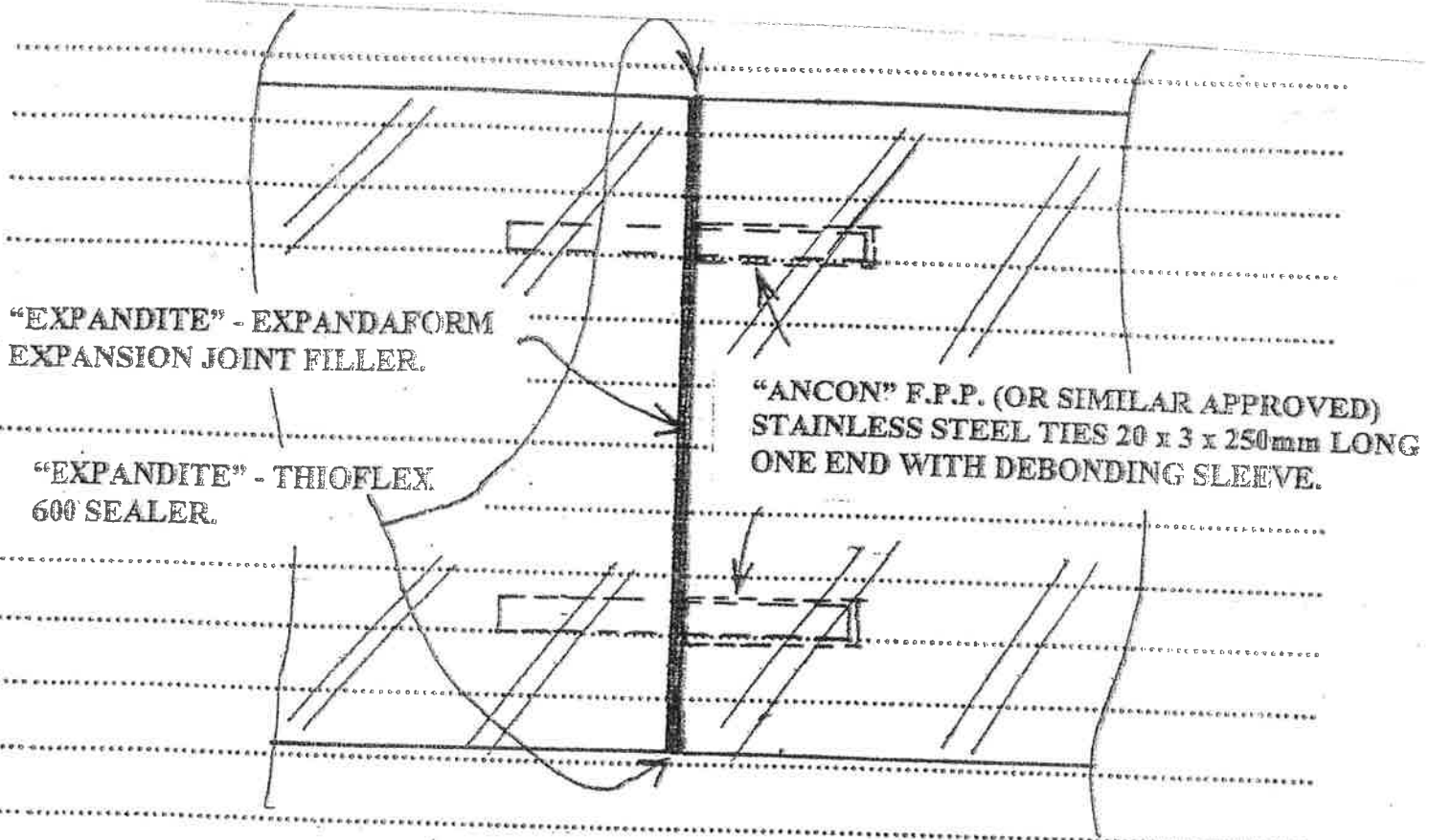
SEE SHEET No: "14" for DETAILS / NOTES.

TYPICAL WALL SECTION & NOTES.

STRUCTURAL CALCULATIONS and DETAILS for:-
PROPOSED GARDEN RETAINING WALLS at:- **SHEET No:- 14.**
9, THE HIGHLANDS, NEATH ABBY, NEATH. SA10 6PF.
Mr & Mrs JONES / NEATH PORT TALBOT C.B.C. **DATE: SEPT 2019.**

[9]

EXPANSION / MOVEMENT JOINT DETAILS.



PLAN.

(NOTE! THE NUMBER OF WALL TIES REQUIRED IS DEPENDENT UPON THE WIDTH OF THE WALL.)

NOTES.

- WALLS CONSTRUCTED IN CLASS "A" CONCRETE BLOCK WORK, SHALL BE PROVIDED WITH MOVEMENT JOINTS AT A MAXIMUM OF 6.00m CENTRES, AS REQUIRED BY BS 5628 (USE OF MASONRY.)
- WALLS CONSTRUCTED IN CALCIUM SILICATE MASONRY, SHOULD BE PROVIDED WITH MOVEMENT JOINTS OF BETWEEN 7.5m AND 10.0m.
- MOVEMENT JOINTS SHOULD NOT EXCEED 10mm WIDTH AND BE SEALED.