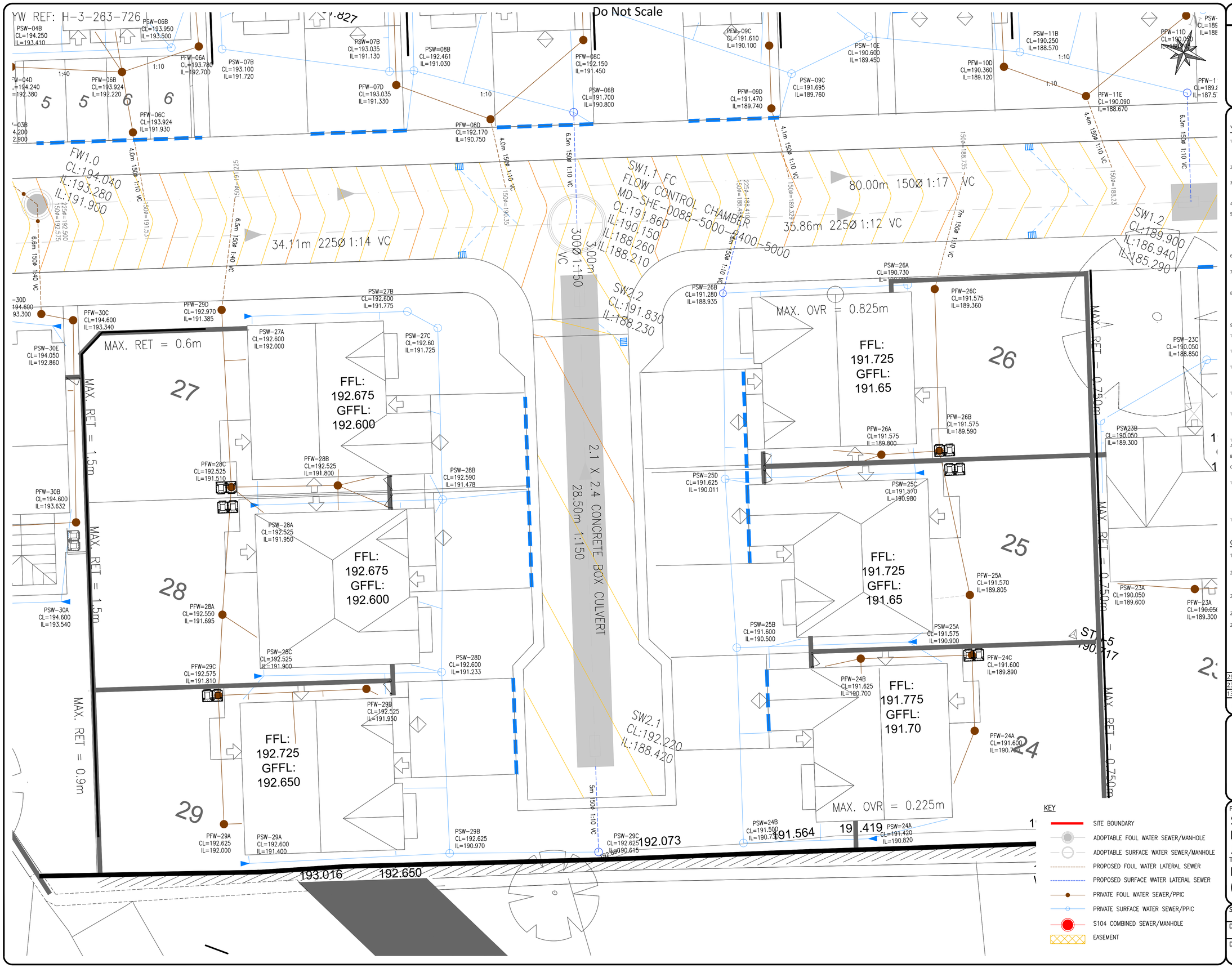


## DESIGNERS HAZARD IDENTIFICATION

IT IS ASSUMED THAT ALL WORKS WILL BE UNDERTAKEN BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT. IN ADDITION TO THE HAZARDS TYPICALLY ASSOCIATED WITH THE TYPES OF CONSTRUCTION DETAILED ON THIS DRAWING, ANY KNOWN ABNORMAL HAZARDS SPECIFIC TO THIS DRAWING HAVE BEEN IDENTIFIED.

ABNORMAL HAZARD REFERENCE

## Notes

### YORKSHIRE WATER GENERAL NOTES

1. ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH SEWERS FOR ADOPTION 6TH EDITION THE RELEVANT BRITISH /EUROPEAN AND YORKSHIRE WATERS STANDARDS/REQUIREMENTS/ADDENDUM TO THE MECHANICAL AND ELECTRICAL SPECIFICATION AND KITEMARKED.
2. MANHOLE COVERS SHALL/MUST HAVE A CLEAR OPENING 600mm AND BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAY.
3. FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION YORKSHIRE WATER BEFORE ANY SEWER WORKS ARE CARRIED OUT.
4. ALL VCS TO BE CLASS TO EN 1916 / BS 5911-1:2002.
5. COVER SLABS MUST CARRY THE BSI KITEMARK OR WILL BE REJECTED BY YORKSHIRE WATER INSPECTOR. WHERE THE CLEAR OPENING THE KITEMARKED PRODUCT IS DIFFERENT TO THAT THE COVER AND FRAME, A LOADING BEARING SLAB SHOULD BE FITTED ABOVE THE COVER SLAB TO BRING THE SIZE DOWN TO 600mm X 600mm FOR THE YORKSHIRE WATER SPECIFIED COVER SIZE. PLEASE REFER TO TO VC SYSTEMS ASSOCIATION (CPSA), TECHNICAL BULLETIN ISSUED AUTUMN 2004 FOR KITEMARKED COVER SLAB OPENING SIZES.
6. THE ADOPTABLE SEWERS SHOULD BE A MINIMUM 1m FROM KERBS AND MANHOLES 0.5m FROM KERB FACES AND SERVICE MARGINS.
7. SEWERS MUST HAVE 5 METERS CLEARANCE FROM TREES AND HEDGES, (PLEASE ALSO REFER TO FIGURE 2.3 ON PAGE 33 IN SEWERS FOR ADOPTION 6TH EDITION FOR RESTRICTIONS ON TREE PLANTING ADJACENT TO SEWERS).
8. SEWERS TO BE LAID IN CLASS 'S' BEDDING (150mm GRANULAR BED AND SURROUND). WHERE DEPTH COVER TO TOP THE SEWER IS LESS THAN 1.2m IN HIGHWAYS AND VERGES (OR LESS THAN 900mm IN PEDESTRIAN ONLY AREAS) THEN A CONCRETE SLAB SHOULD BE PROVIDED ABOVE THE GRANULAR BED AND SURROUND.
9. ALL ADOPTABLE SEWERS TO BE BSI KITEMARK (CERTIFIED TO WIS 4-35-01).
10. ADOPTABLE SEWER PIPES TO BE LAID IN MAXIMUM 3 METER LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER.
11. BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENTS WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A2).
12. PLASTIC CHANNEL SECTIONS IN MANHOLES ARE NOT ACCEPTABLE AND YORKSHIRE WATER WOULD PREFER CLAYWARE CHANNEL IN MANHOLES. YORKSHIRE WATER HAVE FOUND THAT PLASTIC CHANNELS ARE DIFFICULT TO SET IN CONCRETE BECAUSE THEY FLOAT AND A SATISFACTORY FINISH CANNOT BE OBTAINED ON THE BENCHING.
13. THE CHAMBER SIZE MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE THE CONNECTIONS AND BENDS.
14. YORKSHIRE WATER POLICY IS NOT TO ACCEPT TYPE 'C' BRICK MANHOLES AND 1050mm DIA MANHOLE RINGS. INSTEAD IT IS PREFERRED THAT YOU USE TYPE 'B' MANHOLES WITH 1200mm DIA OR 1500mm DIA. RINGS, WITH THE OPENING SITED OVER THE CHANNEL WHERE DEPTH COVER TO PIPE SOFFIT IS 1-1.5m.
15. IF PLASTIC PIPES ARE TO BE USED THEN THE FOLLOWING SHOULD APPLY:-
    A) ALL ADOPTABLE SEWERS TO BE BSI KITEMARK (CERTIFIED TO BS EN 13476-1 AND WIS 4-35-01 AND BS EN 13476-2 OR BS EN 13476-3).
    B) PIPES LESS THAN OR EQUAL TO 500Ø SHALL HAVE NOMINAL SHORT-TERM RING STIFFNESS NOT LESS THAN 8KN/M².
    C) BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENTS WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A2)
17. YORKSHIRE WATER IS NOT OBLIGED TO ACCEPT FILTER DRAIN/LAND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM (DIRECTLY OR INDIRECTLY). AN ALTERNATIVE METHOD DISPOSAL THE LAND DRAINAGE RUN-OFF WILL THEREFORE BE REQUIRED AND YOU WILL HAVE TO LIAISE WITH THE LOCAL AUTHORITY, LAND DRAINAGE SECTION WITH REGARDS TO THE DISPOSAL THE FILTER DRAIN/LAND DRAINAGE RUNOFF.
18. SULPHATE RESISTANT CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.

### GENERAL NOTES

19. ALL CONNECTIONS TO PROPOSED PUBLIC SEWERS TO BE A MINIMUM 150Ø.
20. ALL MANHOLES WITHIN DRIVES TO HAVE B125 COVERS WITH CONCRETE COLLAR. MANHOLES LOCATED WITHIN THE HIGHWAY TO HAVE D400 COVERS.
21. ALL PRIVATE DRAINAGE WITHIN 1m TREES TO HAVE 150mm CONCRETE BED AND SURROUND.
22. ALL SURFACE WATER PIPEWORK TO BE 150Ø UNLESS NOTED OTHERWISE.
23. ALL FOUL WATER PIPEWORK TO BE 100Ø UNLESS NOTED OTHERWISE.

| Date | Revision | By | Chkd | Ref |
|---|---|---|---|---|
| 29/06/17 | HOUSE TYPE INFORMATION UPDATE | KB | VB | P3 |
| 23/02/17 | COMBINE SEWER / TWO SEPARATE | KB | VB | P2 |
| 13/02/17 | PRELIMINARY ISSUE | KB | VB | P1 |


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A1 v.1.1

Project
ST MARY'S AVE, NETHERTHONG, JONES HOMES

Title
PLOT DRAINAGE (SHEET 2 OF 4)

| Scale | 1:100 | Drawn | KB | Checked | VB |
|---|---|---|---|---|---|
| Date | FEB'17 | Status | PRELIMINARY | | |
| Drg. No. | 16293/012 | | | Rev. | P3 |