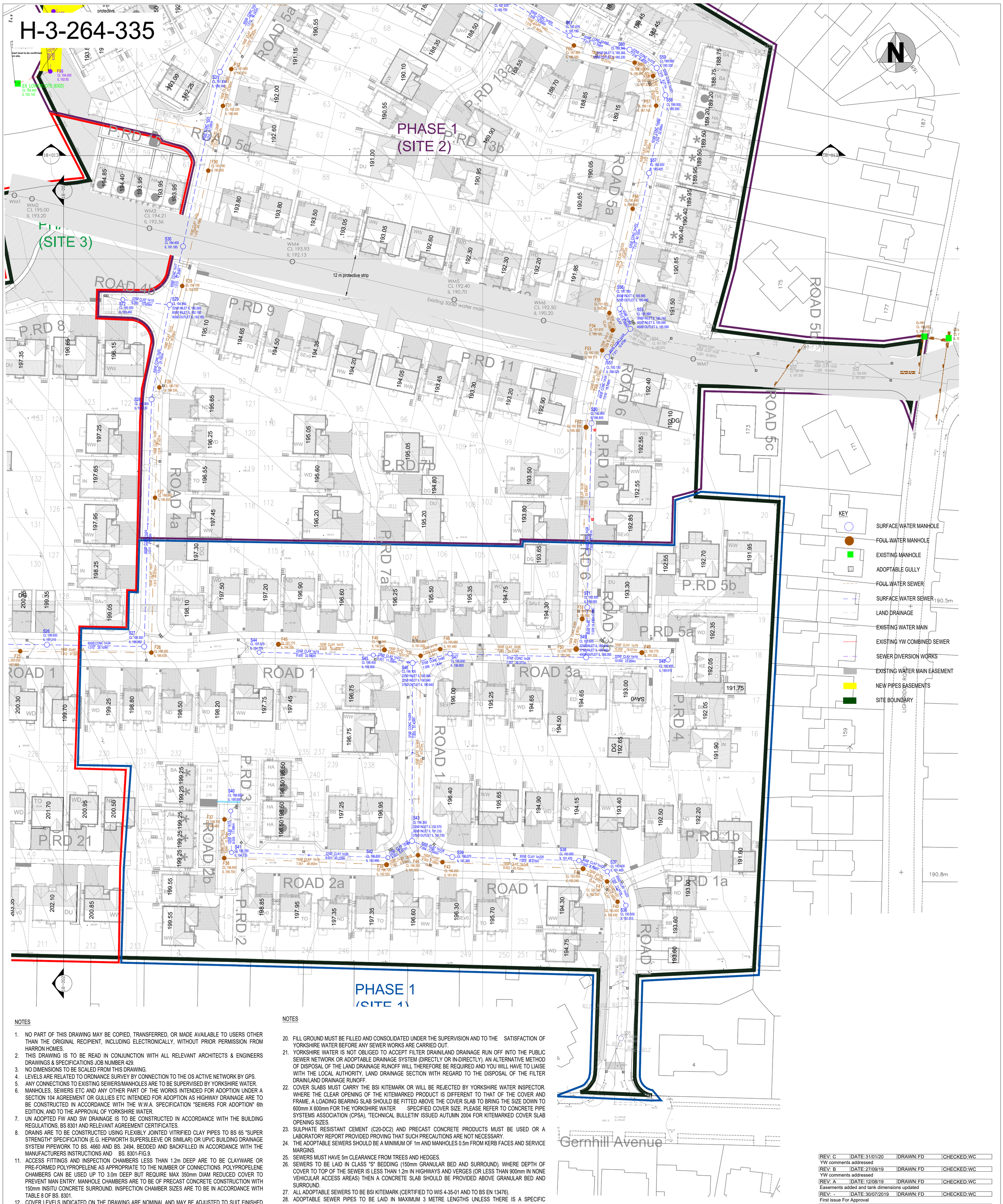

NOTES

1. NO PART OF THIS DRAWING MAY BE COPIED, TRANSFERRED, OR MADE AVAILABLE TO USERS OTHER THAN THE ORIGINAL RECIPIENT, INCLUDING ELECTRONICALLY, WITHOUT PRIOR PERMISSION FROM HARRON HOMES.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS & ENGINEERS DRAWINGS & SPECIFICATIONS JOB NUMBER 429.
3. NO DIMENSIONS TO BE SCALED FROM THIS DRAWING.
4. LEVELS ARE RELATED TO ORDNANCE SURVEY BY CONNECTION TO THE OS ACTIVE NETWORK BY GPS.
5. ANY CONNECTIONS TO EXISTING SEWERS/MANHOLES ARE TO BE SUPERVISED BY YORKSHIRE WATER.
6. MANHOLES, SEWERS ETC AND ANY OTHER PART OF THE WORKS INTENDED FOR ADOPTION UNDER A SECTION 104 AGREEMENT OR GULLIES ETC INTENDED FOR ADOPTION AS HIGHWAY DRAINAGE ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE W.W.A. SPECIFICATION "SEWERS FOR ADOPTION" 6th EDITION, AND TO THE APPROVAL OF YORKSHIRE WATER.
7. UN ADOPTED FW AND SW DRAINAGE IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE BUILDING REGULATIONS, BS 8301 AND RELEVANT AGREEMENT CERTIFICATES.
8. DRAINS ARE TO BE CONSTRUCTED USING FLEXIBLY JOINTED VITRIFIED CLAY PIPES TO BS 65 "SUPER STRENGTH" SPECIFICATION (E.G. HEPWORTH SUPERSLEEVE OR SIMILAR) OR UPVC BUILDING DRAINAGE SYSTEM PIPEWORK TO BS. 4660 AND BS. 2494, BEDDED AND BACKFILLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS AND BS. 8301-FIG.9.
11. ACCESS FITTINGS AND INSPECTION CHAMBERS LESS THAN 1.2m DEEP ARE TO BE CLAYWARE OR PRE-FORMED POLYPROPELENE AS APPROPRIATE TO THE NUMBER OF CONNECTIONS. POLYPROPELENE CHAMBERS CAN BE USED UP TO 3.0m DEEP BUT REQUIRE MAX 350mm DIAM REDUCED COVER TO PREVENT MAN ENTRY. MANHOLE CHAMBERS ARE TO BE OF PRECAST CONCRETE CONSTRUCTION WITH 150mm INSITU CONCRETE SURROUND. INSPECTION CHAMBER SIZES ARE TO BE IN ACCORDANCE WITH TABLE 8 OF BS. 8301.
12. COVER LEVELS INDICATED ON THE DRAWING ARE NOMINAL AND MAY BE ADJUSTED TO SUIT FINISHED ROAD/ EXISTING GROUND LEVELS AS NECESSARY. INSPECTION CHAMBER COVERS SHOULD BE GRADE B125. WHERE A B125 COVER AND FRAME HAS BEN APPROVED, THIS MUST NOT BE COATED IN PLASTIC AND MUST HAVE LIFTING EYES SUITABLY SIZED TO ACCOMMODATE STANDARD LIFTING KEYS. SCREW DOWN COVER ARE NOT ACCEPTABLE.
13. WHERE DRAINS PASS THROUGH FOUNDATIONS OR OTHER RIGID STRUCTURES, A LINTEL OR SLEEVE IS TO BE USED AND PROVISION FOR FLEXIBILITY IS TO BE MADE WITH "ROCKER PIPES".
14. ANY EXISTING LAND DRAINS SEVERED BY SITE OPERATIONS SHOULD BE DIVERTED AROUND ANY PROPERTIES AND RECONNECTED TO THE EXISTING LAND DRAINAGE SYSTEM VIA A SILT TRAP.
15. GULLIES SITUATED IN AREAS ACCESSIBLE TO WHEELED VEHICLES TO BE OF A SUITABLE CONSTRUCTION (E.G. HEPWORTH CODE 194 GULLY POT WITH INSITU CONCRETE BED AND SURROUND, FITTED WITH DRAINAGE CASTINGS CODE TD651 GRATING AND FRAME).
16. DRAINS WITHIN AREAS OF "MADE GROUND" TO BE CONSTRUCTED BY FIRST MAKING UP THE AREA TO APPROXIMATE FINISHED LEVEL AND THEN EXCAVATING THROUGH THE FILL MATERIAL INTO UNDISTURBED GROUND. THE DRAIN TRENCH IS THEN TO BE BACKFILLED TO FORMATION LEVEL USING SUITABLE GRANULAR FILL MATERIAL WELL COMPACTED IN LAYERS NOT EXCEEDING 225mm.
17. CONCRETE SLAB TO PIPES REQUIRED WHERE DEPTH OF PIPE FROM GROUND LEVEL TO SOFFIT LESS THAN 1.2m.
18. ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH "SEWERS FOR ADOPTION" 6th EDITION, THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/ REQUIREMENTS/ ADDENDUM AND KITEMARKED".
19. MANHOLE COVERS SHALL/MUST HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.

NOTES

20. FILL GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF YORKSHIRE WATER BEFORE ANY SEWER WORKS ARE CARRIED OUT.
21. YORKSHIRE WATER IS NOT OBLIGED TO ACCEPT FILTER DRAIN/LAND DRAINAGE RUN OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM (DIRECTLY OR IN-DIRECTLY). AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUNOFF WILL THEREFORE BE REQUIRED AND YOU WILL HAVE TO LIAISE WITH THE LOCAL AUTHORITY, LAND DRAINAGE SECTION WITH REGARD TO THE DISPOSAL OF THE FILTER DRAIN/LAND DRAINAGE RUNOFF.
22. COVER SLABS MUST CARRY THE BSI KITEMARK OR WILL BE REJECTED BY YORKSHIRE WATER INSPECTOR. WHERE THE CLEAR OPENING OF THE KITEMARKED PRODUCT IS DIFFERENT TO THAT OF 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 CONCRETE PIPE SYSTEMS ASSOCIATION (CPSA), 'TECHNICAL BULLETIN' ISSUED AUTUMN 2004 FOR KITEMARKED COVER SLAB OPENING SIZES.
23. SULPHATE RESISTANT CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.
24. THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1m AND MANHOLES 0.5m FROM KERB FACES AND SERVICE MARGINS.
25. SEWERS MUST HAVE 5m CLEARANCE FROM TREES AND HEDGES.
26. SEWERS TO BE LAID IN CLASS "S" BEDDING (150mm GRANULAR BED AND SURROUND). WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2m IN HIGHWAYS AND VERGES (OR LESS THAN 900mm IN NONE VEHICULAR ACCESS AREAS) THEN A CONCRETE SLAB SHOULD BE PROVIDED ABOVE GRANULAR BED AND SURROUND.
27. ALL ADOPTABLE SEWERS TO BE BSI KITEMARK (CERTIFIED TO WIS 4-35-01 AND TO BS EN 13476).
28. ADOPTABLE SEWER PIPES TO BE LAID IN MAXIMUM 3 METRE LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER LENGTHS.
29. BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A2).
30. PLASTIC CHANNEL SECTIONS IN MANHOLES ARE NOT ACCEPTABLE AND YORKSHIRE WATER WOULD PREFER CLAYWARE CHANNEL IN MANHOLES.
31. THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE THE CONNECTIONS AND BENDS.
32. YORKSHIRE WATER POLICY IS NOT TO ACCEPT TYPE "C" BRICK MANHOLES AND 1050mmØ MANHOLE RINGS. INSTEAD IT IS PREFERRED THAT YOU USE A TYPE "B" MANHOLE WITH 1200mmØ OR 1500mmØ RINGS, WITH THE OPENING SITED OVER THE CHANNEL WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1-1.5m.
33. SURFACE WATER LATERAL PIPES SHOULD BE A MINIMUM OF 150mm IN DIAMETER.
34. THE INVERT LEVELS AT THE PROPOSED POINTS OF CONNECTION TO EXISTING PUBLIC SEWERS SHALL BE CHECKED BEFORE ANY NEW DRAINS ARE CONSTRUCTED. ANY VARIATION TO THE LEVELS SHOWN ON THE DRAWING SHALL BE NOTIFIED TO HARRON HOMES SITE ENGINEER.
35. ALL INSITU CONCRETE TO BE DESIGNATED MIX GEN 1 TO BS 8500-1
36. ALL TRENCHES IN ROADS AND PAVED AREAS SHALL BE BACKFILLED WITH TYPE 1 DOT GRANULAR SUB-BASE MATERIAL, OR OTHER GRANULAR MATERIAL APPROVED BY THE HIGHWAY AUTHORITY.
37. PIPES ENTERING MANHOLES AND ROAD GULLIES SHALL HAVE A FLEXIBLE JOINT WITHIN 600mm OF THE INSIDE THE MANHOLE OR GULLY JOINING WITH A SHORT ROCKER PIPE.
38. ALL PIPES SHOULD ALWAYS CONNECT SOFFIT TO SOFFIT UNLESS NOTED OTHERWISE.
39. ALL PIPES SHALL BE EITHER:
    A - VITRIFIED CLAY TO BS EN 295 WITH A MINIMUM CRUSHING STRENGTH AS FOLLOW :-
        150 dia. - 40 kN/m
        225 dia. - 45 kN/m
        300 dia. - 72 kN/m
    B - CLASS 120 CONCRETE TO BS EN 1916/BS5911-1 2002.
    C - PVC (CERTIFIED TO WIS 4-35-01 & BS EN 13476)
40. THERE SHOULD BE ENOUGH CLEARANCE TO ACCOMMODATE THE BEDDING FOR BOTH PIPES, APPROX 300mm. IF CROSSOVER IS NEAR THE ROCKER THEN THE CLEARANCE NEEDED MAY BE INCREASED.

0 5 10 25 50m

1:500

REV: C	DATE:31/01/20	DRAWN:FD	CHECKED:WC
YW comments addressed			
REV: B	DATE:27/09/19	DRAWN:FD	CHECKED:WC
YW comments addressed			
REV: A	DATE:12/08/19	DRAWN:FD	CHECKED:WC
Easements added and tank dimensions updated			
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Revisions

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Site Layout Plan
(2 of 3)

Drawn: FD Date:July 19

Checked:WC Scale @ A1:1:500

Job no:429 Drg No:18-003 Rev:D