



Note A - Infiltration Tanks:

The proposed surface water drainage system serving the site has been split into two separate networks, each draining to a cellular infiltration tank. These tanks have been sized using the results of localised on-site infiltration testing carried out across the site at appropriate depths. Both tanks have been designed with access duscts for inspection and maintenance

Tank A. achieves the higher infiltration rate and therefore manages run-off from a higher proportion of the site while still achieving the 24-hour half drain time for both the peak

1:30y +20% and 1:100y +40% storm events. Tank B. has a lower infiltration rate, therefore the run-off area it serves has been kept to a minimum. Analysis shows this tank does fail the 24-hour half drain time test both the peak 1:30y +20% and 1:100y +40% storm events however the tank has been oversized to account for this. Allowing for a larger tank will not only proved additional storage capacity for a repeat storm event but will also maximise the amount of

Note B - Permeable Paved Areas:

Some areas of the development will be allowed to drain locally to ground via permeable paving. These include driveways and parking areas. A 60mm thick block may be used for the private driveways however any of the shared surfaces that my be subjected to occasional HGV loading should be laid with an

Initial source control calculations have shown that these areas will successfully drain to ground without exceeding the 24 hour half drain time limit, however infiltration rates do vary across the site. Gully's have been allowed for within the surface water drainage design as a safety measure to collect any overflow from the permeable paved areas should the surfaces ever become clogged prior to scheduled maintenance works. These gullys will also allow exceedance flows to surcharge out of the drainage system into the permeable paving should it ever be required, See Note A.

Notes:

1. This drawing is to be read in conjunction with all of the relevant architects, engineers and specialist sub-contractor drawings and specifications

Any discrepancies between the engineers and the architects drawings to be referred to the architect before proceeding. Drawings must not be scaled. 3. All private drainage is to be in accordance with BS EN 752-1-2-3-4, BS EN 1295-1, BS EN 1610 and all relevant sections of approved document H of the

building regulations (2015 Edition). 4. All adoptable drainage is to be in accordance with 'Design and construction guidelines for foul & surface water sewers offered for adoption', where appropriate. 5. Pipework Type - Plastic i.e. PVC-U, to BS EN 1401-1 Osma or equivalent. (Private pipework to be type SN4 and all adoptable pipework to be type SN8.) 6. Precast concrete manholes and fittings shall be to BS 5911 parts 3 and 4 and BS EN 1917.

7. Whenever pipework passes through foundations, walls or connects to manholes, flexible pipe joints are to be provided within 150mm of the face of the structure. 600mm pipe length to then be used to form a rocker pipe. 8. Whenever pipework passes through screen walls, footings or retaining walls, lintels are to be provided.

9. Where pipelines pass within 1.0m of buildings or walls the foundations are to be taken down below the bottom of the trench. Where pipelines are more than 1.0m away from foundations the trench shall be backfilled with concrete up to a point that meets a 45° angle line taken from the bottom corner of the nearest foundation.

10. Where pipelines cross with less than 300mm of clearance, each is to be surrounded with grade ST4 mass concrete for a distance not less than 1.0m centered on the crossing point. The length of surround should be extended as necessary to within 150mm of the next nearest flexible joints.

11. For private drainage, concrete protection is to be provided where the effective cover to the crown of the pipe(s) is less than 1.2m in trafficked areas and 0.6m in soft landscaped or pedestrianised areas. (Applies during and after construction). 12. The contractor is to ensure that suitable protective measures are taken to ensure that the drainage pipework and fittings are not damaged by site traffic prior to any over-site filling operations being completed.

- 13. Chamber annotation references are as follows:
- AC Denotes a polypropylene or vitrified clay access chamber, depth not exceeding 600mm, diameter not exceeding 300mm.
- IC Denotes a polypropylene inspection chamber, depth not exceeding 3.0m, diameter not exceeding 600mm. Standard diameter 450mm unless specified otherwise
- MH Denotes a manholes constructed from either brick, polypropylene or P.C.C. sections. Chamber depth to be in excess of 1.2m.

14. The top run of each private foul drainage network is to be laid to falls no slacker than 1:40. the head of each run is to be vented to atmosphere in accordance with approved document H.

15. All foul and surface water drainage pipelines are to be 100mm dia min and laid at a gradient no slacker than 1:80, unless stated otherwise.

16. The contractor is to ensure that all pipework connections are arranged to direct flows down or into the main channel in the direction of the main flow. Any oblique or perpendicular chamber connections are to be directed into the mainline channel via appropriate benching. All chambers must include a connection via the main channel to ensure that a flush through is achieved.

17. The contractor is to ensure that when preformed polypropylene manhole bases are used, they are orientated such that the main flow is directed through the main channel of the base. This should be achieved by using long radius bends outside of the manhole when necessary.

18. Where new connections are to be made into existing manholes or sewers, all invert levels, pipe orientation and sizes should be checked on-site prior to the commencement of the works, with any variance reported to the engineer once identified. Where new connections are to be made either on or off-site, the contractor is to check the line and level of any existing services / mains, to ensure that no clashes exist prior to the works commencing

19. Any and all new connections into a public sewer are to be inspected by the local water authority and carried out fully in accordance with their requirements. The contractor is to allow for obtaining the appropriate `Section Agreements' as well as paying all necessary fees.

20. The contractor is to allow for obtaining the appropriate road opening licence's from the local highway authority and paying all necessary fees. All reinstatement works within the public highway are to be carried out in accordance with the requirements of the local highway authority.

21. Permeable paving surface finish 'to the architects spec'. Any alteration to the extents of the permeable paving may have an adverse affect upon the Surface water drainage design and must therefore be discussed with the engineer

22. Modular crate soakaway system(s) to be 'Wavin Aquacell' or 'Polypipe Polystorm'. Any other system offered will need to be provided with a separate warranty for design and installation.

Note:

The proposed surface water drainage measures have been designed to manage a peak 1:100 year +40% climate change storm event.

Proposed Root Protection Areas

Drainage Legend - - - - Existing Private SW Sewer (& Manhole) ---- Existing Private FW Sewer (& Manhole) P2 12.07.22 Site plan and building layouts updated. Drainage revised following the results of on-site infiltration testing - Issued for Planning – – – – Existing Public SW Sewer (& Manhole) P1 21.06.22 Drawn - Preliminary Issue ---- Existing Public FW Sewer (& Manhole) Rev. Date Description - - + \bigcirc - - Proposed SW Sewer (& Manhole) — — — — Proposed Suspended SW Drain Jonsen House 43 Commercial Rd info@calcinotto.co.uk RG 🔂 – – 450Ø Trapped Road Gully Poole BH14 0HU www.calcinotto.co.uk YG - Square Trapped Yard Gully + Shallow Bucket RE **—** — Rodding Eye (Refer to plan for invert level) ← — — Rainwater Collection Pipe (At High Level) (R) — — — Rainwater Collection Pipe AJC Homes (R) \star — — Rainwater collection Pipe (with Access) Project Title Drainage Channel (with Sump Unit) Orchard Gate, Dibden Purlieu Threshold Drainage Channel (to Architects Spec) Drawing Title Gravel Drainage Strip Proposed Drainage (S) Soil & Vent Pipe / Stub Stack Layout Drawings Sheet 1 of 3 \times \times \times \times \times \times Pipeline to be Removed / Abandoned Drawing Status Permeable Block Paving

Refer to architects / M&E drawings for exact positions of internal

Planning Originator No. Rev by

114290 GEB

PROJECT | ORIGINATOR | ZONE | LEVEL | TYPE | ROLE | NO. Revision 114290-CAL-XX-XX-DR-D-005 P2

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Scale 1:125 @A1