

**Drawing Notes**

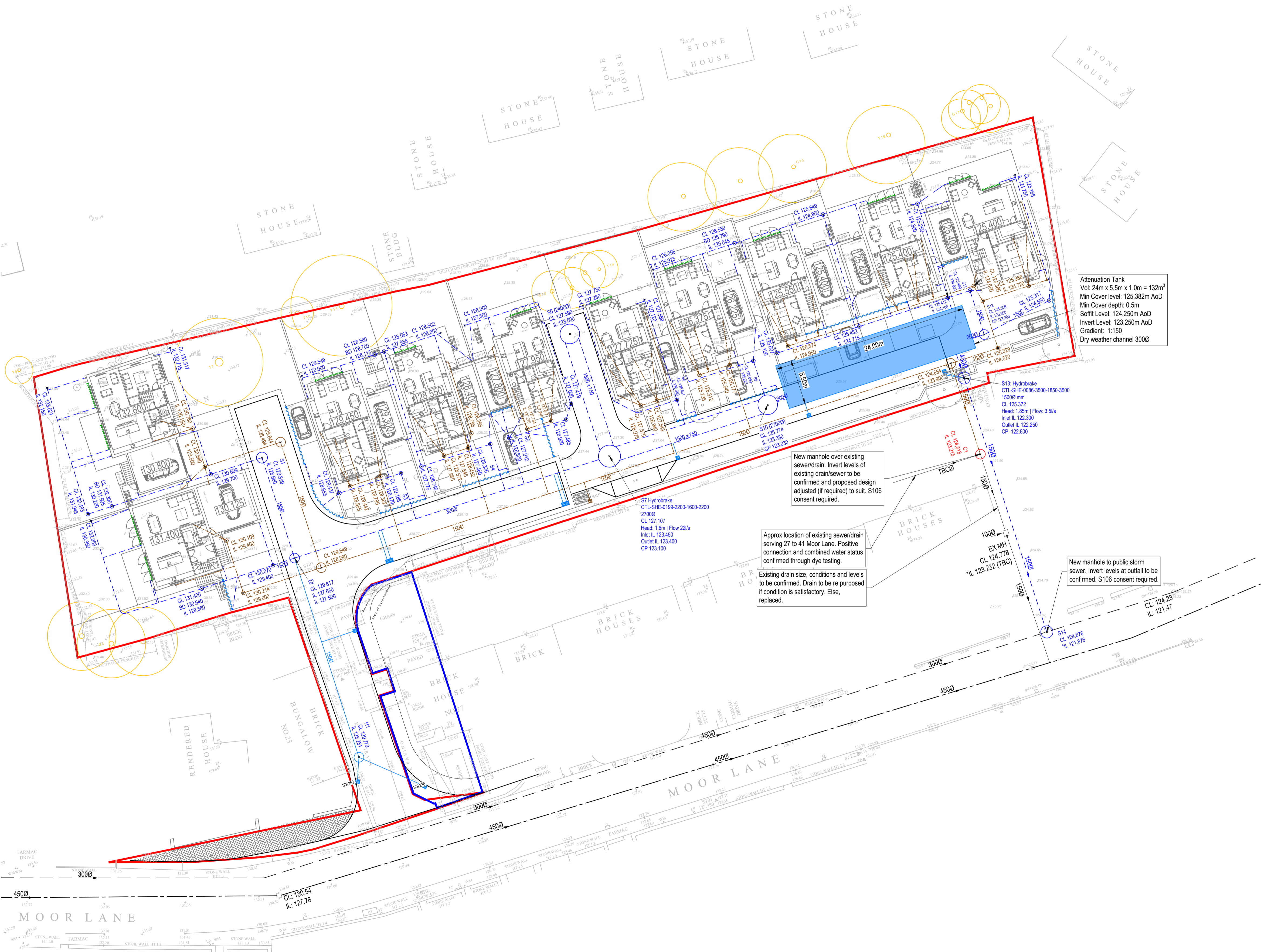
This drawing is based on the following sources of information, and must be checked and reviewed against all project information.

- Site layout by AHJ Architects ref: 2539-D-20-002 Rev J
- OS files contained within the site layout
- Tree Root Protection Zones contained with the site layout.
- Topographic survey by LMS Geomatics Engineering Ltd ref: LMS0221\_PPJ\_TS\_01A
- Site entrance drawing by Bryan G Hall ref: 18-412-SKH-001 Rev K BOUND
- Existing manhole invert levels as provided by the client.

**Drainage Notes**

- This drawing is to be read in conjunction with and checked against all other drawings, engineering details, specification and any structural, geotechnical or other specialist documents provided.
- Building drainage shall comply with BS EN 752, 12056 and Building Regulations Part H.
- This drawing is schematic for clarity only, positions of pipe runs and manholes may vary on site due to site conditions.
- All low spots on hard standing areas to have double gullies, except single driveways.
- Gully top and manhole cover specification to be in accordance with BS EN 124 and located in accordance with the intended use and loading classification as described within groups 1-6.
- Prior to topsoiling of rear gardens, the gardens should be reworked, rotated or decompacted to a depth of 600mm. Once this is carried out, NO PLANT to access these areas. Any further consolidation of subsoil to be reworked as necessary. Before reworking or rotating, the Contractor is to mark all drain runs in the area.
- Any deviations from the aforementioned and/or regulatory standards may attract additional consent/approvals to the satisfaction of LPA/LFA, Building Control and/or Water Authority.
- Inspection chambers shall be positioned minimum of 500mm behind the back of the footway.
- Inspection chambers located within garages to have double seal bolt down covers.
- Lateral pipes shall be 150mm (unless stated otherwise) and laid at min 1:80 or to the adopting Water Authority's requirements.
- Inspection chambers shall be positioned minimum 100mm away from the plot boundary.
- Drainage runs should be laid within hard standings as far as practicable.
- Drainage runs shall be laid minimum of 5.0 metres from the rear of properties where practicable to allow for future extensions.
- All drainage pipes (except laterals) shall be min 100mm unless otherwise stated.
- Drainage runs shall be installed as per the following conditions:
  - Storm water 100mm - 1:80 (1:100min).
  - Storm water 150mm - min 1:150
  - Foul/Combined Water 100mm - 1:80 min\*
  - Foul/Combined Water 150mm - 1:150 min\*\*

(\*min 1 W/C, else, 1:40)  
(\*\*min 5 W/C's, else, 1:80)
- All connections when laid shall be plugged, protected as necessary and marked with a stake for future use.
- Invert levels indicate lowest connection point, unless multiple values are noted for differing pipe diameters. Pipework to be installed soft to soffit.
- \* Indicates interpolated or inferred invert/cover levels that must be checked/confirmed.
- Where backdrop connections are proposed, BD notation indicates invert level of the back drop pipe (higher invert level). Max 1.5m backdrop where height measures between benching soffit and backdrop invert levels.
- Back inlet gullies and catchpits (min 300mm) required where connecting to SUDs features and in areas where silt build up likely.
- Foundations adjacent to pipe runs or manholes are to have their formation level set at or below pipe invert level.
- Where excavations for pipe runs are parallel and in close proximity to each other and/or other service trenches, the contractor shall ensure that adequate safety measures, including temporary shoring are provided, in line with current Health & Safety Legislation and good practice. Particular attention is to be paid to adjacent trenches of differing invert levels.
- Excavations for manholes, pipe runs etc located within a 45-degree load distribution splay from any adjoining existing foundations, are to be adequately supported for the duration of the works and building drainage protected.
- Where pipes pass under buildings, unless beam & block floors are used, they are to be surrounded in concrete.
- Finished Floor Levels (FFL's), assumed to be typically 150mm above external level. Refer to architects drawing for details.
- All new private inspection chambers and rodding eyes shown without cover levels (CL) shall be assumed to be at external ground level, and invert levels (IL) are to be typically between 450 and 600mm below CL, subject to the length of the internal house connections.
- Cover and invert levels are indicative and may vary on site. In any case the following minimum cover depth to soffit of pipes without protection shall be as follows:
  - Domestic gardens and pathways without any possibility of vehicular access - 0.35m
  - Domestic driveways, parking areas and yards with height restrictions to prevent entry by vehicles with a gross weight in excess of 7.5 tonnes - 0.5m
  - Domestic driveways, parking areas and narrow streets without footways (e.g. Mews developments) with limited access for vehicles with a gross weight in excess of 7.5 tonnes - 0.9m
  - Agricultural land and public open space - 0.9m
  - Other highways and parking areas with unrestricted access to vehicles with a gross weight in excess of 7.5 tonnes - 1.2m
- Where drainage does not comply with minimum cover depths, the following protection measures should be installed in accordance with Building Regulations part 'H' and good practices:
  - UPVC pipes - provide a concrete bridging (in addition to class 'S' bedding)
  - Vitrified clay pipes - provide a 100 mm min. thick concrete bed and surround (instead of class 'S' bedding) and a 13 mm thick compressible filler at each joint.
- Note: in-situ concrete used in connection with a) and b) above shall be standard mix GEN3 in accordance with BS 8500-1.
- All existing drainage found on site during the works shall be investigated, its operational status confirmed, and the following applied:-
- Inoperative drainage shall be cut back and pipe runs grubbed out (preferred) or filled with concrete grout.
- 'Live' drainage shall be temporarily re-routed to allow the new drainage to be constructed.
- Where existing drainage is to be re-used including road, building and external drainage systems, the contractor shall ensure that all chambers and drainage runs are cleaned, de-silted and made good.
- Covers to existing chambers to be re-used shall be replaced where necessary to suit proposed development loading class. Chamber covers shall also be adjusted to suit final ground levels as necessary.
- Where necessary, existing chambers shall be re-benched to suit new pipework arrangement.



**Key**

- Indicative Site Boundary
- Indicative Ownership Boundary

**Finished floor level/DPC Level.**  
Refer to architects details.

XX.XXX

Existing Tree RPA as per Arboricultural report. All existing trees to be removed except those indicated as retained. All planting to be min 5m away from drainage assets, unless specialist protection provided.

**Combined Water Drainage Legend**  
(Dimensions are approx. internal sizes)

- Existing Combined Water Drain
- New Combined Water PCC Manhole. 1200 dia (unless stated otherwise) up to 6000mm deep.

**Foul Water Drainage Legend**  
(Dimensions are approx. internal sizes)

- Existing Foul Water Sewer
- New Foul Water Drain/Sewer 1000 unless otherwise stated.
- New Foul Water PCC Manhole 1200 dia (unless stated otherwise) up to 6000mm deep.
- New Foul Water Inspection Chamber 450mm dia. polypropylene up to 300mm deep.
- New Foul Water Inspection Chamber 250mm dia. polypropylene up to 600mm deep.
- New Foul Yard Gully

**Storm Water Drainage Legend**  
(Dimensions are approx. internal sizes)

- Existing Storm Water Sewer
- New Storm Water Drain/Sewer 1000 unless otherwise stated.
- New Storm Water PCC Manhole 1200 dia (unless stated otherwise) up to 6000mm deep.
- New Storm Water Inspection Chamber 450mm dia. polypropylene up to 300mm deep. 300mm catchpit required where CP annotated.
- New Rodding Eye
- Spot Elevation
- Linear ACO drain with silt bucket.
- Low threshold drain as per architectural specification.
- Attenuation Tank

**Highway Drainage Legend**  
(Dimensions are approx. internal sizes)

- New Highway Drain 1000 unless otherwise stated.
- New Highway PCC Manhole 1200 dia (unless stated otherwise) up to 6000mm deep.
- New Road Gully

P08	Invert level tweaks.	MA	-	-
P07	Drainage updated to reflect site layout received on 11.05.26.	MA	ZS	ZS
P06	Drainage cover levels updated near plot 10 following external works changes.	MA	LF	LF
P05	Notes updated	MA	-	-
P04	Drainage outfall revised following dye testing and confirmation of public sewer. Associated drainage adjusted to suit.	MA	-	-
P03	Outfall revised following dye testing. Tank geometry and associated drainage adjusted to suit.	MA	-	-
P02	Topographic survey shown, gullies tweaked and S12 changed to 1200 PCC.	MA	-	-
P01	First Issue	MA	ZS	ZS
Rev	Details	Author & Date	Checked & Date	Approved & Date

**align PROPERTY PARTNERS**

Client: PPJ Developments  
 Project Name: Land rear of 23-43 Moor Lane, Gomersal, Cleckheaton, BD19 4LF  
 Drawing Title: Drainage Plan  
 Purpose: S3 - For Comment  
 Scale: 1:250  
 Original Size: A1  
 Drawing Number: PV2511-APP-92-XX-DR-C-2500  
 Rev: P08