Prior to any construction, the contractor must confirm the precise invert level and pipe diameter of the receiving drainage system and must immediately advise RSK of any variation to that upon which the design has been based.

Design Information Identification	
1	Foul water network to drain via gravity and connect to phase 1 adoptable network located in Cheltenham Avenue.
2	Surface water network to drain via gravity and drain into existing watercourse located at the south of the site.
3	Offline basin used to contain 100yr+40% CC storm event.
4	Offline basin located outside of flood zone.

The details provided on this drawing are subject to comments by all the relevant approving authorities. Until such time as all comments have been received and incorporated onto the drawings, all the information provided and costing's, are used at Persimmon Homes risk and no liability will be accepted by RSK. Scheme based on Layout ARCH/PL/PH2 Rev G

Note: The drainage works are subject to Technical Approval from Severn Trent and may therefore change

Appraisal based on the following :

Surface Water

Surface water to discharge to the watercourse in the south. 100yr+40%CC storm event to be contained within the offline basin. Adoptable piped network to contain up to and including 30 year surcharged outfall event.

Foul Water

Foul water is to discharge into the Phase 1 adoptable network located in Cheltenham Avenue at manhole F307. Manhole has a depth of 1.585m deep.

CIVIL / STRUCTURAL DESIGN RISK MANAGEMENT

Abnormal or unusual residual risks associated with the design outcomes shown on this drawing are:-

RSK LDE LTD has followed its Design Risk Management process for Hazard Elimination and Risk reduction in developing the designs shown on this drawing. Abnormal or unusual residual risks may be shown above where it is considered that such risk may not normally be expected by competent persons engaged on work of this nature or type.

Notes:

1. This drawing is to be read in conjunction with all Architectural Drawings and Topographical Survey Drawing .
2. This drawing has been prepared Appraisal purposes only, and a detailed design must be carried out prior to construction.
3. House levels are Finished Floor Levels (FFL's).
4. Figures quoted next to manholes / rodding eyes are cover & invert level, in metres AOD.
5. Footpaths are to be laid with a crossfall to allow drainage to soft landscaped areas.
6. Where possible all drainage runs shall be kept a minimum of 4.0m from any existing tree that is to be retained.
7. All drainage design is subject to technical approval, no connections shall be made to any public sewers without written consent from the drainage authority.

Drainage Legend:

- Proposed foul water sewer and manhole
- Proposed surface water sewer and manhole
- Proposed Drainage Easement
- Site boundary
- Retaining feature- retaining type to be discussed with Client at detailed design stage
- Extra Facing Brick
- Existing Flood Zone
- FFL 161.00 — Finished Floor Level (All plots set above the 100 year + 45% modelled WL)

Removable bollards for emegency access only

For tree and hedge planting refer to detail landscaping drawing

Shaft 401344-003 - Coal Mining Desk Based Assessment (Ref: 11-156LJ) (June 2018) confirms that the shaft has been capped. Assessment indicates a 5.0m radial standoff from the shaft will be required whereby no structures should be positioned. However, it is considered prudent to extend this to circa 20m to avoid shafts not being located within the search area for a future freehold sale.'

Plots/School boundary location not consistent with current Phase 1 Site Layout

Flood compensation exercise to be undertaken at detailed design stage

Offline Basin to contain 1:100 year +40%CC

Top of bank 161.535
Base of basin 160.530.

1.0m Depth Effective.
Basin Water Level
1:100 yr + 40%cc 161.438m
Effective volume provided 552m³

Hydrobrake S26
SHE-0162-1740-2700-1740. Hydrobrake to restrict flow to 17.40l/s at 2.7m head.

Any earthworks required to increase levels within flood zone area pending appropriate flood compensation/agreement from LLFA

LLFA have agreed discharge level at normal water level. Flap valve to be fitted. Normal water level at this location TBC.

Increased flow into existing 150mm Foul network may require upsizing subject to review by Severn Trent

Phase 1 easement to be considered when producing final site layout for plot locations in this area

Pond Shape/ size amended to follow latest Phase 1 design

Surface Water drainage philosophy

- Surface Water Network to drain to the existing watercourse south of site at 17.4 l/s. Discharge rate taken from RSK FRA dated February 2019.
- All storm events up to and including 30yr contained within pipe system
- 100 year +40% climate change event contained within offline basin
- Consent to discharge via the LLFA will be required
- Existing flows and water level in ditch to be determined

Foul Water drainage philosophy

- Foul water network drains via gravity to phase 1 FW network at manhole F307.

Rev	Date	Amendment	Drawn	Chkd	Appd
P3	11.11.22	Updated to suit latest drainage design to tie in with landscaping	LGS	MS	
P2	20.10.22	Second pond indicated for wildlife purposes as requested by client	MAR		
P1	19.10.22	First Issue	LGS	MAR	

LDE
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Client: Persimmon Homes

Project Title: Ayr Road Phase 2 Cheadle

Status: APPRAISAL

Drawing Title: Proposed Drainage Layout

Drawn	Date	Checked	Date	Approved	Date
LGS	OCT 22	MAR	OCT 22		

Scale	Org Size	Dimensions
1/500	A0	

Project No.: 882655 File Name:

Drawing No.: 10-01 | LDE | | | DR | D | 10-01 | Rev. P3

Project No. | Orig. | Vol./Sys. | Lev./Loc. | Type | Role | Draw. No.

Scale 1:500
0 5 10 15 20 25m