

Appendix D

Drainage Strategy Drawings

Notes:

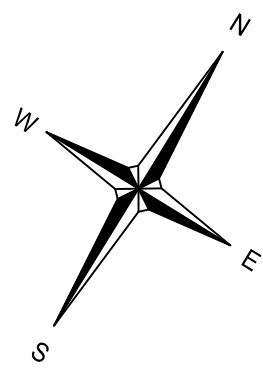
- The contractor is to check all information provided prior to commencing the works and seek clarification from the engineer in respect to any ambiguities found.
- Pipe materials shall be as follows:
Surface Water:
-150a to 225a - Polypropylene PVCu pipes
-300a and above - Polypropylene PVCu pipes
Foul Water:
-All pipe materials shall be clayware Class 120 to BS EN 295
- All drainage under trafficked areas must be backfilled with an approved graded granular material.
- All chamber covers and gully tops shall be kile marked and comply with the strength / group requirements of BS EN 124.
- Cover levels for chambers within landscaped areas shall be adjusted to match surrounding finished levels.
- All new rainwater down pipes are to discharge into roddable connections.
- All pipes to be benched within the chambers soffit to soffit.
- Section 106 connection application to be sought and approved prior any connections to the public sewers.
- All foul drainage pipes to be DN100 and all surface water pipes to be DN150 and laid at 1:100 or steeper (unless noted otherwise).
- All foul SVP pipes to be laid at 1:40 or steeper, and 1:80 if at least one WC drains into the pipe.
- Drainage chambers within areas paved with paving flags and block sets shall all have recessed covers.
- Final position of all RWP's and SVP's to be confirmed.

Key:

	Proposed Building
	Proposed Gravel Surround
	Existing Access Road
	Existing Building
	Proposed Concrete Slab
	Existing and Proposed Green Areas
	Existing Trees
	Proposed New Tree (refer to Landscape Architect Design)
	Proposed new hedgerow (refer to Landscape Architect Design)
	Proposed fencing

Planning Application Legend:

	Phase 1: Studio & Barn Holiday Lets
	Phase 2: Farmhouse Extension
	Phase 3: Cattle Sheds & Farmhouse Buildings

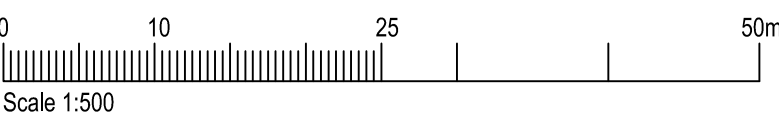


Note:

- Dirty Water/ Lightly Fouled Water from yard areas exposed to regular animal access are directed to Slurry Tanks. Dirty water will be treated in Treatment Tank prior to discharge into Slurry Tank. Contractor to confirm.
- Stormwater and Other Fouled Water from yard areas which are not directly contaminated by livestock excreta will be directed to Attenuation Pond.
- Foul water generated from buildings to be discharged into a separate Foul Water System. TBC by Contractor.

General Notes:

- Do not scale from this drawing.
- All dimensions are in millimetres (mm), all levels in metres (m) unless noted otherwise.
- Discrepancies or omissions are to be reported to the Engineer prior to work commencing.
- Materials and workmanship are to comply in all respects with current British Standard Specifications, Codes of Practice, and Building Regulations Approved Documents.
- The copyright of this drawing is vested in the Engineer and must not be copied or reproduced without written consent.
- The Contractor is to check and verify all building and site dimensions, levels and sewer invert levels at connection points before work commences.
- This drawing is to be read in conjunction with all relevant specifications and drawings issued by the Engineer, Architect and other Specialists.



For drainage details showing outfall to existing Ditch/Watercourse, refer drawing: CSH-BML-XX-XX-DR-C-0501

Safety, Health & Environmental Information:

In addition to the hazards and risks normally associated with the types of work detailed on this drawing, please note the significant hazards identified by symbols below,



INDICATES A RESIDUAL RISK AS A WARNING



INDICATES A RESIDUAL RISK FOR INFORMATION

and described below:

Construction/Maintenance/Cleaning/Demolition
Refer to Drawing:

Drainage Key:

	Proposed Surface Water Sewer
	Proposed Filter Drain
	Proposed Stormwater Manhole
	Proposed Ridgistorm Separate Catchpit
	Proposed DN1500 Hydro-brake Chamber
	Proposed DN1800 Diversion Chamber
	Cutoff Linear Drain
	Proposed Dirty Yard Water/ Lightly Fouled Water Sewer taken to Slurry Tank
	Proposed Yard Gully
	DN150 Gully / RWP Connector
	Proposed Rain Water Pipe
	Proposed Rodding Eye
	Proposed Inspection Chamber with Grilled Cover
	United Utilities Water Main (position shown indicatively)
	Proposed new water feed with stop-taps to specialist design & details
	Proposed Foul Sewer Rising Main
	Proposed DN100 Connector
	Proposed Foul Pumping Station
	Proposed Finish Floor Level
	Existing Water Sewer

P03	IWINJ	08/08/2024	Updated to suit new masterplan
P02	IWINJ	23/07/2024	Existing drainage details updated
P01	IWINJ	11/07/2024	Preliminary issue for Client comments
Rev	By / Chkd	Date	Description

PRELIMINARY DRAWING
This drawing is not to be used for construction

Client



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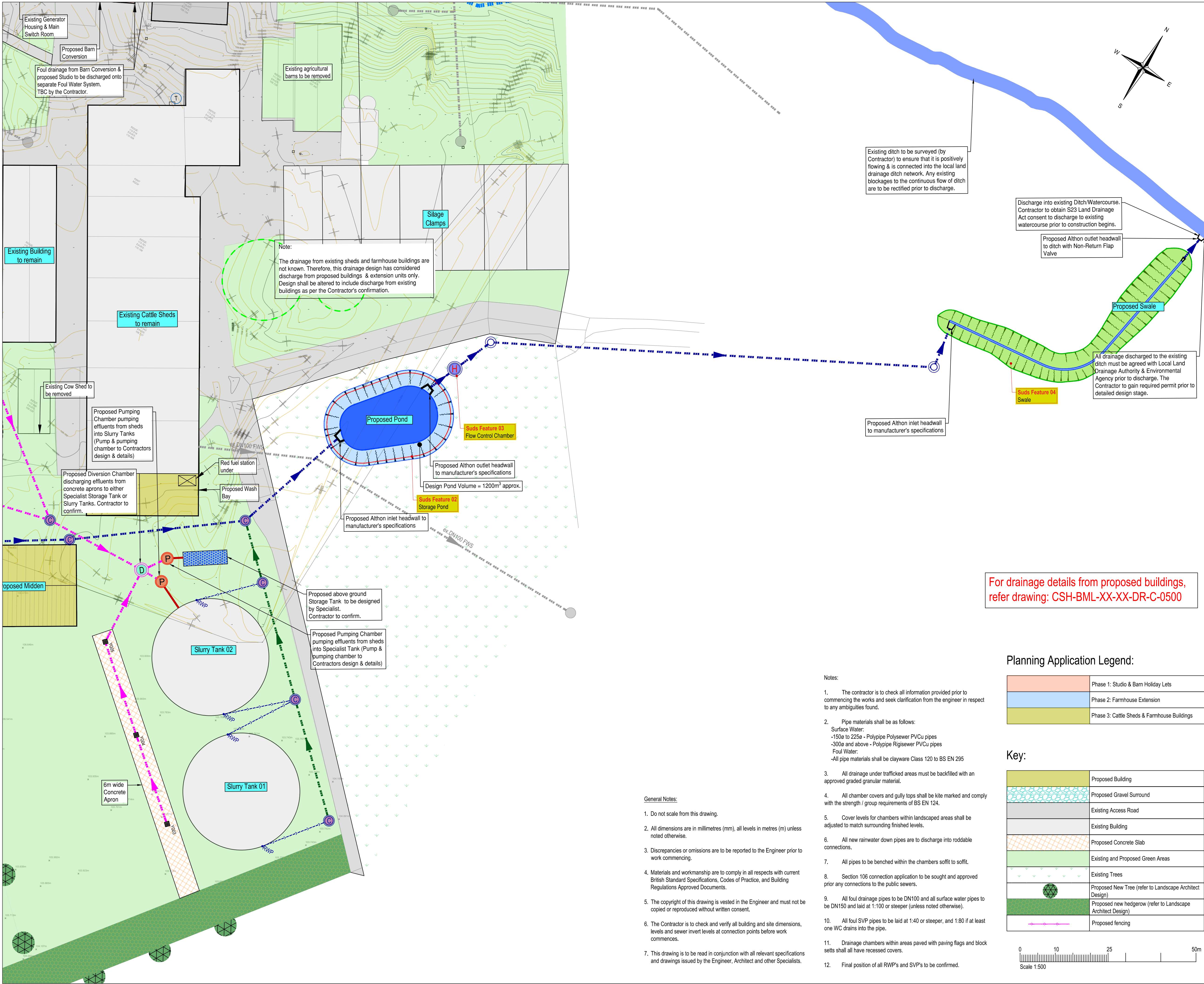
Project

Cow Shed
Elmridge Lane, Preston
PR3 2NY

Drawing

High Level Drainage Strategy
1 of 2

By	IW	Date	04/07/2024
Drawing No.	CSH-BML-XX-XX-DR-C-0500	Revision	P03
BML Job No.	1000-05	Status	-
Drawing Scale at A1:	1:500		
CAD Filename:	Y:\Projects\1000-05 Cow Shed\Information - Working\DWG\CSH-BML-XX-XX-DR-C-0500 P01-Highlevel Drainage Strategy.dwg		



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INDICATES A RESIDUAL RISK AS A WARNING

INDICATES A RESIDUAL RISK FOR INFORMATION

and described below:

Construction/Maintenance/Cleaning/Demolition
Refer to Drawing:

Drainage Key:

DNXXX SWS @ 1:XXX	Proposed Surface Water Sewer
DNXXX SFT @ 1:XXX	Proposed Filter Drain
	Proposed Stormwater Manhole
	Proposed Ridgistorm Separate Catchpit
	Proposed DN1500 Hydro-brake Chamber
	Proposed DN1800 Divergence Chamber
	Cutoff Linear Drain
DNXXX DSW 1:XXX	Proposed Dirty Yard Water/ Lightly Fouled Water Sewer taken to Slurry Tank
YGXX	Proposed Yard Gully
	DN150 Gully / RWP Connector
	Proposed Rain Water Pipe
	Proposed Rodding Eye
	Proposed Inspection Chamber with Grilled Cover
	United Utilities Water Main (position shown indicatively)
	Proposed new water feed with stop-taps to specialist design & details
DNXXX FWS Rising Main	Proposed Foul Sewer Rising Main
	Proposed DN100 Connector
	Proposed Foul Pumping Station
FFLXXX	Proposed Finish Floor Level
ex.DNXXX FWS @ 1:100	Existing Water Sewer

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Project

Cow Shed
Elmridge Lane, Preston
PR3 2NY

Drawing

High Level Drainage Strategy
2 of 2

By	IW	Date	04/07/2024
Drawing No.	CSH-BML-XX-XX-DR-C-0501	Revision	P03
BML Job No.	1000-05	Status	-
Drawing Scale at A1:	1:500		
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Appendix E

Hydraulic Calculations

Region	QBAR Rural (L/s)	QBAR Urban (L/s)	Q 20 (years) (L/s)	Q 1 (years) (L/s)	Q 30 (years) (L/s)	Q 100 (years) (L/s)
Region 10	17.7	17.7	27.9	15.4	30.1	36.9