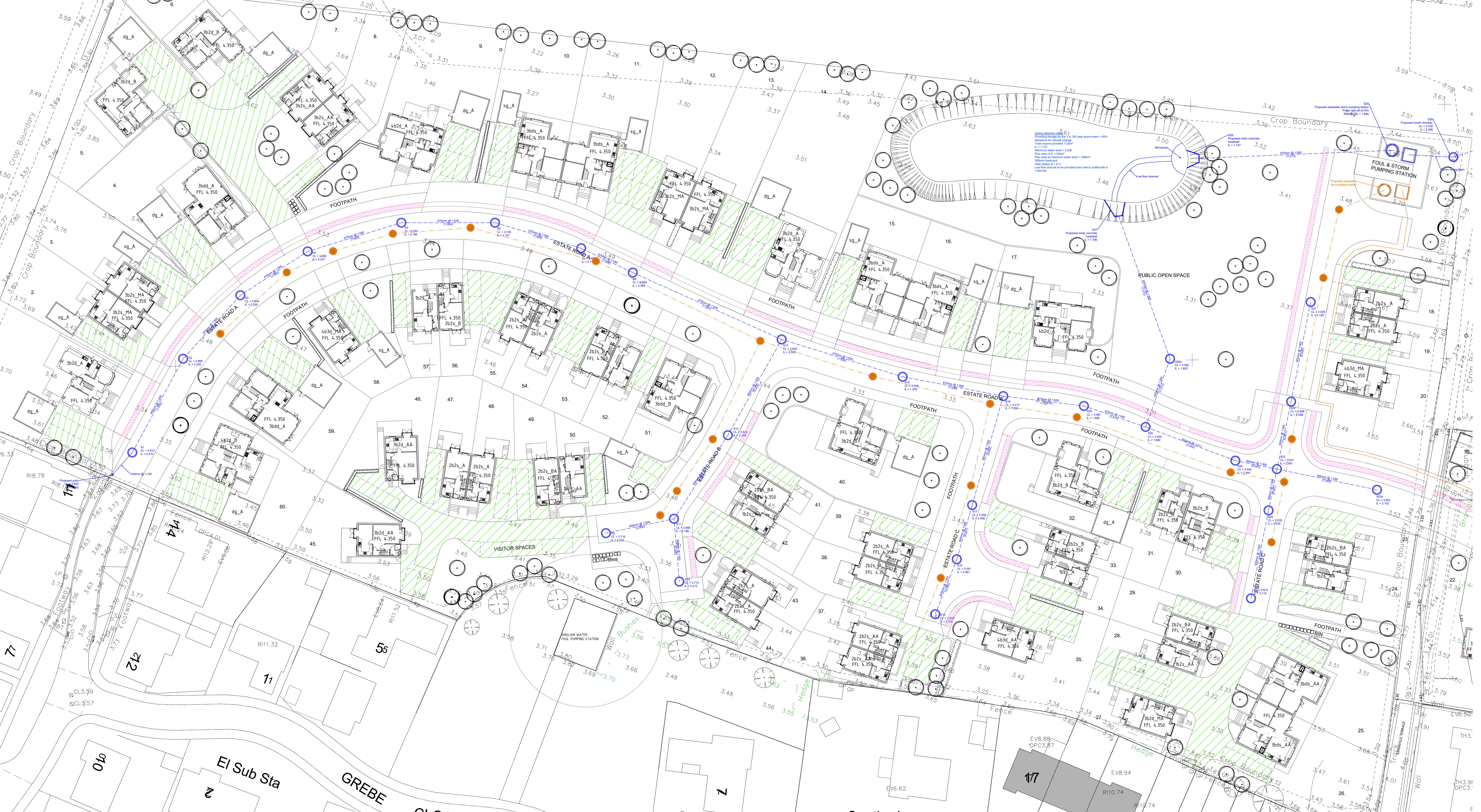




GENERAL

Do not scale from this drawing.

All dimensions are in millimetres unless noted otherwise.

All setting out to architects drawings.

Drawing to be read in conjunction with all other SEA drawings and architects drawings.

This scheme has been designed using the survey information provided by others. It shall be the responsibility of the contractor to verify levels, boundaries etc prior to commencing any works on site. SEA Structural Engineers Ltd. shall not accept any responsibility for errors resulting from the survey.

All setting out of houses and private drives/footpaths to be in accordance with the Architect's drawings, the Contractor is to check all dimensions and levels prior to commencement of work and report any discrepancies to the Engineer, including any encountered during construction works.

All dimensions should be checked on site prior to construction. Please notify the Engineer of any discrepancies before commencing or continuing any work.

HEALTH, SAFETY & THE ENVIRONMENT

In accordance with the Health and Safety at Work etc. Act 1974 and the Construction (Design and Management) Regulations 2015, designs and details on this drawing have been the subject of a Designers Risk Assessment, to identify risks in construction, use, or demolition of the scheme.

It is not considered necessary for Designers to highlight obvious and/or common risks (such as deep excavations, manual handling and working around heavy plant) which Contractors should be familiar with.

So far as is reasonably practicable, risks inherent in the design have been eliminated. Where it has been considered that elimination of a risk (or part of a risk) is not reasonably practicable, it has been reduced.

Significant unusual residual risks are identified below, beside the measures which have been adopted to eliminate and/or reduce them:

None identified.

DRAWING KEY:	
	Proposed adoptable storm water drainage
	Proposed adoptable storm water rising main
	Existing Anglian Water storm sewer with easement
	Proposed adoptable foul water drainage
	Proposed adoptable foul rising main
	Proposed permeable block paving drives
	All storm pipework within drive to be perforated
	Proposed highway filter drain in accordance with LCC details

MAINTENANCE SCHEDULES		
Operation and maintenance requirements for filter drains		
Maintenance schedule	Required action	Typical frequency
Regular maintenance	Remove filter (including leaf filter) and debris from filter drain surface, access chambers and pre-treatment devices	Monthly (or as required)
	Inspect filter drain surface, inlet/outlet pipework and control systems for blockages, clogging, standing water and structural damage	Monthly
	Inspect pre-treated systems, inlets and perforated pipework for all accumulation, and establish appropriate fall removal frequencies	Six monthly
Occasional maintenance	Remove sediment from pre-treated devices	Six monthly, or as required
	Remove or control tree roots where they are encroaching the sides of the filter drain, using recommended methods (eg NUGUS 2007 or BS 3998:2010)	As required
	At locations with high pollution loads, remove surface geotextile and replace, and wash or replace overlying filter medium	Five yearly, or as required
	Clear perforated pipework of blockages	As required

Operation and maintenance requirements for pervious pavements		
Maintenance schedule	Required action	Typical frequency
Regular maintenance	Brushing and vacuuming (standard cosmetic sweep over whole surface)	Once a year, after autumn leaf fall, or reduced frequency as required, based on site-specific observations of clogging or manufacturer's recommendations - pay particular attention to areas where water runs along previous surface from adjacent impermeable areas as this area is most likely to collect the most sediment
	As required	As required
Occasional maintenance	Stabilise and mow contributing and adjacent areas	As required - once per year on less frequently used pavements
	Removal of weeds or management using glyphosate applied directly into the weeds by an applicator rather than spraying	As required
Remedial Actions	Remediate any landmining which, through vegetation maintenance or soil slip, has been raised to within 50 mm of the level of the paving	As required
	Remedial work to any depressions, rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users, and replace lost bedding material	As required
Monitoring	Rehabilitation of surface and upper substructure by remedial sweeping	Every 10 to 15 years or as required (if infiltration performance is reduced due to significant clogging)
	Initial inspection	Monthly for three months after installation
	Inspect for evidence of poor operation and/or weed growth - if required, take remedial action	Three-monthly, 48 h after large storms in first six months
	Inspect all accumulation areas and establish appropriate brushing frequencies	Annually
	Monitor inspection chambers	Annually

Operation and maintenance requirements for detention basins		
Maintenance schedule	Required action	Typical frequency
Regular maintenance	Remove litter and debris	Monthly
	Cut grass - for slipways and access routes	Monthly (during growing season, or as required)
	Cut grass - meadow grass in and around basin	Half yearly (spring - before nesting season, and autumn)
	Manage other vegetation and remove nuisance plants	Monthly (at start, then as required)
	Inspect inlets, outlets and overflows for blockages, and clear if required	Monthly
Occasional maintenance	Inspect canopies, structures, pipework etc for evidence of physical damage	Monthly
	Inspect inlets and facility surface for silt accumulation, establish appropriate silt removal frequencies	Monthly (for first year), then annually or as required
	Check any prestroke and other mechanical devices	Annually
	Trim all dead growth before start of growing season	Annually
	Remove sediment from inlets, outlet and forebay	Annually (or as required)
Remedial actions	Manage wetland plants in outlet pool - where provided	Annually (as set out in Chapter 25)
	Revised areas of poor vegetation growth	As required
	Prune and trim any trees and remove cuttings	Every 5 years, or as required
	Remove sediment from inlets, outlets, forebay and main basin when required	Every 5 years, or as required (likely to be minimal requirements where effective upstream source control is provided)
	Repair erosion or other damage by reseedling or re-turfing	As required
	Revegetation of rip rap	As required
	Rehabilitation of inlets, outlets and overflows	As required
	Relevel uneven surfaces and minimise design levels	As required

Rev. Date By Description

SEA
STRUCTURAL ENGINEERS
[CONSULTING CIVIL & STRUCTURAL ENGINEERS]
E: enquiries@seasstructuralengineers.co.uk
T: 01832 272352

PROJECT

RESIDENTIAL DEVELOPMENT
LAND NORTH OF SUTTON
BRIDGE

DRAWING

PROPOSED DRAINAGE LAYOUT
(1 OF 3)

SCALE: 1:250 @A0

DATE: 06.08.2020

DRAWN BY: SEA

REV:

STATUS: FOR PLANNING

DWG No: 1886/S/E101