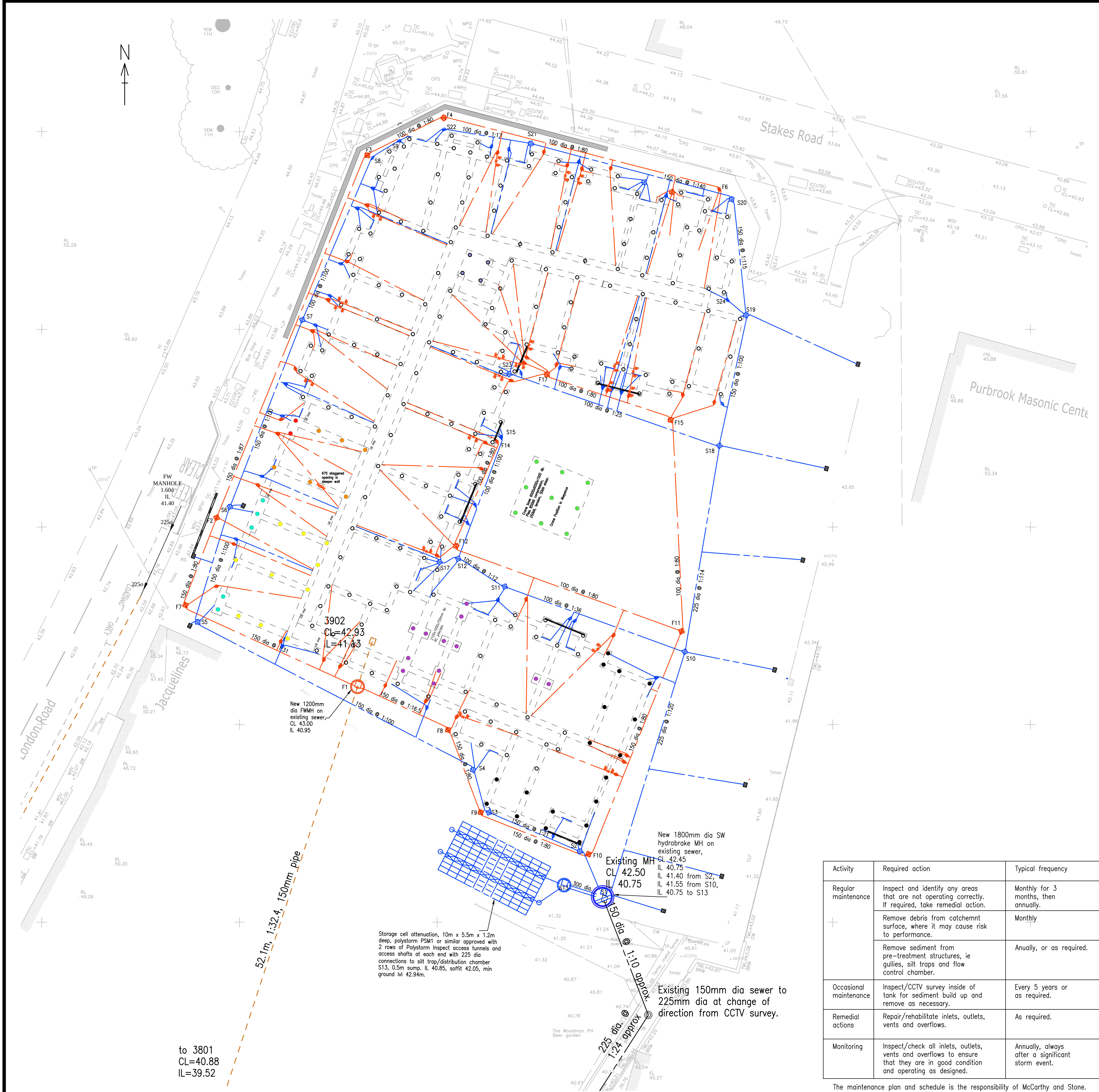




FOUL MANHOLE SCHEDULE

MH No.	COVER	INVERT LEVEL		DEPTH	MAX PIPE	MH	COVER TYPE
		IN	OUT				
F1	43.00	40.95	40.95	2.05	150	2	B125
F2	43.20	41.68	41.68	1.52	150	3	B125
F3	43.47	42.18	42.13	1.34	150	3	B125
F4	43.50	42.29	42.29	1.21	100	3	B125
F5	deleted			####			
F6	43.50	42.65	42.65	0.85	100	3	B125
F7	43.2	41.57	41.57	1.63	150	2	B125
F8	43.0	41.56	41.56	1.44	150	3	B125
F9	43.45	41.67	41.67	1.78	150	3	B125
F10	42.8	41.81	41.81	0.99	150	3	B125
F11	42.95	42.16	42.11	0.84	150	3	D400
F12	43.50	42.46	42.46	1.04	100	3	B125
F13	deleted			####			
F14	43.50	42.60	42.60	0.90	100	3	B125
F15	43.43	42.43	42.43	1.00	100	3	B125
F16	deleted			#####			
F17	43.5	42.60	42.60	0.90	100	3	B125
F18	deleted			####			

Foul inspection chambers/manholes scheduled for main runs only. All inspection chambers connecting lateral drains to have invert levels at 42.650m unless noted otherwise.

SURFACE WATER MANHOLE SCHEDULE

MH No.	COVER	INVERT LEVEL		DEPTH	MAX PIPE	MH	COVER TYPE
		IN	OUT				
S1	42.45	41.55	40.75	1.70	150	2	D400
S2	42.8	41.55	41.55	1.25	150	2	B125
S3	43.40	42.02	42.02	1.38	150	3	B125
S4	43.50	42.07	42.07	1.43	150	3	B125
S5	43.10	42.39	42.39	0.71	150	3	B125
S6	43.20	42.51	42.51	0.69	150	3	B125
S7	43.45	42.77	42.72	0.73	150	3	B125
S8	43.5	42.95	42.95	0.55	100	3	B125
S9	43.5	43.00	43.00	0.50	100	3	B125
S10	42.9	41.76	41.76	1.14	225	3	D400
S11	43.55	42.40	42.40	1.15	100	3	B125
S12	43.55	42.82	42.82	0.73	100	3	B125
S13	42.8	40.8	40.8	2.00	300	2	B125
S14	deleted			####			
S15	43.55	42.95	42.95	0.60	100	3	B125
S16	deleted						
S17	43.55	42.95	42.95	0.60	100	3	B125
S18	43.3	42.02	41.945	1.36	225	3	D400
S19	43.4	42.15	42.15	1.25	150	3	B125
S20	43.60	42.25	42.25	1.35	150	3	B125
S21	43.50	42.45	42.40	1.10	150	3	B125
S22	43.50	42.95	42.95	0.55	100	3	B125
S23	43.55	42.95	42.95	0.60	100	3	B125
S24	43.50	42.6	42.6	0.90	100	3	B125

Surface water inspection chambers/manholes scheduled for main runs only. All inspection chambers connecting lateral drains to main runs to have invert levels at 42.95m unless noted otherwise.

MAINTENANCE.

The surface water drainage system comprises collection from impermeable surfaces by gutters and downpipes for the building and gullies and drainage channels incorporating silt and hydrocarbon retention for paved areas. Surface water is conveyed via a pipe network to the south west corner of the site where the discharge to the public surface water sewer is controlled by a vortex flow control device. excess storm water is directed via a silt trap to a geocellular attenuation tank with two access/inspection tunnels.

Due to the nature of the development, the external areas including soft and hard landscaping are expected to be maintained by specialist contractors experienced in maintaining similar developments and drainage installations. The following maintenance schedule, ref Table 21.3, SUDS Manual, is recommended and can be used as a basis for the determination of further maintenance schedule.

Activity	Required action	Typical frequency
Regular maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Monthly for 3 months, then annually.
	Remove debris from catchment surface, where it may cause risk to performance.	Monthly
	Remove sediment from pre-treatment structures, ie gullies, silt traps and flow control chamber.	Annually, or as required.
Occasional maintenance	Inspect/CCTV survey inside of tank for sediment build up and remove as necessary.	Every 5 years or as required.
Remedial actions	Repair/rehabilitate inlets, outlets, vents and overflows.	As required.
Monitoring	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed.	Annually, always after a significant storm event.

The maintenance plan and schedule is the responsibility of McCarthy and Stone.

Notes:

- THIS DRAWING IS NOT TO BE SCALED
- Cross-references
 - This drawing is to be read in conjunction with all relevant architects' and engineers' drawings and specifications. Any inconsistencies or errors should be referred to the engineer immediately and confirmed in writing.
 - Minimum gradient for surface water pipes to be 1 in 100.
 - Minimum gradient for foul pipes to be as follows:-
100mm dia, 1 in 80
150mm dia, 1 in 150.
 - Concrete protection to be provided to all pipes where cover to the crown of the pipe is less than:-
-gardens/paths/no vehicles 350mm
-private driveways vehicles < 7.5T 500mm
-drives/parking areas with limited access for vehicles with a gross weight > 7.5 900mm
-highways 1200mm
 - For proposed levels of all paths, footways and soft landscape areas refer to Landscape Architects details.
 - Indicates existing drains, all drains within the site to be abandoned to be grubbed out and backfilled with min C20 concrete and the foundations adopted in accordance with the Structural Engineers details.

HEALTH AND SAFETY

The construction of drainage and external paving shown on this drawing is considered to of a routine nature to a suitably experienced Contractor. However the Contractors attention is drawn to the potential instability of excavations particularly backfill materials in existing drainage trenches. It is also to be noted that as the site has had a previous use there may be unrecorded buried services, etc. Appropriate risk assessment/method statement/working practices should be developed and followed in accordance with the requirements of the Construction (Design and Management) regulations 2015. In relation to existing sewers, there may be asbestos cement or fibre reinforced concrete pipes within the site or Public Sewerage network and the Contractor is to ensure that any persons carrying out the works are competent and adequately trained, safe systems of work are in place and disposal of any pipework/affected material is carried out in accordance with current legislation. Attention is drawn to: The Control of Asbestos at Work Regulations 1987 and amendment 1992 and all other legislation relating to health and safety at work.

revision	details	Date

Client
McCarthy & Stone
Later Life. Greater Life

Architect
kenn scadden associates

Job title
38-44 London Road
Purbrook
Hampshire

Drawing title
Drainage Layout
including sub-structure

GGP

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