

Construcion site (2b) run-off calculation sheet

1 in 10 year			1 in 30 year			1 in 100 year		
Proposed impermeable area	1.381	ha	Proposed impermeable area	1.381	ha	Proposed impermeable area	1.381	ha
CC Factor	0%		CC Factor	0%		CC Factor	0%	
Total volume for 6 hour event	539.12	m ³	Total volume for 6 hour event	725.78	m ³	Total volume for 6 hour event	998.31	m ³
Duration hours	Rainfall 10 yr event mm	Rainfall intensity 10 yr event mm/hr	Duration hours	Rainfall 30 yr event mm	Rainfall intensity 30 yr event mm/hr	Duration hours	Rainfall 100 yr event mm	Rainfall intensity 100 yr event mm/hr
0.25	18.05	72.20	0.25	26.60	106.40	0.25	40.29	161.16
0.5	21.36	42.72	0.5	30.86	61.72	0.5	45.77	91.54
0.75	23.57	31.43	0.75	33.66	44.88	0.75	49.32	65.76
1	25.28	25.28	1	35.80	35.80	1	52.00	52.00
2	29.91	14.96	2	41.54	20.77	2	59.07	29.54
3	33.00	11.00	3	45.31	15.10	3	63.65	21.22
4	35.39	8.85	4	48.19	12.05	4	67.11	16.78
5	37.36	7.47	5	50.55	10.11	5	69.92	13.98
6	39.05	6.51	6	52.57	8.76	6	72.31	12.05
8	41.87	5.23	8	55.91	6.99	8	76.24	9.53
10	44.20	4.42	10	58.65	5.87	10	79.43	7.94
12	46.20	3.85	12	60.99	5.08	12	82.14	6.85
16	49.86	3.12	16	65.28	4.08	16	87.16	5.45
20	52.89	2.64	20	68.82	3.44	20	91.26	4.56
24	55.51	2.31	24	71.85	2.99	24	94.75	3.95
28	57.82	2.07	28	74.52	2.66	28	97.81	3.49
32	59.90	1.87	32	76.91	2.40	32	100.54	3.14
36	61.80	1.72	36	79.08	2.20	36	103.00	2.86
40	63.55	1.59	40	81.07	2.03	40	105.26	2.63
44	65.17	1.48	44	82.92	1.88	44	107.35	2.44
48	66.69	1.39	48	84.64	1.76	48	109.29	2.28

Construcion site (2c+2d) run-off calculation sheet

1 in 10 year			1 in 30 year			1 in 100 year		
Proposed impermeable area	1.397	ha	Proposed impermeable area	1.397	ha	Proposed impermeable area	1.397	ha
CC Factor	0%		CC Factor	0%		CC Factor	0%	
Total volume for 6 hour event	545.33	m ³	Total volume for 6 hour event	734.14	m ³	Total volume for 6 hour event	1009.81	m ³
Duration hours	Rainfall 10 yr event mm	Rainfall intensity 10 yr event mm/hr	Duration hours	Rainfall 30 yr event mm	Rainfall intensity 30 yr event mm/hr	Duration hours	Rainfall 100 yr event mm	Rainfall intensity 100 yr event mm/hr
0.25	18.05	72.20	0.25	26.60	106.40	0.25	40.29	161.16
0.5	21.36	42.72	0.5	30.86	61.72	0.5	45.77	91.54
0.75	23.57	31.43	0.75	33.66	44.88	0.75	49.32	65.76
1	25.28	25.28	1	35.80	35.80	1	52.00	52.00
2	29.91	14.96	2	41.54	20.77	2	59.07	29.54
3	33.00	11.00	3	45.31	15.10	3	63.65	21.22
4	35.39	8.85	4	48.19	12.05	4	67.11	16.78
5	37.36	7.47	5	50.55	10.11	5	69.92	13.98
6	39.05	6.51	6	52.57	8.76	6	72.31	12.05
8	41.87	5.23	8	55.91	6.99	8	76.24	9.53
10	44.20	4.42	10	58.65	5.87	10	79.43	7.94
12	46.20	3.85	12	60.99	5.08	12	82.14	6.85
16	49.86	3.12	16	65.28	4.08	16	87.16	5.45
20	52.89	2.64	20	68.82	3.44	20	91.26	4.56
24	55.51	2.31	24	71.85	2.99	24	94.75	3.95
28	57.82	2.07	28	74.52	2.66	28	97.81	3.49
32	59.90	1.87	32	76.91	2.40	32	100.54	3.14
36	61.80	1.72	36	79.08	2.20	36	103.00	2.86
40	63.55	1.59	40	81.07	2.03	40	105.26	2.63
44	65.17	1.48	44	82.92	1.88	44	107.35	2.44
48	66.69	1.39	48	84.64	1.76	48	109.29	2.28

Construciton site (3a) run-off calculation sheet

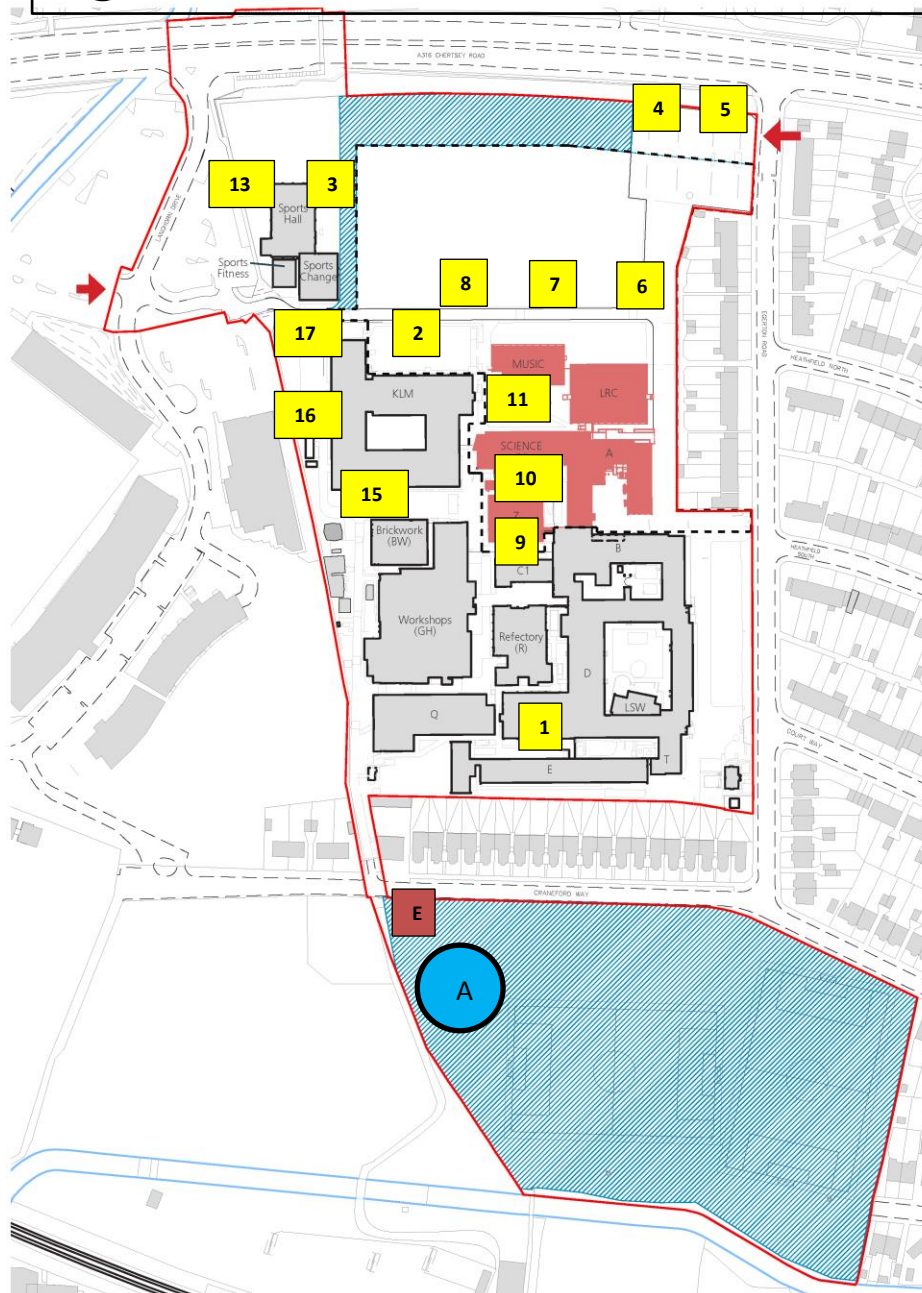
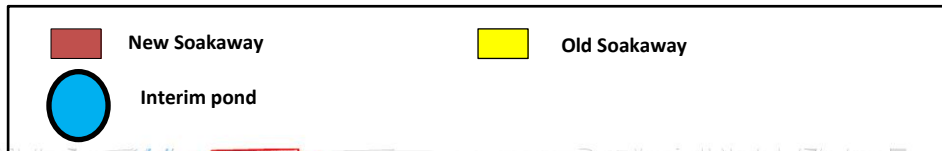
1 in 10 year			1 in 30 year			1 in 100 year		
Proposed impermeable area	0.595	ha	Proposed impermeable area	0.595	ha	Proposed impermeable area	0.595	ha
CC Factor	0%		CC Factor	0%		CC Factor	0%	
Total volume for 6 hour event	232.46	m ³	Total volume for 6 hour event	312.95	m ³	Total volume for 6 hour event	430.46	m ³
Duration hours	Rainfall 10 yr event mm	Rainfall intensity 10 yr event mm/hr	Duration hours	Rainfall 30 yr event mm	Rainfall intensity 30 yr event mm/hr	Duration hours	Rainfall 100 yr event mm	Rainfall intensity 100 yr event mm/hr
0.25	18.05	72.20	0.25	26.60	106.40	0.25	40.29	161.16
0.5	21.36	42.72	0.5	30.86	61.72	0.5	45.77	91.54
0.75	23.57	31.43	0.75	33.66	44.88	0.75	49.32	65.76
1	25.28	25.28	1	35.80	35.80	1	52.00	52.00
2	29.91	14.96	2	41.54	20.77	2	59.07	29.54
3	33.00	11.00	3	45.31	15.10	3	63.65	21.22
4	35.39	8.85	4	48.19	12.05	4	67.11	16.78
5	37.36	7.47	5	50.55	10.11	5	69.92	13.98
6	39.05	6.51	6	52.57	8.76	6	72.31	12.05
8	41.87	5.23	8	55.91	6.99	8	76.24	9.53
10	44.20	4.42	10	58.65	5.87	10	79.43	7.94
12	46.20	3.85	12	60.99	5.08	12	82.14	6.85
16	49.86	3.12	16	65.28	4.08	16	87.16	5.45
20	52.89	2.64	20	68.82	3.44	20	91.26	4.56
24	55.51	2.31	24	71.85	2.99	24	94.75	3.95
28	57.82	2.07	28	74.52	2.66	28	97.81	3.49
32	59.90	1.87	32	76.91	2.40	32	100.54	3.14
36	61.80	1.72	36	79.08	2.20	36	103.00	2.86
40	63.55	1.59	40	81.07	2.03	40	105.26	2.63
44	65.17	1.48	44	82.92	1.88	44	107.35	2.44
48	66.69	1.39	48	84.64	1.76	48	109.29	2.28

Construcion site (3b+3c) run-off calculation sheet

1 in 10 year			1 in 30 year			1 in 100 year		
Proposed impermeable area	0.852	ha	Proposed impermeable area	0.852	ha	Proposed impermeable area	0.852	ha
CC Factor	0%		CC Factor	0%		CC Factor	0%	
Total volume for 6 hour event	332.55	m ³	Total volume for 6 hour event	447.69	m ³	Total volume for 6 hour event	615.79	m ³
Duration hours	Rainfall 10 yr event mm	Rainfall intensity 10 yr event mm/hr	Duration hours	Rainfall 30 yr event mm	Rainfall intensity 30 yr event mm/hr	Duration hours	Rainfall 100 yr event mm	Rainfall intensity 100 yr event mm/hr
0.25	18.05	72.20	0.25	26.60	106.40	0.25	40.29	161.16
0.5	21.36	42.72	0.5	30.86	61.72	0.5	45.77	91.54
0.75	23.57	31.43	0.75	33.66	44.88	0.75	49.32	65.76
1	25.28	25.28	1	35.80	35.80	1	52.00	52.00
2	29.91	14.96	2	41.54	20.77	2	59.07	29.54
3	33.00	11.00	3	45.31	15.10	3	63.65	21.22
4	35.39	8.85	4	48.19	12.05	4	67.11	16.78
5	37.36	7.47	5	50.55	10.11	5	69.92	13.98
6	39.05	6.51	6	52.57	8.76	6	72.31	12.05
8	41.87	5.23	8	55.91	6.99	8	76.24	9.53
10	44.20	4.42	10	58.65	5.87	10	79.43	7.94
12	46.20	3.85	12	60.99	5.08	12	82.14	6.85
16	49.86	3.12	16	65.28	4.08	16	87.16	5.45
20	52.89	2.64	20	68.82	3.44	20	91.26	4.56
24	55.51	2.31	24	71.85	2.99	24	94.75	3.95
28	57.82	2.07	28	74.52	2.66	28	97.81	3.49
32	59.90	1.87	32	76.91	2.40	32	100.54	3.14
36	61.80	1.72	36	79.08	2.20	36	103.00	2.86
40	63.55	1.59	40	81.07	2.03	40	105.26	2.63
44	65.17	1.48	44	82.92	1.88	44	107.35	2.44
48	66.69	1.39	48	84.64	1.76	48	109.29	2.28

APPENDIX B

Drainage Strategy during Construction/Demolition Phase



ENABLING WORKS

PHASE 1a

Existing rooms to be taken out of use for Decant

PHASE 1b

Existing rooms to be refurbished to accommodate new curriculum

Line out 2nr pitches to playing fields

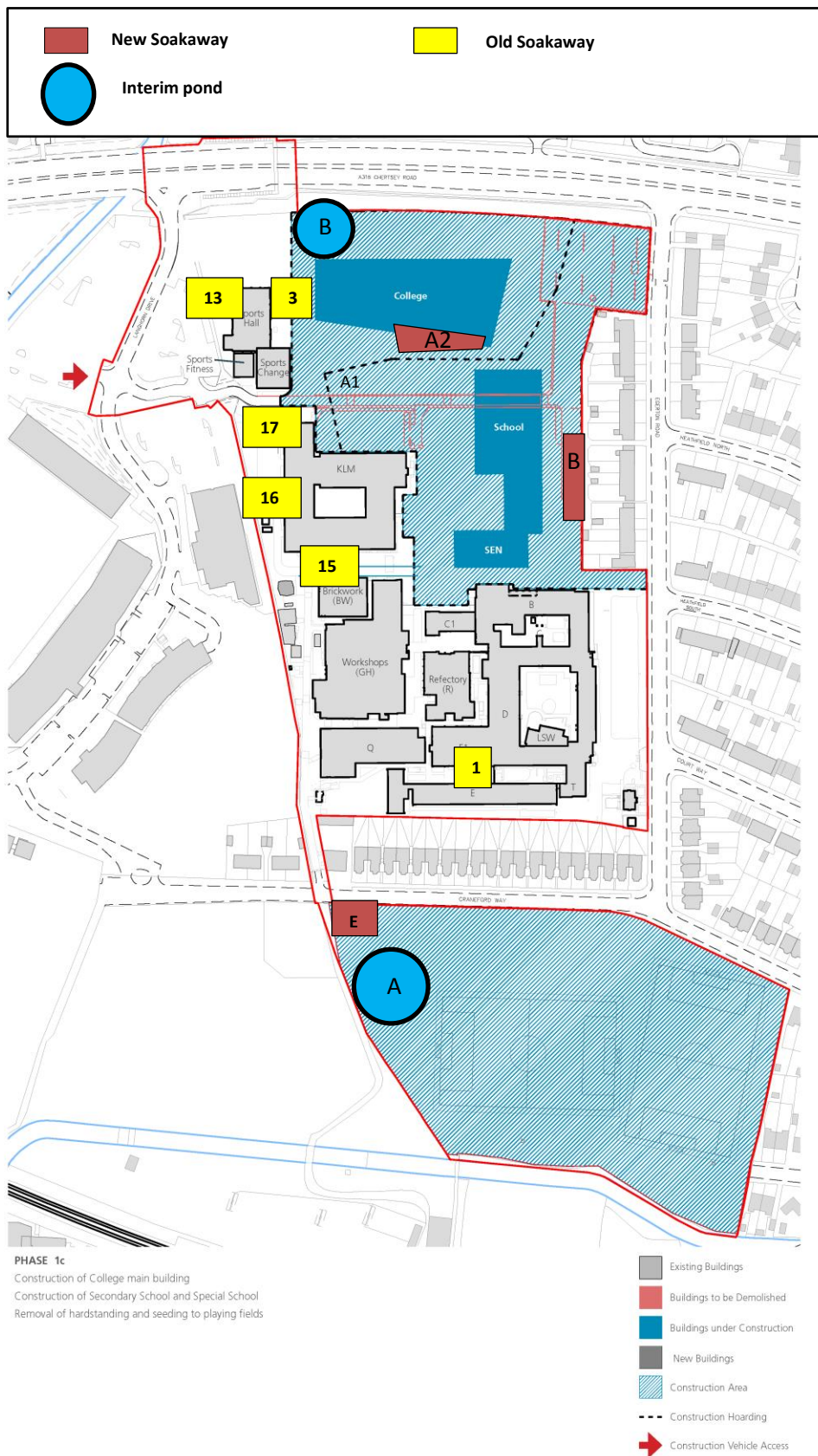
College move into decant area

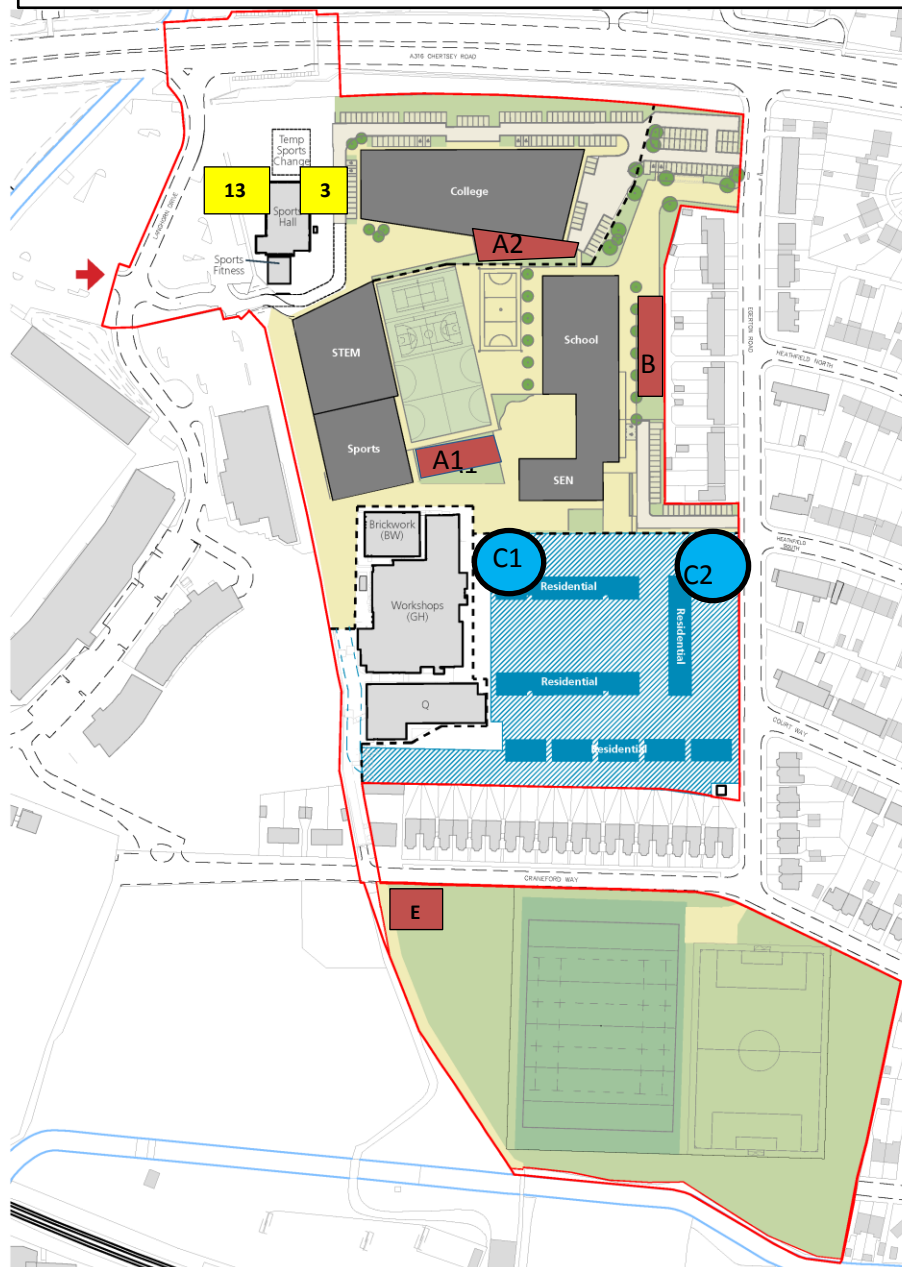
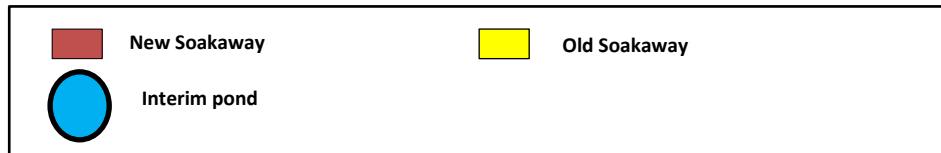
Creation of haul road & preparation of access off Langhorn Drive and Egerton Road

Demolition of existing buildings (Music, LRC, Science and A block (part) and Z block)

Weatherproofing to the end of open end of Block A

- Existing Buildings
- Buildings to be Demolished
- Buildings under Construction
- New Buildings
- Construction Area
- Construction Hoarding
- Construction Vehicle Access



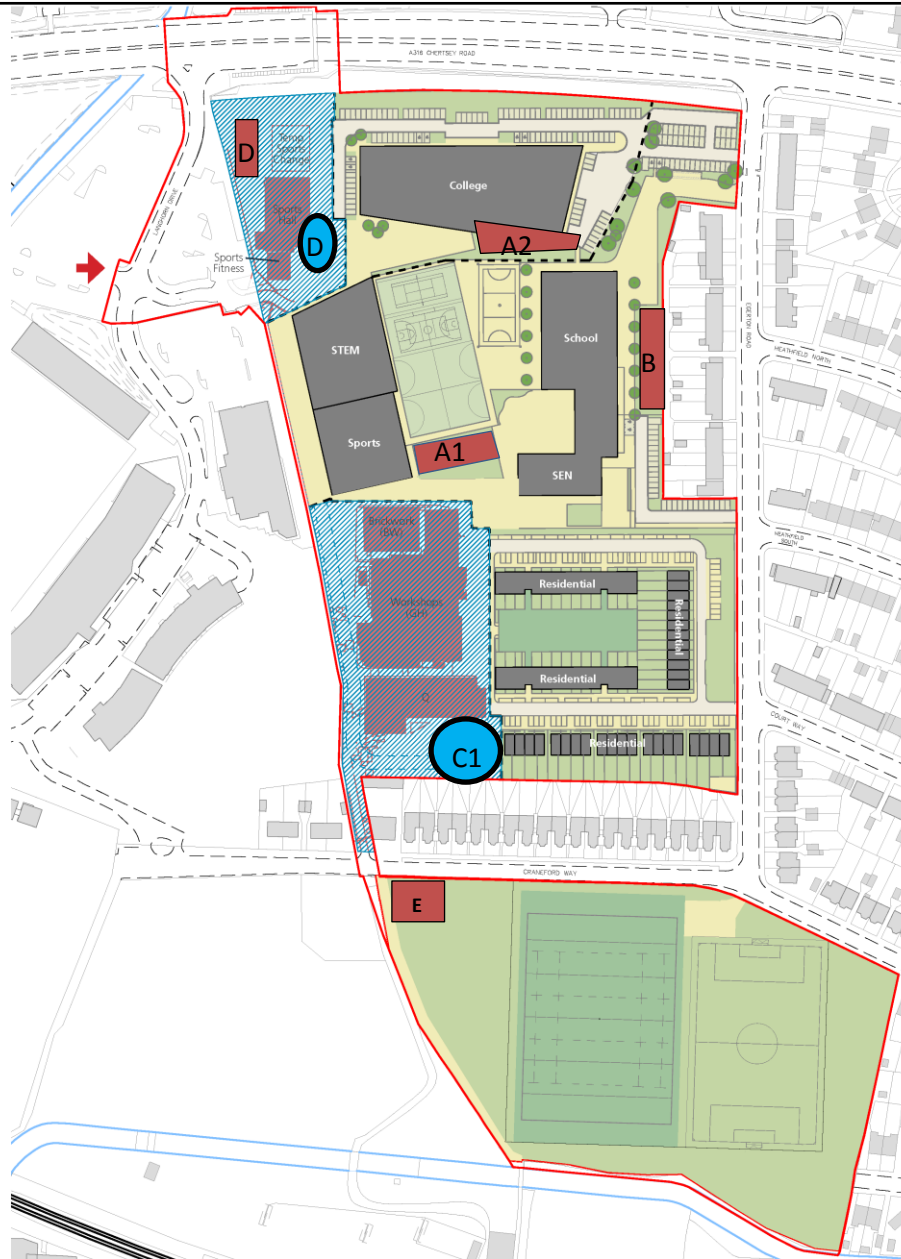
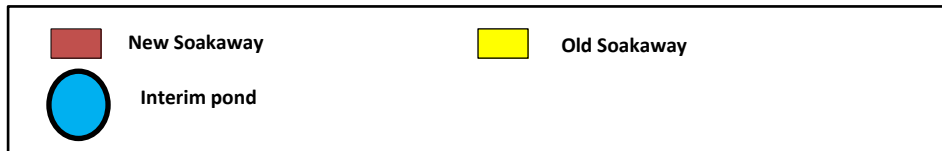


PHASE 2b

Phase 1 of the residential starts on site.

Access to Phase 1 residential site controlled and managed by contractor.

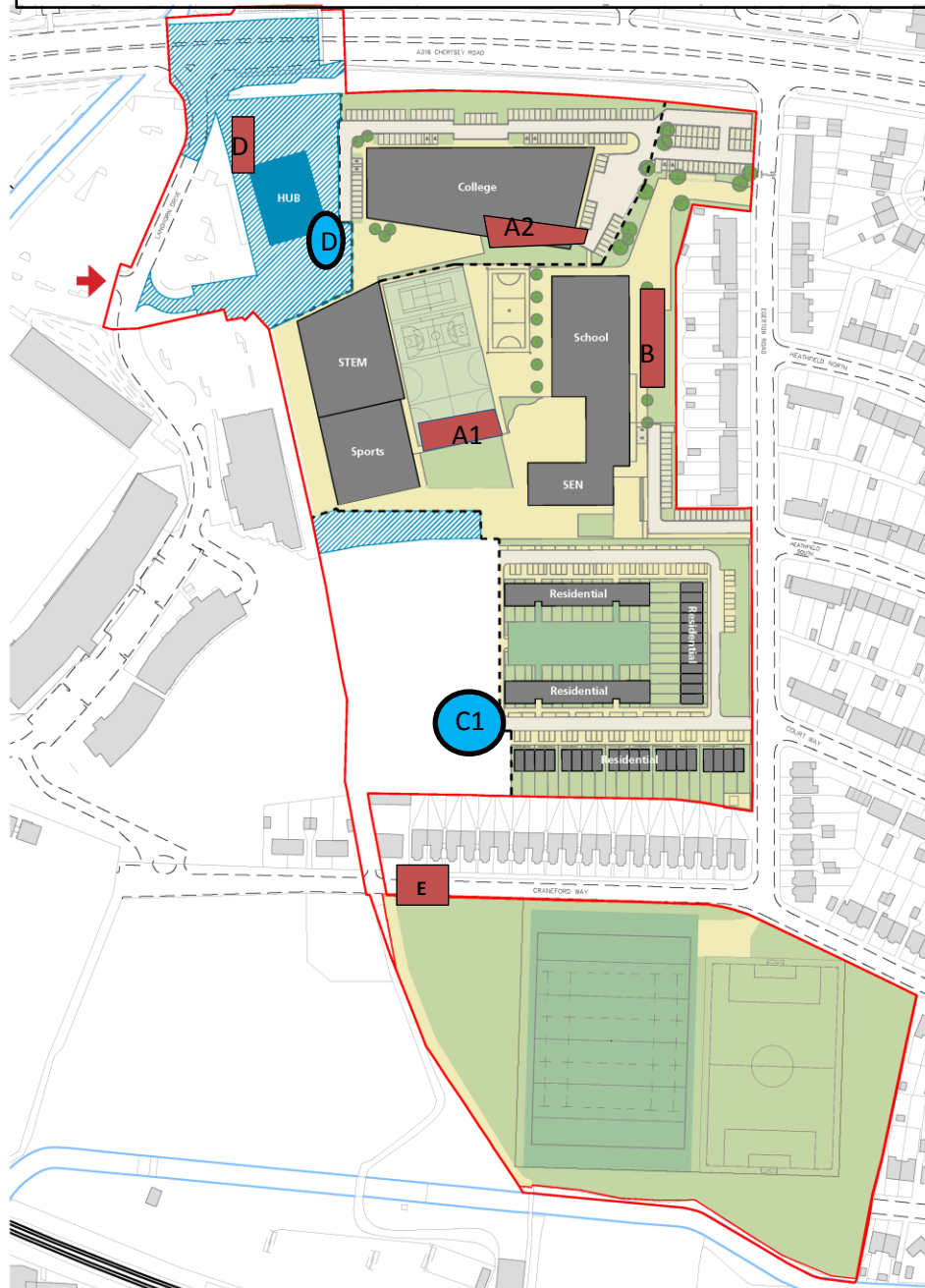
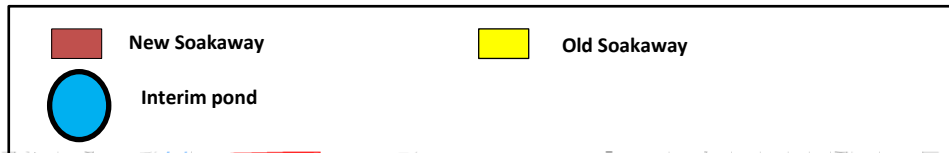
- Existing Buildings
- Buildings to be Demolished
- Buildings under Construction
- New Buildings
- Construction Area
- Construction Hoarding
- Construction Vehicle Access



Phase 2c
Decant into Sports and STEM building

Phase 2d
Demolition of Sports building and temporary changing building
Demolition of Brick, Conc, Engine, E Block and Q Block
Temporary route for residential site established and controlled by contractor

- Existing Buildings
- Buildings to be Demolished
- Buildings under Construction
- New Buildings
- Construction Area
- Construction Hoarding
- Construction Vehicle Access



Phase 3a
 Construction of Haymarket
 Upgraded junction on to A316
 Langhorn Drive road widening and realignment & Marsh Farm Lane from STEM to Sports, including SEN MUGA and Sports car park

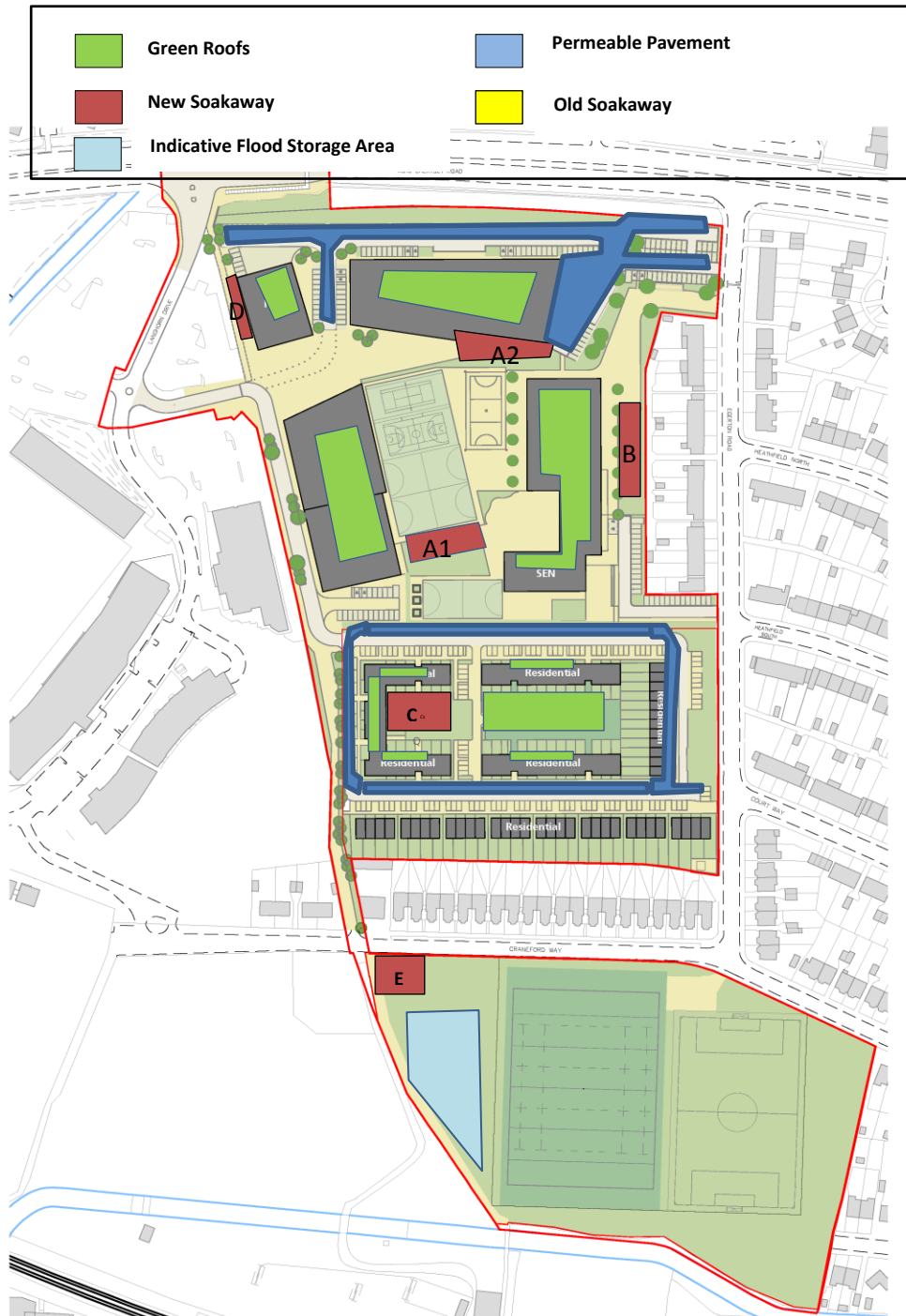
- Existing Buildings
- Buildings to be Demolished
- Buildings under Construction
- New Buildings
- Construction Area
- Construction Hoarding
- Construction Vehicle Access



Phase 3b
Construction of Phase 2 residential.
Permanent residential access established.

Phase 3c
Marsh Farm Lane (playing fields to sports centre)





APPENDIX C

Ground Investigation Results



Symbol	Type	Method	Depth	Objectives
	Borehole	Driven Tube Sample	~4m	- Measure Made Ground thickness - Soil sampling / logging
	Borehole	Driven Tube Sample	2m	- Measure Made Ground thickness - Soil sampling / logging - Infiltration test
	Dynamic cone penetration testing	Dynamic cone penetration	4-5m	In situ density testing
	Borehole with water standpipe	Cable and tool precision drilling	20m	- Soil profile - Standard Penetration Testing - Soil shear strength testing - Water sampling / monitoring
	Borehole with water standpipe	Cable and tool precision drilling	25m	- Soil profile - Standard Penetration Testing - Soil shear strength testing - Water sampling / monitoring
	Trial Pit	Hand tools	1-2m	- Expose existing foundation arrangements - Measure Made Ground thickness - Soil sampling / logging
	Trial Pit	Hand tools	0.5-1.5m	- Measure Made Ground thickness - Soil sampling / logging - Infiltration test

Borehole	Depth to groundwater (mbgl)
BH01	3.5
BH02	3
BH03	2.5
BH04	2.5
BH05	2.5
BH06	2.8
DTS02	1.1
DTS05	1.55
DTS06	1.34
DTS07	1.05
DTS08	1.09
DTS09	1.17
DTS10	0.87
DTS11	2
DTS12	1.8
DTS13	2.45
DTS14	2.5
DTS16	1.2
DTS17	1.41
DTS18	2.3
DTS20	2

(Extract from Table 5.3.1 ground investigation report, Soiltechnics, 2008)