

Report No:	Date:
DW0660	9th June 2014
Project:	
Manchester Science Park Proposed Temporary Car Park at Ripon Street Depot Drainage Strategy	
Client:	
Manchester Science Park Limited	

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Report prepared by: J S Thomas

Signature:

Report status:

Approved for issue: C J Corrigan

Signature:

Date: 9th June 2014

DW Consulting Engineers llp

Marsland House
Marsland Road
Sale
Cheshire
M33 3AQ
0161 969 4144

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2.0 Proposed Site Areas & Summary

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1.0 Introduction

A new temporary car park is proposed on the former Ripon Street Council Depot, adjacent to the existing Manchester Science Park land.

Refer to Appendix A for site location

2.0 Proposed Site Areas and Summary

The existing site area is understood to drain under gravity to the adopted combined sewers at the perimeter of the site in Denmark Road and Ripon Street (refer to Appendix C for extracts from the United Utilities Sewer Records). In accordance with current legislation the surface water discharge from the site is to be reduced to 50% of the current flow.

The site is within Flood Zone 1, i.e. above the 1 in 1000 year flood level; please refer to DW Consulting Flood Risk Assessment submitted in support of the Planning application.

Ripon Street Temporary Car Park

The proposals are for a Temporary Car Park on the existing Council depot site. The site is accessed off Ripon Street & Denmark Road and is bounded by Manchester Science Parks to the North, Denmark Road to the South, Holy Name Catholic School to the East and Cornerstone Day Centre/George Halle Road to the West. Refer to Appendix A for site location.

Refer to Appendix B for existing and proposed site layouts.

The existing site area is approx. 4,500m² (0.45 Ha) and the impermeable area of the proposed Temporary Car Park is the same as the existing yard & buildings.

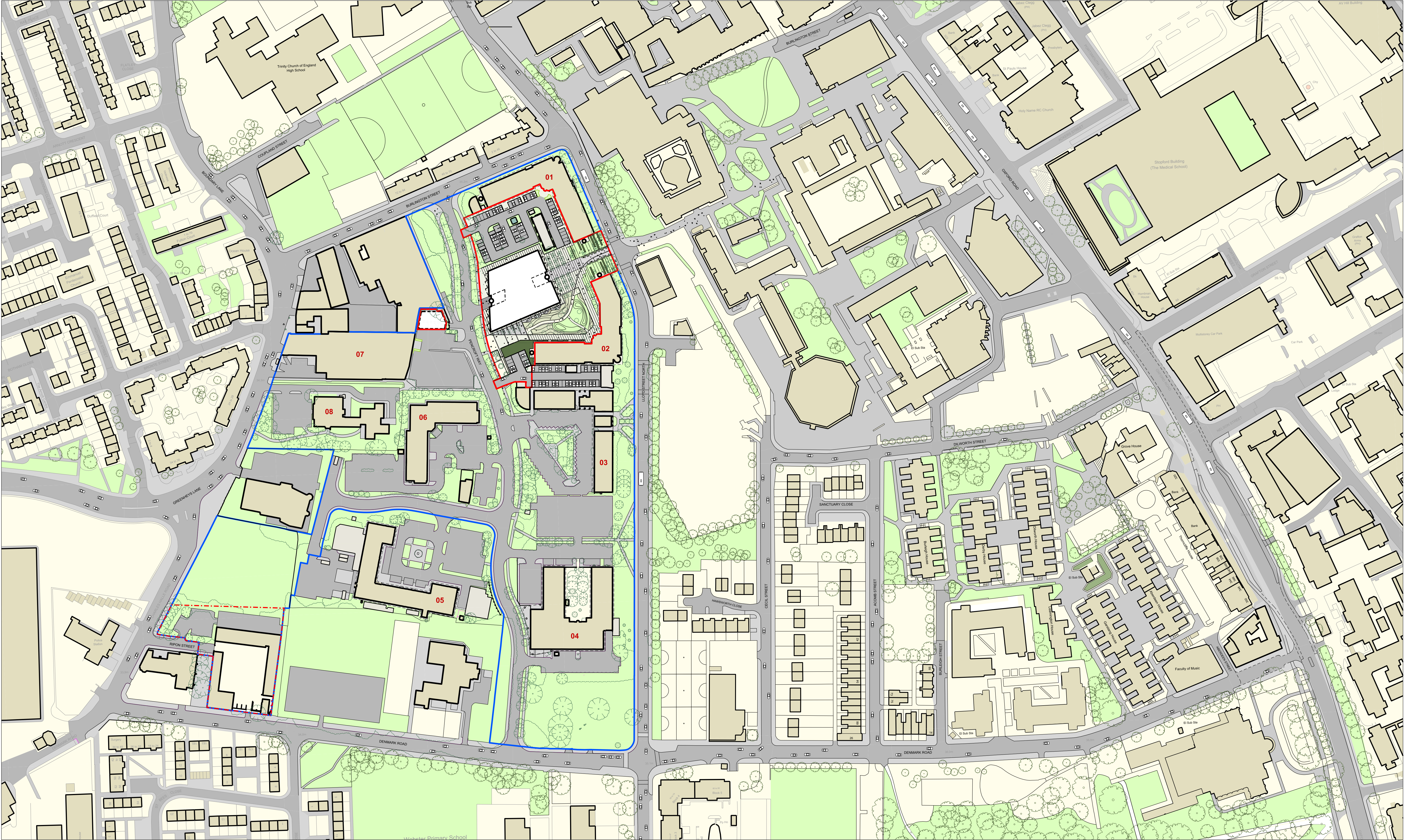
- Surface water drainage from the existing depot buildings and yard are understood to discharge under gravity to the combined sewers in Denmark Road and Ripon Street.
- The proposed Temporary Car Park will maintain the current connection to the public sewers in Denmark Road and Ripon Street using the existing site connections.
- The proposed temporary car park will have no need for any foul water connection.
- Subject to final ground investigation to confirm suitability, the possibility of utilising soakaways to discharge storm water into the ground below is to be checked; however due to previous uses of the land we do not anticipate that this will be possible.
- Due to the size of the car park a by-pass petrol interceptor is to be provided.
- On the basis that soakaways are not used, storm water will be attenuated on site by localised ponding of the car park area together with utilising underground attenuation tanks and flow restrictors to limit to overall surface water discharge from site to a maximum of 50% of the existing.

In approximate figures the site would currently produce a surface water run-off in the order of 65 litres per second; the proposed site will limit this to max. 32 litres per second.

Appendix A

Site Location Plan

Topographical Survey



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ANY DRAWING ERRORS OR DIVERGENCES SHOULD BE BROUGHT TO THE ATTENTION OF BUILDING DESIGN PARTNERSHIP AT THE ADDRESS SHOWN.

Drawing Key:			
	Surrounding Context Buildings		MSP Bruntwood Ownership 72,935 Sq.m 785,066 Sq.ft
	Proposed MSP Hub		Cycle Storage
	MSP Phase 1 The Hub 9,611 Sq.m 103,452 Sq.ft		
	MSP Phase 1 Ripon Street Car Park 4,505 Sq.m 48,491 Sq.ft		

MSP Building Key:			
01	Williams House	08	Hillel House
02	Kilburn House		
03	Enterprise House		
04	Skelton House		
05	Synergy House		
06	Rutherford House		
07	Greenheys		

FIRST ISSUE			
ROC	GW	29.04.14	

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msp
manchester science parks

bruntwood

11 Dudge Street
P.O. Box 85, Piccadilly Basin
Manchester M60 3JA
United Kingdom
T +44 (0)161 828 2200
F +44 (0)161 828 2235
www.bdp.com

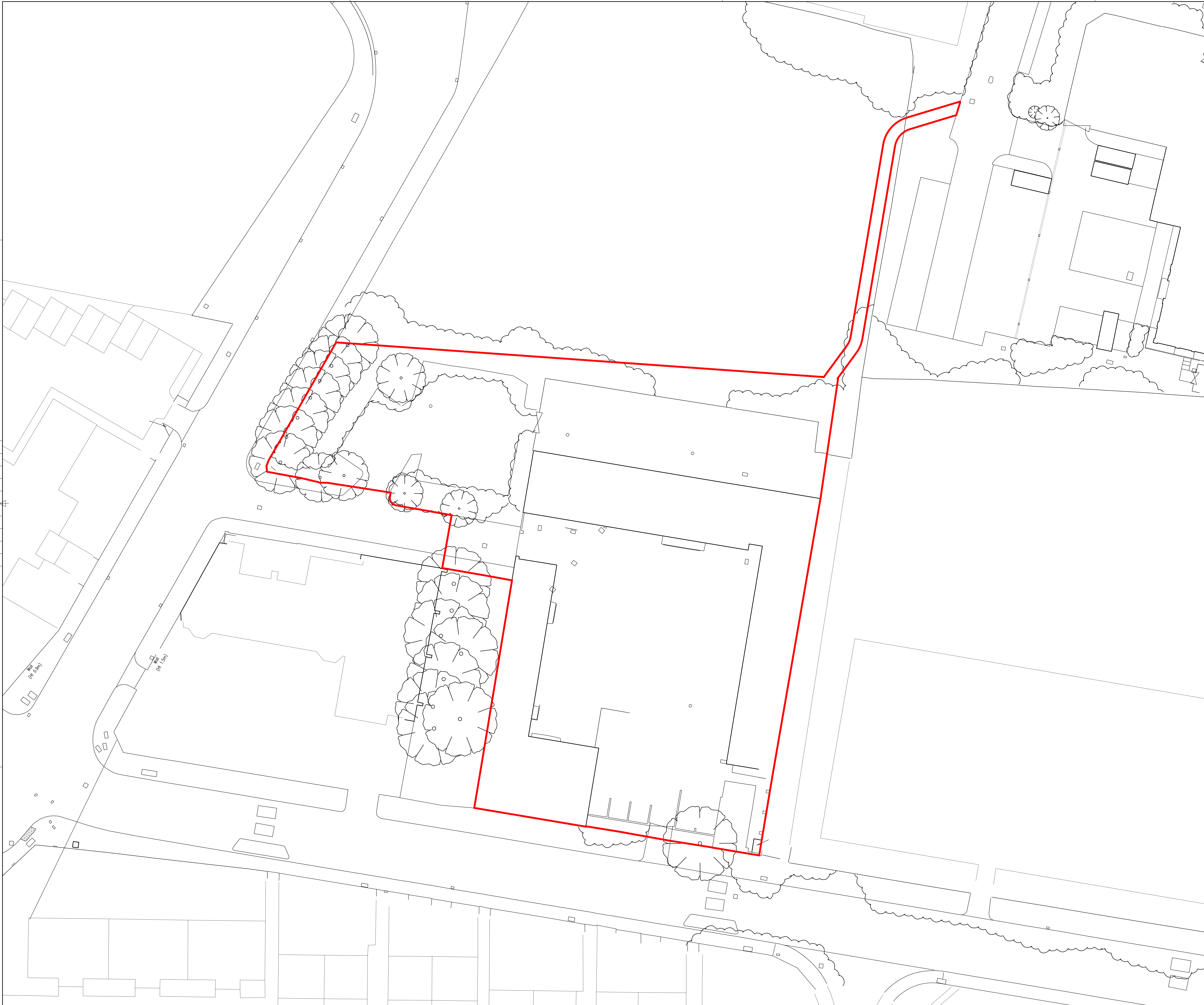
BDP.

PROJECT TITLE The Hub Manchester Science Parks		SCALE 1:1250@A1
PROJECT NUMBER P2006149		
DRAWING TITLE Site Location Plan		DATE Apr 2014

Appendix B

Existing Site Layout

Proposed Site Layout



BDP SHALL HAVE NO RESPONSIBILITY FOR ANY USE MADE OF THIS DOCUMENT OTHER THAN FOR THAT WHICH IT WAS PREPARED FOR AND ISSUED.
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BRUNTWOOD CONSULTANTS AT THE SOONEST OPPORTUNITY.

NOTES

TO BE READ IN CONJUNCTION WITH:
(9-JL011 - TEMPORARY CAR PARK PLAN
(9-JL012 - PLANTING STRATEGY PLAN
(9-JL013 - LANDSCAPE ELEVATIONS
(9-JL014 - LEVELS PLAN
(9-JL015 - DEMOLITION PLAN
(9-JL016 - SURFACE TREATMENT PLAN

COMPASS LIGHTING LAYOUT - 001151-E01
CCTV TO BE LOCATED ON LIGHTING COLUMNS. EXACT
POSITIONS AND SPECIFICATION TO BE AGREED.

DATE	11/06/14	IF	ECW	06.06.14
PROJECT	MANCHESTER SCIENCE PARKS	DATE	06.06.14	DATE

11 Duke Street
P.O. Box 65, Piccadilly Basin
Manchester, M60 3JA
United Kingdom
T +44 (0)161 828 2200 F +44 (0)161 828 2205
www.bdp.com

THE HUB MANCHESTER SCIENCE PARKS	
RIPON STREET TEMPORARY CAR PARK RED LINE BOUNDARY PLAN	DATE 1:200 JUNE '14
P2006149 (9-JL017	-



- KEY**
- SITE BOUNDARY
 - TARMAC SURFACE (please refer to drawing (9-JL016 for surface finishes)
 - 900mm HIGH TIMBER POST AND RAIL FENCE
 - AUTOMATED BARRIER
 - LIGHTING TO ENGINEERS DETAILS
 - PROPOSED BOUNDARY PLANTING
 - EXISTING TREES

NOTES

TO BE READ IN CONJUNCTION WITH:
(9-JL012 - PLANTING STRATEGY PLAN
(9-JL013 - LANDSCAPE ELEVATIONS
(9-JL014 - EXISTING LEVELS PLAN

COMPASS LIGHTING LAYOUT - 001151-001(B)
CCTV TO BE LOCATED ON LIGHTING COLUMNS. EXACT POSITIONS AND SPECIFICATION TO BE AGREED.

A IF ECW 03.06.14
CAR PARK LAYOUT REVISED IN LINE WITH CLIENT REQUESTS.
ACCESS FROM DENMARK STREET RELOCATED.
GATES CHANGED TO AUTOMATIC BARRIERS.
1.8m HIGH FENCE REVISED TO TIMBER POST AND RAIL FENCE.
PARKING BAY NUMBERS ADDED.
LIGHTING ADDED.
SHEET SIZE AMENDED.

IF DAW 08.05.14



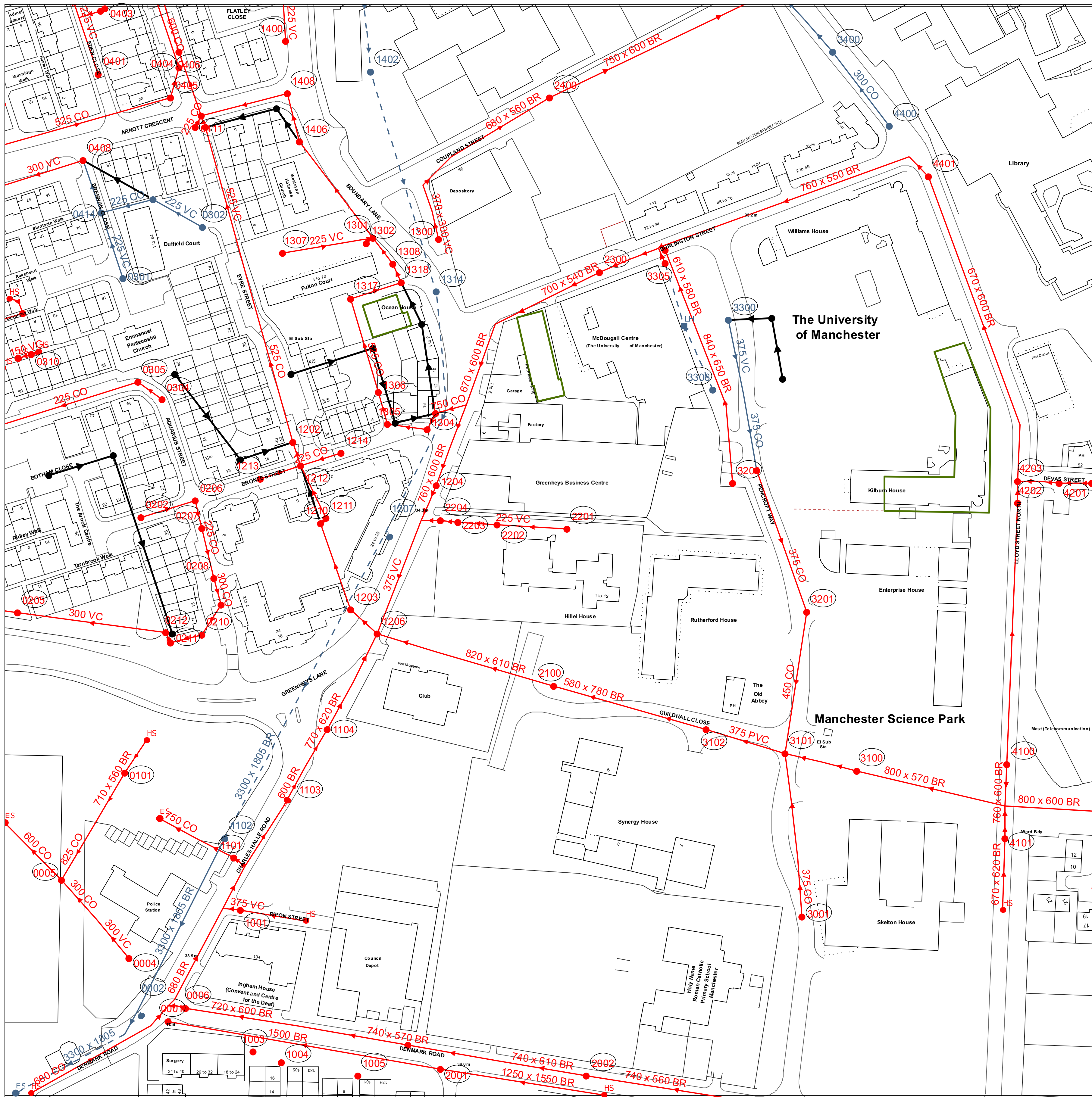
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11 Ducie Street
P.O. Box 65, Piccadilly Basin
Manchester M60 3JA
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T +44 (0)161 628 2200
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THE HUB MANCHESTER SCIENCE PARKS		
RIPON STREET TEMPORARY CAR PARK		SCALE 1:200
P2006149 (9-JL011		DATE MAY '14
		REVISION A

Appendix C

Extracts from United Utilities Sewer Records



Refo	Cover	Func	Invert	Size	Shape	Mat	Length	Grad	Refo	Cover	Func	Invert	Size	Shape	Mat	Length	Grad			
0001	33.36	CO	0	3300	1805	EG	BR	12.53	3	0201	33.37	SW	0	3300	1805	EG	BR	12.53	3	
0002	33.38	SW	31.09	300		CI	VC	23.43	0	0203	33.9	CO	0	3300	1805	EG	BR	12.53	3	
0004	33.33	CO								0204	33.52	CO	0	3300	1805	EG	BR	12.53	3	
0005	33.37	CO								0303	34.5	CO	0	3300	1805	EG	BR	12.53	3	
0006	33.69	CO								0413	34.34	SW	0	3300	1805	EG	BR	12.53	3	
0101	33.37	SW	30.42	710	560	EG	BR	27.78	1	1201	34.34	CO	0	3300	1805	EG	BR	12.53	3	
0202	CO		0	225		CI	VC	25.83	17	1215	34.34	CO	0	3300	1805	EG	BR	12.53	3	
0205	33.91	CO								1309	34.63	CO	0	3300	1805	EG	BR	12.53	3	
0206	CO									1311	33.94	CO	0	3300	1805	EG	BR	12.53	3	
0207	CO									1312	33.85	CO	0	3300	1805	EG	BR	12.53	3	
0208	CO									1313	34	CO	0	3300	1805	EG	BR	12.53	3	
0209	CO									1319	34.79	CO	0	3300	1805	EG	BR	12.53	3	
0210	CO									1401	34.79	CO	0	3300	1805	EG	BR	12.53	3	
0211	CO									1407	CO									
0212	CO									3302	35.64	SW	0	3300	1805	EG	BR	12.53	3	
0301	34.32	SW	32.36	225		CI	VC	31.78	1	3303	35.81	SW	0	3300	1805	EG	BR	12.53	3	
0302	34.71	SW	32.55	225		CI	VC	26.09	0											
0304	CO		0	225		CI	VC	13.64	9											
0305	CO																			
0307	CO																			
0310	CO																			
0401	34.42	CO	32.33	225		CI	VC	69.57	2											
0402	34.39	CO	32.72	150		CI	VC	10.44	0											
0403	34.45	CO	32.6	150		CI	VC	2.24	7											
0404	34.63	CO	28.83	600		CI	CO	92.97	4											
0405	34.66	CO	27.12	525		CI	VC	51.24	2											
0406	34.63	CO																		
0407	34.72	CO																		
0408	34.7	CO																		
0410	CO																			
0411	CO		27.55	525		CI	VC	30.84	4											
0412	SW		0	225		CI	VC	6.07	1											
0414	SW		0	225		CI	VC	24.5	16											
1001	33.84	CO	31.11	375		CI	VC	8.06	0											
1002	33.59	CO																		
1003	33.9	CO																		
1004	33.98	CO																		
1005	34.11	CO																		
1101	33.63	CO	0	3300	1805	EG	BR	88.55	22											
1102	33.71	SW	31.76	600		CI	BR	20.59	0											
1103	34.01	CO																		
1104	34.19	CO	28.38	525		CI	CO	74.8	3											
1202	34.62	CO																		
1203	34.28	CO																		
1204	34.08	CO																		
1206	33.73	CO																		
1207	34.3	SW	31.38	3300	1805	HO	BR	159.24												
1210	CO																			
1211	CO																			
1212	CO		28.68	525		CI	CO	11.42	0											
1213	CO		0	225		CI	VC	19.67	13											
1214	CO		0	225		CI	VC	19.3	12											
1300	34.61	CO	32.72	370	300	EG	VC	13.34	0											
1301	34.62	CO																		
1302	34.71	CO	32.22	225		CI	VC	1.89	6											
1304	CO																			
1305	CO																			
1306	CO																			
1307	34.55	CO	32.49	225		CI	VC	38.49	1											
1308	34.88	CO	29.89	525		CI	VC	14.99	0											
1310	34.35	CO																		
1314	34.68	SW																		
1317	CO		0	525		CI	CO	9.33	1											
1318	CO		33.05	525		CI	VC	50.14	1											
1400	35.02	CO	32.6	3300	1805	HO	BR	105.36	3											
1402	34.95	SW																		
1406	CO																			
1408	CO																			
2001	33.8	CO	31.19	1500		CI	BR	126.92	4											
2002	33.85	CO																		
2003	34.69	CO	33.34	225		CI	VC	32.06	1											
2201	34.69	CO																		
2202	34.41	CO																		
2203	34.04	CO																		
2204	33.91	CO																		
2300	34.52	CO																		
2400	34.87	CO																		
3001	34.73	CO	31.41	750	600	EG	BR	57.7	2											
3100	34.74	CO	32.78	375		CI	CO	27.07	0											
3101	34.34	CO	32	800	570	EG	BR	164.9	0											
3102	34.23	CO																		
3103	35.23	CO	32.53	450		CI	CO	65.76	2											
3104	34.84	CO																		
3204	34.72	CO	0	840	650	EG	BR	74.75	30											
3300	35.41	SW	33.13	375		CI	VC	34.71	1											
3304	34.59	CO																		
3305	34.74	CO	31.59	300		CI	VC	7.62	0											
3306	34.36	SW	31.86	300		CI	VC	62.14	2											
3400	35.33	SW	31.86	300		CI	VC	19.85	0											
4100	34.88	CO	32.38	760	600	EG	BR	19.03	0											
4101	34.85	CO	32.79	600	570	EG	BR	8	0											
4200	35.48	CO																		
4201	35.28	CO																		
4202	34.9	CO																		
4203	CO																			
4400	35.1	SW	32.15	300		CI	CO	42.8	1											
4401	35.03	CO	0	670	600	EG	BR	127.3	4											
0007	SW																			
0008	CO		0	680		CI	CO	63.13	24											
0010	CO		0	680		CI	BR	12.04	4											
0011	CO		30.95	300		CI	CO	24.08	0											
0013	CO		0	680	580	EG	BR	4	0											
0102	CO		30.46	625		CI	CO	29.15	1											
0103	CO		0	750		CI	CO	19.24	6											
0105	CO		0	710	560	EG	BR	18.03	1											
0306	CO		150			CI	VC	3.49	9											
0309	CO		0	375		CI	VC	10.29	11											