

## BEBROKE SCIENCE PARK DESIGN NOTE

Project name **Begbroke Science Park**  
 Project no. **1620011508**  
 Recipient **Cherwell District Council North Oxfordshire**  
 Document **BBSP-RAMB-ZZ-XX-RP-C-000002**  
 Reference  
 Version **P01**  
 Date **17/12/2021**  
 Prepared by **A Taleb**  
 Checked by **L February**  
 Approved by **L Sawyer**  
 Description **Response to Planning Conditions**

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## 1. Introduction

This report has been produced in support of the planning application (18/00803/OUT) for the Begbroke Science Park, Begbroke Hill, Begbroke, Kidlington OX5 1PF. The design note has been written in support of discharging the planning Condition 16.

Planning Condition 16 reads as follows;

*Development shall not begin until a surface water drainage scheme for the site or part if separate reserved matters are submitted, based on sustainable drainage principles and an assessment of the hydrological and hydro-geological context of the development, has been submitted to and approved in writing by the Local Planning Authority. The scheme shall subsequently be implemented in accordance with the approved details before the development is completed. The scheme shall also include:*

- a) *Discharge Rates*
- b) *Discharge Volumes*
- c) *SUDS (Soakaways)*
- d) *Maintenance and management of SUDS features (To include provision of a SuDS Management and Maintenance Plan)*
- e) *Infiltration in accordance with BRE365 (To include infiltration testing; seasonal monitoring and recording of groundwater levels)*
- f) *Detailed drainage layout with pipe numbers*
- g) *Network drainage calculations*
- h) *Phasing*
- i) *Flood Flow Routing in exceedance conditions (To include provision of a flood exceedance route plan)*

*Reason - To ensure an acceptable drainage scheme is provided in relation to the proposed expansion and do ensure the proposals do not have a detrimental impact on the drainage systems currently in situ in the immediate locale.*

The design note should be read in conjunction with the information listed in Section 2, below.

### 1.1 Objective

The objective of this report is to provide a description of the below ground drainage system for the proposed development in support of discharging Condition 16, as noted above.

### 1.2 Constraints and Limitations

This report is prepared in support of discharging the planning conditions as noted above.

The report summarises information from a number of external sources and cannot offer any guarantees or warranties for the completeness or accuracy of information relied upon. Ramboll UK has not verified information from third parties unless otherwise stated in the report.

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## 2. Supporting Information

The information noted below, and appended to this report, is provided in support of discharging the planning condition 16.

The design note should be read in conjunction with the information below:

a) b) c)	BBSP-RAMB-ZB-XX-DR-C-000101 BBSP-RAMB-ZB-XX-DR-C-000102 BBSP-RAMB-ZC-XX-DR-C-000103 BBSP-RAMB-ZC-XX-DR-C-000104	Zone B- Indicative Surface Water Drainage Layout Zone B- Indicative Foul Water Drainage Layout Zone C- Indicative Surface Water Drainage Layout Zone C- Indicative Foul Water Drainage Layout	Appendix 2
d)	SuDS Management and Maintenance Plan		Appendix 5
e)	Ground Investigation Results	Ground Engineering C15387 Begbroke Science Park	Appendix 4
e) g)	BBSP-RAMB-ZZ-XX-CA-C-00001	Detailed design and calculations including schematic showing the pipe numbers.	Appendix 3
h)	Phasing	Single phase development	N/A
i)	BBSP-RAMB-ZC-XX-DR-C-00105 BBSP-RAMB-ZB-XX-DR-C-00106	Zone C – Exceedance Flow Path Zone B – Exceedance Flow Path	Appendix 2

**APPENDIX 1**  
**OUTLINE PLANNING PERMISSION DECISION NOTICE**



DISTRICT COUNCIL  
NORTH OXFORDSHIRE

**NOTICE OF DECISION**  
**TOWN AND COUNTRY PLANNING ACT 1990**  
**(AS AMENDED)**

**Name and Address of Agent/Applicant:**

Chancellor, Masters And Scholars Of The  
University Of Oxford  
c/o David Lock Associates Limited  
Mr Duncan Chadwick  
50 North Thirteenth Street  
Central Milton Keynes  
MK9 3BP

**Date Registered:** 8th May 2018

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**Proposal:** Outline planning permission, with all matters except for access reserved for subsequent approval, for up to 12,500m2 of B1a / b / c and ancillary D1 floor space, retention of and improvements to the existing vehicular, public transport, pedestrian and cycle access including internal circulation routes; associated car parking including re-disposition of existing car parking; associated hard and soft

**Location:** Begbroke Science Park, Begbroke Hill, Begbroke, Kidlington OX5 1PF

**Parish(es):** Begbroke

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**OUTLINE PERMISSION FOR DEVELOPMENT SUBJECT TO CONDITIONS**

The Cherwell District Council, as Local Planning Authority, hereby **GRANTS** outline planning permission for the development described in the above-mentioned application, the accompanying plans and drawings and any clarifying or amending information **SUBJECT TO THE CONDITIONS SET OUT IN THE ATTACHED SCHEDULE.**

The reason for the imposition of each of the conditions is also set out in the schedule.

Cherwell District Council  
Bodicote House  
Bodicote  
BANBURY  
OX15 4AA

**Jim Newton**

**Assistant Director for  
Planning Policy and Development**

**Date of Decision:** 17th September 2018

**Checked by:** rd (Officer initials)

## SCHEDULE OF CONDITIONS

- 1 No development shall be started until full details of the design, layout and external appearance of all buildings and landscaping of the site (hereafter referred to as the reserved matters) have been submitted to and approved in writing by the Local Planning Authority. In relation to landscaping, the details shall include existing and proposed hard and soft landscaping areas. For the avoidance of doubt details of all proposed trees, planting, including nursery stock, areas of soft landscaping as well as all hard landscaped areas including all parking areas, footpath and circulation areas shall be submitted and approved in writing by the Planning Authority. Details of all proposed hedges, wall and fences shall also be submitted as part of a Landscaping Plan.

Reason - This permission is in outline only and is granted to comply with the provisions of Section 92 of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004, and Article 4 of the Town and Country Planning (General Development Procedure) Order 2010 (as amended).

- 2 In the case of reserved matters, application for approval shall be made not later than three years from the date of this permission i.e. by 16th September 2021.

Reason - This permission is in outline only and is granted to comply with the provisions of Section 92 of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004, and Article 4 of the Town and Country Planning (General Development Procedure) Order 2010 (as amended).

- 3 The development to which this permission relates shall begin no later than whichever is the latter of the following dates
- i) the expiration of five years from the date of this outline permission i.e. by 16th September 2023.
  - ii) The expiration of two years from the final approval of the reserved matters or, in the case of approval on different dates, the final approval of the last such matter to be approved.

Reason - This permission is in outline only and is granted to comply with the provisions of Section 92 of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004, and Article 4 of the Town and Country Planning (General Development Procedure) Order 2010 (as amended).

- 4 The reserved matters submission(s) required by Condition 1 of this permission, shall include a Landscape and Ecology Management Plan (LEMP), which shall include biodiversity enhancements proposed within the site. Thereafter, the LEMP shall be carried out in accordance with the approved details.

Reason-To protect habitats of importance to biodiversity conservation from any loss or damage in accordance with Policy ESD10 of the Cherwell Local Plan 2011-2031 and Government guidance contained within the National Planning Policy Framework.

- 5 The reserved matters submission(s) required by Condition 1 of this permission shall include a Landscape Impact Assessment relating to the site, proposed buildings and the surrounding area. The development shall be carried out in accordance with the approved Landscape Impact Assessment.

Reason-To allow the Local Planning Authority to further assess the proposed buildings' impact on the visual amenity of the site, the landscape to which it relates and the surrounding area.

- 6 Except where otherwise stipulated by conditions the application shall be carried out in accordance with the following plans and documents; Application forms and drawings "UNO001/010", "UNO001-011", "UNO001/015A", "Archaeological Desk Based Assessment:AC00641A", , Heritage Assessment 3934 May 2018", "Begbroke Science Park Phase 1 Desk Top Study" accompanying this application.

Reason - For the avoidance of doubt, to ensure that the development is carried out only as approved by the Local Planning Authority and to comply with Government guidance contained within the National Planning Policy Framework.

- 7 The buildings constructed as part of the proposed development shall be no higher than 12.6 metres at their highest point when measured from ground level, excluding point features and plant, as shown on approved drawing UNO001/015A.

Reason - To ensure that the proposed development is in scale and harmony with its neighbours and surroundings and to comply with Policy C28 of the adopted Cherwell Local Plan and Government guidance contained within the National Planning Policy Framework.

- 8 No more than 20% of the approved floorspace shall be occupied for uses falling within Class B1(a) of the Schedule to the Town and Country Planning (Use Classes) Order 1987 (as amended).

Reason - In order to maintain the research and development focus of the Begbroke Science Park and to comply with Government guidance contained within the National Planning Policy Framework.

- 9 Other than what is permitted by condition 8, the development hereby permitted shall be used only for purposes falling within Class B1(b) and B1 (c) and for ancillary D1 uses as specified in the Schedule to the Town and Country Planning (Use Classes) Order, 1987 (as amended) and for no other purposes whatsoever.

Reason - In order to maintain the research and development focus of the Begbroke Science Park and to comply with Government guidance contained within the National Planning Policy Framework.

- 10 Further to condition 9, the development hereby permitted shall only be occupied where consultation and liaison with staff of the University of Oxford or another research institution or company within Oxfordshire is an integral part of the research and development process and shall not involve any manufacture other than the manufacture of prototypes and ancillary production for market testing.

Reason - In order to maintain the research and development focus of the Begbroke Science Park and to comply with Government guidance contained within the National Planning Policy Framework.

- 11 Prior to occupation of the development hereby permitted the Framework Travel Plan in place for the Begbroke Science Park shall be updated to take account of the travel demands of the additional development and shall be submitted to and agreed in writing with the Local Planning Authority in consultation with the Local Highway Authority. The Framework Travel Plan shall be monitored for a period of five years post-occupation of any building constructed as part of the development hereby permitted with updated travel survey results provided to the Local Planning Authority within 3 months of the first occupation of the relevant building.

Reason - In the interests of sustainability and to ensure a satisfactory form of development, in accordance with Government guidance contained within the National Planning Policy Framework.

- 12 In accordance with the submitted Framework Travel Plan, details shall be submitted to and agreed in writing by the Local Planning Authority for the provision of a bus stop including a shelter within the site at the existing turnaround area at the eastern end of Begbroke Hill. The applicant shall enter into discussions with a service provider to either divert an existing public bus service into the site or provide a new public bus service to serve the site. Subject to agreeing an overall package of public bus service within the site with a service provider or an enhanced private minibus service to serve the site, the proposed bus stop and shelter shall be provided and the public bus service implemented in accordance with details and a programme to be first submitted to and approved in writing by the Local Planning Authority.

Reason- To ensure a sustainable scheme of public/private bus provision is created and maintained to service the existing site and the expansion hereby permitted.

- 13 In accordance with the submitted Framework Travel Plan, and subject to Condition 12 above, a scheme shall be submitted to and approved in writing by the Local Planning Authority, detailing the existing level of provision and the proposed increase of traffic movements of the University of Oxford's Begbroke Science Park private minibus service. The Travel Plan, and subject to Condition 12 above, shall ensure that the overall level of public bus service directly serving the site or private minibus provision shall show a pro-rata increase based on the increased number of University employees/ floor space generated by the development hereby permitted. The approved scheme and Travel Plan shall be implemented in accordance with the approved details unless otherwise approved in writing by the Local Planning Authority.

Reason- To ensure a sustainable scheme of public/private bus provision is created and maintained to service the existing site and the expansion hereby approved.

- 14 The development hereby permitted shall be carried out in accordance with the recommendations set out in Table 6 of the Ecology Report prepared by BSG, issued on 4th May 2018.

Reason- To ensure that the development does not cause harm to any protected species or their habitats in accordance with Policy ESD10 of the Cherwell Local Plan 2011-2031 and Government guidance contained within the National Planning Policy Framework.

- 15 Prior to the commencement of the development hereby approved, a lighting strategy which demonstrates how impacts on ecology will be avoided, shall be submitted to and approved in writing by the Local Planning Authority. Thereafter, the lighting strategy shall be carried out in accordance with the approved details.

Reason- To protect habitats of importance to biodiversity conservation from any loss or damage in accordance with Policy ESD10 of the Cherwell Local Plan 2011-2031 and Government guidance contained within the National Planning Policy Framework.

- 16 Development shall not begin until a surface water drainage scheme for the site or part if separate reserved matters are submitted, based on sustainable drainage principles and an assessment of the hydrological and hydro-geological context of the development, has been submitted to and approved in writing by the Local Planning Authority. The scheme shall subsequently be implemented in accordance with the approved details before the development is completed. The scheme shall also include:
- o Discharge Rates
  - o Discharge Volumes
  - o SUDS (Soakaways)



- o Maintenance and management of SUDS features (To include provision of a SuDS Management and Maintenance Plan)
- o Infiltration in accordance with BRE365 (To include infiltration testing; seasonal monitoring and recording of groundwater levels)
- o Detailed drainage layout with pipe numbers
- o Network drainage calculations
- o Phasing
- o Flood Flow Routing in exceedance conditions (To include provision of a flood exceedance route plan)

Reason - To ensure an acceptable drainage scheme is provided in relation to the proposed expansion and do ensure the proposals do not have a detrimental impact on the drainage systems currently in situ in the immediate locale.

- 17 A permissive pedestrian and cycle route between Begbroke Science Park and the restricted byway at Roundham Bridge that is suitable for use year-round, shall be provided in accordance with details and a programme to be submitted to and approved in writing by the Local Planning Authority prior to the commencement of the development hereby permitted. . The details shall include timing for delivery of the permissive pedestrian and cycle route, the location and routing of the connection and design details including the minimum width and surfacing details. The permissive pedestrian and cycle route shall be provided in accordance with the approved details and programme.

Reason- This requirement is in line with the Kidlington Masterplan SPD and Policy SLE 4 of the Cherwell Local Plan 2011-2031 which supports the delivery of new sustainable transport connections and requires development to make the fullest possible use of public transport, walking and cycling

- 18 Prior to the commencement of the development hereby permitted, full specification details (including construction, layout, surfacing and drainage) of the turning area and 414 parking spaces within the curtilage of the site, arranged so that motor vehicles may enter, turn and leave in a forward direction and vehicles may park off the highway, shall be submitted to and approved in writing by the Local Planning Authority. . Thereafter, and prior to the first occupation of the development, the turning area and car parking spaces shall be constructed in accordance with the approved details and shall be retained for the parking and manoeuvring of vehicles at all times thereafter.

Reason - In the interests of highway safety, to ensure the provision of off-street car parking and to comply with Government guidance contained within the National Planning Policy Framework.

- 19 Prior to the first use or occupation of the development hereby permitted, covered cycle parking facilities shall be provided on the site in accordance with details which shall be first submitted to and approved in writing by the Local Planning Authority. Thereafter, the covered cycle parking facilities shall be permanently retained and maintained for the parking of cycles in connection with the development.

Reason - In the interests of sustainability and to ensure a satisfactory form of development, in accordance with Government guidance contained within the National Planning Policy Framework

- 20 Prior to commencement of the development hereby permitted, a Construction Traffic Management Plan (CTMP) shall be submitted to and approved in writing by the Local Planning Authority. The CTMP shall include details of times for access by construction traffic and delivery vehicles, which must be outside of peak network hours. Thereafter, the approved Construction Traffic Management Plan shall be implemented and operated in accordance with the approved details.

Reason - In the interests of highway safety and the residential amenities of neighbouring occupiers.

- 21 The reserved matters submission(s) required by Condition 1 of this permission, shall include details of the creation and/or enhancement of the public art in the vicinity of the new development as identified within Policy Kidlington 1, to the satisfaction of the Local Planning Authority. Thereafter, the proposed public art shall be in situ prior to the development hereby permitted , being operational.

Reason: To accord with Cherwell Local Plan 2011-2031, Policy Kidlington 1

### **STATEMENT OF ENGAGEMENT**

In accordance with the Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended) and paragraph 38 of the National Planning Policy Framework, the Council has worked positively and proactively to determine this application within the agreed timescales, having worked with the applicant/agent where necessary and possible within the scope of the application (as set on in the case officer's report) to resolve any concerns that have arisen, in the interests of achieving more appropriate and sustainable development proposals. Consent has been granted accordingly.

The case officer's report and recommendation in respect of this application is available to view online at: <http://www.cherwell.gov.uk/viewplanningapp>. The agenda, minutes and webcast recording of the Planning Committee meeting at which this application was determined 23 August 2018 are also available to view online at: <http://modgov.cherwell.gov.uk/ieListMeetings.aspx?CIId=117&Year=0>.



## NOTICE OF DECISION

### TOWN AND COUNTRY PLANNING ACT 1990 (AS AMENDED)

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#### NOTES TO THE APPLICANT

##### TIME LIMITS FOR APPLICATIONS

By virtue of Sections 91-96 of the Town and Country Planning Act 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act 2004, planning permissions are subject to time limits. If a condition imposing a time limit has been expressly included as part of the permission, then that condition must be observed. Otherwise, one or other of the following time limits will apply :

**Where planning permission is given in outline** subject to a condition reserving certain matters for subsequent approval, application for approval of such matters reserved must be made not later than the expiration of 3 years beginning with the date of the outline planning permission and further the development to which the permission relates must be begun not later than the expiration of 2 years from the final approval of the reserved matters or, in the case of approval on different dates, the final approval of the last reserved matters to be approved.

**Where the planning permission is complete and is not in outline**, the development must be begun not later than the expiration of 3 years from the date on which permission was granted.

##### OTHER NECESSARY CONSENTS

This document only conveys permission or approval for the proposed development under Part III of the Town and Country Planning Act 1990 and you must also comply with all the bye-laws, regulations and statutory provisions in force in the District and secure such other approvals and permissions as may be necessary under other parts of the Town and Country Planning Act 1990 or other legislation.

In particular you are reminded of the following matters :

- The need in appropriate cases to obtain approval under the Building Regulations. **The Building Regulations may be applicable to this proposal. You are therefore advised to contact the District Council's Building Control Manager before considering work on site.**
- Data supplied by the National Radiological Protection Board (NRPB) and the British Geological Survey (BGS) suggests that the site of this application falls within an area which is potentially at risk from radon. This may require protective measures in order to comply with the Building Regulations if your consent relates to a new dwelling or house extension. Further advice on whether protective measures are required under the Building Regulations can be obtained by contacting the Building Control Manager on 0300 0030 200 , fax 0300 0030 201 or E-mail at [building.control@cherwellandsouthnorthants.gov.uk](mailto:building.control@cherwellandsouthnorthants.gov.uk)
- The need to obtain an appropriate Order if the proposal involves the stopping up or diversion of

a public footpath.

- The need to obtain a separate "Listed Building Consent" for the demolition, alteration or extension of any listed building of architectural or historic interest.
- The need to make any appropriate arrangements under the Highways Act in respect of any works within the limits of a public highway. The address of the Highway Authority is Oxfordshire County Council, Speedwell House, Speedwell Street, Oxford, OX1 1NE.
- It is the responsibility of the applicant to ascertain whether his/her development affects any public right of way, highway or listed building.

## **APPEALS TO THE SECRETARY OF STATE**

If you are aggrieved by the decision of the Local Planning Authority to grant permission or approval subject to conditions, you can appeal to the First Secretary of State in accordance with Section 78(1) of the Town and Country Planning Act 1990.

If you wish to appeal then you must do so within six months of the date of this notice. Forms can be obtained from the **Planning Inspectorate, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6PN. Tel 0303 444 5000**. The Secretary of State can allow a longer period for giving notice of an appeal, but he will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.

The Secretary of State need not consider an appeal if it seems to him that permission or approval for the proposed development could not have been so granted otherwise than subject to the conditions imposed by the Local Planning Authority, having regard to the statutory requirements, to the provisions of the development order and to any directions given under the order.

In practice, the Secretary of State does not refuse to consider appeals solely because the Local Planning Authority based its decision on a direction given by him.

## **PURCHASE NOTICES**

If either the Local Planning Authority or the First Secretary of State grants permission or approval for the development of land subject to conditions, the owner may claim that he/she can neither put the land to a reasonably beneficial use in its existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.

In these circumstances the owner may serve a purchase notice on the District Council. This notice will require the Council to purchase his/her interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act 1990.

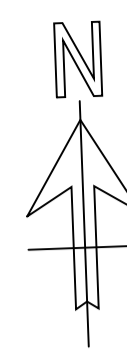
## **COMPENSATION**

In certain circumstances compensation may be claimed from the Local Planning Authority if permission is granted subject to conditions by the Secretary of State on appeal or on reference of the application to him.

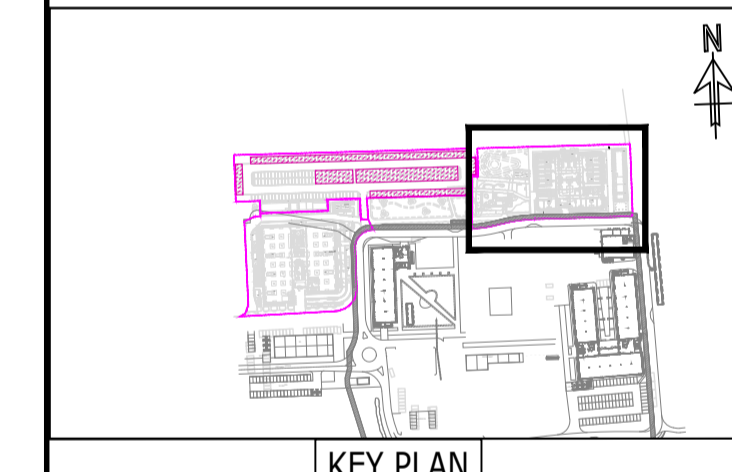
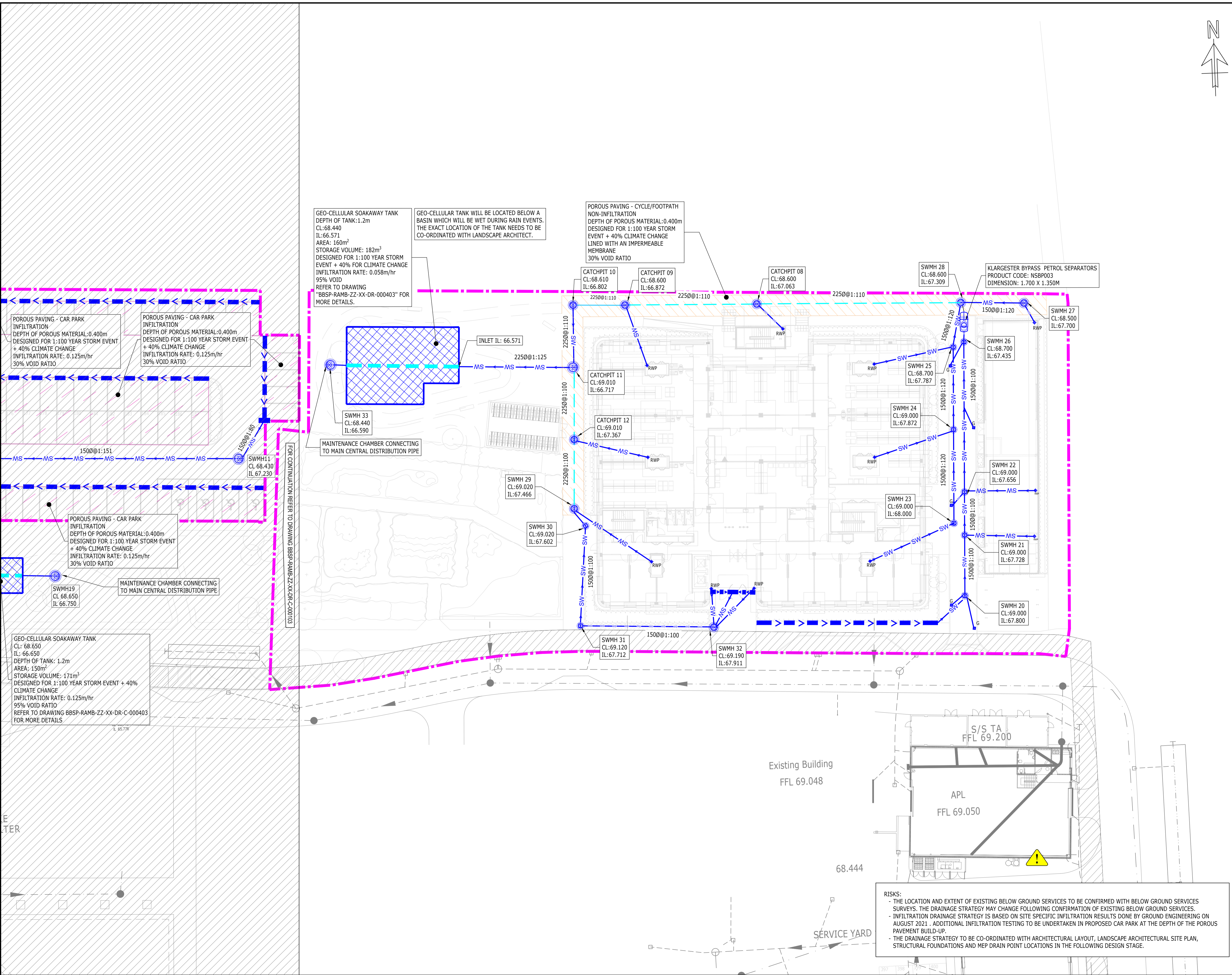
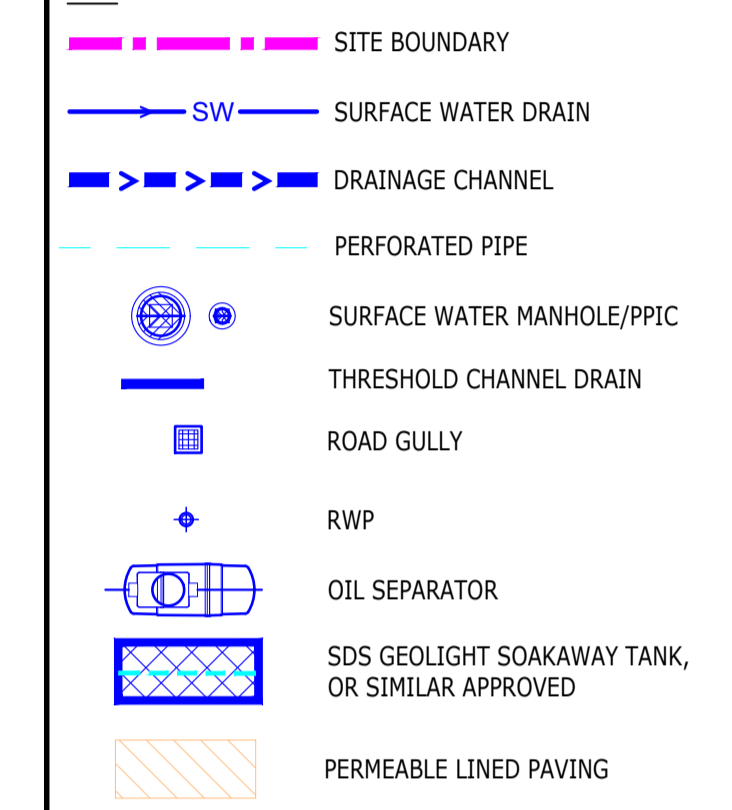
These circumstances are set out in the Town and Country Planning Act 1990 as amended by the Planning and Compensation Act 1991.

**APPENDIX 2**  
**PROPOSED FOUL AND SURFACE WATER DRAINAGE LAYOUT DRAWING**

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- Notes
- THIS DRAWING IS NOT TO BE SCALED.
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL AND M&E DRAWINGS.
  - THIS IS NOT AN INSTALLATION DRAWING NOR A CO-ORDINATION DRAWING.
  - INDICATIVE BELOW GROUND DRAINAGE STRATEGY SUBJECT TO FURTHER DESIGN DEVELOPMENT AND COORDINATION.
  - THIS DRAWING IS BASED ON
    - FIRA LP2264-FIRA-MP-ST-P-LA-WS 0001 'WIP' LANDSCAPE DRAWING RECEIVED ON 18.08.2021.
    - BSP-NBBJ-ZZ-XX-DR-A-511010-S11011 ARCHITECT DRAWINGS RECEIVED ON 24-08-2021.
    - HISTORIC SITE INFO RECEIVED ON 22.03.2021.
  - FOR DRAINAGE DETAILS REFER TO DRAWINGS 'BSP-RAMB-CP-XX-DR-C-000410-413 FOR PAVEMENT DETAILS REFER TO DRAWINGS BSP-RAMB-CP-XX-DR-C-000510 AND 551.



PO2	STAGE 3 ISSUE	10.09.2021	AT	LS
PO1	STAGE 2 ISSUE	28.05.2021	AT	LS
Rev	Description	Date	By	App
			Chk	

STAGE 3

BEGBROOKE SCIENCE PARK ACADEMIC BUILDING



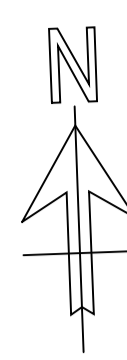
ZONE B INDICATIVE SURFACE WATER DRAINAGE LAYOUT

Project No:	Scale (@A1):	Drawn:	Date:
1620011508	1:250	MES	MAY 2021
Drawing No:		Rev:	
BSP-RAMB-ZZ-00-DR-C-000101		P02	

RISKS:

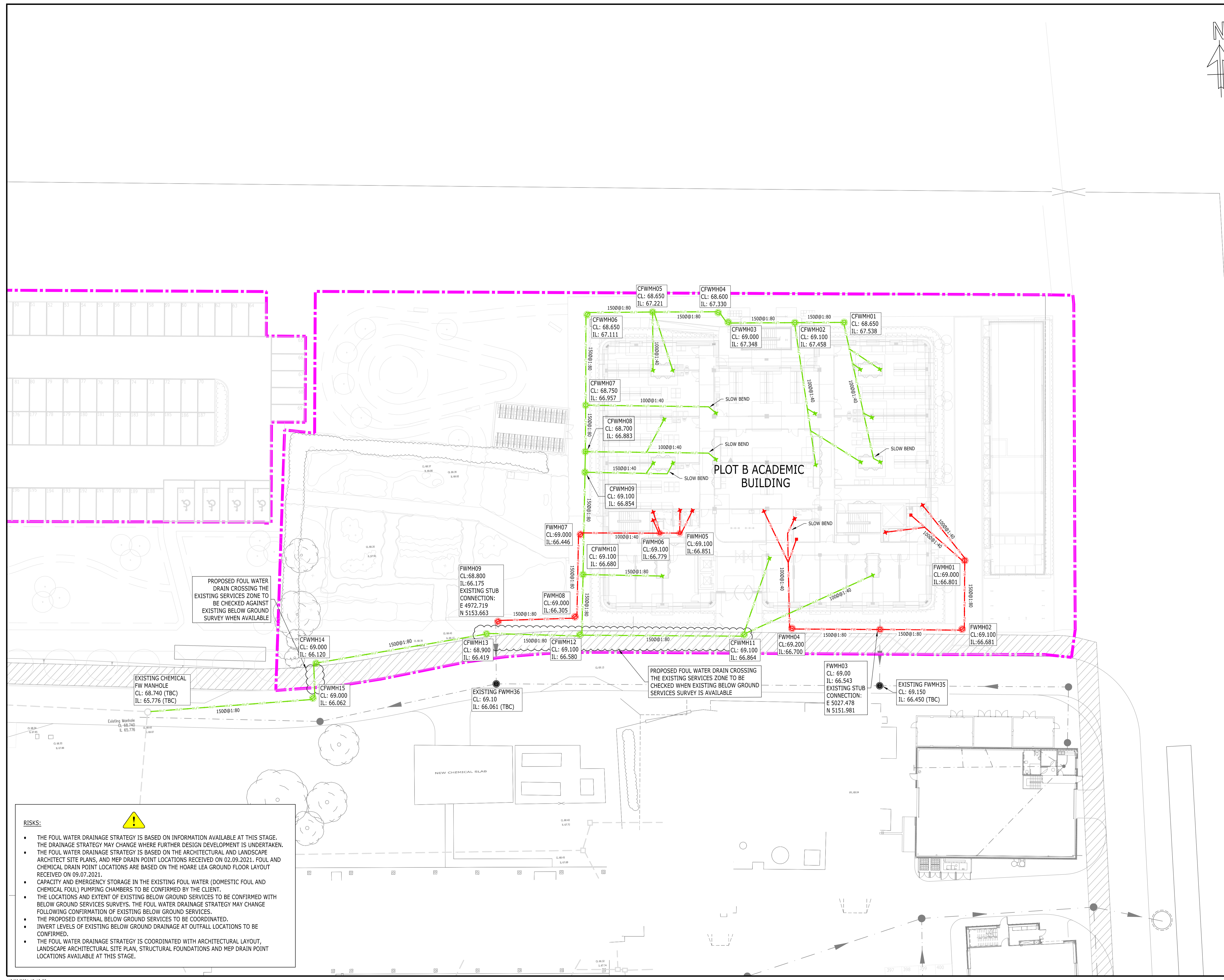
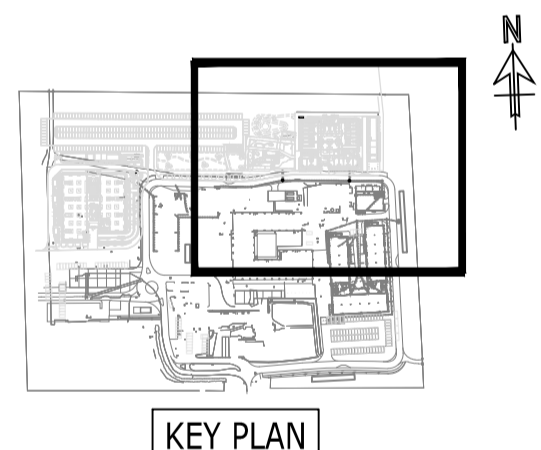
- THE LOCATION AND EXTENT OF EXISTING BELOW GROUND SERVICES TO BE CONFIRMED WITH BELOW GROUND SERVICES SURVEYS. THE DRAINAGE STRATEGY MAY CHANGE FOLLOWING CONFIRMATION OF EXISTING BELOW GROUND SERVICES.
- INFILTRATION DRAINAGE STRATEGY IS BASED ON SITE SPECIFIC INFILTRATION RESULTS DONE BY GEOTECHNICAL ENGINEERING ON AUGUST 2021. ADDITIONAL INFILTRATION TESTING TO BE UNDERTAKEN IN PROPOSED CAR PARK AT THE DEPTH OF THE POROUS PAVEMENT BUILD-UP.
- THE DRAINAGE STRATEGY TO BE CO-ORDINATED WITH ARCHITECTURAL LAYOUT, LANDSCAPE ARCHITECTURAL SITE PLAN, STRUCTURAL FOUNDATIONS AND MEP DRAIN POINT LOCATIONS IN THE FOLLOWING DESIGN STAGE.

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- Notes
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  - THIS IS NOT AN INSTALLATION DRAWING NOR A CO-ORDINATION DRAWING.
  - INDICATIVE BELOW GROUND DRAINAGE STRATEGY SUBJECT TO FURTHER DESIGN DEVELOPMENT AND COORDINATION.
  - THIS DRAWING IS BASED ON:
    - NBS3 SITE LAYOUT RECEIVED ON 02.09.2021
    - HISTORIC SITE INFO RECEIVED ON 22.03.2021
    - LANDSCAPE DRAWING RECEIVED ON 25.08.2021
    - FIRA LP2264-FIRA-MP-ST-P-LA-W5
    - ARCHITECT DRAWING RECEIVED ON 02.09.2021

- KEY:
- SITE BOUNDARY
  - PROPOSED FOUL WATER DRAIN
  - PROPOSED CHEMICAL FOUL WATER DRAIN
  - PROPOSED CHEMICAL FOUL WATER MANHOLE
  - PROPOSED FOUL WATER MANHOLE
  - EXISTING UTILITIES ZONE
  - EXISTING FOUL WATER DRAIN
  - EXISTING CHEMICAL FOUL WATER DRAIN
  - EXISTING FOUL WATER MANHOLE
  - FLOOR GULLY
  - DP



PROPOSED FOUL WATER DRAIN CROSSING THE EXISTING SERVICES ZONE TO BE CHECKED AGAINST EXISTING BELOW GROUND SURVEY WHEN AVAILABLE

PROPOSED FOUL WATER DRAIN CROSSING THE EXISTING SERVICES ZONE TO BE CHECKED WHEN EXISTING BELOW GROUND SERVICES SURVEY IS AVAILABLE

- RISKS:**
- THE FOUL WATER DRAINAGE STRATEGY IS BASED ON INFORMATION AVAILABLE AT THIS STAGE. THE DRAINAGE STRATEGY MAY CHANGE WHERE FURTHER DESIGN DEVELOPMENT IS UNDERTAKEN.
  - THE FOUL WATER DRAINAGE STRATEGY IS BASED ON THE ARCHITECTURAL AND LANDSCAPE ARCHITECT SITE PLANS, AND MEP DRAIN POINT LOCATIONS RECEIVED ON 02.09.2021. FOUL AND CHEMICAL DRAIN POINT LOCATIONS ARE BASED ON THE HOARE LEA GROUND FLOOR LAYOUT RECEIVED ON 09.07.2021.
  - CAPACITY AND EMERGENCY STORAGE IN THE EXISTING FOUL WATER (DOMESTIC FOUL AND CHEMICAL FOUL) PUMPING CHAMBERS TO BE CONFIRMED BY THE CLIENT.
  - THE LOCATIONS AND EXTENT OF EXISTING BELOW GROUND SERVICES TO BE CONFIRMED WITH BELOW GROUND SERVICES SURVEYS. THE FOUL WATER DRAINAGE STRATEGY MAY CHANGE FOLLOWING CONFIRMATION OF EXISTING BELOW GROUND SERVICES.
  - THE PROPOSED EXTERNAL BELOW GROUND SERVICES TO BE COORDINATED.
  - INVERT LEVELS OF EXISTING BELOW GROUND DRAINAGE AT OUTFALL LOCATIONS TO BE CONFIRMED.
  - THE FOUL WATER DRAINAGE STRATEGY IS COORDINATED WITH ARCHITECTURAL LAYOUT, LANDSCAPE ARCHITECTURAL SITE PLAN, STRUCTURAL FOUNDATIONS AND MEP DRAIN POINT LOCATIONS AVAILABLE AT THIS STAGE.

P02	STAGE 3 ISSUE	10.09.2021	BG	LS
P01	STAGE 2 ISSUE	28.05.2021	BG	MS
Rev	Description	Date	By	App

**STAGE 3**

**BEGBROOKE SCIENCE PARK  
ACADEMIC BUILDING**

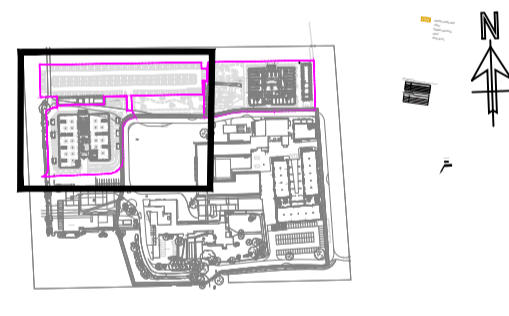
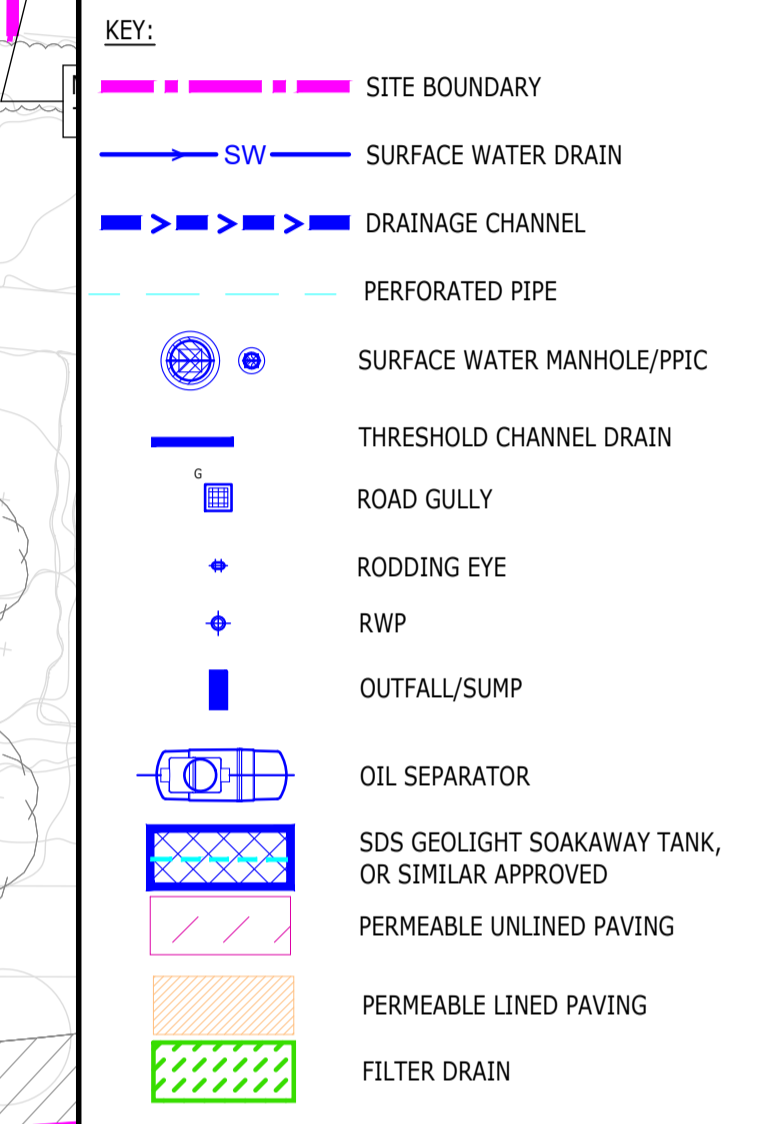
tel 020 7631 5291 london@ramboll.co.uk  
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**INDICATIVE FOUL WATER  
DRAINAGE LAYOUT  
ZONE B**

Project No:	Scale (BA1):	Drawn:	Date:
1620011508	1:250	MES	MAY 2021
Drawing No:	Rev:		
BBSR-RAMB-ZZ-XX-DR-C-000102	P02		

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- Notes
- THIS DRAWING IS NOT TO BE SCALED.
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL AND M&E DRAWINGS.
  - THIS IS NOT AN INSTALLATION DRAWING NOR A CO-ORDINATION DRAWING.
  - INDICATIVE BELOW GROUND DRAINAGE STRATEGY SUBJECT TO FURTHER DESIGN DEVELOPMENT AND COORDINATION.
  - THIS DRAWING IS BASED ON
    - LP2264-FIRA-MP-ST-P-LA-WS RECEIVED 02.09.2021.
    - LANDSCAPE DRAWING RECEIVED ON 25.08.2021.
    - BSP-NBBJ-ZZ-XX-DR-A-511010-511011
    - BSP-NBBJ-AB-00-DR-A-201010
    - BSP-NBBJ-CB-00-DR-A-201000
    - ARCHITECT DRAWINGS RECEIVED ON 02-09-2021.
    - HISTORIC SITE INFO RECEIVED ON 22.03.2021.
  - FOR DRAINAGE DETAILS REFER TO DRAWINGS "BSP-RAMB-CP-XX-DR-C-000410-413" FOR PAVEMENT DETAILS REFER TO DRAWINGS BSP-RAMB-CP-XX-DR-C-000510 AND 551.



P02	STAGE 3 ISSUE	10.09.2021	AT	LS
P01	STAGE 2 ISSUE	28.05.2021	AT	LS
Rev	Description	Date	By	App

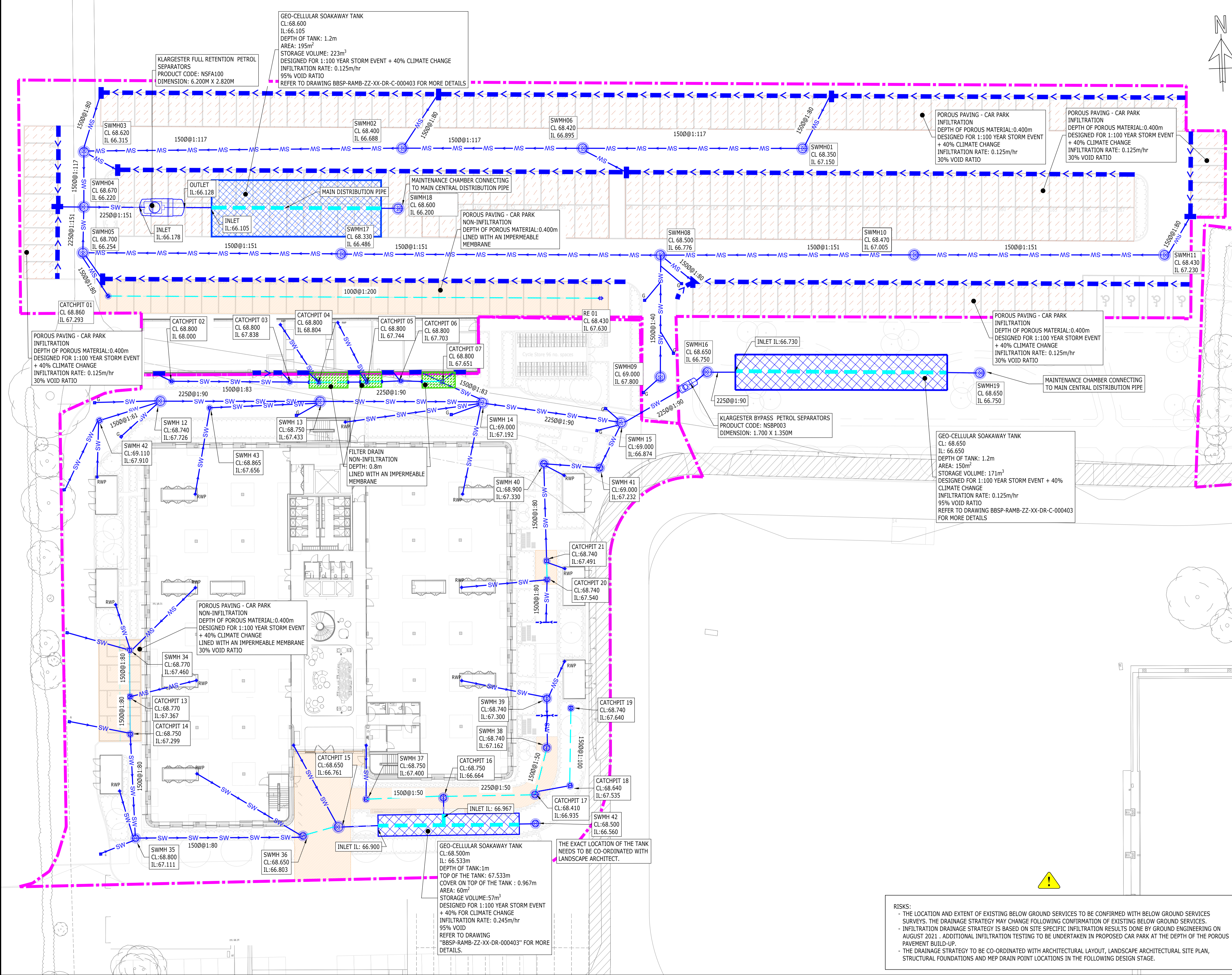
**STAGE 3**

**BEGBROOKE SCIENCE PARK COMMERCIAL BUILDING AND SURFACE CAR PARK**



**ZONE C INDICATIVE SURFACE WATER DRAINAGE LAYOUT**

Project No:	Scale (@A1):	Drawn:	Date:
1620011508	1:250	MES	MAY 2021
Drawing No:			Rev:
BSP-RAMB-ZC-XX-DR-C-000103			P02



**RISKS:**

- THE LOCATION AND EXTENT OF EXISTING BELOW GROUND SERVICES TO BE CONFIRMED WITH BELOW GROUND SERVICES SURVEYS. THE DRAINAGE STRATEGY MAY CHANGE FOLLOWING CONFIRMATION OF EXISTING BELOW GROUND SERVICES.
- INFILTRATION DRAINAGE STRATEGY IS BASED ON SITE SPECIFIC INFILTRATION RESULTS DONE BY GROUND ENGINEERING ON AUGUST 2021. ADDITIONAL INFILTRATION TESTING TO BE UNDERTAKEN IN PROPOSED CAR PARK AT THE DEPTH OF THE POROUS PAVEMENT BUILD-UP.
- THE DRAINAGE STRATEGY TO BE CO-ORDINATED WITH ARCHITECTURAL LAYOUT, LANDSCAPE ARCHITECTURAL SITE PLAN, STRUCTURAL FOUNDATIONS AND MEP DRAIN POINT LOCATIONS IN THE FOLLOWING DESIGN STAGE.