



Nottingham Trent University
Clifton campus

Landscape Management Plan

February 2013

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Section 1: Introduction & Background

1. INTRODUCTION AND BACKGROUND

Location

- 1.1 Clifton Campus is a 31.8 hectare site on the south bank of the River Trent, situated approximately four miles southwest of Nottingham City Centre on the A453, Clifton Lane.
- 1.2 The site fronts onto Clifton Lane, from which the site is accessed by bus, bike, car or on foot. The Campus is served by the Unilink bus service, which provides access from Nottingham. Buses to Clifton Campus leave NTU City Site every 7-10 minutes Monday to Friday during term time.

Current Use

- 1.3 Clifton Campus is home to the School of Arts and Humanities; School of Science and Technology; School of Computing and Informatics; and School of Education.
- 1.4 Clifton Campus has lecture theatres, General Purpose Teaching Rooms (GPTs), laboratories, IT suites, a library and sports centre providing all the specialist equipment necessary to support the wide range of courses offered. A health centre, two halls of residence, a student's union, sports pitches and shops provide all the facilities to make this an independent Campus.

History

- 1.5 The Campus itself has been developed on former agricultural land. Historic maps dating from circa 1883 show the site dissected into 12 fields. Other site features shown on this map are two lines of trees along field boundaries and the Old Marl Pit also referred to as the 'Dell'), all of which are still in existence today. The Old Marl Pit is around 0.2 hectares in size and is believed to date from 1700 or earlier. Marl (a mixture of clay and carbonate of lime) would have been excavated and used as soil improver, among other things.
- 1.6 Immediately north of the Campus lies Clifton Grove. It comprises an impressive avenue of Elm trees, which were planted in 1677 by Sir William Clifton as a carriage route to Clifton Hall located southwest of the site. In addition to the avenue is an orchard.
- 1.7 The first buildings appeared on the site in approximately 1950. These were located on the current New Hall Student Village site and comprised a community library and a Police Operational Centre. By the 1960s, these buildings were demolished and approximately half of the site was developed as Nottingham College of Education, which amalgamated with Trent Polytechnic in 1975. In 1992 it became Nottingham Trent University (NTU). The George Elliot building and the Maintenance and Grounds department plus some of the original staff housing (one of which is now the Forensic House) are the only built elements of the former Polytechnic which are still in existence today. Parallel to Clifton Lane, an ancient hedgerow borders the site, which dates beyond 1840.

The Grounds Now

- 1.8 Although the site comprises many buildings and car parks, a parkland setting is created by the surrounding woodland, open space and sports fields.
- 1.9 **Figure 1** below shows a map of the grounds at Clifton. The site is accessed from Clifton Lane via two entrances (main Entrance and south gate), while a further central gate is for exit only. A

rugby field and surrounding open space separates most of the buildings from the front of the site, creating a welcoming entrance and pleasant first experience.

Figure 1- Plan of Clifton Campus



- 1.10 The built aspects of the Campus are largely focussed in the centre of the site and as a result the site edges remain as green spaces, largely comprising woodland and sports pitches.
- 1.11 A series of sports pitches and facilities are located around the edge of the site, making up the 'Sports Village'. To the south, adjacent to Clifton Lane, a rugby pitch and five-a-side pitch creates a wide open space between the south entrance and the main exit. These pitches are separated from the main buildings by a bund, which helps to screen the buildings from Clifton Lane. A further two rugby pitches and a cricket wicket are located in the eastern corner of the site, with a further cricket pitch and pavilion situated in the northern corner. In the west of the site, the all-weather hockey pitch has recently been resurfaced in blue, the same colour as the London 2012 Olympics pitches. Some new tennis courts, also in blue, have recently been built. Slightly south of the tennis courts, adjacent to the Sports Hall, a football pitch is located on the site of the former running track.



- 1.12 Along the northeast site boundary lies a significant area of woodland, 50-70 metres in depth. This comprises mature and semi-mature native trees on land sloping away from the sports pitches. The Old Marl Pit is located centrally in this area of woodland.
- 1.13 A line of mature trees along the northwest boundary mirrors what were the Elm avenue trees which dominated Clifton Grove in the past. A grassed bund lies along the southwest side of the all-weather pitch, beyond which is a further area of native woodland and open grassland.
- 1.14 A further bund and tree planting surround part of the Observatory, beyond which native tree planting continues along the southwest boundary.
- 1.15 Within spaces between buildings, a variety of open spaces and courtyards provide a pleasant environment for staff and students to enjoy, while more secluded areas, such as the balancing ponds between Peverell Hall and the Lee Westwood Sports Centre present ideal wildlife habitats.
- 1.16 Around the perimeter, a 1.5m high wire mesh fence helps to secure the site. Although a pedestrian gate (currently locked), linking with Clifton Grove, is situated north of Peverell Hall.

Recent and Proposed Development

The Rosalind Franklin Building

- 1.17 The Rosalind Franklin building, also referred to as Superlab, now occupies the site of the former Toyota Centre. This has been designed to support the delivery of high quality laboratory classes and student research projects. In addition, the building houses chemistry research laboratories and contains high specification equipment and facilities to support innovation projects for a wide range of industry clients.

- 1.18 Achieving the Building Research Establishment Environmental Assessment Method (BREEAM) accreditation is at forefront of refurbishment and new developments on NTU's estate. Particular attention has been given to the planting and habitat creation around the Rosalind Franklin Building, although these are just part of the wider BREEAM criteria. Further details are given in **Section 6**.



New Hall Student Village

- 1.19 This redevelopment has replaced some of the previous student accommodation and ancillary academic support facilities on the Clifton Campus with attractive, high quality student accommodation.
- 1.20 The scheme houses around 727 students and also includes a central management suite, reception, staff offices, landscaped gardens, parking and a laundrette.
- 1.21 The project forms part of the University's plans to create an inspiring and innovative environment to match the aspirations of its students and staff, now and into the future. The scheme responds to the demand for high quality accommodation at NTU's Clifton Campus and helps to ensure the University continues to attract a high volume of students in years to come. The scheme was developed in consultation with stakeholders and the local community and will help to reduce pressure on housing stock elsewhere in the city.
- 1.22 As part of the development, a high quality landscape scheme was delivered, incorporating paving, street furniture, lighting as well as soft landscaping. The Swale forms a focal point in the landscape, bounded by gabion walls and crossed by a timber bridge. An interpretation board gives information on the environmental benefits of the swale.

- 1.23 In September 2012 New Hall was awarded BREEAM Excellent making it the first redevelopment at NTU to achieve this prestigious accreditation.



Clifton 'Heart of' Campus Regeneration

- 1.24 The optimisation of the Clifton Campus estate is very high on the agenda. The Computing and Informatics Building will become the principal focus of GTPs rooms and General Purpose IT accommodation on the Campus. To improve the site NTU is proposing to demolish parts of the George Eliot building to create a 'Heart' to the Campus' including more open space. This will improve the student experience of the campus whilst also opening up the opportunity for increased green space on the campus creating new habitats and encouraging biodiversity. The Environment Team and the Landscape Services Team both sit on the Clifton Landscaping Project steering group.

A453 Widening

- 1.25 After over thirty years of proposed widening works of one of the major roads into and out of Nottingham, the A453 widening works have begun in January 2013. The A453 bounds Clifton Campus along the south east fence line of the campus. As part of the widening of the road the campus will be encroached by the new part of the road. This has resulted in the loss of the ancient hedgerow as well as many trees that previously lined the campus boundary.
- 1.26 As part of the widening scheme mitigation planting is proposed to ensure that any trees, plants or hedgerows lost on NTU's campus will be replaced. NTU will ensure that all proposed planting will meet strict conditions. It will provide a valuable opportunity to work with the contractor and

NTU's Environment Team and Landscape Services Co-ordinator are keen to invite staff, students and members of the local community to get involved and plant replacement species.

All-weather Sports Pitch

- 1.27 NTU is looking to continuously improve its facilities for current and future students and visitors. In 2012 a planning application was submitted for a new all-weather sports pitch to be located in the west of the campus. Planning permission has been granted and works began in February 2013.
- 1.28 The development area has had both an Extended Phase I Habitat Survey (February 2012) and an Arboricultural Assessment (March 2012) completed by FPCR. These reports have assessed the area of trees that will be removed as a result of the development and have ensure appropriate mitigation planting by NTU is in place to replace any lost.
- 1.29 The mitigation planting has been recognised as an opportunity to involve NTU staff and students as well as members of the local community as explained in more detail in **Section 8** of this report.



Section 2: A Welcoming Place

2.0 A WELCOMING PLACE

Opportunities for access

- 2.1 As well as being an important resource for students and academics, Clifton provides facilities which are used by the local community.
- 2.2 The main focus for community use is the Lee Westwood Sports Centre, providing the following facilities;
- Two Sports Halls;
 - Astro-turf Pitch / Tennis Courts;
 - Squash Courts;
 - Exercise Studio;
 - Grass Pitches; and
 - Fitness suite.
- 2.3 A historic agreement made between Colonel Clifton and the people of Clifton Village gives the local community access to the use of the cricket pitch and pavilion.
- 2.4 The University is keen to increase public access to the site and is currently looking at how access can be managed to balance the needs of the University and the community. This includes new signage for the Mammoth and Lotus art pieces to be incorporated into the Clifton Nature Trail with a small plaque explaining each of the sculptures.
- 2.5 Public involvement is actively encouraged to ensure that the community maximises the opportunities available at Clifton Campus. These currently include Open Dome events and tree planting events (see **Section 8**), while more informal public access is available for sport.



Lee Westwood Sports Centre

Finding your way around Clifton Campus

- 2.6 Signage along Clifton Lane (A453) clearly advertises the entrances to the Campus. Signage from Clifton Lane is in the form of standardised road signage. Once on Campus, standardised grey signage use the NTU 'brand' logo and typeface.
- 2.7 Once on the main entrance roads, visiting vehicles and cycles are directed to one of the main car parks, from where the rest of the Campus can be accessed on foot.
- 2.8 Within the Campus, information boards for visitors are provided adjacent to each main entrance, providing a map of the Campus, whilst further direction signs are situated throughout the Campus. The information boards provide basic information about the site, together with contact details for the on-site security team.
- 2.9 Beyond the buildings, an informal path follows the perimeter of the site, along which users can enjoy many of the site's landscape assets. Information boards and signage are currently being designed to advertise the route. The information boards are being designed to provide staff, students and members of the public information on the landscape, ecology, history and management of the site as well as information on the wildlife you might hear and see throughout the year.

Physical access

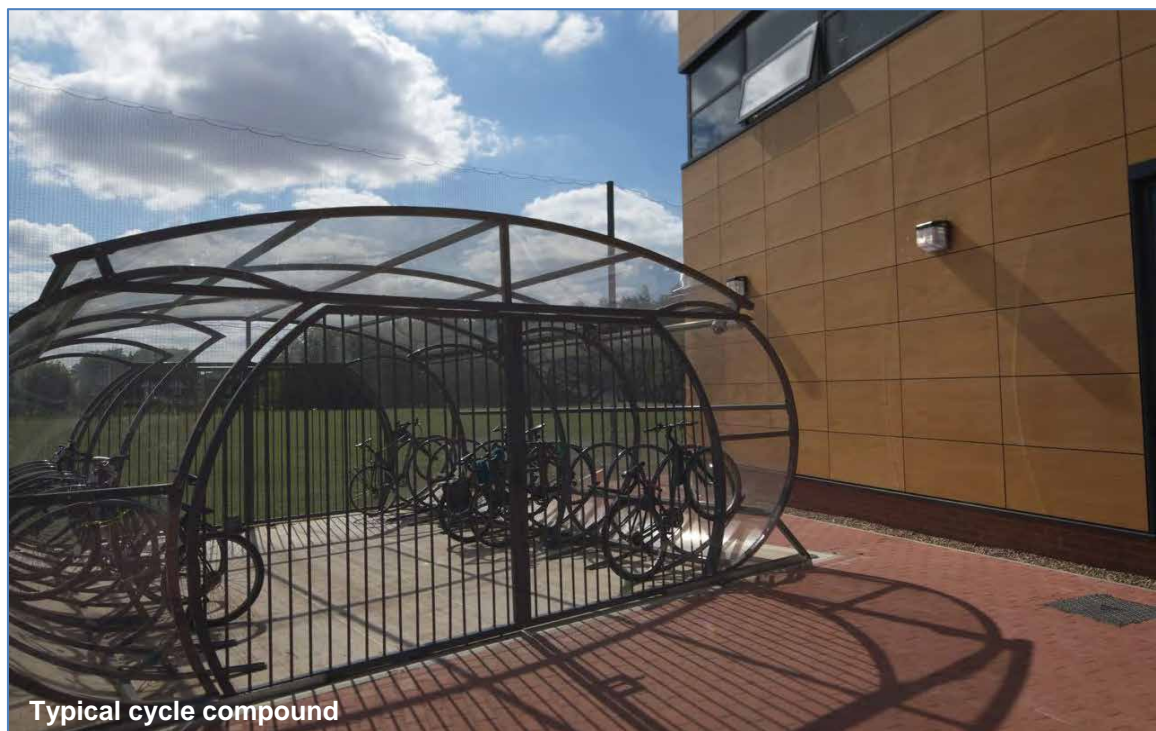
- 2.10 Two vehicular entrances (main entrance and south gate) access the Campus from Clifton Lane, while pedestrians and cyclists can also access the site from Clifton Village via College Drive. A further entrance on Clifton Lane is for vehicular exit only and is signposted as such, although pedestrians and cyclists can enter the site through this entrance. Pedestrian and cycle access is available through all four entrances, with pavements segregating pedestrians from other traffic. A footway leads directly into the Campus from the bus stop on Clifton Lane, with a Pelican crossing allowing safe access to and from the bus stop on the south side of Clifton Lane. During term time, the majority of people accessing the site by bus use the Unilink bus service, which accesses the site via the south gate, stopping at a centrally located bus stop within the Campus. A cycle lane along Clifton Lane provides direct access by bike.
- 2.11 Open views are available into the Campus from Clifton Lane, ensuring that good sight lines are retained, allowing active surveillance.
- 2.12 Currently cycle stands are located around the Campus. Many of these are housed in restricted access shelters with swipe card access and CCTV. As part of sustainable transport plans, cycle facilities at the Campus have recently been upgraded, providing more covered and restricted access cycle parking. Clearer signage will also be introduced across the Campus in the near future.

Access for all

- 2.13 The award-winning Unilink (number 4) bus service runs every 7-10 minutes and is available for students, staff and members of the general public throughout term time, Monday to Friday. This service takes about 30 minutes to travel between the City Site and Clifton Campus. The route is ideal as it passes through Nottingham City Centre via Nottingham train station.



- 2.14 A predominantly traffic free cycle route between City Site and Clifton Campus takes just 30 minutes to cycle. Due to the A453 widening works some disruption to this route maybe unavoidable, however staff and students are kept up to take via eNews bulletins and news stories on the staff and student intranet as well as EcoWeb. NTU's Transport Commuter Plan Co-ordinator and Sustainable Transport Officer are both in regular contact with the Highways Agency regarding these works and any disruption it may cause to NTU's staff, students and visitors on their journey will be communicated.
- 2.15 A bike hire scheme operates from all three Campuses, allowing staff and students to travel between and around the Campuses by bike. The University are continuously working with local partners to improve and promote alternative modes of transport to the private car.



- 2.16 Access across the site complies with BS 8300, design of buildings, and its approaches to meet the needs of people with disabilities to ensure that buildings are accessible to all. This includes level or ramped access into buildings, as well as dropped kerbs and tactile paving at most road crossings. Paths across the Campus have been made accessible to wheelchairs and pushchairs. When any new development is carried out consideration is given to DDA.



Section 3: Safety, Security, Health & Well-being

3.0 SAFETY, SECURITY, HEALTH AND WELL-BEING

Personal Safety and Security

- 3.1 Security at Clifton Campus is 24 hours a day, seven days a week, providing surveillance and helping to give peace of mind to all site users. The Security Team is contactable by all Campus users on 0115 848 6600, the number is provided on the Campus information boards.
- 3.2 The Campus is monitored by CCTV cameras, which are recorded 24 hours a day and can be viewed by the Security Team. The network of cameras provides excellent coverage of the Campus.
- 3.3 The on-site Landscape Services Team works with the Security Team to ensure views from CCTV cameras are obstacle-free and good site-lines are maintained along footpaths and other access routes.
- 3.4 Streetlights provide appropriate levels of lighting along roads and paths around the main Campus. Where hedges are located alongside these routes, these are maintained to a maximum of 1.5m in height to help avoid creating hiding places.
- 3.5 Any incidents of crime are recorded and annual statistics produced. This allows the Security Team to review progress and take appropriate action to develop security policy and reduce the likelihood of any future incidents.

Safe Facilities and Equipment

- 3.6 The University recognises that it is necessary to ensure that this remains a safe environment for all prospective site users. To maintain a safe environment, the Estates and Resources Department runs a programme of cyclical inspections to identify and address potential issues. Any site user is able to report a problem to the maintenance department via the online Badger system. Issues are then sought to be resolved as quickly as possible.
- 3.7 Equipment used to maintain the grounds is subject to an annual inspection to ensure that it is safe to use. Built features within the grounds are also subject to inspections and appropriate action taken if required.
- 3.8 All tree stock including woodlands within the Campus has been surveyed by external consultants FPCR Environment and Design Ltd with advice given on their condition. This has identified any trees which are dead, dying or dangerous. Trees are then maintained accordingly.
- 3.9 Water safety is a priority and as such, the risks posed by water bodies have been assessed and responded to appropriately to ensure that the grounds can be safely used. Access to the three balancing ponds just south of Peverell Hall is made difficult by the surrounding dense vegetation. Gently sloping, solid edges comply with safety guidelines. Pedestrian guardrails around the Swale at New Hall Student Village help to prevent access to the water. Drainage outlets ensure that the water does not become deep. Regular checks of guardrails and outlets are made to barriers as part of the maintenance regime.

Health and Safety

- 3.10 The Landscape Services Coordinator has the responsibility for ensuring safe working practices within the Landscape Services Team. Risk Assessments and safe working practices are in place

and are reviewed regularly. Control of Substances Hazardous to Health (COSHH) Assessments are recorded and updated as required. The Landscape Services Team are trained in their responsibilities under Health and Safety legislation.

- 3.11 The University Health and Safety Management Team have developed their own health and safety policy and procedures. All necessary precautions are taken to ensure that the grounds can be used with minimal risk of accident or injury. Suitable and sufficient management practices are in place to address health and safety issues.
- 3.12 Staff working on the grounds are provided with all necessary protective clothing and equipment. All necessary training is provided to staff, covering topics such as chainsaw use, tree climbing, fire training and first aid. All NTU security staff are first aid trained and are contactable 24 hours a day. Staff are provided with details of risk assessments and information leaflets relevant to any risks relevant to their job.

Accident and incident reporting

- 3.13 As a requirement of the Health and Safety at Work legislation, the University ensures that all accidents and near-misses are reported on-site using a standard report procedure. Results are monitored centrally by the University, who instruct accident investigations if necessary.



Section 4: Cleanliness

4.0 CLEANLINESS

Litter and waste management

- 4.1 The appearance of the Campus is a priority for the University and is recognised as a basic requirement for attracting new students. The Landscape Services Team is responsible for maintaining the landscape, while the Facility Support Team empty external litter and recycling bins.
- 4.2 To encourage site users to keep the Campus litter-free, litter bins and recycling banks are provided at strategic points throughout the Campus. To help promote recycling on the Campus, the University have recently replaced external litter bins with recycling bins. These new bins segregate paper/card, plastic bottles/ cans and general waste.
- 4.3 NTU has a fully integrated Environmental Management System (EMS) further details of which are provided in **Section 6**. As part of this system, a series of policies have been written to promote the sustainability objectives of the EMS. The University issues guidance on 'What to do with your waste' via EcoWeb as well as posters and labelling of bins, encouraging the use of recycling banks. In addition the Environment Team work with project managers and minor works to help reuse unwanted office furniture within the local community.

Dog fouling

- 4.4 Currently dogs are not encouraged on the Campus, due to the presence of outdoor sports facilities. In future, this policy may be reviewed, if the University is able to manage access for dog-walkers. Dog waste bins will be considered, along with clear signage indicating permissive routes. A code of conduct would also be introduced.



Section 5: Maintenance

5.0 MAINTENANCE

General Landscape Services

- 5.1 The Landscape Services Team is responsible for the upkeep of the grounds, helping to enhance the outward appearance of the Campus. The team meets on a regular basis to discuss priorities at relevant times of the year, such as clearance of leaves in autumn and cutting of grass in summer (including sports pitch maintenance). In addition to a short-term annual programme of maintenance requirements, a longer-term programme is in place to address more-complex issues, such as de-silting the balancing ponds and replanting of areas.
- 5.2 The University recognises the importance of maintaining the grounds to a high standard, as this influences people's perception of the site, including potential future students.

Tree management

- 5.3 An assessment of tree condition has been undertaken for the entire site, by external consultants FPCR Environment and Design Ltd. The site is surveyed every three years and the assessment updated accordingly. Plans for the site identify the location of every tree or group of trees, identifying them by a code. A database linked to the plans lists the species and condition of each tree, identifying any maintenance work which needs to be carried out. The Landscape Services Team uses this active database as a tool to manage the tree stock. Landscape Services staff carry out on-going surveys of 'at risk' trees.

Building Maintenance

- 5.4 Buildings on the Campus are diverse in terms of age, scale, style and use. These buildings have specific uses for teaching, research, administration or residential purposes, but all share the same setting.
- 5.5 All buildings are maintained to a high standard by the Estates and Resources Department. An on-site maintenance team is responsible for the upkeep of the buildings.

Equipment Maintenance

- 5.6 A programme of equipment inspections is in place to ensure that all work equipment is safe to use, as required by the Provision and Use of Work Equipment Regulations 1998 (PUWER). Appliances are PAT tested, to comply with the Health and Safety at Work Act (1974), which places a duty on employers to ensure that electrical appliances used by employees or the public are safe to use. Six-monthly inspections are carried out on tree climbing equipment under LOLER.
- 5.7 The NTU fleet of vehicles are managed by the Estates and Resources Department, who ensure that they are serviced, tested and inspected as required. Specialist vehicles, such as tractors, are either owned or leased. Servicing and maintenance of lease vehicles is included in the lease fee. An onsite vehicle wash-down facility, located within the Landscape Services maintenance compound helps to maintain and clean landscape machinery and equipment as well as NTU fleet vehicles.



Section 6: Environmental Sustainability

6.0 ENVIRONMENTAL SUSTAINABILITY

Environmental Strategy

- 6.1 NTU is committed to recognising and reducing its impact on the environment. Positive developments in environmental awareness and research are making a big difference and are complemented by a comprehensive environmental policy that is available to staff, students and members of the public via NTU's Environment Team's website, EcoWeb.
- 6.2 All new members of staff receive an Environmental Induction as part of the compulsory Health and Safety induction.
- 6.3 In September 2012 the Environment Society was formed, with over forty student members the society has already been actively involved in environmental events including Green Week and NTU's Big Switch off, with many more events planned for the rest of the year whilst also supporting NTU's Environment Team.
- 6.4 NTU has been named as one of the top 5 most environmentally friendly and ethical Universities in the UK in the People & Planet Green League for four consecutive years.
- 6.5 The University has a number of policies (listed below) relevant to environmental sustainability. These are reviewed annually by senior management. All of which are available on EcoWeb.
- Environmental Policy;
 - Biodiversity Policy;
 - Transport Plan;
 - Sustainable Food Policy; and
 - Sustainable Construction and Refurbishment Policy.
- 6.6 The University has committed to:
- reduce carbon emissions by 10% from 2005 baseline by 2012/13.
 - reduce carbon emissions by 48% from 2005 baseline by 2020/21.
- 6.7 Elements that are included in the calculation of NTU's carbon footprint include:
- Energy use in buildings (gas, electricity, district heating consumption);
 - NTU fleet vehicle use – emissions associated with current vehicle fleet;
 - The Unilink bus service for staff and students operating between City Site and Clifton Campus – the emissions associated with the use of this inter campus bus service.
 - Waste management and recycling – aiming to reduce emissions associated with waste disposed of by increasing recycling.

Eco Campus & ISO14001

- 6.8 EcoCampus is an Environmental Management System (EMS) and award scheme that has been specifically designed for universities. It aims to assist institutions in moving towards environmental sustainability through good operational and management practices.

- 6.9 NTU has completed the final Platinum stage of the Environmental Management System (EMS) 'EcoCampus'. The University is only one of seven higher education institutions in the UK to receive the Platinum Award and is the largest University to date to achieve platinum.



Professor Neil Gorman (NTU VC) receiving the Eco Campus Platinum Award

- 6.10 The EcoCampus scheme enables universities to identify, evaluate, manage and improve their environmental performance and practices, while benchmarking environmental improvement.
- 6.11 In addition to achieving the EcoCampus Platinum Award NTU have successfully implemented the EMS ISO14001 accredited by NQA in November 2012.

Recycling and Waste Management

- 6.12 External recycling stations have recently been installed on the Campus to encourage the recycling of waste. The University currently recycles 89% of the waste generated, with aims to increase this. Food waste from catering kitchens is collected and turned into compost.
- 6.13 Landscape Services utilise a dedicated composting facility which is located within the far perimeter of the student car park area and is used to recycle all soft and woody landscape material. The majority of this material is processed with a composting machine. This material is then regularly turned and left in the bay area for a minimum of six months before being returned to the woodland areas. This landscape recycling facility is fenced off and licenced by the Environment Agency.
- 6.14 At the end of every academic year NTU's Environment Team runs a campaign called 'NTU's Big Clear Out', claiming unwanted reusable items from students moving out of their first year halls of residence. Kitchenware, textiles (clothes/bedding etc.), shoes, bric-a-brac, dried/tinned food and electrical items are collected and donated to local charities. To date over 10 tonnes of unwanted but reusable items have been distributed between charities in Nottinghamshire.



Sustainable Transport

The Unilink

- 6.15 During term-time, the award winning NTU Unilink runs between the City site and Clifton Campus every 7-10 minutes. This service is subsidised by NTU and Nottingham City Transport (NCT). Out of term-time, bus service number 1 runs every 20 minutes from Market Square in Nottingham City Centre and drops off at the gates of Clifton Campus on Clifton Lane.

Cycling

- 6.16 The University runs the Ucycle Nottingham project, which encourages staff and students to cycle more often. The project runs a range of activities including infrastructure improvements on and between Campuses, events and activities to raise awareness of the benefits of cycling and a bike hire scheme for students and staff.
- 6.17 Men's and women's bikes are available in different sizes and can be hired for the whole academic year for just £35 (plus a £60 refundable deposit). Bikes are available to hire between October and June. The cost of the cycle hire includes maintenance sessions, access to free Ridewise training and advice and information (through information packs and general on-going support such as drop-in surgeries).
- 6.18 EcoWeb provides staff, students, stakeholders and the wider public with up-to-date information on cycle facilities such as maps showing locations of cycle compounds, cycle routes, lockers and showers. One of the routes identified is a predominantly traffic-free cycle route linking Clifton Campus to the City site, which takes around 30 minutes to cycle. The website also provides information to the general public on topics such as buying a bike, bike maintenance and cycle clothing. Restricted access cycle compounds with CCTV are provided across the Campus. Further cycle information is planned to be incorporated onto the external campus information boards found around the campus in the future.
- 6.19 A new cycle lane on campus is being designed to be completed by Spring/Summer 2013, linking New Hall Student Village and the south of the campus, incorporating the Rosalind Franklin building.
- 6.20 In addition to bike hire, NTU staff can get a tax-free bike and accessories up to the value of £1,000 with the help of Cycle scheme.

Electric Vehicles

- 6.21 Landscape Services uses and maintains their own John Deere electric powered gator (all terrain utility vehicle) for on-site maintenance. Investment into electric charging points at each of the campuses is currently underway with two charging points proposed for Clifton Campus to be installed in March 2013.

Car Sharing

- 6.22 NTU does not currently have an internal car share scheme, however the existing Nottinghamshare car share scheme (nottinghamshare.com) is promoted to staff and students as it is available for all to use in Nottinghamshire. The Sustainable Transport Officer is exploring the option of setting up an informal car share scheme for NTU staff which would involve

opportunities for staff living in the same area to meet during a networking event and determine if they are able to car share to and from the University.



Solar Photovoltaic Panels (PV)

- 6.23 Forty two PV panels were installed on the roof of the George Eliot building in April 2011. Each set of panels has a peak rating of 10kW and produce in excess of 8000kWh of electricity per year, resulting in a significant reduction in carbon dioxide emissions. As well as reinforcing the University's commitment to environmental sustainability, the panels generate income through the Government's Feed-in Tariff.
- 6.24 The Rosalind Franklin building has 160 PV panels on the south facing roof generating 33,778kWh of renewable energy per year that is used by the building.
- 6.25 The New Hall student accommodation has solar thermal panels use to heat the hot water used by the residents.

Efficient Cooling System

- 6.26 An efficient cooling system has been installed in the Clifton Data Centre to reduce its carbon footprint. The Evaporative Cooling System maintains a relatively stable internal environment in terms of temperature and humidity regardless of the external conditions.
- 6.27 The system provides a 90% reduction in annual running costs, which also means that up to 40% of the power for the installation could be provided by the photovoltaic cells installed on the roof of the data centre. Overall, the carbon footprint for cooling in the data centre has been significantly reduced.

Combined Heat and Power (CHP) Plant

- 6.28 There are two CHP units on Clifton Campus, fuelled by natural gas supplying a number of buildings with heating on the campus.
- 6.29 All of NTU's electricity is purchased from a green energy provider. The University is also working on projects for more renewable sources across the estate



Carbon Elephant

- 6.30 Carbon Elephant is an NTU initiative which aims to encourage staff and students to become involved in the University's plans to reduce its carbon emissions.
- 6.31 The Green Impact scheme, now in its third year, challenges university departments to implement a number of easy practical actions to help the environment. The scheme is about empowering individuals to reduce their environmental impact by encouraging, rewarding and celebrating practical environmental improvements. Each department that signs up can work towards a Bronze, Silver or Gold award that is presented by the VC in the summer. During the scheme, NTU students have the opportunity to become a volunteer 'Green Impact Auditor' checking that what departments say they do is actually what they do. This provides an excellent opportunity for students to become involved and learn key skills to add to their university experience.

- 6.32 In October 2012 the Carbon Challenge for NTU departments across the estate was launched with over 70 carbon champions signing up to help their department to start saving energy and top the monthly league table. The energy savings made each month are recorded and the equivalent monetary value will be added up over the year. The department to save the most energy over the year will be given the money that they have saved to use as they wish towards the department.

Fairtrade

- 6.33 NTU has been awarded Fairtrade status for the last 5 years. Fairtrade products are available in all Campus shops and catering outlets and used in all meetings hosted by the University and the Students' Union.
- 6.34 The Fairtrade Steering Group demonstrates a strong commitment to increasing Fairtrade consumption on all three Campuses, as written into the NTU Fairtrade Policy a copy of which is available on EcoWeb.

Biodiversity

- 6.35 Management techniques employed across the Campus ensure that the potential for biodiversity is maximised, resulting in a number of varying habitats.
- 6.36 Areas of woodland are found around the edges of the Campus, largely comprising native species such as Oak, Ash and Field Maple. Woodland is managed to promote biodiversity, by allowing interesting ground flora to grow and using small piles of wood and stone to encourage small ground-dwelling animals, such as hedgehogs and toads.
- 6.37 A number of bat and bird boxes are located on trees, mostly located towards the east of the site. As part of the Rosalind Franklin development new bird nesting boxes other boxes for housing animals and insects were be installed. There is potential for many more such boxes to be installed around the Campus.
- 6.38 The Old Marl Pit, located within the woodland towards the east of the site provides an important wildlife habitat, as it has a unique form and is relatively undisturbed by human activity. Both Green Woodpeckers and Lesser Spotted Woodpeckers have been heard and seen in the Old Marl Pit. The pit is managed with the sole focus of increasing biodiversity.



- 6.39 In the southeast corner of the site, lying on the inside of the hedgerow is an area of conservation headland, which provides potential for increased biodiversity. This area is maintained through the implementation of a mowing regime, which excludes this area for all except two cuts per year during July and at the end of the season.
- 6.40 The woodlands near to the Observatory contain a good collection of snowdrops, bluebells and primroses, which were transplanted by students from other areas on Campus which were being developed.
- 6.41 Immediately southwest of the all-weather hockey pitch lies a grassed bund, beyond which is an area of open grassland, surrounded by native woodland. The Landscape Services Team has employed a new mowing regime in this area, which will involve only mowing certain areas in July and at the end of the season. This will allow grass to grow, producing seed-heads, resulting in a wildlife meadow. This will help to further increase potential for biodiversity.

- 6.42 Where practicable and safe to do so, dying trees are left for biodiversity benefits. Tree stumps are cut high to encourage wood-boring beetles and sculpted to retain water.
- 6.43 The three balancing ponds, south of Peverell Hall, are aerated using a fountain, to help provide an ideal habitat for fish. As a result, herons have been seen on pond margins.



- 6.44 NTU's Environment Team are working towards the adoption of a Biodiversity Action Plan (BAP) for Brackenhurst Campus, which will comprise a comprehensive list of Habitat Action Plans (HAPs) and Species Action Plans (SAPs). Once this has been adopted, it will be used as a template for a BAP for Clifton Campus.
- 6.45 The planting that was part of the Rosalind Franklin development was specified to help achieve the BREEAM accreditation very good. Planting areas included native trees and grass/meadow margin. The meadow area was sown with native wild flowers and meadow grass seed mix to include species as recommended in the Nottinghamshire Wildlife Trust 'Mini-Meadow' campaign. This will be mown only seasonally to enable the meadow to establish.

Composting and Elimination of Peat Use

- 6.46 The use of peat for improvement of soils is not used on Clifton Campus by the Landscape Services Team. Compost used for summer bedding is largely composed of alternative waste or renewable materials.
- 6.47 Horticultural waste from the grounds is recycled to produce compost or mulching material. Landscape Services staff segregate woody material (used for mulching) and softer material such as autumn leaves (for enriching soil). The team uses a composting machine and a chipper is used to break down the landscape waste. All compost material generated is used on the grounds.

Pesticides and Herbicides

- 6.48 Integrated Pest Management (IPM) is in place to maintain the landscapes. This is an effective and environmentally sensitive approach to maintain the landscapes and relies on a combination of environmentally sound practices.
- 6.49 The use of pesticides is kept to a minimum. Herbicides are used for weed control in certain areas, as well as some turf fungicides and insecticides, where appropriate to do so. All ground maintenance staff have been fully trained in the safe application of herbicides, and hold appropriate certification.
- 6.50 Glyphosate is used to keep hard surfaces weed free. Herbicide is used for vegetation management in other areas. Where applied appropriately it represents little risk to the environment.
- 6.51 Landscape services rely only on minimal use of granular herbicides to control weed growth in some shrub borders. However, where practicable, hand weeding and mulching of such areas is preferred and supported by spot treatment for more persistent weeds. Where necessary herbicides are also used to control weeds along paved areas and building perimeters.

Water Conservation

- 6.52 The ponds are filled naturally from rainwater collected from Peverell Hall. The Swale at New Hall acts as a flood attenuation basin, collecting surface runoff, then allowing it to seep into the water table.
- 6.53 Summer bedding schemes use water-retaining granules or gel to reduce drying-out.
- 6.54 Water used by the wash-down facility, located within the Landscape Services maintenance compound, is pumped around the system and re-used.

Planting Policy

- 6.55 Native species are largely used for planting and replacement of trees, woodland and hedgerows, to promote biodiversity through creation of appropriate wildlife habitats. Ash, Field Maple and Oak are locally native species, found throughout the site woodland. However, since the outbreak of the Ash die-back disease Ash is currently not being planted on campus and any Ash trees on Campus are being regularly inspected for signs of the disease. A mitigation planting plan for any removal of Ash on the estate has been prepared by the Landscape Services Co-ordinator.
- 6.56 Most of the bedding is grown from plugs, supplied from a local nursery, which are then planted out. In previous years the University has won 'In Bloom' awards, however new development has taken precedence over recent years. It is the aim of the management team to enter Clifton Campus for further recognition over the coming years.
- 6.57 New planting is largely undertaken as part of development schemes. In addition to the amenity benefit of planting, the University recognises the important biodiversity benefits. As described earlier in this section, the planting at Rosalind Franklin was of native origin and provides habitats for a wide range of wildlife.



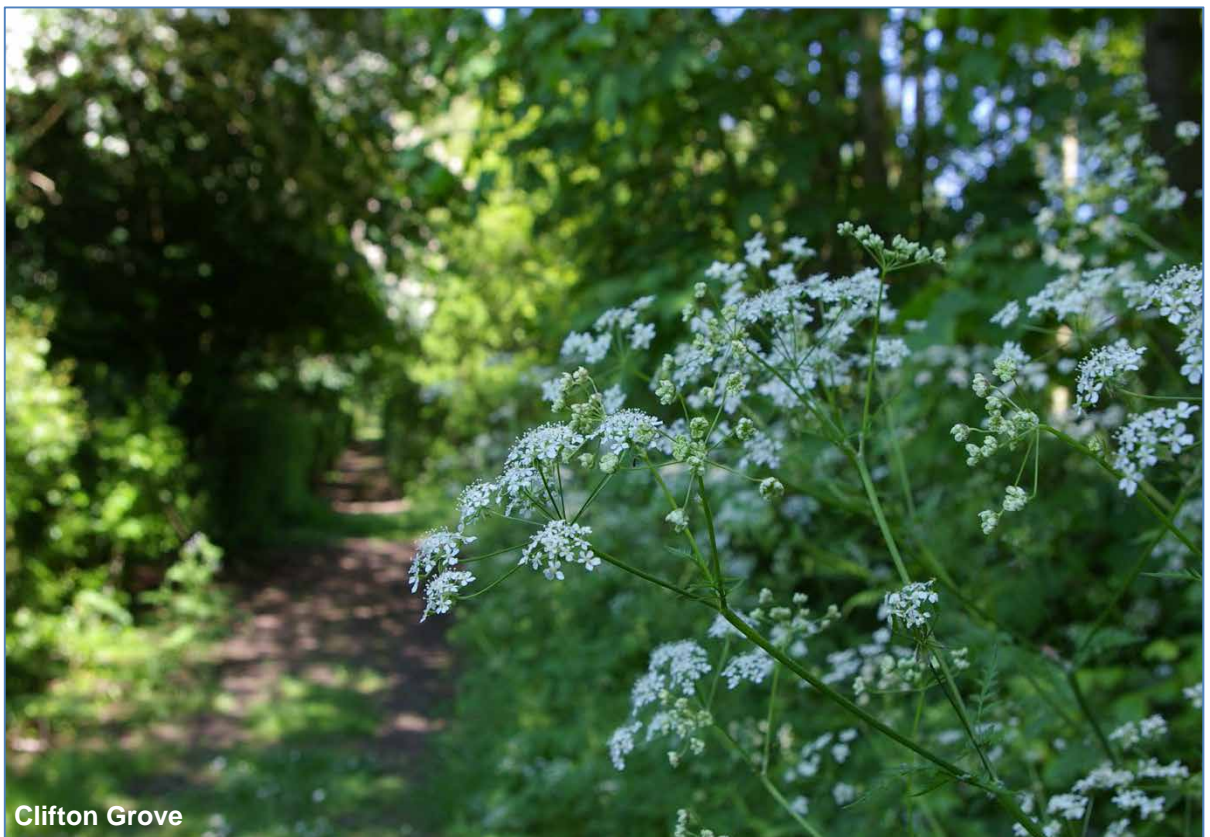


Section 7: Conservation & Heritage

7.0 CONSERVATION AND HERITAGE

Site Heritage

- 7.1 The Campus is a comparatively recent development and therefore contains little in the way of historic features. The features, as described in **Section 1**, include hedgerow trees and the Old Marl Pit shown on the 1883 Ordnance Survey map, but are believed to date from much earlier.
- 7.2 Despite the lack of apparent site heritage, historic features do lie in the vicinity of the Campus. Most noteworthy is Clifton Grove, situated immediately northwest. Clifton Grove is a historic avenue of Elm trees, which were planted to create a majestic route alongside the River Trent to the front of Clifton Hall, but which unfortunately fell victim to Dutch elm disease.
- 7.3 Clifton Village and Clifton Grove are Conservation Areas. The historic core of Clifton Village contains 22 listed buildings and features, including Clifton Hall and the associated Ice House. The closest listed buildings to the site are The Old Rectory and School House, which lie near to the Observatory. Although these features do not fall within the site, it is important that development within Clifton Campus is sensitive to the setting of these adjacent Conservation Areas.



Clifton Grove

Conservation of Landscape Features

- 7.4 As described in **Section 1**, the steep-sided Old Marl Pit, originating from around 1700, is situated within the woodland on the northeast boundary of the site. Although this feature is not

recognised by way of designation as having any historic importance, it does serve as a reminder of past land use on the site. This area will remain an important feature, protected by the surrounding woodland. It is intended that future management will ensure that potential for biodiversity is maximised.

- 7.5 In the southeast corner of the site, an ancient hedgerow, believed to date back to around 1840, border Clifton Lane until January 2013. This was beyond the Campus boundary and NTU were not responsible for its maintenance. Due to the A453 widening works that begun in January 2013 the hedgerow has now been removed. Mitigation planting as part of this road widening scheme has been incorporated into the design and will be replaced. NTU have proposed to plant a hedgerow on campus in addition to any proposed planting by the Highways Agency.
- 7.6 A group of 10 Turkey Oak trees (*Quercus cerris*), each over 20 metres in height, are located along the perimeter of the cricket pitch, in the northern corner of the site. These are protected by a Tree Preservation Order (TPO) due to their prominence and contribution to the landscape. As with all trees on the Campus, these are regularly surveyed by external consultants and maintained according to the advice given.



The protected Turkey Oaks



Section 8: Community Involvement

8.0 COMMUNITY INVOLVEMENT

Community Events

- 8.1 'Open Dome' events are held regularly at the Observatory, managed by the School of Science and Technology. These events are publicised locally in Clifton Village as well as on the NTU staff and student website, 'What's On' and Facebook pages. These events are open to the general public, as well as staff and students. They comprise a tour of the Optical Observatory, which houses a 20 inch telescope, a solar scope and a range of smaller telescopes, as well as providing opportunities to explore the wonders of the sky. Each Open Dome Event includes a talk, held in a 100 seat lecture theatre, focusing on interesting, recent and sometimes surprising topics relating to astronomy. Members of the audience also have time to talk to scientists about astronomy and ask questions.
- 8.2 Due to the popularity of Open Dome events, it is proposed that an open air classroom (or theatre) is constructed. This would comprise steps built into the existing bund around the Observatory, providing seating for up to 80. The proposal for this work is in the process of being completed in February 2013 and it is hoped that the outdoor classroom will be an available resource by the summer of 2013.
- 8.3 The University often arranges one day seminars on subjects relating to the subjects taught at Clifton Campus. These are open to professionals and the public, with the purpose of making training available to a wider audience than just full-time students.
- 8.4 Open days offer another opportunity to all sections of the community, giving the opportunity to people with an interest in higher education a chance to view the facilities.
- 8.5 The University is actively involved with local schools. Events in the past have included bulb planting and tree planting in March 2012 and more recently in February 2013.

Community Access

- 8.6 The University is planning on advertising the perimeter path around the campus to staff, students and members of the public. Information boards have been designed to provide users of the path with information concerning the nature interests they can look out for, as well as the informing the community about on-going management practices and history of the site.
- 8.7 The University is pursuing the potential of creating a 'Friends of Clifton Campus' group. This would comprise a group of volunteers, who could be members of the public as well as staff and students. This would create an opportunity to get involved in the conservation of the Campus grounds and have a say in how they are managed.

Tree Planting Events

- 8.8 NTU's Environment Team and Landscape Services Co-ordinator are keen to create as many opportunities as possible for staff, students and members of the local community to help enhance the environment of the campus for all to enjoy. By working with project managers, NTU's Widening Participation Team as well as the Student Union such activities are becoming regularly available.
- 8.9 In March 2012 a group of school children from Glapton Primary and Nursery School along with NTU staff volunteers came to Clifton Campus to plant ornamental shrubs, add habitat boxes for

toads and hedgehogs and leave log piles for insects as part of the Rosalind Franklin development.



- 8.10 In November 2012 as part of NTU's Green Week the Environment Team teamed up with the Conservation Society to start some of the mitigation planting as part of the proposed all-weather sports pitch.
- 8.11 In February 2013 this mitigation planting was continued by the school children from Glapton Primary School who helped with the Rosalind Franklin. In addition a group of NTU student volunteers came along to help plant the native tree species as part of NTU's Student Volunteer week.

Conferences, Catering and Room Hire

- 8.12 Various Campus buildings offer rooms for various functions, such as seminars and conferences. On-site catering can deliver hospitality for a range of events.



Sports Facilities

- 8.13 The Campus is home to two football pitches, a cricket pitch and pavilion, a cricket wicket, 3 rugby pitches, an all-weather hockey pitch, a five-a-side pitch, tennis courts and a sports centre. Although largely for student use, these facilities are also used by local sports teams. The Lee Westwood Sports Centre is open to members of the public as well as staff and students.
- 8.14 Although used by NTU students, the cricket pitch and pavilion is also used by Clifton Cricket Club. A historic agreement between Colonel Clifton (the former owner of the site) and the Clifton Cricket Club gives the club use of the cricket pitch. Clifton Cricket Club is involved with local schools, helping to coach children.
- 8.15 In conjunction with Run in England, NTU has devised three maps for Clifton Campus, showing routes for 1, 2 and 3km runs around the grounds these are available on the NTU Sports and Lifestyle website.
- 8.16 In May 2012 NTU launched its first charity relay race, Run NTU 2012. The race raised awareness for two charities close to NTU staff and students' hearts John Van Geest Cancer Research Centre and the Anthony Nolan Trust. Twenty nine teams of three people ran 5km each, following tracks along the River Trent and the Clifton Grove area, raising over £8,000 for charity. It is hoped that this will be an annual event and opened up to the wider community.



Clifton rugby pitch

Royal Visit

- 8.17 In 2002, the Toyota Centre was opened by HRH Prince Andrew. The original training centre included seven classrooms, two showrooms and a fully fitted training workshop and body/paint shop, but has now been redeveloped as the Rosalind Franklin building, formally opened by the renowned scientist and television presenter Professor Robert Winston in October 2012.



Professor Neil Gorman and Professor Robert Winston

- 8.18 In October 2010 the Lee Westwood Sports Centre was opened by the then world number one golfer and Ryder Cup winning team member Lee Westwood. The new building boasts a range of top-class facilities which will play a crucial role in the development of elite and specialist student athletes at NTU. The facilities also accommodate the growing requirements for sport amongst its staff, students and members of the local community.





Section 9: Marketing

9.0 MARKETING

- 9.1 Increasing efforts are being made to make the local community aware of the facilities at Clifton Campus which are available for the local community to use and enjoy. A leaflet giving information about the flora and fauna found at Clifton Campus has been produced by NTU students and could potentially be adapted by the University as a guide to the Campus, promoting the grounds as a community resource. This leaflet could then be distributed locally, whilst also being available on the NTU EcoWeb website.
- 9.2 The design of the Clifton Nature Trail information boards is underway and once the path is officially open they will be a good resource for all to use, the information on these will also be available on EcoWeb and as a walking guide leaflet. The Environment Team are working with a group of NTU MA Visual Design students on a number of projects including the Clifton Trail and hope that with their skills an audio commentary can be designed to support the nature trail in the future.
- 9.3 The NTU website includes extensive features on the Campus, including information on the facilities available to the public. The news section of the main website and EcoWeb site gives information on current and future events.
- 9.4 EcoWeb has a dedicated page on Clifton Campus which includes a copy of this report for staff, students and members of the public to view and learn more about the opportunities the campus offers.
- 9.5 Internal communications within NTU include the 'What's On' e-bulletin which is sent on a weekly basis to all members of staff with forthcoming events within the university. In addition the bimonthly Carbon Elephant newsletter is emailed to all staff and students and summarises recent carbon saving initiatives that have taken place across the estate. A copy of the newsletter is also added to the staffnet webpages and all news stories are added to EcoWeb's News and Events page.
- 9.6 The Estates and Resources department have their own newsletter providing another great opportunity to communicate to staff about the carbon saving and green initiatives that have taken place or that are planned in the near future.
- 9.7 The Environment Team have strong relations with both the staff and student communication teams and work closely to ensure key messages and opportunities for involvement are advertised for all. Communication is now often via social media such as Facebook and Twitter which there are several for NTU.
- 9.8 New to 2012 NTU's Environment Team now has its own Twitter account with currently 143 followers. The account is used on a weekly basis to keep followers up to date with all the activities the team are involved in from tree planting, to carbon challenge workshops to Dr Bike sessions.



Section 10: Management

10.0 MANAGEMENT

Management Structure

- 10.1 Clifton Campus is managed by the Landscape Services Team who are part of the Estates and Resources Department.
- 10.2 As part of this management NTU's Environment Team help ensure that up to date information of best practice on environmental issues is disseminated throughout the University.
- 10.3 The Director of Estates and Resources is supported by other Senior Management in the management and implementation of the University's environmental policy. A growing group of NTU staff and student representatives known as the Go Green Group is chaired by the Environmental Manager comprising people who take personal responsibility for progressing an action stream within the eco-agenda.
- 10.4 The Landscape Services Team meets regularly with academics to give regular updates and ensure continuity between Landscape Services and teaching projects.
- 10.5 The Hazardous Waste Management Group (HWWG) has been established to ensure the University meets its legal obligations with regard to disposal of hazardous waste.
- 10.6 This Landscape Management Plan (LMP) is reviewed annually by the Environment Team and the Landscapes Sources Co-ordinator.

Maintenance Planning

- 10.7 Currently University Maintenance Services largely work on a reactive basis, such as gritting roads in icy conditions and clearing tree debris after strong winds. Day-to-day maintenance is discussed as a team, with objectives and actions agreed with the Landscape Services Coordinator. Works having health and safety implications are given highest priority.
- 10.8 Cyclical maintenance activities, such as shrub bed maintenance, planting of summer bedding, mowing and strimming are all undertaken by the Landscape Services Team.

Project Funding

- 10.9 Currently, NTU is involved in major redevelopment across all three Campuses. Working capital for site work is used to deliver these projects. With each new building project, the University has sought to deliver new associated landscape areas, such as the new planting and the swale at New Hall and the planting scheme at Rosalind Franklin.
- 10.10 The Landscape Services Team have an annual budget of £300k for all three of NTU's site. A budget breakdown for Clifton Campus will be provided once the Implementation Plan has been written.

Management Priorities

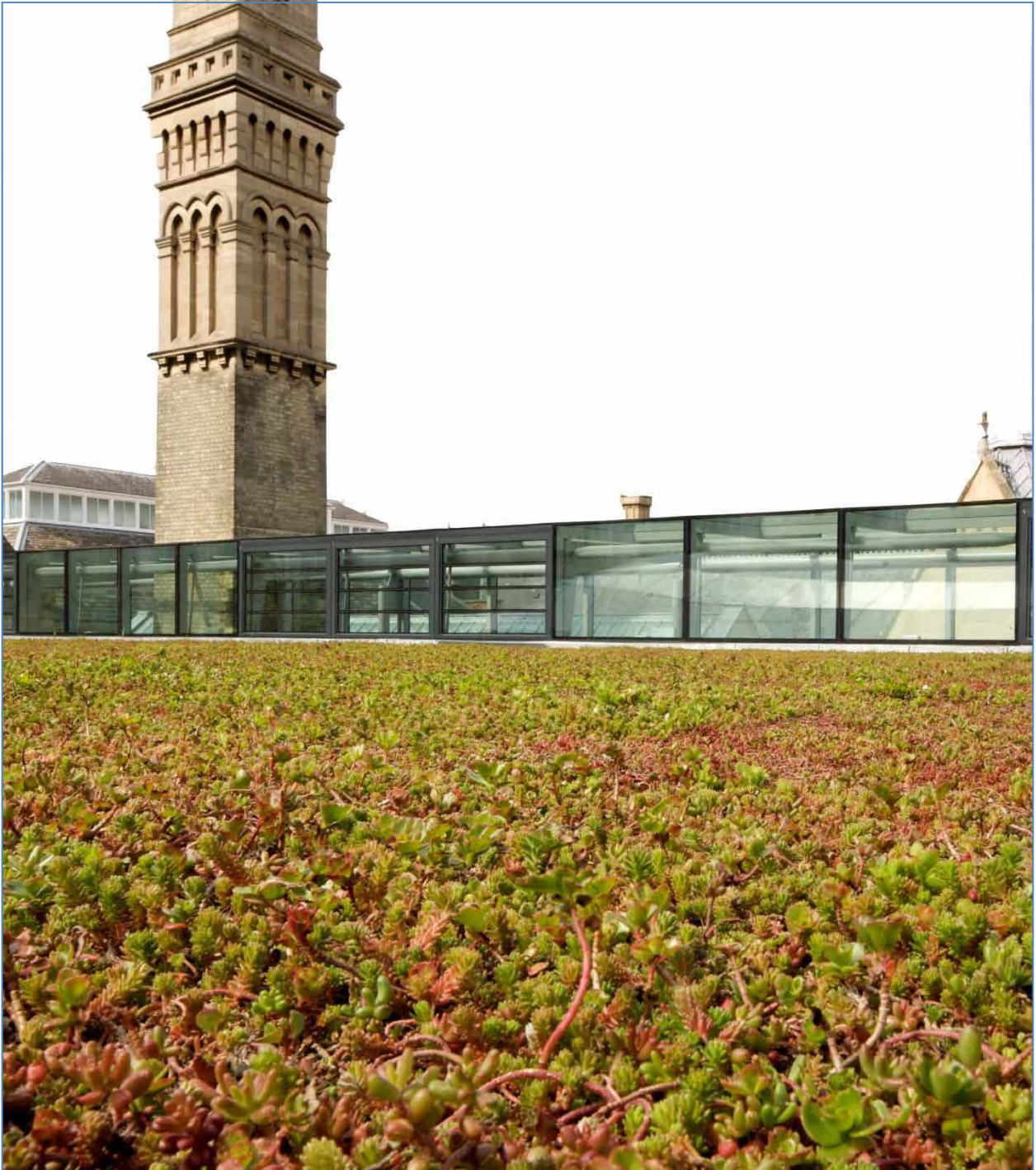
- 10.11 The current short term aims for Clifton Campus are:
- Providing surfaced footpaths paths along 'desire lines' – on-going;
 - Providing cycle paths around the campus – on-going

- Maintaining and improving cycle storage – on-going;
- Provide information boards on the flora and fauna as well as current management techniques along the perimeter path of the campus known as the Clifton Trail – May 2013;
- To hold a bird box making workshop for NTU staff and students allowing them to make a bird box for themselves as well as for the campus – May 2013.
- To begin writing a Biodiversity Action Plan for both habitats and species for Clifton Campus – August 2013.
- Improving communication with the local community, to advertise the grounds as a public resource – Summer 2013 launched with the official opening of the Clifton Nature Trail.
- To create an open air classroom as part of the Observatory – Summer 2013.
- Production of an Implementation Plan for maintenance objectives – February 2014.
- Further development of links with local community groups, such as Clifton Village Residents Association and local schools – February 2014.
- Planning and implementation of mitigation planting for both the A453 and the all-weather pitch developments – Summer 2014.

10.12 The long term aims are:

- To upgrade the Clifton Trail perimeter path to allow access throughout the year – 2014/15.
- Increased useable open space for staff, students and visitors as part of the 'Heart of' Campus redevelopment – 2016.
- Increased creation of insect, bird, bats, small mammal habitats across the estate as part of the 'Heart of' Campus redevelopment – 2016.

10.13 The production of an Implementation Plan will allow the management team to assess the highest priorities and develop a programme that responds to these. Once in place, this will be actively implemented and reviewed regularly. It will also set out specific budgets for the campus and any further future opportunities.



Section 11: Addendum – City Site

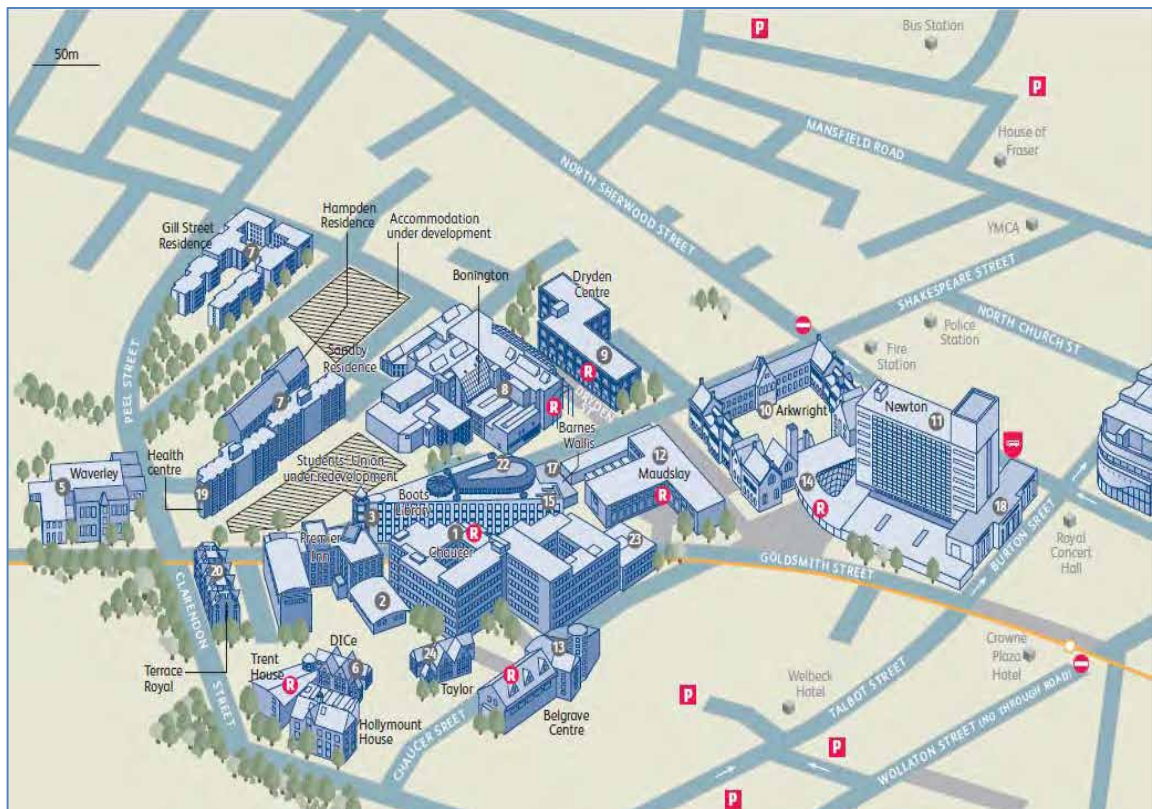
11.0 ADDENDUM – CITY SITE

11.1 This addendum aims to provide a brief outline of NTU’s City site under each of the Green Flag judging criteria for consideration as part of the Green Flag Submission 2013.

12.0 INTRODUCTION AND BACKGROUND

12.1 NTU’s City Site is located in the heart of Nottingham city centre with a number of buildings and open space covering an area of 5 hectares.

Figure 2 – Plan of City Site



12.2 As the buildings are spread out across an area of Nottingham city centre it is classed as a site rather than a campus.

12.3 The history of NTU began in 1843 when the Nottingham Government School of design was opened. In 1881 University College Nottingham (UCN) was established on Shakespeare Street later becoming NTU’s Arkwright Building. In 1903 poet DH Lawrence received his teaching certificate after studying in the Arkwright building. In 1945 Nottingham and District Technical College was designated. In 1966 Nottingham College of Art and Design was linked with the Regional College and in 1970 Trent polytechnic was granted polytechnic status with the official name, Trent Polytechnic taking place in 1988. It was in 1992 that Nottingham Trent University was launched and Professor Raymount Cowell was appointed as the first Vice-Chancellor. In 2004 a project to transform the learning facilities across the University’s three campuses began at a total cost of £130 million.

12.4 Despite the intense density of buildings typical of any urban setting, NTU is working to enhance the green space and biodiversity found within the city site.

- 12.5 The Landscape Services Team now have one full time person who is based at City site to carry out immediate day to day grounds maintenance jobs such as mowing, weeding and planting.
- 12.6 Parts of the City site lie within the Arboretum Conservation Area, these include the buildings and grounds of Waverley, Terrace Royal and Hollymount House.

Recent and Proposed Development

- 12.7 NTU has invested significantly into its City site as it has done with Clifton Campus. Due to the city centre location expansion of the site is limited due to its surroundings. Investment has been in the refurbishment of many of the buildings on site. The largest project has been the refurbishment of the Grade II* listed buildings Newton and Arkwright.
- 12.8 Newton and Arkwright were once separate are now linked to form a stunning glazed centre court with a walk around balcony. The buildings are used for teaching space, lecture theatres, cafes and social learning space. Sustainability was at the forefront of the refurbishment design incorporating natural light, solar glazing, insulation, intelligent lighting, the sedum roof and much more. On several occasions NTU's Environment Team have been approached to give tours of the building for groups such as E-On and the Civic Society which have been well received with positive feedback from all events.
- 12.9 The most recent development of the City site is the Byron development which aims to create a landmark building on Shakespeare Street. The scheme will provide 5,000 meters of social, leisure and wellbeing facilities including a sports hall, shops and bars plus student accommodation. As with all developments the design of the development incorporates sustainable features and a BREEAM accreditation of Very Good to Excellent is being aspired to.
- 12.10 The pedestrianisation of Shakespeare street to create more of a campus feel is part of the Bryon development. The final design is to be confirmed, however one of the proposals includes the creation of a Woonerf to restrict vehicle movement and provide opportunity to increase green space on the site and within Nottingham city centre for all to enjoy.

13.0 A WELCOMING PLACE

- 13.1 NTU's City site has over 16,000 students and is home to Nottingham Business School, Nottingham Law School, School of Architecture, Design and the Built Environment; the School of Art and Design, the School of Social Sciences and the Centre of Broadcasting and Journalism.
- 13.2 Due to Nottingham's central location in the heart of England the site is readily accessible by car, bus, train, tram (with its own tram stop), plane, cycling and walking.
- 13.3 Clear NTU branded signage around the buildings and grounds are provided by information boards.
- 13.4 The City site is service by the Unlink bus service every 7-10 minutes Monday to Fridays during term times as described in more detail in **Sections 2 and 6** above.

14.0 SAFETY, SECURITY, HEALTH AND WELL BEING

- 14.1 The City site has a Security Team who are available 24 hours a day, seven days a week all year round. Their contact number is 0115 8482468 and it is proposed that this number will be added to the NTU information boards around the site in the future as has been done at Clifton Campus.

14.2 As detailed in **Section 3** above the City site is managed in the same way with regards to safe facilities and equipment; health and safety and accident and incident reporting.

15.0 CLEANLINESS

15.1 Due to its city centre location and open access to staff, students and members of the public the appearance of the site is of paramount importance. NTU's Facility Team work closely with Nottingham City Council (NCC) and Nottingham Express Transit (NET) to ensure footpaths are litter free and street bins are emptied on a regular basis.

15.2 The same approach as that of Clifton Campus is taken, more details of which can be found in **Section 4** above.

16.0 MAINTENANCE

16.1 NTU's City site is maintained in the same approach as Clifton Campus. Please refer to **Section 5** above for further information.

17.0 ENVIRONMENTAL SUSTAINABILITY

17.1 A detailed description of NTU's approach to Environmental Sustainability is given in **Section 6** above, the large majority of which is applicable to City site. Specific examples to City site are briefly described below.

SOLAR PHOTOVOLTAIC PANELS (PV)

17.2 The Chaucer building has solar PV panels on its roof which generate 50kWh of electricity for use within the building.

TRANSPORT

17.3 The City site is easily accessible to staff, students and visitors by sustainable transport options and even has its own tram stop thanks to lobbying of the Phase I NET tram line which connects to Nottingham Train Station.

17.4 Staff and students at the city site have access to the Unilink bus, the bike hire scheme and the cycle to work scheme further details are available in **Section 6** above.

17.5 Extensive investment into the cycling facilities on City site have been made over the last three years to include showers, lockers and restricted access compounds. In addition NTU has worked closely with Nottingham City Council to ensure improvements to cycle paths and facilities within Nottingham City Centre.

BIODIVERSITY

17.6 The City site provides a number of opportunities for biodiversity within a city centre location including the sedum roof on the Newton building and the gardens of Waverley, Dryden, Chaucer and Arkwright.

17.7 In 2012 a colony of bees and a bee hive were introduced to the sedum roof of the Newton building to encourage biodiversity within the city. NTU's Environment Team are currently exploring the criteria required to become a Bee Guardian.

- 17.8 These new residents join the famous Peregrine Falcons that have used the shelf of the 9th floor of the Newton building for the last 10 years to breed and raise their chicks every year. Thanks to the launch of NTU's Falcon Cam available via EcoWeb there have been over half a million hits to the website and in 2012 the Falcon blog attracted hundreds of comments throughout the year.

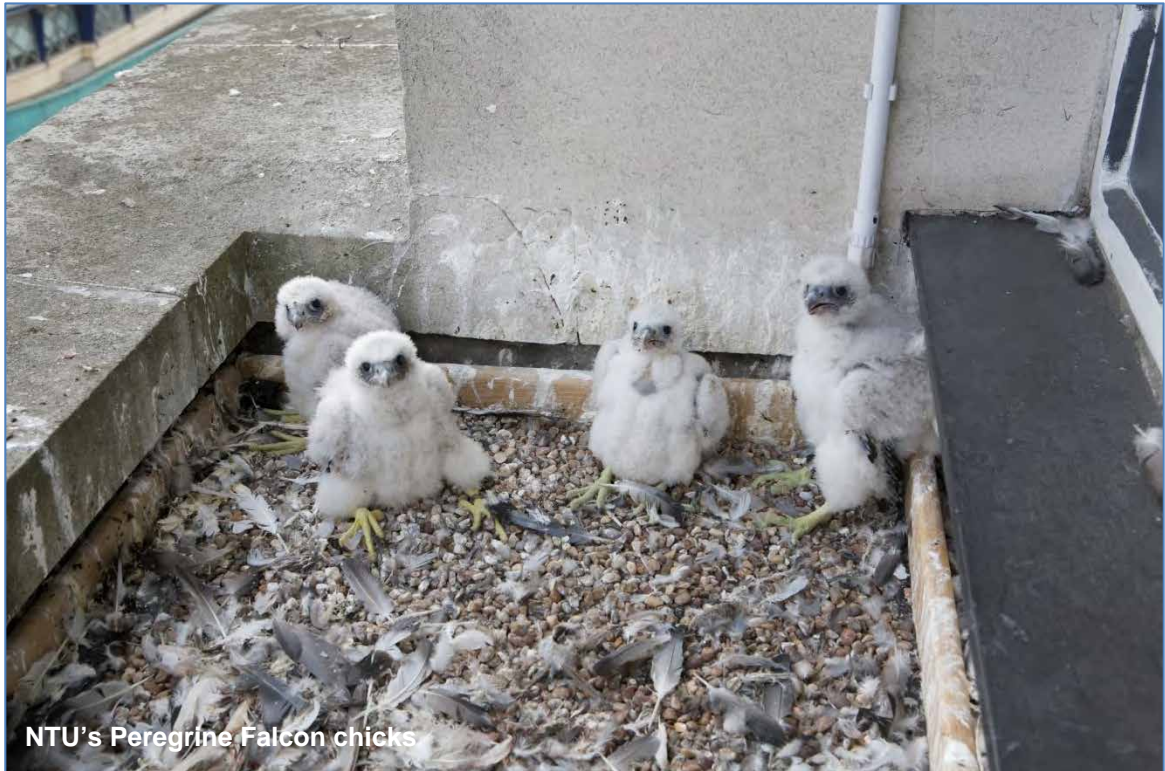


- 17.9 After the success of Falcon Cam the bee hive on the Newton roof has a camera with live footage streaming from the entrance of the hive and inside of the hive. Both cameras provide a valuable awareness raising tool for staff, students and members of the public.
- 17.10 The mature trees across the site do have some bird and bat boxes installed on them however the Environment Team and Landscape Services Team are keen to increase the number of these over the coming years.
- 17.11 A Biodiversity Action Plan is to be written for City site within the next twelve months so that objectives and targets can be set for specific habitats and species.

18.0 CONSERVATION AND HERITAGE

- 18.1 NTU's City site buildings range from Victorian gothic to modern contemporary fashion studios and recognises the importance to preserve these for future students as well as for the city of Nottingham. The refurbishment of Newton Arkwright set the standard for any future redevelopments of the City site buildings.

The Arboretum Conservation Area in which three of NTU's city site buildings lie within ensures strict planning restrictions and development of the area, taking into consideration the conservation and heritage of both NTU's estate and Nottingham city's buildings.



19.0 COMMUNITY INVOLVEMENT

19.1 The central location of NTU's City site makes community involvement opportunities extremely possible. The site is predominantly used for student teaching purposes, however events do take place throughout the year that allow for community involvement including the Distinguished Lectures Series and the Nottingham Wildlife Trust bird watching event in association with the Peregrine Falcons.

19.2 In December 2012 the Student Union and student volunteers planted a number of spring bulbs in the gardens of Chaucer as part of their work towards the NUS Green Impact biodiversity Award. This type of activity will be encouraged for all to take part in across the City site.

19.3 Opportunities for future events that have been identified include the landscaping of the Dryden gardens; bird box building workshop and bulb planting across the site.

19.4 As part of Green Week 2012 NTU's Environment Team along with the Conservation Society invited staff and students make their own bird feeders on site and they were able to take what they made away with them for their own gardens, such events will continue to be planned in the future.

20.0 MARKETING

20.1 As with Clifton Campus efforts to raise awareness of opportunities for staff, students and members of the public to become involved in the opportunities at NTU's City site will be sought.

20.2 The same marketing materials as those mentioned in **Section 9** above will be used to advertise NTU's City site.

21.0 MANAGEMENT

21.1 The management structure, maintenance planning and project funding for NTU's City site are the same as those for Clifton Campus, details of which are provided in **Section 10** above.

Management Priorities

21.2 The current short term aims for City site are:

- To hold a bird box making workshop for staff and students to take part in – September 2013.
- To incorporate opportunities to create habitats for city biodiversity as part of the Byron Development – September 2013.
- To hold further events such as 'make your own bird feeder' in conjunction with the Conservation Society – November 2013.
- To increase the number of bird boxes on trees across the site – December 2013.
- To find further opportunities for staff, students and local community groups to come onto site and help plant bulbs or trees – February 2014.

21.3 The current longer term aims for the City site are:

- Pedestrianisation of Shakespeare Street to incorporate green open spaces for all to use – 2015.