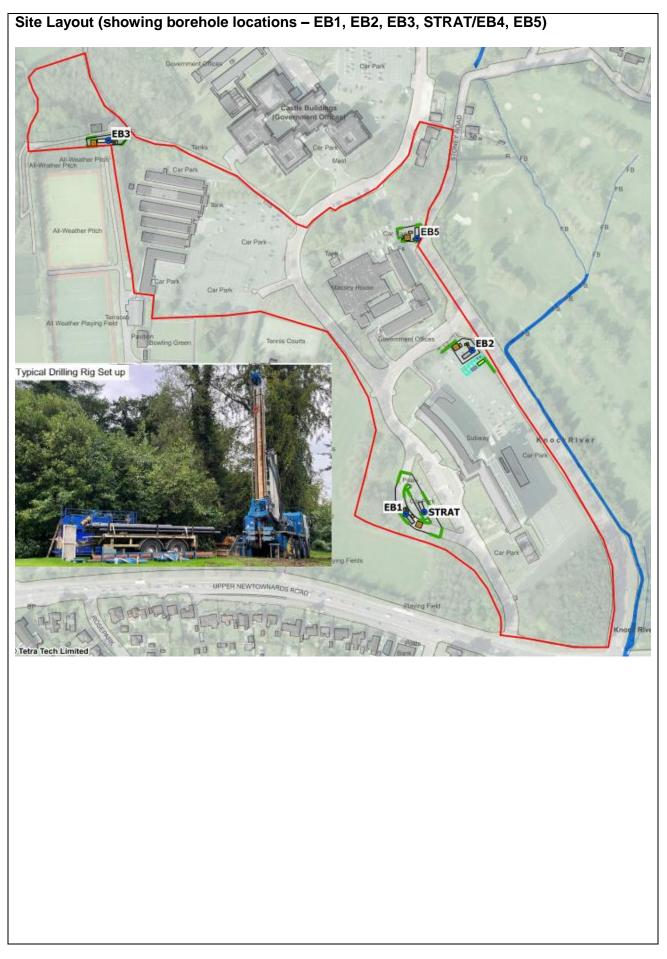
Development Management Report

Summary			
Application ID: LA04/2023/3856/F	Committee Meeting Date: 19 th March 2024		
Proposal: Short duration Geothermal Ground Source Heating Demonstration Project comprising shallow drilling, testing and completion of 5 no. exploratory boreholes, associated temporary access, compound areas and mobile public information kiosk.	Location: Lands at Stormont Estate, Upper Newtownards Road, Belfast		
Referral Route: Major Application Recommendation: Approval subject to conditions			
Applicant Name and Address: Dept for the Economy, Adelaide House, Adelaide Street, Belfast	Agent Name and Address: Gravis Planning, 1 Pavilions Office Park, Kinnegar Drive, Holywood		
Executive Summary: This application seeks full permission for a short duration Geothermal Ground Source Heating Demonstration Project comprising shallow drilling, testing and completion of 5 no. exploratory boreholes, associated temporary access, compound areas and mobile public information kiosk. The key issues are: Principle of development Built heritage Climate change Natural heritage and landscape Access Drainage and Waste-Water Infrastructure Noise, odour and other environmental impacts			
Consultees are satisfied subject to conditions and no representations have been received.			
Having regard to the development plan and other material considerations, the proposal is considered acceptable. It is recommended that planning permission is granted subject to conditions. Delegated authority is sought for the Director of Planning and Building Control to finalise the wording of conditions, and deal with any other matters that arise prior to issuing the decision,			
Delegated authority is sought for the Director of Planning and Building Control to finalise the			







2.0 Characteristics of the Site and Area

- 2.1 The application site measures approximately 11.1ha and is located at lands within Stormont Estate, Upper Newtownards Road, Belfast. The main parliament building and its associated gardens are located outside the site but within the north and west section of the wider estate. The eastern part of the estate includes sporting facilities and a number of government offices and parking. The proposal is located in the south-eastern part of the estate.
- **2.2** The site is within the development limits of Belfast in BUAP, on white unzoned land, closely adjacent to an area of "Landscape, Recreation or Amenity use". Draft BMAP (v2004) identifies the site as within the city's settlement limit and within Stormont Office Node (ref. BT019). The site does not extend into the adjacent area of existing open space. In BMAP the site is zoned as Stormont Office Node (ref. BT012), it is within a Local Landscape Policy Area and a Historic Park, Garden and Demesne. A very small part of the site to the north west extends into a Site of Local Nature Conservation Importance (BT084/27).

3.0	Description of Proposed Development	
3.1	Full planning permission is sought for a short duration Geothermal Ground Source Heating Demonstration Project comprising shallow drilling, testing and completion of 5 no. exploratory boreholes, associated temporary access, compound areas and mobile public information kiosk. The proposal includes drilling of 4 No boreholes (EB1 – EB3, EB5) each to a depth of up to 250 m and 1 No cored borehole to a depth of up to 500 m deep (STRAT/EB4).	
3.2	The aim of the project is to conduct geothermal exploratory and feasibility studies in accordance with the actions set out within the Northern Ireland Energy Strategy (Path to Net Zero Energy). This project will identify suitable drill sites then drill and test the water and rocks in five shallow exploratory boreholes within the Stormont Estate. This location at Stormont has been chosen because it sits on top of a productive aquifer with shallow geothermal potential for both closed-loop and open-loop geothermal systems.	
4.0	Planning Assessment of Policy and Other Material Considerations	
4.1	Development Plan – operational policies Belfast Local Development Plan, Plan Strategy 2035	
4.2	Development Plan – zoning, designations and proposals maps Belfast Urban Area Plan (2001) BUAP Draft Belfast Metropolitan Area Plan 2015 (v2004) Draft Belfast Metropolitan Area Plan 2015 (v2014)	
4.3	Regional Planning Policy Regional Development Strategy 2035 (RDS) Strategic Planning Policy Statement for Northern Ireland (SPPS)	
4.4	Other Policies Belfast Agenda	
4.5	Relevant planning history There is recent relevant planning history within the vicinity of the site under the following application references:	
	 LA04/2023/3232/DETEIA – Short duration Geothermal Ground Source Heating Demonstration Project comprising shallow drilling, testing and completion of 5 no. exploratory boreholes, associated temporary access, compound areas and mobile public information kiosk, Lands at Stormont Estate Upper Newtownards Road, Belfast, BT4 3SB. Decision - EIA Not required 07.09.2023. 	
	 LA04/2023/2459/F & LA04/2023/2467/LBC - Redevelopment of the NICSSA pavilion complex within the Stormont Estate creating a centre of excellence for sport. The development will comprise of demolition of the existing pavilion building and replacement with new 2 storey building providing state of the art indoor sports halls, changing accommodation, function/meeting space offering improvements to the existing offering. Site works will include the demolition and site clearance of the Dundonald House site to facilitate the extension and development of new international standard outdoor multi-sports playing, training and ancillary facilities. Day to Day operation of the site will be improved by way of improvements to internal road network via new access/egress arrangements from the existing Stoney Road junction, additional car and cycle parking and new waste/recycling areas – Under Consideration. 	

- **4.6** The boundary of the above application extends east to include part of the proposed borehole application site. As the proposed boreholes will only be temporary in nature, there will be no conflict with the proposed redevelopment of the NICSSA Pavilion complex.
- **4.7** Since this proposal falls under the category of Major Development, Pre Application Community Consultation was carried out under the planning reference LA04/2023/2904/PAN. The PACC report details the online consultation, public event, as well as remote consultation. Feedback in general was supportive for the project while there were some queries. Queries included questions regarding why the project was 'short duration', what depth they intended to drill to etc.

5.0 Consultations and Representations

5.1 Statutory Consultees
 DFI Roads Service – No objection
 NI Water – No objection

 DfI Rivers Agency – No objection
 DAERA Water Management Unit – No objection

 DAERA Regulation Unit – No objection subject to conditions
 Historic Environment Division: Historic Buildings – No objection subject to conditions
 DAERA Drinking Water Inspectorate – No objection

5.2 Non Statutory Consultees BCC Environmental Health – No objection subject to conditions BCC Tree Officer – No objection subject to conditions

Shared Environmental Services - No objection subject to conditions

5.3 Representations The application has been neighbour notified and advertised in the local press. No written representations have been received.

6.0 Planning Assessment

6.1 Development Plan Context

- **6.2** Section 6(4) of the Planning (Northern Ireland) Act 2011 states that in making any determinations under the Act, regard is to be had to the local development plan, and the determination must be made in accordance with the plan unless material considerations indicate otherwise.
- **6.3** Section 45(1) of the Act states that in determining planning applications, the Council must have regard to the local development plan, so far as material to the application, and to any other material considerations.
- **6.4** The Belfast Local Development Plan (LDP) when fully completed will replace the Belfast Urban Area Plan 2001 as the statutory Development Plan for the city. The Belfast LDP will comprise two parts. Part 1 is the Plan Strategy, which contains strategic and operational policies and was adopted on 02 May 2023. Part 2 is the Local Policies Plan, which will provide the zonings and proposals maps for Belfast and has not yet been published. The zonings and proposals maps in the Belfast Urban Area Plan 2001 remain part of the statutory local development plan until the Local Policies Plan is adopted.

- **6.5 Operational policies** the Plan Strategy contains a range of operational policies relevant to consideration of the application. These are listed in the report.
- **6.6 Proposals Maps** until such time as the Local Policies Plan is adopted, the Council must have regard to the land-use zonings, designations and proposals maps in the Belfast Urban Area Plan 2001, both versions of the draft Belfast Metropolitan Area Plan (v2004 and v2014) (draft BMAP 2015) and other relevant area plans. The weight to be afforded to these proposals maps is a matter for the decision maker. It is considered that significant weight should be given to the proposals map in draft BMAP 2015 (v2014) given its advanced stage in the development process, save for retail policies that relate to Sprucefield which remain contentious. The relevant zonings/designations are set out below.

6.7 dBMAP (v2004)

In dBMAP (v2004) the site is within the Belfast Metropolitan/Settlement Development Limit. identifies the site as within the city's settlement limit and within Stormont Office Node (ref. BT 019). The site does not extend into the adjacent area of existing open space.

6.8 dBMAP2015 (v2014)

In dBMAP (v2014) the site is within the Belfast Metropolitan/Settlement Development Limit. The site is zoned as Stormont Office Node (ref. BT012), it is within Stormont Local Landscape Policy Area (BT 135); Landscape Character Area (LCA) 97 Belfast/Lisburn; and Craigantlet Escarpment Area of High Scenic Value (Plan Policy COU 5/09) and a Historic Park, Garden and Demesne. A very small part of the site to the north west extends into a Site of Local Nature Conservation Importance (BT 084/27).

6.9 BUAP

Within the BUAP the site is within the settlements limits of Belfast but the land is white unzoned land.

7.0 Relevant Planning Policies

Policy SP2 – Sustainable development Policy SP6 – Environmental resilience

Policy DES1 – Principles of Urban Design Policy DES2 - Masterplanning approach for major development

Policy BH1 - Listed buildings

Policy BH4 – Works to grounds affecting built heritage assets

Policy BH6 – Parks, gardens, and demesnes of special historic interest

Policy ITU4 – Renewable energy development

Policy ENV1 – Environmental Quality Policy ENV2 - Mitigating environmental change Policy ENV3 – Adapting to environmental change

Policy ENV4 – Flood Risk

Policy TRAN6 – Access to public roads

Policy NH1 – Protection of natural heritage resources Policy TRE1 – Trees Policy LC1 – Landscape Policy LC1C – LLPAs

8.0	Key issues
8.1	 The key issues to be considered in the assessment of this application are: Principle of development Built heritage Climate change Natural heritage and landscape Access Drainage and Waste-Water Infrastructure Noise, odour and other environmental impacts
8.2	RDS Policy RG5 relates to the delivery of a sustainable and secure energy supply. It states that; decision makers will have to balance impacts against the benefits from a secure renewable energy stream, and the potential for cleaner air and energy for industry and transportation. The first objective is to; Increase the contribution that renewable energy can make to the overall energy mix. There will need to be a significant increase in all types of renewable electricity installations and renewable heat installations, including a wide range of renewable resources for electricity generation both onshore and offshore to meet the region's needs. The proposal is considered to be consistent with the general direction of the Strategy's strategic objectives in this regard.
8.3	SPPS Para 6.217 of the SPPS states that the main sources of renewable energy are wind, sun (solar energy), moving water (hydropower), heat extracted from the air, ground and water (including geothermal energy), and biomass (wood, biodegradable waste and energy crops such as for use in an Anaerobic Digestor). Para 6.218 states that the aim of the SPPS in relation to renewable energy is to facilitate the siting of renewable energy generating facilities in appropriate locations within the built and natural environment in order to achieve Northern Ireland's renewable energy targets and to realise the benefits of renewable energy without compromising other environmental assets of acknowledged importance. The proposal is considered to be consistent with the general direction of the SPPS policies in this regard.
9.0	Principle of development Geothermal is seen as one of the most environmentally friendly ways of producing, locally sustainable and renewable energy as it harnesses the heat which is continuously produced inside the earth. Energy is naturally stored as heat in rocks and waters within the Earth's subsurface.
9.1	In the right geological setting heat can be utilised at the surface by either pumping water to the surface as a direct heat source or, it can be used to create steam that can power a turbine and generate electricity. In most cases, low temperature heat from shallow depths is used by transferring heat from the rocks to a circulating fluid in a pipe, which can be extracted and further warmed using a heat pump. The heat exchange processes can also operate in reverse and transfer excess heat back to the subsurface, thereby cooling buildings.
9.2	The Stormont Estate proposal intends to prove that a shallow geothermal system can provide efficient, affordable, heating, cooling and thermal storage to help decarbonise and reduce the cost of heating buildings not only on the Estate, but elsewhere.
9.3	The Design and Access Statement which accompanies the submission highlights that accessing geothermal energy is totally different to fracking. Geothermal projects circulate fresh water in pre-existing pore spaces and fractures beneath the earth's surface and once the heat has been extracted and used, the water is re-injected into the same formation to allow it to re-heat. Fracking is where rock is deliberately fractured under pressure to enable

gas to be extracted. The aim of this Geothermal project is to capture natural heat and use it as renewable energy, to assist with moving away from fossil fuel use.

9.4 The proposed borehole sites are located on or close to existing car parks which are low lying with flat topography. They are situated in locations which will not be visible from public viewpoints on the Upper Newtownards Road. Policy ITU 4, Renewable energy development is a material consideration. The consultation responses from Environmental Health and DAERA indicate the proposal will not result in an unacceptable adverse impact on human health, visual amenity, nature conservation or natural resources. The principle of the development is considered to be in keeping with the direction of the criteria set out in Policy ITU 4.

9.5 Built Heritage

The proposal has been assessed against Policies BH1, BH4 and BH6 of the Plan Strategy. The Historic Environment Division was consulted since the site is in the vicinity of Dundonald House (Grade B listed building HB26/13/045), which is of special architectural and historic interest, protected by Section 80 of the Planning Act (NI) 2011. HED Historic Buildings (HED:HB) has considered the effects of the proposal on the listed building and on the basis of the information provided is content subject to the inclusion of conditions.

9.6 The application site is also located in an Historic Park, Garden and Demesne however only one borehole is within this area (EB3). An Archaeological and Built Heritage Appraisal accompanying the application set out details of archaeological monitoring and earthwork restoration, however HED Historic Monuments did not return formal comments. They instead confirmed via internal email they were content with the bore holes "subject to micrositing to ensure that the drilling will not cause any damage to the existing tree planting". This was essentially reiterating their comments from the associated EIA determination (LA04/2023/3232/DETEIA). The proposal therefore complies with policies BH1, BH4 and BH6.

9.7 Climate change

Policy ENV2, (Mitigating Environmental Change) states that planning permission will be granted for development that incorporates measures to mitigate environmental change and reduce greenhouse gas by promoting sustainable patterns of development. Policy ENV3, (Adapting to environmental change) states that planning permission will be granted for development that incorporates measures to adapt to environmental change, in order to support sustainable and enduring development.

9.8 The proposal complies with these policies in seeking to investigate existing resources in order to promote and encourage the use of renewable energy, and encourage its use in the future. The proposal does not involve any built development as such so there is no potential for SUDs measures.

9.9 Natural Heritage and landscape

A range of ecological reports including a Bat report, Badger Survey and Habitats Regulation Assessment were submitted. DAERA NED assessed the proposal and considered its impacts on designated sites and other natural heritage interests, and on the basis of the information provided has no concerns subject to the inclusion of conditions should approval be granted. Having regard to Policy NH1, Protection of Natural Heritage Resources, it is considered that the proposal meets the requirements of the relevant policy.

9.10 Policies LC1 and LC1A are of relevance with regard to seeking to protect and improve the quality and amenity of the landscape. Given that all associated components of the system are not visible from above ground, there would be no visual impact on the landscape area. Therefore, the proposal would comply with policy LC1 and LC1A. This was confirmed

within BCC Landscape, Planning and Development comments during pre application discussions.

9.11 A TPO is present on the site (LA04/2023/0053/TPO), and the existing trees adjacent to the proposal provide high levels of visual amenity offering and helping promote the character within the context of the surrounding area. A tree protection plan and arboricultural report were submitted and forwarded to the BCC Tree Officer for comment. No trees or woodlands are proposed to be removed for installation of the boreholes which are all to be constructed outside of the existing RPAs. Tree protection measures were outlined which will be conditioned as part of any approval and the proposal complies with Policy TRE1.

9.12 Access

Access to the five locations will be via Stoney Road, which will then follow the internal road network within Stormont Estate. Drill locations EB1, EB2 and the STRAT/EB4 boreholes are located in the southeast of the site at/adjacent to Dundonald House car parking areas. EB5 will be accessed via Stoney Road and EB3 will be accessed via the internal road to the west of the Castle Buildings.

9.13 The DAS states that traffic to the site will be limited and typically be of the order of a few vehicle trips per day to and from site, including the drilling rig. It will also include visitor traffic for those wishing to visit the mobile info kiosk, which is not expected to cause a perceptible change to local traffic levels. There are no proposed changes to carparking or movement around the Estate with the site accessed from the existing vehicular access. Dfl Roads Service has considered the proposed development and raise no objection under Policy TRAN8.

9.14 Drainage and Waste-Water Infrastructure

As stated previously the proposal does not involve any built development as such so there is no potential for SUDs measures, and therefore Policy ENV5 is not applicable.

- **9.18** Shared Environmental Service (SES) carried out a Habitats Regulation Assessment on behalf of the Council and advise that the development would not have an adverse effect on the integrity of any European site, either alone or in combination with other plans or projects subject to mitigation measures which are recommended as a condition.
- **9.19** DAERA's Drinking Water Inspectorate and Water Management Unit both responded with no objection to the proposal and suggested conditions to be included should approval be granted. They noted obtaining the requisite statutory permissions and adhering to their associated conditions will be fundamental for the project. NI Water and Dfl Rivers Agency responded with no objection, and therefore the proposal complies with Policies ENV3, ENV4 and ENV5.

9.20 Noise, odour and other environmental impacts

A Quantitative Risk Assessment were submitted relating to the risk of contaminated land on the site. BCC Environmental Health and DEARA both responded with no objection to the proposal and suggesting conditions to be included should approval be granted.

9.21 BCC Environmental Health also have no objection to the proposed development subject to the inclusion of a condition relating to the control of noise and vibration impacts detailed within the CEMP, should approval be granted.

10.0 Recommendation:

Having regard to the development plan and other material considerations, the proposal is considered acceptable. It is recommended that planning permission is granted subject to conditions.

	Delegated authority is sought for the Director of Planning and Building Control to finalise the wording of conditions, and deal with any other matters that arise prior to issuing the decision, provided that they are not substantive.	
11.0	Draft Conditions:	
	1. The development hereby permitted shall be begun before the expiration of 5 years from the date of this permission.	
	Reason: As required by Section 61 of the Planning Act (Northern Ireland) 2011.	
	2. Prior to and throughout the exploratory drilling and testing phases of the proposal, the appointed contractor must implement, and adhere to, all mitigation measures set out in the Construction Environmental Management Plan (CEMP) – (Tetra Tech, dated August 2023) to effectively prevent the egress of contaminated water from the drilling and testing sites. All exploratory drilling and testing works must conform with the proposed measures in the CEMP, unless otherwise agreed in writing by the Council.	
	Reason: To ensure the project will not have an adverse effect on the integrity of any European site.	
	3. During construction of the development, noise and vibration impacts shall be controlled in accordance with Section 3.9.1 of the submitted Tetra Tech report 'Geothermal Feasibility Study, Stormont Estate, Belfast, Northern Ireland; Construction Environmental Management Plan (CEMP) – Shallow Geothermal Exploratory Drilling and Testing Works', Version 2, dated August 2023.	
	Reason: Protection of local amenity	
	4. No development activity, including ground preparation or vegetation clearance, shall take place until protection zones, clearly marked with posts joined with hazard warning tape, has been provided around badger sett entrances Outlier 3, Outlier 5, and Outlier 7 (as identified within Figure 2a of the Badger Survey Report dated August 2023) at a radius of 25 metres. No works, vegetation clearance, disturbance by machinery, dumping or storage of materials shall take place within the protection zones unless an appropriate Wildlife Licence has been obtained from NIEA. The protection zones shall be retained and maintained until all construction activity has been completed on site.	
	Reason: To protect badgers and their setts on the site.	
	5. No works shall take place between 1 March and 31 August inclusive, unless a competent ecologist has undertaken a detailed check for active bird's nests within 48 hours prior to works and provided written confirmation that no nests are present / birds will be harmed and / or there are appropriate measures in place to protect nesting birds. Any such written confirmation shall be submitted to the Planning Authority within 6 weeks of works commencing.	
	Reason: To protect breeding birds.	
	6. No development shall commence until the applicant has submitted evidence in writing to the Planning Authority for its agreement demonstrating that the risks to groundwaters and surface waters due to on-site contamination of the groundwater have been effectively assessed. This evidence should include:	

• Suitable groundwater quality monitoring data and a quantitative risk assessment to investigate the risks to groundwater and surface water from groundwater contamination identified at the site,

• If unacceptable risks to the water environment are identified, provision of remedial criteria as groundwater concentrations that would not pose a risk to receptors. The remedial criteria are required to be derived through quantitative risk assessment based on the Conceptual Site Model and the Environment Agency's Hydrogeological Risk Assessment for Land Contamination. Remedial Targets Worksheet v3.2 (P20) or an equivalent risk assessment tool. If unacceptable risks to receptors are identified a remediation strategy to address those risks should be submitted to the Planning Authority for agreement.

Reason: Protection of environmental receptors to ensure the site is suitable for use.

7. A watching brief for land contamination should be maintained by a suitably qualified and experienced individual during groundworks. If new contamination or risks are encountered which have not previously been identified, works should cease, and the Planning Authority shall be notified immediately. This new contamination shall be fully investigated in accordance with the Land Contamination: Risk Management (LCRM) guidance available at: https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks In the event of unacceptable risks being identified, a remediation strategy shall be agreed with the Planning Authority in writing, and subsequently implemented and verified to its satisfaction.

Reason: Protection of environmental receptors to ensure the site is suitable for use.

8. After completing all necessary remediation works, and prior to operation of the development, a verification report needs to be submitted in writing and agreed with Planning Authority. This report should be completed by competent persons in accordance with the Land Contamination: Risk Management (LCRM) guidance available at: https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks The verification

report should present all the remediation, waste management and monitoring works undertaken and demonstrate the effectiveness of the works in managing all the risks and in achieving the remedial objectives.

Reason: Protection of environmental receptors to ensure the site is suitable for use.

9. On completion of the project, all geotechnical boreholes must be fully decommissioned and in line with SEPA guidance document Good practice for decommissioning redundant boreholes and wells (UK Groundwater Forum) available at: https://www.sepa.org.uk/media/34618/decommissioning-redundant-boreholes-andwells.pdf

Evidence of the decommissioning shall be provided in a verification report which shall be submitted to and agreed in writing by the Council.

Reason: Protection of environmental receptors to ensure the site is suitable for use.

10. No works shall commence on site unless a Detailed Method Statement has been submitted to and agreed in writing by the Council. The Method Statement shall demonstrate that Dundonald House shall be monitored for vibration during the proposed works.

Reason: To ensure that the development is not detrimental to the character, appearance or interest of the Listed Buildings. Approval is required upfront to safeguard original features of the building.

11. All associated site compounds shall be removed and ground finishes shall be returned to their original material and state on completion of the works.

Reason: In the interests of the special architectural and historic qualities of the Listed Building

12. On completion of the works bore holes shall be finished with manholes instead of fencing compounds.

Reason: In the interests of the special architectural and historic qualities of the Listed Building

13. The gates and piers at the main entrance to Upper Newtownards Road and rear entrance at Stoney Road shall be protected against impact for the duration the works.

Reason: In the interests of the special architectural and historic qualities of the Listed Building

14. All trees and planting within the site shall be retained. Any trees or planting indicated on the approved drawings which, within a period of five years from the date of planting, die, are removed, or become seriously damaged, diseased or dying, shall be replaced during the next planting season (October to March inclusive) with other trees or plants of a location, species and size to be first approved in writing by the Council.

Reason: In the interests of visual amenity.

15. Prior to any work commencing all tree protective measures, protective barriers (fencing) and ground protection is to be erected or installed as specified within the landscape plan and in accordance with the British Standard 5837: 2012 (section 6.2) on any trees to be retained within the site and must be in place before any materials or machinery are brought onto site for demolition, development, or soil stripping. Protective fencing must remain in place until all work is completed, and all associated materials and equipment are removed from site.

Reason: To ensure the protection of, and to ensure the continuity of amenity afforded by any existing trees to be retained within the site and on adjacent lands.

16. Details specified within the submitted Arb Impact Assessment & Method Statement – J Morris Arb Consultancy – date 7th August 2023 submitted in support of the application shall be adhered to in full, subject to site supervision as specified within the report, by a suitably qualified tree specialist.

Reason: Required to safeguard and enhance the character and amenity of the streetscape and to avoid any irreversible damage to retained trees.

17. No storage of materials, parking of vehicles or plant, temporary buildings, sheds, offices service runs / cables or fires within the RPA of trees within the site and adjacent lands during the construction period.

Reason: To avoid compaction and root severance within the RPA of existing trees to be retained.

ANNEX	
Date Valid	18/08/23
Date First Advertised	22/09/23
Date Last Advertised	(as above)
Date of Last Neighbour Notification	26/09/23 (85 notified)
Date of EIA Determination	07/09/23