

APPENDIX 15.5 CUMULATIVE EFFECTS ASSESSMENT

It is a requirement of *Schedule 4 of the Town & Country Planning (Environmental Impact Assessment (EIA)) Regulations 2017* that an assessment of the potential for a proposed development to give rise to significant cumulative effects is included. This requires consideration of combination effects of the proposed AESC Plant 3 development when considered alongside other development proposals within the local area. For the proposed AESC Plant 3 development, the following relevant projects have been identified and assessed individually in terms of archaeological and cultural heritage impacts:

Planning Ref	Project	Archaeology and Cultural Heritage Impacts
18/00092/HE4	IAMP ONE Phase 1: Hybrid planning application seeking: Full planning permission for one industrial unit (Class B1(c), B2 and B8), with ancillary office and research & development floorspace (Class B1(a) and B1(b)) with associated access, parking, service yards and attenuation basins, as well as the temporary construction route, internal spine road, utility diversions, with two accesses onto the A1290 and associated infrastructure, earthworks and landscaping; and Outline planning permission for the erection of industrial units (Class B1(c), B2 and B8) with ancillary office and research & development floorspace (Class B1(a) and B1(b)) with internal accesses, parking, service yards, attenuation basins, electricity substations, foul pumping station, realignment of the access road to North Moor Farm and associated infrastructure, earthworks and landscaping	Four known archaeological or cultural heritage assets were known from the area: the former Pontop and South Shields branch of the Stanhope and Tyne Railway (built over by the A1290); a concrete base, the only surviving remnant of the decontamination unit for RAF Ullsworth and the site of a barbed wire barricade associated with RAF Ullsworth, since removed and anomalies revealed during geophysical surveys which trial trench evaluations discovered were of no archaeological significance. A watching brief condition imposed on the construction of a surface water drain encountered a shallow ditch containing palaeoenvironmental remains including Alder stemwood charcoal; the charcoal was radiocarbon dated to the Bronze Age. Medieval or post-medieval furrows were also recorded. No further work was required, and the archaeological conditions were discharged. This development resulted in minor adverse impacts to archaeology and cultural heritage
20/00556/OU4	IAMP ONE Phase 2: erection of industrial units (Class B1(c), B2 and B8) with ancillary office and research & development floorspace (Class B1(a) and B1(b)) with internal accesses, parking,	West Moor Farm (HER 6773) was first recorded in Greenwood’s plan of 1820 and redeveloped between 1862 and 1896. A Historic England Level 3 historic building recording survey was undertaken prior to demolition. An Aerial

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	service yards, electricity sub-stations, attenuation basins and associated infrastructure, earthworks and landscaping, as well as the demolition of the existing buildings at West Moor Farm	<p>Assessment identified medieval and post medieval ridge and furrow, post medieval field boundaries and trackways of and features associated with WWII activity at Usworth Airfield. Geophysical surveys also revealed anomalies of possible archaeological origin, tested by trial trench evaluation which recorded remains of medieval or post-medieval ploughing. Further trial trenching was required as a condition to planning permission based on the archaeological potential of the area.</p> <p>This development will result in minor adverse impacts to archaeology and cultural heritage</p>
21/02807/HE4 and STC/1172/21/FUL	IAMP TWO and Early Infrastructure: hybrid planning application including demolition works, erection of industrial units (up to 168,000sqm) (Gross Internal Area) for light industrial, general industrial and storage & distribution uses (Class E(g)(iii), B2 and B8)) with ancillary office and research & development floorspace (Class E(g)(i) and E(g)(ii) with internal accesses, parking, service yards and landscaping, and associated infrastructure, earthworks, landscaping and all incidental works (Outline, All Matters Reserved); and dualling of the A1290 between the A19/A1290 Downhill Lane Junction and the southern access from International Drive, provision of new access road including a new bridge over the River Don, electricity sub-stations, pumping station, drainage, and associated infrastructure, earthworks, landscaping and all incidental works	<p>Fatherless Field (Elliscope) Farm (HER 960) was first documented in the 1340s as Fadreless Houses. It was annotated Fatherless Field Farm on 1st ed OS and known as Elliscope Farm more recently. A Historic England Level 3 historic building recording survey was undertaken prior to demolition. Several evaluations, geophysical surveys and watching briefs were also undertaken within the development area, revealing archaeological evidence of prehistoric, medieval and post-medieval occupation within the development area. Five archaeological conditions have been placed on planning permission (evaluation, and potentially excavation if required; archaeological post-excavation reporting; archaeological publication reporting; archaeological monitoring under watching brief remit during groundworks; archaeological watching brief reporting).</p> <p>It is anticipated that this development will result in minor adverse impacts to archaeology and cultural heritage</p>
21/01764/HE4	IAMP ONE: erection of industrial unit to be used for the manufacture of batteries for vehicles with ancillary office/welfare floorspace and associated infrastructure provision, accesses, parking, drainage and landscaping	<p>The proposed development area had previously been subject to archaeological desk-based assessments, geophysical survey, building recording of West Moor Farm (and evaluation trial trenching and a watching brief was undertaken in the eastern portion of the site. As no significant archaeological remains were identified no further archaeological work was required.</p> <p>This development resulted in minor adverse impacts to archaeology and cultural heritage</p>

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19/00245/REM	IAMP ONE: Reserved matters approval for the access, layout, scale, appearance and landscaping of the development for Plot 4 of hybrid planning application 18/00092/HE4	Geophysical survey and archaeological evaluation had already been carried out on the IAMP One site. The only archaeological work that remained was a watching brief to monitor the installation of a culvert between the site and the lane next to the Three Horseshoes Pub. It is anticipated that this development will result in minor adverse impacts to archaeology and cultural heritage
19/00280/REM	IAMP ONE: Reserved matters approval for the access, layout, scale, appearance and landscaping of the development for Plots 5 and 6 of hybrid planning application 18/00092/HE4	Geophysical survey and archaeological evaluation had already been carried out on the IAMP One site. The only archaeological work that remained was a watching brief to monitor the installation of a culvert between the site and the lane next to the Three Horseshoes Pub. It is anticipated that this development will result in minor adverse impacts to archaeology and cultural heritage
TR010024	A19 Downhill Lane Junction Improvements: to enhance capacity of junction to support the IAMP. Includes construction of new bridge to south of existing (A1290) bridge across the A19 to create a more traditional roundabout layout above the A19. New slip roads will connect the A19 to the south	It is anticipated that this development resulted in no impacts to archaeology and cultural heritage
20/01915/FUL	1 to 5 Usworth Cottages and Chalet: demolition of numbers 1 to 5 Usworth Cottages and the Chalet, including associated garages and outbuildings	Demolition of structures has occurred. This development resulted in no impacts to archaeology and cultural heritage
21/01330/FUL	West Moor Farm: demolition of buildings comprising West Moor Farm	West Moor Farm (HER 6773) was first recorded in Greenwood's plan of 1820 and redeveloped between 1862 and 1896. A Historic England Level 3 historic building recording survey was undertaken prior to demolition as part of IAMP ONE Phase 2 (planning ref: 20/00556/OU4). Demolition of Farmstead has occurred. This development resulted in minor adverse impacts to archaeology and cultural heritage
18/01869/FUL and 19/02161/VAR	Land adjacent to the Three Horseshoes: construction of a new 3 storey 36 Bed Hotel with associated landscaping, car parking and other associated works	No archaeological or cultural heritage related particulars were raised. This development resulted in no impacts to archaeology and cultural heritage
18/02055/FUL and 18/00459/FUL	Unipres UK Ltd: installation of an array of solar panels to the roof of the existing building	This development resulted in no impacts to archaeology and cultural heritage

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21/00401/HE4	Land west of Infiniti Drive: erection of industrial units for light industrial, general industrial and storage distribution uses with ancillary office floorspace, associated access, landscaping, parking and service yards	A desk-based assessment identified that that the site had been used as a compound with access roads and by 2018 it had been landscaped, and concluded that it is unlikely that any archaeological remains survived within the proposed development. Earlier trial trench evaluations had also already occurred. No further archaeological investigations were required. This development resulted in no impacts to archaeology and cultural heritage
21/00605/OU4 and 22/01944/REM	Land east of Infiniti Drive: application for Outline Planning Permission with all matters reserved for the erection of industrial units for light industrial, general industrial and storage and distribution uses with ancillary office floorspace	A desk-based assessment identified that that the site had been used as a compound with access roads and by 2018 it had been landscaped and concluded that it is unlikely that any archaeological remains survived within the proposed development. Earlier trial trench evaluations had also already occurred. No further archaeological investigations were required. This development resulted in no impacts to archaeology and cultural heritage
21/00605/OU4 and 18/01964/FUL	Elm Tree Nursery: application for Outline Planning Permission with all matters reserved for the erection of industrial units for light industrial, general industrial and storage and distribution uses with ancillary office floorspace	A desk-based assessment identified that that the site had been used as a compound with access roads and by 2018 it had been landscaped and concluded that it is unlikely that any archaeological remains survived within the proposed development. Earlier trial trench evaluations had also already occurred. No further archaeological investigations were required. This development resulted in no impacts to archaeology and cultural heritage
17/01117/OUT, 18/00111/REM, 18/00237/OUT, 18/00574/FUL, 18/00573/COU, 20/00021/REM and 20/00208/REM	Amazon UK, Follingsby International Enterprise Park: application (relating to appearance, landscaping, layout and scale) for a storage and distribution unit (use class B8) with ancillary offices, car parking, servicing and landscaping on PLOT A	This development resulted in no impacts to archaeology and cultural heritage
18/00860/OUT	Land west of Follingsby Way: erection of business/industrial development (Classes B1(c) and/or B2 and/or B8) with associated works	Located outside the 1km study area. This development resulted in no impacts to archaeology and cultural heritage
19/01252/OUT	Land north of Follingsby Way: erection of business/industrial development (use classes B1(c)/B2/B8)	Located outside the 1km study area. This development resulted in no impacts to archaeology and cultural heritage

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16/00698/OUT and 19/00813/REM	Former Wardley Colliery, Gateshead: reserved matters application pursuant to outline permission (DC/16/00698/OUT) for the erection of up to 144 residential dwellings	Located outside the 1km study area. This development resulted in no impacts to archaeology and cultural heritage
18/02226/FUL	Unit 1 Spire Road, Glover: extension to existing building to provide additional education accommodation (class D1), including external works to reconfigure vehicular parking	This development resulted in no impacts to archaeology and cultural heritage
17/02425/LP3	Northern Area Playing Fields Stephenson Road: demolition of existing changing pavilion. Engineering works to re-grade site and install drainage to facilitate the provision of 4no artificial pitches (3no football and 1no dual football/rugby) with associated fencing, floodlighting and improvements to remaining existing natural grass pitches; erection of new pavilion building to include changing facilities, club room and bar, kitchenette and education space; alterations to existing access and associated works and provision of associated car and cycle parking, signage, landscaping and boundary fence. Provision of bridleway and barrier treatment and provision of 2no passing places	No known archaeological or cultural heritage assets were known from within the development area, but the site had never been archaeologically investigated and was in close proximity to a presumed prehistoric enclosure. As a result, a geophysical survey and archaeological trial trenching (followed by appropriate reporting, publication) was required as a planning condition. This development resulted in minor adverse impacts to archaeology and cultural heritage
21/01670/S37	IAMP Washington: works at the International Advanced Manufacturing Park (IAMP), Sunderland	An archaeological watching brief programme was a condition of permission. It is anticipated that this development will result in minor adverse impacts to archaeology and cultural heritage
15/00942/FUL	Nissan Motor Manufacturing (UK) Ltd: 4.774MWp Solar Photovoltaic Array	It is anticipated that this development resulted in minor adverse impacts to archaeology and cultural heritage
21/01565/FUL	Nissan Motor Manufacturing (UK) Ltd: erection of Wireless network seven 10m masts	This development resulted in no impacts to archaeology and cultural heritage
19/01062/FUL	Vacant Units, Turbine Way: construction of four two-storey buildings (Use Class B2/B8), with access, parking, turning space and landscaping	The site had previously been subject to archaeological desk-based, geophysical survey and trial trench evaluations. Potential ridge and furrow was identified by the geophysical survey, but no evidence was observed during subsequent trial trenching. The trial trenching demonstrated that most of the site had been heavily re-worked during the 20th century and therefore earlier archaeology is unlikely to be preserved on the site. It was concluded that the development was unlikely to encounter significant archaeological deposits and therefore no further archaeological investigation was required as part of this application.

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		This development resulted in no impacts to archaeology and cultural heritage
20/01309/FUL and 22/02601/SUB	Land at 4 Turbine Way: erection of two commercial units, with access and associated parking /service area	This development resulted in no impacts to archaeology and cultural heritage
22/00966/FUL	Land at Turbine Way: erection of two industrial units, with associated access, landscaping and parking	This development resulted in no impacts to archaeology and cultural heritage
19/01062/FUL	Décor Cladding & Bathrooms: construction of four two-storey buildings (Use Class B2/B8), with access, parking, turning space and landscaping	The site had previously been subject to archaeological desk-based, geophysical survey and trial trench evaluations. Potential ridge and furrow was identified by the geophysical survey, but no evidence was observed during subsequent trial trenching. The trial trenching demonstrated that most of the site had been heavily re-worked during the 20th century and therefore earlier archaeology is unlikely to be preserved on the site. It was concluded that the development was unlikely to encounter significant archaeological deposits and therefore no further archaeological investigation was required as part of this application. This development resulted in no impacts to archaeology and cultural heritage
22/00136/FUL	Land east of Turbine Way: construction of four detached buildings (9no. units) with ancillary offices	The proposed development area has previously been archaeologically investigated as part of a programme of evaluations undertaken across a broader area concluding that it is likely that later use of the site will have damaged or destroyed any upstanding or shallow cut archaeological features. No further archaeological investigation was required as part of this application. This development resulted in no impacts to archaeology and cultural heritage
22/01039/PCZ	Griffiths Textiles Machines, Alston Road: installation of roof-mounted 707kwp PV solar panels	Located outside the 1km study area. This development resulted in no impacts to archaeology and cultural heritage
22/00294/FUL	Former Usworth Sixth Form Centre: erection of 190 dwellings with associated access, landscaping and boundary treatment	Located outside the 1km study area. This development resulted in no impacts to archaeology and cultural heritage
19/01252/FUL	Land at Albany Park, Spout Lane: erection of 76 dwellings, with associated open space and infrastructure	Located outside the 1km study area. This development resulted in no impacts to archaeology or cultural heritage
23/00805/PCZ	Vantec, Turbine Way: installation of roof mounted solar 320.76 KWp solar system, with two 110KW inverters	This development resulted in no impacts to archaeology and cultural heritage

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22/02384/FU4	Land west of International Drive: erection of a 275kV substation and 66kV substation with associated infrastructure	It is anticipated that this development resulted in minor adverse impacts to archaeology and cultural heritage
22/02538/FUL	Kasai UK Ltd, Factory 1, Stephenson Road: installation of roof-mounted 1,450KWp solar system	This development resulted in no impacts to archaeology and cultural heritage
23/01097/FU4	Land north of International Drive: erection of switching station with security fencing and landscaping, with associated earth works and engineering operations	This development will result in no impacts to archaeology and cultural heritage
23/00806/PCZ	Vantec Infiniti Drive, Washington: Installation of a roof mounted solar PV system (302.25 kwp, consisting of 806 solar modules alongside 2x 80kW inverters and 100kW inverter	This development will result in no impacts to archaeology and cultural heritage
23/01542/VA4	Envision GIGA Plant 1 International Drive: variation of conditions attached to planning approval 21/01764/HE4 for the erection of industrial unit to be used for the manufacture of batteries for vehicles with ancillary office / welfare floorspace and associated infrastructure provision, accesses, parking, drainage and landscaping	This development will result in no impacts to archaeology and cultural heritage
23/01540/FU4	Envision GIGA Plant 1 International Drive: erection of canopy above bulk stores on western side of the Giga 1 factory	This development will result in no impacts to archaeology and cultural heritage
23/01541/FU4	Envision GIGA Plant 1 International Drive: erection of gas governor house for Giga 1	This development will result in no impacts to archaeology and cultural heritage
23/01555/FU4	Envision GIGA Plant 1 International Drive: erection of high voltage sub-station with compound, transformers and securing fencing	The proposed development area has previously been subject to desk-based assessments, geophysical survey, trial trench evaluations and a watching brief. No further archaeological investigation was required as part of this application. This development will result in no impacts to archaeology and cultural heritage