

Northumberland County Council

Malhotra Property Developments Limited C/O Malhotra Group PLC Malhotra House 50 Grey Street Newcastle Upon Tyne NE1 6AE Our ref: Enquiries to: Tel direct: Date:

PS/017541 Paul Stevens 01670 623326 22 October 2021

BY FIRST CLASS POST

Dear Sirs

Northumberland Line Project Right to Enter and Survey Land - Housing and Planning Act 2016 Essendene, Kenilworth Road, Ashington NE63 8AR ("the Site")

Northumberland County Council ("the Council") is the acquiring authority for the purposes of the Housing and Planning Act 2016 ("the Act") and requires access to the Site in order to conduct various surveys. The results of the surveys will be used in the decision-making process in the proposed acquisition of a right or interest in the site where Ashington station and platform are proposed to be constructed, and the redevelopment of the car park that will accompany the station.

Section 172 the Act provides that persons authorised by an acquiring authority may enter and survey land in connection with a proposal to acquire an interest in or a right over the land.

In accordance with section 174 of the Act, the Council is obliged to provide notice to owners of the land before the survey is undertaken.

Please accept this letter as notice of the Council's intention to enter onto the Site to carry out various surveys. The surveys will commence no earlier than 10 November 2021 and should last no longer than 3 weeks. The surveys will include (amongst other things) the following:

- 1. Searching, boring, and excavating trial pits for ground investigation works (as shown on the enclosed plan);
- 2. undertaking such ground investigation one (1) day of work will be required per trial pit (please note that this might not be on consecutive days);

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- 3. taking samples (at this stage only soil samples are to be taken, but this may change at a later date);
- 4. keeping the area of the Site which will be accessed fenced off appropriately for security purposes; and
- 5. Reinstatement of the trial pits following completion of the ground investigation.

You should be aware that a person commits an offence if he, without reasonable excuse, obstructs another person in the exercise of the power conferred by section 172 of the Act. A person found guilty of such offence is liable on summary conviction to a fine not exceeding level 3 on the standard scale. You should seek independent legal advice if you have any queries or concerns about this.

By section 176 of the Act a person with an interest in land is entitled to compensation from the acquiring authority for damage as a result of the exercise of the power conferred in section 172. An extract of section 176 is copied below, and we would suggest that you seek independent legal advice if you have any queries or concerns about this.

Housing and Planning Act 2016

Section 176 - Right to compensation after entry on or survey of land

(1) A person interested in land is entitled to compensation from the acquiring authority for damage as a result of the exercise of the power conferred by section 172.

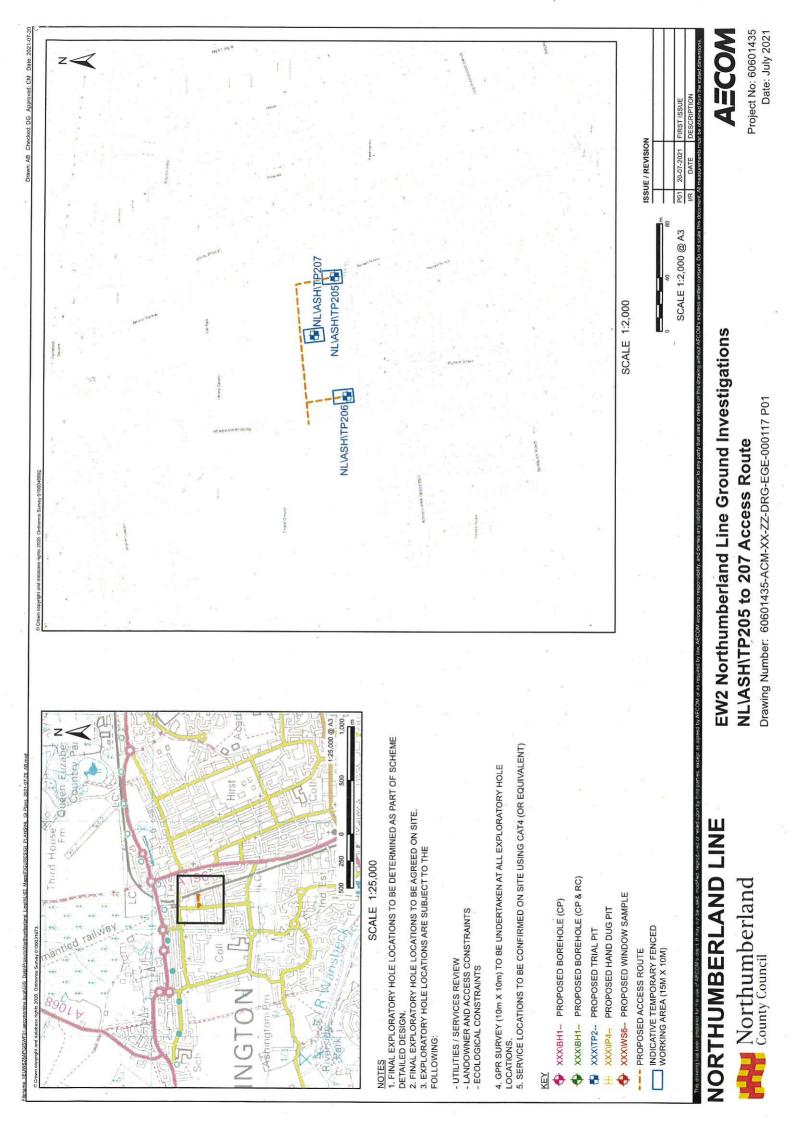
(2) Any disputes relating to compensation under this section are to be determined by the Upper Tribunal.

(3) The provisions of section 4 of the Land Compensation Act 1961 apply to the determination of such disputes, with any necessary modifications.

Please confirm by return that you will not prevent, or attempt to prevent, the Council's exercise of the power conferred by section 172 of the Act. If there are any gates or other means of restricting access to the Site, please provide details of how the Council may gain access.

Yours faithfully

Paul Stevens Lawyer, for & on behalf of Northumberland County Council



Haldane Street: 23 spaces (1 disabled, 2 M/C, 20 regular). 0.19 miles, 5 minute walk.



Woodhorn Road: 144 spaces (5 disabled, 1 M/C, 138 regular). 0.35 miles, 8 minute walk.

John Street: 78 spaces (8 disabled, 4 taxi only, 66 regular). 0.05 miles, 1 minute walk.

Dairy House: 45 spaces (2 disabled, 43 regular). 0.13 miles, 3 minute walk.

A.L.C (Peoples Park): 170 spaces (11 disabled, 159 regular). 0.46 miles, 9 minute walk.

> Park Road: 40 spaces. 0.28 miles, 6 minute walk.

> > Cricket Club: 29 spaces (1 disabled, 28 regular). 0.07 miles, 1 minute walk.

Station location



Document Number	36706-RAMS-04a v01
Document Title	Machine Excavated Trial Pits RAMS
AECOM Project Number	60601435
Project Title	Northumberland Line – AiP Phase Part ii and Phase 2 Ground
	Investigation – Off Track
Site Address	Multiple Sites – Northumberland Park, Seaton Delaval, Blyth
	Bebside, Bedlington and Ashington
Start date of Works	October 2021
End date of Works	December 2021

Revision	Originator (G	EL)	Approved by (GEL)	Date
v01	David Owen		Martyn Brocklesby	01 October 2021
Revision record				
Revision no.	Date	Date of next review	Details of revision	

SCOPE OF WORKS

As part of the ground investigation, machine excavated trial pits are scheduled for completion at various locations within the site. The trial pits will be excavated using a 180° wheeled excavator. Where required in accordance with the Specification, dynamic cone penetrometer testing will be undertaken within or adjacent to the excavations.

PROJECT SPECIFIC	PROJECT SPECIFIC HAZARDS / RISKS / ENVIRONMENTAL FACTORS (Check as appropriate and add as												
necessary)													
Underground	\square	Overhead services	\square	Contaminated	\square	Contaminated water	\square						
Services				ground									
Confirmed	\boxtimes	Suspected asbestos	\square	Bodies of water		Water courses							
asbestos													
Unstable ground	\boxtimes	Working at height	\square	Manual handling	\boxtimes	Biohazards including							
						sharps							
Vehicles / Live	\square	Excessive Noise		Tools and equipment		Plant and machinery	\boxtimes						
traffic													
Lone Working	\square	Confined spaces		Difficult access /	\square	Vagrants							
				egress									
Members of the	\square	Children		Vulnerable adults		Vehicle recovery	\boxtimes						
public													
Ticks / Lyme		Livestock	\square	Unexploded		Anti-social behaviour	\square						
disease				ordnance									
Leptospirosis	\square	Invasive species		Interface with other		COVID-19	\square						
				construction works									
Instruction: For e	ach F	Hazard / Risk / Enviro	onmei	ntal Factor selected a	bove	, detail where, when	and						
how this will be e	ncour	ntered/controlled du	ring tł	ne planned scope of w	orks.								



Underground services: Utility tracing surveys will be undertaken in accordance with PAS128 and a Permit to Dig will be provided for all exploratory hole locations. All machine excavated trial pits will be set out to avoid all known services. Please refer to the relevant risk assessment and method statement.

Overhead services: All overhead lines will be considered to be live unless expressly informed otherwise by the statutory providers. Where access routes are required to pass beneath overhead lines, telescopic goalposts will be erected (to mark the necessary clearance heights defined by the utility company in accordance with GS6 guidance) and blue cones will be used to mark the crossing points and approaches. Please refer to the relevant risk assessment and method statement.

Contaminated ground and water: Works will be undertaken in accordance with the YELLOW site risk assessment and method statements.

Asbestos: All site staff will be asbestos in soils or asbestos awareness trained as appropriate. Please refer to the risk assessment and method statement.

Unstable ground: Trial pit excavation works will be suspended where excessive side wall collapse occurs, ground surfaces are undermined or where water ingress leads to instability and or obscures the material being excavated. Please refer to the risk assessment and method statement.

Work at Height: Machine operators will face the cab and maintain three points of contact when mounting and dismounting the machine in accordance with the Operator's Manual. Heavy-duty safety trellis will be deployed over the narrow end of an open excavation before it is approached by the site engineer for the purposes of inspection or to take depth measurements. Please refer to the method statement and risk assessment.

Manual handling: Mechanical means of lifting or moving equipment or materials will be used wherever possible. All site staff will be manual handling trained. Please refer to the risk assessment and method statement.

Vehicles / Live traffic: Site staff will exercise care when entering / exiting vehicles, crossing or working close to highways. Vehicles will be parked courteously and in a position of safety as far away from the highway as possible. All commercial vehicles and plant movements will be marshalled when reversing or manoeuvring in difficult areas on site by a vehicle and plant marshal. Other reversing activities will be overseen by operatives who have undertaken appropriate awareness training. Please refer to the risk assessment and method statement.

Plant and machinery: Plant and machinery will be inspected daily and the inspection will be recorded. Staff will be advised of any additional plant / vehicle movements that are planned or anticipated during the Task Briefing. Please refer to the corresponding risk assessment and method statement.

Difficult access / egress and vehicle recovery: Access routes will be agreed in advance. Particular care and attention will be paid when using narrow, rural routes. Access routes will be inspected for areas where underfoot conditions are poor (rough terrain, waterlogged ground, obstructions, adverse cambers, slip, trip and fall hazards etc.). In the event of a vehicle becoming stuck, no recovery should proceed until such times as a safe system of work is established and agreed (in writing where necessary). Please refer to the corresponding risk assessment.

COVID-19: Construction works will only proceed where strict adherence to Government and industry guidelines can be achieved and in accordance with AECOM's policy documents. Please refer to the method statement and risk assessment.



REFERENCE DOCUMENTS	
DOCUMENT NAME	DOCUMENT ID NUMBER
AECOM CPP	EC-SHE-FO-132-NBL PH2 Scheme_CPP
Northumberland Line Phase 2 All work sites RAMS	36706-RAMS-00
Northumberland Line Phase 2 COVID-19 RAMS	36706-RAMS-41
Northumberland Line Phase 2 Working on	36706-RAMS-050a
Contaminated Land (SISG Yellow Site)	
Northumberland Line Phase 2 Working on	36706-RAMS-050b
Contaminated Land (SISG Red Site)	

SUBCONTRACT AND THIRD-PARTY WORKS

Trial pitting activities will be subcontracted in terms of plant hire. The excavator and operator will be provided by D&K Plant. D&K Plant have been vetted by the Company and appear on our Approved Subcontractor's database.

AREAS OF WORKS

Machine excavated trial pitting will be undertaken at exploratory hole locations as detailed in Schedule 2 of the Specification at the positions shown on the site plans.

Welfare facilities will be available at the main site compound locations (provided and maintained by AECOM) and at selected access points using mobile welfare vehicles or units (provided and maintained by GEL).

ADDITIONAL TASK SPECIFIC PLANT / VEHICLES / EQUIPMENT

The following additional equipment will be provided for the machine excavated trial pitting works:

• Heavy duty trellis.

For dynamic cone penetrometer testing:

• Dynamic cone penetrometer testing equipment including hand-held slide hammer and extension rods.

ADDITIONAL SAFE SYSTEM OF WORK

The following additional elements will be embedded into the safe system of work outlined for the machine excavated trial pitting works:

- 1. Where specified, dynamic cone penetrometer testing will be undertaken prior to commencement of trial pitting operations.
- 2. The hand-held test equipment will be operated by the GEL site engineer using threaded rods and a slide hammer to obtain in-situ test data to shallow (<2.0m) depth.
- 3. Hands and arms will be kept clear of the anvil surfaces as the drop weight is deployed. Tests will be terminated where no effective rod penetration is achieved after 20 blows of the slide hammer.
- 4. When taking depth measurements from an open excavation, the GEL site engineer (with the assistance of the excavator operator or monitoring technician) will place heavy-duty trellis across the nearest narrow section of the trial pit to provide fall protection.
- 5. The safety trellis will be extended to a width twice that of the excavation and laid over the end of the trial pit. Care will be taken to ensure that the extending trellis does not cause pinch or trap injuries.



- 6. The safety trellis will be removed prior to photographs being taken of the trial pit, so as not to obscure the sidewalls or image of the open excavation.
- 7. Photographs will be taken from a position of safety, >2.0m away from the edge of the narrow end of the open excavation, at a location adjacent to the excavator. Photographs of the spoil heap will be taken from a position well away from the open excavation.



BACKGROUND

This method statement describes the procedures to be followed when digging trial pits using mechanical excavators.

The trial pits will be excavated using operated plant typically from small, 1.5t, rubber tracked machines through to larger 20t tracked 360° excavators. More commonly, the JCB 3CX type wheeled excavator with a 180° backhoe (back actor) will be employed. *Breaking out of hardstanding may be carried out using a hydraulic breaker attachment*.

Trial pits are excavated in layers and the spoil stockpiled alongside the pit. During excavation, the pit is logged and sub-sampled and in situ testing carried out in accordance with BS5930. On completion, the trial pit is backfilled in layers compacted using the excavator bucket and the spoil left proud to accommodate future settlement. *Where required, the surface may be fully reinstated*.

This Method Statement should be read in conjunction with the relevant Risk Assessment. Elements of this Method Statement shown in italics may apply according to site specific and contractual arrangements.

RESOURCES		
POSITION	RESPONSIBILITIES	TRAINING AND QUALIFICATIONS
GEL site engineer	Supervision of excavator driver. Provision of Permit to Dig and work instructions. Oversee vehicle manoeuvres.	Safety critical medical CSCS Asbestos in Soils Safe Driving Awareness Save excavation and Buried Services Awareness. Manual Handling. First Aid at Work Fire Marshal Level 2 risk assessment Vehicle and Plant Marshal qualification (for those undertaking marshalling activities)
Sub-Contract plant operators	Operation of excavator. Undertake trial pitting operations and other fieldwork activity as appropriate.	Safety critical medical CPCS or NPORS

TASK SPECIFIC PLANT / VEHICLES / EQUIPMENT

The trial pitting activities will be undertaken using the following:

- Mechanical excavator, complete with appropriate toothed or toothless buckets.
- Hydraulic breaker.
- Fencing or temporary barriers for trial pits excavated and backfilled in a single shift.
- Chapter 8 barriers and pedestrian barriers; to delineate GEL site engineer safety zone during excavation works.
- Sampling, testing, and measuring equipment.

The excavator including all safety devices will be inspected daily by the plant operator. Inspections will be recorded. The seat belt will always be worn by the driver during machine operation activities. Where



appropriate, excavators may be fitted with fully automatic, double locking quick hitches with an in-cab audible alarm. The equipment is also subject to a planned preventative maintenance scheme in line with the manufacture's maintenance manual.

The following additional safety information will be considered and adhered to as appropriate:

- The appropriate bucket will be attached to the boom arm for each operation.
- All plant will be isolated between shifts. Where possible window shields will also be used when plant is exposed to the risk of vandalism.

SERVICE INFORMATION

For modern installations, a national coding system for buried services has been agreed by most utilities. In summary, the system is as follows:

- Black: Electricity, Red: Electricity some high voltage cable
- Orange: Street Lighting & Traffic Control Cables
- Blue: Water
- Yellow: Gas
- Grey or White: Telecommunications
- Green: Cable TV and some Telecommunications

Where there is any doubt about the identity of an exposed service it will be treated as an electricity cable or gas pipe until proved otherwise.

TASK SPECIFIC MATERIALS INCLUDING COSHH

The following task specific materials will be used during works:

- Diesel.
- Engine oil.
- Hydraulic oil.
- Grease.

TASK SPECIFIC PERSONAL PROTECTIVE EQUIPMENT (PPE) / RESPIRATORY PROTECTIVE EQUIPMENT (RPE)

In addition to mandatory 5-point PPE (safety hard hat, light eye protection, high visibility clothing, safety boots and gloves), the following additional task specific PPE will be provided and worn by site staff as and when indicated.

GRADE / TYPE OF PPE REQUIRE	TASK	
Eye protection		
Gloves		
RPE		
Ear protection	Hard hat mounted ear defenders	During breaking out activities
Overalls		

The adequacy of PPE will be continually monitored, and works shall cease if the levels of protection are deemed inadequate by any member of the site teams.



SAFE SYSTEM OF WORK

This safe system of work will be undertaken sequentially in the order shown unless otherwise instructed / necessary.

- 1. All staff will be briefed or will discuss at the commencement of each shift the proposed works, access points and sequencing of operations for the day. Specific hazards for each intended area of works and measures in place to manage the hazards will be discussed.
- 2. Hazards associated with the public highway will be identified and communicated in any briefings. Particular attention will be paid on narrow, rural routes where heavy or light goods vehicle require access and egress. Only defined and agreed routes will be used.
- 3. All vehicle movements, particularly reversing, will be marshalled by a trained member of the site team. Vehicles will be parked considerately and in designated areas.
- 4. Lone working will not be permitted other than when driving.
- 5. All equipment will be inspected prior to use. Any damaged or faulty equipment will be reported and replaced or repaired prior to use.
- 6. Site staff will be suitably experienced to use the tools and equipment required to complete the given task in accordance with the manufacturer's instruction. Tools will be inspected before use and stored neatly (to eliminate trip hazards) and removed from the work areas after each shift.
- 7. The site engineer MUST be in receipt of a current and valid GEL Permit to Dig for the project or particular exploratory position.
- 8. All materials and equipment will be taken to the work site by mechanical means were possible in order to minimise manual handling.
- 9. All staff will visually inspect the work site for sharps. Sharps will not be touched. Where contact is made inadvertently, site staff will irrigate wounds with fresh potable water and seek urgent medical attention.
- 10. All available service plans and other suitable information regarding underground services in the area (including hazard plan or hazard directory if available) will be referred to when the work is planned and will be available on site when locating exploratory hole positions. It should be noted that service connections from a main service to a building or streetlight may not be shown on drawings.
- 11. A visual inspection of proposed exploratory location will be undertaken by the GEL site engineer to identify potential underground hazards. For example, positions should be relocated if they fall within the line of two inspection covers or are close to other signs of service connections (e.g., telegraph poles).
- 12. Locations MUST be set out to <u>avoid</u> the known or traced location of underground services by the GEL (or Client) site supervisor using a CAT and signal generator or utility clearance survey.
- 13. Locations MUST be scanned with a CAT by a trained operative prior to commencement of excavation. If underground services, are detected the GEL site or contract management team will be informed immediately and before continuing further. The Permit to Dig MUST be signed off by the GEL site engineer on completion of the final CAT scan for the exploratory hole(s) to which it refers.
- 14. Temporary fencing and appropriate signage may be erected around the work site to demarcate the area and / or prevent access by unauthorised persons as necessary.
- 15. The appropriate bucket / breaker will be attached to the boom arm for each operation. After the bucket has been attached, locked and physically checked, any quick hitch will be shaken vigorously to ensure that the bucket is secured. The GEL site engineer MUST witness the operative installing the locking pin when attachments are changed.
- 16. The excavator will be positioned at the exploratory hole and any stabilising jacks deployed.
- 17. Where breaking out is required, the operator will visually inspect the equipment and hose connections prior to use. The driver will ensure that all steels are fit for purpose. Any equipment that shows signs of damage or excessive wear will be replaced.



- 18. A minimum of three pedestrian barriers will be set up with the centre barrier positioned 2m back and parallel to the narrow end of the pit opposite the excavator position. The central barrier will have panels at either side, positioned at a 45° angle facing towards the excavator. The GEL site engineer will stand within this cordon during <u>all</u> digging activities. The GEL site engineer will only approach the pit when the excavator has stopped, and the bucket is placed firmly on the ground adjacent to the excavation.
- 19. Mechanical excavation for the first 1.5m (or deeper in Made Ground or where the risk of encountering services exists) will be undertaken in thin layers (<~100mm), using a toothless bucket, with repeat CAT scans undertaken as excavation progresses but only where the pit depth is less than waist height and where there is no significant water ingress or signs of instability.
- 20. If a service is uncovered, work MUST stop, the service will be assumed to be live, and the GEL site or management team will be informed immediately. The operational crew MUST not proceed until they are instructed to do so, and only when <u>they</u> consider it is safe to carry on.
- 21. A toothed bucket may only be used when the risk of encountering services has been eliminated (at greater than 1.5m depth) and subject to the completion of a Dynamic Risk assessment, where ground conditions dictate that progress with a toothless bucket is impracticable. Excavation thicknesses can also increase at this point up to a maximum of 300mm.
- 22. Arisings will be stockpiled adjacent to the trial pit where they will not cause a trip hazard and where they do not surcharge the sidewall of the pit. Spoil will be placed as far away as the excavator can reach. *Plastic sheeting or ground protection (plywood sheeting) may be used if the contract dictates.*
- 23. When taking depth measurements, the machine will be turned off and the bucket rested on the floor. The GEL site engineer will approach the nearest narrow section of the trial pit and take measurements whilst kneeling down.
- 24. The GEL site engineer will take samples and carry out in situ testing (hand vanes and pocket penetrometer tests) from the trial pit sides to a maximum depth of waist height and only if the pit is stable and a suitable escape route is available. No man entry into unstable pits is permitted, and in these circumstances (and where the pit is too deep), samples will be obtained from material in the excavator bucket.
- 25. In the event of sampling from the excavator bucket, the bucket MUST be placed on the ground and the excavator fully isolated. The driver will only recommence machine operations once sampling work is complete and only when instructed to do so the by the site engineer.
- 26. The working area around the excavation will be kept clear of any trip hazards.
- 27. When approaching an open excavation, site staff will position themselves directly in line of sight of the excavator operator and away from the long edge of the excavation. They will avoid standing between the spoil heap and the open pit. A close watch of the excavation sides will be maintained. Where significant instability or undermining is encountered, the trial pit excavation will be halted and the pit carefully backfilled.
- 28. On completion of the excavation exercise and when man entry into shallow (less than waist height) pit is required, the machine will be turned off and the bucket rested on the floor.
- 29. Where required, the GEL site engineer will take photographs of the spoil heap and trial pit sides incorporating a suitable colour chart and scale in the image. The measuring staff will be carefully lowered into the narrow end of the pit whilst kneeling.
- 30. Once all technical information has been obtained and recorded, the trial pit will be backfilled in layers and compacted using the excavator bucket. The trial pits will be left proud to accommodate the inevitable settlement of the backfill. The GEL site engineer must be satisfied that the area does not pose a future trip hazard prior to leaving the site of works.
- 31. All plant will be isolated between shifts. Where possible window shields will also be used.
- 32. No open pits will be left unattended.



ENVIRONMENTAL PROTECTION

The following environmental protection arrangements will be in place:

- All arisings may be stockpiled on plastic sheeting / tarpaulins and ground protection boarding.
- A fully stocked spill-kit will be available at each trial pit location. All spills will be reported on the daily log and to the GEL site engineer.

HEALTH, SAFETY AND ENVIRONMENTAL HOLD POINTS

A "Hold Point" is an event which is experienced by the site team whereby they will stop the works and seek clarification on how to proceed from a senior or specialist member of staff before continuing.

NUMBER	HOLD POINT DESCRIPTION	ACTIONS REQUIRED	BY WHOM	
1	Encountering unknown or unexpected obstruction or service within excavation.	Stop work and seek clarification from the GEL site supervisor before proceeding.	GEL engineer	site
2	Where a deviation from a standard working practice occurs.	Cease work and complete a dynamic risk assessment. Where necessary, seek clarification from the GEL site supervisor before continuing.	GEL engineer	site
3	Lone working – any issue where a member of site staff would be alone (i.e., out of line of sight) on any part of the site.	Lone working is not permitted during machine excavation works. Works MUST cease until a revised safe system of work is established.	GEL engineer	site
4	Encountering suspected Asbestos Containing Material (ACM) or unexpected ground contamination.	Stop work and seek clarification from the GEL site supervisor before proceeding.	GEL engineer	site
5	Significant excavation instability (sidewall spalling) or where ground surfaces are undermined.	Terminate excavation, obtain necessary technical information where it is safe to do so, and backfill pit.	GEL engineer	site
6	Significant ingress or water which obscures the base of the pit (or causes excessive instability).	Terminate excavation, obtain necessary technical information where it is safe to do so, and backfill pit.	GEL engineer	site
7	Where ground conditions dictate the use of a toothed bucket	Cease work and complete a dynamic risk assessment. Where necessary, seek clarification from the GEL site supervisor before continuing.	GEL engineer	site
8				



Details of instructions given / received in relation to hold points:

REFEF	RENCE DOCUMENTS
1	COSHH Assessments - HSC01, 06, 10 & 20
2	GEL Dynamic Risk Assessment - RAd
3	GEL Risk Register - RA00
4	Service Avoidance Procedure - HSP08



PROJECT NAME	NORTHUMBERLAND LINE	PHASE 2 GROUND	CONTRACT NUMBER			36706	DATE	01-Oct	-21				
DEVELOPMENT TEAM	(NAME & POSITION)		REVIE	WED B	Y (NAME	& POSITION) REVISION							
David Owen	Contract manager		Martyn Brocklesby			Contract director	v01						
						Safety boots; safety helmet; cut level 5 safety gloves; light eye protecti vest / jacket; high visibility trousers Minimum PPE not required for the following activities: Driving PPE free zones in compound areas	on; high visibilit	-					
LIKELIHOOD SEVERITY		; Probable (4) ; Occasional (3); Im				Risk is unacceptable		16 to 25					
RISK	(S) Catastrophi (R) LIKELIHOOD	c (5); Major (4); Reportable (3); Se x SEVERITY	erious (2)	; Minor	(1)	Stop and consider controls before proceeding. Can controls be improved? Risk is tolerable		9 to 15 1 to 8					
		Who might be harmed	Initi	Initial assessment				Risk after controls					
Activity	What are the hazards?	and how?	L	S	R	Risk control measure	Responsibility		S	R			
Machine excavated trial pits	Conflict with pedestrians, road traffic and other site activities	All site staff may suffer serious injury in the event of conflict	3	4	12	 An agreed meeting point will be established ahead of attending site. Site staff will adhere to specific instructions (including details of any traffic management plans) identified during the task briefing given by GEL site supervisor and in the induction given by AECOM. Vehicles will be parked so as not to cause any hazard or physical obstruction to other vehicles / access points or to obscure any visibility that may be required by other road users and on suitable surfaces. Reverse parking will be undertaken wherever possible. All vehicle movements will be marshalled by a suitably qualified member of the site team. Hazard lights and amber beacons are to be used for all access and egress off the public highway. Gates / barriers are to be closed and secured if they have been opened by operatives for the purposes of gaining access. 		1	4	4			



Activity	What are the hazards?	Who might be harmed	Initia	al asses	sment	Risk control measure	Responsibility	Risk a	fter co	ntrols
ACTIVITY	what are the hazarus?	and how?	L	S	R	Kisk control measure	Responsibility	L	S	R
Machine excavated trial pits	Busy urban areas and narrow rural roads	All site staff and the general public may suffer injury in the event of an incident or accident	3	3	9	plant and this information will be briefed to site staff.	GEL site engineer and excavator operator	1	3	3
Machine excavated trial pits	Conflict with other site activities / vehicles	All site staff may suffer serious injury in the event of a collision	3	3	9	2. Hazard lights and amber beacons are to be used when moving to	GEL site engineer and excavator operator	1	3	3
Machine excavated trial pits	Vehicle and plant movements on site	Staff and third parties may suffer serious injury in the event of an incident of accident	3	4	12	 All drivers will have completed safe driving awareness training. All vehicle movements, particularly reversing, will be marshalled by 	GEL site engineer and excavator operator	1	4	4
Machine excavated trial pits	Poor underfoot conditions	All site staff may suffer injury or vehicle or equipment damage where underfoot conditions are poor or deteriorate significantly	3	3	9	hazards prior to works commencing.	GEL site engineer and excavator operator	1	3	3
Machine excavated trial pits	Overhead power lines	All site staff may suffer serious injury in the event of contact with overhead power cables	3	5	15	 Where it is possible, alterative access routes will be established to remove the risk of tracking under overhead lines. Where there is no alternative to tracking below an overhead line, blue cones (to mark the approaches) and GS6 height restriction goalposts will be erected in accordance with the voltage being carried by the overhead line and the overhead lines clearances set out by the statutory provider. All vehicle and plant movements will be marshalled by a suitably qualified member of the site team. 	Excavator operator	1	5	5



A	What are the hazards?	Who might be harmed	Initia	al asses	sment	Risk control measure		Risk a	fter co	ntrols
Activity	what are the hazards?	and how?	L	S	R	- Risk control measure	Responsibility	L	S	R
Machine excavated trial pits	Off-road driving	All site staff may suffer injury in the event of an incident or accident	2	4	8		GEL site engineer	1	4	4
Machine excavated trial pits	Sites with livestock	Sites staff, third parties and animals could be injured where conflict exists	3	3	9		Operational crew	1	3	3
Machine excavated trial pits	Encountering unexpected services	Services may be damaged and site staff may suffer serious injury in the event of conflict with a live service	4	5	20	 All exploratory hole locations will be surveyed using GPR and electromagnetic techniques by a utility tracing crew and will be set out to <u>avoid</u> buried services. Machine excavation will only commence once an operational crew is in receipt of a valid Permit to Dig from AECOM. 	GEL site engineer	2	5	10
Machine excavated trial pits	Encountering ground contamination	All site staff and the environment causing health issues or environmental damage	3	3	9		GEL site engineer	1	3	3



A ativity	What are the hazards?	Who might be harmed	Initia	al asses	sment	- Risk control measure	Responsibility	Risk a	fter co	ontrols
Activity		and how?	L	S	R	Risk control measure	Responsibility	L	S	R
Machine excavated trial pits	Excavation left open	Site staff or members of the public may suffer serious, possible fatal injury if they fell into an open excavation	3	5	15		GEL site engineer	1	5	5
Machine excavated trial pits	Approaching an open excavation for the purposes of depth measurements or inspection	Site staff may suffer serious, possible fatal injury if they fell into an open excavation	3	5	15	 A heavy-duty safety trellis will be deployed by the GEL site engineer with assistance from the excavator operator across the open, narrow end of the excavation prior to depth measurements or inspections being undertaken. The heavy-duty safety trellis will be extended to at least twice the width of the trial pit. Care will be taken when handling the safety trellis to avoid pinch injuries. 	GEL site engineer	1	5	5
Machine excavated trial pits	Lone working	Site staff working alone may suffer further injury or ill health if they are unable to raise the alarm	2	3	6	 Lone working is not permitted at any time. Should a situation arise which may constitute lone working (other than driving between work sites) site staff should consult the GEL site supervisor and AECOM site agent and appropriate alternative arrangements or a documented safe system of work will be established. 	Operational crew	1	3	3



Activity	What are the hazards?	Who might be harmed	Initia	al asses	sment	Risk control measure	Responsibility	Risk a	fter co	ntrols
ACTIVITY	windt die the nazarus:	and how?	L	S	R		Responsibility	L	S	R
Machine excavated trial pits	Manual handling	Site staff could suffer back injury or long term effects from moving heavy or awkward plant and / or equipment	3	3	9	 Mechanical means of lifting plant and equipment will be utilised wherever possible. The size and weight of plant and /or equipment will be assessed, and two-person lifts undertaken where necessary. Members of staff will only complete a manual handling task where they consider it to be within their physical capability, in appropriate conditions and where the risk of injury has been mitigated. Site staff will be manual handling trained. 	Operational crew	1	3	3
Machine excavated trial pits	COVID-19	All site staff may suffer serious ill-health in the event that they contract or potentially spread the virus at work	4	4	16	 All site staff will adhere strictly to the control measures defined in the COVID-19 method statement and risk assessment documents and as outlined in the AECOM CPP and policy documents. 	Operational crew	2	4	8



PROJECT NAME	NORTHUMBE		PHASE 2 GROUND	CONT	RACT N	UMBER	36706	DATE	01-Oc	t-21	
DEVELOPMENT TEAM	(NAME & POSI	TION)		REVIE	WED BY	(NAME	E & POSITION) REVISION				
David Owen	Contract mana	ager		Marty	n Brock	lesby	Contract director	v01			
			QUIPMENT (SEE CONTROL N	<u>IEASU</u>	KES FOF	TASK-S	PECIFIC REQUIREMENTS) Safety boots; safety helmet; cut level 5 safety gloves; light eye protectivest / jacket; high visibility trousers Minimum PPE not required for the following activities: Driving PPE free zones in compound areas	ion; high visibilit	y		
LIKELIHOOD	(L)	Frequent (5)); Probable (4) ; Occasional (3); Im	probabl	e (2); Rer	note (1)	Risk is unacceptable		16 to 25	5	
SEVERITY	(S)	Catastrophi	c (5); Major (4); Reportable (3); Se	rious (2); Minor ((1)	Stop and consider controls before proceeding. Can controls be improved?		9 to 15		
RISK	(R)	LIKELIHOOD	x SEVERITY				Risk is tolerable		1 to 8		
			Who might be harmed	Initi	al asses	sment			Risk a	after co	ontrols
Activity	What are the	nazards?	and how?	L	S	R	- Risk control measure	Responsibility	L	S	R
Machine excavated trial pits	Insufficient plar	nning	Staff and third parties may suffer serious, possible fatal injuries if a buried service is damaged	3	4	12	 The Permit to Dig will be in place for the specific exploratory hole location. All available plans and other suitable information regarding underground services in the area of concern will be referred to when work is planned and made available on site when locating exploratory holes. 	GEL site engineer	1	4	4
Machine excavated trial pits	Striking buried s	services	Staff and third parties may suffer serious, possible fatal injuries if a buried service is damaged	3	4	12	 A visual inspection of proposed exploratory locations will be undertaken to identify potential underground hazards. Positions will be set out to <u>avoid</u> the known or traced location of underground services. Locations will be scanned with a CAT and Genny. If underground services are detected the Principal Conmtractor will be informed before works proceeding. At least one member of each operational crew shall be in possession of a current and valid service avoidance (CAT) training certificate. Where suitable, routes of services will be marked on the ground surface with waterproof crayon, chalk or paint. 	GEL site engineer	1	4	4



Activity	What are the hazards?	Who might be harmed	Initia	al asses	sment	Risk control measure	Responsibility	Risk a	fter co	ntrols
ACTIVITY	what are the hazarus?	and how?	L	S	R	Kisk control measure	Responsibility	L	S	R
Machine excavated trial pits	Uncovering a buried service	Staff and third parties (including members of public) may suffer serious, possible fatal injuries if a buried service is damaged	3	4	12	 A CAT and Genny will be used at regular intervals where safe and practical to do so (i.e., excavations are stable and unlikely to collapse). Man entry to the pit for the purposes of a CAT scan is strictly prohibited. Where a CAT indicates the presence of buried service, work should be suspended until approval to proceed has been agreed with the Principal Contractor. If accidental damage of a service is caused or suspected, the Principal Contractor will be informed. No works shall proceed in the vicininty of the excavation unit! a revised safe system of work has been agreed and documented in writing where necessary. 	GEL site engineer	1	4	4
Machine excavated trial pits	Operator competence	Staff, driver and third parties may suffer serious injury in the event of an accident	4	4	16	 Only competent and approved personnel will be permitted to operate excavators. The validity of the driver's CPCS card or equivalent, and that it is relevant to the machine being used, will be checked by the GEL site supervisor. The excavator will be operated in accordance with the manufacturer's instructions, and within its operational limits. The excavator will be imobilised with the bucket placed on the ground and ground surfaces protected by a plant nappy between shifts. The driver / operator will use the seat belt at all times when operating the excavator. 	GEL site engineer	1	4	4
Machine excavated trial pits	Mechanical breakdown	Staff, driver and third parties may suffer serious injury in the event of a mechanical breakdown	4	4	16	 The excavator will be maintained in accordance with the manufacturer's requirements, and inspected in accordance PUWER. The operator will complete a daily mobile plant inspection prior to use. The operator will stay alert to any indication of mechanical fault developing during use e.g. exhaust fumes, vibrations, hydraulic leaks / hose wear or other symptoms. Defective equipment or accessories will be immediately removed from service. 	Excavator operator	1	4	4



Activity What are the hazards?		Who might be harmed	Initial assessment		ssment	Risk control measure	Description	Risk a	fter co	ntrols
Activity	what are the hazards?	and how?	L	S	R	Risk control measure	Responsibility	L	S	R
Machine excavated trial pits	Fall from height	Excavator operator could suffer serious injury in the event of a fall from height	3	3	9	 Driver will use access steps and handholds and never jump from the cab. Driver will use nearside cab door whenever possible. Cab floor, doors, pedals and boots will be kept mud-free. Driver will access / egress cab facing inwards so that they have a good grip and visibility. 	Excavator operator	1	3	3
Machine excavated trial pits	Uneven and / or unstable ground	Staff and driver may suffer serious or even fatal injury if the machine overturned	4	4	16	 The access and egress route for all locations will be inspected for obstacles, poor underfoot conditions (soft ground or ruts) and adverse cambers. Site speed limits will be observed at all times. Where ground conditions are uneven or unstable, excavators to be driven at speeds equivalent to walking pace. Routes will be chosen to avoid adverse cambers. Seat belts, where fitted, will be worn at all times by driver. 	Excavator operator	1	4	4
Machine excavated trial pits	Changing bucket and other attachment	Staff and driver may suffer serious injury if attachments become unsecured	3	4	12		GEL site engineer	1	4	4



Activity	What are the hazards?	Who might be harmed		al asses	sment	Risk control measure	Responsibility	Risk after cor		ntrols
ACTIVITY	what are the hazarus?	and how?	L	S	R	Risk control measure	Responsibility	L	S	R
Machine excavated trial pits	Overhead services / obstructions	Staff and third parties may suffer serious, possible fatal injuries if overhead service or obstruction is struck	3	4	12	 Where it is possible, alterative access routes will be established to remove the risk of tracking under overhead lines. Where there is no alternative to tracking below an overhead line, 	Excavator operator (1) GEL site engineer (2 to 4)	1	4	4
Machine excavated trial pits	Being struck by the excavator bucket or during slewing movements of 360° machines	Staff could suffer serious, possibly fatal injury if struck by plant.	4	4	16	 The GEL site engineer will agree how to communicate with the excavator operator and will ensure the driver is in his line of sight at all times. Hand signals and spoken instructions will be used to stop and machine operations should the need arise. The GEL site engineer will stand behind barrier at the end of the excavation furthest from the machine. Site staff will only approach the excavator once it has stopped and the bucket has been placed on the ground. No one will stand under a raised bucket. Site staff will only approach plant with the express permission of the operator. Site staff will keep well away from the swing zone at the rear of 360° machines. 	GEL site engineer	1	4	4
Machine excavated trial pits	Falling into an open excavation	Site staff could suffer serious injury in the event that they fell into an open excavation	3	5	15	 Site staff will stand behind barriers erected at the narrow end of the excavation furthest away from the machine during all the excavation works. Site staff will only approach an trial pit from the narrowest end, and will kneel down to inspect the open excavation, take depth measurements etc. Trial pit photographs will only be taken from the narrow end of the trial pit. 	GEL site engineer	1	5	5



Activity	What are the hazards?	Who might be harmed	Initia	al asses	sment	Risk control measure	Responsibility	Risk a	fter co	ntrols
ACTIVITY	what are the hazarus?	and how?	L	S	R	Risk control measure	Responsibility	L	S	R
Machine excavated trial pits	Sampling and in situ testing	Staff and driver could suffer serious, possibly fatal injuries if the excavation collapsed	3	5	15		GEL site engineer	1	5	5
Machine excavated trial pits	Sampling from material in the excavator bucket	Site staff could suffer serious injury in the event of inadvertant contact with the excavator jib and / or bucket	4	2	8	when the bucket is set on the ground and the excavator has been isolated. The machine operator will not proceed with further	GEL site engineer and Excavator operator	1	2	2
Machine excavated trial pits	Excavation instability	Staff and driver could suffer serious, possibly fatal injuries if the excavation collapsed	3	5	15	surcharge the excavation. 2. The GEL site engineer will stand, measure and log from the narrow end of the trial pit opposite the excavator and minimise time spent	Exacator operator (1) GEL site engineer (2 to 4)	1	5	5
Machine excavated trial pits	Backfilling	Staff and third parties may suffer sprains or fractures if they slip, trip or fall over backfilled excavations	3	3	9		Excavator operator	1	3	3



Activity	What are the hazards?	Who might be harmed	Initial asses		sment	Risk control measure	Responsibility	Risk a	fter co	ntrols
Activity	windt die the nazarus:	and how?	L	S	R	Kisk control measure	Responsibility	L	S	R
Machine excavated trial pits	Vandalism	Site can be contaminated if fuel siphoned is spilled or machinery is tampered with. Broken glass can cause injury	3	2	6	 Plant will be left secure and isolated between shifts (within site compound areas). The excavator boom to be lowered with bucket placed on the ground when not in use. Any window screens will be installed as necessary between shifts. Anti-vandal fuel caps will be fitted. 	Excavator operator	1	2	2
Machine excavated trial pits	Injury caused by lifting heavy or awkward loads	Site staff may suffer back or limb injuries from lifting samples	3	3	9	 Mechanical means of lifting plant, equipment and samples will be utilised wherever possible (e.g., the excavator bucket) The size and weight of plant, equipment and samples will be assessed, and two-person lifts undertaken where necessary. Members of staff will only complete a manual handling task where they consider it to be within their physical capability, in appropriate conditions and where the risk of injury has been mitigated. Vehicles will be moved as close to the working area as posisble (and safe to do so) to minimise carrying distances. Multiple smaller samples will be obtained to minimise sample weights. Site staff will ensure that work areas are free from trip hazards. Site staff will be manual handling trained. 	GEL site engineer	1	3	3
Lightweight deflectometer testing	Manually lifting drop weight	Staff could suffer back pain from lifting the drop weight	3	3	9	 Site staff will stand close to the unit whilst raising the drop weight on the testing equipment. Knees will be bent and back kept straight as the drop weight is lifted. 	GEL site engineer	1	3	3
Lightweight deflectometer testing	Impact, pinching and crush injuries	Staff could suffer serious impact, trapping, pinching or crushing injuries when handling the drop weight	3	3	9	 Site staff will not insert hands between the drop weight and instrumented plate surfaces. Hands, arms and feet will be clear of the equipment before deploying the drop weight. 	GEL site engineer	1	3	3



Activity	What are the hazards?	Who might be harmed	Initial assessment			Risk control measure	Responsibility	Risk a	ifter co	ntrols
Activity	what are the hazarus:	and how?	L	S	R	Kisk control measure	Responsibility	L	S	R
Dynamic cone penetrometer testing	Manually lifting slide hammer	Staff could suffer back pain from repetitively lifting slide hammer	4	3	12	 Site staff will stand close to the unit whilst raising the weight on the testing equipment. Knees will be bent and the back kept straight during repetitive use of the slide hammer during the test. If penetration is slow, site staff will take regular breaks and rotate the operation of the testing equipment with other personnel. Repeated tests will not be undertaken in a single shift. Testing will cease if no effective penetration recorded over twenty consecutive blows. 	GEL site engineer	1	3	3
Dynamic cone penetrometer testing	Impact, pinching and crush injuries	Staff could suffer serious impact, trapping, pinching or crushing injuries when handling the slide hammer	4	4	16	 Site staff will not insert hands between hammer and anvils. Hands and arms will be clear of the equipment before operating slide hammer. 	GEL site engineer	1	4	4



PROJECT NAME		IUMBERLAND LINE PHASE 2 C TIGATION	GROUN	ND							01-Oct	-21	
DEVELOPMENT TEAM	(NAME &	& POSITION)				REVIE	NED BY	(NAN	IE & POSITION)	REVISION			
David Owen	Contra	ct manager				Martyr	n Brock	lesby	Contract director	v01			
MINIMUM REQUIRED	PERSON	AL PROTECTIVE EQUIPMENT	(SEE C	ONTRO	L MEAS	SURES F	OR TAS	SK-SPE	CIFIC REQUIREMENTS)				
									Safety boots; safety helmet; cut level 5 safety gloves; light eye protection	on; high visibility			
		nîn -							vest / jacket; high visibility trousers				
									Minimum PPE not required for the following activities:				
									Driving				
									PPE free zones in compound areas				
	(a)							()					
LIKELIHOOD	(L)	Highly probable (5); Probable (4); Po		••••••			•	e (1)	Significant impact - risk is unacceptable		16 to 25		
SEVERITY	(S)	Catastrophic (5); Major (4); Mode	rate (3);	; Minor (2); Insigr	ificant (1	.)		Minor impact - stop and consider controls before proceeding. Can controls be	e improved?	9 to 15		
RISK	(R)	LIKELIHOOD x SEVERITY							Minor or positive impact - no action required		1 to 8		
			C	Conditio	n	Initia	l assess	ment		_	Risk a	fter cor	ntrols
Activity	lask /	Event / Condition	L	S	R	L	S	R	- Risk control measure	Responsibility	L	S	R
Machine excavated trial	Fuel, oil	or lubricant leaks during works	4	4	16	4	4	16	1. When parked, ground surfaces beneath plant will be protected by	GEL site	2	4	8
pits	or wher	n recharging tanks							plant nappies.	supervisor			
									Fully stocked spill kits to be available at work sites.				
									3. In the event of an fuel, oil or lubricant leak, site staff will deploy the				
									spill kits and notify the GEL site supervisor.				
									4. Re-fuelling at the compound will be from a towable bunded bowser				
									with automatic cut off.				

DYNAMIC RISK ASSESSMENT



PROJECT NAME			CONT	RACT			DATE			
			NUME	BER						
DEVELOPMENT TEAM (NAME & POSITION)		REVIE	WED BY	' (NAM	E & POSITION)	REVISION			
MINIMUM REQUIRED F	PERSONAL PROTECTIVE EQ	UIPMENT (SEE CONTROL	MEAS	JRES FO	OR TAS	K-SPECIFIC REQUIREMENTS)				
						Cotton overalls; safety boots; safety helmet; safety gloves; light eye				
			Ŭ			protection Minimum PPE not required for the following activities:				
LIKELIHOOD		; Probable (4) ; Occasional (3);	Improba	ble (2); R	emote	Risk is unacceptable		16 to 25		
SEVERITY		: (5); Major (4); Reportable (3);	Serious	(2); Mino	or (1)	Stop and consider controls before proceeding. Can controls be improved?		9 to 15		
RISK	(R) LIKELIHOOD	x SEVERITY				Risk is tolerable		1 to 8		
Activity	What are the hazards?	Who might be harmed	Initia	l assess	ment	Risk control measure	Responsibility	Risk a	fter co	ntrols
Activity	what are the hazarus:	and how?	L	S	R		Responsibility	L	S	R



PROJECT NAME	NORTHUMBERLAND LINE PHASE 2	CONTRACT	36706	DATE	
	GROUND INVESTIGATION	NUMBER			
amended to ensure the changes are to be record been detailed below, rev	proval and authorisation to proceed with site health and safety of those undertaking the t ded within the table below. During any such viewed and approved by the GEL H&S Mana and date the risk assessment and method s	ask or third parties, or t amendment period the ger / H&S Co-ordinator	o ensure that the site operations works covered by the risk assess	are aligned to this risk assessment method statement must	nent method statement, all such cease, until the amendment has
Sections Amended	Removed Text (strike through amended text)		Added Text	Date Amended	Amendment Approval (name / role) (GEL H&S Manager / Co- ordinator / Project Director / Project Manager)

NCC car parking excluding Station Yard.

		Walk time to station	NCC	NCC expert	VOA 2017 rating
Car Park	Distance from station (miles)	(minutes)	website*	correction*	list
Cricket Club	0.07	1	36	29	29
John Street	0.05	1	97	78	83
Dairy House	0.13	3	54	45	38
Park Road	0.28	6	40	40	Unavailable
Haldane Street	0.19	5	25	23	20
A.L.C (Peoples Park)	0.46	10	150	170	Unavailable
Woodhorn Road	0.35	8	159	144	147
Total			561	529	N/A

*Number of car parking spaces (gross parking spaces inclusive of disabled and taxi)

Existing Station Yard discrepancies

Car park	NCC website	NCC expert	VOA 2017 rating list
Station Yard			
North	147	122	102
Station Yard		122	163
South	74		
Total	221	122	163

Private car parking alternatives

		Distance from		Subject to		
Operator	Name	station	Capacity (spaces)	charge	Operational notes	Other restrictions
						Customer use
Asda	Asda Car Park Lintonville Terrace	0.40	400	Free	3 hours maximum stay	only
					1.5 hours maximum	Customer use
Lidl	Lidl Car Park High Hirst Farm	0.57	127	Free	stay	only
Smart					1.5 hours maximum	
Parking	Pound Stretcher Woodhorn Road	0.32	84	Free	stay	n/a
Total			611			