<b>5</b> .	Site Details	
5.1	What name would you like the site to be known by?  (Please note if the site is currently included within the ALDP2017 please use the OP site number)	Heathvale, Cove
5.2	Site Address	Land to the east of Wellington Road and west of Charleston Crescent Cove Aberdeen
5.3		
5.4	Have you any information for the site on the internet? If so please provide the web address:	Yes / No Details: No
5.5	Is the site currently being marketed?	Yes / No Details: No
5.6	Site Location Map (Please include an OS Map with the Boundary of the site clearly marked)	Details:
5.7	Please provide the National Grid reference of the site.	NJ940008
5.8	What is the current use of the site?	grazing/gorse/scrubland
5.9	Has there been any previous development on the site? If yes please provide details	Yes / No Details: No previous development, but Heathvale cottage is located within the boundary of the site.

6.	Legal and Planning History		
6.1	Please indicate the relationship	Sole owner	
	to the Proposer or Person / Organisation they are working	Part owner	
	on behalf of, has with the site.	Option to purchase	<b>&gt;</b>
		No legal interest	
6.2	Is the site under option to a developer?	Yes / No Details: Yes, under option to Mactaggart & Micke	l Homes
6.3	Is the proposed site included in the ALDP2017?	Yes / No Details: see paper apart	
6.4	Is the proposed site included in the Aberdeen City Centre Masterplan?	Yes / No Details:	
6.5	Has the site been subject of previous discussions with the Council or any agent there of?	Yes / No Details:	
6.6	Has the site been subject of previous Planning Applications? (Please provide a planning reference)	Yes / No Details:	
6.7	Has the site been subject of a previous Bid to a previous LDP? (Please provide the bid reference number)	Yes / No Details: However, a representation was made to temporary Proposed Plan in 2015	he
6.8	Are there any legal restrictions on the title deeds such as rights of way, way leaves etc.	Yes / No Details:	
6.9	Are there any other legal factors that might prevent or restrict development? (e.g. ransom strips / issues with accessing the site etc.)	Yes / No Details:	

7.	Your Proposal		
	(Please provide as much detail as p		
7.1	Proposed Use	Housing	
		Employment	
		Mixed Use	
		Retail	
		Other (Please Specify)	
7.2	Do you have a specific	Yes / No	
	occupier in mind for the	Details:	
	site?	Botano.	
	S. C.		
7.3	Site Area (hectares)	<del>ha-</del> 6.2 ha	
	Haveler		
	Housing		
7.4	Approx. no of units.	120	
7.5	Proposed Mix and Number	A mix of terraced, semi detached, detached houses and flatted	
	(Number of Flats / Terraced /	units would be provided. The exact mix to be determined	
	Semi-detached / detached etc.)	at the detailed design stage.	
7.0	Afficial de la Llaure de la	0/ This would be associated in the control of the least Development Discount	
7.6	Affordable Housing	% This would be provided in line with Local Development Plan	
	Percentage	Policy at the time of a planning application	
	A	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
7.7	Affordable Housing Partner	Yes / No	
	(Details of any partner	Details: Early discussions have taken place with	
	organisation, Registered Social Landlord etc.)	Hillcrest Housing Association	
	Landiord etc.)		
7.8	Tenure	This is unknown at this stage, but would be discussed at the	
	(Details of tenure type, Private	detailed design stage.	
	Rental Sector / private sale /		
	Housing for the elderly etc.)		
	Empley mant		
	Employment		
7.9	Business and Office	m <sup>2</sup> n/a	
7.10	General Industrial	m <sup>2</sup> n/a	
7.11	Storage and distribution	m <sup>2</sup> n/a	
7.12		m <sup>2</sup> n/a	
	i j		
	Mixed Use		
	(Please provide as much detail as p	possible on each use class)	
7.13	Housing	No of units and type:-	
7.14	Employment	m <sup>2</sup> n/a	
7.45	Deteil		
7.15	Retail	m <sup>2</sup> n/a	
	Retail		
7.40			
7.16	Approx. floor area	m <sup>2</sup> n/a	

	Other (Please Specify examples could income and recreation, institutions and edu	clude retailing, tourism, renewable energy, sports, leisure cation.)
7.17	Details of proposal	
7.18	Approx. floor area	m <sup>2</sup>

8.	Engagement and Delivery	
8.1	Has the local community been given the opportunity to influence/partake in the development proposal?	If there has been any community engagement please provide details of the way in which it was carried out and how it has influenced your proposals. If no consultation has yet taken place please detail how you will do so in the future.  Yes / No Details: see paper apart
8.2	Will the proposed development be phased?	Yes / No Details: see paper apart
8.3	Expected development <b>start</b> post adoption of the plan in 2022	Year, 0-5, 6-10, 10+ See paper apart
8.4	Expected development completion	Yea <mark>r, 0-5, 6</mark> -10, 10+ See paper apart
8.5	Is finance in place and if so what form? (Secured Loan, Grant Funding etc.)	Yes / No Details: Finance will be available by the developer at the time of development.
8.6	Are there any other issues with the delivery of the site that we should be made aware of? (These should include any issues which may prevent or impact on the deliverability of the site.)	Yes / No Details:

9.	Sustainable Development and	l Design	
9.1	Have you applied principles of sustainable siting and design to your site? The City Council has produced a Sustainability Checklist which provides guidance on the principles of sustainable siting and design and other issues which can be found on <a href="https://www.aberdeencity.gov.uk">www.aberdeencity.gov.uk</a> . Please provide the following information:		
	Orientation		
9.2	Exposure:- (does the site currently have)	Little shelter from northerly winds Some shelter from northerly winds Good shelter from northerly winds	<b>V</b>
9.3	Aspect:- (is the site mainly)	North facing East or west facing South, south west or south east facing	<b>✓</b>
9.4	Slope:- (do any parts of the site have a gradient greater than 1 in 12?)	Yes  If yes approx. what area (hectares or %)  No	<b>V</b>
	Flooding & Drainage		
9.5	Flooding (is any part of the site at risk of flooding or has it previous flooded, if so provide detail You can view the SEPA flood	Yes (If yes please use the SEPA flood maps to determine the risk) Little or No Risk	<b>✓</b>
	maps at http://map.sepa.org.uk/floodmap/map.htm)	Low to Medium Risk  Medium to High Risk	
		If yes approx. what area (hectares or %)  No	
9.6	Has a flooding strategy been developed for the site?	Yes / No Details:	
9.7	Have discussions been had with the Council's flooding team?	Yes / No Details:	
9.8	Have discussion been had with Scottish Water?	Yes / No Details:	
9.9	Is there waste water capacity for the proposed development? http://www.scottishwater.co.uk/bu siness/Connections/Connecting-your-property/Asset-Capacity-Search)?	Yes / No Details: see paper apart	
9.10	Is there <b>water</b> capacity for the proposed development?	Yes / No Details: see paper apart	

	http://www.scottishwater.co.uk/bu	I	
	siness/Connections/Connecting- your-property/Asset-Capacity- Search)?		
	Search):		
	Land Use, Built and Cultural Her	ritage	
9.11	Built and Cultural Heritage (would the development of the	Significant loss or disturbance	
	site lead to the loss or disturbance of archaeological sites or vernacular or listed	Some potential loss or disturbance	
	buildings?)	No loss or disturbance	<b>~</b>
9.12	Natural conservation (would the development of the	Significant loss or disturbance	
	site lead to the loss or disturbance of wildlife habitats or	Some potential loss or disturbance	see paper apart
	species?)	No loss or disturbance	
9.13	Landscape features (would the development of the	Significant loss or disturbance	
	site lead to the loss or disturbance of linear and group features of woods, tree belts,	Some potential loss or disturbance	see paper apart
	hedges and stone walls?)	No loss or disturbance	
9.14	Landscape fit (would the development be	Significant intrusion	
	intrusive into the surrounding landscape?)	Slight intrusion	
		No intrusion	see paper apart
9.15	Relationship to existing settlements	Unrelated (essentially a new settlement)	
	(how well related will the development be to existing	Partially related	
	settlements?)	Well related to existing settlement	✓
9.16	Land use mix (will the development contribute	No contribution	
	to a balance of land uses, or provide the impetus for attracting	Some contribution	<b>✓</b>
	new facilities?)	Significant contribution	
9.17	Contamination (are there any contamination or	Significant contamination or tipping present	
	waste tipping issues with the site?)	Some potential contamination or tipping present	
		No contamination or tipping present	✓

9.18 Will the site impact on any water courses?  9.19 Does the development site contain carbon-rich soils or peatland?  9.19 http://www.snh.gov.uk/planning-and-development/advice-for-planners-and-developers/soils-and-development/cpp/  9.20 Is the development site within the airport safety exclusion zone?  9.21 Is the development site within the airport 57dB LAeq noise contours?  9.22 Land use conflict (would the development conflict with adjoining land uses or have any air quality or noise issues?)  9.23 If there are significant conflicts, what mitigation measures are proposed?  Transport and Accessibility  9.24 Has contact been made with the Council's transport team?  9.25 Is access required onto a Trunk road and if so has contact been made with Transport Scotland?  9.26 Accessibility  9.27 A contact been made with A contact been made with Transport Scotland?  9.28 A contact been made with A contact been made with Transport Scotland?  9.29 Proximity to services and facilities (How close are any of the following?)  9.29 Frootpath and cycle connections are there any existing direct footpath and cycle connections to include and cycle connections are there any existing direct footpath and cycle connections to include and cycle connections are there any existing direct footpath and cycle connections to include and cycle connections are there any existing direct footpath and cycle connections to include a connections are there any existing direct footpath and cycle connections to include a connections are there any existing direct footpath and cycle connections to include a connections are there any existing direct footpath and cycle connections to include a connections are there any existing direct footpath and cycle connections to include a connections are there any existing direct footpath and cycle connections to include a connections are there any existing direct footpath and cycle connections to include a connections are there any existing direct footpath and cycle connections to include a connections are the	0.40	Mill the site immed on any	LVad (Na				
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9.29	community and recreation facilities or employment? Give the Core Path number if core path is present https://www.aberdeencity.gov.uk/ services/environment/core-paths- plan ) Proximity to employment opportunities (are there any existing	Good range of connections  None  Limited	<b>/</b>
	employment opportunities within 1.6km for people using or living in the development you propose?)	Significant	<b>✓</b>
	Infrastructure		
9.30	Physical Infrastructure (does the site have connections to the following utilities?)	Electricity Gas	no, but these can be provided no, but these can
			be provided
9.31	Does the development have access to high speed broadband?	Yes / No Details: Connections to these can be provided	
9.32	Does the development include a Heat Network/District Heating Scheme?	Yes / No Details: see paper apart	
9.33	How is the development proposing to satisfy the Councils Low and Zero Carbon Policy?	Details: see paper apart	
9.34	Are there any further physical or service infrastructure issues affecting the site?	Yes / No Details:	
	Public open space		
9.35	Will the site provide the required level of open space as per the current LDP (Please provide details of your calculations)	Yes / No Details: see paper apart	
9.36	What impact will the development have on the Green Space Network?	Enhance the Network  No impact on the Network  Negatively impact the Network  Please justify your response: see paper a	apart

10.	Education	
10.1	Have discussions been had with the Council's Education Department?	Yes / No Details:
10.2	Is there currently education capacity for the proposed development? <a href="https://www.aberdeencity.go">https://www.aberdeencity.go</a> <a href="y.uk/">y.uk/</a> <a href="services/education-and-childcare/schools-and-education/schools-pupil-roll-forecasts">https://www.aberdeencity.go</a> <a href="y.uk/">y.uk/</a> <a href="services/education-and-education/schools-pupil-roll-forecasts">services/education-and-education/schools-pupil-roll-forecasts</a>	Yes / No Details: see paper apart

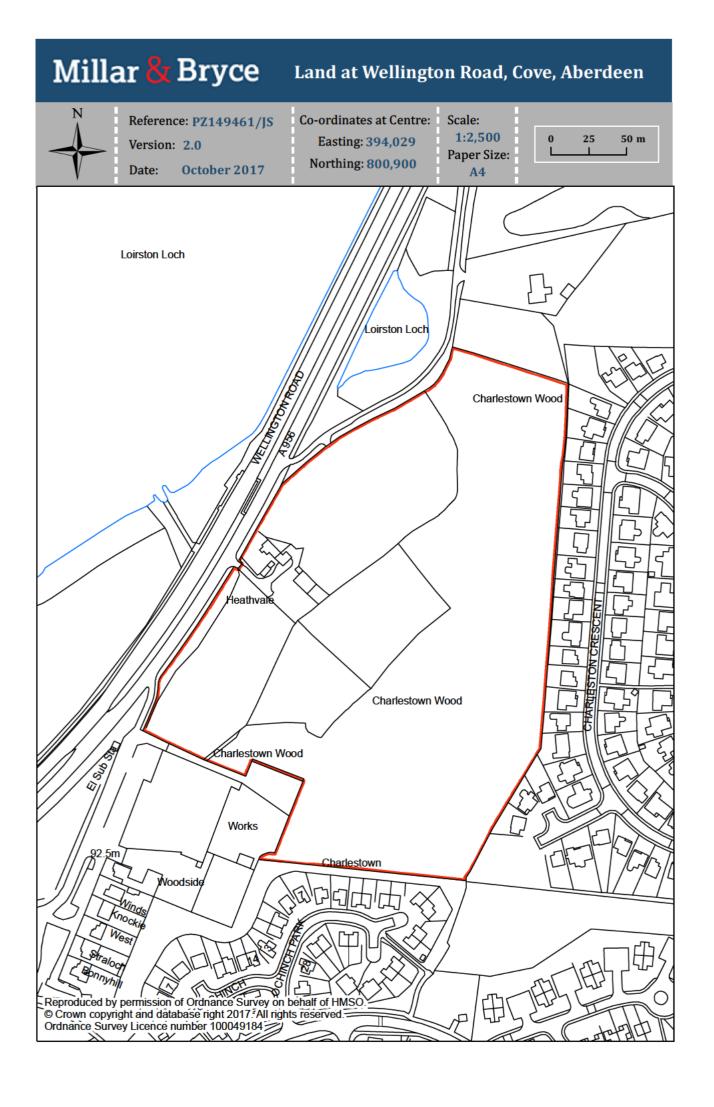
11.	Community benefits	
	education, leisure and community fa open spaces. Include elements whi	w community facilities (such as local shops, health, acilities), affordable housing, green transport links and ich you anticipate may be required as developer.  (Please note, specific contributions will have to be basis of the proposal.)
11.1	Does the development proposal give any benefits to the community? If so what benefits does the development bring, and how would they likely be delivered?	Yes / No Details: see paper apart

12.	Masterplan Development Fram	nework
12.1	If you have prepared a framework or masterplan showing a possible layout for the site, please include it with this form.	Yes / No Details:

13.	Additional attachments		
	No site is going to be perfect and the checklist above potential negative impacts from any development. Whidentified, please provide details of their nature and example undertaken. Listed below are examples of furtincluded in your submission;	ere negative in	npacts are y mitigation that
		Included	Not Applicable
13.1	Contamination Report		
13.2	Flood Risk Assessment		
13.3	Drainage Impact Assessment		
13.4	Habitat/Biodiversity Assessment	<b>✓</b>	

13.5	Landscape Assessment	<b>✓</b>	
13.6	Transport Assessment	<b>&gt;</b>	
13.7	Other as applicable (e.g. trees, noise, dust, smell,	Tree survey Utilities information	
	retail impact assessment etc. please state)	Noise Assessment	

14.	Development Viability		
14.1	Taking into account all the information provided above, and the requirements of the	I confirm that I consider the site to be viable as per the details provided above.	<b>~</b>
	Aberdeen Local Development Plan 2017 and supporting Supplementary Guidance, please confirm that you have assessed the financial viability of your proposed development and found it to be viable for development in the timeframe set out above.	Please provide details of viability: see paper apart	



# ABERDEEN LOCAL DEVELOPMENT PLAN REVIEW PRE-MAIN ISSUES PROPOSAL FOR A SITE TO BE INCLUDED IN THE MAIN ISSUES REPORT

### FURTHER DETAILS IN RESPONSE TO SPECIFIC QUESTIONS RAISED IN THE BID FORM

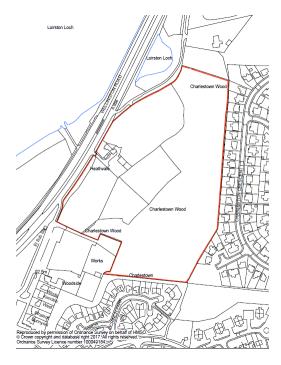
### **HEATHVALE, COVE**

Mactaggart & Mickel are part of the Mactaggart and Mickel Group, a family-owned group of companies whose core business is creating high quality homes while leaving a lasting legacy for future generations. Mactaggart and Mickel Homes are an award winning family housebuilder who have been hand-crafting new homes in Scotland for more than ninety years. They currently have developments underway across central Scotland, from Edinburgh to Glasgow and the Ayrshire Coast and are looking to expand into the Aberdeen market.

Cove Bay is a suburb which lies to the south east of Aberdeen. It originated around the fishing industry when it had a population of around 300 people. It has been the subject of significant expansion with the development of the Aberdeen Gateway Business Park, new housing at Charleston and Loirston, as well as the new Lochside Academy and Cove Rangers football stadium which are currently under construction. Cove now has a population of over 7,000 people and lies close to the A90, giving good access to the national road network.

The site at Heathvale is located to the west of Cove. It extends to approximately 6.2 hectares (15.3 acres) and is bounded to the north by Charleston Wood, beyond which lies a single dwellinghouse; to the east by Charleston Crescent; to the south by Lochinch Place and a small industrial complex; and to the east by the A956. The site is generally grazing land, however, land identified as Charleston Wood, containing gorse scrubland, as well as Heathvale Cottage lie within the site boundary of the bid site. The Green Belt status of the site was removed at the previous LDP examination, however, the Green Space Network designation remains and the site is also designated as Urban Green Space in the 2017 Local Development Plan.

The site is identified outlined and red on the map below.



### **Q6. Legal and Planning History**

**6.7 Previous LDP Bids** – The site has not been the subject of a previous bid, however, a response was submitted to the Proposed Aberdeen Local Development Plan in 2015 on behalf of the landowner. This objected to the Green Belt and Green Space Network designation on the site and requested that these be removed and the site be identified for alternative uses. The justification for this was that the site contained no special landscape features, the site is surrounded by development and offers no opportunities for public access. It also offers nothing in terms of protecting or promoting wildlife and lies outwith the Loirston Local Nature Conservation Site. In addition, Charleston Wood is not identified as a District Wildlife Site.

The Reporter to the LDP examination concluded that, at the time, the site contributed positively to the landscape setting of this approach to Aberdeen. However the character of this approach will change following development of the OP59 Loirston site and OP60 Charleston further south. The site will then be separated by over 500m from other substantial areas of Green Belt. As such, it could not form part of the green belt in any meaningful sense and should be removed from the Green Belt. However, the site was still retained as Green Space Network as the Reporter considered that the site continued to play a positive role by improving the visual amenity of this important approach.

### Q7. Proposal

The site is proposed for a residential development and has the capacity to deliver around 120 units, as well as infrastructure, open space, strategic landscaping and the retention of areas of gorse forming part of Charleston Wood. A footpath through Charleston Wood to the east would be provided and this would connect with existing footpaths in the area to improve access to this site. The bid is accompanied by an indicative site layout (Appendix 1) which demonstrates that the site can comfortably accommodate the proposed residential development.

The development would include a mix of houses, including detached, semi-detached and terraced and flatted, 2 – 5 bedroomed properties. An exact mix would be provided in due course taking account of the prevailing market conditions and affordable housing requirements. Affordable Housing will be provided in line with developer obligations requirements at the time of development. Early discussions have taken place with Hillcrest Housing Association, however, no details of tenure have been identified at this stage and this would be clarified as the process progresses.

This bid is supported by a number of studies, including a Tree Survey, Extended Phase 1 Ecological Survey, Services Report, Transport and Access Appraisal Report, Noise Assessment and Landscape Plan which all support the development of the site.

### **Q8.** Engagement and Delivery

- 8.1 The local community would have been aware of the previous LDP bid process which promoted this site for development. No public consultation has taken place in respect of this specific bid, however, the local community and community council will be consulted if the site is identified for development. This would take the form of exhibitions as part of any major planning application or any consultation required by Aberdeen City Council through the LDP Review process.
- 8.2 Given the size of the site, it is anticipated that it could be development as one phase, however, the developer is willing to work with Aberdeen City Council to develop a phasing plan, should they consider that this is more appropriate.

8.3 The developer is committed to submitting a planning application as soon as practicable after the site is allocated in the Local Development Plan. Development would commence as soon as a planning and other technical consents are issued and this is expected in year 0-5 post adoption of the plan.

### Q9. Sustainable Development and Design

- **9.2 Exposure** The site has some shelter from northerly winds in the form of trees to the north of the site.
- **9.4 Slope** The site is generally slopes from north to south, with some higher points to the east where it has a more undulating form. No part of the site has a gradient greater than 1 in 12.
- **9.5 Flooding** SEPA's Flood Risk maps show that there is no risk of flooding on the site from any river, however, there is some risk from surface water flooding. The proposed SUDs within each area of the site would alleviate any surface water flood issues. A drainage impact assessment would be prepared as part of any planning application for the site.
- **9.9/9.10** Water and Waste Water In terms of waste water and water, the existing services report (Appendix 2) demonstrates that connections would be available in the vicinity of the site. An extension to these would be required and new foul and surface water sewers will be provided to service the development and these will be located within the new roads and areas of open space where necessary. It is unknown at this stage if there is capacity in the waste water and water network, however, capacity can be made available if the site is identified for development. This would be investigated and agreed at the appropriate time and is not considered to be an impediment to development.
- **9.12 Natural Conservation** Although the site is identified in the Aberdeen LDP as Urban Green Space and Green Space Network, it is argued that there is no requirement for these designations. Urban Green Space is more suitable for formal playing fields, unlike this site, which is gorse/scrubland with little opportunity for public access. It is therefore requested that this designation is removed from the site. The layout will retain land for public use and improve access to this and therefore an Urban Green Space designation is not appropriate.

The purpose of the Green Space Network is for wildlife, access, recreation, ecosystem services and landscape value. An extended Phase 1 Ecological Survey Report (Appendix 3) has been carried out for the bid site and the desk top survey states that there are no protected mammal species present on the site.

A walkover survey was completed and it v	vas noted that the site was subject to significant levels of
disturbance in the form of noise from the $\boldsymbol{n}$	earby traffic and nearby construction sites, with periphera
paths being well used by dog walkers.	

It was concluded that Heathvale cottage may offer bat roost potential. The report provides guidance on additional surveys required prior to any development and these can be provided should the site be identified for development.

**9.13** Landscape features – A Landscape Appraisal (Appendix 4) has been prepared which identifies landscape features. Land to the east is identified as Charleston Wood, which takes the form of gorse scrubland. This area has no landscape designation over it. A tree survey (Appendix 5) has been undertaken to assess the existing trees on the site, the majority of which are in a fair or poor condition, within category C and U. Category C are classified as being "of low quality with an estimated remaining life expectancy of at least 10 years; unremarkable or very limited merit; trees with no material conservation or other cultural value". Some are in a poor condition, or dead and require to be removed regardless of development on the site. The U classified trees are trees that have serious structural defects, such that their early loss is expected due to collapse; are dead or showing signs of immediate decline. The trees are therefore of no great significance and many require removal.

The development will retain healthy trees where appropriate and significantly enhance planting on the site to improve these landscape features, which will aid the integration of housing and provide screening to and from the site.

- **9.14 Landscape Fit** The site is surrounded on three sides by development and on the fourth by established trees. Any development would therefore be seen in the context of this existing development and would not have a significant impact on the landscape character of the Cove area, which has seen significant changes. Large areas of gorse would be retained on site to ensure this element of the landscape is retained at this location. Paths will be integrated through the gorse, linking with existing paths in the area, to improve the accessibility and use of the site.
- **9.15 Relationship to existing settlements** The site forms a natural expansion of Cove, being located immediately adjacent to existing development and surrounded on three sides by development. It is therefore considered to be infill development and a logical location for new housing. It would provide pedestrian links with Charleston Crescent, which leads onto Charleston Road where bus stops and the primary school is located.
- **9.16 Land Use Mix** Given the size of the site, it will generally only provide housing, however, it will provide a range of house types, including flatted properties and affordable housing, thereby providing a choice of housing in the area. Open space to the east with footpath provision will ensure land for recreational purposes is provided and is accessible to users in the area.
- **9.22/9.23** Land Use Conflict The A956, Wellington Road lies to the west of the site. A Noise Assessment (Appendix 6) has been carried out which concludes that although some of the buildings exceed noise limits for daytime and night time periods, this can be controlled to the required internal noise limits using a strategy of closed windows and alternative means of ventilation. As such, noise from the adjacent road is not an impediment to development.
- **9.28 Footpath and cycle connections** There are no Core Paths running through the site, but there are a number in close proximity, including Path 78, 80 and 83. A Transport and Access Appraisal Report (Appendix 7) has been prepared for the bid site. It summaries that the surrounding transport network includes facilities for pedestrians in the form of footways on the A956 Wellington Road and Charleston Crescent and a footpath link to Charleston Drive; facilities for cyclists in the form of the shared use path on the eastern side of the A956 Wellington Road; and for bus passengers in the form of services on Old Wellington Road, Charleston Road and Charleston Drive. It is well situated for access to the surrounding transport network and there are no transport related reasons why the site cannot be allocated for development.
- **9.32/9.33 Heating/Low Carbon Policy** Mactaggart and Mickel Homes, in common with the majority of housebuilders, advocate a fabric first approach to ensure energy conservation and thus minimise

carbon footprint. Appropriate technologies available at the time will also be considered as a means to deliver reduced energy consumption and heat generation.

**9.35 Open Space** - The site will provide the required level of open space as per the current LDP Policy. Significant areas of open space are proposed within the bid area to the east, south and west which will be well integrated to provide access to areas for all users. A Landscape Plan (Appendix 7) has been prepared to accompany the bid.

**9.36 Impact on Green Space Network** – the site is currently identified in the Aberdeen Local Development Plan as Green Space Network, however, it is considered that there is merit in the removal of this designation. The purpose of the Green Space Network designation is to protect, promote and enhance the wildlife, access, recreation, ecosystem services and landscape value of the land. However, the Phase 1 habitat survey confirms that, while there may be some wildlife present on the site, appropriate mitigation can be provided to protect these species.

The site has no other landscape value benefits and provides little in terms of landscape value being surrounded on most sides by development. Although the site is used by dog walkers in the area, it is considered that accessibility to the site is poor as many of the surrounding streets are dead ends. The site will retain areas of gorse/Charleston Wood to the east and improve access by creating more formal footpaths through this area.

### Q10. Education

No recent discussions have taken place with the Council's Education Department. The 2015 School Roll Forecasts state that Charleston Primary School is forecast to have a rising school roll, predicted to be operating at 179% of capacity by 2023. More recent forecasts should have been carried out by Aberdeen City Council, however, these are not publicly available.

It is understood that a new primary school is to be built as part of OP59 at Loirston and that changes are proposed to the catchment areas of the schools in Cove. Without more up to date forecasts, it is difficult to predict the impact from development on the bid site, however, it is considered that these changes will significantly improve the capacity of Charleston School.

A new Lochside Academy is being built in Cove, which is due to open in Summer 2018, with a capacity of 1,350 pupils. It is anticipated that this school would have capacity for additional development in Cove.

Developer contributions would be agreed, if required during the planning application process and is not an impediment to development.

### **Q11. Community Benefits**

The proposals provide benefits to the local community in the form of housing, including affordable housing and the potential for improved accessibility to the Charleston Wood area to the east of the site.

### **Q14.** Development Viability

Cove is a popular location for housing, given the recent housing developments. This is enhanced through the recent Aberdeen Gateway development, providing employment close to areas of housing. The landowner has invested in promoting the site through previous Local Development Plans and was successful in the removal of the Green Belt designation.

Mactaggart and Mickel now has an option over this site which demonstrates their commitment to the site and its deliverability of the site in the next Local Development Plan. They are confident that there is residual value following development of the site and the provision of necessary infrastructure. The infrastructure constraints have been considered and they are confident that they can be addressed and do not impose an impediment to development.



# **Existing Services**

124007: Residential Development - Heathvale Cove, Aberdeen

December 2017













### **Contents**

Location Plan
Openreach BT
Line Search Before U Dig
Scottish and Southern Energy
Scottish Water

### **Appendix**

SGN results from Line Search

### **Disclaimer**

Fairhurst does not accept liability for the accuracy of record information provided by others and contained within this document.

A desktop utility records search older than 90 days must be classed as historical and used with caution.

Read this document alongside HSE HSG47 'Avoiding danger from underground services' and published guidance from utility providers. Attention is also drawn to the New Roads and Street Works Act 1991 (NRSWA).

Only leading utility providers have been approached. The utility providers referred to within this document do not necessarily represent an exhaustive list of utility providers.

Utility records alone are not sufficient to identify and locate services before starting work. Utility records provide basic information on which to base a thorough site survey before work begins. Safe excavation practices, in accordance with HSG47, must be used to verify and establish the actual position of apparatus, before mechanical plant is used.

Damage to underground services can cause fatal or severe injury as well as significant disruption and environmental damage; it can also delay the project and incur considerable costs.

## **Appendix**



GRID REFERENCE - NJ 94045 00911

Description

Drawn Checked Approved

RESIDENTIAL SITE HEATHVALE, COVE ABERDEEN

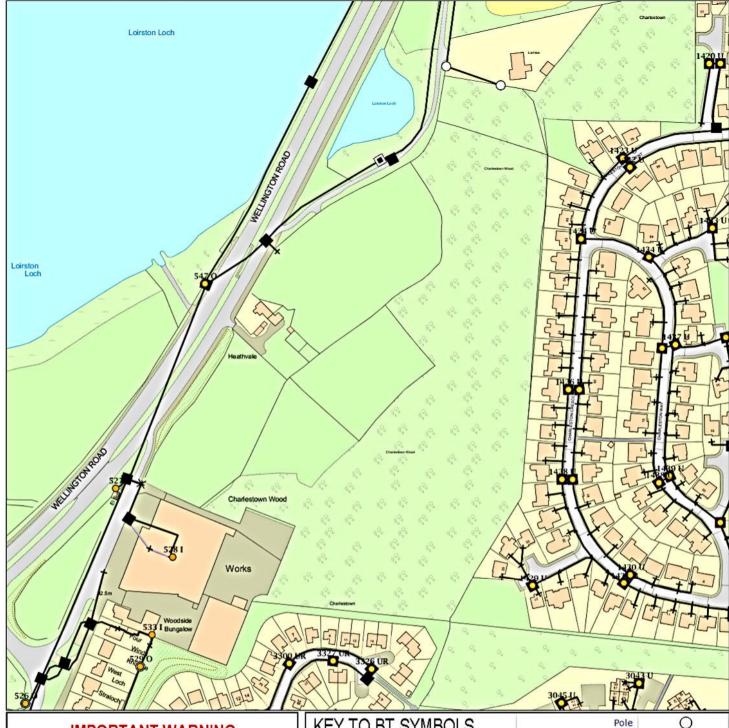
LOCATION PLAN

FAIRHURS<sup>-</sup>

#88 Queens Road,
#BERDEEN, #815 4/0
Tel: 01224 321 222 Fax: 01224 323 201
Scale at A4: Status:
For Information
Drawn: Checked: Approved

11/12/17 Revisit

# Maps by email Plant Information Reply



### IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only.

No guarantee is given of its accuracy.

It should not be relied upon in the event of excavations or

It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.



# openreach

# CLICK BEFORE YOU DIG

OR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE

### email cbyd@openreach.co.uk

ADVANCE NOTICE REQUIRED (Office hours: Monday - Friday 08.00 to 17.00) www.openreach.co.uk/cbyd

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KEY TO BT SYMBOLS	Pole	0
DP	Planned Pole	O
Planned DP	Joint Box	
PCP 🔯	Change Of State	+
Planned PCP	Split Coupling	×
Built	Duct Tee	•
Planned	Planned Box	
Inferred	Manhole	•
Building	Planned Manhole	
Kiosk	) Cabinet	Û
Hatchings	Planned Cabinet	Û
	Other proposed plant is shown usi	ng dashed lines

Other proposed plant is shown using dashed lines BT Symbols not listed above maybe disregarded. Existing BT Plant may not be recorded. Information valid at time of preparation

BT Ref: XHH02591T

Map Reference : (centre) NJ9404500911 Easting/Northing : (centre) 394045,800911

Issued: 08/12/2017 14:59:54



# **Enquiry Confirmation LSBUD Ref: 11805054**

Date of enquiry: 08/12/2017 Time of enquiry: 14:34

Enquirer							
Name	Mr Craig Riddell	Phone	01224 321222				
Company	Fairhurst	Mobile	Not Supplied				
		Fax	Not Supplied				
Address	88 Queens Road Aberdeen Aberdeen City AB15 4YQ						
Email	craig.riddell@fairhurst.co.uk						
Notes	Please ensure your contact details are correct and up to date on the system in case the LSBUD Members need to contact you.						

Enquiry Details							
Scheme/Reference	124007						
Enquiry type	Initial Enquiry	Work category	Development Projects				
Start date	09/12/2017	Work type	Commercial/industrial				
End date	31/12/2017	Site size	63375 metres square				
Searched location	XY= 394045, 800911 Easting/Northing	Work type buffer*	25 metres				
Confirmed location	394051 800925						

<sup>\*</sup> The WORK TYPE BUFFER is a distance added to your search area based on the Work type you have chosen.



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# Enquiry Confirmation LSBUD Ref: 11805054

Date of enquiry: 08/12/2017 Time of enquiry: 14:34

### **Asset Owners**

**Terms and Conditions.** Please note that this enquiry is subject always to our standard terms and conditions available at www.linesearchbeforeudig.co.uk ("Terms of Use") and the disclaimer at the end of this document. Please note that in the event of any conflict or ambiguity between the terms of this Enquiry Confirmation and the Terms of Use, the Terms of Use shall take precedence.

Validity and search criteria. The results of this enquiry are based on the confirmed information you entered and are valid only as at the date of the enquiry. It is your responsibility to ensure that the Enquiry Details are correct, and LinesearchbeforeUdig accepts no responsibility for any errors or omissions in the Enquiry Details or any consequences thereof. LSBUD Members update their asset information on a regular basis so you are advised to consider this when undertaking any works. It is your responsibility to choose the period of time after which you need to resubmit any enquiry but the maximum time (after which your enquiry will no longer be dealt with by the LSBUD Helpdesk and LSBUD Members) is 28 days. If any details of the enquiry change, particularly including, but not limited to, the location of the work, then a further enquiry must be made.

Asset Owners & Responses. Please note the enquiry results include the following:

- 1. "LSBUD Members" who are asset owners who have registered their assets on the LSBUD service.
- 2. "Non LSBUD Members" are asset owners who have not registered their assets on the LSBUD service but LSBUD is aware of their existence. Please note that there could be other asset owners within your search area.

Below are three lists of asset owners:

- 1. LSBUD Members who have assets registered within your search area. ("Affected")
  - a. These LSBUD Members will either:
    - i. Ask for further information ("Email Additional Info" noted in status). The additional information includes: Site contact name and number, Location plan, Detailed plan (minimum scale 1:2500), Cross sectional drawings (if available), Work Specification.
    - ii. Respond directly to you ("Await Response"). In this response they may either send plans directly to you or ask for further information before being able to do so, particularly if any payments or authorisations are required.
- 2. LSBUD Members who do not have assets registered within your search area. ("Not Affected")
- 3. Non LSBUD Members who may have assets within your search area. Please note that this list is not exhaustive and all details are provided as a guide only. It is your responsibility to identify and consult with all asset owners before proceeding.

**National Grid.** Please note that the LSBUD service only contains information on National Grid's Gas above 7 bar asset, all National Grid Electricity Transmission assets and National Grid's Gas Distribution Limited above 2 bar asset.

For National Grid Gas Distribution Ltd below 2 bar asset information please go to www.beforeyoudig.nationalgrid.com



# Enquiry Confirmation LSBUD Ref: 11805054

Date of enquiry: 08/12/2017 Time of enquiry: 14:34

LSBUD Members who have assets registered on the LSBUD service within the vicinity of your search area.

List of affected LSBUD members							
Asset Owner Phone/Email Emergency Only Status							
SGN	08009121722	0800111999	Await response				

LSBUD Members who do not have assets registered on the LSBUD service within the vicinity of your search area. Please be aware that LSBUD Members make regular changes to their assets and this list may vary for new enquiries in the same area.

	List of not offerted LCDLD wombon	
	List of not affected LSBUD members	
AWE Pipeline	Gamma	Premier Transmission Ltd (SNIP)
BOC Limited (A Member of the Linde Group)	Gateshead Energy Company	Prysmian Cables & Systems Ltd (c/o Western Link)
BP Exploration Operating Company Limited	Gigaclear PLC	Redundant Pipelines - LPDA
BPA	Humbly Grove Energy	RWEnpower (Little Barford and South Haven)
Carrington Gas Pipeline	IGas Energy	SABIC UK Petrochemicals
CATS Pipeline c/o Wood Group PSN	INEOS FPS Pipelines	Scottish Power Generation
Cemex	INEOS Manufacturing (Scotland and TSEP)	Seabank Power Ltd
Centrica Storage Ltd	INOVYN Enterprises Limited	Shell (St Fergus to Mossmorran)
CLH Pipeline System Ltd	Intergen (Coryton Energy or Spalding Energy)	Shell Pipelines
Concept Solutions People Ltd	Mainline Pipelines Limited	SSE (Peterhead Power Station)
ConocoPhillips (UK) Ltd	Manchester Jetline Limited	Total (Colnbrook & Colwick Pipelines)
DIO (MOD Abandoned Pipelines)	Manx Cable Company	Total Finaline Pipelines
E.ON UK CHP Limited	Marchwood Power Ltd (Gas Pipeline)	Transmission Capital
EirGrid	Melbourn Solar Limited	UK Power Networks
	National Grid Gas (Above 7 bar), National Grid	
Electricity North West Limited	Gas Distr bution Limited (Above 2 bar) and	Uniper UK Ltd
	National Grid Electricity Transmission	
ENI & Himor c/o Penspen Ltd	Northumbrian Water Group	Vattenfall
EnQuest NNS Limited	NPower CHP Pipelines	Veolia ES SELCHP Limited
EP Langage Limited	O kos Storage Limited	Western Power Distribution
ESP Utilities Group	Ørsted	Westminster City Council
ESSAR	Perenco UK Limited (Purbeck Southampton	Wingas Storage UK Ltd
Loorat	Pipeline)	Willigas Storage Oil Eta
Esso Petroleum Company Limited	Petroineos	Zayo Group UK Ltd c/o JSM Group Ltd
Fulcrum Pipelines Limited	Phillips 66	



# Enquiry Confirmation LSBUD Ref: 11805054

Date of enquiry: 08/12/2017 Time of enquiry: 14:34

The following Non-LSBUD Members may have assets in your search area. It is YOUR RESPONSIBILITY to contact them before proceeding. Please be aware this list is not exhaustive and it is your responsibility to identify and contact all asset owners within your search area.

	nembers (Asset owners not registered o		Obstan
Asset Owner	Preferred contact method	Phone	Status
ВТ	https://www.swns.bt.com/pls/mbe/welcome.home	08009173993	Not Notified
CityF bre	asset.team@cityf bre.com	033 3150 7282	Not Notified
Colt	plantenquiries@catelecomuk.com	01227768427	Not Notified
Energetics Electricity	plantenquiries@energetics-uk.com	01698404646	Not Notified
ENGIE	nrswa@cofely-gdfsuez.com	01293 549944	Not Notified
GTC	https://pe.gtc-uk.co.uk/PlantEnqMembership	01359240363	Not Notified
GTT (formerly Hibernia Networks)	owen.maguire@gtt.net	01704 322 300	Not Notified
Interoute	interoute.enquiries@plancast.co.uk	02070259000	Not Notified
KPN (c/-Instalcom)	kpn.plantenquiries@instalcom.co.uk	n/a	Not Notified
Level 3 Communications UK Ltd (C/-Instalcom)	plantenquiries@instalcom.co.uk	02087314613	Not Notified
Mobile Broadband Network Limited	mbnl.plant.enquiries@turntown.com	01212 621 100	Not Notified
Scottish and Southern Energy	asset.data@sse.com	01256337294	Not Notified
Scottish Water	searches@scottishwater.co.uk	01382563666	Not Notified
Sky UK Limited	nrswa@sky.uk	02070323234	Not Notified
Utility assets Ltd	assetrecords@utilityassets.co.uk		Not Notified
Verizon Business	osp-team@uk.verizonbusiness.com	01293611736	Not Notified
Virgin Media	http://www.digdat.co.uk	08708883116	Not Notified
Vodafone	osm.enquiries@atkinsglobal.com	01454662881	Not Notified
Vtesse Networks	https://plant.interoute.com/plant-enquiries/	01992532100	Not Notified

### Disclaimer

Please refer to LinesearchbeforeUdiq's Terms of Use for full terms of use available at www.linesearchbeforeudiq.co.uk

The results of this Enquiry are personal to the Enquirer and shall not be shared with or relied upon by any other party. The asset information on which the Enquiry results are based has been provided by LSBUD Members, therefore LinesearchbeforeUdig will provide no guarantee that such information is accurate or reliable nor does it monitor such asset information for accuracy and reliability going forward. There may also be asset owners which do not participate in the enquiry service operated by LinesearchbeforeUdig, including but not exclusively those set out above. Therefore, LinesearchbeforeUdig cannot make any representation or give any guarantee or warranty as to the completeness of the information contained in the enquiry results or accept any responsibility for the accuracy of the mapping images used. LinesearchbeforeUdig and its employees, agents and consultants accept no liability (save that nothing in this Enquiry Confirmation excludes or limits our liability for death or personal injury arising from our negligence, or our fraud or fraudulent misrepresentation, or any other liability that cannot be excluded or limited by English law) arising in respect thereof or in any other way for errors or omissions including responsibility to any person by reason of negligence.

#### Watch it!

### Safety advice brought to you by Scottish and Southern Electricity Networks

These notes are intended to help all those who have to work in the vicinity of electrical apparatus. Employers have a legal obligation to ensure that their operatives are fully instructed in the correct procedures.

**The Electricity at Work Regulations 1989** impose health and safety requirements upon employers, employees and self-employed persons with respect to electricity at work. The regulations impose restrictions on persons being engaged in work activities on or near live conductors.

**Regulation 14 requires that:** "No person shall be engaged in any work activity on or near any live conductor (other than one suitably covered with insulating material so as to prevent danger) that danger may arise unless:

- it is unreasonable in all circumstances for it to be dead; and
- it is reasonable in all circumstances for him to be at work on or near it while it is live; and
- ◆ suitable precautions (including where necessary the provision of suitable protective equipment) are taken to prevent injury."

The purpose of the regulations is to require precautions to be taken against the risk of death or personal injury from electricity in work activities.

#### Publications

The Health and Safety Executive have produced a document entitled 'Avoiding Danger from Underground Services', and the Appendix 1 deals specifically with electric cables. Copies are available from the HSE's Accredited Agents and good booksellers, Ref. HS (G) 47.

Copies of Health and Safety Guidance note GS 6 relating to safe working in proximity to overhead lines, are available from the Health and Safety Executive's website - www.hse.gov.uk.

#### <u>Note</u>

In situations of emergency or danger, or where the advice contained in these notes cannot be followed, you must consult Scottish and Southern Electricity Networks immediately. Tel. 08457 708090 for southern England or 0800 300999 for Scotland.

Additional copies of these "Watch it!" leaflets can be obtained from our Asset Data Team office upon request. Tel. 01256 337294, or Fax 01256 337295.

You must read and accept the following safety notes as part of the contract to receive our network plans. You will have the option to print these and issue them to site staff.

### Watch it! - Working in the vicinity of underground cables

Our plans show the positions and normal depths for the buried cables and pipes at the time when they were installed. However, alterations to road alignments surface levels and buildings may have occurred subsequently without our knowledge. If you discover plant or cables that are not marked or incorrectly marked, then you are required to contact us as soon as possible to give us the opportunity to amend our plans.

These plans show the equipment owned by Scottish and Southern Electricity Networks. There may be other privately owned plant in the area, which is outside of our control. You should always check with the Local Authority, National Grid Company, Department of the Environment, other Electricity Companies and other utilities before proceeding.

It is not intended that the issue of these plans will absolve either party from their obligation under any of the acts that control digging in the public highways.

### Supplies To Properties, etc.

The location of cables supplying individual properties, street lighting, traffic signs, telephone kiosks etc. are not always shown on the plans. You should assume that each property, streetlight etc. will have its own supply cable.

### **Major Circuits**

Where our plans indicate the presence of cables with a voltage exceeding 11,000 volts, you are advised to contact our local depot (telephone number is on the plans), before commencing any excavations within the vicinity of these cables. These major circuits form an extremely important link in Scottish and Southern Electricity Networks' networks, and damaging or modifying these circuits is a major and costly undertaking. Any development should therefore be designed to allow these circuits to remain undisturbed and accessible in their present location.

For your own and your workmates' safety, please follow the do's and don'ts listed below:

- do make sure you have plans of the underground cables in the area before any excavation work starts. Remember that some cables may not be shown on plans. If carrying out emergency work, excavate as though there are buried live cables in the vicinity.
- do use a cable locator to determine the position of existing cables in the work area. The positions should be marked and tests made as work proceeds. If in doubt, get advice from your supervisor.
- ✓ do ask for a cable to be made dead if it is buried in concrete.
- do watch for signs of cables as work progresses. Note any marker-tape or cable-cover, which may be exposed

- do backfill carefully, using stone-free soil around the cables, replacing marker-tapes and / or covers.
- do notify us immediately if you accidentally damage our cables. Arrange to keep people well clear of a cable that has been damaged until we have confirmed it has been made safe.
- ✓ do make sure before starting to demolish a building that all cables have been disconnected. We welcome prior notice of the intention to demolish buildings. This enables us to ensure that the site has been made safe electrically.
- don't operate a bulldozer, scraper, dragline or excavator; unless you are satisfied that there are no buried cables in the working area.
- ✓ don't use picks, pins, forks or pointed instruments in soft clay or soil when cables are present. Exercise extreme caution where such instruments are used to free lumps of stone, or break up firmly compacted ground. Never throw a fork or sharp instrument into the ground.
- ✓ don't dig trial holes over the indicated route of the cable. Excavate alongside instead.
- ✓ don't use exposed cables as a convenient step or handhold.
- ✓ don't handle or attempt to alter the position of any cable.

**Remember** that a damaged cable may cause extensive loss of supplies, make expensive repairs necessary and cause serious or even fatal injury.

If effective measures are not adopted to protect our equipment, we will take steps to recover the cost of any damage caused. Persons causing damage resulting in loss of supply to customers can be held legally responsible for any claims made by those customers. Promptness in reporting an incident will minimise costs.

In most cases it is not practicable to make cables dead without interrupting supplies to our customers. But given adequate notice, we will wherever possible, give advice regarding special precautions which may be necessary on any site where particular problems are likely to be encountered. The right is reserved to make a charge for this service.

Electricity cables can exist anywhere - under paths or roads, in gardens or driveways, on new housing or industrial development sites or even farmland.

#### Watch it! - Working in the vicinity of overhead lines

For your own and your workmates' safety, please follow the do's and don'ts listed below

- ✓ **do** carefully note the position of all overhead lines before commencing work.
- ✓ **do** co-operate with us during planning and sitework stages.
- ✓ do follow the advice given in HSE Guidance Note GS 6 when siting barriers, goal posts, bunting etc.
- do keep overhead lines in view when moving scaffolding or machinery and take special care when felling or lopping trees.
- do remember that the raising or slewing of a crane or excavator jib may cause danger when operating near an overhead line.

- ✓ do avoid any machinery that is in contact with an overhead line until we confirm that conditions
  are safe.
- ✓ do warn others to keep well clear.
- don't drive a high vehicle below an overhead line when an alternative route is available.
- don't raise the bed of a tipper lorry beneath an overhead line or drive under the line with the body of the vehicle raised.
- don't steady any suspended load until you are satisfied that there is no danger from overhead lines
- don't handle or use scaffold platforms, poles, pipes or ladders unless they are at a safe distance from overhead lines.
- don't transport long objects beneath overhead lines, unless they are carried in a horizontal position.
- ✓ don't approach or touch any broken or fallen overhead lines.

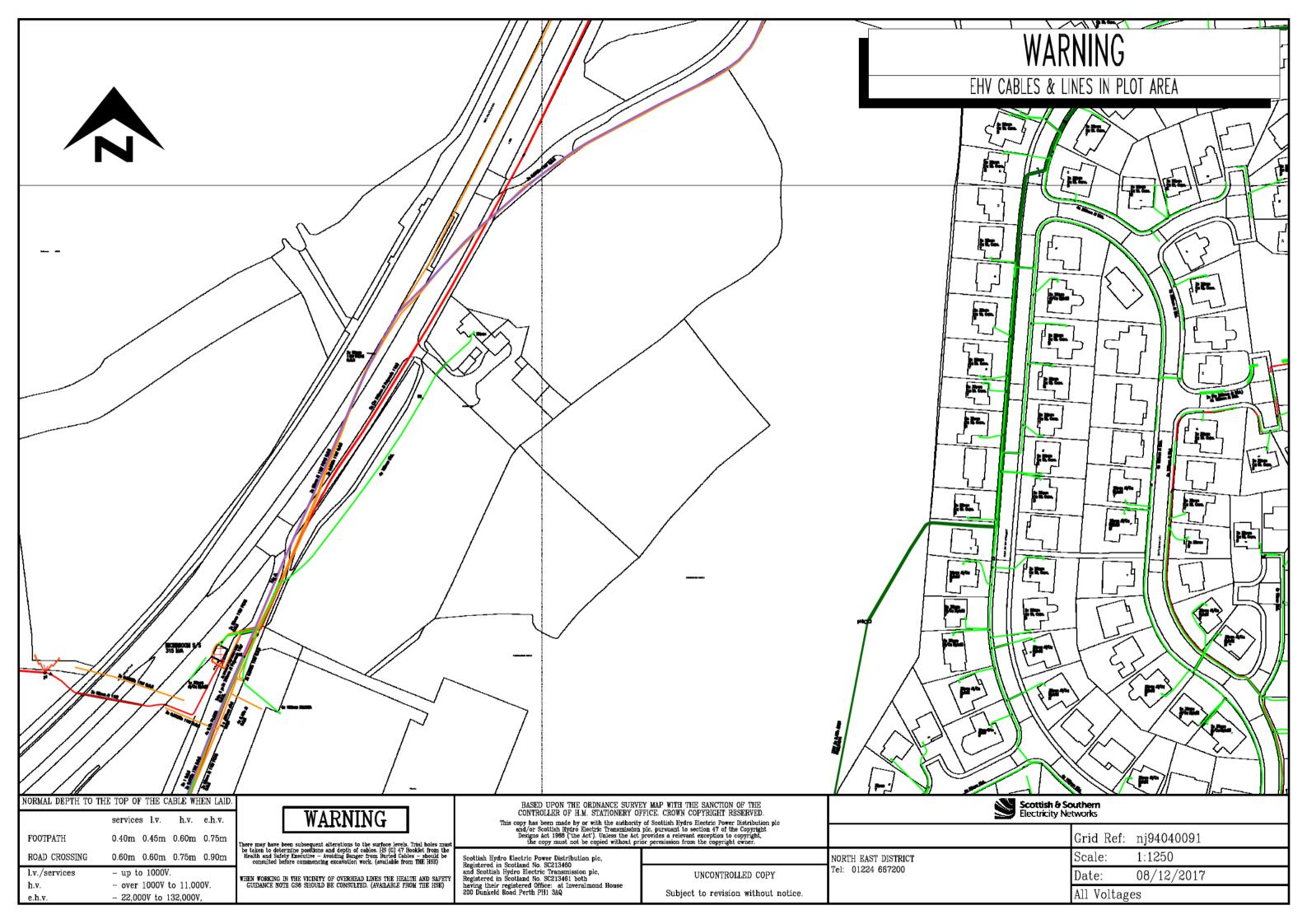
#### Always remember that:

- Electricity can jump gaps.
- Contact or near contact with a crane jib, scaffold or ladder can cause a discharge of electricity with a risk of fatal or severe shock and burns to any person in the vicinity.

If effective measures are not adopted to protect our equipment, we will take steps to recover the cost of any damage caused. Persons causing damage resulting in loss of supply to customers can be held legally responsible for any claims made by those customers. Promptness in reporting an incident will minimise costs.

In most cases it is not practicable to make overhead lines dead without interrupting supplies to customers. However, provided adequate notice is given, then we will, whenever possible, give advice regarding special precautions which may be necessary on site where specific problems may be encountered. The right is reserved to make a charge for this service.

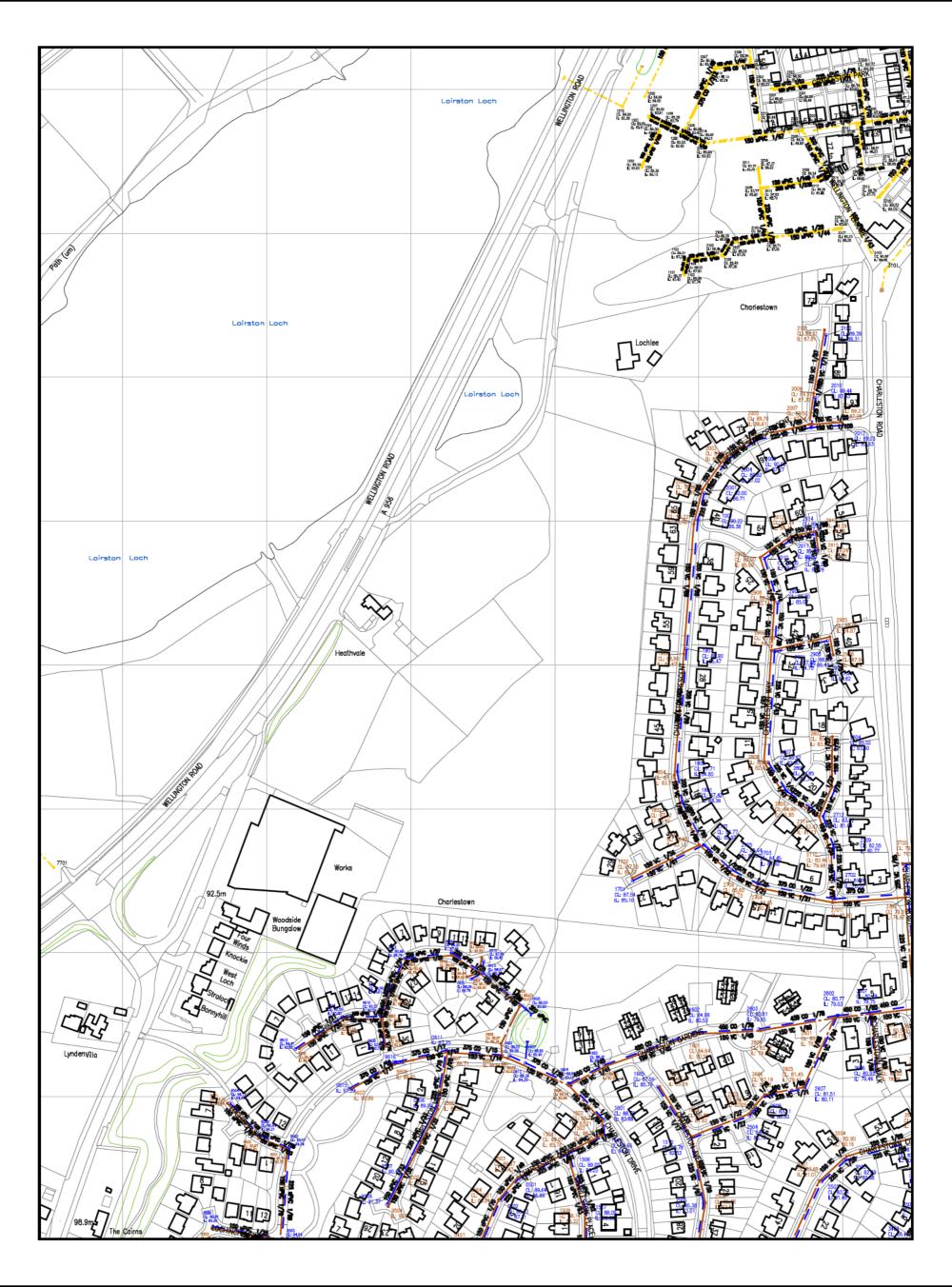
Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460 (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having its Registered Office at No.1 Forbury Place 43 Forbury Road Reading RG1 3JH which are members of the SSE Group www.ssen.co.uk



## **SMALLWORLD GIS – WASTEWATER LEGEND**



	Pipework	*	Collapse/Choke (not visible by		Balancing Pond
	Combined (red)		default)		Rodding Eye
—	Foul (brown)		Combined Storm Overflow	•	Rodding Eye
	Surface Water (blue)	_	Connection (not visible)	_	Septic Tank
	Natural Water (light blue)				
	CSO (dark blue)		Duct	$\circ$	Sewer Junction
	Trade Effluent (brown)		Ghost Node (not visible by		Sewer Structure
	Treated Effluent (black)		default)	_	O Ain Make
	Abandoned (grey)	НВ	Hatchbox	•	Sewerage Air Valve
	Water Course (dark green)		Hydraulic Control Chamber		Sewerage Pipe Bridge
	PFI sewer (bright green)	H	Trydraulic Control Chamber		Sewerage Tipe Bridge
	Rising Main (red)		Lamphole		Sluice Valve
	Proposed sewers (foul, combined and surface water)	4	Change of Attributes		Storm Tank
			Outfall	(?)	Unknown End
	Syphon	- 3	Inlet	wwww	Treatment Plant
	Chamber (same colour as	7	met	WWIW	Treatment Flant
	pipework)		Pumping Station		Vent Column
	Dual Chamber (same colour as pipework)	п	Wash Out		Buchan Trap
0	Surface Water Chamber	В	Bifurcation Chamber		Capped End (same color as pipework)





The representation of physical assets and the boundaries of areas in which Scottish Water and others have an interest does not necessarily imply their true positions. For further details contact the appropriate District Office.

Date Plotted: 08/12/2017

OP/PYVSE305

Wastewater Plan

Scale: 1:2500

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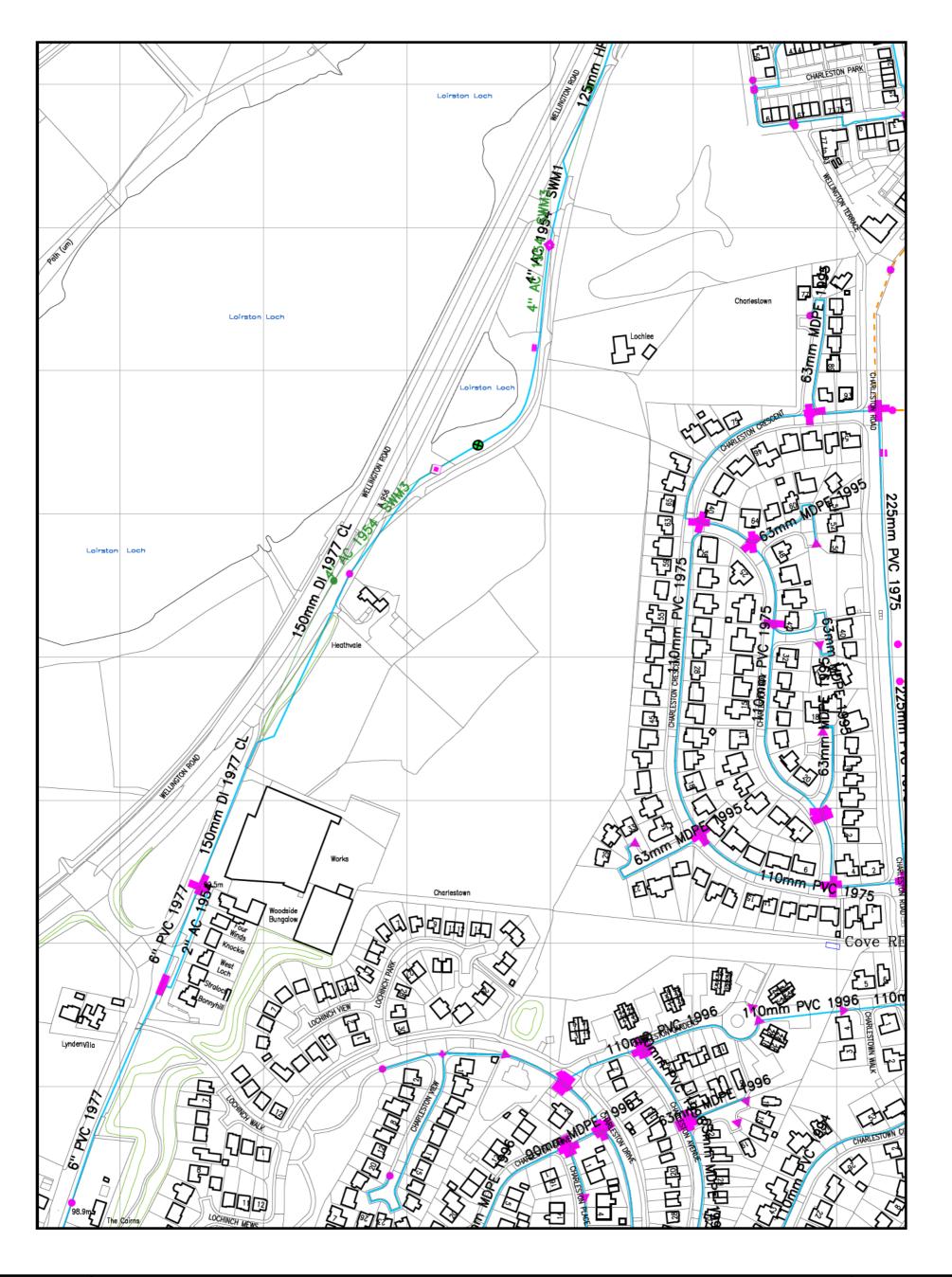
170 metres



Tel Ho: 0845 601 8855

### SMALL WORLD GIS WATER LEGEND

	Trunk Main	<b>\</b>	Tapping		Bulk Meter		Water Treatment Works
<u> </u>	(in use)  Distribution Main	-	Field trough	•	Revenue Meter		Pressure Reducing Valve
	Raw Water Main	7	Other fitting		Meter Cable	⊳	Pressure Sustaining Valve
	Mains (abandoned)	0	Orifice Plate		Meter Display Unit Pumping Station	<b></b>	Reflux (Non-Return) Valve
	Mains (proposed)	Р	Meter Point		Booster Station		
	Mains (isolated)					II	Washout (Scour) Valve
	Communication Pipe	0	Cleansing Cock	Р	Pump Symbol	1	Control Valve
	Supply Pipe	I	Coupling	•	River Intake		Pressure Relief Valve
	Tunnel	Q	Flow Restrictor		Spring Intake	•	Altitude Valve
	Open Course	0		<b>V</b>			Level Control Valve
	Aqueduct		Taper	•	Borehole Intake	2	Valve - Other
	Logical Service Link	_ <	Change Collar		Other Company Intake	•	BC WSZ Valve
	Duct		End Cap		Clear Water Tank	ĕ	BC DMA Valve
<b>(</b>	Air Valve Double	н	Stopcock		Service Reservoir		BC WOA Valve
À	Air Valve Single	•	Sample Point		Impounding Reservoir	ē	BC PRA Valve
_	All Valve Single	+	Service Point		Pumped Storage Reservoir	•	BC PCC Valve
Ą	Anode		Hatchbox		Storage Tank	ē	BC PSA Valve
<b>o</b>	Hydrant : Terminal	D	Chemical Dosing Point		Storage - Other		
•	Hydrant : Fire		Chemical Dosing Foult				Pipebridge
D	Dialysis Patient	B	Break Pressure Tank		Balancing Tank - Current		





The representation of physical assets and the boundaries of areas in which Scottish Water and others have an interest does not necessarily imply their true positions. For further details contact the appropriate District Office.

Date Plotted: 08/12/2017

OP/PYVSE305

Water Plan

Scale: 1:2500

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170 metres



Tel No: 0845 601 8855



# SGN results from Line Search



Our Ref: 11805054 Your Ref: 124007

Friday, 08 December 2017

Craig Riddell 88 Queens Road Aberdeen Aberdeen City AB15 4YQ

Dear Craig Riddell

Thank you for your enquiry dated Friday, 08 December 2017

Please find an extract from our mains records for your proposed work area, any SGN assets are described in the map legend. On some occasions blank maps may be sent to you, this is due to your proposed work being in a no gas area but within our operational boundaries.

This mains record only shows the pipes owned by SGN in our role as a Licensed Gas Transporter (GT). Please note that privately owned gas pipes or pipes owned by other GTs may be present in this area and information regarding those pipes needs to be requested from the owners. If we know of any other pipes in the area we will note them on the plans as a shaded area and/or a series of x's.

The information shown on this plan is given without obligation or warranty and the accuracy cannot be guaranteed. Service pipes, valves, siphons, stub connections etc. are not shown but their presence should be anticipated. Your attention is drawn to the information and disclaimer on these plans. The information included on the plan is only valid for 28 days.

On the mains record you may see the low/medium/intermediate pressure gas main near your site. There should be no mechanical excavations taking place above or within 0.5m of a low/medium pressure system or above or within 3.0m of an intermediate pressure system. You should, where required confirm the position using hand dug trial holes.

A colour copy of these plans and the gas safety advice booklet enclosed should be passed to the senior person on site in order to prevent damage to our plant and potential direct or consequential costs to your organisation.

Safe digging practices in accordance with HSE publication HSG47 "Avoiding Danger from Underground Services" must be used to verify and establish the actual position of the mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all relevant people (direct labour or contractors) working for you on or near gas pipes.

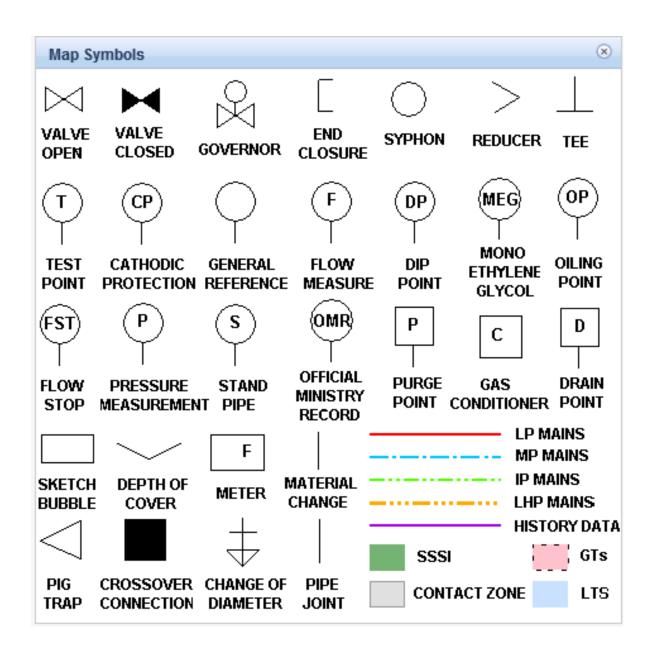
It must be stressed that both direct and consequential damage to gas plant can be dangerous for your employees and the general public and repairs to any such damage will incur a charge to you or the organisation carrying out work on your behalf. Your works should be carried out in such a manner that we are able to gain access to our apparatus throughout the duration of your operations.

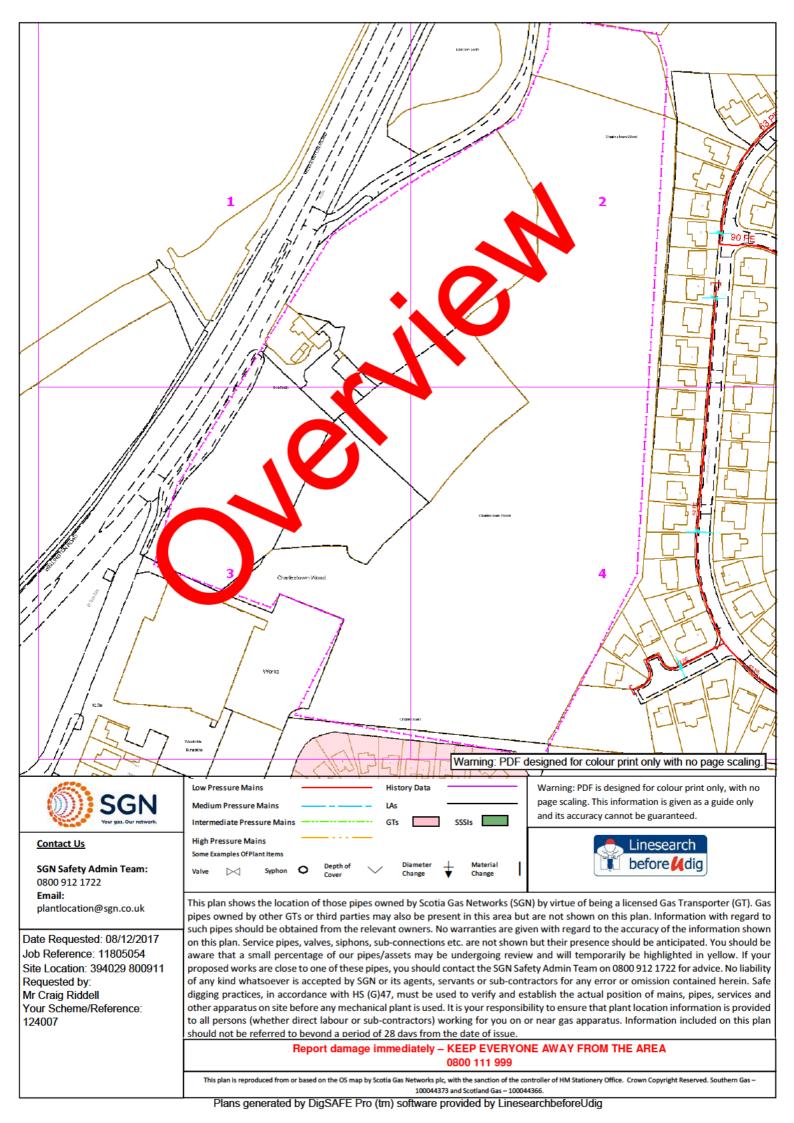
If you require any further information please do not hesitate to contact us.

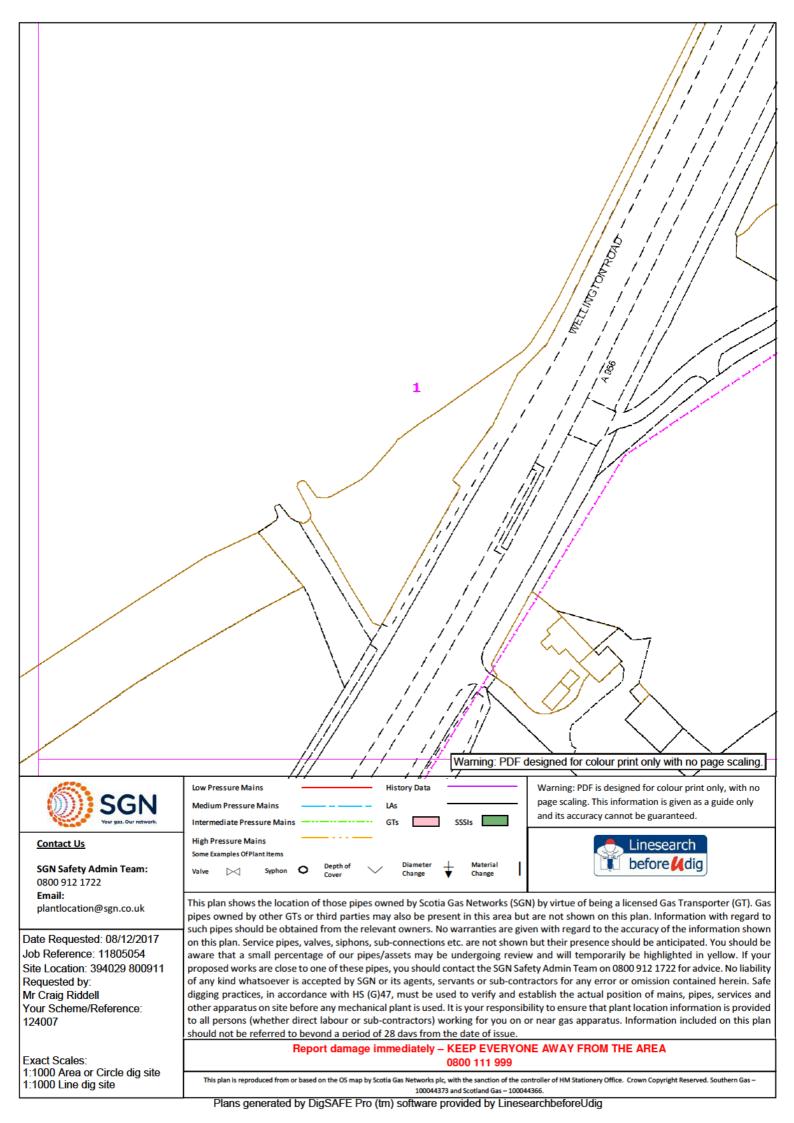
Yours sincerely,
The Safety Admin Team
For more information, visit our Dig Safely pages on sgn.co.uk

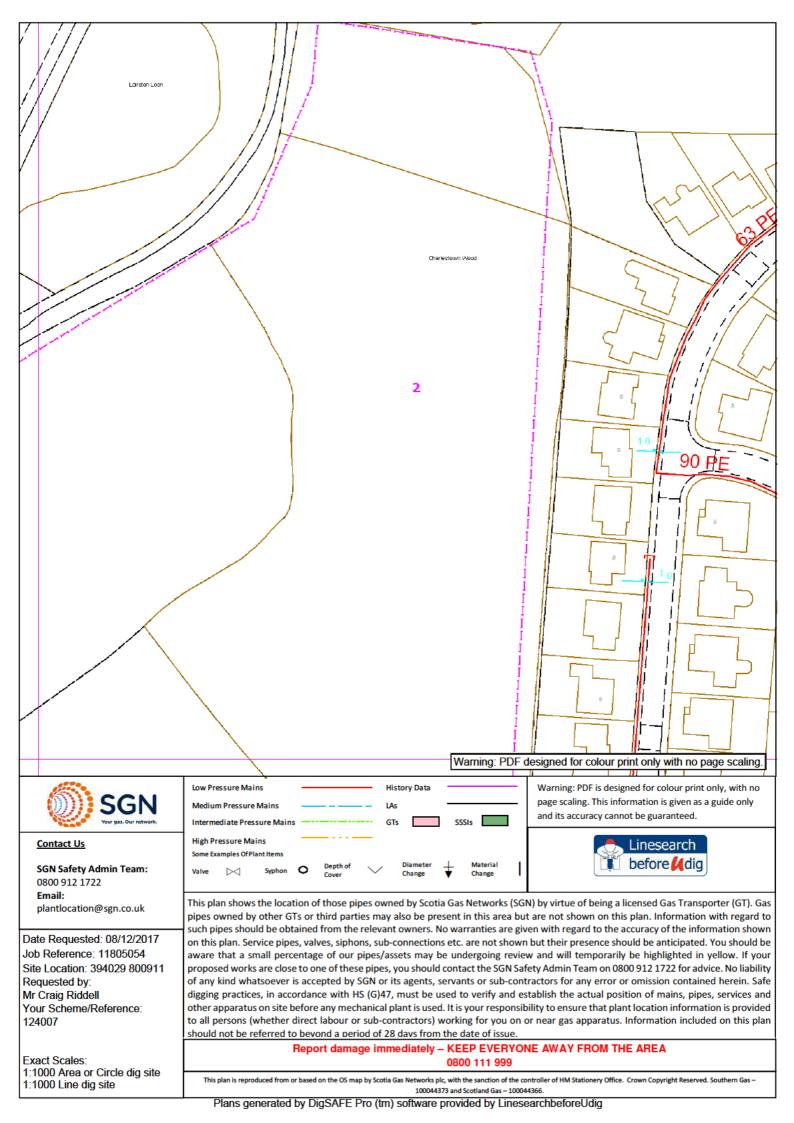
Tel: 0800 912 1722

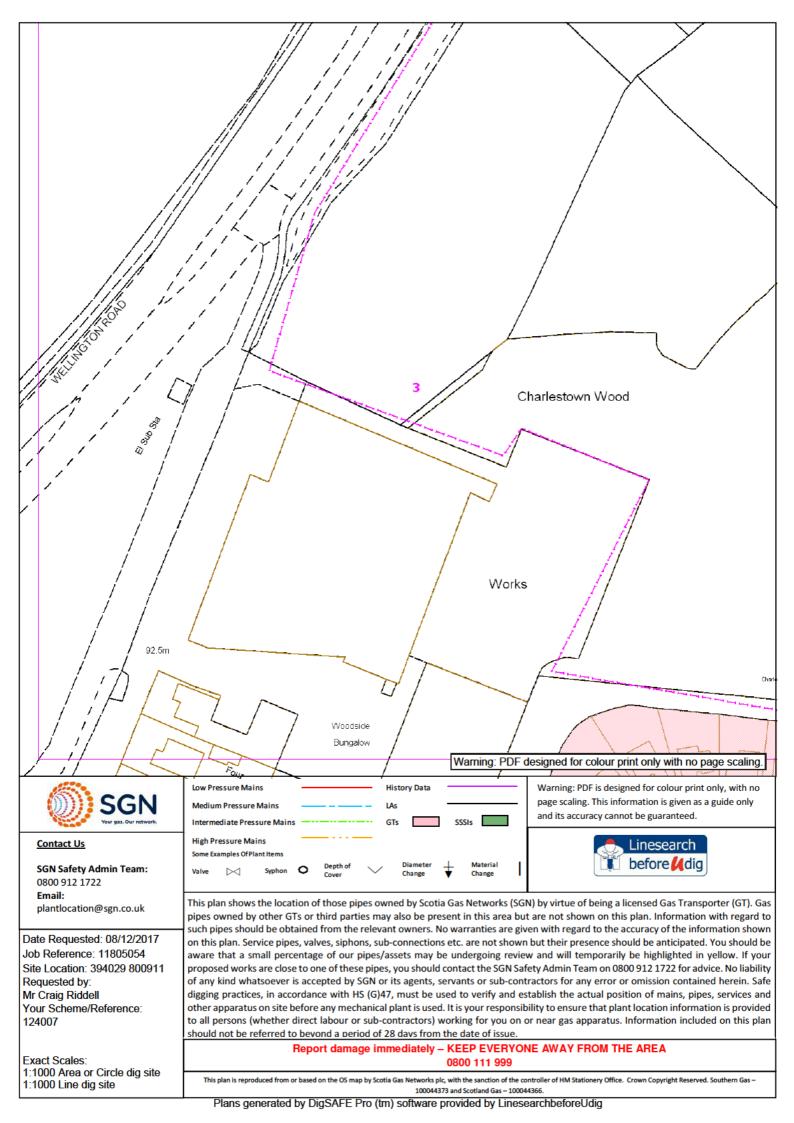
Smell gas? Call 0800 111 999

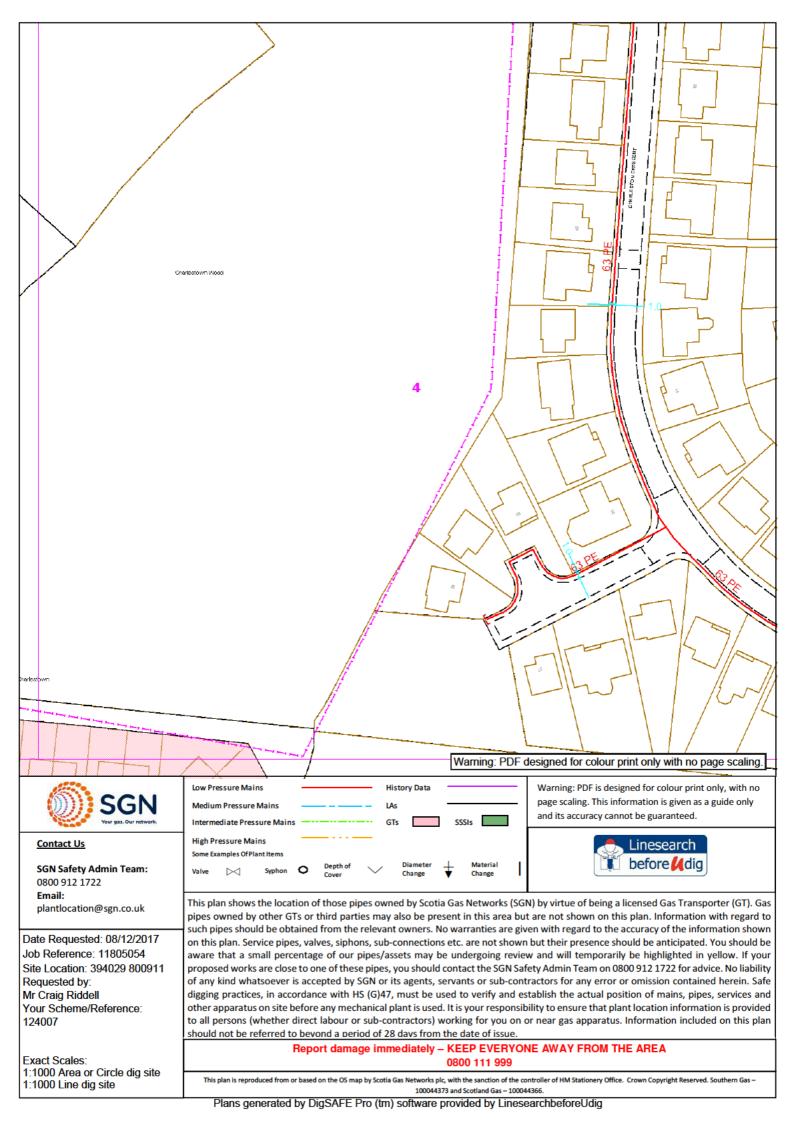














The following protective and precautionary measures MUST be taken when working in the vicinity of gas mains and services.

It is the responsibility of the property owner or company carrying out the work to make sure they've complied with the relevant legislation and Health and Safety Executive (HSE) guidance, eg HS(G)47. In practice, this means that whoever is carrying out the work MUST obtain gas mains location information and/or maps showing the indicative position of the gas network before any work takes place.

To avoid injury to yourself, your employees, colleagues and the general public you MUST suitably mark the position of the pipes on site.

HS(G)47 outlines best practice that should be followed to ensure you work safely:

- 1. Plan the work, obtain maps.
- 2. Detecting, identifying and marking underground services.
- 3. Safe excavation and safe digging practices.

In addition to the requirements under the Health and Safety At Work etc. Act 1974 to prevent injuries to employees and others (not employed), it is an offence under regulation 15 of the Pipelines Safety Regulations 1996 to cause damage to a pipeline (which includes gas mains and services as well as higher pressure pipelines) so as to give rise to a danger to persons.

You MUST make sure that current full colour copies of our maps are issued to all relevant personnel on site and they're aware of the presence and location of our gas mains and services prior to any excavation.

# In a gas emergency

If you cause a gas leak or suspect a main or service pipe or equipment is leaking. you MUST take the following emergency actions immediately:

- Ask people to move away from the area of the gas escape.
- Call 0800 111 999 immediately.

- Don't attempt to repair the escape or stop the leakage.
- As gas may enter buildings, ask people in the surrounding premises to leave until it's safe for them to return.
- 3. Stop anyone going near the immediate vicinity of the gas escape.
- 4. Prohibit smoking and extinguish all naked flames.
- 5. Don't use mobile phones or other ignition sources.
- 6. Assist our representatives and other emergency services such as the police, ambulance, and fire service as requested.

# Additional reference material

- SGN guidance for Safe Working in the Vicinity of Pipelines & Associated Installations operating >7barg. Applicable for HP only.
- HS(G)47 Avoiding Danger from Underground Services available from hse.gov.uk
- NJUG Utilities Guidance on Positioning and Colour Coding of Apparatus available from njug.org.uk





# Making an enquiry for gas mains or services maps

Please visit our **Dig safely** pages on **sgn.co.uk** for plant protection information and links to our online mapping system and other associated information and guidance.

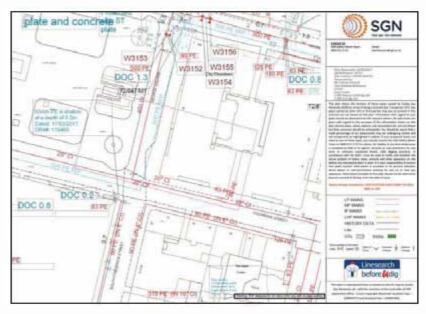
Our simple and easy to use online mapping system is available 24/7, 365 days a year.

You'll need to register/log in and provide a few details about your site location and the work you'll be carrying out. We'll respond immediately by email.

# What you're likely to be sent

You'll be sent an email with a map. This will be an extract from our gas mains record, showing your site and any of our gas pipes as well as relevant safety information.

We always send out safety information, however we may forward your enquiry on to a local plant protection officer or a pipelines engineer to make direct contact with you depending on the work location.



Example of a gas map

Note: Service pipes are not shown on our maps

# When working near our gas mains and services

# Safe system of work

To satisfy ourselves that work in the vicinity of our gas mains is being carried out safely, we may ask for a copy of your risk assessment and/or method statement paperwork.

Where work falls under the Construction (Design and Management) Regulations 2015 reference to our gas mains and services MUST be made within your site Health and Safety file.

#### **Financial**

Every reasonable precaution MUST be taken to avoid personal injury or damage to our gas network at all times.

If we incur any costs to repair direct or consequential damage or divert any gas main or service, you'll be recharged in full.

## **HSE**

Any damage to our gas mains or services will be subject to legislative reporting responsibilities to the Health and Safety Executive under Reporting of Injuries, Diseases & Dangerous Occurrences Regulations 2013, Gas Safety Management Regulations 1996, and the Pipelines Safety Regulations 1996.

# Minimum safe working distances

Depending on the activity being undertaken and the gas mains or services you are working within the vicinity of, there are different safe distances that MUST be adhered to. SGN plant protection officers or pipeline engineers will inform you of these if required.

#### Surface boxes and manholes

Do not bury or move our surface boxes. Free access MUST be maintained during and after your work. No manhole cover or other structure can be built over, around or under a gas main, and no work is to be carried out that results in a reduction or increase in cover or protection without prior written agreement.

# Deep excavations

Adequate protection, approved by us, MUST be applied for any deep excavations in the vicinity of our gas mains and services that may affect its security and integrity. Ground movement around gas mains MUST be prevented. We MUST be contacted if a sewer trench or any other water authority is to be constructed at greater than 1.5 metres depth near a buried gas main or service pipe. You MUST give us detailed drawings showing the line and width of the proposed sewer or other trench, together with the soil group classification of the area concerned.



# Crossing our mains or services

The placing of heavy construction plant, equipment, materials or the passage of heavy vehicles over our gas mains is prohibited unless specifically agreed protective measures (ie the construction of reinforced crossing points) have been carried out. This is particularly important where reductions in side support or ground cover are planned. You MUST NOT carry out any work in servitudes/easements without our prior written consent.

# **Exposed plant**

Where excavations in the vicinity of our gas mains affect its support, the plant MUST be adequately supported and protected in consultation with us and to our satisfaction. It MUST be protected from impact, restraints and thrust blocks, and supports MUST NOT be removed without our agreement.

## Hot work

One of our representatives should be present when welding or other hot work involving naked flames is being carried out near our gas mains, as there's potential for heat damage to plastic pipeline/coatings.

# Backfilling

Concrete backfill should not be placed closer than 300mm to our mains. No concrete or hard material should be placed under or adjacent to any of our gas mains. Shuttering MUST be constructed to maintain the stated clearances and prevent fresh concrete encasing our mains or services. Material used for backfill around our gas mains MUST conform to the following:

- If sand, it MUST be well-graded in accordance with BS EN 12620:2002.
- It MUST NOT contain any sharp particles (stones, bricks, lumps or corrosive materials).
- Foamed concrete MUST NOT be used.
- It MUST be laid to a minimum depth of 250mm above the crown of the gas main.

Note: Power ramming MUST NOT take place until a 300mm hand rammed layer has been completed over the crown of the main.

#### Access

Free access to our sites, mains and services, including temporary structures and spoil heaps MUST be available at all times.





# Mechanical excavation

Mechanical excavators (including breaker attachments) MUST NOT be used within the following distances from the confirmed location of our gas mains and services shown on our gas maps without prior agreement:

Type of mains and services	Gas map identification	Hand excavation required inside	Pipe pressure indication shown on map
Low Pressure (LP)	0 - 75mbar	0.5 metres	
Medium Pressure (MP)	75mbar to 2 bar	0.5 metres	
Intermediate Pressure (IP)	2 - 7 bar	3.0 metres	
High Pressure (HP)	Above 7 bar	You must seek approval from us prior to any work	

# Major accident hazard pipelines

# High pressure pipeline

No work is to take place near an HP pipeline until it is agreed with us. After agreement and before any work does take place, the location of our pipeline MUST be marked up and its position confirmed by digging trial holes with our personnel in attendance.





Pipeline markers

# High pressure

We will be involved in any work taking place near high pressure pipelines. We will provide you with additional information that you MUST familiarise yourself with before carrying out any work.

The default method of excavating near high pressure gas pipelines MUST always be by hand.



Wind turbines

The UK Onshore Pipelines
Operations Association (UKOPA)
has identified the appropriate
exclusion zone (distance from the
base of the wind turbine mast to
the edge of the pipeline) as 1.5
times the turbine height. Contact
MUST be made with us during the
planning stages of a wind turbine
or wind farm.



## Tree planting

If trees or shrubs are to be planted in the vicinity of our gas mains and services, the selection of tree or shrub type and how it's planted MUST be considered carefully. This is to avoid root damage to buried mains or services, and to ensure our subsequent excavations for main repair and maintenance won't damage the trees or shrubs.

Written approval from us MUST be obtained before any tree planting is carried out on a servitude/easement. Any approval we grant to plant trees

The following trees and those of similar size (deciduous or evergreen) MUST NOT be planted within 6m of the centre line of the main: ash, beech, birch, most conifers, elm, maple, lime, horse chestnut, oak, and sycamore. Apple and pear trees are also included in this category.

Dwarf apple stocks may be planted up to 3m of the centre line of the main.



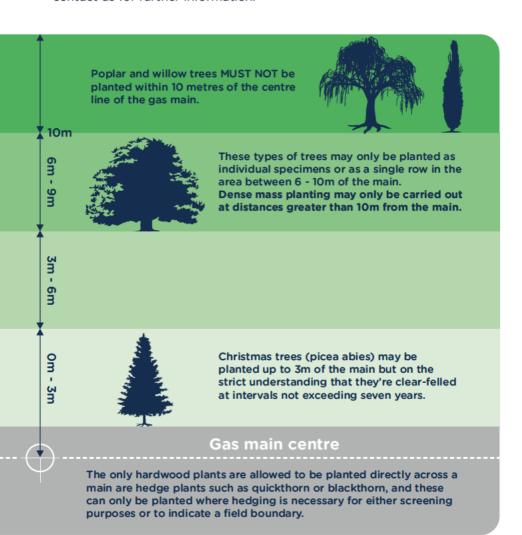
In cases where screening is required, the following are shallow rooting and may be planted close to the gas mains and services: blackthorn, broom, cotoneaster, elder, hazel, laurel, quickthorn, privet, snowberry and most ornamental shrubs.

# Gas main centre

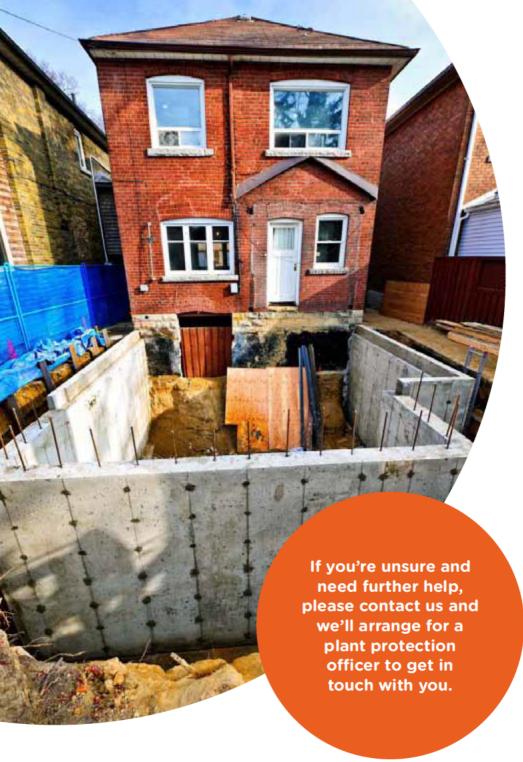
Raspberries, gooseberries and blackcurrants may be planted on the gas main, but a four metre strip, centred on the main, MUST be left clear at all times.

on a servitude/easement will be subject to us retaining the right to remove any tree, which in our opinion may become a danger to our mains in the future.

The written consent to plant trees will state what area may be planted and also the type of tree. The diagram details the specific species and the distances they MUST be planted from gas mains or services. You MUST contact us for further information.



Note: For further guidance, please refer to NJUG 10.



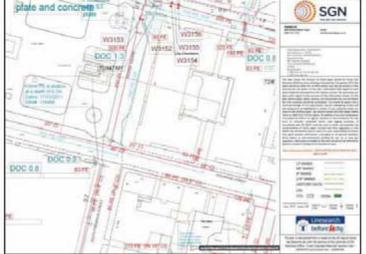
# Gas services/work in gardens

If you're going to be carrying out work around your home, or a third party is carrying out work on your behalf, we may send you a site map of our gas mains and services but your own gas service won't be marked.

The simplest way to understand the location of your gas service is to know where it enters your house.







< Your gas service pipe usually takes the shortest route to the gas main, as shown on the sample network map/drawing.



We provide a free plant location enquiry service and we're always happy to help.



Visit our Dig safely pages on sgn.co.uk



0800 912 1722 \*

\*All calls are recorded and may be monitored

# Safety Advice - Valves



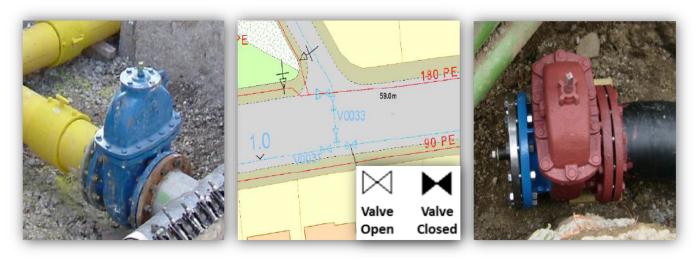
# Guidance when undertaking work near gas valves in our network areas

SGN manages the network that distributes gas to 5.8 million homes and businesses across Scotland and the south of England.

Due to a manufacturing issue, we are currently replacing or upgrading certain valve types that are at risk of bolt failure. In extreme cases, this can lead to gas escapes. This is a safety hazard and we have produced this guide to ensure you undertake adequate safety precautions when working near gas valves.

# Identifying gas valves

The images below are an illustration of typical gas valves. Please note, valves come in various colours, shapes and sizes, and you may come across a valve that looks different to those found in the images.



# What should you do?

When planning to work in our network areas, please observe the following points:

- You must contact us before starting any work activity within <u>3.0m</u> of a gas valve identified on our maps.
- 2. If an unexpected gas valve is exposed you must immediately stop excavation works and report this to us.
- 3. To protect yourself against the risks associated with exposing a valve, we advise that you contact us when in doubt.

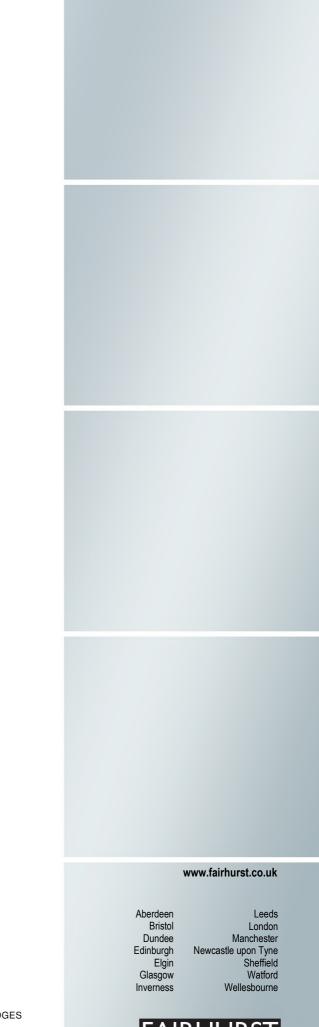
# Contact details

If you require further information or need assistance please contact us:

Safety Admin Team: 0800 912 1722

plantlocation@sgn.co.uk

Valve enquiries will be forwarded to a local engineer who will provide further safety information.



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# DEVELOPMENT BID FOR SITE AT HEATHVALE, COVE LANDSCAPE APPRAISAL on behalf of Mactaggart & Mickel



ABERDEEN CITY LOCAL DEVELOPMENT PLAN 2018

initiatives
urban design
landscape architecture
environmental planning

# **CONTENTS**

- 1.0 Introduction
- 2.0 Location plan
- 3.0 Aerial view
- 4.0 Landscape appraisal
- 5.0 Development site plan
- 6.0 Topography
- 7.0 Landscape masterplan

# 1.0 INTRODUCTION

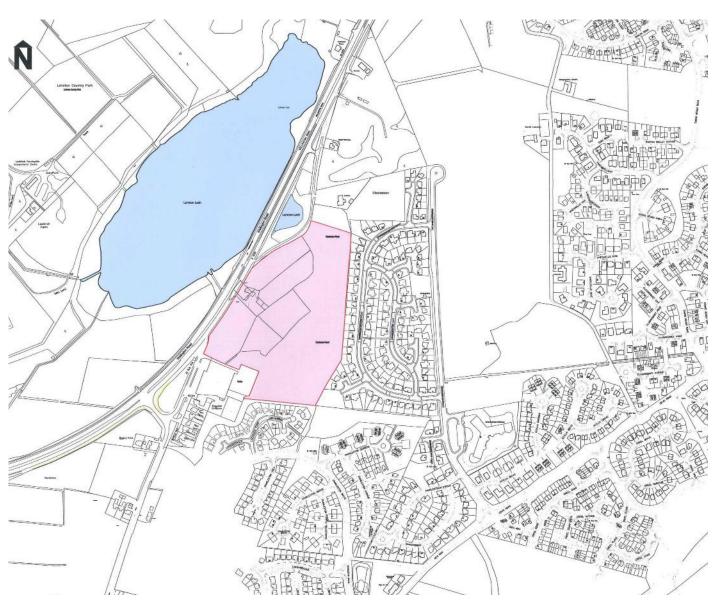
- 1.1 The site is located on the southern edge of Aberdeen City in the suburb of Cove. At just over 1km inland from the coast, the site sits at approximately 87m above sea level.
  - In December 2017 Mactaggart & Mickel instructed DEP landscape initiatives to prepare a landscape appraisal of the site with a view to submitting a bid for inclusion in the next Local Development Plan.
- 1.2 In order to inform the landscape planning of the site, a ground level tree survey and a Phase 1 ecological survey were commissioned. These were carried out in January and February 2018.











2.0 location plan



# **KEY APPRAISAL POINTS**

- site surrounded on 3 sides by residential development and commercial
- eastern half of the site comprises steep, Gorsecovered ground, the remains of Charlestown Wood
- the rest of the site is primarily rough grass with minimal tree cover except along boundaries
- site is secluded, with vehicle access from south commercial premises road or from small residential lane to the north
- site bounded by dilapidated stone walling
- Loirston Loch and Country Park situated opposite on western side of Wellington Road



3.0 aerial view of the site

# 4.0 Landscape Appraisal

#### 4.1 Landscape Character

The Loirston/Cove area consists of a narrow strip of agricultural land which slopes gently to the tops of adjacent coastal cliffs. Extensive views eastwards can be gained, although these may be obscured in parts by the railway embankment. Views inland are generally restricted due to rising land and industrial development prevalent in that area.

#### 4.2 Settlement

In the past, development of the wider area has centred on the industrial and commercial development of Altens, however, in recent years the scale of house building has accelerated particularly in the Charlestown area. Inevitably after the dust has settled from this expansion, small isolated sites like Heathvale emerge on the planning map. As if abandoned by the volume housebuilders, these sites, small in development terms at 6.2 hectares, require to be stitched back into the new built form that has been created.

To the east, the site has been closed off by development building hard up against the boundary, in what was Charlestown Wood. The A956 Aberdeen to A90 link road, Wellington Road, and a minor residential sealed track run along the western boundary. Beyond the trunk road is Loirston Loch, a Local Nature Conservation Site. To the southare business premises housing, while rough ground and an area of construction workdefines the northern boundary.

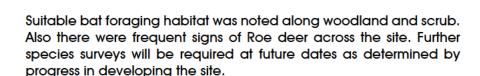
Heathvale cottage and paddock is situated in the centre of the site with access off the A956.

## 4.3 Topography

The low lying site sits below the elevated carriageway of Wellington Road and lies for the most part at around 85m AOD then rises up to a high point along the eastern boundary at around 92m AOD. The eastern side of the site has been disturbed historically where old gravel pits have since been colonised by Gorse and mixed woodland.

#### 4.4 Ecology

The site comprises a range of improved and semi-improved habitats including woodland, grassland, tree lines, hedgerow and extensive Gorse scrub.



Dry stone dykes were notable boundary features.

The ecological survey report is appended to this document.

#### 4.5 Tree survey

A tree survey was carried out by Angus Mackay Consultants in February 2018.

Within the site there were 72no trees surveyed that exceeded 17cms airth at 1.5m height.

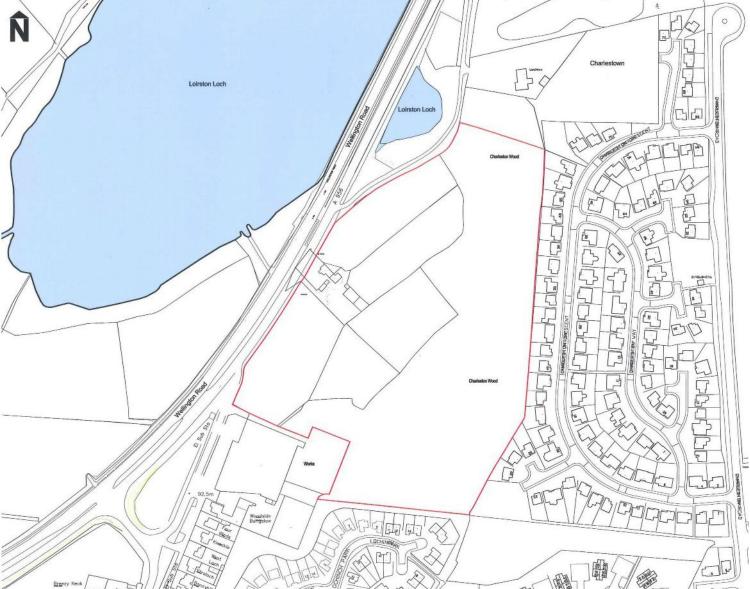
Species present and percentages are;-

Fagus sylvatica	Beech	12
Betula pendula	Silver Birch	4
Sorbus aria	Whitebeam	20
Sorbus aucuparia	Rowan	15
Picea sitchensis	Sitka Spruce	4
llex aquifolium	Holly	1
Alnus glutinosa	Common Alder	10
Salix caprea	Goat Willow	5

Of the 72 trees, 27no were recommended for removal on the grounds of decay, condition and public safety.







5.0 development site plan



view SW from the edge of the adjoining housing site



view eastwards towards the adjoining housing site



6.0 topography



# key landscape features

- site area 6.2 ha
- 30 open market flatted units
- 30 affordable flatted units
- 60 house plots
- public open space in excess of 40%



- incorporation of "natural" play areas to take advantage of the site
- links created to corepath and into adjoining residential areas
- Gorse understorey to be managed to protect bird and mammal life on the site
- enhanced biodiversity by introducing a mix of trees and understorey shrubs
- sustainable drainage
- reflect the dramatic topography of the site in the layout
- create new blocks of woodland, undergrowth and open areas to maximise the wildlife potential

7.0 landscape masterplan





**DEP**landscape initiatives

The Studio, 17 Bidders Gait, Regency Gardens, Lanark ML11 9FG tel 01555 660555

Email: smb@depli.co.uk

# HEATHVALE, COVE, ABERDEEN TREE SURVEY REPORT

For on behalf of

# **DEP LANDSCAPE INITIATIVES**

**26 FEBRUARY 2018** 

Angus Mackay Landscape Consultants 28 Ballater Drive Bearsden Glasgow G61 1BX

# Contents

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Tree Survey Report -

Rigifa Farm, Aberdeen

#### 1. Introduction.

The purpose of this Tree Survey is to report on the trees, and their condition and retention potential at Heathvale, Charleston Wood, Aberdeen

# 2. Existing Tree Resource

140 No trees were individually surveyed along with a woodland survey on remainder of

#### 3. Tree Survey.

- 3.1 The objects of the survey are:-
  - To undertake a detailed assessment with regard to the nature, extent and condition of the trees.
  - To provide a comprehensive inventory for the surveyed trees, in line with the British Standard 5837: 2012 -Trees in relation to Design, Demolition and Construction Recommendations.
  - To provide recommendations for works required in the interests of safety and sound arboricultural management.
- 3.2 Limitations
  - The findings and recommendations relating to the tree contained within this report are valid for a period of twelve months from the date of survey I.e. until 31 January 2019.
  - As trees are living organisms and subject to change, it is strongly recommended that they are inspected on a regular basis for reasons of safety.
  - The report relates only to the trees surveyed.
  - The trees have been visually inspected from ground level, and whilst every effort has been made to detect defects, no absolute guarantee can be given as to the structural stability or otherwise of any individual tree. Extreme weather conditions can cause damage to even apparently healthy trees.
  - A detailed assessment of the internal condition of the trees was not undertaken.
  - This report has been prepared for the sole use of DEP Landscape Initiatives and their appointed agents. Any reference on reliance to this report or information therein by any other party is done so entirely at their own risk.

# 3.3 Tree Survey Methodology

The tree survey was carried out from the ground on 1,8 & 9 February 2018, by Angus Mackay, Landscape Consultants. Weather conditions at the time were Showery, Dull, Breezy, 2-6 C.

140 No trees were surveyed

Tree Survey Report - - Rigifa Farm, Aberdeen

The Visual Tree Assessment method (Stage 1) was used to determine the condition of the trees.

Information on the tree is provided in the Tree Survey Schedule. This records pertinent details as follows.

Tree Number	Tree numbers
Tree Species	Common Name and botanical name of species
Diameter	Diameter at breast height. Measured in centimetres at 1.5M
Height	Approximate Height of tree assessed in metres
Crown Spread	Approximate Spread of branches from centre of trunk to drip line, assessed to North, South, East or West
Crown clearance	Crown clearance above adjacent ground level assessed in metres N,S E & W
Age Class	Young (Y) Semi Mature (SM), Early Mature (EM) Mature (M) Over Mature (OM) Veteran (V)
Comments	General comments on tree health, structural condition and form, highlighting any defects or areas of concern.
Useful remaining life expectancy	Estimated remaining contribution in years ie -10, 10 +, 20 + & 40 +
Physiological condition	Good, Normal, Fair & poor.
Category grading	Tree quality assessment.
Recommendations	Recommended remedial action/arboricultural works

Trees are graded with a tree category (as per BS 5837: 2012 – Trees in Relation to Design, Demolition and Construction – Recommendations). There are four main categories as noted below A,B,C for trees good enough to be retained and U for trees to be removed. This is fully expanded overleaf. Within these categories, trees can be assessed for their specimen value, their landscape value or their conservation value.

Tree Survey Report -

Rigifa Farm, Aberdeen

Category Definitions	Criteria	Sub Categories	
	1	2	3
Category A	Mainly arboricultural values	Mainly landscape Values	Mainly cultural values, including conservation
Trees of high quality with an estimated life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual: or those that are essential components of groups or semi formal arboricultural features (e.g) the dominant and/or principal trees within an avenue	Tree, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical commemorative or other values (e.g veteran trees or wood-pasture)
Category B			
Trees of moderate quality with an estimated life expectancy of at least 20 years	Trees that might be included in category A, but are down graded because of impaired condition (e.g presence of significant defects, including un sympathetic past management and storm damage) such that they are unlikely to be suitable for retention for beyond 40 years: or trees lacking the special quality necessary to merit category A designation	Trees usually present in numbers, usually growing as groups or woodland, such that they attract a higher collective rating than they might as individuals: or trees occurring as collectives, but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value
Category C			
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees or very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value: and/or trees offering low or only temporary/transient screening benefits.	Trees with no material conservation or other cultural value
Category U	Criteria – sub categories		
Those in such a condition that they cannot realistically be retained as living trees in the context of the current land used for longer than 10 years	expected due other categor shelter canno • Trees that are overall declir	ve a serious, irremediable, structural of to collapse, including those that will by U trees (eg where, for whatever reast be mitigated by pruning) adead or are showing signs of significate.  I with pathogens of significance to he	become unviable after removal of son, the loss of the companion cant, immediate and irreversible

# 4.0 Arboricultural Recommendations.

# 4.1 Category Grading as per schedule

The trees surveyed were in various categories.

Tree Survey Report - - Rigifa Farm, Aberdeen

### 4.2 Trees and Construction

In order to safeguard the tree during any works on the property, BS 5837: 2012 recommends the establishment of a tree protection zone from which all construction activity, including material storage, is excluded. All works must ensure tree roots are not damaged by compaction/mechanical damage and tree boles/branches are not damaged by construction traffic. BS 5837: 2012 recommends the erection of a scaffold fence at a distance of 12 times the diameter of the tree to a maximum distance of 15M. Some encroachment into the RPA can be tolerated to a degree, depending on tree and site conditions, but must only be sanctioned by an arboriculturist.

RPA fencing should be erected prior to work commencing to detail as shown on attached drawing prior to any work taking place as per BS 5837:2012

### 4.3 Tree Surgery and Precautions.

Tree surgery and felling work required should comply with BS 3998: 2010 'Tree Work – Recommendations'.

Trees may host numerous species of animals, birds, bats, insects and fungi, many of which are protected by British and European legislation. The destruction or disturbance of any of these species or their habitat is an offence. It is therefore paramount that checks are conducted prior to tree works to identify if there are protected species using the trees or nearby habitats which may be disturbed. Expert help will be required to identify and /or protect these species.

The trees may be covered by a Tree Preservation Order ,or may be in a Conservation Area, therefore, prior to removing or carrying out any work on the trees, permission should be sought from the Local Planning Authority. Prior to any Arboricultural works, permission from the landowner should be sought and contact should be made with Forestry Commission Scotland to check if a Felling Licence is required

4.4 Replacement Trees – Where trees are to be replaced, consideration should be given to a 1 for 1 basis. Native trees are suggested with a local seed provenance Forestry Commision zone 202. Planting should be carried out to BS 4545:2014 – Trees from Nursery to Independence in the Landscape - Recommendations

Default specification for protective barrier

22

Кеу

- 1 Standard scaffold poles
- 2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- A Ground lovel
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps



							<u> </u>			
C VS = Multi Semi Mature:	RPA Radius of a nominal circle (M²)	0	3.8	5.00	0	6.5	0	0	3.8	4.4
WEATHER: Calm, Clear, Dry 3-8 C intives a Clearance: D/S = Double Stem: M/S = Multi AGE CLASS Y = Young: SM = Semi Mature: Survey valid until 21 February 2019	Grading Category	n	C 2	C 2	n	C 2	n	ם	C 2	C 2
Calm, Cle D/S = Do S Y= Y	ERV	0	+01	+ 01	0	20+	0	0	+01	10+
WEA andscape Initiatives eight of Crown Clea AG	Preliminary Management Recommendations	REMOVE	N/W/R MONITOR	Lift canopy to 5 M	REMOVE	Remove smaller dead stem	REMOVE	REMOVE	Remove smaller stem	Remove smaller stem
ND LEVEL TREE SURVEY: Heathvale, Charleston Wood, Cove, Aberdeen DATE OF SURVEY: 22 > 24/02/2018 SURVEY No. 708/908  IED OUT BY MACKAY CONSULTANTS BSS837:2012 - Trees in Relation to Design, Demolition & Construction CLIENT: DEP Landscap  = Remove Dead Wood & Snags Physio Cond. = Physiological Condition N= Normal: F = Fair: P = Poor: U = Remove: HCC = Height of  AS = Aerial Survey Recommended: DDT = Decay Detection Test Recommended: WLP = Wild Life Potential 1 = High: 2 = Moderate: 3 = Poor:  Early Mature: M = Mature: ERY = Estimated Remaining Years = -10, 10 + , 20 + , 40+:  N/W/R = No Work Required at this time.	Structural Condition	Growing out of stone deck overhanging access rd. Decay at base	Close to stone dyke on the West	Fair	South	Fair	Suppressed & leans to the East	Growing out of stone dyke & poor vigour	Fair	Bifurcates at 2 M
OF SURVEY: 22 > 24/02/2018 ign, Demolition & Construction I: F = Fair: P = Poor: LP =Wild Life Potential 1= Higl 20 +, 40+: N/W/R =	Physio Cond.	Poor	Fair	Fair	Poor	Fair	Poor	Poor	Fair	Fair
Sign, Demolitions in F = Fair:  TP = Wild Life 20 +, 40+:	Age Class	EM	$_{ m SM}$	EM	$_{ m SM}$	SM	$_{ m SM}$	$_{ m SM}$	$_{ m SM}$	$_{ m SM}$
Cond. = Physiological Condition N= Normal: F = Fair: P = Poor: Estimated Remaining Years = -10, 10 +, 20 +, 40+:	Stem Diam at 1.5M AGL CM *	50/31 20/10	32	48	18	32/12 10	20/10	12/10 10/6	20/12	27/10
1 Wood, Cove, AP 137:2012 – Trees hysiological Conc Detection Test Re I Remaining Yea	Height of Crown Clearance M N,S,E,W	0	M 9	5 E	5 E	0	0	0	0	0
ale,Charlestor NTS BSSt ysio Cond. = P DDT = Dccay = Estimate	Branch Spread Approx. M	N: 5 S: 1.5 E: 6 W: 8	N; 5 S; 4 E; 4 W; 4	N: 6 S: 6 E: 5 W: 6	R. S. 3 W. 5 W. 1	N: 5 S: 5 E: 5 W: 6	N: 3 S: 3 E: 6 W: 1	N; 3 S: 4 E: 4 W; 5	N; 3 S; 5 E; 2 W; 2	N; 5 S: 5 W: 4
VEY: Heathva CONSULTAN & Snags Phys ommended: D ure: ERY=	Height approx M	15	19	19	13	17	10	8	10	11
GROUND LEVEL TREE SURVEY: Heathvale, Charleston Wood, Cove, Aberdeen DATE O CARRIED OUT BY MACKAY CONSULTANTS BS5837:2012.—Trees in Relation to Design D/W/S = Remove Dead Wood & Snags Physio Cond. = Physiological Condition N=Normal: Stem: AS = Aerial Survey Recommended: DDT = Decay Detection Test Recommended: WLP EM = Early Mature: M = Mature: ERY = Estimated Remaining Years = -10, 10 +, 20	Species	Common Beech M/S	Sitka Spruce	Sitka Spruce	Shore Pine	Sitka Spruce M/S	Shore Pine D/S	Rowan M/S	Shore Pine D/S	Shore Pine D/S
⊋≈⋞∴∵	Tree Ref No	00929	930	931	932	933	934	935	936	00937

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C I/S = Multi Semi Mature:	RPA Radius of a nominal circle (M2)	0	0	0	0	2.8	0	1.9	4.1	0	
WEATHER: Calm, Clear, Dry 3-8 C intives  n Clearance: D/S = Double Stem: M/S = Multi AGE CLASS Y= Young: SM = Semi Mature: Surrow volid meil 21 Echanom 2010	Grading Category	n	i o	'n	n	C 2	n	C 2	B 2	n	
Calm, Cle D/S = De	ERY	0	0	0	0	+ 01	0	10+	20+	0	
WEA andscape Initiatives gight of Crown Clea AG	inary gement mendations	REMOVE	REMOVE	REMOVE	REMOVE	N/W/R	REMOVE	Lift canopy to 8 M to clear No 945	N/W/R	REMOVE	A CANADA
SURVEY No CLIEN U = Remove: 1: 2 = Moderate No Work Reo	Structural Condition	Leaning badly to the North & root heave	Severe bend at 2.5 M	Leaning badly to the South East	Leaning badly to the South East	Fair	On the deck	Fair	Fair	Dying, Poor	Control of the Contro
OF SURVEY: 22 > 24/02/2018 ign, Demolition & Construction : F = Fair: P = Poor: LP = Wild Life Potential 1 = High 20 +, 40+: N/W/R =	Physio Cond.	Poor	Poor	Poor	Poor	Fair	Poor	Fair	Normal	Poor	
OF SURVEY ign, Demolitio I: F = Fair: LP = Wild Life 20 +, 40+:	Age Class	SM	SM	SM	SM	$_{ m SM}$	SM	Y	SM	SM	
Cond. = Physiological Condition N=Normal: F= Fair: P = Poor: = Potential Detection Test Recommended: WLP = Wild Life Potential 1 = High Estimated Remaining Years = -10, 10 + , 20 + , 40+:	Stem Diam at 1.5M AGL CM *	28	28/14/8	20/15	26/13	23	25	16	34	30/6	
1 Wood, Cove, Al 337:2012 – Trees hysiological Cond Detection Test Rd	Height of Crown Clearance M N,S,E,W	1.8 S	0	0	0	3 W	0	N 9	0	0	
vale, Charlestor INTS BS58 1ysio Cond. = P DDT = Decay	Branch Spread Approx. M	X X X X X X X X X X X X X X X X X X X	S: 2 W: 1 W: 1	N. S. 4. 4.	S: 7 S: 5 W: 6	N. S.	X: 0 S: 0 E: 0 W: 0	N: 3 S: 3 E: 3 W: 3	N: 6 S: 6 E: 6 W: 6	N: 2 S: 5 W: 2 W: 2	
YVEY: Heathval Y CONSULTAN d & Snags Phys commended: Di	Height approx M	6	10	10	Ξ	12	0	10	8	9	
GROUND LEVEL TREE SURVEY: Heathvale, Charleston Wood, Cove, Aberdeen DATE OF SURVEY. CARRIED OUT BY MACKAY CONSULTANTS BSS837:2012 – Trees in Relation to Design, Demolition D/W/S = Remove Dead Wood & Snags Physio Cond. = Physiological Condition N= Normal: F = Fair. Stem: AS = Aerial Survey Recommended: DDT = Decay Detection Test Recommended: WLP = Wild Life EM = Early Mature: M = Mature: ERY = Estimated Remaining Years = -10, 10 + , 20 + , 40+:	Species	Shore Pine	Shore Pine M/S	Shore Pine D/S	Shore Pine D/S	Shore Pine	Shore Pine	Shore Pine	Common Holly	Common Alder D/S	
GROUND CARRIED D/W/S = Stem: AS EM = Early	Tree Ref No	00938	938	940	941	942	943	944	945	00946	

<u> </u>											
C /S = Multi semi Mature:	RPA Radius of a nominal circle (M <sup>2)</sup>	0	0	0	0	8,9	13.6	13.4	0	0	
THER: Calm, Clear, Dry 3-8 C rance: D/S = Double Stem: M/S = Multi E CLASS Y = Young: SM = Semi Mature: Survey valid until 21 Experience 2010	Grading Category	Ω	ū	n	n	C 2	C 2	C 2	Ω	n	
Calm, Cle  D/S = Do  S	ERY	0	0	0	0	10+	10+	+0	0	0	
WEA' andscape Initiatives sight of Crown Clea AG	inary gement imendations	REMOVE	REMOVE	REMOVE	REMOVE	Remove barbed wire from stem & smaller stems to the East	D/W/S MONITOR	D/W/S. Remove barbed wire	REMOVE	REMOVE	
GROUND LEVEL TREE SURVEY: Heathvale, Charleston Wood, Cove, Aberdeen DATE OF SURVEY: 22 > 24/02/2018 SURVEY No. 708/908  CARRIED OUT BY MACKAY CONSULTANTS BS5837:2012 – Trees in Relation to Design, Demolition & Construction  CLIENT: DEP Landscal  D/W/S = Remove Dead Wood & Snags Physio Cond. = Physiological Condition N= Normal: F = Fair: P = Poor: U = Remove: HCC = Height of  Stem: AS = Aerial Survey Recommended: DDT = Decay Detection Test Recommended: WLP = Wild Life Potential 1 = High: 2 = Moderate: 3 = Poor:  EM = Early Mature: M = Mature: ERY = Estimated Remaining Years = -10, 10 + , 20 + , 40+:  NW/R = No Work Required at this time		Dead. On the deck	Dying	Dying	Affecting retaining wall	Growing from old stump & through boundary fence. Slight basal decay	Growing out of retaining wall	Barbed wire around trunk. Slight stem damage	Decay at base. Growing out of retaining wall	Decay at base & growing out of stone dyke	
DATE OF SURVEY: 22 > 24/02/2018  1 to Design, Demolition & Construction Normal: F = Fair: P = Poor: ed: WLP = Wild Life Potential 1 = Higt 10 +, 20 +, 40+: NW/R =	Physio Cond.	0	Poor	Poor	Poor	Fair	Fair	Fair	Poor	Poor	and the state of t
OF SURVEY sign, Demolitio al: F = Fair: 1LP = Wild Life 20 +, 40+:		0	EM	$_{ m SM}$	Y	SM	ЕМ	ЕМ	SM	SM	
DATE OF SURVEY: 22 > 24/02/2018  BS5837:2012 – Trees in Relation to Design, Demolition & Construction Cond. = Physiological Condition N=Normal: F = Fair: P = Poor: = Decay Detection Test Recommended: WLP = Wild Life Potential 1 = Higt Estimated Remaining Years = -10, 10 +, 20 +, 40+:	Stem Diam at 1.5M AGL CM *	15	44/23 20	26/12 10/10	13	53/21 20	52/30 21/10	50/38 12/12	20/18 14/12	20/16 12/10	
1 Wood, Cove, Al 337:2012 – Trees hysiological Con Detection Test Ra d Remaining Yea	Height of Crown Clearance M N,S,E,W	0	0	0	1 E	0	0	0	0	0	
ale, Charleston NTS BSS; ysio Cond. = P DDT = Decay	Branch Spread Approx. M	%	N: 6 S: 6 W: 5	W.E. 5	N: 2 S: 1 W: 1	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	次 55 W E 13 W 8 8	N: 9 S: 8 W: 7	N: 8 S: 6 E: 6 W: 9	X: 5 S: 5 E: 6 W: 8	
Y CONSULTAN Y CONSULTAN I & Snags Phys commended: D ture: ERY=	Height approx M	2	8	8	7	10	<del></del>	15	10	10	
GROUND LEVEL TREE SURVEY: Heathvale, Charleston Wood, Cove, Aberdeen DATE OF SURVEY CARRIED OUT BY MACKAY CONSULTANTS BS5837:2012 – Trees in Relation to Design, Demolitio D/W/S = Remove Dead Wood & Snags Physio Cond. = Physiological Condition N=Normal: F = Fair: Stem: AS = Aerial Survey Recommended: DDT = Decay Detection Test Recommended: WLP = Wild Life EM = Early Mature: M = Mature: ERY = Estimated Remaining Years = -10, 10 + , 20 +, 40+:	Species	Shore Pine	Common Alder M/S	Common Alder M/S	Common Alder	Common Beech M/S	Common Beech M/S	Common Beech M/S	Common Beech M/S	Common Beech M/S	
GROUND CARRIED D/W/S = 1 Stem: AS:	Tree Ref No	00947	948	949	950	951	952	953	954	00955	

Multi Mature:	RPA Radius of a nominal circle (M²)										
8 C M/S = = Semi	RPA of a r circle (M²)	0	0	0	3.6	0	0	2.8	0	2.4	ļ
WEATHER: Calm, Clear, Dry 3-8 C intives a Clearance: D/S = Double Stem: M/S = Multi AGE CLASS Y= Young: SM = Semi Mature: Survey valid until 21 February 2019	Grading	n	n	a	C 2	n	n	C 2	n	C 2	
Calm, Cl.  D/S = D  SS Y= valid until	ERY	0	0	0	10+	0	0	20+	0	+ 01	
WEA andscape Initiatives eight of Crown Clea AG	inary gement imendations	REMOVE	REMOVE	REMOVE	N/W/R	REMOVE	REMOVE	N/W/R	REMOVE	N/W/R MONITOR	***************************************
GROUND LEVEL TREE SURVEY: Heathwale, Charleston Wood, Cove, Aberdeen DATE OF SURVEY: 22 > 24/02/2018 SURVEY No. 708/908 CARRIED OUT BY MACKAY CONSULTANTS BS5837:2012 – Trees in Relation to Design, Demolition & Construction D/W/S = Remove Dead Wood & Snags Physio Cond. = Physiological Condition N = Normal: F = Fair: P = Poor: U = Remove: HCC = Height of Stem: AS = Aerial Survey Recommended: DDT = Decay Detection Test Recommended: WLP = Wild Life Potential 1 = High: 2 = Moderate: 3 = Poor: EM = Early Mature: M = Mature: ERY = Estimated Remaining Years = -10, 10 + , 20 + , 40+: N/W/R = No Work Required at this time.	Structural Condition	Elevated root plate. Affecting boundary wall	Elevated root plate. Decay at base	Elevated root plate. Decay a near base	Slight root heave bends at 1 M	Decay in crown & partially on the deck.	On the deck	Fair	Severe decay in main stem	Bends near base	
OF SURVEY: 22 > 24/02/2018 ign, Demolition & Construction I: F= Fair: P = Poor: LP =Wild Life Potential 1= Higl 20 +, 40+:	Physio Cond.	Poor	Роог	Poor	Fair	Poor	Poor	Fair	Poor	Fair	
Sign, Demolial: F = Fa	Age Class	Y	Y	$_{ m SM}$	SM	SM	SM	>-	¥	Y	
Cond. = Physiological Cove, Aberdeen DATE BSS837:2012 – Trees in Relation to Dec Cond. = Physiological Condition N= Norma = Decay Detection Test Recommended: W Estimated Remaining Years = -10, 10 +,	Stem Diam at 1.5M AGL CM *	16/14 14/8	21/15 14/12	30/22 14/12	30	25/22 12/12	23/18	15/8	17/16 12/12	20	
1 Wood, Cove, A 837:2012 – Trees hysiological Con Detection Test R d Remaining Yea	Height of Crown Clearance M N,S,E,W	0	0	0	1 W	0	0	0	0	0	
vale, Charleston NTS BSSI ysio Cond. = P DDT = Decay	Branch Spread Approx. M	N. S. 3 W. E. 4 W. 8	N: 5 S: 6 E: 5 W: 6	N: 6 S: 6 E: 7 W: 7	N: 7 S: 7 E: 6 W: 6	X X X X X X X X X X X X X X X X X X X	X; 3 S; 3 E: 6 W; 6	N: 3 S: 2 E: 3 W: 3	N: 6 S: 6 E: 6 W: 6	X: 2 W: 2 W: 2	
VEY: Heathvai CONSULTAN & Snags Phys commended: Di	Height approx M	8	6	10	13	5	5	7	9	7	
GROUND LEVEL TREE SURVEY: Heathvale, Charleston Wood, Cove, Aberdeen DATE OF SURVEY: 22 > 24/02/2018 CARRIED OUT BY MACKAY CONSULTANTS BSS837:2012 – Trees in Relation to Design, Demolition & Construction D/W/S = Remove Dead Wood & Snags Physio Cond. = Physiological Condition N= Normal: F = Fair: P = Poor: Stem: AS = Aerial Survey Recommended: DDT = Decay Detection Test Recommended: WLP = Wild Life Potential 1 = High EM = Early Mature: M = Mature: ERV = Estimated Remaining Years = -10, 10 + , 20 + , 40+: N/W/R =	Species	Common Beech M/S	Common Beech M/S	Common Beech M/S	Common Silver Birch	Goat Willow M/S	Goat Willow D/S	Common Alder D/S	Goat Willow M/S	Common Alder	
GROUND CARRIED D/W/S = 1 Stem: AS: EM = Early	Tree Ref No	95600	957	958	959	096	961	962	963	00964	

C I/S = Multi Semi Mature:	RPA Radius of a nominal circle (M2)	0	6.4	3.0	2.5	2.4	2.5	4.8	7.1	0	
WEATHER: Calm, Clear, Dry 3-8 C latives  n Clearance: D/S = Double Stem: M/S = Multi AGE CLASS Y= Young: SM = Seni Mature: Survey valid until 21 Reheaver 2010	Grading Category	n	C 1	C 1	C 1	C 1	C 1	C 1	C 1	n	
Calr D/S SS-slid	ERY	0	20+	+ 02	20+	20+	20+	20+	20+	0	
WEA' andscape Initiatives eight of Crown Clea AG	linary gement imendations	REMOVE	N/W/R	N/W/R	N/W/R	N/W/R	N/W/R	N/W/R	N/W/R	REMOVE	- Company
ND LEVEL TREE SURVEY: Heathvale, Charleston Wood, Cove, Aberdeen DATE OF SURVEY: 22>24/02/2018 SURVEY No. 708/908  IED OUT BY MACKAY CONSULTANTS BS\$837:2012 – Trees in Relation to Design, Demolition & Construction CLIENT: DEP Landsca = Remove Dead Wood & Snags Physio Cond. = Physiological Condition N= Normal: F = Fair: P = Poor: U = Remove: HCC = Height of AS = Aerial Survey Recommended: DDT = Decay Detection Test Recommended: WLP = Wild Life Potential 1 = High: 2 = Moderate: 3 = Poor: artly Mature: M= Mature: ERY = Estimated Remaining Years = -10, 10 +, 20 +, 40+: NW/R = No Work Required at this time.	Structural Condition	Severe decay in crown	Fair	Fair	Fair	I M from stone dyke	1 M from stone dyke	Fair	Fair	Poor vigour. Stems splitting	
DATE OF SURVEY: 22 > 24/02/2018 a to Design, Demolition & Construction Normal: F = Fair: P = Poor: ed: WLP = Wild Life Potential 1 = Higt 10 +, 20 +, 40+:	Physio Cond.	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Poor	
OF SURVEY sign, Demolitio al: F = Fair: 1LP = Wild Life 20 +, 40+:		SM	$_{ m SM}$	Y	<b>&gt;</b>	<b>&gt;</b>	<b>&gt;</b>		$_{ m SM}$	SM	
Charleston Wood, Cove, Aberdeen DATE OF SURVEY: 22 > 24/02/2018 BS\$837:2012 – Trees in Relation to Design, Demolition & Construction Cond. = Physiological Condition N= Normal: F = Fair: P = Poor: — Becay Detection Test Recommended: WLP =Wild Life Potential 1= High Estimated Remaining Years = -10, 10 +, 20 +, 40+: NW/R =	Stem Diam at 1.5M AGL CM *	18/14 10/10	30/23	15/10	12/10	10/6/4	14/8	16/14 10	22/21 16	13/12 10	
1 Wood, Cove, Al 137:2012 – Trees hysiological Con Detection Test Rd	Height of Crown Clearance M N,S,E,W	0	0	0	0	0	0	0	0	0	
ale, Charlestor NTS BS58 ysio Cond. = P DDT = Decay	Branch Spread Approx. M	S.S.S. W. S. 2 A.S. 2 A.S. 2		S: 2 E: 1 W: 1	N: 2 S: 2 E: 2 W: 2	N: 1 S: 1 E: 1 W: 2	N: 1 S: 1 E: 2 W: 2	N: 2 S: 2 E: 2 W: 2	W. S. 3 W. 2 2	N: 2 S: 2 E: 1 W: 1	
VEY: Heathval CONSULTANI & Snags Physi commended: DI ure: ERY=	Height approx M	v	7	5	4	4	4	4	5	5	
GROUND LEVEL TREE SURVEY: Heathvale, Charleston Wood, Cove, Aberdeen DATE OF SURVEY CARRIED OUT BY MACKAY CONSULTANTS BSS837:2012—Trees in Relation to Design, Demolition D/W/S = Remove Dead Wood & Snags Physio Cond. = Physiological Condition N=Normal: F = Fair: Stem: AS = Aerial Survey Recommended: DDT = Decay Detection Test Recommended: WLP = Wild Life EM = Early Mature: M = Mature: ERY = Estimated Remaining Years = -10, 10 + , 20 + , 40+:	Species	Rowan M/S	Rowan D/S	Rowan D/S	Rowan D/S	Rowan M/S	Rowan D/S	Whitebeam M/S	Whitebeam M/S	Whitebeam M/S	
GROUND CARRIED D/W/S = 1 Stem: AS EM = Early	Tree Ref No	59600	996	296	896	696	970	971	972	00973	

	Ti Ti	T	···			1	Τ	1			]
.8 C M/S = Multi = Semi Mature:	RPA Radius of a nominal circle (M²)	4.9	2.3	6.4	6.0	7.8	5.5	5.2	5.2	4.9	
e :	Grading Category	C 1	0.1	C 1	C 1	C 1	C 1	C 1	0.1	- C -	
Calm, Cle D/S = Do	ERY	20+	-10	-10	10+	-10	-10	01-	-10	10+	
WEA' andscape Initiatives eight of Crown Clea AG	inary gement imendations	N/W/R	Remove smaller stems	N/W/R	Remove decayed stem to the South	N/W/R	N/W/R MONITOR	N/W/R MONITOR	N/W/R	N/W/R	
GROUND LEVEL TREE SURVEY: Heathvale, Charleston Wood, Cove, Aberdeen DATE OF SURVEY: 22 > 24/02/2018 SURVEY No. 708/908 CARRIED OUT BY MACKAY CONSULTANTS BSS837:2012 – Trees in Relation to Design, Demolition & Construction D/W/S = Remove Dead Wood & Snags Physio Cond. = Physiological Condition N= Normal: F = Fair: P = Poor: U = Remove: HCC = Height of Stem: AS = Aerial Survey Recommended: DDT = Decay Detection Test Recommended: WLP = Wild Life Potential 1 = High: 2 = Moderate: 3 = Poor: EM = Early Mature: M = Mature: ERY = Estimated Remaining Years = -10, 10 + , 20 + , 40+: N/W/R = No Work Required at this time.	Structural Condition	Slight stem damage	Inclusion at 0.30 M	Slight decay at base. Bifurcates at 1.0 M	Surrounded by Gorse	Witches Broom in crown. Water Logging under canopy to the East	Water logging under canopy	Slight decay at base. Water logging under canopy	Slight water logging under canopy & Witches Broom in crown	2 M from wall to the South	
DATE OF SURVEY: 22 > 24/02/2018 n to Design, Demolition & Construction Normal: F = Fair: P = Poor: ed: WLP = Wild Life Potential 1 = High 10 +, 20 +, 40+: N/W/R =	Physio Cond.	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	
OF SURVENsign, Demolitical: F = Fair: TP = Wild Lift 20 +, 40+:	Age Class	SM	<b>X</b>	EM	$_{ m SM}$	$_{ m SM}$	SM	Y	¥	Y	
Cond. = Physiological Condition N= Normal: F = Fair: P = Poor: = Betamated Remaining Years = -10, 10 +, 20 +, 40+:	Stem Diam at 1.5M AGL CM *	17/10 8/6	13/6	53	16/14	18/17 15/15	22/8 8/8	13/12 10/8	13/12 10/8	13/12 8/8	
Wood, Cove, At 37:2012 – Trees hysiological Conc Detection Test Re I Remaining Yea	Height of Crown Clearance M N,S,E,W	0	0	1.5 S	0	0	0	0	0	0	
ale, Charlestor NTS BS58 ysio Cond. = P DDT = Decay	Branch Spread Approx. M	X: 3 S: 2 W: 3	N: 1 S: 1 E: 1 W: 1	X 7 X 5 W 6 W 5	N: 4 S: 4 E: 5 W: 5	N: 5 S: 5 W: 5	N: 5 S: 5 E: 5 W: 4	X X X X X X X X X X X X X X X X X X X	N.S.S. X.	N. S. 1 W. 2 W. 2	
VEY: Heathva CONSULTAN & Snags Phys ommended: D	Height approx M	4	4	4	5	8	7	∞	8	6	
GROUND LEVEL TREE SURVEY: Heathvale, Charleston Wood, Cove, Aberdeen DATE OF SURVEY CARRIED OUT BY MACKAY CONSULTANTS BS5837:2012 – Trees in Relation to Design, Demolition D/W/S = Remove Dead Wood & Snags Physio Cond. = Physiological Condition N=Normal: F = Fair: Stem: AS = Aerial Survey Recommended: DDT = Decay Detection Test Recommended: WLP = Wild Life EM = Early Mature: M = Mature: ERY = Estimated Remaining Years = -10, 10 + , 20 + , 40+:	Species	Whitebeam M/S	Whitebeam D/S	Whitebeam	Whitebeam M/S	Common Silver Birch M/S	Goat Willow M/S	Common Silver Birch M/S	Common Silver Birch M/S	Common Silver Birch M/S	
GROUND CARRIED D/W/S = 1 Stem: AS EM = Early	Tree Ref No	00974	975	926	977	978	626	086	981	00982	

RPA Radius of a nominal AGE CLASS Y= Young: SM = Semi Mature: P = Poor: U = Remove: HCC = Height of Crown Clearance: D/S = Double Stem: M/S = Multi circle (M²) 4.8 5.6 2.6 9.7 4. 4. <u>د</u> 1.9 3.1 Survey valid until 21 February 2019 0 WEATHER: Calm, Clear, Dry 3-8 C Grading Category C 1 C 1 Ç J Ö C O O  $\supset$ ERY 20+ 20+ 20 +10+ 10+ 10+ 10+ 10+ 0 Remove rope from CLIENT: DEP Landscape Initiatives Management Recommendations Preliminary REMOVE canopy N/W/R N/W/R N/W/R N/W/R N/W/R N/W/R N/W/R CARRIED OUT BY MACKAY CONSULTANTS BSS837:2012 – Trees in Relation to Design, Demolition & Construction CLIENT: DEP Landscap D/W/S = Remove Dead Wood & Snags Physio Cond. = Physiological Condition N= Normal: F = Fair: P = Poor: U = Remove: HCC = Height of Stem: AS = Aerial Survey Recommended: DDT = Decay Detection Test Recommended: WLP = Wild Life Potential 1 = High: 2 = Moderate: 3 = Poor: EM = Early Mature: M = Mature: ERY = Estimated Remaining Years = -10, 10 +, 20 +, 40+: N/W/R = No Work Required at this time. SURVEY No. 708/908 1 M from stone dyke Decay in stem Structural Condition Seedling Seedling Seedling Seedling Seedling GROUND LEVEL TREE SURVEY: Heathvale, Charleston Wood, Cove, Aberdeen DATE OF SURVEY: 22 > 24/02/2018 Fair Fair Physio Cond. Fair Fair Fair Fair Fair Fair Fair Fair Fair Age Class >  $\succ$  $\succ$  $\succ$  $\succ$  $\succ$ Stem Diam at 1.5M AGL CM \* 12/8/6 20/17 16/10 16/12 17/10 1010/9 18/8 6/7 10/6 13/9 20/8 6/6 \_\_ Clearance M N,S,E,W Height of Crown (I) m 0 0 0 0 0 0 0 0 Branch Spread Approx. M z∝ä∺ ZSEZSEZ ääää Äääää Šääää Żää≅ ääää Żää≷ Żάä≷ Height approx M 6  $\infty$ 9 \_ S S 4 4 4 Common Silver Birch Whitebeam M/S Whitebeam M/S Whitebeam M/S Whitebeam D/S Silver Birch Silver Birch Whitebeam Whitebeam Common Common Species M/S M/S S/W S/Q 00983 16600 Tree Ref No 984 886 686 985 986 786 066

S = Multi emi Mature: 019	RPA Radius of a nominal circle (M <sup>3)</sup>	0	8.4	0	7.2	5.6	4.9	7.8	9.9	4.6	
FHER: Calm, Clear, Dry 3-8C rance: D/S = Double Stem: M/S = Multi E CLASS Y = Young: SM = Semi Mature: Survey valid until 21 February 2019	Grading	n n	C 1	U	C 1	C 1	C 1	C 1	C 1	C 1	
Calm, Cle  D/S = Do  SS Y= Y	ERY	0	01-	0	10+	-10	-10	10+	+ 01	+ 01	
WEA andscape Initiatives eight of Crown Clea AG	Preliminary Management Recommendations	REMOVE	N/W/R	REMOVE	N/W/R	MONITOR	MONITOR	N/W/R	N/W/R	N/W/R	
ND LEVEL TREE SURVEY: Heathvale, Charleston Wood, Cove, Aberdeen DATE OF SURVEY: 22 > 24/02/2018 SURVEY No. 708/908  IED OUT BY MACKAY CONSULTANTS BS5837:2012 – Trees in Relation to Design, Demolition & Construction CLIENT: DEP Landscapher Dead Wood & Snags Physio Cond. = Physiological Condition N= Normal: F = Fair: P = Poor: U = Remove: HCC = Height of AS = Aerial Survey Recommended: DDT = Decay Detection Test Recommended: WLP = Wild Life Potential 1 = High: 2 = Moderate: 3 = Poor: Date Mature: M = Mature: ERY = Estimated Remaining Years = -10, 10 +, 20 +, 40+:	Structural Condition	20 Cms from stone dyke junction. Partially on the deck	At wall junction. Poor vigour	Decay in stems	Fair	Slight basal decay	Seedling. Slight stem damage near base	Fair	Fair	Fair	
DATE OF SURVEY: 22 > 24/02/2018 to Design, Demolition & Construction Normal: F = Fair: P = Poor: ed: WLP =Wild Life Potential 1= Higl 10 +, 20 +, 40+: N/W/R =	Physio Cond.	Fair	Fair	Poor	Fair	Fair	Fair	Fair	Fair	Fair	
Sign, Demolition of Every Sign, Demolition of Every CP = Wild Life 20 +, 40+:	Age Class	Y	SM	$_{ m SM}$	SM	X	<b>&gt;</b>	$_{ m SM}$	Y	Y	
perdeen DATE in Relation to De liftion N=Norm: commended: Wers = -10, 10 +,	Stem Diam at 1.5M AGL CM *	26/21 19/12	28/22 20/10	32/22 18	35/13 12	22/15 10	14/13 12	28/15 12/10	16/15 14/10	13/13 12	
Cond. = Physiological Condition N=Normal: F = Fair: P = Poor: Estimated Remaining Years = -10, 10 +, 20 +, 40+:	Height of Crown Clearance M N,S,E,W	0	0	0	0	0	0	0	0	0	
ale, Charleston VTS BS58 Sio Cond, = P ODT = Decay	Branch Spread Approx. M	X: 6 E: 6 W: 6	N: 6 S: 5 E: 6 W: 4	N. 5 S. 6 E. 6 W. 4	N: 5 S: 7 E: 4 W: 4	N: 4 S: 5 E: 4 W: 3	N; 6 S: 6 E: 6 W; 5	N: 6 S: 8 E: 4 W: 6	N: 5 S: 4 E: 5 W: 4	K E S E	
VEY: Heathva CONSULTAN & Snags Phys ommended: D ure: ERY=	Height approx M	9	4	4	6	6	8	7	8	7	
GROUND LEVEL TREE SURVEY: Heathvale, Charleston Wood, Cove, Aberdeen DATE OF SURVEY CARRIED OUT BY MACKAY CONSULTANTS BS5837:2012 – Trees in Relation to Design, Demolition D/W/S = Remove Dead Wood & Snags Physio Cond. = Physiological Condition N=Normal: F = Fair: Stem: AS = Aerial Survey Recommended: DDT = Decay Detection Test Recommended: WLP = Wild Life EM = Early Mature: M = Mature: ERY = Estimated Remaining Years = -10, 10 + , 20 + , 40+:	Species	Whitebeam M/S	Common Alder M/S	Goat Willow M/S	Common Silver Birch M/S	Common Silver Birch M/S	Rowan M/S	Rowan M/S	Rowan M/S	Rowan M/S	
⊇≈≤	I ree Ref No	00992	993	994	995	966	997	866	666	001000	

	(high category)		(low category)	(fell category
gories	Trees where retention is most desirable	Trees where retention is desirable	Trees which could be retained	Trees for removal
 B S Categories	A	В	ပ	n

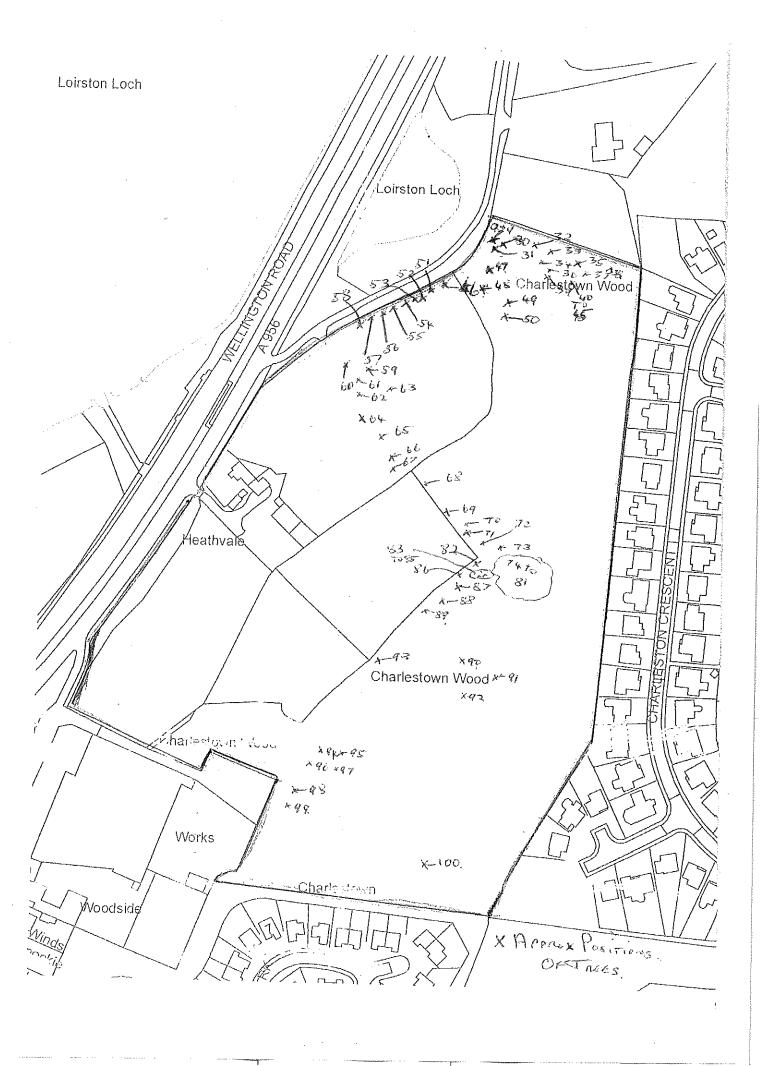
# HEATHVALE, CHARLSTON WOOD, COVE, ABERDEEN FEBRUARY 2018

LIST OF IN	LIST OF INDIVIDUAL TREES SURVEYED ON SITE	REF 508/908		
TREE SPECIES		$\vdash$	SON	Wild Life
	The state of the s			Potential
COMMON BEECH	FAGUS SYLVATICA	6		2
SITKA SPRUCE	PICEA SITCHENSIS			1 65
SHORE PINE	PINUS CONTORTA		12	2
ROWAN	SORBUS AUCUPARIA		_	-
COMMON HOLLY	ILEX AQUIFOLIUM			-
COMMON ALDER	ALNUS GLUTINOSA	7		2
COMMON SILVER BIRCH	BETULA PENDULA	- Annual Control of the Control of t	_	2
GOAT WILLOW	SALIX CAPREA	4	•	1 (5)
WHITEBEAM	SORBUS ARIA	The state of the s	14	-
an adjusting and adjusting an adjusting and adjusting an adjusting adjusting an a		**************************************		
	A CANADA	THE PERSON NAMED IN COLUMN NAM		
		Transition of the state of the		
TOTAL		72	2	

# WILD LIFE POTENTIAL

<u>||</u>

HIGH MODERATE POOR 3 2 = 8





## **ANGUS MACKAY**

DEP Landscape Initiatives 17 Bidders Gait Lanark ML11 9FG

26 February 2017.

Our Ref 708/908

FAO MR STEVEN BRIDGE

PRINCIPAL LANDSCAPE ARCHITECT

Dear Sir

PROPOSED DEVELOPMENT AT HEATHVALE, CHARLESTON WOOD, COVE, ABERDEEN

VISUAL TREE ASSESSMENT/GROUND LEVEL TREE SURVEY BS 5837:2012 -- TREES IN RELATION TO DESIGN, DEMOLITION & CONSTRUCTION

We have now carried out a Ground Level Tree Survey at the above site, and the report on our findings is now attached.

The findings and recommendations in this report are valid for a period of 12 Months (i.e. 21/02, 2019). Trees are living organisms, and as such are subject to change – it is recommended that trees be inspected on an annual basis for reasons of safety. The findings relate to the site, as it exists at present, and to the current levels and pattern of use. The degree of risk and hazard may alter should these aspects change.

Whilst every effort has been made to detect defects of trees within the survey area, no guarantee can be given as to the absolute safety or otherwise of any individual tree. Extreme climatic conditions can cause damage to apparently healthy trees. It is strongly recommended that the trees are inspected at regular intervals for reasons of safety.

This report has been prepared for the sole use of DEP Landscape Initiatives and their appointed agents. Any reference or reliance to this report or information therein by any other party is done so entirely at their own risk. No work should commence before permission from the Local Authority is granted

I trust this is satisfactory, but if you require any further information please do not hesitate to contact me

Yours faithfully

Angus iviackay

Landscape Consultants

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# **Document Revision History**

Version	Reason	Date/Edits Made By:
1279 001 PR	1 <sup>st</sup> Issue	2018/05/08 PR
1279 001 PR V3	Text Edits	2018/05/24 LH



### 1.00 Introduction

- 1.01 This Report has been prepared on behalf of Mactaggart and Mickel to support a local plan bid to develop residential accommodation on a site at Heathvale, Cove, Aberdeen. The site is located to the West of Wellington Road (A956). A noise impact assessment is required as part of the plan bid process and CSP Acoustics has been engaged to carry out this work; details and results of the assessment completed are summarised in this report.
- 1.02 The assessment considers the impact of traffic from the local road network. The predictions of road traffic noise within this report are based on the results of a noise survey completed at the Site.
- 1.03 The impact of road noise in this report has been carried out using assessment methods and criteria set out in WHO guidelines and PAN1/2011 which sets internal levels for residential accommodation.
- **1.04** Predictions of noise on the proposed development have been made using proprietary noise prediction software CadnaA® (computer Aided Noise Abatement) developed by Datakustik.





**1.05** All CSP Acoustics Consultants/Surveyors hold membership of the Institute of Acoustics.

### **CSP Acoustics:**

- Fort Street House, 63 Fort Street, Broughty Ferry, Dundee DD5 2AB
- 29 Eagle Street, Craighall Business Park, Glasgow G4 9XA



### 2.00 Summary

- **2.01** CSP Acoustics has completed a noise impact assessment for a proposed residential development to be constructed on a site in Charleston Loirston Cove, Aberdeen.
- **2.02** The dominant source of noise in the area likely to affect the development is road traffic on Wellington Road (A956).
- 2.03 Assessment of the impact of road traffic noise on the proposed development has been carried out using the trigger noise levels set out in the table below. The triggers levels are based on WHO recommended internal noise limits for accommodation plus 15 dB. The latter is the value of attenuation that should be considered as the noise ingress that typically occurs through a partially open window. Hence the trigger levels assume windows are open for ventilation. The trigger levels used for assessment are set out in the table below.

Period	External Noise Limit
Daytime, 07.00 to 23.00	50 dB L <sub>Aeq,16hr</sub>
Night time 23.00 to 07.00	45 dB L <sub>Aeq,8hr</sub>

- 2.04 Predictions of noise within this report were made using proprietary noise prediction software CadnaA® (computer Aided Noise Abatement) developed by Datakustik.
- 2.05 The assessment indicates that road traffic noise for 61 residential buildings is likely to exceed specified limits for all residential buildings during daytime periods and 47 residential buildings during night time periods where windows are open for ventilation. Consequently these dwellings would need to rely on closed windows and an alternative means of ventilation in order to control road traffic noise sources to BS8233: 2014 internal noise limits. It should be understood that "closed" windows to dwellings does not mean fixed, i.e. windows could be opened at occupant's discretion. Appropriate performances for building façade elements have been specified in this report.
- 2.06 It is considered that where windows and ventilators to the building meet with the sound insulation performances set out in this report then internal noise levels are likely to be meet BS8233:2014 limits.



### 3.00 Impact Assessment Criteria

- 3.01 PAN 1/2011: The Planning Advice Note recommends the use of Quantitative and Qualitative assessments of noise together with assessments of the level of its significance to help planning authorities determine applications for a development types including commercial and workshop development. The PAN and its accompanying Technical Advice Note do not however offer specific guidance with respect to the standards to be applied in assessments of noise impact.
- 3.02 In the Technical Advice Note that accompanies the PAN in Chapter 3, para 3.8 states that: "The choice of appropriate criteria noise levels and relevant time periods are the responsibility of the local authority. Although this may lead to inconsistencies between different Local Authorities and, indeed, across areas within a given Local Authority, it does provide flexibility, allowing particular circumstances to be taken into account and the use of the latest guideline values to be included where appropriate."
- 3.03 The PAN also notes, in Appendix 1, a range of Technical Standards and Codes of Practice that may be relevant to assessments including BS4142:2014 which can be used for assessing the impact of industrial/commercial developments, BS 8233:2014 which provides general guidance on acceptable levels within buildings and WHO Guidelines for Community Noise, 1999.
- **3.04 BS8233:2014:** Road traffic noise will be assessed in accordance with the method set out in CRTN 88 against noise criteria set out in Table 4, page 24 of BS8233:2014 and reproduced below.

BS8233:2014 – "Table 4: Indoor ambient noise levels for dwellings"					
Activity					
Resting	Living Room	35dB, L <sub>Aeq,16hrs</sub>	-		
Dining	Dining room/ area	40dB, L <sub>Aeq,16hrs</sub>	-		
Sleeping (daytime resting)	Bedroom	35dB, L <sub>Aeq,16hrs</sub>	30dB, L <sub>Aeq,8hrs</sub>		



### 4.00 Survey

**4.01** The dominant existing noise source at site is road traffic on the A956 to the West. The impact of noise from this source has been assessed for the proposed residential development site, see Figure 1 below.



Figure 1: Proposed Residential Development

4.02 A noise survey was carried out at the site on the 9<sup>th</sup> of April 2018. Measurements of road traffic noise were completed between 10.00 and 13.00 hours at survey location to the west of the proposed development site, see Figure 2. This location was approximately 4 metres distance from and A956. Measurements were completed in accordance with the shortened survey procedures described in CRTN'88 using fifteen minute minimum measurement samples taken over three consecutive hours.





Figure 2: Road noise survey locations

- 4.03 For all measurements locations the sound level meter was positioned 1.2 metres above ground level with no vertical reflecting surfaces within 1 metre of the chosen measurement location. Equipment was operated in accordance with British Standard and ISO procedures. The sound level meter was calibrated prior and post to site measurements using the appropriate calibrator to a reference tone of 114 dB at 1 kHz. Pre and post calibrations indicated a shift of no more than 0.1 dB. Details of sound level meter equipment used is set out below:
  - Norsonic Nor140 Serial Number 1404033
  - Norsonic Microphone Type 1225 Serial Number 118448
  - Norsonic Calibrator Type 1251Serial Number 34216



- **4.04** Weather conditions at the time of surveys were noted as follows: wind speed was below 5.0m/sec; air temperature was 10 degrees Celsius. No precipitation was record during surveys.
- **4.05** A summary of measured road traffic noise levels is shown in Table 1 below.

Table 1	Table 1: CRTN, A956 Survey Results				
Measurement Period (5 min sample)	L <sub>Aeq,</sub> (dB)	L <sub>A10,3 hr</sub> (dB)	L <sub>A90,3 hr</sub> (dB)		
10:00 to 10:15	76.0	80.8	56.7		
10:15 to 10:30	75.8	80.5	56.8		
10:30 to 10:45	75.9	80.5	57.2		
10:45 to 11:00	75.6	80.4	54.4		
11:00 to 11:15	76.4	81.0	57		
11:15 to 11:30	76.0	80.5	56.9		
11:30 to 11:45	76.3	81.1	50.9		
11:45 to 12:00	76.4	81.1	46.7		
12:00 to 12:15	76.6	81.2	51		
12:15 to 12:30	76.2	80.6	53.1		
12:30 to 12:45	75.5	80.2	52.1		
12:45 to 13:00	75.4	80.3	50.9		
Mean/ Average	76.0	80.7	53.6		



### 5.00 Road Traffic Daytime/Night Time Noise Levels

- 5.01 The assessment of road traffic noise has been completed using the methods detailed in Calculation of Road Traffic Noise, 1988 (CRTN'88), using the proprietary noise prediction software CadnaA® (computer Aided Noise Abatement) developed by Datakustik. The modelling software calculates noise levels based on the inputted noise emission values, source and receiver locations, and primarily distance, barrier, ground attenuation and 2.5dB façade reflection.
- 5.02 Results produced by CadnaA® for traffic noise levels are in terms of the highest noise level occurring for 10% of an 18 hour period between 06.00 hours and midnight, these are referenced as L<sub>A10,18hr</sub> in dB. Noise levels required for assessing the impact on residential dwellings are in terms of average daytime 16 hour noise levels from 07.00 to 23.00 and average night time 8 hour noise levels from 23.00 to 07.00, referenced as L<sub>Aeq,16hr</sub> and L<sub>Aeq,8hr</sub>. The average day time and night time levels, L<sub>Aeq,16hr</sub> and L<sub>Aeq,8hr</sub>, can assessed from the L<sub>A10,18hr</sub> as described below.
- **5.03** In accordance with CRTN'88 the daytime 18 hour noise level due to road traffic at the survey location is given by:

$$L_{A10.18hr} = Mean L_{A10.3hr} - 1 dB$$

5.04 Published guidance indicates that for road traffic noise measurements the normal differential between  $L_{A10}$  and  $L_{Aeq}$  is 3 dB; for 95% of cases this relationship gives results within  $\pm$  2dB of "true" values. Thus the 18 hour average noise level,  $L_{Aeq.18hr}$ , can be estimated as 3dB lower:

$$L_{A10,18hr} - 3 dB = L_{Aeq,18hr}$$

5.05 Average daytime 16 hour values,  $L_{Aeq,16hr}$  values are normally taken to be 1 dB higher than the  $L_{Aeq,18hr}$  value (c.f. PAN 56, Annex 2), consequently:

Daytime, 
$$L_{Aeq, 16hr} = L_{Aeq, 18hr} + 1 dB$$

**5.06** Procedures set out in the 2002 TRL publication Converting the UK traffic noise index  $L_{A10,18h}$  to EU noise indices for noise mapping can be used to establish the night time average noise level,  $L_{Aeq,\,8hr}$ , using:

Night Time, 
$$L_{Aeq, 8hr} = 0.90 \text{ x } L_{A10,18hr} - 3.77dB$$



**5.07** These procedures have been used to assess 16 hour daytime and 8 hour night time average noise level levels occurring at measurement location 7. The resulting levels are set out in Table 2.

Table 2: Road Traffic Daytime/Night Time Noise Levels					
Measurement Location Daytime L <sub>Aeq,16hr</sub> (dB) Night Time L <sub>Aeq,8hr</sub> (dB)					
A956 Road measurement	78.7	68.9			



### 6.00 Road Traffic Noise Assessment

- **6.01** Road traffic noise levels at the proposed housing has been calculated with CadnaA® using assessed daytime, night time noise levels and the development site layout provided by Mackie Ramsay Taylor.
- 6.02 Where windows to dwellings are partially open for ventilation then it is assumed noise ingress is reduced by 15dB based on World Health Organisation recommendations. Applying this correction to internal noise limits, set out in section 3.04, gives trigger noise levels as set out in Table 3 below. Effectively where external noise levels due to all noise sources exceed these trigger noise levels then it indicates that permanent ventilation by partially open windows would result in an excess of internal noise limits within the building.

Table 3: Trigger Noise Levels			
Period External Noise Limit			
Daytime, 07.00 to 23.00	50 dB L <sub>Aeq,16hr</sub>		
Night time 23.00 to 07.00	45 dB L <sub>Aeq,8hr</sub>		

6.03 The influence of road traffic noise on the development site has been determined using the assessed daytime and night time average noise levels set out in Table 3. Results are presented as noise level ranges in Table 4 below, along with the number of new dwellings where road traffic noise exceed limits.

Table 4: Summary of Noise Impact Assessment Results For Road traffic						
Number of Residential buildings Where						
Range of Daytime	Range of Night Time	ne Noise Exceeds:				
Levels	Levels	Daytime Trigger Night Time Trigger				
L <sub>Aeq, 16 hours</sub> (dB)	L <sub>Aeq, 8, hours</sub> (dB)	Level Level				
		L <sub>Aeq, 16 hours</sub> 55 (dB) L <sub>Aeq, 8, hours</sub> 45 (dB)				
52.8 to 74.5	43.0 to 64.7	61	47			

6.04 With reference to Table 4, it can be seen that of the 61 proposed residential buildings all are likely to have noise levels during daytime that exceed the trigger noise level, and at night time 47 are indicated with levels in excess of the trigger noise level. Detailed results determined from noise contour noise maps are shown in Appendix B.



### 6.05 PAN 1/2011 TAN Magnitude and Significance Assessments

**6.06** A further assessment breakdown of the excess of noise sources over the trigger noise levels is given in Table 5 and Table 6 using TAN to PAN 1/2011 guidance in terms of ranges of exceedance.

Table 5: Daytime Road Traffic TAN to PAN1/2011 Assessment						
	Number of Residential Buildings exceeding Daytime Trigger Level, 50 dB L <sub>Aeq,16hr</sub> By:					
	<0	≤0 to <3 dB	≤3 to <5 dB	≤5 to <10 dB	>10	
No. Houses	0	8	8	28	17	
Magnitude of Impact	No adverse Impact	Negligible	Minor adverse	Moderate adverse	Major adverse	
Significance of Effects	Neutral	Slight	Slight / Moderate	Moderate / Large	Large / Very Large	

Table 6: Night Time Road Traffic TAN to PAN1/2011 Assessment								
	Number of Residential Buildings exceeding Night Time Trigger Level, 45 dB L <sub>Aeq,8hr</sub> By:							
	<0	<0 ≤0 to <5 dB ≤5 to <10 dB ≤10 to <15 dB >15						
No. Houses	14	30	10	5	2			
Magnitude of Impact	No adverse impact	Negligible	Minor adverse	Moderate adverse	Major adverse			
Significance of Effects	Neutral	Slight	Slight / Moderate	Moderate / Large	Large / Very Large			

- 6.07 With reference to Table 5 and Table 6, for traffic noise the majority of proposed houses are likely to experience levels of no greater than trigger levels. Approximately 61 and 47 of proposed residential buildings are likely to experience traffic noise levels in excess of daytime/night-time trigger levels respectively.
- 6.08 The impact of Road Traffic noise levels during daytime and night time periods can be controlled to required internal noise limits using a strategy of closed windows with alternative means of ventilation. As this aspect can be controlled by appropriate design this should not be considered an impediment to granting the development planning permission.



### 7.00 Noise Mitigation

7.01 Levels of sound insulation required for the housing windows and ventilators have been determined using the method set in appendix G of BS8233:2014. This method determines internal noise levels likely to arise within a room using the façade incident noise level from both, road and industrial noise levels and the composite sound insulation performance of the building envelope. Calculations are based on meeting the following internal noise requirements.

Table 7: Noise limits inside residential properties					
Source Accommodation Period Noise Limit					
	Living Rooms/ Bedrooms	Daytime 07.00 to 23.00	45 dB L <sub>Aeq,16hr</sub>		
Road	Bedrooms	Night time 23.00 to 07.00	35 dB L <sub>Aeq,8hr</sub>		

**7.02** Areas of façade elements and room dimensions are for a typical Bedroom as follows:

• Room Volume: 26m<sup>3</sup>

Area of Façade Wall area: 9.5m<sup>2</sup>

Area of Window: 1.5m<sup>2</sup>

Single Ventilator

- 7.03 Noise ingress calculations assume the external facades of the development provide a sound insulation performance of at least 50 dB  $R_W$  ( $C_{tr}$ ). It is recommended that a review of the façade construction is completed to verify this.
- 7.04 The required sound insulation performances for windows and ventilators of the proposed Residential development are tabulated below and houses where they need to be applied are shown in the Mitigation map shown in Appendix B. Ventilators performances are for them set in the open position.

Table 8: Summary of Noise Impact Assessment Results For Road traffic				
Refer to Appendix B Mitigation map colour	Ventilators, D <sub>new</sub> (C <sub>tr</sub> ) dB	Windows, R <sub>w</sub> (C <sub>tr</sub> ) dB		
Red	55 (-3)	45 (-7)		
Orange -	55 (-3)	40 (-5)		
Purple	35 (0)	31 (-4)		

**7.05** Sound insulation performances summarised for windows in Table 8 are given in terms of single figure performances. It is recommended that where selecting



windows they should also provide the minimum octave band sound insulation performances set out in the Table 9:

Table 9: Minimum Sound Insulation performance of windows of the proposed development in dB						
R <sub>W</sub> (C <sub>tr</sub> )Performance dB	R <sub>W</sub> (C <sub>tr</sub> )Performance dB					
31 (0)	24	20	25	35	38	35
40 (-5)	27	29	36	41	42	52
45 (-7	28	32	43	46	48	55

**7.06** Table 10 below gives example of double glazing configurations that typically provide the performances set out in Table 9.

Table 10: Example of Double Glazing windows			
Required Window Sound Insulation Performance, R <sub>W</sub> (C <sub>tr</sub> ) dB	Double glazed window configuration typically providing required performance		
31 (-4)	4 mm glass/12 mm air-gap/4 mm glass		
40 (-5)	6.4mm glass /12mm air-gap/10mm glass laminate		
45 (-7)	10mm glass/12mm air-gap/16.8mm glass laminate		
(1) This is also likely to be achieved by introducing a primary double glazed unit, and secondary single glazed unit with a large air gap of at least 150mm in between			

**7.07** Required octave band sound insulation performances for ventilators to the rear facade are set out in the table below.

Table 11: Minimum Sound Insulation performance of the vents in dB						
D <sub>n,e,w</sub> Performance	125	250	500	1k	2k	4k
55(-3)	47	46	49	56	66	75
35(0)	32	36	36	35	34	35

- **7.08** The required sound insulation performances can typically be achieved by trickle ventilation or through wall ventilators from the following suppliers:
  - http://www.passivent.com/
  - <a href="http://www.greenwood.co.uk/range/36/acoustic-ventilation.html">http://www.greenwood.co.uk/range/36/acoustic-ventilation.html</a>
  - http://www.rensonuk.net/
  - <a href="http://www.titon.co.uk/pages/products/ventilators.php">http://www.titon.co.uk/pages/products/ventilators.php</a>
- **7.09** It is considered that where windows and ventilators to the building meet with the sound insulation performances set out above then BS8233: 2014 internal noise limits are likely to be meet.

wactaggart and wicker





Report Authors: Checked By:

**Pedro Rodrigues,** MSc Civil Eng., MIOA (CEng) *Consultant*  **Lee Hadden,**BSc (hons), MSc, P.Dip, AMIOA *Consultant* 



# Appendix A: Acoustic Glossary

Word	description
Acoustic environment	Sound from all sound sources as modified by the environment
Ambient Noise	Totally encompassing sound at a given location, usually composed of sound from many sources near and far
Background Noise	The lowest noise level present in the absence of any identifiable noise sources. This is usually represented by the L <sub>A90</sub> measurement index.
Break-in	Noise transmission into a structure from outside
Break-out	Noise transmission from inside a structure to the outside
Cross-talk	Noise transmission between one room and another room or space
Ctr	Correction term applied against the sound insulation single-number values (R <sub>w</sub> , D <sub>w</sub> , and D <sub>nT,w</sub> ) to provide a weighting against low frequency performance
dB (decibel)	Defined as 20 times the logarithm of the ratio between the root-mean-square pressure of the sound field and a reference pressure (2x10-5Pa).
dB(A)	Level of sound across the audible spectrum with a frequency filter to compensate for the varying sensitivity of the human ear to sound at different frequencies at a lower SPL
Façade Level	A sound field determined at a distance of 1m in front of a building façade.
Free-field Level	A sound field measured at a point away from reflective surfaces other than the ground
Frequency (Hz)	Number of cycles of a wave in one second measured in Hertz.
Impact sound pressure level	Average sound pressure level in a specific frequency band in a room below a floor when it is excited by a standard tapping machine or equivalent
Indoor ambient noise	Noise in a given situation at a given time, usually composed of noise from many sources, inside and outside the building, but excluding noise from activities of the occupants



### wactaggart and wicker

L <sub>Aeq,T</sub>	$L_{aeq,T}$ is defined as the equivalent continuous A -
	weighted Sound Pressure Level in dB over a given period of time.
L <sub>Amax</sub>	Maximum A - weighted sound pressure level recorded over the measurement period. Usually has a time constraint (L <sub>afmax</sub> , L <sub>asmax</sub> )
Measurement time interval, Tm	Total time over which measurements are taken
Noise	Unwanted sound.
Noise criteria	Numerical indices used to define design goals in a given space
Noise rating NR	Graphical method for rating a noise by comparing the noise spectrum with a family of noise rating curves. This is usually used to control noise that has tonal characteristics that L <sub>Aeq,t</sub> wouldn't detect.
Noise-sensitive premises (NSPs)	Any occupied premises outside the assessment location used as a dwelling (including gardens), place of worship, educational establishment, hospital or similar institution, or any other property likely to be adversely affected by an increase in noise level
Normalized impact sound pressure level	Impact sound pressure level normalized for a standard absorption area in the receiving room
Octave band	Band of frequencies in which the upper limit of the band is twice the frequency of the lower limit
Percentile level L <sub>AN,T</sub>	A-weighted sound pressure level obtained using time-weighting "F", which is exceeded for N% of a specified time period
Rating level, L <sub>Ar,Tr</sub>	Specific sound level plus any adjustment for the characteristic features of the sound
Reference time interval, <sub>Tr</sub>	Specified interval over which the specific sound level can be determined.
Residual sound	Ambient sound remaining at the assessment location when the specific sound source is suppressed to such a degree that it does not contribute to the ambient sound
Residual sound level, Lr = L <sub>Aeq,T</sub>	Equivalent continuous A-weighted sound pressure level of the residual sound at the assessment location over a given time interval, T
Reverberation time T	Time that would be required for the sound pressure level to decrease by 60 dB after the sound source has stopped within a reverberant space



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Sound level difference D	Difference between the sound pressure level in the source room and the sound pressure level in the receiving room
Sound power level, LWA	Ten times the logarithm to the base 10 of the ratio of the sound power radiated by a sound source to the reference sound power, determined by use of frequency-weighting network "A"
Sound pressure level	Is the Root Mean Squared value of the instantaneous sound level over a period of time expressed in decibels, usually measured with an appropriate frequency weighting
Specific sound level, Ls = L <sub>Aeq,Tr</sub>	Equivalent continuous A-weighted sound pressure level produced by the specific sound source at the assessment location over a given reference time interval, Tr
Specific sound source	The sound source which is being assessed
Third octave band	Octave bands sub-divided into three parts, equal to 23% of the centre frequency
Weighted level difference Dw	Single-number quantity that characterizes airborne sound insulation between rooms, but which is not adjusted to reference conditions
Weighted standardized level difference $D_{nT,w}$	Single-number quantity that characterizes the airborne sound insulation between rooms



# Appendix B: Noise Maps (next three pages)

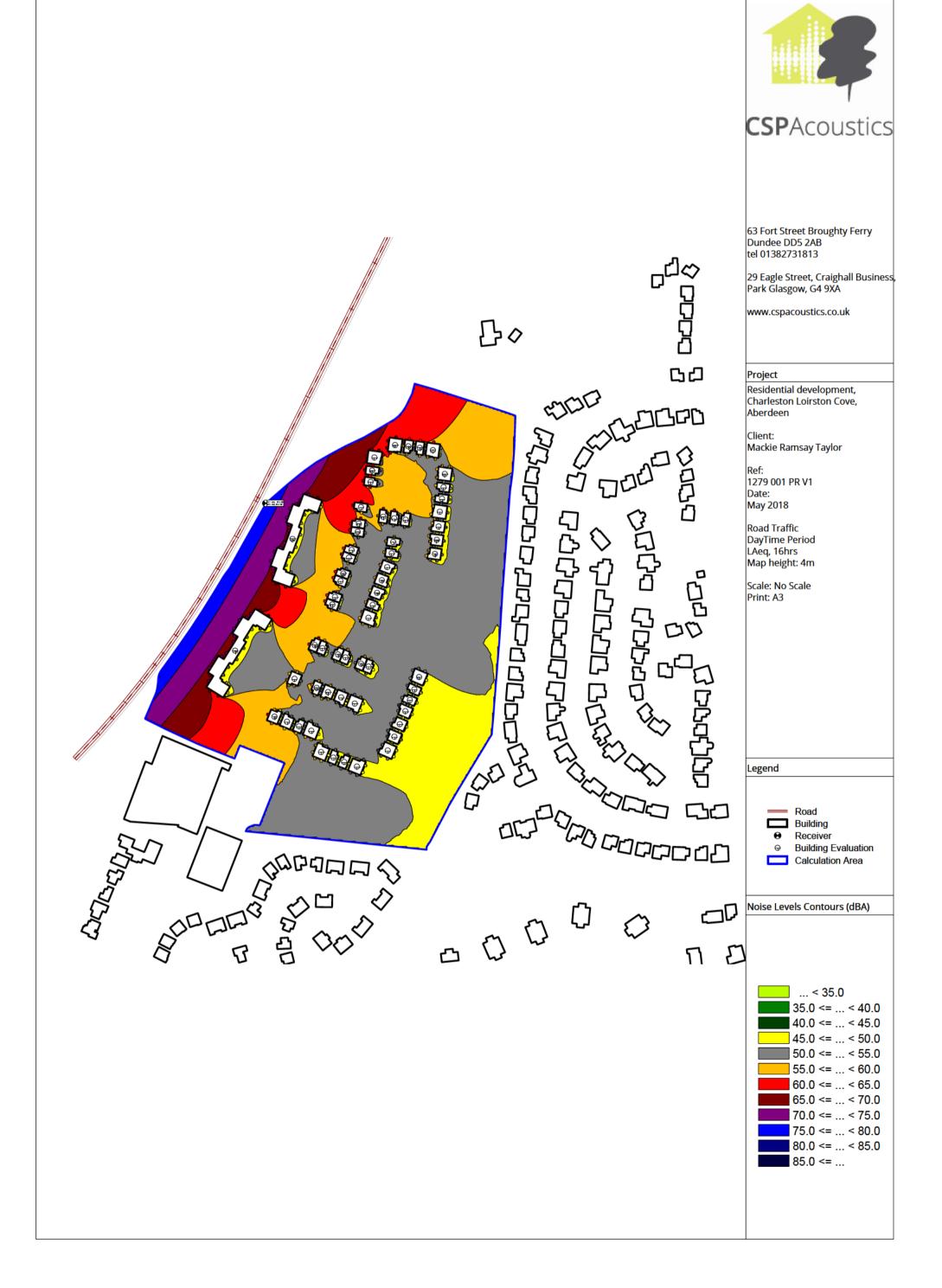
- L<sub>Aeq,16 hours</sub> Road Traffic Noise Map L<sub>Aeq,8 hours</sub> Road Traffic Noise Map
- Mitigation Map

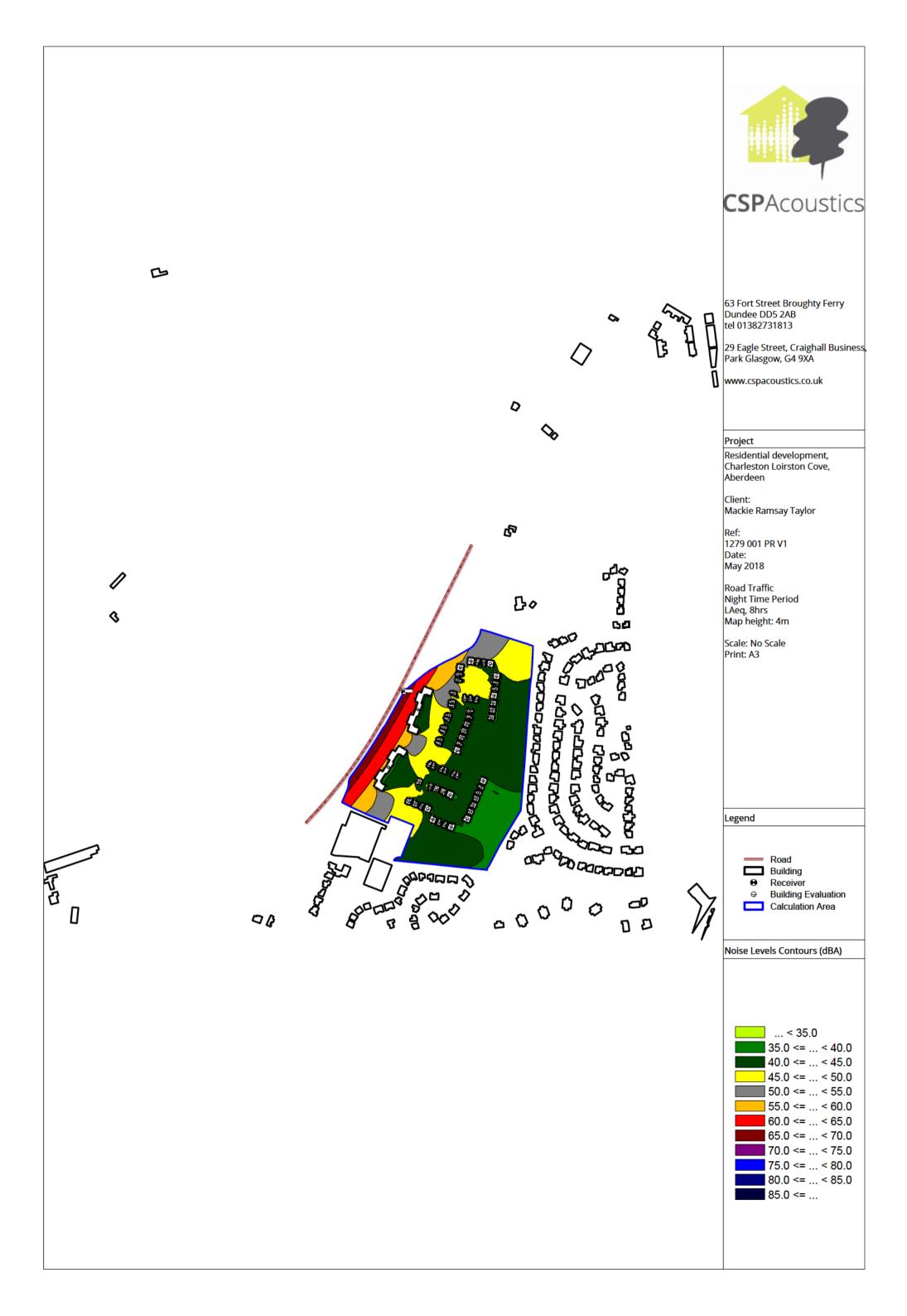
FORT STREET HOUSE, FORT ST, BROUGHTY FERRY DUNDEE, DD5 2AB 01382 731813

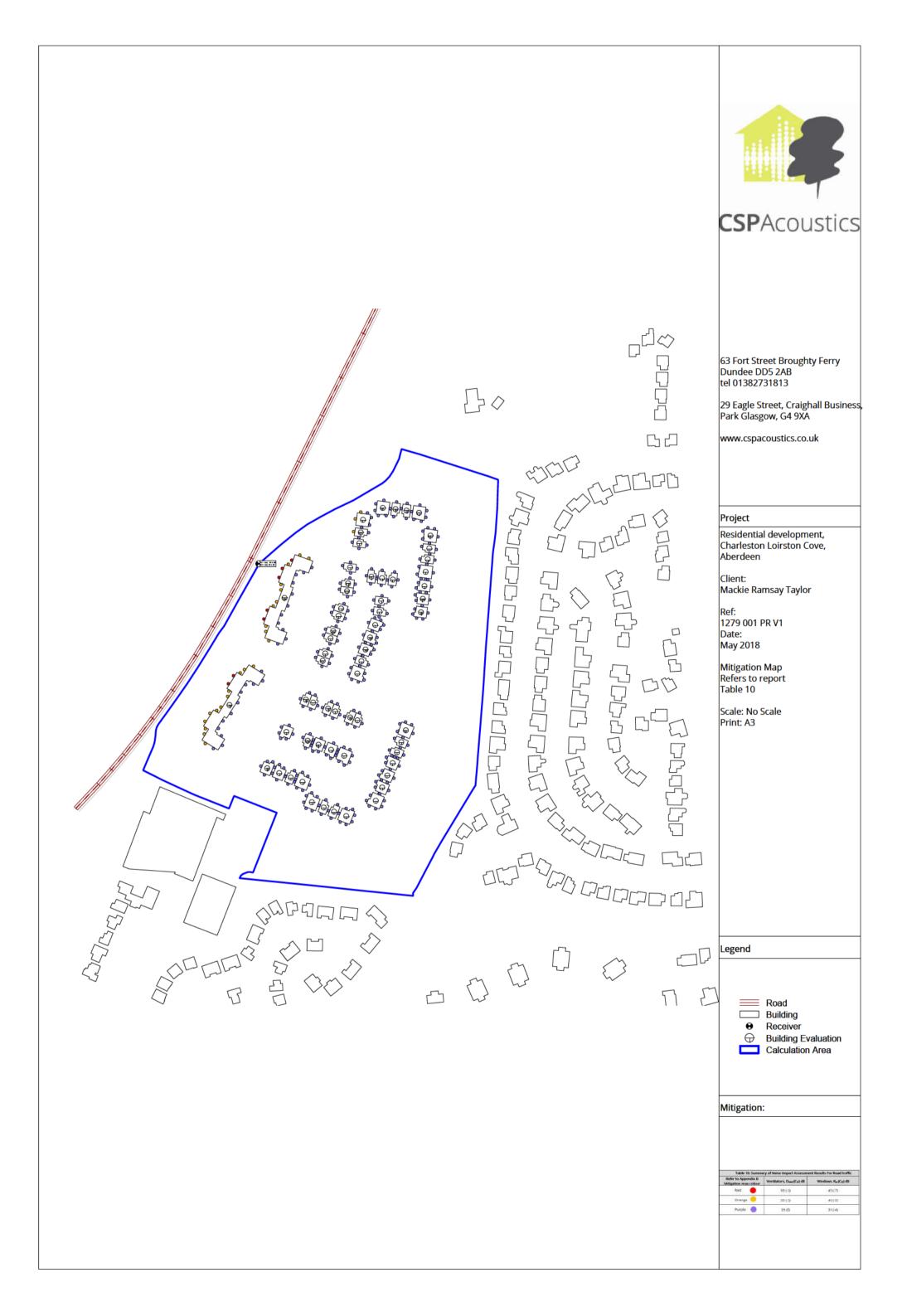
29 EAGLE STREET
CRAIGHALL BUSINESS PARK
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# Aberdeen Local Development Plan review **Pre-Main Issues Report Consultation**

# Land at Heathvale, Cove Transport and Access Appraisal Report

May 2018

Prepared for: Prepared by:

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## 1. INTRODUCTION

## **Background**

1.1 Transport Planning Ltd has been appointed to advise on transport issues associated with the potential allocation for residential development of land at Heathvale to the east of the A956 Wellington Road in Aberdeen City Council's (ACC's) review of their adopted Local Development Plan (LDP).

## Report content

- 1.2 Following this introduction, the remainder of this report considers:
  - Existing Transport Network: describes the existing transport infrastructure in and around the potential allocation site; and
  - Potential for Development on Allocation Site: provides information on the potential development area in terms of its potential links to the existing transport network and any associated transport infrastructure.
  - Conclusions.

## 2. EXISTING TRANSPORT NETWORK

#### Introduction

- 2.1 This section of the report discusses the existing transport network surrounding the site. The transport network has been considered using the following hierarchy as described in Scottish Planning Policy (SPP):
  - pedestrians;
  - cyclists;
  - public transport; and
  - private car.
- 2.2 Figure 1 in Appendix A shows the location of the proposed allocation site and Figure 2 in Appendix A shows the surrounding transport network. The site is bounded to the east by homes accessed from Charleston Crescent, to the south by an industrial unit and homes accessed from Lochinch Park, to the west by the A956 Wellington Road and Old Wellington Road and to the north by open grassland and a road forming a loop from the eastern side of the A956 Wellington Road.

## **Pedestrians and cyclists**

2.3 There is a shared-use cycle and footway on the eastern side of the A956 Wellington Road as it passes the proposed allocation site. This footway provides a link northward towards Charleston and the local facilities (such as shops) at the junction of the A956 Wellington Road and Charleston Road, around a nine-minute walk (around 750m) from the northern edge of the proposed allocation site.



Shared use cycle footway on eastern side of A956 Wellington Road

A footpath leads from the eastern side of Old Wellington Road eastwards to link with the footways on Lochinch Walk, a road serving a residential area to the south of the proposed allocation site. The footways on Lochinch Walk link with the footways on Charleston Drive, which in turn provide a route for pedestrians through to Cove Road and Charleston Road. Cove Road in turn provides a route to Core Path 78, which runs to the east of Cove Road and is shown in Appendix B.



Footpath linking Old Wellington Road to Lochinch Walk

2.5 There are footways on each side of Charleston Crescent on the eastern side of the proposed allocation site. There is an area of open space at the southwestern edge of Charleston Crescent, which borders the proposed allocation site. The footways on Charleston Crescent link with the footways on Charleston Road and provide a route to Charleston Primary School. It is around a three-minute walk (around 300m) from Charleston Crescent at the eastern edge of the open space to the primary school. A path also leads southwards from the area of open space to Charleston Drive.



Open space between Charleston Crescent and proposed allocation site

ACC and Aberdeen Cycle Forum produce maps showing cycle routes in the city and a copy of the map for the area around the proposed allocation site is provided in Appendix B. The map shows the shared use path on the eastern side of the A956 Wellington Road and how it links with the cycle infrastructure to the north. The map also shows the route of National Cycle Network (NCN) Route 1 along Cove Road and cycle routes towards Altens Industrial Estate.

#### **Bus services**

- 2.7 There are bus stops on Charleston Road at its southern junction with Charleston Crescent, around a two to three-minute walk (around 270m) from the southeastern corner of the proposed allocation site. There are further bus stops on Old Wellington Road at the footpath leading to Lochinch Walk, around a two-minute walk from the southwestern corner of the proposed allocation site. There is a further stop on Charleston Drive adjacent to the junction with Lochinch Walk.
- 2.8 The stops on Charleston Road are served by First's 18 service which, at the time of writing, serves Dyce, Danestone, Tillydrone Road, Aberdeen city centre, Kincorth, Redmoss and Charleston. It operates every 20 minutes Monday to Saturday daytime until the early evening.
- The stops on Old Wellington Road are served by First's 3G service and Stagecoach's 7A and 7B services at the time of writing. The 3G route serves Mastrick, Aberdeen Royal Infirmary, Bridge Street and Guild Street in Aberdeen City Centre, Nigg and Gateway Business Park. There are five services on weekday mornings (the latest arriving at 0844) and five services on weekday evenings (the latest departures at 1743).
- 2.10 The 7A and 7B services link Aberdeen with Portlethen and Stonehaven. They operate hourly Monday to Sunday daytime with a service approximately every two hours in the evenings.

2.11 The stop on Charleston Drive is served by First's service number 3. This routes along Cove Road in both directions and loops clockwise around Charleston Drive. The route services Mastrick, Aberdeen Royal Infirmary, Bridge Street and Guild Street in Aberdeen City Centre, Nigg and Cove. It operates every 10 minutes during weekday daytimes, every 12 minutes during Saturday daytimes and every 30 minutes during Sunday daytimes and Monday to Sunday evenings.

#### Private car

- 2.12 Near to the proposed allocation site, the A956 Wellington Road is a dual carriageway with two lanes in each direction. To the north, it provides a route to Aberdeen city centre and industrial areas in Nigg and Altens. To the south, it provides a route to the A90 and will provide a route to the Aberdeen Western Peripheral Route when it opens. The junction of the A956 Wellington Road and A90 is less than a minute's drive time from the junction of the A956 Wellington Road and Old Wellington Road.
- 2.13 The junction of the A956 Wellington Road and Old Wellington Road is controlled by traffic signals. A slip road allows southbound traffic on the A956 Wellington Road to bypass this junction and enter Old Wellington Road around 50m to the east of the junction. Old Wellington Road provides a route to Aberdeen Gateway business park and Cove Road.

#### **Summary**

2.14 The information above shows that the surrounding transport network includes facilities for pedestrians (in the form of the footways on the A956 Wellington Road and Charleston Crescent and the footpath link to Charleston Drive), cyclists (in the form of the shared use path on the eastern side of the A956 Wellington Road) and bus passengers (in the form of the services on Old Wellington Road, Charleston Road and Charleston Drive).

## 3. POTENTIAL FOR DEVELOPMENT ON ALLOCATION SITE

#### Introduction

3.1 This section of the report provides initial comments on potential transport issues associated with the proposed allocation site.

#### **Development layout**

- An indicative layout of development on the proposed allocation site is shown in Appendix B. The drawing shows that the proposed allocation site could be accessed by realigning and extending Old Wellington Road into the southwestern corner of the site. This would require the existing slip lane from the A956 Wellington Road to Old Wellington Road to be closed and traffic diverted to the signalised junction of the A956 Wellington Road and Old Wellington Road. A secondary emergency vehicle-only access is shown indicatively onto the road at the northern boundary of the proposed allocation site.
- 3.3 A footpath would be provided at the southeastern corner of the proposed allocation site, which would allow a link to be formed to the open space to the east and onwards to Charleston Crescent. This footpath would also provide a link to the footpath linking to Lochinch Park to the south. Pedestrian and cyclist connections could also be provided onto the existing shared-use path on the eastern side of the A956 Wellington Road, onto Old Wellington Road and onto the road forming the northern boundary of the proposed allocation site.

## **Transport demand**

Data from the 2011 census was inspected to understand the mode of travel to work or study from residents of the existing houses adjoining the proposed allocation site. The data from the census relates to 'All people aged 4 and over who are studying or aged 16 to 74 in employment in the week before the census' and hence includes schoolchildren. That data is summarised in Table 3.1 below.

TABLE 3.1: DATA FROM CENSUS ON MODE OF TRAVEL TO WORK OR STUDY

	Proportion using mode									
Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other		
0%	17%	1%	50%	14%	0%	2%	12%	5%		

- 3.5 The data in Table 3.1 above shows that half of residents of the existing houses adjoining the proposed allocation site drive on their journey to or from work or study, with around 31% choosing to walk, cycle or catch a bus for that journey.
- 3.6 Should the proposed allocation site be allocated for residential development, then any subsequent planning application would be accompanied by a Transport Statement or Assessment which would consider the likely transport demand arising from the development and assess the effects of this on the surrounding transport network. This assessment would include a detailed analysis of the operation of the key junctions on the surrounding road network.

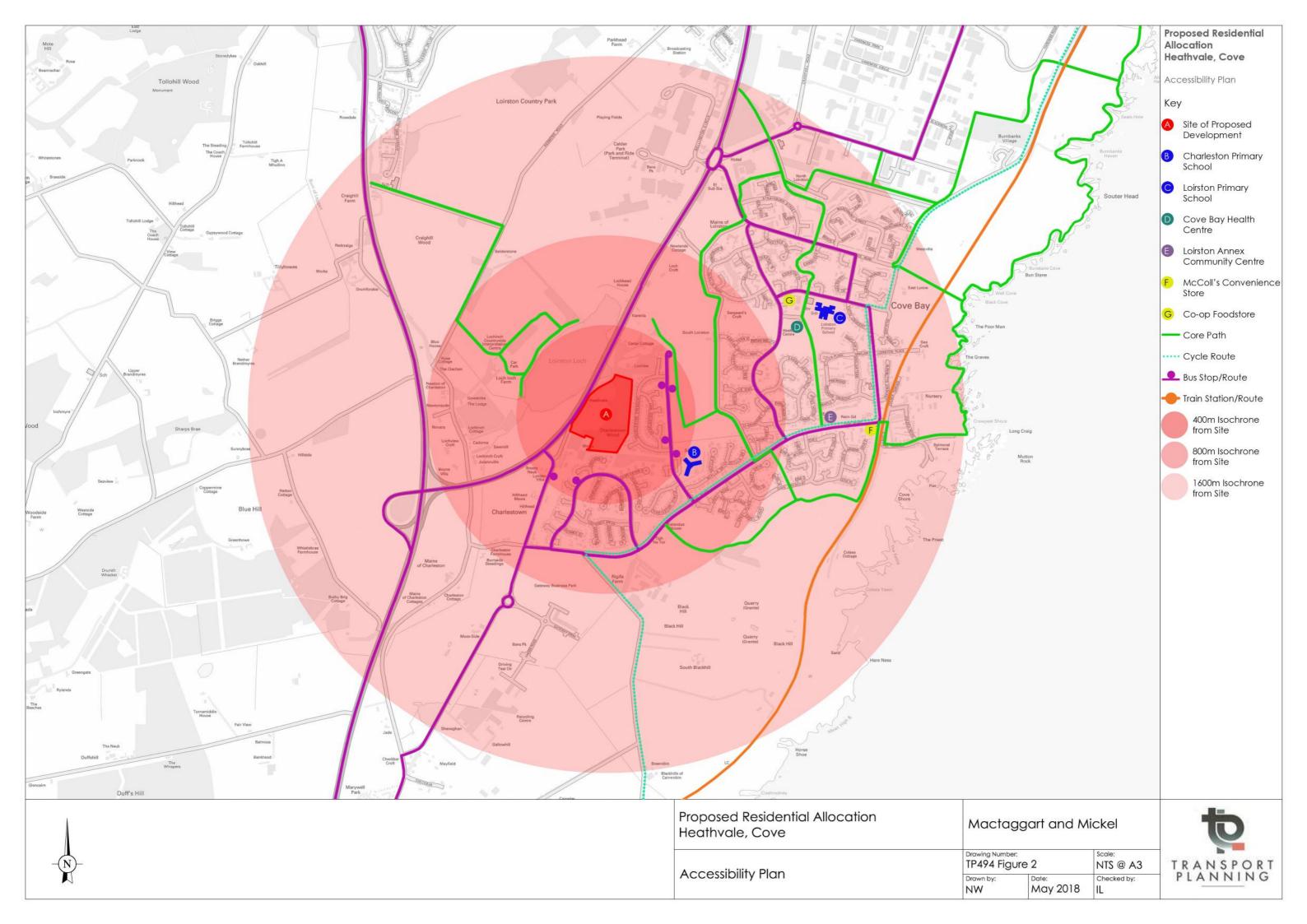
# 4. CONCLUSIONS

4.1 This report has shown that the proposed allocation site is well-situated for access to the surrounding transport network, including access by foot to key destinations such as Charleston Primary School. It is considered therefore that there are no transport-related reasons why the site cannot be allocated for residential development.

# APPENDIX A

# **FIGURES**





# APPENDIX B

# **DRAWINGS**









One-way arrow

Care Needed

On Road Cycle Lane Bus, Cycle and Taxi Lane

Dual Use Path

Busy but Useful Road

Off-Road Recreational Route

Path Where Cyclists May Have To Dismount National Cycle Network, Route 1 (Under Review) and Route 195

Cycle Friendly Access Point Access Point

Rail Wood, Forest or Park

River/Lake

Urban Area

2017 Update

arising from this map. This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Aberdeen City Council 100023401 2013.

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