

Transport and Environment Committee

10.00am, Tuesday, 30 August 2016

A71 Dalmahoy Junction – Traffic Signals Option

Item number	8.5
Report number	
Executive/routine	Routine
Wards	2 - Pentland Hills

Executive Summary

A petition was considered by the Petitions Committee on 4 September 2014; regarding a request for the installation of traffic signals at the A71 Dalmahoy junction to improve road safety particularly for pedestrians.

The Transport and Environment Committee considered this petition on 28 October 2014, and asked for a follow up report on the possible options at this location together with their effectiveness and cost.

An options report was presented to the Transport and Environment Committee on 17 March 2015, who agreed that the installation of traffic signals was the only practical option to improve road safety for both vehicles and pedestrians. The Committee agreed for a detailed design of a signalised junction to be undertaken and asked for a more detailed cost estimate, along with details of any available funding.

This report provides an update on further work undertaken since March 2015.

Links

Coalition Pledges	P44
Council Priorities	CP4 , CP9
Single Outcome Agreement	SO4

A71 Dalmahoy Junction – Traffic Signals Option

1. Recommendations

- 1.1 It is recommended that the Committee:
 - 1.1.1 notes that sufficient detailed design work has been undertaken to produce a workable junction layout and a more detailed cost estimate;
 - 1.1.2 notes that there is a projected funding shortfall of between £132,380 and £222,380;
 - 1.1.3 agrees that negotiations be undertaken with affected landowners, seeking to acquire the land required for a signalisation scheme by agreement;
 - 1.1.4 agrees that the detailed design should be completed, such that the scheme will be 'shovel ready' and that a further report be submitted to Committee on possible funding options; and
 - 1.1.5 agrees that a low cost safety scheme involving vehicle activated signs be introduced as a interim measure to address the current collision profile at the junction.

2. Background

- 2.1 The Petitions Committee, at its meeting on 4 September 2014, referred a petition entitled “Dalmahoy Traffic Lights Needed” to the Transport and Environment Committee. The petition requested the installation of traffic signals at the Dalmahoy Junction on the A71 in order to improve road safety, particularly for pedestrians.
- 2.2 The Transport and Environment Committee on 28 October 2014 (Item 7.15b) considered the petition on the Dalmahoy Junction. It agreed to request a further report outlining a range of options and costs for improvements.
- 2.3 Three options were investigated: 1) full signalisation of the junction; 2) installation of a signal controlled pedestrian crossing; and 3) installation of a pedestrian refuge island. These options were reported to the Transport and Environment Committee on 17 March 2015 (Item 8.1).

- 2.4 The Transport and Environment Committee considered the options and decided that the installation of traffic signals was the only practical option to improve road safety for both vehicles and pedestrians. As the scheme had an estimated funding shortfall of approximately £76,000 at that time, and therefore could not proceed to construction, the Committee agreed to undertake a detailed design for the signalisation of the junction with a more detailed cost estimate and request a further update once this has been done.

3. Main report

- 3.1 Following Committee's decision in March 2015, traffic surveys have been undertaken at the Dalmahoy junction to determine the existing traffic levels and turning movements. A topographical survey was also carried out to model the junction layout. Traffic modelling was then undertaken to determine the optimum signal phasing and traffic lane requirements.
- 3.2 Sufficient detailed design work has been undertaken to produce a workable junction layout. The proposed layout is attached as Appendix 1: A71 Dalmahoy Road Junction, Signalisation General Layout. It should be noted that it would be necessary to acquire areas of land that are not currently in Council ownership to construct this layout.
- 3.3 The estimated cost of constructing the full junction signalisation, including land acquisition costs (see 3.10) and an allowance of £30,000 for completing the detailed design, procurement and site supervision, is £430,400.
- 3.4 An investigation into potential funding sources for the scheme has been undertaken. £208,020 of funding has been identified from Planning and Transport Capital budgets:
- 3.4.1 £143,020 from Road Safety (see 3.7).
 - 3.4.2 £25,000 from Access to Bus Stops.
 - 3.4.3 £40,000 Section 75 Craigpark Quarry Planning Application.
- 3.5 A further £90,000 of potential funding has been identified from other sources. It should be noted that these funding contributions have not been secured.
- 3.5.1 £30,000 from Cycling, Walking and Safer Streets.
 - 3.5.2 £50,000 from South West Locality Transport and Environment (ie £25,000 each year for a two year period).
 - 3.5.3 £10,000 from Marriott Hotel Group, subject to the conclusion of a formal agreement.
- 3.6 This leaves a projected funding shortfall of £132,380. Should some or all of the potential funding detailed in 3.5 above not be secured the shortfall could potentially rise to as much as £222,380.

- 3.7 The junction currently has a collision history of four personal injury collisions over the last three years of held records. These form a pattern of vehicle collisions involving vehicles turning into and out of the side roads. Bringing the junction under signal control is expected to reduce these collisions by two thirds. Personal Injury collisions are attributed a cost by Transport Scotland, which is updated annually. This estimates the immediate costs incurred after a collision, both personal and to society. The current figure given is £160,898 for each collision. This allows us to work out a basic cost/benefit to give the financial rate of return from the installation of these signals as £143,020 for the first year post construction. This allows for the amount quoted in 3.4.1 to be allocated from the Road Safety budget.
- 3.8 The amounts quoted in 3.4.1, 3.5.1 and 3.5.2 above differ from those reported previously within the 17 March 2015 report to Committee. The Road Safety contribution, quoted in 3.4.1, has changed because Transport Scotland has updated the cost attributed to a personal injury collision in the interim period. The two other amounts have changed because the levels of funding available from these sources vary over time. The amounts reported previously reflected the levels of funding potentially available at that time but these sums were not specifically set aside for use on the project, given that there was no definite commitment to its implementation.
- 3.9 Given the projected funding shortfall of between £132,380 and £222,380 it is recommended that negotiations be undertaken with affected landowners, seeking to acquire the land required for a signalisation scheme by agreement. The detailed design should also be completed, such that the scheme will be 'shovel ready', should sufficient funding for construction become available in the future.
- 3.10 From previous experience, the acquisition of the required land is likely to take at least a year to complete. It is anticipated that this will incur an approximate cost of £15,000, including legal costs for all parties.
- 3.11 It is also recommended that a low cost safety scheme be introduced as an interim measure, to address the current collision profile at the junction. At an approximate cost of £12,000, vehicle activated "staggered junction ahead" signs could be erected, which would be triggered by oncoming traffic when vehicles are either sitting at the give way line or in the centre of the road waiting to turn right. This would, however, not bring an immediate benefit to pedestrian safety at this location.

4. Measures of success

- 4.1 Success will be measured through:
- 4.1.1 A reduction in the collision rate, as measured through the comparison of before and after collision statistics.
 - 4.1.2 An improvement in exiting and entering the side roads.
 - 4.1.3 Improved pedestrian access to Dalmahoy Hotel and encouraging the use of Public Transport through access to the bus stops.

5. Financial impact

5.1 As detailed in main report.

6. Risk, policy, compliance and governance impact

6.1 There are no significant governance, health and safety, compliance or regulatory implications expected, as a result of approving the recommendations of this report.

7. Equalities impact

7.1 An Equalities and Rights Impact Assessment has been prepared and is available as background reference. There are no direct negative equalities or human rights impacts anticipated and the proposals are expected to enhance accessibility to the Dalmahoy Hotel complex and to Ratho village, for both vehicular and pedestrian traffic, especially for elderly, young and mobility or visually impaired pedestrians who encounter difficulties in crossing busy roads.

8. Sustainability impact

8.1 The impacts of this report have been considered in relation to the three elements of the Climate Change (Scotland) Act 2009 Public Bodies Duties and the outcomes summarised as follows:

8.1.1 Potential for positive impact on the environment by reducing speeds, reducing the potential for collisions and removing community severance.

8.1.2 The proposals in this report will help achieve a sustainable Edinburgh as it will enhance access to public transport, aid social cohesion and inclusion as well as equality of opportunity.

9. Consultation and engagement

9.1 Consultation will be carried out on the design and construction of any proposed scheme. This will include the following stakeholders:

- Residents and businesses which front on to the location;
- Neighbourhood Partnerships;
- Community Councils;
- Local elected members;
- Council Roads Neighbourhood Managers;
- Bus operators;
- Emergency services; and

- Affected landowners.

9.2 Initial consultation has been carried out with the Marriott Dalmahoy Hotel, with a view to securing funds and further consultation will be carried out on the design and construction of any proposed scheme.

10. Background reading/external references

- 10.1 Transport and Environment Committee Report – Item 7.15b, Dalmahoy Junction – Response to Petition, 28 October 2014.
- 10.2 Transport and Environment Committee Report – Item 8.1, A71 Dalmahoy Junction – Options Report, 17 March 2015.

Paul Lawrence

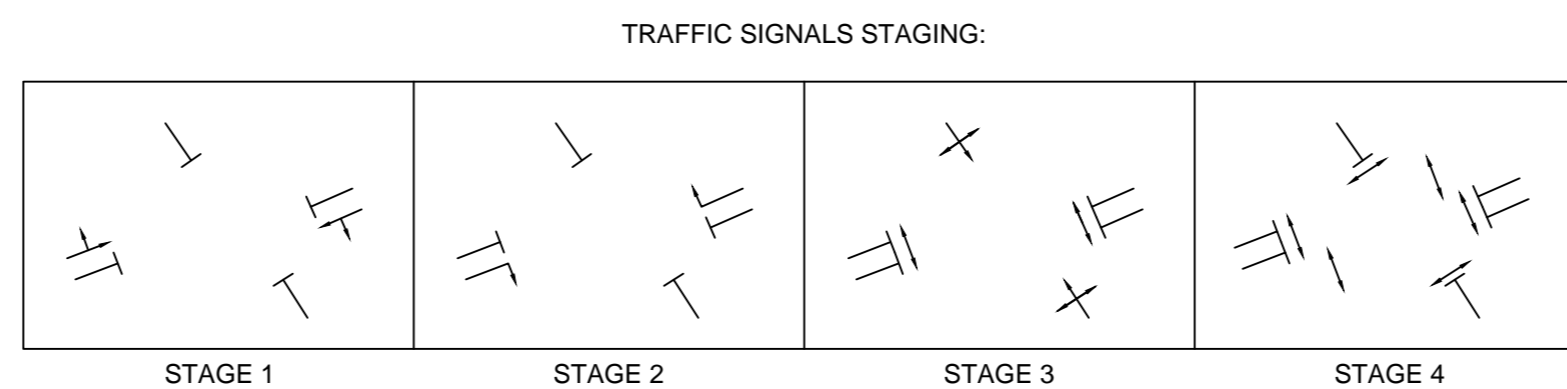
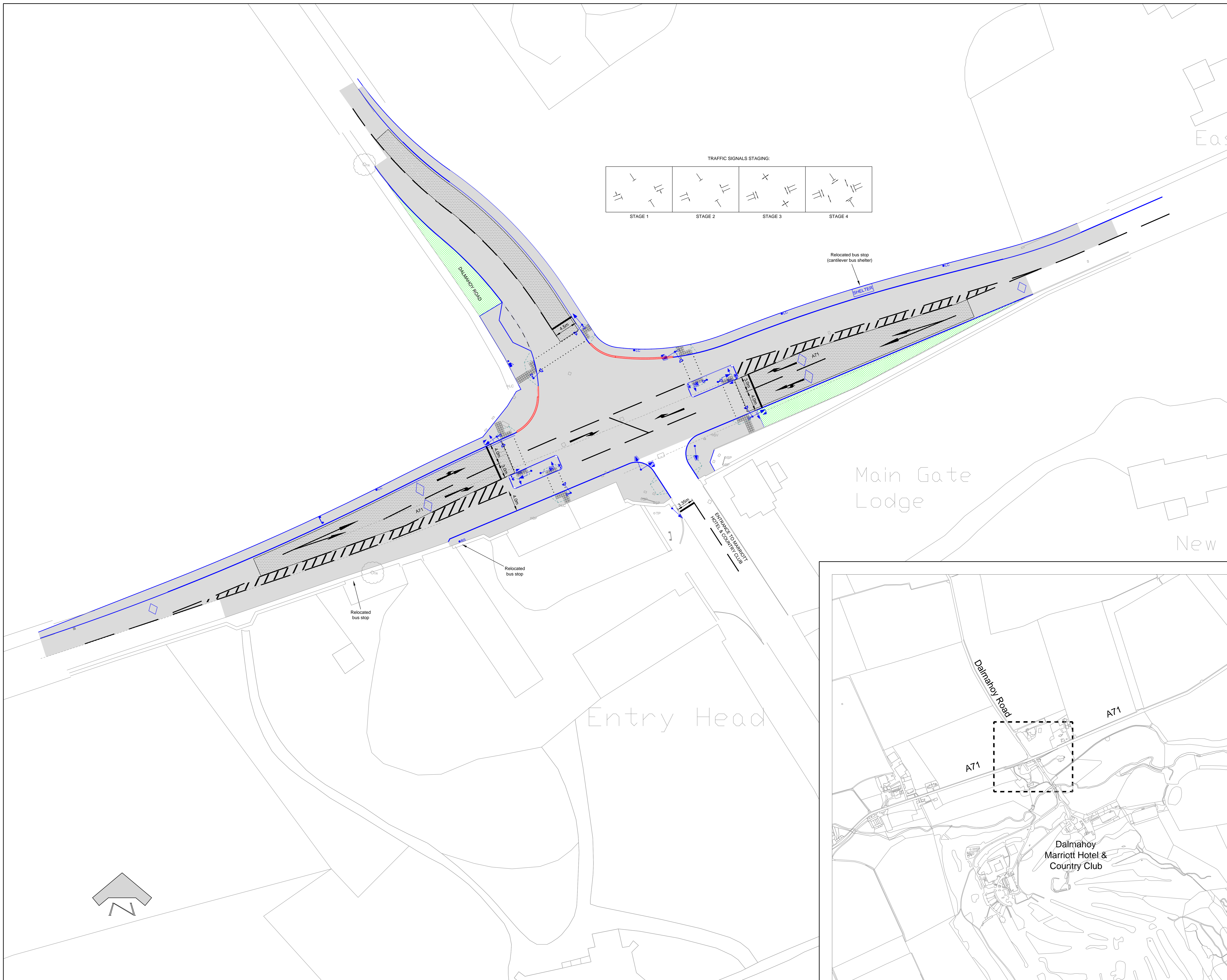
Executive Director of Place

Contact: Iain Peat, Professional Officer, Road Safety

E-mail: iain.peat@edinburgh.gov.uk | Tel: 0131 469 3416

11. Links

Coalition Pledges	P44 - Prioritise keeping our streets clean and attractive
Council Priorities	CP4 – Safe and empowered communities CP9 – An attractive city
Single Outcome Agreement	SO4 - Edinburgh's communities are safer and have improved physical and social fabric
Appendices	Appendix 1 - A71 Dalmahoy Road Junction, Signalisation, General Layout

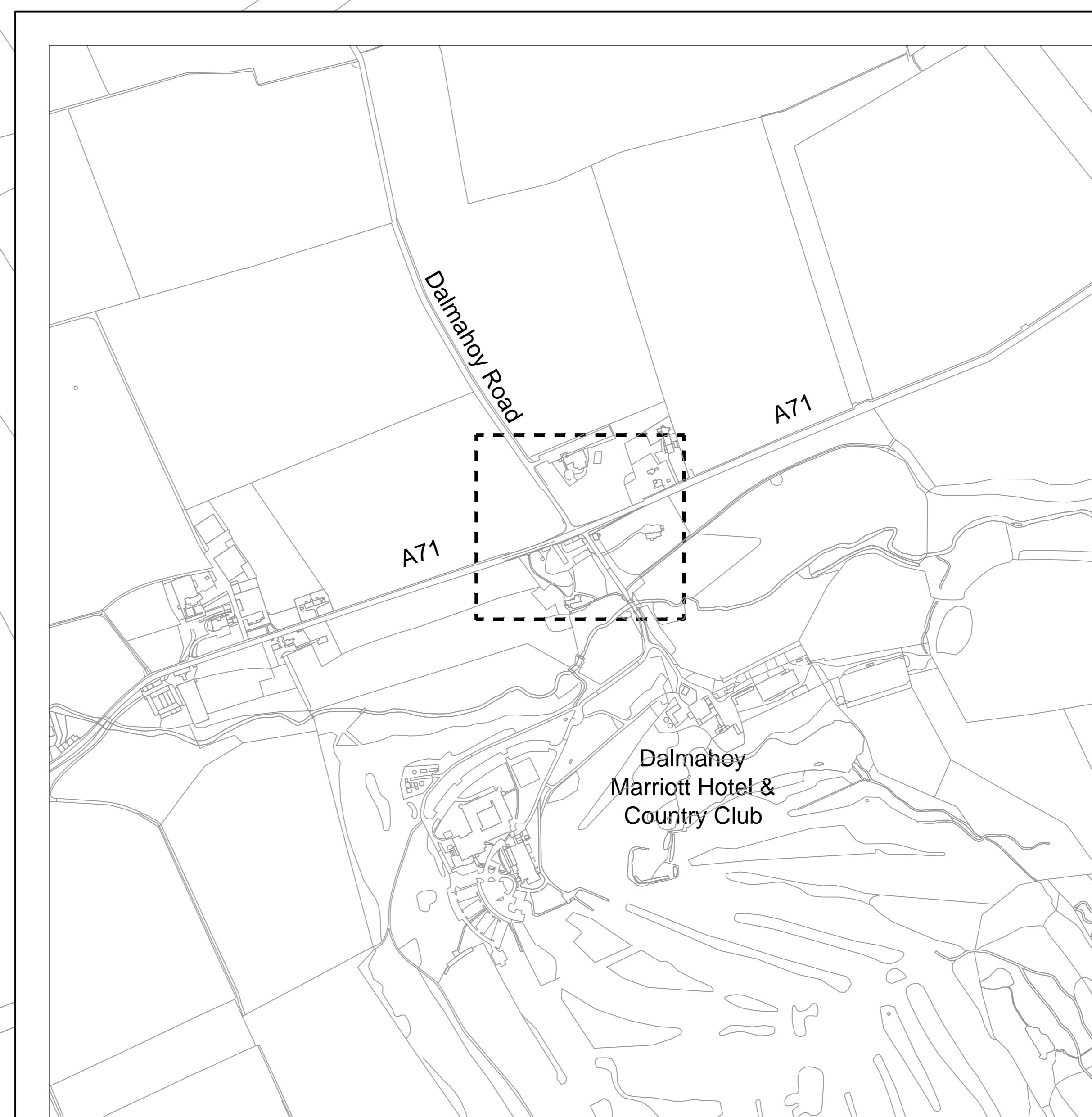


NOTES:

KEY:

- New kerbline
- New edging kerbline
- New drainage kerbline
- New carriageway & footway
- High friction surfacing
- Verge
- White road markings
- Stainless steel studs
- White direction arrows
- Traffic signals
- Tactile paving
- Drop kerb crossing

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LOCATION PLAN
Scale 1:10,000

REVISION	DETAILS	BY	DATE	CHECKED

EDINBURGH
THE CITY OF EDINBURGH COUNCIL

The City of Edinburgh Council
Waverley Court
4 East Market Street
Edinburgh, EH8 8BG
Telephone: 0131 200 2000

PLACE
PLANNING & TRANSPORT
TRAFFIC & ENGINEERING
TRANSPORT DESIGN & DELIVERY

A71 / Dalmahoy Road Junction
Signalisation
General Layout

Date: 1 June 2016 Scale: 1:250 @A1	Job No. 636718	Drawn by: A Parkinson Checked by: D Wilson Reviewed by:
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