

Notice of a meeting of Cabinet

Tuesday, 7 March 2017 6.00 pm Pittville Room - Municipal Offices

Membership									
Councillors:	Steve Jordan, Flo Clucas, Chris Coleman, Rowena Hay, Peter Jeffries,								
	Andrew McKinlay and Roger Whyborn								

Agenda

	SECTION 1 : PROCEDURAL MATTERS	
1.	APOLOGIES	
1.	APOLOGIES	
2.	DECLARATIONS OF INTEREST	
3.	MINUTES OF THE LAST MEETING	(Pages
J.	Minutes of the meeting held on 7 February 2017	3 - 8)
4.	PUBLIC AND MEMBER QUESTIONS AND PETITIONS These must be received no later than 12 noon on the fourth working day before the date of the meeting	
	SECTION 2 :THE COUNCIL There are no matters referred to the Cabinet by the Council on this occasion	
	SECTION 3 : OVERVIEW AND SCRUTINY COMMITTEE	
	There are no matters referred to the Cabinet by the Overview and Scrutiny Committee on this occasion	
	SECTION 4 : OTHER COMMITTEES	
	There are no matters referred to the Cabinet by other Committees on this occasion	
	SECTION 5 : REPORTS FROM CABINET MEMBERS	
	AND/OR OFFICERS	
5.	CABINET RESPONSE TO THE SCRUTINY REPORT ON ACCESSIBILITY Report of the Cabinet Member Clean and Green Environment	(Pages 9 - 24)

6.	APPOINTMENT OF THE NON EXECUTIVE DIRECTOR TO 2020 COMPANY Report of the Head of Paid Service	(Pages 25 - 36)
7.	FINANCING ARRANGEMENTS FOR IMPROVEMENTS TO LEISURE-AT-CHELTENHAM Report of the Cabinet Member Healthy Lifestyles	(Pages 37 - 70)
8.	PROGRESS UPDATE REGARDING THE NEW CREMATORIUM PROJECT INCLUDING BUSINESS CASE DECISIONS REGARDING ACCESS ROAD AND SECOND CHAPEL OPTION Report of the Cabinet Member Clean and Green Environment	(Pages 71 - 360)
	SECTION 6 : BRIEFING SESSION • Leader and Cabinet Members	
9.	BRIEFING FROM CABINET MEMBERS	
	SECTION 7 : DECISIONS OF CABINET MEMBERS Member decisions taken since the last Cabinet meeting	
	SECTION 8 : ANY OTHER ITEM(S) THAT THE LEADER DETERMINES TO BE URGENT AND REQUIRES A DECISION	

Contact Officer: Rosalind Reeves, Democratic Services Manager, 01242 774937 Email: democratic.services@cheltenham.gov.uk

Cabinet

Tuesday, 7th February, 2017 6.00 - 6.30 pm

Attendees								
Councillors:	Steve Jordan (Leader of the Council), Flo Clucas (Cabinet Member Healthy Lifestyles), Chris Coleman (Cabinet Member Clean and Green Environment), Rowena Hay (Cabinet Member Finance), Peter Jeffries (Cabinet Member Housing), Andrew McKinlay (Cabinet Member Development and Safety) and Roger Whyborn (Cabinet Member Corporate Services)							

Minutes

1. APOLOGIES

There were no apologies.

2. DECLARATIONS OF INTEREST

There were no declarations of interest.

3. MINUTES OF THE LAST MEETING

The minutes of the last meeting were approved and signed as a correct record.

4. PUBLIC AND MEMBER QUESTIONS AND PETITIONS

There were none.

5. FINAL GENERAL FUND REVENUE AND CAPITAL BUDGET PROPOSALS 2017/18 (INCLUDING SECTION 25) RESOLVED THAT

This item be deferred until 24 February Special meeting of Cabinet

6. FINAL HOUSING REVENUE ACCOUNT (HRA) BUDGET PROPOSALS 2017/18
RESOLVED THAT

This item be deferred until 24 February Special meeting of Cabinet

7. TREASURY MANAGEMENT STRATEGY STATEMENT AND ANNUAL INVESTMENT STRATEGY 2017/18

The Cabinet Member Finance introduced the report which had been circulated with the agenda. She explained that the council under the CIPFA code must report annually on its treasury management strategy statement and its prudential indicators and the report incorporated the annual investment strategy which is also a requirement.

The Treasury Management Panel (TMP) had recommended that Cabinet

approve this report and forward it to Council. The treasury & annual investment strategy statements were clearly set out in Appendix 2, and the Minimum Revenue Provision at Appendix 4.

She highlighted the revisions made to the lending list in Appendix 3 and the use of Repo/Reverse Repo as a form of securitised lending and was pleased that this had the support of the TMP.

She gave thanks to council officers and advisors for their achievements. Since the budget monitoring report in September the investment income had improved for 16/17 and was currently showing as a £12,800 surplus above the budget.

The Cabinet Member Healthy Lifestyles asked whether given that PWLB rates were rising gently and the volatility of the current international financial situation, would it be a good time for the Council to use PWLB to make investments in Cheltenham to meet the requirements of the town and the council. The Section 151 Officer advised that this would be possible but there had to be an evidenced need for borrowing based on incurred or imminent capital expenditure and the council could not make a speculative application.

RESOLVED THAT

Council be recommended to approve the attached Treasury Management Strategy Statement, Annual Investment Strategy for 2017/18 at Appendix 2, 2017/18 Lending list at Appendix 3 and MRP policy statement for 2016/17 and 2017/18 at Appendix 4, including:

- The general policy objective 'that Council should invest prudently the surplus funds held on behalf of the community giving priority to security and liquidity'.
- That the Prudential Indicators for 2017/18 including the authorised limit as the statutory affordable borrowing limit determined under Section 3 (1) Local Government Act 2003 be approved.
- Revisions to the Council's lending list and parameters as shown in Appendix 3 are proposed in order to provide some further capacity. These proposals have been put forward after taking advice from the Council's treasury management advisers Capita Asset Services and are prudent enough to ensure the credit quality of the Council's investment portfolio remains high.
- The use of Repo/Reverse Repo is accepted as a form of securitised lending.

For 2016/17 and 2017/18 in calculating the Minimum Revenue Provision (MRP), the Council will apply a modified Option 1 in respect of supported capital expenditure to repay the debt in equal instalments over 35 years and Option 3 in respect of unsupported capital expenditure, adjusted from 2017/18 by the use of capital receipts to repay debt associated with capital loans as per paragraph 24 in Appendix 4.

8. BUDGET MONITORING REPORT 2016-17-POSITION AT DECEMBER 2016
The Cabinet Member Finance introduced the third financial monitoring report
giving the position statement for the financial year 2016/17. The purpose of the
report was to notify members of any known significant variations to budgets for
2016/17 and highlight any key issues.

The table at 2.1 summarised the net impact of the variances identified at this stage in the financial year, for anything over 50K and areas with volatile income trends.

With regard to the Housing Revenue Account (HRA), the final budget report for 2017/18 showed the revised forecasts for the current year updated to December 2016. The only amendments to the October figures were a further anticipated saving of £49.600 on repairs and maintenance. Overall capital expenditure was expected to be £74,500 lower at £11,583,100, reducing revenue contributions by the same amount. These variations increased the forecast revenue reserve at 31st March 2017 by £124,100 to £6,176,100.

The monitoring report for the collection of council tax and business rates (NNDR) income was shown in Appendix 5 and indicated the position at the end of December 2016 and the projected outturn for 2016/17.

In conclusion, the net effect on the general fund of the variances reported was a forecast net underspend against the budget of £110,737 for 2016/17. The continued impact of the changes in government funding arrangements and the economic climate presented particular concerns for the Council's budgets. It was clearly important to ensure that budgets continued to be closely monitored over the coming months with a view to taking action at a future date, if necessary.

Cabinet and Council would decide in July 2017, when the outturn is finalised, how to apply any potential further savings. However it was recommended that any underspend identified on outturn be transferred firstly to the Budget Deficit (Support) Reserve and secondly to support general balances, bearing in mind the need to keep the level of reserves robust and the uncertainty surrounding future budget funding gaps, as outlined in the Council's Medium Term Financial Strategy report.

The Cabinet Member Healthy Lifestyles commended the council tax officers for their sterling work in maintaining the high rate of collection referred to in Appendix 5.

The Leader commended the excellent financial control which the report demonstrated by officers across the council.

RESOLVED THAT

 the contents of this report including the key projected variances to the 2016/17 budget and the expected delivery of services within budget be noted.

- 2. the budget virements to the 2016/17 budget, as detailed in Appendix 7 be approved.
- 3. Council be recommended to approve a contribution of £110,737 to the Budget Deficit (support) reserve, as detailed in paragraph 10.1.

9. REVIEW OF HACKNEY CARRIAGE FARES

The Cabinet Member Built Environment introduced the report which explained that section 65 of the Local Government (Miscellaneous Provisions) Act 1976 permitted the council to set fares for hackney carriage or taxi vehicles licensed by it. The council had adopted a fare formula which was used annually to calculate the running costs of a licensed hackney carriage vehicle. He highlighted that there had not been a fare increase since November 2013 as the calculated increases would be too small to be practically reflected. However the cumulative percentage increase since the last fare adjustment in 2013 had resulted in a proposed 6% increase. The report asked Cabinet to approve readjustment of the current maximum fares and the new tariffs which were set out in Appendix 2.

RESOLVED THAT

- 1. the proposed maximum fare increase for hackney carriages be approved; and
- 2. authority be delegated to the Director of Environment to carry out the necessary advertising requirements to comply with section 65 of the Local Government (Miscellaneous Provisions) Act 1976; and
- 3. Subject to there being no substantive amendments being made following consultation, authority be delegated to the Director of Environment to adopt the proposed fares.

10. BRIEFING FROM CABINET MEMBERS

The Cabinet Member Corporate Services was pleased to announce that the council had been successful in its recent reassessment for Investors in People and had retained its award. This was important as it demonstrated that the council considered its staff to be its biggest asset and invested in them accordingly. It would be reassessed in three years time.

The Cabinet Member Built Environment announced that the Cheltenham Local Plan had been put out for informal consultation over the next six weeks. This document sat beneath the Joint Core Strategy which would be debated at Council on Friday. This was an opportunity for residents to put forward their views on the draft document before the formal consultation and he encouraged everybody to give their feedback by following the link on the council's website.

The Cabinet Member Housing indicated that he would be attending an important affordable housing conference on Friday and therefore would be giving his apologies for Council. He updated members on his recent first-hand experience of rough sleeping in Cheltenham and he was pleased that this had helped to raise awareness of the current crisis across the county with strong support from local media. It had provided him with a good insight of the issues and problems and he would share his ideas with colleagues at a future date

once he had had time to reflect on his experience.

The Cabinet Member Healthy Lifestyles noted that the Public Art Strategy for Cheltenham was currently being reviewed and one of her aims was that it should celebrate the achievements of legendary females which was currently lacking. She advised that plans were being drawn up for a revamp at Leisure@ which would be reported to Council in March. She hoped that the project could then move forward as it would have a major benefit for families in the town.

The Leader announced that the government had launched a White Paper on housing and commended the Cabinet Member Housing for highlighting the rough sleeping issue. He referred to the imminent retirement of Rob Bell and wished to formally note the council's thanks for the huge amount of work that he had done for the council and for the town in both his previous role and in his current role as Managing Director of Ubico.

11. CABINET MEMBER DECISIONS TAKEN SINCE THE LAST MEETING OF CABINET

13/12/16	Cabinet	Procurement of kerbside sort recycling vehicles
	member	
	Clean and	
	Green	
	Environment	
13/01/17	Cabinet	To appoint Emmdee Electrcial to upgrade lighting and
	Member	electrical infrastructure within communal areas of CBC
	Finance	sheltered accommodation and general needs block of flats
23/01/17	Leader	Appointment of new Managing Director of Ubico Limited
3/02/17	Leader	Ubico Ordinary Resolution-extension of the existing
		arrangements with various support service providers for 12
		months

12. LOCAL GOVERNMENT ACT 1972 - EXEMPT BUSINESS

13. EXEMPT MINUTES

The exempt minutes of the meeting held on 13 December 2016 were approved and signed as a correct record.

Chairman

Cheltenham Borough Council Cabinet – 7th March 2017 Changing Places Accessible Toilets Cabinet Response to Scrutiny Report on Accessibility

Accountable member	Cabinet Member Clean and Green Environment, Councillor Chris Coleman						
Accountable officer	Director of Resources, Mark Sheldon						
Ward(s) affected	All						
Key Decision	No						
Executive summary	On 13 December 2016 Cabinet considered a report on Accessibility from Overview and Scrutiny and approved the recommendation that appropriate officers look at what actions could be taken to reduce difficulties experienced by disabled persons and to develop an action plan.						
	Cheltenham Borough Council successfully applied for funding from the Disabled Children and Young People Short Breaks Capital Grant, to install two Changing Places Accessible Toilets within Cheltenham, one to be sited adjacent to Pittville Park Play Area and the other in a town centre location.						
Recommendations	That Cabinet agree to:						
	 Approve the project to develop the proposal and the business case, subject to existing budgets, to install and maintain two Changing Places Accessible Toilets within Cheltenham, one in Pittville Park and another in a town centre location to be determined, following consultation with user groups and stakeholders. 						

1 age 10							
Financial implications	There are no direct financial implications arising from this report. However, the financial implications to the council's 2017-18 and future capital and revenue budgets will need to be considered as part of the business case, to be developed. If this business case identifies a shortfall in funding, this will have an impact on the Medium Term Financial Strategy and Cabinet of Council may be required to request increased funding, for which a corresponding budget saving may need to be identified elsewhere. Contact Officer: Sarah Didcote, Deputy Chief Financial Officer						
	Email: Sarah.Didcote@cheltenham.gov.uk						
	Tel: 01242 264125						
	Contact Officer: Sarah Didcote						
	Email: Sarah.Didcote@cheltenham.gov.uk						
	Tel: 01242 264125						
Legal implications	The Authority will need to comply with its Contract Rules in respect of the design and build of the facilities and the on- going maintenance of the facilities.						
	The Authority needs to comply with the Disabled Children and Young People Short Breaks Capital Grant Acceptance Contract requirements.						
	Contact Officer: Shirin Wotherspoon, Head of Law (Commercial)						
	Email: shirin.wotherspoon@tewkesbury.gov.uk						
	Tel: 01684 272017						
HR implications	There are no direct HR implications identified in the report.						
(including learning and organisational	Contact officer: Carmel Togher, HR Business Partner						
development)	Email: carmel.togher@cheltenham.gov.uk						
	Tel: 01242 775215						
Key risks	That Cheltenham Borough Council is unable to deliver the project due to the inability to support a budget for the ongoing maintenance costs.						

Corporate and community plan Implications	The project to install two Changing Places Accessible Toilets has been included within the Corporate Strategy for 2017/18 under the outcome: • People live in strong, safe and healthy communities							
	The project also contributes to the Corporate Priority Action:							
	 The council is committed to the elimination of discrimination and promotion of equality of opportunity for all citizens and will work towards this goal, both in the provision of services and employment. 							
Environmental and climate change	No direct implications identified in the report.							
implications	Environmental issues will be considered as part of the business case.							
Property/Asset Implications	Dependant on the delivery timescale for this scheme it may be necessary to engage a temporary external resource. The potential cost of this resource has not been included in the cost estimates and an allowance of 12-15% will need to be added to budget estimates.							
	Contact Officer: David Roberts, Head of Property and Asset Management							
	Email: david.roberts@cheltenham.gov.uk							
	Tel: 01242 264151							

1. Background

- 1.1 As part of the agenda for the Overview and Scrutiny meeting held on 12 September 2016, the committee received a presentation from wheelchair users about some of the problems some disabled people encounter when trying to find accessible public toilets in Cheltenham as well as more general access issues. One issue raised was the lack of suitable public disabled toilets, which had proper facilities and enough room either for a mobility scooter or two carers. Also, since the closure of the accessible toilet in the Beechwood Arcade, there is no public facility in Cheltenham that offers additional requirement to assist with the needs of those with complex disabilities, and their carers'.
- 1.2 Over 230,000 people in the UK need personal assistance to use the toilet or for personal hygiene [see appendix 3]. Changing Places Accessible Toilets are designed to provide the three elements key to helping improve accessibility for these people within their community.
 - The right equipment height adjustable changing bench and hoist system
 - Space to allow disabled person and up to two carers
 - A safe and clean environment non-slip floor, appropriate water facilities
- 1.3 During the redevelopment of Pittville Play Park in spring 2016, the project team sought advice from Gloucestershire County Council (GCC) regarding accessibility. GCC provided information on the Disabled Children and Young People Short Breaks Capital Grant and made the suggestion that Cheltenham Borough Council bid for funding to install a Changing Places Accessible Toilet to serve the Pittville Play Park area.

- 1.4 Within the facilities available at Pittville Play Park, there is a disabled toilet that meets current legal standards. However, the number of people, children and adults, with complex disabilities is increasing and these basic facilities are not meeting their needs. In turn this prevents their ability to visit public places such as the play area or restricts the period of time they are able to stay.
- 1.5 A report on Accessibility was taken to Cabinet on 13th December 2016 with the recommendation that Cheltenham Borough Council 'look at what action the council could take in areas it has direct control of access to toilet facilities in the light of the comments made to reduce difficulties being experienced by disabled persons with a view to an action plan being submitted to Cabinet'.
- 1.6 Following an application to the Disabled Children and Young People Short Breaks Capital Grant in December 2016, to install two Changing Places Accessible Toilets within Cheltenham, the Council's bid for £136k has been accepted. The Trust made a separate bid for the Disabled Children and Young People Short Breaks Capital Grant for the Leisure Centre and they too were successful.
- 1.7 The Disabled Children and Young People Short Breaks Capital Grant to Cheltenham Borough Council was approved on the basis that one of the Changing Places Accessible Toilet would be sited at Pittville Play Park and the second facility within the Town Centre.
- **1.8** Although funding has been granted for the capital cost of installing two Changing Places Accessible Toilets, identification and securing of funding for future maintenance and cleaning regime of the two facilities is still required.

2. Reasons for recommendations

- 2.1 Although there are public disabled toilets within Cheltenham, none are large enough or suitably equipped for those with complex disabilities, those that require two carers to accompany them or those that require mobility scooters to access facilities. For some this leads to an inequality in choice, when deciding to visit Cheltenham for longer periods of time.
- 2.2 The installation of two facilities within Cheltenham would improve upon the current provision within Gloucestershire, where there are currently only three Changing Places Accessible toilets, the closest facility being at Dursley over 22 miles away.
- 2.3 The Equality Act 2010 requires that service providers must think ahead and take steps to address barriers that impede disabled people. Under this Equality Act, adjustments must be made where disabled people experience 'substantial disadvantage'. ['Equality Act 2010... a quick start guide' (Background Information)]

3. Costs & Funding

3.1 The Disabled Children and Young People Short Breaks Capital Grant would be used to fund the following:

The installation of two
 Changing Room Accessible Toilets

£124,000 (£62,000 per toilet)

- Officer resource

£12.000

The Disabled Children and Young People Short Breaks Capital Grant cannot be used for the ongoing maintenance and cleaning of the two Changing Places Accessible Toilets. If there is no

flexibility within the planned maintenance budget to support the running costs and limited opportunity for maintenance grant funding, there may be implications to the baseline budget from 2018/19 onwards.

4. Consultation and feedback

- **4.1** Stakeholders and service users will be consulted on the most suitable location for the second facility within the Town Centre.
- 4.2 Cheltenham Borough Council will partner with Charitable Organisations to develop a community engagement strategy and opportunities for extending the grant funding

5. Performance management –monitoring and review

5.1 This project will follow the principles of Prince 2 project management.

Report author	Contact officer: Claire Cook, Client and Research Officer							
	Email: claire.a.cook@cheltenham.gov.uk Tel: 01242 775212							
Appendices	Risk Assessment							
	2. Community Impact Assessment							
	3. Changing Places Summary							

Background information

12th September 2016 – Minutes from Overview & Scrutiny Meeting agenda item 6.

https://democracy.cheltenham.gov.uk/ieListDocuments.aspx?Cld=267&Mld=2584&Ver=4

13th December 2016 – Cabinet Report on Accessibility Issues agenda item 5

https://democracy.cheltenham.gov.uk/ieListDocuments.aspx?Cld=1 66&Mld=2572&Ver=4

Equality Act 2010: Public Sector Equality Duty What do I need to know? A quick start guide for Public Organisations.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/85041/equality-duty.pdf

Equality Act 2010: What do I need to know? Disability quick start guide'

https://www.gov.uk/government/uploads/system/uploads/attachment data/file/85037/disability.pdf

Changing Places – The Practical Guide http://www.changing-places.org/LinkClick.aspx?fileticket=YEDKVYyX8TE%3d&tabid=81

Risk Assessment Appendix 1

The risk			Oı	riginal risk sco	ore	Managing risk						
			(im	pact x likeliho	od)							
Risk ref.		Risk	Date raised	Impact 1-5	Likelihood 1-6	Score	Control		Deadline	Responsible	Transfer red to	
	Risk description	Owner						Action		officer	risk register	Risk Status
R001	If the proposed locations for the Changing Places Accessibility Toilets are not suitable, then there will continue to be inequality of access and choice to facilities within Cheltenham.	David Roberts		3	1	3	Reduce	Undertake Community Impact Assessments against the different locations for the siting of the Changing Place Accessible Toilets		Claire Cook		
R002	If the installation of Changing Places Accessible Toilets has a detrimental impact on persons who share protected characteristics (for example age, disability or pregnancy and maternity), then the Council will be in potential breach of its Public Sector Equalities Duty contained in Section 149 of the Equality Act 2010 which will also impact CBC's reputation.	David Roberts		4	1	4	Reduce	Undertake Community Impact Assessments against the different locations for the siting of the Changing Place Accessible Toilets		Claire Cook		Page 15
R003	If CBC is unable to proceed with the installation of the Changing Places Toilets, then disabled people with complex needs will continue to have limited choices when visiting Cheltenham	David Roberts		3	2	6	Reduce	A business case is being developed		Claire Cook		

R004	If there are a limited number of specialised suppliers then CBC may be unable to obtain value for money as well as a suitable standard of design and build.	David Roberts	2	2	4	Reduce	Research to be undertaken as part of the development of the business case	Claire Cook	
R005	If CBC is unable to meet the terms and conditions of the Disabled Children and Young People Short Breaks Capital Grant, then the grant will be removed.	David Roberts	3	1	3	Reduce	A business case is being developed	Claire Cook	
R006	If CBC is unable to secure future maintenance funding, then it will not be possible to maintain the facilities to the required standard of compliance.	David Roberts	3	2	6	Reduce	A business case is being developed	Garrie Dowling	Page 16
R007	If property services are unable to provide the necessary resource within the timeframes, then there may be a delay to project deliver and cost implications.	David Roberts	2	2	4	Reduce	A business case is being developed	Garrie Dowling	

Explanatory notes

Impact – an assessment of the impact if the risk occurs on a scale of 1-5 (1 being least impact and 5 being major or critical)

Likelihood – how likely is it that the risk will occur on a scale of 1-6

(1 being almost impossible, 2 is very low, 3 is low, 4 significant, 5 high and 6 a very high probability)

Control - Either: Reduce / Accept / Transfer to 3rd party /

Close

What is a community impact assessment?

A community impact assessment is an important part of our commitment to delivering better services for our communities. The form will help us find out what impact or consequences our functions, policies, procedures and projects have on our communities, as well as employees and potential employees.

By undertaking an impact assessment, we are able to:

- Take into account the needs, experiences and circumstances of those groups of people who use (or don't / can't use) our services.
- Identify any inequalities people may experience.
- Think about the other ways in which we can deliver our services which will not lead to inequalities.
- Develop better policy-making, procedures and services.

Background

Name of service / policy / project and date	Changing Places Accessible Toilets	
Lead officer	Mark Sheldon	Page
Other people involved in completing this form	Claire Cook Jane Stovell	

Step 1 - About the service / policy / project

What is the aim of the service / policy / project and what outcomes is it contributing to	The project to install two Changing Places Accessible Toilets has been included within the Corporate Strategy for 2017/18 under the outcome:
	People live in strong, safe and healthy communities
	The project also contributes to the Corporate Priority Action:
	The council is committed to the elimination of discrimination and promotion of equality of opportunity for all citizens and will work towards this goal, both in the provision of services and employment.

Who are the primary customers of the service / policy / project and how do they / will they benefit	The primary customers of the Changing Places Accessible Toilets are Cheltenham residents and visitors with complex disabilities, and their carers'.
How and where is the service / policy / project implemented	One Changing places facility is to be sited at Pittville park. The location of the other facility is still to be determined but will be sited within the town centre.
What potential barriers might already exist to achieving these outcomes	Funding of the ongoing maintenance of the facilities due to the Council's budgetary constraints.

Step 2 – What do you know already about your existing / potential customers

What existing information and data	Over 230,000 people in the UK need personal assistance to use the toilet or for personal hygiene.	
do you have about your existing /		
potential customers e.g. Statistics,	In the 2011 Census the overall number of people in Gloucestershire, whose day to day activities were limited a lo	
customer feedback, performance	was 43292 and that 7582 of those were Cheltenham residents.	
information		
What does it tell you about who	There are a significant number of people within Cheltenham and beyond who are at a disadvantage when making	<u> </u>
uses your service / policy and	decisions to visit Cheltenham. Their visits may be shorter, limited to certain locations or avoided altogether.	ດ
those that don't?		ag
What have you learnt about real		ወ
barriers to your service from any	Consultation with service users and stakeholder groups will take place as part of the project.	2
consultation with customers and		Œ
any stakeholder groups?		ı
If not, who do you have plans to	Leonard Cheshire Home, St Vincent's and St George's Association, Bettridge School, Star College,	
consult with about the service /	Gloucestershire County Council Occupational Therapists, Carers Gloucestershire, Active Gloucestershire	
policy / project?		

Step 3 - Assessing community impact
How does your service / policy / project impact on different groups in the community?

Group	What are you already doing to benefit this group	What are you doing that might disadvantage this group	What could you do differently to benefit this group	No impact on this group
People from black and minority ethnic groups				✓
Gender				✓
Gender Reassignment				✓
Older people / children and young people	Potential users will be of all ages, but there will be a steady increase of the number of older people.	Failure to implement is likely to impact on accessibility to town centre for shopping, leisure and social contact.	Help to ensure future provision is in a suitable location within the town.	
People with disabilities and mental health challenges	Primary user base.	Failure to implement is likely to impact on accessibility to town centre for shopping, leisure and social contact.	Help to ensure future provision is in a suitable location within the town.	Page 20
Religion or belief				√
Lesbian, Gay and Bi-sexual people				✓
Marriage and Civil Partnership				✓
Pregnancy & Maternity	Potential user of the service, but not a major target.		Help to ensure future provision is in a suitable location within the town.	
Other groups or communities				✓

Step 4 - what are the differences

Are any groups affected in different	Financially disadvantaged groups may be more likely to be impacted as may not have easy access to transport
ways to others as a result of the	options which gives them greater mobility flexibility. This could result in these groups being more dependent on

service / policy / project?	facilities within the town centre.
Does your service / policy / project either directly or indirectly discriminate?	No
If yes, what can be done to improve this?	N/A
Are there any other ways in which the service / project can help support priority communities in Cheltenham?	Any potential synergies between the service and other organisations in the town will be considered as part of the research work.

Step 5 – taking things forward

What are the key actions to be carried out and how will they be resourced and monitored?	It is necessary to engage with services users and stakeholders, to consult on the location of the Changing Place Accessible Toilets and to promote the services.	s T
	It will also be necessary to undertake a procurement exercise to secure a service provider to design, build and implement the two facilities.	7 o 6
	The exercise will be resourced with officers from CBC, GOSS and One Legal.	-
Who will play a role in the decision-making process?	Cabinet Member Clean and Green, Councillor Chris Coleman, lead officer Mark Sheldon, the Cabinet and the Council.	_
What are your / the project's learning and development needs?	Understanding the requirements of the service users, through consultation and adhering to planning and building control regulations during design and build phase of the project.	3
How will you capture these actions in your service / project planning?	A dedicated project manager will utilise PRINCE2 based methodology to capture and manage project actions ar overall time management.	nd

(Extract from website www.changing-places.org)

What are Changing Places Toilets?

Standard accessible toilets do not meet the needs of all people with a disability.

People with profound and multiple learning disabilities, as well people with other physical disabilities such as spinal injuries, muscular dystrophy and multiple sclerosis often need extra equipment and space to allow them to use the toilets safely and comfortably. These needs are met by Changing Places toilets.

Each Changing Places toilet provides:

The right equipment

- A height adjustable adult-sized changing bench
- A tracking hoist system, or mobile hoist, if this is not possible.

Enough space

- Adequate space in the changing area for the disabled person and up to two carers
- A centrally placed toilet with room either side
- A screen or curtain to allow some privacy.

A safe and clean environment

- Wide tear off paper roll to cover the bench
- A large waste bin for disposable pads
- A non-slip floor.

PLEASE NOTE: Changing Places toilets are different to standard accessible toilets (or "disabled toilets") and should be provided in addition to accessible toilets.

Changing Places standards

Changing Places facilities need to meet a certain standard to be registered on our website. This is to ensure that any facility advertised as a Changing Places toilet meets the needs and expectations of the people who use them.

For advice on health and safety and legal matters, please refer to our legal factsheet, included in background information. Remember that slings should not be provided by the venue.

To be registered on our website, the facilities must be open to the public. Changing Places toilets should be installed in addition to, not in replacement of, standard accessible toilets for independent use.

We recommend that the dimensions of the room are a minimum of 12 square metres (3m x 4m), with a ceiling height of 2.4m. Examples can be found from page 32 of our Practical Guide, included in the background reading.

Some facilities listed on the website as Changing Places will be smaller than 12 square metres. This reflects the standards of Changing Places toilets when the campaign was launched in 2006.

The Changing Places Consortium appreciates that meeting the 12 square metres (3m x 4m) size criteria of the British Standard may be difficult in, for example, a listed building that cannot be altered. We would recommend that you consult with us before you start planning any renovations or adaptations in buildings such as these.

Toilets may continue to be identified as Changing Places toilets where the minimum room dimensions are 7 square metres or above. We do recommend that providers and installers do their best to meet the 12 square metre British Standard current guidelines as smaller facilities may exclude many users who need the full space.

Facilities which do not provide the features in the Changing Places Standard section below, or alternative layouts, may not be identified as a Changing Places toilet on our website. However, they may still be of benefit to disabled people and their carers', and as such information regarding these facilities may be included on the website.

Mandatory size for new build, complies with space and equipment fit out standards set out in BS8300

Research has found that over a quarter of a million severely disabled people, including those with profound and multiple learning disabilities do not have access to public toilet facilities that meet their needs.

In the UK 230,000 people would benefit from a Changing Places toilet and would include approximately:

- 40,000 people with profound and multiple learning disabilities
- **130,000** older people
- 30,000 people with cerebral palsy
- 13,000 people with an acquired brain injury
- 8,500 people with Multiple Sclerosis
- 8,000 people with Spina Bifida
- **500** people with Motor Neurone Disease

We also know that the number of people with complex disabilities is growing – we are all living longer, meaning many more people are likely to need access to a Changing Places toilet in the future.

These figures come from a 2009 report by Professor James Hogg, at the University of Dundee.

Cheltenham Borough Council Cabinet – 7 March 2017

Nominations to Outside Bodies – Non-executive director for Publica

Accountable member	Leader, Councillor Steve Jordan						
Accountable officer	Head of Paid Service, Pat Pratley						
Accountable scrutiny committee	O&S						
Ward(s) affected	AII						
Key Decision	No						
Executive summary	Following each Selection Council, and at other times when vacancies arise, the Leader/Cabinet takes the opportunity to nominate and, in limited cases, appoint persons to various roles within bodies external to the Council.						
	In October 2016 Council approved the transfer of GO Shared Services (Finance, HR, ICT, Procurement) and ICT functions to a local authority company owned by Cheltenham Borough Council, Cotswold District Council, Forest of Dean District Council and West Oxfordshire District Council. It was proposed that the company structure would comprise 3 companies each with its own distinct focus; i.e. business support services, co-ordinating company (commissioning) and regulatory services.						
	The Council appointed the Leader of the Council as the Council's representative on the business support service's company who will be responsible for taking member decisions on behalf of the Council.						
	As a member of that company the council will also be seeking to nominate a Councillor to be a non-executive director. The services that will be delivered from the company will be Finance, HR, ICT, and Procurement.						
	With regard to the new company name, Publica, following an informal meeting of the 2020 Partners Joint Committee members it was agreed that the new companies will be named Publica and the term Publica Group will be used to describe all of the companies. The use of the name will be primarily for registering the companies and for internal purposes. It will not replace any partner Council branding.						
Recommendations	To nominate Councillor Wendy Flynn for appointment as a non-executive director of Publica as set out in the terms of appointment in Appendix 2 and in accordance with the						

following principles:

- all nominations are made on the basis that the nominee/appointee is a representative of Cheltenham Borough Council (insofar as that is compatible with any overriding legal duty to an outside body); and
- the appointor reserves the right at any time to withdraw/terminate a nomination/appointment which it has made
- a nomination/appointment to an outside body is referred to Council for determination where consensus on that nomination/appointment cannot be achieved between the political Group Leaders
- the appointment is subject to the necessary due diligence checks being successfully completed.

Financial implications	There is no remuneration for the non-executive Directors appointed to the Board of Publica. There are therefore no financial implications arising from this report. Contact officer: Sarah Didcote E-mail: sarah.didcote@cheltenham.gov.uk Tel no: 01242 264125
Legal implications	See body of the report. Two general powers are relevant to nomination/appointment to outside bodies, these being the general power of competence found in the Localism Act 2011 and the power of an authority to do anything conducive, incidental to or facilitative of the discharge of any of their functions found in the Local Government Act 1972. Contact officer: Shirin Wotherspoon E-mail: shirin.wotherspoon@tewkesbury.gov.uk Head of Law (commercial) Tel no: 01684 272017
HR implications (including learning and organisational development)	As outlined in the body of the report. Contact officer: Julie McCarthy, Strategic HR Manager julie.mccarthy@cheltenham.gov.uk, 01242 26 4355
Key risks	Members appointed should be aware of their roles and responsibilities.

Corporate and community plan Implications	Approval of the recommendations will deliver the corporate plan objective for 2016/17 VFM1 - we will work with 2020 partners to implement agreed shared services from April 2016 and specifically deliver the milestone-to consider a business case for a local authority company governance model and its subsequent delivery.
Environmental and climate change implications	None

1. General background relating to the appointment of outside bodies

- 1.1 The outside bodies to which nominations/appointments are made comprise a variety of organisations and groups. A traditional distinction can be drawn between incorporated and *unincorporated* bodies; the former being distinct legal entities such as companies, having a legal personality and a framework imposing obligations upon those who become involved by appointment; the latter being bodies which, albeit without formal legal foundation, play an important role in representing interests within the local community. Involvement in these unincorporated organisations will often carry few or no legal obligations on those appointed.
- 1.2 In the majority of cases Cheltenham Borough Council decides who to nominate to the outside body concerned and it is then for that body to decide on whether to accept the nomination and make the appointment. There are some limited exceptions to this, such as Cheltenham Borough Homes Gloucestershire Airport and the Cheltenham Trust where the Council is entitled to make the appointments to the boards of directors.

2. Legal issues

- 2.1 With regard to outside bodies whilst nominations/appointments are made on the general basis that the nominee/appointee is the Council's representative on the outside body, it is important to note that in many cases the overriding duty is to the outside body. For example, a company director has a primary duty of care towards the company and to act in the best interests of the company as a whole and a trustee must act in accordance with the trust deed and uphold the trust's objectives.
- 2.2 The Council is able to indemnify members (and officers) in the course of their activities on outside bodies provided they are acting within the scope of their authority as Council representatives. Outside bodies, such as companies, that are legal entities in their own right must have their own appropriate insurance arrangements in place. It is important that members (and officers) clarify the position in each particular case.
- 2.3 Under the council's Constitution, the Leader (or Cabinet if so referred by the Leader) has the power to make appointments to outside bodies where they relate to an executive function provided there is Group Leader agreement to the appointments. If there is no consensus, then the nomination/appointment is referred to Council for approval.

3. Nomination/appointment of external persons

- 3.1 Historically Cheltenham Borough Council has nominated/appointed external persons to some outside bodies. On 29th June 2006 Council specifically agreed that 'All nominees are elected Members of Cheltenham Borough Council unless there are exceptional reasons justifying the appointment of a non- Member'. Relevant examples of outside bodies to whom external persons have been appointed are; Gloucestershire Airport, Pate's Grammar School Foundation. The reasons for these appointments have been the specialist knowledge skills and experience that have been brought to the outside body and/or the lack of Member nomination to that body.
- 3.2 External persons are not, of course, subject to the Code of Members' Conduct nor are they under any general obligation to act in the best interests of the Council or the broader public interest. Also, they are not covered by the Council's insurance. Whilst these factors do not prevent the nomination of external persons they should be borne in mind when considering whether to make such nominations/appointments.

4. The appointment process for Non-Executive directors of Publica

4.1 The report to Council in October 2016 made reference to the appointment process. Each member

council would have the right to appoint a suitable non-executive director of the company. This right could be exercised individually or collectively by other partner councils i.e two or more member councils may agree to the appointment of the same non-executive director. However it was agreed that CBC would appoint a single non-executive director on its behalf who was expected to be an elected Member of this Council.

- 4.2 It should be noted that the other three councils in the 2020 vision partnership, namely Cotswold District Council, Forest of Dean District Council and West Oxfordshire District Council will be following a different process to Cheltenham. The GOSS HR team are working in partnership with an external consultant to support the partnership with the selection and appointment process for non-executive directors.
- 4.3 Candidates for the roles of non-executive directors referred to in 4.2 would be subject to formal terms of appointment and be subject to a rigorous process to ensure that they meet minimum levels of skills and experience required to undertake the roles. This due diligence process is to be carried out with the support of external consultants.
- **4.4** CBC is entitled to appoint who they choose to be their non-Executive Director to Publica but will be subject to some basic due diligence checks before the formal appointment can be made.
- 4.5 The terms of appointment for the Non-Executive Directors as set out in Appendix 2 was circulated to Group Leaders in CBC on 30 January 2017 with a request for nominations by close of play on Tuesday 7 February 2017. The short timescales were due to the terms of appointment only being made available at the beginning of February and to allow time for the due diligence checks to be carried out.
- 4.6 Councillor Wendy Flynn was nominated by the Liberal Democrat Group and Councillor Matt Babbage by the Conservative group and the PAB group had no nominations. As there were two nominations for one position after further consultation with the Group Leaders, Councillor Matt Babbage decided to withdraw from the process. However he wished it noted that he would be interested in the future if the vacancy occurred again. Councillor Wendy Flynn completed the due diligence form which were sent to officers in the 2020 partnership and as at the time of writing this report the final checks are still being completed..

5. Remuneration

5.1 There is no remuneration for the non-executive Directors on the board. The CBC Member will be able to claim travel expenses under the CBC Members' Allowance Scheme in attending meetings of the Board if there is no provision for the payment of these expenses by Publica. Other expenses associated with the role such as attending training arranged for board members would be the responsibility of Publica.

6. Reasons for recommendations

6.1 It is in the interests of the council to ensure representation on the board of Publica.

7. Alternative options considered

7.1 It was this Council's preference that the council's representative on the Publica board should be an elected Member of this Council.

8. Consultation and feedback

8.1 Set out in paragraph 4.5

Report author	Rosalind Reeves, Democratic Services Manager, 01242 774937 Rosalind.reeves@cheltenham.gov.uk					
Appendices	Risk Assessment					
	2. Publica Group – Terms of appointment for non-executive directors.					
Background information	1. Constitution Part 5G					

Risk Assessment Appendix 1

The risk			Original risk score (impact x likelihood)		Managing risk						
Risk ref.	Risk description	Risk Owner	Date raised	Impact 1-5	Likeli- hood 1-6	Score	Control	Action	Deadline	Responsible officer	Transferred to risk register
	If elected members are not aware of their roles and responsibilities they may compromise their position	PP	1 February 2017	3	2	6	Control	Ensure members are aware of guidance set out in Constitution Ensure members understand their role on the outside body and have a copy of relevant constitution or terms of reference of the body concerned		Pat Pratley	
	If NEDs do not understand their role on Publica and its constitution they may compromise their position or not carry out their role effectively.	MD of Publica	16 February 2017	3	2	6	Reduce	Ensure members understand their role as non exec director and have a copy of relevant constitution or terms of reference of Publica		David Neudegg	

Explanatory notes

Impact – an assessment of the impact if the risk occurs on a scale of 1-5 (1 being least impact and 5 being major or critical)

Likelihood – how likely is it that the risk will occur on a scale of 1-6

(1 being almost impossible, 2 is very low, 3 is low, 4 significant, 5 high and 6 a very high probability)

Control - Either: Reduce / Accept / Transfer to 3rd party / Close

Publica Group - Terms of Appointment for Non-Executive Directors

General Duties of Non-Executive Directors

Role Summary

Non-Executive Directors are chosen because they have a breadth of experience, and have particular personal qualities to bring to an organisation. They may also provide specialist knowledge which will help provide the organisation with valuable insights. Of the utmost importance is their independence in the management of the organisation. This means they can bring a degree of objectivity to the Board's deliberations.

The Key Responsibilities of the Non-Executive Directors are as follows:

<u>Strategic Direction</u> – to provide a creative and informed contribution to strategy formation, giving a wider view of external factors affecting the Company and its business environment, and act as a constructive critic in looking at the objectives and plans devised by the Executive Management Team;

<u>Monitoring Performance</u> – to monitor the performance of Executive Management Team in terms of the progress made towards achieving the approved Company Business Plan and delivery of the services to the Shareholders;

<u>Communication</u> – to maintain good communications with the Shareholders and to help connect the business and Board with the broader stakeholder community, including people and organisations which can assist the Company in achieving its objectives;

<u>Risk</u> – to ensure that financial controls and systems of risk management are robust and defensible;

<u>Audit</u> - to ensure that the Company accounts properly to its Shareholders by presenting a true and fair reflection of its actions and financial performance and that the necessary internal control systems are put into place and monitored regularly and rigorously.

Role Description

- To take corporate, team and personal responsibility as a Board member.
- To offer constructive criticism and challenge and any other contributions to board discussions and decisions which he/she may constructively make to the Executive Management Team.
- To contribute positively to the development of the Business Plan and in relation to any other material and significant issues facing the Company.
- To set challenging targets aimed at improving performance and delivering excellence, and against which the performance of the business can be measured and monitored.

- To communicate effectively with the Shareholders and ensure that their objectives are met and provide a wider community perspective on the operating environment of the Company through regular communication with other stakeholders.
- To ensure that the Company is operated in a safe, legal, efficient and environmentally sustainable manner.
- To participate in appropriate training on Board duties and accountabilities and to familiarise themselves with the Company's operation.
- Ensure that the obligations to members and other stakeholders are understood and met.
- Promote equality of opportunity and embrace diversity in the way the organisation goes about its work.
- To fulfil a time commitment of approximately 6 12 days per year as required and maintain a good attendance record at meetings.

Skills and Experience

Whilst Non-Executive Directors are expected to have the following skills and experience, some training and development will be made available:

- knowledge and understanding of the current Local Government system in the UK and the development and monitoring of organisational or business strategy;
- understanding of the processes of planning, financial control, performance management and assurance that deliver the Company's objectives;
- credibility with internal and external stakeholders;
- the ability to understand complex strategic issues, to analyse and to resolve difficult problems;
- able to work as an effective member of the Board, all of whose members are equally and jointly responsible for its decisions;
- cognisant of the need for accountability to the Shareholders and able to bring engagement with the Shareholders and the broader stakeholder community

Specific Company Law Duties

All directors must act in accordance with their statutory duties under the Companies Act 2006 (the "Act"). Directors should be aware of the following duties:

To promote the success of the Company - All directors must act in the way they consider, in good faith, would be most likely to promote the success of the Company for the benefit

of its shareholders as a whole. In doing so, a director must have regard (among other matters) to:

- the likely consequences of any decision in the long term;
- the interests of the Company's employees;
- the need to foster the Company's business relationships with suppliers, customers and others;
- the impact of the Company's operations on the community and the environment;
- the desirability of the Company maintaining a reputation for high standards of business conduct; and
- the need to act fairly as between the members of the Company.

Reasonable care, skill and diligence - A director has a duty to exercise reasonable care, skill and diligence exercised by a reasonably diligent person in similar circumstances with;

- the general knowledge, skill and experience that may reasonably be expected of a person carrying out the functions carried out by the director in relation to the company (an objective test); and
- the general knowledge, skill and experience that that director has (a subjective test);
- ability to challenge constructively, and accept challenge where appropriate.

Term of Appointment

It is agreed that the Non-Executive Director will be appointed on the basis of three year terms

Finally, it is important to acknowledge that a Non-Executive Director cannot subordinate the interests of the Company to those of the member Councils.

Agenda Item 7

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Cheltenham Borough Council Cabinet 7 March 2017

Council 27 March 2017

Financing arrangements for improvements to Leisure-at-Cheltenham

Accountable member	Cllr. Flo Clucas; Cabinet Member Healthy Lifestyles
Accountable officer	Richard Gibson, Strategy and Engagement Manager
Ward(s) affected	AII
Key/Significant Decision	Yes
Executive summary	The Cheltenham Trust has asked Cheltenham Borough Council for assistance with funding a range of improvements to the facilities within Leisure-at-Cheltenham, which is owned by Cheltenham Borough Council and currently leased to the Trust on a 15 year term. The proposed improvements are as follows:
	 Convert two existing squash courts into new studios to enable an increase in the number of class and activity programmes.
	 Upgrade the existing dry-side changing spaces to reflect the quality of offer that customers expect and that competes well with the local market.
	 The provision of a new sauna and steam room suite adjacent to the new changing rooms, strengthening the link with health and fitness and replacing the outdated existing health suite facilities.
	 Extend the existing fitness suite on the ground floor into the current dance studio enabling an increased capacity to meet demand and enable improved functional training space and health support related activities.
	 Conversion of the existing health suite into an aquatics play space, developing and extending the aquatics opportunities for families with young children and also the commercial hires for children's birthday parties
	The improvement scheme will deliver much needed investment into Leisure- at-Cheltenham to keep it competitive and to enable a growth in income and footfall. Although gym equipment was refurbished in 2013, there has been no significant investment into the fabric of the building since the post-flood refurbishment in 2007.
	The council plans to support this request via a loan of up to £1.5m which will be repaid by the Trust at an interest rate of 3% per annum.

Recommendations

- 1 Cabinet approves the proposed improvements to Leisure-at-Cheltenham as set out in this report and recommends that Council;
- 2 Subject to the conditions set out in section 6 being met to the satisfaction of the Section 151 Officer in consultation with the Cabinet Member Finance authorises:
- 3 The Authority to offer a loan of up to £1.5million at an interest rate of 3% per annum to the Cheltenham Trust for onward funding of the improvements to Leisure-at-Cheltenham as detailed in Section 3 of this report;
- The Authority entering into a loan agreement with The Cheltenham Trust for the sum of up to £1.5m at an interest rate of 3% per annum for onward funding of the improvements to Leisure-at-Cheltenham as detailed in Section 3 of this report.

Financial implications

The proposed loan will be a 3% annuity loan for 10 years with twice yearly repayment of capital and interest.

The loan will be unsecured because the Trust does not itself own any land or buildings. It should be noted that the remaining 8 year period of the current management agreement is less than the 10 year period of the proposed loan, as detailed in the key risks section below. However, the council could, if both parties were willing, extend the management agreement to cover the remaining term of the loan.

The business case submitted by the Trust (Appendix 2) has been reviewed in terms of the proposed capital costs of the scheme, affordability and expected rate of return. This is based on a proposed capital cost of £1.43m. However for the basis of this report to Cabinet / Council we have based our workings on the maximum loan of £1.5m.

The revenue forecast at 4.3 shows that the proposed improvements will generate a cumulative net surplus of £675k at the end of the 10 year loan period, with an average return on investment over the 10 year period of 4.22%. This is slightly below the CBC target of 5% but this can be off-set by the social and health benefits of the proposed scheme.

The preliminary costs of £81k will be funded by the Trust from their cashflow. The projected net cash outflows in the first three years of the capital scheme, as detailed in paragraph 4.3, will also need to be absorbed within the Trust's revenue budgets.

Contact officer:
Sarah Didcote
GO Business Partner Manager (West)
Sarah.Didcote@cheltenham.gov.uk
01242 264125

Legal implications

The Authority has power under Section 19 of the Local Government (Miscellaneous Provisions) Act 1976 to provide the loan to the Cheltenham Trust (the Trust).

If approved by full Council, the Authority will be providing a loan at a lower interest rate than offered by financial institutions and advice has been given to officers about state aid. It is considered that the assistance is not state aid because the assistance will not affect trade between member states because the activities carried on at Leisure-at-Cheltenham are of a local nature. On 19 July 2016 the European Commission published "Notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union" which stated the following;

"The Commission has in a number of decisions considered, in view of the specific circumstances of the cases, that the measure had a purely local impact and consequently had no effect on trade between Member States. In those cases the Commission ascertained in particular that the beneficiary supplied goods or services to a limited area within a Member State and was unlikely to attract customers from other Member States, and that it could not be foreseen that the measure would have more than a marginal effect on the conditions of cross- border investments or establishment." The Notice referred to a number of examples which included "sports and leisure facilities serving predominantly a local audience and unlikely to attract customers or investment from other Member States"

The Trust occupy Leisure-at-Cheltenham under a lease granted for a term of 15 years which commenced on 1st October 2014. The Lease will automatically end before the expiry of the 15 years should the management agreement be terminated earlier or is not extended at the end of year 10. The Lease requires the prior written consent of the Authority as freeholder of the building before any works can be carried out. The consent will be documented by both the Authority and the Trust entering into a Licence for Alterations.

It is intended that the Trust employs the building contractors, design team and other professionals and contractors. The Council will not be party to these contracts so in order to protect the Authority's position as freeholder, the Authority will need to be supplied with collateral warranties from each professional and contractor in a form approved by the Authority.

The Lease and the Management Agreement contain provisions about the ownership and maintenance of equipment. It may be that variations to are required depending on the agreement reached regarding the new equipment and facilities being provided.

The terms of the loan and repayments will be documented in a loan agreement.

Contact officer:
Donna Ruck, Solicitor, One Legal

Tel: 01684 272696

Donna.ruck@tewkesbury.gov.uk

	1 495 15					
HR implications	No HR implications identified with this report					
(including learning and						
organisational						
development)						
Property/Asset Implications	Leisure@ Cheltenham is currently leased to the Trust on a 15 year term starting on October 2014.					
	To undertake the Phase 1 there will be a requirement for 'A Licence for Alterations'. This is also subject to the works occurring within the term of the lease. There will be two elements to this: • Works to the structure and fabric of the building • Works that change and alter fixtures and fittings and maintenance and repairing liabilities					
	As part of the licence to alteration, consideration will need to be given to Ownership of the 'Assets' (depreciation) How changes effect repair and maintenance responsibilities Exit strategies (for the Council or the Trust)					
	These elements will require negotiation between the two parties.					
	In addition, as there are other capital works being undertaken in the next year or so (such as replacing the air conditioning units in the gym, the installation of a changing places toilet and potential improvement works funded by Sport England's Swim Local programme), consideration should be given to coordinating these works as a whole which may help reduce the costs of those works and minimise disruption to customers.					
	Contact officer:					
	Abigail Marshall					
	Estates Surveyor					
	<u>Abigail.Marshall@cheltenham.gov.uk -</u> 01242 775166					

3						
Key risks	As set out above in the financial implications, there are two areas of risk for the council: The Council is proposing to grant a loan to the Trust which will be unsecured because the Trust does not itself own any land or buildings. This is a risk to the council because in the event of default on the loan, there will be no property that CBC can repossess. This is a risk that CBC has taken at least once before other external organisations operating from within council owned buildings. The Council owes a fiduciary duty to its council tax payers to ensure that the business case is sound so that it can be sure that the repayments will made. Secondly, the term of the loan is 10 years, and there is less than 8 years of the certain term of the management agreement with the Trust remaining. If the Council were not to extend the management agreement and as a result if the Trust needed to wind itself up, it must clear all its debts. If it cannot repay the remainder of the loan, the council would need to seize any assets of value (assuming CBC takes a floating charge over its assets under the loan agreement) and potentially write off any remaining repayments.					
	its assets under the loan agreement) and potentially write off any					
Corporate and community plan Implications	Successful delivery of the project by the Cheltenham Trust will help the council deliver its corporate strategy outcome: • People live in strong, safe and healthy communities					
Environmental and climate change implications	The range of improvements to Leisure-at-Cheltenham will be built in accordance with the environmental specifications set out in the latest building regulations.					

1. Background

- 1.1 The Cheltenham Trust were established as a consequence of a commissioning review into how best the Council could continue to support the delivery of its leisure and cultural services, and the management of five properties (The Wilson, Town Hall, Pittville Pump Room, Leisure at Cheltenham, Prince of Wales Stadium) whilst delivering best value to the taxpayer.
- **1.2** The Trust went live in October 2014 and are in receipt of a declining management fee from the Council:

Year	2014 15	2015 16	2016 17	2017 18	2018 19	Total
Management Fee	£1,666k	£968k	£764k	£648k	£641k	
Net reduction	£0	-£698	-£204	-£116	-£7	-£1,025

- **1.3** The Council has encouraged the Trust to develop a vision for the Leisure Centre and Prince of Wales stadium.
- **1.4** The Trust has subsequently come back with an initial vision. This is:

To develop a hub within the town that encourages public participation in diverse experiences that touch and inspire people be it through sport, culture, play, competition, heritage, learning, health and wellbeing. The ambition is to put Cheltenham at the forefront nationally, creating a unique place that contributes to the social, cultural and economic value of the town and enriching the lives of residents and visitors.

- 1.5 In March 2016 the Cheltenham Trust commissioned an initial feasibility study and developed a two-phase approach to creating a hub at Leisure-at-Cheltenham. The proposals were presented to the Council in the autumn of 2016 and the first phase element (described in section 3) was endorsed as a robust first step to delivering the broader vision. The second phase included works to re-orientate the entrance and reception along with the provision of a large adventure play facility and outdoor trampoline park and it was agreed not to progress these at this point.
- 1.6 In summary, the phase 1 project is to update and upgrade the wellbeing facilities at the leisure centre and develop a new aquatic play space. It is planned to obtain funding through a loan from Cheltenham Borough Council and for the new facilities open to be open to the public for January 2018.

2. Current arrangements

- 2.1 Leisure-at-Cheltenham is currently leased to the Trust on a 15 year term that started on October 2014. It hosts over 570,000 visits per year and welcomes visitors from cradle to grave. Customers come to the facilities from Cheltenham and surrounding areas and its regional and national competition events attract people from all over the UK.
- **2.2** Many services are delivered in partnership with 19 other providers across health, education, social services and sport. The proposal aims to ensure that the facilities remain attractive to these partners.
- 2.3 In terms of its wider operations, the Trust remains very successful at delivering a range of outcomes for local residents. Performance is assessed at a quarterly review meeting chaired by the Cabinet Member Healthy Lifestyles.
- 2.4 To support the council's understanding of the performance of the Trust, a value for money study is to be undertaken this year which will assess the Trust's contribution to social, cultural and economic outcomes against a picture of how much it costs to support the Trust.

3. Details of the proposal

- **3.1** The proposed improvements are as follows:
- Convert two existing squash courts into new studios to enable an increase in the number of class and activity programmes.
- Upgrade the existing dry-side changing spaces to reflect the quality of offer that customers expect and that competes well with the local market.
- The provision of a new sauna and steam room suite adjacent to the new changing rooms, strengthening the link with health and fitness and replacing the outdated existing health suite facilities.
- Extend the existing fitness suite on the ground floor into the current dance studio enabling an
 increased capacity to meet demand and enable improved functional training space and health
 support related activities.
- Conversion of the existing health suite into an aquatics play space, developing and extending the
 aquatics opportunities for families with young children and also the commercial hires for children's
 birthday parties

4. Business Plan Assessment

4.1 The estimated capital costs of the project are shown below:

Phase 1	
Preliminary costs	81,000
Build costs	666,000
Equipment	557,000
Contingency costs (8.1%)	106,000
Project Management & Delivery	90,000
Total	1,500,000

- **4.2** Based on a 3% loan over the 10 year term of the loan, the total interest payments equate to £247,372.
- **4.3** The revenue forecast is shown below assuming a loan at £1.5m:

	Years									
SUMMARY	1	2	3	4	5	6	7	8	9	10
Income	273	344	389	418	434	429	425	421	417	412
Expenditure	127	131	135	137	139	139	139	139	139	139
Lost income	24	40	39	39	40					
Surplus	122	173	215	242	255	290	286	282	277	273
Loan repayment	174	174	174	174	174	174	174	174	174	174
Net Surplus	-52	-1	41	68	81	116	112	108	103	99
Cumulative Surplus	-52	-53	-12	56	137	253	365	473	576	675

- **4.4** The revenue forecast is based on the following assumptions:
- Income grows from years 1 to 5 and then shows a marginal decline from years 5 10
- Squash retains 80% of income through fully utilising capacity in the remaining courts
- Splash pad utilisation rates are based on term time v holiday time attendance levels
- Attrition rate on membership based on 5% v actual of 4.8%
- Capital loan repayments shown as full cost in year one
- Food and beverage spend estimated at 10p per user on new attendances and 50p in café spend
- Staff costs for new role based on UK Living wage at £8.45 from April 2017
- Loss of squash income and health suite income are factored into the business plan up to year 5

5. Project governance

5.1 The project will be co-sponsored project between The Cheltenham Trust and Cheltenham Borough Council with oversight being provided by the Joint Commissioning Group. The Joint Commissioning Group is the mechanism by which Cheltenham Borough Council and The Cheltenham Trust work together using a co-commissioning approach to deliver capital development projects relating to CBC owned and TCT managed venues.

5.2 Current membership of the Group is:

Jaki Meekings-Davis	Trustee, The Cheltenham Trust
Cllr Flo Clucas	Cabinet Member, Cheltenham Borough Council
Julie Finch	CEO, The Cheltenham Trust
Riah Pryor	Head of Content & Programmes, The Cheltenham Trust
Mark Sheldon	Director Corporate Resources & Projects, Cheltenham Borough Council
Richard Gibson	Lead Commissioner for the Trust, Cheltenham Borough Council
Jackie Rigby	Programme Manager, Cheltenham Borough Council

- 5.3 Scrutiny of the project will be via the Cheltenham Trust's Audit and Governance Committee and the Council's Overview and Scrutiny Committee
- 5.4 Delivery of the project will be through a development partner, which is a tried and tested formula model to ensure delivery on time and within budget. The Trust will manage the procurement of the development partner which will be achieved through national frameworks to ensure speed and compliance with procurement regulations.

6. Suggested conditions for the offer of a loan

- **6.1** If council are minded to offer a loan, it is suggested that it is offered with the following conditions:
- 6.2 The maximum loan that will be offered to The Cheltenham Trust will be £1.5m at an interest rate of 3% per annum.
- 6.3 The offer of the loan will remain open for 12 months from the date of the Council meeting.
- 6.4 The offer of the loan is only to be used in connection with the proposed improvement scheme as detailed in section 3.
- 6.5 The Trust will bring forward detailed costings for the improvement scheme and this work will be funded in the first instance by their own cash-flow though will be later refunded from the loan.
- 6.6 The Trust will agree to enter into a licence for alterations and associated collateral warranties as detailed in the property and legal implications.
- 6.7 Subject to the detailed costings for the scheme not being greater than £1.5m, the loan will then be

agreed by the s.151 officer, in consultation with the Cabinet Member Finance.

7. Reasons for recommendations

- **7.1** The proposed loan of £1.5m to fund the proposed improvement scheme is being recommended for the following reasons:
- The loan will be repaid by the Trust in full over a 10 year period.
- It will enable much needed investment into leisure-at-Cheltenham, which is owned by the council and leased to the Trust. This will ensure the building remains an attractive leisure destination for local residents within a competitive market.
- The investment will increase footfall and therefore income for the Trust.
- The improvement scheme will have direct benefits for local residents increasing their health and wellbeing
- The improvement scheme will support the work of 19 partners who deliver health and wellbeing related activities at leisure-at.

8. Alternative options considered

- **8.1** The Council and the Trust have explored two other options:
- 8.2 DO NOTHING: Continue to maintain the existing facility to ensure it is fit for purpose within resources, in the knowledge that Leisure at will not be able to meet the demand for business and customer expectations, with reducing appeal and subsequent declining retention and reputation with increased wear and tear on kit and facilities. There will be a negative impact upon economic viability of the business and the Trust. This option has therefore been dismissed.
- 8.3 COMMERCIAL FUNDING: The Cheltenham Trust could fully fund the capital investment programme without contribution by CBC through seeking a commercial loan. Although on the face of it, this would minimise the risk to the Council in that the Trust business activities would fund the repayments, the Council would need to act as a guarantor for the loan. That would mean assigning an equivalent sum in our reserves to fund this in case the Trust failed. In addition, the cost of the loan would have been higher at an estimated 5%. On advice from the s.151 officer, this option has been dismissed.

9. Consultation and feedback

9.1 It is suggested that, prior to the loan being finally agreed by the s.151 officer and the Cabinet Member Finance, the works should be discussed by the Asset Management Working Group.

10. Performance management – monitoring and review

10.1 If a loan is entered into, this will be managed via the agreed terms and conditions as set out in the loan agreement.

Report author	Contact officer:					
	Richard Gibson Strategy and Engagement Manager Richard.gibson@cheltenham.gov.uk 01242 235 354					
Appendices	Risk Assessment Business Plan					
Background information	Project Assessment Tool					
Dackground Information						

The ri	sk				Original risk score impact x likelihood)			Managing risk			
Risk ref.	Risk description	Risk Owner	Date raised	Impact 1-5	Likeli- hood 1-6	Score	Control	Action	Deadline	Responsible officer	Transferred to risk register
	If the Trust defaults on the loan, there will be no property that CBC can repossess. Therefore the Council owes a fiduciary duty to its council tax payers to ensure that the business case is sound.	s.151 officer	20.2.17	3	2	6	Accept	Ensure that the business case is sound so that it can be sure that the repayments will made.	Feb 2017	Sarah Didcote	
	As the term of the loan is 10 years, and there is less than 8 years of the certain term of the management agreement with the Trust remaining, if the Council were not to extend the management agreement and as a result if the Trust needed to wind itself up the loan repayment agreement would not be fulfilled.	s.151 officer	20.2.17	4	2	8	Reduce	The council would need to be in a position to seize any assets of value. This therefore suggests that CBC should take a floating charge over its assets under the loan agreement	Sept 2017	Donna Ruck	

Explanatory notes

Impact – an assessment of the impact if the risk occurs on a scale of 1-5 (1 being least impact and 5 being major or critical)

Likelihood – how likely is it that the risk will occur on a scale of 1-6

(1 being almost impossible, 2 is very low, 3 is low, 4 significant, 5 high and 6 a very high probability)

Control - Either: Reduce / Accept / Transfer to 3rd party / Close



Phase 1 development of leisure-at-cheltenham

Stephen Petherick, January 2017

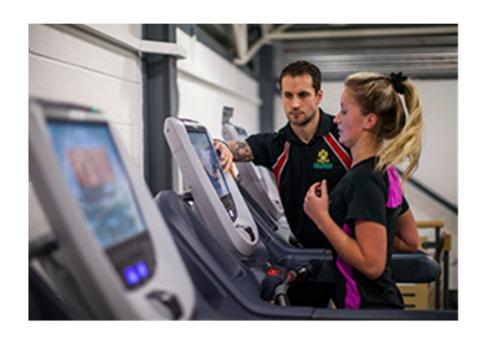
1.0 Introduction

1.1 The Proposal

Sport England recommends 150 minutes of activity per week as an absolute base line. Leisure at can become a venue where it becomes easier to take part in 'activity' of many kinds. This will be a place where the dwell time is increased by the very fact that the choices for families, friends and communities enable multiple opportunities to get active, socialise, participate and compete. This will be a place that will enable everyone to 'find their thing', to take part and love life. This development proposes to make the following changes to the facilities within leisure-at-Cheltenham:

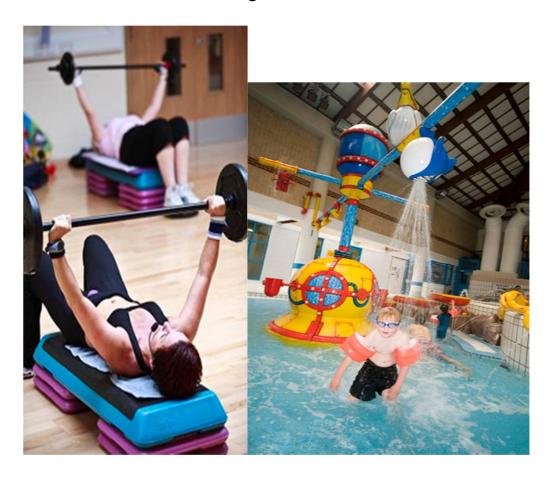
- Convert 2 existing squash courts into two new studios enabling development of class and activity programmes.
- Upgrade the existing dry side changing spaces to reflect a quality of offer that customers expect and that competes well with the local market
- Provision of new sauna and steam room suite adjacent to the new changing rooms, strengthening the link with health & fitness and replacing the out dated existing health suite facilities.
- Extend the existing fitness suite on the ground floor into the current dance studio enabling increased capacity to meet demand and enable improved functional training space and health support related activities.
- Conversion of the existing health suite into an aquatics play space, developing and extending the aquatics opportunities for families with young children and also the commercial hires for children's birthday parties
- Opportunities for new employment, job creation, learning and volunteering.

Together, this will enable growth in income and footfall, delivering an increased surplus to meet the charitable objectives of the Cheltenham Trust and social objectives of the Council.





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1.3 Context

The Cheltenham Trust made a bid to Cheltenham Borough Council for North Place Funding in December 2014 to develop the concept of a Sport and Play Hub, these proposals were not supported in that round of funding and the Council asked the Trust to look at commercial options for funding. The Council confirmed that it wished to work with The Cheltenham Trust to develop a broader vision for the leisure centre and stadium as well as the redevelopment of the Town Hall.

The broad vision is to develop of a hub within the town that encourages public participation in diverse experiences that touch and inspire people be it through Sport, Culture, Play, Competition, Heritage, Learning, Health and Wellbeing. The ambition to put Cheltenham at the forefront nationally, creating a unique place that contributes to the Social, Cultural and Economic value of the town and enriching the lives of residents and visitors.

In March 2016 the Cheltenham Trust commissioned an initial feasibility study and developed a proposal to create a Hub at Tommy Taylors Lane for Sport, Wellbeing and Culture. The initial proposals were presented to the Council in the autumn of 2016 and the phase 1 element being suggested as a first step.

The phase 1 project is to update and upgrade the wellbeing facilities at the leisure centre and develop a new aquatic play space. It is planned to obtain funding through loan from CBC and the new facilities open to the Public for January 2018.

1.4 Financial context

In common with many other Charities the Trust faces significant financial challenges. To have a positive impact on the people who live, work, visit and study in Cheltenham, the Trust must remain sustainable.

The Trust will meet these challenges through developing its content and product mix, capital investments, growth in commercial business, efficiency and active fundraising. As an example Table 1 below shows the reduction in Council funding years 1 to 5.

Year	2014 15	2015 16	2016 17	2017 18	2018 19
Management Fee	1672	974	770	654	647
Net reduction	0	-698	-204	-116	-7

1.5 Audience

Attracting over 570,000 visits per year Leisure-at-Cheltenham welcomes a wide range of people. Its services support people from the unborn child through to those nearing the end of life. Customers come to the facilities from Cheltenham and its surrounds and its regional and national competition events attract people from all over the UK and internationally.

Many services are delivered in partnership with other providers across Health, Education, Social Services and Sport; this with the facilities available, ensure that the places are accessible and services targeted around need. The proposal aims to ensure that the facilities attract more people more often – with quality, value and opportunity being the main drivers of growth. Table 2 provides examples of the key partners and groups.

Partner	Activity	Social	Wellbeing	Learning
University of	1. Teacher Training (PE)	Х	Х	Х
Gloucestershire	2. Universal Sport	X	Х	X
	3. Sport (Talent)	X	X	X
	4. Sport (Professional)	Х		X
	5. Placements	Х		Χ
Glos College	1. Universal Sport	Х	X	X
	2. Placements			Χ
Primary Schools (36 slots)	Key Stage 2 Swimming	Χ	X	Χ
CCG	Exercise on referral	Χ	X	X
NHS (Chelt Gen & St Pauls)	Physiotherapy	Х	Х	Х
NHS (Chelt Gen)	Cardiac Rehab & Respiratory Failure	Х	Х	Х
NHS (2gether Trust)	1. Swimming	Х	Х	Х
	2. Trampolining	X	Х	X
GRFC Wheel Chair Rugby	Disability Sport	Х	Х	Х
Chelt & District SAD	Disability Sports	Х	Х	Х
CSWPC	Water Polo, Swimming & Synchro Coaching	Х	Х	Х
Harriers	1. Athletics Coaching	Х	Х	Х
	2. Athletics Competition	X	Х	X
CBC Concessions	Disabled, 60+, Unemployed, Students, Low	Х	Х	Х
	Income, Free Swims for U16			
Netball Leagues / Clubs	Netball	X	Х	X
Soccer Leagues / Clubs	Soccer	Х	Х	Х
Skaters Fun Club	Roller skating	Х	Х	Х
Roller Torrent	Roller Derby	Х	Х	Х
St Vincents & St Georges	Leisure activities access	Х	Х	Х
The Key	Disability Access to sport	Х	Х	Х
Gloucestershire CCC	1. Cricket Coaching	Х	Х	Х
	2. Cricket Youth Team Practice	Χ	Х	X
Badminton England	1. Coaching	Х	Х	Х
	2. Social schemes	X	Х	Χ

1.6 Civic role of leisure at cheltenham

Leisure-at-Cheltenham plays a crucial civic role within the life of the town Table 3 below highlights some key aspects of this.

Civic Function	Activity	Social	Health & Wellbeing	Learning / Culture
Democracy	Election Count centre for Local, National & EU elections	X		Х
Civil Emergency	Rest centre for local communities in the event of emergency	Х	Х	
Community	A place to meet that is accessible and open to all	Х	Х	X
Community	A place that offers safe and secure access to public services and information	Х	Х	Х

1.7 The role of leisure at cheltenham in relation to disabilities & health

Long standing and new activities are delivered directly or with partners to help improve the quality of life of local people. Table 4 below outlines some of the core activities and their impact.

Health Partner	Activity	Physical	Mental	Emotional
Clinical Commissioning	Reactive Exercise on prescription &	Х	Х	х
Group	concession scheme			
NHS CGH	Back 2 Fitness	Х	Х	х
NHS CGH	ACL	Х	Х	х
NHS CGH	Respiratory Failure	Х	Х	х
NHS 2gether	Trampolining	Х	Х	х
NHS 2gether	Swimming	Х	Х	х
St Georges & St Vincent's	Activities	Х	Х	х
NHS CGH	LEAP	Х	Х	х
Social	The Key	Х	Х	х
CSAD	Sport & Swim	Х	Х	х
GRFC	Wheelchair Rugby	Х	Х	х
Special Olympics	Host / Partner	Х	Х	х
Milsom Street Centre	Sexual Health	Х	Х	х
Dept of Health	PIP Assessment	Х		
Eddystone Trust	Sexual Health HIV/ Hep C	Х	Х	х
Winston's Wish	Bereavement/Meeting place drop in	Х	Х	х
GFA (WFA) & Active Glos	Powerchair Football	Х	Х	Х

2 Business Plan

2.1 Capital Cost and repayment

The capital costs of the project are shown in Table 5

Phase 1	
Build and preliminary costs	747,000
Equipment & contingency costs	602,000
Project Management & Delivery	90,000
Total	1,439,000

The repayments based on the 3% Public Works Loan Board loan over the term of the loan the total interest payments on the initial loan equate to £237k.

2.2 Revenue Forecast

Table 6 provides a summary of the revenue split growth in income over ten years. Table 7 shows the revenue position over the duration of the loan. Trading enters surplus in year 2 and over the term provides a net cumulative benefit of £739k, a return on investment of 51% over 10 years. An updated cash flow can be seen in Appendix 1. Key assumptions:

Description	Budget		Additional Income								
Income	EXISTING	1	2	3	4	5	6	7	8	9	10
Health & Fitness (membership)	726	79	145	184	209	218	216	214	212	209	207
Health & Fitness Casual	143	15	15	16	16	17	17	17	16	16	16
Splashpad	0	155	158	161	165	168	166	165	163	161	160
Secondary Spend (Retail, F&B)	202	23	26	28	29	30	30	29	29	29	29
Total Income Growth	1,071	272	344	389	419	433	429	424	420	416	412

- Income grows from years 1 to 5 and then shows a marginal decline from year 5 10
- Squash retains 80% of income through fully utilising capacity in the remaining courts
- Splash pad utilisation rates are based on term time v holiday time attendance levels
- Attrition rate on membership based on 5% v actual of 4.8%
- Capital Loan repayments shown as full cost in year 1
- F&B spend estimated at 10p per user on new attendances and 50p in café spend
- Staff costs for new role based on UK Living wage at 8.45 from April 2017
- Loss of squash income and health suite income are factored into the business plan

SUMMARY	1	2	3	4	5	6	7	8	9	10
Income	273	344	389	418	434	429	425	421	417	412
Expenditure	127	131	135	137	139	139	139	139	139	139
Surplus (including lost income)	122	173	215	242	255	290	286	282	277	273
Capital Payment	125	129	133	137	143	147	149	154	159	163
Interest Payment	42	38	34	30	26	22	17	13	8	3
Net Operating Surplus	- 45	6	47	74	85	120	118	114	110	106
Cumulative Net Surplus	- 45	- 38	9	83	169	290	408	523	633	739

2.3 Governance

Sponsoring Groups:

TCT Board of Trustees Council

Capital Dev Commitee Cabinet & Cabinet Member

Finance Committee Working Groups

TCT Executive SLT

Project Scrutiny

TCT Audit & CBC Overview &

Governance Committee Scrutiny

Committee

Project Sponsors

TCT Julie Finch

CBC Mark Sheldon

Joint Project Board

TCT Representatives

CBC Representatives

Development Partner

Evaluation Panel

TCT Representatives

CBC Representatives

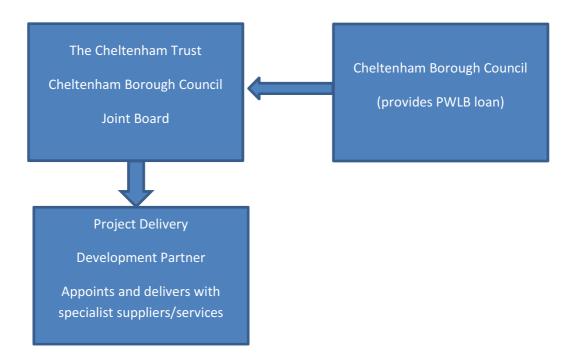
2.4 Project Management (Procurement, Delivery, Timeframe & Contract Structure)

- 2.4.1 Procurement of the Development Partner (DP) through National Frameworks will ensure speed and compliance with procurement regulations. For example
 - a) Minor Works Framework SCAPE http://www.scapegroup.co.uk/services/procure/frameworks/minor-works
 - b) Development Partner Leisure Facilities Framework

 https://www.sell2wales.gov.wales/search/show/search_view.aspx?ID=JAN11773

 1
- 2.4.2 Delivery of the project would be through a Development Partner Model, this ensures delivery on time, within budget and utilises a nationally tried and tested formula.
- 2.4.3 The Development Partner must deliver within the agreed budget and timeframes.
- 2.4.4 The Development Partner reports to the Joint Project Board on progress against the project deliverables.
- 2.4.5 Project would include the 5 stages of Gateway review:

- Brief developed in line with business needs completed (INCEPTION)
- Solution matched to best business outcomes Feasibility Report and confirm affordability programme (completed) - Sign off PID (including business case) CBC/TCT (out-standing) (FEASIBILITY)
- Social Value & Local spend agreed appoint design team, mitigate risks and maximise opportunities project costs agreed on order (PRE-CONSTRUCTION) develop design
- Best VFM solution contract information agreed and costs 100% market tested cost agreed on project order (PRE-CONSTRUCTION) detailed design
- Quality build delivered on time and in budget with performance measurement at all stages contract sum (CONSTRUCTION).
- Occupy new facilities, client value report & post project review, final accounts (IN USE)



In summary we already have the feasibility, the business case and governance model, approach (joint board) model require sign off once agreement between the Cheltenham trust and council is in place.

The estimated timeframe of the project is evidenced in table 7 below $% \left(1\right) =\left(1\right) \left(1\right$

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Jan
	16	16	17	17	17	17	17	17	17	17	17	18
Phase 1 Business Case												
Phase 1 PID												
TCT Exec Sign Off												
TCT Sign Off of Phase 1												
CBC S151 Officer Sign Off												
CBC Exec Board Sign Off												
CBC Cabinet Sign Off												
CBC Council Sign Off												
TCT Budget Sign Off												
CBC Budget Sign Off												
Loan Approval												
Procure & Appt Dev Partner												
Agree Project Cost & timeframe												
Project Initiation												
Consultation & Pre Planning												
Planning												
Build (20 weeks) Open 01/18												
Convert Squash Courts												
Convert Changing Rooms												
Convert Fitness Suite												

3 Consultation

An analysis and engagement plan template is a sensible way to reflect this. Consideration must be given to keeping stakeholders aware of changes to project costs, timescales, quality, scope, risk profile and benefits. The table below indicates the stakeholders and level of interest in the project.

Stakeholder Group	What is their Role?	What is their level of interest (high/med/low) and influence (high/med/low) in the project?	What are the Key Messages we wish to send	Ongoing and Future Activity
Board of TCT Trustees and CBC Cabinet	Owners of the project	High interest High Influence	Project on time, budget	Monitoring and evaluation
Audit & Governance Ctte	Assurance	High Interest High Influence	Project is being delivered within plan	Scrutiny of project and its deliverables
TCT Exec	Project driver	High Interest High influence	As above	As above
CBC Cabinet Member, Cabinet and SLT	Landlord, funding provider & client monitoring of the management agreement	High Interest High Influence	As above	As above
Customers / Customer Groups	Principle users of the facilities	High Interest High Influence	Improvement of services & facilities, expansion of the offer and increased inclusivity, accessibility	Consultation
Health & Fitness Members	Users of facilities and services	High Interest High Influence	Improvement, extension and broadening of the offer, increased quality and value	Consultation
Sport England	Overarching NGB for sport	High Interest High Influence	Alignment of project to national values and objectives around	Consultation and possible funding / grants

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Stakeholder Group	What is their Role?	What is their level of interest (high/med/low) and influence (high/med/low) in the project?	What are the Key Messages we wish to send	Ongoing and Future Activity
			physical activity & engagement	
UK Active	Health & Fitness National Body	Medium Interest Medium Influence	As above linked into Sport England and Dept. of Health	Consultation
ASA	Nat Governing Body Swimming	Medium Interest Medium Influence	Improved services and accessibility to broaden engagement in aquatics	Consultation and possible funding
Tenants	SME's based within leisure centre	High Interest Medium Influence	Possible impact upon their business	Consultation
Active Gloucestershire	Customer and Partner	High Interest Medium Influence	Project will contribute to Active Gloucestershire and The Cheltenham Trust objectives around engagement and growing participation especially amongst target groups	Consultation
Police	Advice on security	Low Interest Medium to High Influence	Consideration given to deliver improvement	Consultation

4 Risk

The management of Risk is a key element of the development and a summary of risks associated with the project can be found in **Appendix 2**.

5 Recommendation

To proceed with the project in light of the following factors:

- Time The project build time of 20 weeks in combination with the methodology of development partner will reduce risks and ensure that the project is delivered on time and within budget.
- Social Impact The projects improvements will enable more people to be active more often.
- Equalities The project through design will improve accessibility to people with disabilities, target groups around Health, Older people, Families and Older people, Young people.
- Partnerships Ability to increase the work with partners around health & education
- Learning The project will provide new opportunities for informal learning and play
- Opportunity Opening of new facilities coincides with peak season in the marketplace if the project commences in Sept 2017.
- Affordability The term of the loan repayment at 10 years ensures the project completed within the existing lease agreement between the Council and The Cheltenham Trust.
- Financial opportunity The growth in revenue, opportunity for engagement and employment with a prudent budget delivers a net return on investment of 57% with interest at 2% dropping to a return of 49% if interest is charged at 3.5%.
- Financial sustainability Increased net surplus provides additional and critical income for the Trust to meet its charitable objectives, business plan and need to ensure a sustainable future.

Stephen Petherick

Cheltenham Trust

Cheltenham Borough Council – Project Assessment Tool Section 1: Business case for capital projects

Name of proposal	Version and date last assessed	Lead Officer
Improvements to Leisure-at- Cheltenham	v.1.1	Richard Gibson

Brief description of project for use in public documents

The proposed improvements are as follows:

- Convert two existing squash courts into new studios so enabling an increase in the number of class and activity programmes.
- Upgrade the existing dry-side changing spaces to reflect a quality of offer that customers expect and that competes well with the local market.
- The provision of a new sauna and steam room suite adjacent to the new changing rooms, strengthening the link with health and fitness and replacing the outdated existing health suite facilities.
- Extend the existing fitness suite on the ground floor into the current dance studio enabling increased capacity to meet demand and enable improved functional training space and health support related activities.
- Conversion of the existing health suite into an aquatics play space, developing and extending the
 aquatics opportunities for families with young children and also the commercial hires for children's
 birthday parties

The improvement scheme will deliver much needed investment into Leisure-at-Cheltenham to keep it competitive and to enable a growth in income and footfall. Although gym equipment was refurbished in 2013, there has been no significant investment into the fabric of the building since the post-flood refurbishment in 2007.

The management arrangement between the Trust and the Council provide for a year on year reduction in funding by the Council. This project will help to strengthen the financial viability and performance of Leisure-at Cheltenham creating a surplus for reinvestment and development by the Trust.

The council plans to support this request via a loan of £1.5m which will be repaid by the Trust at an interest rate of 3% per annum.

What is the Timescale of this project (critical milestones)?

The estimated timeframe of the project is evidenced in table 7 below

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Jan
	16	16	17	17	17	17	17	17	17	17	17	18
Phase 1 Business Case												
Phase 1 PID												
TCT Exec Sign Off												
TCT Sign Off of Phase 1												
CBC S151 Officer Sign Off												
CBC Exec Board Sign Off												
CBC Cabinet Sign Off												
CBC Council Sign Off												
TCT Budget Sign Off												
CBC Budget Sign Off												
Loan Approval												
Procure & Appt Dev Partner												
Agree Project Cost & timeframe												
Project Initiation												
Consultation & Pre Planning												
Planning												
Build (20 weeks) Open 01/18												
Convert Squash Courts				_								
Convert Changing Rooms												
Convert Fitness Suite												

What are the alternatives options to delivering the project (include doing nothing)

DO NOTHING: Continue to maintain the existing facility to ensure it is fit for purpose within resources, in the knowledge that Leisure – at will not be able to meet the demand for business and customer expectations, with reducing appeal and subsequent declining retention and reputation with increased wear and tear on kit and facilities. Negative impact upon economic viability of the business and the Trust. This option has therefore been dismissed.

COMMERCIAL FUNDING: The Cheltenham Trust fully fund capital investment programme without contribution by CBC through seeking a commercial loan. Although on the face of it, this would minimise the risk to the Council in that the Trust business activities would fund the repayments, the Council would need to act as a guarantor for the loan. That would mean assigning an equivalent sum in our reserves to fund this in case the Trust failed. In addition, the cost of the loan would have been higher at an estimated 5%. On advice from the s.151 officer, this option has been dismissed.

CBC FACILITATED LOAN: The council secures funding for the investment on the Trust behalf. This will be a rate of 3%. The loan repayments will be met through growth in Trust business. The relationship between Trust / Council will require clarification and ongoing issues of security of tenure, asset ownership. Officers and members have expressed a preference for this model and a joint approach to delivering the project.

What will be the impact of the project on other parts of the CBC; property services, legal, procurement, finance etc?

It is proposed to utilise a development partner, a well tried and established route that at cost removes any direct pressure on capacities within the Trust. This can be secured through existing national frameworks. The development partner owns and covers the risk of delay and cost of exceeding agreed

project costs.

The development would be overseen by a joint Trust CBC project board. The project management of the delivery would be through a Development partner who would be contracted to deliver on time and within budget a turn-key solution. This is a well-used process with robust evidence of delivery to support the approach.

Will the proposal involve any longer term commitments from the council particularly in terms of long-term financial and staffing commitments?

Yes, the project involves a 10 year loan to the Trust which will be re-paid at an interest rate of 3%.

The asset will remains in control of the Council and the Council would benefit ultimately in the improvement of its buildings.

Staffing costs for operating the facility will sit with The Cheltenham Trust and have been built into future calculations

There are no long term revenue commitments for the council although replacement of equipment will continue to be planned at 5 year intervals. Though the new equipment will come with 5 year parts and labour service agreement.

How will the views, opinions and concerns of the community and partners be considered in planning the proposal?

Customer comment, stakeholder engagement and operational concerns have in part motivated this project. Further consultation will be included within the delivery of the project. The project will contribute significantly to improved service delivery and meeting customer needs, as well as ensuring the offer at Leisure-at remains fresh and at the top end of Cheltenham's competitive leisure market.

Consultation is planned as part of planning processes to assure any concerns with regard to the built and heritage environment and security.

Further to this, the Stakeholder Event on 24th November 2014 held by TCT highlighted the need to be competitive in growing market place; the provision of improved facilities also supports use of those individuals from deprived areas or targeted communities eg special needs.

Cheltenham Borough Council - Project Assessment Tool

Section 2: Financial details of proposal (at current pay and price levels)

These figures are drafted as viewed from the Trust Preliminary costs

Architect fees	£30,188
Mechanical and electrical advice	£17,250
WFC Construction	£11,500
Local Authority Fees (Building Control, signage etc)	£ 4,025
Structural Engineer Fees	£ 9,775
Нірро	£ 3,500
ALS / SPC	£ 5,000
Total	£81,238

Capital costs

Preliminary costs	81000.00
Squash courts to Studio's	135000
Extend gym	63000
Refurb dry change & sauna / steam	129000
First Floor corridors	16000
Health suite to splash pad	63000
M&E	243000
build prelims	17000
Build Total	666000
Fitness Equipment	216000
Splash Pad Equipment costs	341000
equipment total	557000
Project Management & Delivery	90000
Contingency costs	106000
Total	1500000.00

Loan Repayments and return on investment calculation:

Principal	£1,500,000				
Rate	3.00%	Fixed			
Years	10				
Half years	20				
semi-annual					
annuity payment	£87,368.60		Annual repayment	£174,737.21	

	Opening	annuity			
Due Date	balance	payment	interest paid	principal repaid	closing balance
					£1,500,000
1	£1,500,000.00	£87,368.60	£22,500.00	£64,868.60	£1,435,131.40
2	£1,435,131.40	£87,368.60	£21,526.97	£65,841.63	£1,369,289.76
3	£1,369,289.76	£87,368.60	£20,539.35	£66,829.26	£1,302,460.51
4	£1,302,460.51	£87,368.60	£19,536.91	£67,831.70	£1,234,628.81
5	£1,234,628.81	£87,368.60	£18,519.43	£68,849.17	£1,165,779.64
6	£1,165,779.64	£87,368.60	£17,486.69	£69,881.91	£1,095,897.73
7	£1,095,897.73	£87,368.60	£16,438.47	£70,930.14	£1,024,967.59
8	£1,024,967.59	£87,368.60	£15,374.51	£71,994.09	£952,973.50
9	£952,973.50	£87,368.60	£14,294.60	£73,074.00	£879,899.50
10	£879,899.50	£87,368.60	£13,198.49	£74,170.11	£805,729.39
11	£805,729.39	£87,368.60	£12,085.94	£75,282.66	£730,446.73
12	£730,446.73	£87,368.60	£10,956.70	£76,411.90	£654,034.82
13	£654,034.82	£87,368.60	£9,810.52	£77,558.08	£576,476.74
14	£576,476.74	£87,368.60	£8,647.15	£78,721.45	£497,755.29
15	£497,755.29	£87,368.60	£7,466.33	£79,902.27	£417,853.01
16	£417,853.01	£87,368.60	£6,267.80	£81,100.81	£336,752.21
17	£336,752.21	£87,368.60	£5,051.28	£82,317.32	£254,434.88
18	£254,434.88	£87,368.60	£3,816.52	£83,552.08	£170,882.80
19	£170,882.80	£87,368.60	£2,563.24	£84,805.36	£86,077.44
20	£86,077.44	£87,368.60	£1,291.16	£86,077.44	£0.00
		£1,747,372.08	£247,372.08	£1,500,000.00	
			·		

loan	£1,500,000.00
interest	£247,372.00
Total	1,747,372
Cumulative surplus	739,000
RO1 -10 years	42.20%
ROI per annum	4.22%

Cheltenham Borough Council - Project Assessment Tool

Section 2: Financial details of proposal (at current pay and price levels)

These figures are drafted as viewed from CBC

CAPITAL COSTS PROFILE	2017/18	2018/19	2019/20	2020/21	2021/22	Totals £
Buildings	666,000					666,000
Infrastructure e.g. parks and gardens, landscaping						
Vehicles, plant or equipment	557,000					557,000
Project Management	90000					90000
Contingency	106,000					106,000
Prelim costs	81,000					81,000
Total capital cost of project	1,500,000					1,500,000
CAPITAL FUNDING PROFILE (please state if confirmed)	2017/18	2018/19	2019/20	2020/21	2021/22	Totals £
Loan to The Cheltenham Trust	1,500,000	2010/19	2015/20	2020/21	2021/22	1,500,000
Total capital funding of project	1,500,000					1,500,000
Net capital cost to CBC	1,500,000					1,500,000
ADDITIONAL REVENUE COSTS PROFILE	2017/18	2018/19	2019/20	2020/21	2021/22	Totals £
Direct staffing / Additional support services staffing	2017/10	2010/19	2019/20	2020/21	2021/22	
Maintenance						
Heating/lighting/NNDR etc.						
Other						
Total additional revenue cost of project	0					0
INCOME / SAVINGS / MATCH FUNDING PROFILE	2017/18	2019/10	2019/20	2020/21	2021/22	Totals £
Loan repayment	£174,737	2018/19 £174,737	£174,737	£174,737	2021/22 £174,737	873,685
Cashable savings	E1/7,/3/	E1/7,/3/	£1/7 ₁ /3/	£1/7,/3/	£1/¬,/3/	0/3,003
Non-cashable savings						
J :			•			1
NET CONTRIBUTION TO BRIDGING THE GAP	2017/18	2018/19	2019/20	2020/21	2021/22	Totals £
Please profile the net contribution to the bridging the gap programme			25,000			
			,			

Cheltenham Borough Council - Project Assessment Tool

Section 3: Assessment against corporate strategy objectives and outcomes

What contribution will the		assessment				Please describe how the project will	
project make:	significant	moderate	weak	none	undermines	contribute to the delivery of the council's strategic objectives and outcomes and what the constraints are to delivering these outcomes	
Cheltenham's environmental quali	ty and	herita	ge is p	1	ed, ma		
Green space improvements /				Х		None anticipated	
maintenance and enforcement				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		Non- and the deal	
Public realm improvements / maintenance and enforcement				X		None anticipated	
Being environmentally sustainable		X				The project will introduce new equipment and fittings eg lighting air-con etc will be at a higher level of carbon efficiency and will reduce the carbon footprint of the facilities further	
Sustain and grow Cheltenham's	s econ	omic	and cu	ıltura	vitali	ity	
Economic growth		X				Continuing to invest in Cheltenham's leisure offer is important as it strengthens Cheltenham as a place where people wish to live, work and play.	
Cultural vitality	X					The Trust actively seeks to explore opportunities to expose its customers to sport arts and culture across all its venues through cross fertilisation.	
Improving connectivity		X				Many services are delivered in partnership with 19 other providers across Health, Education, Social Services and Sport. The proposal aims to ensure that the facilities remain attractive to these partners	
People live in strong, safe and	health	y com	munit	ties			
Safety and wellbeing of individuals and communities	X					The activities delivered will contribute directly to the safety and wellbeing of local residents through building communities and social cohesion, in particular with some of the target populations that use the facilities	
Decent and affordable housing				Χ		None anticipated	
Strong and healthy communities	Х					The activities delivered will contribute directly to the strength and health of local residents; the scheme will increase access to facilities for the public that both improve physical, mental and emotional wellbeing	
Our council can continue to factorisidents	Our council can continue to facilitate the delivery of our outcomes for both Cheltenham and its						
Effective use of assets	X					The proposal makes a significant investment into leisure-at to keep it competitive and to enable a growth in income and footfall. Although gym equipment was refurbished in 2013, there has been no significant investment into the fabric of the building since the post-flood refurbishment in 2007.	
Commissioning						None anticipated	
Organisational development						None anticipated	

Cheltenham Borough Council - Project Assessment Tool Section 4: Risk assessment

See risk assessment in main body of Cabinet report

Please identify the main risks associated with the project (financial, health and safety, reputation)	Impact 1-5	Likelihood 1-5	Score out of 25	How would you manage the risk	Risk Manager
If the Trust defaults on the loan, there will be no property that CBC can repossess. Therefore the Council owes a fiduciary duty to its council tax payers to ensure that the business case is sound.	3	2	6	Ensure that the business case is sound so that it can be sure that the repayments will made.	Sarah Didcote
As the term of the loan is 10 years, and there is less than 8 years of the certain term of the management agreement with the Trust remaining, if the Council were not to extend the management agreement and as a result if the Trust needed to wind itself up the loan repayment agreement would not be fulfilled.	4	2	8	The council would need to be in a position to seize any assets of value. This therefore suggests that CBC should take a floating charge over its assets under the loan agreement	Donna Ruck

Cheltenham Borough Council Cabinet – 7th March, 2017 Council – 27th March, 2017

Progress update regarding the new crematorium project including business case decisions regarding access road and second chapel option

Accountable member	Cllr Chris Coleman, Cabinet Member for Clean and Green Environment			
Accountable officer	Mike Redman, Director of Environment			
Ward(s) affected	AII			
Key/Significant Decision	Yes			
Executive summary	This report provides an update on the development of Cheltenham's new crematorium as it moves through its design stage.			
	It is proposed that a permanent exit route from the new facility is built immediately to the south of the cemetery emerging onto Bouncers Lane and that this is included within the planning application, which is timetabled for submission in April/May.			
	It is also proposed that a second new chapel is built as an integral part of the development of the facility.			
	A further round of public consultation is taking place, including a staffed event at the Municipal Offices to which all members have been invited. An update on the results of this consultation will be available to help inform decision-making on 7 th March, with a particular focus on the second chapel option, proposed road and construction access issues.			
Recommendations	Cabinet is recommended to:			
	 Approve the approach to providing public access to and from the new crematorium, including the development, subject to planning consent, of a new permanent road linking the new facility to Bouncer's Lane (See option 'Route B' at Appendix 2); 			
	 Approve the appropriation of land on prior's farm playing field from use as open space to cemetery use and delegate authority to the Head of Property and Asset Management to carry out the appropriation should planning permission for the development of the crematorium and access road be granted; 			
	3. Note that a temporary route for construction traffic leading to the new crematorium will be required, with the preferred route to be informed by professional advice and the results of public			

consultation, provided in a supplementary update;

- 4. Approve, subject to Council agreeing the additional project budget, the construction of a second chapel in conjunction with the new crematorium.
- 5. Agrees to programme further work to review the options for repurposing the existing chapels and how the associated costs can be further mitigated to improve scheme viability.

Cabinet recommends that Council:

6. Allocates the budget for the construction of a second new chapel, including the use of the capital receipt of £275,000 from the sale of the cemetery lodge and £373,000 from the revenue budget reserve arising from the introduction of new crematorium fees in 2017-18, with the balance of £352,000 being supported by prudential borrowing.

Financial implications

A range of financial models have been drawn up to compare the financial return, the total cost and the impact on the medium term financial strategy for the options surrounding the use of the existing chapels and the proposed 2nd new chapel.

The financial implications are detailed throughout this report. In summary, the proposed option for the construction of a second chapel, whilst temporarily mothballing the existing chapel, pending consideration of its future use, will incur capital costs of £1million.

The proposed funding will be from the use of £275k capital receipts, £373k use of reserves and Public Works Loan Board borrowing of £352k. Members will need to take account of how these funding arrangements represent a loss of opportunity to fund other schemes going forward.

The business case has been prepared over 25 years, generating an internal rate of return of 4.5% and total additional revenue income of £2.6m over this period. However, this assumes an increase in the volume of activity from 2027 onwards, as per the expected growth in the local population and age profile. The risk of this growth not being achieved is detailed in Section 7 and the Risk Appendix 1 to this report.

When taking into account the additional costs and savings from this proposal, although there is a positive impact on the Medium Term Financial Strategy over a 25 year period, there is a deficit impact over the first 9 years, totalling £283k, prior to the expected increase in demand in year 10 of the business case. However, a small increase in fees from 2018-19 onwards will offset this shortfall, as shown in Appendix 4.

Contact officer: Sarah Didcote, sarah.didcote@cheltenham.gov.uk, 01242 264125

Legal implications

The Authority owns the land upon which it is proposed to build the new crematorium and associated car parking. The land on which the crematorium will be constructed lies within the administrative area of Tewkesbury Borough Council.

By virtue of Sections 214(1) and (3) of the Local Government Act 1972 and Section 4 of the Crematorium Act 1902, the Authority has the power to build and operate a crematorium outside of its own administrative area. The Authority is complying with its obligations under the Public Contract Regulations 2015 by accessing a framework to engage with project managers, Pick Everard and build contractors Willmott Dixon to work up designs for the new crematorium prior to a build contract being entered into

The framework being accessed (the SCAPE framework) expires on 7 May 2017 and the Authority is able to enter into a build contract with Willmottt Dixon up to that date. If this deadline is not achieved, whilst the Authority may join the new framework issued by SCAPE, there is no guarantee that Willmottt Dixon will be on the new SCAPE framework or that the prices fixed by the current framework will remain the same. Therefore, many of the costs incurred to date could be abortive costs if the authority has to contract with a different contractor either through the new SCAPE framework or another procurement route.

The land on which the Authority wishes to construct a permanent access to the new crematorium is open space used for the purposes of public recreation. The Authority is therefore required to appropriate the land under Section 122(1) Local Government Act 1972 to change the use of the land from open space to cemetery use. This section requires that the land is no longer needed for recreational purposes. Case law has held that this does not mean that the land has to have fallen into disuse; the Authority is entitled to strike the balance between comparative local interests; between the need for one land use over another, taking account of wider community interests. Therefore, when deciding whether or not to appropriate the land, Cabinet will need to first consider the interests of the users of Priors Farm Playing Field and the current and future users of the Crematorium, together with the need for the access to be provided on land currently used for public recreation.

S122(2) Local Government Act 1972 required the Authority to cause notice of its intention to appropriate the land to be advertised in two consecutive weeks in a local newspaper and to consider any objections to the proposed appropriation. Notices were placed in the Gloucestershire Echo on 12th and 19th January 2017, with a 3 week period within which to make objections. No responses were received to these notices. However, representations have been received in relation to the outline planning application for potential access roads. Whilst these objections are not directly related to the issue of appropriation of the public open space, Cabinet should take these into account when making its decision about the appropriation. The representations are set out in Appendix 5.

Part of the land at the cemetery, including the North chapel is consecrated ground. Advice has been given to officers that should the intention be to use this land for secular use, it needs to be either deconsecrated or consent obtained for the proposed use. Further enquiries regarding this issue will need to be made with the Bishop of Gloucester.

When considering potential uses for the existing chapels, the Authority will need to comply with and have regard to the provisions of the Local Authorities Cemeteries Order 1977. Advice has been given to officers about the provisions of the Order.

Contact officer: Donna Ruck, donna.ruck@tewkesbury.gov.uk, 01684 272696

HR implications (including learning and organisational development)

There are no immediate HR implications arising from the content of this report however, should the decision to construct a second chapel proceed then a review of operational staffing levels will be required once the building is completed.

Contact officer: Julie McCarthy, julie.mccarthy@cheltenham.gov.uk, 01242 264355

Key risks

Business case assumptions are set out at section 7 and key risks are set out at Appendix 1.

The project to deliver a new crematorium is primarily driven by the need to replace the existing two cremators, which have a limited lifespan and are currently giving rise to significant maintenance and business continuity concerns.

The development project has a detailed risk register which currently contains 34 risks and mitigating actions, which are subject to regular review. There is a further risk register relating to the safety and business continuity of the existing crematorium, which also helps evidence the need for a new facility.

The new build crematorium is viewed as the primary means by which the Council will stabilise and improve upon its current bereavement services offer, providing a more financially sustainable commercial operation which better aligns to the needs of our customers.

A second new chapel would provide customers with the same advantages as those for the new main chapel, but it would add cost that is unlikely to significantly increase income. There is also a risk that the existing chapels could remain vacant for some time, whilst proposals for repurposing them are refined. The effect of this risks putting additional financial pressure on the medium term financial strategy (MTFS).

Corporate and community plan Implications	The new crematorium will help to underpin the continuation of the Council's bereavement service and contribute to the following high level objectives:- • Cheltenham's environmental quality and heritage is protected,						
	maintained and enhanced.						
	 Transform our Council so it can continue to enable delivery of our outcomes for Cheltenham and its residents. 						
	Whilst the provision of a cremation service is discretionary, there is insufficient capacity within the catchment area of our current facility to cater for demand were it to close.						
	The Council has run this service successfully for very many years and our experience and level of customer satisfaction is such that there is considerable community support for the authority continuing to do so.						
Environmental and climate change implications	The Council currently pays around £53k per annum into a national scheme called CAMEO which helps to offset the impact of mercury emissions from our current cremation plant. The proposed new facility will have mercury abatement plant which will minimise our emissions and remove the need for the authority to pay into the CAMEO scheme. Indeed, this may even generate a cash return from CAMEO based on our mercury abatements in respect of the proposed new plant.						
	It is also anticipated that the new gas cremators will be significantly more efficient than those we currently use, reducing our carbon emissions.						
Property/Asset Implications	If the delivery of a second new chapel is to be considered, it should be predicated on the financial viability and income generation forecasts for a new use of the existing facility, or there is a risk that the existing chapel buildings which are Grade II listed will remain vacant for an extended period.						
	This issue is addressed under recommendation 5.						
	Contact officer: David.Roberts@cheltenham.gov.uk, 01242 264151						

1. Background

- 1.1 In September 2015, Cabinet approved the principle of building a new crematorium on Councilowned land to the east of the current cemetery and in October 2015, Council approved a total budget of £7,443,100 for the proposed development. £6,523,000 of this budget is allocated to the 'design and build' phases of the project.
- 1.2 Subsequently, a programme team was formed to lead the work and determined that the SCAPE Procurement Framework was the best approach for securing contractors. SCAPE is a public sector owned organisation which specialises in providing compliant frameworks to public bodies in the UK.
- 1.3 Using the SCAPE framework, Pick Everard was appointed in April 2016 to provide project management and quantity surveying support and in June 2016, Willmottt Dixon was appointed as principal contractor.
- 1.4 As anticipated in the report brought to Cabinet in November 2016, further decisions are now required on important issues. It is imperative that decisions are made in order to maintain the programme's momentum and minimise the period where the service is dependent on the existing cremators, which continue to give rise to concerns about their reliability and life expectancy.
- 1.5 This report builds on the Cabinet decisions already taken in relation to the project and seeks approval for a preferred new access (exit) road for the new facility, a decision about whether to build a second new chapel now as part of the development and if so, what use should be made of the existing chapel buildings.
- **1.6** Consultant advice which informs the rationale for the conclusions and recommendations within the report are appended and referenced where appropriate.

2. Crematorium development options

- 2.1 In broad terms, three principal options were considered for taking the project forward, with the advantages and disadvantages of each set out on pages 6-7 of the Pick Everard report at Appendix 3.
- 2.2 The options are as follows:-

Option A	Build one new chapel with two cremators at the new site and use one existing chapel
Option B	Build one new chapel with two cremators at the new site and use one existing chapel in the short term, but build a second chapel later
Option C	Build two new chapels now at the new site, identify funding to support this and release the existing chapels to enable their deployment for a new commercial venture

2.3 Option A is the one which already has Cabinet and Council support in terms of funding and Option B was discounted at an early stage, as there would be significant additional costs and service impacts in seeking to deliver a second chapel at a later date. In addition to increased preliminaries in relation to site set up costs, there would be lost income arising from disruption and downtime of the service. Our contractors advised that in practice, services in the new main chapel would need to stop for several months.

- 2.4 In the absence of further information, this analysis makes a good argument for Option C, i.e. the building of two new chapels now.
- 2.5 The report goes on to examine a number of commercial options, including the repurposing of the existing chapel buildings and identifies that a number of them would be revenue positive over a 25 year period. The most favourable options from a financial viewpoint include the provision of offices, boutique-style holiday accommodation, or a mix of wake facilities with catering and business units.
- 2.6 None of the options account for the costs associated with building out the second chapel building. If these costs are included, none of the options presents a viable financial case.
- 2.7 In appraising options, both financial and non-financial criteria should be considered in assessing the investment decision. The assessment of non-financial criteria has indicated a preference for a conversion of the existing chapels to a wake facility with catering and some associated business units on the site.
- 2.8 This does not of course resolve the financial challenges regarding the funding of such an option, which would require up-front investment of £1.0M, representing a major project in its own right, with considerable resource implications and risks attaching to it.
- 2.9 In view of the Council's challenging financial situation, including a lack of capital for reinvestment, a number of options have been modelled for funding the new second chapel, including some which would not involve immediately reinvesting in an option for the reuse of the existing chapel buildings. This analysis has identified how the second chapel might be funded, utilising a capital receipt from the sale of the cemetery lodge building and income from an early uplift in cremation fees to help offset the total borrowing that would otherwise be required. Using this approach to funding and the assumptions set out in section 7 below, the project is cash positive over 25 years, but has some negative impact on the MTFS in years one to nine. This impact is modest and it would only take a small fee increase to cover the extra costs profiled in the early years.
- 2.10 However, Cabinet should note that it does not allow for the foregone opportunity cost of using internal capital and revenue resources to part fund the option. This is because the suggestion is that £275,000 is funded from the receipt from the sale of the cemetery lodge (an asset which was previously aligned to the service) and that £373,000 is funded from income from increased cremation fees which will be received before the Council draws down the PWLB loan for the main scheme.
- 2.11 Based on the Pick Everard option analysis and the accountancy analysis at Appendix 4, Cabinet is recommended to pursue the delivery of a second chapel now and to undertake further work to examine how the costs associated with the development of the existing chapels might be managed down to improve scheme viability. Members need to be mindful of the assumptions and risks relating to this recommendations as set out in this report.

3. Budgeted increase in cremation fees

3.1 The Council's proposed budget for 2017-18 includes the following in relation to fee increases relating to the service:-

Current cremation fee = £620

- + £12.40 2% inflation (£620 + 2% = £632.40)
- +£168.71 to support the new crematorium development (£632.40 +£168.71 = £801)
- + £26.50 Environmental fee (CAMEO mercury abatement) (£801 + £26.50 = £827.50)
- + £25 Medical Fees (£827.50 + £25 = £852.50)

New cremation fee = £852.50

- 3.2 Memorial and Burial fees will increase by:-
 - 5% on burial fees i.e. interment and exclusive rights
 - 2% increase on all other fees.
- 3.3 The following benefits will be delivered through the provision of the new facility:-
 - A more reliable and efficient service:
 - More space for larger services;
 - Modern up-to-date flexible facility;
 - Better parking, including disabled provision;
 - Future proofing with equipment to meet modern funeral requirements, including audio-visual technology;
 - Pricing comparable to other neighbouring crematoria.

4. Access Roads

- 4.1 In the work carried out in 2015, the building of an additional permanent egress road through the cemetery was proposed to serve the new facility. However, it was identified early on that further work would be needed to confirm its feasibility. Also, it was recognised that providing a route for construction vehicles through the cemetery would be extremely disruptive and hence a temporary haul route to the south of the cemetery was also proposed.
- **4.2** Subsequently, following a recommendation by Pick Everard, an investigation of the potential access options was commissioned through Willmottt Dixon as part of the feasibility work.
- 4.3 The conclusions of the resulting studies are set out at Appendix 2 and have been considered by the programme team, resulting in a preferred access route and identified costs which are within the original programme estimate, together with a fall-back approach in the event of any show-stopping risks arising.
- **4.4** The preferred egress 'Route B' takes the line of a farm track which runs east to west, to the immediate south of the existing cemetery site and emerges onto Bouncers Lane at its western extremity.
- **4.5** Whilst there are risks associated with this option, including potential ecology, archaeology, tree, playing field/public open space and ground condition impacts, specialist reports and input from planning officers have informed the view that these should be manageable.
- 4.6 The proposed 'inward access' to the new crematorium would follow existing road routes within the site, which may need some upgrading, but represents a relatively low cost and low risk option.
- 4.7 An outline planning application (ref: 17/00011/OUT) was submitted to provide public transparency about the Council's likely intentions regarding an egress route across Priors Farm land, which is in Council ownership.
- 4.8 A range of representations have been received in relation to this undetermined application and these are set out at Appendix 5. Cabinet is requested to have regard to these representations in considering the recommended option for providing public access to and from the new crematorium, including the development and subject to planning consent, a new permanent road linking the new facility to Bouncer's Lane. A plan of the recommended route is also included within Appendix 2a page 49.

- 4.9 If the access route through Priors Farm is agreed in conjunction with the planning application for the new crematorium, it will be necessary to appropriate some existing Public Open Space for this purpose; the necessary advertisement for this has already taken place and no objections were received. However, the relevance of representations to the outline planning application set out in para 4.8 above should be taken into account in considering recommendation 2 of this report.
- **4.10** Cabinet needs to consider the balance of interests between the current users of the land, the impact of the proposed development on them and the necessity (or otherwise) to interfere with those uses because of the needs of the cemetery and its users.

4.11 Access route options summary

Option	Advantages	Disadvantages	Programme Board / Exec Board view
Route A – through the existing	Relatively cheap option, primarily utilising existing	Unsatisfactory as permanent route due to service conflicts	This is a fall-back option which could be used temporarily.
memorial gardens	roads	H&S concerns	Requires certainty that a
		Damaging to tranquillity of memorial gardens.	more permanent route would be provided within a reasonable timescale (i.e. two years).
		Risk of damage to memorials.	Not the most attractive option for the project, but
		Not suitable for construction traffic haul route, which would still need to be provided across Priors Farm.	may be appropriate if wider development of Priors Farm area considered viable.
Route B – to the immediate south of the cemetery site	Provides a potential permanent egress route Relatively discreet route adjoining boundary of existing site Services can follow road route No direct long term impact on Imjin Road Preference of ward members	More expensive option than following existing roads Some risk, particularly around ecology Impacts on properties backing on to the farm lane	Recommended egress route
Route C – via Imjin Road	Provides a potential permanent egress route	Severance of playing area and changing facilities High risk in relation	Not recommended

	Would support	to site archaeology	
	wider potential development of	Landscape impact	
	Priors Farm land	Likely to attract most resident opposition	
Route D - to the south of the cemetery site,	Provides a potential permanent	Similar risks to C, but with additional costs as longer route	Not recommended
then linking	egress route	Impacts on	
with Imjin Rd	Would avoid traffic exiting the site through Imjin Road	residential properties backing onto Priors Farm	
Route E – via Prestbury playing field off Roberts Road	Provides a potential permanent egress route	Unsuitable road access via bridge which would need replacing	Not recommended
	Shortest route	Unsatisfactory narrow approach through residential area	
		Would require landowner consent	
		Developer has advised this option is unworkable	

- 4.12 There will need to be a haul route provided to service construction traffic accessing the new crematorium site. This is likely to follow the line of the proposed permanent access (Route B) for much of its length, but there are options about where the route links to the existing road system. One option is for this to be temporarily accessed via the lower end of Priors road playing field site via Imjin Road, or the route could emerge either adjacent to, or at the existing entrance to the cemetery site.
- **4.13** There are a range of considerations in this respect, including the impact on local residents, highway issues and potential conflicts with funerals and other service users of the Bouncers Lane cemetery site. This issue forms part of the public consultation regarding the project and will be subject to a supplementary update report to Cabinet on 7th March.

5. Second chapel business case

- 5.1 The construction of a second new chapel was outside the scope of the original crematorium build programme, but there were enduring concerns that if the construction of a second chapel were to take place once the new facility had begun operating, it would be extremely disruptive to the service. It was also identified that this approach would have significant service delivery, quality and financial implications. In particular, there were considerable operational concerns that splitting the operation between the existing and new chapels could have a negative impact on the business. Funeral directors have advised that they believe there will be customer concerns about moving coffins between buildings which could impact on cremation numbers.
- 5.2 The suggestion therefore, was that the scope of the programme should be extended to include the creation of a business case to identify whether there were any viable options to help meet the

- costs of a second new chapel (for example, from a commercial use for the existing chapel buildings).
- 5.3 In November 2016, Cabinet thus approved the increase in the scope of the programme, to include the development of a business case for a second new chapel, in order to identify whether it was a financially viable proposition.
- 5.4 Cabinet also agreed that a second (optional) new chapel consistent with the main programme's scope would be included in the planning application for the new facility. This maintained the option of either partially or fully building out a second new chapel, subject to the viability of the business case.
- 5.5 When Cabinet originally gave approval for the building of a new crematorium, including a single chapel, one of the existing chapels (North) was expected to be retained for small ceremonies. It was intended that the scheme would allow scope for future expansion in the medium to long term. At that time, initial estimates had shown that the construction of a second new chapel was unaffordable at an additional cost of £1.7M.
- 5.6 Following Cabinet approval in November 2016, subsequent feasibility and design work has incorporated the potential for a second new chapel (with the intention of seeking full planning approval for a two chapel design) whilst recognising that the approved scheme allows for only a single chapel to be funded and built initially.
- 5.7 The continuing feasibility and design work has allowed our contractors to re-estimate the cost of the second chapel, on the basis that it is constructed at the same time as the first. Even with due allowance for contingency and internal costs, the revised build estimate is £1.0M, considerably less (-41%) than the earlier estimate in 2015.
- 5.8 The study of the potential business options has been undertaken by Pick Everard and is included in this report as Appendix 3.
- 5.9 In their study, Pick Everard set out the advantages and disadvantages of using two new chapels as opposed to using a single new chapel. They also looked at the option of continuing to operate one existing chapel, with the possibility of constructing a second new chapel later. Pick Everard also looked at the opportunities for re-purposing the existing chapel buildings and the potential for generating a commercial return which might support a second new chapel. Financial modelling and an analysis of non-financial benefits were undertaken for the three most viable options:
 - 1. A wake / café facility with office / retail accommodation for bereavement related services;
 - 2. Serviced offices:
 - 3. Boutique style visitor accommodation.
- **5.10** GOSS Finance has used the analysis from Pick Everard to assess the overall financial impact of options, taking account of how the additional investment costs might be funded. The return on investment, payback period and impact on the Medium Term Financial Strategy (MTFS) have been assessed. The results of this analysis are detailed in Appendix 4.
- **5.11** The main advantages of constructing a second new chapel along with the first chapel are:
 - Construction will not disrupt the ongoing service. Later construction of an additional chapel will
 likely lead to the first new chapel being out of action for months with a consequent impact on
 mourners and on the Council's income. As a result, later construction is not thought to be a
 likely scenario in practice.

- Construction now will be less costly. Later construction will entail additional start-up costs.
- Focussing services on one site will simplify the experience of mourners. There will be a single set of access routes to and from the crematorium, a single car park and chapels will be located close to each other. The likelihood of confusion, for example mourners going to the wrong chapel, will be much reduced.
- Focussing services on one site will lead to operational savings. Bereavement services will not need to staff both locations, nor will a vehicle be required to move coffins from the existing chapels to the new crematorium (a consequent saving has been estimated in the financial modelling). Maintenance costs for two buildings might not need to be met by Bereavement Services (assuming a new use is found for the existing buildings)
- The risk that the transfer of coffins from the existing chapels to the new crematorium leads to negative comments and services being moved to other crematoria would be eliminated.
- Increasing the quality of the construction helps to protect against loss of business to competitors and may help to deter new competitors, thus protecting the Council's revenue from the overall service.
- Delaying construction risks reputational damage, as it is perceived as missing an obvious opportunity to improve the service.
- Both existing chapels will be available for alternative uses from the outset, unfettered by the constraint of an operational chapel in the same building.
- Informal contact with funeral directors suggests that they are in favour of a two chapel scheme.
- **5.12** The main disadvantages of constructing a second new chapel along with the first chapel are:
 - There is no guarantee that two new chapels will generate any more custom and income than one new chapel and one existing chapel;
 - There is a risk that the lack of a traditional chapel option may lead to some services being moved to other crematoria;
 - Undertaking the construction of an additional chapel will put additional pressure on the Council's finances and resources.
- **5.13** The non-financial advantages of re-purposing the existing chapels depend on the uses to which chapels are put. The potential advantages are:
 - Some provision of support for economic growth through the encouragement of small businesses;
 - Improving the experience of mourners at the crematorium and cemetery, possibly thereby increasing the attraction of the crematorium for holding funeral services (e.g. due to the availability of an on-site wake facility);
 - Ensuring the listed buildings have a function and are not left to deteriorate.

The programme team's analysis against a number of non-financial criteria suggests that the option of a wake / café facility with adjacent office / retail accommodation for bereavement related services, is the most favourable. Inevitably, there are a number of risks and uncertainties associated with re-purposing, which are detailed in the Pick Everard report.

- **5.14** The conclusions of the financial analysis of constructing a second new chapel and potential repurposing of the existing chapels are:
 - The additional capital costs of constructing a second new chapel are approximately £1.0M
 (Willmottt Dixon estimate adjusted to include internal CBC costs) this cost would add to the
 current budget of £7.4M for the approved project based on a single chapel.
 - The estimated capital costs of re-purposing the existing chapels are £0.94M (Pick Everard estimate adjusted to include internal CBC costs). Pick Everard have commented that reduction of these costs may be possible if a 'light touch' refurbishment is used, but does not have confidence in such an approach without more detailed work. This can be revisited at a later date and a more detailed assessment of possible uses / disposal options will be considered. Given the options work that has been carried out, there is a high degree of confidence that a scheme can be achieved which will provide a better than cost neutral future for the existing chapels.
 - CBC financial modelling has taken place on 11 options with a variety of assumptions, with the
 preferred option recommended in this report attached at Appendix 4 and subsequent funding
 analysis based on the assumptions set out in Section 7.
 - None of the options for re-purposing the existing chapels has demonstrated a significant financial business case for the construction and operation of a second new chapel.
 - The most favourable financial option considered is the construction of a second new chapel, whilst not immediately re-purposing the existing chapels; with capital costs funded by the early fee increase, use of Cemetery Lodge capital receipt and borrowing; and factoring in reasonably projected extra deaths over 25 years. It has a payback period of 12 years, an internal rate of return (IRR) of 4.5% and a total return of £2.6M over 25 years. However, it has a cumulative negative impact on the MTFS of £283K over the first nine years (from 2019-20), Prior to the expected volume increase in accordance with population projections. This impact on the MTFS could be offset by the increase in fee charges of £26.50 per cremation, representing a permanent environmental fee. This funding is in addition to the funding from the capital receipt, PWLB loan and reserves, as detailed above.
 - The main financial risks are uncertainty over the precise borrowing rate; some limited
 uncertainty as to whether the projected increased mortality will materialise (assumptions are
 based on an assessment using national statistical data from OPCS); the risk of competition
 from other operators reducing our income; uncertainty over utility costs and business rates
 treatment for the new facilities.
- **5.15** None of the models constitute a favourable return if the options are considered in purely financial terms. However, the financial implications of the options need to be weighed against the non-financial considerations set out above.

6. Alternative options considered

- 6.1 The range of option considered for utilising the existing chapel buildings with a view to assisting the funding for the second chapel, is set out in the report by Pick Everard at Appendix 3, with further detailed financial assessment undertaken by our accountancy team, as set out at Appendix 4.
- 6.2 Alternative access road options are set out in the report and subsequent update from our consultants WSP, which form Appendix 2 to this report.

7. Assumptions in relation to recommended option

- 7.1 There are a number of key assumptions which generate associated risks in relation to the recommendation to build out a second chapel now.
- 7.2 The table below sets out the key assumptions, together with the risks which are further assessed within Appendix 1 against the Council's corporate risk score card. Cabinet is advised to have regard to the reasonableness of these assumptions in determining whether or not to accept the report recommendations.

[
Key assumptions	Sensitivity considerations	Key risks
That the base demand for cremations is assumed to be 1,900 per annum, but this figure is itself subject to annual fluctuations.	In the 2016 calendar year, there were 2,043 cremations (+7.5% on baseline assumption)	Business continuity Competition from new or improved service offers
In most recent years, cremations have exceeded 2,000, providing some resilience within the business case, despite the unreliability of the current cremators.	Additional cremations have been assessed to generate an 80% margin.	Technological alternatives to cremation
That there will be a 28% increase in cremation activity in the next 20 years, linked to population growth within the Cheltenham catchment, based on OPCS death rate data and JCS growth projections for the catchment.	If the JCS growth attracts a greater proportion of younger people to the area, this may moderate the expected additional demand for cremations.	Financial - cremation demand does not grow at the anticipated rate.
Capital borrowing costs have been assessed at the PWLB loan rate, currently fixed at 2.4% from date of drawdown. This has not been applied to the other sources of funding to be applied to the project – i.e. there is no internal rate of return on capital receipts or revenue funding from fee income.	The PWLB loan rate could rise before the project is completed.	Financial – an increase in the PWLB rate prior to completion of the new facility.
Demand will not be affected by the transition from traditional to new modern chapels.	Options within the Cheltenham catchment are currently limited, but we are aware of one new facility being proposed by a private operator. This could potentially reduce demand within our catchment by up to 150 cremations per annum (7.9%).	Financial – potential for reduction in service demand and associated fee income.
The costs of the new two chapel crematorium will be managed within the estimated budget.	The project is being managed with a reasonable level of contingency.	Financial - as with any major building project, costs will need to be actively managed, but may be subject to pressures outside of the

		control of the programme e.g. materials inflation.
No allowance has been made for an increase in custom as a result of the new facilities offering a higher standard to customers.	Improvements to parking and chapel capacity may result in a marginal demand increase.	This may help to mitigate other financial risks.

8. Consultation and feedback

- 8.1 A discussion report was taken to Overview and Scrutiny on 16th January 2017, which focussed upon programme progress and timeline, major risks (including access roads and the second new chapel business case) and contingency plans in the event that the current cremators fail.
- 8.2 A joint consultation event was held on 23rd January 2017, for the cross-party Cemetery and Crematorium Cabinet Member Working Group and local Funeral Directors. At that meeting, the Council's architects and lead contractors presented the developing design and an update was given on both access roads and the second chapel. Useful feedback was given on the routing of vehicles in the immediate vicinity of the new buildings and this has led to adjustments in the designs. There was quite general support for the building of a second new chapel although it was noted that some members of the public do have an attachment to the Victorian chapels.
- 8.3 Local ward members continue to be kept in touch with the programme, particularly on those aspects such as access roads which most affect people in the locality, with dedicated briefings in October 2016 and February 2017. Members generally are informed of progress and issues through the Member Briefing.
- 8.4 A public consultation will take place in the week commencing 27th February. The main event will be a drop-in session at the Municipal Offices from 2.30pm to 7.30pm on 1st March at which members of the public and key stakeholders will be able to view the designs and discuss them with the architects and lead contractors. Designs may also be viewed on www.cheltenham.gov.uk/Cem-and-Crem until 10a.m. on 2nd March and in the foyer of the Municipal Offices on 27th and 28th February All those viewing the designs will be encouraged to feedback on a questionnaire which will also ask for views on access roads and on the construction of a second new chapel.
- 8.5 It is intended that the results of the consultation will be reported to Cabinet on 7th March.

9. Performance management – monitoring and review

- **9.1** The programme is managed by a Programme Board led by the Director of Environment and which includes the Cabinet Member for Clean and Green Environment.
- **9.2** The programme uses the 'Managing Successful Programmes' methodology.
- **9.3** The programme reports every four weeks to the Council's Senior Leadership Team and as required, to the Council's Executive Board.

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Appendices	Risk Assessment
	2. WSP reports on access routes
	a. original study
	b. update covering routes B and C
	c. Gardens of Remembrance route
	3. Two Chapels Options Study – Pick Everard
	4. Financial Model for second chapel
	 Outline planning application for possible access roads – public representations received
Background information	1.

Risk Assessment Appendix 1

The ri	sk				l risk scor x likeliho		Managing risk				
Risk ref.	Risk description	Risk Owner	Date raised	Impact 1-5	Likeli- hood 1-6	Score	Control	Action	Deadline	Responsible officer	Transferred to risk register
1	If Cabinet/Council fail to make timely decisions in relation to the project, there is an increased risk that the programme will not be delivered on time or within budget.	Director Environment	04/11/2016	4	4	16	Reduce	Approve report recommendations.	March 2017	Director Environment	
2	If sufficient maintenance funds are not made available for the upkeep of the existing chapels whilst they are not being used, there is a	Director Environment	04/11/2016	3	4	12	Reduce	Consider the implications for the existing Grade II listed chapel building in the context of temporary mothballing.	March 2017	Programme Manager	- 290
	risk to the future of the Grade II listed buildings, for which the Council has a statutory responsibility.							Ensure that the need for maintenance of the existing chapels is considered in relation to the business case.	On- going	Head of Property Services	
3	If the Cabinet agrees to support the construction of 2 nd new chapel at the same time as delivering the	Director Environment	04/11/2016	3	4	12	Reduce	The timeline for the project has been re-evaluated to show the implications of constructing a 2 nd	Mar 2017	Programme Manager	

	the same time as the first, there										
	second chapel at										
	not support the construction of a	Environment						recommendations.	2017	Environment	
4			04/11/2016	3	3	9	Reduce				
4	is a risk that the delivery timeline could increase with a consequent delay to the opening of the new facility. This in turn could impact on; 1. service delivery because of the unreliability of the current facility, 2. the reputation of the Council to manage to an agreed plan, and 3. fee income and programm e costs. If Cabinet does not support the	Director Environment	04/11/2016	3	3	9	Reduce	the overall programme. As with any building programme, there are financial and project timeline risks that will need to be managed and these will be proportionately greater in relation to a larger project. Approve report recommendations.	Mar 2017	Director Environment	Page 88
	original new crematorium programme there							chapel and this can be achieved with minimal impact on			

	may be reputational damage to the authority arising from any future forward planning (linked to population growth										
	etc.) for maintaining a sustainable service. Operational limitations may be significant and a later construction would have a detrimental impact on customer service										Fac.
5	and income. If the Council	Director	04/11/2016	3	2	6	Reduce	Include acone for	Apr	Director	rage 89
	does not include the design of a 2 nd Chapel within the Planning Application, it will lose the opportunity to provide a closely linked facility that is capable of expanding to meet future service needs and expectations.	Environment						Include scope for the provision of a second chapel within the Planning Application for the new facility.	Apr 2017	Environment	
7	If the Council	Director	04/11/2016	4	3	12	Reduce	Follow the agreed	Apr	Programme	

	does not agree a Delivery (Construction) Agreement with Willmottt Dixon before 7 th May 2017 it will need to re-procure construction services with a consequent impact on costs, timescales and customer service	Environment						pre-construction plan with adequate contingency for reaching agreement	2017	Manager	
Θ	If projected future population growth and the resulting increase in demand for cremations does not arise, or competitor facilities are built, there is a risk that the income from the crematorium may fall, exposing the authority to increased financial risk.	Director Environment	01/02/2017	3	3	9	Accept	Careful consideration has been given to the likelihood of increased demand for the service over time and estimates are considered reasonable. The future-proofing of our crematorium facility is one of the best means of countering the risk of competitor facilities, which is a risk borne by the current service.	N/A	Bereavement Services Manager	Page 90
9	If the new chapels do not provide a quality experience	Director Environment	01/02/2017	3	3	9	Reduce	It is important that adequate investment is put	Mar 2017	Director Environment	

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	for mourners, there is a risk that some bereaved families may choose to have funeral services elsewhere							into the new facility, such that the design and materials used in the new facility, including space standards and technological improvements can be funded.			
10	If the 2nd chapel project is approved utilising the sources of funding identified, this will have a negative impact	Director Environment	01/02/2017	3	3	9	Accept	The Cabinet will need to identify additional savings or income to bridge the increased MTFS funding gap.	N/A	Section 151 officer	
	on the Council's MTFS position and increase the Council's exposure to external borrowing							The income levels for the facility will need to be closely monitored to ensure delivery of increase targets which support the scheme and part finance borrowing.		Bereavement Services Manager	rage 9

Explanatory notes

Impact – an assessment of the impact if the risk occurs on a scale of 1-5 (1 being least impact and 5 being major or critical)

Likelihood – how likely is it that the risk will occur on a scale of 1-6

(1 being almost impossible, 2 is very low, 3 is low, 4 significant, 5 high and 6 a very high probability)

Control - Either: Reduce / Accept / Transfer to 3rd party / Close

REPORT N^o 70024730 V4

CHELTENHAM BOROUGH COUNCIL, PROPOSED CREMATORIUM

ACCESS ROAD STUDY

OCTOBER 2016



CHELTENHAM BOROUGH COUNCIL, PROPOSED CREMATORIUM

ACCESS ROAD STUDY

Cheltenham Borough Council

Project no: 70024730 Date: October 2016

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3	PROPOSED ROUTE OPTIONS	11
4	ROUTE OPTIONS – OPPORTUNITIES AND CONSTRAINTS	18
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Α	Р	Р	Ε	N	DΙ	X A	4	CBC'S ACCESS ROAD BRIEF
Α	Р	Р	Ε	Ν	DI	X E	3	STUDY AREA CONSTRAINTS
Α	Р	Р	Ε	Ν	DI	X C)	ATC SURVEY DATA AND SERVICE TIME INFORMATION
Α	Р	Р	Ε	Ν	DI	X C)	PREVIOUS ROUTE OPTION STUDIES
Α	Р	Р	Ε	Ν	DI	X E	Ē	PETER MITCHELL ASSOCIATES REPORT
Α	Р	Р	Ε	Ν	DΙ	X F	:	TREE SPECIALIST REPORT
Α	Р	Р	Ε	Ν	DΙ	X C	3	ADDITIONAL ECOLOGICAL DETAILS

ROUTE OPTION PLANS

WSP | PARSONS BRINCKERHOFF DRAWING 4730-SK-01 REV A - EXISTING ACCESS ROUTE

WSP | PARSONS BRINCKERHOFF DRAWING 4730-SK-02 REV A - PROPOSED ACCESS ROUTE

WSP | PARSONS BRINCKERHOFF DRAWING 4730-SK-03 REV B - PROPOSED ROUTE OPTIONS

WSP | PARSONS BRINCKERHOFF DRAWING 4730-SK-04 REV A – PROPOSED ROUTE OPTION A

WSP | PARSONS BRINCKERHOFF DRAWING 4730-SK-05 REV B - PROPOSED ROUTE OPTION B

WSP | PARSONS BRINCKERHOFF DRAWING 4730-SK-06 REV A - PROPOSED ROUTE OPTION C

WSP | PARSONS BRINCKERHOFF DRAWING 4730-SK-07 REV B - PROPOSED ROUTE OPTION D

WSP | PARSONS BRINCKERHOFF DRAWING 4730-SK-08 REV A - PROPOSED ROUTE OPTION B - ACCESS OPTIONS 1 AND 2

1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 WSP | Parsons Brinckerhoff has been commissioned by Cheltenham Borough Council (CBC) to undertake an independent options appraisal and impact assessment study to identify potential vehicular access and egress routes (for both construction and operational traffic) to and from a proposed new Crematorium, in Cheltenham.
- 1.1.2 The proposed new Crematorium will replace the existing Crematorium and North Chapel buildings located within the existing Cheltenham Cemetery and Crematorium.
- 1.1.3 This study has been commissioned on the basis that the existing internal road network which currently serves Cheltenham Cemetery and Crematorium (herein referred to as 'the existing Cemetery and Crematorium') is deemed insufficient to serve the proposed new Crematorium.
- 1.1.4 This report considers the potential transport / highways, flood risk, ecological, and environmental opportunities and constraints presented by various proposed vehicular route options to and from the proposed new Crematorium.
- 1.1.5 This report presents the findings of a detailed desktop study supplemented by a site visit, which took place on Friday 16th September, 2016.
- 1.1.6 This report does not seek to highlight the preferred vehicular route option, but instead provides a review of opportunities and constraints presented by each vehicular route option, which in turn will assist CBC in making their decision of the preferred access strategy for the proposed new Crematorium.
- 1.1.7 For reference, CBC is the relevant planning authority for which the site is located in, and Gloucestershire County Council (GCC) is the relevant highway authority. It is understood that the existing Cemetery and Crematorium is operated by CBC. It is also worth noting that the proposed development site falls under the planning jurisdiction of Tewkesbury Borough Council (TBC).
- 1.1.8 This report has been prepared in line with CBC's 'Access Road Brief Initial Draft' document, which is included at **Appendix A**.
- 1.1.9 In support of this study, WSP | Parsons Brinckerhoff has obtained additional specialist advice from:
 - > Peter Mitchell Associates Independent Grave Specialist; and
 - → Chris Chavasse Senior Tree Officer (CBC).
- 1.1.10 WSP | Parsons Brinckerhoff has also sought advice from GCC highways department; however a response has not been received in sufficient time to inform this report.

1.2 PROPOSED DEVELOPMENT SITE AND STUDY AREA

PROPOSED DEVELOPMENT SITE

1.2.1 The site for the proposed new Crematorium comprises of undeveloped fields (two in total) which are located to the immediate east of the existing Cemetery and Crematorium. The fields border the existing Cemetery and Crematorium to the west, and are currently bounded by existing trees and hedgerows.

1.2.2 There is currently no formal vehicular access arrangement to the proposed development site, other than local field access.

STUDY AREA

- 1.2.3 The 'study area' comprises of:
 - → The existing Cemetery and Crematorium, which is currently accessible directly from Bouncers Lane via a gated entrance. Internally, there are a number of existing vehicular routes to access the various areas of the existing Cemetery and Crematorium, including the North and South Chapels and Crematorium buildings (located within the western half of the existing Cemetery and Crematorium) and the Garden of Remembrance (located within the southeast section of the existing Cemetery and Crematorium);
 - → Existing agricultural land, which is located to the south and east of the proposed development site;
 - Oakley Playing Fields (comprising up to three pitches and associated changing facilities and parking for approximately 20 cars), which are located to the south of the existing Cemetery and Crematorium. Oakley Playing Fields are accessible directly from Imjin Road; and
 - → An existing residential estate, which is located to the southwest of the existing Cemetery and Crematorium, and is accessible directly from the B4075 Priors Road and/or Bouncers Lane.

1.3 DEVELOPMENT PROPOSALS

- 1.3.1 CBC is intending to build a new Crematorium to the immediate east of the existing Cemetery and Crematorium At present, it is understood that CBC are considering two potential options, comprising of either one or two Chapels, with associated infrastructure and parking.
- 1.3.2 In conjunction with the development proposals, it is understood that CBC intend to close the existing Crematorium and North Chapel and transfer all activity to the proposed new Crematorium. However, it is understood that the South Chapel will remain open to the general public.
- 1.3.3 CBC has indicated that vehicular access to the proposed new Crematorium is intended via the internal road network which currently serves the existing Cemetery and Crematorium.
- 1.3.4 Owing to the constraints of the existing internal road network, CBC is currently investigating potential options to provide a new vehicular route for vehicles to exit the proposed new Crematorium (which would be used specifically during services). In addition, CBC has indicated that there is a requirement to provide a temporary route for construction traffic to access and egress the proposed new Crematorium (during the construction phase of the development).

1.4 REPORT STRUCTURE

- 1.4.1 Following this introduction, the remainder of the report is structured as follows:
 - → Chapter 2: Site Overview;
 - → Chapter 3: Proposed Route Options;
 - → Chapter 4: Route Options Opportunities and Constraints;
 - Chapter 5: Further Considerations; and
 - → Chapter 6: Summary and Conclusion.

2 SITE OVERVIEW

2.1 INTRODUCTION

- 2.1.1 This Chapter of the report provides an overview of the proposed development site and wider study area, including the existing Cemetery and Crematorium, agricultural land, Oakley Playing Fields, and existing residential estate.
- 2.1.2 This Chapter also provides an overview of the local highway network, flood risk, ecology and conservation.

2.2 CHELTENHAM CEMETERY AND CREMATORIUM

- 2.2.1 The existing Cemetery and Crematorium is located approximately 2.5km to the east of Cheltenham Town Centre, within a built up area consisting of primarily residential uses (albeit the undeveloped agricultural land to the east). It is understood that the older western section of the existing Cemetery and Crematorium, which comprises the North and South Chapels and Crematorium buildings, is Victorian era, whilst the newer eastern section is effectively a modern extension.
- The existing Cemetery and Crematorium is currently accessible directly from Bouncers Lane via a gated entrance and internal two-way access road (which varies in width between 5.0m and 5.5m). Internally, the two-way access road runs for approximately 150m before it splits to provide designated one-way access and egress routes to the various areas of the existing Cemetery and Crematorium, including the North and South Chapels and Crematorium (located within the older western half of the existing Cemetery and Crematorium) and the Garden of Remembrance (located within the southeast section of the existing Cemetery and Crematorium). There is also an existing car park which is located approximately 100m to the southeast of the South Chapel.
- 2.2.3 A designated pedestrian entrance / footway is provided to the existing Cemetery and Crematorium from Bouncers Lane.
- 2.2.4 For reference, the existing vehicular access and egress routes within the existing Cemetery and Crematorium are illustrated on WSP | Parsons Brinckerhoff drawing **SK-01**.
- 2.2.5 In terms of its operation, it is understood that the existing Cemetery and Crematorium is open to the general public seven days a week (including Good Friday, Christmas Day and bank holidays), between the following hours:
 - → 1st April to 30th September 9am to 7.30pm; and
 - → 1st October to 31st March 9am to 4.30pm.
- Over the course of a typical year, it is understood that up to 2000 cremations and 200 burials are held at the existing Cemetery and Crematorium (equating to an average of 5-6 cremations and 1 burial per day). It is understood that all services currently use the access from Bouncers Lane and internal road network to access the North or South Chapel, Crematorium, and associated car park.

2.2.7 The existing Cemetery and Crematorium has been formally landscaped with mature trees, shrubs, flower beds, paths and grassland areas, as well as ornamental ponds and water-courses. A large area of the existing Cemetery and Crematorium on the southern boundary has been given over to deciduous woodland. For a full report on the habitats present within the survey area please refer to the Extended Phase 1 Habitat Survey report prepared by Lepus Consulting.

2.3 AGRICULTURAL LAND

- 2.3.1 The area to the south of the proposed development site comprises of namely agricultural land (fields segregated by trees and hedgerow).
- 2.3.2 Currently there are no formal vehicular arrangements to the agricultural land, other than local field access. Pedestrians can currently access the agricultural land via Oakley Playing Fields to the west or via the residential areas to the north.
- 2.3.3 The agricultural fields have become scrubbed over from lack of management in recent years, therefore the dominant species are rank grasses and tall ruderal species with scattered mature and semi-mature trees and shrubs scattered throughout.
- 2.3.4 To the east of the proposed development site, part of the agricultural land is designated as Cotswolds Area of Outstanding Natural Beauty (AONB) (see **Figure 5** provided in **Appendix B** of this report).
- 2.3.5 A number of Public Footpaths run through the agricultural land to the east of the existing Cemetery and Crematorium (see **Figure 6** provided in **Appendix B** of this report).
- 2.3.6 It is understood that the majority of the agricultural land falls within CBC's ownership.

2.4 OAKLEY PLAYING FIELDS

- 2.4.1 Oakley Playing Fields are located to the immediate south of the existing Cemetery and Crematorium. The playing fields are designated recreational ground, and comprise of up to three football pitches with associated changing facilities and parking (for approximately 20 cars). It is understood that the existing football fields fall under FA regulation. In addition to the football fields, there is also an existing children's playground located at the southeast boundary of the playing fields.
- Vehicular access to the playing fields is currently provided from Imjin Road, which is a two-way road which serves the residential areas to the west. There is also a designated paved footpath provided along the southern boundary of the playing fields which links Imjin Road and the children's playground,
- 2.4.3 On reviewing the topographical survey that is available (and observations from the site visit), there is a notable difference in height between the western and eastern extents of the football fields (approximately 5.0m between the car park and the football field, and a further 4.0m between the football fields and top of the bank at the eastern extent of the fields), and between the southern and northern extents of the fields (approximately 2-3m between the football fields and the football fields itself, and a further 1-2m between the football fields and the southern boundary of the existing Cemetery and Crematorium).
- 2.4.4 The playing fields are predominantly amenity grassland maintained as close cut turf with areas of scrub and semi-mature trees on the boundaries. During the site visit, a stream was identified running to the south of the playing fields and hedgerows were observed to the east. Residential housing and associated gardens are located to the west and the north is bordered by areas of woodland marking the border with the existing Cemetery and Crematorium.

2.4.5 It is understood that Oakley Playing Fields fall within CBC's ownership.

2.5 EXISTING RESIDENTIAL ESTATE

- 2.5.1 To the southwest of the proposed development site, south of the existing Cemetery and Crematorium, and west of Oakley Playing Fields, there are currently a number of residential streets which take their access namely from the B4075 Priors Road (via Ladysmith Road and Imjin Road).
- 2.5.2 There are currently no restrictions on parking within the residential estate.

2.6 LOCAL HIGHWAY NETWORK

DESCRIPTION OF HIGHWAY NETWORK

- 2.6.1 There is currently no formal vehicular access arrangement to the proposed development site, other than local field access.
- 2.6.2 The existing Cemetery and Crematorium is accessible directly from Bouncers Lane via a priority junction. Internal, the existing Cemetery and Crematorium is served by a mix of one-way and two-way routes.
- 2.6.3 Bouncers Lane links to the B4075 Priors Road to the west, via a priority junction. To the immediate south of the existing access from Bouncers Lane, Ladysmith Road provides access to an existing residential estate. In addition, Ladysmith Road also provides access to an existing Farm Track which skirts the southern boundary of the existing Cemetery and Crematorium (see WSP | Parsons Brinckerhoff drawing **SK-01**).
- 2.6.4 Further south, Imjin Road is accessible directly from the B4075 Priors Road via a priority junction. Imjin Road provides access the residential estate located to the south of the existing Cemetery and Crematorium. Imjin Road also provides access to Oakley Playing Fields, where there is an existing car park (which includes approximately 20 parking spaces).
- 2.6.5 Further afield, the B4075 Priors Road links to Prestbury Road to the north, via a priority junction, and to Harp Hill / Hewlett Road / Hales Road via a double mini-roundabout. It is also worth noting that to the south of the Imjin Road, the B4075 Priors Road links to Redmarley Road which provides access to Sainsbury's Supermarket, and also Oakley Farm housing development.

TRAFFIC FLOWS

- 2.6.6 In order to understand the existing traffic volumes (and vehicular speeds) using the existing Cemetery and Crematorium over the course of a given weekday and weekend, an Automatic Traffic Count (ATC) survey was undertaken along the existing Cemetery and Crematorium access road (inside the initial gated entrance point from Bouncers Lane).
- 2.6.7 The ATC survey was undertaken between Saturday 6th August (00:00) and Friday 12th August (23:59). For reference, a copy of the ATC survey data is included in **Appendix C**.
- 2.6.8 Details of the existing traffic volumes entering and exiting the existing Cemetery and Crematorium, as recorded by the ATC survey, are summarised in **Table 2.1**.

Table 2.1 Average Daily Flows (derived from ATC Survey)

	Inbound	Outbound	Two-Way
Weekday	468	470	938
Weekend	303	304	607

- 2.6.9 Table 2.1 shows that on a typical weekday there was an average daily flow of 468 vehicles entering and 470 vehicles exiting the existing Cemetery and Crematorium, respectively. On a typical Saturday or Sunday there was an average of 303 vehicles entering and 304 vehicles exiting the existing Cemetery and Crematorium, respectively.
- 2.6.10 In order to ascertain the number of vehicles that utilise the existing Cemetery and Crematorium during a typical weekday and weekend period, CBC has provided details (times and durations) of all services that were held between Monday 8th August and Friday 12th August 2016 (which coincides with the dates of the ATC survey). CBC has confirmed that services are currently held between Monday and Friday only (generally between the hours of 10:00 and 16:00), with no services being held on weekends. It is also understood that the duration of services is usually in the region of 45 minutes, with vehicles arriving / departing approximately 30 minutes either side of a service. On average there were 9 services held per day between Monday 8th August and Friday 12th August 2016. For reference, a copy of the service information, which includes the start and end times, is included in Appendix C.
- 2.6.11 Based on the information provided by CBC, the ATC survey data was further interrogated to understand the traffic flows associated with a service taking place, and when there is no service taking place. For ease of reference, average and peak hour weekday and weekend traffic flows are highlighted separated. The results of which are shown in **Table 2.2**.

Table 2.2 **Average and Peak Hour Flows (Non-Service and Service)**

WEEKDAY								
Period	Inbound	Outbound	Two - Way					
Average Hour (across 5 days)								
Non-service (average hour)	18	20	38					
Service (average hour)	59	62	121					
	Peak Hour (day sp	ecific)						
Non-service (peak hour) 09:00 - 10:00	97	22	119					
Service (peak hour) 10:00-11:00 – Highest Entry Flow*	113	36	149					
Service (peak hour) 11:00-12:00 – Highest Exit Flow**	49	159	208					
Service (peak hour) 11:00 – 12:00 – Highest Two-Way Flow**	110 103		213					
	WEEKEND							
Period	Inbound	outbound	Two - Way					
Average Hour (across 2 days)								
Non-service (average hour)	26	26	52					
Peak Hour (day specific)								
Non- Service (peak hour) 11:00 – 12:00	54	43	104					

Note: Average hour taken as all service hours / all non-service hours

- 2.6.12 It should be noted from the above, that there is potential that some of the traffic movements may not be associated with a specific service, and could just comprise of people visiting the existing Cemetery and Crematorium separately.
- 2.6.13 Table 2.2 shows that on a typical weekday, during service periods, on average 121 (two-way) vehicles were recorded using the existing Cemetery and Crematorium access.

 ^{*} Highest entry flow recorded on Friday 12th August 2016 between 10:00 to 11:00
 ** Highest exit flow recorded on Friday 12th August between 11:00 to 12:00

^{***} Highest two-way flow recorded on Tuesday 9th August 2016 between 11:00 to 12:00

- 2.6.14 During weekday service periods, the highest recorded entry flow was 113 vehicles (which occurred between 10:00 and 11:00) and the highest recorded exit flow was 159 vehicles (which occurred between 11:00 and 12:00). The highest recorded two-way flows were 213 vehicles (which occurred between 11:00 to 12:00).
- 2.6.15 During weekday non-service periods, the highest recorded two-way flow was 119 vehicles (which occurred between 09:00 to 10:00 on Friday 12th August 2016).
- 2.6.16 On a typical weekend where there are no services held, on average 52 vehicles (two-way) were recorded using the existing Cemetery and Crematorium access. The highest recorded two-way flow on a typical weekend was 104 vehicles (11:00 to 12:00 on Sunday 7th August 2016).
- 2.6.17 In addition to recording the volume of traffic, the ATC survey also recorded average vehicle speeds along the existing Cemetery and Crematorium access road. For reference, these are summarised in **Table 2.3**.

Table 2.3 Seven Day Average & 85th Percentile Speeds (mph)

CEMETERY ACCESS ROAD							
INBOU	JND	OUTBOUND					
Average Speed	85 TH percentile speed	Average Speed	85 [™] percentile speed				
16	21	17	22				

HIGHWAY SAFETY

2.6.18 In order to understand the existing highway safety conditions on the local highway network, Personal Injury Accident (PIA) data was obtained from CRASHMAP for a five year period between 2011 and 2015. A summary of the total number of recorded accidents within the study area for a five year period is provided in Table 2.4. The area investigated includes the access road to the existing Cemetery and Crematorium, Bouncers Lane, Priors Road, and Imjin Road.

Table 2.4 Summary of Recorded Accidents

	SLIGHT	Serious	FATAL
Number of Accidents	7	0	0

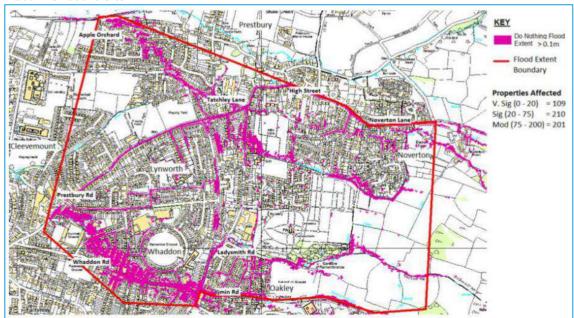
- 2.6.19 In total there were seven slight incidents recorded over the past five year period, of which:
 - > Two incidents were recorded on Bouncers Lane; and
 - → Five incidents were recorded on Priors Road.
- 2.6.20 No incidents were recorded along the access road to the existing Cemetery and Crematorium, not along Imjin Road.

2.7 FLOOD RISK

EXISTING FLOOD RISK

- 2.7.1 The online Environment Agency Flood Map¹ shows that the entirety of the study area lies within Flood Zone 1, which means that there is less than a 0.1 per cent chance of flooding from rivers in any given year. However, this designation is principally due to the lack of hydraulic modelling that has been undertaken in the area, therefore placing the site in Flood Zone 1 by default.
- 2.7.2 The Gardens of Remembrance located in the southeast of the existing Cemetery and Crematorium is bound to the south by an Environment Agency Main River a tributary of the Wyman's Brook. The headwaters of this watercourse flow from the north and east as minor drains. The other Main River the main channel of the Wyman's Brook is located to the south of Oakley Playing Fields.
- A more accurate assessment of risk has been undertaken by CBC as part of the Whaddon Flood Alleviation Scheme (FAS) Feasibility Study (ch2m, 2016). This included using the Surface Water Management Plan hydraulic model to understand the likely flood extents close to the site. The resultant 1 in 200 year flood map, which can be said to be assessing the study area for a combination of surface water and fluvial sources is shown in **Figure 2.1**.





2.7.4 The resultant flood map shows the majority of the study area to be outside the fluvial/surface water floodplain, thus presenting a very low risk. No significant areas of floodplain are predicted, with flooding mostly constrained to the watercourse channel and immediate surrounds.

See: http://maps.environment-agency.gov.uk/wiyby/wiybyController?x=394500.0&y=222500.0&topic=floodmap&ep=map&scale=9&location=Cheltenham, Gloucestershire&lang=_e&layerGroups=default&distance=&textonly=off#x=396943&y=223157&lg=1,2,10,&scale=11

WHADDON FLOOD ALLEVIATION SCHEME

2.7.5 The Whaddon FAS Consultation Note (ch2m, 2016) states that:

"Whaddon, Lynworth and Prestbury experienced severe flooding during the June and July 2007 flooding events. The peak event was identified as 1 in 125-year annual probability event. During the July 2007 event over 300 properties are known to have experienced internal or external flooding...

Flooding was principally caused by excess surface runoff from the escarpment to the east exceeding the capacity of the culverted watercourses, which resulted in surface runoff entering the urban environment, following the natural (or man-made) topography, and ponding in low spots within the catchment (e.g. immediately to the north of Cheltenham Town Football Club). Anecdotal evidence gained from the public consultation confirmed that the flood water was extremely fast as it flowed down roads and into properties."

- 2.7.6 To try and alleviate further flooding the Whaddon FAS scheme is being taken forward as a preferred option for construction. This involves the construction of two flood storage areas at Noverton Farm (immediately east of the proposed Crematorium extension) and Priors Farm (to the south of the Gardens of Remembrance). Ensuring that the future construction of these flood storage areas are not compromised by the Access Route Options, is considered to be a key constraint to the proposed development. The timescales for delivery of the proposed Whaddon FAS scheme are unknown at this stage.
- 2.7.7 Modelling of the 1 in 200 year event with the flood storage areas in place demonstrates no increases in flood risk to the site; as illustrated **on Figure 2.2**.

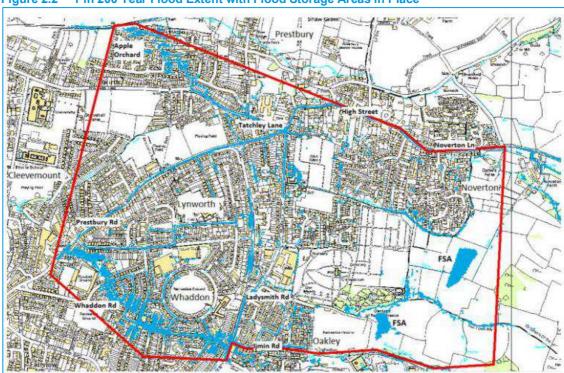


Figure 2.2 1 in 200 Year Flood Extent with Flood Storage Areas in Place

2.8 ECOLOGY AND CONSERVATION

OVERVIEW

2.8.1 The ecological site overview is included in **Appendix B** of this report.

2.9 STUDY AREA CONSTRAINTS

2.9.1 Consideration has been given to the constraints presented by the overall study area. For reference, these are detailed in **Appendix B**.

3 PROPOSED ROUTE OPTIONS

3.1 INTRODUCTION

3.1.1 This Chapter provides details of the various vehicular route options which are currently being considered as part of this study, to serve the proposed new Crematorium.

3.2 PROPOSED NEW CREMATORIUM

- 3.2.1 CBC is intending to build new Crematorium to the immediate east of the existing Cemetery and Crematorium. At present, it is understood that CBC are considering two potential options, comprising of either one or two Chapels, with associated infrastructure and parking.
- 3.2.2 In conjunction with the development proposals, it is understood that CBC intend to close the existing Crematorium and North Chapel and relocate activity to the proposed new Crematorium. However, it is understood that the South Chapel will remain open to the general public

3.3 PREVIOUS VEHICULAR ROUTE OPTION STUDIES

- 3.3.1 It is understood that both Robert Potter and Partners architects and Willmott Dixon has previously undertaken studies which have considered potential route options to and from the proposed new Crematorium.
- 3.3.2 Robert Potter and Partners considered the potential for providing a new 2.5m wide route internally within the existing Cemetery and Crematorium (which roughly follows the alignment of WSP | Parsons Brinckerhoff's Route Option A see Section 3.5). The route alignment is shown on Robert Potter and Partners plan '6333-SK02, Proposed Link Road', which is included in **Appendix D**.
- 3.3.3 Willmott Dixon has previously produced a Draft Stage 2 Feasibility Report for the proposed new Crematorium (Ref: CC/S2/JM/180716) in which they have undertaken a high-level access/egress appraisal of two potential Route Options:
 - → Option 1 the provision of a permanent egress route through the existing Cemetery and Crematorium; and
 - → Option 2 the provision of a segregated permeant egress route.
- 3.3.4 Willmott Dixon's report identified high level opportunities and constraints presented by each option. For reference, a copy of the relevant section of Willmott Dixon's Draft Stage 2 Feasibility Report is provided in **Appendix D**.

3.4 PROPOSED VEHICULAR ACCESS ROUTE

- 3.4.1 CBC has indicated that vehicular access to the proposed new Crematorium would be via the internal road network which currently serves the existing Cemetery and Crematorium.
- 3.4.2 More specifically, on entry to the site vehicles would follow the existing-one way route, which runs to the north of the existing Chapels and Crematorium. From this point vehicles would join the section of one-way road, which links the older western and newer eastern sections of the existing Cemetery and Crematorium, before travelling north then east (within the new eastern section of the existing Cemetery and Crematorium where the roads are wide enough to accommodate two-way traffic movements) to the proposed new Crematorium.

3.4.3 For reference, the proposed access route is shown on WSP | Parsons Brinckerhoff drawing number **SK-02**.

3.5 PROPOSED VEHICULAR EGRESS ROUTES (OPTIONS A, B, C, AND D)

- 3.5.1 A total of four possible vehicular routes have been identified as part of this study, a detailed description of which is outlined in the following sections. In reviewing the four routes, consideration has been given to the potential for the routes to accommodate both construction traffic (temporarily) and operational traffic (permanently).
- 3.5.2 It should be worth noting that, at this stage Route Option A has been ruled out for accommodating any construction traffic, on the basis that CBC does not want any construction vehicles travelling through the main area of the existing Cemetery and Crematorium.
- 3.5.3 If Route Option A was pursued, then a separate haulage routes would need to be provided as outlined for Routes Option B, C or D below.
- 3.5.4 Routes A, B, C or D would be required to serve the proposed new Crematorium (as an egress route only).
- 3.5.5 For reference, the four egress routes which are currently being considered as part of this study are illustrated on WSP | Parsons Brinckerhoff drawing **SK-03**.

ROUTE OPTION A

- 3.5.6 Route Option A is intended as an egress route only to the proposed new Crematorium, and would only accommodate operational traffic associated with the proposed new Crematorium. It is not proposed to use Route Option A for construction purposes.
- 3.5.7 Route Option A includes the use of part of the existing internal access roads between the main entrance to the existing Cemetery and Crematorium and the car park located to the immediately west of the Garden of Remembrance. From this point it is proposed to provide a new 3m wide road which would skirt the southern boundary of the existing Cemetery and Crematorium (to the immediate north of the Garden of Remembrance), linking the existing car park and the proposed new Crematorium.
- 3.5.8 It is proposed to use the roads which serve the existing Cemetery and Crematorium, it is not proposed to alter the existing widths or alignments of the existing roads. However, there may be a requirement to undertake some minor carriageway repairs / resurfacing, the details of which would be subject to a separate study.
- 3.5.9 It is not proposed to provide any footways along the new section of road. Instead, it is envisaged that pedestrians would use the routes provided within the existing Cemetery and Crematorium to access and egress the proposed new Crematorium.
- 3.5.10 It is understood from CBC that Route Option A would only be used to allow vehicles to exit the proposed new Crematorium following a service. During all other times, the route would not be available for general use (albeit the existing two-way section of road between the two gated entrances which would remain in use to serve the existing Cemetery and Crematorium).
- 3.5.11 For reference, the proposed access route alignment is shown on WSP | Parsons Brinckerhoff drawing number **SK-04**.

- 3.5.12 Route Option A has a total length of approximately 725m (between the existing gated entrance to the existing Cemetery and Crematorium (from Bouncers Lane) and the proposed new Crematorium); of which newly constructed carriageway would be 300m. The elevation of the road increases from 83.615m at the western end to 93.233m at the eastern end and will climb at an even gradient of approximately 3.3% (1 in 30).
- 3.5.13 Further to the site visit it is evident that part of the land required to accommodate Route Option A is heavily populated with gravestones. To help understand the potential impacts on the existing graves and the feasibility of delivering Route Option A, Peter Mitchell Associates has been commissioned to undertake a separate study. The findings of which are summarised in Chapter 4 of this report, and are included in **Appendix E**.
- 3.5.14 In addition to the above, it was also noted during the site visit that there are a number of well-established trees which could be impacted by the proposed route alignment. To help understand the potential impacts on the existing trees, WSP | Parsons Brinckerhoff has discussed the proposed route alignment with Chris Chavasse (Senior Tree Officer) at CBC. For reference, Chris's comments are summarised in Chapter 4 of this report, with a full copy of his comments provided at **Appendix F**.

ROUTE OPTION B

- 3.5.15 Route Option B has been considered for use by both construction and operational traffic.
- 3.5.16 Route Option B includes the use of part of the existing Cemetery and Crematorium access road, between the two gated entrance points, with the construction of a new 3m wide access road which would link to the existing access roads (in the vicinity of the internal gated entrance point) skirting the southern boundary of the existing Cemetery and Crematorium.
- 3.5.17 At present it is envisaged that the proposed new section of road would follow the alignment of the existing Farm Track. Owing to the presence of an existing Badger Sett, an option has also been considered which shifts the alignment of the road approximately 30m south.
- 3.5.18 For reference, the proposed access route alignment is shown on WSP | Parsons Brinckerhoff drawing number **SK-005**. It should be noted from the plan that where there is sufficient space, an indicative outline (dashed line) has been provided along the Route Option alignment which denotes a 9.5m wide carriageway, which allows for the provision of a two-way route (with footways) to serve any potential future development to the south of the proposed new Crematorium.
- 3.5.19 During the construction phase of the proposed new Crematorium, CBC has indicated that their preference is not for construction traffic to use any of the existing internal access roads within the existing Cemetery and Crematorium. However, CBC has not discounted the use of the existing internal section of the road between the two gated entrance points. As such, consideration has been given to two potential options for accommodating construction traffic internally along this section of road, which are as follows:
 - → Option 1 retains the existing Cemetery and Crematorium access road as one-way (at 3m wide), and introduces a segregated construction traffic route which relies on use of the remainder of the carriageway and the introduction of localised widening (to accommodate a 3m wide haulage route). In this Option both operational and construction traffic would use the existing gated entrance via Bouncers Lane. As such there would be a likely requirement to either widen the existing main entrance gates or control traffic movements (via the introduction of a banksman or similar). In this option it is envisaged that hording could be introduced to split normal operational and construction traffic movements. In the section of one-way workings, measures to control traffic movements, such as temporary traffic lights, would be required; and

- → Option 2 proposes the introduction of a segregated construction route which would make use of the existing grass / landscape verge and existing Farm Track located to the immediate south of the existing Cemetery and Crematorium access road. In this Option, construction traffic could potentially use the existing Farm Track access, which links to Ladysmith Road, as opposed to the existing Cemetery and Crematorium main entrance gates. In this Option, the existing Cemetery and Crematorium access road would continue to operate as two-way.
- 3.5.20 CBC has indicated that on completion of the proposed new Crematorium, there would no longer be a need to retain either of the options detailed above (as construction traffic would no longer need to access the proposed Crematorium). As such, the intention would be to re-instate the route to reflect its current arrangement (including the re-introduction of trees and hedgerow). For reference, both of the Options described above are illustrated on WSP | Parsons Brinckerhoff drawing **SK-08**.
- 3.5.21 Route Option B has a total length of approximately 740m (between the main gates to the existing Cemetery and Crematorium (from Bouncers Lane) and the proposed Crematorium). For operational purposes, the route would comprise of approximately 617m of new carriageway (excluding the route intended for construction traffic using / adjacent to main access to the existing Cemetery and Crematorium). The elevation of the road increases from 75.576m at the western end to 93.109m at the eastern end. The road climbs at approximately 2.09% (1 in 48) for the first two thirds of its length and then increases to 3.94% (1 in 25) for the final third flattening off as it enters the proposed new Crematorium.
- 3.5.22 Further to the site visit it is evident that part of the land required to accommodate Route Option B forms part of the usable (working) space within the existing Cemetery and Crematorium. On this basis, to help understand the potential impacts on the existing Cemetery and Crematorium, Peter Mitchell Associates has been commissioned to undertake a separate study. The findings of which are summarised in Chapter 4 of this report, and are included in **Appendix E**.
- In addition to the above, it was also noted during the site visit that there are a number of well-established trees which could be impacted by the proposed route alignment. To help understand the potential impacts on the existing trees, WSP | Parsons Brinckerhoff has discussed the proposed route alignment with Chris Chavasse (Senior Tree Officer) at CBC. For reference, Chris's comments are summarised in Chapter 4 of this report, For reference, Chris's comments are summarised in Chapter 4 of this report, with a full copy of his comments provided at Appendix F.

ROUTE OPTION C

- 3.5.24 Route Option C has been considered for use by both construction and operational traffic.
- 3.5.25 Route Option C includes the provision of a new 3m wide access road which would skirt the southern extent of Oakley Playing Fields and the agricultural land to the south of the proposed development site, and would link the proposed new development to Imjin Road at its western extent. The land required to provide Route Option C is within adopted highway and / or under CBC's ownership.
- 3.5.26 At the southern extent of Oakley Playing Fields, it is envisaged that the route would skirt the northern edge of the existing changing facilities building and would either i) travel through or, ii) to the north of the existing children's playground.
- 3.5.27 It is understood that part of this route (between Imjin Road and the southeast extent of Oakley Playing Fields) was previously used as a haulage route for construction traffic when constructing the footbridge over Wyman's Brook.

- 3.5.28 For reference, the proposed access route alignment is shown on WSP | Parsons Brinckerhoff drawing number **SK-06**. It should be noted from the plan that where there is sufficient space, an indicative outline (dashed line) has been provided along the Route Option alignment which denotes a 9.5m wide carriageway, which allows for the provision of a two-way route (with footways) to serve any potential future development to the south of the proposed new Crematorium.
- 3.5.29 Route Option C has a total length of 613m (between the point where it intersects Imjin Road and the proposed new Crematorium). The 613m would comprise of completely new carriageway. The elevation of the road increases from 75.576m at the western end to 93.109m at the eastern end. The road climbs at approximately 2.32% (1 in 43) for the first two thirds of its length and then increases to 4.34% (1 in 23) for the final third flattening off as it enters the proposed development site.
- 3.5.30 Owing to the proposed alignment of Route Option C, there is potential for the route to conflict with existing established trees located to the south of the existing Cemetery and Crematorium and the proposed development site. This has been considered by both WSP | Parsons Brinckerhoff and also CBC's Tree Office; the comments are summarised in Chapter 4 and **Appendix F**.

ROUTE OPTION D

- 3.5.31 Route Option D has been considered for use by both construction and operational traffic.
- 3.5.32 Route Option D is a hybrid of both Route Options B and C.
- 3.5.33 In this Option, a 3m wide road is proposed which would run between Imjin Road, up the western boundary of Oakley Playing Fields, and along the northern boundary of Oakley Playing Fields (along the same alignment as Route Option B i.e. following the existing Farm Track alignment). The land required to provide Route Option D is within adopted highway and / or under CBC's ownership. As per Route Option B, owing to the presence of an existing Badger Sett, an option has also been considered which shifts the alignment of the road approximately 30m south.
- 3.5.34 For reference, the proposed access route alignment is shown on WSP | Parsons Brinckerhoff drawing number **SK-07**. It should be noted from the plan that where there is sufficient space, an indicative outline (dashed line) has been provided along the Route Option alignment which denotes a 9.5m wide carriageway, which allows for the provision of a two-way route (with footways) to serve any potential future development to the south of the proposed new Crematorium.
- 3.5.35 Route Option D has a total length of approximately 637m (between the point where it intersects Imjin Road and the proposed new Crematorium). The 670m would comprise of completely new carriageway. The elevation of the road increases from 75.031m at the western end to 93.060m at the eastern end. The road climbs at approximately 3.18% (1 in 31.4) for the first 80m of its length and then decreases to 1.77% (1 in 56.33) for the next 310m before increasing to 4.13% (1 in 24) for a further 250m. The final 220m of the road is at approx. 4.13% (1 in 24) except for the flattening off as it enters the proposed new Crematorium.
- Owing to the proposed alignment of Route Option D, there is potential for the route to conflict with existing established trees located to the south of the existing Cemetery and Crematorium and the proposed development site. This has been considered by both WSP | Parsons Brinckerhoff and also CBC's Tree Office, who's comments are summarised in Chapter 4 and **Appendix F**.

SUMMARY

3.5.37 For ease of reference, the four Route Options and their potential use (i.e. construction and / or operational traffic) is summarised in **Table 3.1**.

Table 3.1 Route Options and Indicative Use

ROUTE	CONSTRUCTION TRAFFIC (TWO-WAY)	OPERATIONAL TRAFFIC (EGRESS ONLY)	
Α	No	Yes	
В	Yes (Two Options)	Yes	
С	Yes	Yes	
D	Yes	Yes	

3.6 FURTHER CONSIDERATIONS

DRAINAGE

- 3.6.1 Although drainage has not been considered in detail as part of this study, it is envisaged that Surface Water Run-off from proposed roads within the existing Cemetery and Crematorium could be collected by a conventional gulley and pipe system and attenuated to Qbar for rainfall return periods up to 1 in 100year + 40% climate change. Due to space constraints attenuation is to be within oversized pipes under the proposed road with controlled discharge to the existing culvert system within the existing Cemetery and Crematorium.
- 3.6.2 Surface Water Run-off from proposed roads outside of the cemetery (B, C, and D) could be via shallow ditches located adjacent to the carriageway which would discharge to a small detention area within the open space. Discharge from the detention area would be at Qbar for rainfall return periods up to 1 in 100year + 40%. Discharge would be to Wymans Brook or adjacent Surface Water Sewer. Sections of road below the open space would be drained and attenuated as per proposed existing Cemetery and Crematorium roads.

UTILITIES

3.6.3 At this stage no utility searches have been carried out, but it is envisaged that there is enough flexibility within the road designs that utility diversion/protection works could be avoided where needed.

LIGHTING

3.6.4 It is envisaged that there may be a requirement to provide lighting for some / all of the Route Options (in particular Route Options B, C, and D). This would be considered further once the preferred Route Option is taken forward.

GROUND RISK AND REMEDIATION

3.6.5 It should be noted that Route Options B, C and D skirt Oakley Playing Fields, which is an historic landfill site. The stability (or level of contamination) of the land, and potential implications in terms of the preferred route alignment and carriageway make-up, is unknown at this stage. It is recommended that a ground risk assessment is undertaken prior to any construction works.

FUTURE ADOPTION

3.6.6 Should it be required, it is envisaged that Route Options C or D could potentially be upgraded to adoptable standards, to serve any potential future development. However, please note [depending on the initial specification of the carriageway] that there would be a likely requirement to upgrade the carriageway sub base and base course, and drainage and lighting.

3.7 ROUTE OPTIONS EXCLUDED FROM THIS STUDY

EXISTING INTERNAL CEMETERY AND CREMATORIUM ROADS

- 3.7.1 As detailed above, one of the main constraints to achieving both access and egress to the proposed new Crematorium from within the existing Cemetery and Crematorium is the presence of a solitary one-way road which links the older western and newer eastern sections (which is lined by existing gravestones).
- 3.7.2 Although this route is excluded from this study, Peter Mitchell Associates (grave specialist) has been commissioned to undertake a separate study to determine the potential implications associated with using / modifying the existing internal route to serve the proposed new Cemetery. In addition, Peter Mitchell Associates has also considered the implications of potentially upgrading an existing internal pedestrian footpath to provide vehicular access.
- 3.7.3 The findings of Peter Mitchell Associates report are summarised in Chapter 4 of this report, and are included in **Appendix E**.

ALTERNATIVE ROUTE OPTIONS TO NORTH AND SOUTH

- 3.7.4 CBC in their brief has outlined the following alternative potential vehicular route options and subsequent reasons for their exclusion from this study:
 - → Via Prestbury village and Noverton Farm from the north farm land not owned by the Council;
 - → Via Prestbury village and Finchcroft Lane from the north costs and legal issues associated with need to bridge Noverton brook; and
 - → Via Oakley Farm housing development from the south costs and legal issues associated with need to bridge Wyman's brook and complications of traffic flow through Oakley Farm housing estate.

4 ROUTE OPTIONS – OPPORTUNITIES AND CONSTRAINTS

4.1 INTRODUCTION

- 4.1.1 This Chapter of the report considers the opportunities and constraints presented by the proposed vehicular Access Route, and by each of the proposed vehicular Egress Routes (Options A, B, C, and D), as detailed by Chapter 3 of this report.
- 4.1.2 For ease of reference, the opportunities and constraints presented by each of the routes have been numbered, and have been marked on the relevant Route Option plans (SK-002, SK-004 to SK-007 and SK-08). Where the points identified are general to the route, these are highlighted in the key of the relevant Route Option plan.
- 4.1.3 This Chapter also summarises the advice received from Peter Mitchell Associates and CBC's Tree Officer.

4.2 OPPORTUNITIES AND CONSTRAINTS

ACCESS ROUTE

- 4.2.1 For reference, the location of each of the opportunities and constraints detailed below are illustrated on WSP | Parsons Brinckerhoff drawing number **SK-02**.
- 4.2.2 It is worth noting that in this option, there would still be a requirement to provide a temporary haulage route to the proposed new Crematorium (see opportunities and constraints for Route Options B, C and D).

Opportunities

- 1. The proposed access route does not require the construction of any new roads internally or externally to the existing Cemetery and Crematorium.
- 2. This proposed access route would not result in any displacement of traffic onto the local highway network, nor would this route impact on any existing operation of / parking along local streets (i.e. along Imjin Road).
- 3. The proposed access route relies on existing roads which currently serve the existing Cemetery and Crematorium; as such it would not impact on any existing hedgerows / trees / habitats.

Constraints

- 4. The existing Grade II listed gates (main entrance and inner) on entry to the existing Cemetery and Crematorium restrict vehicle movements to one-way. Although, in this option the gates would not be required to be widened, it is worth noting that there would likely still be an issue with queuing and delays experienced at the main entrance (as per the current situation).
- 5. This Option would result in increased traffic movements internally within the existing Cemetery and Crematorium. In particular, there would be a likely increase in traffic using the one-way section of road which skirts the northern boundary of the older western section of the existing Cemetery and Crematorium (which is currently used to access the wider existing Cemetery and Crematorium). This could result in increased congestion internally within the existing Cemetery and Crematorium.

- 6. The existing internal Cemetery and Crematorium roads are narrow in places. As such, any intensification of use of these routes (resulting from the relocation of the Crematorium) could result in internal congestion / delays and increased safety risks to pedestrians.
- 7. In general, the existing internal roads, in particular within the older western section of the existing Cemetery and Crematorium are observed to be in poor condition (the road surface is cracked / breaking up in numerous locations). This is likely to be exacerbated as a result of the relocation of the Crematorium and the intensification of traffic using these roads.

ROUTE OPTION A

- 4.2.3 For reference, the location of each of the opportunities and constraints detailed below are illustrated on WSP | Parsons Brinckerhoff drawing number **SK-04**.
- 4.2.4 It is worth noting that in this option, there would still be a requirement to provide a temporary haulage route to serve the proposed new Crematorium [please see opportunities and constraints for Route Options B, C and D].

Opportunities

- 1. Route Option A is contained within the curtilage of the existing Cemetery and Crematorium. As such it does not rely on the use of any existing [or proposed] external roads.
- 2. The length of the proposed new road section [in isolation] required for Route Option A is considerably less than the proposed new road sections proposed for Route Options B, C and D.
- 3. Route Option A does not impact on existing housing estates to south (i.e. noise / pollution).
- 4. Route Option A does not impact on Oakley Playing Fields to the south.

Constraints

- 5. This Option would potentially result in the loss of parking internally within the existing Cemetery and Crematorium (where it is proposed to use the existing car park located to the immediate west of the Garden of Remembrance).
- This Option involves crossing one Ordinary Watercourse (Wyman's Brook Tributary), which will likely need a simple assessment of flood risk and water quality impacts in consultation with GCC as Lead Local Flood Authority.
- 7. The proposed route alignment is in close proximity to an active badger sett. Any works within 30 m of the sett will require further consideration. Should the badger sett be directly affected a licence would be required to close the sett. Should works be required within 30 m of the sett, a pre-works check and subsequent ecological method statement would be required. The pre-works check should be carried out within eight weeks of the construction start date in case a licence is required.
- 8. The proposed route alignment falls within 250 m of ponds suitable for Great crested newts. A record of Great crested newt was returned by the desk study, located 180 m from the survey area. Previous Great crested newt surveys did not identify any Great crested newts within the pond surveyed. However, only one of the three suitable ponds was surveyed. The Natural England Great crested newt Risk Grading Tool was applied to ascertain the risk of causing an offence under Great crested newt legislation. The results of this were 'Amber: Offence Likely'. It is therefore recommended that presence/likely absence surveys for Great crested newts be undertaken, which would then inform further recommendations.
- 9. The proposed route alignment skirts near existing trees that are suitable for roosting bats. Micro-siting of the road alignment is advised to ensure mature trees are not affected. Should tree works be required further survey for bats may be necessary. This could include aerial assessments and/or dusk/dawn emergence surveys for bats within the bat activity season.

- 10. The area in which the route is proposed is considered to contain habitats suitable for breeding birds. Clearance works should be carried out outside of the breeding bird season (considered to be March September). If this were not possible, additional ecological input would be required. This could include pre-works breeding bird checks and ecological supervision of clearance works.
- 11. The area in which the route is proposed is considered to be suitable habitat for reptiles. It is recommended that a detailed Method Statement be written to control vegetation clearance methods and ensure legal compliance.
- 12. Habitats of Principal Importance, specifically existing hedgerows and lowland woodland have potential to be impacted by the proposed route alignment. This would likely be taken into consideration at the planning stage to comply with relevant legislation. These habitats should ideally be avoided by the proposed route and where this is not possible.
- 13. The proposed alignment would likely impact directly on Bouncers Lane Cemetery, which is a Grade II listed Park and Gardens, and includes the following Grade II Listed buildings / structures:
 - 13.1 Main entrance and inner gates to the existing Cemetery and Crematorium;
 - 13.2 Cemetery Lodge;
 - 13.3 North and South Chapel; and
 - 13.4 Octagonal Lodge (located approximately 15m northwest of the North and South Chapel).
- **14.** The proposed alignment would directly impact on existing deciduous woodland which is identified within the Priority Habitat Inventory.
- **15.** The proposed alignment would directly impact on the following tree types:
 - 15.1 Common Beach (Category A1 tree); and
 - 15.2 Copper Beach (Category A1 tree).
- **16.** The proposed alignment could directly impact on existing graves.

ROUTE OPTION B

- 4.2.5 For reference, the location of each of the opportunities and constraints detailed below are illustrated on WSP | Parsons Brinckerhoff drawing numbers **SK-05**.
- 4.2.6 It should be noted that Route Option B could also be used as a temporary haulage route for construction traffic, in which two potential options have been considered for the existing Cemetery and Crematorium access road section (see WSP | Parsons Brinckerhoff drawing number **SK-08**).

Opportunities

1. Route Option B would result in the bulk of traffic being taken away from the existing internal Cemetery and Crematorium roads (albeit the section of road located between the two existing gated entrance points), which in turn would reduce internal congestion / delays.

Constraints

2. For the operational phase, this Option would require the provision of a new internal junction where the proposed new section of road (external to the existing Cemetery and Crematorium) would tie into the internal section of road located between the two existing gated entrance points. There is potential for increase congestion / conflict as a result of the proposed arrangement.

- 3. The existing Farm Track, which skirts the southern boundary of the existing Cemetery and Crematorium is narrow and observed to be in poor condition. This would likely require upgrading and resurfacing.
- 4. Of the two options for construction access which are currently considered for the internal section of road located between the two existing gated entrance points (see WSP | Parsons Brinckerhoff drawing SK-08):
 - In Option 1 construction traffic would be directed to use the existing Farm Track via Ladysmith Road. This would require that the existing access is upgraded to accommodate construction traffic.
 - 2. In Option 2 the narrowing of the existing Cemetery and Crematorium access road (to accommodate the construction route) would require the introduction of one-way controlled workings (such as temporary traffic lights). This arrangement would likely lead to increased congestion and delays (particularly during peak hours).
 - 3. In Option 2 this arrangement would likely lead to increased traffic movements at the existing [modified] access.
 - 4. In Option 2 there would be a potential requirement to widen the main entrance gates to the existing Cemetery and Crematorium (or control movements).
 - 5. In both Options it is noted that there are currently areas of parking located along the existing access which could restrict movements / result in congestion.
 - In both options there would be an intensification of traffic movements, in particular construction vehicles, on the local highway network in the vicinity of the existing access which could result in increased congestion and delays (particularly during peak hours).
- 5. Potential highway safety implications associated with bringing construction traffic through the existing Cemetery and Crematorium access.
- 6. This Option involves crossing a Main River (Wyman's Brook Tributary) which will likely need a simple assessment of flood risk and water quality impacts in consultation with the Environment Agency.
- 7. This Option crosses the proposed ditch / culvert offtake from Wyman's Brook Tributary for the Priors Farm Flood Storage Area. The timing of construction and future proofing of the FSA Scheme should be considered in conjunction with its designers.
- 8. This Option appears to run within 8m of the Environment Agency's Main River (Wyman's Brook Tributary), alongside the football pitches. An Environmental Permit is required from the Environment Agency for any works within this distance from top of bank
- 9. The proposed route alignment is in close proximity to an active badger sett. Any works within 30 m of the sett will require further consideration. Should the badger sett be directly affected a licence would be required to close the sett. Should works be required within 30 m of the sett, a pre-works check and subsequent ecological method statement would be required. The pre-works check should be carried out within eight weeks of the construction start date in case a licence is required.
- 10. The proposed route alignment falls within 250 m of ponds suitable for Great crested newts. A record of Great crested newt was returned by the desk study, located 180 m from the survey area. Previous Great crested newt surveys did not identify any Great crested newt within the pond surveyed. However, only one of the three suitable ponds was surveyed. The Natural England Great crested newt Risk Grading Tool was applied to ascertain the risk of causing an offence under Great crested newt legislation. The results of this were 'Amber: Offence Likely'. It is therefore recommended that presence/likely absence surveys for Great crested newts be undertaken, which would then inform further recommendations.
- **11.** The proposed route alignment skirts near existing trees which trees that are suitable for roosting bats. Micro-siting of the road alignment is advised to ensure mature trees are not

- affected. Should tree works felling be required further survey for bats may be necessary required. This could include aerial assessments and/or dusk/dawn emergence surveys for bats within the bat activity season.
- 12. The area in which the route is proposed contains suitable breeding bird habitat. Clearance works should be carried out outside of the breeding bird season (considered to be March September). If this were not possible, additional ecological input would be required. This could include pre-works breeding bird checks and ecological supervision of clearance works.
- **13.** The area in which the route is proposed contains suitable habitat for reptiles. It is recommended that a detailed Method Statement be written to control vegetation clearance methods and ensure legal compliance.
- 14. Habitats of Principal Importance, specifically existing hedgerows, running water and lowland woodland, have potential to be impacted by the proposed route alignment. This would likely be taken into consideration at the planning stage to comply with relevant legislation. These habitats should ideally be avoided by the proposed route and where this is not possible.
- 15. The proposed alignment would likely impact directly on Bouncers Lane Cemetery, which is a Grade II listed Park and Gardens, and includes the following Grade II Listed buildings / structures:
 - 15.1 Main entrance and inner gates to the existing Cemetery and Crematorium;
 - 15.2 Cemetery Lodge;
 - 15.3 North and South Chapel; and
 - 15.4 Octagonal Lodge (located approximately 15m northwest of the North and South Chapel).
- **16.** The proposed alignment would directly impact on existing deciduous woodland which is identified within the Priority Habitat Inventory.
- 17. The proposed alignment would directly impact on the following tree types:
 - 17.1 Cedar (Category B1/C1 tree).
- **18.** The proposed route would impact on areas of mixed vegetation (trees, hedgerows), which have not been included as part of the arboriculture survey, and may be of potential local conservation importance.
- 19. The route would skirt the northern boundary of Oakley Playing Fields, which is an historic landfill site. The stability of the landfill site is unknown, and would likely require a separate Ground Investigation Study.
- 20. The proposed route would directly impact on the existing residential properties (approximately 16 in total) (in terms of noise and pollution) which skirt the southern boundary of the Farm Track. There is also potential that the existing playing fields could be contaminated.
- **21.** The option crosses a water body. This means riparian species have potential to be impacted. Depending on the final route alignment, further surveys for otters, water vole and white clawed crayfish may be required.
- **22.** The route alignment would impact on the existing basketball court and northernmost football pitch.

ROUTE OPTION C

- 4.2.7 For reference, the location of each of the opportunities and constraints detailed below are illustrated on WSP | Parsons Brinckerhoff drawing number **SK-06**.
- 4.2.8 It should be noted that Route Option C could also be used as a temporary haulage route for construction traffic.

Opportunities

- 1. Route Option C would not impact on the existing Cemetery and Crematorium.
- 2. The provision of a new separate road to the existing Cemetery and Crematorium would reduce traffic movements at the existing Cemetery and Crematorium access (from Bouncers Lane).
- 3. The proposed route alignment would not directly impact on the existing car park which serves Oakley Playing Fields.
- 4. Route Option C could be used to access potential future development land / proposed flood alleviation scheme located to the south of the proposed new Crematorium.

Constraints

- 5. This Option would require traffic (construction and operational) to use Imjin Road. The potential implications associated with this are as follows:
 - 1. Potential for access to be obstructed by motorists parking along both sides of Imjin Road; and
 - 2. Potential congestion / delays resulting from increased traffic using Imjin Road;
 - 3. Increased safety concerns resulting from increased traffic using Imjin Road; and
 - 4. Potential impacts on wider network, including along B4075 Priors Road.
- 6. This Option involves crossing a Main River (Wyman's Brook Tributary) which will likely need a simple assessment of flood risk and water quality impacts in consultation with the Environment Agency.
- 7. This Option crosses two proposed culverts associated with the Priors Farm Flood Storage Area. The timing of construction and future proofing of the FSA Scheme should be considered in conjunction with its designers. Suitable cover should be sought over the culvert.
- 8. This Option appears to run within 8m of the Environment Agency's Main River (Wyman's Brook Tributary), alongside the football pitches. An Environmental Permit is required from the Environment Agency for any works within this distance from top of bank.
- 9. The proposed route alignment falls within 250 m of ponds suitable for Great Crested Newts. A record of Great Crested Newt was returned by the desk study, located 180 m from the survey area. Previous Great Crested Newt surveys did not identify any Great Crested Newt within the pond surveyed. However, only one of the three suitable ponds was surveyed. The Natural England Great Crested Newt Risk Grading Tool was applied to ascertain the risk of causing an offence under Great Crested Newt legislation. The results of this were 'Green: Offence Highly Unlikely' due to the location of the ponds and the extent of habitat to be affected. Therefore no surveys are required in this instance. It is recommended that once the exact scope of works has been agreed this assessment is confirmed. It is recommended that should Option C be taken forward, all works are carried out under a precautionary method of working for great crested newts.
- 10. The proposed route alignment skirts near existing trees that are suitable for roosting bats. Micro-siting of the road alignment is advised to ensure mature trees are not affected. Should tree works be required further survey for bats may be necessary. This could include aerial assessments and/or dusk/dawn emergence surveys for bats within the bat activity season.
- 11. The area in which the route is proposed contains suitable breeding bird habitat. Clearance works should be carried out outside of the breeding bird season (considered to be March September inclusive). If this were not possible, additional ecological input would be required. This could include pre-works breeding bird checks and ecological supervision of clearance works.

- 12. The area in which the route is proposed contains suitable habitat for reptiles. It is recommended that a detailed Method Statement be written to control vegetation clearance methods and ensure legal compliance.
- **13.** The option crosses one water body and comes in close proximity to another. This means riparian species have potential to be impacted. Depending on the final route alignment, further surveys for otters, water vole and white clawed crayfish may be required.
- 14. Habitats of Principal Importance, specifically existing hedgerows, have potential to be impacted by the proposed route alignment. This would likely be taken into consideration at the planning stage to comply with relevant legislation. These habitats should ideally be avoided by the proposed route and where this is not possible impacts should be minimised.
- 15. The proposed route would impact on areas of mixed vegetation (trees, hedgerows), which have not been included as part of the arboriculture survey, and may be of potential local conservation importance.
- 16. The route would skirt the southern boundary of Oakley Playing Fields, which is an historic landfill site. The stability of the landfill site is unknown, and would likely require a separate Ground Investigation Study. There is also potential that the existing playing fields could be contaminated.
- 17. The proposed route alignment would impact on the existing football fields and associated changing facilities (effectively bisecting the two).
- 18. The proposed route alignment would impact on the existing children's playground.
- **19.** The proposed route alignment would require re-profiling of land / potential introduction of retaining wall along the southern boundary of the Oakley Football Fields.

ROUTE OPTION D

- 4.2.9 For reference, the location of each of the opportunities and constraints detailed below are illustrated on WSP | Parsons Brinckerhoff drawing number **SK-07**.
- 4.2.10 It should be noted that Route Option D could also be used as a temporary haulage route for construction traffic.

Opportunities

- 1. Although Route Option D would skirt the southern boundary of the existing Cemetery and Crematorium, it would not impact directly on any existing graves.
- 2. The provision of a new separate road to the existing Cemetery and Crematorium would reduce traffic movements at the existing Cemetery and Crematorium access (from Bouncers Lane).
- The proposed route alignment would not directly impact on the existing car park which serves Oakley Playing Fields.
- 4. Route Option D could be used to access potential future development land / proposed flood alleviation scheme located to the south of the proposed new Crematorium.

Constraints

- 5. This Option would require that traffic (construction and operational) would use Imjin Road. The potential implications associated with this are as follows:
 - Potential for access to be obstructed by motorists parking along both sides of Imjin Road; and
 - 2. Potential congestion / delays resulting from increased traffic using Imjin Road;
 - 3. Increased safety concerns resulting from increased traffic using Imjin Road; and

- 4. Potential impacts on wider network, including along B4075 Priors Road.
- 6. This Option involves crossing a Main River (Wyman's Brook Tributary) which will likely need a simple assessment of flood risk and water quality impacts in consultation with the Environment Agency.
- 7. This Option crosses the proposed ditch / culvert offtake from Wyman's Brook Tributary for the Priors Farm Flood Storage Area. The timing of construction and future proofing of the FSA Scheme should be considered in conjunction with its designers.
- 8. This Option appears to run within 8m of the Environment Agency's Main River (Wyman's Brook Tributary), alongside the football pitches. An Environmental Permit is required from the Environment Agency for any works within this distance from top of bank.
- 9. The proposed route alignment is in close proximity to an active badger sett. Any works within 30 m of the sett will require further consideration. Should the badgers sett be directly affected a licence would be required to close the sett. Should works be required within 30 m of the sett, a pre-works check and subsequent ecological method statement would be required. The pre-works check should be carried out within eight weeks of the construction start date in case a licence is required.
- 10. The proposed route alignment falls within 250 m of ponds suitable for Great crested newts. A record of Great crested newt was returned by the desk study, located 180 m from the survey area. Previous Great crested newt surveys did not identify any Great crested newt within the pond surveyed. However, only one of the three suitable ponds was surveyed. The Natural England Great crested newt Risk Grading Tool was applied to ascertain the risk of causing an offence under Great crested newt legislation. The results of this were 'Amber: Offence Likely'. It is therefore recommended that presence/likely absence surveys for Great crested newts be undertaken, which would then inform further recommendations.
- 11. The proposed route alignment skirts near existing trees which trees that are suitable for roosting bats. Micro-siting of the road alignment is advised to ensure mature trees are not affected. Should tree works felling be required further survey for bats may be necessary required. This could include aerial assessments and/or dusk/dawn emergence surveys for bats within the bat activity season.
- 12. The area in which the route is proposed contains suitable breeding bird habitat. Clearance works should be carried out outside of the breeding bird season (considered to be March September). If this were not possible, additional ecological input would be required. This could include pre-works breeding bird checks and ecological supervision of clearance works.
- **13.** The area in which the route is proposed contains suitable habitat for reptiles. It is recommended that a detailed Method Statement be written to control vegetation clearance methods and ensure legal compliance.
- 14. Habitats of Principal Importance, specifically existing hedgerows, running water and lowland woodland have potential to be impacted by the proposed route alignment. This would likely be taken into consideration at the planning stage to comply with relevant legislation. These habitats should ideally be avoided by the proposed route and where this is not possible impacts should be minimised.
- 15. The proposed alignment would likely impact indirectly on Bouncers Lane Cemetery, which is a Grade II listed Park and Gardens, and includes the following Grade II Listed buildings / structures:
 - 15.1 Cemetery Lodge;
 - 15.2 North and South Chapel; and
 - 15.3 Octagonal Lodge (located approximately 15m northwest of the North and South Chapel).
- **16.** The proposed alignment would directly impact on existing deciduous woodland which is identified within the Priority Habitat Inventory.

- 17. The proposed route would impact on areas of mixed vegetation (trees, hedgerows) which have not been included as part of the arboriculture survey, and may be of potential local conservation importance.
- 18. The route would skirt the north and west of Oakley Playing Fields, which is an historic landfill site. The stability of the landfill site is unknown, and would likely require a separate Ground Investigation Study. There is also potential that the existing playing fields could be contaminated.
- 19. The proposed route would directly impact on the existing residential properties (approximately 8 in total) (in terms of noise and pollution) which skirt the western boundary of Oakley Playing Fields.
- **20.** The proposed route alignment would require re-profiling of land / potential introduction of retaining wall along the western boundary of the Oakley Football Fields.
- **21.** The option crosses one water body and comes in close proximity to another. This means riparian species have potential to be impacted. Depending on the final route alignment, further surveys for otters, water vole and white clawed crayfish may be required.
- 22. The route alignment would impact on the existing basketball court and northernmost football pitch

4.3 EXTERNAL ADVICE

GRAVE SPECIALIST

- 4.3.1 As detailed in Chapter 3 of this report, Peter Mitchell Associates has also undertaken a separate study which identifies the issues surrounding the potential use / modification of the existing internal road (and potential pedestrian footpath) which links the older western and newer eastern sections of the existing Cemetery and Crematorium.
- 4.3.2 In addition, Peter Mitchell Associates has also considered the implications, in terms of impacts on existing graves resulting from the proposed Route Options (namely Route Options A and B) identified within this report.

In summary, Peter Mitchell Associates report identifies:

"In my view, there is no legislation that is applicable to authorising the removal of memorials and burials in an operational local authority cemetery;

Based upon the information that I have received, of the routes identified by WSP | Parsons Brinckerhoff which impact directly on the cemetery (namely A and B), I recommend that Route B shown in purple on the WSP | Parsons Brinckerhoff's drawing SK03 is regarded as having a much greater chance of being feasible than Route A shown in yellow, due to the clear indications of coffin burials along Route A;

Similarly, Route B shown in purple on the WSP | Parsons Brinckerhoff's drawing SK03 avoids areas clearly used for coffin burials within the areas shaded orange and red on the RES Surveying Topographic Survey Sheet 13; and

The proposals threaten to disturb a place where the bodies and ashes of deceased people lie and thereby have the potential to cause great distress to be eaved people, which must be recognised by the team working on this project."

4.3.3 For reference, a copy of Peter Mitchell Associates report is contained in **Appendix E**.

TREE SPECIALIST

- 4.3.4 As detailed in Chapter 3 of this report, to help understand the potential impacts on the existing trees internal and external to the existing Cemetery and Crematorium, WSP | Parsons Brinckerhoff has discussed the proposed Route Options with Chris Chavasse (Senior Tree Officer) at CBC.
- 4.3.5 For reference his comments are summarised below for each Route Option (A-D), with a copy of the Chris's full comments included at **Appendix F**.
 - Route A would incur the most tree related damage/removals and may be the most expensive to construct but would ultimately fit best into this landscape on the assumption that a generous landscaping scheme could mitigate for tree loss/damage. This may be technically the most challenging route to achieve due to the "no-dig" requirement where the route deviates into the root protection area of existing large trees;
 - → Route B would incur some loss of boundary screening and trees along front of drive (if drive is to be widened). However, re-landscaping could mitigate for this loss. This new route would fit aesthetically well into the local environment;
 - → Route C would not incur significant tree loss but the proposed new road may look incongruous through this open space. Some ground cover would have to be removed; and
 - → Route D would also not incur significant tree loss but some ground cover would need to be removed. The road would fit more discretely into the landscape.

5 FURTHER CONSIDERATIONS

5.1 INTRODUCTION

5.1.1 This Chapter considers the potential additional tasks that could be required should any of the proposed Route Options be progressed further. More specifically, the Chapter considers potential future survey requirements, consultation, cost implications and deliverability.

5.2 POTENTIAL SURVEY REQUIREMENTS

TRAFFIC IMPACTS

- 5.2.1 When compared to the existing service time information provided by CBC, the ATC survey recorded a maximum of 113 and 159 vehicles entering and exiting the existing Cemetery and Crematorium, respectively (which occurred during two separate hours). This equates to approximately 1.5 vehicles per minute in either direction.
- Assuming that the hours of operation of the proposed new Crematorium would reflect that of the existing Cemetery and Crematorium (i.e. services would be held between 10:00 and 16:00), traffic generated by the proposed new Crematorium would not be anticipated to conflict with the peak hours of operation of the local highway network.
- 5.2.3 Notwithstanding this, given that two of the routes identified in this report rely on the use of Imjin Road for access, GCC, as relevant highway authority, may request that further analysis is undertaken (as part of any assessment required to support a planning application) to understand the potential impacts that the development proposals, in terms of traffic generation, could have on the existing local highway network (in particular Imjin Road / Priors Road).
- 5.2.4 Based on the traffic volumes derived from the ATC survey (and in the absence of any detailed assessment) we do not envisage that there would be a need to undertake any significant upgrades to the existing Imjin Road / Priors Road junction. This is however subject to discussions with GCC highways department.
- Internally, vehicles are currently permitted to park along the existing access road between the main entrance and inner gates. However, CBC has indicated that they would potentially look to prohibit parking in this location once the proposed new Crematorium is in place. Should this be the case, then there may be a requirement to assess the likely impacts on parking displacement (although this is not envisaged to be substantial).
- 5.2.6 Externally, it is also worth noting that, should there be a requirement to use Imjin Road to access the proposed new Crematorium, there may also be a need to undertake a parking beat survey to understand existing parking demand and any impacts associated with the potential displacement of parking.

PROTECTED SPECIES

BADGERS

- 5.2.7 The proposed route alignments are in close proximity to an active badger sett. Any works within 30 m of the sett will require further consideration. Should the badgers sett be directly affected a licence would be required to close the sett. Should works be required within 30 m of the sett, a pre-works check and subsequent ecological method statement would be required. The pre-works check should be carried out within eight weeks of the construction start date in case a licence is required.
- 5.2.8 The peak time to survey badgers is February to April. Should a licence and sett closure be required it should be noted that no closures can take place between December and June due to the dependence of juveniles upon their mothers.

RIPARIAN

- 5.2.9 The route options potentially cross one water body and comes in close proximity to another. This means riparian species have the potential to be impacted. Depending on the final route alignment, further surveys for otters, water vole and white clawed crayfish may be required.
- 5.2.10 The optimal time of year to carry out surveys for water vole is from mid-April to September, whilst otter survey can be undertaken at any time of year. Surveys carried out after heavy rains are not advisable, as field signs are often washed away. White clawed crayfish should be surveyed during late summer (July to September).

BATS

- 5.2.11 The proposed route alignments skirt near existing trees that are suitable for roosting bats. Micrositing of the road alignment is advised to ensure mature trees are not affected. Should tree works or felling be required further survey for bats may be necessary required. This could include aerial assessments and/or dusk/dawn emergence surveys for bats within the bat activity season (May to September).
- 5.2.12 Preliminary ground level roost assessments of trees are best carried out in winter due to the lack of foliage.
- 5.2.13 Should trees identified as being of moderate roost suitability or high roost suitability need to be removed or affected then the following surveys would need to be undertaken under best practice guidance (BCT Guidelines, 2016):

Table 5.1 Potential Bat Surveys

Low roost suitability	Moderate roost suitability	High roost suitability
No further surveys required	Two separate survey visits. One	Three separate survey visits. At
	dusk emergence and a separate	least one dusk emergence and a
	dawn re-entry survey.	separate dawn re-entry
		survey. The third visit could be
	Surveys undertaken between May	either dusk or dawn.
	to September, with at least one	
	survey between May and August.	Surveys undertaken between May
		to September, with at least two
		surveys between May and August.

BREEDING BIRDS

- 5.2.14 The areas in which the routes are proposed are suitable breeding bird habitat. Clearance works should be carried out outside of the breeding bird season (February to August). If this were not possible, additional ecological input would be required. This could include pre-works breeding bird checks and ecological supervision of clearance works.
- 5.2.15 The breeding bird season is considered to be February to August. Vegetation clearance within this time would require ecological supervision.

GREAT CRESTED NEWTS

- 5.2.16 Ponds within the survey area were identified as being suitable for Great crested newts and records of Great crested newts were returned within 180 m of the survey area by a previous third party survey.
- 5.2.17 It is recommended that presence/absence survey be undertaken under best practice guidance in the event that options A, B or D are selected. Should option C be selected it is recommended that a detailed Method Statement be written to protect against breaches of legislation.
- 5.2.18 Presence absence survey would consist of four survey visits between mid-March to mid-June, with at least two of these visits during mid-April to mid-May.

ADDITIONAL ECOLOGICAL DETAILS

5.2.19 Further detail regarding the potential ecological survey requirements and implications on the programme for delivery is included in **Appendix G**.

HERITAGE

- 5.2.20 Consultation should be undertaken with the relevant CBC Planning and Conservation Officers at the earliest opportunity. Widening of the Grade II listed entrance pillars will require listed building consent prior to works commencing.
- 5.2.21 The timescales for achieving listed building consent will vary depending on the outcomes of consultation with CBC planning and Conservations Officers (and / or any third parties).
- 5.2.22 Landscape consultation should be undertaken with the Cotswold AONB Conservation Board at the earliest opportunity. The proposed scheme may impact on the setting of the AONB; therefore it is advisable to inform the Board of the proposals. Although not envisaged to be significant, the potential implications of constructing a new route adjacent to the AONB, would not be fully understood until discussions have been held with the Cotswold AONB Conservation Board.
- It is also worth noting that the proposed Route Options (namely Route Options A and B) would impact upon the existing Bouncers Lane Cemetery, which is a Grade II listed Park and Gardens. As such, CBC as Local planning Authority would likely have to liaise directly with Historic England to understand the potential implications associated with the preferred Route Option.

GROUND INVESTIGATION

5.2.24 The Oakley Playing Fields historical landfill site has been identified as a potential risk to delivery of Route Options B, C and D. Construction on or in the vicinity of a landfill site can give rise to abnormal costs which need to be considered when assessing the feasibility and design of the various scheme options. Landfill material is often heterogeneous and contaminated which can give rise to a number of geotechnical and contaminated land constraints.

- 5.2.25 Depending on the route option under consideration and subject to further information in relation to the extent of the landfill, in order to evaluate the significance of potential constraints and abnormal constraints, an intrusive geotechnical and geo-environmental assessment is required. The assessment will need to obtain data on the composition of the landfill material and underlying geology, geotechnical parameters, contamination concentrations, hydrogeological and ground gas regimes.
- 5.2.26 Potential measures which may be required to mitigate potential ground and contamination related constraints may include the use of piled foundations, ground improvement / stabilisation of materials, retaining features and removal of unacceptable material; and the installation of long term leachate and / or ground gas control measures.

SUMMARY

5.2.27 Based on the above, it is anticipated that the following surveys could be required for each of the proposed vehicular egress Route Options

SURVEY TYPE	ROUTE OPTION A	ROUTE OPTION B	ROUTE OPTION C	ROUTE OPTION D
Traffic			X	X
Badger	Х	Х		Х
Riparian	X	X	X	X
Bats	Х	Х	Х	X
Breeding Birds	Х	Х	X	X
Great crested newts	Х	Х	Х	Х
Ground Investigation	Χ	Χ	Χ	Χ

Table 5.2 Potential Survey Requirements

5.3 OFF-SITE HIGHWAY WORKS

5.3.1 Although this report does not take into consideration the design and construction of the preferred route option, it should be noted that where it is intended to link into the existing highway network (i.e. Imjin Road) there may be a need to enter into a S278 minor works agreement (or similar agreement) to undertake any necessary works. This could also be the case should there be a requirement to undertake any off-site highway improvements on the local highway network (i.e. Imjin Road / Priors Road junction).

5.4 CONSTRUCTION PERMITS FOR WORKS NEAR WATERCOURSES

- 5.4.1 Works within 8m of an Environment Agency Main River (Wyman's Brook and Tributary) will require an Environmental Permit. The process and timescales for this will vary depending on the final design. However, early consultation with the Environment Agency is recommended, and between 4 and 12 weeks are required for determination. Prior to the granting of the permit no works should be undertaken within 8m of the top of bank.
- 5.4.2 It is recommended that more detailed consultation is undertaken with Gloucestershire County Council to identify who will approve any required Land Drainage Consents prior to construction. Powers have been delegated to Cheltenham Borough Council but it is expected they are unable to self-approve an application.

5.5 CONSULTATION

- 5.5.1 Owing to the proposed alignment of each of the Route Options considered and their associated impacts, CBC are likely to have to enter into discussions / consultation with:
 - → General Public:

- → GCC (Highways Authority);
- Environment Agency;
- Historic England; and
- Natural England.
- 5.5.2 Please note that the above list is by no means extensive, and is intended to provide an indication of likely third parties that would need to be consulted.

5.6 COST IMPLICATIONS

5.6.1 It is understood that Willmott Dixon will prepare a detailed cost estimate of each of the Route Options described in this report, which will be provided to CBC under separate cover. Please note that there would be a likely difference in costs associated with constructing the 3m carriageway to serve the proposed new Crematorium, and any future upgrade of the route/s to meet adoptable standards.

5.7 DELIVERABILITY

PLANNING RISK

- 5.7.1 Owing to the complexities surrounding each of the proposed Route Options, it is difficult to gauge the level of planning inputs required and subsequent time-frames for their delivery.
- 5.7.2 However, based on the information presented in this report, it is considered that:
 - → Route Option A would impact directly on graves / ash scatterings within the existing Cemetery and Crematorium, which could carry significant risk in terms of achieving planning / deliverability.
 - → Route Options B carries low to medium risk, in the respect that it relies on the use of external land (Farm Track) to provide a new road, which would likely impact directly on existing residents and existing trees / hedgerows located to the south of the existing Cemetery and Crematorium).
 - → Route Option C and D carry higher risk, as they rely on land outside of the existing Cemetery and Crematorium, which could require considerable consultation / planning inputs. It is considered that Route Options C and D would be the most expensive (to be confirmed by Willmott Dixon) of the four Route Options to implement (owing to their length and their variations in height).
- 5.7.3 It is considered that CBC would take a view on the likely planning risks and subsequent timeframes for delivery of each Route Option following receipt of this report.

CBC'S 'ACCESS ROAD BRIEF - INITIAL DRAFT'

- 5.7.4 Each of the proposed Route Options has been evaluated against the points raised I CBC's 'Access Road Brief Initial Draft', namely:
 - → Most positive impact on proposed Crematorium Redevelopment Project budgeted costs;
 - → Least negative impact on Crematorium Redevelopment Project timescales;
 - → Maximise likelihood of planning permission, taking account of the sensitivity of the location; the nearby Area of Outstanding Natural Beauty and public green space aspirations;
 - → Ability to deal with expected traffic volumes;

- → Least negative impact on local facilities, e.g. cemetery, sports facilities including paying fields, playground etc.; and
- → Greatest social value through enabling or not constraining flood alleviation schemes; allotment provision; local green space designation and potential for future housing development.
- 5.7.5 In respect of the first two points, these are addressed through the earlier points raised in this report. The latter points are considered in **Table 5.3**, over page.

Table 5.3 Route Options Appraisal (Against Points Highlighted by CBC's Brief)

ROUTE OPTION	AONB	Public Green Space	TRAFFIC VOLUMES	LOCAL FACILITIES - CEMETERY	LOCAL FACILITIES - OAKLEY PLAYING FIELDS	LOCAL FACILITIES - PLAYGROUND	FLOOD ALLEVIATION SCHEME (FAS)	FUTURE DEVELOPMENT
Access	No Impact	No Impact	Potential implications internally with re- distribution of traffic	No Impact	No Impact	No Impact	No Impact	Not considered feasible to facilitate any future development
A *	No Impact	No Impact	Potential implications internally with re- distribution of traffic	Direct impact on existing graves / memorial area	No Impact	No Impact	No Impact	Not considered feasible to facilitate any future development
В	Indirect Impact (setting)	Direct impact on Public Green Space	Potential implications internally with re- distribution of traffic	Direct impact on main access to existing Cemetery and Crematorium	Indirect impact (skirts north of Oakley Playing Fields)	No Impact	Indirect impact on location of FAS scheme Direct impact in respect that proposed alignment crosses culverts associated with the Priors Farm Flood Storage Area	Not considered feasible to facilitate any future development (owing to use of existing Cemetery and Crematorium access road / and road width constraints presented by Farm Track)
С	Indirect Impact (setting)	Direct impact on Public Green Space	Direct impact on Imjin Road	No Impact	Direct impact	Direct / Indirect Impact – depending on preferred route alignment	Indirect impact on location of FAS scheme Direct impact in respect that proposed alignment crosses culverts associated with the Priors Farm Flood Storage Area	Considered feasible to facilitate any future development
D	Indirect Impact (setting)	Direct impact on Public Green Space	Direct impact on Imjin Road	No Impact	Direct impact	No Impact	Indirect impact on location of FAS scheme Direct impact in respect that proposed alignment crosses culverts associated with the Priors Farm Flood Storage Area	Considered feasible to facilitate any future development

^{*} Please note that in Route Option A, a separate haulage route would need to be considered (i.e. Route Options B, C and D).

6 SUMMARY AND CONCLUSION

6.1 SUMMARY

- 6.1.1 This report summarises the transport / highways, flood risk, ecological, and environmental opportunities and constraints presented by various potential Route Options which are proposed to serve a new Crematorium in Cheltenham.
- 6.1.2 This study has been commissioned on the basis that the existing internal road network which currently serves the existing Cemetery and Crematorium is deemed insufficient to serve the proposed new Crematorium.
- This report does not seek to highlight the preferred vehicular route option, but provides a review of opportunities and constraints presented by each vehicular route option, which in turn will assist CBC in making their decision of the preferred access strategy for the proposed new Crematorium.
- 6.1.4 The proposed Route Option alignments presented in this report are intended to serve the proposed new Crematorium. However, where sufficient space allows, an indicative outline (dashed line) has been provided along the Route Option alignments which denotes a 9.5m wide carriageway, which allows for the provision of a two-way route (with footways) to serve any potential future development to the south of the proposed new Crematorium.
- 6.1.5 In support of this study, WSP | Parsons Brinckerhoff has obtained additional specialist advice from:
 - > Peter Mitchell Associates Independent Grave Specialist; and
 - → Chris Chavasse Senior Tree Officer (CBC).
- 6.1.6 WSP | Parsons Brinckerhoff has also sought advice from GCC highways department; however a response has not been received in sufficient time to inform this report.
- 6.1.7 This report has also been informed by a number of existing ecological / environmental surveys which were commissioned by CBC at the existing Cemetery and Crematorium.
- Based on the information available and points raised by this report, there will likely be a requirement to undertake additional surveys (see Chapter 5) prior to implementing the preferred Route Option. In addition, there would be likely requirement to consult with third parties.
- 6.1.9 It is understood that Willmott Dixon will prepare a detailed cost estimate of each of the Route Options described in this report, which will be provided to CBC under separate cover.
- 6.1.10 For ease of reference, the Route Options are summarised in **Table 6.1**, along with a description of the key opportunities and constraints and an indication of the likely level of risk of delivery (low to high).

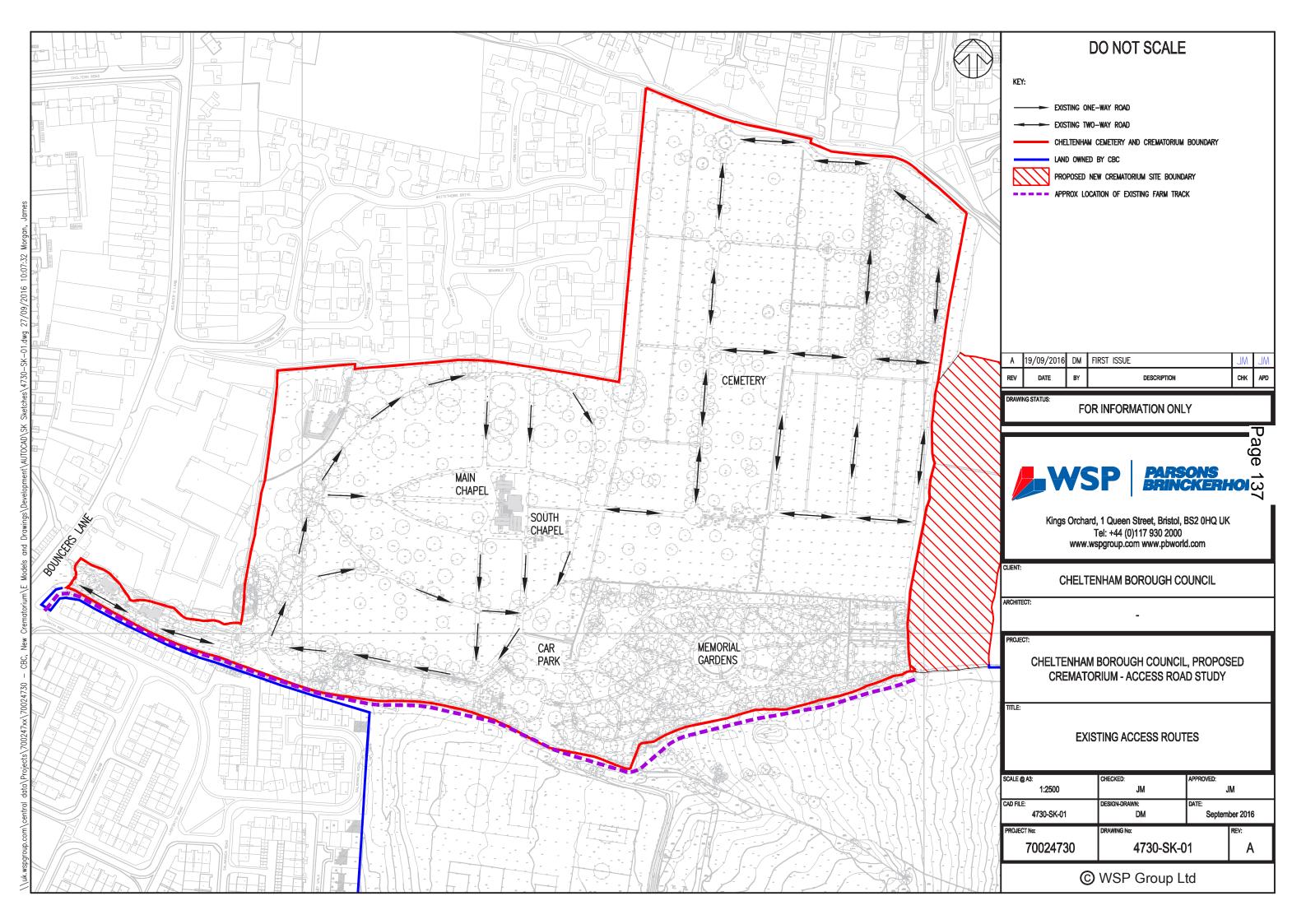
6.2 CONCLUSION

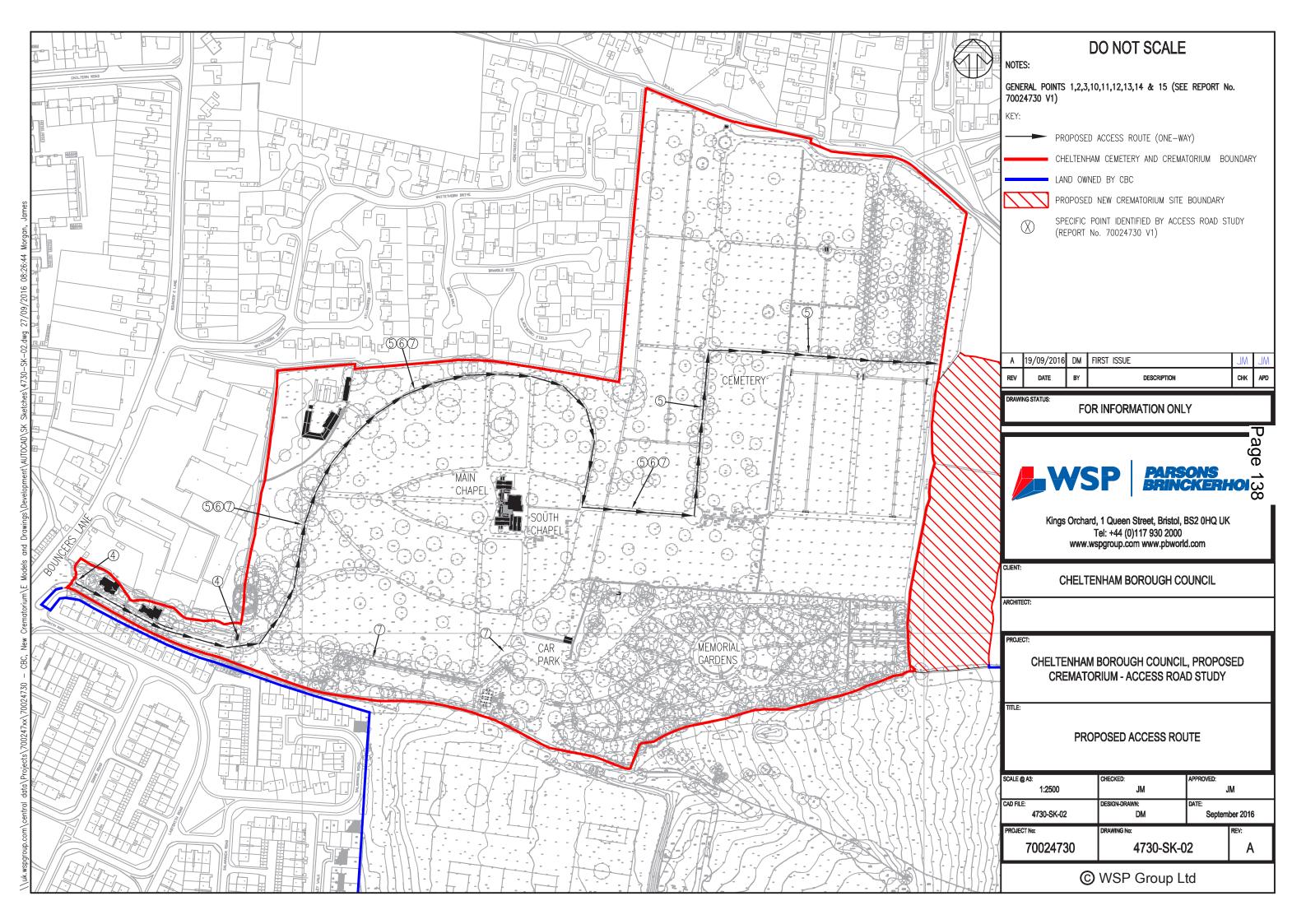
6.2.1 This report demonstrates that, by virtue of its nature and location, there are a number of potential constraints which need to be considered and addressed prior to the implementation of any of the potential Route Options (A, B, C, and D) to serve the proposed new Crematorium.

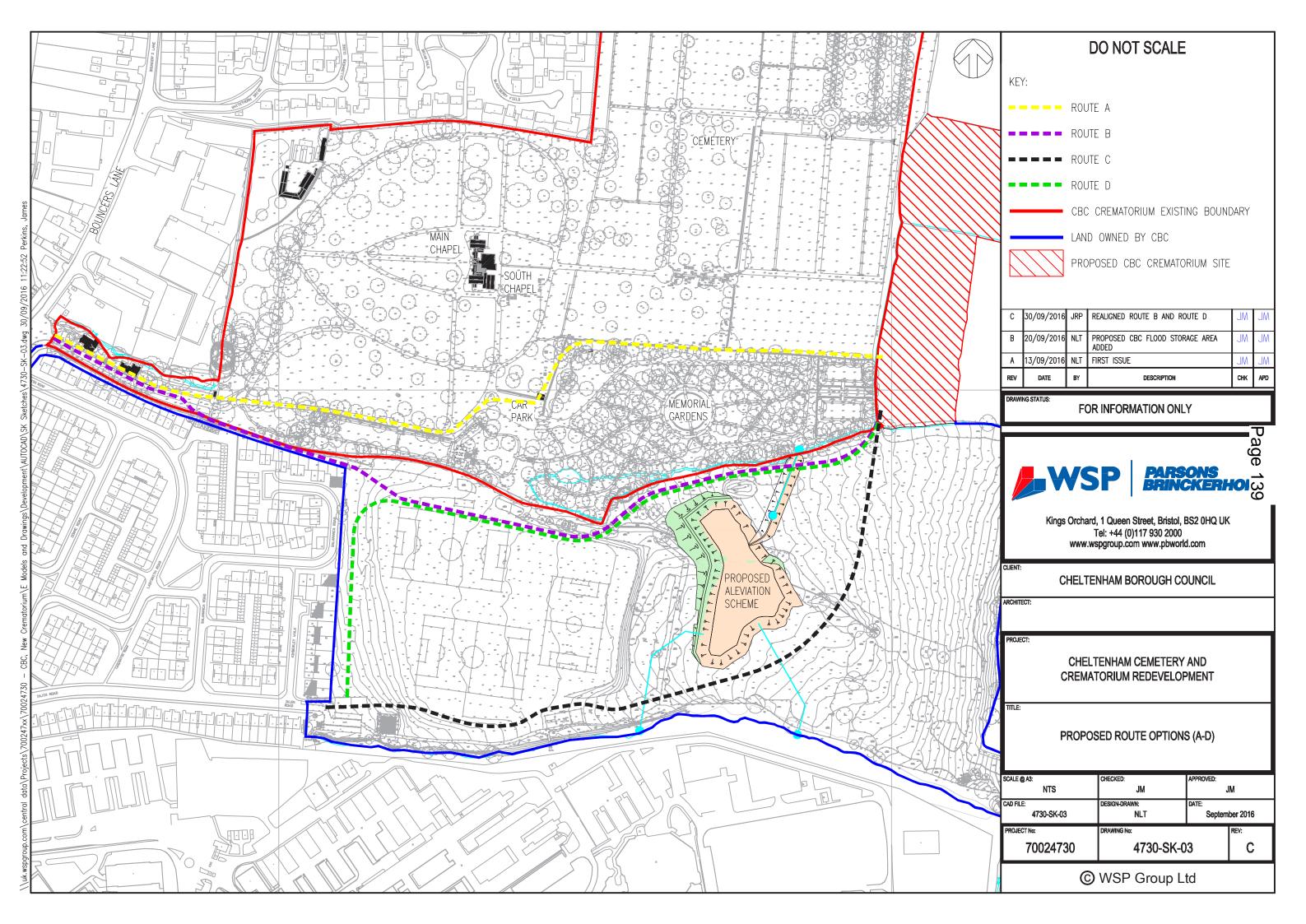
Table 6.1	Route Options Summary				
ROUTE OPTION	DESCRIPTION	POTENTIAL USE (CONSTRUCTION / OPERATIONAL)	Key Opportunities	KEY CONSTRAINTS	Risk
Access	Use of existing internal roads to access the proposed new Crematorium	Operational [only]	 The proposed access route does not require the construction of any new internal or external roads. This proposed access route would not result in any displacement of traffic onto the local highway network. The proposed access route would not impact on any existing hedgerows / trees / habitats. 	 Existing main entrance gates restrict access to one-way. Likely intensification of traffic along specific internal routes resulting in internal congestion / delays. Existing internal roads are narrow and observed to be in poor condition in places. 	Low
A	Relies in part on the use of the existing internal Cemetery roads, and the provision of a new 3m wide access road which would skirt the northern boundary of the Garden of Remembrance.	Operational [only]	 The proposed access route would be contained within the curtilage of the existing Cemetery and Crematorium. The length of the proposed new road section [in isolation] required for Route Option A is considerably less than the proposed new road sections proposed for Route Options B, C and D The proposed access route does not impact on Oakley Playing Fields / residential estates to the south of the existing Cemetery and Crematorium. 	 Impacts on existing graves. The proposals threaten to disturb a place where the bodies and ashes of deceased people lie and thereby have the potential to cause great distress to bereaved people (Grave Specialist) (see Section 4.3). Would potentially result in loss of internal parking. The proposed route alignment is in close proximity to an active badger sett. The proposed route alignment falls within 250 m of ponds suitable for Great crested newts. Would impact on existing established trees / hedgerows. Route A would incur the most tree related damage/removals and may be the most expensive to construct but would ultimately fit best into this landscape on the assumption that a generous landscaping scheme could mitigate for tree loss/damage (Tree Officer) (see Section 4.3). 	High
В	Relies on use of part of the existing internal Cemetery access road, between the two gated entrance points, and then the provision of a new 3m wide access road which would link to the existing access road (in the vicinity of the internal gated entrance point) and would skirt the southern boundary of the existing Cemetery and Crematorium. Consideration has also been given to two potential options to split construction and operational traffic within of the existing Cemetery and Crematorium.	Construction and Operational	 Traffic would be taken away from existing internal Cemetery and Crematorium roads. Preferred Route Option by Grave Specialist which does not impact on existing graves (Grave Specialist) (see Section 4.3). 	 Provision of new junction onto existing internal Cemetery and Crematorium access road could lead to potential congestion / conflict. Construction access: Option 1 - Farm Track likely to require significant upgrading. Option 2 – Would require introduction of one-way workings Option 2 – Would potentially require the widening of the Grade II Listed main entrance gates (or introduction of control measures). Potential highway safety implications associated with bringing construction traffic through the existing Cemetery and Crematorium access. Proposed Route Option alignment would cross Main River, which would require consultation with Environment Agency / Environmental Permit. The proposed route alignment is in close proximity to an active badger sett. The proposed route alignment falls within 250 m of ponds suitable for Great crested newts. Would impact on existing established trees / hedgerows, and residential dwellings located to south of the existing Cemetery and Crematorium access road. Proposed Route alignment would skirt northern extent of Oakley Playing Fields, which is an historic landfill site. The stability of the landfill site is unknown. Route B would incur some loss of boundary screening and trees along the access road (if drive is to be widened). However, re-landscaping could mitigate for this loss. This new route would fit aesthetically well into the local environment (Tree Officer) (see Section 4.3). 	Medium / High
С	Includes the provision of a new 3m wide access road which would skirt the southern extent of Oakley Playing Fields and the agricultural land to the south of the proposed development site, and would link the proposed new development to Imjin Road at its western extent.		 The proposed access route would not impact on the existing Cemetery and Crematorium The provision of a new separate road would reduce traffic movements at the existing Cemetery and Crematorium access. The proposed access route could be used to access potential future development land / proposed flood alleviation scheme located to the south of the proposed new Crematorium. 	 Potential highway operation and safety implications resulting from additional traffic movements along Imjin Road. Proposed Route Option alignment would cross Main River, which would require consultation with Environment Agency / Environmental Permit. Route crosses proposed ditch / culvert offtake from Wyman's Brook Tributary for the Priors Farm Flood Storage Area. The proposed route alignment falls within 250 m of ponds suitable for Great crested newts. Proposed Route alignment would skirt southern extent of Oakley Playing Fields, which is an historic landfill site. The stability of the landfill site is unknown. Route C would not incur significant tree loss but the proposed new road may look incongruous through this open space. Some ground cover would have to be removed (Tree Officer) (see Section 4.3). 	High
D	Hybrid of both Route Options B and C. Includes the provision of a new 3m wide road is proposed which would run between Imjin Road, up the western boundary of Oakley	Construction and Operational	 The provision of a new separate road would reduce traffic movements at the existing Cemetery and Crematorium access. The proposed access route could be used to access potential future development land / proposed flood alleviation scheme located to the south of the proposed new Crematorium. 	 Potential highway operation and safety implications resulting from additional traffic movements along Imjin Road. Proposed Route Option alignment would cross Main River, which would require consultation with Environment Agency / Environmental Permit. Route crosses proposed ditch / culvert offtake from Wyman's Brook Tributary for 	High

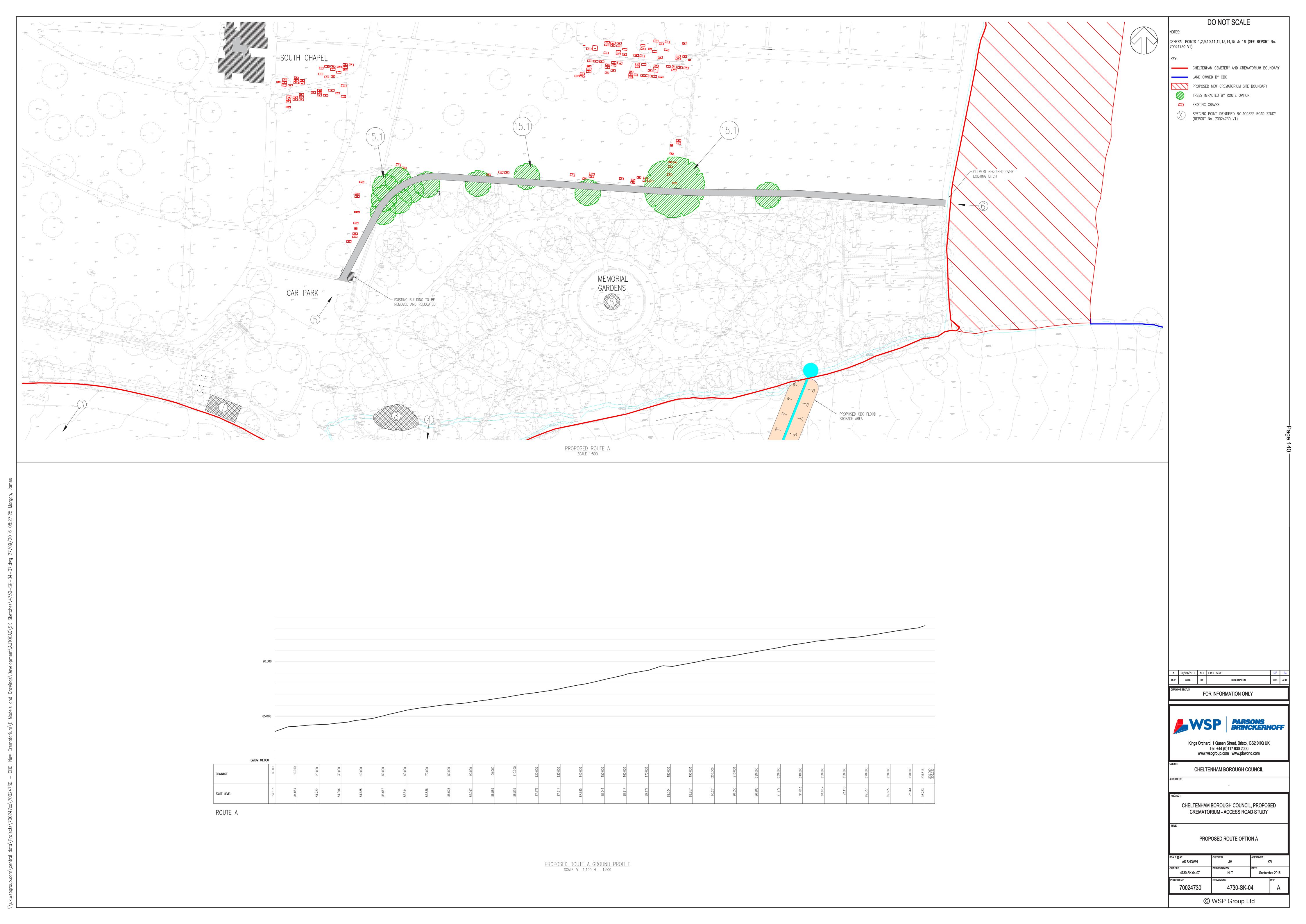
ROUTE OPTION	Description	POTENTIAL USE (CONSTRUCTION / OPERATIONAL)	KEY OPPORTUNITIES	Key Constraints	Risk
	Playing Fields, and along the northern boundary of Oakley Playing Fields (along the same alignment as Route Option B – i.e. following the existing Farm Track alignment.			 the Priors Farm Flood Storage Area. The proposed route alignment is in close proximity to an active badger sett. The proposed route alignment falls within 250 m of ponds suitable for Great crested newts. Proposed Route alignment would skirt southern extent of Oakley Playing Fields, which is an historic landfill site. The stability of the landfill site is unknown. The proposed route would directly impact on the existing residential properties (approximately 16 in total) (in terms of noise and pollution) which skirt the southern boundary of the Farm Track. Route D would also not incur significant tree loss but some ground cover would need to be removed. The road would fit more discretely into the landscape (Tree Officer) (see Section 4.3) 	

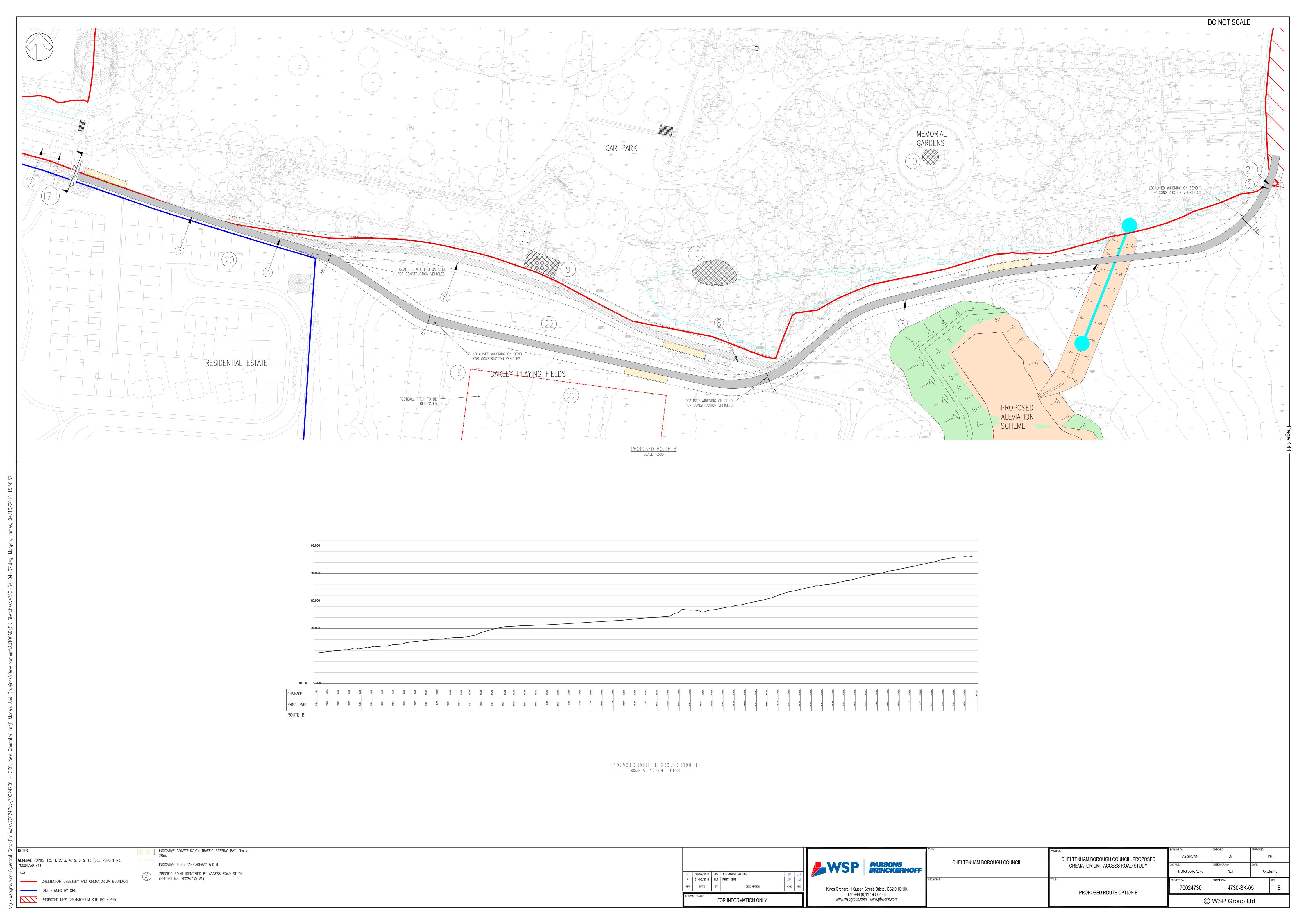
ROUTE OPTION PLANS

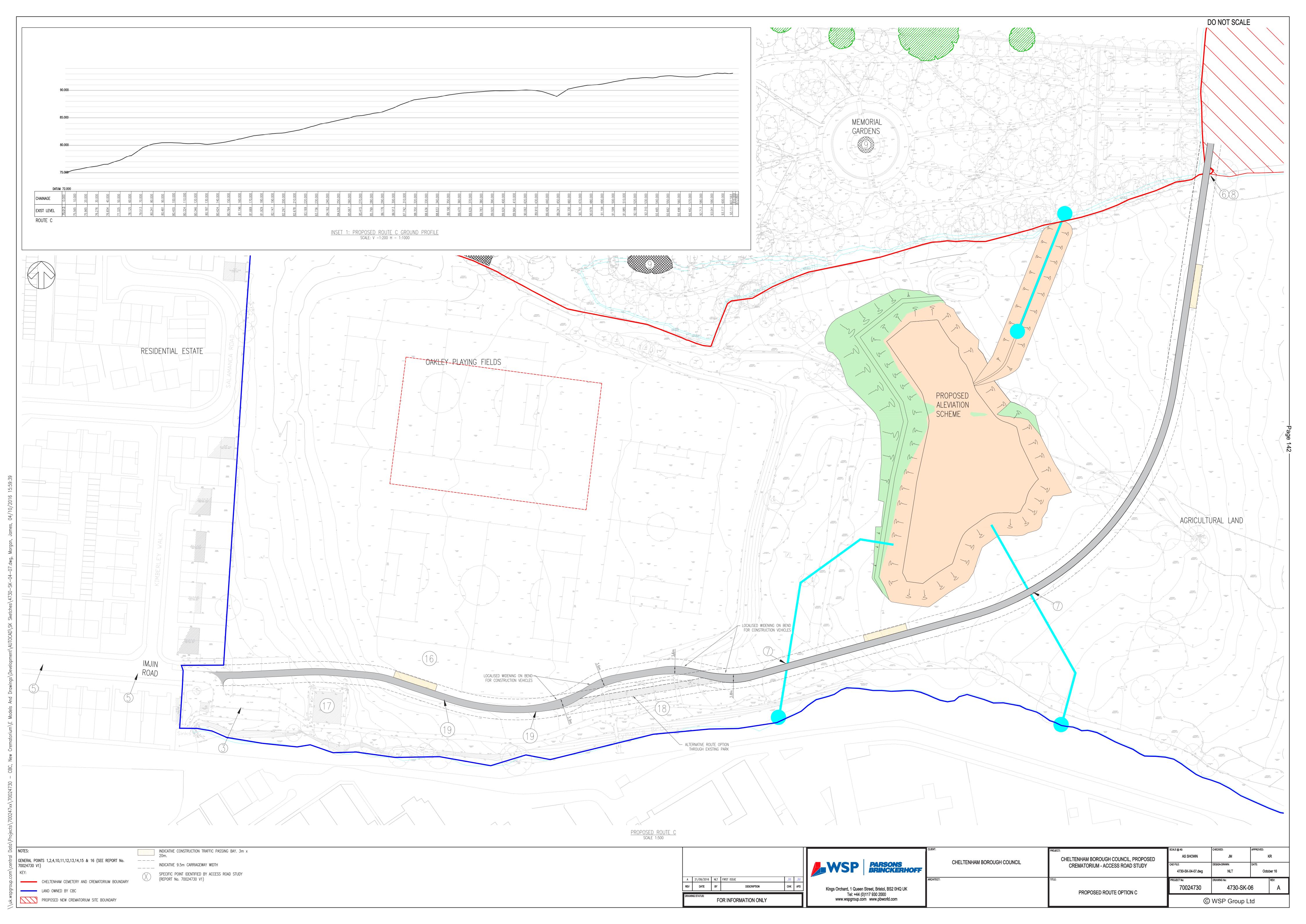


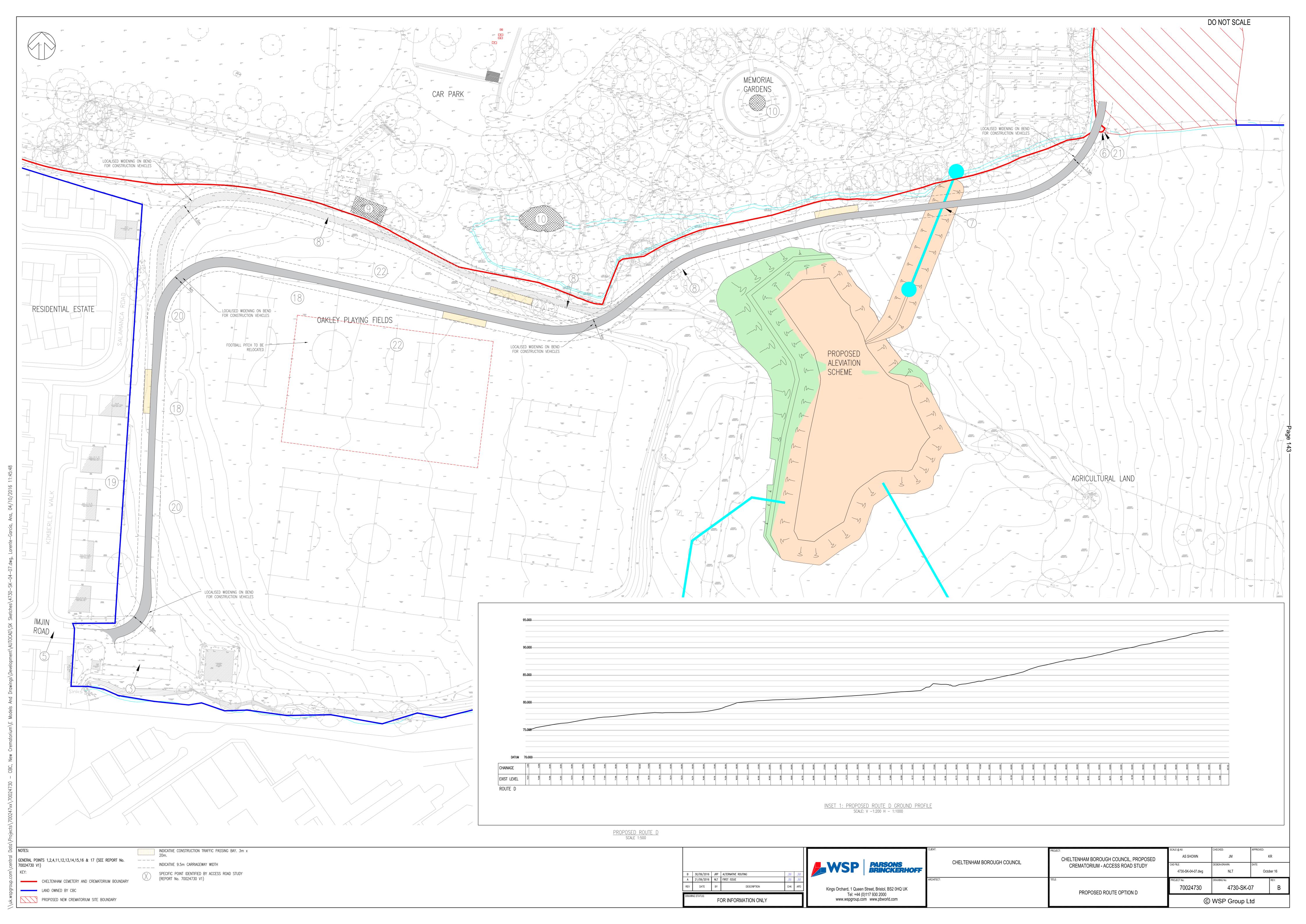


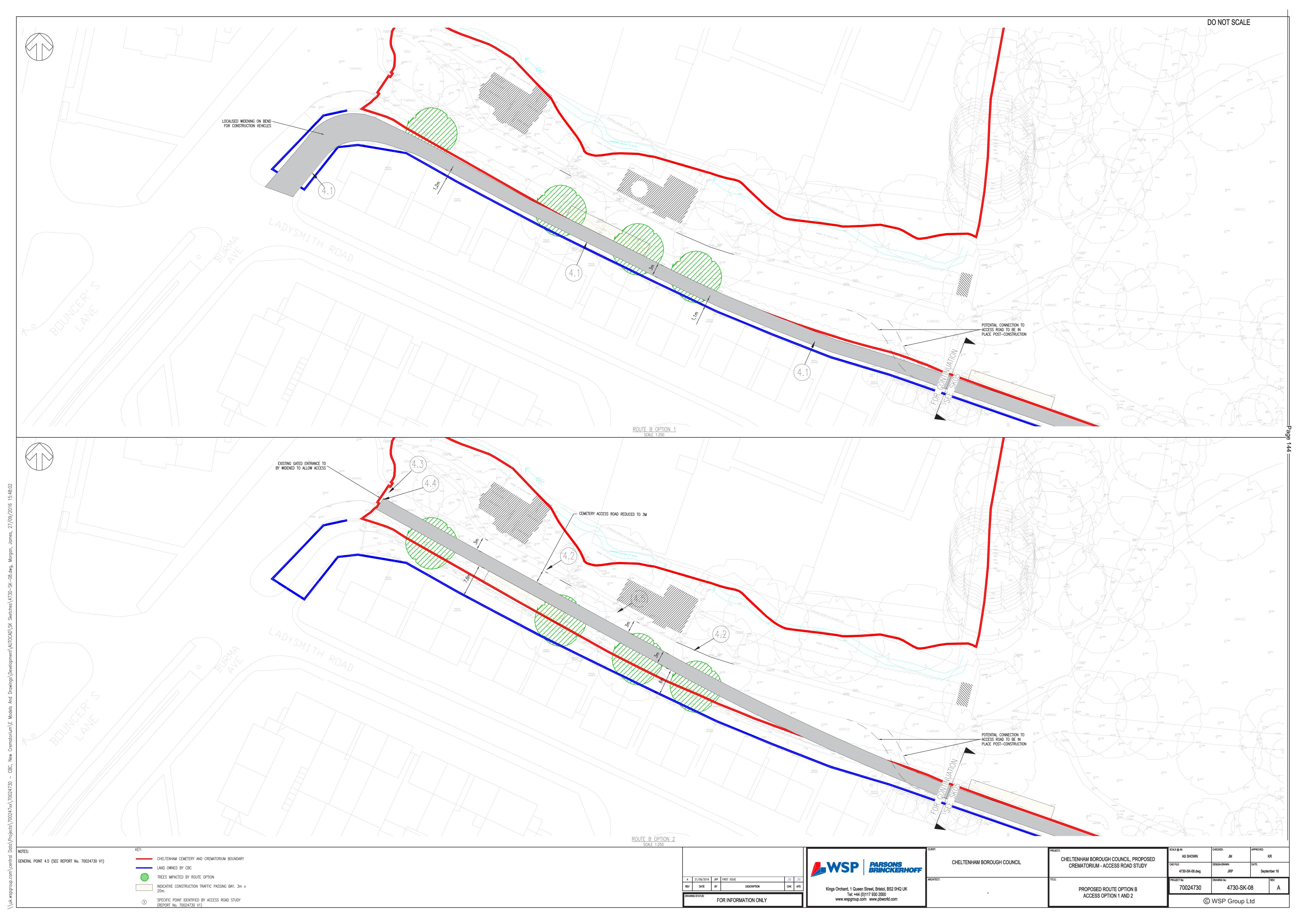












Appendix A

CBC'S ACCESS ROAD BRIEF

Introduction & Background

Cheltenham Borough Council is intending to build a new crematorium on land it owns immediately to the east of its existing Cemetery and Crematorium off Bouncers Lane, Cheltenham. See Diagram 1.

An independent options appraisal undertaken in 2015 by Robert Potters and Partners, identified possible entrance and exit routes to and from a new crematorium and car park, producing some initial ideas for routes within the existing cemetery and land owned by the council to the south. See Diagram 2.

Principal Contractor for the project, Willmott Dixon has recently completed a feasibility study of a conceptual plan for the new facilities which includes a comparison of two alternative exit routes, one inside the existing grounds and one to the south known as Prior's Farm.

While studies so far have been useful conceptually, it is clear the Council and its partnering Contractor require a comprehensive impact assessment study and detailed appraisal of possible operational access routes taking account of all relevant factors. This need was also suggested in a strategic development report undertaken by the lead planning Officer who advises the Crematorium Redevelopment Project Board.

The crematorium development project is constrained by an allocated budget which has no provision for land purchase. Therefore certain possible access route options have been ruled out for further consideration. As such, the following possible routes can be discounted for the reasons stated:

- a. Via Prestbury village and Noverton Farm from the north Farm land not owned by the Council
- b. Via Prestbury village and Finchcroft Lane from the north Costs and legal issues associated with need to bridge Noverton brook
- c. Via Oakley Farm housing development from the south Costs and legal issues associated with need to bridge Wyman's brook and complications of traffic flow through Oakley Farm housing estate

Objectives

Provide a comprehensive report, which is able to support any forthcoming planning application, to Cheltenham Borough Council and Willmott Dixon, analysing options for:

- The preferred operational access routes to and from the proposed new crematorium and car park
- Construction traffic haul road (Principal Contractor's temporary Works)
- Reducing Project risk in terms of practical implementation and costs

Scope

Ingress to the proposed new facilities via the existing entrance to the cemetery has always been the preferred operational option. However the options for a permanent egress route are numerous, and the following shall be included and considered in this study. See Diagram 3:

- Utilising existing routes through the cemetery investigating all reasonable alternative routes therein
- Utilising the existing redundant farm track to the southern boundary of the cemetery and investigating all variants thereof
- Utilising existing land within Prior's Farm and the playing field leading from Imjin Road to the south

In conjunction with the operational access route options the study shall investigate and consider the best option for the Contractor's temporary Works construction traffic haul road, taking into account both time and cost to the project delivery programme.

The study shall reference all necessary legislative and regulatory requirements pertaining to roads, civil engineering, trees, conservation restrictions, burials, playing fields, traffic and environmental impact assessments and the like, in order to provide a definitive report that can be used to support future planning application/s.

Constraints

Conceptual plans for the location of the new crematorium and car park. See Willmott Dixon feasibility study.

Deliverables

- 1. A report to the Council and Willmott Dixon setting out:
 - Options considered
 - Assessment against criteria including development and operational costs, timescales and risks

The report should set out in CAD format:

- Road routes
- Road characteristics, including but not limited to, separation; drainage; width; lanes; surface; footpaths; lighting, future adoption; etc.

The report must include

- An assessment of likely traffic volumes taking into account the option to build a second chapel in the future.
- An assessment of likely traffic volumes along local roads.
- Adequate engineering drawings to support the feasibility of the chosen option, including any topographical surveys required.
- 2. A presentation supporting the report to be given to the Council, Willmott Dixon and other relevant parties.

Quality

Options should be evaluated against the following assessment criteria:

- Most positive impact on proposed Crematorium Redevelopment Project budgeted costs
- Least negative impact on Crematorium Redevelopment Project timescales
- Maximise likelihood of planning permission, taking account of the sensitivity of the location; the nearby Area of Outstanding Natural Beauty and public green space aspirations.
- Ability to deal with expected traffic volumes
- Least negative impact on local facilities, e.g. cemetery, sports facilities including paying fields, playground etc.
- Greatest social value through enabling or not constraining flood alleviation schemes; allotment provision; local green space designation and potential for future housing development

Assumptions

It's assumed that local residents will be consulted as part of the planning application process and therefore no public consultation is required during this study.

Report Delivery Timescales

To be agreed with Willmott Dixon and CBC

Reporting

To:

- Cheltenham Borough Council Senior Responsible Officer (Mike Redman)
- Cheltenham Borough Council Senior Property Surveyor (Garrie Dowling)

- Project Principal Contractor (Willmott Dixon)

Stakeholders

- Crematorium Programme Team
- Cabinet Member
- Ward Members
- Cabinet Member Working Group
- Project Design Team (Willmott Dixon / Pick Everard / Roberts Limbrick)
- Cheltenham Borough Council Senior Engineer (Flood Alleviation Scheme lead Officer)
- Cheltenham Borough Council Green Environment Service Manager (Allotments & Playing Fields)
- Cheltenham Borough Council Managing Director (Place and Economic Development)

Attachments

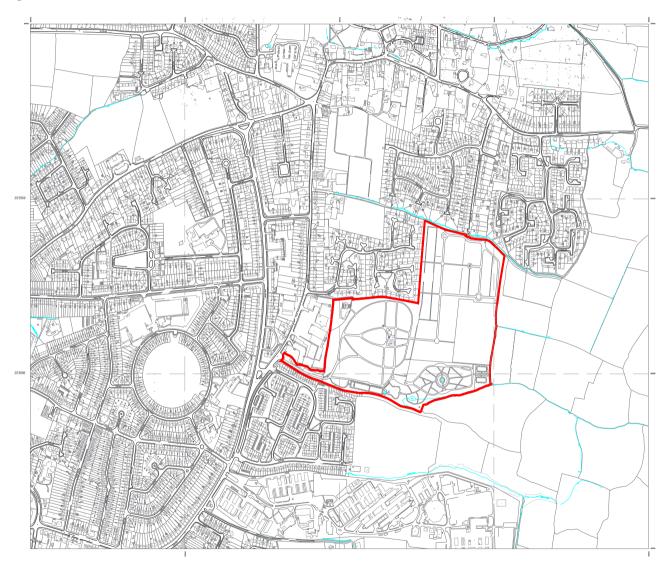
- Willmott Dixon feasibility report (draft)
- Lead Planning Officer's report on Prior's Farm

Site investigation and survey works undertaken to date and available include:

- Topographical surveys of the Cemetery & Crematorium
- Cemetery & Crematorium Heritage statement of significance
- Ecology Surveys (Extended Phase 1 Habitat survey; great crested newt survey; reptile survey; badger survey; bats surveys)
- Arboricultural surveys
- Hydro-geotechnical (Tier 1) survey
- Archaeological survey (Heritage Desk-based assessment and geophysical survey)

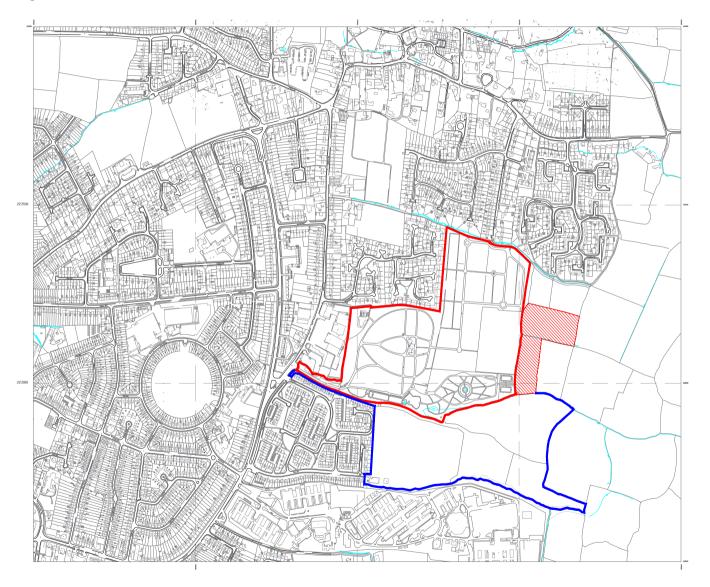
ACCESS ROAD BRIEF – INITIAL DRAFT

Diagram 1 – Location Plan



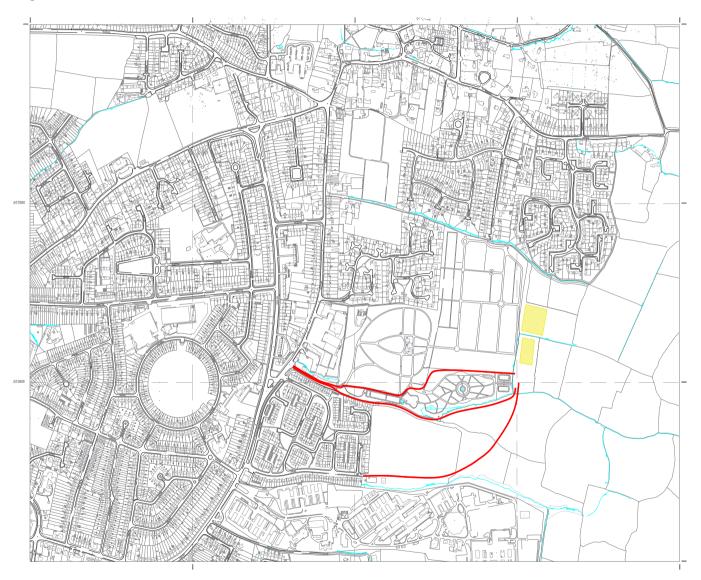
ACCESS ROAD BRIEF - INITIAL DRAFT

Diagram 2 – Site Plan



ACCESS ROAD BRIEF - INITIAL DRAFT

Diagram 3 – Potential Routes



Appendix B

STUDY AREA CONSTRAINTS

APPENDIX B - STUDY AREA CONSTRAINTS

INTRODUCTION

The following Sections consider the existing constraints presented by the overall study area (see Chapter 4 of the main report for individual Route Options opportunities and constraints).

For ease of reference, the site-wide constraints have been split out by discipline (transport, flood risk, ecology, and environmental).

TRANSPORT AND HIGHWAYS

EXTERNAL ROAD NETWORK

There is currently no formal vehicular access arrangement to the proposed development site, other than local field access. As such motorists would rely on either the existing [potentially upgraded] access to the existing Cemetery and Crematorium from Bouncers Lane, a new access assuming use of the existing [upgraded] farm track located to the immediate south of the existing access, or via a new access road linking to Imjin Road further south.

Although it is not anticipated that any additional trips would be generated by the proposals, consideration may need to be given to the potential impacts of any displaced traffic (i.e. to a new route) onto the existing highway network, including at the existing roads and junctions of:

- → B4075 Priors Road;
- → Imjin Road:
- → Bouncers Lane;
- → Cheltenham Cemetery and Crematorium / Bouncers Lane priority junction;
- → Bouncers Lane / B4075 Priors Road priority junction;
- → Bouncers Lane / Ladysmith Road priority junction (including Burma Avenue and the existing Farm Track); and
- → B4075 Priors Road / Imjin Road / Whaddon Road crossroads.

The existing road network that serves the residential estate to the south of the existing Cemetery and Crematorium comprises of predominantly residential streets, where there are currently no restrictions on parking. Should any of these streets be used to serve the proposed new Crematorium (in particular by construction traffic) there could be a requirement to restrict parking (so that sufficient width can be achieved for access) which in turn could result in potential displacement of parking onto the wider network. Taking Imjin Road for example, the existing carriageway is between 7.5m and 8m. However, when taking into consideration parking (which currently occurs along both sides of the carriageway) the road width is effectively narrowed to below 4m (which is insufficient to accommodate two-way vehicular movements).

Consideration would also have to be given to the potential safety implications associated with using these routes to access the proposed new Crematorium.

On-site observations of the Farm Track, which skirts the southern boundary of the existing Cemetery and Crematorium indicates that the track is narrow (to the north of the residential dwellings the Farm Track varies in width from 2.5m at its western extent to 1.4m at its eastern extent) and overgrown. Furthermore, the track abuts existing properties to the south. Significant works could be required to upgrade this route to serve the proposed new Crematorium. We understand that CBC control the Farm Track between the existing Cemetery and Crematorium and the northern edge of the residential estates.

INTERNAL ROAD NETWORK

In respect of the internal access roads which currently serve the existing Cemetery and Crematorium, the following constraints have been identified:

- → The existing Cemetery and Crematorium / Bouncers Lane priority junction is informal and lends itself to confusion;
- → The existing gates on entry to the existing Cemetery and Crematorium are not wide enough to accommodate two-way vehicle movements;
- → Part of the access road (between the main entrance and inner gates) is unrestricted; as such parked vehicles can impede access. This is particularly evident during peak periods of operation (i.e. when a service is held);
- → There is only one road which links the older western and newer eastern sections of the existing Cemetery and Crematorium. This route is one-way at present and is lined by numerous graves / stones (which limit the potential for any localised widening works to accommodate future two-way movements); and
- → The existing internal routes, in particular within the older western section of the existing Cemetery and Crematorium are observed to be narrow and in poor condition (the road surface is cracked / breaking up in numerous locations).

For reference, the existing vehicular access and egress routes within the existing Cemetery and Crematorium are illustrated on WSP | Parsons Brinckerhoff drawing **SK-01**.

As detailed above, one of the main constraints to achieving both access and egress internal within the existing Cemetery and Crematorium is the presence of a solitary one-way road which links the older western and newer eastern sections of the existing Cemetery and Crematorium (which is lined by existing gravestones).

FLOOD RISK

As discussed in Chapter 2 of this report, the study has a low flood risk, with flooding predicted to be constrained to the watercourses and immediate surrounds. The overall study area constraints are as follows:

- → Crossings of watercourses, which will require Ordinary Watercourse Consent and/or Environmental Permit applications. Box culverts may be allowed but the impacts on ecology and water quality will have to be discussed with the Lead Local Flood Authority and Environment Agency where appropriate; and
- → Ensuring that the future construction of the Whaddon FAS Scheme is not compromised by the development works.

The latest design drawings for the Whaddon FAS Scheme have been obtained from CBC's consultant's ch2m and overlain with the route options. The location of Whaddon FAS Scheme in relation to the proposed Route Options (considered in Chapter 4 of this report) is shown on WSP | Parsons Brinckerhoff's drawing **SK-03**. As can be seen from the plan over page, all but Route Option A cross the proposed scheme.

For reference and extract of WSP | Parsons Brinckerhoff's drawing (SK-03).

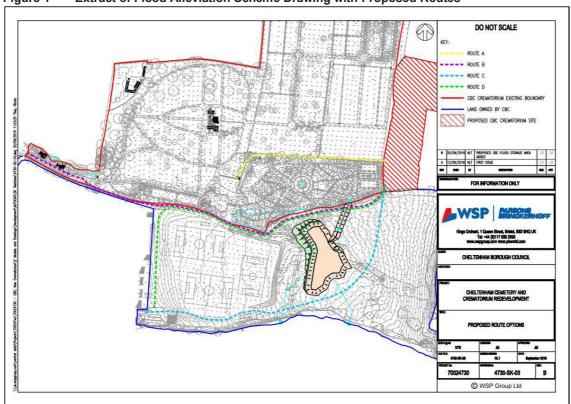


Figure 1 Extract of Flood Alleviation Scheme Drawing with Proposed Routes

ECOLOGY

Between 2015 and 2016, CBC commissioned a number of surveys at the existing Cemetery and Crematorium, which included:

- → Badger Survey (undertaking by Lepus Consulting in July, 2015);
- → Reptile Survey (undertaken by Lepus Consulting in June, 2015);
- → Extended Phase I Habitat Survey (undertaken by Lepus Consulting in April, 2015);
- → Bat Survey (undertake by Aspect Ecology in February, 2016);
- → Great Crested Newt Survey (undertaken by Lepus Consulting in June, 2015); and
- → Arboriculture Survey (undertaken by Tree King Consulting in November, 2015).

The following Sections detail the findings of the above-detailed reports.

DESIGNATED SITES AND PROTECTED HABITATS

Designated areas of note include the Cleeve Common SSSI (2.1km north-west) and the Puckham Woods SSSI (3km east).

HABITATS OF PRINCIPLE IMPORTANCE

During the site visit, four Priority Habitats were identified within the study area, comprising of deciduous woodland, running water, standing water and hedgerows.

PROTECTIVE SPECIES

BADGERS

The badger survey identified two badger setts within the existing Cemetery and Crematorium area. These were located in the north west corner of the existing Cemetery and Crematorium (the Nursery sett) and in the south of the existing Cemetery and Crematorium near the entrance to the Garden of Remembrance (the Garden of Remembrance sett). For further details please refer to the Extended Phase 1 Habitat Survey report prepared by Lepus Consulting's

The entire scheme area is considered suitable for use by badgers for foraging, commuting and sett building. Badgers are protected under the Protection of Badgers Act (1992). As such, it is an offence to wilfully take, kill, injure or ill-treat a badger, or possess a dead badger or any part of a badger. Under the Act, their setts are also protected against obstruction, destruction, or damage in any part.

Sett interference includes damaging or destroying a sett, obstructing access to a sett, and disturbing a badger whilst it is occupying a sett. The Act defines a badger sett as 'any structure or place, which displays signs indicating the current use by a badger' and Natural England (NE) takes this definition to include seasonally used setts.

Work that may disturb badgers or their setts or damage or destroy a sett may take place under a licence from the relevant statutory body. In England, licences are administered by NE. This will usually require mitigation measures to be put in place as a condition of the licence.

RIPARIAN SPECIES

Two streams were identified by the Extended Phase 1 Habitat survey. The streams are unknown stream that runs through the centre of the survey area and Wyman Brook, which runs immediately to the south of the survey area. The streams were both observed during the constraints walkover and were both considered suitable to support riparian species (otter (*Lutra lutra*), water vole (*Arvicola amphibius*) and white clawed crayfish (*Austropotamobius pallipes*)).

Water voles are fully protected under the Wildlife and Countryside Act (1981, as amended) (WCA). It is an offence to possess, control or sell water voles or to intentionally or recklessly kill, injure or take water voles. It is also an offence to intentionally or recklessly damage, destroy or obstruct access to a place that water voles use for shelter or protection or disturb water voles whilst using such a place.

Otters are fully protected under Schedule 2 of the Conservation of Habitats and Species Regulations 2010 (as amended)(Conservation Regulations) which defines "European protected species of animals", and also receive partial protection under the WCA.

Taken together the Act and Regulations make it illegal to:

- → deliberately kill, injure or capture otters;
- → deliberately disturb otters (whether in a resting place or not);
- → damage, destroy or obstruct access to a resting place used by an otter;
- → possess or transport an otter or any part of an otter, unless acquired legally; or to
- → sell, barter or exchange or advertise for such purposes an otter.

Development activities that could result in impacts on otters should be modified to avoid/minimise the likelihood of an impact occurring in the first instance. If impacts are unavoidable then the works may need to be carried out under a European Protected Species development licence, granted under the Conservation Regulations.

White-clawed crayfish receive partial protection under Schedule 5 of the WCA. This prohibits the taking of any native crayfish for any purpose except under licence. They are listed on Annex II of the European Communities Habitats Directive (1992), which allows sites to be designated based on the species being present.

Otters, water voles and white-clawed crayfish are also Species of Principal Importance in England under Section 41 of the Natural Environment and Rural Communities Act 2006 (NERC).

DORMICE

The habitats within the survey area were considered sub-optimal for dormice (*Muscardinus avellanarius*) as reported within the 2015 Extended Phase 1 Habitat survey by Lepus Consulting. The constraints walkover observed sub-optimal habitat for dormice within the survey area and surrounding landscape.

Dormice are therefore not considered further in this report.

BATS

A bat tree inspection was undertaken in the eastern extent of the survey area, focusing on the area highlighted for the proposed new Crematorium works. In the survey, Aspect Ecology identified several trees with potential to support roosting bats (for further detail please see Aspect Ecology's report).

The constraints walkover noted numerous tress in the south, east, and centre of the survey area that were suitable for roosting bats, although a full assessment was not within the scope of the constraints walkover.

All 18 native UK bat species receive partial protection under Schedule 5 of the WCA. The Countryside and Rights of Way Act 2000 (CRoW) has amended the WCA in England and Wales and this act adds additional enforcement. Barbastelle (*Barbastella barbastellus*), Bechstein's bat (*Myotis bechsteinii*), greater horseshoe bat (*Rhinolophus ferrumequinum*) and lesser horseshoe bat (*Rhinolophus hipposideros*) are also listed on Annex II of the Habitats Directive.

Together this legislation makes it illegal to:

- → Deliberately kill, injure or capture bats;
- → Deliberately disturb bats whether in a roost or not, disturbance includes anything that is likely to impair their ability to survive, breed, reproduce or rear their young, or impair their ability to hibernate or migrate:
- → Intentionally or recklessly disturb roosting bats or obstruct access to their roosts;
- → Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
- → Possess or transport a bat or any part of a bat unless acquired legally; and;
- → Sell or exchange bats, or parts of bats.

Certain bat species are also Species of Principal Importance in England under Section 41 of the NERC Act. These species need to be taken into consideration by a public body when performing any of its functions. The species are: greater horseshoe bat, lesser horseshoe bat, Bechstein's bat, noctule (*Nyctalus noctula*), soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared bat (*Plecotus auritus*) and barbastelle.

BREEDING BIRDS

The survey area (Cheltenham Cemetery and Crematorium) contained numerous areas suitable for breeding birds, in particular areas of deciduous woodland, scrub and tall ruderal vegetation.

All birds, their nests and eggs are protected by the WCA. It is an offence to intentionally kill, injure, or take any wild bird, or take or destroy an egg of any wild bird. It is also an offence to damage or destroy the nest of any wild bird (whilst being built, or in use). Birds listed under Schedule 1 of the WCA are afforded additional protection with regard to intentional or reckless disturbance while nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

REPTILES

The survey area contained numerous areas suitable for reptile, in particular areas of woodland edge, scrub and tall ruderal vegetation to the south and east of the survey area.

The reptile survey was undertaken in the south and east of the survey area. The survey did not identify any reptiles.

The four common reptile species, adder (*Vipera berus*), grass snake (*Natrix natrix*), common lizard (*Zootoca vivipara*) and slow-worm (*Anguis fragilis*), are protected under Schedule 5 of the WCA against intentional killing, injuring and trade. The natural range of the rarer UK reptile species (smooth snake (*Coronella austriaca*) and sand lizard (*Lacerta agilis*) does not include Gloucestershire, thus they are not considered further in this assessment.

The widespread reptile species are also listed as Species of Principal Importance in England under Section 41 of the NERC Act.

GREAT CRESTED NEWTS

A survey for great crested newt (*Triturus cristatus*) (GCN) was undertaken of a single pond within the survey area. Several other ponds were identified as suitable for GCN but were scoped out of the 2015 survey by Lepus Consulting. The survey did not identify any GCN.

The constraints walkover identified two ponds that were considered suitable to support GCN.

GCN receive full protection under the Conservation Regulations Schedule 2 and are also partially protected under the WCA Schedule 5. It is illegal to deliberately capture, injure or kill, to intentionally or recklessly disturb, or to deliberately take or destroy the eggs of GCN. It is also illegal to damage, destroy or intentionally or recklessly obstruct access to a breeding or resting place used by GCN. All life stages of GCN are afforded the same level of protection.

INVERTEBRATES (EXCLUDING WHITE CLAWED CRAYFISH)

The habitats observed within the survey area during the ecological constraints walkover were considered unlikely to support a diverse range of invertebrate species (excluding white clawed crayfish).

Invertebrates are therefore not considered further in this report.

FLORA (INCLUDING INVASIVE SPECIES)

No protected or invasive flora species were recorded within the existing Extended Phase 1 report by Lepus Consulting. In addition, no protected or invasive flora species were observed during the ecological constraints walkover. It must be noted however that no targeted invasive species surveys were undertaken; therefore, their absence is not confirmed.

Protected or invasive flora species are not considered further in this report.

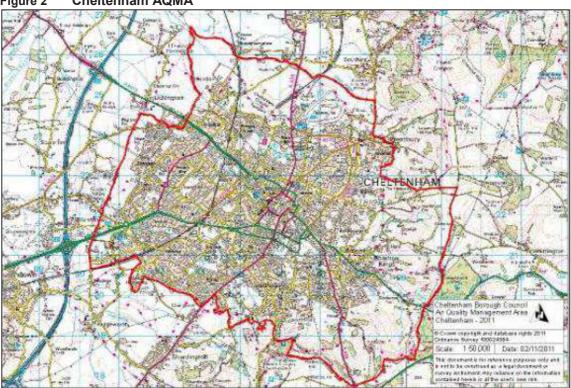
ENVIRONMENTAL

CBC commissioned Justin Ayton Ltd to prepare a Statement of Significance (dated January, 2015) to help formulate long-term plans for the evolution of the existing Cemetery and Crematorium. The report has been used to inform the following sections if this report.

AIR QUALITY

The entire proposed development site falls within an Air Quality management Area (AQMA). The whole borough of Cheltenham was declared an AQMA on the 18th September, 2011, due to heightened levels of Nitrogen dioxide (NO₂) sourced from road traffic. Figure 2 illustrates the extent of the AQMA in Cheltenham.

Figure 2 Cheltenham AQMA



There are a number of air quality sensitive receptors located within the vicinity of the overall study area, which include:

- Adjacent residential properties and residents; and
- A school is located 250m North West of the Cemetery.

ARCHAEOLOGY AND CULTURAL HERITAGE

In respect of archaeology and cultural heritage:

- The land adjacent to the existing Cemetery and Crematorium is classified as a Grade II listed park and garden;
- → The two the existing Cemetery and Crematorium Chapels are Grade II listed; and
- → There are also two lodges, and two gateways (including the main entrance) and a tomb on the existing Cemetery and Crematorium grounds, which are all Grade II listed structures.

Figure 3 illustrates (black triangles) the Grade II Structures and Land which surround existing the existing Cemetery and Crematorium.

Nursery

Cemetery

War

Meml

Crematorium

Gard

of Remer

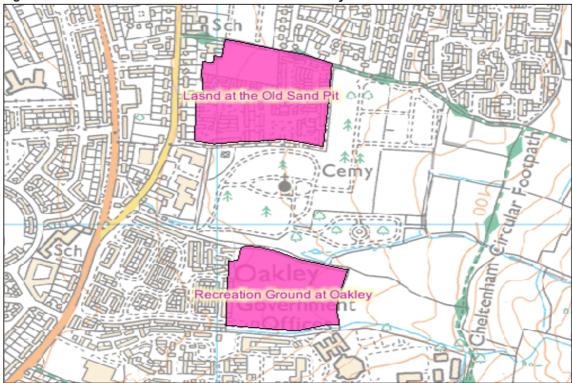
Figure 3 Grade II Structures and Land surround Cemetery site

CONTAMINATED LAND

The Environment Agency interactive online map indicates that there are two historic (the exact date of their use is unknown, however it is understood that their last use was likely to be during the Victorian era) landfills in the immediate vicinity of the existing Cemetery and Crematorium.

One is located directly to the north (Land at the Old Sand Pit), while the other is located directly to the south of the existing Cemetery and Crematorium (Recreation Ground at Oakley) which forms part of the study area. For reference, the locations of the landfill sites are illustrated on **Figure 4**.

Figure 4 Historic Landfills located around Cemetery site



LANDSCAPE

The study area is located to the immediate east of a designated Area of Outstanding Natural Beauty (AONB), as illustrated by **Figure 5**.





NOISE AND VIBRATION

There are a number of noise and vibration sensitive receptors located within 200m of the study area, including the existing residential properties located to the south of the existing Cemetery and Crematorium and to the west of Oakley Playing Fields.

ARBORICULTURE

There are a number of existing trees located within the study area which fall within the following categories:

- → Class A: Exceptionally good trees or arboriculture features with >40 years useful safe life.
- → Class B: Good trees with a minimum of 20 years useful safe life.
- → Class C: Unremarkable trees of limited merit. Minimum safe life of 10 years.
- → Class U: Unsuitable for retention. Likely to have <10 years useful safe life.

The arboriculture survey, previously undertaken by Tree King Consulting, considered the classification and quality of the trees in the vicinity of the proposed vehicular route options. The survey has been used to inform this study.

CBC has confirmed that there are some trees (namely beech trees which are located to the north east of the chapel and adjacent to the rear garden of 6 Blackberry Field) which are subject to Tree Preservation Orders (TPO's). There are no trees with TPO's in the vicinity of the proposed vehicle route options.

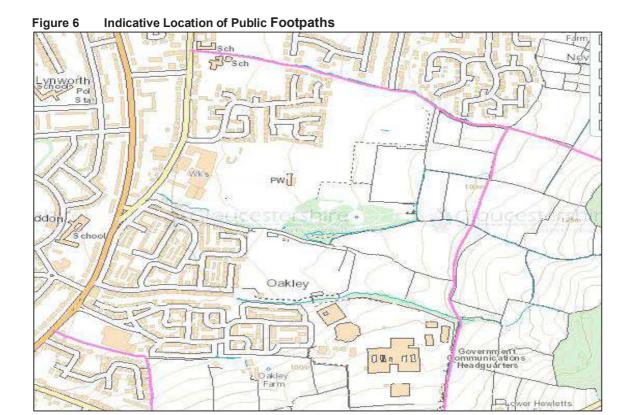
It is worth noting however, that there are number of well-established trees, in particular along the southern boundary of the access road (between the main entrance and inner gates), and along the northern boundary of the Gardens of Remembrance.

SOCIAL

To the immediate south of the existing Cemetery and Crematorium, Oakley Playing Fields are designated as recreational ground. In addition, it is worth noting that there is also an existing children's playground located at the southeast boundary of the playing fields.

There is an existing public footpath which skirts the southern boundary of Oakley Playing Fields, and travels through the agricultural fields to the south of the proposed development site.

For reference, the existing public footpath is illustrated on **Figure 6**.



Appendix C

ATC SURVEY DATA AND SERVICE TIME INFORMATION





Midlands

Haseley Office Centre, Firs Lane, Haseley, Warwick, CV35 7LS

Tel: 01926 485504 Fax: 01926 485537

WSP PARSONS BRINCKERHOFF CHELTENHAM ATC SURVEY

SURVEY REPORT AUGUST 2016

PROJECT NO.	6559
CHECKED	M.NORRIS
DATE	16/08/2016
CONTACT	N. TOONE
REVISION	



CONTENTS

Introduction

Diagram 1 – General Location Plan

Site Notes

Site Photograph

Appendix A – Vehicle Categories

Appendix B – Automatic Traffic Count Data



INTRODUCTION

Nationwide Data Collection (NDC) was instructed by WSP Parsons Brinckerhoff to undertake an automatic traffic count (ATC) in Cheltenham, Gloucestershire.

A general location plan is given in Diagram 1.

Automatic Traffic Count

The automatic traffic counter (ATC) was installed at the following location:

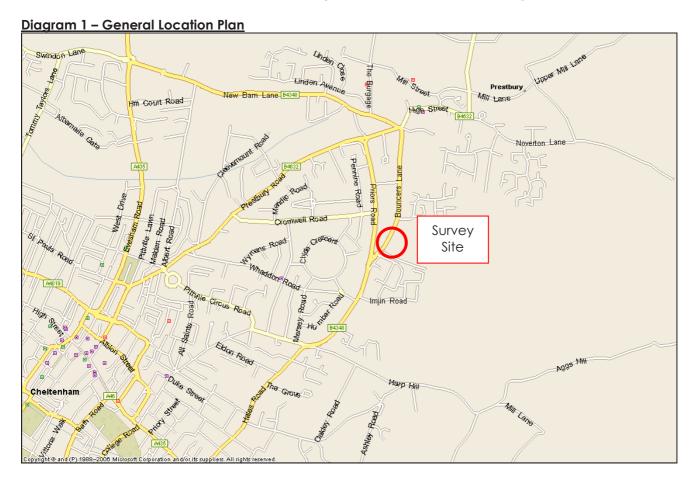
Site 1: Cheltenham Cemetery access, OSGR: SO 96855 23015

Data Collection

A Metrocount 5600 series automatic traffic counter, attached to pneumatic tubes, was used at the site. The counter was installed for a period of 1 week commencing Saturday 6th August 2016.

The resulting data files have been analysed to produce speed and class data at hourly intervals. Details of the vehicle categories & speed bin classifications are given in Appendix A, and a copy of the data is included in Appendix B.

The data was emailed to Karishma.Khatri@wspgroup.com on Tuesday 16th August.





Site Notes

ATC site notes & Data Quality

The ATC was carried out with no incidents or disruptions likely to affect the results.

Site Photograph





APPENDIX A Vehicle Categories



ATC VEHICLE CATEGORIES

Axles	Groups	Description		Class	Parameters	Dominant Vehicle	Aggregate
2	1 or 2	Very Short - Bicycle or Motorcycle	мс	1	d(1)<1.7m & axles=2		
2	1 or 2	Short - Sedan, Wagon, 4WD, Utility, Light Van	SV	2	d(1)>=1.7m, d(1)<=3.2m & axles=2		
3, 4 or 5	3	Short Towing - Trailer, Caravan, Boat, etc.	SVT	3	groups=3, d(1)>=2.1m, d(1)<=3.2m, d(2)>=2.1m & axles=3,4,5		1 (Light)
2	2	Two axle truck or Bus	TB2	4	d(1)>3.2m & axles=2		
3	2	Three axle truck or Bus	ТВЗ	5	axles=3 & groups=2		
>3	2	Four axle truck	T4	6	axles>3 & groups=2		2 (Medium)
3	3	Three axle articulated vehicle or Rigid vehicle and trailer	ART3	7	d(1)>3.2m, axles=3 & groups=3		
4	>2	Four axle articulated vehicle or Rigid vehicle and trailer	ART4	8	d(2)<2.1m or d(1)<2.1m or d(1)>3.2m axles = 4 & groups>2		
5	>2	Five axle articulated vehicle or Rigid vehicle and trailer	ART5	9	d(2)<2.1m or d(1)<2.1m or d(1)>3.2m axles=5 & groups>2		
>=6	>2	Six (or more) axle articulated vehicle or Rigid vehicle and trailer	ART6	10	axles=6 & groups>2 or axles>6 & groups=3		
>6	4	B-Double or Heavy truck and trailer	BD	11	groups=4 & axles>6		
>6	>=5	Double or triple road train or Heavy truck and two (or more) trailers	DRT	12	groups>=5 & axles>6	000 00 00	3 (Heavy)



ATC SPEED BINS & DATA HEADINGS

Heading	Description
0 - 5	Speed bin totals 0 - 5 mph
5 - 10	Speed bin totals 5 - 10 mph
10-15	Speed bin totals 10 - 15 mph
15 - 20	Speed bin totals 15 - 20 mph
20 - 25	Speed bin totals 20 - 25 mph
25 - 30	Speed bin totals 25 - 30 mph
30 - 35	Speed bin totals 30 - 35 mph
35 - 40	Speed bin totals 35 - 40 mph
40 - 45	Speed bin totals 40 - 45 mph
45 - 50	Speed bin totals 45 - 50 mph
50 - 55	Speed bin totals 50 - 55 mph
55 - 60	Speed bin totals 55 - 60 mph
60 - 65	Speed bin totals 60 - 65 mph
65 - 70	Speed bin totals 65 - 70 mph
70 - 75	Speed bin totals 70 - 75 mph
75 - 80	Speed bin totals 75 - 80 mph
80 - 85	Speed bin totals 80 - 85 mph
85 - 90	Speed bin totals 85 - 90 mph
90 - 95	Speed bin totals 90 - 95 mph
95 - 100	Speed bin totals 95 - 100 mph
100 - 105	Speed bin totals 100 - 105 mph
105 - 110	Speed bin totals 105 - 110 mph
110 - 115	Speed bin totals 110 - 115 mph
115 - 120	Speed bin totals 115 - 120 mph
120 - 125	Speed bin totals 120 - 125 mph
125 - 130	Speed bin totals 125 - 130 mph
130 - 135	Speed bin totals 130 - 135 mph
135 - 140	Speed bin totals 135 - 140 mph

Heading	Description
>PSL	Greater than the posted speed limit
>PSL%	Greater than the posted speed limit as a percentage
>\$L1 ACPO	Greater than ACPO (Association of Chief Police Officers) standard. ACPO is PSL x 10%+2mph
>\$L1% ACPO	Greater than ACPO displayed as a percentage
>SL2 DfT	Greater than DFT (Department For Transport) standard. DFT is PSL plus 15mph.
>\$L2% DfT	Greater than DFT displayed as a percentage
Mean	Average speed
Vpp 85	85th percentile speed



APPENDIX B Automatic Traffic Count Data



Site No.	Location.	Direction.	Speed Limit - PSL (mph)	Start Date.	End Date.	Total Vehicles.	5 Day Ave.	7 Day Ave.	No. > Speed Limit.	%. > Speed Limit.	No. > ACPO Limit.	%. > ACPO Limit.	No. > DfT Limit.	%. > DfT Limit.	Mean Speed	85%ile Speed
		Eastbound	15	Sat 06 August 2016	Fri 12 August 2016	2948	468	421	1859	63.1	785	26.6	11	0.4	16.5	20.6
001	Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015	Westbound	15	Sat 06 August 2016	Fri 12 August 2016	2957	470	422	2085	70.5	1014	34.3	21	0.7	17.3	21.7
		Two way	15	Sat 06 August 2016	Fri 12 August 2016	5905	938	844	3944	66.8	1799	30.5	32	0.5	16.9	21.3

Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Sat 06 August 2016

		501 00 A	ugusi zu																		
Time	Total						Classif	ication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	1	100	1	100	0	0	21.5	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	7	2	5	0	0	0	0	0	0	0	0	0	0	4	57.1	2	28.6	0	0	14.9	-
0800	8	0	8	0	0	0	0	0	0	0	0	0	0	7	87.5	4	50	0	0	19.9	-
0900	30	0	29	0	1	0	0	0	0	0	0	0	0	27	90	11	36.7	0	0	18.3	22.4
1000	21	0	21	0	0	0	0	0	0	0	0	0	0	18	85.7	8	38.1	0	0	18.4	22.4
1100	39	0	39	0	0	0	0	0	0	0	0	0	0	33	84.6	17	43.6	0	0	18.5	Page
1200	35	1	33	0	1	0	0	0	0	0	0	0	0	27	77.1	13	37.1	0	0	17.7) Be
1300	30	0	29	0	1	0	0	0	0	0	0	0	0	28	93.3	16	53.3	1	3.3	20	`Ф
1400	24	0	21	0	3	0	0	0	0	0	0	0	0	21	87.5	14	58.3	0	0	19.5	17
1500	20	0	19	0	1	0	0	0	0	0	0	0	0	18	90	7	35	0	0	18.4	74
1600	20	0	20	0	0	0	0	0	0	0	0	0	0	14	70	7	35	0	0	17.8	21.7
1700	19	1	18	0	0	0	0	0	0	0	0	0	0	17	89.5	12	63.2	0	0	19.1	22.1
1800	12	1	10	0	0	0	1	0	0	0	0	0	0	6	50	2	16.7	0	0	15.1	18.1
1900	4	0	4	0	0	0	0	0	0	0	0	0	0	3	75	3	75	1	25	24.9	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	265	5	252	0	7	0	1	0	0	0	0	0	0	220	83	113	42.6	1	0.4	18.4	22.4
06-22	269	5	256	0	7	0	1	0	0	0	0	0	0	223	82.9	116	43.1	2	0.7	18.5	22.6
06-00	269	5	256	0	7	0	1	0	0	0	0	0	0	223	82.9	116	43.1	2	0.7	18.5	22.6
00-00	270	5	257	0	7	0	1	0	0	0	0	0	0	224	83	117	43.3	2	0.7	18.5	22.6



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Sun 07 August 2016

Time	Total						Classif	fication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>\$L2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	1	100	1	100	0	0	25.3	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	5	0	5	0	0	0	0	0	0	0	0	0	0	5	100	1	20	0	0	17	-
0800	21	2	18	0	1	0	0	0	0	0	0	0	0	13	61.9	5	23.8	0	0	16.2	19.7
0900	20	0	20	0	0	0	0	0	0	0	0	0	0	15	75	8	40	1	5	19.1	23.9
1000	40	0	40	0	0	0	0	0	0	0	0	0	0	34	85	14	35	0	0	17.7	20.4
1100	54	0	54	0	0	0	0	0	0	0	0	0	0	46	85.2	26	48.1	0	0	19	Pag
1200	39	3	35	0	0	0	1	0	0	0	0	0	0	31	79.5	16	41	0	0	18.2	_ <u>Ğ</u>
1300	35	1	33	0	0	1	0	0	0	0	0	0	0	25	71.4	9	25.7	0	0	16.8	Ф.
1400	39	1	37	0	1	0	0	0	0	0	0	0	0	28	71.8	12	30.8	0	0	16.7	
1500	25	1	24	0	0	0	0	0	0	0	0	0	0	18	72	7	28	0	0	17.3	207
1600	30	3	27	0	0	0	0	0	0	0	0	0	0	20	66.7	9	30	0	0	16.3	21.9
1700	16	2	14	0	0	0	0	0	0	0	0	0	0	11	68.8	6	37.5	0	0	16.4	20.4
1800	7	0	7	0	0	0	0	0	0	0	0	0	0	7	100	5	71.4	0	0	21.3	-
1900	4	0	4	0	0	0	0	0	0	0	0	0	0	4	100	3	75	0	0	21.6	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	331	13	314	0	2	1	1	0	0	0	0	0	0	253	76.4	118	35.6	1	0.3	17.6	21
06-22	335	13	318	0	2	1	1	0	0	0	0	0	0	257	76.7	121	36.1	1	0.3	17.6	21
06-00	335	13	318	0	2	1	1	0	0	0	0	0	0	257	76.7	121	36.1	1	0.3	17.6	21
00-00	336	13	319	0	2	1	1	0	0	0	0	0	0	258	76.8	122	36.3	1	0.3	17.7	21.3



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

Mon 08 August 2016

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

		741011 00	August 20	010																	
Time	Total						Classif	ication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	1	100	0	0	0	0	15.5	-
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	1	100	0	0	0	0	18	-
0600	1	0	1	0	0	0	0	0	0	0	0	0	0	1	100	1	100	0	0	24.7	-
0700	11	2	9	0	0	0	0	0	0	0	0	0	0	6	54.5	3	27.3	0	0	16.6	21
0800	6	0	6	0	0	0	0	0	0	0	0	0	0	4	66.7	2	33.3	0	0	16.6	-
0900	18	0	17	0	1	0	0	0	0	0	0	0	0	12	66.7	6	33.3	0	0	16.2	19.5
1000	80	1	76	0	3	0	0	0	0	0	0	0	0	57	71.3	24	30	1	1.3	17.2	20.8
1100	59	0	52	0	7	0	0	0	0	0	0	0	0	35	59.3	17	28.8	0	0	16	
1200	50	0	46	0	4	0	0	0	0	0	0	0	0	16	32	1	2	0	0	14.1	ag
1300	79	2	73	0	4	0	0	0	0	0	0	0	0	25	31.6	9	11.4	0	0	13.1	1 0
1400	49	1	44	0	4	0	0	0	0	0	0	0	0	25	51	8	16.3	0	0	15.1	<u> </u>
1500	22	0	21	0	1	0	0	0	0	0	0	0	0	13	59.1	7	31.8	0	0	17.4	်ဝီ
1600	14	0	12	0	2	0	0	0	0	0	0	0	0	9	64.3	4	28.6	0	0	17.3	20.4
1700	13	1	12	0	0	0	0	0	0	0	0	0	0	10	76.9	4	30.8	0	0	16.8	20.8
1800	13	1	12	0	0	0	0	0	0	0	0	0	0	8	61.5	6	46.2	0	0	16.9	19.9
1900	2	0	2	0	0	0	0	0	0	0	0	0	0	2	100	2	100	0	0	20.5	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	414	8	380	0	26	0	0	0	0	0	0	0	0	220	53.1	91	22	1	0.2	15.6	20.1
06-22	417	8	383	0	26	0	0	0	0	0	0	0	0	223	53.5	94	22.5	1	0.2	15.6	20.1
06-00	417	8	383	0	26	0	0	0	0	0	0	0	0	223	53.5	94	22.5	1	0.2	15.6	20.1
00-00	419	8	385	0	26	0	0	0	0	0	0	0	0	225	53.7	94	22.4	1	0.2	15.6	20.1



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Tue 09 August 2016

Time	Total		09031 20				Classif	ication						>PSL	>PSL%	>SL1	>\$L1%	>SL2	>SL2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.5	-
0600	3	1	2	0	0	0	0	0	0	0	0	0	0	2	66.7	2	66.7	0	0	22.9	-
0700	14	2	10	0	2	0	0	0	0	0	0	0	0	7	50	5	35.7	0	0	15.6	20.8
0800	9	0	9	0	0	0	0	0	0	0	0	0	0	6	66.7	2	22.2	0	0	17.1	-
0900	55	0	52	0	3	0	0	0	0	0	0	0	0	41	74.5	23	41.8	0	0	18.1	21.7
1000	88	2	79	1	6	0	0	0	0	0	0	0	0	63	71.6	23	26.1	0	0	16.9	20.6
1100	110	2	102	0	5	1	0	0	0	0	0	0	0	50	45.5	17	15.5	2	1.8	15.8	p
1200	77	1	70	0	6	0	0	0	0	0	0	0	0	47	61	21	27.3	3	3.9	18.6	_g _g
1300	22	0	20	0	2	0	0	0	0	0	0	0	0	15	68.2	3	13.6	0	0	16	
1400	56	1	49	0	5	0	0	1	0	0	0	0	0	32	57.1	13	23.2	0	0	15.4	
1500	33	1	30	0	1	1	0	0	0	0	0	0	0	18	54.5	6	18.2	0	0	15.2	
1600	12	1	10	0	1	0	0	0	0	0	0	0	0	7	58.3	2	16.7	0	0	15.5	18.1
1700	13	3	10	0	0	0	0	0	0	0	0	0	0	8	61.5	4	30.8	0	0	16.2	20.6
1800	11	0	11	0	0	0	0	0	0	0	0	0	0	9	81.8	6	54.5	0	0	18.8	21.5
1900	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10.2	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	500	13	452	1	31	2	0	1	0	0	0	0	0	303	60.6	125	25	5	1	16.7	20.6
06-22	504	14	455	1	31	2	0	1	0	0	0	0	0	305	60.5	127	25.2	5	1	16.7	20.6
06-00	504	14	455	1	31	2	0	1	0	0	0	0	0	305	60.5	127	25.2	5	1	16.7	20.6
00-00	505	14	456	1	31	2	0	1	0	0	0	0	0	305	60.4	127	25.1	5	1	16.7	20.6



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Wed 10 August 2016

Time	Total						Classif	ication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.4	-
0600	2	1	1	0	0	0	0	0	0	0	0	0	0	2	100	0	0	0	0	15.1	-
0700	13	3	10	0	0	0	0	0	0	0	0	0	0	9	69.2	6	46.2	0	0	17.6	19.9
0800	13	1	11	0	1	0	0	0	0	0	0	0	0	9	69.2	4	30.8	0	0	17.6	23.5
0900	24	0	23	0	1	0	0	0	0	0	0	0	0	17	70.8	9	37.5	0	0	17.2	20.4
1000	58	0	58	0	0	0	0	0	0	0	0	0	0	42	72.4	21	36.2	0	0	17.6	21
1100	54	0	49	0	5	0	0	0	0	0	0	0	0	34	63	13	24.1	0	0	16.3	P
1200	31	1	29	0	1	0	0	0	0	0	0	0	0	22	71	9	29	0	0	16.7	ag
1300	63	2	55	0	6	0	0	0	0	0	0	0	0	26	41.3	12	19	0	0	15	O
1400	102	2	95	0	5	0	0	0	0	0	0	0	0	38	37.3	5	4.9	0	0	14.4	
1500	32	1	30	0	1	0	0	0	0	0	0	0	0	16	50	3	9.4	0	0	14.5	∞
1600	22	2	18	0	2	0	0	0	0	0	0	0	0	14	63.6	7	31.8	0	0	16.4	20.4
1700	17	2	15	0	0	0	0	0	0	0	0	0	0	9	52.9	4	23.5	0	0	15.3	19
1800	12	0	12	0	0	0	0	0	0	0	0	0	0	7	58.3	4	33.3	0	0	17.6	21.5
1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	441	14	405	0	22	0	0	0	0	0	0	0	0	243	55.1	97	22	0	0	15.9	19.9
06-22	443	15	406	0	22	0	0	0	0	0	0	0	0	245	55.3	97	21.9	0	0	15.9	19.9
06-00	443	15	406	0	22	0	0	0	0	0	0	0	0	245	55.3	97	21.9	0	0	15.9	19.9
00-00	444	15	407	0	22	0	0	0	0	0	0	0	0	245	55.2	97	21.8	0	0	15.9	19.7



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Thu 11 August 2016

		IIIU III A	900. 20																		
Time	Total						Classif	fication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13.2	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	2	1	1	0	0	0	0	0	0	0	0	0	0	1	50	0	0	0	0	15.9	-
0700	10	2	8	0	0	0	0	0	0	0	0	0	0	6	60	2	20	1	10	17.4	-
0800	9	0	8	0	1	0	0	0	0	0	0	0	0	7	77.8	4	44.4	0	0	18.3	-
0900	14	0	13	0	1	0	0	0	0	0	0	0	0	11	78.6	3	21.4	0	0	16.7	19.9
1000	37	0	36	0	1	0	0	0	0	0	0	0	0	23	62.2	8	21.6	0	0	16.5	20.8
1100	92	1	85	0	6	0	0	0	0	0	0	0	0	52	56.5	15	16.3	1	1.1	14.9	_ `D
1200	54	1	51	0	2	0	0	0	0	0	0	0	0	36	66.7	8	14.8	0	0	15.7	Page
1300	64	2	60	0	2	0	0	0	0	0	0	0	0	36	56.3	10	15.6	0	0	15.5	е
1400	83	3	79	0	1	0	0	0	0	0	0	0	0	29	34.9	10	12	0	0	13.9	17
1500	25	0	23	0	2	0	0	0	0	0	0	0	0	19	76	9	36	0	0	17.5	79
1600	18	1	17	0	0	0	0	0	0	0	0	0	0	12	66.7	4	22.2	0	0	16.3	19.2
1700	10	1	8	0	1	0	0	0	0	0	0	0	0	7	70	4	40	0	0	16.6	-
1800	9	0	9	0	0	0	0	0	0	0	0	0	0	7	77.8	4	44.4	0	0	17.5	-
1900	3	1	2	0	0	0	0	0	0	0	0	0	0	1	33.3	1	33.3	0	0	14.5	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	425	11	397	0	17	0	0	0	0	0	0	0	0	245	57.6	81	19.1	2	0.5	15.5	19.5
06-22	430	13	400	0	17	0	0	0	0	0	0	0	0	247	57.4	82	19.1	2	0.5	15.5	19.5
06-00	430	13	400	0	17	0	0	0	0	0	0	0	0	247	57.4	82	19.1	2	0.5	15.5	19.5
00-00	431	13	401	0	17	0	0	0	0	0	0	0	0	247	57.3	82	19	2	0.5	15.5	19.5



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Fri 12 August 2016

Time	Total		9031 2011				Classif	fication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.4	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.9	-
0700	11	3	8	0	0	0	0	0	0	0	0	0	0	7	63.6	6	54.5	0	0	18.4	22.8
0800	13	0	13	0	0	0	0	0	0	0	0	0	0	11	84.6	7	53.8	0	0	19	22.8
0900	97	0	94	0	3	0	0	0	0	0	0	0	0	68	70.1	20	20.6	0	0	16.4	19.2
1000	113	2	104	0	7	0	0	0	0	0	0	0	0	73	64.6	25	22.1	0	0	16.2	19.5
1100	49	2	41	0	5	0	0	1	0	0	0	0	0	27	55.1	13	26.5	0	0	14.8	Page
1200	42	1	38	0	3	0	0	0	0	0	0	0	0	32	76.2	18	42.9	0	0	18.7	
1300	55	4	45	0	6	0	0	0	0	0	0	0	0	31	56.4	16	29.1	0	0	15.7	
1400	84	0	81	0	3	0	0	0	0	0	0	0	0	52	61.9	19	22.6	0	0	15.6	
1500	22	0	21	0	1	0	0	0	0	0	0	0	0	16	72.7	8	36.4	0	0	17.3	
1600	21	0	20	0	1	0	0	0	0	0	0	0	0	17	81	7	33.3	0	0	17.6	20.1
1700	14	1	13	0	0	0	0	0	0	0	0	0	0	9	64.3	4	28.6	0	0	16.7	19.5
1800	19	3	16	0	0	0	0	0	0	0	0	0	0	12	63.2	3	15.8	0	0	15.9	18.1
1900	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.4	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	-	0	0		-	0	0	0	0	-	0	0	0	0	0	-	0	0
2300	<u> </u>	0		0	0	0	0	0	0	0	0	0	0	0	Ů	0	0	0	0	0	-
07-19	540	16	494	0	29	0	0	1	0	0	0	0	0	355	65.7	146	27	0	0	16.4	20.4
06-22	542	17	495	0	29	0	0	1	0	0	0	0	0	355	65.5	146	26.9	0	0	16.3	20.4
06-00	542	17 17	495	0	29	0	0	1	0	0	0	0	0	355	65.5	146	26.9	0	0	16.3	20.4
00-00	543	17	496	0	29	U	0	I	0	0	0	0	0	355	65.4	146	26.9	0	0	16.3	20.4



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Virtual Day (7)

		Virtual D	uy (/)																		
Time	Total						Classif	fication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33.3	0	0	0	0	14.3	-
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0	60	0	40	0	0	18.5	-
0600	1	0	1	0	0	0	0	0	0	0	0	0	0	1	66.7	0	33.3	0	0	18.6	-
0700	10	2	8	0	0	0	0	0	0	0	0	0	0	6	62	4	35.2	0	1.4	16.8	21
0800	11	0	10	0	0	0	0	0	0	0	0	0	0	8	72.2	4	35.4	0	0	17.6	23.5
0900	37	0	35	0	1	0	0	0	0	0	0	0	0	27	74	11	31	0	0.4	17.3	20.6
1000	62	1	59	0	2	0	0	0	0	0	0	0	0	44	70.9	18	28.1	0	0.2	17	20.6
1100	65	1	60	0	4	0	0	0	0	0	0	0	0	40	60.6	17	25.8	0	0.7	16.2	_;D
1200	47	1	43	0	2	0	0	0	0	0	0	0	0	30	64.3	12	26.2	0	0.9	17.1	ag
1300	50	2	45	0	3	0	0	0	0	0	0	0	0	27	53.4	11	21.6	0	0.3	15.4	<u> </u>
1400	62	1	58	0	3	0	0	0	0	0	0	0	0	32	51.5	12	18.5	0	0	15.2	
1500	26	0	24	0	1	0	0	0	0	0	0	0	0	17	65.9	7	26.3	0	0	16.6	
1600	20	1	18	0	1	0	0	0	0	0	0	0	0	13	67.9	6	29.2	0	0	16.8	20.4
1700	15	2	13	0	0	0	0	0	0	0	0	0	0	10	69.6	5	37.3	0	0	16.8	20.6
1800	12	1	11	0	0	0	0	0	0	0	0	0	0	8	67.5	4	36.1	0	0	17.2	21.5
1900	2	0	2	0	0	0	0	0	0	0	0	0	0	1	66.7	1	60	0	6.7	19.2	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	417	11	385	0	19	0	0	0	0	0	0	0	0	263	63.1	110	26.4	1	0.3	16.4	20.6
06-22	420	12	388	0	19	0	0	0	0	0	0	0	0	265	63.1	112	26.6	2	0.4	16.5	20.6
06-00	420	12	388	0	19	0	0	0	0	0	0	0	0	265	63.1	112	26.6	2	0.4	16.5	20.6
00-00	421	12	389	0	19	0	0	0	0	0	0	0	0	266	63.1	112	26.6	2	0.4	16.5	20.6



Location

Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

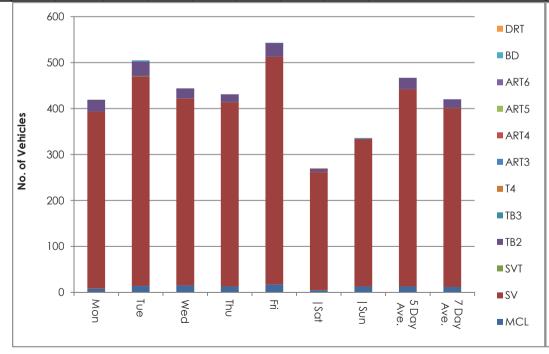
Direction Eastbound

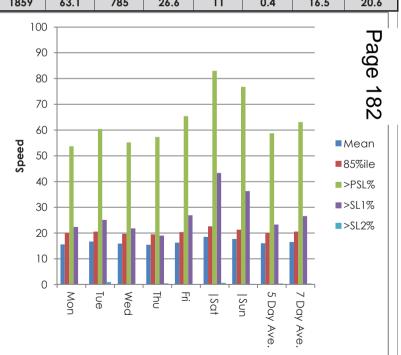
6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Virtual Week (1)

Time	Total						Classifi	ication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
Mon	419	8	385	0	26	0	0	0	0	0	0	0	0	225	53.7	94	22.4	1	0.2	15.6	20.1
Tue	505	14	456	1	31	2	0	1	0	0	0	0	0	305	60.4	127	25.1	5	1	16.7	20.6
Wed	444	15	407	0	22	0	0	0	0	0	0	0	0	245	55.2	97	21.8	0	0	15.9	19.7
Thu	431	13	401	0	17	0	0	0	0	0	0	0	0	247	57.3	82	19	2	0.5	15.5	19.5
Fri	543	17	496	0	29	0	0	1	0	0	0	0	0	355	65.4	146	26.9	0	0	16.3	20.4
Sat	270	5	257	0	7	0	1	0	0	0	0	0	0	224	83	117	43.3	2	0.7	18.5	22.6
Sun	336	13	319	0	2	1	1	0	0	0	0	0	0	258	76.8	122	36.3	1	0.3	17.7	21.3
5 Day Ave.	468	13	429	0	25	0	0	0	0	0	0	0	0	275	58.8	109	23.3	2	0.4	16.0	20.1
7 Day Ave.	421	12	389	0	19	0	0	0	0	0	0	0	0	266	63.1	112	26.6	2	0.4	16.5	20.6
	2948	85	2721	1	134	3	2	2	0	0	0	0	0	1859	63.1	785	26.6	11	0.4	16.5	20.6









Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Sat 06 August 2016

		Jul 0	o Aug	UST 2U	0																								
Time	Total													Spe	ed Bin	s (mph	1)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125	130 -	135 -
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	7	0	2	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	8	0	0	1	4	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	30	0	0	3	19	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	21	0	0	3	11	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	39	0	2	4	19	11	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P
1200	35	0	2	6	16	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ag
1300	30	0	0	2	14	12	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ф
1400	24	0	0	3	10	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1500	20	0	0	2	13	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ယ်
1600	20	0	0	6	8	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	19	0	1	1	7	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	12	0	2	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	4	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	265	0	9	36	128	78	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-22	269	0	9	37	128	79	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-00	269	0	9	37	128	79	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00-00	270	0	9	37	128	80	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Sun 07 August 2016

		Sun C	I/ Aug	just 20	10																								
Time	Total													Spe	ed Bin	s (mph	າ)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125 -	130 -	135 -
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	5	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	21	0	1	7	11	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	20	0	0	5	9	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	40	0	1	5	25	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	54	0	0	8	25	19	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P
1200	39	0	1	7	18	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ag
1300	35	0	1	9	22	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ወ
1400	39	0	1	10	24	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-8
1500	25	0	1	6	11	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
1600	30	0	3	7	12	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	16	0	2	3	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	7	0	0	0	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	4	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	331	0	11	67	170	71	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-22	335	0	11	67	171	73	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-00	335	0	11	67	171	73	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00-00	336	0	11	67	171	73	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Mon 08 August 2016

Time	Total			_										Spe	ed Bin	s (mpł	1)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125 -	130 -	135 -
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	11	0	1	4	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	6	0	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	18	0	2	4	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	80	0	0	23	40	16	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ן ₀ <mark>ס</mark>
1100	59	0	8	16	24	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$-\omega$
1200	50	0	3	31	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ge
1300	79	3	19	32	16	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<u> </u>
1400	22	0	5	19 9	19	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$-\infty$
1600	14	0	1	4	6	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1
1700	13	1	1	1	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	13	0	1	4	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	414	4	41	149	155	59	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-22	417	4	41	149	155	62	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-00	417	4	41	149	155	62	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00-00	419	4	41	149	157	62	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Tue 09 August 2016

		1000	" Aug	UST 20																									
Time	Total													Spe	ed Bin	s (mph	ո)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125 -	130	135
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	3	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	14	0	3	4	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	9	0	0	3	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	55	0	0	14	25	15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	88	0	7	18	45	16	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	110	0	8	52	37	10	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ק
1200	77	0	3	27	31	13	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	ag
1300	22	0	1	6	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ф
1400	56	0	12	12	22	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1500	33	0	6	9	14	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86
1600	12	0	1	4	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	13	0	2	3	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	11	0	0	2	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	500	0	43	154	208	81	9	0	0	0	2	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
06-22	504	0	43	156	208	81	11	0	0	0	2	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
06-00	504	0	43	156	208	81	11	0	0	0	2	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
00-00	505	0	43	157	208	81	11	0	0	0	2	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Wed 10 August 2016

				gusi zi																									
Time	Total													Spe	ed Bin	s (mph	ո)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125 -	130 -	135 -
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	13	0	0	4	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	13	0	1	3	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	24	0	1	6	11	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	58	0	0	16	27	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	54	0	6	14	23	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Pa
1200	31	0	2	7	16	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
1300	63	0	5	32	18	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ወ
1400	102	0	4	60	36	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<u>-</u> 8
1500	32	0	6	10	13	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
1600	22	0	1	7	10	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	17	0	2	6	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	12	0	0	5	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	441	0	28	170	176	62	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-22	443	0	28	170	178	62	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-00	443	0	28	170	178	62	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00-00	444	0	28	171	178	62	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Thu 11 August 2016

		1110 1	i Aug	UST 20																									
Time	Total													Spe	ed Bin	s (mph	1)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125 -	130 -	135 -
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	10	0	1	3	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	9	0	0	2	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	14	0	0	3	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	37	0	4	10	15	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	92	1	16	23	43	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Pa
1200	54	0	2	16	30	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	g
1300	64	0	4	24	31	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	е
1400	83	0	9	45	24	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
1500	25	0	1	5	13	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
1600	18	0	2	4	10	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	10	0	1	2	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	9	0	0	2	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	3	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	425	1	40	139	196	40	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-22	430	1	41	141	197	41	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-00	430	1	41	141	197	41	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00-00	431	1	41	142	197	41	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Fri 12 August 2016

		111 12	Augu	ST 2016																									
Time	Total													Spe	ed Bin	s (mph	h)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120	125 -	130	135
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	11	0	1	3	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	13	0	0	2	4	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	97	0	4	25	58	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	113	1	4	35	59	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	49	2	12	8	17	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Σ
1200	42	0	0	10	16	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Pag
1300	55	1	7	16	22	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ወ
1400	84	0	13	19	38	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<u></u>
1500	22	0	0	6	9	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89
1600	21	0	0	4	12	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	14	0	1	4	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	19	0	3	4	10	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	540	4	45	136	255	89	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-22	542	4	46	137	255	89	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-00	542	4	46	137	255	89	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00-00	543	4	46	138	255	89	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Virtual Day (7)

		VIITU	al Day	(7)																									
Time	Total													Spe	ed Bin	s (mph	າ)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125 -	130 -	135 -
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	10	0	1	3	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	11	0	0	3	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	37	0	1	9	20	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	62	0	2	16	32	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	65	0	7	18	27	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Pa
1200	47	0	2	15	20	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	g
1300	50	1	5	17	19	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ф
1400	62	0	6	24	25	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<u> </u>
1500	26	0	2	7	12	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90
1600	20	0	1	5	9	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	15	0	1	3	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	12	0	1	3	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	417	1	31	122	184	69	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-22	420	1	31	122	185	70	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-00	420	1	31	122	185	70	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00-00	421	1	31	123	185	70	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

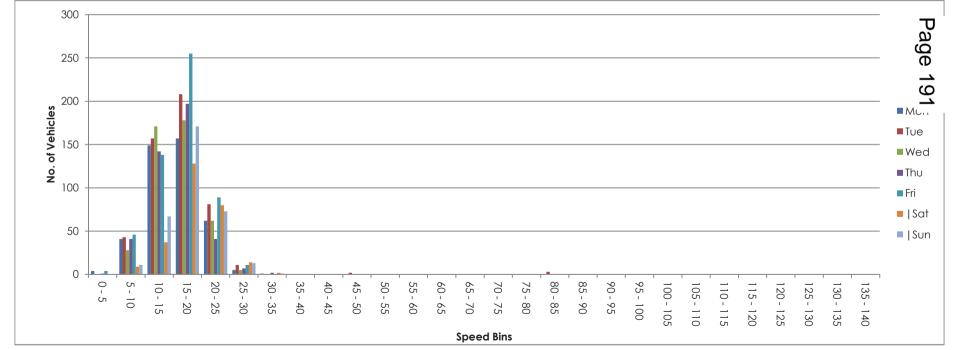
Direction Eastbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Virtual Week (1)

Time	Total													Spe	ed Bin	s (mpł	1)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125 -	130 -	135 -
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
Mon	419	4	41	149	157	62	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue	505	0	43	157	208	81	11	0	0	0	2	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
Wed	444	0	28	171	178	62	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thu	431	1	41	142	197	41	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fri	543	4	46	138	255	89	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sat	270	0	9	37	128	80	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sun	336	0	11	67	171	73	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Day Ave.	468	2	40	151	199	67	8	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
7 Day Ave.	421	1	31	123	185	70	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2948	9	219	861	1294	488	66	6	0	0	2	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0

Summary Graphs





Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Sat 06 August 2016

		501 00 A	ugusi zu																		
Time	Total						Classif	ication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	1	0	1	0	0	0	0	0	0	0	0	0	0	1	100	0	0	0	0	18	-
0700	4	0	4	0	0	0	0	0	0	0	0	0	0	3	75	2	50	0	0	19.4	-
0800	6	0	6	0	0	0	0	0	0	0	0	0	0	4	66.7	3	50	0	0	19.4	-
0900	19	0	19	0	0	0	0	0	0	0	0	0	0	15	78.9	6	31.6	0	0	17.9	20.1
1000	26	0	25	0	1	0	0	0	0	0	0	0	0	18	69.2	6	23.1	0	0	16.4	19.5
1100	35	1	34	0	0	0	0	0	0	0	0	0	0	29	82.9	18	51.4	0	0	19	
1200	41	0	41	0	0	0	0	0	0	0	0	0	0	36	87.8	17	41.5	1	2.4	19.7	age
1300	23	0	23	0	0	0	0	0	0	0	0	0	0	20	87	11	47.8	1	4.3	20.4	
1400	25	0	23	0	2	0	0	0	0	0	0	0	0	23	92	13	52	1	4	19.6	
1500	25	0	22	0	3	0	0	0	0	0	0	0	0	23	92	16	64	0	0	20.5	
1600	22	0	21	0	1	0	0	0	0	0	0	0	0	19	86.4	8	36.4	0	0	18.4	21.5
1700	20	1	19	0	0	0	0	0	0	0	0	0	0	18	90	13	65	0	0	20.1	24.2
1800	11	0	11	0	0	0	0	0	0	0	0	0	0	7	63.6	5	45.5	0	0	18.2	24.4
1900	9	1	8	0	0	0	0	0	0	0	0	0	0	4	44.4	4	44.4	1	11.1	19	-
2000	1	0	1	0	0	0	0	0	0	0	0	0	0	1	100	1	100	0	0	25.6	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	257	2	248	0	7	0	0	0	0	0	0	0	0	215	83.7	118	45.9	3	1.2	19.1	23.9
06-22	268	3	258	0	7	0	0	0	0	0	0	0	0	221	82.5	123	45.9	4	1.5	19.1	24.2
06-00	268	3	258	0	7	0	0	0	0	0	0	0	0	221	82.5	123	45.9	4	1.5	19.1	24.2
00-00	268	3	258	0	7	0	0	0	0	0	0	0	0	221	82.5	123	45.9	4	1.5	19.1	24.2



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Sun 07 August 2016

Time	Total						Classif	ication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>\$L2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14.6	-
0700	2	0	2	0	0	0	0	0	0	0	0	0	0	1	50	1	50	0	0	16.6	-
0800	10	1	9	0	0	0	0	0	0	0	0	0	0	9	90	4	40	0	0	19.3	-
0900	26	1	23	0	2	0	0	0	0	0	0	0	0	21	80.8	9	34.6	0	0	17.5	21
1000	30	0	30	0	0	0	0	0	0	0	0	0	0	28	93.3	18	60	0	0	19.5	25.3
1100	43	0	42	0	1	0	0	0	0	0	0	0	0	40	93	19	44.2	0	0	19.5	
1200	50	3	47	0	0	0	0	0	0	0	0	0	0	44	88	26	52	0	0	19.6	 - -
1300	38	0	37	0	1	0	0	0	0	0	0	0	0	26	68.4	13	34.2	0	0	17.8	; ™
1400	31	2	28	0	0	0	1	0	0	0	0	0	0	17	54.8	7	22.6	0	0	15.8	
1500	36	1	34	0	1	0	0	0	0	0	0	0	0	31	86.1	11	30.6	1	2.8	18.2	² ယ
1600	25	0	25	0	0	0	0	0	0	0	0	0	0	18	72	7	28	0	0	17.1	20.6
1700	28	4	24	0	0	0	0	0	0	0	0	0	0	23	82.1	11	39.3	0	0	17.9	21.7
1800	12	1	11	0	0	0	0	0	0	0	0	0	0	12	100	7	58.3	1	8.3	20.4	22.8
1900	7	0	7	0	0	0	0	0	0	0	0	0	0	5	71.4	5	71.4	0	0	19	-
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	331	13	312	0	5	0	1	0	0	0	0	0	0	270	81.6	133	40.2	2	0.6	18.4	22.6
06-22	339	13	320	0	5	0	1	0	0	0	0	0	0	275	81.1	138	40.7	2	0.6	18.4	22.8
06-00	339	13	320	0	5	0	1	0	0	0	0	0	0	275	81.1	138	40.7	2	0.6	18.4	22.8
00-00	339	13	320	0	5	0	1	0	0	0	0	0	0	275	81.1	138	40.7	2	0.6	18.4	22.8



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Mon 08 August 2016

Time	Total						Classif	ication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>\$L2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	2	0	2	0	0	0	0	0	0	0	0	0	0	2	100	1	50	0	0	19.2	-
0700	1	0	1	0	0	0	0	0	0	0	0	0	0	1	100	1	100	0	0	19.7	-
0800	3	0	3	0	0	0	0	0	0	0	0	0	0	1	33.3	1	33.3	0	0	15.6	-
0900	11	0	10	0	1	0	0	0	0	0	0	0	0	6	54.5	3	27.3	0	0	15.5	19.2
1000	28	2	25	0	1	0	0	0	0	0	0	0	0	24	85.7	10	35.7	1	3.6	18.7	21.7
1100	47	0	44	0	3	0	0	0	0	0	0	0	0	36	76.6	16	34	0	0	17.8	
1200	90	2	80	0	8	0	0	0	0	0	0	0	0	66	73.3	28	31.1	1	1.1	17.2	
1300	55	2	51	0	2	0	0	0	0	0	0	0	0	38	69.1	14	25.5	0	0	16.6	_Φ
1400	78	1	71	0	5	0	0	0	0	0	1	0	0	49	62.8	19	24.4	0	0	16.4	194
1500	38	0	34	0	4	0	0	0	0	0	0	0	0	31	81.6	13	34.2	0	0	17.8	
1600	39	2	37	0	0	0	0	0	0	0	0	0	0	32	82.1	18	46.2	0	0	18.7	22.6
1700	17	1	15	0	1	0	0	0	0	0	0	0	0	13	76.5	8	47.1	1	5.9	19	26.2
1800	14	1	13	0	0	0	0	0	0	0	0	0	0	11	78.6	7	50	0	0	19.4	25.3
1900	9	1	8	0	0	0	0	0	0	0	0	0	0	6	66.7	4	44.4	0	0	17.7	-
2000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.1	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	421	11	384	0	25	0	0	0	0	0	1	0	0	308	73.2	138	32.8	3	0.7	17.4	21.3
06-22	433	13	394	0	25	0	0	0	0	0	1	0	0	316	73	143	33	3	0.7	17.4	21.3
06-00	433	13	394	0	25	0	0	0	0	0	1	0	0	316	73	143	33	3	0.7	17.4	21.3
00-00	433	13	394	0	25	0	0	0	0	0	1	0	0	316	73	143	33	3	0.7	17.4	21.3



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Tue 09 August 2016

Time	Total						Classif	fication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>\$L2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	1	0	1	0	0	0	0	0	0	0	0	0	0	1	100	1	100	1	100	32.7	-
0700	5	0	5	0	0	0	0	0	0	0	0	0	0	5	100	2	40	0	0	18.7	-
0800	7	0	5	0	2	0	0	0	0	0	0	0	0	4	57.1	1	14.3	0	0	15.5	-
0900	17	0	16	0	1	0	0	0	0	0	0	0	0	15	88.2	12	70.6	0	0	20.3	23.5
1000	34	1	30	0	3	0	0	0	0	0	0	0	0	27	79.4	14	41.2	0	0	18.9	23.7
1100	103	1	98	0	3	1	0	0	0	0	0	0	0	72	69.9	33	32	0	0	17.3	
1200	99	2	91	0	5	1	0	0	0	0	0	0	0	73	73.7	37	37.4	1	1	17.8	age
1300	79	0	73	0	6	0	0	0	0	0	0	0	0	57	72.2	25	31.6	0	0	17.1	
1400	45	0	41	0	3	1	0	0	0	0	0	0	0	31	68.9	9	20	0	0	17	19
1500	46	1	41	1	3	0	0	0	0	0	0	0	0	35	76.1	10	21.7	0	0	16.8	5
1600	26	2	21	0	3	0	0	0	0	0	0	0	0	16	61.5	8	30.8	1	3.8	17.1	22.8
1700	15	1	13	0	1	0	0	0	0	0	0	0	0	10	66.7	8	53.3	1	6.7	19.2	23.7
1800	11	1	10	0	0	0	0	0	0	0	0	0	0	9	81.8	3	27.3	0	0	17	19
1900	7	1	6	0	0	0	0	0	0	0	0	0	0	4	57.1	2	28.6	0	0	17.4	-
2000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.8	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	487	9	444	1	30	3	0	0	0	0	0	0	0	354	72.7	162	33.3	3	0.6	17.5	21.5
06-22	496	11	451	1	30	3	0	0	0	0	0	0	0	359	72.4	165	33.3	4	0.8	17.5	21.5
06-00	496	11	451	1	30	3	0	0	0	0	0	0	0	359	72.4	165	33.3	4	0.8	17.5	21.5
00-00	496	11	451	1	30	3	0	0	0	0	0	0	0	359	72.4	165	33.3	4	8.0	17.5	21.5



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Wed 10 August 2016

Time	Total						Classif	ication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>\$L2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.1	-
0600	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11.1	-
0700	2	1	1	0	0	0	0	0	0	0	0	0	0	1	50	0	0	0	0	15.1	-
0800	8	1	6	0	1	0	0	0	0	0	0	0	0	5	62.5	4	50	0	0	17.6	-
0900	11	0	10	0	1	0	0	0	0	0	0	0	0	8	72.7	5	45.5	0	0	20.1	25.1
1000	29	0	29	0	0	0	0	0	0	0	0	0	0	25	86.2	15	51.7	0	0	19.2	24.6
1100	50	0	48	0	2	0	0	0	0	0	0	0	0	33	66	17	34	0	0	17	Pa
1200	79	1	73	0	5	0	0	0	0	0	0	0	0	50	63.3	16	20.3	0	0	16.2	Q
1300	35	2	28	0	5	0	0	0	0	0	0	0	0	27	77.1	21	60	1	2.9	20	Φ
1400	53	1	49	0	3	0	0	0	0	0	0	0	0	29	54.7	15	28.3	1	1.9	15.5	<u> </u>
1500	107	1	101	0	5	0	0	0	0	0	0	0	0	67	62.6	23	21.5	0	0	16	¹ග
1600	40	2	37	0	1	0	0	0	0	0	0	0	0	29	72.5	10	25	0	0	16.2	20.6
1700	16	2	14	0	0	0	0	0	0	0	0	0	0	11	68.8	4	25	0	0	16.4	21
1800	19	2	17	0	0	0	0	0	0	0	0	0	0	11	57.9	6	31.6	0	0	16.9	21.3
1900	4	1	3	0	0	0	0	0	0	0	0	0	0	3	75	2	50	0	0	21	-
2000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10.2	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	449	13	413	0	23	0	0	0	0	0	0	0	0	296	65.9	136	30.3	2	0.4	16.8	21.3
06-22	455	15	417	0	23	0	0	0	0	0	0	0	0	299	65.7	138	30.3	2	0.4	16.8	21.3
06-00	455	15	417	0	23	0	0	0	0	0	0	0	0	299	65.7	138	30.3	2	0.4	16.8	21.3
00-00	456	16	417	0	23	0	0	0	0	0	0	0	0	299	65.6	138	30.3	2	0.4	16.8	21.3



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Thu 11 August 2016

Time	Total						Classif	ication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>\$L2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.5	-
0600	1	0	1	0	0	0	0	0	0	0	0	0	0	1	100	1	100	0	0	21.7	-
0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0800	7	0	6	0	1	0	0	0	0	0	0	0	0	4	57.1	2	28.6	0	0	16.1	-
0900	11	0	11	0	0	0	0	0	0	0	0	0	0	7	63.6	4	36.4	0	0	17.9	21.3
1000	24	0	23	0	0	0	0	0	1	0	0	0	0	16	66.7	7	29.2	0	0	17	21.3
1100	40	1	37	0	2	0	0	0	0	0	0	0	0	31	77.5	20	50	0	0	18.5	Pag ``
1200	73	1	67	0	5	0	0	0	0	0	0	0	0	60	82.2	22	30.1	1	1.4	17.8	<u> </u>
1300	52	2	47	0	3	0	0	0	0	0	0	0	0	32	61.5	10	19.2	0	0	16	Φ.
1400	77	3	70	0	4	0	0	0	0	0	0	0	0	48	62.3	26	33.8	0	0	16.8	<u> 1</u> 9
1500	59	3	55	0	1	0	0	0	0	0	0	0	0	41	69.5	20	33.9	0	0	17.5	
1600	46	3	42	0	1	0	0	0	0	0	0	0	0	35	76.1	12	26.1	1	2.2	17.3	21.7
1700	10	0	10	0	0	0	0	0	0	0	0	0	0	7	70	0	0	0	0	16.2	
1800	11	1	9	0	1	0	0	0	0	0	0	0	0	7	63.6	3	27.3	0	0	16.5	21.3
1900	7	1	6	0	0	0	0	0	0	0	0	0	0	5	71.4	3	42.9	0	0	17.9	-
2000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10.3	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	410	14	377	0	18	0	0	0	1	0	0	0	0	288	70.2	126	30.7	2	0.5	17.2	21.3
06-22	419	16	384	0	18	0	0	0	1	0	0	0	0	294	70.2	130	31	2	0.5	17.2	21.3
06-00	419	16	384	0	18	0	0	0	1	0	0	0	0	294	70.2	130	31	2	0.5	17.2	21.3
00-00	420	17	384	0	18	0	0	0	1	0	0	0	0	294	70	130	31	2	0.5	17.2	21.3



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Fri 12 August 2016

		FII 12 AU	900. =0																		
Time	Total						Classif	ication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.8	-
0600	2	0	2	0	0	0	0	0	0	0	0	0	0	1	50	0	0	0	0	12.7	-
0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0800	4	0	4	0	0	0	0	0	0	0	0	0	0	4	100	1	25	0	0	18.4	-
0900	22	0	19	0	3	0	0	0	0	0	0	0	0	8	36.4	4	18.2	0	0	14.5	19
1000	36	0	32	0	4	0	0	0	0	0	0	0	0	21	58.3	13	36.1	0	0	17.1	23.3
1100	159	0	151	0	7	0	0	1	0	0	0	0	0	32	20.1	11	6.9	0	0	9.6	Page
1200	71	3	61	0	6	1	0	0	0	0	0	0	0	54	76.1	29	40.8	0	0	17.8) Be
1300	56	1	49	0	6	0	0	0	0	0	0	0	0	41	73.2	22	39.3	2	3.6	18.2	
1400	54	0	51	0	3	0	0	0	0	0	0	0	0	47	87	26	48.1	1	1.9	19.2	198
1500	54	1	50	0	3	0	0	0	0	0	0	0	0	46	85.2	29	53.7	0	0	19.2	
1600	43	0	42	0	1	0	0	0	0	0	0	0	0	38	88.4	22	51.2	1	2.3	19.5	23.9
1700	15	1	13	0	1	0	0	0	0	0	0	0	0	12	80	9	60	0	0	18.9	23.7
1800	25	5	20	0	0	0	0	0	0	0	0	0	0	16	64	10	40	0	0	17.9	23.5
1900	2	1	1	0	0	0	0	0	0	0	0	0	0	1	50	1	50	0	0	17.6	-
2000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.9	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	539	11	492	0	34	1	0	1	0	0	0	0	0	319	59.2	176	32.7	4	0.7	15.7	21.7
06-22	544	13	495	0	34	1	0	1	0	0	0	0	0	321	59	177	32.5	4	0.7	15.7	21.7
06-00	544	13	495	0	34	1	0	1	0	0	0	0	0	321	59	177	32.5	4	0.7	15.7	21.7
00-00	545	14	495	0	34	1	0	1	0	0	0	0	0	321	58.9	177	32.5	4	0.7	15.7	21.7



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Virtual Day (7)

		Virtual D	uy (7)																		
Time	Total						Classif	ication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.1	-
0600	1	0	1	0	0	0	0	0	0	0	0	0	0	1	66.7	0	33.3	0	11.1	18	-
0700	2	0	2	0	0	0	0	0	0	0	0	0	0	2	78.6	1	42.9	0	0	18.2	-
0800	6	0	6	0	1	0	0	0	0	0	0	0	0	4	68.9	2	35.6	0	0	17.6	-
0900	17	0	15	0	1	0	0	0	0	0	0	0	0	11	68.4	6	36.8	0	0	17.5	21.9
1000	30	0	28	0	1	0	0	0	0	0	0	0	0	23	76.8	12	40.1	0	0.5	18.2	23
1100	68	0	65	0	3	0	0	0	0	0	0	0	0	39	57.2	19	28.1	0	0	15.2	$\Box_{\mathcal{D}}$
1200	72	2	66	0	4	0	0	0	0	0	0	0	0	55	76.1	25	34.8	1	0.8	17.8	age
1300	48	1	44	0	3	0	0	0	0	0	0	0	0	34	71.3	17	34.3	1	1.2	17.6	
1400	52	1	48	0	3	0	0	0	0	0	0	0	0	35	67.2	16	31.7	0	0.8	17	
1500	52	1	48	0	3	0	0	0	0	0	0	0	0	39	75.1	17	33.4	0	0.3	17.5	99
1600	34	1	32	0	1	0	0	0	0	0	0	0	0	27	77.6	12	35.3	0	1.2	17.8	21.9
1700	17	1	15	0	0	0	0	0	0	0	0	0	0	13	77.7	8	43.8	0	1.7	18.4	22.8
1800	15	2	13	0	0	0	0	0	0	0	0	0	0	10	70.9	6	39.8	0	1	18	23.7
1900	6	1	6	0	0	0	0	0	0	0	0	0	0	4	62.2	3	46.7	0	2.2	18.4	-
2000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	16.7	0	16.7	0	0	12.3	-
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	413	10	381	0	20	1	0	0	0	0	0	0	0	293	70.8	141	34.2	3	0.7	17.3	21.7
06-22	422	12	388	0	20	1	0	0	0	0	0	0	0	298	70.6	145	34.3	3	0.7	17.3	21.7
06-00	422	12	388	0	20	1	0	0	0	0	0	0	0	298	70.6	145	34.3	3	0.7	17.3	21.7
00-00	422	12	388	0	20	1	0	0	0	0	0	0	0	298	70.5	145	34.3	3	0.7	17.3	21.7



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

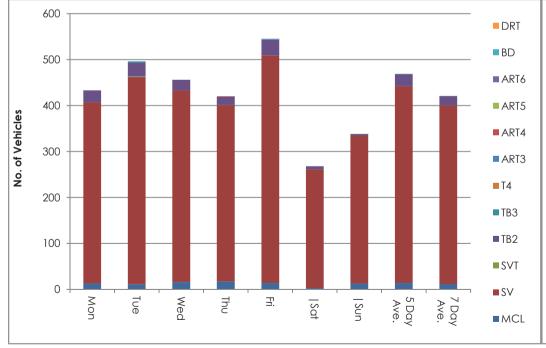
Direction Westbound

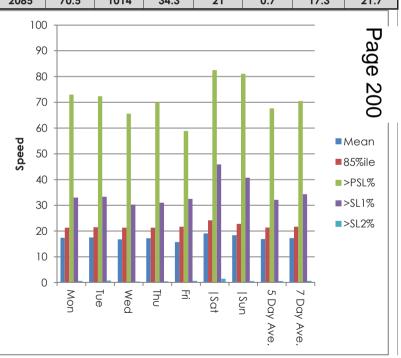
6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Virtual Week (1)

Time	Total						Classif	ication						>PSL	>PSL%	>SL1	>SL1%	>SL2	>SL2%	Mean	Vpp
		1	2	3	4	5	6	7	8	9	10	11	12	15	15	19	19	30	30		85
		MCL	SV	SVT	TB2	TB3	T4	ART3	ART4	ART5	ART6	BD	DRT			ACPO	ACPO	DfT	DfT		
Mon	433	13	394	0	25	0	0	0	0	0	1	0	0	316	73	143	33	3	0.7	17.4	21.3
Tue	496	11	451	1	30	3	0	0	0	0	0	0	0	359	72.4	165	33.3	4	0.8	17.5	21.5
Wed	456	16	417	0	23	0	0	0	0	0	0	0	0	299	65.6	138	30.3	2	0.4	16.8	21.3
Thu	420	17	384	0	18	0	0	0	1	0	0	0	0	294	70	130	31	2	0.5	17.2	21.3
Fri	545	14	495	0	34	1	0	1	0	0	0	0	0	321	58.9	177	32.5	4	0.7	15.7	21.7
Sat	268	3	258	0	7	0	0	0	0	0	0	0	0	221	82.5	123	45.9	4	1.5	19.1	24.2
Sun	339	13	320	0	5	0	1	0	0	0	0	0	0	275	81.1	138	40.7	2	0.6	18.4	22.8
5 Day Ave.	470	14	428	0	26	1	0	0	0	0	0	0	0	318	67.7	151	32.1	3	0.6	16.9	21.4
7 Day Ave.	422	12	388	0	20	1	0	0	0	0	0	0	0	298	70.5	145	34.3	3	0.7	17.3	21.7
	2957	87	2719	1	142	4	1	1	1	0	1	0	0	2085	70.5	1014	34.3	21	0.7	17.3	21.7









Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Sat 06 August 2016

		sar u	6 Aug	ust 201	10																								
Time	Total													Spe	ed Bin	s (mph	າ)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125 -	130 -	135 -
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	4	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	6	0	0	2	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	19	0	1	3	11	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	26	0	2	6	14	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	35	0	0	6	16	8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P
1200	41	0	2	3	21	7	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ag
1300	23	0	0	3	10	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ф
1400	25	0	0	2	14	7	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
1500	25	0	0	2	8	11	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1600	22	0	0	3	13	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	20	0	1	1	9	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	11	0	1	3	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	9	0	0	5	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	257	0	7	35	120	63	29	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-22	268	0	7	40	121	65	31	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-00	268	0	7	40	121	65	31	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00-00	268	0	7	40	121	65	31	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Sun 07 August 2016

		3011	W AUG	just 20	10																								
Time	Total													Spe	ed Bin	s (mpł	1)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125 -	130 -	135 -
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	10	0	0	1	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	26	0	1	4	14	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	30	0	2	0	13	10	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	43	0	0	3	22	15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ŋ
1200	50	0	1	5	20	22	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ag
1300	38	0	1	11	14	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ф
1400	31	0	2	12	14	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
1500	36	0	0	5	24	6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0)2
1600	25	0	1	6	13	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	28	0	0	5	15	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	12	0	0	0	6	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	7	0	1	1	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	331	0	8	53	160	92	16	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-22	339	0	9	55	160	96	17	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-00	339	0	9	55	160	96	17	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00-00	339	0	9	55	160	96	17	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Mon 08 August 2016

0 - 5 - 10 - 15 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 55 - 60 - 65 - 70 - 75 - 80 - 85 - 90 - 95 - 100 - 105 - 110 - 115 - 120 - 125 - 130 - 135 - 130 - 13	Time	Total		06 AU	900. =										Sne	ed Rin	s (mnh	2)												
	IIIIe	loidi	0-	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	1	i .	1	1	80 -	85 -	90 -	95 -	100 .	105 -	110	115	120 -	125 .	130 .	135
O100																														
0200	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 3 0 0 2 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0600	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	0700	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	0800	3	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	0900	11	0	1	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200	1000	28	0	1	1		7	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1200		47	0	1		24		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		_	Pa
1400 78 0 2 27 35 12 2 0<								1		-		-				-		_					_	_				_		Q
1500 38 0 1 6 23 6 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			ļ					1	-						-															Φ
1600 39 0 0 7 18 12 2 0 </th <td></td> <td></td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>20</td>				2					-																					20
1700 17 0 2 2 6 3 3 1 0 <td></td> <td></td> <td></td> <td>1</td> <td></td> <td>Ü</td>				1																										Ü
1800 14 0 0 3 5 3 3 0 <td></td> <td></td> <td><u> </u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>0</td>			<u> </u>							-																-				0
1900 9 0 1 2 3 3 0			!							-																				0
2000 1 0 1 0		_		1					-	-				-	-															0
2100 0			<u> </u>	1					-																					0
2200 0				0					-	-		-																		0
2300 0			1							-																				0
07-19 421 0 9 104 214 73 18 3 0 <								-	-	-				-	-															0
06-22 433 0 11 106 218 77 18 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0												-																		0
			1	-								-				-								_					_	0
			1																											0
00-00 433 0 11 106 218 77 18 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			1																											0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Tue 09 August 2016

		100 0	, Hoa	JUSI 2U																									
Time	Total													Spe	ed Bin	s (mpł	1)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125 -	130 -	135 -
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	5	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	7	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	17	0	0	2	5	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	34	0	0	7	15	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	103	1	1	29	47	24	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Pa
1200	99	0	2	24	43	26	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
1300	79	0	2	20	40	16	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ф Ф
1400	45	0	1	13	23	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
1500	46	0	2	9	31	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
1600	26	0	2	8	10	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	15	0	0	5	4	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	11	0	0	2	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	7	0	0	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	1	0	I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	487	1	10	122	232	102	17	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-22	496	1	11	125	234	103	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-00	496	1	11	125	234	103	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00-00	496	I	11	125	234	103	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Wed 10 August 2016

T *	T. 1. 1			gusi zi										0															
Time	Total		l	l I	l	ı	I.	1 1		I.	I.	I.	1 1		ed Bin	1	1	T.		l.	ı	ı		l	I I		l	l	
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -				115 -				
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	8	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	11	0	0	3	3	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	29	0	0	4	12	10	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	50	0	4	13	19	12	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Pa
1200	79	0	2	27	37	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	бE
1300	35	0	1	7	8	13	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ф
1400	53	1	8	15	20	8	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
1500	107	0	7	33	52	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
1600	40	0	2	9	21	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	16	0	0	5	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	19	0	1	7	5	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	4	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	449	1	25	127	187	90	17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-22	455	1	25	130	188	91	18	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-00	455	1	25	130	188	91	18	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00-00	456	1	26	130	188	91	18	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Thu 11 August 2016

			i Aug	00. 20	. •																								
Time	Total													Spe	ed Bin	s (mpł	າ)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125 -	130 -	135 -
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	7	0	0	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	11	0	0	4	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	24	0	0	8	10	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	40	0	1	8	16	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Pa
1200	73	0	0	13	46	11	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
1300	52	0	2	18	23	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Φ.
1400	77	0	4	25	30	14	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
1500	59	0	0	18	29	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ŏ
1600	46	0	2	9	24	10	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	10	0	0	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	11	0	0	4	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	7	0	0	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	410	0	9	113	194	76	16	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-22	419	0	9	116	196	79	17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-00	419	0	9	116	196	79	17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00-00	420	0	10	116	196	79	17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Fri 12 August 2016

		111 12	Augu	IST 2016																									
Time	Total													Spe	ed Bin	s (mph	1)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125 -	130 -	135 -
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	4	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	22	0	1	13	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	36	1	2	12	11	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	159	33	72	22	24	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Pa
1200	71	0	5	12	32	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
1300	56	0	2	13	21	15	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ф
1400	54	0	0	7	26	17	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
1500	54	0	0	8	20	25	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
1600	43	0	1	4	21	12	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	15	0	0	3	5	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	25	0	1	8	6	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	539	34	84	102	174	120	21	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-22	544	34	86	103	175	121	21	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-00	544	34	86	103	175	121	21	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00-00	545	34	87	103	175	121	21	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Virtual Day (7)

		V 11 10 C	עם וג	(1)																									
Time	Total													Spe	ed Bin	s (mph	1)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125 -	130 -	135 -
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0700	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	6	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	17	0	1	5	6	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000	30	0	1	6	13	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	68	5	11	13	24	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Pa
1200	72	0	2	15	36	15	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
1300	48	0	1	13	21	10	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	е
1400	52	0	2	14	23	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
1500	52	0	1	12	27	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8(
1600	34	0	1	7	17	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	17	0	0	3	8	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1800	15	0	0	4	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	6	0	0	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	413	5	22	94	183	88	19	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-22	422	5	23	96	185	90	20	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06-00	422	5	23	96	185	90	20	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00-00	422	5	23	96	185	90	20	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Location Cheltenham Cemetery Access, <15mph> - OSGR:SO 96855 23015

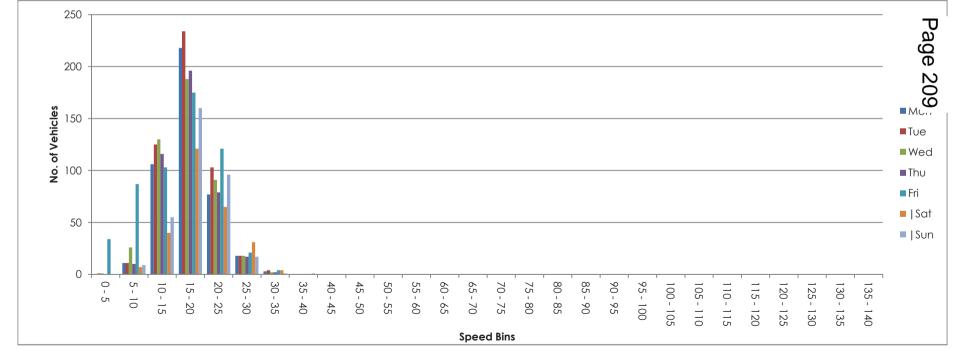
Direction Westbound

6559 / CHELTENHAM AUGUST 2016 AUTOMATIC TRAFFIC COUNT

Virtual Week (1)

Time	Total													Spe	ed Bin	s (mpł	1)												
		0 -	5 -	10 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -	90 -	95 -	100 -	105 -	110 -	115 -	120 -	125 -	130 -	135 -
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
Mon	433	0	11	106	218	77	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue	496	1	11	125	234	103	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wed	456	1	26	130	188	91	18	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thu	420	0	10	116	196	79	17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fri	545	34	87	103	175	121	21	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sat	268	0	7	40	121	65	31	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sun	339	0	9	55	160	96	17	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Day Ave.	470	7	29	116	202	94	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 Day Ave.	422	5	23	96	185	90	20	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2957	36	161	675	1292	632	140	20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Summary Graphs





MONDAY 8th AUGUST 2016

South Chapel

Time	Name	Cremation or Burial	Gardens of Remembrance or Grave Reference.	Full or Committal Service
9.00				
9.45				
10.30				
11.15	Joyce DANSON	Cremation	F1 - 524	Full
12.00	Eileen Edith WEEKS	Cremation		Full
1.00	Constance Muriel EVANS	Cremation		Full
1.45	Ernest Walter ASTON	Cremation		Full
2.30				
3.15	David Michael CASTELL	Cremation		Full

North Chapel

Time	Name	Cremation or Burial	Gardens of Remembrance or Grave Reference	Full or Committal Service
9.30				
10.45				
11.45	Ernest Cyril MARVIN	Cremation		Full
1.30	Colin Terance SULLIVAN	Cremation		Full
2.45	Richenda Margaret WATSON	Cremation	'G' 590	Full

Graveside Services

Time	Name	Grave Reference	
1.15	Monica Marie ADDLE	K3 – 443	Graveside
			<u> </u>

TUESDAY 9th AUGUST 2016

South Chapel

Time	Name	Cremation or Burial	Gardens of Remembrance or Grave Reference.	Full or Committal Service
9.00				·
9.45				
10.30	Peter GREEN	Cremation	Rock & Water 'C' 165	Full
11.15	Frederick John George HOBBS	Cremation		Full
12.00	Doris KERSHAW	Cremation		Full
1.00	Pamela Ann WILKINSON	Cremation		Full
1.45				
2.30	Henry John KOCON	Cremation		Committal
3.15	Henry Colin HUGHES	Cremation		Committal

North Chapel

Time	Name	Cremation or Burial	Gardens of Remembrance or Grave Reference	Full or Committal Service
9.30				
10.45	Patrick Keith LISSIMORE	Cremation		Full
11.45	Margaret Pamela EAVES	Cremation		Full
1.30		·		
2.45	Mary Patricia HINES	Cremation		Committal

3.30 Scattering of Cremated Remains of the late Sylvia and Betty RANGER. Garden Two - 1518

WEDNESDAY 10TH AUGUST 2016

South Chapel

Time	Name	Cremation or Burial	Gardens of Remembrance or Grave Reference.	Full or Committal Service
9.00				
9.45	Gillian WALKER	Cremation		Full
10.30				
11.15	Margaret Jean MAY	Cremation		Full
12.00	Gillian HORLEY	Cremation		Committal
1.00	Edward PARSONS	Cremation		Committal
1.45	Michael John LLOYD	Cremation		Full
2.30	Donald George Charles COOK	Cremation		Full
3.15	Gilbert Arthur Frederick HOLTHAM	Cremation		Full

North Chapel

Time	Name	Cremation or Burial	Gardens of Remembrance or Grave Reference	Full or Committal Service
9.30				
10.45				
11.45	Margaret Louise Maud GALLIE	Cremation		Full
1.30	Phyllis Sabina BENNETT	Cremation		Committal
2.45	Mollie Edna PARKER	Cremation		Full

12.30 Interment of Cremated Remains of the late Michael John HANCOCKS. F1 - 297

3.30 Interment of cremated remains of the late Gwendolen Beryl HARTWELL. K5 - 662

4.00 Scattering of cremated remains of the late Arthur Brian PERKINS. 'L' 669/670

THURSDAY 11th AUGUST 2016

South Chapel

Time	Name	Cremation or Burial	Gardens of Remembrance or Grave Reference.	Full or Committal Service
9.00				
9.45				
10.30				
11.15	Ian Grant FITTON-KEARNS	Cremation		Full
12.00	Edward Victor Charles HIGGINS	Cremation	Beech Walk 175	Full
1.00	Una Marjorie WOOD	Cremation		Full
1.45	Linda June LEWIS	Cremation		Full
2.30	Elizabeth Hannah FLANAGAN	Cremation		Committal
3.15	Jacqueline Mary JEFFERIES	Cremation	Gdn.One 517	Full

North Chapel

Time	Name	Cremation or Burial	Gardens of Remembrance or Grave Reference	Full or Committal Service
9.30				
10.45				
11.45	Bridget Joyce RAYFIELD	Cremation	Rock & Water 'B' 74	Full
1.30	David Mark HOLMAN	Cremation		Full
2.45	Harmony Hope BOREHAM	Cremation	Fountain Rose Gdn. Border 73	Full

Graveside Services

Time	Name	Grave Reference	
11.30	Freda Margaret MUSTOE	J1 - 838	Graveside

- 10.15 Scattering of cremated remains of the late Linda Christine FAULKNER. Gdn. One 1458
- 3.00 Interment of cremated remains of the late Haydn ELLIS. Beech Walk 101

FRIDAY 12th AUGUST

South Chapel

Time	Name	Cremation or Burial	Gardens of Remembrance or Grave Reference.	Full or Committal Service
9.00				
9.45				
10.30 & 11.15	Stephen Michael Charles PLAYFAIR	Cremation		Full
12.00	Malcolm Richard JAMES	Cremation		Full
1.00	Reginald GRIMES	Cremation		Full
1.45	Teresa Mary DOWNES	Cremation		Committal
2.30	Richard Sin Kheck TEOH	Cremation		Full
3.15	Elizabeth Ethel Conquest GEMMILL	Cremation		Full

North Chapel

Time	Name	Cremation or Burial	Gardens of Remembrance or Grave Reference	Full or Committal Service
9.30				
10.45	John Baden WILSON	Cremation		Full
11.45	Mark Andrew LEWIS	Cremation		Full
1.30				
2.45				

Graveside Services

Time	Name	Grave Reference	
1.30	David Frank KNAPP	K5 – 88	Graveside

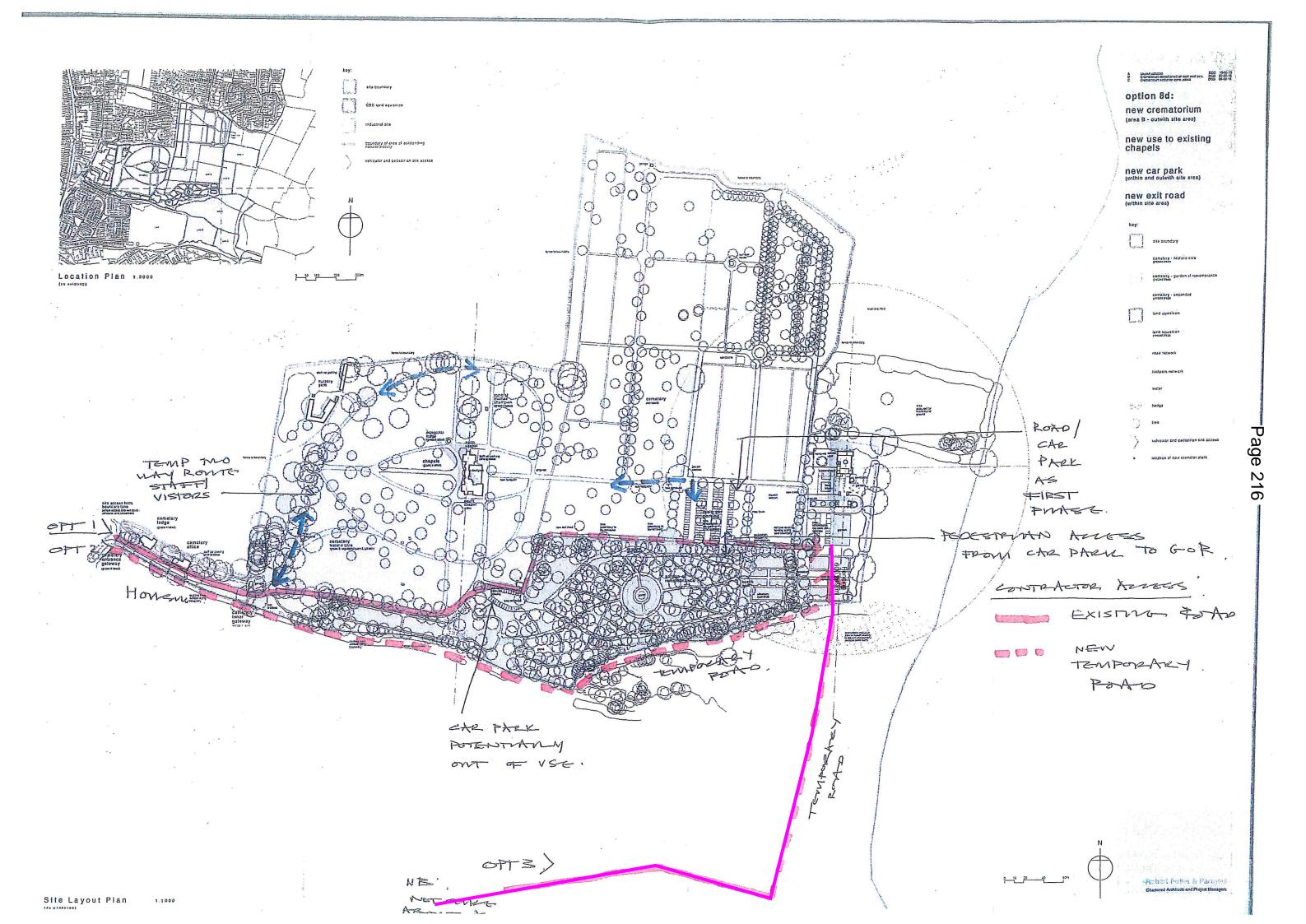
3.00 Scattering of Cremated Remains of the late Jean Mary WILLS. 'I' - 55/56

At Charlton Kings

2.00 Interment of Cremated Remains of the late Tracey Jane HEFTER. Block 9 – 95.

Appendix D

PREVIOUS ROUTE OPTION STUDIES





CHELTENHAM CREMATORIUM DEVELOPMENT

Stage 2 Feasibility Report Ref: CC/S2/JM/180716

Submitted: 15th July 2016 Valid Until: 18th August 2016



4. ACCESS/EGRESS APPRAISAL

During the feasibility study we have considered options for logistics and more specifically access and egress arrangements for construction materials, plant and operatives.

NB. Please refer to appendix G for options.

On a daily basis we will be bringing vehicles onto site and subsequently off site for materials, plant and operatives as well as taking away waste materials.

A major consideration is how we provide access and egress routes for this traffic.

Following discussions with our client we have looked at the viability of each of the following options:

Option 1 – Provide a temporary Haul road off site which will be removed at the end of the contract. Construct a new exit route within the existing cemetery connecting to the existing road layout.

Option 2 - Form a permanent road from the existing highways infrastructure to the construction site through land surrounding the cemetery (adjacent fields) to serve construction traffic and future permanent egress.

Benefits of constructing a permanent egress through the cemetery (option 1)

- Keeps the existing road network within the cemetery
- Less opposition from neighbouring community

Constraints of constructing a permanent egress through the cemetery (option 1)

- Constructing a new road creates a 'construction site' considered to be major disruption for a cemetery environment.
- Graves and memorials will need to be exhumed and relocated
- Legals, permission and licensing issues associated with grave and memorial relocation.
- Ecology issues will need to be investigated and accommodated
- Trees and hedges will need to be removed, tree root protection required
- Working space requirements could impinge on adjacent graves, memorials and areas of cremated human remains.
- Construction activities immediately adjacent to mourners visiting graves.
- Accommodation of road drainage.
- Potential increase in programme duration due to downtime from sensitive cemetery events.

Benefits of a permanent egress road (option 2)

- All construction traffic provided with access and egress route completely segregated from cemetery
- Elimination of down time or risk allowances for periods when it would not be acceptable for construction traffic to use cemetery roads
- Provides potential for dedicated egress route for funeral traffic from new chapel to leave site.
- Enhances value of land along road route for future development
- Possible shared funding from temporary access haul roads of flood defence woks project





4. ACCESS/EGRESS APPRAISAL

Constraints of permanent egress road (option 2)

- Ecology issues will need to be investigated and accommodated
- Disruption to playing field
- Opposition from residents.
- Potential relocation of sports field changing facilities.

Cost based comparison

We have assessed each option and provided the following budget costs within out estimate of the works.

NB: As there will already be a capital expenditure required to construct a haul road to service the construction site it would be beneficial to convert the haul road into a permanent service road to maximise on this investment and eliminate any disruption to the cemetery

Recommendation

Having taken the above considerations into account we would recommend option 2 as the best option to proceed against.

Our site layout and logistics plan (SL-01) illustrates this proposal and allows the existing Cemetery roads to continue to be used for its intended use on a day to day basis without impact from large scale volumes of construction traffic and effect to the Cemetery and its visitors.

We recommend that this permanent egress road be completed as an enabling works package prior to the main contract to maintain a completion date of Phase 1 in June 2018.

High Level Cost Assessment of Haul Road v's Internal Cemetery Road

Option	Description			
1	Cost of a Haul Road	2400 m ²	120.00	288,000.00
	Cost of Internal road through Cemetery	997.5 m²	100.00	99,750.00
				387,750.00
2	Permanent Exit and Haul Road	2400 m ²	150.00	360,000.00



Appendix E

PETER MITCHELL ASSOCIATES REPORT

Cheltenham Cemetery and Crematorium

Route Options Appraisal

Peter Mitchell Associates

September 2016

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Executive Summary

This report provides a high-level overview of the issues surrounding the potential creation of access through Cheltenham Cemetery.

In my view, there is no legislation that is applicable to authorising the removal of memorials and burials in an operational local authority cemetery.

Based upon the information that I have received, of the routes identified by WSP | Parsons Brinckerhoff which impact directly on the cemetery (namely A and B), I recommend that Route B shown in purple on the WSP | Parsons Brinckerhoff's drawing SK03 is regarded as having a much greater chance of being feasible than Route A shown in yellow, due to the clear indications of coffin burials along Route A.

Similarly, Route B shown in purple on the WSP | Parsons Brinckerhoff's drawing SK03 avoids areas clearly used for coffin burials within the areas shaded orange and red on the RES Surveying Topographic Survey Sheet 13.

The proposals threaten to disturb a place where the bodies and ashes of deceased people lie and thereby have the potential to cause great distress to be reaved people, which must be recognised by the team working on this project.

About the Author

I am Peter Mitchell and I have worked at all levels in the Bereavement Services sector in both public and private sectors since 1983. Since 2002 I have been an independent consultant, specialising in all matters relating to burial, cremation and exhumation.

I wrote the IBCA Exhumation Handbook in 1998 and have project managed the exhumation of approximately 30,000 burials, mainly in the UK, but also in Luxor, Egypt and Jakarta, Indonesia. These exhumations have ranged from single bodies to large numbers of burials and the type of client and their reasons for requiring exhumation have also varied widely.

I have been featured in 3 TV documentaries on exhumation, including being the subject of 'The Exhumer', a 50-minute documentary broadcast on Channel 4 in July 2009.

Basis of this report

My understanding of the proposed route options is informed by the following drawings:

Company	Drawing Ref	Date
RES Surveying Ltd	Topographic Survey Sheet 13	13/04/2015
WSP / Parsons Brinckerhoff	4730-SK03 Rev B	September 2016
	Overview Map	
	Proposed Route Options	
WSP / Parsons Brinckerhoff	4730-SK04 Rev A	September 2016
	Proposed Route A	
WSP / Parsons Brinckerhoff	4730-SK05 Rev A	September 2016
	Proposed Route B	

I have also had the benefit of seeing 17 photographs of the areas shaded Blue, Orange and Red on the RES Surveying Topographic Survey Sheet 13.

The various route options under consideration relate to an operational cemetery and crematorium site. I have not made a site visit nor sought any information directly from the client, Cheltenham Borough Council.

The 'Proposed Route Options' drawing shows areas shaded Blue, Orange and Red, which all directly impact upon areas of the cemetery previously used for burial. The area shaded in blue forms part of WSP | Parsons Brinckerhoff's Route Option A.

This same drawing shows Route B in purple, which does not appear to affect graves as such, but may impact upon an area adjacent to the site entrance drive, previously used for the burial or scattering of ashes.

Key Issues

The key issues for consideration include:

Legal

Practical

Financial

Public relations

Legal issues

The redevelopment of land previously used for burial is not unusual in the UK and there is a statutory framework in place to enable this to happen, subject to the particular circumstances of each case. These circumstances do not necessarily have to involve the disturbance of buried human remains.

A significant factor in understanding which legislation applies within England is the status of the land in terms of its formal consecration by a Bishop of the Church of England. Whilst liaison and gaining consent may be required when dealing with churchyards in Wales or Scotland, in England only consecration has a legal status recognised in statutes relating to exhumation.

Regardless of the ownership of the land, its consecration by a Bishop of the Church of England places it under the Faculty Jurisdiction, which places restrictions upon what can be done on the land without applying for faculty permission.

The statutes relevant to the use or redevelopment of land used for burial include:

Burial Act 1857

• Disused Burial Grounds (Amendment) Act 1981

- Town and Country Planning Act 1990 & Town and Country Planning Regulations
 1950
- Open Spaces Act 1906
- Mission and Pastoral Measure 2011
- Care of Churches and Ecclesiastical Jurisdiction (Amendment) Measure 2015
- Private Acts of Parliament

Examples of relevant private Acts of Parliament include the Channel Tunnel Rail Link Act 1996 and the Crossrail Act 2008.

Statutes have provisions relating not only to the actual burials, but also to the treatment of memorials on graves, which technically remain the property of the person who originally paid for their installation.

In general, there are requirements to give public notice of the intentions regarding the land previously used for burial and arrangements relating to objections from relatives and others and to compensation for loss of burial rights.

In terms of creating access for vehicles over old burials, the Disused Burial Grounds (Amendment) Act 1981 provides that the Secretary of State may issue an Order dispensing with the requirements to exhume burials in areas of old burials where no building is to take place. The provision is used to enable the redevelopment of an old non-conformist chapel so that burials in the area redeveloped as entrance and car park are left undisturbed. The formality of what is known as a Dispensation Order is required as the work results in the graves being made inaccessible.

The Church of England sometimes grants faculty permission for raft type foundations to be used for the extension of church buildings to bridge over old graves.

It is important to note that, regardless of the location and status of the site, graves containing Commonwealth War Burials have special protection. These are defined in the

Local Authorities' Cemeteries Order 1977 (LACO) as a burial of any member of the forces of His Majesty fallen in the war of 1914-1921 or the war of 1939-1947.

It is also important to note that cremation ashes are also classified as human remains for the purposes of legislation. This applies where ashes are buried, whether in a container or otherwise. The situation where ashes are scattered is less clear and is considered below.

Another factor that may be relevant is that the original part of the cemetery is registered under the Historic Buildings and Ancient Monuments Act 1953 within the Register of Historic Parks and Gardens by English Heritage (now Historic England) for its special historic interest. It was Grade 2 listed in 2003. This does not apply to 20th Century cemetery extensions, in which the proposed route options currently being considered may be located.

Cheltenham Cemetery and Crematorium

The Cheltenham site under consideration is neither a churchyard nor a disused burial ground, but an operational cemetery. This means that it does not readily fit in with any of the statutory provisions listed above.

I suspect that, in common with most other local authority cemeteries, a significant proportion of the site may be consecrated.

The memorials visible in the photographs that I have seen suggest to me that the graves lying in the Blue, Orange and Red areas are purchased graves, although there may be unpurchased graves in the Blue area.

'Purchased' means that the burial authority sold the exclusive rights of burial in the grave to a relative of the person first buried in it. That owner may have subsequently also been buried in the grave. The sale of the exclusive rights is a legally binding contract between the burial authority and the purchaser and in subject to the terms and conditions of the grant of rights.

I do not know the age of the burials along the 3 potential routes, but in the photographs the memorials generally look quite old. I therefore suggest that the exclusive rights in the graves may have been sold prior to 1974 in perpetuity. This needs clarification from the cemetery records, but it means that the rights were not sold for a limited period, as they have been since 1974, and they do not simply expire. In all probability the rights are still extant, even if the registered owners of those rights are themselves deceased. There are appropriate procedures for the rights to be transferred to those legally entitled, usually but not necessarily a direct descendant.

'Unpurchased' means that no-one purchased any exclusive rights and unrelated people may have been buried over a period of time in the same grave. Some burial authorities permit memorials on unpurchased graves, so the presence or absence of a memorial does not define the status of a grave.

In addition to any consideration of the potential disturbance of burials, there should also be factored in the exclusive rights of burial and the property rights in memorials. These matters are dealt with in the legislation relating to disused burial grounds, but this is an operational cemetery regardless of the age of any burials that might be affected by new access routes.

The area shaded in blue which forms part of WSP | Parsons Brinckerhoff's Route Option A may appear to have good potential as an access route, due to the smaller number of memorials visible in the photographs. However:

- The absence of a memorial does not indicate that there is not a grave in which burials have taken place.
- There appears to be a CWGC headstone in one of the photographs (P1080270).
- There appears to be evidence from photographs of vases (P1080248) and a memorial feature (P108262) that ashes have been scattered or buried in the area on the Blue route. A site inspection is required to confirm this.

The Purple Route B appears not to affect graves, but it may affect an area used for the scattering or burial of ashes where it links to the main drive close to the main entrance to the cemetery.

If ashes have been buried in containers the affected area, particularly if individual burial plots have been sold, then legally there is no difference from graves containing bodies. When scattered, ashes are not identifiable or recoverable.

The Ministry of Justice publishes guidance notes with its exhumation licence application form, which state:

It is not practical to remove scattered remains. They are not considered to be buried and no licence is therefore required if they are to be disturbed.

If the remains have been placed in the grave without a container, it may not be practicable to remove them. Any application for a licence to do so will be considered in the light of advice from the burial authority.

Whilst the legal implications of scattered ashes many seem to be minimal, other aspects are discussed in the Public Relations section below.

In London only, local authorities have powers to extinguish exclusive rights of burial granted in perpetuity if the most recent burial in the grave concerned was 75 years or more ago. The wording of the legislation - the Greater London Council (General Powers) Act 1976 s.9 – specifically refers to extinguishing rights where there is depth remaining in the grave for at least one further burial. Last year, I sought the opinion of the Ministry of Justice team as to whether these powers could be used to extinguish exclusive rights in order to create a new pedestrian access through 3 rows of graves.

I made my original request on 5th November 2015, but did not receive a reply until 24th March 2016. The reply included the following:

"... I'm afraid MoJ is not in a position to provide the information you're seeking. As you'll know, neither the City of London (Various Powers) Act 1969 nor the Greater London Council (General Powers) Act 1976 were pieces of government legislation and, therefore, it's not possible for us to speculate on the policy intention behind the provisions you have queried. In any event, the issues you have raised are essentially matters of legal interpretation and, as a Government department, we're unable to give advice of this kind. I can only suggest that you should seek this from an independent adviser."

I think that the words of the legislation in this specific example do not extend to permit the creation of access routes. The situation for a local authority outside of London seeking to do something similar, but lacking even powers to extinguish exclusive rights in graves that have been used for burial, seems even less likely to find a successful legal outcome.

Regardless of the merits of improving access, one cannot simply remove memorials from graves and create a new route or widen an existing route by covering graves partially or completely or exhume burials as part of this process.

In general terms, in my view the options for gaining legal consent to encroach upon graves in Cheltenham Cemetery, whether involving the disturbance of burials or building access routes over graves without disturbing burials, are very limited. There appears to be no provision in law to authorise these works.

Consecrated areas

Discussion with the Gloucester Diocesan Registrar to explore how the Church of England views the proposals. These discussions should be informed by clear maps and other information showing the number of graves, memorials and burials potentially affected by the creation of new or wider routes.

Unconsecrated areas

Discussion with the Ministry of Justice along the same terms. As discussed above, I am not optimistic that the Ministry team would have the capacity or willingness to commit to providing any helpful advice.

The time required to successful engage in dialogue and reach conclusions with these 2 bodies could be considerable. Based upon my own and others' experience, it would not surprise me if up to one year or even two years were spent on this process and yet there would be no guarantee that a successful outcome could be achieved.

In the absence of any alternative, the client could consider seeking powers within a new and specific private Act of Parliament, but there would be no guarantee of success.

Subject to site investigations to confirm the situation on the ground regarding ashes of body burials, the Purple Route B appears to offer the least legal obstacles.

Practical issues

If legal authority could be obtained to authorise the removal of memorials and build a road over old graves, the practical issues would be relatively straightforward. Even if some or all of the burials were to be removed, this would not present significant practical challenges.

The memorials and burials could be relocated to another part of the cemetery. Where disused burial grounds are cleared, normal practice is to rebury exhumed remains in communal graves in order to save space in existing cemeteries. In this case, however, the sensitivities of the situation would require the reinterment of burials and the re-erection of memorials to be on a grave by grave basis. If 50 graves were affected, the memorials and burials would be relocated to 50 new graves elsewhere in the cemetery.

The dismantling and re-erection of memorials would require care to minimise any damage. The memorials would have to be re-erected to modern standards in terms of foundations and fixing of components to ensure safety. If burials were to be exhumed, the work would need to be screened from public view and undertaken in liaison with the local authority's Environmental Health Officer. In view of the specific nature of the project, each burial would likely be reinterred in a new individual coffin. Both activities would need to be completed by people suitably experienced in the work, with BRAMM / NAMM registration applicable to the memorial work.

The time taken to complete this work would obviously depend upon the number of memorials and/or burials involved. However, I would expect completion within a matter of a few weeks rather than months.

Purple Route B appears to offer the least practical difficulties. There may be no need to move any memorials or buried ashes or bodies at all. The removal of lawn areas used for scattering ashes would need to be completed with an awareness of the sensitivity of the situation and manual excavation may be deemed more appropriate than mechanical excavation. The site and method of relocation of such ground would need consideration, with a location within the cemetery.

Financial issues

Legal costs

If the client wished to pursue the identified route options, the costs of seeking legal consent may include charges made by the Diocesan Registry for the time of the Registrar and/or Chancellor. These charges would likely be equivalent to lawyers' fees.

The Ministry of Justice would not make any charge.

The client might wish to engage specialist lawyers to act on their behalf in the hope of increasing the chances of a successful outcome to the discussions with Diocese and Ministry.

Practical costs

The costs of dismantling and re-erecting the memorials are unlikely to be significant, in view of the modest size and design of memorials apparent in the photographs. I suggest an allowance of £250 to £500 per memorial.

The costs of exhuming burials if required would again be modest. I suggest an allowance of £2,000 per coffin burial.

In addition, there would be the costs of new coffins. I suggest an allowance of £300 per coffin.

The client would be providing new graves for any reinterments and could excavate the graves as in the case of standard coffin burials. If an exhumation contractor were responsible for the reinterments, the costs would be minimal if carried out on the same site immediately following exhumation.

In view of the sensitivity of the project, the client might wish to engage the services of a Funeral Director, for which quotations would have to be sought.

Public Relations

Perhaps even greater than the challenges of obtaining legal consent for the works, managing the public relations aspects of such a project is likely to be very difficult.

As an example, within recent years Perth and Kinross Council have faced protests from members of the public disturbed by the prospect of a new road being constructed within the grounds of Perth Crematorium and potentially affecting areas where ashes had been scattered.

(See: https://www.thecourier.co.uk/news/local/perth-kinross/238648/anger-over-new-link-road-near-perth-crematorium/)

The use of social media, combined with what I perceive from experience to be a heightened awareness and sensitivity to the disturbance of the dead in the UK, enables even a relatively small minority to gain a high public profile for their objections to such a project.

Any activity that threatens to disturb a place where the bodies and ashes of deceased people lie has the potential to cause great distress to bereaved people, which must be recognised by the team working on this project. This distress is not limited to those families whose graves are directly affected by any proposals, but includes relatives of others buried in this cemetery and also elsewhere.

Ideally, the proposals to create access routes and discussions regarding legal authority for the works should be kept out of the public domain until there is certainty as to what might be the finally agreed solution. This would avoid causing unnecessary distress to be eaved people.

If any of the route options are to be pursued and legal authority successfully obtained, it will be essential to ensure the integrity of the work on the ground, maintain the identity of any memorials and burials affected, whether bodies or ashes.





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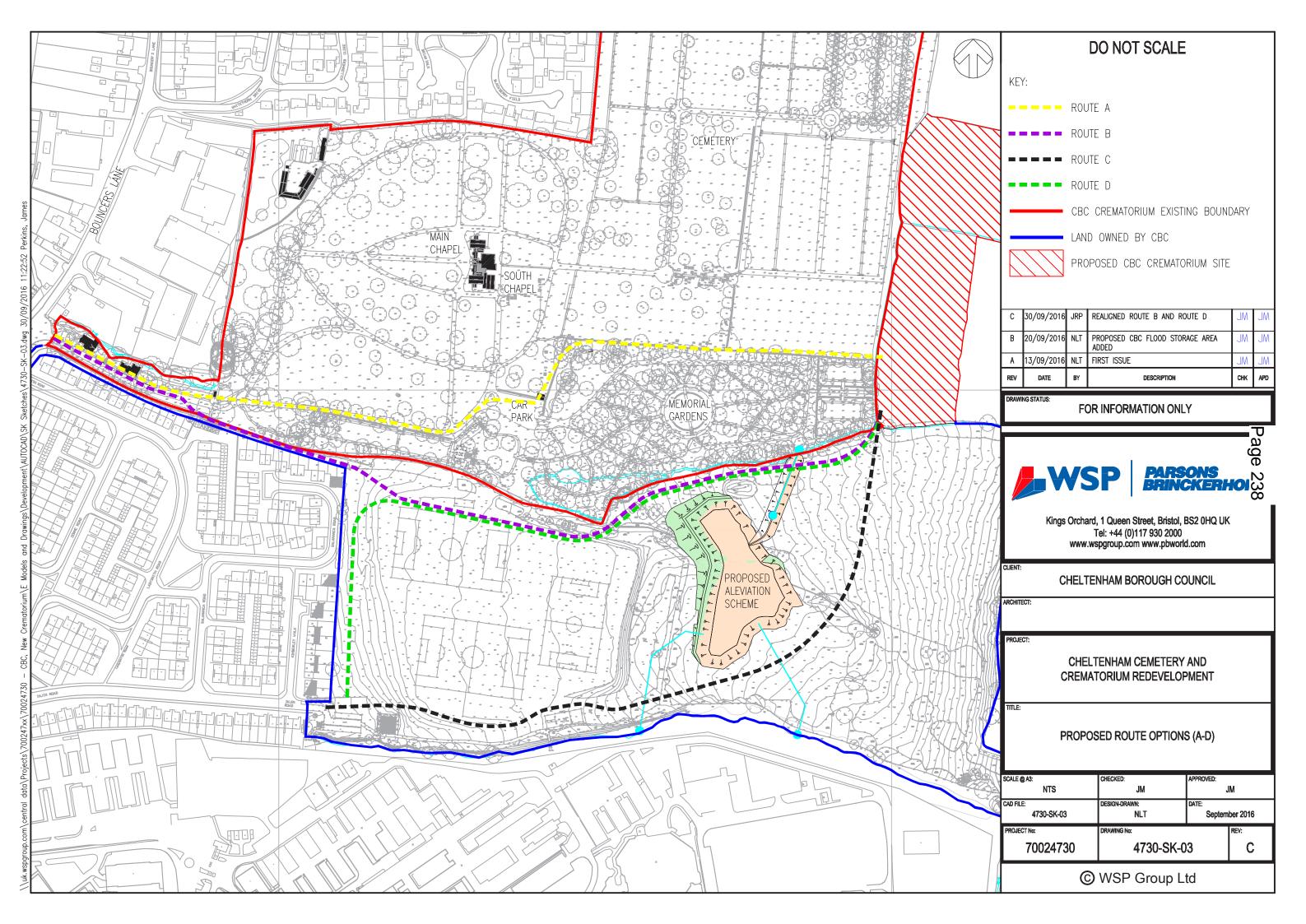
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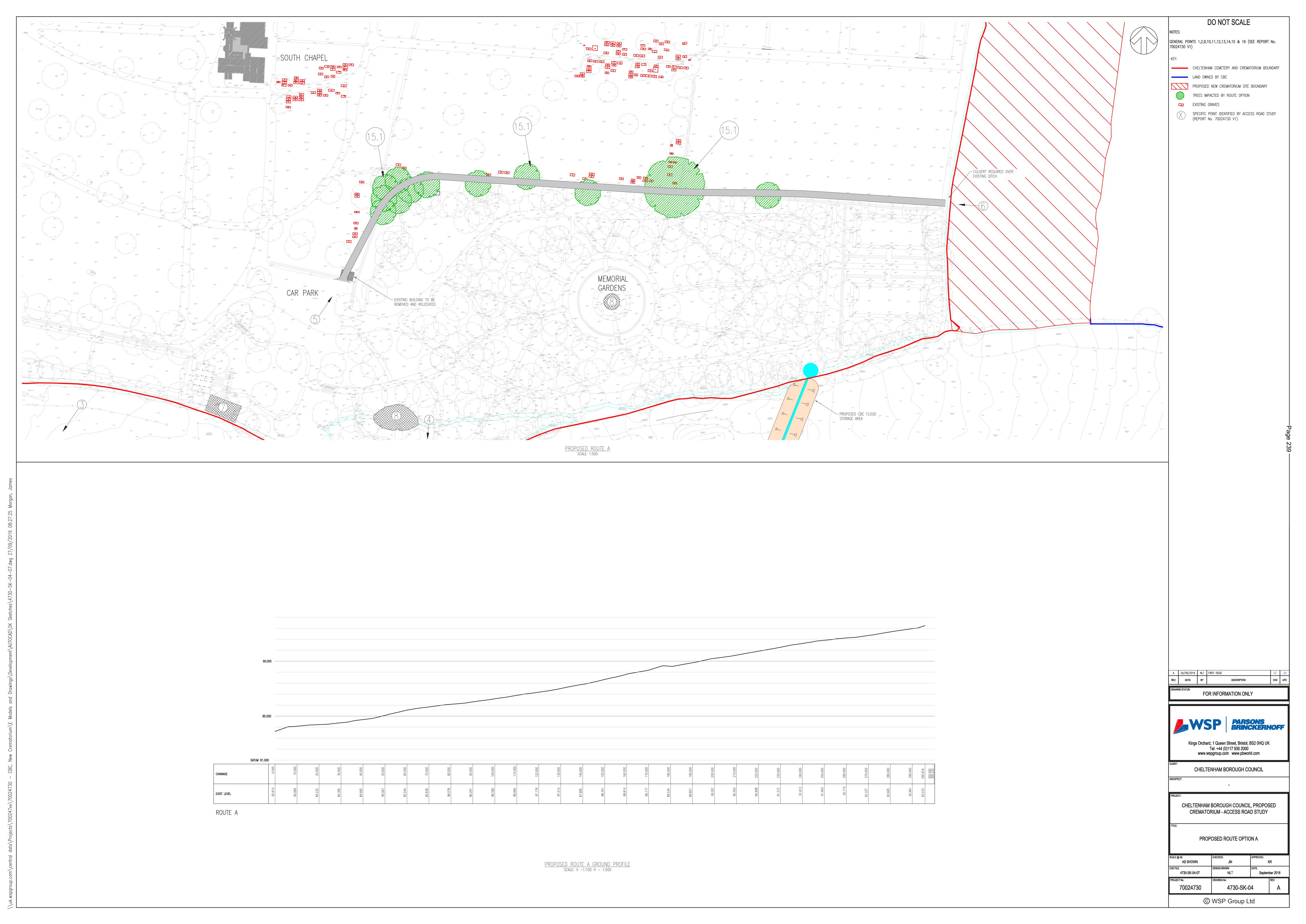
Cheltenham Cemetary and
Crematorium
Bouncers Lane

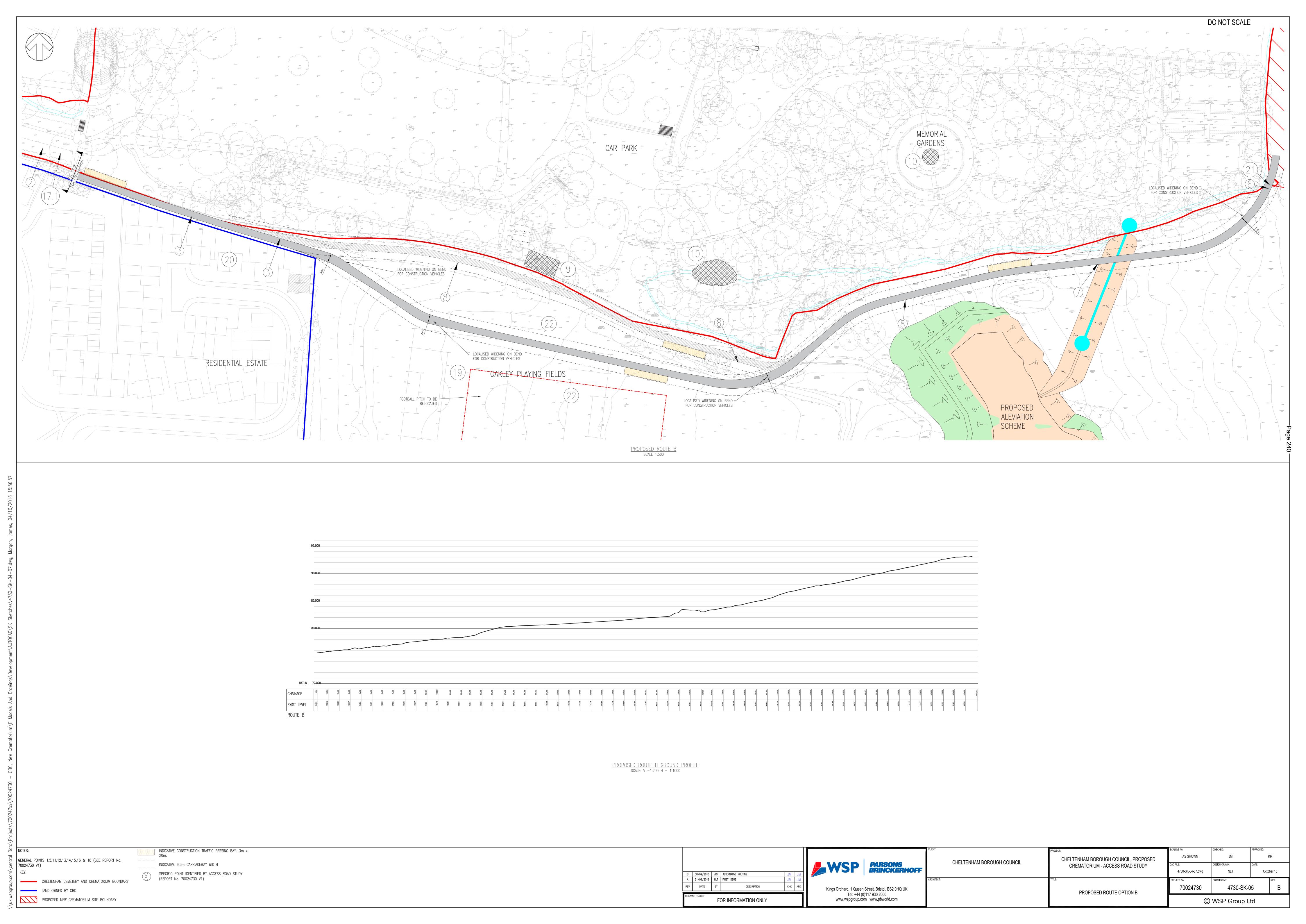
Topographic Survey Sheet 13

PROJECT NO SUR.1126
DATE 13/04/2015
DRAWN BY ZA
CHECKED BY KL

L13







Appendix F

TREE SPECIALIST REPORT

Cheltenham Cemetery-Proposed Route Options

CBC Tree Section comment pertaining to WSP Drawing no 4730-SK-03 Sept 2016

Route A-

Pros-

- If constructed well, this would be the most visually pleasing route for mourners/visitors to the cremator as it meanders through several different well tree'd and more open areas throughout the cemetery.
- It would leave the southern existing boundary vegetation intact thus leaving functional screening into and out of the cemetery from the playing pitches and open space to the south.

<u>Cons</u>

- A more expensive "no-dig construction" method for the road would need to be engineered to reduce damage to trees rooting environment.
- Route would likely need the removal of several trees from within the children's cemetery as
 well as part of a hedge line within the cemetery. This hedge line is species-rich and is
 composed of rowan, Berberis, smoke bush, yew, birch, Laburnum, cotoneaster, hawthorn
 etc.
- Unless this road meanders significantly, it will involve the placing of the road right under the
 canopy of several large beech, hornbeam and oak. Whilst this may be technically possible,
 some collateral damage will be incurred to these trees and indeed access facilitation pruning
 (in the form of crown lifting would be necessary-such crown lifting involves the removal of
 several large limbs off these trees to enable vehicle access under the canopy) would be
 required. This pruning would likely detract from the visual amenity of these trees.
 Alternatively the road could meander away from trees, but this would likely involve the
 moving of grave stones.
- Road construction would be over an area where it is suspected ashes are scattered (there
 appears to be many bunches of flowers and other assorted mementos on the ground in this
 area).
- Any "new road" will take some time to "bed-in" and may look somewhat "shiny and new" in a mature amenity landscape. It would likely take several years before it blends into the landscape.
- No-dig construction specialist advice would be required to ascertain whether such an
 engineering construction is possible.
- Cedar tree and 2 mature lime trees near to the entrance would need to be removed if proposed entrance-widening is required.

Route B

Pros

- Little /no damage to trees within the cemetery assuming road follows route outside the palisade fence line.
- New road would not be highly visible within cemetery or externally from the open space or playing pitches.
- Relatively easy to construct-whether temporary or permanent.
- No high quality trees would need to be removed to facilitate construction or future visitor movement.
- Construction over cedar rooting area at top of drive should be relatively simple.
- Loss of southern hedge line could be overcome with renewed planting.
- If road route is to the south of the existing palisade fence line, then most internal trees could be retained without significant damage to root protection areas.
- No significant trees exist within private rear gardens along 62-41 Salamanca road inhibiting construction of new road/track.
- Traffic within the cemetery would not increase during the construction period.

Cons

- Cedar and limes adjacent to entrance would need removal should access widening be required.
- Part of the hedgerow along the southern boundary would need to be removed. This would open up views into/out of the cemetery
- There is a manhole cover along this existing track indicating the presence of underground services. Construction methods/design would need to take account of this.
- Much valuable wildlife rich cover such as bramble, plum, blackthorn, willow, alder etc would need to be removed. However there is a lot of such cover around the playing fields and open space to the south of the cemetery. It would be a relatively small overall proportion of total cover.

Route C

<u>Pros</u>

 No tree related damage or removals required (assuming route could easily avoid several mature oak and willow within open space to the east of the playing field).

- If sensitively designed and the existing young oak trees within this open space to the east of the playing pitches are protected and further planting included, this would add to the overall tree-rich landscape.
- No increase of internal construction related traffic during the build.

Cons

- Some cover for wildlife would be lost-bramble, wild plum, ash etc to enable access into the open space to the east of the playing pitches.
- The new road/route through this open space could look somewhat incongruous through the existing landscape and could take several years to "bed in".

Route D

Pros

- Little/no damage to significant individual trees required.
- No loss of significant individual trees.
- Existing south boundary screening into/out of cemetery would be retained.
- No increase of internal construction related traffic during the build.

Cons

• Some ground cover loss (as per Route B) of overall woody vegetation.

Conclusion

Each option carries several positives and negatives-some of these carry more weight and are of more significance than others.

Route A would incur the most tree related damage/removals and may be the most expensive to construct but would ultimately fit best into this landscape on the assumption that a generous landscaping scheme could mitigate for tree loss/damage. This may be technically the most challenging route to achieve due to the "no-dig" requirement where the route deviates into the root protection area of existing large trees.

Route B would incur some loss of boundary screening and trees along front of drive (if drive is to be widened). However, re-landscaping could mitigate for this loss. This new route would fit aesthetically well into the local environment.

Route C would not incur significant tree loss but the proposed new road may look incongruous through this open space. Some ground cover would have to be removed.

Route D would also not incur significant tree loss but some ground cover would need to be removed. The road would fit more discretely into the landscape.

All comments are from a "trees-only" perspective and do not take account of inconvenience to neighbours, nuisance, cost, the proposed Noverton and Priors flood alleviation scheme or the appropriateness of design. CBC Tree Section considers that Route B may offer the best long term solution.

A possible alternative solution may be to construct a temporary access road for the construction phase of this project and then, where necessary, upgrade existing surfaces for future car users to the new cremator. This would avoid the necessity to construct lorry-bearing roads within the existing cemetery. Such a new temporary road surface could be constructed using eg Eve Trackway solutions. This would avoid the need to construct expensive loadbearing roads internally as well as reducing the need for tree removal whilst still involving visitor movement within the tranquil environs of the Cemetery.

Christopher Chavasse

CBC Trees Officer 20.9.16

Appendix G

ADDITIONAL ECOLOGICAL DETAILS

APPENDIX G – ADDITIONAL ECOLOGY DETAILS

The following Tables outline the potential ecological survey requirements, timeframes and mitigation measures (should they be required) for each route.

Table 1 Potential Ecology Survey Requirements

Route Option (A – D)	Survey Type	Survey (Brief) Description	Survey Requirement	Survey Window	Time Required to Complete Survey	Completion Prior to August 2017 Construction Start	Mitigation Timeframe
A	Badger – updated survey	Updated survey to ensure no changes in sett locations have occurred	Recommended	Within 8 weeks of construction start	1 day	Yes	Should no evidence be found, works can proceed without delay. Should new badger excavation(s) be found then further survey would be required. If works are required within 30m of any badger setts, a sett closure licence would be required to close the sett legally. Refer below for mitigation timeline for badger sett closure.
	Bat – Tree Roost	Bat roost assessment of trees to be affected	Recommended to ensure appropriate consideration for planning	Preferably during winter due to reduction in foliage	1 day	Yes	Should potential roosting features be identified then aerial assessment for bats would be required. These could be carried out at any time of the year. Should bat roosts be identified and the trees require works/ felling then a licence from Natural England would be required to carry out the works legally. Dusk and dawn emergence / re-entry surveys would be required to inform a licence application. Dusk and dawn surveys would need to be carried out in May – August.

Route Option (A – D)	Survey Type	Survey (Brief) Description	Survey Requirement	Survey Window	Time Required to Complete Survey	Completion Prior to August 2017 Construction Start	Mitigation Timeframe
							Worst case delay – 6 months Should no evidence be found, works can proceed without delay.
	Great crested newt (GCN)	Presence/likely absence survey	Recommended to ensure appropriate consideration for planning	Mid-March to mid-June, with at least two of these visits during mid-April to mid-May	4 visits in suitable weather conditions	Yes	Should GCN be found to be present within the ponds on site, a licence application would be required. This would take 2 weeks to prepare and 6 weeks for deliberation. All information on the scheme (including justification for the works and consideration of alternatives) would be required for the application. Worst case delay – 2 months Should no evidence be found, works can proceed without delay.
В	Badger – updated survey	Updated survey to ensure no changes in sett locations have occurred	Recommended	Within 8 weeks of construction start	1 day	Yes	B1. Avoiding badger sett (more than 30m and no heavy impact works within 50 m). Update survey only. Should no evidence be found, works can proceed without delay. If new excavation(s) found further survey required. If works are required within 30m of any badger setts, a sett closure licence would be required to close the sett legally. Refer to details below. Worst case delay – 9 months

Route Option (A – D)	Survey Type	Survey (Brief) Description	Survey Requirement	Survey Window	Time Required to Complete Survey	Completion Prior to August 2017 Construction Start	Mitigation Timeframe
	Bat – Tree Roost	Bat roost assessment of trees to be affected	Recommended to ensure appropriate consideration	Preferably during winter due to reduction in	1 day	Yes	B2. Not avoiding badger sett (works within 30m) A licence would be required to close the badger sett. Badger surveys would be required to determine the use of the badger sett and the sett would need to be closed within the closure period (July – November). A period of monitoring and excavations works are required as part of the licensable works. Worst case delay – 9 months Refer to bat tree roost mitigation timeline provided for Option A.
	Great crested newt (GCN)	Presence/likely absence survey	for planning Recommended to ensure appropriate consideration for planning	foliage Mid-March to mid-June, with at least two of these visits during mid-April to mid-May	4 visits in suitable weather conditions	Yes	Refer to great crested newt mitigation timeline provided for Option A.
	Combined otter, water vole and white clawed crayfish	Habitat suitability/ Presence/likely absence and survey	Recommended to ensure appropriate consideration for planning	April / May and August – September	2 days (combined survey over 1 day, followed by an additional	No (incomplete by August)	Otter Should an otter holt be found, monitoring and a licence may be required to undertake the works legally. Worst case delay – 3 months

Route Option (A – D)	Survey Type	Survey (Brief) Description	Survey Requirement	Survey Window	Time Required to Complete Survey	Completion Prior to August 2017 Construction Start	Mitigation Timeframe
					water vole survey on a second day)		Mater vole Should water vole be identified, mitigation measures would be required. A licence may be required to undertake the works legally. Worst case delay – 3 months White clawed crayfish Should white clawed crayfish be found a licence may be required depending on an impact assessment. Mitigation measures would be required for temporary loss of habitat. A trapping operation and seasonal restrictions on when works proximate to the watercourse may be required. Works to be carried out under a Method Statement for white clawed crayfish. Worst case delay – 1 month
С	Badger – updated survey	Updated survey to ensure no changes in sett locations have occurred	Recommended	Within 8 weeks of construction start	1 day	Yes	Refer to badger mitigation timeline provided for Option A.
	Bat – Tree Roost	Bat roost assessment of trees to be affected	Recommended to ensure appropriate consideration for planning	Preferably during winter due to reduction in foliage	1 day	Yes	Refer to bat tree roost mitigation timeline provided for Option A.
	Combined otter, water	Habitat suitability/	Recommended to ensure	April / May and	2 days (combined	No (incomplete by	Refer to otter, water vole and white clawed crayfish mitigation timeline for Option B.

Route Option (A – D)	Survey Type	Survey (Brief) Description	Survey Requirement	Survey Window	Time Required to Complete Survey	Completion Prior to August 2017 Construction Start	Mitigation Timeframe
	vole and white clawed crayfish	Presence/likely absence and survey	appropriate consideration for planning	August – September	survey over 1 day, followed by an additional water vole survey on a second day)	August)	
D	Badger – updated survey	Updated survey to ensure no changes in sett locations have occurred	Recommended	Within 8 weeks of construction start	1 day	Yes	D1. Avoiding badger sett (more than 30m and no heavy impact works within 50 m). Update survey required. Should no evidence be found, works can proceed without delay. If new excavation(s) found further survey required. If works are required within 30m of any badger setts, a sett closure licence would be required to close the sett legally. Refer to details below. Worst case delay – 9 months D2. Not avoiding badger sett (works within 30m) A licence would be required to close the badger sett. Badger surveys would be required to determine the use of the badger sett and the sett would need to be closed within the closure period (July – November). A period of monitoring and excavations works are required as part of the licensable works.

Route Option (A – D)	Survey Type	Survey (Brief) Description	Survey Requirement	Survey Window	Time Required to Complete Survey	Completion Prior to August 2017 Construction Start	Mitigation Timeframe
							Worst case delay – 9 months
	Bat – Tree Roost	Bat roost assessment of trees to be affected	Recommended to ensure appropriate consideration for planning	Preferably during winter due to reduction in foliage	1 day	Yes	Refer to bat tree roost mitigation timeline provided for Option A.
	Great crested newt (GCN)	Presence/likely absence survey	Recommended to ensure appropriate consideration for planning	Mid-March to mid-June, with at least two of these visits during mid-April to mid-May	4 visits in suitable weather conditions	Great crested newt (GCN)	Refer to great crested newt mitigation timeline provided for Option A.
Notes:	Combined otter, water vole and white clawed crayfish	Habitat suitability/ Presence/likely absence and survey	Recommended to ensure appropriate consideration for planning	April / May and August – September	2 days (combined survey over 1 day, followed by an additional water vole survey on a second day)	No (incomplete by August)	Refer to otter, water vole and white clawed crayfish mitigation timeline for Option B.

Notes:

⁻Please note that this schedule assumes that no additional protected species are encountered during the above surveys and that likely absence of additional badger setts, GCN, trees suitable for roosting bats and protected riparian species (otters, water vole and white clawed crayfish) is confirmed. The potential impacts of protected species presence within the survey area are discussed below.

⁻This schedule assumes that no works will be undertaken within 30 m of the known badger setts and no piling or similar works will be undertaken nearby (exact distances to be determined by the supervising ecologist on an individual basis).

⁻Additional species constraints, such as breeding bird checks and method statements for reptiles, are considered elsewhere. This table should therefore not be considered as the full ecological recommendations of the report.

The following table details a broad timeframe of potential works in the event a protected species has potential to be affected by the works. The timeframes detailed below are deliberately vague, as specific mitigation and timing constraints can only be confirmed once the full details of the proposed works and species presence is known.

Table 2 Timeframes of Potential Works

Species	Potential further works (in the event of potential impacts to protected species)
Badger	Should the proposed works encroach within 30 m of a badger sett or require a sett to be closed a licence to disturb or displace badgers would be required from Natural England.
	In order to apply for a licence, Natural England would require additional surveys and mitigation to prove that no viable alternative is possible to prevent impact to badger and that no net negative effects will be experienced by the badger clan affected. This could include surveys to understand the use of the area by badger, such as bait marking surveys, and mitigation to offset the loss of a sett, such as creation of an artificial sett.
	Exact mitigation and requirement for further survey would depend on the degree of effects to the sett and it should be noted that it cannot be guaranteed that Natural England will issue a licence.
Great crested newt	Should great crested newts (GCN) be identified in one or more of the ponds in the survey area further surveys and mitigation would be required.
	In the event that GCN are identified an additional two surveys would be required to give a population class assessment. Once these surveys were completed mitigation would be required to ensure no breach of relevant legislation occurs, which could include a licence application in the event that trapping is required.
	The exact level of mitigation would depend on the level of impact and its proximity to breeding ponds.
Otter, water vole and white clawed	Should any protected riparian species (otter, water vole and/or white clawed crayfish) have potential to be affected by the work appropriate controls and mitigation would be required to ensure compliance with relevant legislation.
crayfish	The exact level of control and mitigation would vary by species and may include measures such as changes in the design of any culverts, licence applications to Natural England in the event that a water vole or otter resting place is to be affected and/or sympathetic methods of working.
Bats	Should a tree requiring removal or pruning be identified as suitable for roosting bats further surveys would be required.
	This would likely involve aerial surveys to determine whether suitable features are in use and/or presence/likely absence (summer) surveys. Should a bat roost be identified within a tree to be affected, a licence would be required from Natural England in order for works to proceed, if the loss of the tree is unavoidable.
Breeding birds	In the event that vegetation clearance is required in the breeding bird season, ecological supervision would be required. Should a nest in use be identified within an area to be cleared a suitable buffer would need to retained until the young had fledged and we no longer

Species	Species Potential further works (in the event of potential impacts to protected species)	
	dependant on the nest.	



CHELTENHAM BOROUGH COUNCIL, PROPOSED CREMATORIUM

MEMO - Updated Egress Road Route Opportunities & Constraints

Project Number: 70020522

31st January 2017

The WSP | Parsons Brinckerhoff 'Access Road Study' report dated October 2016 assessed four separate possible egress routes, A, B, C & D for the proposed new Cheltenham Crematorium, adjacent to the existing Crematorium site, Bouncers Lane, Cheltenham. Two of the options, B & C were subsequently selected for further investigation ahead of a final decision. Since production of the initial report in October 2016, the following additional information has been obtained or produced by WSP | Parsons Brinckerhoff;

- Severn Trent Water sewage and water supply statutory records
- Below ground services radar survey of road routes B & C
- Traffic technical note TN-01: Impact of Proposed Crematorium Egress Route (Option C) on Imjin Road (dated 20.01.17) and related additional traffic and parking survey & data collection
- Preliminary Geo-Environmental and Geotechnical Risk Assessment (Desk Based) Report No. 70020522-GEO-R1
- Ecological Verification Survey memo dated February 2017
- Updated Preliminary Ecological Appraisal Report dated January 2017



Additional information has also been made available from other parties, in particular from the design team working on the proposed flood alleviation scheme including additional ecological surveys, archaeological investigation and revised flood alleviation scheme designs. We have also been made aware of proposals for a new housing scheme in fields to the south of the existing cemetery.

A possible further egress route option via the existing site roads through the Gardens of Remembrance is currently being reviewed with regards to traffic safety and vehicle swept path analysis and is to be issued ahead of a final decision on the preferred egress route on the 8th February.

The following tabulated options and constraints are extracted from section 4 of our original October 2016 Access Road Study report for the currently considered routes B and C only and updated comments added in the right hand column where new information exists as of end of January 2017. Where no comments are added, the originally identified opportunity or constraint is not considered to be altered by recent information. Comments should be read in conjunction with the original Access Road Study report, the detailed information listed above and WSP | Parsons Brinkerhoff constraints drawing 70020522-GA-02 'Constraint Plan' revision B, prepared to illustrate the known major constraints related to potential routes B & C.

	F	
Ref	Opportunities/ Contraints October 2016	January 2017
Opp	ortunities	
1.	Route Option B would result in the bulk of traffic being taken away from the existing internal Cemetery and Crematorium roads (albeit not the section of road located between the two existing gated entrance points), which in turn would reduce internal congestion / delays.	
Cons	straints	
2.	For the operational phase, this Option would require the provision of a new internal junction where the proposed new section of road (external to the existing Cemetery and Crematorium) would tie into the internal section of road located between the two existing gated entrance points. There is potential for increase congestion / conflict as a result of the proposed arrangement.	
3.	The existing Farm Track, which skirts the southern boundary of the existing Cemetery and Crematorium is narrow and observed to be in poor condition. This would likely require upgrading and resurfacing.	Track would need to be re-constructed to new road specification. Existing below ground services have been identified along this route requiring due coordination and caution in future construction. The narrow width available at the end of this route adjacent to the housing estate will require an oversized storm drainage attenuation pipe to be laid below the new road.



Ref	Opportunities/ Contraints October 2016	January 2017
4.	Of the two options for construction access which are currently considered for the internal section of road located between the two existing gated entrance points (see WSP Parsons Brinckerhoff drawing SK-08):	The larger potential construction traffic such a full articulated HGV understood to be required for delivery of the cremators would have
	 In Option 1 – construction traffic would be directed to use the existing Farm Track via Ladysmith Road. This would require that the existing access is upgraded to accommodate construction traffic. 	extremely tight clearance around the garden walls at the bottom 90 degree turning in the lane and would not currently be able to
	 In Option 2 – the narrowing of the existing Cemetery and Crematorium access road (to accommodate the construction route) would require the introduction of one-way controlled workings (such as temporary traffic lights). This arrangement would likely lead to increased congestion and delays (particularly during peak hours). 	negotiate the pedestrian crossing island at the end of Ladysmith Road. Some degree of redesign and associated highways approvals would therefore be necessary.
	 In Option 2 – this arrangement would likely lead to increased traffic movements at the existing [modified] access. 	This exit route (from the existing lane onto
	 In Option 2 – there would be a potential requirement to widen the main entrance gates to the existing Cemetery and Crematorium (or control movements). 	Ladysmith Road has until now only been considered for construction traffic, if considered as a future permanent egress route
	 In both Options – it is noted that there are currently areas of parking located along the existing access which could restrict movements / result in congestion. 	for Crematorium traffic further studies and traffic modelling of the existing Lane,
	 In both options – there would be an intensification of traffic movements, in particular construction vehicles, on the local highway network in the vicinity of the existing access which could result in increased congestion and delays (particularly during peak hours). 	Ladysmith Road, Bouncers Lane junction would be required and likely queueing times considered.
		4. It is understood that the heritage officer is unlikely to support widening of the gates and therefore it would be prudent to assume that control of traffic movements and queuing at the entrance gates will be necessary.
5.	Potential highway safety implications associated with bringing construction traffic through the existing Cemetery and Crematorium access.	
6.	This Option involves crossing a Main River (Wyman's Brook Tributary) which will likely need a simple assessment of flood risk and water quality impacts in consultation with the Environment	It is understood from discussions to date that the watercourse only becomes an Environment Agency



Ref	Opportunities/ Contraints October 2016	January 2017
7.	Agency.	Main River at the corner of the existing cemetery and so dependent on the exact final proposed point of crossing of the watercourse, culvert approvals could be made by CBC as opposed to the Environment Agency. It is understood from the designers of the FSA
	This Option crosses the proposed ditch / culvert offtake from Wyman's Brook Tributary for the Priors Farm Flood Storage Area. The timing of construction and future proofing of the FSA Scheme should be considered in conjunction with its designers.	Scheme, CH2M, that construction is due to begin in March 2017 and would therefore be expected to be complete or substantially complete before construction of the new Crematorium egress road. It is also understood that a revised FSA Scheme has been submitted for planning permission which relocates the intake ditch to the East which may avoid the need to cross it with the proposed route B road. This scheme was tabled at a meeting 20.01.17 but has not currently been made available to WSP PB in a format that can be overlaid with the current project proposals. We are further aware however following the meeting 20.01.17 that further adjustments to the FSA Scheme are currently being investigated which would potentially return the design closer to that currently indicated on Constraint Drawing 70000522-GA-02.
8.	This Option appears to run within 8m of the Environment Agency's Main River (Wyman's Brook Tributary), alongside the football pitches. An Environmental Permit is required from the Environment Agency for any works within this distance from top of bank	
9.	The proposed route alignment is in close proximity to an active badger sett. Any works within 30 m of the sett will require further consideration. Should the badger sett be directly affected a licence would be required to close the sett. Should works be required within 30 m of the sett, a pre-works check and subsequent ecological method statement would be required. The pre-works check	Updated and further information provided in WSP PB Updated Preliminary Ecological Appraisal Report dated January 2017.



Ref	Opportunities/ Contraints October 2016	January 2017
	should be carried out within eight weeks of the construction start date in case a licence is required.	
10.	The proposed route alignment falls within 250 m of ponds suitable for Great crested newts. A record of Great crested newt was returned by the desk study, located 180 m from the survey area. Previous Great crested newt surveys did not identify any Great crested newt within the pond surveyed. However, only one of the three suitable ponds was surveyed. The Natural England Great crested newt Risk Grading Tool was applied to ascertain the risk of causing an offence under Great crested newt legislation. The results of this were 'Amber: Offence Likely'. It is therefore recommended that presence/likely absence surveys for Great crested newts be undertaken, which would then inform further recommendations.	eDNA testing of the two ponds within the existing Cemetery carried out by CH2M in connection with the FSA Scheme, in combination with the traditional survey by Lepus of the 3 rd suitable pond indicates likely absence of GCN across the site and therefore this risk/constraint is now removed.
11.	The proposed route alignment skirts near existing trees that are suitable for roosting bats. Micrositing of the road alignment is advised to ensure mature trees are not affected. Should tree works felling be required further survey for bats may be necessary required. This could include aerial assessments and/or dusk/dawn emergence surveys for bats within the bat activity season	In addition, consideration should be given to protecting the trees during construction work.
12.	The area in which the route is proposed contains suitable breeding bird habitat. Clearance works should be carried out outside of the breeding bird season (considered to be March - September). If this were not possible, additional ecological input would be required. This could include pre-works breeding bird checks and ecological supervision of clearance works.	One mature tree has been identified as having potential to support barn owl. Should Option B be taken forward an inspection from height should be made to further assess the potential of the tree to support breeding barn owl.
13.	The area in which the route is proposed contains suitable habitat for reptiles. It is recommended that a detailed Method Statement be written to control vegetation clearance methods and ensure legal compliance.	
14.	Habitats of Principal Importance, specifically existing hedgerows, running water and lowland woodland, have potential to be impacted by the proposed route alignment. This would likely be taken into consideration at the planning stage to comply with relevant legislation. These habitats should ideally be avoided by the proposed route and where this is not possible mitigation measures may be required.	
15.	The proposed alignment would likely impact directly on Bouncers Lane Cemetery, which is a Grade II listed Park and Gardens, and includes the following Grade II Listed buildings / structures:	
	15.1 Main entrance and inner gates to the existing Cemetery and Crematorium;	
	15.2 Cemetery Lodge;	
	15.3 North and South Chapel; and	



age 260

Route Option B

Ref	Opportunities/ Contraints October 2016	January 2017
	15.4 Octagonal Lodge (located approximately 15m northwest of the North and South Chapel).	
16.	The proposed alignment would directly impact on existing deciduous woodland which is identified within the Priority Habitat Inventory.	
17.	The proposed alignment would directly impact on the following tree types:	
	→ Cedar (Category B1/C1 tree).	
18.	The proposed route would impact on areas of mixed vegetation (trees, hedgerows), which have not been included as part of the arboriculture survey, and may be of potential local conservation importance.	
19.	The route would skirt the northern boundary of Oakley Playing Fields, which is an historic landfill site. The stability of the landfill site is unknown, and would likely require a separate Ground Investigation Study.	A ground investigation study has been scoped and specified and is currently out to tender.
20.	The proposed route would directly impact on the existing residential properties (approximately 16 in total) (in terms of noise and pollution) which skirt the southern boundary of the Farm Track. There is also potential that the existing playing fields could be contaminated.	A habitat suitability assessment for those species
21.	The option crosses a water body. This means riparian species have potential to be impacted. Depending on the final route alignment, further surveys for otters, water vole and white clawed crayfish may be required.	A habitat suitability assessment for these species has concluded no potential likelihood and this constraint/risk can now be removed.
22.	The route alignment would impact on the existing basketball court and northernmost football pitch.	The constraints drawing 70000522-GA-02 demonstrates a potential relocation of the affected football pitch. It is understood that some form of pitch drainage may exist and therefore potentially need relaying.

Ref	Opportunities/ Contraints October 2016	January 2017	
Орро	Opportunities		
1.	Route Option C would not impact on the existing Cemetery and Crematorium.		



Ref	Opportunities/ Contraints October 2016	January 2017
2.	The provision of a new separate road to the existing Cemetery and Crematorium would reduce traffic movements at the existing Cemetery and Crematorium access (from Bouncers Lane).	
3.	The proposed route alignment would not directly impact on the existing car park which serves Oakley Playing Fields.	
4.	Route Option C could be used to access potential future development land / proposed flood alleviation scheme located to the south of the proposed new Crematorium.	The current proposals for the Crematorium egress road are for a 3m wide unadoptable construction. Whilst this could potentially be increased in width and specification to allow widening and conversion to an full two-way adoptable road appropriate to a housing scheme in the future this would involve additional initial construction works and considerable disruption and construction activities in relation to road works and service upgrading/relaying whilst the road was maintained as a live Crematorium egress route. Given the early nature of the potential housing scheme proposals it is also likely that any final option C route would act as a constraint to the housing proposals.
Cons	straints	
5.	This Option would require traffic (construction and operational) to use Imjin Road. The potential implications associated with this are as follows: 1. Potential for access to be obstructed by motorists parking along both sides of Imjin Road; and 2. Potential congestion / delays resulting from increased traffic using Imjin Road;	Further traffic and parking data collection and analysis has concluded that existing capacity of Imjin road and the Imjin Road/Priors Road junction is acceptable for the anticipated Crematorium operational traffic volumes.
		Barried of the control of the contro
	Increased safety concerns resulting from increased traffic using Imjin Road; and	Perceived safety concerns and possible resident objections are highlighted as possible.
	4. Potential impacts on wider network, including along B4075 Priors Road.	objections are nightighted as possible.
		Full details are provided in technical note TN-01 dated 20 th January 2017.



Ref	Opportunities/ Contraints October 2016	January 2017
6.	This Option involves crossing a Main River (Wyman's Brook Tributary) which will likely need a simple assessment of flood risk and water quality impacts in consultation with the Environment Agency.	It is understood from discussions to date that at the proposed point of crossing of the watercourse, culvert approvals could be made by CBC as opposed to the Environment Agency.
7.	This Option crosses two proposed culverts associated with the Priors Farm Flood Storage Area. The timing of construction and future proofing of the FSA Scheme should be considered in conjunction with its designers. Suitable cover should be sought over the culvert.	We understand that construction of the FSA Scheme is currently due to commence in March and would therefore be expected to be complete or substantially complete prior to construction of the egress road. The team were advised by FSA designers CH2M during a meeting at CBC's offices on 20.01.17 that the scheme design had been revised and submitted to planning indicating the spillway relocated to the south of the FSA and connecting with Wymans Brook. This would mean route C would have to cross the spillway, either utilising the spillway as road surface or by means of raised culvert or bridging structures. The scheme understood to have been submitted for panning approval has not currently been made available to WSP PB to overlay on the Crematorium project proposals. Further to the meeting 20.01.17 and requests by the housing scheme team, we understand further amendments to the FSA Scheme are currently being considered.
8.	This Option appears to run within 8m of the Environment Agency's Main River (Wyman's Brook Tributary), alongside the football pitches. An Environmental Permit is required from the Environment Agency for any works within this distance from top of bank.	It is understood from discussions to date that the watercourse only becomes an Environment Agency Main River at the corner of the existing cemetery and so dependent on the exact final proposed point of crossing of the watercourse, culvert approvals could be made by CBC as opposed to the Environment Agency.



Ref	Opportunities/ Contraints October 2016	January 2017
9.	The proposed route alignment falls within 250 m of ponds suitable for Great Crested Newts. A record of Great Crested Newt was returned by the desk study, located 180 m from the survey area. Previous Great Crested Newt surveys did not identify any Great Crested Newt within the pond surveyed. However, only one of the three suitable ponds was surveyed. The Natural England Great Crested Newt Risk Grading Tool was applied to ascertain the risk of causing an offence under Great Crested Newt legislation. The results of this were 'Green: Offence Highly Unlikely' due to the location of the ponds and the extent of habitat to be affected. Therefore no surveys are required in this instance. It is recommended that once the exact scope of works has been agreed this assessment is confirmed. It is recommended that should Option C be taken forward, all works are carried out under a precautionary method of working for great crested newts.	As noted for route B above, Great Crested Newt eDNA testing in the two ponds within the existing site has returned negative results. In combination with the likely absent conclusion of the previous Lepus survey to the 3 rd pond assessed as having GCN potential, Great Crested Newt risk can now be discounted as a constraint.
10.	The proposed route alignment skirts near existing trees that are suitable for roosting bats. Micrositing of the road alignment is advised to ensure mature trees are not affected. Should tree works be required further survey for bats may be necessary. This could include aerial assessments and/or dusk/dawn emergence surveys for bats within the bat activity season.	It is believed disturbance to the relevant trees can be avoided, consideration would also be required to protection during construction activities.
11.	The area in which the route is proposed contains suitable breeding bird habitat. Clearance works should be carried out outside of the breeding bird season (considered to be March – September inclusive). If this were not possible, additional ecological input would be required. This could include pre-works breeding bird checks and ecological supervision of clearance works.	\frac{1}{2}
12.	The area in which the route is proposed contains suitable habitat for reptiles. It is recommended that a detailed Method Statement be written to control vegetation clearance methods and ensure legal compliance.	
13.	The option crosses one water body and comes in close proximity to another. This means riparian species have potential to be impacted. Depending on the final route alignment, further surveys for otters, water vole and white clawed crayfish may be required.	Further survey work has concluded habitat is unsuitable, risk of Otter, Water Vole and Crayfish can now be discounted.
14.	Habitats of Principal Importance, specifically existing hedgerows, have potential to be impacted by the proposed route alignment. This would likely be taken into consideration at the planning stage to comply with relevant legislation. These habitats should ideally be avoided by the proposed route and where this is not possible impacts should be minimised.	
15.	The proposed route would impact on areas of mixed vegetation (trees, hedgerows), which have not been included as part of the arboriculture survey, and may be of potential local conservation importance.	
16.	The route would skirt the southern boundary of Oakley Playing Fields, which is an historic landfill	A ground investigation study has been scoped and



Ref	ortunities/ Contraints October 2016 January 2017	
	site. The stability of the landfill site is unknown, and would likely require a separate Ground Investigation Study. There is also potential that the existing playing fields could be contaminated.	specified and is currently out to tender.
17.	The proposed route alignment would impact on the existing football fields and associated changing facilities (effectively bisecting the two).	
18.	The proposed route alignment would impact on the existing children's playground.	
19.	The proposed route alignment would require re-profiling of land / potential introduction of retaining wall along the southern boundary of the Oakley Football Fields.	

New constraints and possible impacts on routes B & C

Archaeology

Desk top study and site investigation in connection with the Flood Alleviation Scheme has revealed archaeological features. We understand a full report of the site work has now been completed and will be circulated shortly. The information provided to date has been mapped onto the constraints plan and can be seen to coincide with a significant section of route C. County Archaeologist Charles Parry advised at a meeting at CBC's offices 20.01.17 that a recommendation had been made for an archaeological impact assessment to be carried out for both route B & C options but that given knowledge gathered from the site work, it would be likely that a desk based assessment and mitigation measures would be required for route C and a watching brief only for route B. Mitigation measures to route C could possibly include raising levels of the road to avoid excavating through features, limiting the width of any services trenches or archaeological investigation to expose and record features prior to construction.

Housing Scheme

We have been made aware of proposals for future housing in the fields to the south of the existing cemetery. Proposals are likely to either constrain or be constrained by any route C alignment.



> Flood Alleviation Scheme Design

Revisions to the proposed Priors Farm Flood Storage Area may impact on feasible alignment, levels and number and complexity of culvert structures required for route C. It is expected based on sight of re-design options to date that route B will remain as a single culvert across the FSA incoming ditch although the location may be subject to change.





70020522: Cheltenham Borough Council, Proposed Crematorium

Technical Note 02: Egress Route Option Appraisal – Existing Gardens of Remembrance

06th February, 2017

Introduction

WSP | Parsons Brinckerhoff has been commissioned by Cheltenham Borough Council (CBC) to provide transport and highways advice in support of proposals to provide a new Crematorium on land located to the east of the existing Cemetery and Crematorium, in Cheltenham.

WSP | Parsons Brinckerhoff previously undertook an independent Options Appraisal and Impact Assessment Study (dated October, 2016) to identify potential vehicular access and egress routes to and from the proposed Crematorium and their associated opportunities and constraints.

This Technical Note (02) has been prepared at the request of CBC, to consider the feasibility of using the existing Gardens of Remembrance and Cemetery and Crematorium access roads (from Bouncers Lane) as an egress route (only) to serve the proposed Crematorium as a temporary route for operational traffic (and not construction traffic). To achieve this, it is recognised by CBC that a new road link would need to be provided between the existing internal access roads that currently serve the newer, eastern section of the Cemetery and Crematorium, and the internal access roads that currently serve the Gardens of Remembrance. For reference, the proposed egress route is shown on WSP | Parsons Brinckerhoff's drawing number **SK-05**. It should be noted that this route was not considered as part of the initial Options Appraisal and Impact Assessment Study (on the grounds that the use of the Gardens of Remembrance was politically sensitive and potentially fraught with safety related issues, namely to pedestrians).

Following this introduction, this TN provides:

- A description of the proposed egress route;
- An overview of the potential opportunities and constraints presented by the proposed egress route; and
- A summary of the suitability of the proposed egress route to accommodate traffic associated with the proposed Crematorium.

For clarity, this TN does not provide details of potential geometries, or preliminary drawings of the proposed new road link, as detailed above.

Overview of Proposed Egress Route

The proposed egress route comprises, in part:

- The existing internal access roads that currently serve the newer, eastern section of the Cemetery and Crematorium;
- The internal access roads that currently serve the Gardens of Remembrance (namely the southern section of the road that loops around the Gardens of Remembrance);
- The existing internal access roads that currently serve the older, eastern section of the Cemetery and Crematorium (namely the southern section of the road which loops around the existing North and South Chapels); and
- The existing section of road between the main and inner gates to the existing Cemetery and Crematorium, from Bouncers Lane.

In addition to the above, it should also be noted that the proposed route also incorporates the existing Cemetery and Crematorium car park.

The existing internal access roads that serve the eastern section of the Cemetery and Crematorium are newer in nature than those in the western section of the Cemetery and Crematorium, and as such have been built to accommodate two-way vehicle movements.

The existing internal road that currently serves the Gardens of Remembrance operates as a one-way clockwise loop road, and is accessed through the existing Cemetery and Crematorium car park. The Gardens of Remembrance internal access road is wide enough to accommodate one-way traffic movements only. It should be noted that the carriageway is kerbed, and lined with remembrance plaques (mounted along the kerbs

along both sides of the carriageway). The nature of the road, in that it used by visitors to view the remembrance plaques, lends itself to low vehicular speeds.

The existing internal access roads that currently serve the older, eastern section of the Cemetery and Crematorium (in particular the section which forms part of the route being considered) is wide enough to accommodate one-way traffic movements only, and as such operates as a one-way route (westbound from the car park). At its western extent it links to the existing section of road between the main and inner gates to the existing Cemetery and Crematorium, from Bouncers Lane.

For reference, the existing roads widths along the route are also shown on WSP | Parsons Brinckerhoff's drawing number **SK-05**.

Opportunities and Constraints

The following section considers the opportunities and constraints presented by using the route to egress the proposed Crematorium.

For ease of reference, the opportunities and constraints noted along the route have been numbered, and have been marked on WSP | Parsons Brinckerhoff's drawing number **SK-06**. Where the points identified are generic to the route, these are highlighted in the key.

Where applicable, the safety implications associated with each of the identified constraints are also detailed in the following section.

Swept Path Analysis

The following swept path assessments have been undertaken to determine the suitability of the proposed egress route to accommodate vehicular movements associated with the proposed Crematorium.

- Limousine (see WSP | Parsons Brinckerhoff drawing number ATR-01, attached to this report);
- Hearse (see WSP | Parsons Brinckerhoff drawing number ATR-02, attached to this report);
- Small Skip Lorry (see WSP | Parsons Brinckerhoff drawing number ATR-03, attached to this report);
- Rigid Vehicle (7m in length) (see WSP | Parsons Brinckerhoff drawing number ATR-04, attached to this report);
- Fire Tender (see WSP | Parsons Brinckerhoff drawing number ATR-05, attached to this report);

The results of the assessment demonstrate that all of the above vehicles could be accommodated along the proposed route. However, it should be noted that the route is extremely tight in places (particularly within the Gardens of Remembrance) for the larger vehicles detailed above (including a small skip lorry, rigid vehicle, and fire tender).

Opportunities

- 1) This proposed egress route would not result in any displacement of traffic onto any other roads on the local highway network, above that currently used (i.e. Bouncers Lane);
- 2) Albeit the need to provide a new road link (between the existing internal access roads that currently serve the newer, eastern section of the Cemetery and Crematorium, and the internal access roads that currently serve the Gardens of Remembrance), the majority of the proposed egress route relies on the use of existing roads which currently serve the existing Cemetery and Crematorium;
- 3) It is not considered that there are any significant barriers (albeit an existing hedgerow and potential tree routes see Point 22) to providing a new road link between the existing internal access roads that currently serve the newer, eastern section of the Cemetery and Crematorium, and the internal access roads that currently serve the Gardens of Remembrance;
- 4) The existing internal access road that currently serves the older, eastern section of the Cemetery and Crematorium (namely the southern section of the road which loops around the existing North and South Chapels) has recently been resurfaced. As such the carriageway in this location is in good condition:
- 5) It is assumed that, given the relocation of the existing Crematorium (North and South Chapels) and associated services, the level of use of the existing car park would drop significantly. As such, any issues that are currently experienced relating to the over-use of parking (which could otherwise impede egress), would potentially subside; and

6) Further to point 5, it is assumed that fewer vehicles (associated with services) would park along the older, eastern section of the Cemetery and Crematorium access road (namely the southern section of the road which loops around the existing North and South Chapels) in the future. As such, the potential for obstruction would be reduced.

Constraints

- 7) As detailed by the Options Appraisal and Impact Assessment Study, the proposed egress route would still rely on the use of the existing section of road between the main and inner gates to the Cemetery and Crematorium, from Bouncers Lane. Although there is not anticipated to be any uplift in traffic, it is worth noting that this section of road is understood to already experience congestion, owing to parked cars (particularly during services) and also the restrictive nature of the gates (which currently restrict traffic movements to one-way);
- 8) Owing to the fact that the egress route proposes use of the existing car park, there is potential for increased conflict and blocking (leading to delays) to occur, particularly during busy periods of the day / larger services. This is exacerbated by the narrow nature of the aisles in the car park, and the angle in which traffic enters the car park from the Gardens of Remembrance internal access road. This could also be exacerbated by the larger nature of the vehicles (limousine and hearse) which are proposed to use the route on a frequent basis in the future;
- 9) Further to point 8, it is not clear how well utilised the car park would be once the Crematorium is relocated (i.e. would it continue to be well used for burials?). On-site observations reveal that the car park is over-used during services, leading to vehicles parking haphazardly around the entrance / exit to the car park and along the existing internal access roads that currently serve the older, eastern section of the Cemetery and Crematorium. Again this could lead to potential issues with conflict / and blocking (leading to delays);
- 10) It is considered that there is potential that vehicles could stop, to visit memorial plaques (or even break down), along the Gardens of Remembrance internal access road, which could lead to potential blocking (given the route is one-way with limited passing points), and subsequent delays. Also, although it is not clear how well utilised the existing layby is located along the southern section of the Gardens of Remembrance internal access road, should this be over-used, or should a vehicle be awkwardly parked, this again could lead to potential blocking and delays:
- 11) Vehicles were observed to park along the verges of the internal access road that currently serves the older, eastern section of the Cemetery and Crematorium (namely the southern section of the road which loops around the existing North and South Chapels). There is potential for blocking / delays to occur as a result of this;
- 12) There are currently no road markings / physical barriers (such as kerbs) to denote the point where the Gardens of Remembrance internal access road (when entering from the car park) splits to travel north (to the immediate east of the kerbed island). There is potential for motorists to get confused here, resulting in increased potential for conflict (especially given the uplift in traffic movements associated with the proposed Crematorium);
- 13) Further to point 12, it is considered that the current road width (5.75m) and curvature of the road at the point where the Gardens of Remembrance internal access road splits (to the immediate east of the kerbed island) lends itself to a natural pinch point. As a result, there is potential for increased conflict at this point (especially when used by larger vehicles);
- 14) Sections of the carriageway along the Gardens of Remembrance internal access road were observed to be in poor condition (i.e. broken up, pot holed, ponding). The carriageway condition could be worsened by the potential increase in traffic movements along the route;
- 15) Owing to the projected increase in traffic movements through the Gardens of Remembrance, there is increased potential of damage occurring to the memorial plaques that currently line the kerbs.
- 16) Although the swept path analysis demonstrates that the existing route could accommodate all vehicles assessed, it should be noted that the route is extremely tight in places (in particularly for larger service vehicles within the Gardens of Remembrance). As such, there is increased risk of larger vehicles colliding with and damaging the kerbs;
- 17) The carriageway is currently narrow (approximately 2.75m wide) at the point where it is proposed to link into the Gardens of Remembrance internal access road (at the northern extent). There is potential for vehicles to clip the kerb in this location;

- 18) Visibility is somewhat restricted when looking right (by existing foliage) at the point where it is proposed to link into the Gardens of Remembrance internal access road (at the northern extent). Furthermore (given the current layout) there are no priority workings in this location. Combined, these points could lead to motorists failing to give-way in this location, leading to potential conflict;
- 19) Forward visibility for vehicles at the southwest extent of the Gardens of Remembrance internal access road (when travelling westbound toward the car park) is somewhat limited by the curvature of the road and existing furniture / foliage lining the route. On exiting the proposed Crematorium, there is potential for motorists not to see a pedestrian in the road at this point, leading to increased potential for vehicle to pedestrian conflict:
- 20) Further to point 19, it should also be noted that pedestrian to vehicle visibility is also poor when looking left towards oncoming westbound traffic at the point where the existing footways intersect the road (at the southwest extent of the Gardens of Remembrance). Again, owing to the projected increased vehicle movements associated with the proposed Crematorium, there is increased potential for vehicle to pedestrian conflict in this location; and
- 21) Owing to the nature of the route, in particular through the Gardens of Remembrance, and the intensification of traffic movements, there is potential for increased safety risk to pedestrians. This is exacerbated by:
 - 1. The position of the memorial plaques (which currently line the kerbs along the Gardens of Remembrance internal roads), which encourage residents to stand in the road for viewing;
 - 2. The narrow road widths along the Gardens of Remembrance internal roads (which varies between 3.0m and 3.5m), in which there is insufficient space for a pedestrian to stand in the road whilst a vehicle passes;
 - 3. The network of footways within the Gardens of Remembrance, in which there are numerous points where pedestrians can cross the internal access road; and
 - 4. Where the route travels through the car park, there is potential for increased conflict with pedestrians entering / exiting vehicles.
- 22) There is currently an existing hedgerow and tree-routes which would likely be impacted where it is proposed to provide road link between the existing internal access roads that currently serve the newer, eastern section of the Cemetery and Crematorium, and the internal access roads that currently serve the Gardens of Remembrance.

Potential Mitigation Measures

Consideration has been given to possible measures to mitigate against the constraints identified above. For ease of reference, where applicable, reference is made to the specific constraints.

Points 8 and 9

Consideration could be given to removing the car parking within the central aisle of the car park. This would ease egress for vehicles exiting the proposed Crematorium.

Furthermore, consideration could be given to managing the use of the car park, particularly during peak times of operation of the proposed Crematorium (subject to its projected level of use in the future).

Point 10

Consideration could be given to formalising the existing layby (by introducing white lining), to discourage vehicles from parking within the extents of the running carriageway.

Point 11

This is considered to be an internal management issue.

Points 12 and 13

Consideration could be given to:

- Introducing formal road markings in this location to denote entry / exit lanes;
- Introducing improved signage to make motorists aware of the current arrangement; and
- Widening this section of road / or, if not possible, introducing give-way road markings on entry / exit, which would discourage two-way traffic from using the pinch point.

Point 14

Consider repairing / resurfacing the areas of poor / damaged road surface.

Point 15

Consider relocating the memorial plaques.

Point 16

Consideration could be given to using an alternative route to egress the proposed Crematorium for larger vehicles (namely service vehicles).

Point 17

Consideration could be given to widening the existing carriageway in this location. However, it is not known the extent of memorial plaques / ash scatterings in this location, and the issues surrounding any impacts on these.

Point 18

Consideration could be given to:

- Trimming the existing foliage in this location to improve visibility (looking right); and
- Introducing formal give-way road markings.

Points 19 and 20

Consideration could be given to introducing signage and / or physical measures (i.e. speed humps) to further slow speeds in this location (thus reducing the potential for conflict to occur).

Point 21

Consider relocating the memorial plaques. See also potential mitigation measures detailed above for points 8, 9, 19 and 20.

General

In addition to the above, consideration could also be given to deploying a member of staff to manage traffic flows along the route (particularly through the Gardens of Remembrance) during service times.

Suitability of Proposed Egress Route

Further to the above assessment, it is considered that there are no significant physical constraints (in terms of geometry) that would otherwise restrict the use of the route by general vehicles (i.e. large cars, limousines, and hearses) to egress the proposed Crematorium. However, there are potential physical constraints (in terms of existing road widths, particularly within the Gardens of Remembrance) to using the route for larger vehicles (namely service vehicles). As such, an alternative route should be considered for service vehicles.

There are a number of potential safety related reasons in which the route may not be suitable to serve the proposed Crematorium, including the potential for increased risk to pedestrians, and also other motorists using and / or parked along the route.

It is considered that there are no major physical constraints to providing a road link between the existing internal access roads that currently serve the newer, eastern section of the Cemetery and Crematorium, and the internal access roads that currently serve the Gardens of Remembrance. Following the site visit it was observed that part of the fields in the southeast section of the cemetery, where it is proposed to provide the new road link, were occupied by graves. However, it is considered that, at present, there is still sufficient space to the west of this area to accommodate the road link (albeit there may be a requirement to provide a non-straight road link, which would skirt around the existing graves in this location). There was also observed to be a slight difference in levels between the field and Gardens of Remembrance internal road. However, this was not considered significant.

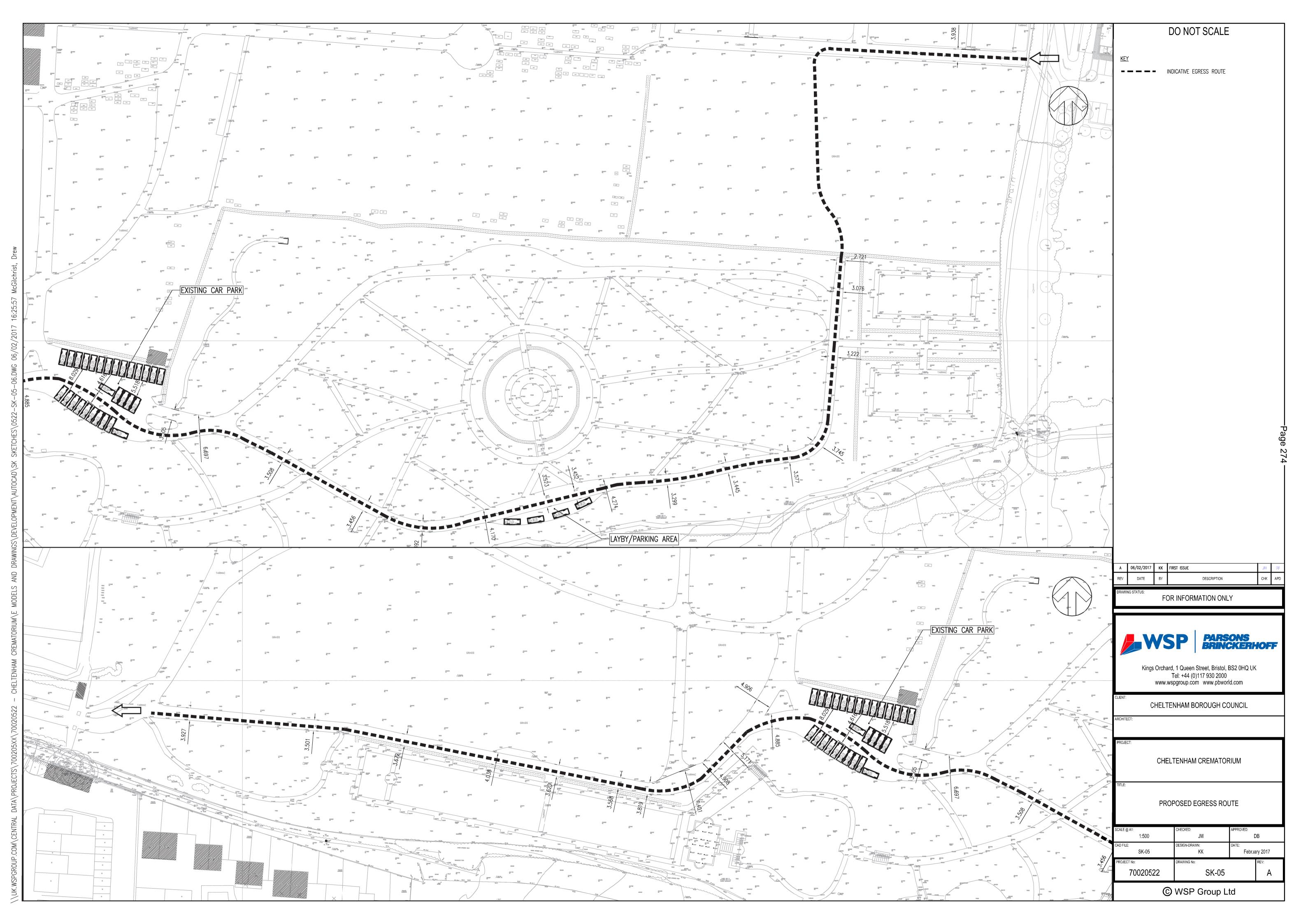
Conclusion

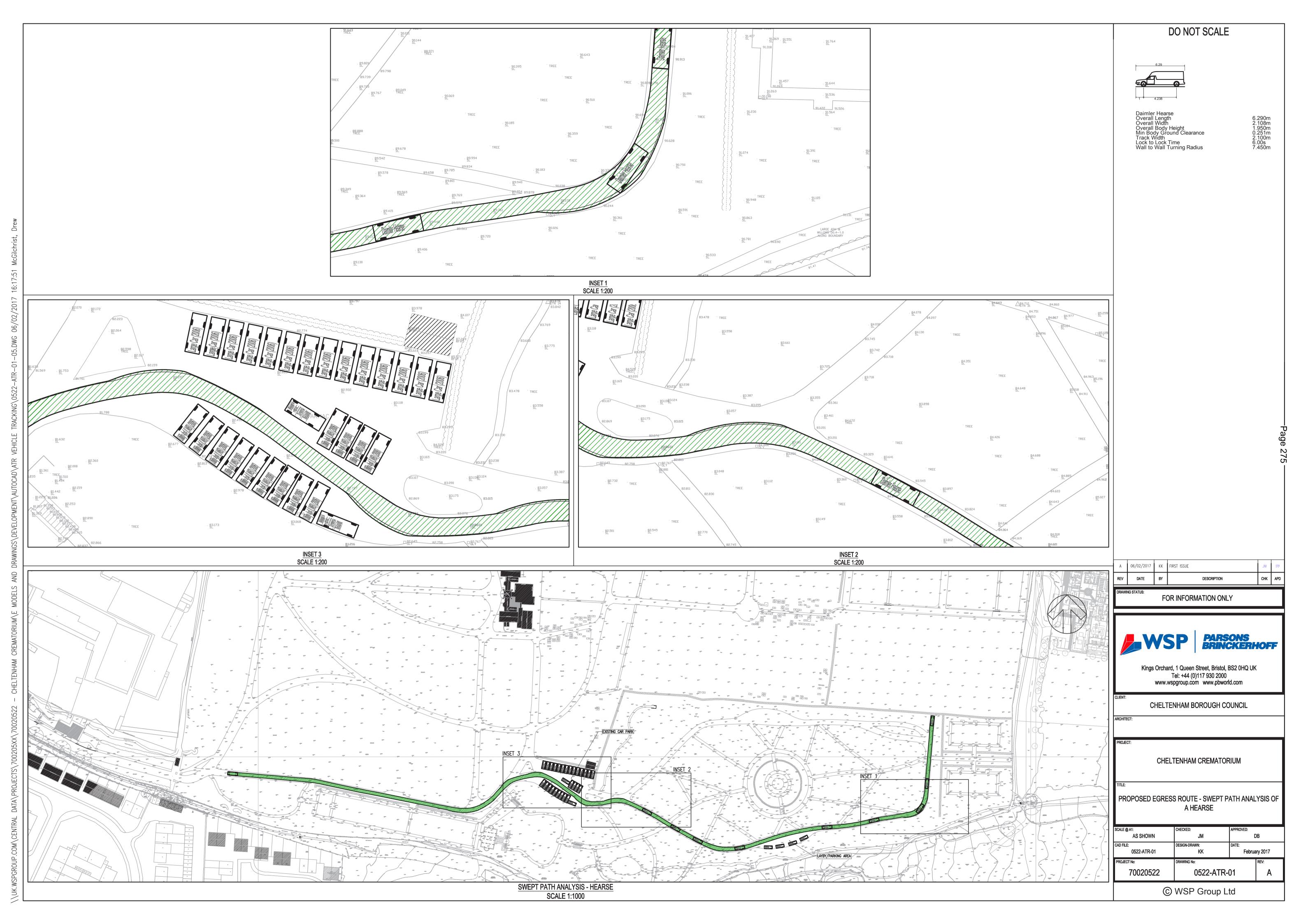
This Technical Note (02) has been prepared at the request of CBC, to consider the feasibility of using the existing Gardens of Remembrance and Cemetery and Crematorium access roads (from Bouncers Lane) as an egress route (only) to serve the proposed Crematorium.

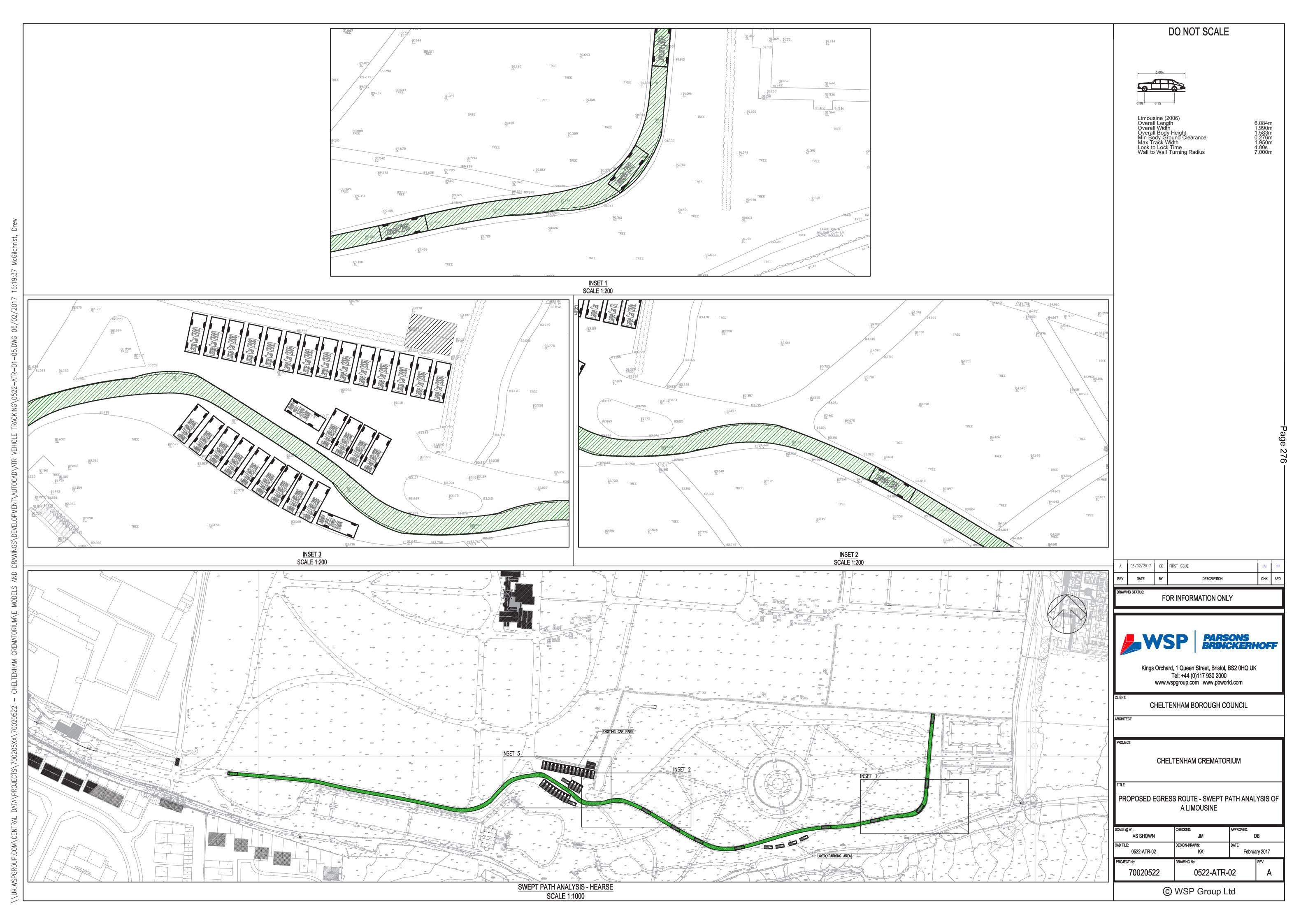
The following key points can be concluded from this TN:

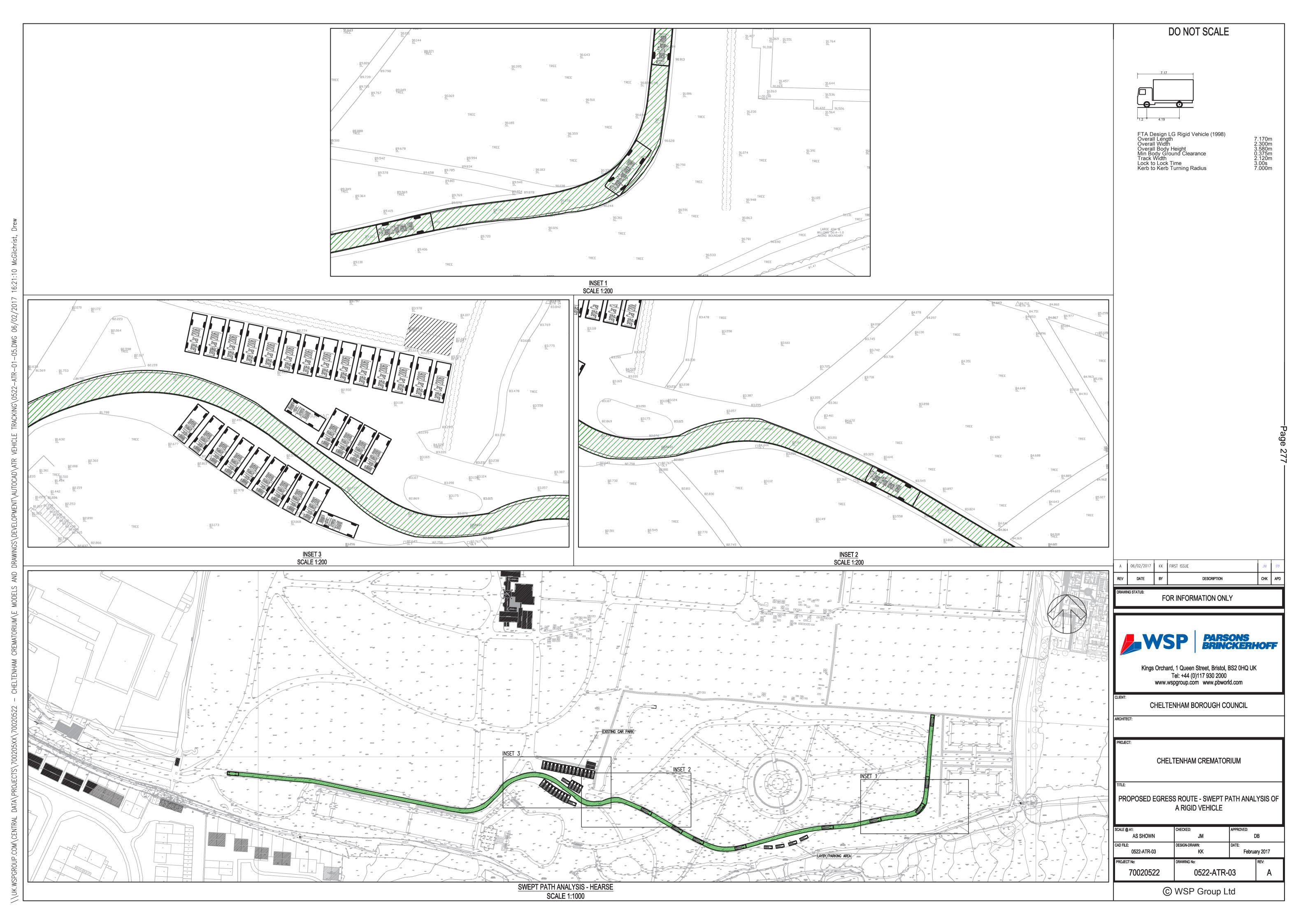
- It is considered that there are no significant physical constraints (in terms of geometry) that would otherwise restrict the use of the route by general vehicles associated with services (i.e. large cars, limousines, and hearses) to egress the proposed Crematorium;
- It is recognised that there are potential physical constraints to using the route for larger vehicles (namely by a service vehicles). As such, an alternative route should be considered for service vehicles; and
- There are a number of potential safety related reasons in which the route may not be deemed suitable to serve the proposed Crematorium, including the potential for increased risk to pedestrians, and also other motorists using and / or parked along the route.

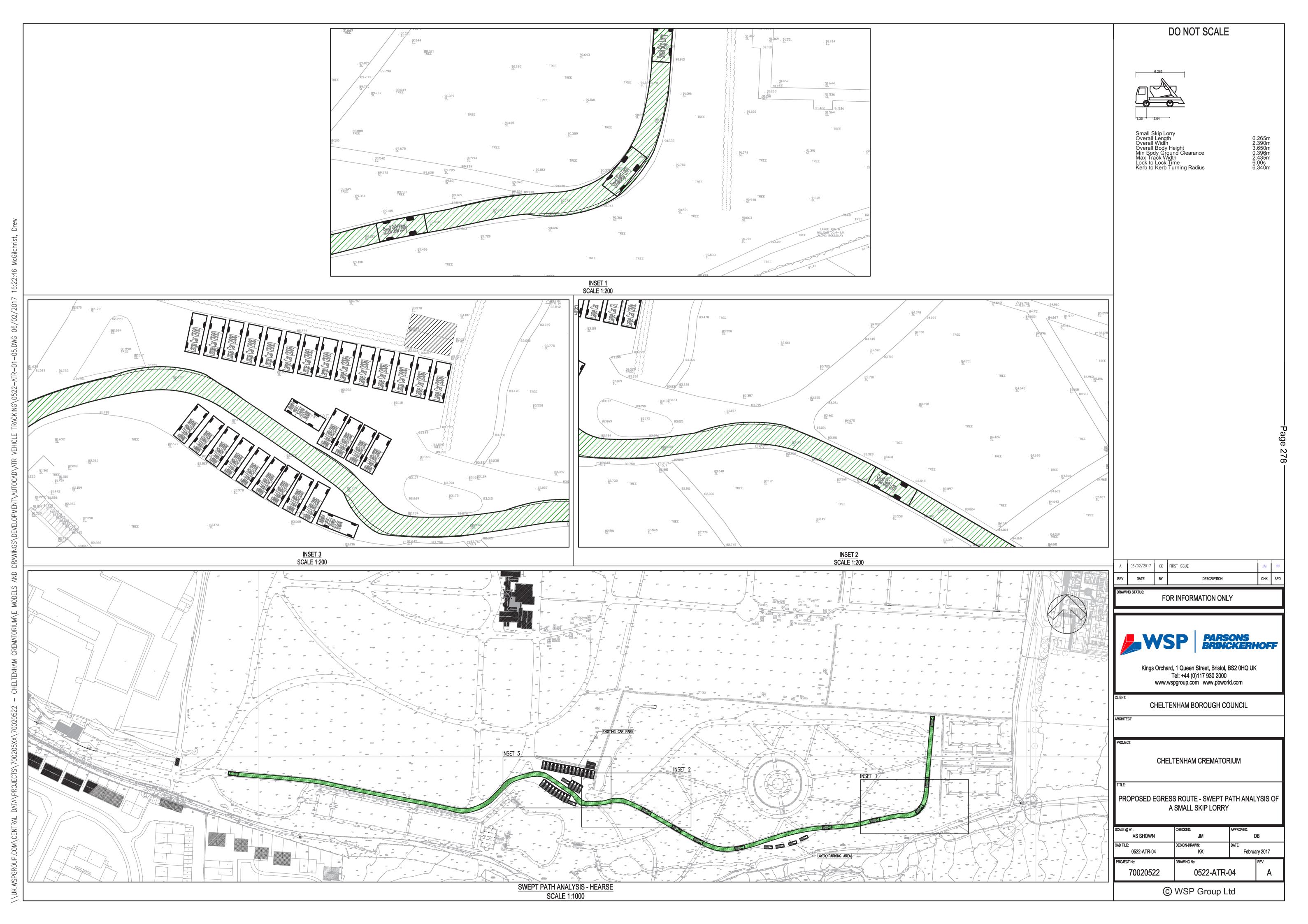
Figures

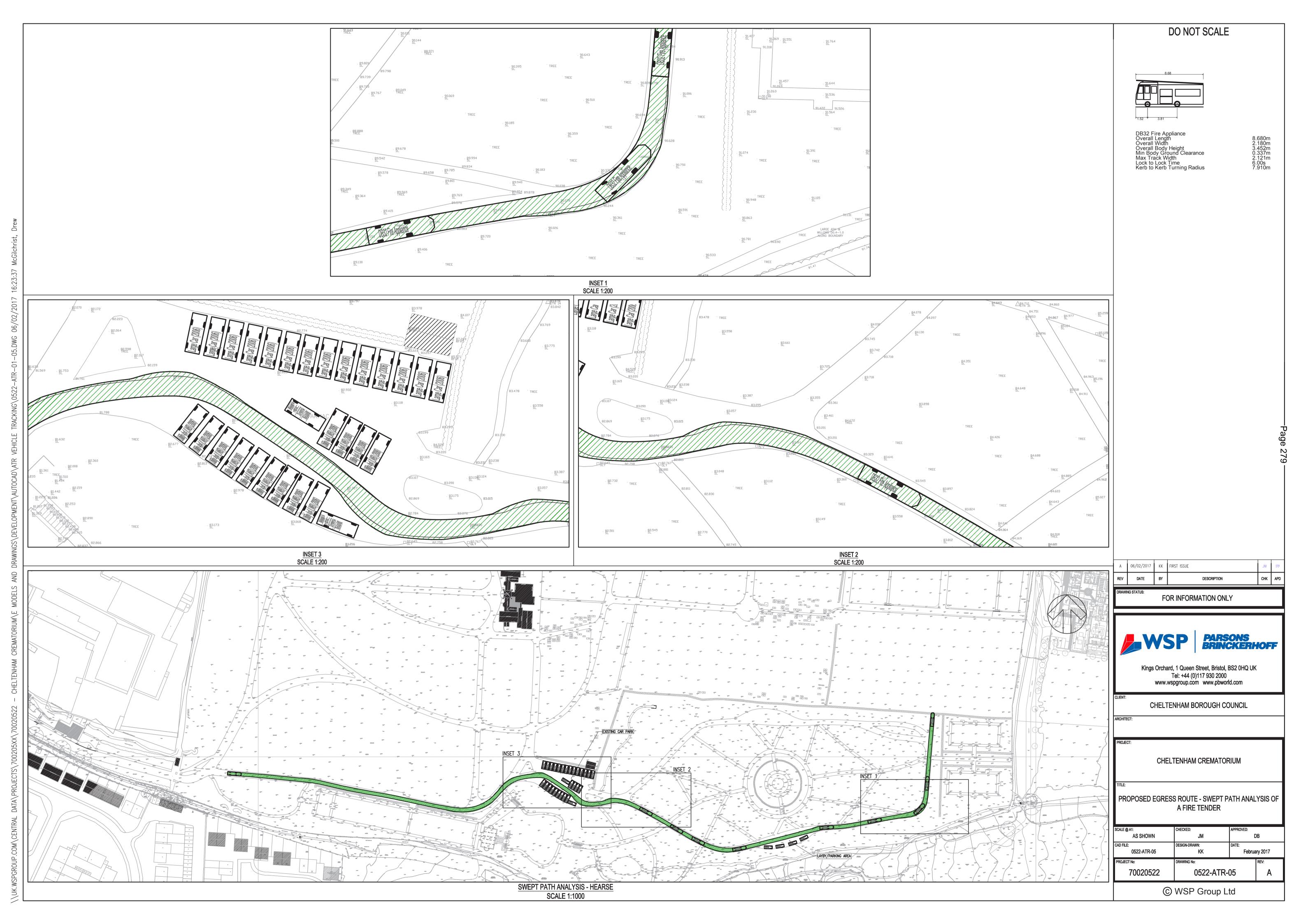


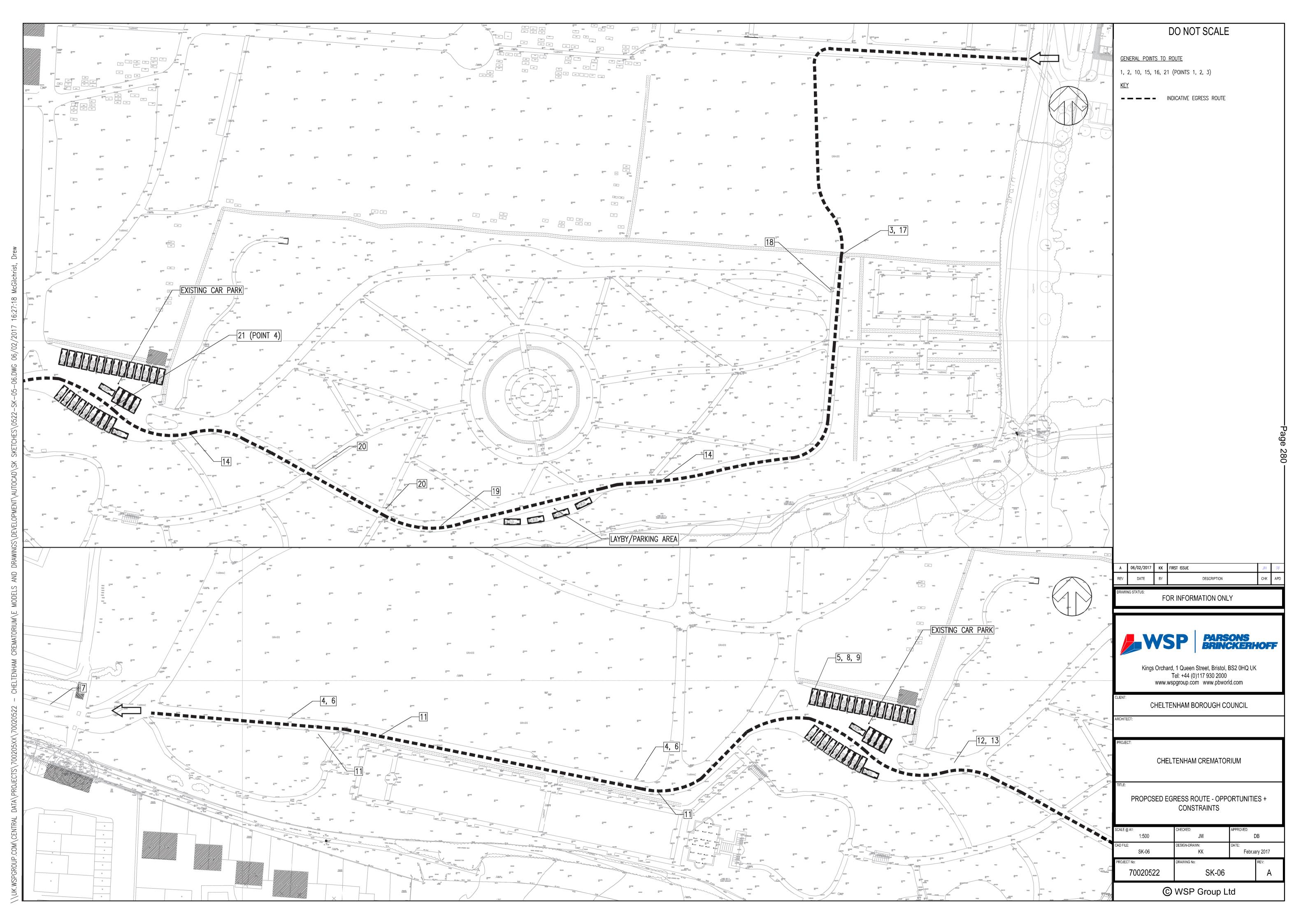


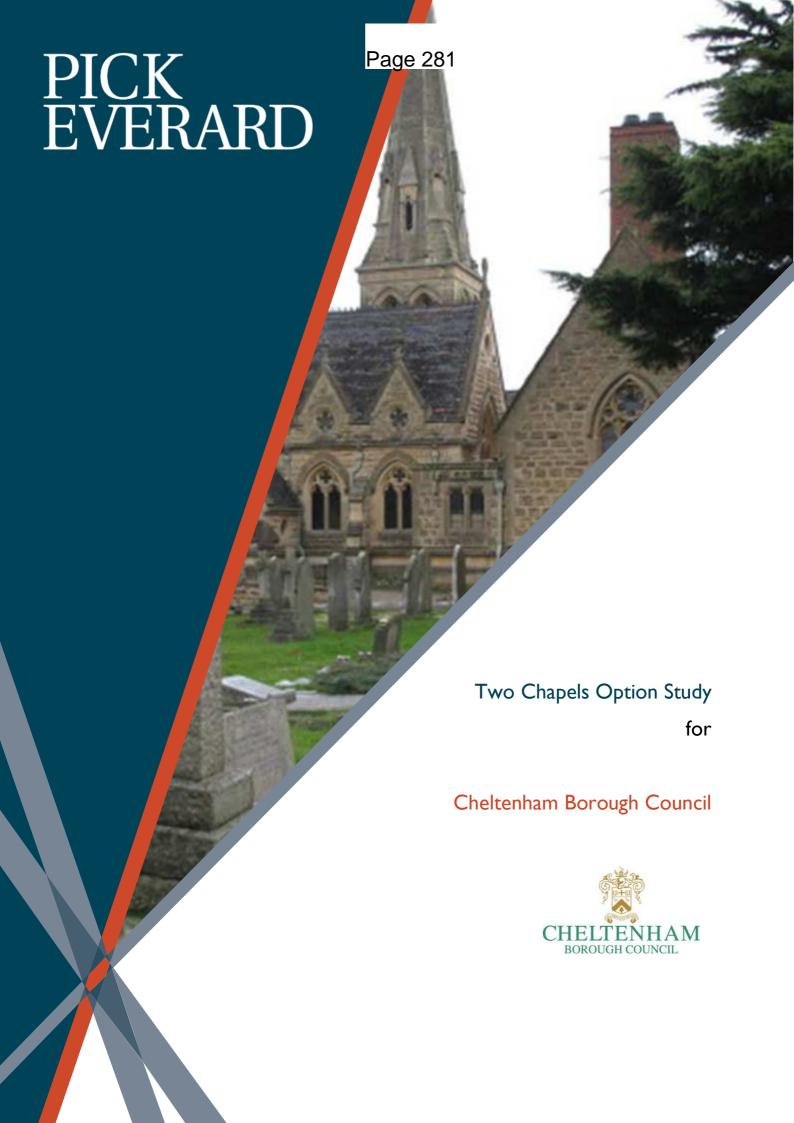












Document History

Issue	Date	Comment	Author	Chk'd
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Appendix

Appendix A

Table of Consultees and Summary Feedback undertaken as part of this Option Study

Appendix B

2016 Financial Data for Bereavement Services





Appendix COrder of Cost Estimate

Appendix DWhole Life Cost Model



1.0 Introduction

Cheltenham Borough Council currently operate a cremation service from two Grade II listed Chapels located in the centre of the Cheltenham Cemetery. The Chapels are restricted in use for a number of reasons:

- The chapels were not designed for cremations, and whilst they have been adapted, this limits sight lines during services.
- Parking and access to the site is very constrained and swap over between ceremonies creates anxiety amongst visitors at a time when they wish to be calm and reflective.
- The existing cremators are not functioning well and need to be replaced.

This report explores the commercial viability of using the existing chapels to generate an income, which would then enable additional funding to realise the aspiration of replacing both chapels at the same time.

The option study considers the merits of retaining one of the existing chapels longer term, compared to replacing both chapels with new facilities and the opportunities for any commercial enterprise to be delivered from any surplus estate.



2.0 Background

In September 2015, Cabinet approved in principle the building of a new crematorium and subsequently in October 2015 approved a total project budget of £7,443,100, with £6,523,000 allocated to the new chapel development. These approvals allowed for the "scope for future expansion in the medium to long term".

With the professional service support of Pick Everard and Willmott Dixon, both appointed under the Scape National Framework for Project Managers and Quantity Surveying and Major Works, respectively, a feasibility study has been completed for the new chapel.

Through adjustment of internal funding sources, Cheltenham Borough Council may wish to consider the reallocation of funding to support the development of two new chapels. The approval in September 2015 mandates one new chapel. Prior to any formal Members approval for a second chapel, the Cabinet proposed and approved in the meeting 8th November 2016, for a Business Case to be undertaken to assess the option of constructing both chapels simultaneously and to consider the commercial opportunity of re-developing the existing chapels for an alternative use.

Access to the construction site and to the new chapel(s) is the subject of a separate study. Existing access is difficult, winding its way through the cemetery. As a minimum, it is considered necessary for a separate haul road for the duration of the construction and for this to be accommodated within the original project budget.

A key risk is identified in relation to the reliability and life expectancy of the existing cremation plant. Cheltenham Borough Council are committed to protecting the environmental quality and heritage within the locality as well as providing local bereavement services for its residents. New cremation plant will be more efficient, consume less fossil fuels and reduce CO2 and mercury emissions. Replacement of the existing plant is deemed as urgent.



3.0 The Option Study

The primary purpose of developing this detailed assessment is to identify a preferred option, which demonstrably optimises value for money. This Option Study will seek to establish:

- o The service requirement and current service offer from the existing chapels
- The options for either part or full chapel relocation
- The potential options for re-use of the two chapels to generate a regular and sustainable income for the client
- The investment that would be required to remodel the chapels to provide suitable locations for such a commercial opportunity
- Local support and partner opportunity for any commercial use.
- o Demonstrate the overarching affordability of the preferred solution
- Identify a projected timeline to deliver the improvements to ensure this aligns with the proposed new chapels' development and ensures a continuum of service operation during transition.
- Identify significant risks to any such commercial venture and consider mitigation strategies

There are number of work-streams involved in collating the information to provide a comprehensive review of any investment options. This study will methodically present the data and then compile comparative options for easy assessment.

3.1 The Current Bereavement Service Capacity

In 2016, Cheltenham crematorium facilitated 2043 cremations, averaging 39.3 per week, 7.86 per day. The current cremators compromise optimum efficiency and if they provided reliable service, it would be possible to increase the number of cremations per day up to 14 between the two chapels.

Ten services per day is the current limited maximum due to the constraints of unreliable cremators, which includes an unpopular 9am slot. There is also an option to provide a Saturday morning service in the future.

Two chapels and two cremators are required to support both current demand and potential future demand as summarised below. It is understood that service capacity should not be impacted by split sites for the chapels, however there could be increased costs of transfer of coffins from the existing site to the new cremation facilities. This would reduce current levels of revenue as well as compromising the potential additional income that might be secured through alternative use of the chapels.

3.2 Demography and Demand

Current statistics indicate that 49% of bereavement services are provided for residents of Cheltenham, with a further 46.5% of services for people living within a 15-mile radius of Cheltenham but not Cheltenham Borough residents.

It is difficult to project future potential requirement for cremation services based upon demographic behaviour. Generally, we are living longer and the impact of future government policies (such as immigration or student funding) and changing economic circumstances may all impact choice of the individual.

From the Sub National Population Projections (SNPP) 2014 data that is available, it may be suggested that for the catchment areas within a 15-mile radius of Cheltenham, there could be an estimated 28% increase in deaths over the next 20 years.



The Joint Core Strategy (JCS) team, who are responsible for strategic housing planning in Cheltenham, Gloucester and Tewksbury and they consider predicted employment growth, indicate a slightly higher increase in population – Ino. additional person for every 4no. persons under the SNPP data. However, with JCS focussing upon growth, it may not necessarily follow that the population increase will result in proportionate increase of mortalities.

For the purposes of this assessment, we have based our calculation upon a 28% increase in demand over 20 years. The data suggests that the increase in deaths will occur in the latter part of the 20 years, although we have assumed a straight-line increase.

Therefore, based upon these assumptions, the capacity of two chapels supported by efficient cremation facilities will be able to support up to 70 services per week, with demand increasing, based upon current demographic data, up to 50 services per week in the next 20 years.

The requirement for two new chapels and the sustainable efficiency that can be achieved from two new cremators will protect the bereavement service offer for the medium term.

3.3 The Service Delivery Options

The original chapels were not designed for cremation services and have subsequently been adapted to cater for this type of bereavement service. However, due to the complexity of the existing structure, the current service offer is compromised with limited vision of the minister during parts of the service. In addition, transfer of coffins from the south chapel to the cremation facilities near the north chapel, have to be carefully managed to ensure the transfer is discreet and respectful.

The cremation plant is nearing the end of its' useful life and needs to be replaced. This provides a unique opportunity for the Cheltenham Borough Council to consider the replacement of the chapels and complete relocation of the cremation facilities to new, purpose built chapels.

The potential options are:

- Option A: Build one chapel, use one of the existing chapels, provide two new cremators at the new site
- **Option B**: Build one chapel, use one of the existing chapels in the short term and build second chapel at a later date
- Option C: Build both chapels now, diverting funding from other sources to support.

In September 2015, Cabinet approved the construction of one new chapel with provision for two new cremators. This Option A is dependent upon the continued use of one of the existing chapels. The clients' budget has allowed for some improvements to the remaining chapel to enable its continued use as a bereavement facility.

The table below compares the advantages and constraints of each of the proposed options:



Comparison of Development Options

This table presents a comparison of the 3 development options and compares the advantages and disadvantages of each Option.

Advantages of the Chapel Use Options

Option A	Option B	Option C
Build one chapel, use one existing, two new cremators at new site	Build one new chapel, use one existing in the short term and build second chapel later, two new cremators at new site	Build both chapels now, divert funds from other sources to support; enable full new commercial venture at existing chapels
	Advantages	
This option is approved and funding in place to deliver. The design development for this project is in progress.	This option is approved and funding in place to deliver. This could proceed without delay	
One new chapel with parking would ease the current parking pressure on the site	One new chapel with parking would ease the current parking pressure on the site	New chapels facility would provide improved parking for visitors in one area
Disruption of one facility would not impact both, ie maintenance, re-decorations or services issues, so reduced service offer could continue as long as cremators were operational	Disruption of one facility would not impact both, ie maintenance, re-decorations or services issues, so reduced service offer could continue as long as cremators were operational	Construction of both chapels simlutaneously would limit disruption to bereavement services as they would continue as is until all facilities are fully operational.
	The partial commercial use of the spare chapel could be an opportunity to test the viability of a commercial solution before full commitment to relocation of the second chapel	Both existing chapels would be available for commercial use, which would not be limited by the requirements of an operational chapel.
		Staffing of the chapels would only be required at the new facility, as any commercial use of the existing would be managed by others as part of the commercial agreement. The commercial income from the existing chapels could be used to off set the additional cost of building the second chapel.
		Having two chapels at separate locations could introduce a potential for public confusion. Having both chapels at same location would avoid this.

Disadvantages of Chapel Use Options

Option A	Option B	Option C	
Build one chapel, use one existing, two new cremators at new site	Build one new chapel, use one existing in the short term and build second chapel later, two new cremators at new site	Build both chapels now, divert funds from other sources to support; enable full new commercial venture at existing chapels	
	Disadvantages		
It would be necessary to transfer coffins from the existing chapel to the new cremators	It would be necessary to transfer coffins from the existing chapel to the new cremators	This option requires full Cabinet approval backed by a robust business case and thus requires additional internal resource before it is approved.	
There would need to be staff presence at both locations - which would increase staff costs	There would need to be staff presence at both locations - which would increase staff costs	Funding the additional chapel may place finance pressures on other projects or delay other projects	
Part use of the existing chapels would limit the commercial options for re-use of theexisting chapels to provide additional income for the Borough	Part use of the existing chapels would limit the commercial options for re-use of theexisting chapels to provide additional income for the Borough	Would lose the "old-style" chapel and the loss of choice may be unpopular with some.	
Ongoing maintenance of two buildings		The management of additional construction work on a second chapel and the re-purposing of existing chapels will place resourcing pressures on the council which may impact other projects.	
Potential for efficiency achieved from one site is lost - ie	Potential for efficiency achieved from one site is lost - ie		
grounds maintenance, well-fare facilities	grounds maintenance, well-fare facilities		
Transfer of coffins will negatively impact public perception	Increased cost commitment to maintain a working chapel and		
and may lead to the public choosing to use other crematoria	also provide for new chapel in the future.		
Transfer of coffins wil give rise to additional vehicle and staff	Potential disruption to the new chapel during construction		
costs	phase of additional chapel - resulting in lost income.		
	The cost of construction could increase in the future - the cost		
	of the second chapel is a known at this stage		
	There is efficiency of building all at one time as the client will		
	only pay once for site set up, hoarding, and large machinery -		
	this would be lost if second chapel delayed		
	Retaining one chapel for bereavement services could limit the		
	commercial opportunity of the whole. Transfer of coffins will negatviely impact public perception		
	and may lead to the public choosing to use other crematoria		
	Transfer of coffins wil give rise to additional vehicle and staff		
	costs		

4.0 The Commercial Opportunity

The existing two chapels offer a unique opportunity for a commercial venture and we will consider a variety of options to explore how such use might support or constrain the provision of local bereavement services.

4.1 Do nothing/or modest remodel of the existing chapels for use by client

This option could place a maintenance burden upon the Borough Council and would not increase any revenue. The two chapels, as Grade II listed buildings will need to be maintained if they are to provide any useful return for the cost of ongoing repair. It would be necessary to provide a level of heating and functional service support to enable occupation for council use.

4.2 Remodel the chapels to provide a facility for a commercial venture which provides a return on the capital investment for the client

Ranges of potential commercial uses have been reviewed and are listed below. There are three uses, which may present a viable commercial solution, and these are developed in some detail to inform decision-making.

4.3 Release the chapels to secure a one off capital receipt

This would enable an immediate one off payment, if the Chapels could be released. Given the location of the Chapels in the centre of the cemetery and that their use may be restricted by existing covenants this would impact the commercial value of the facility, Based upon comparable evidence from the current market, it is anticipated that the market value of the chapels could be in the region of £250,000 - £300,000, sold as seen. However, this would depend upon planning permissions being granted for change of use and the revocation of any restrictive covenants that would impede its potential. Depending upon future use, full pedestrian and vehicular access might have to be allowed.

4.4 Combined chapel and commercial use

It may be possible to retain use of one of the chapels and remodel the surplus space to provide a commercial opportunity. This is explored in more detail within the report.



Potential Redevelopment Ideas for the Two Chapels

Proposal	Advantages in brief	Disadvantages		
Pet Crematorium	Some alignment with general bereavement services	May be considered discourteous to relatives of deceased previously cremated in the chapels Different equipment is required, so the existing facilities would not be suitable New facility recently opened at Tewkesbury Not an option for beloved pets to be		
Full wake only facility	Would provide natural extension to existing bereavement services	scattered with owner and no room for pet burials Not commercially sustainable as likely to be able to offer maximum of 3 wakes per day, per chapel at minimum return. Some space would be surplus and underused some refurbishment would still be required but the revenue could be inconsistent		
Part Wake/Office and support catering facility	Option developed a	as part of this Study		
Serviced Office Accommodation	Option developed a	as part of this Study		
Serviced Residential Accommodation	Option developed as part of this Study Difficult to secure planning for full private planning full private planning for full private planning full planning full private planning full plan			
Full Residential conversion	Very quirky place to live!	Difficult to secure planning for full, private, residential use. Very unique and limited market that may be interested in purchasing a propoerty located in the centre of a cemetery		
Spa facility	Could be a unique venue	Discounted as not considered appropriate adjacent to bereavement services and would be difficult to promote		
Health Support Services	A potential location for well-being support services such as physiotherapy. This option would be an extended public service use, which would add value	Access for visitors may be challenging, especially if they have restricted mobility May seem obscure having health services located within a cemetery - may not be viewed as appropriate or supported by local community		
Office facility for Crematorium staff (relocated from gatehouse office)	A little closer to the new chapels	This would leave the gatehouse unoccupied and possibly surplus Visitors would have to enter into site to make arrangements with the team, whereas at the moment they just call into the front entrance. The chapels would be too big and therefore part would remain unused		
Retain one cremator and one existing chapel	Provides continuum of service, so if work was required on one chapel, then services could continue in reduced number at the other site.	This would duplicate staff costs and maintenance and also limit the commercial use of the surplus chapel. It is considered more prudent to have both new cremators operational in the same location. Approcal has been given for the actual cremation facilities to be located with the new chapel.		

5.0 The Commercial Option Appraisals

In order to assess the Commercial opportunity and potential revenue from any re-use of the chapels, we have undertaken the following activities:

- o Full site appraisal
- Brainstorming process to identify 3 leading commercial opportunities
- o Identifying demand
- O Using comparable data, evidence of recent sales rents etc.
- Exploring economic benefit
- Meetings and discussions with local and regional stakeholders

After researching the local market place in the Cheltenham area and appraising similar properties that have been redeveloped in the recent past we have outlined three potential commercial opportunities to explore in more detail:

- 1. A wake/cafe facility with office/retail accommodation for bereavement related services.
- 2. Serviced Office facility
- 3. Boutique Style visitor accommodation, for example Landmark Trust

This option appraisal will explore each option in turn, considering the potential for the conversion of the chapels to a different use; any restrictions on use; the capital investment required to remodel the existing chapels; understand the commercial return that each option might deliver based upon current market indicators; the local context and appetite for such a facility. The aspiration is that the re-use of the chapels will provide a rental return for Cheltenham Borough Council, keep the buildings in use and contribute towards delivering local initiatives to support growth and economic sustainability.

The option to retain one of the existing chapels as an operational bereavement service would limit the development of all of these options:

- I. A wake facility/and or office and retail accommodation only part of this offer could be delivered in the reduced space available. Wake facilities would need to be carefully planned to avoid unnecessary noise transfer during services in the adjacent chapel. The appeal of offices/retail facilities would be reduced without the wake offer.
- 2. Serviced offices the retained use of one chapel would significantly reduce the available space for serviced offices. In addition, the chapel services would place a restriction on use for the offices as there would be an ongoing need to ensure low levels of noise and minimise movement around the facility during services. For potential occupiers, this may be deemed as too limiting.
- 3. Accommodation the retained use of one chapel would reduce the potential available areas for residences and therefore potentially makes this option entirely non-viable.

5.1 A Wake Facility with supporting office and retail

The council might consider a mixed scheme offer of offices /retail, with business related to the funeral sector. For example, office bases for funeral directors, outlet and offices for stonemason and a florists concession along with a café/catering/wake facility. The café facility could leased and managed by an independent provider. Currently there is capacity for up ten services per week day, as well as regular visitors for the cemetery site, and any staff based on site, so there could be reasonable demand for café and or/wake facility



The above development option potentially requires minimal modification to the existing building as the facility can be relatively simply split to provide the required accommodation. Removal of the crematorium plant would be required to open up space but some of the internal walls would have to be removed but overall is relatively straightforward.

In terms of plan form, the northern chapel would comprise of primarily office accommodation, with the insertion of a mezzanine for additional floor area if the developed brief dictates. The Southern chapel would then potentially form a café & wake facility for users of the new proposed crematorium to the East on its completion. The existing back of house areas would be converted to house a retail unit that may comprise flower/wreath sales and/or head stones, again with the insertion of a mezzanine if the developed brief requires it. Unit 4 is housed in the most recent building extension and could be wholly self-contained office accommodation with its own WC and kitchenette or may be used by the funeral directors or other similar service if required. The existing WC provision would be retained "as existing" for use by units 1, 2 & 3.

The existing car park facility on site nearby would be utilised and there should be scope for retail parking as well as attendees at the wake facility. There may be opportunity to develop some Accessible parking at the front of the chapels, to further provide ease of access.

Formal pre-application consultation with the Local Planning Authority (LPA) would be required for this scheme to ascertain exact parking numbers, based on final anticipated person numbers as well as any requirements to modify the existing fabric of this Grade 2 listed building.

Below is an initial outline of the potential space that could be achieved through modest adaptation of the two chapels:

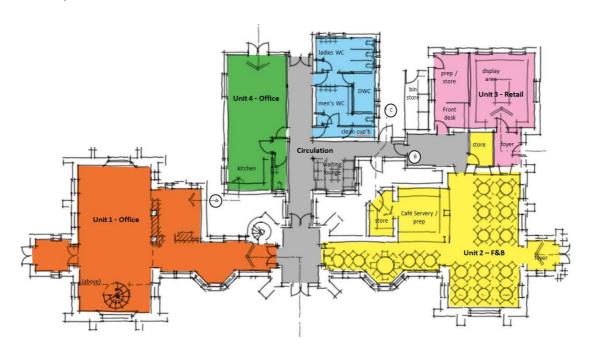


Fig 1: Combined Wake and Bereavement Support Offices/Retail - 4 Unit

An alternative option for the same overall use, a 3-unit solution is also available that looks to increase the overall area of Unit I to incorporate Unit 4 and the existing WC accommodation, forming an altogether larger office facility. Units 2 & 3 will then require some additional works applied to create their own WC and kitchenette facilities. An example of how this proposal would work is shown in the image below:



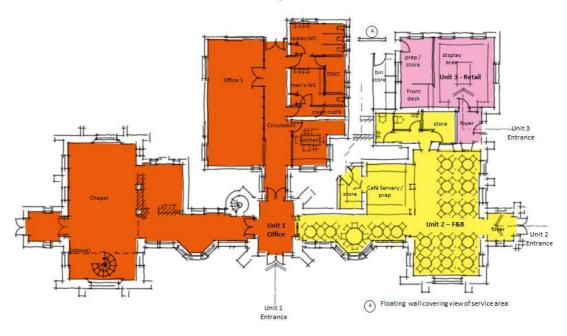


Fig 2: Combined Wake and Bereavement Support Offices/Retail – 3 Unit.

5.1.1 **Current Market Comparisons**

In order to assess the potential market and market value of such a facility, we have considered in the first instance any available similar space/type of use and terms of the proposed offer. For this option, we have explored both retail/restaurant offers and available office accommodation. These are detailed below:

Comparable Retail/Restaurant facilities



Poppins Restaurant has taken 7 Winchcombe Street, Cheltenham comprising 892 sq ft (82.87 sq m) of ground and first floor retail accommodation from Blackrock on a lease expiring 22/04/2028 at £15,000 pa. A 12 month rent-free period was agreed. The lease is subject to a rent review in year five and an option to break 23/04/2023. Downing Bentley acted on behalf of Blackrock. Matenam Associates acted on behalf of Poppins Restaurant. The deal was confirmed by Pete Downing...



ID# 124988251



5.1.1.2 Comparable Office premises



519 SF Office Lease Signed Jan 2016 for £15.41/SF (Achieved) **** 17 Pittville St - Partial Basement Direct, Leased by Countrywide Estate Agents Premises Department Cheltenham, GL52 2LN - Central Cheltenham Submarket Jan 2016 Rent Free Start Date: **New Lease** Retail Class B Property Type: Achieved Rent: £15.41/SF 2,034 SF 5 Years Term On Marke **Building Area:** Effective Rent: Exp. Date: Dec 2020 Reviews: Build-Out: Basement Storage, Common Parts WC Facilities, Kitchen Facilities Leasing Rep KBW Chartered Surveyors - Richard Knightley Landlord Tenant Rep: Tenant SIC Real Estate Agent Countrywide Estate Agents has taken 17 Pittville Street comprising 519 sq ft (48.22 sq m) of basement floor office accommodation from an undisclosed landlord on a five year lease at £8,000pa, equating to £15.41 psf (£165.92 psm). KBW Chartered Surveyors acted on behalf of the landlord. Countrywide Estate Agents was unrepresented

The deal was confirmed by Richard Knightley at KBW Chartered Surveyors.

ID# 123840131



4,429 SF Office Lease Signed May 2016 for £11.74/SF (Effective) 125-127 Promenade - Direct, Leased by SuperGroup plc Cheltenham, GL50 1NW - Outer Cheltenham Submarket Asking Rent: Jun 2016 Office Class B Start Date: Rent Free Deal Type Property Type: Achieved Rent: £11.74/SF Term 7 Years 4 Mos 4,430 SF Full Build-Out £11.74/SF Exp. Date: Jun 2023 Rates Car Parking, Category 2 Lighting, Demised WC facilities, Kitchen Facilities Leasing Rep: Bear Associates Surveyors Ltd - Thomas Wiseman Landlord Tenant Rep: **KBW Property Limited** Tenant SIC Apparel And Accessory Str

Lease Notes: SuperGroup plc has taken 4,429 sq ft (411.46 sq m) of ground, first, second and basement office accommodation on a seven year lease at £52,000 pa, equating to £11.74 psf (£126.37 psm). The quoting rent was £52,000 pa, equating to £11.74 psf (£126.37 psm). Bear Associates Surveyors Ltd acted on behalf of the landlord. KBW Property Limited acted on behalf of SuperGroup plc. The deal was confirmed by Thomas Wiseman at Bear Associates Surveyors Ltd.

ID# 124751721

Based upon this information, we can estimate that the remodelled office and combined café/restaurant accommodation might be leased for £11-£15 per sqft. This will depend upon market factors at the time of leasing, condition, parking and access.

The table below provides a breakdown of potential lease value per unit aligned to the proposed floorplan in Fig I

Unit	Floor area (sqft)	Value £ per sqft	Lease value £pa
Unit 1	1988	£13.00	£25,844.00
Unit 2	1381	£15.00	£20,715.00
Unit 3	607	£15.00	£9,105.00
Unit 4	582	£13.00	£7,566.00
Total			£63,230.00

It is suggested that leases should be agreed for a minimum 5-year term, to include an annual review of lease value.

This option may offer the least risk for Cheltenham Borough Council. There is already footfall onsite for funeral related business and currently there is limited wake facility offer in the locality. The Council would not be responsible for any utility costs, condition or maintenance apart from the common areas.



5.1.2 General Interest

Spoke to Ian George:

Ian George Funerals

Demand for wake facility. Same sort of facility as Gloucester. Wake facility. Royal Oak is closest in Prestbury. Rising Sun on top Cleeve Hill. Space to 70 - 140. They had a large funeral over Christmas and took over the rugby club facility due to parking and facilities there.

Spoke to Mel Dangerfield:

Co-operative Funeral Care

Not every family has one, but quite a few families. Knows of the Arbor Room wake facility at Gloucester. She says a wake facility is something she reckons is needed, and would be beneficial on site, depending on how tastefully it was presented. They do not personally recommend facilities to families; however, she also mentioned the Royal Oak and Rising Sun as being where families would typically go.

Spoke to Anita:

Selim Smith & Co

Said she has not been working there long enough to comment but said it would be a great idea. Passed on my details to a more senior colleagues who will give me a call back

Spoke to Richard Mason:

Mason & Stokes

Very good idea, lots of people looking for venues to have a reception after the funeral, drinks, buffet, etc. He reckons they would be fully booked at least once a day, maybe two times, if you could fit them into crematorium service times. He said the biggest problem is the parking. Again mentioned the Royal Oak, and how they seem to be booked almost every day.

We obviously would now have the parking covered, which is good

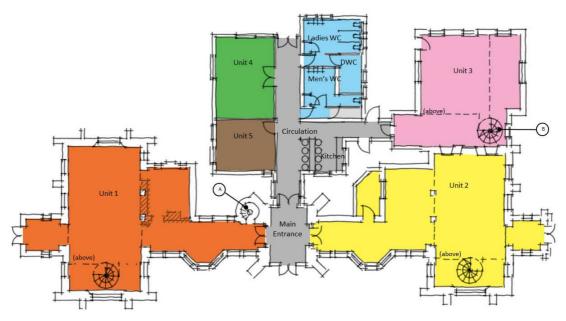
5.2 Serviced Office Facility

The two chapels are Grade II listed and present a wealth of charm, character and architectural importance and could be ideal for serviced office accommodation especially with the existing configuration with a central meeting area and wings to either side. Whilst the location within the cemetery might deter some potential occupants, it would most probably encourage others who require a quiet and somewhat quirky location.

Similar to the wake facility, this option also requires only minimal modification to the existing building with removal of the existing cremators and associated equipment. Intervention in terms of potential mezzanine structures is an additional element of work, but only if it is determined necessary.

Fig 3: Serviced Office Facility – 5 units





Unit I is effectively formed by the area of the northern chapel, with a mezzanine level inserted in this high space to create some additional floor area. This mezzanine would be accessed by a new spiral staircase from ground floor level. Unit 2 is located in the south chapel and is broadly the same as Unit I with a new mezzanine proposed in the vaulted roof space. Unit 3 incorporates the existing plant facilities and "back of house" accommodation and again features a mezzanine structure with new spiral staircase. Units 4 & 5 are proposed as smaller spaces, which are created in the most recent extension to the building that currently houses the waiting area. Communal WC's and kitchen areas are housed in the buildings existing WC & kitchen accommodation and a main entrance with reception desk and waiting area would be created in the current main entrance vestibule.

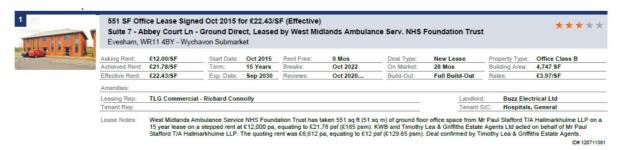
In terms of parking and referring to the Local Plan, we understand that I space per 25m2 is required for office accommodation (26 spaces overall), which is possible in the existing car park on site nearby to the South East, as well as I space per 20 for accessibility – this would be possible directly adjacent the building itself.

Formal pre-application consultation with the LPA would be required for this scheme, primarily to ascertain whether the proposed Change of Use is an acceptable solution and to ensure that any interventions and modifications to this listed building are acceptable in principal, by review of the Conservation Officer.

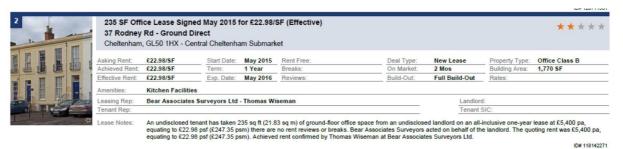
5.2.1 Current Market Comparisons

There are currently some availability of serviced office accommodation in Cheltenham; however, these properties are priced at £22-£25 per sqft and typically co-located within purpose built office complexes.

5.2.1.1 Comparable Serviced Office Accommodation









Based upon the market indicators, it may be possible for Cheltenham Borough Council to offer serviced office accommodation to encourage start up business and at a competitive rent to ensure maximum occupancy. This approach provides additional value to the local community in supporting and retaining new business opportunities in the area. The offices could be suitable for businesses who require office space with modest need for client meetings on site, such as design studios; bereavement services; Accountants or general office function location.

The table below is based upon a competitive market rent of £22 per sqft:

Unit	Floor area (sqft)	Value £ per sqft	Lease value £pa
Unit 1	1988	£22.00	£43,736.00
Unit 2	1938	£22.00	£42,636.00
Unit 3	1263	£22.00	£27,786.00
Unit 4	352	£22.00	£7,744.00
Unit 5	224	£22.00	£4,928.00
Total			£126,830.00

There are additional property owner considerations with the Serviced Accommodation option. The rent would include:

- Utilities
- Rates
- Cleaning
- Insurance
- Communal Kitchen
- Service Charge
- Wi-Fi
- Parking

There would be upfront costs in setting all these in place ahead of any rental income. In addition, there can be high volume turnover of tenants, which increases the property owners' costs and could result in inconsistent income.

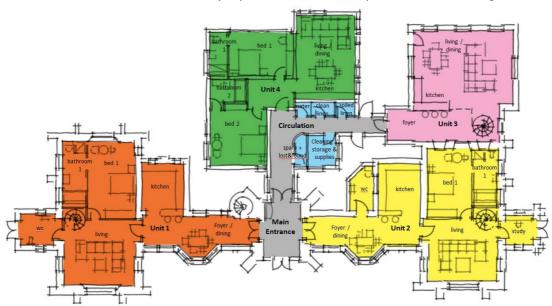


Whilst the potential return on this option is higher, this is not risk free and the risk of empty units and increased incidental service costs should not be ignored.

5.3 Boutique style accommodation

Cheltenham has much to offer, being located within an Area of Outstanding National Beauty. The area offers access to beautiful countryside, Georgian architecture and is the home of the world-renowned racecourse of the same name. Considering this unique location, we have identified there could be a need for interesting, quirky holiday accommodation similar to the Landmark Trust. The Landmark Trust rent out interesting buildings such as chapels and follies in tourist hotspots throughout the UK,

As the above option, the unit split is pretty much the same as the office accommodation solution albeit split over 4 units as opposed to 5, with Units I and 2 accommodated in the two chapels respectively. Unit 3 would located in the back-of-house area and Unit 4 would be located in the recent waiting area and WC addition. Statutory services will need to be re-apportioned to each unit, with requirements for sanitary conveniences in each residence as opposed to being located in one central area – this means more renovation works to the existing building below ground and would potentially mean further intervention and modification to the fabric of the existing building. Mezzanine structures are also proposed for this option but there will be a requirement for acoustic attenuation in the floor structure in this proposal to meet the requirements of Building Control.



Planning considerations here are as the office proposal with a need for a Change of Use planning application. There should be no external amendments apart from a small amount of changes to facilitate unit 4, but there will be a requirement to upgrade the thermal fabric of the building to allow residential accommodation. The extent of this and how it might be implemented would need agreeing between the LPA Conservation Officer and Building Control with the outcome potentially that there would be a reduced thermal performance in lieu of retaining as many of the existing features of the listed building as possible.

For parking, we understand that the local plan would require I parking space per bedroom provided – a figure that we could probably accommodate directly outside the building as opposed to utilising the nearby on-site car park facility.



There are two potential commercial options for use as accommodation.

5.3.1 Accommodation Option I

For Cheltenham Borough Council to manage the letting of the individual units themselves, leaving it to the market to determine occupancy levels, influenced by appropriate advertising and promotional activities. The council would need to employ staff for cleaning, housekeeping and day-to-day management of the facility and cover insurance and on-going maintenance.

5.3.1.1 Similar Accommodation





Based on this market data, we have assessed the rental potential of this type of accommodation in Cheltenham:

Anartmant	Avec description	Foo may might C	80% Annual	60% annual	40% annual
Apartment	Area description	Fee per night £	Occupancy	Occupancy	Occupancy
Apt 1	1699 soft. Living, dining area, kitchen, 2 beds and 2 bathrooms, wc.	£200.00	£58,400.00	£43,800.00	£29,200.00
Apt 2	1626 sqft , living , dining area , kitchen , study ,wc , 2 beds and 2 baths1938	£200.00	£58,400.00	£43,800.00	£29,200.00
Apt 3	1228 sqft, Living dining area, kitchen, 1 bed and 1 bath.	£175.00	£51,100.00	£38,325.00	£25,550.00
Apt 4	1077 sqft, Living dining area, kitchen, 2 beds and 2 baths.	£175.00	£51,100.00	£38,325.00	£25,550.00
Total		£750.00	£219,000.00	£164,250.00	£109,500.00
	Assuming 20% proifit margin	£150.00	£43,800.00	£32,850.00	£21,900.00



Whilst this could be an ideal location for a quirky, unusual place to stay, holiday rentals in the Cotswolds area is a competitive market. To attract visitors, the fit out would need to be befitting of the location, so something a little different. Ongoing maintenance, marketing costs and the uncertainty around actual bookings.

5.3.2 Accommodation Option 2

An alternative to holiday lets, the Council may consider, subject to legislative approvals, renting the four units out on an assured short hold tenancy basis. There is high demand for rented accommodation and the market is currently securing rental values for similar size properties of $\pounds750.00 - \pounds1200.00$ pcm.

Tenancy	Area description	Monthly rent	Annual Income
	1699 soft. Living, dining area,		
Apt 1	kitchen, 2 beds and 2 bathrooms,	£1,200.00	£14,400.00
	wc.		
	1626 sqft , living , dining area ,		
Apt 2	kitchen , study ,wc , 2 beds and 2	£1,200.00	£14,400.00
	baths1938		
Apt 3	1228 sqft, Living dining area,	£750.00	£9,000.00
Apt 3	kitchen, 1 bed and 1 bath.	1730.00	15,000.00
	1077 sqft, Living dining area,		£11,400.00
Apt 4	kitchen, 2 beds and 2 baths.	£950.00	111,400.00
Total		£4,100.00	£49,200.00
	Assumed 85% return after 15% costs	£3,485.00	£41,820.00

5.4 Assumptions and Constraints

In developing this option study, a number of assumptions and constraints should be noted and assessed as part of any decision to approve the development of any one option.

- The site "Bouncer's Lane Cemetery" is listed as a whole see accompanying listing document for further information.
- The "Two Cemetery Chapels" are also separately listed as a building see accompanying document for further information.
- As the building is listed, it is therefore likely that any interventions made to accommodate the proposals herein are required to be made in such a way that they can be classed as "temporary" in that they do not have any adverse impact on the character of the existing building. This means that Listed Building Consent will be needed for the proposed work to ensure that it does not affect the 'special architectural or historic interest' of the chapel building.
- As a first pass to ensure that the LPA is comfortable with the proposals, it is suggested that a pre-application meeting with the LPA is organised as soon as possible to gauge their response. The outcome of this meeting will then better advise on the potential project programme.
- Upgrades to the thermal performance of the building envelope will be required as part of compliance with the Building Regulations but as the building is listed, an early review will be required with the Planner, the Conservation Officer, The Building Inspector and potentially English Heritage(if the LPA deems it necessary) to understand any restrictions



on development for this building and to seek derogation for any building control requirements that may come out of the requirements of the Historic team.

- It is likely that existing fenestration to the original chapel cannot be modified, so either secondary glazing will need to be incorporated to all existing openings or windows will be retained "as is", with an understanding of a reduced thermal performance for the building as a whole. Adding the secondary glazing so that we do not tamper with the original fabric would be covered by a Certificate of Lawfulness or as part of the listed building application.
- A figure should be allowed for repairs to the existing lead windows as necessary extent to be reviewed during the next project stage.
- In terms of existing external walls & roof areas, further investigation will be required as to exact constructions but assuming that external walls cannot be upgraded at all, upgrades to loft areas will be necessary or even the incorporation of independent suspended ceilings (lay-in grid type) may be necessary at first floor level to allow a plane for insertion of fibreglass or similar thermal insulation.
- o It appears that all internal walls to the areas of the "original" chapels are covered with a thin layer of plaster or simply painted stone so adding internal insulation and plasterboard may not be an option we will need to review with the CO/Planner/Building Inspector etc. early doors.
- The new proposed first floor construction is likely to be designed as an independent structure to the main building due to its listing Structural details will therefore be required later but for now, it is likely that steel posts at the line of the external walls are utilised, framing a steel mezzanine structure with timber joist infill.
- Mezzanine Floor Construction As mezzanine floors will effectively be located within individual units, no acoustic or thermal separation will be required as part of their construction. The typical Intermediate Floor detail is therefore likely to be utilised as per Accredited Details reference IF-02.
- Olf a new floor is to be a "Separating Floor" then details incorporated within the Robust Details document "Timber Separating Floors" will be required along with any new partitions at first floor level and associated steel structure. Careful consideration of the detail at the floor perimeter will be required here to ensure that sound transfer is minimised.
- Separating Wall construction will be required between adjacent units on the same floor level. This will be provided as per the Robust Details document "Timber Separating Walls". This would need to be taken to the underside of the roof structure and be acoustically/fire rated construction.
- Studwork partitions within individual units do not require acoustic performance, and fire
 performance can be dealt with in the board specification, so a standard 70mm steel stud
 with insulation and 15mm plasterboard to both sides should be sufficient to work in all



cases. This will again need to run to the underside of the existing roof structures, or the suspended ceiling – depending on final specification.

- We assume that drainage below ground will be "as is" for the serviced office scheme or adapted to incorporate the proposed new sanitary locations shown on the serviced residential proposal.
- We assume that the existing gas, electrical and data/BT services to the building can be adapted to suit the proposals. A review is required by a Building Services Consultant but it is assumed that one new single heating system would be utilised for the whole building with zones apportioned to each unit for sub-metering purposes. This strategy would also be employed in respect of all other power, water, foul drainage and data requirements.
- Radiators, sockets, switches and the like will be fixed to new partitions/walls wherever possible but may need fixing to the existing building fabric in a number of cases. Pipework and cabling etc. is therefore likely to be exposed as opposed to being boxed-in. Suggest Wi-Fi as a potential solution for data provision.
- There should be an allowance for full smoke and fire detection systems throughout the building – the extent and specification of which would need to be provided by a Building Services Consultant.
- There should be an allowance for repairs to the fabric of the existing building, i.e. repointing of the external façade in specific areas maybe, or re-roofing/lead work abutments and refurbishment of existing rainwater goods for example. The extent and therefore relative cost of this element would need to be reviewed by a Building Surveyor at a later stage as part of a full building survey.
- There should be an allowance for the inclusion of the various staircases proposed in all feasibilities these can be assumed as standard timber or steel "off the shelf" products generally, but those which form access from communal spaces to individual units or between separate units will require under-drawing and acoustic/thermal boarding to achieve the relevant acoustic and fire performance requirements.
- We assume that communal areas of the finished building will incorporate the existing floor finishes, which are currently visible, and that individual units will incorporate new carpet tiles throughout.
- Review of the state of the existing floor finishes and sanitary ware in the refurbished WC's should be carried out but for now we assume that all sanitary ware and cubicle systems are to be replaced to a higher standard with non-slip vinyl flooring throughout (including the kitchen area).
- The kitchen areas proposed would generally contain mashing facilities incorporating fridge/freezer, microwave, sink etc. and may require the incorporation of a washer/dryer.
 The Café option would require a more commercial kitchen facility however.



- A new ventilation system will be required throughout all schemes to provide the required flow rates for the WC and kitchen areas but also to provide the required air changes for each business/residential unit. A Building Services Consultant should review but potentially a MVHR system to each unit may be required to achieve this, assuming that the secondary glazing and existing fenestration systems are un-openable throughout.
- Externally, we assume that the existing car parking arrangements for the building are acceptable and a quick check of Local Planning Policy states I space per 25m2 which with the commercial unit equates to 26 spaces, and for residential; one space per bedroom. We assume therefore that the existing car park we visited near to the building will suffice to accommodate the highest requirement without modification.
- There will be an allowance for I accessible parking space per 20 spaces provided in all scenarios this requirement can be accommodated adjacent the building itself.
- We have made allowance for discreet site, carpark and front entrance signage with subtle way finding lighting such as bollards etc.
- Externally, we have made allowance for modifications to existing areas of hard landscaping to facilitate the change of use – in areas where existing crematorium plant is to be removed etc.

5.5 Comparison of the Commercial Options – Pros and Cons

In order to provide transparency of assessment of the various options, we have developed an assessment matrix whereby, each option has been scored by core members of the client review team. The team represents Property and Estates, Legals, Cost, Planning and Crematorium staff.

A summary of the scoring is included below and this establishes that the preferred option, based upon agreed criteria, which extends beyond just a pure cost assessment is for the existing chapels to be remodelled to provide a Wake and supporting services facility.



161564: Two Chapels Commercial Option Assessment - Summary Matrix

	Option	Wake Facility with offices and retail for related services	Serviced Offices 4 Units	Serviced Offices 5 Units	Accommodation - Holiday Lets	Accommodation - Residential Lets
Financial	Pass/Fail	Pass	Pass	Pass	Pass	Pass
		OT PROCEED WITI	H FACTOR ASSESSI	MENT		
	-					
	<u> </u>	2.7	2.5	2.5	2.3	1.8
(x2 weighting)	Pass Pass Pass Pass Pass Pass Pass Pass					
	cemetery.					
	0 = Traffic volumes would be unacceptable					
Environmental	_	0.0	1.7	1.7	1.0	1.9
Impact		0.9	1.7	1.7	1.7	1.9
	·					
	-					
	4 = Improves and reduces the current level of traffic to minimal level					
_	· · ·					
Customer						
		2.5	. 7	1.7	0.7	0.5
		3.5	1./	1.7	0.7	0.5
Customer Experience (future clients of bereavement	<u> </u>					
(XZ VVeighting)	-					
6	· · ·					
				2.0		
-		2.0	2.0		1.3	1.3
		5.0	2.0	2.0	1.5	1.5
	-					
	<i>.</i>					
	environment.					
	0 = Would be deemed highly unsuitable					
With Due Respect	I = Partly acceptable but with elements of compromise (ie volumes of	1.3	1.0	1.0	0.5	0.5
	traffic movement)				0.5	
	· ·					
	,					
	_					
	·					
_	T = Is sympathetic with local priorities	2.3	1.0	1.0	1.3	0.8
Aspirations						
	-					
Risk - financial		2.5	2.5	2.5	0.9	0.7
	11 1					
	-					
	· ·					
Diale Nam Fire of 1		2.7	2.5	2.7	1.2	1.2
KISK - NON FINANCIAL		2.7	2.5	2.7	1.3	1.2
	5					
	Overall Summary	3.2	2.4	2.4	1.7	1.4
						

Notes

I - These figures are compiled values following six individual evaluations.

^{2 -} The overall summary figure includes the x2 weighting factors for business growth and existing clients customer experience respectively.

6.0 Constraints and Considerations for redevelopment of the chapels

6.1 The Legal Context

Research by the Council's Property and Asset Management team has shown that part of the cemetery is consecrated ground. Should consecrated ground be required to be used for any secular purpose, the land will need to be deconsecrated by the Bishop of Gloucester or permission will be required. We have not made enquiries of the Bishop's office or researched how permission is to be granted (e.g. by the Bishop herself or an ecclesiastical court) and we suggest this is carried out at an early stage.

The Local Authorities (Cemeteries) Order 1977 contains provision on the use and management of cemeteries which will need to be taken into account when considering any changes to the current usage, particularly the options of residential or office accommodation because it is a criminal offence under the Order.

Any leases granted will need to comply with the requirements of Section 123 of the Local Government Act 1972 regarding the consideration received for the leases.

We suggest entering into early discussions with the Licensing Authority at an early stage if the Council requires the wake facilities to be able to serve or supply alcohol.



7.0 The Financial Information

7.1 Capital Costs

We have calculated the capital cost expenditure for each option. Our capital cost plans are included in appendix C. Given the very limited design information available and lack of details of the existing facility, we have made a number of assumptions when preparing our costs. These assumptions should be reviewed in detail in order to fully understand the cost. We summarise the key points as follows:

The costs are based on a mid-range specification and assumes the existing facility is structurally sound.

- The costs do not include for upgrades to existing incoming services or roof structure or coverings.
- The costs allow for survey and removal of some minor asbestos but we assume generally there is no significant level of asbestos present or other contamination
- Our costs contain provisional allowances for minor repairs to the external façade but this is currently not quantified. A survey would be required to firm this cost up
- Our costs include for internal secondary glazing as recommended by the design team
- Our costs include for minor external works (new signage, minor repairs) and we assume the existing car parking will generally remain as is.
- We have assumed that tenants will provide office loose furniture.
- Our costs do not include for air conditioned offices
- \circ We assume that the project will be subject to a competitive tender during May / June 2019 and that the works will take between 20 25 weeks.

We have made a general allowance for design and agency fees as well as construction related risks although it should be noted that given the lack of information related to the building and given its listed status there is a further unquantified risk of variance to the allocated construction risk allowance. We recommend that a separate process be undertaken to review the project wide risks and review the need to apply any optimism bias.

We would also recommend that the need to apply any sensitivity analysis to the figures be further reviewed by the project team to determine the viability of the scheme when the capital and whole life costs are subject to sensitivity adjustments.

Our costs make no allowance for any client direct fees or costs.

7.2 Whole Life Cost

The whole life costs for this scheme are comprised of three parts. The first is the capital construction cost carried forward from the capital cost plans. The second part of the whole life cost is a high-level estimate of the life cycle costs.

7.3 Life cycle cost

The life cycle costs are based on typical all in rates for a standard level of major and minor maintenance, scheduled and unscheduled repairs to both building fabric and services. Obviously, we have no information on what actually requires maintenance and what backlog maintenance there is but by using a typical "all in" rate we are able to derive a useful cost model to facilitate the production of an overall whole life cost model.

The life cycle costs do not include grounds maintenance as we assume, given the location of the facility, there is already existing grounds maintenance work in other budgets. However, given the very limited nature of the external works this assumption is unlikely to have any significant impact on costs.



We have not been advised by Cheltenham Borough Council of any specific administration or legal costs so these are excluded from our life cycle costs. We have allowed for utilities costs and cleaning costs where these services are to be provided by the Council for the serviced options.

For the wake facilities option (4 units) we have only allowed for cleaning and utilities in the common parts. We have also assumed that under the wake facilities options maintenance will be done only at the end of a lease (and thus, the maintenance is periodic on 5 and 10-year cycles).

A more detailed commentary of the life cycle costs for each option is included in our whole life model included in appendix C.

A discount factor of 3.5% has been used to calculate the NPV for each option and all costs (both capital, life and revenue) are shown at present value. Individual discount factors have been taken from the HM Treasury's Green Book Appraisal and Evaluation in Central Government to give yearly discount factors.

7.4 Revenue

Pygott Crone has provided rental incomes for each option. Rental values have been inflated by a commercial inflation percentage of 2% compounded per annum to reflect anticipated rises in rent.

Rental values take in to account void loss related to occupancy levels as well including for fully serviced units for the offices and boutique style accommodation. The wake facilities rental values allow for the tenants providing maintenance, repairs, cleaning, and utilities during the lease period (with the exception of common parts).

Administration costs have also been factored in to the rental values.

The rental values for the Boutique style accommodation reflect self-catering arrangements for the holiday lets and are based on an assumed occupancy of 80%.

7.5 Payback return periods

The whole life model shows the following payback return periods on the initial investment and life costs for those schemes, which generate a profit:

Wake facilities 4 units year 21
Wake facilities 3 units year 15
Offices with Mezzanine year 18
Boutique style holiday lets year 15

The above shows that the wake facility with 3 units begins to make a profit from year 14 onwards. This is primarily due to the reduced life cost for this scheme due to the building being fully demised with the majority of the life costs falling to the tenants (which is reflected in the reduced rental values)

It is recognised that the payback return periods shown are represent a significant time investment by the council until profitability is seen. This situation can be improved if the capital outlay costs are reduced. This would involve a "light touch" refurbishment of the existing facilities concentrating on aesthetics only. However, given the level of design information and knowledge of the existing buildings we cannot, at this stage, have any confidence that a light touch regime is possible. For example, a significant element of the capital costs relates to the assumption that existing services installations will require significant upgrade to accommodate the offices / residential / wake facilities.

This might not be the case but without detailed survey work we cannot confirm this. Therefore our costs are based on a "middle to worse case" case capital cost scenario



7.6 Master Cost Summary

The Master Cost Summary below shows the overall residual balance at 25 years for each option included within this report taking into account the expenditure against the revenue. The expenditure for each option is made up of the construction capital cost and the life cycle costs over a 25 year period and the revenue is a reflection of the projected rental income for each option.

Based on the financial analysis, the Boutique Style Holiday Let option receives the largest return at £732k at 25 years with a profit generated from year 15 onwards.

There is a large cost difference between this and the Boutique Style Permanent Let which has resulted in a large loss of approx. £1 m.



7	

3. Master Summary GIFA (m2) 492 639 600 600 545 548

			Offices (with	Boutique style	Boutique style	Wake facilities (4	Wake facilities (3
		Offices (no mezz)	mezz)	holiday let	permanent let	units)	units)
1.0 Expe	enditure						
I.I Cons	truction Build Costs	776,000	828,000	1,118,000	1,118,000	896,000	898,000
1.2 Life C	Cycle Maintenance Costs						
1.2.1	Major & Minor Replacement & Repair (Fabric & Services)	305,250	396,452	372,256	372,256	24,855	24,991
1.2.2	Decoration	15,000	19,482	18,293	18,293	15,493	15,578
1.2.3	Grounds Maintenance (excluded) assumed already being maintained by council	Excl	Excl	Excl	Excl	Excl	Excl
1.2.4	Cleaning	162,178	210,634	197,778	197,778	25,382	-
1.2.5	Utilities	190,559	247,495	232,389	232,389	29,823	-
1.2.6	Administration (excluded - assumed in separate council budget)	Excl	Excl	Excl	Excl	Excl	Excl
1.2.7	Other Costs (excluded)	Excl	Excl	Excl	Excl	Excl	Excl
T	otal Expenditure (A)*	1,449,000	1,702,000	1,939,000	1,939,000	992,000	939,000
2.0 Reve	enue						
2.1 Renta	l Incomes	1,444,109	2,068,394	2,671,316	852,522	1,160,078	1,457,500
T	otal Revenue (B)*	1,444,000	2,068,000	2,671,000	853,000	1,160,000	1,458,000
	Residual balance at 25 years (B - A) (negative balances shown in bracket)	(5,000)	366,000	732,000	(1,086,000)	168,000	519,000

Two Chapels Option Study.

AJH/JLM/161564/17-0/Reports Issue



^{*} All figures are rounded to the nearest 1000

8.0 Delivering the preferred solution

8.1 The next Stages

Upon confirmation of the preferred solution and based upon the assumption that a second chapel will be approved for construction concurrently with the new chapel, then it will be possible to align development of the remodelling of the existing chapels so that both projects dovetail and provide efficiency in delivery.

To this end, we have prepared an outline programme, which identifies the high level activities and timeline to inform development of the existing chapels remodelling project.

8.2 Briefing the Project

The scope or refurbishment will need to be carefully considered, to ensure that the facilities offer suitable accommodation that presents an interesting and worthy rental option to possible occupiers, whilst at the same time, minimising the cost to the client.

It may be useful to research similar facilities, to define the best functional and aesthetic brief. In addition, seeking comment and consultation from potential occupiers would ensure that the accommodation provided the most appropriate types of space.

Consideration needs to be given as to how the building might support the needs of a variety of building occupiers, such as zoning of services, access to the various facilities by different building users and maintenance of shared spaces.

By developing a comprehensive brief which establishes expectations beyond the construction activities, this will ensure that the re-modelled chapels present an interesting and worthy location that fulfils its function with minimum post-occupancy alterations.

8.3 Approvals and Governance

The existing governance and approvals process will be adopted for this project.

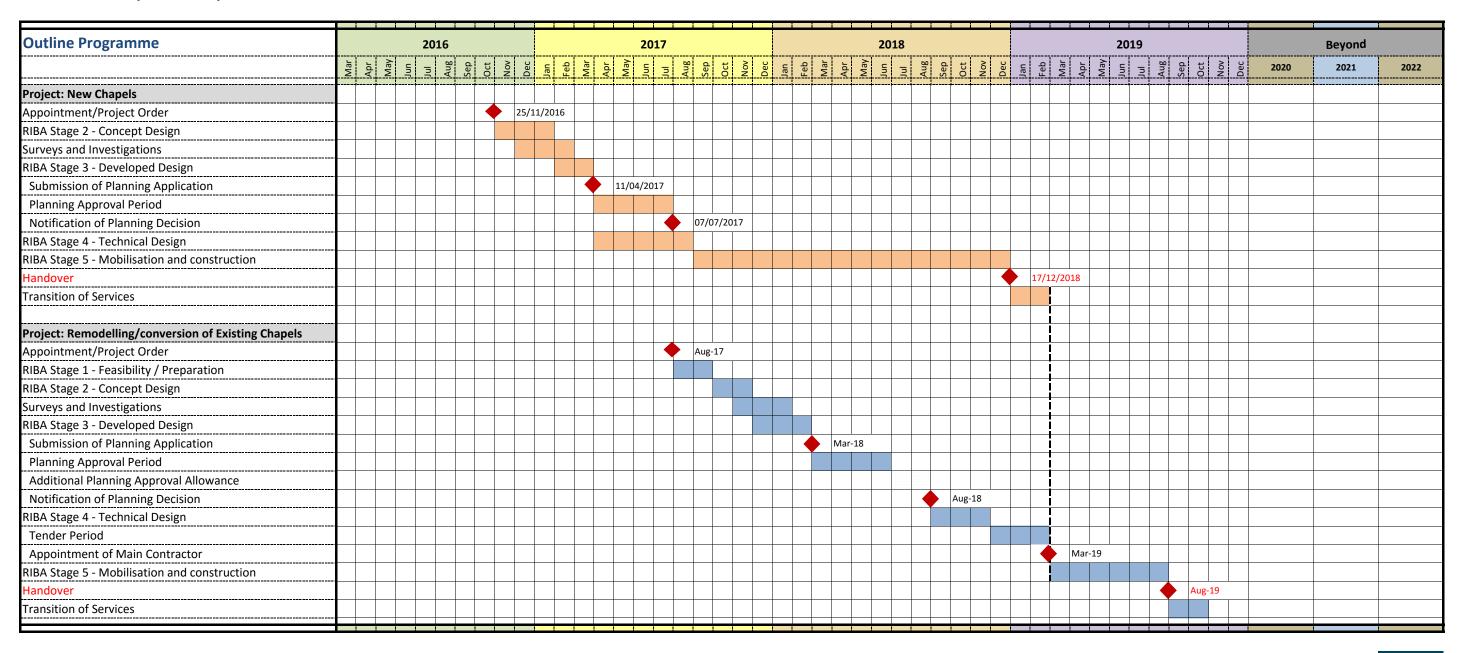
8.4 Transfer of service

The outline programme has allowed for some flexibility for completion of the new chapels, full commissioning and operation of the cremators and transfer of service. It is not until the new facility can fully provide a continuum of service that the remodelling of the chapels should commence.

However, it should be possible to align project development with the completion of the new chapels so that with minimum delay, works can proceed once the existing facilities are vacated and no longer in service. This approach ensures that potential commercial return for the existing chapels is crystallised as the earliest opportunity.



Cheltenham Chapels Development



Note: These Outline programmes assume a traditional procurement route given the nature of the projects and listed status of the existing chapels and grounds.

9.0 Summary

Based upon the assessment and assumptions within this report, the commercial re-use of the existing chapels does provide an alternative approach to both maintaining and protecting these Grade II listed properties. This may also provide for a small revenue. The revenue is not likely to be sufficient to fund the cost of constructing a new second chapel.

However, the business case for developing the second chapel needs to consider more than the immediate financial commitment to construct. There are a number of non-financial considerations which also influence the decision when to construct a second chapel.

I. Timing

To build both chapels simultaneously will both define the construction cost and will also ensure that efficiency of construction is maximised. If the two chapels are built as two separate projects, then there will be a disproportionate increase of cost for the second project, due to additional preliminary costs and extended time on site.

If the second chapel is constructed at a future time, then construction activities will disrupt use of the first new chapel. So for a period of time (maybe 6-8 months), Cheltenham Borough Council would be able to offer a reduced service capacity from the retained operational Grade II listed chapel, as long as construction works did not limit the relocation of coffins to the new cremation facilities.

If both chapels are constructed at the same time, then the current use of both Grade II Chapels would continue until full transfer of service to the new facilities. There would be no apparent change to capacity or service offer to current clients. Revenue levels would continue as forecast.

2. User Experience

It is most important that the client experience remains as calm and stress free as possible. Having two separate chapel locations may cause some confusion for families and last minute stress of having to relocate and park.

This could be further complicated by a second phase of construction works, which would involve an interim relocation before full relocation to a two new chapel offer. There is risk that the integrity of the bereavement service offer could be scrutinised if locations and changes were not well communicated and managed so that client impact is nullified. It is very difficult to always effectively manage individuals' response to change, so some of this may be beyond your control.

3. Re-use of the vacated space

To retain one Grade II listed chapel impacts the use of the vacated spaces. There would be some capital investment required to improve and refurbish the surplus chapel. These works could disrupt the use of the retained chapel, for a period of time, due to noise and necessary vehicular movement.

The re-use of any vacated spaces would be limited by the requirement to observe quiet and reduced movement during services. There is risk that the space could remain empty or used by another department as spare space, which would not generate any revenue to support ongoing maintenance costs of the Grade II listed chapels.

4. Enhancing the Current Bereavement Service Offer

There is an opportunity to enhance the existing bereavement service offer, through new chapels facilities and improved parking as well as offering on site, bereavement related services, such as flowers, stone masons and Wake facilities. With the support of local funeral directors, this could offer Cheltenham a unique one-stop bereavement service offer, that further reduces anxiety for the families.



The commercial use of the existing chapels will be constrained by the legalities of developing a commercial enterprise that operates in harmony with both past and current use of the cemetery. Whilst the legal constraints do not appear to be insurmountable issues, it would be necessary to develop these in more detail before committing to any remodelling of the chapels.

In principle, the chapels can be physically remodelled to provide appropriate accommodation for the preferred commercial use options as set out in this report. The most cost effective solution is to maintain or improve the existing water and toilet facilities for shared use by the new occupants. To create individual units, will require extension and zoning of services, which would increase remodelling costs but not necessarily ensure increased income.

In Summary, the benefits and dis-benefits of constructing the second chapel at the same time as the first new chapel extend far beyond the financial implications. The actual commercial use of the existing chapels is not likely to secure additional income sufficient to support the additional capital cost of constructing the second chapel, however it does seem reasonable that the commercial re-use of the chapels would cover the ongoing costs of maintaining and protecting the chapels, with a little surplus.

This initial study has identified some potential uses for the existing chapels. The development of the preferred commercial use of the existing chapels should be progressed into a full feasibility, which will further define the benefits and revenue potential of this redevelopment.



Appendix



Appendix A

Table of Consultees and Summary Feedback undertaken as part of this Option Study



Register of Consultees to assess Commercial Options

Date	Name	Job Title and Employer	Brief Summary of discussions	Recommendation or comments of note
22.12.2016	Kelly Ballard	Visitor Economy	Requirement for accommodation and potential demand	Considered that this option presented a risk
03.01.2017	Jeremy Williamson	Managing Director, Cheltenham Development Task Force	Discussed service office accommodation	Advised a mixed development of funeral related services and café/wake facility
09.01.2017	Chloe Smart	Planning Officer Environmental and regulatory Services - Cheltenham Borough Council	Submission of outline development proposals to allow initial high-level LPA thoughts/comments. Also, initial organisation of Pre-Application Consultation information.	TBC
22.12.2016	Flexioffices	Serviced office provider	To discuss comparable evidence and office rental demand etc	outlined in the report
22,12.2016	Instant offices	Serviced office provider	As above	As above
22.12.2106	John Ryder commercial	Commercial agents	To discuss demand and rental values for retail, office and catering facilities in Cheltenham area	Relatively buoyant market for rentals and sales etc
03.01.2017	lan George Funeral Directors	Funeral Directors	To discuss demand for and current wake facilities	positive for a wake facility
03.01.2017	Co op funeral services	Funeral Directors	As above	As above
04.01.2017	Selim Smith and co	Funeral Directors	As above	As above

Appendix B

2016 Financial Data for Bereavement Services



Service area broken down by function/activity Cem and Crem	Percentage of staff time spent on each activity during time capture exercise.	Total Number of FTE's per function/activity	Total Budgeted Salary Cost £ per function/activity	Total Income £ per function/ activity	How much do we have to do this? (statutory/ discretionary)	INPUT/ OUTPUT e.g. no of licences, apps, DFG's etc	Estimated Political Priority High (3) Medium (2) Low (1)	Officer priority High (3) Medium (2) Low (1)
Burials					Disposal of the			
Grave preparation	4.2	0.756	£18,369.46		dead is a		3	3
Chapel duties – burials	0.3	0.054	£1,312.10		discretionary			
Public appointments – burials	0.3	0.054	£1,312.10		function, however, once a Council			
Burial admin	1.6	0.288	£6,997.89		decides to take on			
General enquiries/complaints etc	1.1	0.198	£4,811.05	£305,051.00	this function, there	263 Burials		
Burial Memorialisation					are a number of statutory laws that			
Burial memorials admin	0.7	0.126	£3,061.58	£18,450.00	have to be adhered to.	82 Headstone permits		
Cremation					-			
Cremation admin	11	1.98	£48,110.48					
Chapel duties – cremation	4.1	0.738	£17,932.09					
Cremation process	5.9	1.062	£25,804.71					
Cremated remains	0.2	0.036	£874.74					
Public appointments-cremations	0.4	0.072	£1,749.47					
Gen Enq.	1.1	0.198	£4,811.05	£1,201,373.00	1	1961 Cremations		
Cremation Memorialisation					_			
Cremation and memorials admin	2.4	0.432	£10,496.83					
Procurement	0.4	0.072	£1,749.47		1			<u> </u>
Marketing	0.3	0.054	£1,312.10		1			a
Installation of memorialisation	1.1	0.198	£4,811.05	£134,360.00		All income for the numerous kinds of memorialisation available. Agresso doesn't let us split up into the no. of memorials provided and renewal of leases		Page 320
Operations					-			
Grounds maintenance	38.7	6.966	£169,261.42					
External partners – management (TBC)	0.2	0.036	£874.74	£5,000.00		Agreed annual fee with TBC		
Training	1.1	0.198	£4,811.05		1		1	
Staff management	3.2	0.576	£13,995.78		1		1	
Customer services	0.1	0.018	£437.37		1			
Budget monitoring	0.5	0.09	£2,186.84		1		1	
Technical Downtime/Maintenance	8.9	1.602	£38,925.75		1		1	
Other	8.6	1.548	£37,613.65		1		1	
Corp Activities	0.7	0.126	£3,061.58		1		1	
Cleaning	0.7	0.126	£3,061.58		1		1	
H&S First Aid	0.2	0.036	£874.74		1		1	
New Crem Project	2	0.36	£8,747.36		1		1	
•	100	18	£437,368.00	£1,664,234.00	1		1	
Notes: 1. The salary cost and income per funtime capture exercise recently exercalculation, as where staff took bre this time.	cise. I now realise I sh	nouldn't have include	d the 'Other' figure in	n this				

Appendix C

Order of Cost Estimate



Page 322 PICK EVERARD Order of Cost **Estimate** For Cheltenham Crematorium Refurbishment Cheltenham Borough Council Issue Number **Date** 1st February 2017

Issue



Quality checking and version control

Quality check

	NAME	INITIAL	DATE
Originator:	Hussein Ibrahim	HUI	01/02/2017
Technically Checked:	John Peel	JRP	01/02/2017
Arithmetically Checked:	Yvonne Hankwell	YSH	01/02/2017
Type / Page Checked:	Yvonne Hankwell	YSH	01/02/2017
Approved:	Nick Hanson	NGH	01/02/2017

Issue register

Distribution (name and company)	Role	Format	Nr of copies	Tick
Julie Mortimer - Pick Everard	Project Manager	E	I	✓

E = Electronic (email or elink)

D = disk / usb stick

HC = Hard copy

Version control

Issue Number	Date issued
2	01/02/2017
I	13/01/2017

File location

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Issue



- I Introduction, general notes and revision notes & commentary
- **2** Option Summary
- 3 Specification notes, assumptions and exclusions
- 4 Option Estimate(s)

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1. Introduction, general information, revision notes & commentary

I.I - Introduction

- 1.1.1 This Order of Cost Estimate has been prepared by Pick Everard on behalf of Cheltenham Borough Council.
- 1.1.2 The purposes of this Order of Cost Estimate is to provide initial feasibility cost advice.
- 1.1.3 The scheme is currently at stage 2.
- 1.1.4 The project is a refurbishment project and briefly comprises of various different options:
 Offices (no mezzanine): Refurbishment of chapel into 5 office units with WC's and circulation space.

Offices (with mezzanine): Refurbishment of chapel into 5 office units with WC's and circulation space. 3nr internal spiral staircases for accessing mezzanine floors to 3nr units.

Boutique Style Accommodation: Refurbishment of chapel into 4 apartments with mezzanine floor to 3nr apartments providing additional bedroom space. (this cost covers both option 2a and 2b in the Whole Life Cost Model)

Wake facilities (4 units): Refurbishment of chapel into 2 office units, 1 retail unit and 1 food and beverage unit with servery.

Wake facilities (3 units): Option includes refurbishment of existing chapel, 1 retail unit, 1 food and beverage unit and 1 office unit.

- 1.1.5 This Order of Cost Estimate is currently at issue 2.
- 1.1.6 This Order of Cost Estimate is intended only for the use of the requesting party.
- 1.1.7 The base date of this Order of Cost Estimate is January 2017.
- 1.1.8 The estimated construction duration for all options is 20-25 weeks with a commencement date of June 2018
- 1.1.9 These costs are based on a competitive commercial tender process and not a negotiated framework process

1.2 - General information

1.2.1 Schedule of Areas

The following areas have been used for the preparation of this Order of Cost Estimate

	GIFA	NIA
Offices (no mezz)		
Refurbishment	m^2	m^2
Basement level	-	-
Ground Floor	492	478
First Floor	-	-
Total Offices (no mezz)	492	478
Offices (with mezz)		
Refurbishment	m^2	m^2
Basement level	-	-
Ground Floor	492	478
First Floor	147	147
Total Offices (with mezz)	639	625
Boutique Style Accommodation		
Refurbishment	m^2	m^2
Basement level	-	-
Ground Floor	492	471
First Floor	108	108





1. Introduction, general information, revision notes & commentary

Total Boutique Style Accommodation	600	579
Wake facilities (4 units)		
Refurbishment	m^2	m^2
Basement level	-	-
Ground Floor	487	483
First Floor	58	58
Total Wake facilities (4 units)	545	541
Wake facilities (3 units)		
Refurbishment	m^2	m^2
Basement level	-	-
Ground Floor	490	479
First Floor	58	58
Total Wake facilities (3 units)	548	537
	m^2	ha
Site area (c)	N/A	N/A
Site Coverage (a+b / c)		

Site Coverage (a+b / c)

1.2.2 Information Used

1.2.2.1 The following information has been used during the production of this Order of Cost Estimate

Drawing Number / Title	<u>Rev</u>	Comments
Opt_01 - Existing dwg	-	Existing drawing
Opt_01 - Serviced Office_Non-Intervention	-	Offices (no mezz)
Opt_01 - Serviced Office_Serviced Office	-	Offices (with mezz)
Opt_02 - Serviced Apartments	-	Boutique Style accommodation
Opt_03 - Wake facilities	-	Wake facilities (4 units)
Opt_03.1 - Wake facilities	-	Wake facilities (3 units)



 $[\]ensuremath{\ast}$ Area excluded from GIFA calculation as this is an external area



2. Option Summary

The total project cost limit calculated in this Order of Cost Estimate for the selected option(s) is as follows:

	Option -	Offic	ces (no mezz)	Of	fices (with mezz)		outique Style commodation	Wa	ke Facilities (4 units)	Wa	ke Facilities (3 units)
Group Element	GIFA (m2)		492		639		600		545		548
Works cost estimate		£	582,000	£	621,000	£	838,000	£	672,000	£	674,000
Project/design fees estimate		£	116,000	£	124,000	£	168,000	£	135,000	£	135,000
Other development costs estimate		£	-	£	-	£	-	£	-	£	-
Risk allowance estimate		£	70,000	£	74,000	£	100,000	£	80,000	£	80,000
Inflation estimate		£	8,000	£	9,000	£	12,000	£	9,000	£	9,000
VAT assessment		£	-	£	-	£	-	£	-	£	-
Cost Limit Total £		£	776,000	£	828,000	£	1,118,000	£	896,000	£	898,000
£/m² GIFA			1,577.24/m²		1,295.77/m²		I,863.33/m²		I,644.04/m²		1,638.69/m ²
£/m² NIA			1,625.13/m²		1,325.86/m ²		1,931.58/m²		1,656.80/m²		1,671.32/m ²

The above costs should be read in conjunction with the other sections of this Order of Cost Estimate and in particular the specification notes, assumptions and exclusions and revision notes.





3. Specification notes, assumptions and exclusions

3.1 Specification notes - Applies to all Options

3.1.1	Mid range specification level assumed as no design details included
3.1.2	Loose FF&E to offices is provided but excludes data hardware, photo copiers and printers and the like, telephony
	systems, canteen equipment and the like
3.1.3	No loose furniture has been included to the residential apartments
3.1.4	Fixed white goods to residential apartments are included
3.1.5	Café area furniture is included as is the servery costs
3.1.6	We have made an allowance for the survey and removal of asbestos but have assumed there is no significant asbestos
	contamination

3.2 General assumptions

3.2.1	It is assumed offices are not air conditioned
3.2.2	Works to be undertaken in single phase;
3.2.3	Assumed there is no demolition requirement except minor internal alterations;
3.2.4	Assumed gas, water, electricity and data are readily available;
3.2.5	Assumed building is structurally sound;
3.2.6	Assumed no roof repair/replacement is required.
3.2.7	Assumed mezzanine floors can be constructed directly off the ground floor without any additional foundations
3.2.8	We have assumed that generally a mid range specification selection of loose furniture is included for in the costs. This
	does not include items such as printers, data hardware, TV's, computer systems and the like, bar / canteen equipment,
	telephone handsets, data cabling and the like

3.3 Exclusions

3.3.1	Legal fees;
3.3.2	Contaminated soil removal and any necessary gas monitoring required;
3.3.3	Removal of any existing foundations;
3.3.4	Any costs associated with archaeological permissions or findings;
3.3.5	Statutory fees;
3.3.6	Other development costs;
3.3.7	ICT provisions;
3.3.8	Land purchase costs;
3.3.9	VAT;
3.3.10	Discharge of any section 278/106 agreements imposed by planners;
3.3.11	Any further planning constraints.



			Issue I
	4. Option Estimate, Offices (no mezz)	GIFA	(m2) 492
	W. L. C. L. F. H.		
1.0	Works Cost Estimate		
1.1	Facilitating works estimate		
	I.I.I New Build Works		-
	1.1.2 Refurbishment / Remodelling works		-
1.2	Building Works 1.2.1 New Build Works		
	11211		- 582,000
			362,000
13	1.2.3 Consequential Improvements Main Contractors Preliminaries		Incl
1.4	Main Contractors Overheads and Profit		Incl
	Works cost estimate (A)	1,183/m²	582,000
2.0	Project/Design Fees		
2.1	Project/design team fees		
2.1.1	General design team fees	15.0%	87.000
2.1.2		5.0%	29,000
2.1.2	rigency lees	3.0%	27,000
	Project/Design Fees (B)	236/m²	116,000
3.0	Other Development Costs		
3.1	Other development/project costs estimate		
3.1.1	Excluded		-
	Other development costs (C)		
4.0	Base Cost Estimate		
	Base cost estimate (D) = A + B + C	1,419/m²	698,000
5.0	Risk Allowance Estimate		
5.1	Design development risks estimate	3.0%	21,000
5.2	Construction risks estimate	2.0%	14,000
5.3	Employers change risk estimate	3.0%	21,000
5.4	Employers other risks estimate	2.0%	14,000
	Risk allowance estimate (E)	142/m²	70,000
6.0	Inflation		
6.1	Tender Inflation to tender return	(0.35% 3,000
6.2	Construction Inflation to mid point of construction	(0.70% 5,000
	Inflation estimate (F)	16/m²	8,000
7.0	Cost Limit		
7.1	Cost limit (G) (D + E + F)		776,000
7.2	VAT Assessment (H) - Excluded		
	Total Cost Limit Total (G + H)	1,577/m²	776,000



			Issue	1
	4. Option Estimate, Offices (with mezz)		GIFA (m2)	639
1.0	Works Cost Estimate			
1.1	Facilitating works estimate			
	I.I.I New Build Works			-
	1.1.2 Refurbishment / Remodelling works			-
1.2	Building Works 1.2.1 New Build Works			
	1.2.2 Refurbishment / Remodelling works			621,000
	1.2.3 Consequential Improvements			621,000
1.3	Main Contractors Preliminaries			Incl
1.4	Main Contractors Overheads and Profit			Incl
	Works cost estimate (A)	972/m²	_	621,000
2.0	Project/Design Fees			
2.1	Project/design team fees			
2.1.1	General design team fees		15.0%	93,000
2.1.2	Agency fees		5.0%	31,000
	Project/Design Fees (B)	194/m²		124,000
3.0	Other Development Costs			
3.1	Other development/project costs estimate			
3.1.1	Excluded			-
	Other development costs (C)			-
4.0	Base Cost Estimate			
	Base cost estimate (D) = A + B + C	I, I 66/m²		745,000
5.0	Risk Allowance Estimate			
5. I	Design development risks estimate		3.0%	22,000
5.2	Construction risks estimate		2.0%	15,000
5.3	Employers change risk estimate		3.0%	22,000
5.4	Employers other risks estimate		2.0%	15,000
	Risk allowance estimate (E)	I I 6/m²		74,000
6.0	Inflation			
6.1	Tender Inflation to tender return		0.35%	3,000
6.2	Construction Inflation to mid point of construction		0.70%	6,000
	·			·
	Inflation estimate (F)	I 4/m²		9,000
7.0	Cost Limit			
7.1	Cost limit (G) (D + E + F)			828,000
7.2	VAT Assessment (H) - Excluded			
	Total Cost Limit Total (G + H)	1,296/m²		828,000
	Total Cost Elithic Total (G . 11)	-1,21-4111		<u> </u>



			Issue	1
	4. Option Estimate, Boutique Accommod	ation	GIFA (m2)	600
1.0	Works Cost Estimate			
1.1	Facilitating works estimate			
	1.1.1 New Build Works			-
1.2	1.1.2 Refurbishment / Remodelling works Building Works			-
1.2	1.2.1 New Build Works			
	1.2.2 Refurbishment / Remodelling works			838,000
	1.2.3 Consequential Improvements			030,000
1.3	Main Contractors Preliminaries			Incl
1.4	Main Contractors Overheads and Profit			Incl
	Works cost estimate (A)	1,397/m²		838,000
2.0	Project/Design Fees			
2.1	Project/design rees Project/design team fees			
2.1.1	General design team fees		15.0%	126,000
2.1.1	Agency fees		5.0%	42,000
2.1.2	regency rees		3.0%	42,000
	Project/Design Fees (B)	280/m²		168,000
3.0	Other Development Costs			
3.1	Other development/project costs estimate			
3.1.1	Excluded			-
	Other development costs (C)			
4.0	Base Cost Estimate			
	Base cost estimate (D) = A + B + C	1,677/m²		1,006,000
5.0	Risk Allowance Estimate			
5.1	Design development risks estimate		3.0%	30,000
5.2	Construction risks estimate		2.0%	20,000
5.3	Employers change risk estimate		3.0%	30,000
5.4	Employers other risks estimate		2.0%	20,000
	Risk allowance estimate (E)	167/m²	_	100,000
6.0	Inflation			
6.1	Tender Inflation to tender return		0.35%	4,000
6.2	Construction Inflation to mid point of construction		0.70%	8,000
	Inflation estimate (F)	20/m²		12,000
7.0	Cost Limit			
7.1	Cost limit (G) (D + E + F)			1,118,000
7.2	VAT Assessment (H) - Excluded			, -,
	Total Cost Limit Total (G + H)	1,863/m²		1,118,000
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,



		Issue	1
	4. Option Estimate, Wake facilities (4 u	ınits) GIFA (m²)	545
	Works Cost Estimate		
1.1	Facilitating works estimate		
	I.I.I New Build Works		-
	1.1.2 Refurbishment / Remodelling works		-
1.2	Building Works 1.2.1 New Build Works		
	1.2.2 Refurbishment / Remodelling works		672,000
	1.2.3 Consequential Improvements		672,000
1.3			Incl
1.4	Main Contractors Overheads and Profit		Incl
	Works cost estimate (A)	1,233/m²	672,000
2.0	Project/Design Fees		
2.1	Project/design team fees		
2.1.1	General design team fees	15.0%	101,000
2.1.2	Agency fees	5.0%	34,000
	Project/Design Fees (B)	248/m²	135,000
3.0	Other Development Costs		
3.1	Other development/project costs estimate		
3.1.1	Excluded		-
	Other development costs (C)		
4.0	Base Cost Estimate		
	Base cost estimate (D) = A + B + C	1,481/m²	807,000
5.0	Risk Allowance Estimate		
5.1	Design development risks estimate	3.0%	24,000
5.2	Construction risks estimate	2.0%	16,000
5.3	Employers change risk estimate	3.0%	24,000
5.4	Employers other risks estimate	2.0%	16,000
	Risk allowance estimate (E)	147/m²	80,000
6.0	Inflation		
6.1	Tender Inflation to tender return	0.35%	3,000
6.2	Construction Inflation to mid point of construction	0.70%	6,000
	Inflation estimate (F)	17/m²	9,000
7.0	Cost Limit		
7.1	Cost limit (G) (D + E + F)		896,000
7.2	VAT Assessment (H) - Excluded		
	Total Cost Limit Total (G + H)	I ,644/m²	896,000



		Issue	1
	4. Option Estimate, Wake facilities (3 units	GIFA (m2)	548
1.0	Works Cost Estimate		
1.1	Facilitating works estimate		
	1.1.1 New Build Works 1.1.2 Refurbishment / Remodelling works		_
12	1.1.2 Refurbishment / Remodelling worksBuilding Works		-
1.2	1.2.1 New Build Works		_
	1.2.2 Refurbishment / Remodelling works		674,000
	1.2.3 Consequential Improvements		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1.3	Main Contractors Preliminaries		Incl
1.4	Main Contractors Overheads and Profit		Incl
	Works cost estimate (A)	1,230/m²	674,000
2.0	Project/Design Fees		
2.1	Project/design team fees		
2.1.1	General design team fees	15.0%	101,000
2.1.2	Agency fees	5.0%	34,000
	Project/Design Fees (B)	246/m²	135,000
3.0	Other Development Costs		
3.I	Other development/project costs estimate		
3.1.1	Excluded		-
	Other development costs (C)		
4.0	Base Cost Estimate		
	Base cost estimate (D) = A + B + C	I,476/m²	809,000
5.0	Risk Allowance Estimate		
5.1	Design development risks estimate	3.0%	24,000
5.2	Construction risks estimate	2.0%	16,000
5.3	Employers change risk estimate	3.0%	24,000
5.4	Employers other risks estimate	2.0%	16,000
	Risk allowance estimate (E)	146/m²	80,000
6.0	Inflation		
6. I	Tender Inflation to tender return	0.35%	3,000
6.2	Construction Inflation to mid point of construction	0.70%	6,000
	Inflation estimate (F)	16/m²	9,000
7.0	Cost Limit		
7.1	Cost limit (G) (D + E + F)		898,000
7.2	VAT Assessment (H) - Excluded		
	Total Cost Limit Total (G + H)	1,639/m²	898,000

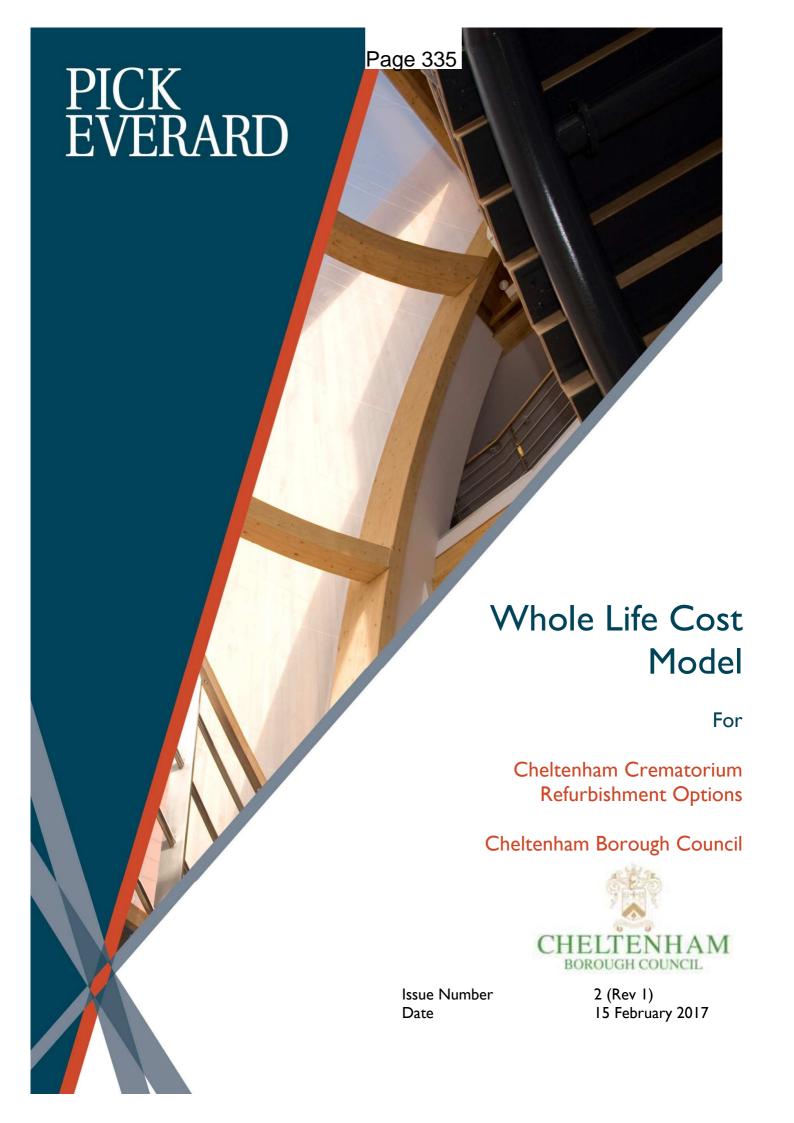


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Appendix D

Whole Life Cost Model







Quality checking and version control

Quality check

	NAME	INITIAL	DATE
Originator:	John Peel	JRP	01/02/2017
Technically Checked:	Shirley Ashford	SJA	01/02/2017
Arithmetically Checked:	Hesham ElGably	HME	01/02/2017
Type / Page Checked:	Hesham ElGably	HME	01/02/2017
Approved:	Nick Hanson	NGH	01/02/2017

Issue register

Distribution (name and company)	Role	Format	Nr of copies	Tick
Julie Mortimer - Project Manager	Project Manager	E	I	✓

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Version control

Issue Number	Date issued
2	01/02/2017
I	13/01/2017

File location

S:\Bury\2016\161564 - CBC - Two Chapels\Quantity Surveyors\17-0 Technical\17-8 Cost Estimates\X001JRP - 161564 - WLC model Master r6 AAR.xlsx





Contents

- I Introduction, general information and revision notes & commentary
- 2 Specifications, assumptions and exclusions and general notes
- 3 Master Summary
- 4 Annualised Summaries (per option)
- 5 Life Cycle Cost Summaries (per option)
- 6 Summary of rental values (year 1)

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- 1.1.3 The scheme is currently at stage 2.
- 1.1.4 The project is a refurbishment project and briefly comprises of 3 different options:

Offices (no mezzanine): Refurbishment of chapel into 5 office units with WC's and circulation space.

Offices (with mezzanine): Refurbishment of chapel into 5 office units with WC's and circulation space. 3nr internal spiral staircases for accessing mezzanine floors to 3nr units.

Boutique accommodation: Refurbishment of chapel into 4 apartments with mezzanine floor to 3nr apartments providing additional bedroom space (there are two rental options for this).

Wake facilities / retail / offices: Refurbishment of chapel into 2 office units, 1 retail unit and 1 food and beverage unit with servery.

Wake facilities / retail / office: Option includes refurbishment of existing chapel, 1 retail unit, 1 food and beverage unit and 1 office unit.

- 1.1.5 This Whole Life Cost Model is currently at issue 1.
- 1.1.6 This Whole Life Cost Model is intended only for the use of the requesting party.
- 1.1.7 The base date of this Whole Life Cost Model is January 2017.
- 1.1.8 The estimated construction duration for all options is 20 25 weeks with a commencement date of June 2018.

1.2 - General information

1.2.1 Schedule of Areas

The following areas have been used for the preparation of this Whole Life Cost Model

	GIFA	NIA
Offices (no mezzanine)		
Refurbishment	m^2	m^2
Basement level	-	-
Ground Floor	492	478
First Floor	-	-
Total Offices (no mezz)	492	478
Offices (with mezzanine)		
Refurbishment	m^2	m^2
Basement level	-	-
Ground Floor	492	478
First Floor	147	147
Total Offices (with mezz)	639	625
Boutique style accommodation		
Refurbishment	m^2	m^2
Basement level	-	-
Ground Floor	492	471
First Floor	108	108
Total Boutique accommodation	600	579





1. Introduction, general information, revision notes & commentary

Wake facilities (4 units)		
Refurbishment	m^2	m^2
Basement level	-	-
Ground Floor	487	483
First Floor	58	58
Total Wake facilities (4 units)	545	541
Wake facilities (3 units)		
Refurbishment	m^2	m^2
Basement level	-	-
Ground Floor	490	479
First Floor	58	58
Total Wake facilities (3 units)	548	537
	m^2	ha
Site area (c)	N/A	N/A
orce area (c)	14/75	1 1// 1

Site Coverage (a+ b / c)

1.2.2 Information Used

1.2.2.1 The following information has been used during the production of this Whole Life Cost Model

<u>Drawing Number / Title</u>	<u>Rev</u>	Comments
Opt_01 - Existing dwg	-	Existing drawing
Opt_01 - Serviced Office_Non-Intervention	-	Offices (no mezz)
Opt_01 - Serviced Office_Serviced Office	-	Offices (with mezz)
Opt_02 - Serviced Apartments	-	Boutique Style accommodation
Opt_03 - Wake facilities	-	Wake facilities (4 units)
Opt_03.1 - Wake facilities	-	Wake facilities (3 units)
Other Documents	Rev	
Report by Tim Downing on rental values	21.12.16	



 $[\]ensuremath{^*}$ Area excluded from GIFA calculation as this is an external area



2. Specification notes, assumptions and exclusions

3.1 General Notes

Generally
All costs shown at NPV with a 3.5% discount rate assumed over 25 years. The NVP is applied to both expenditure and income
All revenues are compounded by 2% (starting at year 2) to reflect anticipated increases in commercial rents over the life of the scheme. This is applied prior to the application of the 3.5% discount for NPV.
All costs are applied to GIFA.
Costs include allowance for design fees & contingency generally for maintenance based items. We have not included these costs on "low risk" items such as cleaning and utilities.
Rates are "all in" rates covering major and minor repairs, scheduled and unscheduled maintenance for both fabric and services.
Grounds maintenance costs have been excluded.
Council direct administration costs (staff, legal fees) and the like are excluded in the life cycle costs as these have not been advised by the council.
Revenues have been reduced to reflect net values (i.e. they include reductions for occupancy void loss and administration costs of the leases).
Cross refer to building cost estimates to understand the notes and exclusions on the base build costs carried forward to this whole life model.
All costs exclude Taxes and VAT.
Offices option notes
This option relates to the provision of fully serviced offices leased by the council on short term "easy in easy out" basis.
One option has no mezzanine the other has a mezzanine floor.
The costs represent the provision of full maintenance provisions and operational costs being born by the council.
Rental values have been increased to £22pm2 to reflect the above provision.
The rental values reflect an anticipated occupancy loss of 20% per annum.
Boutique style accommodation notes
This option relates to the provision of fully serviced apartments. The scheme design and life cycle cost for both options are
identical. However the rental options differ so we have created two distinct options to reflect this.
The first option relates to the provision of boutique style visitor accommodation. This is based on a self catering situation.
The gross rental income has been offset by 40% to reflect occupancy costs and administration costs.
The second option relates to boutique style accommodation rented out on a permanent basis. Rental incomes included in this
whole life model reflect 15% administration costs and potential vacancy rates.
Wake facilities notes
The final option is a mixture of retail, office and wake facilities.
The lease arrangements for the final option differ to the above in that the council will only be responsible for life cycle costs to
common parts. The 4 unit option has 77m2 of common parts and the 3 unit option has no common parts.
We have allowed for a 5 yearly cycle of decoration and a 10 yearly cycle of maintenance to common parts.
This is to reflect the fact that the council will have to decorate periodically as tenants vacate premises and new leases are let.
The 4 unit option does include cleaning and utilities to the areas not demised to tenants.
The 3 unit option has no utility or cleaning costs as these will be carried out be the tenants as the building is fully demised to



tenants.



2. Specification notes, assumptions and exclusions

3.1.4.7 A 10% reduction has been included for revenue incomes as requested by the client.

3.2 General assumptions

- 3.2.1 We have assumed that generally a mid range specification selection of loose furniture is included for in the costs. This does not include items such as printers, data hardware, TV's, computer systems and the like, bar / canteen equipment, telephone handsets, data cabling and the like
- 3.2.2 We have assumed that this appraisal is not subject to any sensitivity analysis or optimism bias requirements.
- 3.2.3 We have assumed that rental values given today will not commence until year I of the project.
- 3.2.4 We have assumed 97.5% of the capital cost will be paid in year 0 and the final 2.5% will be paid in year 1 to reflect the release of retention.

3.3 Exclusions

3.3.6

3.3.1	Grounds maintenance.
3.3.2	Legal fees.
3.3.3	VAT.
3.3.4	Other taxes.
3.3.5	Council administration costs (this also includes insurance).

Decanting costs.



\equiv	

3. Master Summary GIFA (m2) 492 639 600 600 545 548

	Residual balance at 25 years (B - A) (negative balances shown in bracket)	(5,000)	366,000	732,000	(1,086,000)	168,000	519,000
	Total Revenue (B)*	1,444,000	2,068,000	2,671,000	853,000	1,160,000	1,458,000
2.I Rei	ntal Incomes	1,444,109	2,068,394	2,671,316	852,522	1,160,078	1,457,500
2.0 Re	evenue						
	Total Expenditure (A)*	1,449,000	1,702,000	1,939,000	1,939,000	992,000	939,000
1.2	2.7 Other Costs (excluded)	Excl	Excl	Excl	Excl	Excl	Excl 6
1.2	,	Excl	Excl	Excl	Excl	Excl	Excl
1.2	2.5 Utilities	190,559	247,495	232,389	232,389	29,823	-
1.2	2.4 Cleaning	162,178	210,634	197,778	197,778	25,382	-
1.2	Grounds Maintenance (excluded) assumed already being maintained by council	Excl	Excl	Excl	Excl	Excl	Excl
1.2	2.2 Decoration	15,000	19,482	18,293	18,293	15,493	15,578
1.2	2.1 Major & Minor Replacement & Repair (Fabric & Services)	305,250	396,452	372,256	372,256	24,855	24,991
1.2 Life	e Cycle Maintenance Costs						
	kpenditure onstruction Build Costs	776,000	828,000	1,118,000	1,118,000	896,000	898,000
IO Ex	en and i 4 · · · · a		mezz)	holiday let	permanent let	units)	units)
-		Offices (no mezz)					`
		_	Offices (with	Boutique style	Boutique style	Wake facilities (4	Wake facilities (3

^{*} All figures are rounded to the nearest 1000



	e and Revenue Su	·	es no mezzan	nine																						
GIFA	492 m2																									
Cost Centre	Annual Cost Year 0	Year I	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year II	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25
nditure																										
l Cost Outlay rcle Costs Costs	756,600 -	19,400 39,452	38,118	36,829	35,583	34,380	33,218	32,094	31,009	29,960	28,947	27,968	27,023	26,109	25,226	24,373	23,549	22,752	21,983	21,239	20,521	19,827	19,157	18,509	17,883	17,278
Sub total	756,600	58,852	38,118	36,829	35,583	34,380	33,218	32,094	31,009	29,960	28,947	27,968	27,023	26,109	25,226	24,373	23,549	22,752	21,983	21,239	20,521	19,827	19,157	18,509	17,883	17,278
nulative Expenditure	756,600	815,452	853,570	890,399	925,982	960,362	993,580	1,025,674	1,056,683	1,086,644	1,115,591	1,143,559	1,170,582	1,196,690	1,221,916	1,246,289	1,269,837	1,292,590	1,314,572	1,335,812	1,356,333	1,376,160	1,395,317	1,413,826	1,431,709	1,448,987
e																										
5		68,444	67,452	66,475	65,512	64,562	63,626	62,704	61,796	60,900	60,017	59,148	58,290	57,446	56,613	55,792	54,984	54,187	53,402	52,628	51,865	51,113	50,373	49,643	48,923	48,214
Sub total		68,444	67,452	66,475	65,512	64,562	63,626	62,704	61,796	60,900	60,017	59,148	58,290	57,446	56,613	55,792	54,984	54,187	53,402	52,628	51,865	51,113	50,373	49,643	48,923	48,214
Cumulative Revenue		68,444	135,897	202,372	267,883	332,445	396,072	458,776	520,572	581,472	641,489	700,636	758,927	816,372	872,985	928,778	983,762	1,037,949	1,091,350	1,143,978	1,195,843	1,246,956	1,297,329	1,346,972	1,395,895	1,444,109
	- 756,600 -	747,008 -	717,673 -	688,027 -	658,099 -	627,917 -	597,508 -	566,898 -	536,112 -	505,172 -	474,102 -	442,923 -	411,655 -	380,318 -	348,931 -	317,511 -	286,076 -	254,641 -	223,222 -	191,834 -	160,490 -	129,204 -	97,988 -	66,854 -	35,814 -	4,878
4. 2 Annualised Expenditu	ire and Revenue	Summary - Of	fices with me	zzanine																						
GIFA	639 m2																									
Cost Centre	Annual Cost Year 0	Year I	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year II	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25
ture																										
Cost Outlay e Costs	807,300 -	20,700 51,240	49,507	47,833	46,215	44,652	43,142	41,683	40,274	38,912	37,596	36,325	35,096	33,909	32,763	31,655	30,584	29,550	28,551	27,585	26,653	25,751	24,880	24,039	23,226	22,441
Costs				47.833	46.215	44.652	43,142	41,683	40,274	38,912	37,596	36,325	35,096	33,909	32,763	31,655	30,584	29,550	28,551	27,585	26,653	25,751	24,880	24,039	23,226	22,441
	807,300	71,940	49,507	47,833																						
Sub total	807,300 807,300	71,940 879,240	49,507 928,746	976,579	1,022,794	1,067,446	1,110,589	1,152,272	1,192,546	1,231,458	1,269,054	1,305,378	1,340,475	1,374,384	1,407,147	1,438,802	1,469,386	1,498,936	1,527,487	1,555,073	1,581,725	1,607,476	1,632,357	1,656,396	1,679,622	1,702,063
	,		,	.,		92,472	91,132	1,152,272 89.811	1,192,546	1,231,458	1,269,054	1,305,378 84.717	1,340,475	82,279	81,087	79.911	1,469,386 78.753	77.612	76.487	75,379	74.286	73,210	72,149	71,103	70,072	1,702,063 69,057



GIFA	600 m ²	2																									
Cost Centre	Annual Cost Year 0	Year I	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year II	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Tot
nditure																											
al Cost Outlay ycle Costs • Costs	1,090,050	27,950 48,112	46,485	44,913	43,394	41,927	40,509	39,139	37,816	36,537	35,301	34,108	32,954	31,840	30,763	29,723	28,718	27,747	26,808	25,902	25,026	24,180	23,362	22,572	21,809	21,071	1,118 820
Sub total	1,090,050	76,062	46,485	44,913	43,394	41,927	40,509	39,139	37,816	36,537	35,301	34,108	32,954	31,840	30,763	29,723	28,718	27,747	26,808	25,902	25,026	24,180	23,362	22,572	21,809	21,071	1,938
umulative Expenditure	1,090,050	1,166,112	1,212,597	1,257,511	1,300,905	1,342,832	1,383,342	1,422,481	1,460,297	1,496,834	1,532,135	1,566,243	1,599,197	1,631,037	1,661,800	1,691,523	1,720,241	1,747,987	1,774,796	1,800,697	1,825,723	1,849,903	1,873,265	1,895,837	1,917,645	1,938,716	
nue																											
- 5		126,609	124,774	122,965	121,183	119,427	117,696	115,991	114,309	112,653	111,020	109,411	107,826	106,263	104,723	103,205	101,709	100,235	98,783	97,351	95,940	94,550	93,179	91,829	90,498	89,187	2,67
Sub total		126,609	124,774	122,965	121,183	119,427	117,696	115,991	114,309	112,653	111,020	109,411	107,826	106,263	104,723	103,205	101,709	100,235	98,783	97,351	95,940	94,550	93,179	91,829	90,498	89,187	2,67
								040 / 45	0/2.055	1,075,607	1 104 420	1 204 020	1 403 864	1.510.127	1.614.850	1,718,055	1,819,764	1.920.000	2.018.782	2.116.133	2,212,073	2,306,623	2,399,802	2,491,631	2,582,130	2.671.316	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		251,382 961,215 - 7 - Boutique s		,			848,645 573,836 -		421,226 -			195,333 -		46,950	26,532	99,524	172,012	243,987	315,436	386,350	456,720	526,538	595,795	664,484	732,600	
te	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,039,504 - ue Summary	961,215 -	883,163 -	805,374 -	727,874 -	650,687 -									26,532	99,524				386,350	456,720		595,795	664,484		
4.4 Annualised Expend	liture and Reven	1,039,504 - ue Summary 2	961,215 - 7 - Boutique s	883,163 - tyle accomr	805,374 - modation, pe	727,874 - rmanent lets	650,687 -	573,836 -	497,342 -	421,226 -	345,507 -	270,204 -		120,910 -	46,950			172,012	243,987	315,436			526,538			732,600	
GIFA	liture and Reven	1,039,504 - ue Summary 2	961,215 - 7 - Boutique s	883,163 - tyle accomr	805,374 - modation, pe	727,874 - rmanent lets	650,687 -	573,836 -	497,342 -	421,226 -	345,507 -	270,204 -	195,333 -	120,910 -	46,950			172,012	243,987	315,436			526,538			732,600	
4.4 Annualised Expend	liture and Reven	1,039,504 - ue Summary 2	961,215 - 7 - Boutique s	883,163 - tyle accomr	805,374 - modation, pe	727,874 - rmanent lets	650,687 -	573,836 -	497,342 -	421,226 -	345,507 -	270,204 -	195,333 -	120,910 -	46,950			172,012	243,987	315,436			526,538			732,600	1,11
4.4 Annualised Expend GIFA Cost Centre diditure	600 m Annual Cost Year 0	1.039,504 - ue Summary 2 Year I	961,215 - Year 2	883,163 - tyle accomr Year 3	805,374 - nodation, per Year 4	727.874 - rmanent lets Year 5 41,927	650,687 - Year 6	Year 7	497,342 - Year 8	421,226 - Year 9	345,507 -	270,204 - Year II	195,333 - Year 12	120,910 - Year 13	46,950 Year 14	Year 15 29,723	Year 16	172,012 Year 17	243,987 Year 18 26,808	315,436 Year 19 25,902	Year 20 25,026	Year 21	526,538 Year 22 23,362	Year 23	Year 24	732,600 Year 25	1,11 82
4.4 Annualised Expend GIFA Cost Centre diture Cost Outlay cle Costs Costs	600 m Annual Cost Year 0 1,090,050	1,039,504 - ue Summar) 2 Year 1 27,950 48,112 76,062	961,215 - 7 - Boutique s Year 2 46,485	883,163 - tyle accomm Year 3 44,913	805,374 - nodation, pe Year 4 43,394	727.874 - rmanent lets Year 5 41,927	Year 6 40,509	573,836 - Year 7 39,139	497,342 - Year 8 37,816	421,226 - Year 9 36,537	345,507 - Year I0 35,301	270,204 - Year II 34,108	195,333 - Year 12	Year 13 31,840	46,950 Year 14 30,763	Year 15 29,723 29,723	Year 16 28,718 28,718	172,012 Year 17 27,747	243,987 Year 18 26,808	315,436 Year 19 25,902 25,902	Year 20 25,026 25,026	Year 21 24,180 24,180	526,538 Year 22 23,362 23,362	Year 23 22,572 22,572	Year 24 21,809 21,809	732,600 Year 25 21,071	1,1 8
4.4 Annualised Expend GIFA Cost Centre diture Cost Outlay le Costs Sub total	600 m Annual Cost Year 0 1,090,050	1,039,504 - ue Summar) 2 Year 1 27,950 48,112 76,062	961,215 - 7 - Boutique s Year 2 46,485	883,163 - tyle accomm Year 3 44,913	805,374 - nodation, pe Year 4 43,394	727.874 - rmanent lets Year 5 41,927	Year 6 40,509	573,836 - Year 7 39,139	497,342 - Year 8 37,816	421,226 - Year 9 36,537	345,507 - Year I0 35,301	270,204 - Year II 34,108	Year 12 32,954	Year 13 31,840	46,950 Year 14 30,763	Year 15 29,723 29,723	Year 16 28,718 28,718	172,012 Year 17 27,747	243,987 Year 18 26,808	315,436 Year 19 25,902 25,902	Year 20 25,026 25,026	Year 21 24,180 24,180	526,538 Year 22 23,362 23,362	Year 23 22,572 22,572	Year 24 21,809 21,809	732,600 Year 25 21,071	1,1 8
4.4 Annualised Expend GIFA Cost Centre liture Cost Outlay le Costs Costs Sub total sulative Expenditure	600 m Annual Cost Year 0 1,090,050	1,039,504 - ue Summar) 2 Year 1 27,950 48,112 76,062	961,215 - 7 - Boutique s Year 2 46,485	883,163 - tyle accomm Year 3 44,913	805,374 - nodation, pe Year 4 43,394	727.874 - rmanent lets Year 5 41,927	Year 6 40,509	573,836 - Year 7 39,139	497,342 - Year 8 37,816	421,226 - Year 9 36,537	345,507 - Year I0 35,301	270,204 - Year II 34,108	Year 12 32,954	Year 13 31,840	46,950 Year 14 30,763	Year 15 29,723 29,723	Year 16 28,718 28,718	172,012 Year 17 27,747	243,987 Year 18 26,808	315,436 Year 19 25,902 25,902	Year 20 25,026 25,026	Year 21 24,180 24,180	526,538 Year 22 23,362 23,362	Year 23 22,572 22,572	Year 24 21,809 21,809	732,600 Year 25 21,071	1,1
4.4 Annualised Expend GIFA Cost Centre I Cost Outlay vicle Costs Costs	600 m Annual Cost Year 0 1,090,050	1,039,504 - ue Summary 2 Year 1 27,950 48,112 76,062	961,215 - 7 - Boutique s Year 2 46,485 46,485 1,212,597	883,163 - tyle accomm Year 3 44,913 44,913	805,374 - nodation, pe Year 4 43,394 43,394 1,300,905	727,874 - rmanent lets Year 5 41,927 41,927 1,342,832	Year 6 40,509 40,509 1,383,342	Year 7 39,139 39,139 1,422,481	Year 8 37.816 37.816 1,460,297	Year 9 36,537 36,537	345,507 - Year 10 35,301 35,301 1,532,135	Year II 34,108 34,108 1,566,243	Year 12 32,954 32,954 1,599,197	Year 13 31,840 31,840 1,631,037	46,950 Year 14 30,763 30,763 1,661,800	Year 15 29,723 29,723 1,691,523	Year 16 28,718 28,718 1,720,241	Year 17 27,747 27,747 1,747,987	Year 18 26,808 26,808 1,774,796	315,436 Year 19 25,902 25,902 1,800,697	Year 20 25,026 25,026 1,825,723	Year 21 24,180 24,180 1,849,903	Year 22 23,362 23,362 1,873,265	Year 23 22,572 22,572 1,895,837	Year 24 21,809 21,809 1,917,645	732,600 Year 25 21,071 21,071 1,938,716	1,1



				s (4 units)																							
GIFA	545 m2	1																									
Cost Centre	Annual Cost Year 0	Year I	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year II	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	
ure																											
ost Outlay Costs sts	873,600 -	22,400 3,236	3,127	3,021	2,919	7,064	2,725	2,633	2,544	2,458	20,492	2,294	2,217	2,142	2,069	5,008	1,932	1,866	1,803	1,742	14,527	1,626	1,571	1,518	1,467	3,550	8
Sub total	873,600	25,636	3,127	3,021	2,919	7,064	2,725	2,633	2,544	2,458	20,492	2,294	2,217	2,142	2,069	5,008	1,932	1,866	1,803	1,742	14,527	1,626	1,571	1,518	1,467	3,550	9
lative Expenditure	873,600	899,236	902,363	905,384	908,303	915,367	918,092	920,725	923,269	925,726	946,218	948,513	950,729	952,871	954,940	959,948	961,880	963,746	965,550	967,292	981,819	983,445	985,017	986,535	988,002	991,552	
		54,983	54,186	53,400	52,627	51,864	51,112	50,371	49,641	48,922	48,213	47,514	46,826	46,147	45,478	44,819	44,170	43,529	42,899	42,277	41,664	41,060	40,465	39,879	39,301	38,731	I,
Sub total		54,983	54,186	53,400	52,627	51,864	51,112	50,371	49,641	48,922	48,213	47,514	46,826	46,147	45,478	44,819	44,170	43,529	42,899	42,277	41,664	41,060	40,465	39,879	39,301	38,731	1.
mulative Revenue		54,983	109,168	162,569	215,195	267,059	318,171	368,543	418,184	467,106	515,319	562,833	609,659	655,806	701,284	746,103	790,273	833,802	876,701	918,977	960,642	1,001,702	1,042,167	1,082,046	1,121,346	1,160,078	
	873,600 -	844,254 -	793,195 -	742,815 -	693,108 -	648,308 -	599,921 -	552,182 -	505,084 -	458,620 -	430,899 -	385,679 -	341,070 -	297,065 -	253,656 -	213,845 -	171,607 -	129,944 -	88,849 -	48,314 -	21,178	18,256	57,150	95,511	133,344	168,525	
4.6 Annualised Expendi	ture and Reven	ue Summary	- Wake facilit	ies (3 units)																							
GIFA	548 m	2																									
Cost Centre	Annual Cost Year 0	Year I	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year II	Year 12	Year 13	Year I4	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	
ure																											
ost Outlay Costs sts	875,550 -	22,450 -	-	-	-	4,268		-		-	18,217	-	-	-	-	3,025	-	-	-	-	12,915	-	-	-	-	2,145	
Sub total	875,550	22,450	-			4,268					18,217		-			3,025			-		12,915				-	2,145	
lative Expenditure	875,550	898,000	898,000	898,000	898,000	902,268	902,268	902,268	902,268	902,268	920,485	920,485	920,485	920,485	920,485	923,510	923,510	923,510	923,510	923,510	936,425	936,425	936,425	936,425	936,425	938,570	
		69,079	68,078	67,091	66,119	65,161	64,216	63,286	62,369	61,465	60,574	59,696	58,831	57,978	57,138	56,310	55,494	54,690	53,897	53,116	52,346	51,587	50,840	50,103	49,377	48,661	ı
Sub total		69,079	68,078	67,091	66,119	65,161	64,216	63,286	62,369	61,465	60,574	59,696	58,831	57,978	57,138	56,310	55,494	54,690	53,897	53,116	52,346	51,587	50,840	50,103	49,377	48,661	I
umulative Revenue		(0.070	127.157	204.240	270.277	225 520	200 545	4/2.020	525,399	50/ 0/4	/ AT 12T	707.133	7/7-0//	022.042			***				1.00/.000						





5.1 Life Cycle Cost Model - Offices (no mezzanine)

Whole End of Life Life		Total End of Life Costs ov	er 25 years period	
d of Life	5	End of Life Costs	sts over 23 yr per	Excluded
₫ -	4	Occupancy Costs Annualised Occupancy Co	ata ayar 25 yr par	
Annual Maintenance, Occupancy & Operation Costs		Total Operation Costs	over 25 yr period	352,737
<u>π</u>	3.6	Client definable costs		Excluded
aint	3.5	Taxes		Excluded
enan	3.4	Overheads		Excluded
ice,	3.3	Administration Costs		Excluded
ŏ	3.2	Utilities		190,559
upai	3.1	Cleaning		162,178
JCy o	3.0	Operation Costs	5761 25 /1 period	PV Cost
о О	2.0	Grounds Maintenance Total Maintenance Costs	over 25 vr period	Excluded 15,000
per	2.5 2.6	Unscheduled Repairs, Replacement and Maintenance		Incl in 2.1
atio	2.4	Minor replacement, repairs		Incl in 2.1
ŭ	2.3	Decorations		15,000
osts				PV Cost
		Major Replacement Costs	over 25 yr period	305,250
	2.2	Refurbishment and adaptation		Excluded
	2.1	Major Replacement & Refurbishment Costs		305,250
	2.0	Maintenance Costs		PV Cost
		C	onstruction Costs	776,000
		Other direct cost: Loose FF&E and IT		Excluded
		Land Acquisition Costs		Excluded
	1.3	Client definable costs		
			Subtotal	776,000
		Inflation		8,000
		Client Design Development & Project Risk		70,000
		Design Fees - Consultants		116,000
	1.2	Other construction related costs		,,,,,,
	1.1	Construction works costs, including preliminaries		582,000
Discount rate	1.0	Construction Costs		PV Cost
Discount rate			3.5%	
			Total GITA	172
			Total GIFA	492
		GIFA	New	0
		GIFA	Refurbishment	492
		Location (BCIS Index)	Cheltenham	
Lii	te Cyc	le Period of Analysis in years (post construction) Base date	25 4Q2018	
1.9	رم ر _ا	In David of Analysis in years (nest construction)	25	





5.2 Life Cycle Cost Model - Offices (with mezzanine)

Li	fe Cyc	le Period of Analysis in years (post construction) 25	
		Base date 4Q2018	
		Location (BCIS Index) Cheltenham	
		GIFA Refurbishment	639
		New	0
		Total GIFA	639
Discount rate		3.5%	
	1.0	Construction Costs	PV Cost
	1.1	Construction works costs, including preliminaries	621,000
	1.2	Other construction related costs	
		Design Fees - Consultants	124,000
		Client Design Development & Project Risk	74,000
		Inflation	9,000
		Subtotal	828,000
		Subtotal	020,000
	1.3	Client definable costs	
		Land Acquisition Costs	Excluded
		Other direct cost: Loose FF&E and IT	Excluded
		Construction Costs	828,000
	2.0	Maintenance Costs	PV Cost
	2.1	Major Replacement & Refurbishment Costs	396,452
	2.2	Refurbishment and adaptation	Excluded
	2.2	•	396,452
S		Major Replacement Costs over 25 yr period	PV Cost
S S	2.3	Decorations	19,482
o u	2.4	Minor replacement, repairs	Incl in 2.1
grati	2.5	Unscheduled Repairs, Replacement and Maintenance	Incl in 2.1
ŏ	2.6	Grounds Maintenance	Excluded
ø >		Total Maintenance Costs over 25 yr period	19,482
anc	3.0	Operation Costs	PV Cost
d	3.1	Cleaning	210,634
ŏ	3.2	Utilities	247,495
nce	3.3	Administration Costs	Excluded
ena	3.4	Overheads	Excluded
ain1	3.5	Taxes	Excluded
Annual Maintenance, Occupancy & Operation Costs	3.6	Client definable costs	Excluded
		Total Operation Costs over 25 yr period	458,128
⋖ _	4	Occupancy Costs	130,120
	•	Annualised Occupancy Costs over 25 yr per	
و و	5	End of Life Costs	Excluded
End of Life	3		Lxciuded
		Total End of Life Costs over 25 years period	.
Whole	6-8	Whole life elements are excluded from this costing	Excluded
\$			
		Life Cycle Costs over 25 yr period including construction costs	1,702,063
	Anr	nual Equivalent LCC including construction costs (£/m2/annum)	106.55
		Life Cycle Costs over 25 yr period excluding construction costs	874,063
	Ann	ual Equivalent LCC excluding construction costs (£/m2/annum)	54.71





5.3 Life Cycle Cost Model - Boutique style accommodation (holiday lets)

L	ife Cyc	cle Period of Analysis in years (post construction) 25	;
	•	Base date 4Q2018	3
		Location (BCIS Index) Cheltenham	ı
		GIFA Refurbishment	600
		New	
		Total GIFA	
		Total Gill?	
Discount rate		3.5%	,)
	1.0	Construction Costs	PV Cost
	1.1	Construction works costs, including preliminaries	838,000
	1.2	Other construction related costs	
		Design Fees - Consultants	168,000
		Client Design Development & Project Risk	100,000
		Inflation	12,000
		Subtotal	1,118,000
		Subtotal	1,110,000
	1.3	Client definable costs	
		Land Acquisition Costs	Excluded
		Other direct cost: Loose FF&E and IT	Excluded
		Construction Costs	
	2.0	Maintenance Costs	PV Cost
	2.1	Major Replacement & Refurbishment Costs	372,256
	2.2	Refurbishment and adaptation	Excluded
		Major Replacement Costs over 25 yr period	
ts		Trajor Replacement 2000 Over 20 yr period	PV Cost
Č	2.3	Decorations	18,293
<u>5</u>	2.4	Minor replacement, repairs	Incl in 2.1
erat	2.5	Unscheduled Repairs, Replacement and Maintenance	Incl in 2.1
Ö	2.6	Grounds Maintenance	Excluded
øŏ ≻		Total Maintenance Costs over 25 yr period	1 18,293
anc	3.0	Operation Costs	PV Cost
dno	3.1	Cleaning	197,778
Ŏ	3.2	Utilities	232,389
nce	3.3	Administration Costs	Excluded
ten	3.4	Overheads	Excluded
ai ii	3.5	Taxes	Excluded
<u>'a</u> ∑	3.6	Client definable costs	Excluded
Annual Maintenance, Occupancy & Operation Costs		Total Operation Costs over 25 yr period	430,168
⋖ -	4	Occupancy Costs	
		Annualised Occupancy Costs over 25 yr per	
id of Life	5	End of Life Costs	Excluded
End		Total End of Life Costs over 25 years period	1
Life	6-8	Whole life elements are excluded from this costing	Excluded
Whole End of Life Life		, , 2.5	ZXCIGGCG
		Life Cycle Costs over 25 yr period including construction costs	1,938,716
	Δnr	nual Equivalent LCC including construction costs (£/m2/annum)	
		Life Cycle Costs over 25 yr period excluding construction costs	
	Ann	nual Equivalent LCC excluding construction costs (£/m2/annum)	54./1





5.4 Life Cycle Cost Model - Boutique style accommodation (permanent lets)

	Life Cyc	cle Period of Analysis in years (post construction) 25	
		Base date 4Q2018	
		Location (BCIS Index) Cheltenham	
		GIFA Refurbishment	600
		New	0
		Total GIFA	600
		Discount rate 3.5%	
	1.0	Construction Costs	PV Cost
	1.1	Construction works costs, including preliminaries	838,000
	1.2	Other construction related costs	
		Design Fees - Consultants	168,000
		Client Design Development & Project Risk	100,000
		Inflation	12,000
		Subtotal	1,118,000
	1.3	Client definable costs	
		Land Acquisition Costs	Excluded
		Other direct cost: Loose FF&E and IT	Excluded
		Construction Costs	1,118,000
	2.0	Maintenance Costs	PV Cost
	2.1	Major Replacement & Refurbishment Costs	372,256
	2.2	Refurbishment and adaptation	Excluded
	2.2	Major Replacement Costs over 25 yr period	372,256
S.		Trajor Replacement Costs Over 25 yr period	PV Cost
Co	2.3	Decorations	18,293
<u>.</u>	2.4	Minor replacement, repairs	Incl in 2.1
erat	2.5	Unscheduled Repairs, Replacement and Maintenance	Incl in 2.1
ce, Occupancy & Operation Costs	2.6	Grounds Maintenance	Excluded
∞ >		Total Maintenance Costs over 25 yr period	18,293
anc	3.0	Operation Costs	PV Cost
8	3.1	Cleaning	197,778
ŏ	3.2	Utilities	232,389
nce,	3.3	Administration Costs	Excluded
ena	3.4	Overheads	Excluded
aint	3.5	Taxes	Excluded
Annual Maintenan	3.6	Client definable costs	Excluded
nuc		Total Operation Costs over 25 yr period	430,168
₹	4	Occupancy Costs	
		Annualised Occupancy Costs over 25 yr per	
d of Life	5	End of Life Costs	Excluded
End L		Total End of Life Costs over 25 years period	
<u> </u>	6-8	·	Excluded
Whole End of Life Life	0-0	Whole life elements are excluded from this costing	Excluded
>			
		Life Cycle Costs over 25 yr period including construction costs	1,938,716
	Anı	nual Equivalent LCC including construction costs (£/m2/annum)	129.25
		Life Cycle Costs over 25 yr period excluding construction costs	820,716
	Ann	nual Equivalent LCC excluding construction costs (£/m2/annum)	54.71





5.5 Life Cycle Cost Model - Wake facilities (4 units)

	Life Cycl	le Period of Analysis in years (post construction)	25
		Base date 4Q2	2018
		Location (BCIS Index) Chelten	ham
		GIFA Refurbishr	ment 468
		I	New 0
		Common p	parts 77
		Total C	
		Discount rate	3.5%
	1.0	Construction Costs	PV Cost
	1.1	Construction works costs, including preliminaries	672,000
	1.2	Other construction related costs	
		Design Fees - Consultants	135,000
		Client Design Development & Project Risk	80,000
		Inflation	9,000
		Subtotal	896,000
	1.3	Client definable costs	
		Land Acquisition Costs	Excluded
		Other direct cost: Loose FF&E and IT	Excluded
		Construction Costs	896,000
	2	Maintenance Costs	PV Cost
	2.1	Major Replacement & Refurbishment Costs	24,855
	2.2	Refurbishment and adaptation	Excluded
		Major Replacement Costs over 25 yr pe	eriod 24,855
S			PV Cost
Cosi			
.eo	2.3	Decorations	15,493
erat	2.4	Minor replacement, repairs	Incl in 2.1
ŏ	2.5 2.6	Unscheduled Repairs, Replacement and Maintenance Grounds Maintenance	Incl in 2.1 Excluded
⊗ }:	2.0	Total Maintenance Costs over 25yr pe	
Occupancy & Operation Costs	3	Operation Costs (to common parts only)	PV Cost
noo	3.1	Cleaning	25,382
e, O	3.2	Utilities	29,823
Annual Maintenance,	3.3	Administration Costs	Excluded
nter	3.4	Overheads	Excluded
Σ	3.5	Taxes	Excluded
lan	3.6	Client definable costs	Excluded
An	5.0	Total Operation Costs over 25 yr pe	
	4	Occupancy Costs	33,203
o o		Annualised Occupancy Costs over 25 yr	rper
End o Life	5	End of Life Costs	Excluded
<u>9</u>		Total End of Life Costs over 25 years pe	
Whole End of Life Life	6-8	Whole life elements are excluded from this costing	Excluded
		Life Cycle Costs over 25 yr period including construction c	
		Annual Equivalent LCC including construction costs (£/m2/annual)	
		Life Cycle Costs over 25 yr period excluding construction c	·
		Annual Equivalent LCC excluding construction costs (£/m2/annual)	





5.6 Life Cycle Cost Model - Wake facilities (3 units)

	Life Cv	cle Period of Analysis in years (post construction) 25	
	Life Cy	Base date 4Q2018	
		Location (BCIS Index) Cheltenham	
		GIFA Refurbishment	548
		GIFA Reidi distillierit. New	0
		Common Parts	_
			0
		Total GIFA	548
Discount rate		3.5%	
	1.0	Construction Costs	PV Cost
	1.1	Construction works costs, including preliminaries	674,000
	1.2	Other construction related costs	
		Design Fees - Consultants	135,000
		Client Design Development & Project Risk	80,000
		Inflation	9,000
		Subtotal	898,000
	1.3	Client definable costs	
		Land Acquisition Costs	Excluded
		Other direct cost: Loose FF&E and IT	Excluded
		Construction Costs	898,000
	2	Maintenance Costs	PV Cost
	2.1	Major Replacement & Refurbishment Costs	24,991
	2.2	Refurbishment and adaptation	Excluded
		Major Replacement Costs over 25 yr period	24,991
osts	2.2	December	PV Cost
5	2.3 2.4	Decorations Minor replacement, repairs	15,578 Incl in 2.1
ratic	2.5	Unscheduled Repairs, Replacement and Maintenance	Incl in 2.1
o pe	2.6	Grounds Maintenance	Excluded
ccupancy & Operation Costs		Total Maintenance Costs over 25 yr period	15,578
anc	3	Operation Costs	PV Cost
dno	3.1	Cleaning	0
o o	3.2	Utilities	0
ance	3.3	Administration Costs	Excluded
nten	3.4	Overheads	Excluded
Σ	3.5	Taxes	Excluded
Annual Maintenance, O	3.6	Client definable costs	Excluded
Anr		Total Operation Costs over 25 yr period	0
	4	Occupancy Costs	
End of Life		Annualised Occupancy Costs over 25 yr per	
ᇤᄀ	5	End of Life Costs	Excluded
Whole		Total End of Life Costs over 25 years period	
₹ -	6-8	Whole life elements are excluded from this costing	Excluded
		Life Cycle Costs over 25 yr period including construction costs	938,569.72
		Annual Equivalent LCC including construction costs (£/m2/annum)	69
		Life Cycle Costs over 25 yr period excluding construction costs	40,569.72
		Annual Equivalent LCC excluding construction costs (£/m2/annum)	2.96





6. Summary of Rental Values

		GIFA sqft		Rent per sqft	Total Rent	Occupancy Loss /	
						Admin costs 20%	(yr I)
	Offices (no mezzanine)	1 212	,	22.00	20.044		22.001
	Unit I	1,312		22.00	28,864	5,772.80	23,091
	Unit 2	1,322		22.00	29,084	5,816.80	23,267
	Unit 3		£	22.00	17,930	3,586.00	14,344
	Unit 4	352		22.00	7,744	1,548.80	6,195
1.5	Unit 5	224	£	22.00	4,928	985.60	3,942
				-	Sub total		70,840
2.0	Offices (with mezzanine)					20%	
	Unit I	1,988	£	22.00	43,736	8,747.20	34,989
2.2	Unit 2	1,938	£	22.00	42,636	8,527.20	34,109
2.3	Unit 3	1,263	£	22.00	27,786	5,557.20	22,229
2.4	Unit 4	352	£	22.00	7,744	1,548.80	6,195
2.5	Unit 5	224	£	22.00	4,928	985.60	3,942
				_	Sub total		101,464
3.0	Boutique accommodation (holida	ay lets)				40%	
	Flats 1-4	6,460	£	33.81	218,400	87,360	131,040
				_	Sub total		131,040
						15%	
4.0	Boutique accommodation (perm	anent lets)				
		6,460	,	7.62	49,200	7,380	41,820
4 I	Flats I-4	-,			, , , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,-
				_	Sub total		41,820
5.0	Wake facilities (4 units)					N/A	
	Unit I	1,988	f	13.00	25,844		25,844
	Unit 2	1,381		15.00	20,715		20,715
	Unit 3	607	£	15.00	9,105	_	9,105
	Unit 4	582		13.00	7,566	-	7,566
				_	Sub total		63,230
					Sub total		03,230
	Wake facilities (3 units)					N/A	
	Unit I	3,652		13.00	47,476	-	47,476
	Unit 2	1,524		15.00	22,860	-	22,860
6.3	Unit 3	607	£	15.00	9,105	-	9,105
				_	Sub total		79,441



	Model	Capital costs £	Loan £	Interest Rate %	Loan period	IRR	Payback Period (Years)	Negative To impact on MTFS £ ov		Total cost/(saving) over 40 years £	Comments
											No saving/return over 25 years. 15 years before positive impact on
1	Total capital costs funded by loan.	1,940,000	1,940,000	2%	15 years	nil	nil	1,048,592	19,673	-	MTFS No saving/return over 25 years. 15 years before positive impact on
1a	Total capital costs funded by loan - Sensitivity at 3%	1,940,000	1,940,000	3%	15 years	nil	nil	1,216,852	187,934	-	MTFS
2	Fotal capital costs funded by loan. Sensitivity - model over 40 years	1,940,000	1,940,000	3%	15 years	nil	26 years	1,216,852	-	(1,491,117)	as 1, but model spread over 40 years. 15 years before positive impact on MTFS
3	Fotal capital costs funded by internal borrowing - Sensitivity - borrowing at 0%	1,940,000	1,940,000	0%	15 years	nil	23 years	733,352	(295,467)	-	15 years before positive impact on MTFS. Modelled at 0% for comparison purposes, but not a viable option
4	Fotal capital costs funded by internal borrowing - sensitivity - borrowing at 0%, modelled over 40 years	1,940,000	1,940,000	0%	15 years	nil	22 years	733,352		(1,974,404)	as 3, but model spread over 40 years. Not a viable option. 15 years before positive impact on MTFS
5	Total capital costs part funded by contribution of £373k from reserve	1,940,000	1,567,000	3%	15 years	nil	23 years	750,910	(278,009)	-	Assume use of 17/18 increase in fees, ringfenced for scheme, subject to council approval. 15 years before positive impact on MTFS
6	Total capital costs part funded by contribution of £373k from reserve & £275k capital receipt	1,940,000	1,292,000	3%	15 years	nil	19 years	407,387	(621,532)	-	Assume as per no 5, plus use of cemetery lodge capital receipt, subject to council approval. 15 years before positive impact on MTFS
7.	As no 6, but with increased income volume from 2027, in line with population/death statistics	1,940,000	1,292,000	3%	15 years	3.69%	12 years	265,942	(4,144,707)	-	The additional income could be accomodated by the existing and 1st new chapel, so this is not a true incremental increase. 9 years before positive impact on MTFS
	Mothball the existing chapel, no re-use. Capital costs re 2nd chapel only. Total capital costs funded by 3% loan. Assumes popoulation/death increases from 2027	1,000,000	1,000,000	1.80%	15 years	2.25%	18 years	801,320	(1,914,641)		assumes all cremations undertaken in new and second chapel, with volume increases in 2027. Assumes business rates still payable on mothballed chapel, per JG. 9 years before positive impact on MTFS
	Mothball the existing chapel, no re-use. Capital costs re 2nd chapel only. Total capital costs part funded by contribution of £373k from reserve & £275k capital receipt, but no increased volumes of activity	1,000,000	352,000	1.80%	15years	nil	nil	866,228	866,228	-	assumes all cremations undertaken in new and second chapel - no overall increase in volume. Assumes business rates still payable on mothballed chapel. No saving/return over 25 years. Negative impact on MTFS over all 25 years
	As 9, Mothball the existing chapel, no re-use. Capital costs re 2nd chapel only. Total capital costs part funded by contribution of £373k from reserve & £275k capital receipt, but with increased volumes of activity re population ncrease. Loan over 15 years at 1.8%, based on current PWLB loan rate February 2017		352,000	1.80%	15years	4.46%	14 years	355,937	(2,656,947)	<u>-</u>	As no 9, but additional volume of cremations from 2027 across new & 2nd chapel. High risk if death statistics are not as expected in 10 to 25 year's time and estimated increased activity does not materialise. Also assumes business rates still payable on mothballed chapel. 9 years before positive impact on MTFS. Shortfall could be met by increase of £26.50 re environmental charges from year 1, creating a positive impact on MTFS, starting in year 1. This fee increase would result in overall impact on MTFS of £4.061m over 25 years
	Recommended option -										
	As 10, Mothball the existing chapel, no re-use. Capital costs re 2nd chapel only. Total capital costs part funded by contribution of £373k from reserve & £275k capital receipt, but with increased volumes of activity re copulation increase and loan over 25 years at 2.40%, based on PWLB rates ar February 2017	1,000,000	352,000	2.4%	25 years	4.50%	12 years	283,252	(2,590,032)	-	As above but loan over 25 years at a rate of 2.4%, per PWLB rates Feb 17. 9 years before positive impact on MTFS. Shortfall could be met by increase of £26.50 re environmental charges from year 1, creating a positive impact on MTFS, starting in year 1. This fee increase would result in overall impact on MTFS of £3.994m over 25 years.

Capital costs	
Reuse of existing chapel	898,000
Build of 2nd chapel	957,000
Project management/Backfilling (based on 50% of similar costs for approved 1st new chapel)	85,000 (reduced to £43000 (25%) options 8 - 11)
	1,940,000

11. Current Value -assuming 2.4% borrowing, use of 17/18 incom Option: Mothball Existing Chapel and replace we Financing based on £352,000 PWLB annuity loan over Assuming works commence and complete in 2017/18 with loan or	vith a 2nd new chapel 25 years)		ulation vol	umes																									
Years			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Total
Capital Expenditure - 2nd Chapel	Per Pick Evard / Wilmott Dixon - no breakdown	seen 9	907,000																										907,000
Project Management / Backfilling costs	£171k for approved new scheme business case estimate 25% of this for 2nd chapel scheme		43,000																										43,000
Contingency - 2nd Chapel	Estimated CBC Contingency - build second cl	hapel	50,000																										50,000
Total Capital -Existing Chapel and Second Chapel	Total loan £352,000	1,0	000,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,000,000
PWLB Borrowing																													
WLB Borrowing - (25 years)	Based on 2017 interest rates - subject to rate changes			-352,000																									-352,000
Repayment of PWLB Borrowing Principal repayments / MRP - 25 years nterest repayments - 25 years				10,420 8,386	•			11,463 7,343	11,740 7,066	12,023 6,782	12,314 6,492	12,611 6,195	12,916 5,890	13,227 5,578	13,547 5,259	13,874 4,932	14,209 4,597	14,552 4,254	14,903 3,903	15,263 3,543	15,631 3,174	16,009 2,797	16,395 2,410	16,791 2,014	17,197 1,609	17,612 1,194	18,037 769	18,473 333	352,000 118,143
Change in annual occupational costs - to be considered	<u>d</u>																												
Existing Chapel-	Replacement & Refurbishment Costs - assume																												
Life cycle costs	additional costs over current budget for existing chapel. No savings as still have to maintain inter and external building	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saving in existing chapel utility costs	Est.saving in existing chapel utility costs (existing costs for chapel/offices £72500) current budget whole site £48,500 - estimate additional cost across whole site of £20k (on top		tbc	-50,000	-50,000 -50	60,000	-50,000 -	50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-50,000	-1,250,000
Estimated existing/2nd chapel business rates payable - see below	£20k additional costs in original new chapel bus case)	siness	tbc	20,000	20,000 20	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	25,000	25,000	25,000	25,000	25,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	625,000
end New Chapel -																													
ost of transportation of coffins across site	saving in cost identified in 1st new chapel busin case -not needed if have 2nd chapel	ness		-3,000	-3,000 -3	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000	-75,000
Gas / Electricity / Water	based on est 25% efficiency saving compared to existing chapel - to be confirmed at design stage		tbc	40,000	40,000 40	10,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	1,000,01
nsurance -2nd chapel Response Maintenance budget for 2nd chapel new build	based on 1st new chapel business case Estimate of likely budget requirement			2,000	,	2,000 2,000		2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	2,000 5,000	50,0
ncome No additional volumes of cremations as transfer of activities only. Further increase in fees charges??	Fee increases included in 1st new chapel busine			0	0	0	0	0	0	3,000	3,000	ŕ	-113,651	ŕ	r	·	·	ŕ	-227,302	-227,302	-227,302	-227,302	-227,302	-340,952	-340.952	-340,952	-340.952		-3,523,11 C
Cashflow	competition	1.0	000.000		28,806 2		32.806	32.806	32.806	32.806	32.806				-75.845	-75.845	- 75.845	-75.845	-184.496	-184.496	-184.496	-184.496	-184.496	-298.147	-298.147	-298.147	-298.147		-1.942.032
INANCING WLB Borrowing General Reserve - one-off funding Capital receipts - cemetery Lodge Funding	income 17/18 tfrd to budget deficts reserve	-3 -3	352,000 373,000 275,000		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0 -373,000 -275,000
Total		-1,0	000,000	352,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-648,000
Impact on Medium Term Financial Strategy (MTFS)	cumul Annual rate of re	lative	000,000	27,806		86,417 1	119,223 1	,	32,806 184,834 3.28%	32,806 217,640 3.28%	32,806 250,446 3.28%		-80,845 202,406 -8.08%	-75,845 126,561 -7.58%	-75,845 50,716 -7.58%	-75,845 -25,129 -7.58%	-75,845 -100,974 -7.58%	-75,845 - 176,819 -7.58%	-184,496 -361,315 -18.45%	-184,496 -545,811 -18.45%	-184,496 -730,307 -18.45%	-184,496 -914,802 -18.45%	-184,496 -1,099,298 -18.45%	-298,147 -1,397,445 -29.81%	-298,147 -1,695,592 -29.81%	-298,147 -1,993,738 -29.81%	-298,147 -2,291,885 -29.81%	-298,147 - <mark>2,590,032</mark> -29.81%	-2,590,032
Further funding to offset shortfall to MTFS, subject to approval	Environment Fee £26.50 per cremation		0	-50,350	-50,350 -50	0,350	-50,350 -	50,350	-50,350	-50,350	-50,350	-50,350	-55,049	-55,049	-55,049	-55,049	-55,049	-55,049	-59,749	-59,749	-59,749	-59,749	-59,749	-64,448	-64,448	-64,448	-64,448	-64,448	-1,404,429
positive impact on MTFS - per year if introduce £26.50 environme cumulative positive impact on MTFS	ent fee																		-244,245 -1,204,509			-244,245 -1,937,243		-362,595 -2,544,082			-362,595 -3,631,866	-362,595 -3,994,461	-3,994,461
Capital costs		0,000	В	USINESS RA	TES: All CEM	METERY B	BUILDING A	ASSESSED	ON A WHO	OLE SITE BA	SIS.																		
Saving over 25 years Return over 25 years	-259.0																			tional costs,	pending prop	er assessment,	in line with	first new chap	oel business	case.			
RR Payback period Cost over first 9 years (before positive impact on MTFS)	12 1	501% years 3,252	Pr	remises utili	ty costs - cu	irrently e	estimate a s	saving of	£10k per a	nnum, com	pared to ex	xisting chap	el costs, thro	ough more o	efficient equ	ipment, etc	c to be co	onfirmed by	Property										
Population statistics	year £m		0 2017	1 2018	2 2019	3 2020	4 2021	5 2022	6 2023	7 2024	8 2025	9 2026	10 2027	11 2028	12 2029	13 2030	14 2031	15 2032	16 2033	17 2034	18 2035	19 2036	20 2037	21 2038	22 2039	23 2040	24 2041	25 2042	
Cheltenham Cheltenham	Population Deaths % increase		118.9 1.0	119.6 1.0	120.3 1.0	121 1.0		122.4	123.1 1.0	123.8 1.0	124.5 1.0	125.2 1.0	126 1.1 9.33%	126.7 1.1 9.33%	127.4 1.1 9.33%	128.1 1.1 9.33%	128.8 1.1	129.5 1.1 9.33%	130.1 1.2	130.8 1.2 18.67%	131.4 1.2	132 1.2 18.67%	132.6 1.2 18.67%	133.2 1.3 28.00%	133.8 1.3 28.00%	133.8 1.3 28.00%	133.8 1.3	133.8 1.3 28.00%	
			2014 116.5	2015 117.4 1.1	2016 118.1 1.0								of the 300k on sper new c			b		8 fee of £80		g abatement	and medical fe	ee	ŗ	per Perfect Cii	rcle /JCS sta	istics			

Appendix 5 - Comments made on outline planning application 17/00011/OUT (crematorium access roads)

We have issue's with parking up here now as most homes have 2 cars and cars are parked on both sides of the road, also what will happen when it is rubbish day?

Note: The planning application referenced Route A (via Imjin Rd) and Route B (along the southern boundary of the cemetery). Therefore the comments below reference routes A and B. However readers need to be aware the Imiin Rd route as route C

	Supp Route B	oort for Route C/A (see note above)	Comments
5 Imjin Road	n	n	I object to both of these routes for access to the planned chapel & crematorium for the following reasons: The amenity of the field will be severely affected. A road running through the middle or at the edge the playing field will restrict access and make it unsafe for children to play, dogs to are all activities that the residents of Priors estate, Oakley, Whaddon, Prestbury and beyond would lose local access to if this application is approved. It will increase noise, traffic congestion and pollution on the estate especially due to the nature of funerals with lots of people arriving and leaving at the same time. The increase in noise and congestion will definitely be more prominent on Imjin road where many residents use on street parking, which in places effectively turns it into a single track. This problem can already be seen on days when football matches are held in Priors field, where the road becomes extremely congested when all players and families leave at once. I al imposed 20MPH speed limit. This was designed to make the estate safer for vulnerable residents and increasing the traffic load on the estate will not help to achieve this.
3 Somme Road 14 Ladysmith Road	y n?		Letter available to view in Documents Tab (see planning applicationb 17/00011/OUT) I am a resident of Ladysmith road and and writing to say that I will be directly affected if it is decided that the lane behind the houses on the road will be used for access to the new cre Whilst the lane has been problematic as it is overgrown and is used as a dumping ground, I am not sure that it is going to be suitable alternative for access to the crematorium either. I are not very big at all and so the cars would be traveling very close to the properties and would definitely cause a noise issue. (who wil provide new fences or walls for the trees and the wildlife in this area. (birds, squirrels, shrews etc). What will happen to the evergreen trees lining the existing cemetery entrance and the big trees inlow big enough for one way traffic are the trees going to be removed to accommodate more cars or is it going to be one way in on the current entry road and one way out ck if the track will be locked when not in use. This will not deter people from entering the area when it is isn't being used and so I am not sure this will reduce any of the anti sc to I think before a decision is made, more information needs to be provided for both options so an informed decision can be made by all. Thank you
93 Imjin Road		n	We strongly oppose the application for the road to be extended up Imjin Road and across the playing field, how are the children that play football on a weekend going to cross this roa outside to play and do we really want hearses and grief stricken families driving up our road every 15mins especially during the 6 weeks holiday when children will be outside playing. What will happen to the people who walk there dogs up the field, where will they park.
			Where will the football players park when they are using the field How is this going to be policed to stop the joy riders spinning around on it, as we have issues with speeding on this road as it is. Also we are very concerned about the HIGH RISK to flooding,

8 Kimberley Walk	y	n	I write in support of the planning application for option B for the new cemetery to be approached via the existing track at the back of Ladysmith Road with the provision this road be antisocial behaviour.
			I oppose and object to the planning application for option A and believe that residents on Priors Road and myself would prefer to see the play area left as open space to be enjoyed as every day. Dog walkers, children go there to raise their spirits and play games. It is a place of enjoyment and happiness.
			The mourners deserve respect and a quiet and more dignified approach to their loved ones final destination. On Imjin Road there are cars parked on both sides leaving only a narrow problems and blockages. It would make it difficult for emergency vehicles to approach at that time. There are quite a few disabled and elderly residents who may require emergency
22 Ladysmith Road	٧	n	Letter available to view in Documents Tab (see planning applicationb 17/00011/OUT)
6 Ladysmith Road	n?	n	Letter available to view in Documents Tab (see planning applicationb 17/00011/OUT)
65 Imjin Road		n	Letter available to view in Documents Tab (see planning applicationb 17/00011/OUT)
2 Imjin Road	n?	n	My partner and I moved to Imjin Road just over a year ago. We object to the proposals because
			1. the road already has a problem with cars driving too fast.
			2.it is already a busy road, made worse by the chip shop parking, not sure how they were allowed to expand with no further provisions for traffic and parking
			3.the road for the crematorium will no doubt be a stepping stone for a through road up to the new estate, we suspect this is as much a part of plan (A) as the crematorium. If this were
			Road.
			4. the area beyond the playing fields is beautiful and should be protected from any further damage
			plan A is totally unacceptable to us
			plan B is the better of the two, though we still object as we do not want any more traffic, it is already a problem that needs a solution not making worse
			thank you for your time
5 Blackberry Field	у	У	I support this application if it helps enable the delivery of the important enhancements to the town's crematorium facilities
55 Salamanca Road	n	n	We understand the need to expand the crematorium but to dig up green fields that people walk dogs on and play football is wrong, the other route is too narrow and 🗝 🔭 ctly a
			be another route or alternative solution
89 Imjin Road	у	n	I live in Imjin road, & I believe that an access road via Imjin road & playing fields would spoil the playing fiedpld & bring more traffic down Imjin road where children per ether than the playing fields would spoil t
			ladysmith road would be better. & also that it already exists as a nathway
42 Ladysmith Road			I wish to point out that for route alignment B (cemetery / Ladysmith Road) that there is buried drainage infrastructure (a culvert) within the vicinity of this access track boundary. During heavy winter weather and where flow exceeds the capacity of the culvert, run-off is re-directed towards the access track (Route B) between the cere the r
			The new development should incorporate upgraded drainage measures along the southern side of the cemetery considering previous surface water studies within the area and to referred to in the Design Statement would accommodate this development.
			The development should incorporate adequate drainage capacity considering actual flow within watercourses and run-off within the area.
			Environmental screens should be considered for the change of use of the track and for open field areas for Route B if adopted
33 Imjin Road	٧	n	I wish to vote for plan b for several reasons
···· y ··· · · 	,	••	there are four roads that exit imjin road - burma avenue, imjin court and salamanca road
			the busy traffic flow will disrupt the funeral processions, delivery service vehicles, visitors to the crem and residents.
			I am against any plan that would possibly jeopardise the free green spaces we have currently on the estate
			The Occupiers of 16 Imjin Road have requested they be included as an occupant is disabled and they are not able to get into town nor do they have computer access
			On Saturday and Sundays there are football matches held at the field at the top of Imjin Road - just the extra 10-15 cars causes awful traffic delays, with the road not being wide enough
			As you come out of Imjin Road you have a pelican crossing, yellow box and traffic lights, this prevents free flow of traffic, plus cars parking undoable yellow lines outside the shops (ch

adds to the madness.

46 Ladysmith Road	У		I am in strong support of Option B as a new access route to the cemetery.
			The existing track at the back of the properties on Ladysmith Road is a focus for anti-social behaviour and is badly littered. I understand it has also been used as an access route in a provides the opportunity to tackle all the above, together with sensitive landscaping, to support the development of the cemetery
8 Imjin Road		n	I object to the use of Imjin Road as access for the new crematorium. We live just inside Imjin Road near Priors Rd and the traffic on Imjin is very heavy already. Due to Simpsons Fish Imjin Road for a vast majority of the time is one line traffic. Please take heavy traffic on Imjin into consideration when making your decision. Thank you
62 Salamanca Road			The anti social behaviour which Mr Colin Hay has mentioned in his recent letter that takes place on the track behind the houses on ladysmith and Salamanca road actually takes place. Mr Colin Hay has stated if the road was built where the track was it would stop the anti social behaviour and extreme litter as it would be locked at nights. It would not stop the anti the garages. The garages also need some security to prevent access as this is where it all goes on. Only garages owners should be able to get in there. Also the houses that run along problem with rat infestations which is a concern if they are to dig right behind the houses.
69 Imjin Road	V	n	Letter available to view in Documents Tab
10 Kimberley Walk	У	n	We cannot see anything in the Design and Access Statement submitted to support the need for either Route A or B. The report suggests there are "significant logistical challenges" v offered.
			If the need can be established, then Route B is the only sensible option. The fact that Route A is being considered at all seems incredible, since it would be entirely unsuitable and su into the scheme to date.
			The junction of Imjin Road with Prior's Road is not set up to allow a significant increase in traffic, particularly so near to other junctions and traffic lights. Imjin Road itself is too narrotraffic). The playing fields car park gets particularly busy at weekends for sporting use, and would not allow traffic to the crematorium to flow freely.
			If Route B is to be adopted, then the need for it needs to be firmly established
Grey Gables Southam Road	y?	n	Although we are in general agreement that car parking and access to the Cheltenham Cemetery needs improving we are opposed to one of the proposed access roads. namely Rout
			Imjin Road is one of the main routes to the residential housing development and access to Imjin Road is at a very busy and dangerous junction close to a pedestrian cro
			We have to make frequent visits to Imjin Road and we know from experience that access to and from Priors Road is not easy. Also, Imjin Road is quite narrow and due cremaining carriageway to just over one cars width. If vehicles from the cemetery were also using this access it could cause major traffic problems and also be a danger and early years playground is also via Imjin Road and extra traffic would be a danger to children and parents using these facilities.
			Although we are not happy with Route B, via Ladysmith Road, being used, it would probably be a better alternative if no other improved solution can be found.

Although we are not happy with Route B, via Ladysmith Road, being used, it would probably be a better alternative if no other improved solution can be found.

To Summarise: We would strongly object to Imjin Road (Route A) being used as access to the new Cheltenham Cemetery.

50 Salamanca Road

25 Goodrich Road

49 Imjin Road

51 Imjin Road

1 Kimberley Walk

y?

I object to the use of Imjin Road being used as it is so very busy already and the playing field and land beyond should be kept as it is natural for walkers/dog walkers. It makes sense to up side of field. Seems less disruption and more straight forward route.

I object to Route A because not only does this blight my property which will overlook this road, but will cause potential congestion in Imjin Road. It makes much more sense to exit strail although I am unconvinced that the case has been made for a secondary exit requiring either option.

Additionally, I am concerned that already the car park and area to the changing rooms and further to the swings is already a meeting point for off road bikers and others at late hours nuisance to residents.

Finally, I am extremely concerned that this could be used as an incremental extension of home building and would appreciate an assurance this is not paving the way for further developed.

This road is only going in so that Goodrich Road can join it and keep the rich in Battledown quiet. I hope you do it with learner drivers doing three point turns and Refuse lorries doing thappen to the poor old Hearse & Limo with the family sat in the back

I support the application providing on the condition that the access road is Option B. viz: The current track at the rear of Ladysmith Road. Option A. Imjin road is not suitable. It is alrea excessively used by driving instructors for training learner drivers. Any further increase in traffic would place an unacceptable burden on residents.

I think that both the routes will disturb the area and make it really busy and much more hectic. It's a lovely place to live at the moment and there is access to the cemetery just down t safe place for children to play and it's an enclosed area. On Imjin Road a lot of cars park on either side of the road and it already is hard to get through sometimes.

		Many manholes (presumably over drainage channels) have recently been highlighted. There are more than we were ever aware of!
		Route B is preferable as it causes minimal disruption to playing field area.
		Will there be any means to prevent road being used by young racers? i.e. gates and/or speed bumps. There is already enough evening disturbance in Priors Farm car park.
45 Imjin Road	у	There have been active badger sets along Cemetery fence. Will Route B disturb these? Of the two routes proposed, it is clear that Route B will cause the least disruption on an ongoing basis and will not cause the playing fields to require huge modification going forward. a safe space for the local community to use.
47 Imjin Road	У	Route A would be a huge concern in terms of traffic in the area as the majority of house on Imjin Road have no off street parking meaning that cars are parked on both sides of the roat times as it is - to introduce whole new streams of cars using the road would be a huge problem. Of the two routes being proposed it is obvious that Route B which follows the old abandoned Farm access road is a lot less disruptive than Route A.
		Route B delivers traffic out directly onto Bouncers Lane and does not involve changing the playing fields layout and facilities.
		Route A would not only impact the playing fields but would also put traffic out onto Imjin Road which is a heavily parked road (both sides of the road leaving enough s road parking. Also Imjin Road and the rest of the estate has a 20mph speed limit - this was done for a very good reason, and turning Imjin Road into a exit route from the fly in the face of that decision.

Can appreciate why new access road is needed. Presumably these are alternative routes though this is not clear on site map.

Both routes are near water courses: Route A adjacent to Wymans Brook and Route B to stream along Cemetery fence.

Clarification of flooding risk is needed. Field is already very prone to waterlogging.

So I support Route B but object to Route A.

environmental impact survey work undertaken by their consultants."

23 Goodrich Road

There seems to be no sign of documentation relating to the flood alleviation scheme anywhere on this application.

Also you state "The flood alleviation scheme has been overlaid on the attached proposed access route options to help understand its impact on the new Crematorium

d per