Salerie Cyclepath

PIR - Part 1



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1 Introduction

1.1 Brief

This review has been requested by the Office *of the* Committee *for the* Environment & Infrastructure.

The review is based on the Post Implementation Review process which is mandatory for all projects over £1m. It is a phase 1 review. This concentrates on the delivery of the project and includes the views of the Client, Designers, Managers and Contractors directly involved in delivering the project.

A phase 2 review would report on the performance of a project and be carried out after a facility has been operating for a while. It would concentrate on the expected benefits and whether they were achieved. This is not included within the scope of this review.

1.2 The Project

The purpose of the project was to carry out pedestrian & cycling safety improvements at the Salerie car park entrance.

The project arose from an audit of the East Coast cycle path. There were a number of preliminary steps but the key report was entitled "Active Transport in Guernsey" produced by Sustrans¹ in February 2016.

This identified two main issues with the layout.

- The positioning of the cycle path alongside the carriageway, reducing intervisibility.
- The large radius of the entrance accommodating high vehicle speeds, compounded by a dropped kerb.

A sketch of an initial design for a revised layout was included in the report based on the following stated principles.

- Minimise radius at entrance to reduce vehicle speeds and improve intervisibility by ensuring that cyclists and motor vehicles meet perpendicularly
- Utilise set back crossing in line with current design guidance
- Align cycle track either side of crossing to minimise deflection and improve intervisibility
- Install raised table to visually highlight and minimise speeds at crossing point
- Provide priority to pedestrians and cyclists; given the lack of UK regulation this may provide an opportunity to install innovative solution such as a parallel cycle and pedestrian crossing.

The sketch was developed further and many elements can be seen within the final scheme.

¹ Sustrans are a UK charity 'enabling people to travel by foot, bike or public transport for more of the journeys we make every day.' www.sustrans.org.uk

1.3 The Parties

The Client for the work was originally the Environment Department who commissioned the "Active Transport in Guernsey" report. Following the Reform of Government in May 2016 the responsibility for transport transferred to the Committee *for the* Environment & Infrastructure who then advanced the project. Project management and development of the design was undertaken by staff from the Office *of the* Committee *for the* Environment & Infrastructure, specifically Traffic & Highway Services, generally referred to as the Client in this report. Ronez were the contractor.

1.4 Timeline

12 April 2016 Environment Department consider a paper dated 5 April 2016 recommending;

To leave the decision as to whether any alterations are made at the La Salerie car park entrance in line with the proposals from Sustrans to the Committee *for the* Environment & Infrastructure, pending the outcome of the trial filter. High Priority (£40,000 - £50,000)

The paper noted that the figures were very approximate estimates. This scheme gave the cyclists and pedestrians priority over vehicles.

21 July 2016 Committee for the Environment & Infrastructure considers a paper dated 7 July.

The proposed scheme gives priority to cars. The Committee agreed the proposals but requested that the cyclist priority be re-examined.

The paper also said that the costs would only be known once ... the plans had been finalised ... and formal quotes obtained. The estimated cost was stated as £50,000.

- 28 July 2016 Committee considers advice from officers relating to priority at the junction. It reiterates that the Integrated Transport Strategy's main priority is to make journeys easier and safer for cyclists and pedestrians.
- 18 August 2016 Following extensive discussion the Committee requests that the scheme goes ahead with priority for cyclists and pedestrians.
- 19 August 2016 Routine capital request submitted to Policy & Resources requesting that £50,000 be released to fund the works.
- 9 Sept 2016 Police express concerns about the risks to vulnerable road users arising from cyclists and pedestrians having right of way at the crossing, this being a change from the proposals on which the police had previously been consulted.

13 Sept 2016	Planning permission received
14 Sept 2016	Instruction issued to Contractor to carry out works
14 Sept 2016	Revised budget estimate of £85,000 prepared by Project Manager. This was based on an estimate of £76,000 received from engineering staff but which excluded specialist tactile paving, surveying, planting and line painting and contained a warning that some sums were still estimates.
15 Sept 2016	Paper for information presented to Committee <i>for the</i> Environment & Infrastructure containing the Police safety concerns.
17 Sept 2016	Works commence
20 Sept 2016	Meeting with Officers and Members of Committee <i>for the</i> Environment & Infrastructure with Police.
20 Sept 2016	Client reaffirms its decision to afford priority to cyclists and pedestrians but adds CCTV to scope of project and agrees to carry out a safety audit.
5 Oct 2016	Safety audit commences. Lighting of crossing added to scope of project.
14 Oct 2016	Draft safety audit report received. Recommends additional signage and tactile paving.
26 Oct 2016	Additional Site Instructions issued to Contractor to complete works.
24 Nov 2016	New junction opened.

2 Discussion

2.1 Client Brief and pre-tender issues.

The Client brief was set out in the paper dated 7 July. The main discussion point was the priority at the crossing. The brief was based on vehicle priority which the paper considered to be safer. This brief was shared with interested groups and includes feedback from the Guernsey Bicycle Group (GBG), Guernsey Police and the St. Peter Port Constables. Generally the feedback from the GBG was that they would prefer priority for cyclists.

According to the minutes of the meeting of 21 July when discussing the paper of 7 July, was clear that the Committee wanted to further investigate priority being given to cyclists and pedestrians.

This was carried out and the Committee, at its meeting on 28 July, received advice that, on balance, vehicle priority should be retained. The Committee considered it important that improvements to the cycle path were instigated as soon as possible. Internal correspondence between staff was indicating concerns about the time available to prepare for the works and indicated a delay of 6-12 months if detailed plans for a cyclist pedestrian priority were needed.

At this time the budget estimate was £50,000, being based on a sketch layout in the Sustrans report and calculations made in March 2016.

The decision to proceed with priority for cyclists and pedestrians was made by the Committee on the 18th August with the Committee asking to be advised as soon as possible if it's preferred option was not possible. The immediate reaction of officers, on hearing of this decision, was that the work would have to be postponed until the middle of 2017.

An application was made to Policy & Resources on the 19th August for a vote to be opened for the carrying out of pedestrian & cycling safety improvements to Salerie car park entrance at a total cost (estimate) of £50,000.

A revised planning application was submitted shortly afterwards with an altered block plan showing cycle and pedestrian priority. This was registered by the Development & Planning Authority on 22 August 2016. There is no evidence that this application, indicating the change of priorities, was shared with the previous consultees.

There was insufficient time for either the Client or Contractor to prepare detailed construction drawings for the works prior to the start on site. This led to complications during the contract.

A revised budget estimate was received by the Project Manager on 14th September. This was for £76,000 and was based on the layout submitted for planning permission and discussions with Ronez. It included an allowance for traffic management to maintain access to the car park and a safe route around the works for cyclists and pedestrians but did not include all items, there were exclusions for landscaping and line painting and warnings about the extent of some other elements. This estimate was the basis of a figure of £85,000 reported on the same day by the Project Manager.

Shortly before the production of this estimate, on the 9th September, an email was received from the Police expressing their concerns about this change of priorities.

This set in motion a series of discussions culminating in a meeting on 20th September with Officers of transport & Highway Services, Members from the Committee *for the* Environment & Infrastructure

and Officers from Guernsey Police. The Committee Members maintained their previous decision to give priority to cyclists and pedestrians but agreed to address concerns raised by four actions;

- 1. A stage 3 Road Safety Audit to be undertaken when the project is substantially complete. This is standard practice in the UK and would provide an independent view as to whether or not the Scheme is safe before the junction is reopened.
- 2. Staff investigate the possibility of installing CCTV as part of the works to act both as a deterrent to motorists and as a means of monitoring the junction and enforcing any traffic violations.
- 3. Appropriate measures to be taken to ensure that the proposed changes are well publicised in advance of the re-opening of the junction in order to properly educate both cyclists and motorists of the priorities in place at this junction.
- 4. Consideration be given to further re-enforcing {sic} the need for both motorists and cyclists to slow down on approach to the junction and to be aware of the potential risks associated with the crossing of the junction, no matter who had priority.

This challenge and testing of the brief for a project and the scope of the works is quite appropriate. However the later part of these discussions took place after work had started on site. These are commented upon under Delivery Phase Issues below.

The timetable was quite clearly driven by the strong desire to progress the works in 2016. This had three advantages. Firstly if the work was combined with the work already planned to repair the main road then there would not need to be a later second set of traffic control measures on the East Coast route for the junction works. Secondly the benefits of easier and safer journeys for cyclists and pedestrians would be realised earlier and thirdly that it would demonstrate a commitment to the Integrated Transport Strategy.

2.2 Appointing a Contractor

There are only two contractors in Guernsey who are approved to carry out surfacing works of this nature on the public roads. As these works were effectively combined with the adjacent works on St. George's Esplanade the same contractor was used for both.

The appointment was made through the existing tendered term contract which includes rates for common operations, plant, materials and labour and formed the basis on which the Contractor was paid.

2.3 Risk

2.3.1 Risk Register

No formal risk register was prepared for the project. A number of risks were acknowledged in correspondence. These included caveats to budget estimates, concerns about the impact of changed user priorities and the limited time available if the work was to be tied into the St. George's Esplanade road repairs.

2.3.2 Management of identified risks

The management of the risks would have benefitted from a risk register. Although this was a relatively small project it was acknowledged as complex and a maintained risk register would have helped both the management and reporting of risks, most especially to the Committee. From internal correspondence and discussion with staff it is clear there were very serious concerns about the time available to prepare for the works. A risk register shared with the Committee would have helped demonstrate to what extent the Committee was aware of the risks and therefore to what extent those risks informed their decision making.

2.3.3 Contingency

A contingency allowance was included in estimates. This was a contingency against risks within the known scope of the works so proved insufficient as the scope of the works increased.

2.4 Project Management

As a small project this was managed by officers from Traffic and Highway Services within the Office of the Committee *for the* Environment & Infrastructure. It did not have a Project Board or the level of formality in terms of records that would be associated with a larger project. There was however a clear hierarchy with the Operations and Licensing Manager being the Project Manager to whom engineering design and operational staff reported.

If the project had been larger, then more formal project management processes, including independent reviews, would have been required from the start. As it was this was a relatively small project that came within the routine capital review process, consequently it only had a very light touch review by staff external to E&I prior to the release of funding. Once the funds were available project governance was the responsibility of the officers within the sponsoring Committee.

Given the high profile of the project and its key role in both improving the safety of the crossing for cyclists and pedestrians and also demonstrating a commitment to encourage alternative means of transport the Committee had a much greater input and influence on the project than would have been the case for other standard road alteration works of similar value.

2.5 Delivery Phase Issues

2.5.1 Changes

The principal change that affected the project during the delivery phase was the decision to give priority to cyclist and pedestrians. This was on the 18th August, before this date, although the Committee was keen that options for cyclist priority be investigated, the scheme was being developed based on vehicle priority. This change elicited a strong representation from Guernsey Police that the revised proposed arrangement, with cycle priority, put those more vulnerable road users at great risk.

The Committee and Officers from Traffic & Highways Services met with the Police after the Contractor had started on site and arising from these discussions the following steps were taken;

- Addition of CCTV to monitor the crossing
- Commissioning of a Safety Audit

The subsequent safety audit resulted in further changes relating to;

- Addition of lights at the crossing
- Additional signs and markings
- Additional tactile paving
- Changes to the size and location of originally proposed tactile paving

These changes were incorporated into the works as quickly as possible, some in advance of the receipt of the final safety audit report.

Apart from the additional work listed above there was also some abortive work that had to be accommodated due to the design changes.

- Dig through and around new work to install power for lighting
- Realign a length of kerb

The result of these changes was that the Contractor's planning of his works were compromised. This affected both the time needed to carry out the works and the efficiency of his operations, which both attract additional costs.

2.5.2 Site Control

The Contractor, when asked what he would have changed to improve the project from his point of view, made two points.

- Starting with a sufficiently detailed and approved final design.
- Having a single source for instructions from the Client.

The two are linked. As referenced in 2.1 the drawings available to the Contractor did not have all the information needed for construction. One weak area was information on the setting out of the works. This, when compounded with the ongoing design development and other changes during construction necessitated significantly more instructions than would normally be expected on a project of this size and value. Typically instructions would usually relate to unexpected conditions discovered as the works progressed or to clarify minor construction details. On this project not only were there instructions to deal with these unexpected conditions and minor construction details but also instructions covering setting out of the works and other instructions to incorporate into the works the significant changes noted above (2.5.1).

The information needed for instructions covering design changes and reacting to the conditions found on site involved a number of different staff. This included revisions necessary in respect of drainage, ground levels and safety railing adjacent to the slipway. Co-ordinating this was not helped by unavoidable, unplanned absences within the States of Guernsey's small roads design and supervision team. These absences were covered by other staff within the Traffic & Highway Services team who had the twin pressures of having to continue their normal day to day work and not having much experience of managing projects on site.

This led to a certain amount of confusion on site; the Contractor reports that a number of staff from the States of Guernsey were giving his staff instructions and States of Guernsey supervisory staff on occasion discovered work taking place as a result of instructions that they had no knowledge of. There is no evidence that any inappropriate instructions were given, but having a single point of contact for both Contractor and Client through which authorised instructions are issued is a clearer and more efficient way of working for both parties.

2.5.3 Financial

The payments to the Contractor were managed as set out by the Contract. No evidence has been found that the works were not properly executed and measured. It is appropriate here to acknowledge the reasonable position the contractor took in regard to the numerous changes made to the works after they had started on site.

Given the short duration of the works and the comparatively low value there was no regular formal reporting on the project. Updates were provided on an ad-hoc basis. The key reports were;

April 2016	Initial estimate	£50,000
19 August 2016	Capital request	£50,000
14 September 2016	Pre-construction estimate	£85,000
29 September 2016	After safety meeting with Police	£114,000 - £119,000
2 November 2016	After Safety Audit	£117,000
31 January 2017	Final cost	£115,000
	19 August 2016 14 September 2016 29 September 2016 2 November 2016	19 August 2016 Capital request 14 September 2016 Pre-construction estimate 29 September 2016 After safety meeting with Police 2 November 2016 After Safety Audit

It can be seen that there were two separate increases in the predicted cost. The first of these at the change from the original estimate based on the Sustrans drawing to an estimate based on the plans as submitted for planning approval. The second associated with addressing safety concerns relating primarily to cyclist and pedestrian priority at the crossing.

2.5.4 Cost Control

The opportunities to reduce the costs were limited. The changing scope of the project was being driven by the decision to give priority to cyclists and pedestrians and the reactive approach that had to be taken to the advice of the Police and the Safety Audit recommendations. None the less opportunities were taken to reduce costs by stopping some overtime for weekend working and choosing not to move one of the existing street lights near the recycling bins by adjusting manoeuvring areas.

3 Conclusions

This PIR was commissioned as a result of the reporting of ongoing increases in cost and delays to completion of the project. Investigation has shown these to be the symptoms of a project that was not fully defined when it commenced.

The project is a clear example of the risks that arise if changes are made to the scope and specification of a project without allowing sufficient time to understand and incorporate those changes into the project before the delivery phase.

The difficulty in preparing budget estimates, monitoring those budgets and predicting final costs all arose from a lack of understanding of the scope of the works at the start of the project and the subsequent development of aspects of the final scheme whilst the Contractor was working on site.

There was, in retrospect, a short window of opportunity to stop the work before the Contractor started on site. Delaying the start of work would have had advantages and disadvantages including;

Advantages

- Design agreed before work starts
- Works properly planned
- Accurate budget
- Appropriate contingency

Disadvantages

- o Delay to opening of revised crossing with its associated safety benefits
- Additional disruption to motorists from second set of traffic controls at Salerie corner.
- Would incur a second set of Contractor mobilisation costs

The result of continuing to progress the project was that it was not possible to accurately budget the work and also that the Contractor was hindered in his planning of an efficient way to carry out the works.

This review does not include an analysis of the costs of the project but it is clear that the works as completed could not have been carried out for anything like the original estimate as the scope of work has increased significantly after that first Sustrans layout.

4 Recommendations

Lessons learnt

The principal lesson to be learnt from this project are to not underestimate the risks of late changes to the scope and specification of projects.

An assessment of these risks is needed to inform the decision making process so that the benefit of completing a project early can be balanced against the potential inefficiencies in terms of direct and indirect costs and disruption arising from an extended construction period.

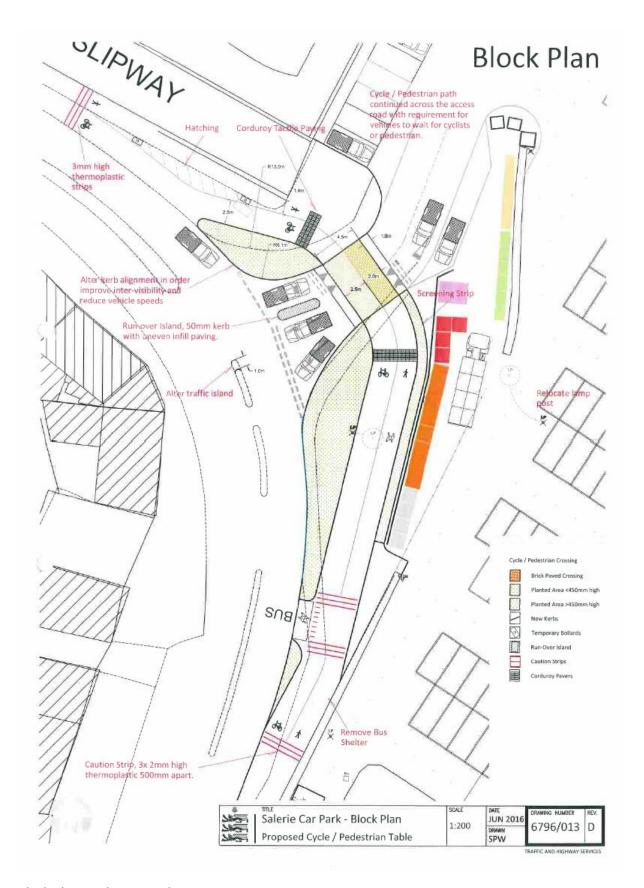
In the absence of a reassessment of these risks the default position should be to stop the project, a brave and difficult decision for any size of project.

Other lessons relate to the procedures and support within the States.

The vast majority of these low value projects progress without incident and further process is not recommended. However the fact that estimates were higher than the budget should have been raised with Routine Capital staff.

It is also recommended that Officers involve Heads of Profession, in this case Engineering, when there are concerns about a project. Heads of Profession may be able to assist with advice, contacts or resources to help those responsible overcome the peaks in resource demand in the project as effectively as possible.

Property Services
States of Guernsey Trading Assets
10 February 2017



Block Plan as Planning Submission