



GLOUCESTER & SHARPNESS CANAL REMOTE-CONTROLLED BRIDGES

Sandfield Bridge Advisory Group Meeting Note 2 March 2016

Attending:

Clive Field	Cotswold Canals Trust	Nick Worthington	CRT Waterway Manager
Daniel Tiffney	Gloucester CC Highways	Dilwyn Parry	CRT Principal Project Manager
Martin Turner	IWA	Trevor Jones	CRT ICA/SCADA Systems Manager
Cllr Samantha Harrower	Fretherne w Saul	Shaun Brown	CRT operations supervisor
Cllr William Alexander	Frampton on Severn	Dave Clements	CRT Operations team leader
Cllr John Jones	Stroud District Council	Madge Bailey	CRT Consultation project manager

Update on road traffic control measures

Daniel: package of GCCH proposed improvements in a single Road Traffic Order (RTO) have previously been circulated to the group. He thanked CRT for their 50% funding contribution which secured GCC funding.

Bridges concerned: Sandfield, Sellars, Fretherne, Parkend and Patch. Significant restrictions (lengths of yellow lines) are proposed although might be moderated depending on consultation response.

Proposals are with the parish councils and the few owners whose frontages are affected for preliminary consultation, will be modified and then will go to full statutory consultation. Public consultation starts April 2016; likely to last 2-3 months. If there is significant objection then the proposals need to go to GCC committee but neither Daniel nor the councillors present expected much objection since the proposals are much-needed.

When the statutory consultation has ended, there is a 28 day period. After this, assuming a smooth consultation, the proposals would be implemented, possibly July/August 2016.

Clive: Cotswold Canals Trust Visitor Centre will assist the consultation if leaflets are provided.

Samantha, William, John: parishes will assist the consultation via their websites etc.

CRT pay & display car park at Sandfield

Nick: CRT estates have confirmed they know improvements are a priority and will be requesting funding but this is still uncertain. A quote 2 years ago for resurfacing was in excess of £100,000.

Samantha: yellow lines on the road are likely to shift parking from the road to the CRT car park and therefore increase its use.

Clive: it needs proper mapping out to determine full income potential in relation to the capital required; CRT could make more money if the unusable bays (big puddles) were improved and spaces marked properly. Is the estates team aware of the correct income potential?

Action Samantha, William: will write formal letters to estates team from parishes.

Update on works at Sandfield Bridge

Trevor, Dilwyn: the kit to pick up signals has been installed plus CCTV cameras. 2 additional cameras have been installed to provide better road view. Views of the canal and road are transmitted to the control centre which is being set up at Fretherne Bridge. Cameras provide the same view down the road and canal as if someone was stood at the bridge; the view is obviously more defined for say the first 50m, but distant views e.g. as far as Saul are also visible.

Update on the app

The app has been further developed and is being commissioned internally to start with. Trevor showed the group the first few screens and instructions on his smart-phone. It asks the boater to give their direction of travel which enables the correct canal traffic light sequence either side of the bridge.

The boater must first register online in "My Trust" on the CRT website where they enter their boat licence number which will be checked. They will then be able to download the app from app stores (Apple i-store and Google Play).

In future, and if the full project goes ahead, the app could have a language conversion for foreign hire boaters.

Practicalities for boaters – using a smart-phone in the rain

Trevor: many waterproof pouches are available on the market. He will buy a range for the select group of boaters to try out during the testing/commissioning phase.

The app could be capable of being triggered by blue tooth devices (like a selfie stick), but this will not be developed for the Sandfield trial. If the full project goes ahead, this capability will be considered for the app.

Action: Trevor to buy waterproof pouches for the select group of boaters

Bridge operation

All boats will clear from one side first, and then any boats from the opposite side, managed by the canal traffic light sequence.

Wi-Fi 'trigger' distance (point on the canal at which the app on the boater's device will send the request to open the bridge) – this is easy to configure and amend to ensure the least time necessary. It will vary between boaters' devices, depending on the strength of their signal. Diagnostics will enable analysis and refinement of the appropriate distance. Trevor agreed with Clive to undertake commissioning of the trigger distance from a boat.

Rowers must be included in the trial. Madge confirmed that a potential new traffic light protocol had been agreed with CRT's head of safety, boating reps and rowers. Clive: visiting rowers are not aware of the current procedure and he had a near miss; Michelle dealt with them well. Nick said that near-misses should be reported to CRT. Dave confirmed that rowing clubs have clear instructions in their huts for their own crews and visiting rowers.

Actions:

Trevor/Dilwyn to liaise with Clive and Martin to use boats during commissioning of Wi-Fi trigger point

Trevor/Dilwyn to invite rowers to test the app at an appropriate stage (Shaun and Dave have their contact details)

Final works at Sandfield starting 4 April 2016 for approx 2 weeks

- reinstall the lasers
- reinstall operation equipment in the hut
- Wi-Fi connection to be installed to Fretherne and testing of signals
- Full system commissioning

The additional road traffic control requested by group members at the car park entrance will be considered after the Sandfield trial if the remote-control project is rolled out in full. It's likely to include a repeater light, a stop line and hatching at the entrance to enable clear passage.

Plan for operating Sandfield Bridge and the trial

Mid April - mid May

CRT test and operate the Sandfield system with bridge-keeper using the app to open the bridge which will be subject to the agreed protocols. Only full-time bridge-keepers will be trained to operate the bridge with the app, not seasonal staff. Small group of boaters invited to test app. Martin can muster volunteer boaters for testing– they are only available until end April/early May before boaters go cruising. CRT fully expect issues to arise as boater testing continues; refinements will be needed to the app, system and the protocol.

Clive: The Cotswold Canals Trust hire boat would be available for CRT set-up of the system at Sandfield. Willow Trust should also be considered for testing.

Samantha and others to observe road traffic impact

When bridge-keeper and advisory group members are happy, the keeper will relocate to Fretherne

Project team members will be on site to train staff and supervise the testing and commissioning

Bridge-keeper training – should include staff using the app *from a boat*

CRT wants informal review meeting with testers to feedback during early stages

William: it's essential to keep everyone updated of what's happening when. Advance notice is needed to ensure that group members can disseminate info to their people.

Action: Dilwyn to communicate important dates to group members in advance. Dilwyn also to set a date for the informal testers' meeting when needed.

Mid May - mid June

app to be rolled out to other select boaters, depending on progress. CRT expect further issues and refinements as boater testing continues.

In addition to the boaters who use the app, the bridge will continue to be operated by the keeper when they see a boat on CCTV wanting to come through or are contacted by keepers phoning ahead from other bridges. Boaters can also phone the keeper, use VHF or the contact point. Whichever way the bridge operation is requested, it will be subject to the agreed protocols.

Mid June

Advisory Group meets to review results after use by select boaters and consider amends to protocols

Date tbc depending on progress

App generally available to boaters who want it; app will be released into app stores. PR campaign will be needed to explain the remote-control, app and trial. CRT staff at gateways will notify boaters of the trial as they enter the G&S Canal, although the app for Sandfield is of course optional.

Protocols NB for Sandfield Bridge only

The group discussed Dilwyn's proposals and agreed the following in principle:

Off peak times

Max opening time to canal (i.e. road traffic held) = 12 minutes

The lasers detect when the road has cleared. If the road is clear i.e. no car has passed the lasers for 30 seconds, then a new request from a boater is accepted and the opening sequence commences. No interval between bridge operations was considered necessary for off-peak times but will be kept under review.

Peak times

Peak road times believed to relate to school run: 8-9am and 3-4pm Mon-Fri (Dilwyn to check if road traffic data concurs)

Max opening time to canal (i.e. road traffic held) = 6 minutes 8-9am and 8 minutes 3-4pm (Dilwyn to check that this is not a peak for canal traffic)

Interval of 10 minutes between operations

Points to note

- The maximum opening times to canal above obviously relate to the 'worst case' scenario when several boats wish to pass; in many cases there will only be one boat when the typical opening time is 4-5 minutes. This must be communicated clearly.
- These are initial protocols for testing and will need refinement as they are trialled. Project team also need to confirm the duration of the opening sequence (from when the road traffic light goes red to when the barrier raises at the end) and also need to time how long it takes for several boats to go through in a line in order to set the app to decline a request from boats that would exceed the max opening time.
- Martin: protocols must not be overcomplicated; remember we are not configuring for exceptional times i.e. Bank Holidays and events when CRT will put staff on bridges.
- Special events (on canal or land) need careful advance planning and may need embargoes for say an hour either to road or canal depending on the event, which has happened in the past. Essential to communicate to all users in advance so they know what to expect and avoid that time if they can. The app will need to allow these interventions.
- William: it's important to tell people what the current waiting time is now, so they can compare it to what will be set by the protocol. People's perceptions are usually worse than the actual waiting time.
- Clive: clear information such as a leaflet explaining things is essential

Action: Dilwyn to ensure clear communication to all stake-holders who can disseminate info to their people

Future decision on the remaining bridges

Dilwyn, Nick: the advisory group should meet September 2016 to review the trial outcomes. If the trial is satisfactory and the case can be made for the full project (i.e. it is technically viable, demonstrates necessary savings and endorsed by stake-holders) the project team will request commercial capital from the Executive Committee in Autumn 2016 and then from Trustees. Advisory group members can review the key points of the draft report in advance.

If funding is approved and available, works could potentially start after April 2017. The works would be implemented in two phases: 2017/18 Phase 1 (bridges north of Sandfield) and 2018/19 Phase 2 (bridges south of Sandfield).

Date of next meetings

Mid June 2016: Advisory Group meets to review results after use by select boaters and consider amends to protocols

September 2016: Advisory Group meets to review trial and consider key points for the directors' paper

William: CRT should invite the chairman of the Severn Voice group of parishes to the September advisory group.

Action: Madge/Nick to invite them

Other points

Martin: fully supports the principles of the remote-control operation and is feeding back to the IWA nationally who are very interested in the scheme. This has been an excellent and constructive meeting.

William: agreed with Martin and commented how the group has come a long way in working together.

Clive, Samantha and John agreed