

THE TRAMWAY MUSEUM SOCIETY1

DEVELOPMENT COMMITTEE

Minutes of the 58th meeting, 22.7.2000 (postponed from 19.3.2000) at Crich

Present: A.W.Bond, D.F.Russell M.C.Wright, J.Soper, J.Miller.

1. Apologies: none, all present.
2. Minutes of last meeting (30.1.00): Agreed.

3. Lottery application:

Provided the application continues to go favourably, phase 2, the detailed design would begin in August, with the Projects Coordination Officer taking a leading role. MCW's paper on Town End was reviewed amended and accepted (Appendix one). The stock of part used points, crossings and rail would be reviewed to establish what was usable.

Actions: DFR to ask our PW consultant

4. Landfill tax:

Red Lion: The Projects Coordination Officer was researching the grant application.

The etched windows were excellent, but delivery was slow. Setting & paving was continuing. Space behind the Tea Rooms needed screening. The fence would be reinstated at the back and a 'Tea Rooms' sign affixed.

Action: JM

The drain geometry had been successfully reviewed. The cast iron gents toilet was ready. Cost of delivery and installation was estimated at £3k.

Action: JS & JM with D.Redmond

5. Health & Safety issues:

Uneven paving outside engine shed. Cost of replacement with tarmac was about £2,000, the cheapest option. It had to be load bearing for Library deliveries. The paving been there since 1968, and would be gone in three years if the Library lottery application was successful. Some members of the Committee felt that spending on the area now was not cost effective, but after a site inspection it was agreed it should be put in the next budget.

IRF1598 referred to tripping on the new emporium wheelchair access ramp. The risk had now been reduced by the placing of the pot plants which were totally inappropriate for a street, but a compromise. The awning plan would solve this and improve the shop's appearance. The awning could be a self-contained project for a volunteer group. To be reviewed with the Membership Committee Chairman.

Action: JM-CH

6. Car Park Security

Expensive staff costs. Reduce height of hedges on members car park. Cameras promised but not here yet.

Action: JM

Recommend we put up warning notices.

Action: AWB- board

7. Entrance building & top of street area:

The review with KBH, CH & IM outstanding. Will be a landfill tax application. JS to provide copies of updated drawings.

Action: JS & MCW

8. Members' accommodation:

No progress. Sketch of FH Field, dimensions to be added to drawings. MCW had outlined the scheme to the PCO.

Action: MCW & DFR

9. Depot Discovery doors:

In budget. Quote received. ordered for November.

Action: JM

10. Woodland Walk:

Some funding from Tarmac. No financial demand from TMS beyond the £1500. Plan to be reviewed with IM.

Action: MCW

11. Access Tram queue weather protection:

The Ashton shelter would be more appropriate at the Victoria Park tram stop and would be the target of the Subscriber Plus programme.

Action: MCW to review with DAF

12. Clay Cross inventory:

Tidied up. The Blackpool omo and the Sheffield works car had arrived. The Leeds recovery vehicle will fill it up. Resource identified to work on the inventory in the winter season.

Action: JM

13. Storage area on Fleamarket.

Committee members had visited the area, and the current tidy storage policy was supported. 400 tons of setts and stone was well laid out and stacked. Signs were recommended to tell visitors what the intended use was for each pile. It was agreed to move piles from trackside to that area. The old portacabin office near Cabin ex quarry needs to be scrapped.

Action: JM

14. Euston Gates:

Delivered and neatly stacked.

15. Empire theatre, Longton facade:

Delivered and tidily stored on Fleamarket.

Action: JS to generate drawings

16. Alhambra facade:

Might still happen.

Action: JS to generate drawing

Action: JM to arrange delivery

17 Toilet signposting :

Four sets delivered. To be put up.

Action: JM

18 Plans for Glory Mine:

MCW's paper was reviewed, amended and agreed. Appendix Two. Suitable track and points needed to be identified (as for Town End above).

Action: DFR to ask our PW consultant

19. Double track to Wakebridge:

Survey needed. The strategy committee suggested do it in two stages. The cost benefit had been challenged. Differing views of costs and need. The single line points may last longer than estimated, and the justification of double track was on point replacement costs.

Action: DFR to investigate

20. AOB:

- a. Crich Carnival had asked to use the Fleamarket. Field House Field looked a better option.

Action: MCW - RTP

- b. Keeping trams dry in winter for winter opening. Ian Stewart had provided costings.

- c. Some traction poles had been offered for the cost of transport. Accepted.

Action: JM

- d. Offer of setts from Leeds. We have 32.7 tons 40 tons due. Accepted.

Action: JM & JS

- e. The quarry had a new owner. Contacts would be set up.

Action: JM

Next meeting: Sunday 22nd October 2000. 10.30am Crich

Circulation: those present, ACSM, PCO, Board, Mins Sec.

mins58 psion

25072000 draft one

Crich Tramways: Town End Design Review.

Amended as agreed at Development Committee meeting no 58, 23.7.00

1. Background & Curatorial:

The 1967 report intended to splay the track to provide a central loading island:- (para 21), having due regard for "recreating the once familiar scene of a tram in the street" (para 19), and para 36 "a townscape such as was common at outer termini." Period to be 1900-1910. Had it been implemented as sketched, we couldn't turn trolleys!

The 1985 Development Report recommended kerb lines at 10ft 6ins from rail and the operation of tramway period road traffic. Drawings show a trailing crossover and track moved east, producing 10ft 6ins between existing kerb & shelter and the western track (and also between eastern track & new kerb). The drawings also show the east side excavated back to the Leylandii, paved and setted with space to park tramway period vehicles at the kerbside all around Town End (37ft. between kerbs). There would be more room to turn large road vehicles. An earlier scheme which included a subway, (drawing no. C0356, 11AU87), shows the track realignment. The need to divert mains services was also identified (para 140).

The Stephenson Place stop would move east on the new kerb line. The Print Shop would be removed.

Passengers would step into the road to board or alight from trams. Kerbside loading became much more prevalent only after WW1, when motor traffic became a significant consideration.

The original 1967 report recommended a "seamless transition from the Museum Street to the real road outside". This is no longer feasible, but the terminus can be laid out so that the illusion of "trams going further" can be created.

The Lottery application (see July 1996 Journal) extends the Library buildings. These plans show no detail of its effect on Stephenson Place and Town End, and simply show the singling of the track **from the breaker** and a narrowing of the street to 10ft by the print shop. If the concept of a Tramway Period Street is to be retained as a feature, then track realignment is required south of the section breaker. The proposal forces the tracks to be moved east (by about 10ft at Town End), if proper clearances and a typical (1910) tramway street appearance is to be attained. The engine shed would go.

The Development Committee's 20th meeting 6.9.97 and 21st meeting set out the parameters for TE track (see summary of decisions, appendix 4 meeting 47, 28.9.97) and Board Minute 8642.

2. The Effect of the Library Scheme:

Street appearance : The extended library building will introduce a subtle curve into the street and improve the image of a street leading through and past a market square then going on beyond. Typical 1910 track in the centre of the road will give the illusion of distance, rather than a terminus in a cul de sac. This is effectively used on model railways, where the introduction of curves and buildings into the line of vision enhances the scene and hides the 'baseboard edge,' which, in our case, is Cromford Road.

3. Visitor movement:

The realignment offers an opportunity to change the visitor circulation by moving the tram stops. It would be possible to reposition the unloading stop to Town End and move the loading stop so that trams draw over the crossover and up to the stop to load as has been suggested by many members. This would change visitor movement. The tram queue would form up right outside the shop on the new wider pavement, and a large queue would totally fill it. The Town End shelter would be redundant. This is operationally less flexible than the present layout. The present tram stops are better, unloading at Stephenson Place into the 'golden mile' of shops & refreshments, and load at Town End where the queue can watch the crew changing ends. The current visitor circulation is effective, and need not be changed.

4. Vehicle movement.

Tramcars: Normal double track operation. A siding for temporary "stacking" is essential, and a good advert when seen from the passing road. Lack of a siding would reduce operating flexibility significantly, but at least trams could not be left out in the hot sun or pouring rain. Reversing facilities for double ended cars with bows, pantographs and trolleys retained as now, including the trolley reverser. With the increased distance between kerb and rail on the east side, Berlin 3006's lift could be used anywhere easily in the SP/TE area.

Road vehicles: The position of alighting & boarding stops will have space for motor cars to pass stationary trams on the nearside and turn round easily.

5. Engineering considerations.

The new track alignment needs to avoid the sewer and mains running down the east side path from the Police Box to Cromford Road bridge.

The incoming 440v AC main which supplies the entire site from the meter house runs through the engine shed, shop & stone workshop, ideally needs to be rerouted under the track and up the east side path to the new distribution point in the Red Lion, then up the east path and across the track by the Depot Gates to the distribution point in the Exhibition Hall. This would complete the Ring Main and mitigate against a catastrophic cable failure. A cheaper option would be to reroute it on the west side either behind the buildings or up the west pavement.

The Engine Shed would disappear. A new home will be needed for the diesels, welding truck and machine tools

6. Track layout:

Examination of tram track maps (particularly the Gillham ones) indicates many permutations of reversing layouts.

6.1. Scissors: an elegant solution, and the facing point could be power operated.. Operationally the best terminal layout. Rarely used until after WW1 (e.g. Wimbledon 1931). We have parts of a scissors from a Bolton depot but it is extremely sharp.

6.2. Facing & trailing. Similar operational potential to a scissors, but takes up more space. Only a few examples (e.g. Woolton, Liverpool, 1924) The Stephenson Place stop would need to be moved 60ft north.

6.3. Single line stub. Simplest solution. Lowest operating potential. Would need to be three cars long. It would compromise the street appearance.

6.4. Facing crossover. Not that rare. Good operating potential. Often replaced by trailing in later years.

6.5. Trailing crossover. By far the most common in inner city locations where the intention was to make further extensions and the highway went on. Operationally sound. Sufficient capacity for current traffic patterns. Has handled 28 departures an hour (1500 passengers¹⁴, car service, 1978 Extravaganza).

6.6. Triangle for steam tram/single ended electric trams. Might be just feasible. Quite untypical of the 1900-1910 period. Triangles were removed quickly after steam ended. A large investment for what would only be occasional use.

6.7. Two points back to back. As flexible as a scissors or facing/trailing combination, but taking more space. Used on reserved track termini on sleeper track extensions. Would not 'look right' in a 'normal' thoroughfare. Stephenson Place tram stop would have to be moved 30-40ft north. (This was Operations Dept's preferred option when last asked.)

7. Cost:

The Lottery application has £100,000 to do all the work around Town End in connection with the library scheme. Detailed costing would be done in phase 2 of the application.

8. Health & Safety:

The layout should resemble a typical street, with appropriate clearances, surfaces, railings, bollards and kerbs, so it becomes more obvious to visitors where to go and how to behave, thereby enhancing

their 'tramway experience' without introducing unnecessary hazards. Vehicles can then move around in the proper period fashion with the minimum risk. The HMRI's recommended clearances have been used in the preliminary sketches. At its narrowest point (the corner of the existing Emporium), sketches show a 6ft west side pavement and a 28ft 9ins road between kerbs.

9. Conclusions:

The Library Scheme presents an opportunity unlikely ever to be repeated to remodel Town End and fulfil the 1967 vision as refined over the years.

The only contentious issue is the track layout. To be typically pre 1910, give the illusion of NOT being a terminus, enable street traffic to circulate properly and complete the picture of a tramway period street, the retention of a trailing crossover is recommended.

Sources (over several years):

1967 & 1985 Development Reports

Development Committee minutes

H&S committee advice (via Chairman GBC)

Operations Dept paper.

P.W.Supt (JMD)

Overhead, other services: R.C.Hall

Phones & Power: J.D.Markham, N.Anderson

On-site contributions from many members (Ian Musgrove, Richard Robson, Richard Sykes, Cliff Pelham, Peter Bannister, John Gardener, Andy Sharpe, Keith Chadbourne, Peter Johansson, Bill Lane, to name but a few).

MCW psion

Jan2000,

v2 July 2000

The Layout of Glory Mine.

Development Committee Review. Meeting 58. 23.7.00.

History: Installed in 1978, parts of the current layout are getting life expired. Last adjustments (the result of rails wearing out) significantly reduced operability, when the reversing stub was reduced from three cars to one, the trolley reverser became unusable and its alteration impractical.

The original 1967 report suggested placing a significant attraction at the outer terminus, and the Museum of Industrial Archaeology Ltd was formed for the purpose. The 1985 Development Report (para 135) was cautious about the viability of any attractions at the outer terminus.

There is still a desire to reach Crich Stand. This would require total obliteration of the present terminus, significant land purchase and a large amount of cash. Whilst not considered further, any alterations should be viewed as medium term (10-15 years).

Curatorial factors. There are few historical precedents in the UK for termini away from roads - Rednal, Temple Newsam, Alexandra Palace (2), Kinver, (Laxey), and these were to tourist attractions. Facilities were sparse, often in temporary wooden structures and operated on a seasonal basis.

Our Objective: To increase visitor dwell time with an attractive area to get off at, enjoy the view, watch trams, take photos, but with no drastic resource implications for staffing, maintenance or security.

Site security is extremely poor because of remoteness, and on a Public Footpath. Very exposed to the weather. Presently no services except 600v DC and telephone. Any buildings would be a security risk. This probably limits development to picnic tables, a tram stop, 'bus' shelter, decent tarmac surfaces and a path to Wakebridge.

The camera obscura, toilets or even a "Bradford Shelter" would be too big a risk. Point box covers were stolen in summer 1999, so even picnic tables pose a problem.

Operational: This terminus should not be a constraining factor opposite track developments envisaged for Town End, Cliffside and Wakebridge. A loop capacity of 3 cars each side and a 3 car stub has supported a 14-car service (Extrav 1978) the maximum likely requirement. The siding, whilst useful for engineering vehicles, is not essential if the stub is long enough for parking.

A revised layout should minimise wear by using right hand points and gentle curves.

To improve tramcar reversal, it will be necessary to have the use of and regrade a small part of the field behind. A turning circle would eliminate the untypical reversal (& seat swapping) when loaded. Few trams reversed en route (Brighton Queen's Park route, Grimsby & Immingham). A circle would even out car wear, but need a lot of land and civil engineering.

The proposal:

Purchase extra land to provide space for a proper reversing stub or turning circle.

If land purchase is not feasible, realign the track within the space available. This would include slewing the track eastwards, gentler curves, single bladed (right hand?) points and some regrading to provide space to alight from trams in both sides of the loop.

Landscape & fence so visitors may alight, with clear segregation from the public footpath.

Provide picnic tables & seats. a shelter, path to Wakebridge.

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