

Contractor



### Forth Crossing Bridge Constructors

HOCHTIEF Solutions American Bridge International DRAGADOS Morrison Construction

Project

## FORTH REPLACEMENT CROSSING

Document title

## TRAFFIC MANAGEMENT PLAN (TMP)

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#### 1. Objective of the Traffic Management Plan

The overall purpose of this document is to establish a system capable of meeting contract and statutory requirements with respect to Traffic Management associated with the project. It provides the framework for managing the implementation of all Traffic Management on the project.

The Traffic Management plan draws its data from the following documents:

- a) Employer's requirements (Appendix 1/17, 1/18, 1/19 and 1/20 of the specification: Part A2). Employer's requirements (Section 2.12 Part A1)
- b) Code of Construction Practice (Section 4)
- c) The Contract Programme

For each Temporary Traffic Management scheme (TTMS) there shall be a specific Traffic Management plan including drawings that provides the detailed requirements of Appendix 1/17 Section 1.3 and Appendix 1/18. (Employers Requirements Part A2: Specification). Appendix A contains the proforma to be completed for individual Traffic Management schemes.

This Traffic Management plan is a live document and is contained in the Project Management Plan. It will be revised and updated as appropriate in line with changes to the construction works.

#### The Traffic Management Working Group

A Traffic Management Working Group (TMWG) chaired by the EDT has been formed for the project which includes representatives from Transport Scotland, road operators, road authorities, the emergency services and FCBC. FCBC shall advise members of the group as to future traffic management proposals, meeting generally at monthly intervals. Information to be delivered at meetings of the TMWG shall be submitted generally 7 days in advance of the next meeting.

FCBC shall also consult with:

- a) The City of Edinburgh Council
- b) Fife Council



- c) The Trunk Road operating companies
- d) The Police
- e) Transport Scotland
- f) West Lothian Council
- g) FETA

The requirements determined from these consultations shall be discussed and determined by the TMWG.

#### 2.0 Contract Information

#### 2.1 Traffic Safety and Control Officer (TSCO)

FCBC have appointed an in-house Traffic Safety and Control Officer (TSCO) who will be assisted by the Deputy TSCO. The public contact number in regard to any Traffic Management issues is the Project 24 hour number, 0800 078 6910. The TSCO shall be responsible for all traffic safety and control during the construction of the works and shall liaise with the relevant authorities as required. FCBC have appointed Class One as their Contractor for the design and implementation of all Traffic Management. Class One will have a full time presence on site from Spring 2015. They will provide a Dayshift and a Nightshift Supervisor who will act as Deputy TSCO.

(organogram here)

The responsibilities of the TSCO and of his nominated deputies shall include, without limitation, the following:

- Monitoring, with the assistance of sufficient mobile personnel and of sufficient other suitable and appropriate aids, the flow of traffic within the area and within the period defined for the operation of the vehicle recovery service;
- Ensuring that, within 5 minutes of notification of the occurrence of an incident, as defined below, resulting in stationary vehicle(s) on a road open to the public, the incident is reported to the vehicle recovery service;



- c) Recording and logging all incidents and all movements of recovery vehicles and, when called, all movements of the emergency services. An "incident" is defined as a shed load, vehicle breakdown, vehicle abandonment or traffic accident, whether or not the latter involves personal injury;
- d) Liaising with Traffic Scotland on matters that affect traffic flow:
- e) All traffic management measures associated with the Works;
- f) Ensuring that all equipment is in place and in full working order at all times;
- g) Enforcement of all relevant Health and Safety directives:
- h) Enforcement of site access requirements;
- Liaison with FCBC, the Employer, the TMWG and any relevant authority and continued monitoring of the traffic management measures adopted: and
- j) Arranging for watchmen and other staff so that the Site is patrolled and inspected at all times and equipment attended to and maintained. In the event of an accident, replacement signs, cones, bollards and lights and the like shall be erected without delay.

#### 3.0 Traffic Management Programme (ref COCP 4.2.7)

3.1 Appendix A contains a "three month look ahead" schedule proforma. This document will be a live document internally updated monthly and submitted to the employer and TMWG 7 days in advance of each TMWG meeting (along with specific Traffic Management plans/drawings). This schedule will be consistent with the contract programme, and periodically uploaded to the Transport Scotland Website.

# 4.0 Measures to provide for the Safety of traffic, the public and construction staff during the Traffic Management

4.1 All traffic management works to be completed by trained competent personnel. All TTMS shall be designed and installed in accordance with chapter 8 and design standards as specified in the Employer's Requirements, part A2 (Appendix 1/17 and 1/18)



- 4.2 A risk assessment shall be carried out for the installation of each TTMS and shall consider hazards associated with each scheme. For major schemes a method statement shall be produced.
- 4.3 A stage 1 road safety audit has been completed on the preliminary phasing traffic management drawings. Comments from this audit will be considered and incorporated into the TTMS as appropriate in the detailed design. Stage 2 and Stage 3 road safety audits shall be carried out on TTMS that are judged by the Contractor, following discussions with the Employer, the police and relevant roads authorities to be sufficiently complex or major to require an audit. In assessing this, the Contractor shall have regard to the opinions, representations and requirements of the above stated parties.
- 4.4 The Contractor shall carry out traffic modelling in accordance with Appendix 1/17, section 4.4 (Employers Requirements Part A2: Specification).
- 4.5 Temporary Automatic Speed Camera System for the enforcement of mandatory speed limits at roadwork's (TASCAR) shall be provided in accordance with Appendix 1/26 (Employer's Requirements Part A2: Specification). In addition, the Contractor shall supply average speed detection cameras in accordance with Appendix 1/17, section 1.23 (Employers Requirements Part A2: Specification).
- 4.6 Responsible and appropriately experienced operatives with an appropriate vehicle shall be made available for the operational supervision and maintaining of the TTMS, as required.
- 4.7 In the event of an accident occurring in or adjacent to the site, the TSCO shall immediately contact the emergency services as appropriate, emergency contact details are:-
  - In case of emergency call 999



- 4.8 When necessary during construction on the line of the trunk roads, the contractor shall provide a recovery service in accordance with Appendix 1/20 and Clause 120 (Employers Requirements Part A2: Specification), to minimise the impact of breakdowns or accidents on the flow of traffic.
- 5.0 Procedures to be followed for the temporary or permanent closure or diversion of roads or accesses.
- 5.1 If a road requires to be closed temporarily then FCBC shall demonstrate to the relevant authorities that the construction work cannot be carried out safely without the road closure.
- 6.0 Procedures to be followed to obtain consent to work on or over railways
- 6.1 FCBC will consult and comply with the requirements of Network Rail and comply with the requirements of Part 10L of the Schedule to the Conditions of Contract
- 7.0 Pedestrian, Equestrian and Cyclist Routes
- 7.1 Pedestrian, Equestrian and Cycling routes will be shown on the specific traffic management plans.
- 7.2 FCBC shall provide temporary vehicular and pedestrian diversions as appropriate. All pedestrian diversions will comply with Transport Scotlands "Design Guidelines for Roads for All".
- 8.0 Monitoring Bus Routes and Private Accesses
- 8.1 Consultation with the relevant public transport and local bus operators regarding traffic management schemes will take place through the forum of the TMWG.



- 8.2 Bus routes affected by the works will be described in the specific traffic management plan.
- 8.3 Private accesses affected by the temporary traffic management schemes shall be maintained unless otherwise agreed with the owner/occupier and the EDT.
- 8.4 FCBC will consult with relevant local authorities, the operators of Halbeath and Ferrytoll Park and ride facilities and relevant public transport and local bus operators regarding traffic management schemes.
- 9.0 Measures to be implemented to Reduce Construction Traffic impacts or impacts associated with over parking on residential streets
- 9.1 Haul roads shall be provided where considered appropriate, following consultation with the TMWG, to minimise the use of public roads.
- 9.2 Construction vehicles will avoid travelling in convoys on public roads.
- 9.3 Construction staff using private vehicles to travel to the site will park their vehicles in designated site car parks and not on public roads within a two mile radius of the site. Parking of vehicles being used for construction purposes will not be permitted on public roads within the limits of any traffic management scheme to minimise disruption to traffic and local residents.

#### 10.0 Temporary and Permanent Access to the Works

10.1 Various site access points will be established during the works. Their location will be determined in consultation with the Employer and relevant roads authorities in accordance with Appendix 1/19, (Employers Requirements Part A2: Specification).

#### 11.0 Permitted Access Routes



- 11.1 The drawings contained in Appendix B show routes not generally permitted within the Contract for use by construction traffic. Exceptions may be authorised by the TMWG following consultation with the relevant roads authority.
- 11.2 A haulage route plan will be developed for the site for major suppliers showing points and access points to be used to get to work areas. The plan will be communicated to all relevant suppliers/subcontractors.
- 11.3 FCBC shall comply with the requirements of Appendix 1/19 (Employers Requirements Part A2: Specification).
- 12.0 Monitoring Requirements in Relation to the Traffic Management Plan
- 12.2 Each specific Traffic Management Plan will describe the level of monitoring required to comply with ERS part A2: Appendix 1/17, section 3 (Employers Requirements Part A2: Specification)
- 12.3 Generally, any planned major changes to the traffic management layouts, including any plans to reduce the number of lanes, shall be notified to the following organisations at least 14 days in advance, following approval by the TMWG:
  - Traffic Scotland Control Centre (TSCC)
  - AA Road watch
  - RAC
  - Radio Scotland
  - Local Radio
  - Local Press
- 12.4 The following organisations shall be informed about the occurrence of delays and queues together with any extraneous reasons for delay.



- TSCC
- AA Road Watch
- Radio Scotland
- Local Radio Network
- Traffic Link
- Any other organisations as specified by the employer
- 12.5 Traffic queues shall be monitored and measured in accordance with Appendix 1/17 (section 3.5 and 3.6) where specified in the specific traffic management plan.
- 12.6 The TSCO will be responsible for all monitoring associated with the TTMS.
- 13.0 Procedures to facilitate the movement of emergency services through any TTMS
- 13.1 Emergency services will be consulted at the TMWG for each TTMS.
- 13.2 The TSCO shall, in the event of an emergency contact the emergency services and Employer to provide details of the incident in accordance with Appendix 1/17, section 3.8 (Employers Requirements Part A2: Specification). The TSCO and/or his deputies will then arrange to facilitate and escort the movement of the emergency service through works area, if possible to do so. The assistance of the police may be required also and shall be co-ordinated with the TSCO.

#### 14.0 Appendices

- A 3 Month Traffic Management Lookahead Programme proforma
- B Routing of Vehicles



#### Appendix A

3 Month Traffic Management Lookahead Programme

Forth Replacement Crossing.

Jemporary Traffic Management Schemes - Lookahead Programme as at 15th August 2011.

| Anticipated Dates            | Location                            | Construction Actualy   | The state of the s |
|------------------------------|-------------------------------------|--|--|
| From To                      |                                     | Assertation and a section  | IN RESTRITIONS   |
| uc                           |                                     |  |  |
| -                            | B980 Castlandhill Road              | Diversion of Footpath installation of drainage & service diversions.   | No restrictions. All works off line  |
|                              | Ferrytoil Syratory                  | Installation of Temporary Safety Barrier to construct bridge abutments   | Lane Closure Off Peak  |
|                              | 8980 Castlandhill Road              | Install Gas and C&W Road Crossings   | Temporary Traffic Lights, Night Time   |
| 14-Oct 25-Oct                | A90/8981                            | Construction of Temporary Ramp to allow delivery of North Launch Steelwork   | No restrictions. All works off line  |
|                              |                                     |  |  |
| South Section                |                                     |  |  |
| July-13 14 weeks             | Society Road                        | Carriageway construction   | Lane Closures. FCBC will look to minimise disruption and   |
| Aug-13 02-Apr-14             | Echline Junction N/8 Diverge / A904 | Delivery of steel units for South Approach Viaduct (90 loads from Darlington) under police escort  | Tempore Introduce possible Temporary shortern restrictions on A904 in both   |
| 19-Aug 22-Aug                | Side Roads (A904, B800, A924)       | Pavement Testing (Pending availibility of Lab)   | Various - Temporary Lights, Stop/go boards, Night Time   |
| Aug / Sep 13                 | A90                                 | Gantry construction  | Night Total Hard Shouldar closures   |
| 09-Sep 11-Sep                | U221                                | Drainage works, Gas and Power Crossings  | Road Closure   |
|                              | A904 (West)                         | Gas main tia-in works  | Temporary Traffic Lights, 2 x Night Time   |
| -                            | A904 (West)                         | Construction of west tie-in - Phase 2 ( Central/esservation works)   | Lanes delineated onto hard shoulders   |
| 23-Oct <b>20-Dec</b>         | A904 (West)                         | Construction of west tie-in - Phase 3 ( Westfound lane construction)   | Lanes delineated onto northern lane / hard shoulder  |
|                              |                                     |  |  |
| 12-Month Lookahead Programme | mme                                 |  |  |
| Anticipated Dates            | - Contract                          |  |  |
| From To                      |                                     | Ones of the Control o | IM Restrictions  |
| North Section                |                                     |  |  |
| Nov-13 Mar-14                | Ferrytoli N/B Merge                 | Ground improvement works between A90 and (A980) Castlandhill Road)   | Details / timing of specific restrictions to be confirmed  |
| Mar-14 Aug-14                |                                     | Delivery of seer bnits for Yorth Approach Viaduct (from Darlington)  | Route to be confirmed  |
| Feb-14                       | Ferrytoll N/B Diverge               | Realignment of Diverge to facilitate temporary bridge across the gyratory  | Traffic switch onto new alignment only   |
| Apr-14 Jun-14                | 18981                               | New carliage ray tie-just  | Temporary Traffic Lights.  |
| TBA                          | Ferrytoli Gyratory                  | Construction of Jemponary andge  | Details / timing of specific restrictions to be confirmed  |
| South Section                |                                     |  |  |
| Oct-13                       | A904                                | Construction of west tie-in  | Details / timing of specific restrictions to be confirmed  |
|                              |                                     |  |  |
| Feb-14                       | A904 / B924                         | Construction of carriageway tie-ins at A904(east) and B924   | Details / timing of specific restrictions to be confirmed  |
| Feb-14                       | A90 S/B Public Transport Link       | New carriageway tia-ins  | Details / timing of specific restrictions to be confirmed  |
| Apr-13                       | B800                                | Realignment of new carriageway   | Details / timing of specific restrictions to be confirmed  |
|                              |                                     |  |  |



#### Appendix B

FRC-T\_SKET-T-GEN-00010 Rev C1b - Routing of Vehicles North FRC-T\_SKET-T-GEN-00011 Rev C1b - Routing of Vehicles South



