SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 4 PART 2

INTEGRATED ROADS INFORMATION SYSTEM

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SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 4 PART 2

INTEGRATED ROADS INFORMATION SYSTEM

1. INTEGRATED ROADS INFORMATION SYSTEM

1.1 General

1.1.1 The Integrated Roads Information System shall be provided by the Director to the Operating Company via a hosted solution. The features and functionality of the Integrated Roads Information System are available through the internet.

1.1.2 The Director shall supply the Operating Company with 50 named licences to access the website.

1.1.3 The Integrated Roads Information System is a functionally rich system which includes:

(i) Pavement management function of the Integrated Roads Information System including data for:

(a) condition,

(b) accidents, and

(c) network.

(ii) Scheme manager function of the Integrated Roads Information System including data for:

(a) all Schemes included in draft and approved one and three year programmes and all other identifiable Schemes for future consideration,

(b) all Statement of Intents, results of further investigations and other information supporting the scheme justification,

(c) current Scheme costs, programme and status information, and

(d) Scheme Design and construction information.

(iii) Routine maintenance and management function of the Integrated Roads Information System including data for:

(a) network,

(b) inventory,

(c) defect,

(d) Inspection,

(e) maintenance, and

(f) street lighting.

The routine maintenance and management function of the Integrated Roads Information System includes all data associated with the Trunk Road network, including electrical, environmental and landscape assets.

(iv) Structures management function of the Integrated Roads Information System:

(a) inventory,

(b) defect,

(c) inspection, and

(d) maintenance.

(v) Development management function of the Integrated Roads Information System:

(a) pre application,

(b) application, and

(c) response.

1.1.4 The Operating Company shall not bulk upload data from its own systems into the Integrated Roads Information System unless this has been expressly consented to in advance by the Director and where such an upload can be fully audited by the Director or the Performance Audit Group.

The Operating Company may bulk download data from the Integrated Roads Information System to its own systems only when the Director has previously audited and consented to the download methodology and the verified the validity of the data to be downloaded in advance.

The Integrated Roads Information System allows for uploads and downloads of data to and from permitted sources in a variety of manners including standard Microsoft Office output files, comma separated variable files and XML Schema. The Operating Company may submit requests to the Director for the use of alternative input and output methodologies. Consent for such usage shall be at the sole discretion of the Director.

1.1.5 The Operating Company shall provide the following to enable its licensed users to access the Integrated Roads Information System:

(i) computer terminals running an acceptable version of Microsoft Internet Explorer or acceptable alternative browser software,

(ii) broadband (with a minimum connection speed of one megabit per second for up to five users), corporate network or similar internet access, and

(iii) security and firewall setup enabling the following protocols:

(a) HyperText Transfer Protocol ("http"),

(b) HyperText Transmission Protocol-Secure ("https"),

(c) Citrix Internet Connection Sharing ("ICS"), and

(d) Remote Desktop Protocol ("RDP") or equivalent.

1.1.6 The Director shall supply software for Data Capture Devices for use during inspections as required by Schedule 7 Part 1.

1.1.7 The Operating Company shall supply all Data Capture Device hardware that shall meet the following minimum specifications:

(i) laptop, tablet personal computer or similar device running a suitable Windows operating system (not Linux or similar), or any other software as notified by the Director,

(ii) compliance with the specification in paragraph 1.1.5 of this Part excepting item (ii),

(iii) minimum 40 gigabyte data storage memory, and

(iv) global positioning system capabilities.

1.1.8 The Operating Company shall accommodate all future developments of the system at any time during the Contract Period.

1.1.9 The Operating Company shall appoint an Integrated Roads Information System Coordinator who is responsible for the implementation and management of all modules of the Integrated Roads Information System by the Operating Company.

1.1.10 The Integrated Roads Information System Coordinator shall provide to the Director the names and email addresses of staff authorised by the Operating Company to use the Integrated Roads Information System. The Operating Company shall notify the Director within five Working Days of any changes of authorised users. The Operating Company shall notify the Director within one Working Day of any authorised user that ceases to be employed by the Operating Company.

All usernames and passwords supplied by the Director to the Operating Company, or passwords generated by the Operating Company's staff, shall be treated as confidential information and the Operating Company shall ensure staff do not divulge this information to unauthorised people.

1.1.11 An Integrated Roads Information System user group meeting shall be held from time to time to inform the Operating Company of future changes to the Integrated Roads Information System and discuss potential developments to the Integrated Roads Information System. Any developments to the Integrated Roads Information System shall be at the sole discretion of the Director.

The Integrated Roads Information System Coordinator shall attend the Integrated Roads Information System user group at the dates and times notified in writing by the Director.

1.1.12 During the Mobilisation Period and from time to time during the Contract Period, the Director shall provide training to staff nominated by the Operating Company on the use of the Integrated Roads Information System. These nominated staff shall then be responsible for training other members of the Operating Company's staff as necessary in its use. The Operating Company shall ensure that all nominated staff attend such training at the dates and times notified in writing by the Director.

1.1.13 The Operating Company is responsible for providing any additional training and ensuring that the Integrated Roads Information System is used in accordance with its own Management System procedures.

1.2 Pavement Management Functionality of the Integrated Roads Information System Features

1.2.1 The Director shall populate the pavement management function of the Integrated Roads System module with the following:

(i) road condition data including:

(a) SCANNER survey data,

(b) Sideways Co-efficient Routine Investigation Machine ("SCRIM") survey data, and

(c) deflectograph survey data,

(ii) derived traffic flow data from the Scottish Roads Traffic Database,

(iii) accident data, and

(iv) road construction data.

1.2.2 Survey contractors employed by the Director shall undertake road condition surveys.

The Director shall notify the Operating Company in writing of the programme of routes and types of survey to be undertaken on the Unit each year during the Contract Period. Notification shall be provided at least one month before the start of the annual survey cycle.

1.2.3 The Director's survey contractors will liaise directly with the Operating Company informing it of dates and types of survey to be, or being, undertaken on the Trunk Road network. The Operating Company shall liaise with such survey contractors when necessary for traffic management and other safety purposes.

1.2.4 The Operating Company shall analyse and interpret the pavement management function of the Integrated Roads System data to identify structural pavement maintenance Schemes.

1.2.5 The Operating Company shall update the Scheme manager function of the Integrated Roads System module of the Integrated Roads Information System with details of all structural pavement maintenance schemes in its draft maintenance programmes as referred to in Schedule 4 Part 1.

The progress of each Scheme, as referred to in Schedule 4 Part 1, shall be updated by the Operating Company in the Scheme manager function of the Integrated Roads System within five Working Days throughout the Contract Period.

1.2.6 A Statement of Intent and value for money assessment as referred to in Schedule 4 Part 1 shall be attached to each Scheme record by the Operating Company.

The category of the Scheme shall be entered by the Director.

1.2.7 As part of the requirements for completion of a Scheme which includes repair, replacement or change of an area of carriageway greater than 30 metres in length and of width not less than half of the lane width, the Operating Company shall produce a maintenance Scheme data sheet for that area.

If more than one specification for repair, replacement or change is adopted within the area, the Operating Company shall produce a structural pavement maintenance Scheme data sheet for each specification that is adopted. Submission shall be made on the basis of one submission per Scheme with separate sheets identified by

chainage for each specification. The following filenaming convention shall be used "MSD_YYYY_XXXX_ZZZZ", where:

(i) YYYY = year e.g. 0910 for financial year 2009/2010.

(ii) XXXX = Route e.g. A1.

(iii) ZZZZ = Scheme name/location e.g. Cockburnspath.

(iv) example filename = "MSD_0910_A1_Cockburnspath".

1.2.8 Maintenance Scheme data sheets shall be prepared in the form referred to in Annex 4.2/A of this Part. Such maintenance Scheme data sheets shall contain sufficient data to identify uniquely the location and extent of the area of repair, replacement or change with respect to the linear network referencing system. Following Scheme approval, there may be a requirement to adjust a Scheme on Site. On such occasions an explanation for change form, provided in Annex 4.2/D of this Part, shall be submitted with the maintenance Scheme data sheet.

Maintenance Scheme data sheets shall be submitted where pavement investigations indicate there is a substantial difference between the existing construction layers and those recorded in the Integrated Roads Information System and where the difference is likely to influence the interpretation of deflectograph data.

Maintenance Scheme data sheets shall be submitted to the Director within 25 Working Days of substantial completion of the related repair, replacement, change or Site investigation.

2. TRUNK ROAD NETWORK REFERENCING AND UPDATING

2.1 Network Reference Requirements

2.1.1 The Trunk Road network is defined by way of a linear network referencing system using a series of links and sections dividing each Route into identifiable lengths for management purposes. Each link and section has attributes defining its location, road characteristics and shape and is marked by sets of studs installed on the road. All Trunk Road data including Defects, treatments, inventory, condition data, accidents and any other relevant data are fitted to this network referencing system. These data are referenced by their link, section and chainage from the network node point and by Ordnance Survey grid reference co-ordinates.

2.1.2 The Director is responsible for:

(i) defining the Trunk Road network and its attributes in the Integrated Roads Information System,

(ii) assigning link and section numbers and node points to the Trunk Road network, and

(iii) updating the Integrated Roads Information System,

when changes occur to the Trunk Road network, attributes and data.

The Trunk Road network referencing system is held by the Director and supplied to the Operating Company on the Integrated Roads Information System. The Operating Company shall ensure that the network referencing system is used in all of its systems which reference data to the Trunk Road network.

2.2 Schemes Requiring Network Updates

2.2.1 Updates to the Trunk Road network referencing system are necessary when the geometric alignment of a road changes.

Changes include major realignments such as new motorways or bypasses of communities and also less extensive changes such as:

(i) on-line dualling,

(ii) new junction layouts,

(iii) roundabouts,

(iv) bend straightening, and

(v) any other change where the new alignment deviates by 300 millimetres from that currently recorded in the Trunk Road network referencing system.

Other changes to the Trunk Road may affect the characteristic of a road although the geometric alignment may remain unaltered. Changes to the characteristics of a road include:

(vi) addition of a climbing lane,

(vii) carriageway or Lane widening,

(viii) changes in Lane allocation or junction layouts,

(ix) bridge or culvert extensions, and

(x) other features affecting the use and maintenance of the Trunk Road.

2.2.2 The Operating Company shall implement processes to ensure that any change to the geometric alignment or characteristic of a Trunk Road is identified.

Sources of potential change may include:

(i) Schemes promoted by the Operating Company such as minor improvement Schemes,

(ii) improvement Schemes promoted by the Scottish Government such as bypasses and major improvement projects,

(iii) Schemes promoted by third parties as referred to in Schedule 8 Part 2, and

(iv) errors and discrepancies in the current network referencing.

2.3 Information Required for Network Reference System Changes

2.3.1 Where, as a result of Operations by the Operating Company or any other works by third parties, changes of geometric alignment or characteristics necessitate updates to the Trunk Road network referencing system, the Operating Company shall, referring to the update process and using the forms provided in Annex 4.2/C of this Part, instigate the update process by submitting a network change sheet to the Director. Where an error is identified, the Operating Company shall submit a network error sheet to the Director.

Complete data shall be provided by the Operating Company at least four weeks before commencement of construction work to allow the changes to be implemented.

2.3.2 The following information shall be provided by the Operating Company to the Director for each Scheme identified, during the update process, to ensure that the changes required can be assessed, node markers installed and the Trunk Road network referencing system updated:

(i) Scheme layout plans at 1:2500 scale which shall include the Scheme chainages for each carriageway in the Scheme at the tie-in points to the existing road,

(ii) proposed new or revised network node locations (if applicable),

(iii) Scheme construction, commencement and completion dates. The date when traffic first starts using the road in a temporary traffic management contra-flow or other temporary traffic management situation before Scheme construction has been completed shall also be provided,

(iv) carriageway specification and the number of Lanes for each new section,

(v) once the revised (Scheme) network has been notified to the Operating Company by the Director, the Operating Company shall within 25 Working Days provide to the Director:

(a) a completed maintenance Scheme data sheet, to the format shown in Annex 4.2/A of this Part, and

(b) Sideways Co-efficient Routine Investigation Machine ("SCRIM") Site categories to the format shown in Annex 4.2/B of this Part,

for the Scheme, based relative to the new network referencing, and

(vi) once the network node locations have been advised in writing by the Director and node markers installed, details for each Scheme as follows:

(a) measured lengths for each new network section including those comprising existing or new road,

(b) measured chainage of the start and end of the new Scheme related to the existing network referencing,

(c) Ordnance Survey grid references for each installed network node point which shall be provided as 12 figure references and shall be accurate to plus or minus one metre, and

(d) node marker reference replacement documents to the format shown in Annex 4.2/E of this Part.

2.3.3 The Operating Company shall:

(i) notify the Director of any Scheme, change in characteristic or potentially required changes to the Trunk Road network and provide data as referred to in paragraphs 2.2.1 and 2.2.2 of this Part,

(ii) ensure that all Operating Company systems use the most up-to-date network referencing system,

(iii) maintain all road studs as referred to in Schedule 7 Part 1, and

(iv) notify the Director of:

(a) any error, inaccuracy or discrepancy in the Integrated Roads Information System,

(b) the reason for such error, and

(c) the proposed correction for consideration by the Director.

2.4 Inventory Requirements

2.4.1 The Director is responsible for:

(i) supplying the Operating Company with the existing known inventory in the Integrated Roads Information System during the Mobilisation Period, and

(ii) defining the inventory items and attributes to be collected by the Operating Company within the Integrated Roads Information System.

2.4.2 The Operating Company shall:

(i) maintain the accuracy and integrity of the inventory data as defined in the Transport Scotland "*Inventory Collection Manual*",

(ii) add new inventory items and end-date old items as the inventory changes, and

(iii) add missing inventory records for current inventory items.

2.5 Inspection and Maintenance Requirements

2.5.1 The Director is responsible for defining the types of inspections and maintenance to be recorded by the Operating Company in the Integrated Roads Information System.

2.5.2 The Operating Company shall:

(i) design its inspection and maintenance routes,

(ii) create and maintain its routes in the routine maintenance and management function of the Integrated Roads Information System,

(iii) enter details of all inspections, Defect rectification and maintenance activities undertaken, and

(iv) record all required data and attributes in the routine maintenance and management function of the Integrated Roads Information System.

2.5.3 The Operating Company shall ensure that the routine maintenance and management function of the Integrated Roads Information System data supports the evidence required for fatal accident inquiries and the consideration of damages claims by third parties. The Operating Company shall maintain and ensure the accuracy and integrity of the routine maintenance and management function of the Integrated Roads Information System data at all times including all inventory, Category 1 and Category 2 Defects and all inspections and maintenance carried out on the Trunk Roads within the Unit.

2.5.4 The Operating Company shall include procedures in its Management System for the validation of all data for correctness and completeness before entering the data into the routine maintenance and management function of the Integrated Roads Information System. Any error or omission in the routine maintenance and management function of the Integrated Roads Information System data found by the Operating Company shall be corrected within four Working Days of its discovery.

2.6 Routine Maintenance and Management Function of the Integrated Roads Information System Features

2.6.1 The routine maintenance and management function of the Integrated Roads Information System data can be accessed, interrogated and retrieved using one or more of the following methods:

(i) map based presentation of data,

(ii) fixed reports, and

(iii) user defined reports.

2.6.2 The fixed reports are intended to include but not be limited to the following:

(i) Category 1 and Category 2 Defects and other Defects,

(ii) Category 1 Defect repair performance,

(iii) Safety Inspection performance,

(iv) Safety Patrol performance,

(v) Detailed Inspection performance, and

(vi) maintenance performance.

2.6.3 The user defined reports enable users to create queries concerning the Integrated Roads Information System data and to save the data in a text format.

The Operating Company shall use the routine maintenance and management function of the Integrated Roads Information System to record details and evidence of its activities, including:

(i) completed inspection checklists and certificates,

(ii) evidence of activities being carried out with before and after photographs,

(iii) photographic evidence of all Category 1 and appropriate Category 2 Defects,

(iv) photographic evidence of Defect repairs for all Category 1 Defects and appropriate Category 2 Defects,

(v) inventory design information, and

(vi) photographs of inventory items for all items required by the "*Inventory Collection Manual*" and where appropriate for other items.

This is Annex 4.2/A to Schedule 4 Part 2 referred to in the foregoing Agreement between Scottish Ministers and BEAR Scotland Limited.

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 4 PART 2

INTEGRATED ROADS INFORMATION SYSTEM

ANNEX 4.2/A – Maintenance Scheme Data Sheet

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 4 PART 2

INTEGRATED ROADS INFORMATION SYSTEM

ANNEX 4.2/A – Maintenance Scheme Data Sheet

MAINTENANCE SCHEME DATA FORM

Unit _____ Date supplied to TS _____

Route _____ Work code _____ Scheme number _____

Scheme Name _____

Lane Number(s) _____ Start link / section _____ Start chainage _____

End link / section _____ End chainage _____

Thickness of material removed (all resurfaced areas) _____

LAYER	MATERIAL TYPE							MATERIAL THICKNESS	BINDER TYPE			TEXTURE			TYPE OF AGGREGATE		NOMINAL SIZE OF AGGREGATE				PSV
	Anti skid	*Bitumen Macadem*	*Hot Rolled Asphalt*	*Surface Dressing*	*Thin layer surfacing*	*Stone Mastic Asphalt*	*Concrete*	*mm*	*Bituminous*	*Cement*	*None*	*Dense*	*Medium*	*Open*	*Crushed rock*	*Crushed gravel*	*40mm*	*20-28mm*	*10-14mm*	*6mm*	*PSV*
Surface																					
Binder																					
Base																					
Sub base																					

Surface material type _____ Source _____

Binder material type _____ Source _____

Base material type _____ Source _____

Date works complete _____ Design Life _____ Outturn Cost _____

Treatment statistics

Work code	101	102	103	104	105
Lane / kms					
Area sq. m					

COMPLETED BY _____ CHECKED BY _____

SERIS UPDATED BY _____ DATE UPDATED _____

NEW CONSTRUCTION SCHEME DATA FORM

TRANSPORT SCOTLAND

Date supplied to TS

Unit

Route

Scheme

Lane Number(s)

Start link / section

Start chainage

End link / section

End chainage

Thickness of material removed (all resurfaced areas)

LAYER	MATERIAL TYPE							MATERIAL THICKNESS	BINDER TYPE			TEXTURE			TYPE OF AGGREGATE		NOMINAL SIZE OF AGGREGATE				PSV
	Anti skid	*Bitumen Macadem*	*Hot Rolled Asphalt*	*Surface Dressing*	*Thin layer surfacing*	*Stone Mastic Asphalt*	*Concrete*	*mm*	*Bituminous*	*Cement*	*None*	*Dense*	*Medium*	*Open*	*Crushed rock*	*Crushed gravel*	*40mm*	*20-28mm*	*10-14mm*	*6mm*	*PSV*
Surface																					
Binder																					
Base																					
Sub base																					

Surface material type

Source

Binder material type

Source

Base material type

Source

Date works complete

Design Life

Treatment statistics

Work code	101	102	103	104	105
Lane / kms					
Area sq. m					

COMPLETED BY

CHECKED BY

This is Annex 4.2/B to Schedule 4 Part 2 referred to in the foregoing Agreement between Scottish Ministers and BEAR Scotland Limited.

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 4 PART 2

INTEGRATED ROADS INFORMATION SYSTEM

ANNEX 4.2/B – Notification of SCRIM Category for Network Update Document

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 4 PART 2

INTEGRATED ROADS INFORMATION SYSTEM

ANNEX 4.2/B – Notification of SCRIM Category for Network Update Document

NOTIFICATION OF SCRIM CATEGORY FOR NETWORK UPDATE

Unit | Route | Date supplied to TS

Lane No	link/section	Start chainage	End chainage	SCRIM Category

COMPLETED BY | CHECKED BY

This is Annex 4.2/C to Schedule 4 Part 2 referred to in the foregoing Agreement between Scottish Ministers and BEAR Scotland Limited.

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 4 PART 2

INTEGRATED ROADS INFORMATION SYSTEM

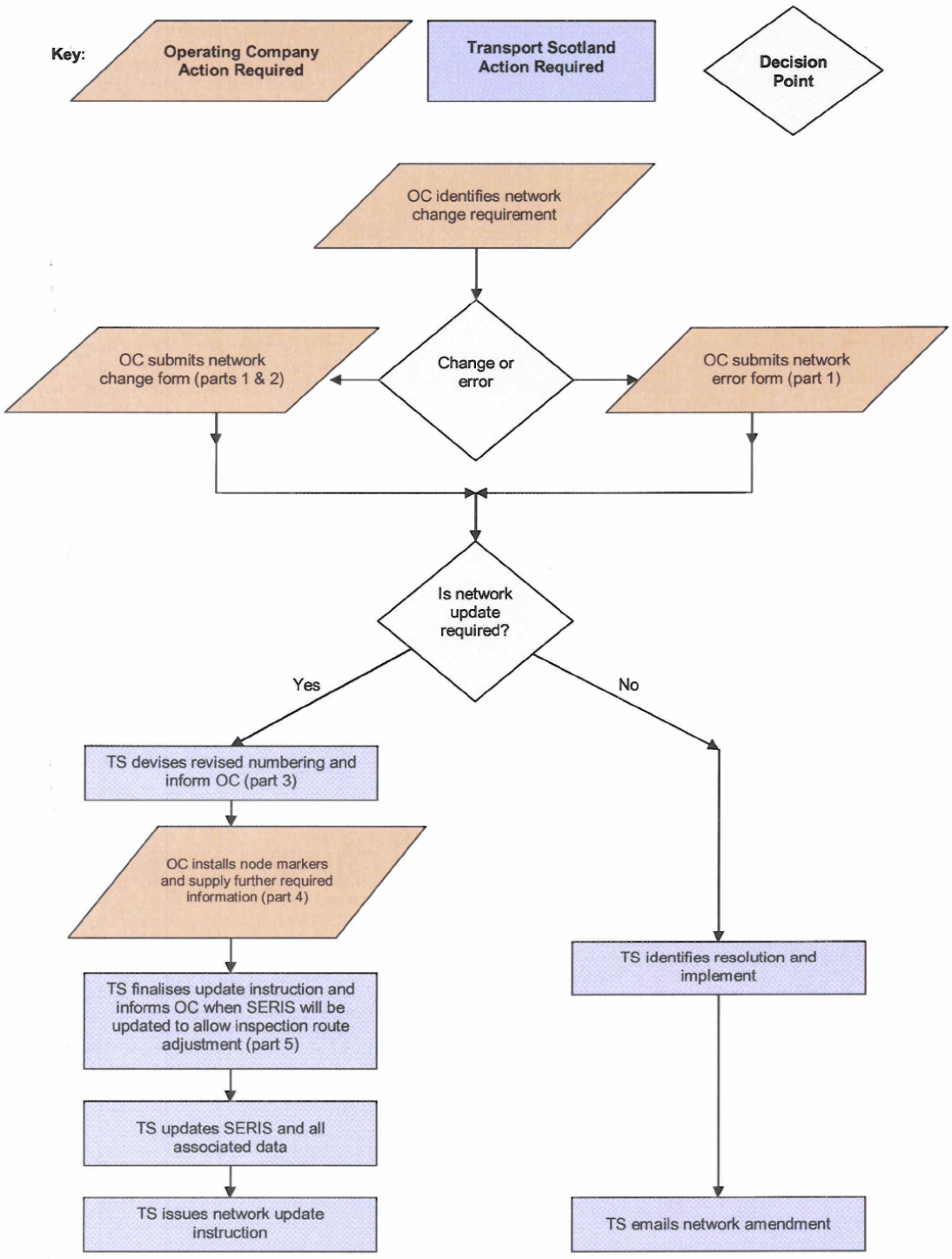
ANNEX 4.2/C – Network Update Process, Network Change Form and Network Error Form

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 4 PART 2

INTEGRATED ROADS INFORMATION SYSTEM

ANNEX 4.2/C – Network Update Process, Network Change Form and Network Error Form



NETWORK CHANGE FORM

1 GENERAL

Submitted by | Date

Unit | Route | Sections

Location

Reason for change

Details of proposed correction

2 INFORMATION SUPPLIED BY OPERATING COMPANY

	Check	Date
Scheme layout plans at 1:2500 as detailed in Schedule 4 Part 3 Section 2.2.1(i)	☐	
Estimated opening date of scheme	☐	

3 TRANSPORT SCOTLAND FEEDBACK

New referencing sections and node locations devised / agreed	☐	
Operating Company informed of section numbers and node locations	☐	

4 OPERATING COMPANY FURTHER INFORMATION SUPPLIED

Node markers installed	☐	
Measured lengths for each new network section	☐	
Measured chainages of existing sections at the start & end of the new scheme	☐	
12 figure OSGR for each installed network node accurate to 1 metre	☐	
Pavement construction data (NCSD)	☐	
Scrim site category data	☐	
Node marker location document	☐	

5 TRANSPORT SCOTLAND NETWORK UPDATE

Network update instruction finalised			☐	
SERIS updated	by		☐	
Network update instruction issued	to		☐	

Version 1.0, June 2010 Willie Grant

NETWORK ERROR FORM

1 GENERAL

Submitted by | Date

Unit | Route | Sections

Location

Reason for change / error

Details of proposed correction

2 TRANSPORT SCOTLAND ACTION

	Check	Date
Network update instruction required	☐	

Proposed TS resolution

TS action taken

3 TRANSPORT SCOTLAND NETWORK UPDATE / AMENDMENT

Network update instruction or amendment finalised			
SERIS updated	by		
Network update instruction issued	to		
or Network amendment emailed	to		

Version 1.0, June 2010 Willie Grant

NETWORK CHANGE / ERROR FORM NOTES

Network Change

1 GENERAL
The OC submits part 1 identifying the location on the network which may require a numbering change due to a change in characteristic. The reason for change and proposed correction are included.

2 INFORMATION SUPPLIED BY OC
The OC supplies scheme plans to enable TS to identify node locations and revise the referencing where necessary. Parts 1 and 2 are supplied together.

3 TRANSPORT SCOTLAND FEEDBACK
TS devise / agree revised referencing and inform the OC of section numbers and node locations to be used.

4 OPERATING COMPANY FURTHER INFORMATION SUPPLIED
The OC installs node markers, provides measured section lengths, the scheme start and end point chainages on existing sections, 12 digit OSGRs of node postions accurate to 1 metre, pavement construction data on the NCSD form, new SCRIM categories on the SCRIM category notification form and the node marker location document.

5 TRANSPORT SCOTLAND NETWORK UPDATE
TS finalise the network instruction, advise the OC when the update to SERIS with all the relevant data will be done and issue the instruction when this is complete.

Network Error

1 GENERAL
As per Network Change

2 TRANSPORT SCOTLAND ACTION
TS decide if a network update instruction is required and formulate the resolution to the error then record what action was taken.

3 TRANSPORT SCOTLAND NETWORK UPDATE
TS finalise the network instruction (if necessary), advise the OC when the update to SERIS will be done and issue the instruction or email the amendmentv when this has been done.

Version 1.0, June 2010
Willie Grant,
Asset Management, Technical and Finance Branch
Transport Scotland
willie.grant@transportscotland.gsi.gov.uk

This is Annex 4.2/D to Schedule 4 Part 2 referred to in the foregoing Agreement between Scottish Ministers and BEAR Scotland Limited.

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 4 PART 2

INTEGRATED ROADS INFORMATION SYSTEM

ANNEX 4.2/D – Explanation for Change Form

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 4 PART 2

INTEGRATED ROADS INFORMATION SYSTEM

ANNEX 4.2/D – Explanation for Change Form

EXPLANATION FOR CHANGE SOI - MSD

TRANSPORT SCOTLAND

Date supplied to SE

Unit

Route Work code Scheme number

Scheme Name

Details of change from approved SOI

Explanation

This is Annex 4.2/E to Schedule 4 Part 2 referred to in the foregoing Agreement between Scottish Ministers and BEAR Scotland Limited.

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 4 PART 2

INTEGRATED ROADS INFORMATION SYSTEM

ANNEX 4.2/E – Design for Node Marker Reference Replacement

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 4 PART 2

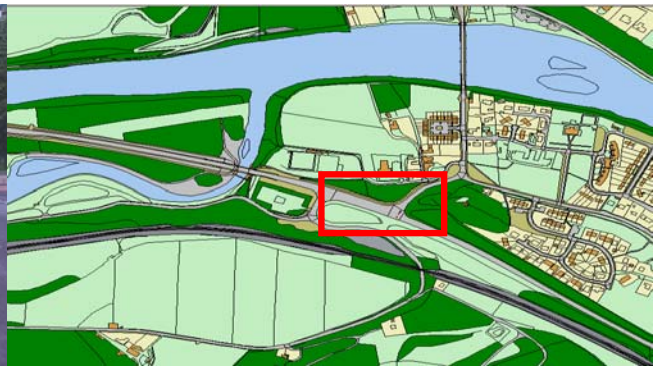
INTEGRATED ROADS INFORMATION SYSTEM

ANNEX 4.2/E – Design for Node Marker Reference Replacement

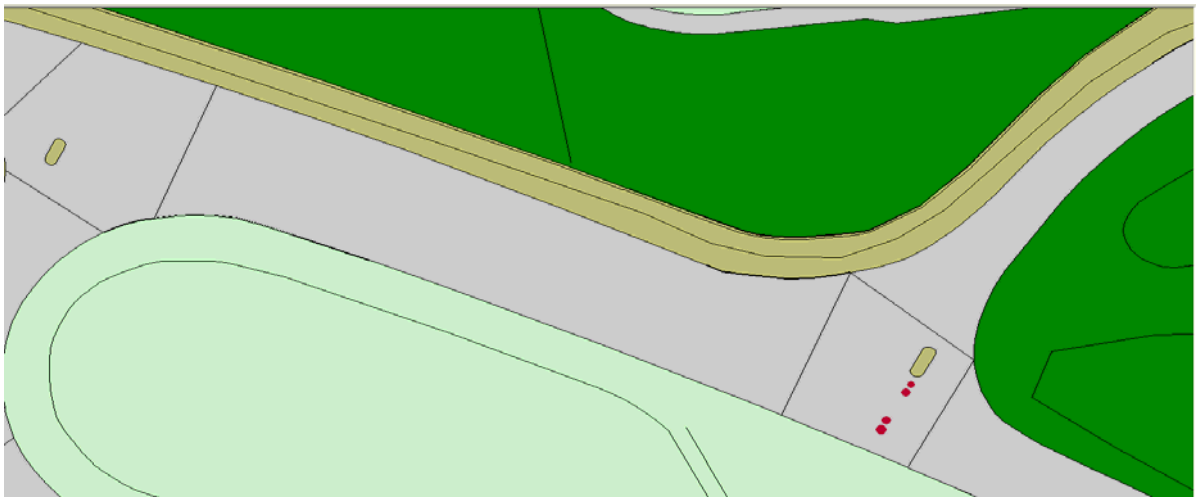
Route		Section	
Section Description			
Section Length			
Section Type			
Design			

Site Image

Location



Site Plan



ADVISORY UPDATE TO DATA (changes to section)			Length	
OSGR	Easting		Northing	
Location Decription				
Other:				
Location submitted by: *Signature*				Date
Location agreed by TS: *Signature*				Date
Data update complete: *Signature*				Date