

July 2017

**NATIONAL HIGHWAYS SECTOR SCHEMES  
FOR  
QUALITY MANAGEMENT IN HIGHWAY WORKS**

**Particular Requirements for  
the Application of ISO 9001:2015 for  
the Installation, Maintenance and Repair of  
Modular Paving**

**Published by the Sector Scheme Advisory Committee for the  
Installation, Maintenance and Repair of Modular Paving  
(ISO 9001:2015 Version)**

# July 2017

Endorsed for publication by the Chairman of the NHSSLG

Name .....I. Walsh.....

Date .....July 2017.....

## DOCUMENT CONTROL

### ISO 9001:2015 version

Issue 1 [9001:2015]

NHSS 30 scheme document

### Revisions

Appendix O – Totally revised to be in accordance with revised Schedule of Suppliers register

Full revision of text to align with ISO 9001:2015

### Issue Statement:

This Sector Scheme Document is the property of the Sector Scheme Advisory Committee for the Installation, Maintenance and Repair of Modular Paving and its issue is controlled. Any reproduction should be of the whole, not part, of the document. The Sector Scheme Document is subject to periodic review and will be amended by the Committee as necessary in the light of experience in its operation.

It is the Committee's policy that the issue of any revision to this document shall be an issue of the full document rather than individual pages.

Chairman of Committee I D Walsh

Secretary of Committee C Nessfield

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## **Composition of the Sector Scheme Advisory Committee, Exclusion of Liability, Copyright and Selection of Certification Body**

### **Composition of Sector Scheme Advisory Committee**

#### **a) Full Members**

Interpave

Interlay

British Precast Concrete Federation (BPCF)

Brick Development Association (BDA)

Stone Federation Great Britain

Highways England (HE)

Association of Directors of Environment, Economy Planning and Transportation (ADEPT)

British Association of Landscape Industries (BALI)

CITB - Construction Skills

Lead Certification Body (LRQA)

UK Accreditation Service (UKAS)

#### **b) Corresponding Members**

Transport Scotland,

Transport NI

NHSS 12D Temporary Traffic Management on Rural and Urban Roads.

NHSS 7 Road Marking

NHSS 18 Landscaping

Certification Bodies on request.

### **EXCLUSION OF LIABILITY**

The National Highway Sector Scheme Liaison Committee

1 have and accept no liability whatsoever for any failure of any system or systems assessed under this Sector Scheme Document or for the quality, fitness for purpose, or safety of any product or service which is the subject of such assessment,

2 do not provide any representation or warranty as to any aspect of any such system, product or service, and

3 hereby expressly exclude all and any liability or responsibility (however alleged to arise) for or in connection with the provision of any service or product or any use of any product, all and any such liability or responsibility attaching exclusively to the producer (or user as the case may be) thereof.

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## Selection of Certification Body

It is important to note that due to the specific requirements for assessor competence required by this Sector Scheme a technical expert may be appointed by the Sector Scheme Advisory Committee to assist UKAS in the assessment of Certification Bodies (CB) as described in Appendix G (clause 3.1).

Prospective companies seeking registration under this scheme should ensure that they engage a Certification Body specifically accredited to assess against the requirements of this SSD. Specifiers, consultants, engineers etc. that require confirmation of compliance with the Contract Specification in respect of a supplier or the supply of products/materials should confirm the current status of the quality management system certificate issuer and that specific reference is made to this Sector Scheme on the Certificate of Registration (See Appendix K).

## Implementation

Issue	Amendments
Issue 1 [9001:2015]	<p>First Issue</p> <p>This Sector Scheme is one of the series of NHSSs, which are bespoke integrated management schemes within an ISO 9001:2015 framework that have been developed to define particular requirements within BS EN ISO 9001:2015 as it applies to a particular activity/industry within the United Kingdom.</p> <p>Note: This document has been produced to supersede the UKAS Issue 2 version (which relates to BS EN ISO 9001:2008), however the UKAS Issue 2 version (or an updated version of this) will continue to have validity until September 2018 when the 2008 version of BS EN ISO 9001 will become obsolete.</p>

The scheme is included in Appendix A of the Specification for Highway Works (SHW) as a mandatory requirement for suppliers contracted to the Highways England where the SHW is a contractual document. Separately the document is called up in specific contracts as necessary.

It is also proposed that a transitional period of twelve months from the date of availability (by UKAS) will be provided to companies who have obtained registration to ISO 9001 itself or another NHSS

This deferral in implementation was to allow new applicant companies and certification/inspection bodies sufficient time to comply with the particular requirement given in this document.

Note 1: Following publication of the document the organization should implement the changes in time for their surveillance visit or assessment visit by the Certification Body.

Note 2: The Certification Body should assess the organization against the latest edition of the scheme within 14 months of its publication.

Note 3: Where the surveillance/assessment visit of an organization occurs within two months of the publication of a revision, such assessment maybe undertaken against the previous edition subject to compliance with Note 2 above.

Note 4: The NHSS document is date specific; however the Organization shall have procedures in place to ensure that the latest version is always available. Organizations should be aware that utilization of internet search engines may result in out of date references being identified/called up.

## Introduction

- 1 This Sector Scheme Document (SSD) relates to the quality management system requirements for the National Highway Sector Scheme NHSS 30 for the Installation, Maintenance and Repair of modular paving.

It sets out to identify common particular requirements and interpretation of ISO 9001:2015 for Organizations and Certification Bodies engaged in the sector, and the minimum qualifications that an assessor/auditor requires. The document shall be read in conjunction with ISO 9001:2015 and other relevant specification/standard as detailed in appendix B.

- 2 This Sector Scheme is one of the series of National Highway Sector Schemes (NHSSs), which have been developed as bespoke integrated management schemes within an ISO 9001 framework to interpret ISO 9001:2015 as applicable to a particular infrastructure related activity/industry within the United Kingdom.
- 3 Separate Sector Scheme Advisory Committees (SSACs) for each activity within the sector provide advice to UKAS and expert representation is drawn from all sides of industry. Each SSAC determines the particular requirements for ISO 9001 in relation to the requirements of their particular activity and come to a consensus on the minimum levels of workmanship, services, products, testing, and the training and competency of personnel, as appropriate, required to meet specification requirements as well as identified requirements in respect of environmental and health & safety and other aspects. The details are contained in the individual Sector Scheme Documents (SSDs). Following the publication of a revised ISO 9001, the committees will review their documents to ensure alignment with the revised ISO 9001 to ensure that the SSD does not conflict with the international standard prior to withdrawal of the previous edition of the standard.
- 4 The individual NHSS technical advisory committees are overseen by the National Highways Sector Scheme Liaison Committee (NHSSLC). This Committee provides a forum for discussion on the effectiveness of the Sector Schemes and co-ordinates developments so that they can be uniformly taken forward by each of the NHSS technical advisory committees. It is also the venue where dialogue with UKAS and the Certification Bodies on the application of the Sector Schemes takes place.
- 5 NHSSs together with ISO 9001 are designed to:
  - Provide an industry benchmark
  - Identify risks and opportunities
  - Ensure that all processes are planned
  - Provide a basis for continuous improvement
  - Focus on quality as an objective
  - Reduce costs for Client and Organization
  - Provide and maintain a properly trained and competent workforce
  - Involve all sides of industry in scheme ownership within a partnership framework
  - Provide the basis for the technical knowledge and experience that Certification Body auditors will use in the sector concerned
  - Promote confidence in quality management systems through provision of a robust transparent system
- 6 This Sector Scheme shall apply where specified by the Client in their Contract Documents for NHSS 30 for the Installation, Maintenance and Repair of modular paving
- 7 In using this Sector Scheme users shall use best practice such as specifying any other relevant NHSSs as appropriate to the nature of the work being undertaken.

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- 8 It should also be noted that NHSSs are mandatory for Highways England contracts and suppliers within the supply chain shall demonstrate compliance with the requirements of ISO 9001 and this SSD as part of their continual improvement within their ISO 9001 registration. The use of the Specification for Highway Works as the basic document for procuring highway works by other highway authorities would normally automatically call up compliance with ISO 9001 and this SSD. Other owners of infrastructure for example [*e.g. Network Rail*] may also require their suppliers to comply with this Sector Scheme, as may other authorities.
- 9 Where traffic management is required companies shall either employ a National Highway Sector Scheme approved company or where applicable have skilled registered traffic management operatives qualified to meet the competency requirements of NHSS 12D relevant to contract requirements and risk assessments. For work carried out on high speed dual carriageways and motorways the Organization installing Temporary Traffic Management measures should always be registered to NHSS 12A/B and/or 12C.
- 10 The SSD is a live document with the SSAC30 meeting at least once a year to develop it as appropriate. Those using the document should always ensure that they have the current version of the document. The SSD may be obtained by visiting the UKAS website ([www.ukas.com](http://www.ukas.com)) from where the document can be freely downloaded.

Note: Information on relevant Certification Bodies may be obtained from the UKAS website by following the instructions given in Appendix F.

This NHSS document is date specific, Organizations should have processes in place to ensure that the latest version is always available. Organizations should be aware that utilisation of internet search engines may result in out of date references being identified/called up.

- 11 The current list of registered Organizations is maintained in the Schedule of Suppliers data base hosted by LANTRA on a website [www.lantra-awards.co.uk/schedule-of-suppliers](http://www.lantra-awards.co.uk/schedule-of-suppliers).
- 12 It is a requirement of this scheme that Organizations themselves register their details on this website and keep them up to date; Certification Bodies will check that the Organization is registered on the website together with all relevant information, including a pdf copy of the current certificate of registration that the Certification Body issues and any other specific documentation to be uploaded specified by this SSD, prior to annual and surveillance visits

## 13 Scheme Feedback

Any observations, complaints or feedback relating to the operation of this document and the scheme should be addressed using the procedures given in Appendices J1, J2 or J3 as appropriate.

Appendix J1 is to be used for observations and general queries concerning the document and general feedback.

Appendix J2 relates to the assessment process carried out by Certification Bodies.

Appendix J3 relates to policing of the scheme.

Completed J1 forms should be sent to the Committee Secretary :

Completed J2 forms should be sent directly to the relevant Certification Body.

Completed J3 forms should be sent to the relevant Highway Authority, client or HSE as appropriate and indicated on the form

## 14. Scheme Contact and Feedback

The Secretary

Sector Scheme Advisory Committee for the Installation, Maintenance and Repair of modular paving Interlay,

The Old Rectory,

Main Street, Glenfield, Leicestershire. LE3 8DG Tel: 01162 325191

## Particular Requirements for the Application of ISO 9001:2015

### 1. SCOPE

The adoption of a quality management system is a strategic decision for an organization that can help to improve its overall performance and provide a sound basis for sustainable development initiatives.

The potential benefits to an organization of implementing a quality management system based on this Standard are:

- a) the ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements;
- b) facilitating opportunities to enhance customer satisfaction;
- c) addressing risks and opportunities associated with its context and objectives;
- d) the ability to demonstrate conformity to specified quality management system requirements.

This SSD together with ISO 9001 describes the quality management system requirements to be established by Organizations providing for the Installation, Maintenance and Repair of modular paving.

The document provides particular requirements for the application of this scheme additional to the requirements of British Standard BS EN ISO 9001:2015 for this industry and shall be read and implemented in compliance with that standard.

The SSD is applicable to the part of the Organizations within the scope of the defined QMS carrying out the Installation, Maintenance and Repair of modular paving (including reinstatement after installation or maintenance/repair of services and other access procedures), to include:

- |                               |                    |
|-------------------------------|--------------------|
| a) Pavers or Setts            | Rigid (Bound)      |
| b) Pavers or Setts            | Flexible (Unbound) |
| c) Flags & Slabs              | Rigid (Bound)      |
| d) Flags & Slabs              | Flexible (Unbound) |
| e) Kerbs, Channels & Edgings  |                    |
| f) Linear Drainage & Ironwork |                    |
| g) Base Construction          |                    |

This scheme is not intended to replace other management system requirements or other contractual requirements.

The SSD shall be referenced on the Certificate of Registration issued by the Certification Bodies.

### 2. NORMATIVE REFERENCE

The following normative documents contain provisions which constitute provisions of BS EN ISO 9001 Quality Management Systems – Requirements:

- BS EN ISO 9000:2015 Quality Management Systems – Fundamentals and Vocabulary
- BS EN ISO 9001:2015 Quality Management Systems – Requirements and normative references within it
- BS EN ISO 9004:2009 Quality Management Systems – Managing for the sustained success of an organization. A quality management approach.
- NHSS 0 – Guide to the identification, Development Management and Certification of National Highway Sector Schemes

## 3. TERMS, DEFINITIONS AND ABBREVIATIONS

For the purpose of this Sector Scheme Document the terms and definitions given in ISO 9000:2015 shall apply except where listed in the table below; see also NHSS 0 Part 5:

**Base:** Any layer below the laying course.

**Client:** The body for which the work is being carried out e.g. Highway Authority.

**Certificate of Registration:** A certificate issued by a UKAS accredited Certification Body certifying that the holder operates a Quality Management System complying with BS EN ISO 9001:2015 and this SSD. The Certificate will state the category(ies) of work that the holder is competent to supply.

Note The Certificate of Registration must identify the NHSS(s) by number as well as by scope and sub-scope

### **Contract Specification:**

i) Manual of Contract Documents for Highway Works: Volume 1: The Specification for Highway Works (Department for Transport) or as specifically required in the contract documents.

ii) Contract Specific Appendices

iii) The Contract Drawings

**Components:** These comprise all the elements that make up the required pavement including as appropriate sub base, base materials, laying course material, jointing sand, bedding course and jointing mortar, concrete, clay and stone units, joint sealants and complementary fittings

**Customer:** The body engaging the Organization for the purpose of the work described in this SSD.

**Diplomas:** These are qualifications developed through the qualification and credit framework [QCF]. See Appendix C

**Ironwork:** Gratings, covers, gulleys, rodding eyes and other metalwork and related products installed in the road structure.

**National Vocational Qualification (NVQ)** – a vocational qualification approved by Ofqual

**National Occupational Standard (NOS)** - provide the means for assessing performance in a job: they are work-related statements of the ability, knowledge, understanding and experience that an individual should have to carry out key tasks effectively. They provide a benchmark for qualifications

**Organization** The body responsible for the provision of the installation of Installation, Maintenance and Repair of modular paving in accordance with this document

**Organization's Manager** The person named in the Organization's Quality Plan as having managerial responsibility for the Installation, Maintenance and Repair of modular paving.

**Project** An individual scheme at a particular location. It may be a contract in its own right or part of a larger contract

**Quality Plan** The document setting out the specific quality practices, resources and sequence of activities relevant to the project (See Appendix A).

**Quality Management System** The Organization's structure, responsibilities, procedures, processes and resources for implementing Quality Management.

**Scottish Vocational Qualification (SVQ)** – a vocational qualification approved by the Scottish Qualification Authority.

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**Supplier** The bodies supplying the components and products required for the Installation, Maintenance and Repair of modular paving. Where such products are the subject of a European Standard only products complying with the relevant standard shall be used.

The following additional terms and definition shall apply:

**Skills Card** A card issued by a recognised authority, which demonstrates the level of competency, the date, achieved by the holder and the validity of the card.  
In some instances it is also used as a registration card and as an identity card.

**Provider** *This term is the preferred term used in ISO 9001:2015 in place of "supplier", which was used in ISO 9001:2008. The terms are synonymous.*

3.2 For the purpose of this Sector Scheme Document the following abbreviations shall apply:

**BS** British Standard

**CB** Certification Body

**CAB** Conformity Assessment Body

**CSCS** Construction Skills Certification Scheme

**EN** European Standard

**HAPAS** Highway Authorities Product Approval System

**HAUC** Highway Authorities and Utilities Committee

**ISO** International Standards Organization

**NHSS** National Highways Sector Scheme

**SS** Sector Scheme

**SSAC** Sector Scheme Advisory Committee

**SSD** Sector Scheme Document

**SHW** Specification for Highway Works

**UKAS** United Kingdom Accreditation Service or any equivalent International Accreditation Forum (IAF) Multi-Lateral Agreement (MLA) signatory with a scope which includes this sector scheme.

Note: The terms and definitions given in ISO 9000:2015 remain applicable.

## 4 to 10 QUALITY MANAGEMENT SYSTEM REQUIREMENTS

### Particular Requirements ISO 9001:2015

#### Introduction

This document shall be read in conjunction with the requirements of ISO 9001:2015

Clause/Paragraph numbers in this section reference appropriate paragraphs of ISO 9001:2015. The requirements of ISO 9001:2015 are deemed to apply unless specific additions are required. Where 'no particular requirements' are recorded under an ISO 9001 clause heading this means that it is not considered necessary to provide a particular requirement for that clause.

The particular requirements given below are to assist in the clarification of the ISO 9001 text for the relevant activity, no inference should be made that ISO 9001 requirements are diluted or deleted because of this particular requirement.

#### **4 Context of the organization**

##### **4.1 Understanding the organization and its context**

No specific particular requirement

##### **4.2 Understanding the needs and expectations of interested parties**

Interested parties shall include the Customer, Client and other contractors, and those that interact with or use the Client's infrastructure e.g. the general public including travelling public, emergency services and other relevant organisations and stakeholders.

##### **4.3 Determining the scope of the quality management system**

- (i) The scope of the quality management system shall cover the range of specific services that the Organization is competent to supply selected from the list in Section 1, and for which they are seeking registration.
- (ii) Consideration shall be given to outsourced services and how those outsourced services are controlled.

##### **4.4 Quality management system and its processes**

**4.4.1** The organization shall operate a quality management system to ISO 9001:2015 and this schedule

**4.4.2** The organization shall have a process in place to record/update their registration to this sector scheme on the Schedule of Suppliers website [www.lantra-awards.co.uk/schedule-of-suppliers](http://www.lantra-awards.co.uk/schedule-of-suppliers) immediately following confirmation of their certification to the sector scheme from the certification body and thereafter check its suitability annually. (See Appendix O for information).

The organization shall notify Lantra's NHSS Schedule of Suppliers if Certification is suspended or withdrawn. (email - [scheduleofsuppliers@lantra.co.uk](mailto:scheduleofsuppliers@lantra.co.uk))

## **5 Leadership**

### **5.1 Leadership and commitment**

#### **5.1.1 General**

The organization's policy document shall include "top management" support for this NHSS.

Note – the term "top management" is defined in ISO 9000:2015 (3.1.1) and variations from the norm may differ for individual organizations.

#### **5.1.2 Customer focus**

- (i) Processes for determining customer requirements shall consider the interaction with other works, the interests of the Client and the product and service end users, e.g. the general public and travelling public, other interested parties, and shall be mindful of the Client's interaction with the end users. This will include processes to minimise disruption and inconveniences.
- (ii) Safe working methods shall be documented and any deviation from these methods shall be agreed with/notified to the Client/customer/interested parties as required.
- (iii) A copy of all working methods and relevant risk assessments for undertaking the works shall be available on site for inspection.

## **5.2 Policy**

### **5.2.1 Establishing the quality policy**

The organization's quality policy statement shall include a statement of commitment to National Highway Sector Scheme 30.

### **5.2.2 Communicating the quality policy**

No specific particular requirement

### **5.3 Organizational roles, responsibilities and authorities**

Where required in the contract

## **6 Planning**

### **6.1 Actions to address risks and opportunities**

**6.1.1** The Organization shall take into account the risks and opportunities relating to this NHSS

**6.1.2** The Organization shall plan:

- a) actions to address these risks and opportunities;
- b) how to:
  - 1) integrate and implement the actions into its quality management system processes (see 4.4);
  - 2) evaluate the effectiveness of these actions.

Actions taken to address risks and opportunities shall be proportionate to the potential impact on the conformity of products and services.

*NOTE 1 Options to address risks can include avoiding risk, taking risk in order to pursue an*

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*opportunity, eliminating the risk source, changing the likelihood or consequences, sharing the risk, or retaining risk by informed decision.*

*NOTE 2 Opportunities can lead to the adoption of new practices, launching new products, opening new markets, addressing new customers, building partnerships, using new technology and other desirable and viable possibilities to address the organization's or its customers' needs.*

The scheme contains no specific particular requirement

## **6.2 Quality objectives and planning to achieve them**

**6.2.1** No specific particular requirement

**6.2.2** No specific particular requirement

## **6.3 Planning of changes**

No specific particular requirement

## **7 Support**

### **7.1 Resources**

#### **7.1.1 General**

All necessary facilities and equipment shall be available to carry out the required processes, inspections and tests in order to construct all the layers in the pavement in accordance with the contract.

#### **7.1.2 People**

Adequate numbers of competent personnel shall be available to carry out the scheme in accordance with the Quality Plan

#### **7.1.3 Infrastructure**

Requirements for levels of plant and equipment resources for contracts shall be determined and substantiated by the Organization and included in their Quality Plan and method statement for the works.

#### **7.1.4 Environment for the operation of processes**

i) In planning and maintaining the work environment due consideration shall be give to the fact that works may be taking place in areas shared with the public. All necessary measures shall be taken to keep the environment safe for all including disabled persons.

ii) Works shall be planned so that disruption to the public is kept to a minimum.

iii) The work area shall be kept neat and tidy and safe.

#### **7.1.5 Monitoring and measuring resources**

##### **7.1.5.1 General**

The quality management system documentation shall identify those items of plant and measuring equipment that require calibration and the frequency of such calibration. Items requiring monitoring include level control devices, tapes and rulers etc.

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The Organization's system shall include documented procedures to demonstrate the manner and frequency of the calibration of the measuring and test equipment. (See Appendix E for guidance.)

## 7.1.5.2 Measurement traceability

No specific particular requirement

## 7.1.6 Organizational knowledge

No specific particular requirement

## 7.2 Competence

### General

The training and assessment of all personnel required by this scheme is aimed primarily at their technical competence as described in Appendix C.

It is also intended to provide awareness to carry out work in a safe manner however it remains the responsibility of the Organization to determine and implement safe systems of work.

### Requirements

#### i) Management of competency

Organizations shall demonstrate their commitment to development and training of personnel. Requirements for appropriate levels of competency, experience and qualification, training and staffing shall be determined and substantiated and regularly reviewed by the organisation. Guidelines for the demonstration of competency requirements for Organization's personnel are outlined in Appendix C and Appendix C1.

NOTE 1: The above requirements apply equally to staff directly employed by the Organization or to staff employed under sub-contract to the organisation.

NOTE 2: As Temporary Traffic Management is likely to be a consideration in laying operations, the training and competency of personnel carrying out such work needs to be considered. Guidance for organisations certificated to this Scheme, but not already certificated to any of the Sector 12 Schemes for Temporary Traffic Management, can be found in Appendix M of the Sector 12 D Scheme Document (available to download from : <http://www.ukas.com/technical-services/publications/publications-relating-to-certification-body-accreditation-3/>).

#### ii) Operative Records

The Organization shall create and maintain a record of training and practical experience for each operative/employee giving the scope of their competency as detailed in the scope of this Sector Scheme (See Section 1 )

The Organization shall create and maintain a register of operatives/employees who hold the necessary qualifications (See Appendix D)

Operatives/employees shall carry an identification card that details their qualifications for competency at all times whilst working at highway construction sites. This card will include an identification photograph and where appropriate the name of the Organization.

## 7.3 Awareness

No specific particular requirement

## 7.4 Communication

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The relevant Quality Plan for the scheme and standard operating procedures shall be communicated to all relevant employees.

Internal communication between everyone involved in the project shall be clear and effective.

## 7.5 Documented information

### 7.5.1 General

- (i) A Quality Plan (documented planned arrangements) shall be required for all contracts. When specified in the contract documents or requested, the organization shall submit a Quality Plan or alternative document as defined in the Contract Specification for acceptance or approval by the Client, as appropriate, prior to commencement of work (See section 8 and Appendix A).
- (ii) The organization shall have in place auditable processes to identify publication of relevant new documents/standards and implementation requirements (See Appendix B, note 2)

### 7.5.2 Creating and updating

- (i) The organization shall have processes in place to ensure that the latest versions of relevant Standards and Documents are always available (See Appendix B)

### 7.5.3 Control of documented information

7.5.3.1 No specific particular requirements in addition to ISO 9001:2015

#### 7.5.3.2 Control of Documents

In addition to ISO 9001:2015 requirements the following documented information is typically required to be controlled:

Contract specific documents e.g. drawings, schedules, as listed in the Quality Plan for a particular scheme (See Appendix B)

#### Control of Records

In addition to the organization's own quality records, the following records shall typically be kept:

Contract specific records, e.g. risk assessments, as listed in the Quality Plan.

(i) Documents required by the quality management system shall have controlled status.

(ii) In addition to the Organization's own quality records, the project specific records as listed in the Quality Plan shall be kept:

(iii) All contract specific records shall remain confidential to the parties to the contract.

(iv) Records relating to Management Review, Internal Audit, 3rd Party Assessment and Inspection and Testing of incoming materials and the finished asphalt pavement layer shall be kept for a **minimum** of 6 years. All other quality records shall be kept, for a minimum period of 6 months beyond the end of the maintenance and/or guarantee period, whichever is the greater.

## 8 Operation

### 8.1 Operational planning and control

- (i) The Quality Plan shall as a minimum address the topics listed in Appendix A of this schedule and where applicable the requirements contained in the Specification for Highway Works (SHW) and associated contract documents.

Note The topics for the content of a QP are given in ISO 10005 and this document; in particular reference should be made to Appendix A of this document and Appendix H of the SHW.

- (ii) The Quality Plan may be a largely standard document as indicated in Appendix A of this schedule supplemented by contract specific information.
- (iii) The Quality Plan should not be considered in isolation. An integrated approach may be taken which links to other relevant plans.

Note 1 - Management of the service as a whole is reliant on quality and hence the contract and the quality element cannot be separated, as one cannot function without the other.

Note 2:- The Quality Plan describes the management strategy that sets clear and sustainable performance objectives, delegates' responsibility and establishes lines of communication. The objective being to manage the various management schemes within an overall management scheme within an organization.

- (iv) The organization shall, in order to reduce the need for waste disposal, minimise the generation and environmental impacts of wastes arising during the contracted works and shall maximise opportunities for the re-use and recovery of wastes. The organization shall document its arrangements for the identification, segregation, handling, storage and disposal of the different types of wastes arising from the contracted works to maximise opportunities for the re-use and recovery of wastes.

### 8.2 Requirements for products and services

#### 8.2.1 Customer communication

The Quality Plan shall identify what and when relevant information is passed on to the Customer and Client. (refer to Appendix A)

Note: Where required by the contract/ legislation the Customer needs to be informed about the products, i.e., they require detailed information as appropriate regarding materials, components, manufacturing details etc. for the purposes of:

- (a) as-built records for maintenance/health and safety requirements.
- (b) For their own monitoring of the effectiveness/performance of the product.

The organization shall define the relevant information e.g. contract or legislative requirement.

#### 8.2.2 Determining the requirements for products and services

Determination of requirements related to the product (Contract review)

The contract review process shall include procedures to ensure that the requirements of the customer and the contract specification are fully understood. There shall be provisions to ensure that any changes in customer or contract requirements are similarly reviewed and that such changes are communicated to appropriate personnel in the organisation.

This SSD should be taken into account when determining the requirements

## **8.2.3 Review of the requirements for products and services**

### **8.2.3.1**

(i) The processes for review and determination of requirements shall require the Organization to verify with the Customer that the order placed meets the technical requirements included in the Client's Contract Specification.

(ii) The organisation's representatives shall, at the earliest opportunity prior to commencement of the paving operation, review and evaluate the technical aspects of the end product required and check the practicality of the proposed measures and work instructions, and also the organisation's ability to provide such product. Where appropriate this will include liaison with the customer and/or third parties, in particular the Highway or Road Authority, and the Police. When irregularities or inconsistencies with the specification, health and safety requirements or other concerns (including concern over the anticipated performance of the installed modular paving) are encountered, then these shall be brought to the attention of the customer for resolution.

(iii) Matters of a significant nature that arise during any contract review shall be considered in the management review and incorporated as necessary into the Quality Management System.

**8.2.3.2** No specific particular requirement

## **8.2.4 Changes to requirement for products and services**

No specific particular requirement

## **8.3 Design and development of products and services**

### **8.3.1 General**

Limited exclusion in relation to product design from the Scope of this SSD.

This exclusion arises because modular paving is generally installed to customer-supplied requirements.

This exclusion does not affect the organization's ability, or responsibility, to provide a service or product that meets customer and applicable regulatory requirements, nor to carry out design and development as part of its commitment to service delivery and continual improvement

Expert advice should be sought for the structural design of paved areas and guidance on selection of materials. Where the Organization has concerns about the customer-supplied requirements they should form part of Contract Review (see Para 7.2.1)

### **8.3.2 Design and development planning**

No specific particular requirement

### **8.3.3 Design and development Inputs**

No specific particular requirement

### **8.3.4 Design and development controls**

No specific particular requirement

### **8.3.5 Design and development outputs**

No specific particular requirement

## **8.3.6 Design and development changes**

No specific particular requirement

## **8.4 Control of externally provided processes, products and services**

### **8.4.1 General**

The Organization shall identify and plan the supply and installation processes. The control procedures shall verify that suppliers of incoming materials, equipment and services are capable of providing the required quality and adequate supplies in order to maintain the planned rate and quality of production of the installed paving.

### **8.4.2 Type and extent of control**

(i) For highway use, modules and unbound aggregates shall be CE marked complying with the relevant harmonized European Standard or may be proprietary products and as appropriate provided with a declaration of performance (DoP).

(ii) Bound bedding and jointing materials may comply with a European Standard or may be proprietary products. Samples shall be taken at regular intervals from the works to demonstrate compliance with the contract. Guidance is provided in Appendix A unless specific requirements are included in the contract.

(iii) Where the provision of ancillary activities such as road marking or temporary traffic management are procured only suppliers with Certification to the relevant NHSS shall be used

### **8.4.3 Information for external providers**

The specification and tolerances for incoming materials, equipment and services (including records and/or personnel training requirements for any services) to be procured shall be established and communicated to suppliers by appropriate traceable and confirmable means (e.g. faxed, emailed or written instructions, and recorded or transcribed telephone messages).

## **8.5 Production and service provision**

### **8.5.1 Control of production and service provision**

The Organization shall identify and plan the supply materials and personnel and the installation processes.

Examples of conditions, which shall be controlled, include:

(i). Quality management system documentation shall be established to describe the flow of materials and the processes carried out on them, including inspection and testing if required, from delivery through to hand-over to the customer. This shall incorporate a written method statement and/or flow diagram to demonstrate the process control measures, personnel and equipment necessary to maintain the quality of the installed modular paving in conformity with the specification and the records that are to be established, and shall reflect any site specific requirements

(ii) Supplier performance shall be assessed and monitored by a nominated representative of the Organization, at a frequency to be determined by the Organization dependent on the period of time and quantity of supply.

(iii) The Organization shall ensure he has knowledge of the location and identification of underground and over ground services and structures including installed systems together with the names, addresses and telephone numbers of persons responsible for them.

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## Validation of processes for production and service provision

Where samples of the components of the installation are required they shall be taken in accordance with relevant Standards or methods by appropriately trained and competent personnel, who should be able to show evidence that he/she has received training in the sampling of such materials.

Works orders, risk assessment and Quality Plans for the installation, maintenance and repair of modular paving shall be signed by the designated Management Representative in the Quality Plan and retained for **6** years. They will also be submitted to the Client if requested.

## Control of monitoring and measuring devices

The quality management system documentation shall identify those items of plant and measuring equipment that require calibration and the frequency of such calibration. Items requiring monitoring include level control devices, tapes and rulers etc.

The Organization's system shall include documented procedures to demonstrate the manner and frequency of the calibration of the measuring and test equipment. (See Appendix E for guidance.)

Procedures noted above may include some or all of the following:

[a) An agreed procedure for carrying out emergency repairs including health and safety requirements.]

[b) when the Organization is the main contractor, location and identification of underground and over ground services and structures including installed systems together with the names, addresses and telephone numbers of persons responsible for them.]

[c) when the Organization is a sub-contractor, the taking of all reasonable steps to ensure this information is available from the main contractor and is suitable to the extent that the organization is satisfied it is safe to carry out the sub-contract works.]

Works orders, risk assessment(s) and sector scheme relevant Quality Plans for the installation, Maintenance and Repair of modular paving shall be signed by the relevant designated personnel and retained for six years. They will also be submitted to the Client if requested.

The quality management system documentation shall identify those items of plant and measuring equipment that require calibration and the frequency of such calibration. Items requiring monitoring include level control devices, tapes and rulers etc.

The Organization's system shall include documented procedures to demonstrate the manner and frequency of the calibration of the measuring and test equipment. (See Appendix E for guidance.)

### **8.5.2 Identification and traceability**

The Organization shall implement and maintain documented processes to ensure that retained documents and records can be clearly identified and traced.

### **8.5.3 Property belonging to customers or external providers**

The quality management system shall include a procedure where materials are supplied by the Customer, an identified agent or the Client (if required in the contract specification), to ensure that the property or material is safeguarded from damage, deterioration or misuse. This is particularly important where those products are not installed by the Organization itself e.g. third party sub-contract organisations such as ground workers, drainage contractors etc.

## 8.5.4 Preservation

Systems shall be in place to inspect and maintain all goods returned from site before their subsequent use.

The quality management system documentation shall contain procedures to ensure that the all the paving components are delivered, handled, stored, mixed, laid and compacted with the minimum of segregation or degradation and in an appropriate ambient temperature to ensure the works can be constructed as required by the contract .

The quality management system documentation should describe the characteristics of any storage system or facilities e.g. at a central depot, or in a site-based silo or store and define their mode of operation. The Organization should ensure through checks, inspections and records that such facilities are used correctly and that stored materials maintain their suitability for use.

NOTE: This schedule applies both to situations where the Organization is responsible for collection and delivery by truck to the paving site and to those where the Organization receives deliveries directly from a supplier. The quality management system documentation should make clear the point to which the organisation's responsibility for handling, storage and delivery extends.

## 8.5.5 Post-delivery activities

No specific particular requirement

## 8.5.6 Control of changes

No specific particular requirement

## 8.6 Release of products and service

The quality management system documentation shall contain procedures to ensure that the all the paving components are delivered, handled, stored, mixed, laid and compacted with the minimum of segregation or degradation and in an appropriate ambient temperature to ensure the works can be constructed as required by the contract .

The quality management system documentation should describe the characteristics of any storage system or facilities e.g. at a central depot, or in a site-based silo or store and define their mode of operation. The Organization should ensure through checks, inspections and records that such facilities are used correctly and that stored materials maintain their suitability for use.

NOTE: This schedule applies both to situations where the Organization is responsible for collection and delivery by truck to the paving site and to those where the Organization receives deliveries directly from a supplier. The quality management system documentation should make clear the point to which the organisation's responsibility for handling, storage and delivery extends.

## 8.7 Control of nonconforming outputs

8.7.1 Non-conforming components shall not be used unless written approval has been received from the Client.

Any material and /or work not conforming to the specification shall either be reworked to conform to the specification or must formally be accepted in writing by the customer. The materials and/or work shall otherwise be considered as rejected and precluded from use as originally intended.

The quality management system documentation shall identify the control procedures to

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be taken when non-conformity in materials, preparation or laying and/or in the modular paving, is identified.

These may include measures such as: delaying access to pedestrians or vehicles to the pavement for a period of time and monitoring the pavement etc.

Some inconsistencies and/or irregularities may not initially be reasonably evident e.g. as a result in delays in receipt of test results on a component or within the control of the Organization and can arise during or after the laying process. The Organization may seek concessions from the customer with regard to acceptance or repair as a result of such factors

## **9 Performance evaluation**

### **9.1 Monitoring, measurement, analysis and evaluation**

#### **9.1.1 General**

No specific particular requirement

#### **9.1.2 Customer satisfaction**

Where customer complaints or observations are made on the quality of the works these shall be noted and referenced in the quality records

#### **9.1.3 Analysis and evaluation**

The Quality Plan shall provide the detailed plan for the delivery of internal audits.

### **9.2 Internal audit**

#### **9.2.1** Internal audits shall be carried out by a suitable technically competent person/s to ensure a robust assessment of the compliance of the product and shall have a working knowledge of this NHSS.

Internal Audits shall be carried out by a suitably qualified person appointed by the nominated Quality Manager (or other nominated person responsible for this activity),

Internal Audits shall be scheduled so that each gang's activities shall be subject to at least one audit annually to cover all relevant sub-scopes over a three year period. The audit shall observe work in progress on that sub-scope, together with other sub-scopes completed or in progress on that site by the same gang.

Internal audits shall be scheduled such that the whole of the organisation's quality management system is audited at least annually. Activities on site are to be included in the scheduled audits. This shall always include assessing the actual laying of modules and also the relevant associated site activities. Relevant activities might include the preparation of underlying structural elements, treatment of joints and ironwork and the preparation of and cutting of modules, public safety and the ongoing impact of the works on other activities including pedestrian and vehicular flows.

### **9.3 Management review**

#### **9.3.1 General**

- (i) The organization shall review the quality management system at least once a year to ensure its continuing suitability and effectiveness to conform to this NHSS.

## **9.3.2 Management review inputs**

No specific particular requirement

## **9.3.3 Management review outputs**

No specific particular requirement

## **10 Improvement**

### **10.1 General**

No specific particular requirement

### **10.2 Nonconformity and corrective action**

**10.2.1** Non-conformity of the quality management system shall be reviewed and procedures for taking corrective action shall be followed.

The Organization shall also take action to eliminate the cause of nonconformities in order to prevent recurrence.

### **10.3 Continual improvement**

The corrective actions and risk assessment processes shall include analysis of incidents and occurrences. Consideration should be given to accident statistics and near miss reporting.

## Appendix A: Requirements for Quality Plans

This appendix must be included for all schemes

The Quality Plan shall include the following items as a minimum.

### 1.0 General requirements

- 1.1 Definition of the product (or service) to be provided.
- 1.2 The structure of the organization describing the line of command and stating the names of the organization's Manager responsible for the contracted work.
- 1.3 Identification of the relevant parts of the organization's documented quality management system relevant to the product or service being provided.
- 1.4 The control of team selection including special requirements for skilled personnel e.g. training of site staff.
- 1.5 The control of equipment.
- 1.6 Any environmental conditions impacting upon the specified works.
- 1.7 Location of site for the contract and means of access
- 1.8 Specification and/or Contract Documents
- 1.9 Extent of the works and the commencement and completion dates of the contract
- 1.10 Details of the work (as appropriate)
- 1.11 Details of existing materials (as applicable)
- 1.12 Disposition of documented information
- 1.13 Frequency of internal audits (see 9.2)

### 2.0 Contract specific information

- 2.1.1 The Customer's nominated Quality Manager, project manager and/or other representatives through whom communication is to be made throughout the contract.
- 2.1.2 Names of the staff involved with the contract including the NHSS30 Contact details for these staff.
- 2.2 Details of the contract specific equipment to be used and any certification required to be issued to the Customer/Client.
- 2.3 Name and contact details of Customer/Client contact(s).
- 2.4 Details of the communications required between the organizations staff and the Customer/Client or any other party.
- 2.5 Work programme and details of deliverables.
- 2.6 Liaison with the Police and the Highway Authority or other competent authority.
- 2.7 Materials storage details and location
- 2.8 Method statements for application/installation, maintenance and removal of Modular Paving, and the detailed drawing(s) to be supplied.
- 2.9 Inspection and testing regime to be adopted covering frequency, methods of test, responsibility for testing and acceptance criteria.

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- 2.10 Control of non-conforming product.
- 2.11 How performance requirements are to be achieved.
- 2.12 All relevant contract specific information in respect to speed restrictions, safety requirements, environmental requirements, existing conditions and site conditions.
- 2.13 Any client-specified testing requirements and responsibility for testing including the supply of test equipment.
- 2.14 Risk Assessments

## NOTES:

1. Where certain aspects of this information cannot be obtained or, is not provided, this fact shall be noted in the Quality Plan against the appropriate section.
2. The organization should also be aware that there may be further general requirements for Quality Plans within a contract, for instance Appendix 1/24 of the Manual of Contract Documents for Highway Works, which may also need to be addressed.
- 3 See ISO 10005 (Quality management systems – Guidelines for Quality Plans) for further information

## Appendix B: Reference and Associated Documents (Bibliography)

**This appendix must be included for all schemes**

NOTE:- The listing is not comprehensive; other documents may be required to fulfil the requirements of the contract. organizations shall ensure that they have a working knowledge of and access to all the documents including amendments unless stated otherwise in the specification

Organizations shall ensure they are working to current reference or associated documents appropriate to work in their sector.

The list of standards and documents below are date specific, however, the organization shall have processes in place to ensure that the latest version is always available. organizations should be aware that utilisation of internet search engines may result in out of date references being identified/called up.

### 1. Reference Documents

**Organizations shall ensure they are working to current reference or associated documents appropriate to work in their sector.**

1. Highways England documents available from

<http://www.standardsforhighways.co.uk/ha/standards/>

Manual of Contract Documents for Highway Works: [MCHW] Volume 1  
Specification for Highway Works (SHW), and amendments and  
associated Notes for Guidance in Volume 2

Series 000 Introduction

Series 100 Preliminaries

Series 700 Road Pavements General

Series 800 Unbound, Cement and other Hydraulically bound mixtures

Series 900 Road Pavements Bituminous Bound Material

Series 1100 Kerbs Footways and Paved areas

Design Manual for Roads and Bridges [DMRB]

CIS 53 and IAN 69/15 and other relevant guidance documentation  
concerning carriageway crossover

GD 02(latest issue) - Quality Management Systems for Highway  
Design (Design Manual for Roads and Bridges – Volume 0, Section 2,  
section 1, Part 1 –

GD 04(latest issue) - Standard for safety risk assessment on the  
strategic road (Design Manual for Roads and Bridges – Volume 0,  
Section 2, section 1, Part 1 –

<http://www.standardsforhighways.co.uk/ha/standards/>

2. BSI documents ( Available from BSI )

BS EN ISO 9000 :2015 - Quality Management Systems – Fundamentals  
and Vocabulary

BS EN ISO 9001 2015 - Quality Management System– Requirements

ISO 9004 (latest issue) - Quality Management Systems – Managing for

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the sustained success of an organization. A quality management approach.

BS 7533 Parts 1-13 Pavements Constructed with clay, natural stone or concrete pavers - design and installation

BS EN 1338 Concrete paving blocks – requirements and test methods

BS EN 1339 Concrete paving flags– requirements and test methods

BS EN 1340 Concrete kerbs – requirements and test methods

BS EN 1341 Setts of Natural Stone for external paving

BS EN 1342 Slabs of Natural Stone for external paving

BS EN 1343 Kerbs of Natural Stone for external paving

BS EN 1344 Clay Pavers – requirements and test methods

BS EN 12620 Aggregates for concrete

BS EN 13285 Unbound mixtures - specifications

PD 6691 Guidance on the use of BS EN 13108 Bituminous Mixtures – Material Specifications

BS 594987 Asphalt for roads and other paved areas – specification for transport laying, compaction and type testing protocols

3. National Highway Sector Scheme Documents (published by UKAS)  
<http://www.ukas.com/technical-services/publications/publications-relating-to-certification-body-accreditation-3/>
  - Scheme 7 - Application of Road Marking Materials and Road Studs to Road Surfaces
  - Scheme 12A/B – Static temporary traffic management on motorways and high speed dual carriageways including on-line widening schemes
  - Scheme 12C - Mobile Lane Closure Traffic Management on Motorways and Other Dual Carriageways
  - Scheme 12D - Installing, maintaining and removing temporary traffic management on rural and urban roads
  - Scheme 16 - Laying of Asphalt Mixes
  - Scheme 18 Natural Environment and Landscape including Ecology Infrastructure
  - Scheme 23 Small Scale Pavement Repairs

4. Other documents

New Roads and Street Works Act 1991

.The Traffic Signs Regulations and General Directions.

Traffic Signs Manual Chapter 8. Traffic Safety Measures and Signs for Road Works and Temporary Situations

Highway Authorities & Utilities Committee (HAUC) Specification for the Reinstatement of Openings in Highways

Note 1: This list of standards and documents include those that are date specific, however, the organization shall have procedures in place to ensure that the latest versions are always available. (See clause 4.2.3).

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Note 2: Highways England may issue Interim Advice Notes (IANs) as a prelude to inclusion in the MCHW (Vol 1 and 2), the DMRB and/or Chapter 8. Organizations must have auditable processes in place to identify when these documents are issued and their implementation date(s). An index of Interim Advice Notes (IANS) is available on the internet ([www.dft.gov.uk/ha/standards/ians/index.htm](http://www.dft.gov.uk/ha/standards/ians/index.htm)).

Note 3: Every effort has been made to update web sites, but the committee cannot provide any guarantees that the sites will continue to exist or if they do that they will maintain access to the documents identified above.

## Appendix C: Training and Assessment of Competence

### 1. General

The Organization shall ensure that all their personnel shall have undergone suitable training and competency assessment that covers all aspects of the work to be undertaken as follows:

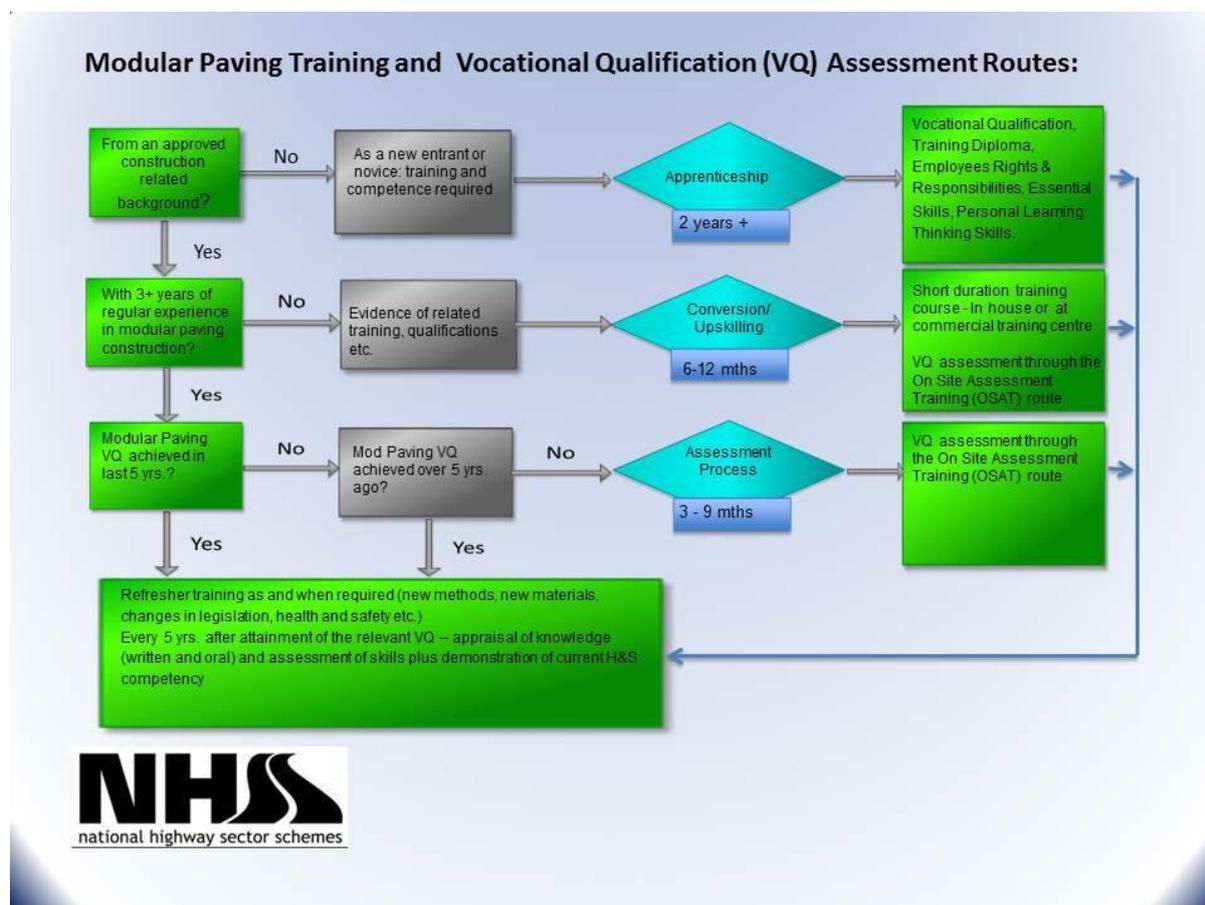
The table below has been developed by employers and stakeholders from the modular paving industry to determine the competence required for personnel laying modular paving.

As an alternative to the Level 3/4 NVQ/SVQ Site Supervisors, Technical Managers and Organization Managers can secure registration at the appropriate level with the Engineering Council.

It is recommended that new entrants complete an apprenticeship leading to a modular paving NVQ Level 2.

By 2018, that all operatives, supervisors and managers will hold, or be working towards, qualifications with a relevant competent outcome as listed in the table below or equivalent:

The Organization shall be able to demonstrate that relevant personnel are working towards qualification. It is a requirement that a minimum of 25% by 3 years following Certification and 70% by 5 years as appropriate (with 90%+ as an ongoing compliance level thereafter).



### 3 Qualifications for workers and labourers carrying out the installation of modular paving

The knowledge requirements for these areas can be found in the current version of COSVR367 or the latest equivalent available from the UK standards website at: <http://www.citb.co.uk/qualifications-standards/national-occupational-standards/national-occupational-standards-suites/construction-operations-civil-engineering-services/>

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Application of knowledge for safe and healthy work practices, procedures and skills relating to the method/area of work and materials used to:

- a) confirm the type of block, brick, sett, flag and natural stone modular pavement
- b) set out the area and prepare ground and foundation for modular pavement construction
- c) confirm substrate matches given specification
- d) mark and cut modular paving
- e) lay modular block, brick, sett, flag and natural stone pavements manually and/or by machine
- f) lay modular block, brick, sett flag and natural stone pavement, domestic and/or commercial to the required design/pattern, levels and stability
- g) monitor work against specification(s)
- h) identify the differences between rigid (bound) and flexible (unbound paving)
- i) install kerbs, channels, edgings and drainage
- j) lift modular paving for removal, maintenance and repair
- k) maintain and repair modular paving to match existing design functions
- l) use hand tools, power tools and equipment

#### **4. Relevant Occupational Skills for use of Plant & Equipment**

For those using plant machinery within the scope of their work, competency should only be recognised against qualifications mapped within the Qualifications Credit Framework (QCF) see appendix C2 for further information on the QCF.

Note: Many plant cards are awarded on the basis of a training course alone. Although the training may accord with NOS, this is nevertheless, training, under controlled conditions, and not competence as demonstrated through the acquisition of experience of operating a machine under a range of conditions, in a working environment. Employers need to recognise this key difference, and ensure that inexperienced workers are carefully managed and their experience developed. The Sector Scheme committee do not have the resources or qualifications to thoroughly assess such training courses and subsequent competency.

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	Cards Available	Provisional	Labourer	Trainee Worker	Worker	Trainee Supervisor	Supervisor	Trainee Manager	Contracts Manager	Consultant	Visitor
<b>Cards Available</b>	Green		•								
	Red	•		• 1		• 1		• 1	•		
	Blue				•						
	Gold						• 2				
	Black								•		
	Yellow & White									•	
	Yellow										•
	CITB Operative Touch ST	•	•	•	•	Sup 3	Sup 3	MAP 3	MAP 3	MAP 3	•
	Qual level required	N/A	Level 1	Working towards Level 2	Level 2	Working towards Level 3	Level 3	Working towards Level 4	Level 4	N/A	N/A
	Existing Highway Modular Paving and/or Construction Modular Paving Card Holder see Note 4 below				•	•	•	•	•	•	N/A

Provisional Card will only be issued once and expires after 6 months

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Note 1: Trainee two routes - trainee 2 years to achieve or experience unqualified trainee 1 year to achieve

Note 2: Two cards one Occupational Work Supervisor (Level 3) and one for Site Supervisor (Level 4)

Note 3: Supervisor Touch Screen Test and Managers and Professional Touch Screen Test

Note 4: Existing modular card holders can renew their card by completing a qualification appropriate to their occupation/card level

Note 5: Labourer Card any CSCS recognized equivalent to Level 1 qualifications can be accepted.

For current information on card types etc. see the CSCS website at: <http://www.cscs.uk.com/cards/types-of-cards/>

Current Qualifications: <http://www.citb.co.uk/qualifications-standards/national-occupational-standards/national-occupational-standards-suites/construction-operations-civil-engineering-services/>

Details of the Construction Plant Certification Scheme can be found at: <http://www.cskills.org/education/cpcs/index.aspx>

## Relevant Occupational Skills for use of Plant & Equipment

For those using plant machinery within the scope of their work, competency should only be recognised against qualifications mapped within the Qualifications Credit Framework (QCF) see Item 5 within this appendix for further information on the QCF.

Note: Many plant cards are awarded on the basis of a training course alone. Although the training may accord with NOS, this is nevertheless, training, under controlled conditions, and not competence as demonstrated through the acquisition of experience of operating a machine under a range of conditions, in a working environment. Employers need to recognise this key difference, and ensure that inexperienced workers are carefully managed and their experience developed. The Sector Scheme committee do not have the resources or qualifications to thoroughly assess such training courses and subsequent competency.

## 5. Health and Safety

Organizations are reminded of the legal requirements to provide health and safety training for all operatives/employees as appropriate in accordance with the Health and Safety at Work Act 1974 and other referenced documents (See Appendix B).

The training and assessment of operatives/employees required by this scheme is aimed primarily at technical competence for temporary traffic management. It is intended to provide awareness to carry out work in a safe manner; however, it remains the responsibility of the organization to determine and implement safe systems of work.

If they are working adjacent to live highways it is a requirement that operatives/personnel pass the specialist test questions for Highway Works included in the CSCS or the ECS Highway Electrical version Health & Safety touch screen test.

## 2. Qualifications and credit framework

The Qualifications and Credit Framework (QCF), has replaced the National Qualifications Framework (NQF). Awarding organizations/Bodies should be actively involved in the development of training and academic qualifications for centres and providers. The aim should be to ensure that only qualifications fit for purpose will be developed and that they continue to work pro-actively with their industry partners to meet the needs of employers and employees in all areas of qualification provision.

### What is the QCF?

The QCF is designed to be a simple and flexible system that will operate across England, Wales and Northern Ireland and is closely aligned with the Scottish Credit and Qualifications Framework (SCQF). It will recognise achievement of learners from aged 14 – 90 and supports a national record of learner achievement enabling movement between centres and the Awarding organizations/Bodies if appropriate.

### Features:

All units within the framework will have a title, credit value, level, and a set of explicit learning outcomes and assessment criteria. Each unit should stand alone and be capable of independent assessment. Units will be the building blocks of qualifications and all qualifications, academic, trained/capable and competent will be described through agreed rules of combination. There is standardised simple architecture to describe qualifications represented by size and level – from Entry level through to level 8. Qualifications will be identified as:

Awards (1-12 credits),

Certificates (13-36 credits) and

Diplomas (37+).

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The aim is that all achievements can be standardised by a common currency which is “credit” and that the level and size of achievements should be standardised and easy to recognise. Credit can be accumulated and transferred and used flexibly to meet a variety of learner needs. One credit will represent 10 notional learning hours.

### **QCF Diplomas:**

A number of existing competency based Qualifications such as NVQs within the QCF are “Diplomas” by virtue of their size. The content of these particular QCF Diplomas is the same; as is the Quality assured assessment strategy that underpins them.

**QCF Diplomas should not be confused with 14-19 Diplomas** that have been designed to offer a vocational route in the school sector and embrace a broad range of outcomes to enable young learners to extend both their academic skills and a broad range of their vocational learning experiences. Although the 14-19 Diplomas may involve some work placement activity they are NOT competency based qualifications and have a very different purpose. For instance, the main 14-19 Diploma in the Lantra footprint is called the 14-19 Diploma in Environmental and Land-Based Studies. The framework offers maximum flexibility for learners to gain recognition for their achievements (whether they are single units or full Qualifications).

## 3. Temporary traffic management

Highways organizations are reminded of the requirements for temporary traffic management on all highways including high speed dual carriageways and motorways.

For work on high-speed dual carriageways and motorways, other than short duration works on hard shoulders or verges, such works shall be carried out by an organization registered to NHSS 12A/B as appropriate.

For works on mobile lane closures NHSS 12C applies.

For works on other roads NHSS 12D applies and organizations need to ensure that they have appropriately skilled and registered operatives to set out the necessary temporary traffic management measures. Guidance is given in Appendix M of NHSS 12D.

## 4. Fraudulent certificates/cards

**ACTION IN THE CASE OF SUSPECT CERTIFICATES/CARDS THE FOLLOWING ADVICE IS GIVEN:**

### **SUGGESTED ACTION BY ORGANIZATION**

On being presented with a suspect certificate/card (check logo, print quality, colour, layout, spelling, likeness of photograph):

Take possession of certificate/card.

Call a member of the body that issued the certificate/card. A member of the team will help you confirm your suspicions or otherwise.

If the certificate/card appears to be fraudulent:

- Retain the certificate/card if possible
  - Make photocopies of front and back
  - Record certificate/cardholder's name and address
  - Ask certificate/cardholder where the certificate/card was obtained from
  - Call the local police and report the matter
  - Refuse access to site (subject to company rules).
4. Forward copies of all evidence to the body who issued the certificate/card marked "SUSPECTED FRAUDULENT CERTIFICATE/CARD" with any crime number given by local police.

Note: The body should in the majority of cases fully support any prosecution with technical and factual evidence.

This should help to maintain the integrity of the Highway Sector Schemes.

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## Appendix D: Example Register of Personnel Attainments

NAME OF COMPANY: .....

Full Name of Employee	Registration Renewal Date	Types of <i>[Activity/Work Aspect]</i> for which Employee is Registered

## Appendix E: Guidance for the Control of Monitoring and Measuring Equipment

For each piece of monitoring and measuring equipment a record should be kept giving the following

- Item
- Equipment No
- Date of purchase
- Specification details
- Calibration Control Calibration Frequency and date of last

### 1 Thermometers and temperature control equipment

Equipment must operate within a tolerance of  $\pm 1^{\circ}\text{C}$  at working temperature

### 2 Thickness/height measuring equipment

Maximum allowable error at any point in working range value  $\pm 5\%$  Calibration traceable to National Standards Annually

### 3 Measuring wheels, tapes and rules, straight edges and wedges as appropriate

Maximum allowable error  $\pm 1\%$  of the measurement range undertaken (upon purchase only)

Verification check when signs of wear or damage appear

Checks as required

### NOTES

1. The list does not represent an exhaustive list of monitoring and measuring devices and therefore equipment not included but employed by the Organization should be calibrated to an acceptable standard and described in their quality manual.
2. Visual daily checks of items 1 and 2 shall be carried out on site to confirm that the equipment is working correctly and is not damaged. Records of the daily checks shall be kept.
3. If in-house calibration equipment is used for the calibration of items 1 and 2 it shall not be used for any other purpose and shall itself be calibrated traceable to national standards at intervals not exceeding two years.
4. If in-house calibration equipment is used for the calibration of item 3 it shall not be used for any other purpose and it shall itself be calibrated traceable to national standards at intervals not exceeding five years.
5. Records of all equipment in use, their calibration status and calibration or verification checks undertaken shall be established and maintained.

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## Appendix F: Certification Bodies Accredited for this Sector Scheme

Information on certification bodies accredited against this scheme can be found on the UKAS website ([www.ukas.com](http://www.ukas.com)).

To identify the certification bodies on the website:

- From the UKAS home page
- Left click in the blue 'FIND' box in top right hand corner of the page; this will open the 'Search Accredited Organisations' page
- In the 'Enter Search Term' box type in "sector scheme No X" ( including the inverted commas) (see Notes 1 & 2 below)
- Left click Search
- Left click on the 'Certification Body results'

This then lists the certification bodies that are accredited to NHSS X and their details can be found by clicking on the appropriate links.

Note 1: "X" represents the scheme number

Note 2: This process will not identify certification bodies that do not have "sector scheme No X" in their scope, but which may have other sector scheme descriptions such as "NHSS X" or "sector scheme X". To complete the full list of accredited CBs it will be necessary to repeat the process (at least twice) by typing in other sector scheme descriptions such as "nhss X" or "sector scheme X" as appropriate at bullet point 3. This should then list the certification bodies who are accredited to the scheme and their details can be found by clicking on the appropriate links.

Note 3: Advice on the current accreditation status of certification bodies to assess against this document should be sought from UKAS (Tel 01784 429001 or Email [info@ukas.com](mailto:info@ukas.com)).

## **Appendix G: The Role of Certification Bodies and Auditors' Competencies**

### **1. Role of certification bodies**

- 1.1. The independent assessment of conformity of organizations to the requirements of ISO 9001:2015 and this SSD rely upon the assessment expertise, competence and capability of accredited certification bodies.
- 1.2. The certification body role is to ensure, through assessment, that organizations have management systems in place which address the enhanced ISO 9001:2015 requirements detailed in this SSD.
- 1.3. Certification bodies shall ensure they are all represented by at least one nominated individual lead certification body (or deputy) who will represent all certification bodies at meetings of this Sector Scheme Advisory Committee. This does not preclude other certification bodies from attending, as appropriate.
- 1.4. Certification bodies shall be represented at the National Highway Sector Scheme Liaison Committee.

### **2. Certification body accreditation**

- 2.1. To ensure consistency and to demonstrate independent capability certification bodies are required to be accredited against the requirements of ISO 17021 by the United Kingdom Accreditation Service (UKAS) or by an equivalent International Accreditation Forum (IAF) member for assessment and registration of ISO 9001:2015 quality management systems in accordance with the particular requirements of this NHSS or other equivalent international management scheme.

### **3. Assessor and auditor team competence.**

3.1 The certification body must be able to demonstrate to UKAS that it possesses and can maintain the necessary assessor experience and technical understanding of the Installation, Maintenance and repair of Modular Paving covered in the scope of this Sector Scheme.

The areas relevant to this SSD shall include, but not be limited to the following:

- i) knowledge, understanding and application of this SSD (See Appendix G1).
- ii) knowledge of the manufacture and supply in the Modular Paving industry, including the methods and techniques sufficient to understand the processes employed and the controls necessary to ensure delivery of conforming product and services. Typically this would include knowledge of the product and processes. (Conveyance of this knowledge to auditing teams will be determined by the certification body and will be audited by UKAS).
- iii) maintenance of demonstrable technical highway engineering background, capable of reading and understanding specifications and drawings, including knowledge of the Specification for Highway Works and design standards requirements for the Installation, maintenance and repair of modular paving
- iv) ability to demonstrate that they have ongoing suitable health and safety training which shall include appreciation of the risks involved in the manufacture, supply and installation in the specific aspects of the scheme as appropriate.
- v) sufficient knowledge of unbound and bound paving construction to be able to identify the requirements that are critical to the performance of the pavement and for which information will be present in the Quality Plan, laying records and internal audits. It will inter- alia require knowledge of the significance of moisture content and compaction on the unbound and bound materials and jointing materials

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- 3.2. The certification body must also ensure that assessors have sufficient knowledge of health & safety requirements related to working on live highways where appropriate, knowledge of temporary traffic management, working in confined spaces and working at height for assessment of guidance provided on this aspect.
- 3.3. Guidance to Certification Bodies on assessor competence related to this Sector Scheme is given in the certification body guidance document – National Highway Sector Scheme Accreditation, Registration and Assessment Guidance for Certification Bodies – NHSS 0 Part 4.
- 3.4 The certification body is responsible for ensuring that the assessment teams possess demonstrable expertise in the assessment areas detailed above as they relate to the scope of client activities under assessment.
- 3.5 Minimum certification body assessor qualifications and competence for assessment of this NHSS, which may reside in a single individual, or in an assessment team are as follows:
  - i) International Register of Certificated Auditors (IRCA) Registered ISO 9001:2015 Lead Auditor qualification or certification body equivalent and demonstrable expertise in leading assessment teams.
  - ii) ISO 9001:2015 assessment experience obtained from assessments of NHSS30 activities in different organizations, including a minimum of three different organizations in any one assessor on a team assessment.
  - iii) technical assessment competence in the categories of installation, maintenance and repair of modular paving
  - vi) demonstrable technical highway engineering background, capable of reading and understanding specifications and drawings, including knowledge of the Specification for Highway Works and design standards requirements for the scope of this SSD
  - vii) ability to demonstrate that they have ongoing suitable health and safety training which includes appreciation of the risks involved in the sector scheme activities of modular having constituent components and their properties

### **4. Conduct of Assessments.**

- 4.1. Certification Bodies shall ensure that an adequate proportion (to be determined during the initial assessment, not less than 25%) of the initial and continuing assessment duration is devoted to assessing operational activities at locations where modular paving activities covered by the scope of this Sector Scheme are being undertaken from.
- 4.2. Certification Bodies shall make every endeavour to ensure that during a three year certification cycle there is evidence of assessment of all execution activities covered by the organization's scope of registration. Certification bodies shall undertake surveillance visits at intervals no greater than one year.

### **5. Format and Content of Registration Certificates.**

- 5.1. Certificates of registration issued by Certification Bodies, which include within the scope of registration reference to compliance with this Sector Scheme, shall be in a format and contain the content detailed in Appendix K of this SSD.
- 5.2. The National Highway Sector Scheme Logo shall be included in any Certificate of Registration which has this Sector Scheme detailed in the Scope of Registration. The logo shall only be used and applied in the manner detailed in any conditions of use which may be published from time to time.

## 6. National Highway Sector Schemes Schedule of Suppliers.

- 6.1. Certification Bodies shall monitor the National Highway Sector Schemes Schedule of Suppliers posted at [www.lantra-awards.co.uk/schedule-of-suppliers](http://www.lantra-awards.co.uk/schedule-of-suppliers) to ensure equivalence between their clients registered to this Sector Scheme and the listed organizations.
- 6.2. Certification Bodies shall provide to National Highway Sector Schemes Schedule of Suppliers administrator at Lantra details of registered organizations whose scope of registration against this Sector Scheme has ceased to be applicable within 10 working days of that situation occurring.
- 6.3. Certification Bodies shall audit the organization to ensure that the organization has recorded their NHSS registration on the Lantra Schedule of Suppliers web-based register (See 4.4 and 8.2.1 of this NHSS). This check will include verification of the certificate of registration currency.

## 7. Reporting on Sector Scheme Performance.

- 7.1. Each Lead certification body shall provide to the Leader of the SSACS a summary report which includes as a minimum:
  - a) observations and comments on the implementation and assessment findings related to the Sector Scheme including any omissions or deficiencies in its scope.
  - b) recommendations for improving/clarifying the SSD
  - c) feedback on deficiencies against contract documentation
  - d) the number of organizations whose scope of registration includes this Sector Scheme for comparison against the Schedule of Suppliers

Note 1: This is to be issued to the Chairperson of this Sector Scheme Committee.

Note 2: Additionally the lead CB shall provide a similar report to the Chairperson of the National Highway Sector Scheme Liaison Committee, which shall be available at least a week before each National Highway Sector Scheme Liaison Committee meeting (normally held each May/June and October/November), so that it may be considered during the Liaison meeting.

Note 3: It is recommended that the report should be a combined report prepared by the nominated certification body (Lead CB) to provide assurance that confidentiality is maintained.

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## **Appendix G1: Guidance to Assessors' and Other Auditors' Competencies Requirements for National Highway Sector Scheme 30, National Highway Sector Scheme for the Installation, Maintenance and Repair of Modular Paving**

### **Section 1 - General Information**

The information contained in this appendix has been collated by the NHSS committee to provide CB assessors with the background information that is considered appropriate for carrying out an assessment against ISO 9001:2015 and these NHSS documents. During the development of the Appendices it was realised that this information would also provide useful guidance for first and second party auditors of the system.

### **Section 2 - Requirements**

Note 1: This section of the guidance is divided in three parts namely 2A, 2B & 2C.

Note 2: Section part 2C will need to be developed by the relevant sector scheme committee to identify all relevant knowledge of their industry that is pertinent to carrying out an audit. It is intended that the content of this part will be used to develop a training awareness course for auditors.

#### **2A General background to the NHSS 30**

- i) The reasons for development of the National Highway Sector Schemes (NHSS) and this scheme in particular, and for CB assessors, examples of where its absence has caused concern/problems.

This is currently contained in the introduction to the scheme.

- ii) To whom the scheme applies. See Scope in this NHSS document
- iii) Contact details of those that can offer scheme specific assistance. (This should be contained in the organization's quality documentation/NHSS documents.)
- iv) An overview of the highway infrastructure that the scheme applies to.
- v) The range of contracts that the scheme can apply to. (See Scope in relevant NHSS document.)
- vi) Specific types of works that the scheme applies to. (See Scope [section 1] in this NHSS document and also Appendix L in this NHSS
- v) Definitions and terminology which are particular to the scheme. (See section 3 of this NHSS.)
- vi) Diagram of routes to competency of personnel (including management, supervisors and other employees etc) delivering the scheme services  
Information/guidance is contained in Appendix C of the document, however the organisation's training administrator should have this information available (assessors should also be aware of training and competency assessment requirements available from Awarding Bodies such as ConstructionSkills, Summitskills , TWI etc, who should be able to assist).
- vii) Overview of important reference documentation applicable to the scheme  
Section 2 and Appendix B of the document provides some information.
- (viii) Knowledge of relevant international, European and British standards for Modular Paving products In particular those relating to product conformity, type testing and their requirements. Familiarity with SHW especially Series 1100 notes for guidance for the SHW,

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(including when these are updated), the Design Manual for Roads and Bridges and Interim Advice Notes issued by the Highways England.

- (ix) Relationship with other NHSS and its applicability to this scheme.

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## 2B Summary of where the scheme interprets sections 4 to 10 of ISO 9001:2015

The summary provides a list of those clauses where particular requirement has been provided. These are indicated by "Y" in the table.

Clauses where particular requirements have been provided are 4.4, 5.1.1, 5.1.2, 5.2, 5.3, 6.1, 7.1.3, 7.1.5, 7.2.1, 7.2.2, 7.5.1, 7.5.2, 7.5.3, 8.1, 8.2.1, 8.2.2, 8.2.3, 8.5.1 to 8.5.4, 9.1, 9.2, 9.3.1 and 10.3.

Section/Clause	Particular requirement Yes/No	Comment/Requirement
<b>4. Context of the organization</b>		
4.1 Understanding the organization and its context	N	Check annually that the organization has determined issues relevant to its purpose and strategic direction and has monitored and reviewed the information. Especially check and seek evidence relating to external context.
4.2 Understanding the needs and expectations of interested parties	N	Check annually that the organization has determined interested parties, their requirements and is monitoring and reviewing the data. Seek evidence.
4.3 Determining the scope of the quality management system	N	Check that the organization has reviewed the scope of the relative elements of the latest applicable issue of the NHSS that the Organization considers appropriate.
4.4 Quality management system and its processes. (4.4.1 & 4.4.2)	Y	Check annually by the CB Auditors and other Auditors the Schedule of Suppliers website to ensure registration and uploaded information is current and valid.
<b>5. Leadership</b>		
5.1 Leadership and commitment	-	
5.1.1 General	Y	Check policy documented information includes reference to this NHSS Ensure that policy is being correctly implemented, communicated and understood. Seek evidence
5.1.2 Customer focus	Y	Ensure that the organization has determined all necessary applicable statutory and regulatory requirements for contract compliance. This may include supplementary services such as recycling, final disposal, equipment inspection, licensing requirements for driving (HGV), animal including wildlife handling etc. Seek evidence that organization is meeting and maintaining customer requirements

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Section/Clause	Particular requirement Yes/No	Comment/Requirement
5.2 Policy		
5.2.1 Establishing the quality policy	Y	Ensure requirements are covered in Quality Plan and in policy documented information
5.2.2 Communicating the quality policy	Y	Ensure that policy documented information is available as necessary and is being communicated and implemented and understood. Seek evidence.
5.3. Organization roles, responsibilities and authorities	Y	<p>Ensure there is an organization plan which covers responsibility/authority in accordance with the requirements of the SSD. Seek evidence. Ensure that personnel with contract specific responsibilities and authorities have been identified and are recorded. Seek evidence.</p> <p>Ensure that the organization management have appointed a nominated person or persons with the appropriate responsibility and authority. Seek evidence.</p>
<b>6. Planning</b>		
6.1 Actions to address risks and opportunities. (6.1.1 & 6.1.2)	Y	Check that documented information is in place to address risk and opportunities and is operational.
6.2 Quality objectives and planning to achieve them (6.2.1 & 6.2.2)	N	Check documented information is in place and meets requirements. Check that Quality Planning is in place and evaluated. See Appendix A
6.3 Planning of changes	N	
<b>7. Support</b>		
7.1 Resources	N	
7.1.1 General	N	<p>Ensure contract/tender review process is in place. Plus review of any amendments etc.</p> <p>Review provisions of resources to confirm they are suitable and include providing the defined personnel for contracts</p>
7.1.2 People	N	See Appendices A, C and D
7.1.3 Infrastructure	Y	Review facilities, processes and equipment to confirm

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Section/Clause	Particular requirement Yes/No	Comment/Requirement
		they are suitable for the scope of registration.
7.1.4 Environment for the operation of processes	N	In process audit. Checks to include environmental condition records, plant maintenance sheets, access equipment certification and induction records.
7.1.5 Monitoring and measuring resources	-	
7.1.5.1 General	Y	See Appendix E
7.1.5.2 Measurement & Traceability	Y	See Appendix E
7.1.6 Organizational knowledge	N	Verify via interviews
7.2 Competence	Y	Seek evidence.  Review copies of training certificates, qualifications and identity cards and forward looking training plans. Ensure that these are in accordance with the requirements of the sector scheme documents Check a sample of identity cards and that they are carried  See Appendices C and D
7.3 Awareness	N	
7.4 Communication	N	Check internal and external communication processes have been established.
7.5 Documented information		
7.5.1 General	Y	Check processes are in place to ensure that organization maintain up to date information on documented information.  See Appendix B
7.5.2 Creating and updating	Y	Ensure that all required contract specific documents are in place. Seek evidence
7.5.3 Control of documented information. (7.5.3.1 & 7.5.3.2)	Y	Ensure that all required contract specific documents are in place. Seek evidence  Check appropriate processes are in place for the retention and disposition of documented information
<b>8. Operation</b>		
8.1 Operational planning and control	Y	Check Quality Plan is in place and complies with 7.5. See Appendix A  Check appropriate processes are in place for the retention and disposition of documented information
8.2 Requirements for products and services		

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Section/Clause	Particular requirement Yes/No	Comment/Requirement
8.2.1 Customer communication	Y	Check effectiveness of communication arrangements
8.2.2 Determining the requirements for products and services	Y	Ensure that the organization has determined all necessary specified statutory and regulatory requirements for contract compliance. This may include supplementary services such as recycling, final disposal, equipment inspection, licensing requirements for driving (HGV+FLT)  Check the organizations ability to meet defined contract requirements
8.2.3 Review of the requirements for products and services. (8.2.3.1 & 8.2.3.2)	Y	Ensure contract /tender review process is in place with an appropriate timescale and assessment of availability of resources.
8.2.4 Changes to requirements for products and services	N	Seek evidence
8.3 Design and development of products and services		
8.3.1 General	N	Check that contract/tender review is in place
8.3.2 Design and development planning	N	
8.3.3 Design and development inputs	N	
8.3.4 design and development controls	N	
8.3.5 Design and development outputs	N	
8.3.6 Design and development changes	N	
8.4 Control of externally provided processes, products and services		
8.4.1 General	N	Check that documented information is in place for externally provided product and services to meet specified requirements.
8.4.2 Type and extent of control	N	Check that documented information is in place. Seek evidence of effective controls.
8.4.3 Information for external providers	N	Check that purchasing requests are adequate
8.5 Production and		

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Section/Clause	Particular requirement Yes/No	Comment/Requirement
service provision		
8.5.1 Control of production and service provision	Y	Check as part of in process audit Refer to Appendix E
8.5.2 Identification and traceability	Y	Cover during procedure review and seek evidence that relevant documented information is in place
8.5.3 Property belonging to customers or external providers	Y	Check that documented information is in place.
8.5.4 Preservation	Y	Check process. Seek evidence as appropriate
8.5.5 Post-delivery activities	N	
8.5.6 Control of changes	N	Check documented information is in place
8.6 Release of products and service	N	Check that monitoring and measuring process documentation has been implemented in line with the current contract specification. Seek evidence.
8.7 Control of nonconforming process outputs, products and services. (8.7.1 & 8.7.2)	Y	Ensure processes are in place and has been implemented in line with contract specification. Check documented information.
<b>9 Performance evaluation</b>		
9.1 Monitoring, measurement, analysis and evaluation		
9.1.1 General	Y	Check planned results are achieved.  Check that any monitoring and measuring processes documentation has been implemented in line with the current contract specification. Seek evidence.  Review copy of annual management review. Ensure this contains continuous improvements to the relevant sector scheme
9.1.2 Customer satisfaction	N	Check that organization is meeting customer requirements.
9.1.3 Analysis and evaluation	N	Check processes are achieving planned results  Check analysis of data has provided information to demonstrate effectiveness of QMS and evaluation of continued improvement

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Section/Clause	Particular requirement Yes/No	Comment/Requirement
9.2 Internal audit (9.2.1 & 9.2.2)	Y	Check internal audits are being carried out and ensure corrective actions have been made.
9.3 Management review		
9.3.1 General	Y	Review minutes of management review. Ensure this contains reference to the relevant sector scheme.
9.3.2 Management review inputs	N	
9.3.3 Management review outputs	N	Check that the output and actions are considered by top management at regular intervals
<b>10. Improvement</b>		
10.1 General	N	Check effectiveness of improvement actions.
10.2 Nonconformity and corrective action (10.2.1 & 10.2.2)	N	Check that documented information is in place and operational.
10.3 Continual improvement	N	-

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## 2C – Overview of this NHSS in terms of industry requirements and working practices.

In addition to an assessor/auditor having a general appreciation of the requirements and processes required by ISO 9001:2015 (latest issue), a CB assessor or internal auditor should be aware of the following when completing an audit:-

C1 - Safe Working Practices

C2 – Training, qualifications and assessment of competency

C3 - Maintain equipment

C4 - Public protection

C5 - Environment

C6 - Testing/inspection/workmanship

C7 - Health and Safety

C8 – Equal Opportunities

C9 – Other

### C1 – Safe Working Practices

- Correct Personal Protective Equipment Worn
- Equipment approved and suitable for use
- Personnel to be fully aware of their H&S obligations
- Must be able to read and understand their job sheet, risk assessment etc; understand English.
- Method Statements/work procedures.
- Risk Assessment.
- Induction card/skills card.
- Vehicles/loads are inspected and drivers are qualified
- Site visit including assessment of installation (if possible) and techniques verified.
- Awareness of relevant H&S requirements as applicable to NHSS30
- Aware of current best practice including temporary traffic management measures (including site arrangements).

### C2 Training, Qualifications and Assessment of Competence

- Have achieved appropriate training appropriately certificated
- Have been assessed as competent within their scope of works (e.g. scheme specific assessment/N/SVQ
- Been inducted on specific equipment (by employer) or if appropriate (i.e. under training) is supervised by a qualified person.
- Aware of and understand the relevant requirements of this NHSS.
- Aware of and understand the provisions for implementation of training in this NHSS.
- Been inducted on site specific H&S issues. (Daily if necessary)
- Hold the relevant skills card.

### C3 Maintain Equipment

- Relevant personnel are aware of LOLER and PUWER requirements

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- Maintenance checklists are available and have been completed as required (e.g. on a daily basis)

## C4 Public Protection

- Personnel are aware of the need to protect public during installation operations
- Relevant personnel have been trained to carry out a visual site risk assessment to ensure that the public will not be put at risk during installation/maintenance operations
- Where appropriate relevant personnel are aware of the Traffic Officer role
- Personnel have identification
- The organization(company) has a complaints process in place

*(Note: Public in this instance includes personnel employed by the customer/client)*

## C5 Environment

Auditors should be sufficiently competent to make general observations on the effectiveness of the organization's provisions in respect of the environment and in particular management of waste and its reduction.

## C6 Inspection/ Testing/Workmanship

Auditors should be aware of the importance of inspection and testing of the product and have knowledge of the relevant tests and the information provided by the tests.

## C7 Health and Safety

Auditors should be aware of the Health and Safety at Work etc Act 1974 and associated Health and Safety Legislation, as it applies to this sector scheme.

## C8 Equal Opportunities

Assessors/auditors should be aware of and understand the need for effective diversity management, including the implementation of equal opportunities and avoidance of disability discrimination as it applies during the provision of services. Assessors/auditors should understand what is involved and how it can be encapsulated in company procedures.

## Appendix H: Organization Acceptance and Guidelines for New Entrants

### 1.0 Organization Acceptance

- 1.1 For work carried out on roads managed by Highways England, the Welsh Government, Scottish Government and "Transport N. Ireland only those organizations holding a valid Certificate of Registration for work within the scope of this SSD will be accepted as complying with Clause 104 and Appendix A of the Specification for Highway Works.
- 1.2 For work carried out on roads managed by other highway authorities, acceptance of the organization will depend on the requirements of the contract.
- 1.3 In the absence of assessment including a site visit has not been carried out over a 3year period then evidence must be provided of site activity (records, video recording etc) to ensure that registration can be maintained.

### 2.0 Guidelines for New Entrants - Requirements

- 2.1 organizations must have the required experienced and qualified NHSS30 personnel and management who meet the requirements of this Sector Scheme. Organizations will need to demonstrate that their equipment and systems meet the requirements of this Sector Scheme.
- 2.2 organizations must have applied for registration with a certification body that is accredited by UKAS to audit against this Sector Scheme. Organizations will have to demonstrate that they have been audited for office based and site based activities.
- 2.3 In addition to any requirement for the organization to notify the Secretary of the Sector Scheme, as detailed in paragraph 4.4 of section 4 of this SSD, the organization shall record their registration to this sector scheme on the Schedule of Suppliers website [www.lantra-awards.co.uk/schedule-of-suppliers](http://www.lantra-awards.co.uk/schedule-of-suppliers) upon receipt of the certificate issued by their certification body to confirm their registration and thereafter keep their organization's information up to date.

## 3. Interim Arrangements for Initial Implementation of this Sector Scheme

In order to be certificated in accordance with NHSS 30, the organization must have in place a Quality Management System that has been assessed and certificated by a UKAS approved Certification Body and thus demonstrates compliance with the requirements specified by this document..

To be accredited by UKAS, Certification Bodies must have in place an audit team whose knowledge and competency satisfies the requirements of this scheme, and in particular Appendix G and G1. The accreditation process includes the assessment of the audit team competency by UKAS before and during an audit. As this is a new scheme, it is possible that a Certification Body will not be accredited for NHSS 30 but may well be accredited for a different Sector Scheme and gain UKAS accreditation for NHSS 30 following the first assessed audit, which will be applied retrospectively.

For an organization that has general ISO 9001 Certification, and more so if it has Certification to another NHSS, extending the existing ISO 9001 Certification to add this scheme, should be relatively straightforward. The key specific details refer to the contents of the Quality Plan (c.f. Appendix A) and the competency requirements for the operatives (Appendix C) and internal auditors (Appendices G and G1). The last two in particular require a considerable investment in training and/or competency assessment. Organizations, because of their size or preference, may hire an outside consultant to carry out internal audits on their behalf. Subject to all the necessary documentation being in place and depending upon the extent to which staff and operatives have the required competency, it should be possible to achieve Certification in less than 1 year – the normal CB requirement is for the Organization to have 6 months records of system operation.

For an organization without any current (ISO 9001) Quality Management System in place, they will need to develop a Quality Manual from scratch. This is a specialist skill. The organization must ensure

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that it, or the Consultant used, is knowledgeable both technically and in Quality Assurance processes by looking at their competencies, previous work and by taking references. The Manual should be the minimum necessary to fulfil the essential quality requirements of the ISO standard and this NHSS and need not be onerous. For a small company it could be quite a short document. It is unlikely that Certification will be achieved in less than 1 year.

The Certification Body selected will make a preliminary assessment of the organization's size and scope and provide a price for Certification. For NHSS 30, there are likely to be at least three Certification Bodies interested in providing this service.

Once the price is agreed, when the organization has all the paperwork in place and the system is operational, with preferably one full internal system audit carried out to confirm this, the Certification Body can be invited to carry out an assessment.

The assessment may identify a number of deficiencies in the operation of the system, or 'Non-Compliances', which will need to be resolved in writing and/or by a follow up visit. Once these have all been corrected and discharged, Certification can follow rapidly and the organization's name entered and certificate uploaded onto the Schedule of Suppliers database.

#### **4. Trade Associations**

4.1 Membership of a trade association is not a requirement of this Sector Scheme, however, the following association(s) support this Scheme along with the training and competency routes discussed in Appendix C. Their details are included here for information:

Interlay : [www.interlay.org.uk/](http://www.interlay.org.uk/)

Stone Federation: [www.stonefed.org.uk/](http://www.stonefed.org.uk/)

British Association of Landscape Architects: [www.bali.org.uk/](http://www.bali.org.uk/)

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## APPENDIX J1: FEEDBACK TO COMMITTEE CHAIRPERSON

**This appendix is mandatory**

Any observations or feedback *relating to the content of this document or the process described* herein should be addressed (using the form below) to:

The Secretary

Sector Scheme Advisory Committee for the Installation, Maintenance and Repair of modular paving  
Interlay,

The Old Rectory,

Main Street,

Glenfield, Leicestershire. LE3 8DG

Tel: 01162 325191

**Issue Identified:**

**Suggested Action:**

Name:

organization:

Address:

Contact details:

Date:

In many instances, J1 forms can be responded to without the need for them to be considered by an NHSS committee, those requiring a more detailed response will be dealt with at the next meeting of the committee as part of the review of the document. If the J1 form contains information that is critical, then exceptionally action can be taken prior to the meeting by the chairperson for instance by arranging an extraordinary meeting of the NHSS advisory committee. The secretary will normally advise the originator of receipt of the J1 document and when the next meeting is expected to be held.”.

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**Appendix J2: Feedback to Certification Bodies and/or Notified Bodies**

Feedback relating to certification matters including alleged deficiencies in the product provided under this scheme should in the first instance be taken up with the organization. In the event that the matter cannot be satisfactorily resolved written complaints should be made to the organization's certification body and/or notified body as appropriate, detailing the problem identified.

*(Where a CE marked product is deficient the organization will need to a) advise the client and b) formally advise the local trading standards officer who should take appropriate action.)*

Issue Identified:

Organization's Details:

Name:

Address:

Feedback

Name:

organization:

Address:

Date:

Signed:

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## Appendix J3: Feedback to Client Bodies on Policing of National Highway Sector Scheme Registration

Feedback relating to policing of National Highway Sector Schemes registration matters in respect of alleged contractual mismanagement/oversights or alleged omissions in contract requirements by client organisations, their management agents or principle contractors where contracts can be or may have been awarded to organisations not registered to this National Highway Sector Scheme, or where contracts are alleged to have omitted requirements for compliance with this National Highway Sector Scheme should be referred back to the client body through an independent third party e.g. a trade association. Details of the alleged mismanagement or omission should as a minimum include the following details

- a) Contract identified
  
- b)
  - i) Details of omission in contract or
  
  - ii) organization Identified as being awarded the contract or
  
  - iii) Both i) and ii) above
  
- c) organization raising feedback / issue  
Name:  
organization:  
Contact details (Address, email address, telephone etc)
  
- d) Date: Signed:

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## **Highways England Roads/Contracts – Route for Feedback**

Feedback should be sent by email to [Standards\\_Enquiries@highwaysengland.co.uk](mailto:Standards_Enquiries@highwaysengland.co.uk)

## **Other Highway Authorities and Clients**

Feedback should be sent back to the relevant project manager or head of division responsible for the contract works. Such information or relevant contact details may be available on that highway authority's or client's web-site.

## **Health and Safety Executive**

Advice about reporting a complaint about the application of the health and safety recommendations related to a specific incident is available at <http://www.hse.gov.uk/contact/workplace-complaints.htm>

## Appendix K: The Interpretation of Certificates Issued by Certification/Inspection Bodies

Whilst this is covered within NHSS 0 Part 4 it was felt that the scopes and subscopes were important to have this as a mandatory appendix

NOTE: Inspection certificates are not a normal requirement of NHSS but may apply to vehicle recovery (NHSS 17). Certification Bodies (CB) issue Certificates of Registration (CoR) in a variety of styles as suits their particular house style. They may consist of a single CoR containing all the requisite information or the CoR may be a standard certificate with appendices or addendum attached providing the full scope of certification (services) and the location(s) where these services are offered by an organization. In the latter case, the CoR refers to the relevant appendices or addenda, which form an integral part of the certificate.

A valid National Highway Sector Scheme (NHSS) CoR is only issued by a CB accredited by UKAS against the relevant NHSS (See Appendix F of this document) or by another recognised equivalent accreditation body.

As a minimum a valid CoR will contain the following information:

- The scope of registration including specific registration to ISO 9001:2015 and this NHSS including the scheme title e.g. National Highway Sector Scheme 30 – Sector Scheme for Installation, Maintenance and Repair of Modular Paving
- The identification of each and every location to which the CoR is applicable.
- The services/product offered by the organization at each location identified on the CoR for NHSS 30 for the Installation, Maintenance and Repair of Modular Paving and any applicable categories with associated typical sub-categories where applicable.
- Logos for the NHSS, UKAS (or equivalent) and the CB.
- The name and address(es) of the organization
- The validity of the certificate (3 years for ISO 9001\*, one year for inspection)
- A unique reference number/code
- The signature of a relevant CB official with their name and title
- 

\* Note where an organization has an extension to scope to include for this NHSS, the expiry date of the certificate remains as 3 years after their initial assessment/or triennial assessment and not 3 years after obtaining the extension to their certificate i.e. the validity of the certificate will not be reset following their NHSS assessment.

Categories currently in NHSS 0 Part 4 are:

	Activity	Primary Category (select)	Secondary Category (select)	Tertiary Category (select)
		a) Asphalt pavements b) Concrete pavements  <b>c) Modular paving</b>  d) Surround to surface apparatus (including ironwork) e) Road Surface Treatments – refer to NHSS13	a) Pavers or Setts b) Pavers or Setts  c) Flags & Slabs  d) Flags & Slabs  e) Kerbs, channels & Edgings  f) Linear Drainage & Ironwork  g) Base Construction	Rigid (Bound)  Flexible (Unbound)  Rigid (Bound)  Flexible (Unbound)

## Appendix K1: Sample Skills Card

This appendix is intended to provide the reader and assessors with information on the style and layout of current competency/identity/registration(NHSS) cards recognised by the SSAC as deeming to satisfy the requirements of this scheme. The appendix will provide colour facsimiles of each type of card and an explanation of what information/data should be expected on each card type and where it is located. Information on re-issuing cards may also be included if seen fit by the SSAC. Where relevant, older style competency cards should be included in this appendix if they are current.

Such information has historically been included in Appendix C and for current information on card types etc. see the CSCS website at: <http://www.cscs.uk.com/cards/types-of-cards/>

Some schemes have an associated administration scheme booklet, in this situation it is strongly recommended that reference should be made to this booklet in Appendix C and that competency/identity/registration(NHSS) cards are not reproduced in this document to prevent possible ambiguity between the documents. Such decision is at the discretion of the SSAC.

Where applicants hold other cards or qualification (e.g. from a state other than England, Scotland, Wales and N. Ireland), it will be necessary to establish the competency equivalence of such qualifications and advice should be sought from the appropriate Sector Skills Council or issuing/awarding body of recognised qualifications or the administrator of the embedded skills scheme as to the equivalence of the qualification to meet the described competency and knowledge described in the sector scheme document..

## Appendix L: Guidance for Clients

### 1 General

It is recommended that Clients acknowledge the requirements of this sector scheme as a contract requirement.

This guidance is primarily of relevance to Clients and their supervisory staff.

### 2. Specific Guidance

2.1. Consideration should be given to the appropriate sector scheme applicable to the works before deciding whether to specify that organizations should be registered to NHSS30, as registration to other NHSS schemes may include relevant requirements for other activities, refer to section 1.0 - Scope

2.2. The NHSS for the modular paving was originally conceived as a document for use by Clients to specify the minimum standards for quality, training and competence of organizations used by them to carry out Installation, Maintenance and Repair of modular paving

2.3. The implementation of the NHSS and development of training and competency requirements is intended to provide:

- a) A competent workforce able to carry out the Installation, Maintenance and Repair of modular paving
- b) Requirements to evaluate risks and develop processes associated with Installation, Maintenance and Repair of modular paving and the production of an associated comprehensive Quality Plan for each contract.

2.4. It is necessary for the Client to ensure that all those involved in carrying out the Installation, Maintenance and Repair of modular paving are appropriately trained, skilled and competent, whether or not they are directly employed. The training and assessment of competency schemes described in this SSD are designed to cater for the range of skills within the overall process of the Installation, Maintenance and Repair of modular paving

2.5. Clients and Customers that require confirmation of compliance with the Contract Specification in respect of the supply of services, products or materials should confirm that the quality management system certificate issuer is accredited by UKAS or equivalent and that specific reference is made to relevant NHSS on certificates. (See Appendices F and K respectively)

2.6. For the NHSS to achieve its objectives it is essential that Clients, either directly or via the agents and individuals they employ, ensure that the requirements of this document are complied with. This includes ensuring that sub-contractors employed directly or indirectly, are registered to the NHSS. Supervisory staff must be instructed to carry out spot checks of identification/skills cards.

2.7. The Schedule of Suppliers Management Team have established and manage a schedule of registered companies that have been registered to National Highways Sector Schemes; free access to the schedule is obtained by logging on to the Lantra website [www.lantra-awards.co.uk/schedule-of-suppliers.aspx](http://www.lantra-awards.co.uk/schedule-of-suppliers.aspx) . However, it should be noted that only those companies that register on the schedule are listed. Clients should contact Lantra Awards by email at [sales@lantra.co.uk](mailto:sales@lantra.co.uk) to ascertain/check the status of company if it is not listed on the schedule.

### 3 Road Death Investigation

Attention is drawn to the ACPO Road Death Investigation Manual, which indicates that in the advent of a collision or other road incident particularly one where there has been a fatality, the police may ask the relevant highway authority to provide information on the state of the road.

In respect of this National Highway Sector Scheme information that is likely to be sought includes the following:

- a) High level general policy statements

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- b) Specific local maintenance policies and standards
- c) Authority procedures
- d) Works records including the results of any test carried out
- e) The quality of systems for traffic management
- f) Skidding resistance testing

An Authority may be required to present data to the Police at short notice in case of a fatality on the network. It should ensure that it has, or can obtain, the relevant information from the Contractor. Reference should be made to Highways England IAN166 for further guidance.”

## 4 Corporate Manslaughter and Corporate Homicide Act 2007

Advice from HSE regarding corporate manslaughter and corporate homicide is available on the HSE web-site, the following extract has been copied from the HSE web-site.

“The Corporate Manslaughter and Corporate Homicide Act 2007 is a landmark in law. For the first time, companies and organisations can be found guilty of corporate manslaughter as a result of serious management failures resulting in a gross breach of a duty of care.

The Act, which came into force on 6 April 2008, clarifies the criminal liabilities of companies including large organisations where serious failures in the management of health and safety result in a fatality.

- The Ministry of Justice leads on the Act and more information is available on its Corporate Manslaughter and Corporate Homicide Act 2007 webpage.

HSE welcomes and supports the Act. Although the new offence is not part of health and safety law, it will introduce an important new element in the corporate management of health and safety.

Prosecutions will be of the corporate body and not individuals, but the liability of directors, board members or other individuals under health and safety law or general criminal law, will be unaffected and the corporate body itself and individuals can still be prosecuted for separate health and safety offences.

The Act also largely removes the Crown immunity that applied to the previous common law corporate manslaughter offence. This is welcome, and consistent with Government and HSE policy to secure the eventual removal of Crown immunity for health and safety offences. The Act provides a number of specific exemptions that cover public policy decisions and the exercise of core public functions.

Companies and organisations should keep their health and safety management systems under review, in particular, the way in which their activities are managed and organised by senior management. The Institute of Directors and HSE have published guidance for directors on their responsibilities for health and safety. ‘Leading health and safety at work: leadership actions for directors and board members’ (INDG417)

### Contacts

For specific questions about the act and guidance:

- Ministry of Justice

For health and safety information and answers to specific health and safety questions contact HSE Infoline:

- HSE Infoline”

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## **Appendix M: Guidance for Organizations**

This appendix is not used

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**APPENDIX N: Guidance on the Relationship between this Sector Scheme and other NHSS's**

Not Used

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## Appendix O - How to Register on the Schedule of Suppliers

The process for registering on the Schedule of Suppliers is as follows:

1. Go to the Lantra Awards Schedule of Suppliers website:

[www.lantra-awards.co.uk/schedule-of-suppliers.aspx](http://www.lantra-awards.co.uk/schedule-of-suppliers.aspx)

2. Select „Get on the Schedule of Suppliers“ or „Register now“

3. Enter the details required, including selecting the Sector Schemes that your organization operates, the Highways England Areas you cover, your certification body and the scopes of the schemes you are registered to for as per your certification body registration certificate

4. Upload a PDF copy of your current ISO 9001 certificate(s) extended to include your NHSS registration and any other specific documentation to be uploaded as specified by this SSD.

5. Submit your registration.

Lantra Awards will check that the relevant document(s) have been uploaded (see note 1) and that the registration details (see note 2) have been filled in. Once complete the information will be published and appear on the Schedule of Suppliers website and will be searchable.

**Note 1** It is the responsibility of companies registering on the site to enter their own details and data which would then be checked by certification bodies during any subsequent company audit. Lantra Awards do not check the content of the records going onto the site and accept no liability for the information being entered. However, Lantra Awards will continue to check that your company ISO certificate (also HERS certificate if registering for NHSS 8) has been uploaded before approving the registration.

**Note 2** Your certification body Assessor should check your entry prior to each surveillance or assessment visit to you to ensure that you have recorded your registration and the details are correct.

**Note 3** You should review/update your registration (It is recommended that this done annually)

**Note 4** Where work is contracted to a public body (e.g. a local highway authority acting for example as a “Contracting Authority”), or where there is a business restriction in place limiting the extent where a local highway authority operates, the NHSS registered organization (highway authority) when completing their registration should under the section “Business Summary” state that “Works carried out are only within the area of the [highway] Authority for in-house requirements only” or as a “Service provider to .....”, and under the section for “Business Description” provide the statement “Local Government trading account” or similar text. In this instance it would not be appropriate for the NHSS registered organization to complete the section “What areas do you cover?”

**Note 5** Any queries should be sent to the “schedule of suppliers” team at [scheduleofsuppliers@lantra.co.uk](mailto:scheduleofsuppliers@lantra.co.uk)