



ASSOCIATED DOCUMENTS:

GR2016-01 Highway Opening & Reinstatement
GR2016-02 Utility Apparatus
GR2016-04 Approved Highway Contractors
GR2016-05 Guidance Notes
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GR2016-07 Applications For Highway Works
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The definitions below are intended to help the interpretation of document GR2016-01 and have been expressed accordingly. Underlined text indicates that they are defined within this document.

Acceptance Criteria The criteria used by <u>Traffic and Highway Services</u> to assess if any

reinstatement is acceptable. If acceptable, <u>Traffic and Highway Services</u> will agree to take responsibility for its future

maintenance, once the Guarantee Period has elapsed.

Administration Costs The administration costs to Traffic and Highway Services incurred

as a direct result of the Applicant's actions or omissions, inclusive of staff time spent arranging remedial works, allowing for staff on-

cost. All such expenses will be charged back to the Applicant.

All-In-One Reinstatement A single-stage reinstatement, where an Interim Reinstatement is

not undertaken and no <u>Settlement Period</u> is allowed for. The final surface is provided immediately following the backfilling of the excavation and will be subject to a Guarantee Period of 5 years.

Applicant Any person or body which requires written permission from Traffic

<u>and Highway Services</u> in order to either undertake, or instruct on their behalf, works to be carried out within the <u>Public Highway</u>.

Approved Contractor A body or person certified by <u>Traffic and Highway Services</u> as

being approved to undertake specific works within the Public

Highway.

Asphalt Surface Asphalt bound material that comprises the <u>Surface Layers</u> of a

highway, commonly called Tarmac or Bitmac. The technical name

for material used in Guernsey is Asphalt Concrete.

Asphalt Reinstatement Any reinstatement that uses Asphalt Concrete.

Backfill Refers to the material used to refill an excavation beneath the <u>Sub</u>

<u>Base</u>, <u>Road Base</u> and Surface Layers. <u>Backfill</u> material may be the excavated material, unless contaminated or deemed unsuitable. Any material must be adequately compacted during backfilling to stop subsequent consolidation; otherwise the reinstated surface

will likely fail.

Binder Course The structural layer of the Asphalt Surface, between the Surface

<u>Course</u> and the <u>Foundation Layers</u>. It both regulates and provides a stable base for the Surface Course. This was previously known as

the base course. AC20 asphalt will be used as binder course.

Deferred Set Material See Cold Laid Asphalt

BS EN 13108 British Standard regarding Bitumen laying practices.

BS 7533 British Standard regarding Modular laying practices.

Carriageway The area of the Highway that vehicular traffic is permitted to drive

on: however, other forms of traffic are permitted to use this area.

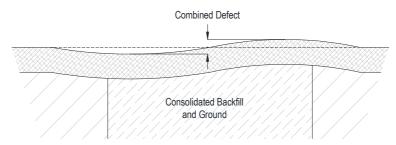
Cold-Laid Asphalt A bonded aggregate mix designed to be laid cold, it remains

workable until laid and then hardens (either due to compaction, air curing or some other mechanism). Generally these products do

Combined Defect

not achieve the same degree of bonding, compaction or cohesion as <u>Hot-Laid Asphalt</u>. Only <u>HAPAS</u> approved materials may be used.

A Combined Defect is an area within a reinstatement where any combination of Edge Depression, Surface Depression and/or Crowning, overlap and is measured from the top of one defect to the bottom of the other. This differs from UK method of measurement.



Compaction

The mechanical removal of voids through the use of whacker plates, rollers, rams or such like. This forces the material together, improving interlock and increasing strength. Compaction should be induced incrementally in layers as backfilling occurs. The effectiveness of such methods is dramatically reduced the thicker the material being compacted gets. See also Consolidation below.

Consolidation

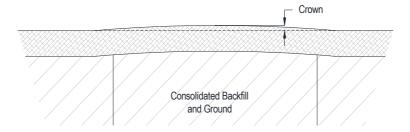
When trafficked or left for long periods, fill material, ground or other material will often settle, especially if <u>Compaction</u> has been poorly undertaken. Any failures due to <u>Consolidation</u> are entirely the responsibility of the Applicant.

Contractor

The contractor is the body who undertakes the actual work within the Highway. They are responsible to the <u>Applicant</u>, and the <u>Applicant</u> is responsible to <u>Traffic and Highway Services</u>.

Crowning

A raised reinstatement that is proud of the surrounding surface. Crowns can cause surface water drainage problems, ride quality issues, and tripping hazards, and as such may fail the <u>Acceptance Criteria</u>.



Cycle Track/Lane

An area of Highway provided for cyclists as either part of the <u>Carriageway</u> or within the <u>Footway</u>, and any works to Cycle Lanes should be reinstated to the standard of the adjoining <u>Carriageway</u> or <u>Footway</u>.

Delamination

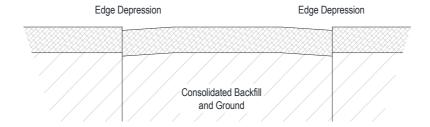
Delamination is the separating of either the Surface Layers from the <u>Foundation Layers</u> or separation between the Surface and



Binder Courses within the <u>Surface Layers</u>. At all times the <u>Surface Layers</u> should be cut back beyond such failures during repairs or reinstatement.

Edge Depression

A lip or vertical edge against a trench edge or adjacent cover.



Embargo Period

The Embargo Period is a temporary restriction on non-essential works (works which are neither Emergency, nor Urgent Works), following <u>Traffic and Highway Services</u> undertaking <u>Major Works</u>. Currently this period is 3 years. The purpose of the embargo is to extend the life of the highway, and encourage more long term planning from <u>Applicants</u>.

Emergency Works

Work required to prevent an *immediate* danger to persons or property, or the failure to maintain an existing statutory obligation. The Applicant must notify <u>Traffic and Highway Services</u>, The <u>The Office of the Committee for the Environment and Infrastructure</u>, and The Island Police of the need to undertake Emergency Works in accordance with <u>IRIS</u> procedures.

Excavation

Any work to open, break up, disturb, tunnel or bore into any <u>public highway</u>, its surface, its foundation or earth below, the removal of <u>fixed features</u>, or undermining of the surface.

Final Reinstatement

The final reinstatement is the permanent surface laid after the Settlement Period (and replaces the temporary surface of the Interim Reinstatement). After the <u>Guarantee Period</u> of 3 years, subject to compliance with the Acceptance Criteria, the Applicant will be not be obliged to undertake remedial works.

Fine Material

The small particles which may be present in soil or graded aggregates. During the pumping of surface or other water these must be trapped to prevent entry to the drainage network (and subsequent choking of the drainage network).

Fixed Feature

Any rigid component within the surface of the Highway. This includes ironmongery, kerbstones, channel blocks, previous reinstatements and road furniture.

Flexible Reinstatement

See Asphalt Reinstatement

Footway

A Footway is the area of Highway over which pedestrians have priority. Commonly called footpath, pavements or walkway.

Foundation Layers The layers, below the Surface Layers, which include the Road Base,

Sub Base and Backfill, these should distribute the traffic loading

evenly to provide a stable foundation to the Surface Layers.

Full Width Reinstatement Within an Embargoed Roads and in certain other situations, a Full

Width Reinstatement may be required. This will be required if the excavation crosses the centre of the carriage way or the carriageway width is less than 4.0m. Most <u>footways</u> will require a full width reinstatement unless agreed with Traffic and Highway

Services.

Green Lane A Green Lane is generally an unpaved, or partially paved Footway

or Carriageway and it is not considered a Public Thoroughfare.

Guarantee Period The period where the Applicant maintains the reinstatement free

of defects. It is to ensure a long term and durable reinstatement is undertaken. Where workmanship, materials or practices are below the required standards it is likely that signs failures will generally become apparent within this period. The Guarantee Period is 3 years following finalisation of an Interim Reinstatement

and 5 years following an All-In-One Reinstatement.

Half Width Reinstatement Within Embargoed Roads and in certain other situations, a Half

Width Reinstatement may be required. This will be permitted if there is an existing centre joint and the excavation does not cross

that joint. This will be instead of a Full Width Reinstatement.

HAPAS The Highways Authorities Product Approval Scheme (HAPAS)

which is a nationally recognised approval scheme for innovative highways products in the UK. Products used on Guernsey's Public

Highways must have a current HAPAS certificate.

Highway Inspector Traffic and Highway Services' representative charged with

monitoring that reinstatements and other highway works are carried out in a manner compliant with GR2016-01 "Opening &

Reinstatement of Traffic and Highway Services (2016)".

Highway Structure This includes the Surface Layers, <u>Foundation Layers</u> and the

features that support the highway or its edge.

Highway Service Life The expected life of the road surface before major resurfacing

works is required. Excavations or bad reinstatements reduce this

service life.

Hot-Laid Asphalt A bitumen / aggregate mix laid at temperatures around 125 ºC ±5

^QC, in accordance with <u>BS EN 13108</u>. If mixed at too high a temperature or laid at too low temperature then optimal cohesion, compaction and bonding will not occur and its service

life will be significantly reduced. See also <u>Cold-Laid Asphalt</u>.

Interim Reinstatement An interim or temporary reinstatement, which on completion of

the Settlement Period, is then made good with a <u>Final</u> <u>Reinstatement</u>. An interim reinstatement is not subject to so stringent Acceptance Criteria as the Final Reinstatement *or* All-In-

One Reinstatement.

IRIS The Island Roadworks Information System (IRIS) as administered

by the <u>The Office of the Committee for the Environment and Infrastructure</u> in order to coordinate road works and approve associated traffic management measures for the works. This does

not give the Right to Excavate in the Public Highway.

IRIS Application An application requesting the The Office of the Committee for the

Environment and Infrastructure to introduce traffic management or control, in order to work within the public highway. This does not give the applicant the right to excavate in the public highway.

Lead in Period The 6 month period leading up to any <u>Major Works</u> scheme

scheduled by <u>Traffic and Highway Services</u>. During this Lead in Period, Public Highways are subject to similar restrictions as roads under embargo. This is to reduce the risk of settlement occurring

following any resurfacing works.

Lead Applicant An Applicant who has submitted an <u>IRIS application</u> and has been

designated by the The Office of the Committee for the Environment and Infrastructure to be responsible for the works where there may be more than one Applicant working within a

section of road.

Loose Ground Loose Ground is any material forming the sides of an excavation

incapable of supporting itself (which therefore needs some form of support). It may also have poor load bearing characteristics

often exacerbated by ground water.

Major Works Traffic and Highway Services defines its Major Works as any large

scale programmed Resurfacing to the Public Highway.

Minor Excavation Minor excavations include reinstatements around covers of less

than 500mm wide and a reinstatement area not exceeding 0.5m².

Modular Surface Any surface consisting of blocks, bricks, slabs, cobbles, setts or

other paviours.

Module A Module refers to any single block / unit within a Modular

Surface.

Narrow Roads Any two-way Section of <u>Carriageway</u> less than 5.2m wide, or any

one way section less than 2.8m, excluding any official parking

area.

Narrow Trench A trench of 300mm surface width or less, with a surface area

greater than 1m². Extra care will be required to achieve proper

compaction.

NJUG National Joint Utilities Group. For information regarding NJUG see

www.NJUG.org.uk

Public Highway Any <u>carriageway</u>, <u>verge</u> or <u>footway</u> of any road, street, lane, alley

or passage repairable in whole or in part by the States, including those that <u>Traffic and Highway Services</u> is responsible for

maintaining as Public Thoroughfares.

Reinstatement Generic term referring to works to make good a Highway following

damage or excavation. See also Interim Reinstatement and Final

Reinstatement.

Action required to be undertaken due to a failure to comply with Remedial Action

the Acceptance Criteria.

Resurfacing Resurfacing refers to the renewing of the Surface Course of a

> defined area of the Highway. This may involve the planing out of the old surface or over laying the existing surface; it may also

include renewing of the Binder Course and Foundation Layers.

Right to Excavate Either a statutory right or written permission from Traffic and

Highway Services to undertake an excavation in the Public

Highway.

Road Base A base layer beneath the Surface Layers, to provide increased

> strength to the roads structure. This can be made of concrete, asphalt, compacted stone, or other material, but where encountered must be replaced like for like. See also Foundation

Layers.

Road Humps Speed bumps/sleeping policemen, or similar. Where present must

be reinstated to the agreed profile.

Rumble Strips Raised strips generally warning of potential hazards. Where

present these must be reinstated as agreed.

Service Owner Any Applicant, Utility or other organisation, including Traffic and

Highway Services, which owns Apparatus within the Public

Highway.

Settlement Settlement refers to consolidation of material within the

> Foundation Layers, after an excavation has been backfilled and surface reinstated. This is generally due to poor compaction

procedures or voids being left.

Settlement Period Following the backfilling of an excavation and undertaking an

> Interim Reinstatement, the period to allow settlement to occur due to traffic loading, prior to the Final Reinstatement being

undertaken.

Typically this is 6 months but may be extended by Traffic &

Highway Services.

Shared Works refer to either a joint road closure between **Shared Works**

Applicants, or a shared excavation.

Excavations or openings with a surface area of 1m² or less. **Small excavations**

SRV Skid Resistance Value as determined by the Transport Research

Laboratory

Statutory Undertaker See Utility

Sub Base Granular material typical laid on the subgrade (natural ground

material) to form the first layer of the foundation also referred to

as GSB (granular sub-base).

Suitable Backfill Suitable backfill comprises material capable of evenly supporting

the loading above on a permanent basis. It should be capable of adequate compaction and not susceptible to be degraded by

ground water or the movement of material.

Surface Course Refers to the uppermost surface of an asphalt road, upon which

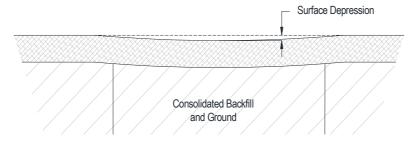
vehicles and pedestrians travel on. The Surface Course will be

either 6mm or 10mm down asphalt.

Surface Depression A dip within the reinstatement or immediately next to it compared

to the surrounding surface. Surface Depressions can cause surface water drainage problems, ride quality issues, and tripping hazards, and as such may fail the Acceptance Criteria. Depressions are most likely due to insufficiently compacted of the excavation or voids

left at the excavation edge.



Surface Layers Surface Layers refers to the Surface Course and Binder Course in

an asphalt surface, and the Modules and bedding material in a

modular surface.

Surround to Apparatus A material used to surround and protect cables and ducts.

Typically stone dust, chippings or similar.

Traffic & Highway Services A section of **The Office** for the **Environment & Infrastructure** that

is tasked to undertake highway maintenance, the inspection of highway works, and execute statutory requirements contained in

the Public Thoroughfares (Guernsey) Law 1958.

The Highways Unit of Traffic and Highway Services is responsible

for maintenance and inspection of the public highways.

The Traffic Unit of Traffic and Highway Services is responsible for

managing traffic flow around the Island and the administration of $% \left\{ 1\right\} =\left\{ 1\right\} =$

the <u>IRIS</u> system.

Traffic Loading The weight or load applied to the Highway Structure by moving

vehicles, which over time may lead to additional compaction of a backfilled excavation or material and subsequently lead to

settlement.

Traffic Sensor/Loop These are cables buried in the surface to detect vehicles. These

are normally located near traffic signal junctions. Typically these will be damaged during excavation and will require replacing at

the Applicant's expense.



Traffic Sign Any road or other sign erected by or with the approval of The

Office of the Committee for the Environment and Infrastructure.

TRL Transport Research Laboratory, where products are independently

tested to find specific properties (such as Skid Resistance Value).

For more information see www.TRL.co.uk

Utility Any organisation that, by law, has the right to place apparatus

within the highway subject to conditions. Utility Companies include Guernsey Electricity, Guernsey Water, Guernsey Gas, Sure

and Jersey Telecom.

Utility Apparatus Refers to any of the Applicant's equipment, apparatus, features,

ironmongery or assets, either buried beneath, present within, or

adjacent to the surface of the public highway.

Verges are areas outside the trafficked Highway, which may be

slightly raised (but not a bank or cutting) and are generally

grassed.

Wear Course See Surface Course.