

APPROVED SUPPLIERS

INFORMATION

BOOKLET

5 February 2020

Introduction

Lincolnshire County Council requires materials used in the construction and maintenance of highways to be from sources that have been approved by the County for such use. This applies to existing highways that are maintained by the County, new highways constructed by the County and those proposed for adoption by the County.

Lincolnshire County Council's Approved Suppliers Information Booklet "The Approved Suppliers List" details the sources of materials commonly used in highway works in the County.

Suppliers promoting materials for inclusion on the list can contact Lincs Laboratory's Principal Materials Advisor for advice. The Principal Materials Advisor can be contacted at Lincs Laboratory on Lincoln (01522) 530355 and email lincslab@lincolnshire.gov.uk

Contractors wishing to propose a source of material for approval are also advised to make initial contact with Lincs Laboratory's Principal Material Advisor.

Approval for project specific materials is granted by the individuals identified below:

Term Maintenance Works	The Service Manager
Major Maintenance Works	The Lead Design Engineer
County New Build Works	The Project's Materials Manager
Adoptable Works (Development Roads etc.)	The Development Management Officer

LINCS LABORATORY INFORMATION
APPROVED SUPPLIERS

		<u>Page No:</u>
High PSV Aggregates for Surface Treatments	66 and over PSV	5
	65 PSV	5
	61 to 64 PSV	6
	60 PSV	6
	55 to 59 PSV	6
	50 to 54 PSV	6
The Regions Coating Plants for Asphalt Concretes	55 to 64 PSV	7
	50 to 54 PSV	8
	<50 PSV	9
Design Asphalt Mixes and Plants	LCC Special Mixes 30/14 Designation	10
	LCC Standard Mix 30/14 Designation	11
	LCC 55% Stone 55/10 Designation ("Hot Box Material")	12
Stone Mastic Asphalt Surface Courses		13
Surface Dressing Chippings	≥60 PSV	14
	55 to 59 PSV	14
	50 to 54 PSV	15
	<50 PSV	15
Non Frost Susceptible Type 1 Sub-Base		16
Frost Susceptible Type 1 Sub-Base		17
Capping Layer Materials for Development Roads		18
Geosynthetics	-6F ₅	19
Block paving Bedding Sand for Conventional Pavements		20

FURTHER INFORMATION MAY BE OBTAINED BY CONTACTING THE PRINCIPAL MATERIALS ADVISOR AT LINCS LABORATORY ON LINCOLN (01522) 530355, FAX NO (01522) 510573 AND E-MAIL LINCSSLAB@LINCOLNSHIRE.GOV.UK.

**LINCS LABORATORY INFORMATION
APPROVED SUPPLIERS**

		<u>Page No:</u>
Surface Dressing Binders		21
HAPAS Certified HAUC Permanent Cold Lay Surfacing Materials	6mm Asphalt Concrete Surface Course	22
	10mm Asphalt Concrete Surface Course	22
Permanent Cold Lay Surfacing	6mm Asphalt Concrete Surface Course	23
Materials for Clause 94.6 Minor Carriageway Repair	10mm Asphalt Concrete Surface Course	23
HAPAS Certified High Friction Surface Systems	Type 1	24
	Type 2	24
	Type 3	24

FURTHER INFORMATION MAY BE OBTAINED BY CONTACTING THE PRINCIPAL MATERIALS ADVISOR AT LINCS LABORATORY ON LINCOLN (01522) 530355, FAX NO (01522) 510573 AND E-MAIL LINCSSLAB@LINCOLNSHIRE.GOV.UK.

HIGH PSV AGGREGATES FOR SURFACE TREATMENTS

Polished Stone Value (PSV), Aggregate Abrasion Value (AAV).

PSV VALUES OF 66 AND OVER

<i>SUPPLIER</i>	<i>AGGREGATE SOURCE</i>	<i>AGGREGATE</i>	<i>PSV</i>	<i>AAV</i>	<i>DATE</i>
Aggregate Industries	Cwm Nant Lleici	Gritstone	69	11	12-14
Tarmac Ltd	Hafod	Gritstone	69	11	2-12
Hanson Aggregates	Craig-Yr-Hesg	Gritstone	69	7	3-15
CEMEX Materials UK Ltd	Gilfach	Gritstone	69	9	3-15
H V Bowen & Sons	Tan-Y-Foel	Gritstone	68	6	2-15
White Mountain Aggregates	Ballystockart	Gritstone	66	7	1-15
Aggregate Industries	Ghyll Scaur	Tuff	66	6	1-16

Aggregates denoted as having a PSV of 66 and over meet Lincolnshire County Council's requirements for sites required to have PSVs of: 65+, >65 and over 65

PSV VALUES OF 65

<i>SUPPLIER</i>	<i>AGGREGATE SOURCE</i>	<i>AGGREGATE</i>	<i>PSV</i>	<i>AAV</i>	<i>DATE</i>

Aggregates denoted as having a PSV of 65 are only approved for sites where a PSV of 65 or less is specified

HIGH PSV AGGREGATES FOR SURFACE TREATMENTS

Polished Stone Value (PSV), Aggregate Abrasion Value (AAV).

PSV VALUES OF 61 TO 64

SUPPLIER	AGGREGATE SOURCE	AGGREGATE	PSV	AAV	DATE
MQP	Griff Quarry	Dolerite	64	8	12-09
White Mountain Aggregates Ltd	Temple Quarry	Gritstone	64	8	9-05
Aggregate Industries	Haughmond Hill	Gritstone	63	4	6-15
Tarmac Ltd	Arcow Quarry	Gritstone	63	6	1-99
Cemex Materials UK Ltd	Roan Edge Quarry	Gritstone	62	6	2-17
Tarmac Ltd	Bayston Hill Quarry	Gritstone	63	4	2-19
Tarmac Ltd	Dolyhir Quarry	Gritstone	62	6	1-16
Tarmac Ltd	Dry Rigg Quarry	Gritstone	62	7	5-14
Tarmac Ltd	Mancetter Quarry	Basalt	62	7	8-10
Tarmac Ltd	Barbae Quarry	Gritstone	64	1	2-19
Steelphalt, Rotherham	Ickles Rotherham	EAF Carbon Steel Slag	62	4	1-18

PSV VALUES OF 60

SUPPLIER	AGGREGATE SOURCE	AGGREGATE	PSV	AAV	DATE

Aggregates denoted as having a PSV of 60 are only approved for sites where a PSV of 60 or less is specified.

PSV VALUES OF 55 – 59

SUPPLIER	AGGREGATE SOURCE	AGGREGATE	PSV	AAV	DATE
Breedon Group	Leaton	Dolerite	59	3	9-15
Tarmac Ltd	Santon	Steel Slag	57	2	6-16
Aggregate Industries	Bardon Hill	Granite	56	3	9-18
Aggregate Industries	Croft	Granite	56	3	9-18
MQP	Cliffe Hill	Granite	55	4	11-18
Tarmac Ltd	Santon	Blast Furnace Slag	55	14	1-15

PSV VALUES OF 50 – 54

SUPPLIER	AGGREGATE SOURCE	AGGREGATE	PSV	AAV	DATE
Cemex Materials UK Ltd	High Force	Granite	53	6	2-15
Tarmac Ltd	Mountsorrel	Granite	52	3	9-16
Steelphalt	Rotherham	EAFS Steel Slag	50	3	3-18

THE REGIONS COATING PLANTS FOR ASPHALT CONCRETE

Polished Stone Value (PSV), Aggregate Abrasion Value (AAV).

PLANT	AGGREGATE SOURCE	AGGREGATE	PSV	AAV	DATE
CEMEX Materials UK Ltd – Selby	Roan Edge	Gristone	62	6	2-17
Tarmac Ltd – Caldon Low	Mancetter	Basalt	62	7	8-10
Tarmac – Renishaw	Dry Rigg	Gritstone	62	7	5-14
Breedon Group – Cloud Hill	Leaton	Dolerite	59	3	9-15
Breedon Group – Corby	Leaton	Dolerite	59	3	9-15
Breedon Group – Mansfield	Leaton	Dolerite	59	3	9-15
Breedon Group – Longwater	Leaton	Dolerite	59	3	9-15
Tarmac Ltd – Santon	Santon Works	Arcow/Steel Slag ⁽²⁾	57 ⁽²⁾	2	6-19
Tarmac Ltd – Kirby in Ashfield	Santon Works	Arcow/Steel Slag ⁽²⁾	57 ⁽²⁾	2	6-19
Tarmac Ltd – Nottingham Asphalt	Santon Works	Arcow/Steel Slag ⁽²⁾	57 ⁽²⁾	2	6-19
Aggregate Industries – Peterborough	Bardon Hill	Granite	56	2	1-16
Aggregate Industries – Bardon Hill	Bardon Hill	Granite	56	2	1-16
Aggregate Industries – Sheffield	Bardon Hill	Granite	56	2	1-16
Express Asphalt – Newark	Bardon Hill	Granite	56	2	1-16
Express Asphalt – Doncaster	Bardon Hill	Granite	56	2	1-16
CEMEX Materials UK Ltd - Ely	Bardon Hill	Granite	56	2	1-16
CEMEX Materials UK Ltd – Grimsby	Bardon Hill	Granite	56	2	1-16
CEMEX Materials UK Ltd - Lincoln	Bardon Hill	Granite	56	2	1-16
MQP – St Ives	Cliffe Hill	Granite	55	3	2-15
MQP - Northampton	Cliffe Hill	Granite	55	3	2-15
MQP – Baston Fen ⁽¹⁾	Cliffe Hill	Granite ⁽¹⁾	55	3	2-15
MQP – Cliffe Hill	Cliffe Hill	Granite	55	3	2-15
CEMEX Materials UK Ltd – Sheffield	Cliffe Hill	Granite	55	3	2-15
Tarmac Ltd – Pentney	Cliffe Hill	Granite	55	3	2-15
Tarmac Ltd – Kirby in Ashfield	Santon Works	Blast Furnace Slag	55 ⁽³⁾	14 ⁽³⁾	1-15
Tarmac Ltd – Nottingham Asphalt	Santon Works	Blast Furnace Slag	55 ⁽³⁾	14 ⁽³⁾	1-15
Tarmac Ltd – Santon ⁽⁴⁾	Santon Works	Blast Furnace Slag	55 ⁽³⁾	14 ⁽³⁾	1-15

* Please see notes

- (1) MQP Baston Fen source is approved to supply 20mm dense binder course incorporating up to 10% recycled bituminous material as aggregate replacement. When this is the case the material shall not be used as the permanent trafficked surfacing.
- (2) When used as the coarse aggregate in conjunction with blast furnace slag fine aggregate the resulting mix has the performance of material made to 60-64 PSV aggregate. Seek guidance from Lincs Laboratory.
- (3) Due to its relative softness blast furnace slag from Santon is not an appropriate coarse aggregate to use on more heavily trafficked roads. See LCC Code of Practice for Highway Works or contact Lincs Laboratory.
- (4) Tarmac Santon Plant ONLY is approved to supply 20mm Dense Binder Course Produced with blended BFS/SS Coarse Aggregate with blended BFS/SS Fines incorporating up to 15% recycled bituminous material as aggregate replacement. When this is the case the material shall not be used as the permanent trafficked surfacing.

5 February 2020

THE REGIONS COATING PLANTS FOR ASPHALT CONCRETE

Polished Stone Value (PSV), Aggregate Abrasion Value (AAV)

PSV VALUES OF 50 TO 54

SUPPLIER	AGGREGATE SOURCE	AGGREGATE	PSV	AAV	DATE
CEMEX Materials UK Ltd – Selby	High Force	Granite	53	6	2-15
Tarmac Ltd Mountsorrel ⁽¹⁾	Mountsorrel	Granite	52	3	9-16
Steelphalt – Ickles, Rotherham	Tinsley Park, Rotherham	EAFS Steel Slag	50	3	3-18

* Please see notes

- (1) Tarmac Mountsorrel source is approved to supply 20mm dense binder course incorporating up to 10% recycled bituminous material as aggregate replacement.
- (2) Sources using Mountsorrel aggregate in dense and close graded bituminous material must incorporate an adhesion agent approved by Lincs Laboratory.

5 February 2020

THE REGIONS COATING PLANTS FOR ASPHALT CONCRETE

Polished Stone Value (PSV), Aggregate Abrasion Value (AAV)

PSV VALUES BELOW 50

PLANT	AGGREGATE SOURCE	AGGREGATE	PSV	AAV	DATE
Breedon Group – Cloud Hill	Cloud Hill	Limestone	45	12	7-15
Breedon Group – Mansfield	Cloud Hill	Limestone	45	12	7-15
Breedon Group – Longwater, Norwich	Cloud Hill	Limestone	45	12	7-15
Breedon Group – Corby	Cloud Hill	Limestone	45	12	7-15
MQP – Baston Fen	Baston	Gravel	45	3	2-15
CEMEX Materials UK Ltd – Dove Holes	Dove Holes	Limestone	39	13	2-17
CEMEX Materials UK Ltd – Ely	Dove Holes	Limestone	39	13	2-17
* CEMEX Materials UK Ltd – Lincoln	* Dove Holes	* Limestone	39	13	2-17
* CEMEX Materials UK Ltd – Selby	* Dove Holes	* Limestone	39	13	2-17
Hanson – Leeds / Bradford	Pateley Bridge / Horton	Limestone	44	9	10-14
Tarmac Ltd – Dairy Cotes	Swinden	Limestone	43	12	5-14
Tarmac Ltd – Caldon Low	Caldon Low	Limestone	41	9	1-14
Tarmac Ltd – Kevin	Caldon Low	Limestone	41	9	1-14
Tarmac Ltd – Renishaw	Dowlow	Limestone	41	12	5-14
Aggregate Industries – Topley Pike	Topley Pike	Limestone	32	1	2-02

* CEMEX Materials UK Ltd Lincoln, Selby sources are approved to supply 20mm and 32mm dense binder courses incorporating up to 10% recycled bituminous material as aggregate replacement. It can be assumed that 20mm limestone binder courses from these plants will normally contain recycled material.

5 February 2020

DESIGN ASPHALT IN ACCORDANCE WITH BS EN 13108-4

LCC SPECIAL MIXES (eg High stability, Polymer modified or rubberised asphalts) 30% 14 Designation (HRA 30/14 F Surf 40/60 des)

The mix shall have a minimum stability of 8kN at the design binder content and a stability within the range 6-10kN (BS 594987 Annex H) or a maximum wheel tracking rate of 5,0 μm / cycle ($W_{TS_{Air}} 5,0$) and a maximum rut depth of 3,0mm ($Rd_{Air} 3,0$) when tested at 45°C to BS EN 12697-22:2003 small device procedure A, and a stability within the range 4 – 10kN. These requirements apply over the permitted binder and filler contents tolerance range.

The maximum permitted flow is 5mm except where stability exceeds 8kN when the maximum permitted flow becomes 7mm. Mixes meeting LCC Specification Mix requirements can also be considered suitable LCC standard mixes.

PLANT	FINE AGGREGATE	COARSE AGGREGATE	ADDITIVE / MODIFIER	WHEEL TRACKING COMPLIANCE CLASSIFICATION ⁽¹⁾ & ⁽²⁾	TEST DATE
Aggregate Industries – Bardon Hill	Two Oaks	Granite	-	-	4-15
Aggregate Industries – Peterborough	Two Oaks	Granite	-	-	4-15
Breedon Group – Cloud Hill	Dunsville	Leaton - Dolerite	-	-	5-14
Breedon Group - Corby	Dunsville	Leaton - Dolerite	-	-	5-14
Breedon Group – Cloud Hill	Two Oaks	Leaton - Dolerite	-	1	8-17
Breedon Group - Corby	Two Oaks	Leaton - Dolerite	-	1	8-17
Breedon Group - Mansfield	Two Oaks	Leaton - Dolerite	-	1	8-17
CEMEX – Lincoln	Two Oaks	Gritstone	-	1	2-17
CEMEX – Selby	Hyndford	Gritstone	-	1	7-19
MQP – Baston Fen	Two Oaks	Granite	-	1	10-19
MQP – St Ives	Two Oaks	Granite	-	1	10-19
MQP – Cliffe Hill	Bestwood	Granite	-	1	12-17
MQP – Cliffe Hill	Bestwood	Granite	pmb	2 ⁽²⁾	10-17
MQP – Cliffe Hill	Two Oaks	Granite	-	1	09-18
MQP – Cliffe Hill	Two Oaks	Granite	pmb	2 ⁽²⁾	09-18
Tarmac Ltd – Caldon Low	Croxden	Basalt	-	-	7-04
Tarmac Ltd – Cross Green	Thrislington	Steel Slag	-	-	1-17
Tarmac Ltd - Mountsorrel	75% Bestwood 25% Mountsorrel Granite	Granite	-	1	8-16
Tarmac Ltd – Mountsorrel	75% Bestwood 25% Mountsorrel Granite	Granite	pmb	2 ⁽²⁾	03-19
Tarmac Ltd – Santon/Renishaw/Cross Green	Finningley	Arcow	-	1	12-19
Tarmac Ltd – Santon/Renishaw/Cross Green	Finningley	Arcow	pmb	2 ⁽²⁾	12-19
Tarmac Ltd – Santon	Finningley	Steel Slag	-	1	3-15
Tarmac Ltd – Dairy Coates (Hull)	Finningley	Steel Slag	-	1	6-13

Note ⁽¹⁾ Mixes meeting the Special Mix wheel tracking requirements are identified by the number 1 in the Wheel Tracking Compliance Classification Column.

Note ⁽²⁾ Mixes meeting Wheel Tracking Class 2 when tested in accordance with BS EN 12697-22:2003 small device procedure A at 60°C shall have a maximum wheel tracking rate WTR_{AIR} 12.5 and a maximum rut depth of RD_{AIR} 7.0 and are identified by the number 2 in the Wheel Tracking compliance Classification Column.

5 February 2020

DESIGN ASPHALT IN ACCORDANCE WITH BS EN 13108-4

LCC STANDARD MIX 30% 14 Designation (HRA 30/14 F surf 40/60 des)

The mix must have a minimum stability of 6kN at the design binder content (BS 594987 Annex H) and a stability within the range 4-8kN over the permitted binder and filler tolerance content ranges.

The maximum permitted flow is 5mm.

Mixes meeting the LCC Special Mix Requirements can also be considered suitable as LCC Standard Mixes.

<i>PLANT</i>	<i>FINE AGGREGATE</i>	<i>COARSE AGGREGATE</i>	<i>ADDITIVE/MODIFIER</i>	<i>TEST DATE</i>
Breedon Group – Longwater	Shropham	Leaton Dolerite	-	11-11
Breedon Group – Ling Hall	Meriden Sannd	Leaton Dolerite	-	9-16
CEMEX Materials UK Ltd – Ely	75% Middleton / 25% Eye	Granite	-	3-00
CEMEX Materials UK Ltd – Ely	60% Middleton / 40% Baston Fen	Granite	-	11-09
CEMEX Materials UK Ltd - Selby	Austerfield	Dolerite	-	2-12
SteelPhalt – Rotherham	Dunsville	Steel Slag	-	8-10
Tarmac Ltd – Cross Green	Thrislington	Gritstone	-	6-14

DESIGN ASPHALT IN ACCORDANCE WITH BS EN 13108-4

LCC 55% STONE CONTENT SURFACE COURSE 55% 10 Type C or F Designation (HRA 55/10 F or C surf 40/60

des) For use only as the substrate for High Friction Surface treatments or as a "Hot Box" Patching or Pothole

Repair Material

The mix shall have a minimum stability of 10kN at the design binder content (BS 594987 Annex H) or a maximum wheel tracking rate when tested to BS EN 12697-22 small device procedure A at 60°C, of $W TR_{AIR12,5}$ and a maximum Rut Depth $RD_{AIR7,0}^{(2)}$ and, have a stability within the range 8-16kN and have a maximum permitted flow of 5mm.

The above performance requirements shall be met over the permitted binder and filler contents tolerance range.

PLANT	FINE AGGREGATE	COARSE AGGREGATE	DATE
Aggregate Industries – Bardon Hill	Two Oaks	Bardon Hill, Porphyry	4-15
Aggregate Industries – Peterborough	Two Oaks	Bardon Hill, Porphyry	4-15
Cemex Materials UK Ltd – Lincoln	Bardon Hill – Al	Bardon Hill, Porphyry	4-15
Cemex Materials UK Ltd – Lincoln	High Force	Roan Edge	1-18
MQP – Baston Fen	Baston Fen – MQP	Cliffe Hill	8-11
Tarmac Ltd – Mountsorrel	Bestwood	Mountsorrel Granite	2-16
Tarmac Ltd – Santon	60% B F Slag, 40% Steel Slag	Steel Slag	5-11
Tarmac Ltd - Santon	75% Bestwood Sand, 25% B F Slag	Steel Slag	4-12

Note: 55% Stone content 10mm Hot Rolled Asphalt Surface Course when used as patching or pothole repair material shall only be used when transported in and discharged from a hot box asphalt transport and storage facility.

The plants listed above are approved for the production of design surface course asphalt. Approved Suppliers List, pages 6 to 8, gives details of those plants approved for the production of asphalt concretes.

5 February 2020

STONE MASTIC ASPHALT SURFACE COURSES

'Lincolnshire has moved to specifying Stone Mastic Asphalt (SMA) Surface Course instead of proprietary Thin Surface Course Systems. Advice on suitable SMA's shall be obtained from Lincs Laboratory prior to their use.

5 February 2020

SURFACE DRESSING CHIPPINGS

Polished Stone Value (PSV), Aggregate Abrasion Value (AAV)

PSV VALUES OF 60 AND OVER

SUPPLIER	AGGREGATE SOURCE	AGGREGATE	PSV	AAV	DATE
Aggregate Industries	Ghyll Scaur	Tuff	66	6	1-16
Aggregate Industries	Haughmond	Gritstone	63	4	6-15
Tarmac Ltd	Bayston Hill	Gritstone	63	5	2-19
Tarmac Ltd	Dolyhir	Gritstone	62	-	1-16

PSV VALUES OF 55 TO 59

SUPPLIER	AGGREGATE SOURCE	AGGREGATE	PSV	AAV	DATE
Breedon Group	Leaton	Dolerite	59	3	8-13
Hanson Aggregates	Ingleton	Gritstone	59	4	11-96
Hanson Aggregates	Criggion	Gritstone	58	4	8-02
Aggregate Industries	Bardon Hill	Porphyry	56	2	12-15
Aggregate Industries	Croft	Granite	56	6	11-15
Midland Quarry Products	Cliffe Hill	Granite	55	3	2-15
Tarmac Ltd	Santon Works	B F Slag	55	14 ⁽¹⁾	1-15
Tarmac Ltd	Santon Works	* Steel Slag	55		2-15

* 2.8/6.3mm or 6.3/10mm Steel Slag only

⁽¹⁾ Due to its relative softness, blast furnace slag from Santon is not an appropriate surface dressing aggregate to use on more heavily trafficked roads. See LCC Code of Practice for Highway Works or contact Lincs Laboratory.

NB: This list is not definitive. If any further sources are known/wish to be used, please contact the Laboratory.

5 February 2020

SURFACE DRESSING CHIPPINGS CONTINUED

Polished Stone Value (PSV), Aggregate Abrasion Value (AAV)

PSV VALUES OF 50 TO 54

SUPPLIER	AGGREGATE SOURCE	AGGREGATE	PSV	AAV	TEST DATE
-	-	-	-	-	-

PSV VALUES BELOW 50

SUPPLIER	AGGREGATE SOURCE	AGGREGATE	PSV	AAV	TEST DATE
Tarmac Ltd	Langford Cromwell	Pt Crushed Gravel	44	-	9-15
Tarmac Ltd	Earith Longham	Pt Crushed Gravel	43	-	-
Tarmac Ltd		Pt Crushed Gravel	40	-	5-04
Tarmac Ltd		Pt Crushed Gravel	40	-	-

5 February 2020

NON FROST SUSCEPTIBLE TYPE 1 SUB-BASE

SUPPLIER	AGGREGATE TYPE	QUARRY/SOURCE	TYPE 3 ⁽¹⁾ SUB-BASE (OPEN GRADED)	DATE
Aggregate Industries	Granite	Bardon Hill	√	12-15
Aggregate Industries	Granite	Croft	√	7-16
Aggregate Industries Woodhall Spa	Bardon Hill Granite 70%/ Gravel 20%/ Sand (Tattershall) 10%	Woodhall Spa Sand & Gravel	-	9-19
Braucewell Quarries	Crushed Concrete/Brick	Braucewell	-	10-18
Braucewell Quarries	Limestone/Limestone	Ex Holme Hall 67%/Ex Braucewell 33%	-	7-19
Breedon Group	Limestone	Cloud Hill	-	2-15
Breedon Group	Limestone	Holme Hall Stainton	√	9-19
CEMEX Matrics UK Ltd	Limestone	Doveholes	-	7-15
Fox Plant Ltd	Rail Ballast (Granite)	Sandiacre Railhead	-	9-17
Fox Plant Ltd	Rail Ballast (Granite)	Doncaster Railhead	-	10-18
G S Hughes	Crushed Concrete	Harmston	-	10-18
G S Hughes	Crushed Concrete	RAF Waddington	-	11-15
Lindum Waste Recycling	Crushed Concrete	Saxilby	-	1-17
Mick George	Limestone	Wakerley Wood	-	9-19
Midland Quarry Products	Granite	Cliffe Hill	√	10-16
P J Thory Ltd	Crushed Concrete & Asphalt	Coates, Peterborough	-	03-19
P J Thory Ltd	Crushed Concrete	Swinderby Airfield	-	9-15
Tarmac Ltd	Limestone	Whitwell	√	10-16
Tarmac Ltd	Granite	Mountsorrel	-	3-16
Tarmac Ltd	B F Slag + 10% 0/4mm Glass	Santon Works, Scunthorpe	√	5-18
Tarmac Ltd	Limestone	Tunstead	-	1-17
Tarmac Ltd	Limestone	Swinden	-	1-17
Total Aggregates (Boston Railhead)	Granite	Ex Bardon Hill	-	5-18
Total Aggregates (Boston Railhead)	70% Granite/30% Limestone	Ex Bardon Hill/Ex Braucewell	-	10-18
Toton Aggregates	Concrete/Black Top/Brick	Colwick Industrial Estate	-	7-16
Total Aggregates (Boston Railhead)	100% Granite Rail Ballast	Ex Carlisle	-	7-19
Total Aggregates (Boston Railhead)	70% Granite/30% Limestone	Ex Carlisle/Ex Braucewell	-	7-19
UDCS Demolition Ltd	Crushed Concrete/Brick	Former RAF Hangar, Swinderby	-	05-18
Welton Aggregates	Limestone (Grey)	Slate House Quarry, Hibaldstow	-	07-19

Note: (1) Non Frost Susceptible Type 1 Sub-Base Approved Source Extended to Include Type 3 Sub-Base (Open Graded) for use in Development Road Permeable Pavements Only.

5 February 2020

FROST SUSCEPTIBLE TYPE 1 SUB-BASE

<i>SUPPLIER</i>	<i>AGGREGATE TYPE</i>	<i>QUARRY/SOURCE</i>	<i>DATE</i>
P J Thory	Crushed Concrete and Brick	Coates, Peterborough	11-10
Welton Aggregates	Crushed Concrete	Kirton Lindsey	9-17
Mick George	Limestone	Wakerley Wood	11-18
Braucewell Quarry	Recycled Concrete & Limestone Blend (50:50)	Braucewell Quarry	05-19

Lincolnshire County Council has revised the county's specifications for sub-base. Sub-bases complying with the appropriate BS EN Standards are now specified. The above lists are therefore subject to review as sources are re-assessed against the new standards

5 February 2020

6F5 CAPPING LAYER MATERIALS FOR DEVELOPMENT ROADS

SUPPLIER	AGGREGATE TYPE	QUARRY/SOURCE	APPROVAL DATE
Ashwood Homes	Crushed Concrete / Brick	Broadgate Barns, Broadgate	10-17
Bullimore Sand & Gravel	Limestone	Collyweston Quarry	8-18
Brauncewell Quarry	Limestone	Brauncewell	10-17
Brauncewell Quarry	Crushed Concrete / Brick	Brauncewell	11-19
CES Ltd	Limestone	Stainby	7-17
CES Ltd	Recycled Concrete / Brick	Stainby	1-18
Creeton Quarries	Limestone	Creeton	11-18
G. Webb Haulage Ltd	Limestone	South Witham Quarry	9-19
GBM Demolition	Chalk	South Thoresby	9-19
GBM Demolition	Crushed Concrete / Brick	Louth Depot	2-12
Geda Construction	Crushed Concrete / Brick	Station Road, Long Sutton	9-19
Geo Quarries Ltd	Limestone	Little Ponton Quarry	1-17
G S Hughes	Crushed Concrete / Brick	Harmston	5-18
G S Hughes	Crushed Concrete	Bridge Street, Saxilby	5-14
G S Hughes	Limestone	Great Ponton Quarry	5-18
Len Kirk Plant Hire Ltd	Limestone	Dunston Quarry	8-18
Lindum Waste Recycling	Crushed Concrete	Saxilby	7-19
Lindum Group Ltd	Recycled Concrete/Brick	Boultham Road Lincoln	8-19
Mick George (Haulage) Ltd	Limestone	Greetham Quarry	7-17
Midland Quarry Products	Granite	Cliffe Hill	2-20
P J Thory	Crushed Concrete / Brick	Coates, Peterborough	8-17
P J Thory	Crushed Concrete / Brick	Cemex Baston Fen	1-14
P J Thory	Crushed Concrete / Brick	Hanson Baston Fen	1-14
Singleton Birch	Chalk	Melton Ross	6-16
Tarmac Ltd	Crushed Recycled/Blast Tarmac Slag	Santon	3-15
UDCS Demolition Ltd	Crushed Concrete/Brick	Former RAF Hangar, Swinderby	5-18
Welton Aggregates	Chalk	Welton Le Marsh	4-18
Welton Aggregates	Crushed Concrete / Brick	Welton Le Marsh	7-19
Welton Aggregates	Limestone	Slate House Quarry, Hibaldstow	7-19
Jelson Ltd	Crushed Concrete	Northons Lane, Holbeach	1-19
Longwood Quarries	Recycled Concrete/Brick	Longwood Quarry	6-19

NOTES

1. Approved status under review. Contact Steve Betteridge at Lincs Laboratory for the latest approved status. The sources listed above are suitable for use as Granular Fill in Development Roads (Clause 6.8 of the Specification). They have demonstrated the ability to achieve the technical requirements for 6F5.

6F5 Capping layer materials are required to comply with **BS EN 13285 Unbound mixtures – Specification** and be made from aggregates complying with **BS EN 13242 Aggregates for unbound and hydraulically bound materials for use in Civil engineering work and road construction**.

These Standards give the technical requirements for the material as well as defining the requirements for the documented quality scheme which govern their production, including the quality of the aggregates used.

The application of a quality scheme, a Factory Production Control system, that accords with BS EN 13285 and BS EN 13242 is mandatory for materials, such as 6F5 Capping, that are marketed as complying with BS EN 13285.

It is the producers responsibility to ensure an appropriate Factory Production Control (FPC) system is in place as an integral part of the production process

If sources other than those listed above are proposed please contact Lincs Laboratory to establish the current status of the source. For works other than Development Roads contact Lincs Laboratory to establish the suitability of the proposed source. All Capping layer materials are classified as frost susceptible.

5 February 2020

GEOSYNTHETICS (GEOTXTILES / GEOGRIDS / GEOCOMPOSITES)

Due to the significant increase in number and variety of geosynthetics now available, a definitive list of approved suppliers is not possible. Advice should be sought from the Lincolnshire County Council Highway and Flood Authority before selection or installation of geogrids, geocomposites and geofabrics.

Geogrid reinforcing is required in areas where the subgrade CBR value is less than 1.5%. Suitable advice should be obtained from the manufacturer and approval obtained from Lincolnshire County Council Highway and Flood Authority for the use of an geosynthetics material.

5 February 2020

BLOCK PAVING BEDDING SAND FOR CONVENTIONAL PAVEMENTS

The sources listed below produce sand suitable for use as bedding for either concrete or clay paving blocks used in conventional (i.e. not permeable or pervious) pavements.

SUPPLIERS	AGGREGATE SOURCE	SITE CATEGORY
Bardo Midlands Ltd	Freemans Pit Baston Fen	II
Aggregate Industries	Pode Hole 0/4 MP	III
CEMEX Materials UK Ltd	Hykeham (Sharp Sand)	III
CEMEX Materials UK Ltd	Tattershall (Sharp Sand)	III
CEMEX Materials UK Ltd	Norton Disney	II
CEMEX Materials UK Ltd	Manor Pit (Coarse Sand)	II
Hanson	Needingworth	III*
MQP	Baston Fen	II
Hanson	Earith	I
Hanson	Auckley	II
Tarmac Ltd	Cromwell (Sharp Sand)	
Tarmac Ltd	Whisby (Grit Sand)	II
Tarmac Ltd	Besthorpe	II
Tarmac Ltd	Finningley	II
Tarmac Ltd	Hoveringham	II
Tarmac Ltd	Langford	III
Tarmac Ltd	Girton	III
Woodhall Spa Sand & Gravel	Kirkby on Bain (0/4 MP Sand) (Woodhall Spa)	II

SAND CATEGORIES

SITE TYPE	APPLICATION
I	Pavements subjected to significant channelised traffic, bus stations, industrial pavements, loading bays, Chart 6 Development Roads.
II	General highways and other roads, Chart 3 Development Roads, pedestrianisation projects with regular heavy trafficking, car parks, receiving some heavy traffic, footways regularly overridden by vehicular traffic.
III	Pedestrianisation projects with only occasional heavy traffic, car parks receiving no heavy vehicles and footways.

NB Site Category II sands can be considered suitable for use at Site Category III locations.
 The designation III* indicates the sand to be theoretically capable of performing satisfactorily on more arduous sites.
 Contact Lincs Laboratory for further advice.

SURFACE DRESSING BINDERS

C69B3 (K1-70) UNMODIFIED EMULSION BINDERS

<i>SUPPLIER</i>	<i>SOURCE</i>	<i>PRODUCT</i>
Ayton Products	Wymondham	Ayton K1-70
Colas	Warrington	Surfix C K1-70
Total	Preston	Emulsis K1-70
Nynas UK AB	Ellesmere Port	Spraymuls K1-70

INTERMEDIATE OR MID-RANGE POLYMER MODIFIED BINDERS¹ (C70 BP3 / C69 BP3)

<i>SUPPLIER</i>	<i>SOURCE</i>	<i>PRODUCT</i>
Ayton Products	Wymondham	Aquagrip 70P (KE90 + KE93)
Colas	Warrington	Surfix 80S
Total	Preston	Emulsis Ultra
Nynas UK AB	Ellesmere Port	Fleximulus

PREMIUM OR HEAVY DUTY POLYMER MODIFIED BINDERS² (C70 BP3/C69BP3)

<i>SUPPLIER</i>	<i>SOURCE</i>	<i>PRODUCT</i>
Ayton Products	Wymondham	Aquagrip PMB (KE94)
Colas	Warrington	Shelphalt SX
Total	Preston	Novalastic
Nynas UK AB	Ellesmere Port	Duramuls

¹ Suitable for sites described as Moderate sites - see Appendix 2.2 Table 4A of the Code of Practice: Highway Works (HT/141/94)

² Suitable for sites described as Difficult Sites - see Appendix 2.2 Table 4A of the Code of Practice

HAPAS CERTIFICATED PERMANENT COLD LAY SURFACING MATERIALS AS AT 1 APRIL 2014 (HAUC APPROVED)

6mm ASPHALT CONCRETE SURFACE COURSE

SUPPLIER	AGGREGATE/MATERIAL NAME	HAPAS APPROVAL DATE & CERTIFICATE NO.	PTSPAS Approval Dates & CERTIFICATE NO.	APPROVAL CATAGORY
Colas Ltd Rowfant Crawley Sussex RH10 4NF	Bitucrete 6mm Surface Course	25 April 2012 07/H128		Footway and Cycle Tracks Only
Instarmac Group PLC Kingsbury Link Trinity Road Kingsbury Tamworth B78 2EX	Ultracrete IRR 6mm	25 November 2016 01/H060		Class 3 and 4 Carriageways Footways and Cycle Tracks
Larsen Manufacturing Ltd 4 West Bank Road Belfast Harbour Industrial Estate Belfast County Antrim Belfast BT3 9JL	Larsen PCL06	22 June 2017 17/H264		Footways and Cycle Tracks Only
Tarmac Trading Ltd Bickenhill Lane Solihull B37 7BQ	Ultipatch Footway 6mm	10 March 2017 02/H073		Footways and Cycle Tracks Only
Vialit mbH Josef Reiter Strasse 78 5280 Braunan Am Inn Austria	Rephalt 6mm Surface Course	20 December 2010 09/H147		Type 2, 3 and 4 Carriageways Footways and Cycle Tracks
Viatec UK Ltd Westfield Business Park Second Avenue Radstock BA3 3BH	Viafixquick 6mm	18 February 2016 16/H245		Type 3 and 4 Carriageways Footways, Footpaths and Cycle Tracks

10mm ASPHALT CONCRETE SURFACE COURSE

SUPPLIER	AGGREGATE/MATERIAL NAME	HAPAS APPROVAL DATES	PTSPAS APPROVAL DATES & CERTIFICATE NO.	APPROVAL CATAGORY
Instarmac Group PLC Danny Morson Way Birch Coppice Business Park Dordon Tamworth Staffordshire B78 1SE	Ultracrete IRR 10mm	25 November 2016 01/H060		Type 3 and 4 Carriageways Footways and Cycle Tracks
Vialit mbH Josef Reiter Strasse 78 5280 Braunan Am Inn Austria	Rephalt 10mm Surface Course	20 December 2010 09/H147		Type 2,3 and 4 Carriageways, Footways, Footpaths and Cycle Tracks
Viatec UK Ltd Westfield Business Park Second Avenue Radstock BA3 3BH	Viafixquick 10mm	18 February 2016 16/H245		Type 3 and 4 Carriageways, Footways, Footpaths and Cycle Tracks

5 February 2020

**PERMANENT COLD LAY SURFACING MATERIALS FOR
CLAUSE 946 MINOR CARRIAGEWAY REPAIRS**

6mm ASPHALT CONCRETE SURFACE COURSE

Supplier	Material	HAPAS Approval Dates & HAPAS Certificate	PTS PAS Approval Dates & Certificate No.	Material Approval Status										
				LCC Carriageway Hierarchies								Footways & Cycleways		
				Major Road Network	1	2	3	4	5	6	7		8	
Instarmac Group PLC	Ultracrete IRR 6mm	25 Nov 16 01/H060		X	X	X	√	√	√	√	√	√	√	√
Vialit mbH	Rephalt 6mm Surface Course	20 Dec 10 09/H147		X	X	√	√	√	√	√	√	√	√	√
Viatec UK Ltd	Viafixquick 6mm	18 Feb 16 16/H245		X	X	X	√	√	√	√	√	√	√	√
Instarmac Group PLC	Ultracrete Tough Patch 6mm	-	PA9460005 01/02/19	X	X	X	X	X	X	X	X	X	X	√

10mm ASPHALT CONCRETE SURFACE COURSE

Supplier	Material	HAPAS Approval Dates & HAPAS Certificate No.	PTS PAS Approval Dates & Certificate No.	Material Approval Status										
				LCC Carriageway Hierarchies								Footways & Cycleways		
				Major Road Network	1	2	3	4	5	6	7		8	
Instarmac Group PLC	Ultracrete IRR 10mm	25 Nov 16 01/H060		X	X	X	√	√	√	√	√	√	√	√
Vialit mbH	Rephalt 10mm Surface Course	20 Dec 10 09/H147		X	X	√	√	√	√	√	√	√	√	√
Viatec UK Ltd	Viafixquick 10mm	18 Feb 16 16/H245		X	X	X	√	√	√	√	√	√	√	√
Instarmac Group PLC	Ultracrete Tough Patch 10mm	-	PA9460005 01/02/19	X	X	X	√	√	√	√	√	√	√	X

Note –

√ = Suitable as temporary and permanent repair material for these Carriageway Hierarchies and Cycleways and Footways.

x = Unsuitable as temporary and permanent repair material for these Carriageway Hierarchies.

5 February 2020

HIGH FRICTION SURFACES SYSTEMS

HIGHWAYS AUTHORITIES PRODUCT APPROVAL SCHEME (HAPAS)

APPROVED HIGH FRICTION SURFACE SYSTEMS (HFS) WITH HAPAS ACCREDITATION AS AT 1 July 2018

HFS Type 1

SYSTEM PROVIDER	SYSTEM	CERTIFICATE NUMBER	AGGREGATE	BINDER
Adbruf	Coldgrip Type 1 High Friction Surfacing System	02/H066	Calcined Bauxite	Polyurethane
Adbruf	Hot Grip Type 1 HFS	17/H258	Calcined Bauxite	Thermoplastic
Aximum	Aximum High Friction Surfacing System Hypergrip Type 1	15/H233	Calcined Bauxite	Methyl Methacrylate
Colas	Spraygrip HFS System	98/H001	Calcined Bauxite	Epoxy
Conren Ltd	Conren Truegrip HFS System	00/H035	Calcined Bauxite	Epoxy
Hitex Traffic Safety Ltd	Hitex Texture Print Type 1 Thermoplastic HFS System	04/H088	Calcined Bauxite	Thermoplastic
Hitex Traffic Safety Ltd	Ecogrip Epoxy Type 1	14/H212	Calcined Bauxite	Epoxy
Hitex Traffic Safety Ltd	Pumagrip Type 1	16/H256	Calcined Bauxite	Polyurethane - MMA
Jobling Purser Ltd	Rocbinda Colorvial HFS System	12/H196	Calcined Bauxite	Polyurethane
Leeson Polyurethanes Ltd	D3149 HFS System	01/H049	Calcined Bauxite	Polyurethane
Prismo Road Marking Ltd	Zebraflex Type 1 HFS System	00/H043	Calcined Bauxite	Thermoplastic
Prismo Road Marking Ltd	Tyregrit Type 1 HFS System	05/H115	Calcined Bauxite	Epoxy
Road Techs Specialist Products Ltd	Techgrip RTTI	10/H158	Calcined Bauxite	Thermoplastic
Road Techs Specialist Products Ltd	Duragrip HFS System	04/H102	Calcined Bauxite	Epoxy
Sildon Thermoplastics	Thermogrip Type 1	12/H193	Calcined Bauxite	Thermoplastic
Stirling Lloyd Polychem Ltd	Safetrack NW HFS System	04/H090	Calcined Bauxite	Methyl Methacrylate
Star Uretech Ltd	Uretech HFS System	11/H177	Calcined Bauxite	Polyurethane
Trustseal Ltd	Keygrip Epoxy 924 HFS System	00/H039	Calcined Bauxite	Epoxy
Trustseal Ltd	Keygrip Type 1 Thermoplastic HFS System	01/H058	Calcined Bauxite	Thermoplastic
Kestrel Thermoplastics Ltd	Kestrel Grip Type 1 Hot	18/H280	Calcined Bauxite	Thermoplastic

HFS Type 2

--	--	--	--	--

HFS Type 3

--	--	--	--	--

Please contact Lincs Laboratory when selecting High Friction Surfaces Systems.

5 February 2020