# regeneration ltc regeneration Itd regeneration Itd SUSTAINABLE MATERIAL SOLUTIONS **Paving**

**OCL Regeneration Limited** 

Systems House | Beluncle Halt | Stoke Road Hoo | Rochester | Kent | ME3 9NT

**Contact Us:** 

Paving the way towards greener infrastructure

### **Strength in** Sustainability

### OCL Regeneration specialise in aggregate recycling.

From our depots in South and Central England and on a national mobile basis we own and operate mobile plant suitable for crushing/screening and ex-situ mixing with our mobile foamed bitumen and stabilisation plants. Get in touch with your surfacing, stabilisation, remediation and recycling enquiries. We are very proud of our service, track record and wide range of customers & projects.

Fully quality assured and Competency accredited we place our main focus on Health and Safety, the Environment and Value Engineering for sustainable solutions to the every-day requirements of the construction industry.

See our fact sheets for more details on our low-energy/highly sustainable alternatives to traditional building materials.

### We specialise in:



Aggregates



Recycling



**Bound Materials** 



Pavements: Residential & Industrial



Pavements & Foundations



Reuse of Asphalt Coal Tar (AWCC) & other Remediation



Site Services & Plant Hire







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### **AGGREGATES**

### From our network of depots, we offer a range of recycled aggregates.

We can crush and screen to any specification at the clients request or merchant primary aggregates as part of a package if designs demand it.



General Fill (SHW600 Series e.g. 6F)



Recycled Type 1 (SHW 800 SERIES)



Single Size RCA 0/10



Single Size RCA 10/20



Single Size 40/70

## Ask us about your primary stone needs too!

### Did you know...

Approximately one quarter (65/275 million tonnes) of the used aggregate requirement is recycled.





### RECYCLING

### From our depots and on a national contracting basis we can offer:

### **Crushing and screening**

- We hold the licenses and permits to mobilise to the clients site to undertake on-site recycling services
- Our best in class fleet and highly trained operatives ensure our clients the right products, outputs and value for money

### **Ex-situ mixed materials**

- Our fleet of mobile mixers allow us to mobilise to provide site-batched products to national specifications
- We own and operate all the support equipment and mobile plant to offer the full grave to cradle process without having to hire in. We can therefore offer full turn-key solutions with one point of contact and responsibility for the whole process chain













Are you disposing of a waste that we could actually turn into a product?

### Did you know...

We can often build the roads or car parks for a project using the wastes coming from the demolition of the previous use..

### **OCL Regeneration Limited**

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### **BOUND MATERIALS**

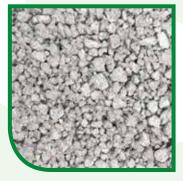
FOAMBASE ™ & HBM

### Foambase™

- Foambase<sup>™</sup> is our cold-lay permanent base and binder course replacement
- Manufactured to SHW cl.948
- Used to replace base and binder course in traditional road designs
- High recycled content
- Uses 5% of the energy of hot asphalt during the manufacture stage
- Laid with the same resource as traditional asphalt
- Site batching gives excellent advantages on cost and program and allows self supply
- Approved for the reuse of tarbound arisings

### **HBM**

- We manufacture all grades of HBM, known most often as cement bound granular material (CBGM) in the UK surfacing market
- CBGM is manufactured to BSEN 14227-1, the European specification
- CBGM can replace the foundation, subbase, lower base and upper base in uk composite pavement designs
- Allows savings by using more cost effective materials and thinner designs to achieve the same results as the original asphalt designs



CSCGA

### Cement stabilised coarse graded aggregate (CSCGA)

- Used as part of SUDS (sustainable urban drainage systems).
- SUDS are a sequence of water management practices and facilities designed to drain surface water in a manner that will provide a more sustainable approach than what has been the conventional practice of routing run-off through a pipe to a watercourse.

OCL materials are used on Highways England Schemes nationwide.

### Did you know...

Foambase<sup>TM</sup> and HBM use up to **94%** recycled constituents.



### **PAVEMENTS**

### RESIDENTIAL & COMMERCIAL INFRASTRUCTURE

We supply and install our Foambase™ and HBM materials for projects around the areas of our depots or, if the project permits, we mobilise the required equipment and labour to the site of the project to provide a turnkey manufacturing and installation service.

More and more designers and consultant engineers are specifying these materials on works as an alternative to the traditional aggregate and asphalt designs. If the materials are not already specified with sufficient early contractor involvement, we can offer alternative designs via our own value engineering department and consultant designers so that any project can benefit from the advantages offered.

As part of our residential and infrastructure offering we can provide our design, manufacture, and installation services with the following pavement types:

- Fully flexible
- Composite pavements
   (HBM base + asphalt surface)
- Concrete block paving
- Permeable concrete block paving
- Grouted macadam

All these materials are covered by established local and national specifications, documents and methods such as design manual for roads and bridges HD26/06 and IAN73. These permit the alternative design of pavements for all applications.

### Potential applications include:

- Access roads
- Commercial car parks
- Cycle paths
- Multi use games area (MUGA)
- Park and ride schemes
- Residential carriageway and footpaths

### Examples and images of jobs:



Castle Hill Development – Ebbsfleet Kent Residential Infrastructure



Luton Airport Long stay car park

Save CO<sup>2</sup> and money on your infrastructure.

### Did you know...

We can supply and install as much as **90%** of a pavement design in approved recycled alternatives. Only the surface course needs to be hot asphalt.



### **PAVEMENTS**

HIGHWAYS & HEAVY DUTY

We supply and install our Foambase<sup>™</sup> and HBM materials for projects in the areas of our depots or, if the project permits, we mobilise the required equipment and labour to the site of the project to provide a turnkey manufacturing and installation service.

More and more designers and consultant engineers are specifying these materials on works as an alternative to the traditional aggregate and asphalt designs. If the materials are not already specified with sufficient early contractor involvement, we can offer alternative designs via our own value engineering department and our consultant designers so that any project can benefit from the advantages offered.

As part of our Highways and heavy duty offering we can provide our design, manufacture, and installation services with the following pavement types:

- Fully flexible
- Composite pavements
   (HBM base+ asphalt surface)
- Machine lay concrete block paving
- Grouted macadam
- Roller compacted concrete

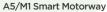
A range of established specifications, documents and methods cover our materials, such as HD26/06 design manual for roads and bridges, DIO for airfields, and Interpave design manual for heavy duty pavements. In addition to these documents we work closely with Consultant Designers to offer bespoke design packages for specialised applications.

### Potential applications include:

- Aviation
- Haul roads
- Highways (motorways & trunk roads)
- Industrial hardstandings
- Ports
- Silage clamps

### Examples of jobs:







Moons Hill Lorry Park

Let us redesign your pavement using value-engineering to increase its green credentials and reduce cost.

### Did you know...

We can batch on site to reduce traffic and save money.





In areas where there is a lack of quarried stone or other factors such as inferior sub-grade it is preferable for bound materials to be used to create or improve the foundation class as part of highway or heavy duty applications.

HD26/06 and IAN73 are used to design from the foundation up, so high MSA roads (million standard axles - the traffic requirement) can be made thinner by improving the foundation so that less asphaltic material is required and savings can be made.

- In situ soil stabilisation
- Ex situ soil stabilisation
- Geogrids



Geogrid



In-situ mixing

Did vou know...

You can reduce earthworks

by using site won materials.

We supplied 45,000T of FABM as a foundation on A13 Sadlers Farm Project for Balfour Beatty.

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### **The Problem**

Certain asphalt waste contains **Coal Tar** which was used as a binder or sealant in past UK road construction in lieu of Bitumen.

**Coal Tar** is deemed hazardous due to elevated levels of PAH's (Polycyclic Aromatic Hydrocarbons) some of which are carcinogenic.

We have seen a sharp rise in requests to help clients manage the hazardous waste that is generated from road maintenance and reconstruction activities.

### **The Solution**

Foambase™ is an approved method of re-using hazardous wastes. This helps our clients to avoid high disposal costs, preventing the waste from having to go to one of only a few permitted landfill sites. Due to their scarcity they are extremely expensive and difficult to access, so involve high transport costs.

As our Foambase $^{\text{TM}}$  process is cold, it doesn't give rise to the aromatics. It also binds the contaminants within the product, which is approved for reuse in surfacing applications.

We hold all the relevant permits and licenses to treat these wastes either at our depots or on a national contract basis where we can move the processing module to the client's job site.

- Avoids disposal costs
- Divert your waste from landfill, protect finite void-space
- Use an environmentally friendly, fully approved alternative to traditional Base & Binder Course
- Benefit from the advantages of self-supply
- Save money
- We have a great track record and demonstrated results

### Why OCL?

- We are the UK's leading independent operator in this field providing unbiased, best value solutions
- We own and operate the whole fleet of equipment to provide grave to cradle service, providing clients with one-stop-shop opportunity
- We operate the largest permanent facility of its kind in the UK, and have a proven track record with councils and their main constractors.
- We have the largest experience (2006) and largest volumes produced in this field
- We operate the largest brand new fleet of equipment, providing the highest quality and most reliable offer.
- We provide a full service, from design and quality plan through to testing and validation.
   (BSI 9001 accreditation for Quality Control)

### **AWCC projects completed**

- Sheffield City Council PFI
- Lincolnshire County Council Kier, via Minster Surfacing
- Oxfordshire County Council Skanska, Aggregate Industries
- MOD
   Hercules Balfour Beatty Kier JV
- Exeter Airport
   Dawnus, Devon County Council, St Modwen

### OCL in numbers in 2016

- 136,000ft of hazardous waste re-used and saved from landfills
- Est £16M savings in disposal for our clients
- Replacing 150,000T of traditional asphalt with green alternative, giving further savings in materials cost







### SITE SERVICES & PLANT HIRE

### OCL Regeneration operate and hire on an operated basis:

### **Crushers:**

- Finlay J1170 Jaw Crusher
- Finlay I110rs Impactor/Screener
- Metso LT1110 Impact Crusher
- Kleemann MR110 Impactor
- RM 100 GO! Impactor

### **Screeners:**

- Finlay 883 "Reclaimer"
- Finlay 683 Inclined Screen
- Finlay 595

### **Mixers & Silos:**

- Wirtgen KMA220 Mobile Foamed Bitumen /Emulsion/Stabilisation Mixer
- 50T Mobile Silos

### **Excavators:**

- Volvo EC160DL
- Volvo EC250DL

### **Loading Shovels:**

- Volvo L120G Loading Shovel
- Volvo L150G Loading Shovel

### **Tractors & Accessories:**

- John Deere 6830 Premium
- Loader Mounted Bucket Sweeper JD H380 Loader, forks & buckets
- NC 16T Dumper Trailer



Finlay J1170 Jaw Crusher



EVO

Finlay 883 "Reclaimer"



RM 100 GO! Impactor



Kleemann MR110 Impactor



Wirtgen KMA 220



Tractor & Trailer

OCL have a varied fleet suitable for use in many size sites.

### Did you know...

At OCL, we crush and screen over half a million tonnes per year.





stabilise and improve many different waste materials so that they can be re-used as suitable products, often on the same job from where it originated.

A fantastic example of this is when muck which would typically have to be transported to landfill can be modified to allow it to be used again as an approved capping or type1 replacement.

The plants are designed to be able to handle even cohesive wastes that traditionally would be problematic to work with, so we are confident that we can offer the right solution to our customers - Whatever they throw at us!

- Save Money. Make your aggregates from your waste! Cut down lorry movements. Accelerate programs.
- Fully quality assured to re-use muck and utility arisings as SHW 600 / 800 series products.
- Combined with our Foambase(™)Asphalt (SHW cl.948) or HBM (SHW 800) can replace all capping, type 1, Base and Binder layers in your surfacing projects.
- Also locks-in and encapsulates contaminants so can be used in remediation applications.









Are you disposing of a waste that we could actually turn into a product?

To find out more about these savings contact Eamon at: eamon.davies@oclonline.co.uk or call the number below.

### Did you know...

We can often build the roads or car parks for a project using the wastes coming from the demolition of the previous use.

