WEARDALE TASK FORCE UPDATE EASTGATE SPECIAL

July 2005



From Cement Works to National Attraction

Two years ago, we consulted residents of the Dale on 'Renewing Weardale: the Way Forward', our strategy for reversing the economic decline of the Dale. More than one in five of Weardale households took the time and trouble to respond formally to our ideas, a remarkably high number for such an exercise.

Of these, a clear majority expressed support for the overall strategy for the Dale and for our main flagship project - the proposed redevelopment of the cement works at Eastgate to create a renewable energy model village, using energy generated on site, that would provide homes and local jobs at the same time as creating a tourist attraction likely to bring in visitors from across the country and even beyond.

We said, at the time, that we thought the site might be the best location anywhere in the country for finding natural hot water from underground that could then be used both for on-site heating and to create a 'hot springs' visitor attraction.

As reported earlier this year by the local and national media, our supposition proved correct. With funding from One NorthEast, provided through the County Durham Sub Regional Partnership, a trial borehole was sunk that found hot water one kilometre beneath the surface with a temperature of 46°C (115°F).



Since then - in the knowledge that the whole range of renewable energy available in the UK, including heat from the natural hot water, could uniquely be exhibited in a living and working environment - we have continued to work on our proposal for the model village. Alongside this, we have also been developing our ideas for the rest of the Lafarge landholding, including the disused quarries, at Eastgate - these ideas, in part, based on interests expressed by various businesses and organisations wishing to take advantage of the special features of the site.

This edition of our newsletter focuses solely upon the Lafarge site at Eastgate. It describes our suggested concept for the redevelopment and reuse of the site and looks at the way forward, including the likely establishment of a public/ private sector organisation that is likely to take over the site from Lafarge. The idea for a mixed-use development based on renewable energy was first put forward, by local residents, in 2002. We hope that by early 2006 an outline planning application can be submitted by the new public/private sector organisation. This would mark a major step forward in the implementation of our regeneration strategy for the Dale.

Preliminary estimates indicate that when fully built the redevelopment of the Eastgate works and quarries could result in a substantial number of jobs on site, potentially more than were ever employed by the cement works.

Publication of this newsletter coincides with a new round of public consultation by the Task Force, concentrating on how the model village might best be laid out and on attractions elsewhere on site that could be provided. We look forward, again, to receiving your comments and ideas.

The Different Faces of Weardale Works



The cement works at Eastgate, seen here (in photo 1) before demolition began in January, has been a familiar sight in the Dale for over 30 years. So too has been the crusher plant at the top of the hillside and the conveyor bringing rock down to the works (photo 2). But few residents of the Dale will have seen the well-hidden quarries up on the 'tops' (photo 3). From end to end, the quarries, with their dramatic faces, stretch for almost a mile.

The Lafarge landholding at Eastgate is enormous - about 550 hecares, the equivalent of over 800 football pitches. The works site measures 25.5 hectares.





THE CONCEPT

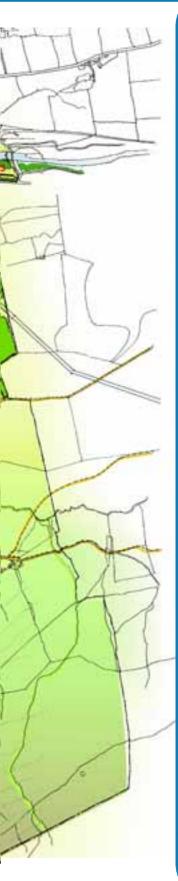
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In practice, the site and its planning, can be divided into four interconnected areas. In the valley floor, there is the works site to the north of the River Wear and, immediately to the south of the river, the riverside meadows stretching as far as the old Eastgate-Westgate back road. Then, to the south of the road, are the steep slopes running up to the 'tops' where the quarries - a western quarry and an eastern quarry - are located. The tops are some 200 metres (650 ft) above the works site.

Featuring in all four parts of the site is the proposed funicular railway, connecting the works site with the tops along the line of the existing conveyor. With no visitor parking proposed on the tops or on the slopes, this is the only way other than on foot that visitors can access these areas.

More detailed descriptions of the concept for each of the various parts of the overall site are given on the following pages. **EXISTING PUBLIC FOOTPATHS NEW WAY MARKED PATHS**

BROAD FOOTPATHS AND SERVICE TRACKS



THE RENEWABLE ENERGY MODEL VILLAGE - See pages 4 & 5

- 1. THE HOT SPRINGS
- 2. HYDRO LAKE AND HYDRO WEIR
- 3. WEARDALE RAILWAYS EASTGATE STATION
- 4. FUNICULAR RAILWAY PASSENGER TERMINUS
- 5. FISH FARM
 Production farm with public access to special features
- 6. PLANT NURSERY

 Commercial nursery with limited public display
- 7. THE VILLAGE GREEN
 Providing 'nucleus' linking existing and new Eastgate villagers
- 8. VISITORS PARKING AREA
- RAIL AND ROAD BRIDGE
 Existing bridge renovated to provide access to Rverside
 Meadows area for cars, railway, cyclists and pedestrians
- FOOTBRIDGE
 Western footbridge linking village and Riverside Measows
- 11. FOOTBRIDGE

 Eastern footbridge providing direct access from parking area to
 Hot Springs and Model Village

THE RIVERSIDE MEADOWS - See page 6

- 12. HOT SPRINGS EXTRACTION POINT Extraction point for geothermal water source
- 13. THE GREEN DRAGON DALE ROUTE
 Narrow-gauge railway linking car parking to Ludwell Open
 Form Control
- 14. PADDOCK NOOK FORGE AND
 MAINTENANCE WORKSHOP
 Blacksmith training/demonstration and Green Dragon
 maintenance workshop
- 15. LUDWELL FARM

 Training and holiday course centre covering woodland management, sustainable agricultural practices, stone walling etc., with tea rooms
- 16. RARE BREEDS COLLECTION
 Small fields grazed with rare breed farm animals
- 17. VISITORS PARKING AREA Including extensive tree planting to minimsie visual impact. Grass surface overflow area to east
- **18.** RIVERSIDE FOOTPATH
 Linking bridge crossings of river with woodland walk
- 19. MAIN RAIL LINK Weardale Railways branch line for transporting of aggregates stone only extracted from the eastern quarry
- 20. AGGREGATE TRANSFER POINT Transfer point from funicular to main railway line

THE SLOPES - See page 6

21. FUNICULAR RAILWAY
Providing visitor access to the tops and transporting
stone down from the quarry

22. ALPINE COASTERS

Tracked downhill thrills feature and dry toboggan run with own uplift track

23. ADVENTURE AREA

Camping and adventure play with woodland trails linking to features in woodland area

- 24. TREE TOP CAFE
- 25. THE TREE CATHEDRAL Durham Cathedral plan cut out of woodland with feature trees planted
- **26.** SNAKES AND LADDERS ADVENTURE FEATURE Family play facility
- 27. NEW BIOMASS PLANTATIONS
 Sustainable woodland and coppice (for use in biomass plant and by the Green Dragon Project)
- 28. EXISTING WOODLAND

 Providing biomass as part of conversion to sustainable
- native woodland

 29. SCULPTURE TRAILS

Stone/wood sculptures on footpath trails

- 30. SMALL DISUSED QUARRIES
 Displaying natural material sculptures and interpretation of
- origins, notably lead mining

 31. SKI TRAINING AREA
 Snow area, made artificially, with elementary instruction in lower section and ski tow to upper area (operational November to
- Easter only)

 32. BILLING SHIELDS CENTRE
 Ski/walking centre and sculpture/land art studios

THE TOPS (QUARRY AREAS) - See page 6

- 33. WIND TURBINES
- 34. WIND TURBINE WITH VIEWING GALLERY Vertical axis wind turbine with viewing gallery
- 35. THE GREEN DRAGON UPPER ROUTE
 Narrow gauge railway providing dramatic views of quarry and
 limited access to features.(Halts marked)
- **36.** COMMERCIAL QUARRY ZONE Small scale quarrying for aggregate stone
- 37. ROCK PARK WITH VIEWING PLATFORM Includes unique limestone corals exposed as pavement. Viewing platform of commercial quarrying operation
- 38. ECOLOGY/BIRD WATCHING CENTRE
 High moorland visitor centre providing information on local
 ecology and bird life
- 39. LIMESTONE PAVEMENT
 Exposed limestone layer forming ecological pavement features
- 40. FAIRY HOLE CAVES

 Controlled access point for experienced potholers to underground system
- **41.** FUNICULAR RAILWAY UPPER PASSENGER TERMINUS Main access point to the tops for visitors
- 42. CAFE/RESTAURANT/INFORMATION POINT Focal point providing information and access to features of the tops and upper slopes

Note: all aspects of the concept are subject to the requisite approvals and funding, and will be subjected to thorough market testing, currently ongoing, to establish their commercial viability.

RENEWABLE ENERGY MODEL VILLAGE -



How it might function

The model village will be a working example of environmentally-friendly and energy- efficient development, utilising only renewable energy generated on site. There will be the potential to house over a hundred families within the village. It will include accommodation for small and medium sized businesses. It will utilise all forms of renewable energy currently available in the UK and, as such, will be a unique example to the rest of the country of what can be achieved.

Its uniqueness and distinctive architecture, utilising local materials and drawing upon the character of local buildings, will make it not only a fun place to live and work, but a fun place to visit.

Some will come to learn about green energy at the renewable energy visitor centre and to see it in action in the village. Some will come for the wide range of attractions to be found within the village and elsewhere within the Eastgate site. Some may come for just a few hours. Others may stay for a week or more in the hotel or holiday 'cottages' to be found within the model village.

At the heart of the model village is its star attraction - the public hot springs. Here, the domed structure of the geothermally-heated hot springs sits in a garden offering visitors, residents and workers the opportunity to relax in either the open-air or covered warm water pools whilst enjoying spectacular views of the hills to the south. A crescent, with shops and cafes at ground floor level and live-work units above, frames the dome on its northern side.

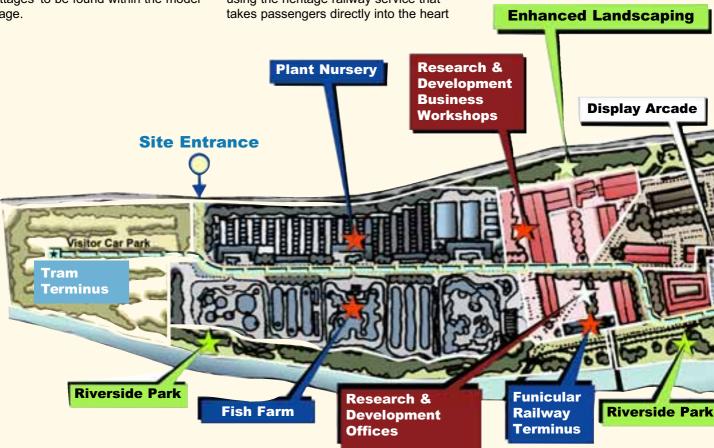
In the west of the site, a fish farm utilises the hot water to breed exotic fish and a plant nursery uses heat generated from the hot water to grow unusual plants. Both exhibit their products in a glass-roofed arcade to the side of the crescent.

At the eastern end, the existing sports pitches are improved and a village green setting created that acts as a fulcrum between the existing hamlet of Eastgate and the model village. Residents of both also share a new leisure/community centre.

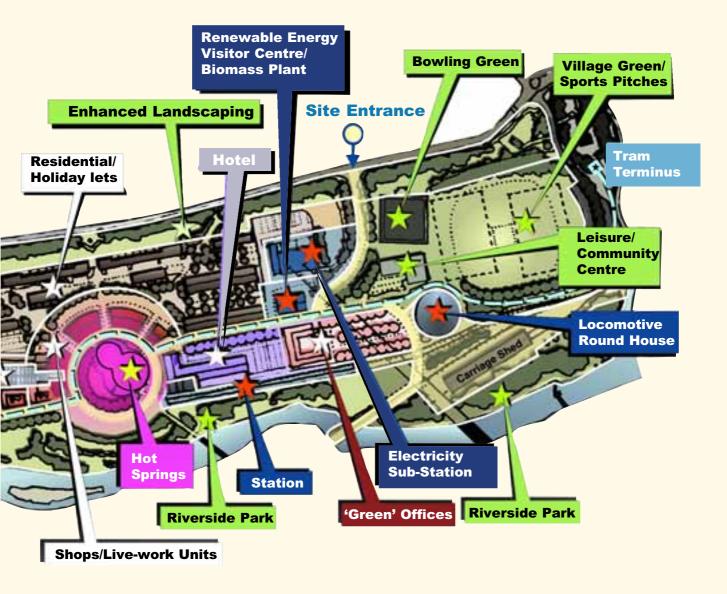
Many visitors to the model village arrive using the heritage railway service that

of the development, close to the hot springs. Additional platforms at the station are used for the display of historic carriages. Nearby, a 'roundhouse' displays historic, working locomotives.

The model village is pedestrian-friendly. Even the main route through it operates at a maximum speed of only 20 mph. Visitors coming by car either use a new entrance at the western end of the site to access a nearby car park or use the existing works entrance before crossing a refurbished bridge to a car park on the south side of the river. A heritage tram service connects all the key attractions. A park, where people stroll and picnic and children play, occupies much of the riverside. Close by, the terminus of the funicular railway provides the 'gateway' to the contrasting scenery and experience up on the tops.







THE CONCEPT CONTINUED

The Tops ----

Additional footpaths up the hillside will provide improved access to the tops and to the countryside beyond. The vast majority of visitors will, however, arrive on the funicular railway. Some will just take advantage of the viewing platform, close to the funicular railway terminus, and the café with its panoramic views back over the Dale before returning to the model village. Others may venture into the western quarry, with its dramatic cliff faces, on the Green Dragon, a wood-burning, narrow-gauge locomotive built in Leeds in 1912. Public access is otherwise limited in the quarry.

In the eastern quarry, public access is completely prohibited. Here, a small-scale aggregates operation takes stone from previously worked limestone benches. Visitors are able to watch operations from a viewing platform above the quarry, within a Rock Park, created and operated by the aggregates company. The Rock Park, which is intended to act as an introduction to the North Pennines AONB European Geopark, provides real-life illustrations of the broad range of geology of the area, all within one small area.

The aggregates company also runs the funicular railway and utilises the system, mainly out of season, to transport stone down the hillside in purpose-built wagons. For the rest of the time, carriages take visitors up and down the hillside - the funicular railway being not only functional but a tourist attraction in itself. The combined passenger/freight operation makes the funicular railway a viable commercial operation.

Away from the quarries, three wind turbines provide electricity to the model village, with sufficient generated to also meet all of the electricity needs of the Dale. One of the turbines has a viewing gallery, open to the public.



A funicular railway, seen here in operation in Switzerland The designers of this system have been commissioned by the aggragates company to design the Eastgate funicular railway.

The Slopes 🔆

The funicular railway also takes visitors up to the start point of the dry toboggan runs. The two runs, the longest of their kind in the country, wind their way down, in and out of the adjoining Ludwell Woods. Amongst various other exciting attractions is an adventure and activities area.

Further east, part of the slope is given over in winter months to a ski-training area using real snow artificially made on site, with the heat generated in this process being transferred to supplement the heating of the fish ponds and plant nursery on the north side of the river. All equipment is of a temporary nature and is removed at the end of the ski season.

Wood from Ludwell Wood and from additional, new areas planted on the slopes is used to supply the biomass plant in the model village that also helps to heat, and provide power to, the new development. The wood, which is replanted as it is harvested, also supplies fuel for the Green Dragon narrow-gauge railway. As part of the process of felling and replanting, the area of Ludwell Wood that was ancient woodland, but which was cut down during WW2, is replanted with deciduous trees.

The Riverside — Meadows

A second wood burning locomotive takes visitors through the meadows, a reminder of the days when narrowgauge railways were an active part of Dale working life. Some visitors board the train at the visitor car park which is accessed by car over the refurbished bridge that crosses the river.

The bridge is shared with pedestrians and cyclists, and, very occasionally, with Weardale Railways. Freight trains pass over the bridge and along a short re-established section of the Eastgate-Wearhead line as far as the funicular railway. At this point, stone from the quarry is transferred from the funicular railway into the main line wagons before being taken off site.

The narrow-gauge railway also stops at Ludwell 'Open' Farm, where adjacent fields are grazed by rare breed farm animals: here people can appreciate the animals in a safe environment.

A new pedestrian bridge over the river provides a direct link between the visitor car park and the hot springs.



An 'Alpine Coaster' - one of the two kinds of dry toboggan runs envisaged.



The 'Green Dragon' wood burning locomotive now 93 years old



RENEWABLE ENERGY

Recent confirmation of the existence of hot water below the surface of the Lafarge landholding at Eastgate means that a unique set of renewable energy sources will be available to generate power and heat:

- Geothermal underground hot water will supply the hot springs and also provide supplementary heat to other developments and operations, including the plant nursery and fish farm.
- Biomass local sustainable wood fuel will provide the principal source of heating and domestic hot water to the new buildings, using a central boiler unit and a community heating system.
- Wind three wind turbines located below the western quarry will be the major source of electricity.
- Hydroelectric a water-driven turbine set in a low weir will generate further electricity from the natural flow of the River Wear.
- Solar the new buildings will incorporate state-of-the-art photovoltaic technology to capture solar energy and convert it into heat and electricity.



A weir of the scale envisaged at Eastgate as part of the proposed hydro-electric power scheme

Together, these schemes provide all the electricity, heating and hot water required on the redeveloped site. They will also provide an excess of electricity that will be fed into the existing grid and supply homes and businesses throughout the Dale.

By avoiding the use of fossil fuels, like coal and oil, for heating or for electricity generation, it is estimated that around 2,600 tonnes of carbon dioxide emissions will be avoided every year on the redeveloped Eastgate site.

Within the whole of the Dale, the use of renewable energy generated at Eastgate could result in a reduction in greenhouse gas emissions of about 1 tonne per Dale household per annum.

This represents a significant reduction on current levels, sufficient for Weardale to play its full part in meeting the UK's national target for 2010, thereby contributing positively to preventing climate change.

TRAFFIC GENERATION

A detailed transport analysis of the potential impact of the concept for the redevelopment of the works site and quarries is yet to be undertaken.

The outcome of this will depend very much on the likely number of visitors to the new attractions, details of which are currently being collected. In the meantime, a preliminary 'worst case' assessment in terms of traffic generation has been undertaken assuming, very optimistically, 400,000 visitors per annum. This suggests:

- o there is significant spare capacity on the A689, as indicated by traffic counts undertaken by the County Council
- o most visitors will arrive at Eastgate outside peak hours



- o those that do arrive or leave in the peak hours will largely be travelling in the opposite direction to the peak hour flows
- a relatively large proportion of visitors to Eastgate are likely to use the heritage rail service to get to the site
- a proportion of visitors will already be in the Dale visiting other attractions
- o on a normal day, the increase in traffic is, at worst, likely to lead to only slightly slower journey times along the A689

o short delays within the villages, and possibly Stanhope in particular, may occur on a limited number of busy summer weekends and bank holidays

As part of the transport assessment, means of minimising any adverse impacts will be investigated. These are likely to include identifying ways in which visitors may be encouraged to minimise the use of their car within the Dale and ways in which measures already in place in the villages to ease the flow of traffic, including parking measures, might be better enforced.

WHAT HAPPENS NEXT?

Subject to feedback from the public consultation exercise accompanying this newsletter, it is hoped to submit an outline planning application by early 2006 for the hot springs, renewable energy model village and other uses identified in the plan shown on pages 2 and 3.

The application, which is likely to be submitted jointly by the members of the Weardale Task Force, will be aimed only at establishing the principle of the reuse of the works site and quarries for the new uses. It will not contain detailed plans for individual buildings. These will come later, if and when the principle is accepted.

Under plans currently being considered by the Task Force it is intended that a new management organisation be established to oversee the planning and redevelopment of the Eastgate. This new organisation is likely to comprise the current members of the Weardale Task Force, plus representation from the local community. Over time, it is envisaged that major operators on the site could join the new body.

The new organisation is likely to take ownership of the site at the time when outline planning permission for the site's redevelopment is granted. It is the intention of Lafarge Cement UK to pass on the site free of charge, although it will remain responsible for remediation works and other matters arising from its past operation on the site.

Until such time as the new organisation has been created, the current members of the Task Force have committed themselves to continue working together on the planning and promotion of the project, together with the local community.

It is possible that a public inquiry may be held to consider the outline planning application. This would likely be towards the end of 2006 with a decision from the government some time in mid 2007. So it is possible that any building works would not start until maybe 2008, after detailed plans have subsequently been submitted for approval. If there was no public inquiry, it is possible that the process could be accelerated by up to a year.

WHAT COULD IT LOOK LIKE?



Detailed plans of the design of buildings within the renewable energy model village have yet to be drawn up. Shown here is an artist's impression of how the key attraction - the hot springs - might look.

YOUR VIEWS ARE IMPORTANT

This newsletter has been produced as part of the public consultation for the redevelopment of the Eastgate site. This is your opportunity to express your views on the concept outlined.

The enclosed form with this newsletter details how you can respond in writing, by email (regeneration@wearvalley.gov.uk) or by telephone (call 01388 761956).

Or you can drop-off your comments form at any of the following display venues: the Dales Centre Stanhope, St John's Chapel Post Office, Bishop Auckland Town Hall, Crook Civic Centre or Wolsingham Library.

Responses should be made by the 30th September 2005. The enclosed form also gives details of where and when the consultation meetings are to be held.

This newsletter can be produced in other formats for further information please contact: Wear Valley District Council - Economic Regeneration on 01388 761575

The Weardale **Task Force**







