

DRY STONE WALLS OF CHALFORD

**Notes on their history, owner's responsibility &
maintenance**



Dry stone walls are part of the charm and unique character of Chalford

A COTSWOLD WALL



**Not made like bricks
Same as each other,
Like men, stones argue
With their brother;
Some up, some down,
Some oblong,
Square or round,
And no cement
Bonds them together,
But ivy
And the common weather;
Any yet - though different -
They, like brothers match,
And neatly fitted
By a man
We call half-witted
Make a wall
About this patch.**

Mr Bernard Smith

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INTRODUCTION

If you live in one of the older houses in Chalford you are likely to have some, if not all, of your boundaries made from dry stone walls.

Many of these walls are hundreds of years old, often originating from the enclosure of Bisley Common in the mid 19th century, and were built when stone was free or cheap and labour was cheap and abundant.

Whilst many walls today are in good condition they are not so by chance, only because their owners are prepared to carry out suitable maintenance and invest in rebuilding when the need arises.

There are three main reasons why dry stone walls are worth looking after:

- they are one of the outstanding and widespread man-made features in the parish and so make a major contribution to Chalford's charm, character and heritage. If we lose them the whole of Chalford will lose part of its distinctiveness;
- they add to the value and appeal of individual properties when they are in good condition;
- demolishing walls could be against planning law or best practice and result in enforcement action.

Our message is simple:

- **a little effort spent keeping walls in good repair and free of vegetation (particularly ivy and weed trees) will save major expenditure and other possible liabilities in the future.**
- **When rebuilding is required attention to detail by using appropriate stone and employing skilled dry stone wallers - who know how to make a sustainable quality job - will pay dividends.**

This booklet is written for people who own, or are interested in sustaining dry stone walls for future generations.



Street scenes like this are unique because of the character provided by the dry stone walls

WALLS OF CHARACTER

The dry stone walls within the Chalford villages date from the 17thC and later, as this seems to be the earliest settlement date. It is probable that the early houses of the villages in the 17th and 18thC were surrounded by walls to mark the property boundary on the common, to retain livestock and to protect produce. Some of these wall positions may survive, but the actual walls are likely to have been rebuilt several times, In the mid 19thC, when the remaining common land was enclosed, there was a rationalisation of the property boundaries. Remaining areas of common within the settlement areas were allocated to the former commoners and incorporated into their garden plots. This must have required new walling to mark the new boundaries. More walls have been added over the years, as the earlier house plots have been subdivided to generate new building land.

In an original wall the stone should be consistent in its nature, as it will have been quarried from the same section of the rock strata. However, some walls will have been recycled (several times) and the stones will be mixed with those from other walls and new stone may have been added.



Recently restored wall with mix of stones and vertical toppers

The size of the stones within a wall depends on the nature of the bed from which it has been removed, and many different sizes can be seen in the walls of the area. But, if properly built, all will have been constructed in a similar way. The stability of the wall depends on it having a good heavy 'cope' to keep the walling stone under compression. The original type of coping will almost certainly have been of upright stones (without mortar). This is the best design as it allows the coping to settle unevenly with the wall. Some houses have dressed coping slabs, mostly flat, although some with a convex or triangular section. These probably date from the 18th and 19thC and were probably intended to suggest a degree of status to the property.

There are a few sections of wall within the villages, which are strictly not dry stone walls. These are built of well dressed stones with a regular face, but are laid without mortar. They are called Mason's walls, as they were built by masons, not wallers. A fine example is the one at Clematis Cottage in Commercial Road, Chalford Hill, this was built in the 19thC, when the house was occupied by a stone mason. Nineteenth century and later walls incorporate jumper stones within their courses. These are larger stones which occupy the height of several courses. within a wall of smaller stones. The

walls have several types of features, including gateposts, water related features, animal related features and copings.



Mason's wall in Commercial Road

Gateposts. There are many good examples of gateposts, the majority are cut from single blocks of stone, with a range of dressing qualities. Some have flat tops, others have a shaped top. The best are from single stones, but cut to a regular size on all faces and have an integral scroll pyramid top (eg, The Old Duke of York, Chalford Hill). Some late nineteenth century and later gateposts are built of well dressed stone blocks with a separate pyramid top (eg The Ferns, Chalford Hill).



Gate posts - even if no longer used.

Water Related Features. There are several features in the villages that relate to the communal supply of spring water supply for the cottages. In Chalford Hill, in Commercial Road there are troughs sunk into the side of the lane, which are flushed by a flow of spring water. At the side of the Duke of York Inn, there is a spout in the wall which fills a trough, before flowing away to provide water for Marle Hill. In the wall of Clematis Cottage there is a spout which is the overflow for a stone lined reservoir in the garden. In France Lynch in Sturmyes Road there is a spring fed water sump. In Chalford Valley in the High Street there is another spring fed sump, next to Tankard Spring House.



Spout by Duke of York

Pig Holes. In the base of the walls, originally with a wooden shutter, they let pigs out of their pens into the lanes so they could forage for food or so the pigsties in the garden could be cleared out.



Copings. Many walls are now without copings, which must be affecting their stability. Some have a rigid concrete coping which is better than nothing. The walls should ideally have a stone coping, generally of upright stones wedged together. The 'better' walls have a dressed stone coping, which is commonly flat, but there are several examples of profiled coping stones.



Unusual ridged coping stone near Chalford Primary School

Other Features. These include stones set in the earth at the wall base, to protect the wall from damage by carts (eg one in Puddingly Pie Lane, Chalford Hill). Some walls have arched entrances, these are not early features but popular additions in the late 19thC. There are several examples of iron tethering rings for donkeys in the lane walls.



Iron tethering hook for donkeys



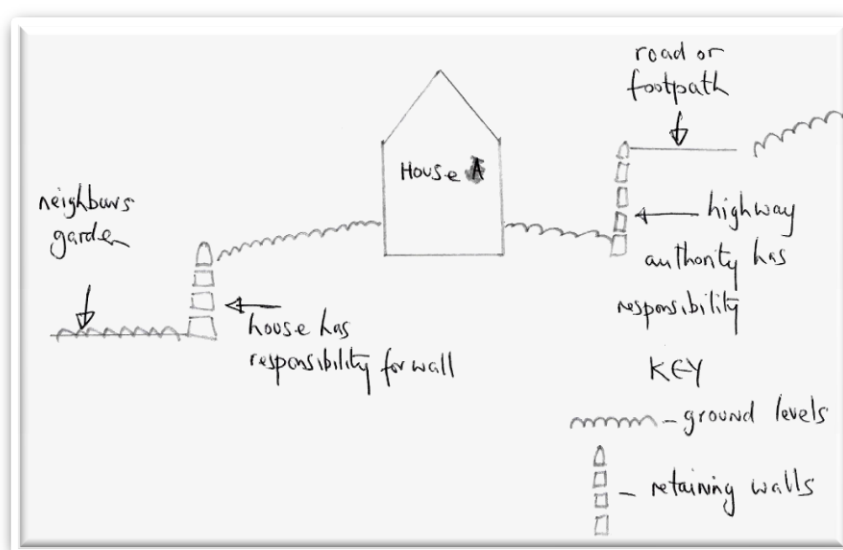
New 'niche' feature in rebuilt walk



Cart/vehicle stopper

OWNERSHIP AND RESPONSIBILITIES

Most walls that form the boundary to a property are the responsibility of the owner of the property. In the case of party walls, there is a joint responsibility with the neighbouring property, unless it is stated otherwise in legal documents or in the form of some precedent. Where ground levels have been raised or lowered to achieve more level ground (e.g. in a garden) or to remove steep hollows in roads or footpaths, then the walls are probably the responsibility of the landowner or authority who has raised or lowered the ground because they have the benefit of more level ground. Although this can be difficult to prove in law, there is much logic to the point that "the beneficiary is responsible". For example, if you own a boundary wall that partly retains a road or footpath you should press Gloucestershire County Council to accept some responsibility if repairs are required. See diagram below. You are likely to retain responsibility for the wall above the road or footpath surface.



This is the commonly accepted method to determine the responsibility for retaining walls

Owners should recognise that the value of a property will be enhanced if all its walls are in sound condition. It is possible to insure boundary walls. Building policies should be checked to verify if boundary walls are covered and if so, under what conditions. It is true that historical damage is not covered, so if you buy a house with boundary walls in poor condition, they will be your responsibility not the insurance company. Ensure that the state of the walls is reflected in the price you pay for the property.



Check with your house insurance to make sure you are covered for this.....

Conservation and Planning Issues

There are three Conservation Areas in the parish: one covering the majority of Chalford Vale, Chalford Hill and France Lynch, the second in Old Bussage and third in Brownhill. The purpose of this designation is to preserve and enhance the character and appearance of the area. Whilst the legislation mainly refers to buildings, trees and control of the visual environment, the walls are recognised as an integral part of the local character.

An important aim of Conservation Area policy is to retain the walls and to recognise their local historical importance. **The boundary walls of listed buildings are automatically fully protected, and permission is required for any alterations.** The boundary walls of unlisted properties in a Conservation Area are not so tightly controlled. However, it is recommended that advice is sought from Stroud District Council, if any changes in height, position of walls, or formation of new openings are being contemplated.

A new level of protection for dry stone walls is provided by the Chalford Design Statement which the Stroud District Council recognised in 2019 as relevant policy guidance. The most relevant part of this Statement is the following design guidance which states (in page 26 reference C11):

"Dry stone boundary walls are an important part of the character of the villages and should be retained, repaired and reinstated as appropriate. New boundaries to roads and footpaths should also be built using Cotswold dry stone construction to blend with existing boundaries."

Legal Implications of Dangerous Walls

Rights of way and highways can be made hazardous for pedestrians and vehicles by the condition of boundary and roadside walls. Large bulges in walls and overhanging vegetation obstruct vision, and collapsed walls can obstruct the footpath or highway.

Local Authorities can act to remove these dangers by issuing an enforcement notice, for which the owner is liable to pay. Clearance costs will also be recovered from the owner.

Any injury to persons or property could result in a claim for compensation. Temporary Closure Orders for footpaths and highways can be raised to protect the public and to allow clearance and rebuilding. Again costs can be charged to the owner of the wall.

Enforcement Notices and Closure Orders are expensive and can add significantly to any rebuilding costs.

In Short:

- Boundary walls are likely to be the responsibility of the owner of the property.
- Good maintenance can add value to the property.
- It is advisable to contact the Stroud District Council Planning Department if changes to walls are proposed or if trees are to be felled to preserve walls.
- Costly legal notices can be served on the owner if walls create a hazard to the public.

MAINTENANCE

A well built dry stone wall will be built without the use of cement mortar. This allows free movement of air and water through the wall. Limestone is absorbent and needs the freedom to expand and contract. Hard mortar prevents this and retained moisture freezes and cracks the stone. Cement also reacts with the limestone causing flaking. A wall will have a good even line along its length and a good batter (sides sloping in towards the top). Stones should be horizontal and laid without gaps, and the wall centre packed firmly with stone. It must have good, firmly wedged coping stones to prevent loss or damage to the top of the wall, Loss of coping stones can signal the beginning of the end of a wall, which has possibly lasted hundreds of years.

To keep a wall in good condition, it should have no large or thick vegetation growing in, on or near it. Ivy is by far the main problem to avoid. Many walls eventually collapse due to pressure of root growth. It may be argued that ivy helps to hold the wall together, but eventually large roots cause collapse. When ivy has engulfed a wall and grows like a bush above the wall line, the whole structure becomes top heavy. Ivy which rocks in the wind or gains weight when it snows will weaken the wall structure. **A wall with a head of ivy on its top is in imminent danger of collapse and a big expense.**

Stone is a valuable commodity and theft of stones, and even whole walls, is on the increase. A well maintained wall will discourage this.



Innocent-looking young ivy?



Ivy taking over - time to cut back



Top heavy and in danger of collapse



Dead ivy - but too late as wall needs rebuilding



An "ex-wall", due to a weed tree, ivy and lack of timely maintenance

Some Practical Maintenance Suggestions

- Keep any vegetation near or on a wall to the minimum by annual trimming. If this is not feasible, remove the vegetation altogether, being careful not to dislodge stones. Sever ivy stems at the base of the wall where possible.
- Prevent the growth of trees, which seed in or near the wall as soon as they appear. Ash and sycamore seedlings grow at an alarming rate. Felling large trees is expensive and prevention at an early stage is advisable.
- Remove soil and debris build up at the wall base. (Also compost, manure storage, etc.) This can reduce air movement through the wall and the extra pressure can cause collapse. Walls built to retain land have a different basic structure and their very wide base compensates for the extra pressure.

- Avoid planting bushes on the tops of retaining walls as this increases the risks of a collapse.
- Avoid use of cement mortar for repair work where possible, though concrete topping is common in the area, the cement content should be kept low.
- Replace coping stones as soon as they become dislodged.
- Always retain spare stone for repair work. Whether dug up from the garden or left over from building work, stones should never be taken to the tip. They are valuable!
- Use the correct type and colour of stone to match the existing wall. Take care when new stone has to be purchased for repair. Stone from a different area can be very different in colour.



Coping stones set in concrete do not move when the wall does, causing weakness

Control of Trees

Before repairing or rebuilding a length of wall, completely clear the wall line of vegetation including trees within a metre of the wall line. In a Conservation Area, permission is required to fell any tree with a trunk diameter of greater than 7.5 cm. The Stroud District Council has its own tree specialist who is there to give advice.

Having grubbed out any invasive roots it is essential to treat root ends and stumps to avoid regrowth. This can be achieved by the use of Ammonium Sulphamate (approved by the Soil Association and is commercially available under the name Rootout). The white crystals should be applied directly to the fresh cut surface where they will be absorbed. Brushwood Killer (SBK) can also be applied to the cut root ends. It is more toxic than Rootout and if combined with diesel or oil is a very effective stump treatment.

Removal of Ivy

There are three options for dealing with ivy growth.

- To spray the ivy with a weed killer (Roundup) which will kill the ivy leaving dead roots and branches. These are best removed when they have decayed to a brittle state.
- To dismantle the wall before rebuilding and to remove the ivy in the process. Roots should be treated to prevent re-growth (use "Rootout " or SBK).

- To keep the damaging effect of the ivy to a minimum by annual trimming.

DIY Repairs

Dry stonewalling is an ancient art that can still be enjoyed today by any reasonably fit individual who enjoys working outside and has a practical eye. Construction of a well-built wall, which may last for hundreds of years, is a satisfying task, even if progress seems slow at the time.

It is advisable to receive some initial training from a reputable instructor, as this will provide basic knowledge, tips and initial experience with which to start a repair. As with any skill, it is experience that enables the builder to improve. Training courses are available from the Cotswolds Area of Outstanding Beauty, see further information below.

Professional Repairs

A waller will take account of many things before providing a quote:

- Access for the delivery of materials and removal of spoil.
- Notification (if footpath has to be closed or trees felled).
- Condition of existing stone.
- Length and height of wall.
- Free standing or retaining wall structure.
- Amount of stone infill required.
- Construction requirements eg, retaining wall may require scaffolding.
- Purchase of new stone.
- Time.

There are many talented wallers in the area. Before choosing one try and inspect an example of their work. Get more than one quote. Word of mouth is the best advert, ask wall owners who have paid for repairs or rebuilding.

COSTS OF REPAIRS

Whilst the cost of day to day maintenance to remove weed trees and ivy is just time, major repairs and rebuilds are sometimes needed due to landslips, perished stone, impact from vehicles, tree falls or general neglect from previous owners.

Stone and Costs

It is important when re-building a dry stone wall that if new stone is required, it is matched as well as possible to the existing stone in size, shape, colour and type. This can often be difficult. New stone will have a different colour which will mellow with age. When buying new stone ask where it comes from and take advice as to its mature colour (eg, stone from the North Cotswolds matures to a yellow/brown and will not blend with the local grey).

Small quantities of stone can sometimes be found at local reclamation companies. It is important to see the stone before any purchase and be satisfied that the seller has the legal right to sell. Check the source of the stone. The value of walling stone is such that a trade in stolen stone does exist.

Local building suppliers will sell stone, but it may come from outside the area and not match existing stone.

Buying in bulk is much cheaper than small quantities. Reclaimed is more expensive than new

Some local stone suppliers:

Stone Quarries Ltd. Tel 01451 850775

lose stone £110+VAT per tonne + transport £125+VAT for up to 10 tonnes
bagged £135+VAT per tonne + transport of £160+VAT for up to 6 bags.

Winchcombe Reclamation. Tel 01242 609564

bagged and sorted, mixed sizes £220+VAT per 750kg + transport £200+VAT.

Smiths of Bletchington. Tel 01869 331281

10 tonne load lose £118+VAT, free delivery.

Cotswold Natural Stone. Tel 01993 867392

10 tonne bags £115+VAT + transport £195+VAT.

Indicative Rebuilding Costs

Costs often differ for retaining walls and free standing walls. Any retaining wall is likely to cost more as spoil needs to be removed before work can begin. It may be possible to build an inner lining of concrete blocks to provide the strength and then face with stone. Some may require the advice of a Structural Engineer.

Labour cost for retaining walls can be in the order of £130 - £180 per square metre, subject to site and existing stone conditions.

Labour costs for free standing walls can be in the order of £100 - £150 per square metre, double sided, subject to site and existing stone conditions.

As a rule of thumb a tonne of stone will build up to 3-4 face square metres of wall, the equivalent of 1.5-2 metres of free standing wall, if 1 metre high.

FURTHER INFORMATION

Building and Repairing Dry Stone Walls; Specifications for Cotswold Oolitic Limestone Walls; A Brief Guide to the Inspection of Dry Stone Walling Work; The Do's and Don'ts of Dry Stone Walling - booklets produced by the Dry Stone Walling Association www.dswa.org.uk

Dry Stone Walls - Laurence Garner, Shire Publications.

Dry Stone Walling, A Practical Handbook - A Booklet by the British Trust for Conservation Volunteers.

Dry Stone Wall Training, cotswoldruralskills.org.uk

Trees - Conservation in Stroud District - Leaflet by Stroud District Council.

Stroud District Council - planning, conservation and tree advice 01453 766321

Gloucestershire County Council - highway - Allan Bently 0800 5144414



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