WGCG
Hidden wonders in the landscape of Warwickshire

The Building Stones of St Giles, Packwood

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St Giles Church – Packwood - History

- St Giles church stands in a wooded glade, about a half-mile north of the National Trust manor of Packwood House. The woodland should not be a surprise, for Packwood is part of that vast ancient woodland known as the Forest of Arden. We do not know when the first church was built here, but it may have been the late Saxon period.
- The first stone church dates to the late 13th century and consisted of a simple rectangular nave and chancel. The west tower was added in the late 15th century by a penitent murderer. The story goes that the lord of Baddesley Clinton, Nicholas Brome, came home unexpectedly to find the local priest 'chockinge' (chucking, or tickling) his wife under the chin. Assuming that the pair were having an affair, he slew the priest in a rage.
- Brome had powerful friends, and he was able to gain a full pardon from both the king and the Pope, but as an act of penitence, he built towers for the churches at Baddesley Clinton and Packwood. The tower has ever since been known locally as The Tower of Atonement.
- You enter St Giles through the south door, which is probably medieval. At the west end of the nave is a simple 12th-century font on a Victorian base. This font is almost certainly older than the church itself. It was found serving as a watering trough for animals in a local farmyard and rescued! At the north-east corner of the nave is the 17th-century Fetherston Chapel, built of red brick.
- The interior is somewhat cluttered with Sunday school oddments, but the walls showcase several fine memorials to members of the Fetherston family of Packwood House. The windows have fragments of medieval stained glass and the wooden screen is very nicely carved and dates to the 18th century.
- Perhaps the most interesting interior feature is a partial wall painting on the north side of the chancel arch, where you can make out a fragment of a Doom, or depiction of the Day of Judgement. The painting dates to the 14th century and was uncovered during restoration in 1927.
- Below the wall painting is a huge oaken chest, carved from a single piece of wood. This acted as a parish safe and is probably older than the church. The chancel screen dates to the 15th century and there are fragments of 13th-century glass in the chancel windows. There are 15th-century-benches in front of the choir pews.
- One last claim to fame for Packwood's church - the parents of Dr Johnson, he of dictionary fame, were married in St Giles.
- This is a delightful country church, not spectacular or overwhelming, but a lovely little rural church. It is easy to walk to St Giles from nearby Packwood House, and it would be a shame to visit the house without making the effort to stroll up the lane to the church!
- The ancient Church of St Giles, Packwood has stood on this site for over 800 years and in the 21st Century continues Prayer & Worship in the traditions of the Church of England following the Book of Common Prayer.
- St Giles has a full peal of Bells and a Choir.

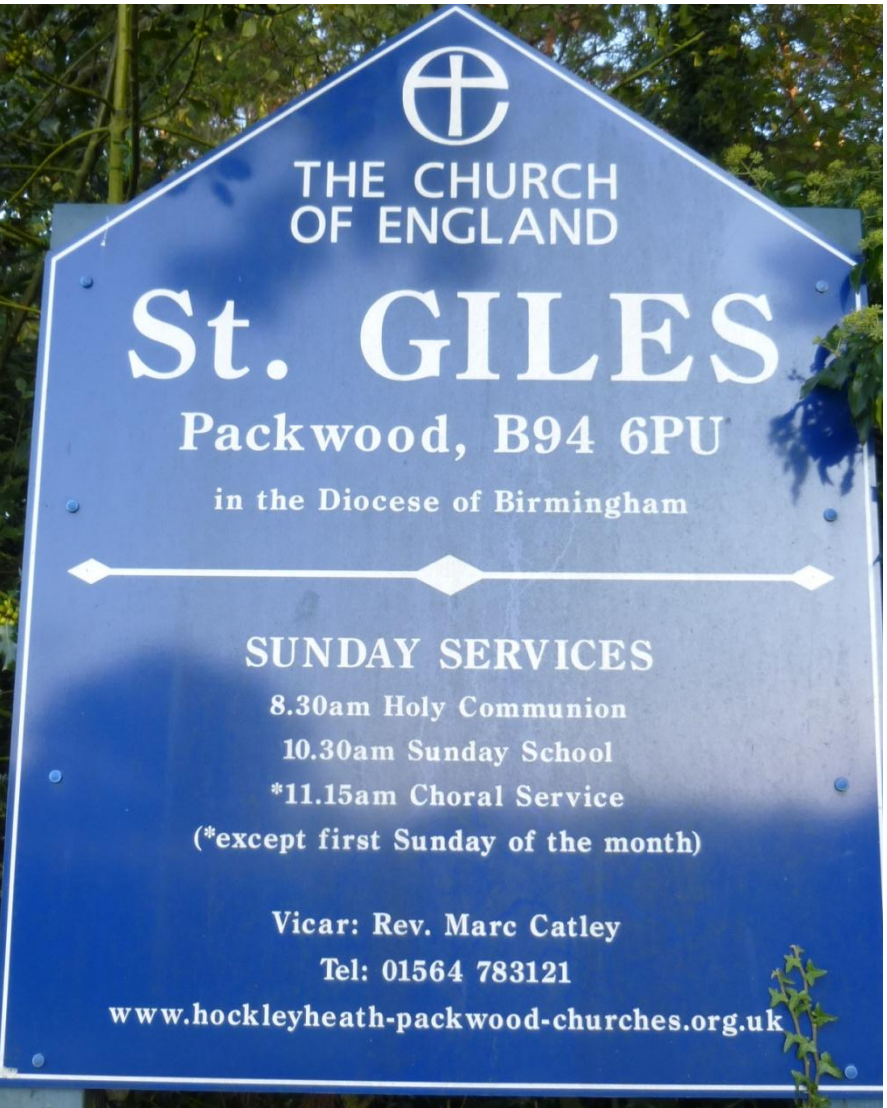
- https://www.britainexpress.com/attractions.htm?attraction=5072

St Giles Church – Packwood. The building stones

- Arden sandstone was used in the construction of the church. This would have been locally derived, but exactly where from is unknown. Arden sandstone is also used for the church in Rowington, a couple of miles to the SE, where it can be seen near the surface in the Rowington canal cutting. Arden sandstone is a fluvial sandstone which occurs in stringers within the Mercia Mudstone group deposited during the Triassic.
- Arden sandstone is a very fine grained sandstone and often with a siliceous cement making it very hard in its fresh state. The blocks of the church show erosion and a breakdown along some of the lesser well cemented layers. However, given that these building stones have been exposed to the elements for several century's they have stood the test of time very well.
- The replacement stones used for repairs to the church seems to have come from 2 different sources. One is dominantly fine grained and the other is commonly medium grained. Degradation of the replacement stones can be seen in part indicating its less durable nature than the original Arden sandstone. Both are possibly carboniferous aged rocks of unknown origin.
- All the magnified images in this presentation are at *500
- The Whitworth grain size chart has been referred to during grain size description

St Giles. Viewed from the NW. The door at the base of the tower is west facing. The oldest parts of this church are Norman, from the 12th-13th century. Each corner of the tower has a buttress for support.

The Narthex and bell tower form the primary west facing entrance to the church. The tower was added n the 15th Century and is known as the Tower of Atonement



View of the south side of the church - current entrance. There are 3 buttresses on the south side. The buttresses give the building structural support. The tower has a protrusion on its south side which houses the staircase

View from the SE. The bricked up doorway once housed the Deacons Door.

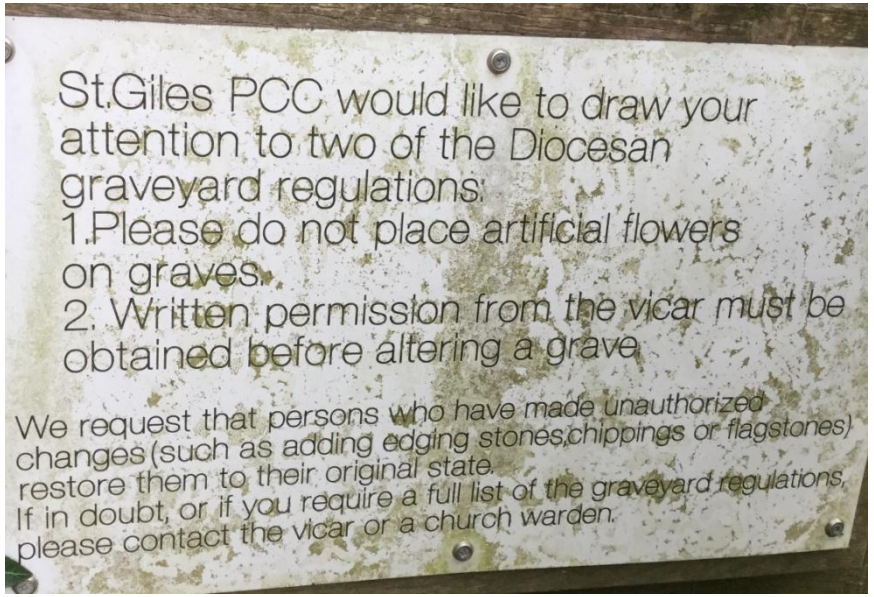
The east end of the church with a buttress on either corner

NE end of the church Buttresses adorn the corners of each side chapel. There are 3 chapels all on the north side of the church.

North side of the church

View of church from NW. The red brick is a later 17th century Featherstone Chapel addition. The smaller chapel is much older

The bell tower – Tower of Atonement



The current entrance Porch located on the south side of the church.
This is of medieval construction

View down the Nave to the Chancel and the alter

View of the Chancel. Stained glass window behind alter from 1913


TO THE GLORY OF GOD
IN MEMORY OF
LUCY JANE
COLCHESTER

The bricked up entrance “Deacons Door” on the south side of the church seen from the inside, now located behind choir benches.

Aisle window to right (south) of alter. 1882

Window in the Bell Tower over the Narthex

The small chapel on the NE side of the church houses an organ. The front choir benches are believed to be 15th century

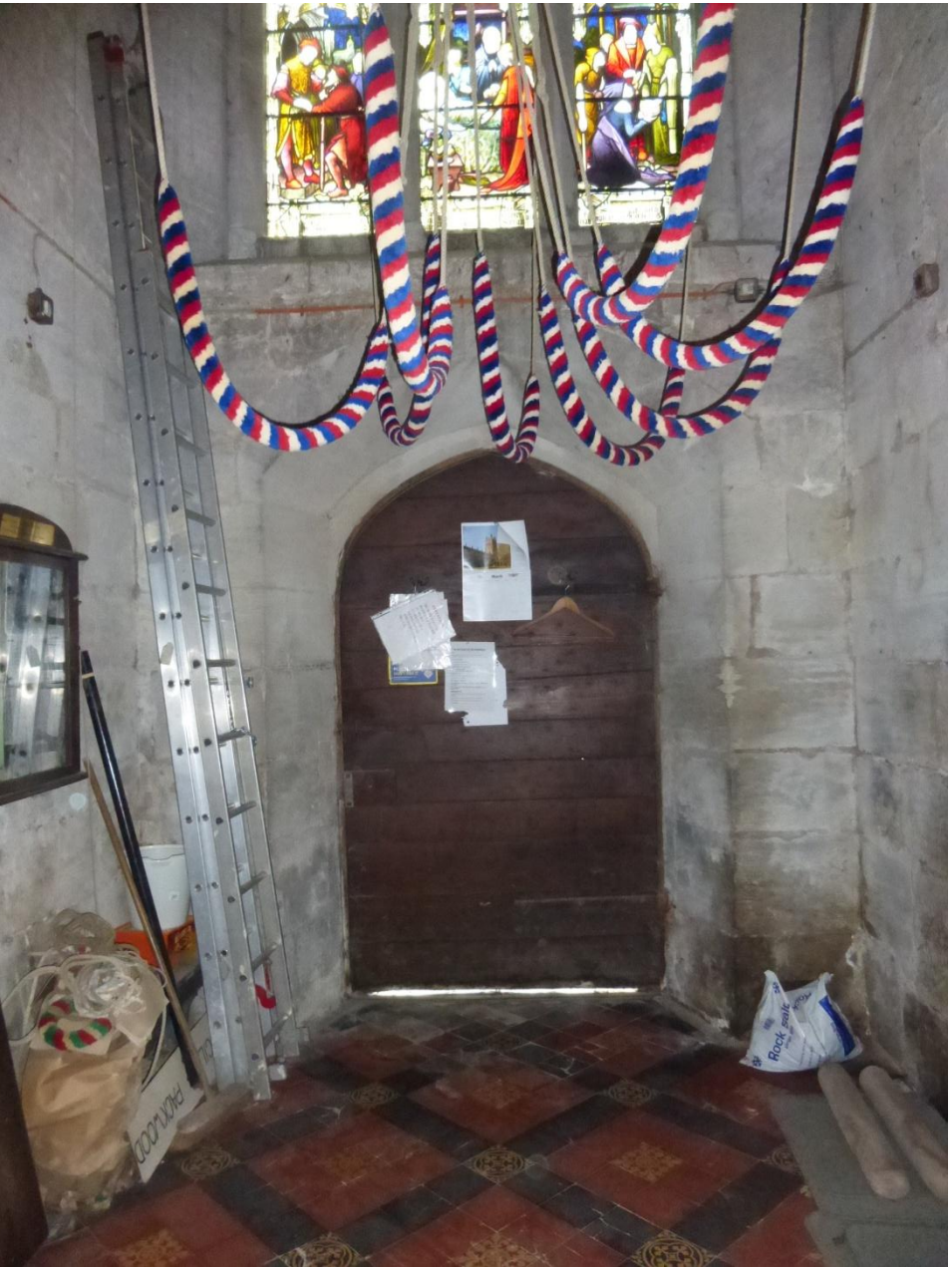
The large 17th century (brick) addition is called the Featherstone Chapel. A large oaken chest, carved from a single piece of wood, is positioned outside this chapel alongside the lectern

Inside the Featherstone Chapel is a doorway on the eastern wall which leads to the adjacent and older NE chapel which now houses the organ.

On the north side of the chancel arch is a painting depicting the Day of Judgement. The painting dates to the 14th century and was uncovered during restoration in 1927.

NW internal door for the small chapel(locked)

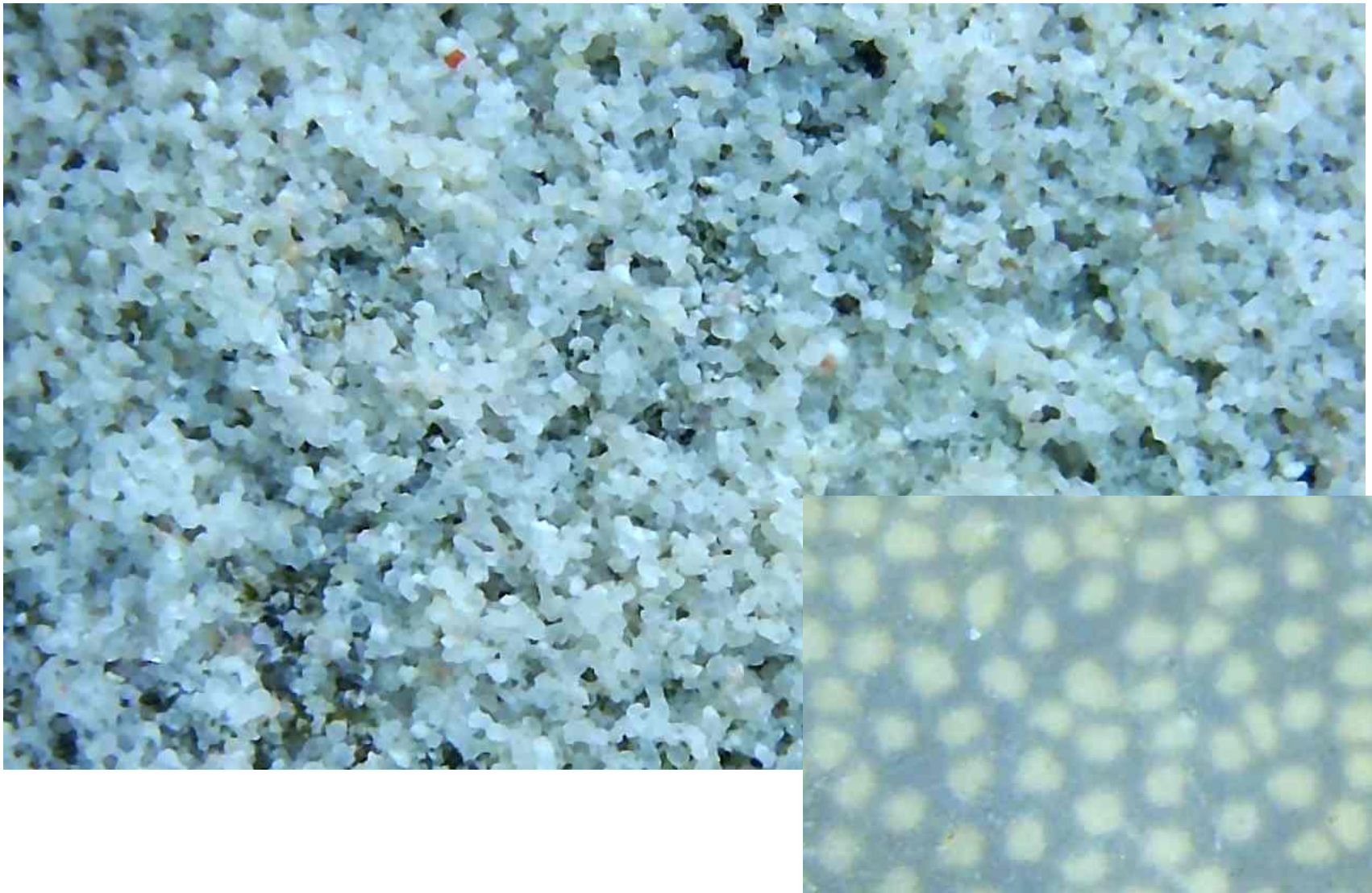
External west door in Narthex / Bell tower



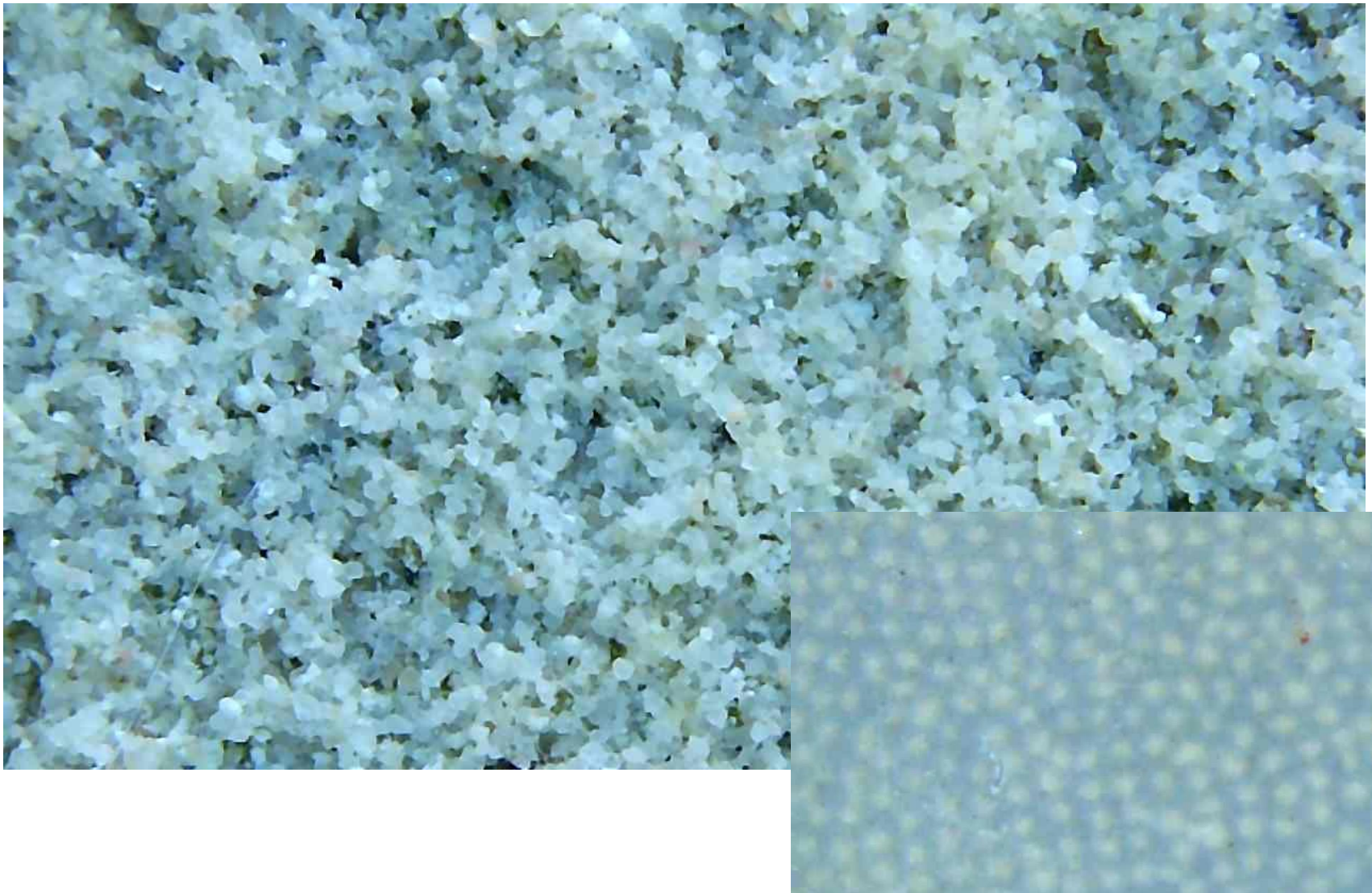
Door to stairs of the Bell Tower

Buff coloured Arden Sandstone

500 magnification of the Arden sandstone. In the lower right we see a scale for a fine grained sand which is clearly larger than the grain size of this block

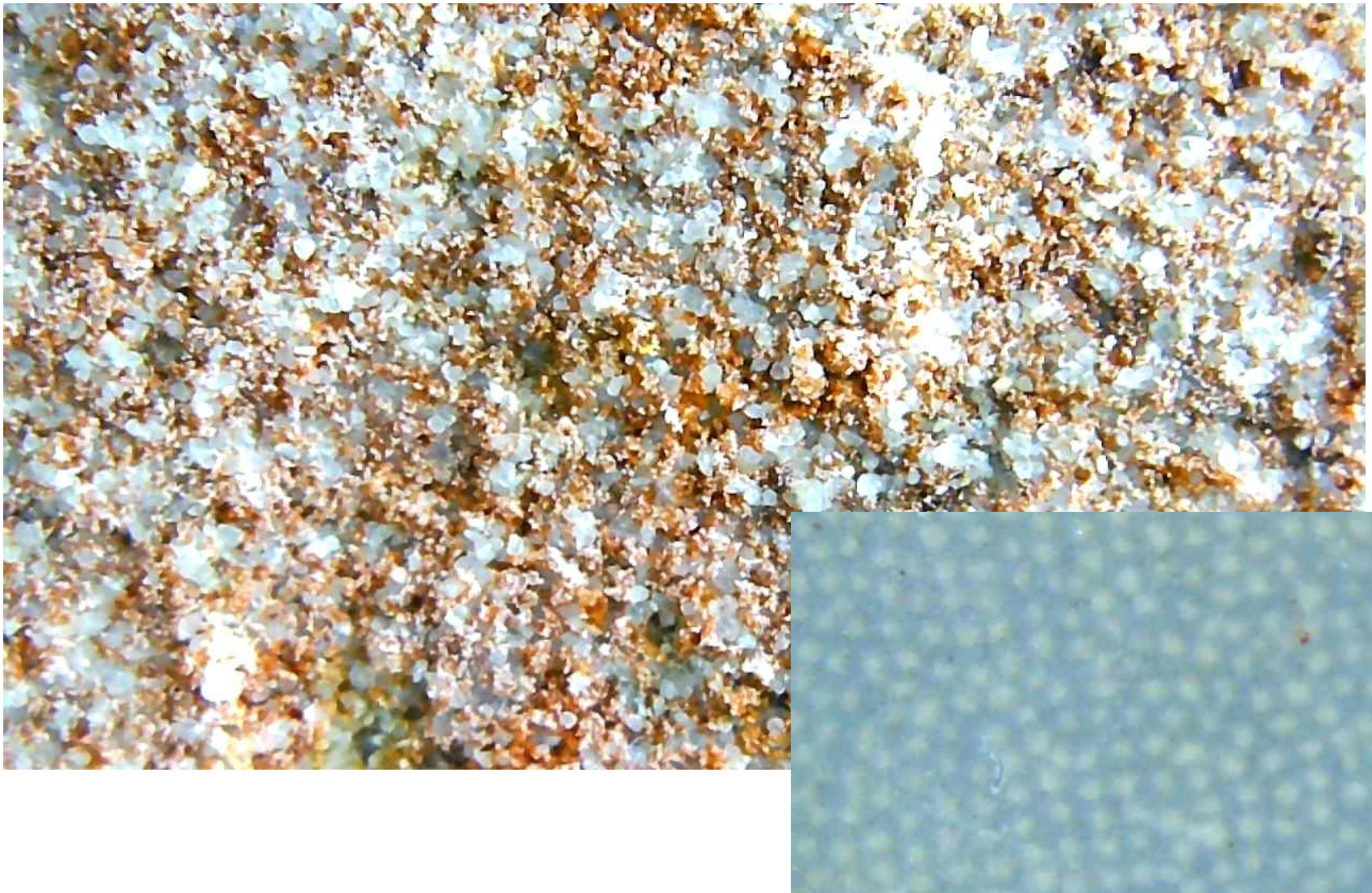


The Arden Sandstone block can be seen to be a very fine grained well sorted sandstone. Over the years the matrix / cement has been eroded to cause the rock to start peeling, leaving loose sand on its surface. (Bottom right is a scale for very fine sand).

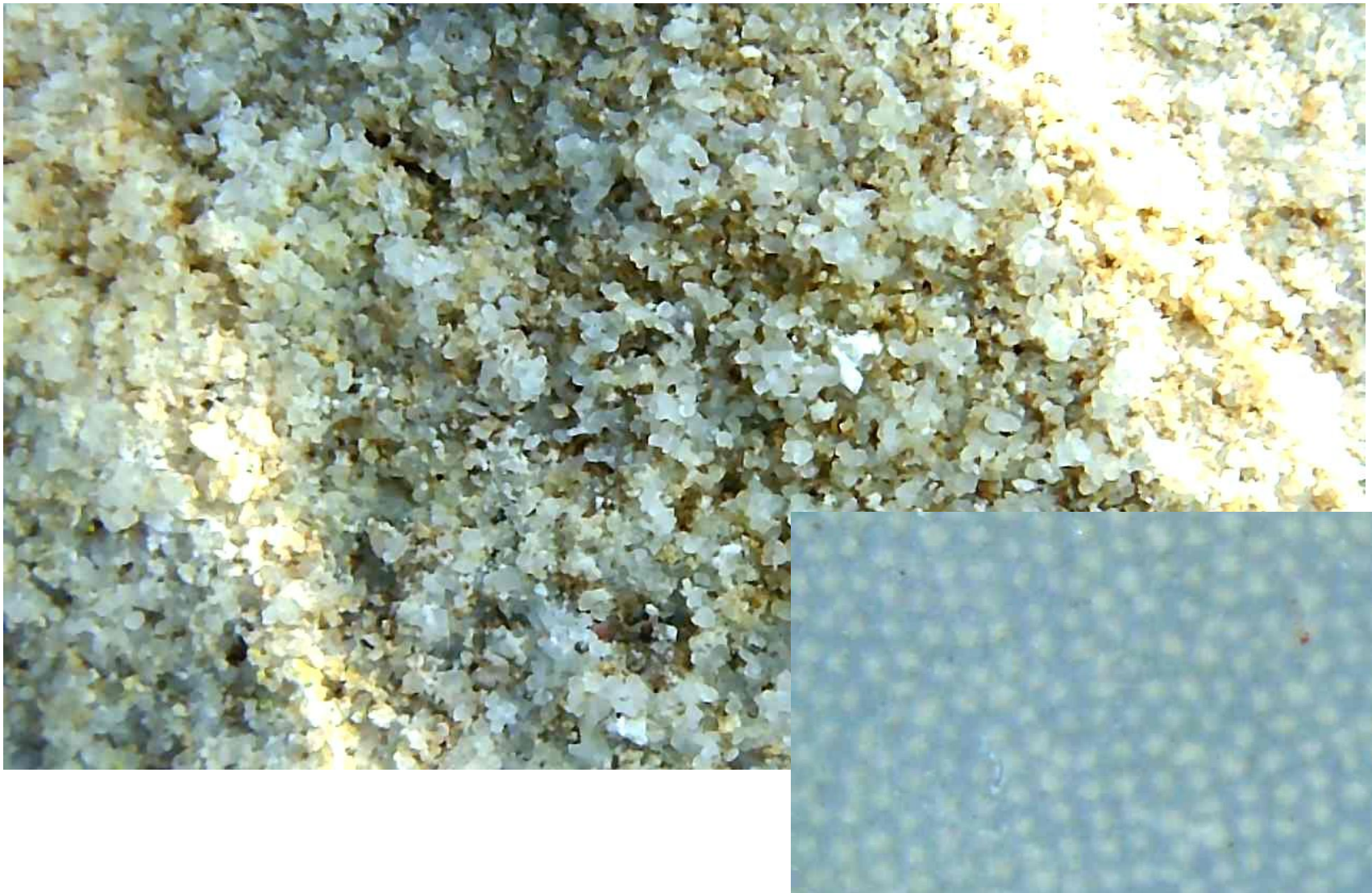


Red and white algal growth colour the surface of the Arden sandstone in areas of the church and play a role in the weathering process of the building stone

Arden Sandstone impregnated with red algal growth. Dominantly very fine grained quartz. 500 * magnification

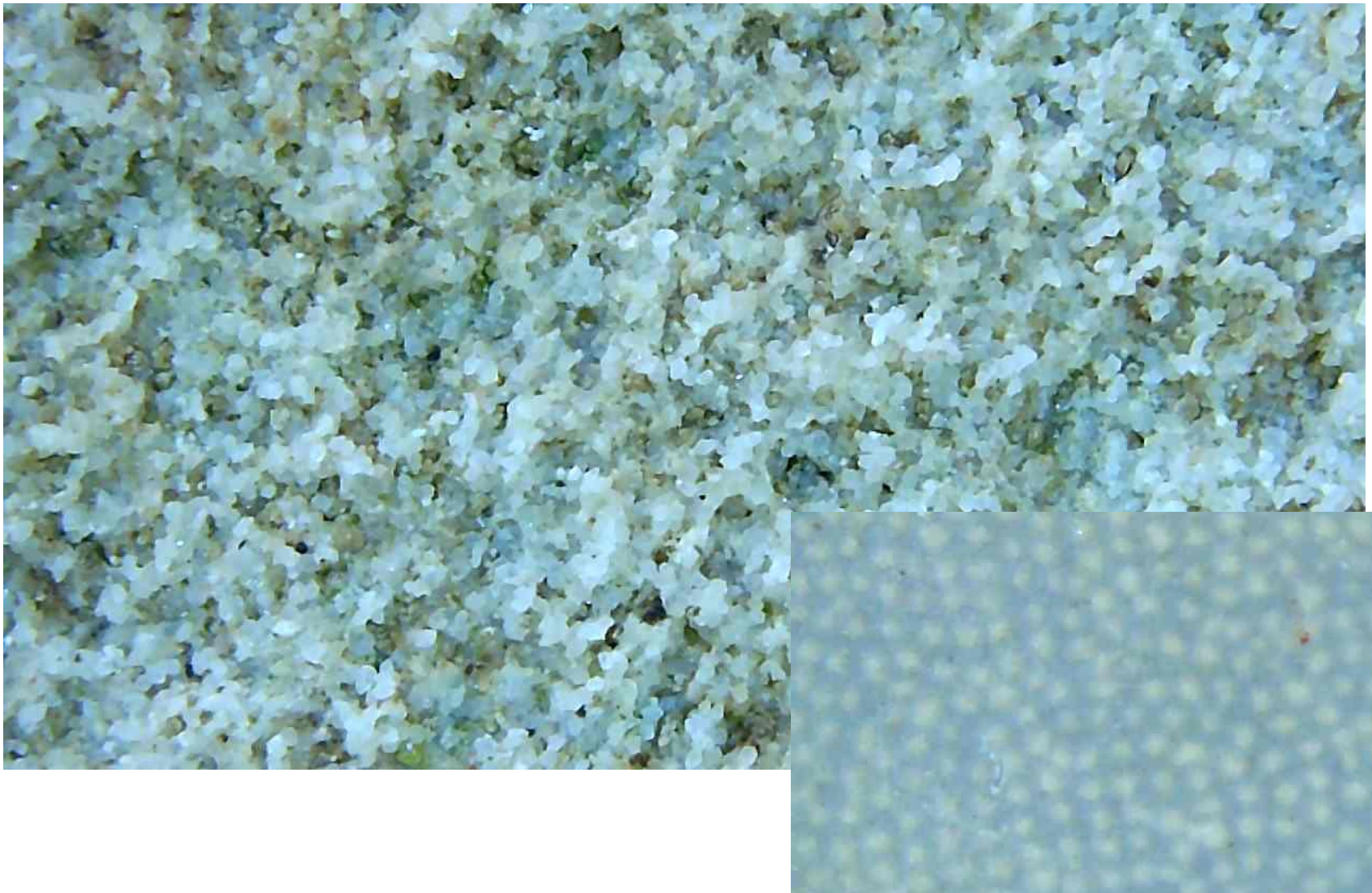


The same sandstone block away from the dominant red algae



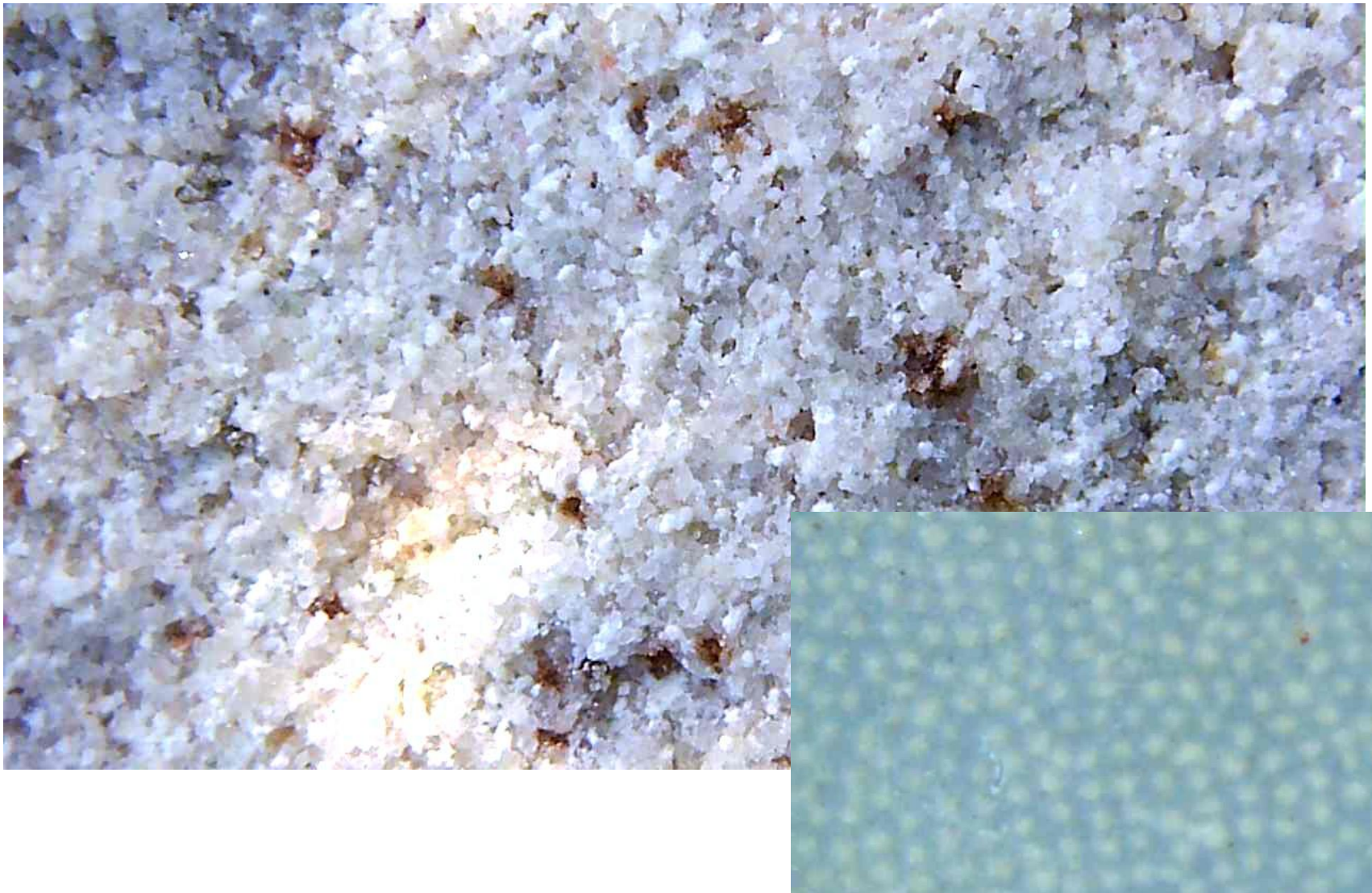
Arden Sandstone Blocks

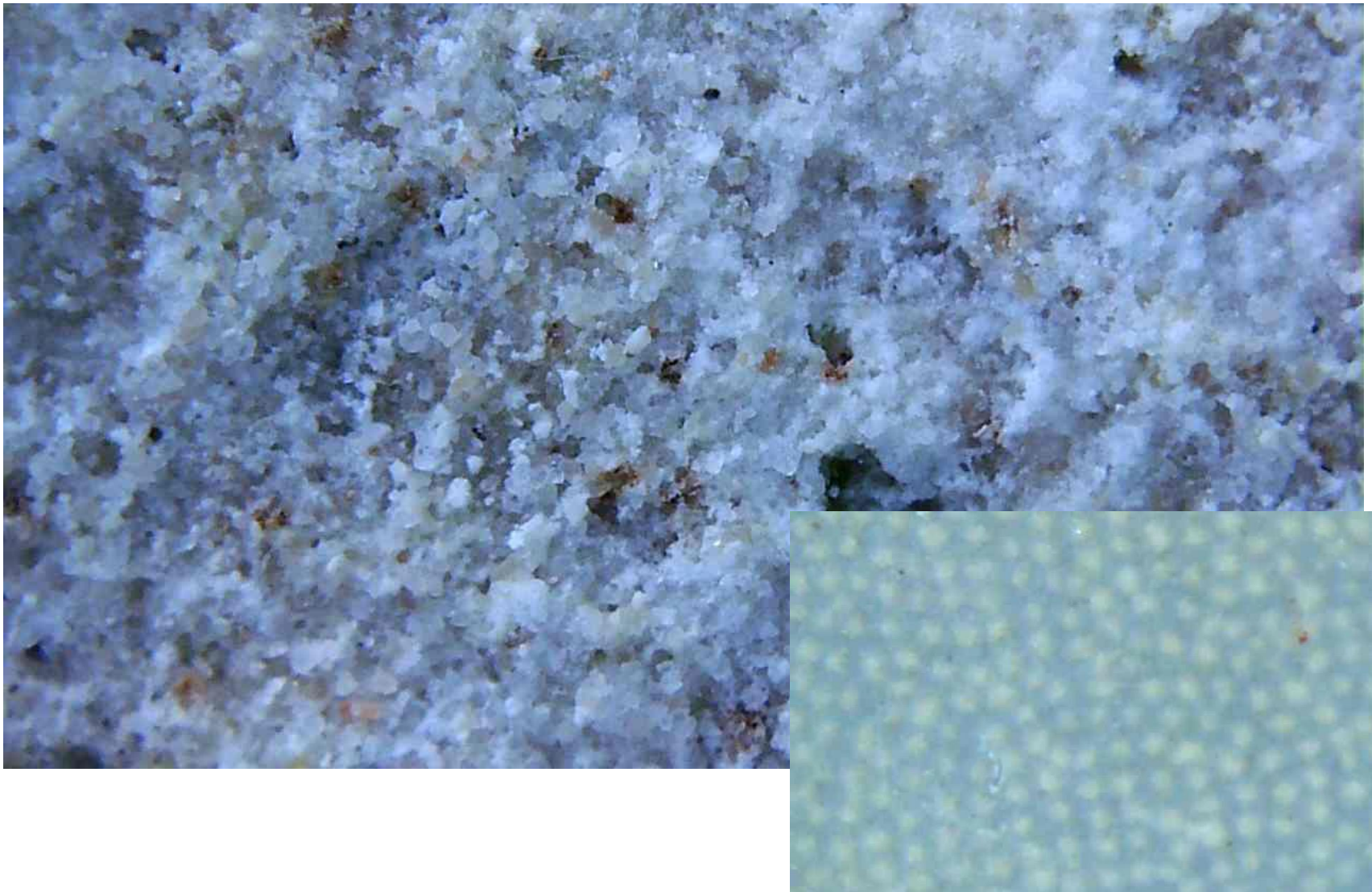
Arden Sandstone. Very fine white to translucent very fine grained, subangular quartz. Silty matrix cement.

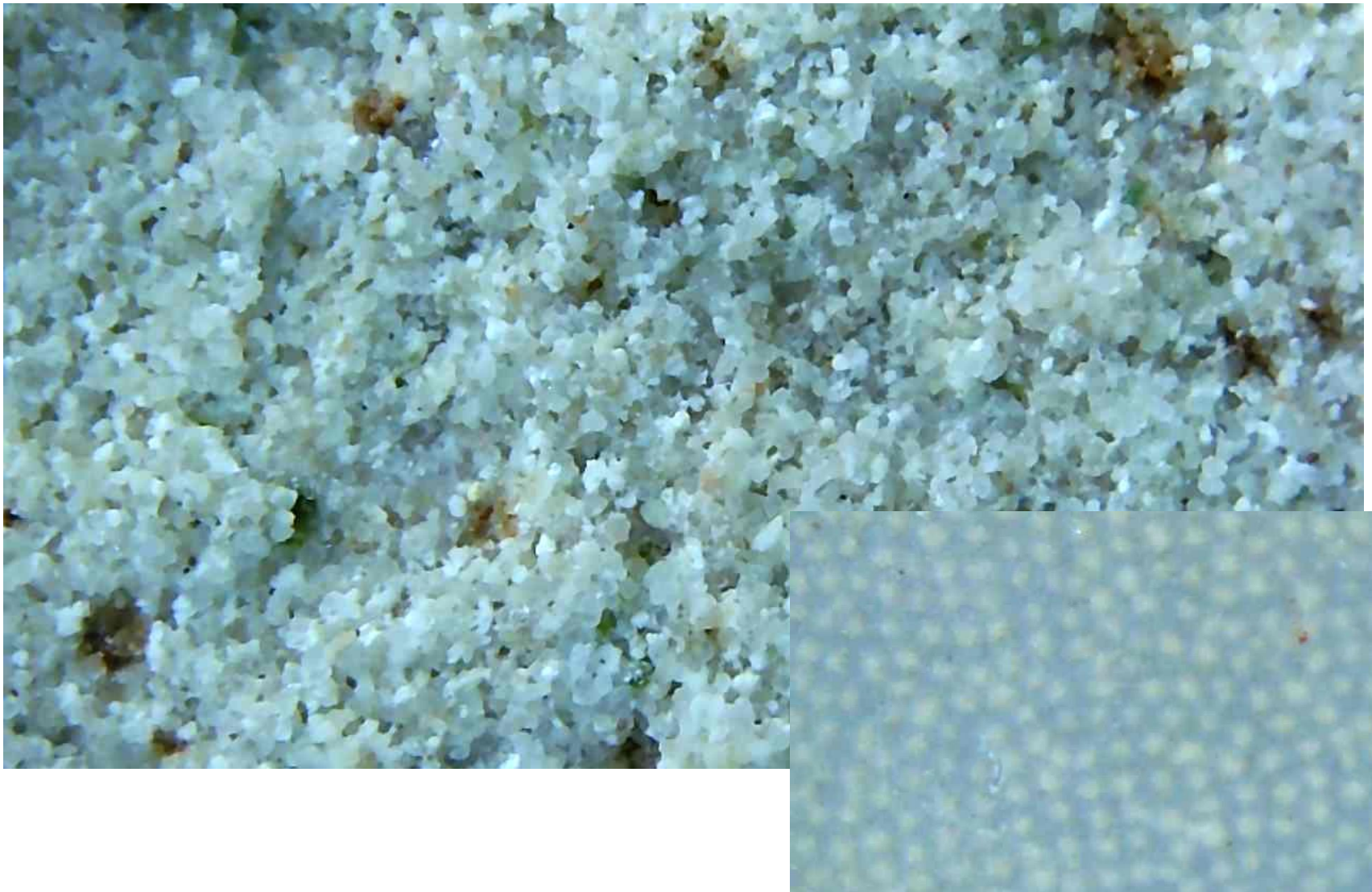


Arden Sandstone . Bedding patterns picked out by differential erosion

Arden Sandstone * 500 magnification. Red colour is algal growth. The grains on the surface are loose due to century's of weathering. Sand bound together by a silty siliceous cement.



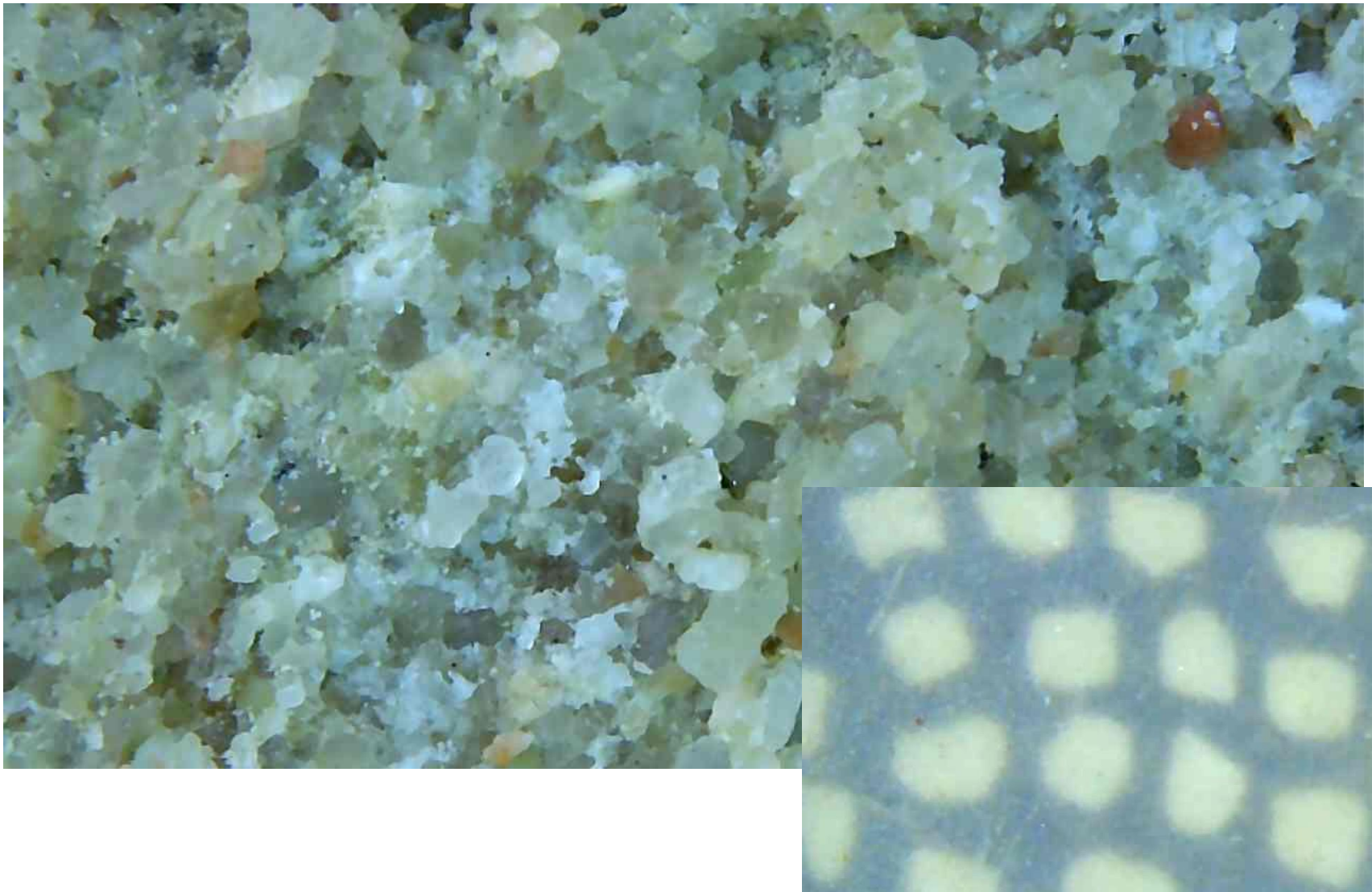




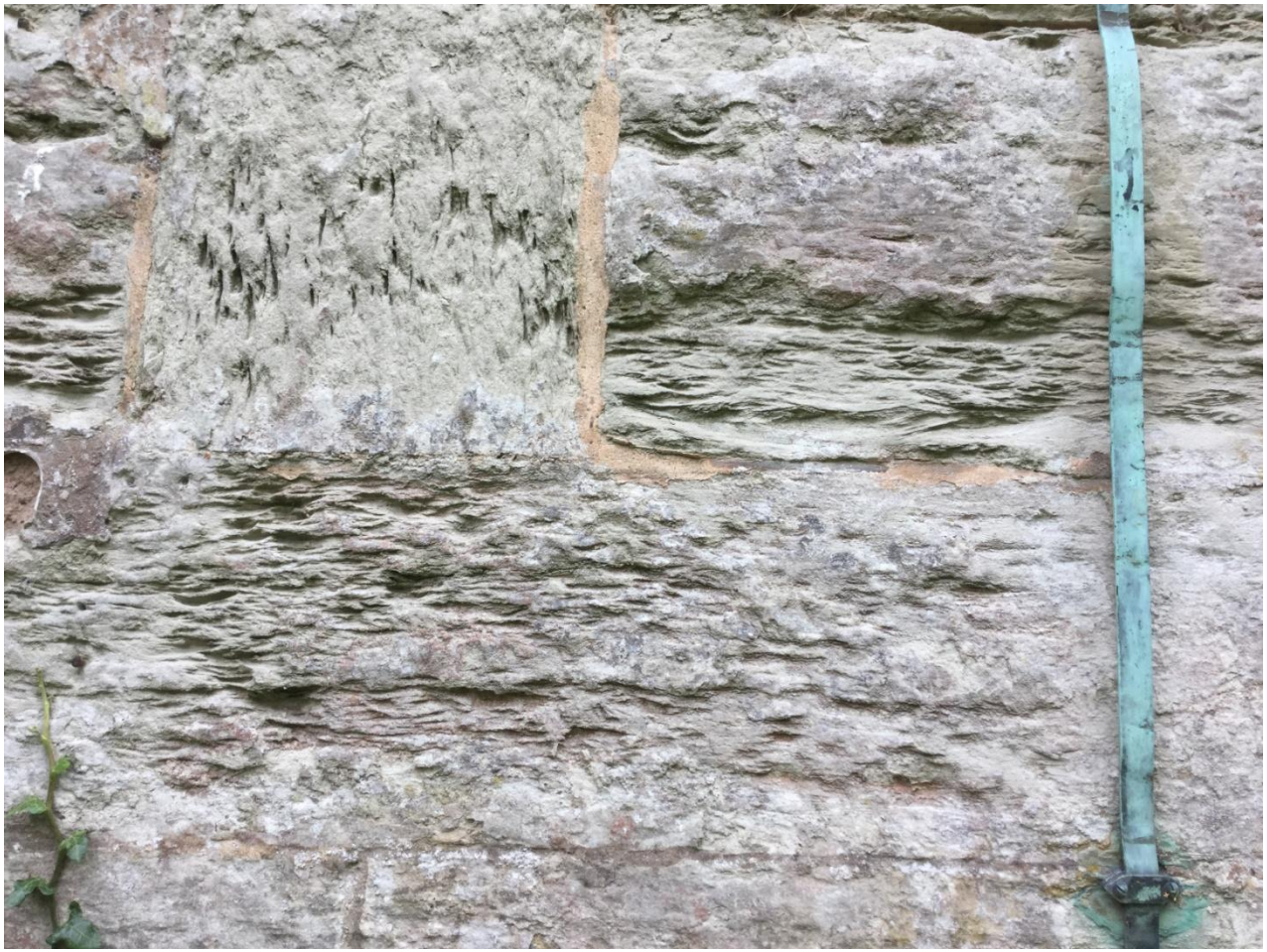
Badly weathered blocks have been replaced in recent times with sandstone of a different origin.

The newer light brown building stones are very fine to medium grained, dominantly fine, subround to subangular, moderately sorted, siliceous matrix. Contains orange coloured quartz and some mafic grains. Magnification *500. Fine grained scale insert bottom right

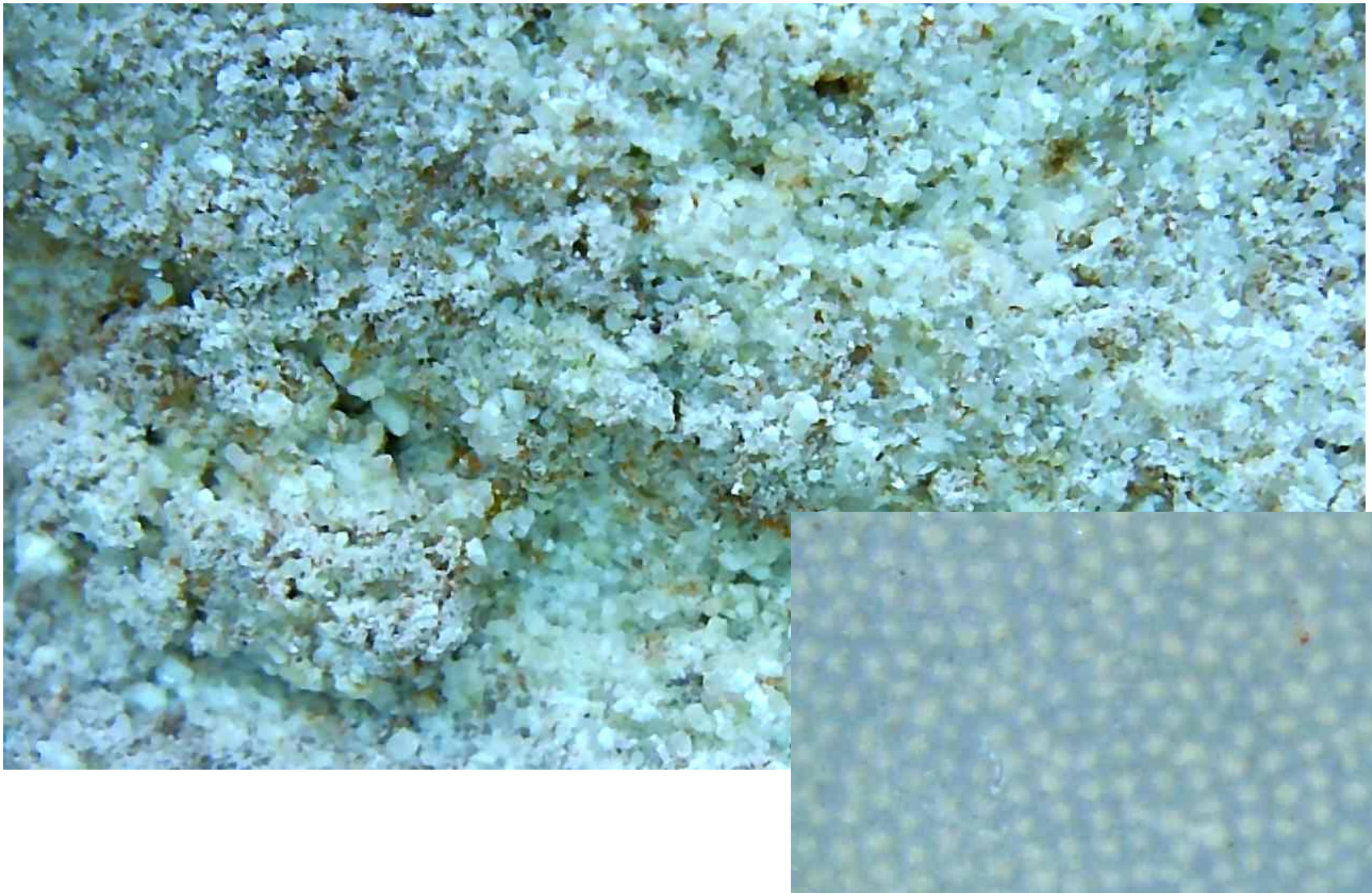
Quite a number of the grains can be seen to be medium in size. Medium grained insert scale bottom right.
*500 magnification

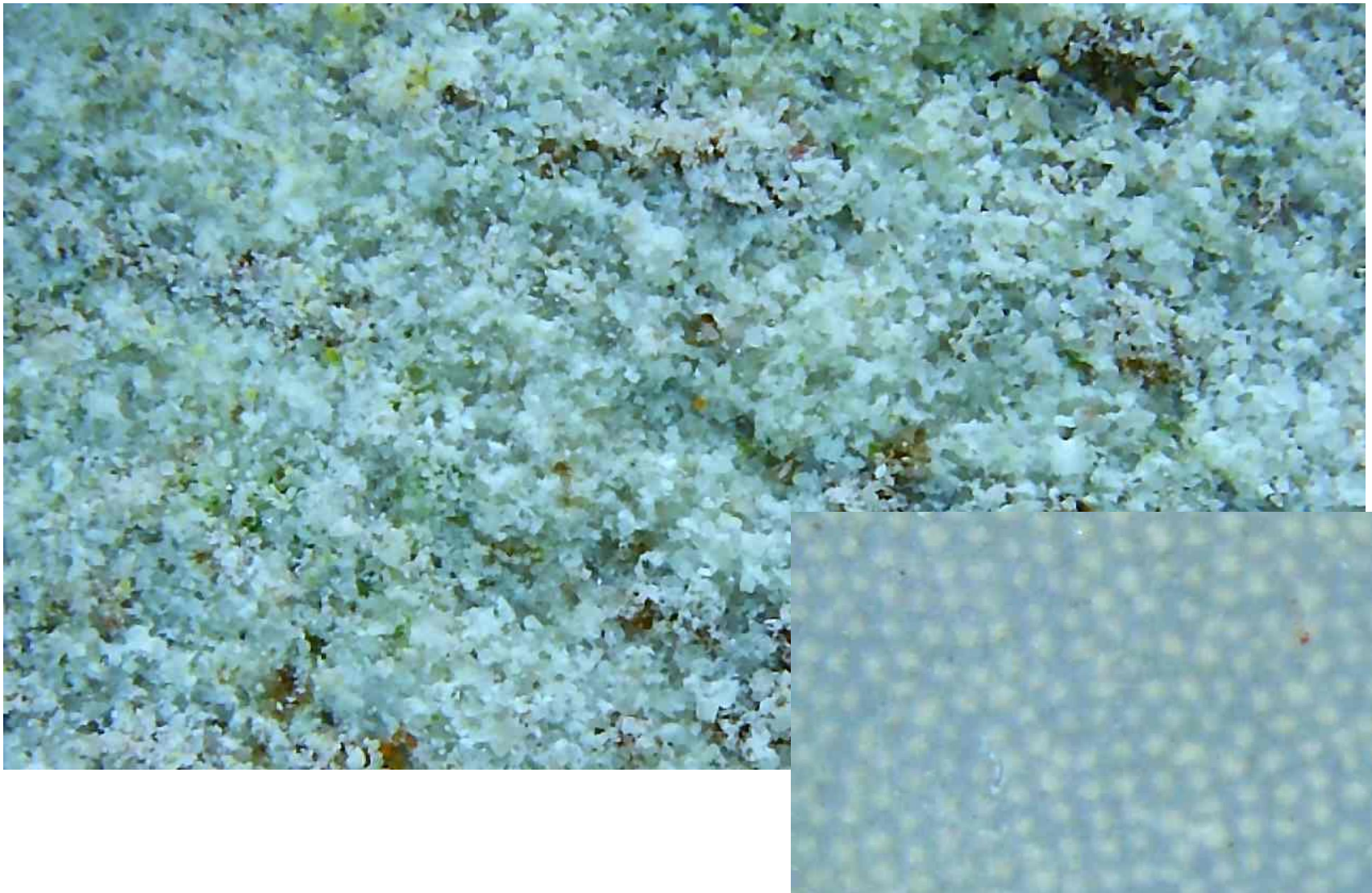


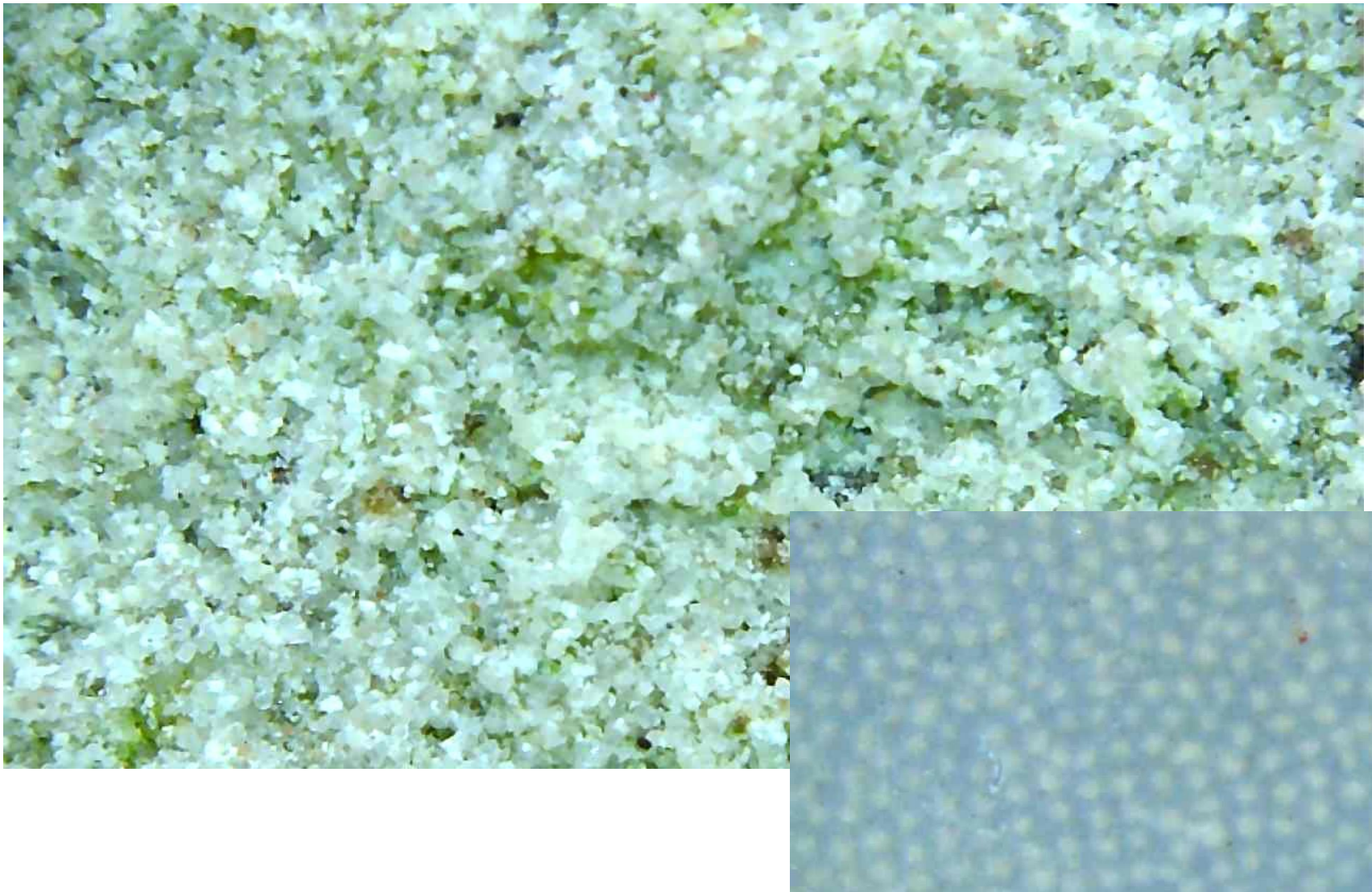
Arden Sandstone. Differential erosion picks out the bedding features. Clay / silt rich laminate weather out quicker than the quartz dominated layers



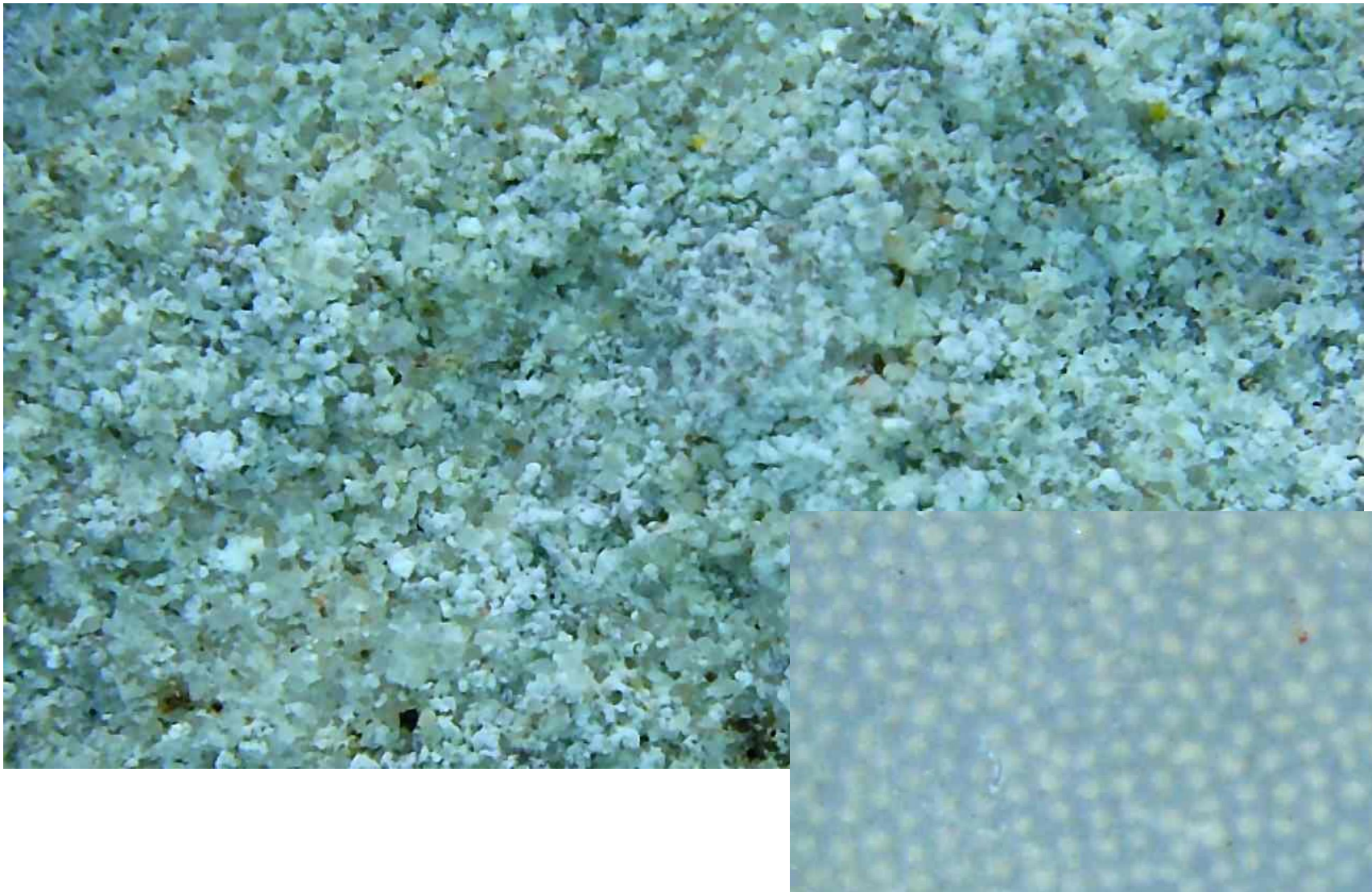
Weathered zones leave a loose assemblage of very fine quartz grains after the silty matrix has been eroded





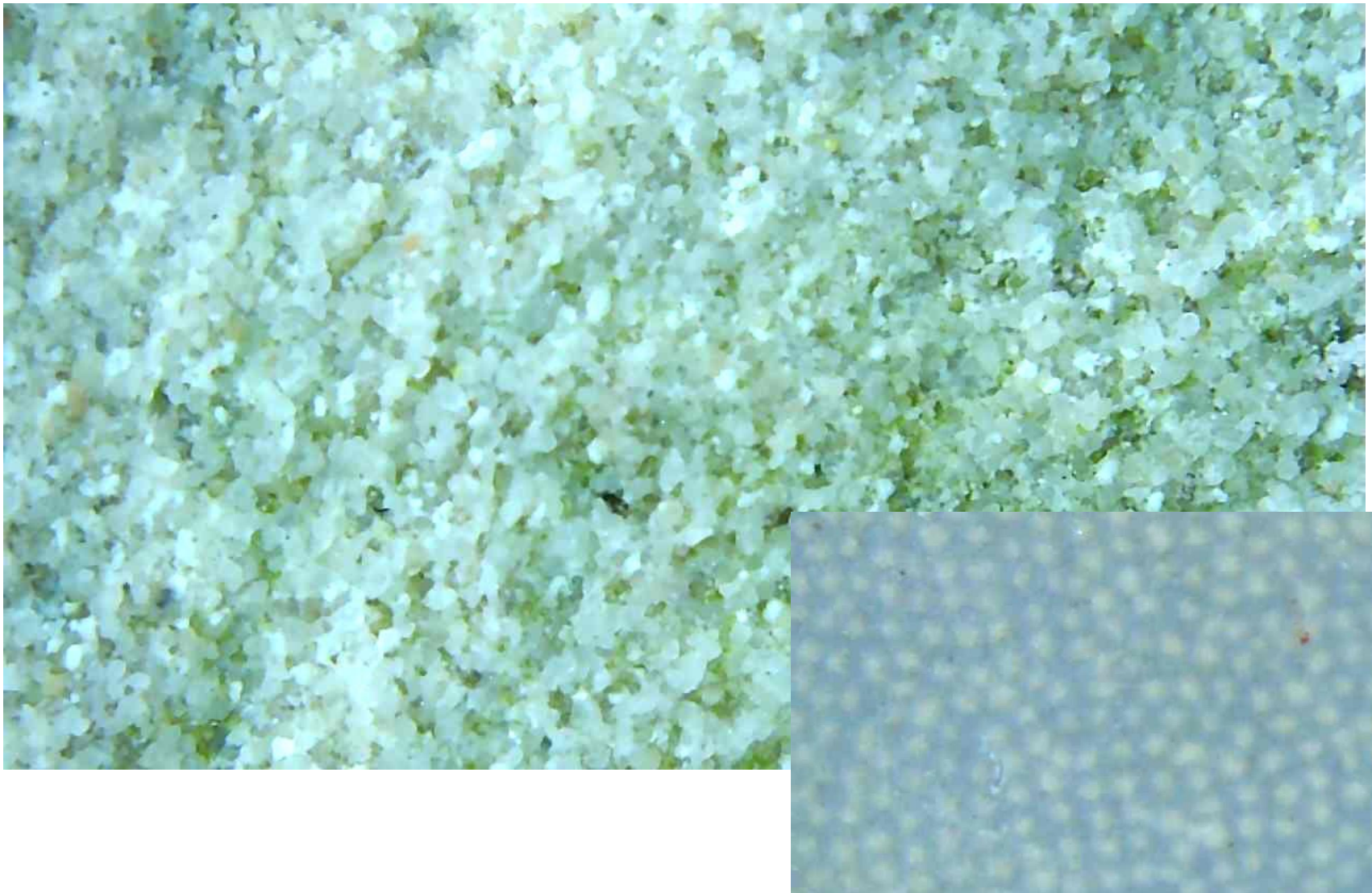


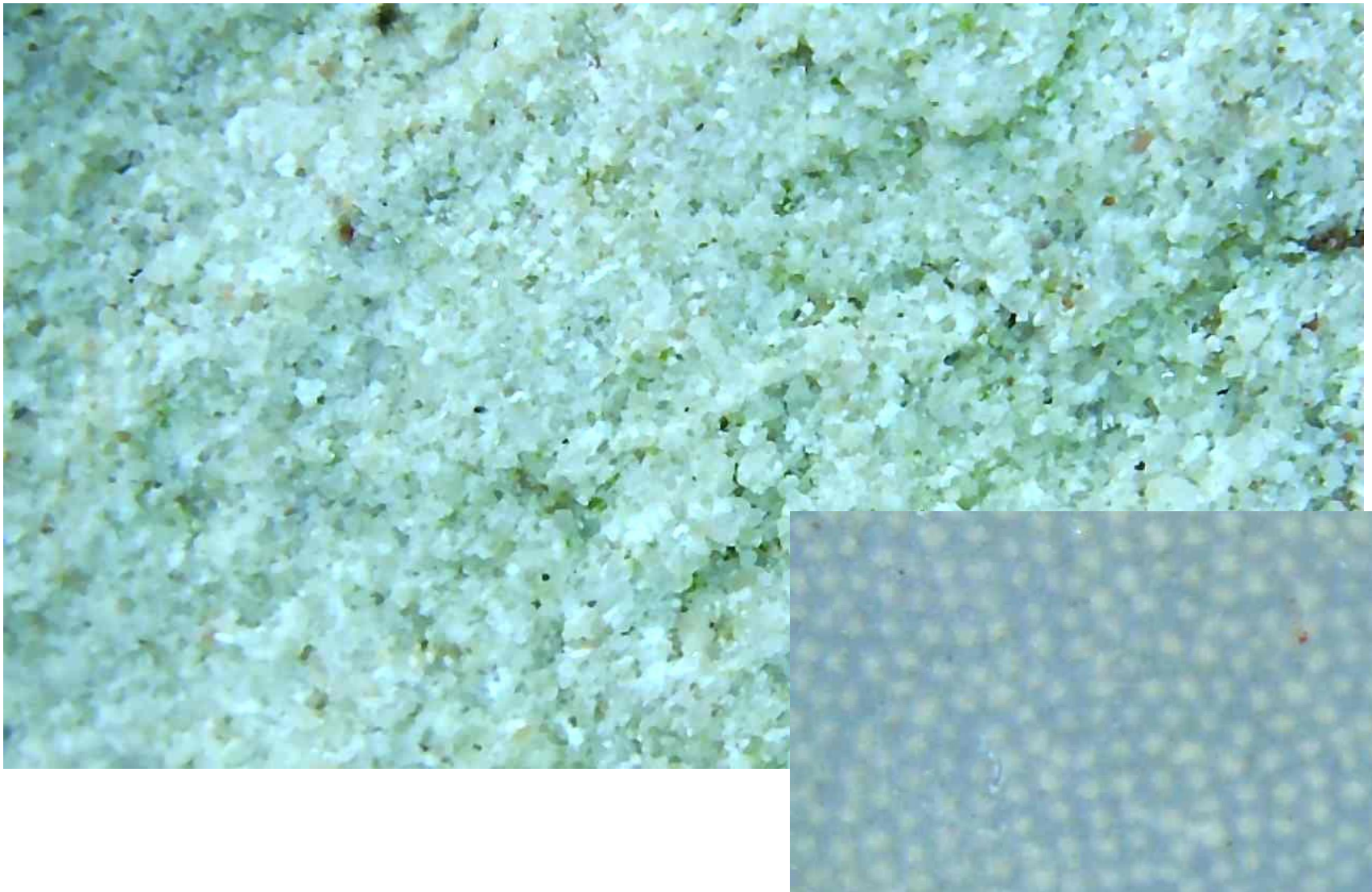
White algal growth in part gives the grains a rounded appearance



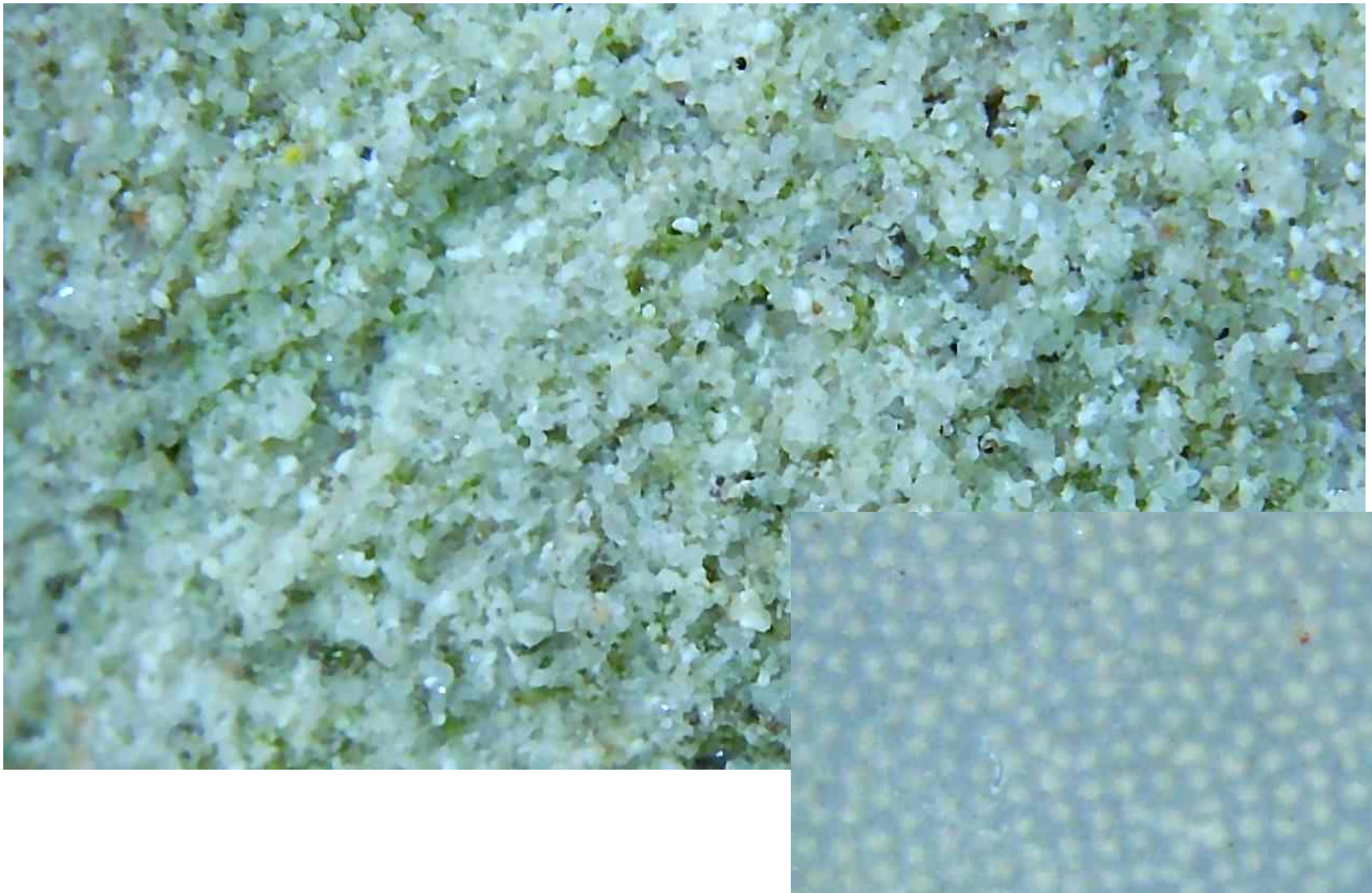
Erosion picks out the wavy current bedding

Arden Sandstone. White, translucent, very fine quartz, subangular, well sorted. Silty siliceous cement. Green is algal growth



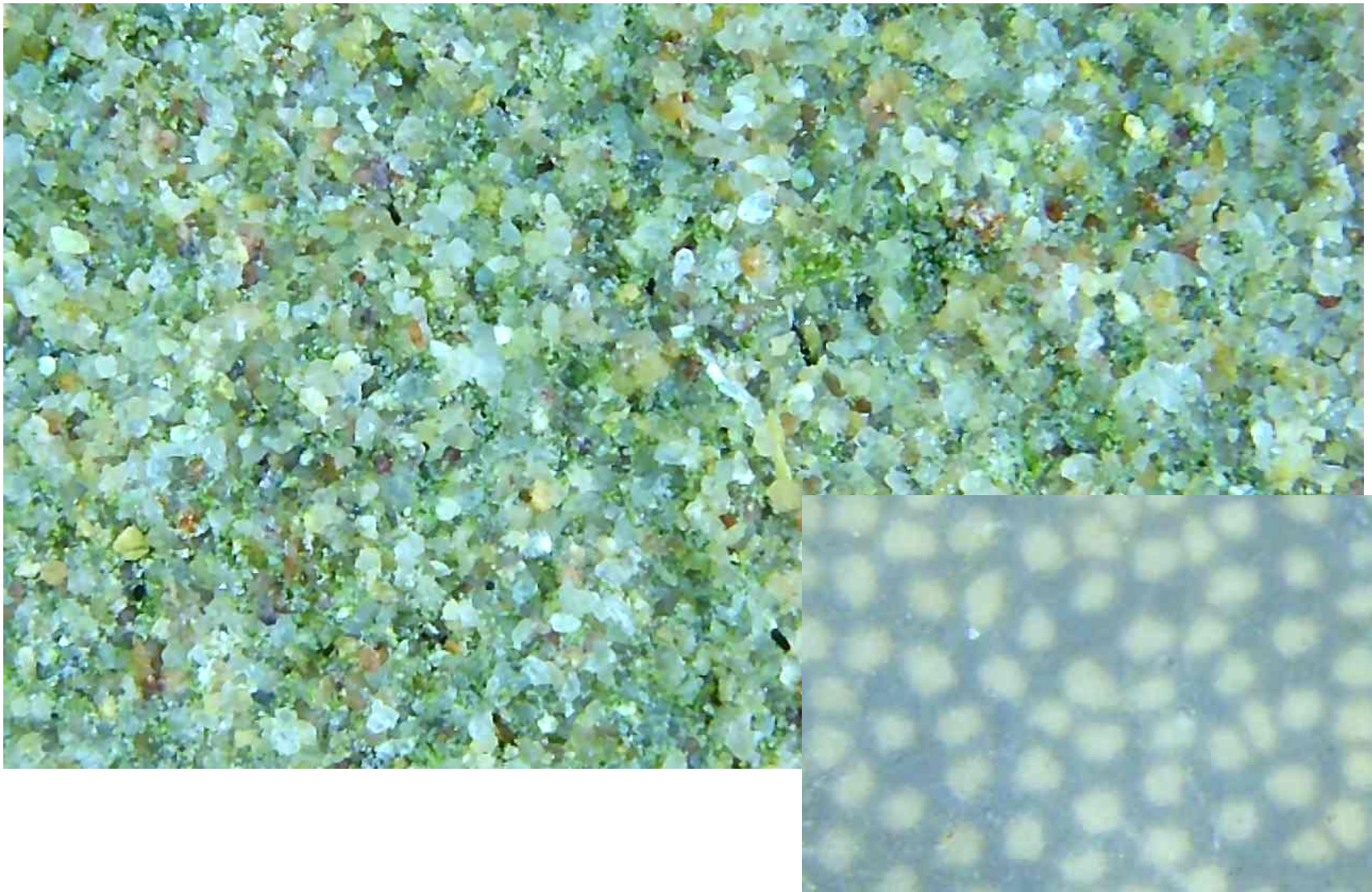


Green & black is algal growth

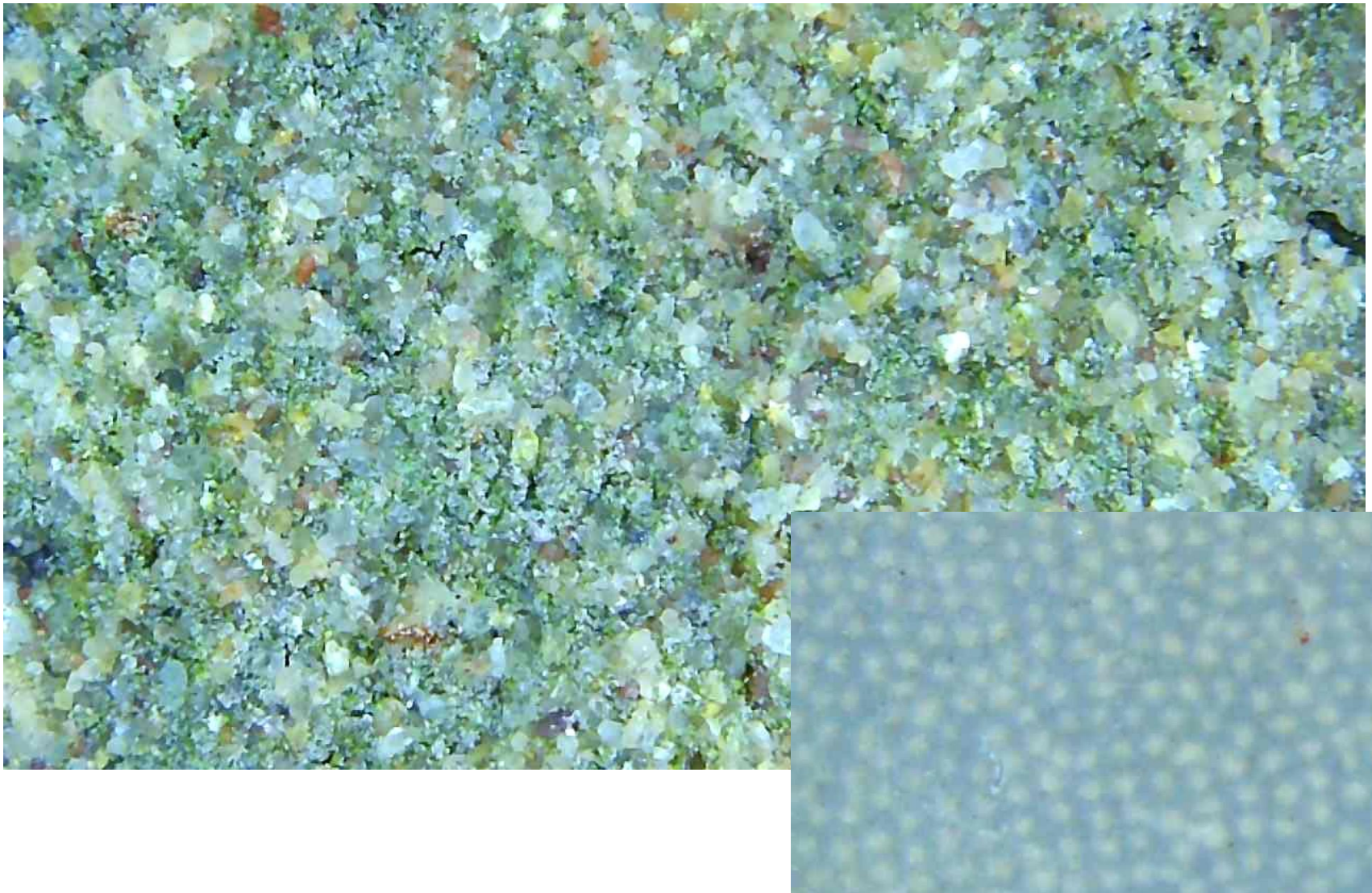


Maintenance. Light olive grey to light brown grey sandstone

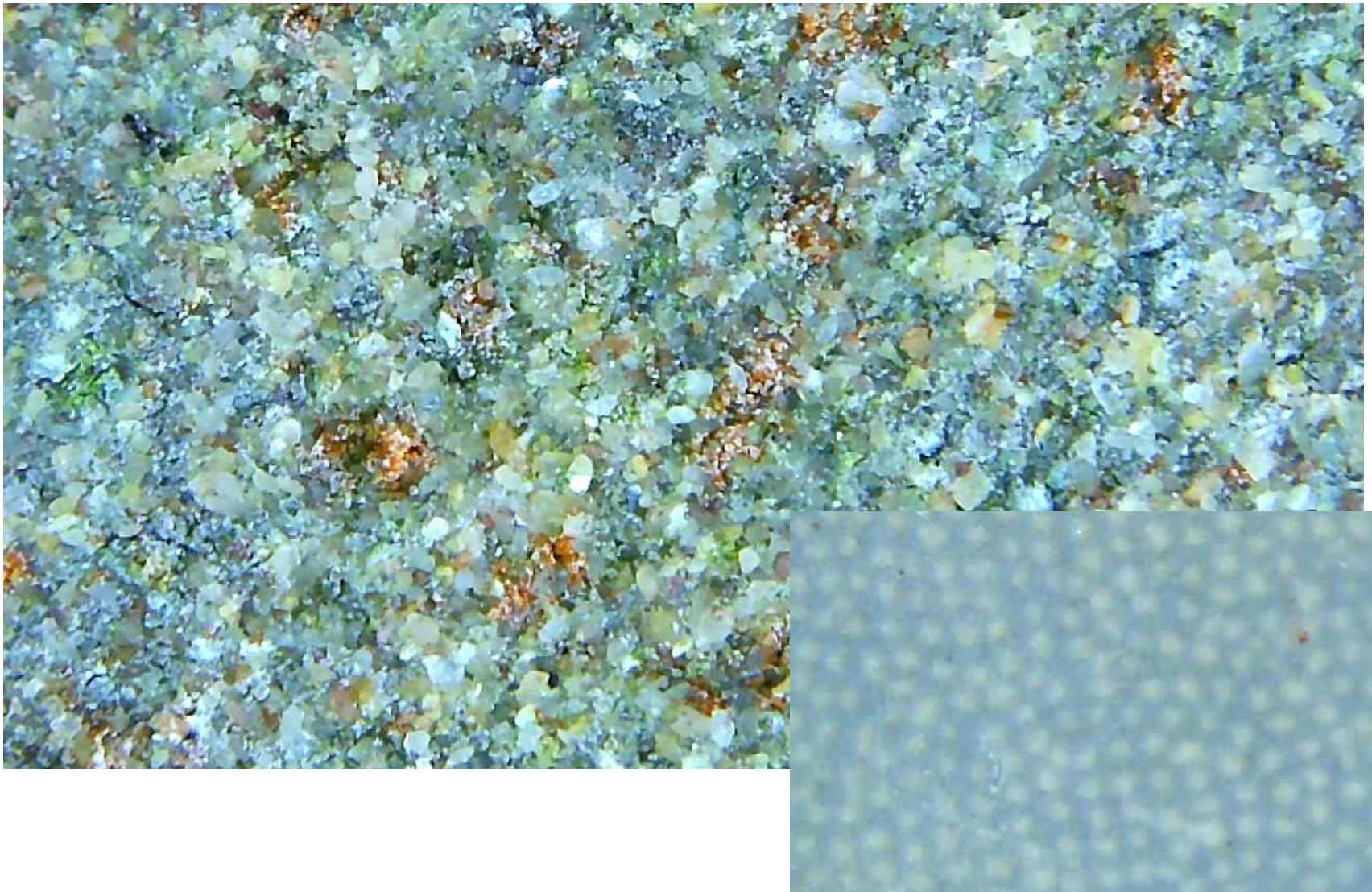
Replacement sandstone: White, translucent, yellow, orange fine to very fine quartz, subround to subangular, moderately sorted, siliceous matrix. Green is algal growth. Scale insert is Fine grained



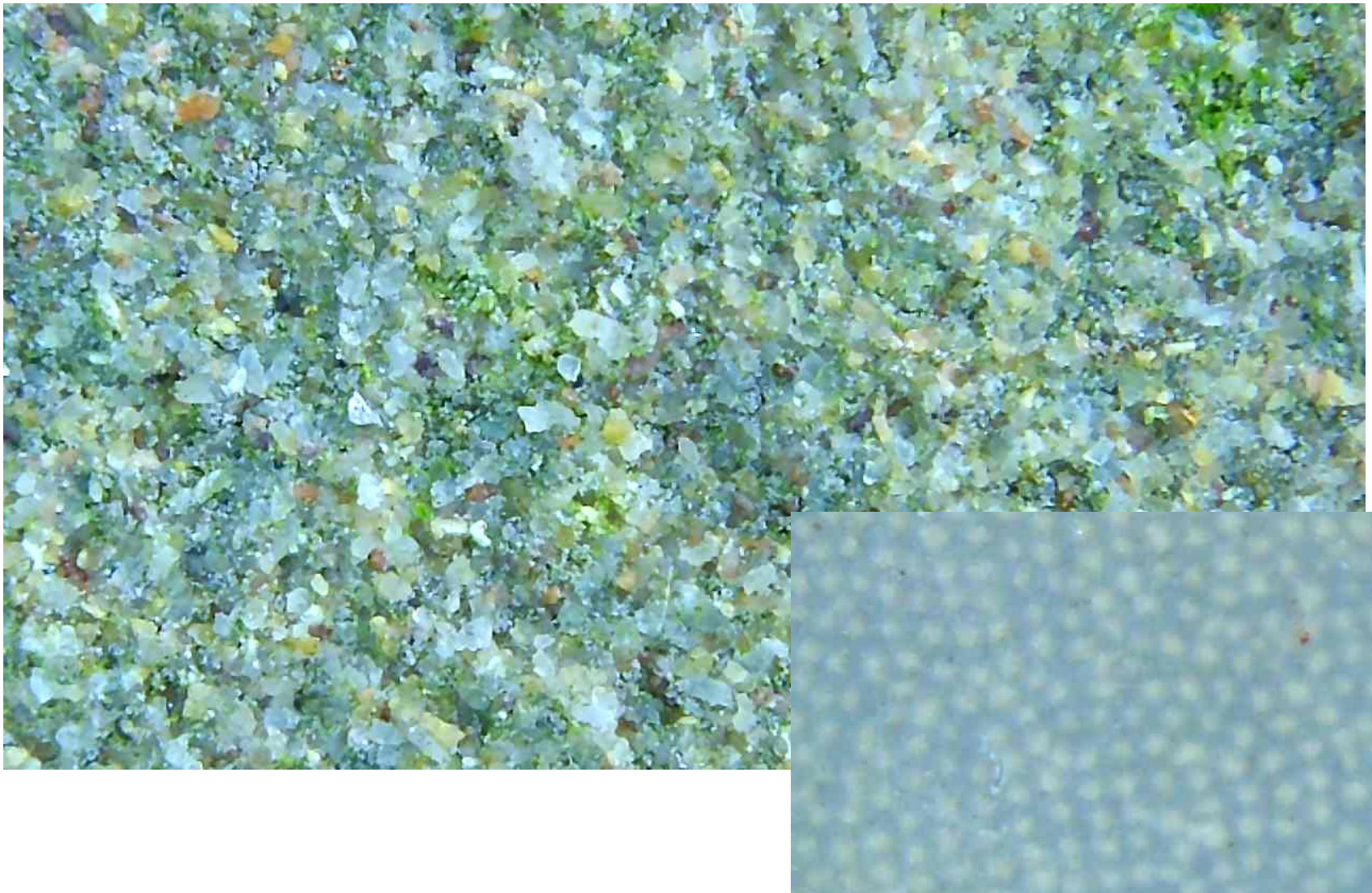
*500 magnification. Very fine grained scale insert



Red & Green algal growth. Note the silty siliceous matrix

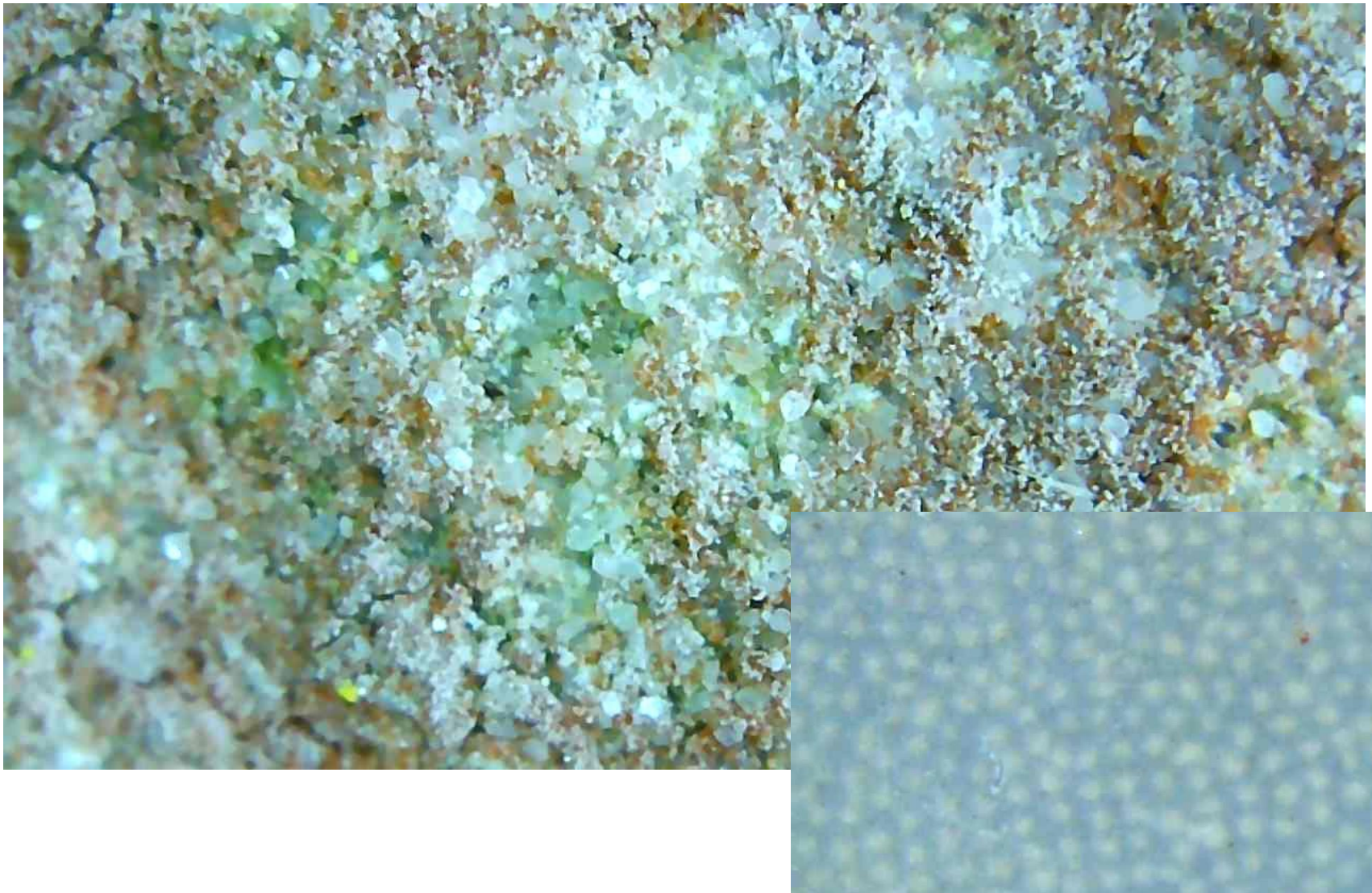


Green is algal growth

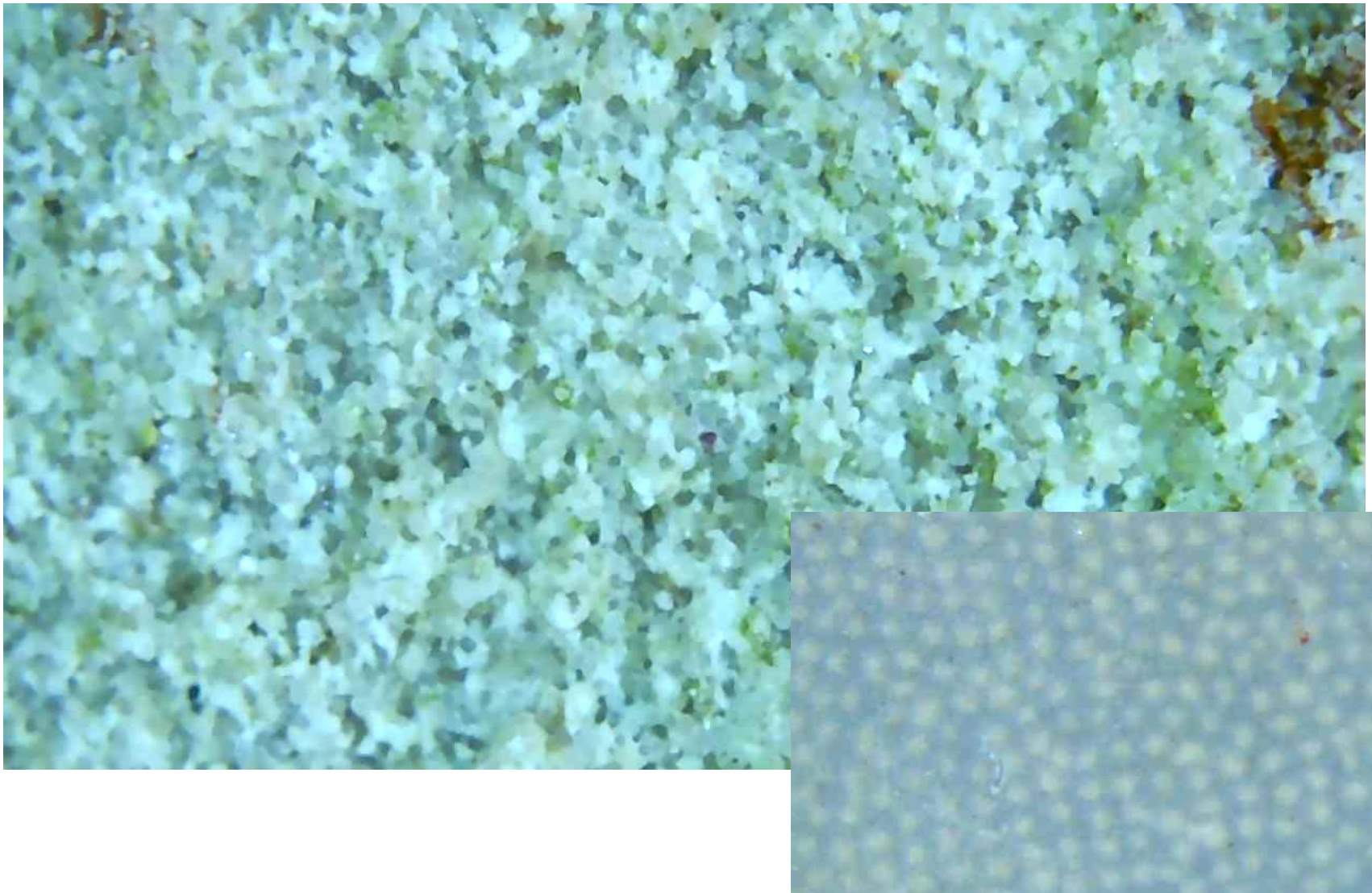


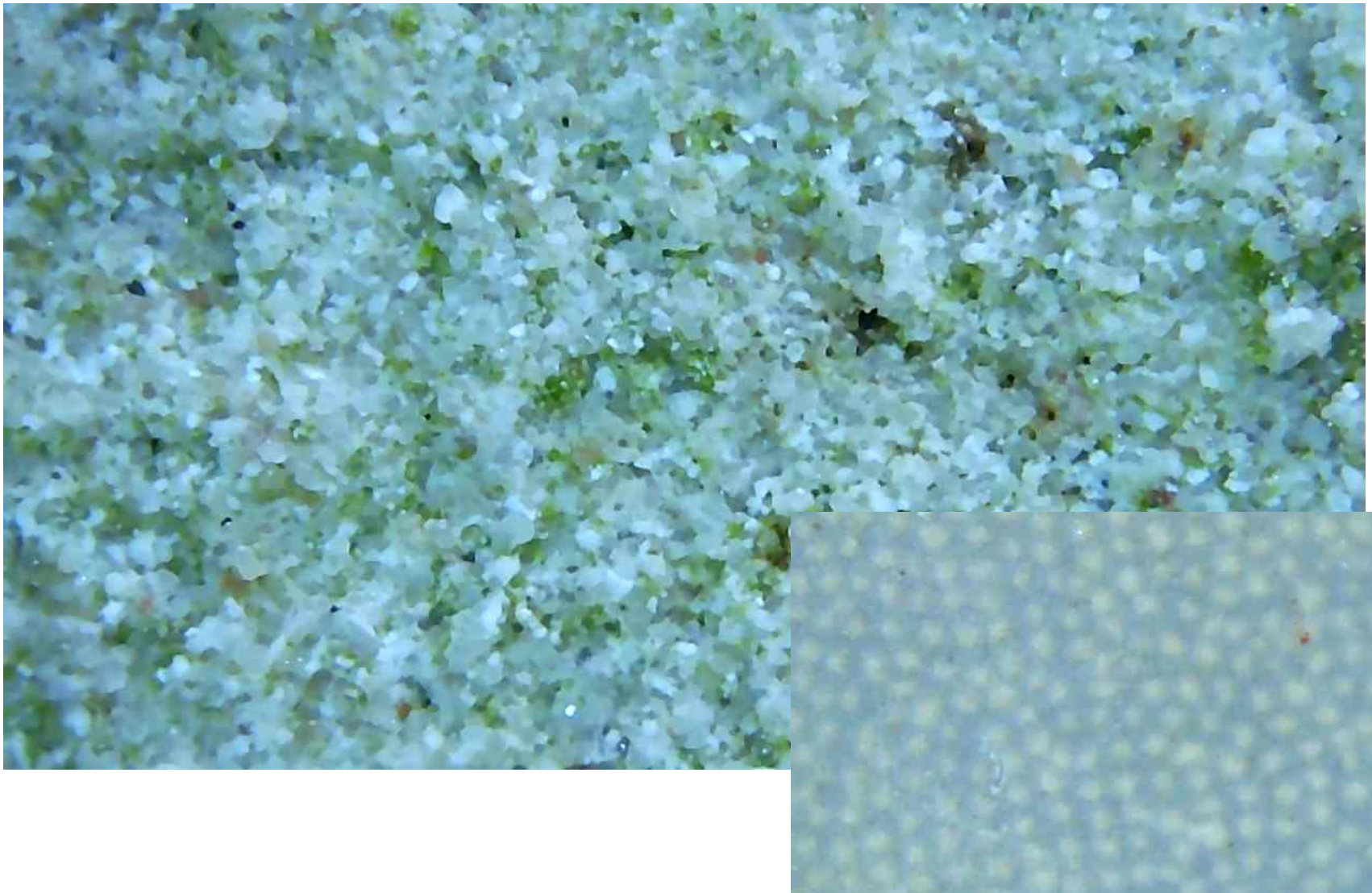
Arden Sandstone showing differential weathering and red algal colouring

Arden Sandstone. Pitted erosion, red algal growth, very fine grained scale insewrt



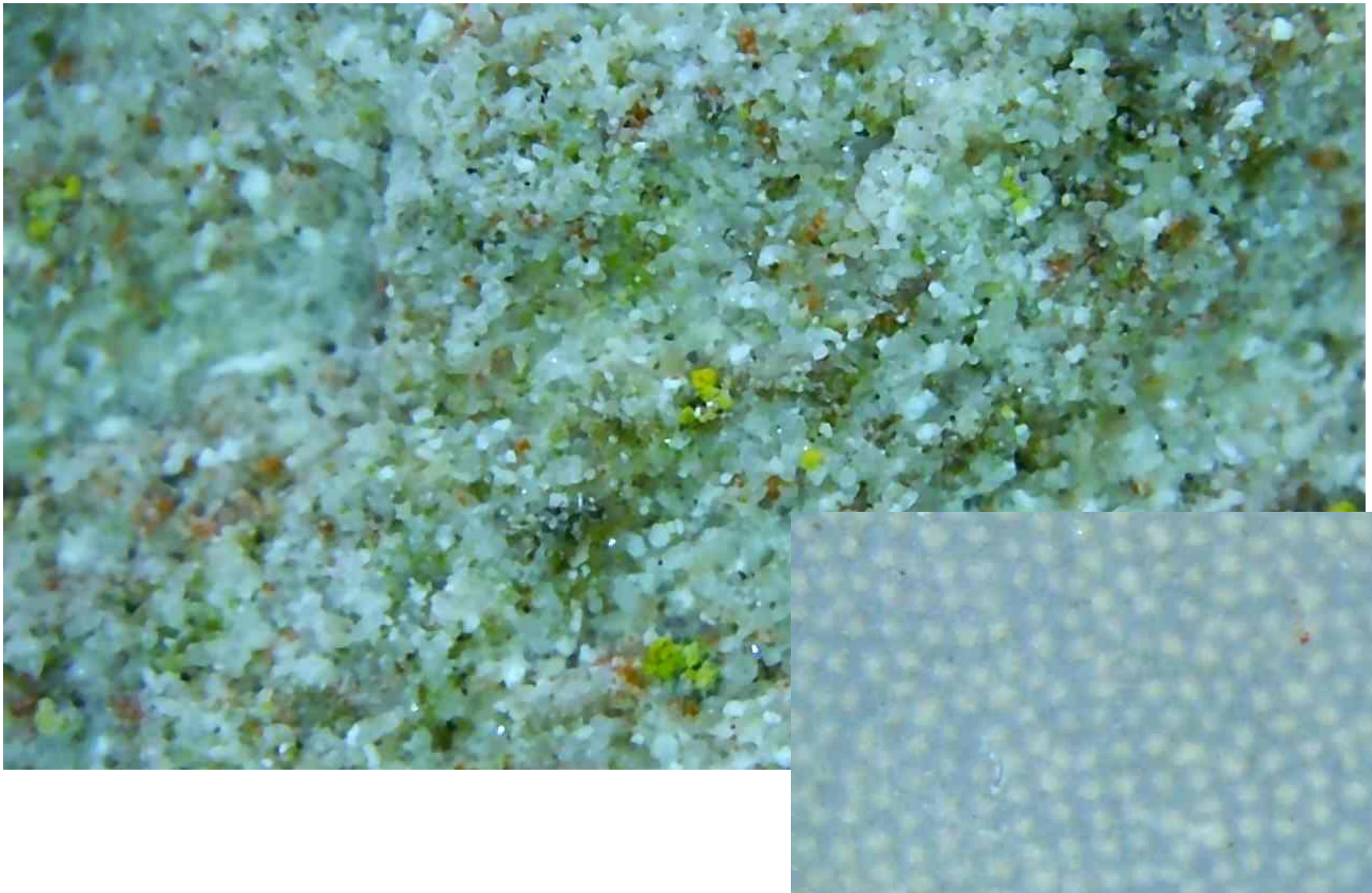
Cleaner & more eroded part of the block. Very fine grained, white amorphous siliceous cement, green and trace red algae



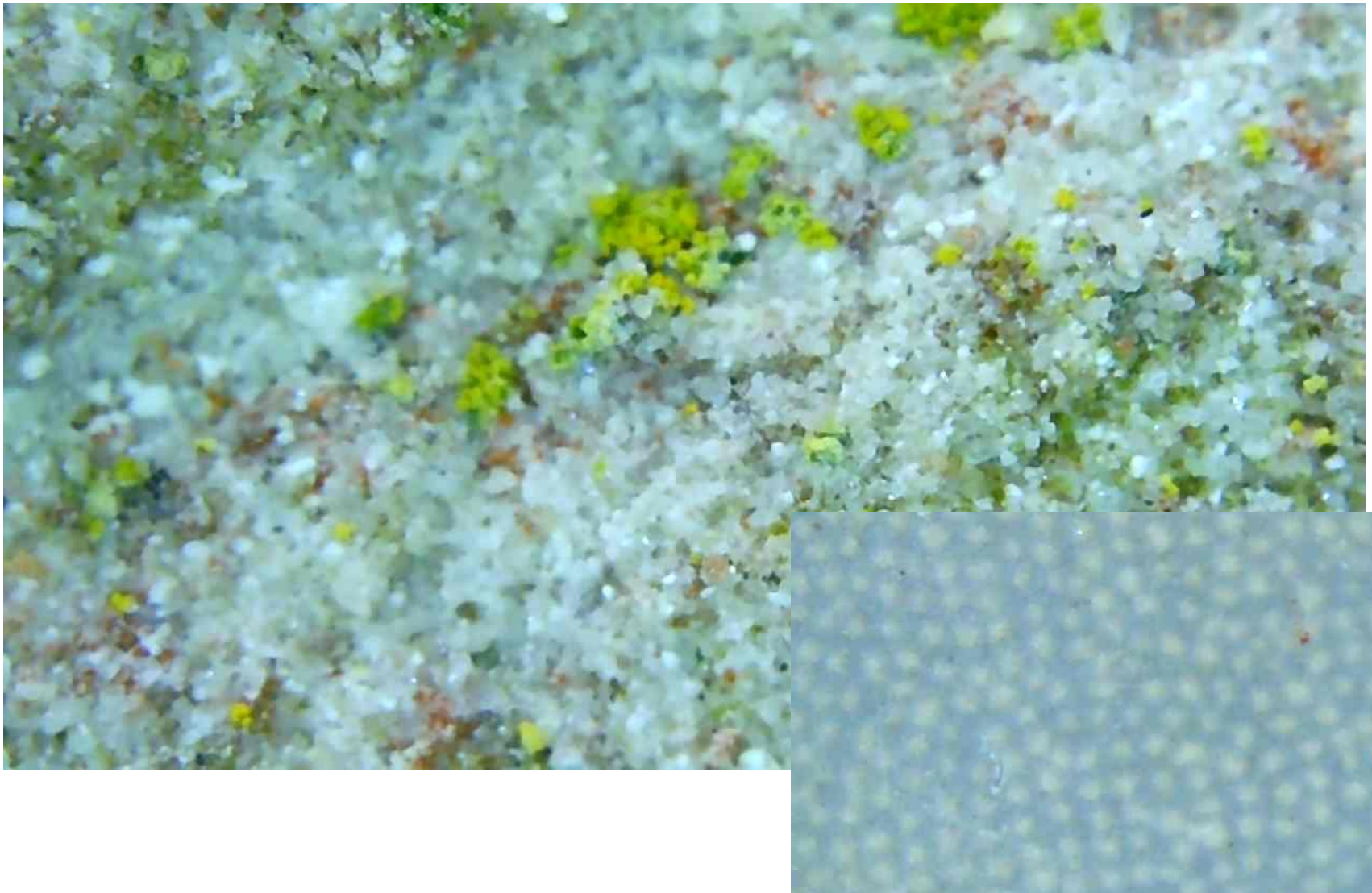


Arden Sandstone

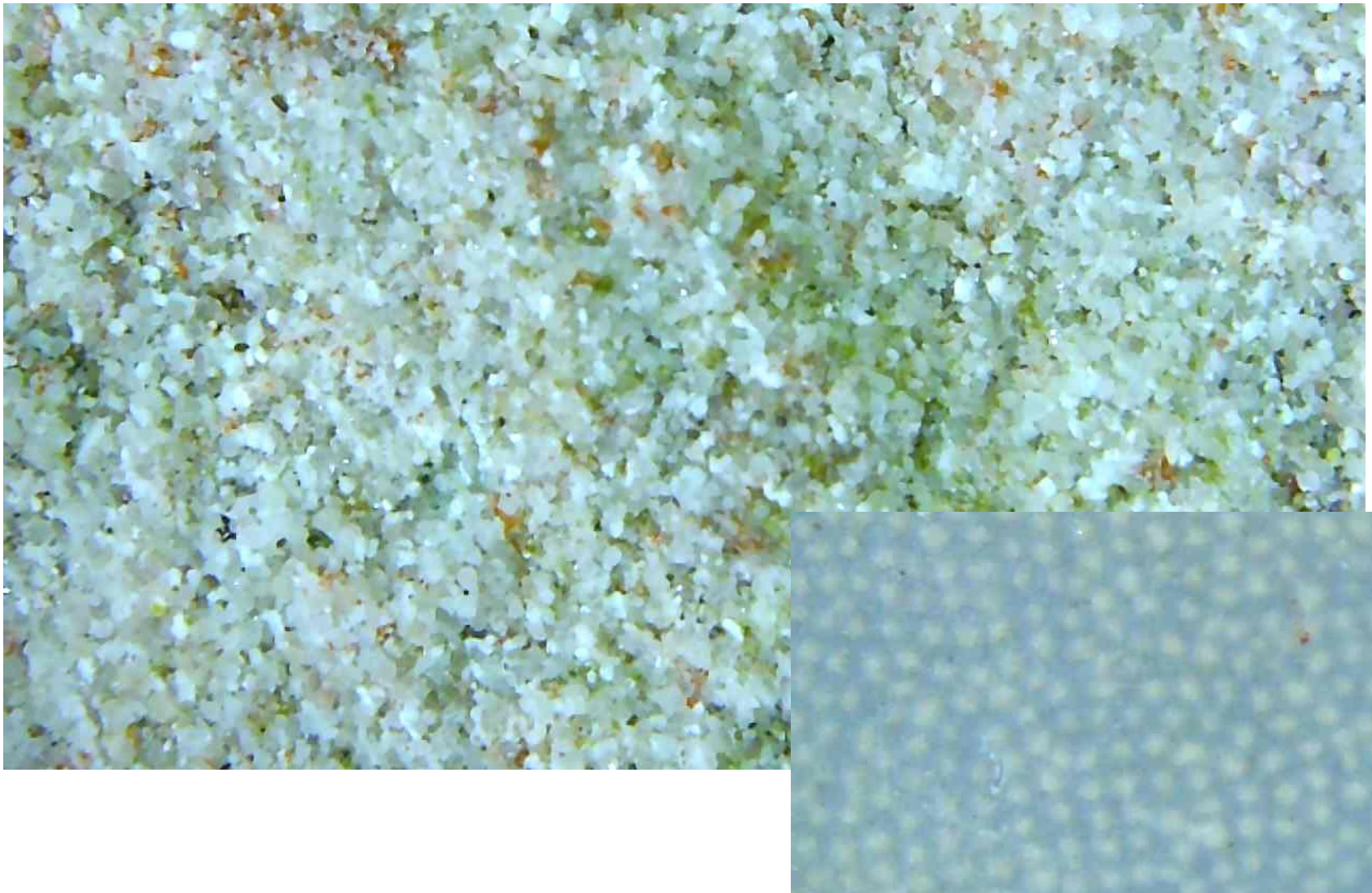
Very fine grained well sorted quartz. Red & green algal growth. Very fine grained scale index insert



Very fine grained well sorted quartz. Red & green algal growth. Very fine grained scale index insert

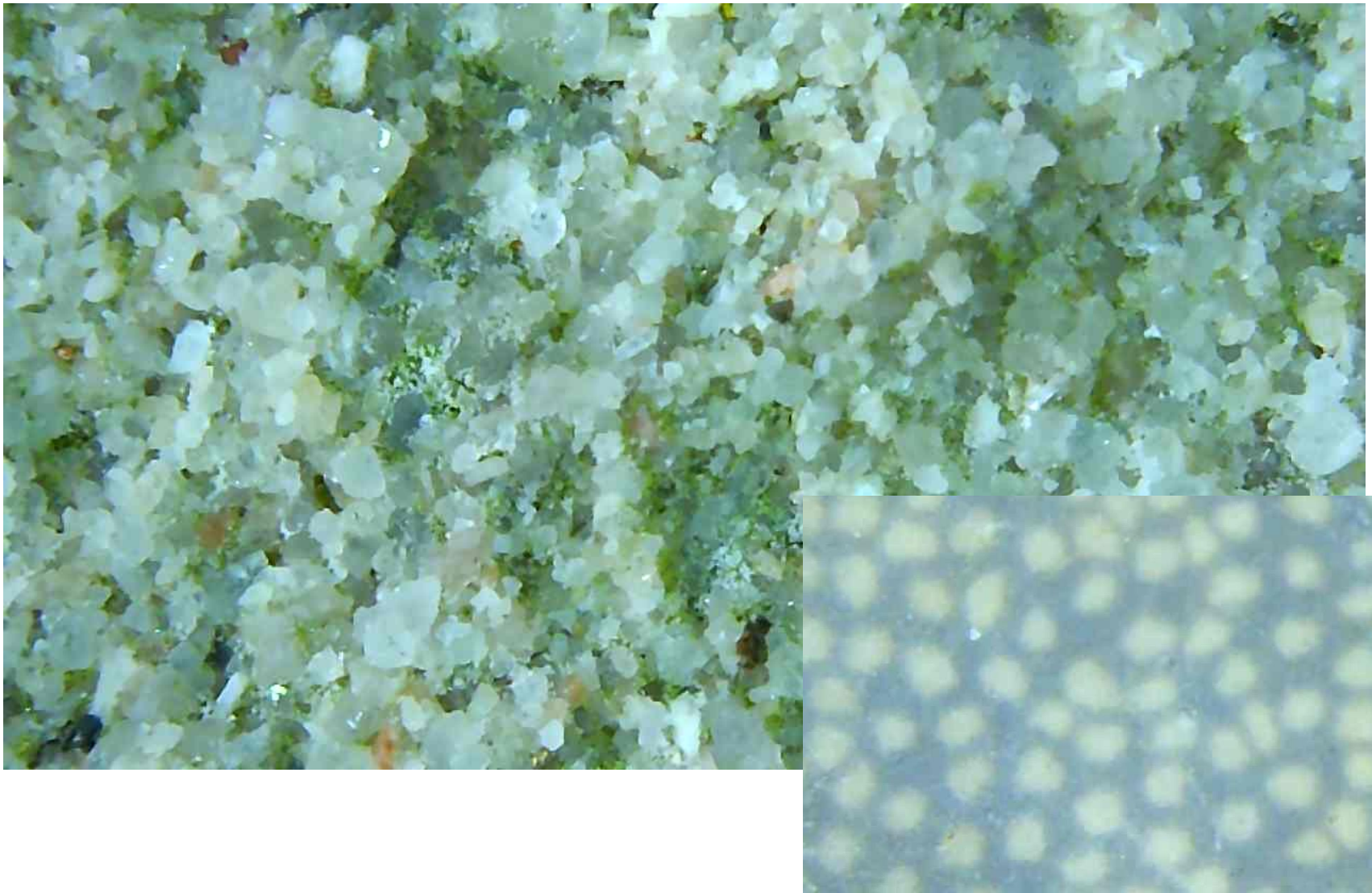


Very fine grained well sorted quartz. Red & green algal growth. Very fine grained scale index insert



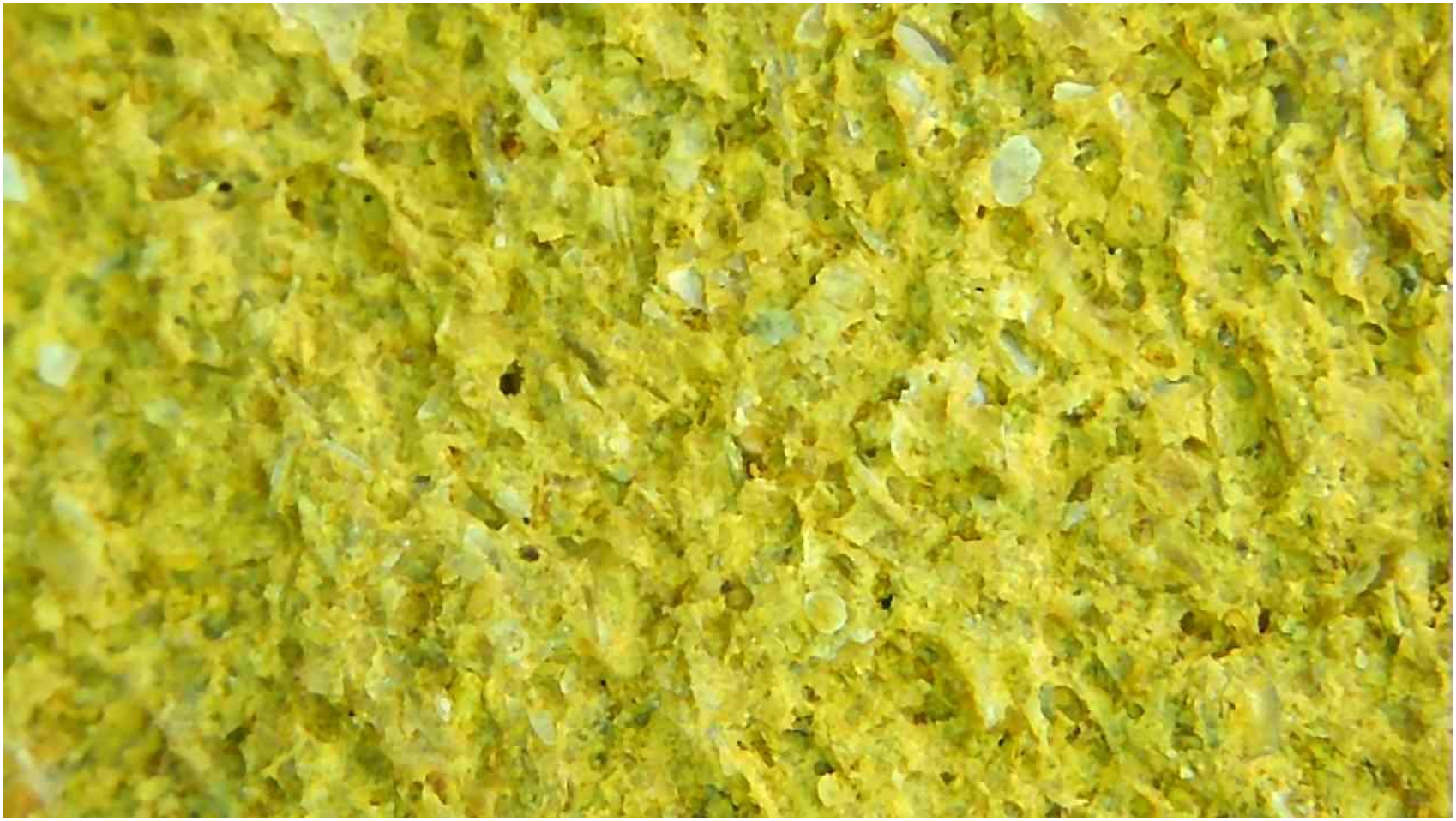
Replacement bock

Replacement block. White, translucent, orange , pink & yellow quartz. Very fine to fine, subangular, moderately sorted . No obvious cement. Green algal growth. Fine grained scale insert

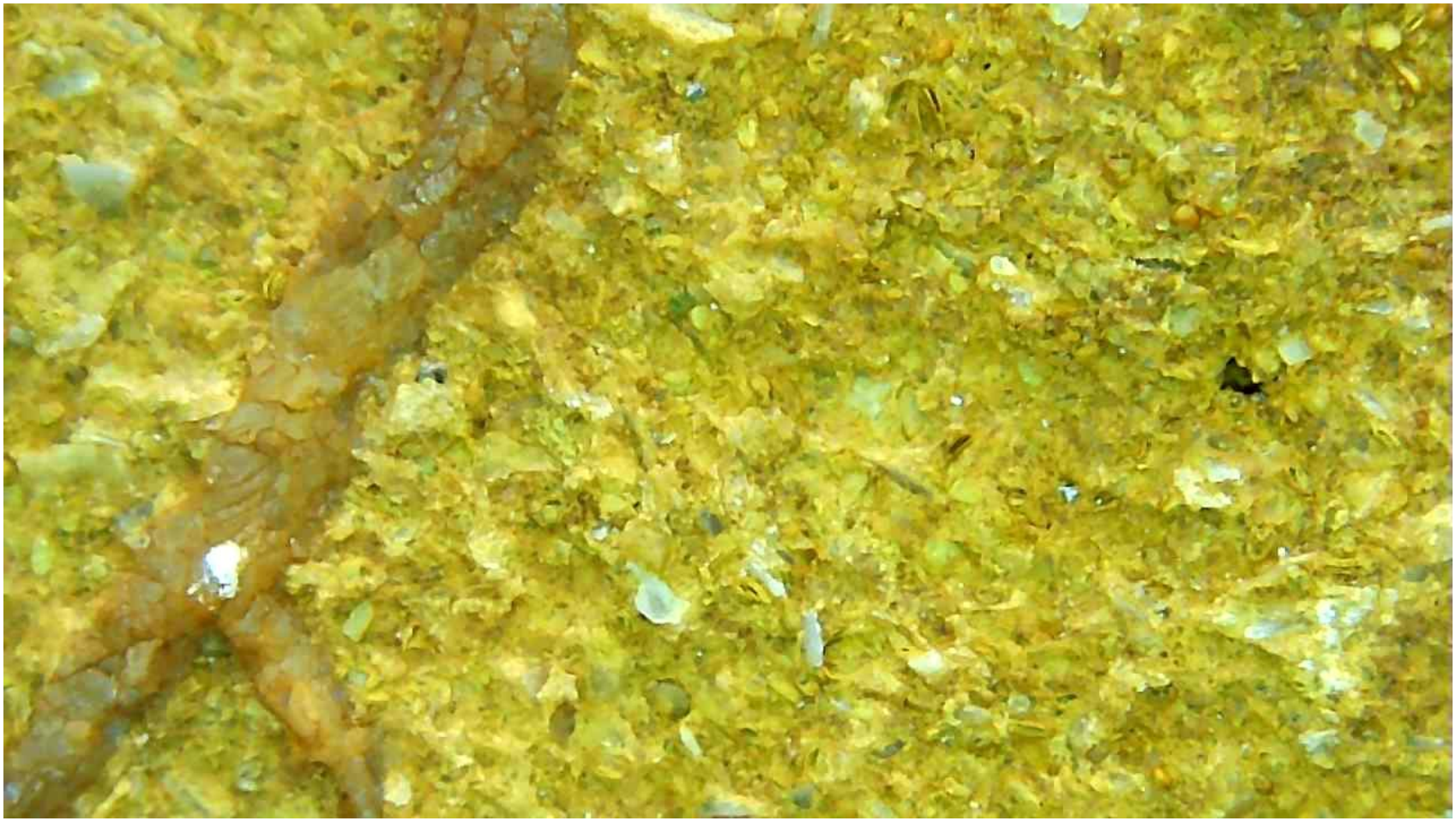


This doorway has been bricked up using Middle Jurassic iron-rich limestone, a south Warwickshire / Northamptonshire building stone from near Edge Hill, sometimes referred to as Hornton stone. It has a rusty brown colour and contains veins rich in limonite.

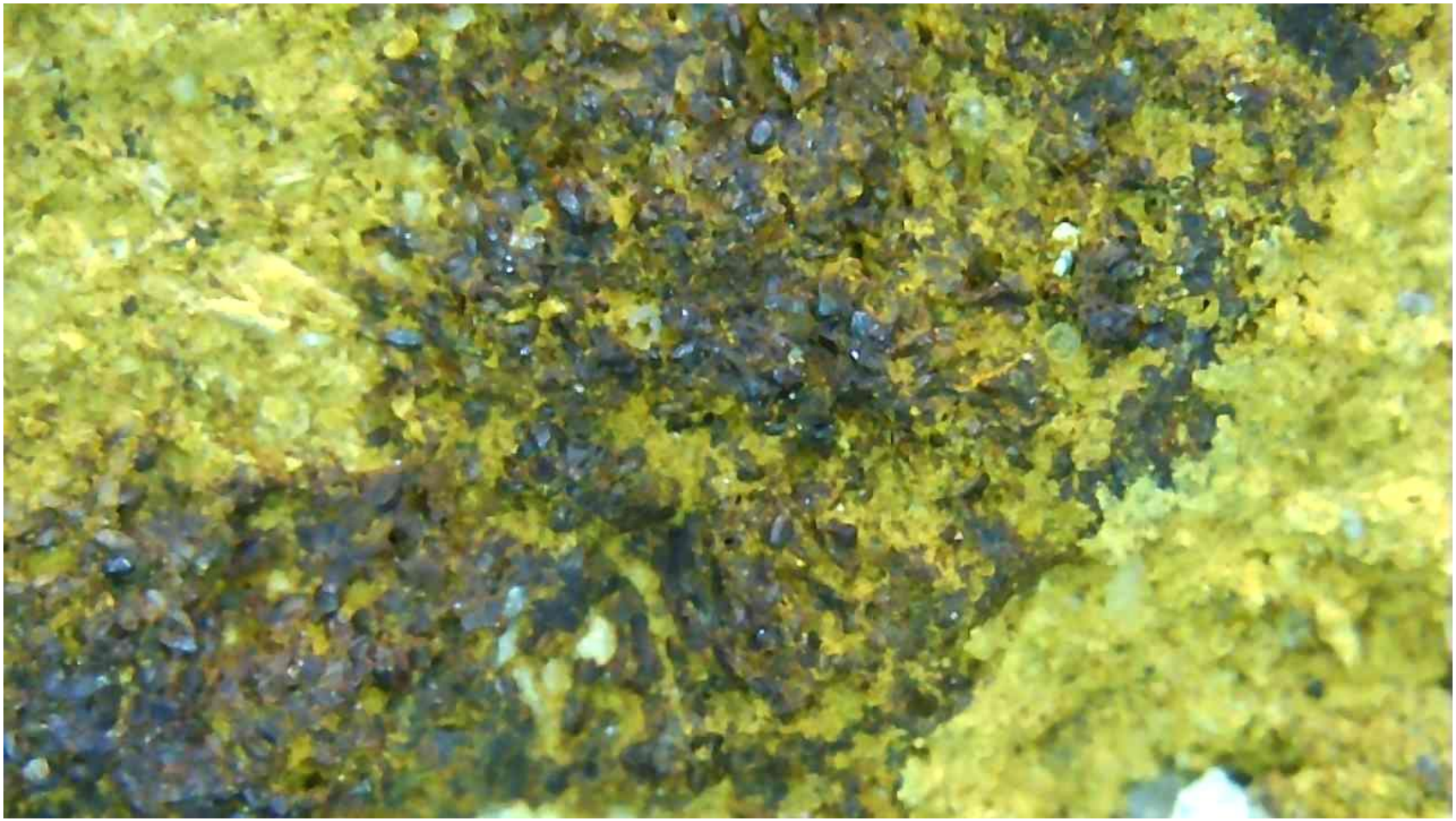
* 500 magnification. Lots of shell debris



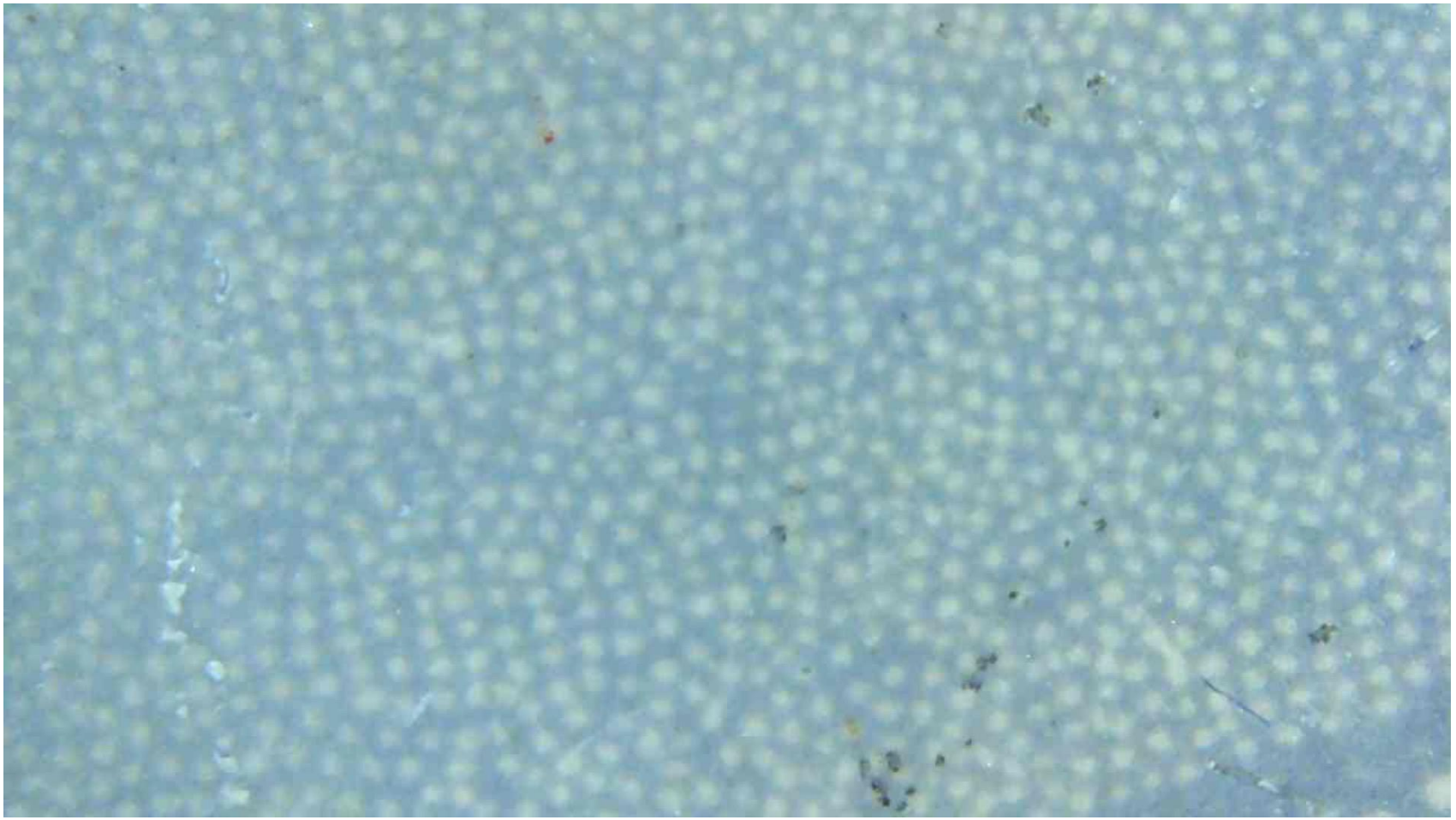
Shell debris. Iron stains



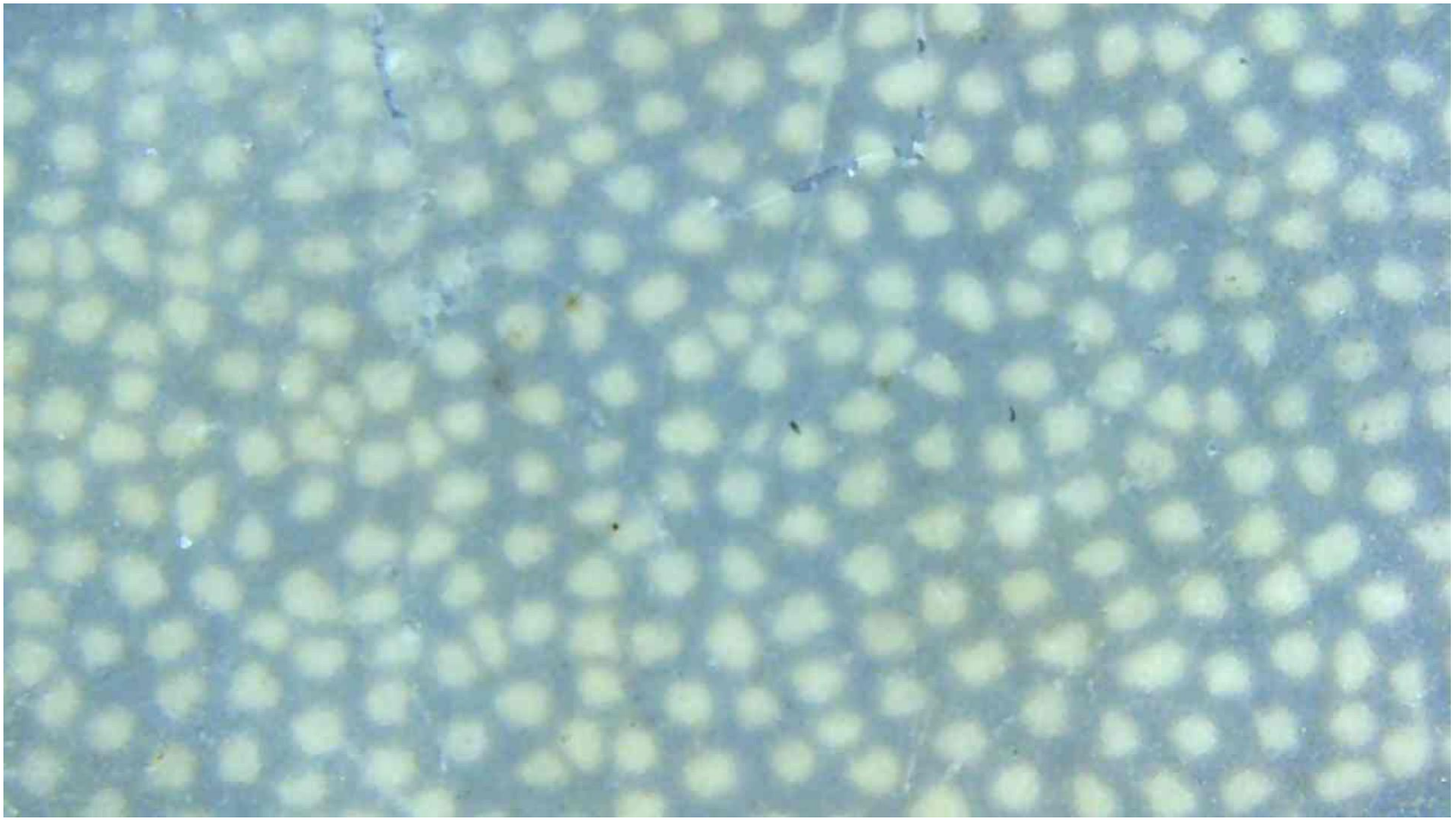
Rusty brown iron veins are black under magnification



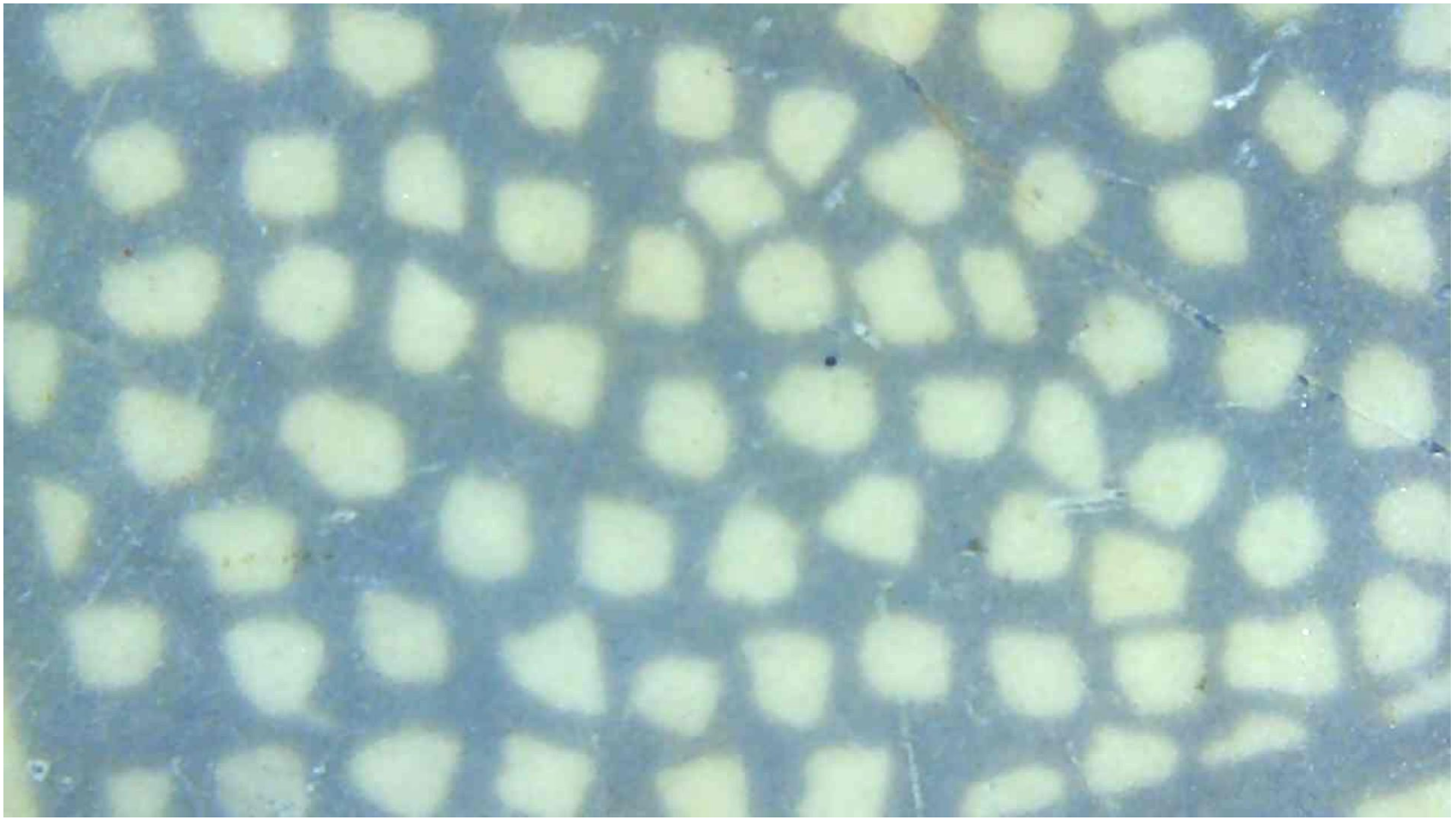
Very Fine Grained



Fine Grained



Medium Grained



BGS Arden Sandstone

- **Arden Sandstone Formation**
- Computer Code:ASPreferred Map Code:ASStatus Code:FullAge range:Carnian Age (TC) — Carnian Age (TC)Lithological
- **Description**:
- Heterolithic, consisting of grey, green and purple mudstones interbedded with paler grey-green to buff coloured siltstones and fine- to medium-grained, varicoloured green, brown, buff, mauve sandstones; beds of conglomerate occur locally. Laminated and thinly interbedded sediments are commonly extensively bioturbated and show structures indicative of thixotropic deformation.
- The siltstones and finer sandstones show small-scale ripple drift cross bedding; thicker sandstone beds show trough and planar cross bedding. The proportion of fine to coarse clastics varies laterally within the Formation. The thicker sandstone units, composed of several individual beds, have a lenticular geometry and occupy the inferred former courses of fluvial distributary channels in a deltaic or estuarine environment. Less arenaceous, mudstone and siltstone-dominated successions occupy intervening interdistributary areas.
- The Arden Sandstone Formation is differentiated from the reddish-brown, blocky weathering mudstones of adjacent formations by its predominantly greenish grey colour, the presence of a significant, though often subordinate, proportion of sandstone, and the predominance of finely laminated lithologies throughout.
- **Definition of Lower Boundary:**
- Placed at a rapid upward transition from the red mudstones or siltstones of the Sidmouth Mudstone Formation to the dominantly grey or green, partly or largely arenaceous beds of the Arden Sandstone Formation. Conformable in all areas. At outcrop, the boundary is typically marked by a change from the reddish-brown clayey soils of the Sidmouth Mudstone Formation to the grey, slightly sandy clay soils of the overlying Arden Sandstone Formation. Where the latter forms a marked cuesta feature, the boundary typically lies at a slight concave break in the scarp slope.
- **Definition of Upper Boundary:**
- Placed at the base of the predominantly red mudstones and siltstones of the Branscombe Mudstone Formation where they rest on the interbedded dark grey-green siltstones and pale grey sandstones of the underlying Arden Sandstone Formation; the boundary is abrupt or a rapid, interbedded transition. At outcrop, the boundary is typically marked by a change from the grey, slightly sandy clay soils of the Arden Sandstone Formation to the reddish-brown clayey soils of the Branscombe Mudstone Formation. Where the Arden Sandstone forms a marked cuesta feature, the boundary lies at the down-dip limit of the dip slope.

- **Thickness**:Typically 7m to 8m in the Warwickshire area near the type section, with a maximum of 20m in the Stowell Park Borehole [SP01SE/1, SP 0835 1176, Green and Melville, 1956] and a minimum, regionally, of 2 to 3m.
- Geographical Limits:The outcrop of the Formation is traceable nearly continuously from Gloucestershire northward through Worcestershire and eastwards through Warwickshire into Leicestershire and Nottinghamshire. Less continuous outcrop is mapped in Somerset and east Devon. At subcrop, the Formation is proved in several cored and geophysically logged boreholes in the subsurface in the Central Midlands (Worcester and Knowle basins), East Midlands , and in southern England (Wessex Basin). It is not recognised in the Cheshire Basin and other basins farther northwest, though thin sandstones in the upper part of the Wilkesley Halite (Poole and Whiteman, 1966), might represent the Formation in the Cheshire Basin. At depth in Dorset and Somerset the Formation passes laterally into halite (Gallois, 2001).
- Parent Unit:Mercia Mudstone Group (MMG)Previous Name(s):Weston Mouth Sandstone Member

- **Obsolete Name And Code: Use AS] (WMSF**)
  Dunscombe Mudstone Formation [Obsolete Name And Code: See AS and BCMU] (DUM)
  North Curry Sandstone Member [Obsolete Name And Code: Use AS] (NCMB)
  Dane Hills Sandstone Group (-3804)
  Hollygate Skerry (-3805)
  Keuper Sandstone [Obsolete Name And Code] (KS)
  Dane Hills Sandstone Member [Obsolete Name And Code: Use AS] (DHSM)
  Butcombe Sandstone (*849)
  Upper Keuper Sandstones (-29)
  Arden Sandstone Horizon (-1314)
  Butcombe Sandstone Member [Obsolete Name And Code: Use AS] (BUS)
  Hollygate Sandstone Member [Obsolete Name And Code: Use AS] (HLY)
  Arden Sandstone Group (-1956)
  Arden Sandstone Member (-3177)
  Dane Hills Sandstone Member (*284)
- Alternative Name(s):Butcombe Sandstone

- **Stratotypes:**
- Type Section Canal cutting at Shrewley, Warwickshire, showing the full thickness (about 9m) of the Formation. Old et al.,1991, pp.34-35 and Plate 10.
- Reference Section Canal cutting, Rowington, Warwickshire. Old et al.,1991, p.33, Plate 9.
- Reference Section Road cutting near Blackford Hill, Henley in Arden, Warwickshire.
- Reference Section Twyning Borehole. (Complete sequence stored in collection at BGS Keyworth). Borehole No. SO83NE/5. Depth range 310.51 to 315.0 metres
- Reference Section Shrewley Quarry and Canal section

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  - E216 E183 E184 E199 E326 E155 E156 E168 E182 E200 E234 E264 E280 E340