



St John the Baptist Coventry
Brief Schedule of Works for Essential Urgent Repairs

March 2007

Roofs

Lady Chapel Lead Roof

Approx. area of 72m². Height of parapet from ground approx. 7m

Existing roof and roof structure may date from the 1950s following an organ fire.

Existing roof is a monopitched lead covered with wooden rolls and a parapet lead gutter. Internally the ceiling appears to be of oak boarding with oak cross ribbing set between principal rafters and a mid-span purlin. It is assumed that above the ceiling are common rafters and then roof boarding.

Proposed

Erect small access/hoist scaffold. Temporarily weatherproof as required.

Strip existing leadwork including flashings and dispose of.

Inspect roof timbers. **Allow to replace 3No x 2m long sections of oak wall plate say 150mm x 200mm.**

Allow to replace 4No x 2m long oak godfathered to existing rafters.

Allow to replace 10No x 150 x 25mm square edged oak roofing boards.

To parapet gutter and the 3No sumps (gutter approx. 12m x 600mm) allow to remove and replace all of existing boarding and firrings with seasoned oak.

Supply and install new code 7 milled lead with wooden rolls all laid on a breather membrane and painted chalk slurry. Roof has about 20 bays with lap joint at the head of the lead sheets. Flashings required to all four sides of roof. Parapet gutter has 6 bays allow to re-lead all gutter area, 3No sumps and there lead pipe outlets.

Allow provisional sum of £3000 for masonry repairs to west wall adjacent flashing.

Supply and install new 5m long aluminium roof ladder to the west end of the roof and fix a new handrail to central tower stonework using non-ferrous fixings.

South and north Transept roofs

Dispose of decayed timber roof ladders. Supply and install 2 No approx. 5m long new aluminium roof ladders over each side of the copper roofs and fix handrail to central tower stonework with non-ferrous fixings.

Allow say 1.0k for masonry repairs to walls adjacent flashings. Undertake localised repointing to the flashing joint.

Generally to other existing: lead roofs of the Nave, aisles, tower and chancel

Undertake hot work patch repairs to weaknesses within the lead sheeting.

Allow for 16 No lead patches 150mm x 150mm to be lead burnt over existing lead sheet.

Re-wedge and repoint 14 linear meters of lead flashings that are located in a variety of areas. Also allow to renew and point 6 linear meters of code 5 lead flashing

The gutter of the North aisle

This gutter is holding water to the bay that is west of the eastern most sump. It is suspected that the support structure may be decayed. Bay is approx. 2.2m x 300mm.

Lift lead from this one bay and locally dress back flashings and r w f leadwork as required. Inspect roof timbers and allow to renew all oak boarding and firrings to the bay using seasoned oak.

Also allow to replace 1 No x 2m long section of oak wall plate say 150mm x 200mm.

Supply and install new leadwork to the gutter bay and redress flashings and downstand lead from roof leadwork.

Rainwater Goods

Existing downpipes and hopper heads are a mixture of modern plastic and cast iron. Many of the cast iron pipes and hoppers are corroded and broken. The plastic pipes are insufficiently robust and leak. The cast iron hoppers are decorative and renewals will need to be cast to match existing but to include an overflow pipe. Pipes have integral ears.

There are two types of hoppers. Large semi-octagonal with a square outlet and smaller rectangular with a circular outlet. The larger hoppers that connect with an existing round pipe have an adhoc lead cowl to form the joint. New hoppers to be cast to match existing decorative hoppers and to include an overflow pipe.

In total **there** are in **the** region of 175 linear metres of RWPs and 30 pipes. Square pipes are 120mm x 95 mm deep and round pipes 110mm.

Access all pipes dismantle and renew or refurbish as specified. Allow for installing temporary plastic pipes and hoppers wherever a pipe is temporarily removed.

Pipes and hoppers that are to be refurbished are to be cleaned of corrosion, fully redecorated and refixed using stainless steel bolts.

Allow to repair splits to lead feeder pipes that pass from gutter sumps to hoppers/pipes. Allow for five new feeder pipes and lead burnt repairs to ten others.

Where a square section pipe replaces an existing circular pipe the pipe not to be chased through string courses etc. However allow £3,500 for local adjustments to existing chases in the masonry and for making good old pipe fixings within the masonry walling.

Tower. Renew 3no. plastic pipes each approx. 13m long. New pipes to be 120mm x 95mm rectangular pipes polyester powder coated cast aluminium with plain rectangular hoppers and overflow pipe and shoe at base. Access? Nave. To the 4no. circular cast iron pipes with shoes and larger decorative cast iron hoppers. Replace 2no. each approx. 3.5m long with new cast iron square pipes 125mm x 95mm. Renew large decorative 2no. hoppers. South Aisle. 21-10 existing pipes with larger decorative cast iron hoppers. Replace 1No pipe and shoe and 1No hopper approx. length 6m. Dismantle other pipe and replace uppermost pipe length. Both pipes to be of rectangular section.

North Aisle. 2no. existing pipes with larger decorative cast iron hoppers. Replace 2no pipes and shoes with square section pipes approx. length 7.5m renew and 2no hoppers

South Transept. 2no. existing pipes with large decorative cast iron hoppers. Replace both pipes and hoppers approx. length 5m each. Repair lead outlet where joins hopper.

North Transept. 2no. existing pipes with decorative cast iron hoppers. Replace 1no circular pipe approx. length 4m and 1no hopper. Repair lead outlet where joins hopper.

Chancel. To the 4no. cast iron/lead pipes with shoes and decorative cast iron hoppers. Replace 4no. pipes each approx. 4m long and 2no. hoppers.

Lady Chapel. 3no. existing circular pipes with small decorative cast iron hoppers. Replace 1No pipe and hopper approx. length 3.5m. Dismantle other pipes and replace uppermost pipe section length 1.8m long.

St Johns Chapel. 2no. existing pipes with decorative cast iron hoppers. Replace 1No pipe and 1No hopper approx. length 6m. Dismantle other pipe and replace uppermost pipe length 1.8m. Both pipes to be of rectangular section.

Choir Vestry. Refurbish circular pipe and refit.

Outhouse Replace circular cast iron shoe at ground level.

Sub-ground drainage

There are problems with the existing surface drainage directing water into the building interior and also the sub-ground drainage is suspected to contain defects and/ or inadequate capacity to discharge the incoming water.

There are approx 8No RWP gullies and say 6No path gullies.

Investigate sub-ground drainage and repair/adjust as required. At the base of each RWP and also to the path gullies allow to renew each gully with a clay roddable type and undertake a CCTV camera inspection of all sub ground pipes. Allow to rod and vacuum suction blocked pipes.

Allow to excavate and renew 20 linear meters of 100mm pipework and set in concrete (because of poor ground). Backfill and make good macadam path.

Excavate for and install a new Aco type drain across the threshold of both double doors to the north and south. Resurface the macadam paths say 250m² ensuring falls are towards gullies.

Allow a provisional sum of £8000 for further unknown adjustments/ repairs to the drainage system.

Structural movement

Nave south clerestorey

The outer face of masonry to the nave south clerestorey (perhaps rebuilt in the 1950s) is 5m high x 15m long and does not appear to be tied back to the inner masonry. There is also longitudinal movement within the south and north nave parapets. This movement should be closely inspected and recorded by a structural engineer.

An access scaffold to permit a full inspection and recording of this active movement is beyond the available budget. Therefore allowance has been made only for an architect to periodically photograph and measure the size of cracks where these are accessible from roof levels.