

The Waterhouse Building: Repairs and Maintenance Works to Chimneys, Roofs & Rainwater Goods

Item	Location / Element	Description	Condition	Work Required	Tender Figure	Comments
1.0	EAST WING: CHIMNEYS					
1.1	Chimneys	4no. brick-built chimney stacks with multiple flues to main roof plus 2no. stacks to the rear (south east corner) projection. 2no. Circular chimneys at east end of East Wing. Lead flashings.	Brickwork and pointing fair where visible except for moderate erosion to pointing on rear-most (south) stack and to circular stack at low level.	Rake out and re-point eroded mortar joints to rear-most (south) chimney stack and to circular stack at low level. (Allow 7m²).		
2.0	EAST WING, SOUTH ELEVATION: ROOF COVERINGS					
2.1	Main Roof	Clay plain tiles with matching ridge and valley tiles bedded in mortar. Individual rows of half-round / scalloped tiles and decorative ridge tiles.	Generally fair. Tiling is reasonably level and even. Pointing to ridge tiles is fair. Several individual broken or missing tiles to this elevation.	Replace missing tiles (allow 10no.).		
2.2	Rooflight	Painted timber rooflight near centre of building on south-facing roof slope.	Paint finish and condition of timber appear poor.	Repair / overhaul joinery and redecorate. Ensure glazing is adequately retained within framing.		

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2.3	Rear Dormer Roofs on South Elevation of Main Roof	Clay plain tiles with matching ridge tiles bedded in mortar. NOTE: restricted views from ground level.	Generally fair. Occasional slipped or missing roof tiles noted. Large Dormer: right-hand verge edge recently re-pointed at low level. Dormer to left of rooflight: eroded pointing to verges on both sides.	Renew eroded pointing on both sides of dormer to left of rooflight.		
2.4			Dormer to left of rooflight: 5no. Slipped or missing tiles noted.	Replace 5no. slipped or missing tiles to small dormer to left of rooflight.		
2.5			Small Dormer to right of rooflight: 2no. Missing ridge tiles.	Replace 2no. missing ridge tiles to small dormer to right of rooflight.		
2.6	Rear Projection Roof (South east corner of the Waterhouse Building)	Clay plain tiles with matching ridge tiles bedded in mortar. NOTE: restricted views from ground level.	Left-hand roof slope: Tiles reasonably evenly laid but 10no. Slipped / broken / missing tiles noted. Open vertical joints visible to ridge tiles. Both verges recently re-pointed.	Replace 10no. slipped / broken / missing roof tiles.		

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2.7	Rear Projection Roof (South east corner of the Waterhouse Building)	Clay plain tiles with matching ridge tiles bedded in mortar. NOTE: restricted views from ground level.	Left-hand roof slope: Tiles reasonably evenly laid but 10no. slipped / broken / missing tiles noted. Open vertical joints visible to ridge tiles. Both verges recently re-pointed.	Re-point open joints between ridge tiles.		
2.8			Dormer on left-hand roof slope: missing ridge tile at head / junction with main roof. Untidy / coarse pointing to verges but reasonably sound. Left (north) slope of dormer not visible from ground level.	Replace missing ridge tile.		
2.9			Right-hand inner roof slope: Fair where visible.			
2.10			Left-hand inner roof slope: Not visible from ground level.			
2.11			Right-hand outer roof slope: 2no. broken / missing tiles and 1no. missing ridge tile.	Replace 2no. broken / missing tiles and 1no. missing ridge tile.		
2.12			Right-hand end of Main Roof: 3no. missing tiles.	Replace 3no. missing tiles.		

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2.13	Rear Projection Roof (South east corner of the Waterhouse Building)	Clay plain tiles with matching ridge tiles bedded in mortar. NOTE: restricted views from ground level.	Dormer to left-hand side of circular chimney: Fair, including verge pointing and valley tiles.			
2.14			Dormer to right-hand side of circular chimney: Fair, 3no. missing tiles.	Replace 3no. missing tiles.		
2.15	Single Storey Extension and Link Corridor	Clay plain tiles with matching ridge and hip tiles bedded in mortar.	43no. broken and 3no. missing roof tiles, plus two dozen moss covered tiles which have probably perished / eroded due to frost and need to be replaced.	Replace 45no. broken / missing roof tiles plus approximately a dozen eroded / moss covered tiles.		Option to defer these works as cost of providing access to roof level will be relatively low.
2.16	Hipped Lean-To Roof to left (west) side of Rear Projection	Clay plain tiles with matching hip tiles bedded in mortar and lead flashing at junctions with building.	Fair. 2no. broken roof tiles and 1no. broken hip tile. Lead flashing is aged but in fair condition.	Replace 2no. broken roof tiles and 1no. broken hip tile.		

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2.17	South-facing hipped roof to single-storey rear extension on south face of Rear Projection	Clay plain tiles with matching hip tiles bedded in mortar and lead flashing at junctions with building.	Tiles slightly uneven due to use of old and new tiles (all new tiles to right-hand slope). 4 no. broken tiles. Lead flashing is aged but in fair condition.	Replace 4no. broken roof tiles.		Option to defer these works as cost of providing access to roof level will be relatively low.
3.0	EAST WING, SOUTH ELEVATION: RAINWATER GOODS					
3.1	Main Roof (Left-hand side of Large Dormer)	Cast iron or possibly Glass Reinforced Plastic (GRP) ogee gutters with bolted joints, installed on corbelled brickwork.	Corrosion to joints and ends generally. Right-hand end of the section of guttering to the left-hand side of the large dormer has twisted and needs to be refixed or replaced.	Refix or replace twisted section of gutter to the left-hand side of the large dormer with 'Alumasc' or equivalent cast aluminium ogee section gutters.		
3.2	Main Roof (Left-hand side of Large Dormer)	4"x3" rectangular section cast iron downpipes and brackets.	Surface corrosion to pipes and brackets.	Replace downpipes with 'Alumasc' or equivalent cast aluminium downpipes and brackets to match recently installed replacement rainwater goods.		

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3.3	Large Dormer on Main Roof	Cast iron hopper marked '1870' and rectangular section cast iron downpipe. Cast iron waste hopper and circular cast iron waste downpipe.	Corrosion to joints and ends generally. Significant corrosion to upper sections of downpipe. Hopper is not straight and may not be adequately secured. Downpipe bracket at approximately 3m above ground level has completely detached from the wall.	Replace hoppers, gutters and downpipes with 'Alumasc' or equivalent cast aluminium hoppers, gutters and downpipes to match recently installed replacement rainwater goods.		
3.4	Main Roof (Right-hand side of Large Dormer)	Cast iron or possibly Glass Reinforced Plastic (GRP) ogee gutters with bolted joints, installed on corbelled brickwork.	Corrosion to joints and ends generally.	Replace gutter to the right-hand side of the large dormer with 'Alumasc' or equivalent cast aluminium ogee section gutters.		Defer ?
3.5	Main Roof (Right-hand side of Large Dormer)	Cast iron circular downpipes.	Ageing but in fair condition.	Replace downpipes with 'Alumasc' or equivalent cast aluminium downpipes and brackets to match recently installed replacement rainwater goods.		Defer ?
3.6	Three-Storey Rear Projection Roof (Left-hand side)	Painted PVC half round gutter.	Appears relatively modern and is in fair condition.			

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3.7	Three-Storey Rear Projection Roof (Left-hand side)	4"x3" rectangular section cast iron downpipes and brackets.	Pipe section broken, condition deteriorating.	Replace downpipes with 'Alumasc' or equivalent cast aluminium downpipes and brackets to match recently installed replacement rainwater goods.		
3.8	Three-Storey Rear Projection Roof (Right-hand side)	Cast iron or possibly Glass Reinforced Plastic (GRP) ogee gutters with bolted joints, installed on corbelled brickwork.	Corrosion to joints and ends generally.	Replace gutters with 'Alumasc' or equivalent cast aluminium gutters to match recently installed replacement rainwater goods.		Defer ?
3.9	Three-Storey Rear Projection Roof (Right-hand side)	Left-hand cast iron waste hopper and cast iron waste downpipe.	Fair.	Replace hopper and waste downpipe with 'Alumasc' or equivalent cast aluminium sections to match recently installed replacement rainwater goods.		Defer?
3.10	Three-Storey Rear Projection Roof (Right-hand side)	White PVC waste pipes discharging into a green-painted PVC hopper and waste downpipe.	Fair.			

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3.11	Three-Storey Rear Projection Roof (Right-hand side)	Cast iron hopper and cast iron waste downpipe receiving several PVC, cast iron and lead drainage pipes.	Ageing pipework is in fair condition but significant corrosion to cast iron hopper.	Replace hopper and waste downpipes with 'Alumasc' or equivalent cast aluminium sections to match recently installed replacement rainwater goods.		
3.12	Three-Storey Rear Projection Roof (Right-hand side)	Grey and painted PVC soil & vent stack.	Fair.			
3.13	Three-Storey Rear Projection Roof (Right-hand side)	Cast iron circular downpipe and similar waste pipe discharge into a cast iron hopper and cast iron circular downpipe below.	The cast iron downpipe has broken at both high and low level.	Replace hopper and downpipes with 'Alumasc' or equivalent cast aluminium sections to match recently installed replacement rainwater goods.		
3.14	Three-Storey Rear Projection Roof (Right-hand side)	Black-painted cast iron soil & vent stack.	Fair.			
3.15	Two-Storey Rear Projection	Cast iron or possibly Glass Reinforced Plastic (GRP) ogee gutters with bolted joints, installed on corbelled brickwork.	Corrosion to joints and ends generally.	Replace gutters with 'Alumasc' or equivalent cast aluminium gutters to match recently installed replacement rainwater goods.		Defer ?

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3.16	Two-Storey Rear Projection	Painted PVC circular downpipes.	Fair.			
3.17	Single Storey Extension and Link Corridor	A mixture of painted PVC and cast iron half round gutters plus a section of fibre cement half round gutter.	The PVC gutters are in fair condition but the cast iron sections show signs of rusting and deterioration. A section of cast iron guttering has broken, possibly due to impact damage, revealing corrosion at the joint. The fibre cement gutter is also broken - unless evidence is available to confirm this gutter does not contain asbestos it must be assumed this is an asbestos cement product and thus handled and disposed of accordingly. The fibre cement gutter is broken.	Replace the cast iron and fibre cement gutters with 'Alumasc' or equivalent cast aluminium gutters to match recently installed replacement rainwater goods.		
3.18	Single Storey Extension and Link Corridor	Cast iron circular downpipes.	Signs of deterioration plus cracked / repaired section noted..	Replace downpipes with 'Alumasc' or equivalent cast aluminium downpipes and brackets to match recently installed replacement rainwater goods.		

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3.19	Hipped Lean-To Roof to left (west) side of Rear Projection	Cast iron or possibly Glass Reinforced Plastic (GRP) ogee gutters with bolted joints, installed on corbelled brickwork. Short length of cast iron circular downpipe.	Slight distortion noted with corrosion to joints and ends generally. Short term repair noted at junction of downpipe with gutter.	Replace gutters and downpipe with 'Alumasc' or equivalent cast aluminium ogee section gutters.		Defer ?
3.20	South-facing hipped roof to single-storey rear extension on south face of Rear Projection	Glass Reinforced Plastic (GRP) ogee gutters with bolted joints, installed on corbelled brickwork.	Substantial sagging and distortion to gutter sections which also show signs of fractures and impact damage revealing the fibre matrix within this material.	Replace the gutters with 'Alumasc' or equivalent cast aluminium gutters to match recently installed replacement rainwater goods.		
3.21	South-facing hipped roof to single-storey rear extension on south face of Rear Projection	Cast iron circular section downpipe	Broken joint noted below gutter.	Replace the downpipe with 'Alumasc' or equivalent cast aluminium downpipe sections to match recently installed replacement rainwater goods.		

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4.0	EAST WING, EAST END ELEVATION: ROOF COVERINGS					
4.1	Main Roof	Clay plain tiles with matching ridge and valley tiles bedded in mortar. Individual rows of half-round / scalloped tiles and decorative ridge tiles.	Generally fair. Tiling is reasonably level and even but 9no. slipped or missing tiles were noted together with 1no. missing ridge tile at the north end of the main roof. Crumbling mortar was also noted to the verges of the east-facing dormer gable.	Replace 9no. slipped / missing tiles and 1no. missing ridge tile.		
4.2	Main Roof	Clay plain tiles with matching ridge and valley tiles bedded in mortar. Individual rows of half-round / scalloped tiles and decorative ridge tiles.	Generally fair. Tiling is reasonably level and even but 9no. slipped or missing tiles were noted together with 1no. missing ridge tile at the north end of the main roof. Crumbling mortar was also noted to the verges of the east-facing dormer gable.	Renew crumbling mortar to the verges of the east-facing dormer gable.		
4.3	Three Dormer Roofs	Clay plain tiles with matching ridge and valley tiles bedded in mortar. Tiled gable elevations. NOTE: restricted views from ground level.	Fair.			

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5.0	EAST WING, EAST END ELEVATION: RAINWATER GOODS					
5.1	East End Elevation Roof	Cast iron or possibly Glass Reinforced Plastic (GRP) ogee gutters with bolted joints, installed on corbelled brickwork.	Corrosion to joints and ends generally.	Replace gutters with 'Alumasc' or equivalent cast aluminium ogee section gutters to match recently installed replacement rainwater goods.		Could consider deferment but unlikely to be cost-effective due to need to replace downpipes.
5.2	East End Elevation Roof	A mixture of rectangular and circular section downpipes and circular downpipes including one section of cast aluminium downpipe.	Severe corrosion at high level.	Replace downpipes with 'Alumasc' or equivalent cast aluminium downpipes and brackets to match recently installed replacement rainwater goods.		
5.3	Balcony	Cast iron hopper and circular downpipe.	Corrosion to joints.	Replace hopper and downpipe with 'Alumasc' or equivalent cast aluminium downpipes and brackets to match recently installed replacement rainwater goods.		Option to defer these works as cost of providing access to roof level will be relatively low.
5.4	Main Roof above Entrance Porch	Modern cast aluminium rainwater gutters and downpipes.	Good.			

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5.5	Single-Storey Entrance Porch Roof	Cast iron ogee / square section gutters. Cast iron circular downpipes and pressed metal square section downpipe.	Severe corrosion to guttering - at end of useful service life. Cast iron downpipes rusting through from the inside. Distortion to pressed metal downpipe.	Replace gutters and downpipes with 'Alumasc' or equivalent cast aluminium downpipes and brackets to match recently installed replacement rainwater goods.		
5.6	Single-Storey Entrance Porch Roof	Cast iron waste hopper and downpipe.	Fair.			
6.0	EAST WING, NORTH ELEVATION: CHIMNEYS					
6.1	Chimneys	See Item 1.1.				

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7.0	EAST WING, NORTH ELEVATION: ROOF COVERINGS					
7.1	Main Roof	Clay plain tiles with matching ridge and valley tiles bedded in mortar. Individual rows of half-round / scalloped tiles and decorative ridge tiles.	Generally fair. Tiling is reasonably level and even. Pointing to ridge tiles is fair. Several individual broken or missing tiles to this elevation.	Replace missing tiles (allow 15no.).		
7.2	Dormer Roofs	Clay plain tiles with matching ridge and valley tiles bedded in mortar.	Generally fair. Pointing to ridge tiles is fair. Several individual slipped tiles to the dormer roofs. Some recently renewed pointing to verges but areas of crumbling mortar to the verges of the dormer to the left of the Roof Access Ladder require re-pointing.	Replace missing tiles (allow 5no.).		
7.3	Dormer Roofs	Clay plain tiles with matching ridge and valley tiles bedded in mortar.	Generally fair. Pointing to ridge tiles is fair. Several individual slipped tiles to the dormer roofs. Some recently renewed pointing to verges but areas of crumbling mortar to the verges of the dormer to the left of the Roof Access Ladder require re-pointing.	Renew pointing to verges of the dormer to the left of the Roof Access Ladder.		

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8.0	EAST WING, NORTH ELEVATION: RAINWATER GOODS					
8.1	Single-Storey Bay at East End of East Wing	Modern cast aluminium rainwater gutters and downpipes.	Good.			
8.2	Main Roof	Modern cast aluminium rainwater gutters and downpipes with matching hopper at valley gutter beside large dormer.	Good.			
8.3	East Wing Main Entrance	Cast iron waste hopper and downpipes to left side of Entrance.	Evidence of cracks and corrosion require replacement.	Replace waste hopper and downpipe with 'Alumasc' or equivalent cast aluminium hopper and downpipes to match recently installed replacement rainwater goods.		
8.4	East Wing Main Entrance	Cast iron soil & vent stack with lead vent section to right side of Entrance, receiving PVC and cast iron waste pipes.	General signs of ageing with light corrosion to surfaces and joints.	Replace soil & vent stack with modern cast iron or painted PVC sections to match recently installed replacement rainwater goods.		Defer ?

Item	Location / Element	Description	Condition	Work Required	Tender Figure	Comments
8.5	East Wing Main Entrance	Cast iron waste downpipe including cast iron hoppers at ground and first floor level, to right side of entrance.	Evidence of previous repairs and more recent corrosion to lower hopper.	Replace waste hoppers and downpipe with 'Alumasc' or equivalent cast aluminium hoppers and downpipes to match recently installed replacement rainwater goods.		
8.6	Dormer to Left-hand Side of Roof Access Ladder	Fibre cement vent pipe and cowl to left side of dormer.	Peeling paint finish and erosion to surfaces at high level. This material must be assumed to contain asbestos unless evidence is available to confirm it does not.	Establish whether this vent is still in use or redundant. Remove or replace as appropriate.		Defer ?

Item	Location / Element	Description	Condition	Work Required	Tender Figure	Comments
9.0	CENTRAL MAIN BUILDING, NORTH ELEVATION: CHIMNEYS					
9.1	Chimneys	Circular brick-built chimneys at both east and west ends of Central Main Building. Lead flashings.	East chimney stack: Fair. Moderate erosion to brickwork and pointing at low level and to base of stack.	Repair eroded brickwork and pointing (allow 1m ² of brickwork and 4m ² of pointing).		
9.2	Chimneys	Circular brick-built chimneys at both east and west ends of Central Main Building. Lead flashings.	West chimney stack: Fair. Moderate erosion to pointing at low level and to base of stack.	Repair eroded brickwork and pointing (allow 2m ² of brickwork and 4m ² of pointing).		
10.0	CENTRAL MAIN BUILDING, NORTH ELEVATION: ROOF COVERINGS					
10.1	Main Roof	Clay plain tiles with matching ridge and valley tiles bedded in mortar. Individual rows of half-round / scalloped tiles and decorative ridge tiles. Steel mesh tile/snow guards fitted at eaves level.	Generally fair. Tiling is reasonably level and even. Several individual slipped or missing tiles to this elevation. Damage to decorative features of several ridge tiles but pointing appears fair.	Replace missing tiles (allow 5no.).		Consider only replacing tiles where within safe reach of access scaffolding erected to serve works to the chimneys and gutters.

Item	Location / Element	Description	Condition	Work Required	Tender Figure	Comments
10.2	Central Tower	Timber framed tower with vertical tile cladding to base and lead sheet covered roof. Lead flashings at head of vertical tile cladding and at junctions with main roof covering. A lightning protection down tape is installed on this roof.	Slight disruption to some cladding tiles but no damaged or missing tiles noted. Lead sheet covering to roof appears to be in fair condition.			
10.3	West Staircase Tower	Clay plain tiles with matching hip tiles, including rows of half-round / scalloped roof tiles. Steel mesh slate and snow guards fitted at eaves level. A lightning protection down tape is installed on this roof.	Generally fair. Tiling is reasonably level and even.			
10.4	Dormer with roof access door, located behind West Tower	Bitumen felt covered timber dormer with roof access door.	Restricted inspection from ground level. Bitumen felt appears to be in fair condition but roof access door appears to be out of position and may not be secure.	Arrange inspection of dormer. Carry out joinery repairs to framing, cladding and door followed by complete redecoration.		

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11.0	CENTRAL MAIN BUILDING, NORTH ELEVATION: RAINWATER GOODS					
11.1	Main Roof	Cast iron box gutters installed on corbelled brickwork.	Fair. Evidence of leaks and corrosion to most joints.	Replace gutters with 'Alumasc' or equivalent cast aluminium box section gutters to match recently installed replacement rainwater goods. Include for setting aside and reinstating tile/snow guards to allow replacement of gutters.		
11.2	Main Roof	Cast iron circular section downpipes and brackets.	Fair. Evidence of leaks together with corrosion to surfaces and several joints.	Replace downpipes with 'Alumasc' or equivalent cast aluminium downpipes to match recently installed replacement rainwater goods.		

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11.3	Right-hand Side of West Staircase Tower	Cast iron hopper with a short length of 4"x3" rectangular section cast iron downpipe immediately below which continues downward as a circular section cast iron downpipe.	Significant corrosion to hopper and rectangular section of downpipe immediately below. Hopper fixings appear to have loosened off leaving a gap between the hopper and the wall. One fixing to the downpipe bracket below appears to be missing. The circular downpipe is in fair condition but recommend this installation be replaced as a complete unit while access has been provided to the circular chimney stack above.	Replace hopper and downpipes with 'Alumasc' or equivalent cast aluminium downpipes to match recently installed replacement rainwater goods.		
12.0	WEST WING: CHIMNEYS					
12.1	Chimneys	7no. brick-built chimney stacks with multiple flues to main roof. Lead flashings.	Brickwork and pointing fair where visible except for moderate erosion to pointing on second and fourth stacks to the west of the staircase tower, including sloping base on rear (south) face of second stack.	Rake out and re-point eroded mortar joints on second and fourth stacks to the west of the staircase tower. (Allow 6m ²).		

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13.0	WEST WING, NORTH ELEVATION: ROOF COVERINGS					
13.1	Main Roof	Clay plain tiles with matching ridge and valley tiles bedded in mortar. Individual rows of half-round / scalloped tiles and decorative ridge tiles.	Generally fair. Tiling is reasonably level and even. 6no. individual broken or missing tiles to this elevation. Pointing to ridge tiles is fair. Eroded mortar pointing to apex of second and fourth dormer verges.	Replace missing roof tiles (allow 6no.).		
13.2	Main Roof	Clay plain tiles with matching ridge and valley tiles bedded in mortar. Individual rows of half-round / scalloped tiles and decorative ridge tiles.	Generally fair. Tiling is reasonably level and even. 6no. individual broken or missing tiles to this elevation. Evidence of damage and previous repairs to verge pointing to apex of second and fourth dormer verges.	Renew eroded pointing to apex of second and fourth dormer verges.		

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14.0	WEST WING, NORTH ELEVATION: RAINWATER GOODS					
14.1	Rainwater Gutters	Cast iron ogee gutters with bolted joints, installed on corbelled brickwork.	Minor corrosion to joints and ends generally.	Replace gutters with 'Alumasc' or equivalent cast aluminium ogee section gutters to match recently installed replacement rainwater goods.		
14.2	Rainwater Downpipes	A mixture of old cast iron (approximately 60%, to east end of elevation) and modern replacement gutters (approximately 40% to west end of elevation).	The old downpipes comprise rectangular sections at junctions with the gutters but change to circular section cast iron downpipes below. The rectangular sections are affected by serious corrosion although the circular sections are in more reasonable condition.	Replace cast iron downpipes with 'Alumasc' or equivalent cast aluminium downpipes to match recently installed replacement rainwater goods.		
14.3	Hoppers and Waste Downpipes (Two-Storey)	4no. cast iron hoppers and waste downpipes.	Peeling paint finish and extensive corrosion.	Replace 4no. cast iron hoppers and waste downpipes with 'Alumasc' or equivalent cast aluminium hoppers and downpipes to match recently installed replacement rainwater goods.		

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14.4	Hoppers and Waste Downpipes (Three-Storey)	Cast iron hopper marked '1870' with short length of 4"x3" rectangular downpipe at high level and circular section cast iron downpipe down to ground level.	Hopper is split and affected by corrosion. Corrosion to joints of circular downpipe sections.	Replace cast iron hopper and waste downpipe with 'Alumasc' or equivalent cast aluminium hoppers and downpipe to match recently installed replacement rainwater goods.		
14.5	Soil & Vent Stack	External soil & vent stack with parallel vent section comprising a mixture of materials (approximately 60% lead, 30% cast iron and 10% PVC).	Ageing lead sections, serious corrosion to cast iron sections with evidence of leaks.	Replace soil & vent stack with painted PVC or 'Alumasc' or equivalent cast aluminium sections to match recently installed replacement rainwater goods.		
14.6	Bay Window at West End of West Wing	Modern pressed steel or aluminium ogee gutter with hopper and downpipe.	Fair.			

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15.0	WEST WING, WEST END ELEVATION: ROOF COVERINGS					
15.1	Main Roof and Dormers	Clay plain tiles with matching ridge and valley tiles bedded in mortar. Individual rows of half-round / scalloped tiles and decorative ridge tiles. Clay vertical tile cladding to cheeks and gables of dormers.	Generally fair. Tiling is reasonably level and even. 5no. individual slipped or missing tiles. Pointing to ridge tiles and verges is fair.	Replace slipped and missing roof tiles (allow 5no.).		
15.2	Entrance Porch	Clay plain tiles with matching ridge and valley tiles bedded in mortar. Mortar pointing to verges and lead flashings at junctions with walls.	Generally fair. Tiling is reasonably level and even except for two broken tiles. Lead flashings and verge pointing are in fair condition.	Replace 2no. broken tiles.		
16.0	WEST WING, WEST END ELEVATION: RAINWATER GOODS					
16.1	Main Roof: Left of Gable	Modern cast aluminium ogee gutters and rectangular section downpipes.	Good.			
16.2	Main Roof: Right of Gable	Old cast iron ogee gutter and 4"x3" cast iron rectangular section downpipe.	Substantial corrosion to gutter and downpipe. Downpipe has also split.	Replace cast iron gutter and downpipe with 'Alumasc' or equivalent cast aluminium gutter and downpipe to match recently installed replacement rainwater goods.		

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16.3	Main Roof: Right of Gable	Cast iron hopper and old cast iron circular section downpipe.	Hopper is in fair condition but the downpipe is broken and affected by corrosion.	Replace hopper and downpipe with 'Alumasc' or equivalent cast aluminium hopper and downpipe to match recently installed replacement rainwater goods.		
16.4	Entrance Porch: Left Side	Modern cast aluminium ogee gutter and rectangular downpipe.	Good.			
16.5	Entrance Porch: Right Side	Old cast iron ogee / box gutter and rectangular downpipe.	Corrosion to gutter. Split and corrosion to downpipe.	Replace cast iron gutter and downpipe with 'Alumasc' or equivalent cast aluminium downpipes to match recently installed replacement rainwater goods.		
17.0	WEST WING, SOUTH ELEVATION: CHIMNEYS					
17.1	Chimneys	7no. brick-built chimney stacks with multiple flues. Lead flashings at junctions between masonry and roof coverings.	Brickwork, pointing and leadwork are in fair condition where visible from ground level except for eroded pointing to the lower sloping section of chimney closest to the three-storey central main roof.	Repoint the lower sloping section of chimney closest to the three-storey central main roof.		

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18.0	WEST WING, SOUTH ELEVATION: ROOF COVERINGS					
18.1	Main Roof and Dormers	Clay plain tiles with matching ridge and valley tiles bedded in mortar. Individual rows of half-round / scalloped tiles and decorative ridge tiles.	Generally fair. Tiling is reasonably level and even. Pointing to ridge tiles and dormer verges is fair except for the third dormer from the right (from the three-storey central main roof) where the verge pointing has been partially repaired in the past but further erosion needs to be repaired.	Renew eroded pointing to the verge of the third dormer from the right where eroded (allow 4 linear metres).		
18.2	Single-Storey Addition	Clay plain tiles with matching ridge and hip tiles bedded in mortar. Lead flashings at junctions with walls.	Tiling is reasonably level and even but with a covering of moss. Approximately 25no. tiles are damaged - more eroded tiles may be present under the moss covering, where more they are vulnerable to dampness and frost attack.	Remove build-up of moss from roof slopes. Replace damaged tiles (allow 25no. tiles).		
18.3	Single-Storey Extension and Link Corridor	Clay plain tiles with matching ridge and hip tiles bedded in mortar.	Tiling is reasonably level and even but extensive damage to approximately twenty tiles, particularly to the link roof.	Replace damaged tiles (allow 20no. tiles).		

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19.0	WEST WING, SOUTH ELEVATION: RAINWATER GOODS					
19.1	Main Roof	Cast iron ogee gutters with bolted joints and a mixture of rectangular and circular section cast iron downpipes. Cast iron hopper marked '1870' with 4"x3" rectangular downpipe.	Evidence of corrosion to gutters and downpipes generally. Several sections of 4"x3" downpipe have split and most are affected by corrosion.	Replace gutters and downpipes with 'Alumasc' or equivalent cast aluminium ogee section gutters and rectangular downpipes to match recently installed replacement rainwater goods.		
	Single-Storey Addition	Glass Reinforced Plastic (GRP) ogee gutters with bolted joints, plus two short lengths of cast iron circular downpipes.	The GRP gutter is twisted and leaking. The two sections of downpipe are reasonably modern and in fair condition.	Replace gutters with 'Alumasc' or equivalent cast aluminium ogee section gutters to match recently installed replacement rainwater goods.		
	Hipped Single-Storey Extension and Link Corridor	Cast iron ogee gutters with bolted joints and circular section cast iron downpipes.	The gutters are affected by corrosion and need to be renewed. Several downpipes are in fair condition but two are rusting and in need of replacement.	Replace gutters and downpipes with 'Alumasc' or equivalent cast aluminium ogee section gutters and circular downpipes to match recently installed replacement rainwater goods.		
	External Waste Drainage Pipework on South Elevation	Modern PVC soil & vent pipe with white waste pipework. 75mm and 150mm diameter cast iron soil & vent pipes at ground floor level.	The PVC waste pipework is in fair condition but the cast iron sections are affected by corrosion and affected by corrosion.	Replace the rusting cast iron soil & vent pipes.		

Item	Location / Element	Description	Condition	Work Required	Tender Figure	Comments
20.0	CENTRAL MAIN BUILDING, SOUTH ELEVATION: CHIMNEYS					
20.1	Chimneys	See Items 9.1 and 9.2				
21.0	CENTRAL MAIN BUILDING, SOUTH ELEVATION: ROOF COVERINGS					
21.1	Main Roof	Clay plain tiles with matching ridge and valley tiles bedded in mortar. Individual rows of half-round / scalloped tiles and decorative ridge tiles. Steel mesh tile/snow guards fitted at eaves level.	Generally fair. Tiling is reasonably level and even. Several individual slipped or missing tiles to this elevation. Damage to decorative features of several ridge tiles but pointing appears fair.	Replace missing tiles (allow 10no.).		Consider only replacing tiles where within safe reach of access scaffolding erected to serve works to the chimneys and gutters.
21.2	Central Tower	Timber framed tower with vertical tile cladding to base and lead sheet covered roof. Lead flashings at head of vertical tile cladding and at junctions with main roof covering.	One missing tile on southwest facing elevation. Lead sheet covering to roof appears to be in fair condition.	Replace 1no. missing tile.		Replace missing tile in conjunction with nearby missing tile on main roof slope.

Item	Location / Element	Description	Condition	Work Required	Tender Figure	Comments
22.0	CENTRAL MAIN BUILDING, SOUTH ELEVATION: RAINWATER GOODS					
22.1	Main Roof	Cast iron box gutters installed on corbelled brickwork.	Fair. Evidence of leaks to joints and corrosion to surfaces generally.	Replace gutters with 'Alumasc' or equivalent cast aluminium box section gutters to match recently installed replacement rainwater goods. Include for setting aside and reinstating tile/snow guards to allow replacement of gutters.		
22.2	Main Roof	Cast iron circular section downpipes and brackets.	Fair. Evidence of leaks together with corrosion to surfaces and several joints.	Replace downpipes with 'Alumasc' or equivalent cast aluminium downpipes to match recently installed replacement rainwater goods.		



PHOTOGRAPHS



1) East Wing, Front Elevation.



2) West Wing, Front Elevation.

	3) Central Main Building: East Chimney Stack Note erosion to mortar joints.
	4) Central Main Building: West Chimney Stack. Note erosion to brickwork and pointing.

	5) East Wing, East End Elevation. Note erosion to mortar joints at low level.
	6) West Wing, Front Elevation. Rectangular chimney stacks

	7) East Wing, Rear Elevation. Note weathered condition of rooflight.
	8) East Wing, Rear Elevation. Note broken, slipped and missing tiles to dormer roof.



9) East Wing, Rear Elevation.
Note missing ridge tile to dormer roof.



10) East Wing, Rear Elevation Single-Storey Addition.
Broken cast iron gutter.

	11) East Wing, Rear Elevation Single-Storey Addition. Damage and deterioration to glass fibre gutter.
	12) East Wing, Rear Elevation Single-Storey Addition. Damage and deterioration to glass fibre gutter.



13) East Wing, Rear Elevation Two-Storey Projection.

Broken cast iron downpipe.



14) East Wing, Rear Elevation Two-Storey Projection.

Collection of rainwater downpipes and waste pipes.

	15) East Wing, Rear Elevation Two-Storey Projection. Corrosion to cast iron hopper. Note possible lead waste pipework above.
	16) East Wing, Rear Elevation Two-Storey Projection. Corrosion and cracks to cast iron downpipe and bracket.



17) East Wing, East End Elevation.



18) East Wing, East End Elevation.
Note erosion to verge pointing.

	19) East Wing, East End Elevation. Note erosion to verge pointing.
	20) East Wing, Front Elevation. Note erosion to verge pointing.

	
21) West-facing Elevation of Central Main Building.	22) West-facing Elevation of Central Main Building. Note gap between hopper and brickwork, plus missing fixing to bracket immediately below rectangular section of downpipe.



23) West Wing, Front Elevation.
Flue pipe at high level.