

Engineers Addendum Report

This report sets out in concise terms the nature of the evidence collected and the consultant's conclusions and recommendations

Policy Holder:	Reading Spiritualist Church	Date:	03/07/2020
Property Address:	81 Baker Street, Reading, RG1 7XY	Our Ref:	IFS-AVI-SUB-19-0084937
Description Of Property:	The damaged property is a traditionally built 1911 detached property. The site is relatively level.		
Location Of Damage:	Front of the building.		
Date Of Relevant Construction:	1911 – Main Property.		
Nature Of The Damage:	Diagonal cracking both internally and externally		
Indicated Mechanism Of Movement:	Downward and outward rotational movement		
BRE Category Of Damage:	Cat 3		
Date Of Discovery:	October 2019		
Occupiers' Observations:	PH noted cracking to the area and being concerned that subsidence movement was occurring contacted their insurers.		
Previous Relevant Movement:	None.		
Comments:	Following geotechnical investigations we concluded that the nearby vegetation is the cause of the damage..		

Investigation Evidence:

Examination By Building Professional:	Cyril Nazareth B.Eng, C.Eng, M.I.C.E. M.B.A. - Chartered Engineer		
Trial Hole/ Bore Hole Excavations:	Yes	(13/02/2020 – Report ref C53353G23834)	
CCTV Drainage Survey:	Yes	The drains have been surveyed. There was no indication that the subsoil had been softened or washed away by water leaking from drains or other sources.	
Soil Laboratory Testing:	Yes	Shrinkable soils (13/03/2020 – Report ref C17713S53353)	Yes
		Desiccated soils (13/03/2020 – Report ref C17713S53353)	Yes
Root Analysis	Yes	(03/02/2020 – Report ref R34812)	
Arboriculture Assessment:	Yes	Recommendations: Tree removal (14/01//2020 – Report ref SA245627)	
Heave Risk After Tree Removal:	No	Cyril Nazareth B.Eng, C.Eng, M.I.C.E. M.B.A. - Chartered Engineer	
Building Monitoring:	Yes	Crack width: Yes Report ref: M15099	Level / distortion: Yes. Report ref: M15099
Monitoring To Date Confirms:	The influence of vegetation as we see clear seasonal fluctuations		
Comments:	There area of damage is to the front. There is cracking both externally and internally in the area concerned. The site investigation has confirmed that the cause of the damage is due to subsidence from clay shrinkage/tree root action. The house foundations are at least 650mm deep and appear to bear on a stiff brown clay soil with adequate bearing capacity. Beneath the foundations there are Copper Beech roots to a depth of 1.7m. The arborist has confirmed that the Copper Beech tree is the cause of the damage and has recommended that it is removed.		
Repair Scope And Value			
If Prompt Vegetation Removal:	Superstructure repairs	Potential Cost	£ 8,000
If No Vegetation Is Removed:	Foundation stabilisation (Piling to rear right hand corner of extension)	Potential Additional Cost	£ 50,000

Comments:	
CONCLUSIONS AND RECOMMENDATIONS	
Following my review of the damage and subsequent geotechnical, arboriculture investigation reports and accurate level monitoring readings I confirm that the cause of the movement to this property is directly related to the seasonal water demands of the nearby Copper Beech tree causing clay shrinkage subsidence.	
Report prepared by:	Cyril Nazareth B.Eng, C.Eng, M.I.C.E. M.B.A. - Chartered Engineer