

1. "Our Utmost, For His Highest,  
And For The Uplift Of Others."

3-5-2016.

Mr Mike Moore,

The Independent Planning Inspector  
Public Examination Hearing  
Holiday Inn Derby Riverlights,  
Mowledge,  
Derby, DE1 2AY.

Dear Mike,

Hearty greetings to you.

Further to my previous submissions I herewith state my points of further concern on the Building of homes in our residential area, i.e Boulton Moor

I understand that the flood plain concerned is "Flood Zone 2" rated, which is a risk that is ten times greater than a Flood Zone 1 rating!

Our own home is not in a registered flood plane yet we have had the water 13 inches only, below our lawn, in 2009, 2 feet 1½ inches, in 2012 on the 25<sup>th</sup> November.

# Hulstone Brook - Actual Route — GRADED Now As "RIVER LINE"

Do Compare With Green Screen Shot

X: 441,289; Y: 331,902 at scale 1:40,000

Other maps ● Data search ● Text only version ●

## Map legend

Click on the map to see what Flood Zone (National Planning Policy) Guidance definitions the proposed development is in.

Flood Map for Planning (Rivers and Sea)

Flood Zone 2

Flood Zone 1

Flood defences

(Not all may be shown\*)

Areas benefiting from flood defences

(Not all may be shown\*)

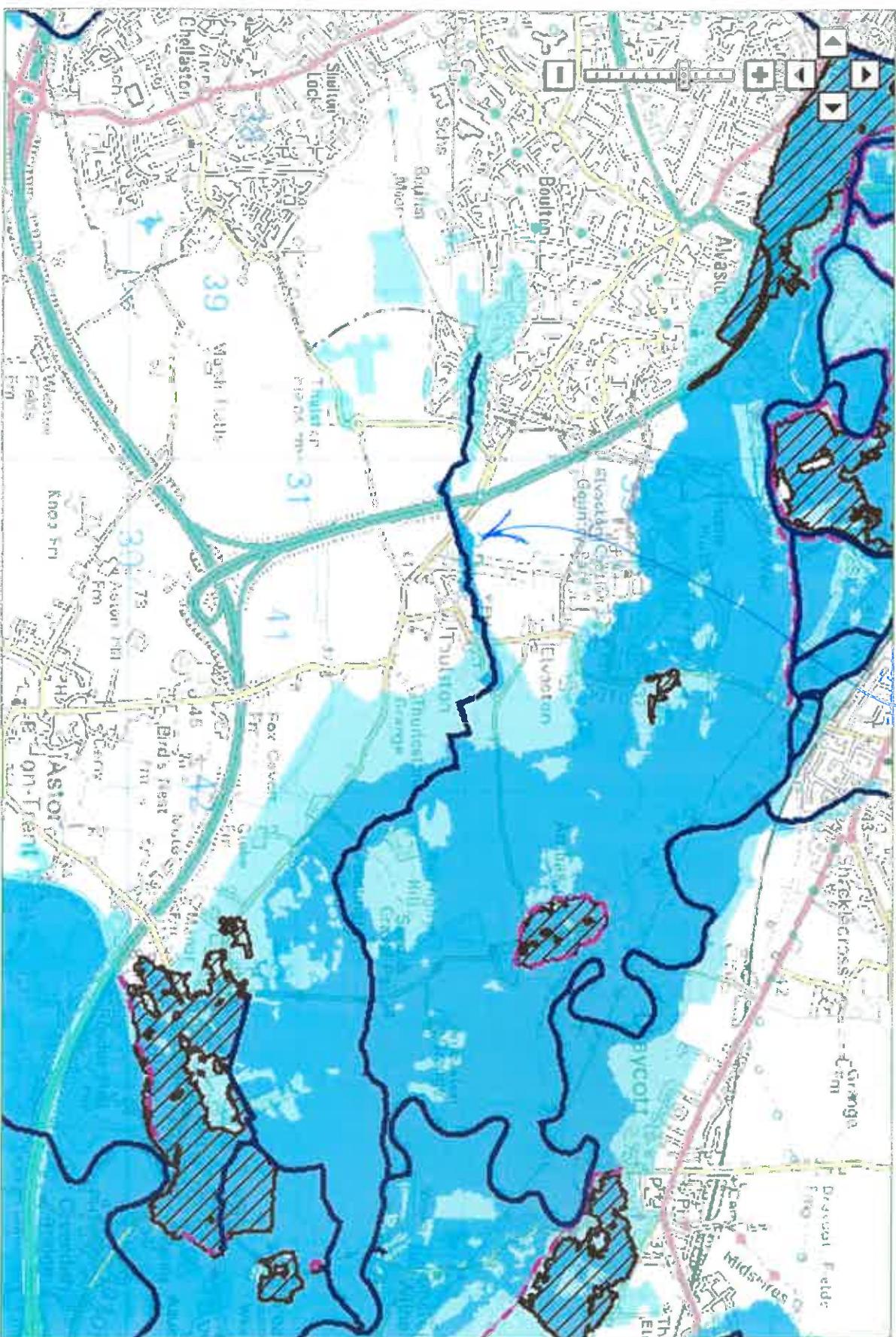
Main River Line

Main River Line

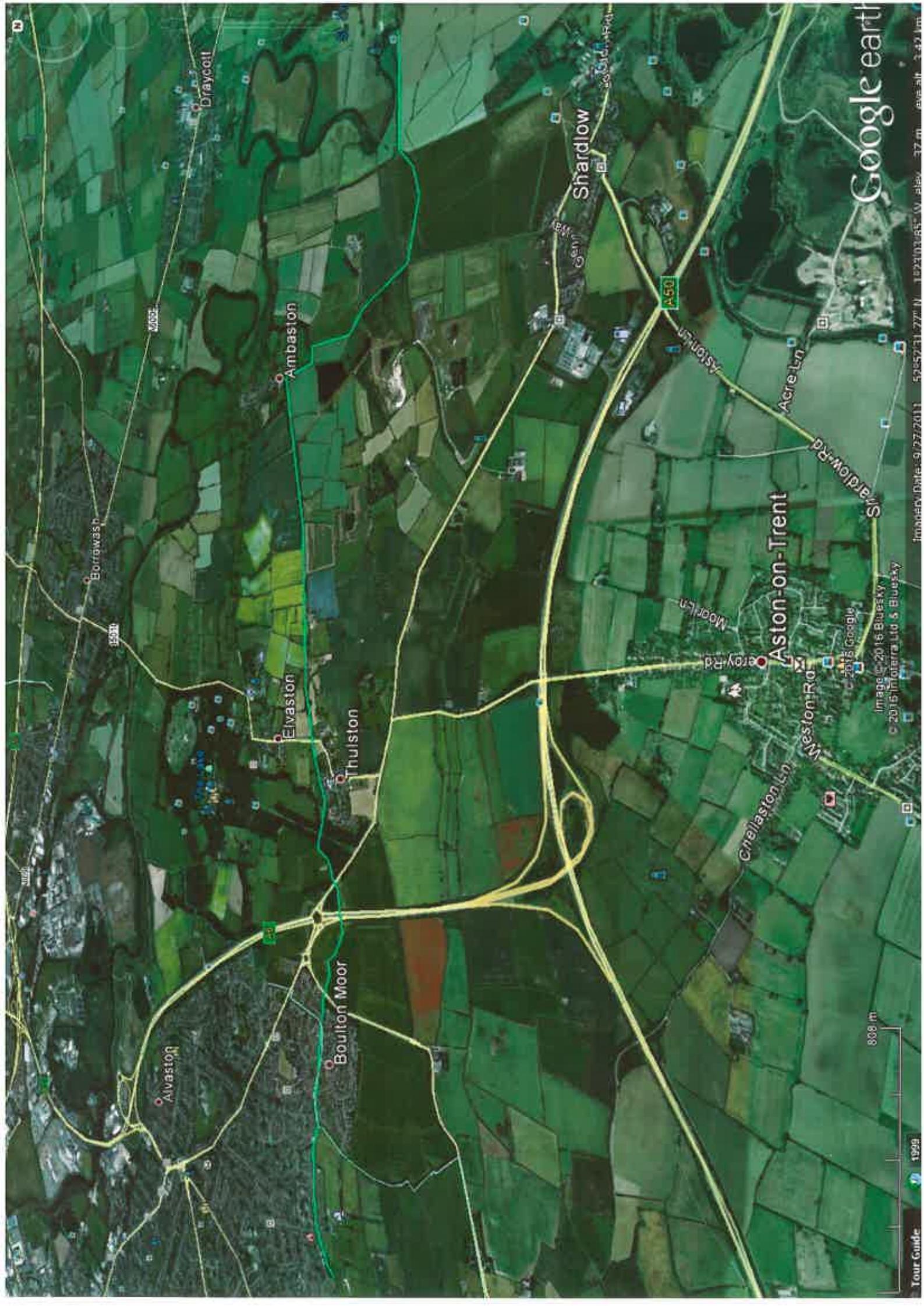
Other national environmental organisations

Natural Resources Wales  
Area of responsibility

Scottish Environment Protection Agency Area of responsibility



Google earth



2.  
Yet the Council's Core Strategy is to build homes  
near us in a FLOOD ZONE 2!

When they have NOT managed to stop the water  
coming to our home which has been here since  
1966, that is not a confidence-giving track-  
record for letting Derby Council authorise the  
building of homes in a "flood zone 2", nearby.

I understand that "Flood Zone 2" rating is classed  
as a Medium Probability of 1 in 100 years or 1 in  
1000 years, but the Environment Agency lady said "the dice is  
rethrown each year! Ref BBC Radio 4. Hence consecutive flood years!"

The Derby Core Strategy speaks of mitigating  
the risk of flooding, but the current increase of  
"hard cover" planned above this site on the long  
25 feet high SLOPE toward this Flood Plain, as well  
as the new Fellowlands Way, hard cover, being  
built now at the ridge top, is greatly threatening  
us with serious increased risk, with our current  
water table already being very high.

Today it is, 4 feet  $8\frac{1}{4}$  inches, below our lawn,  
but it has moved up substantially as already stated,  
from time to time.

Cuttle / Thurlston Brook. - Fall Rate to River Derwent.

It has come to my mind to assess our drainage prospects, from where we are, to the River Derwent.

Following the enclosed "bright green line" on the enclosed "Screen Shot", we have an approximate route of the brook. (There is a small error deviation.)

From Epworth Drive to the River Derwent joining point, we have approximately 6.77 Kilometres.

The Cuttle / Thurlston Brook meets The River Derwent just South of Wilne Weir.

At Epworth Drive end of the Brook, the Land Elevation is 41 metres above mean sea level.

At the River Derwent end of the brook, the land elevation is 34 metres above mean sea level.

The Total Elevation Drop from Epworth Drive Brook section, to the River Derwent end of the Brook, is a Total Elevation Drop of 7 metres.

$$\therefore \text{The Brook average FALL RATE} = \frac{7}{6.77 \times 1000}$$

$$\text{i.e } 0.1 \text{ per } 100. \quad \therefore \quad = 0.00103397.$$

4.

It is very striking in deed to me, that in ground works, the setting for smooth bore, drainage pipes is a Fall Rate of 1 in 60.

But our own drainage brook for this whole area only has a Fall of 1 in a 1000!

If we equate this to a unit of length of 60 again then we have

$$\frac{x \text{ units Fall}}{60 \text{ units length}} = 0.001033973412 \text{ from overleaf}$$

$$\therefore x \text{ FallRate} = 0.001033973412 \times 60$$

$$\therefore x \text{ FallRate} = 0.062038 \text{ in } 60$$

∴ If one desired the Brooks Fall Rate to equal the Drainage Pipe Fall Rate, then the Brooks Fall Rate would need to be 16.119 times greater!

This dramatically demonstrates that the corresponding natural flow rate of drainage water from Boulton Moor will be exceedingly slow. Hence it did Not cope sufficiently in 1976, 2009, and in 2013! even with Derby City Council's Maintenance of it!!! That also lacks good track Record!!!

5.

## Can we produce a Higher Fall Rate Calculation?

If we were to assume a Flood Plain spread just beyond Thulston, at Ambaston, so that our Fall Rate for Cuttle/Thulston Brook, calculation would be over the shorter distance, to the edge of the Flood Plain there, then we have a Brook length from Epworth Drive to the Ambaston Flood Plain of approximately 4,368.3 metres.

The Epworth Drive end Land Elevation is 41 metres above mean sea level.

The Ambaston Land Elevation is 34 metres above mean sea level.

This is a Total Fall of 7 metres.

$$\therefore \text{The shorter Fall Rate} = \frac{7}{4368.3} = 0.001602454$$

$$\frac{x}{60} = \frac{7}{4368.30} \quad \therefore x = 60 \times 0.001602454$$

$$\therefore \underline{\text{Shorter Fall Rate}} \ x = 0.096147242634 \text{ in } 60.$$

$\therefore$  To reach the Drainage Pipe Fall Rate of 1 in 60 then this shorter Cuttle/Thulston Brook Fall Rate would need to be  $\frac{1}{x} = 10.4$  times greater.

However, Planning should carry our water all the way to the River Derwent, and NOT flood other owners' land.

6.

## Increase in Hard Cover of Land.

What will be the total percentage increase of hard cover area of the new housing schemes, over the present hard cover area draining into Cettle/ Thurlston Brook?

The new Hard Cover Area is so large, comprising:

- a.) Additional Chellaston Ridge Estate at Fellowlands Way.
  - Plus b.) Derby City Boulton Moor Building Proposals.
  - Plus c.) South Derbyshire Present Building in progress on the West side of Snelmoor Lane.
  - Plus d.) South Derbyshire Intended Building on East side of Snelmoor Lane.
- 

This total increase being so large will create substantial new faster flow Run off water to pass through very slight only FALL RATE land, a long way toward the River Derwent, while we already have FLOOD PLAINS here!

The Derby Council is making US and the Flood Zone 2 Plain area houses, to be sandwiched by water

from above us, up to 25 feet up the Ridge, and water trying to move across an extremely low Fall Rate land in Cuttle/Irwellton Brook to get away from us.

With all the incidents of flood plain crises broadcast so frequently in the last three or so years in our Country, please do NOT permit new homes to be built on our local flood plains, down in this River Basin, here.

### Disciplined Brook Maintenance

With railways, the tracks and signalling systems HAVE TO BE very regularly tested and maintained, to prevent DAMAGE to peoples' lives.

This discipline is equally important to prevent flooding of our homes, but our Derby City Council seems to have failed to sufficiently protect our homes in 1976 flooding, in 2009-4 local homes, and again in 2013 with exceedingly high water table - 2 feet 1½ inches at our homes' foundations, migrating ground fines.

8.

Hence, what RELIABLE DISCIPLINE is the Government or other Authority putting in place, to ensure a SAFE-GUARD INTERLOCK, in BROOK and drainage MAINTENANCE, before any of these new projects, which are creating much GREATER Flood Risk, are considered, or approved please?

How will this be MORE RELIABLE than the past maintenance track record please?

Is there a Sound Safety against FLOODING, INTERLOCK, being put in place, or Not please?

How will this SAFETY INTERLOCK be reliably FUNDED?

Will this Funding be POLICED by a Government Body, so that other more topical interests do Not divert the Maintenance of the Brook, money?

Will the existing pipes in Elvaston Castle Estate have sufficient bore for taking away increased storm Run off volumes?

9.

Thank You, Mike, for receiving my submissions as a worried Resident.

I am deeply grateful to our fellow neighbours who have greatly helped me to compile these submissions. They are Precious Friends in deed.

You are welcome to visit us for a coffee at our above address.

A very Special THANK You to Cornel Edwards.

Yours Most Gratefully,

P.S. Can we please have a direct contact

Office address for Mike Moore?

This for future contact in the years of progress.

