



New Pavement Meridian Plaque

A new plaque has been installed in Highams Park celebrating the unusual position of our town centre in global mapping. The plaque marks the International Reference Meridian (IRM), the place where mobile phones and other sat nav devices will show zero longitude. This is not the Greenwich Meridian. We are not aware of any other plaque (in the world) marking the IRM so Highams Park may be the first.

The pictures below show:

1. The Meridian Plaque (designed by residents of Highams Park).
2. Where the Greenwich and IRM Meridian lines run through Highams Park; the Greenwich Meridian is the line on the left and the IRM is the line on the right.

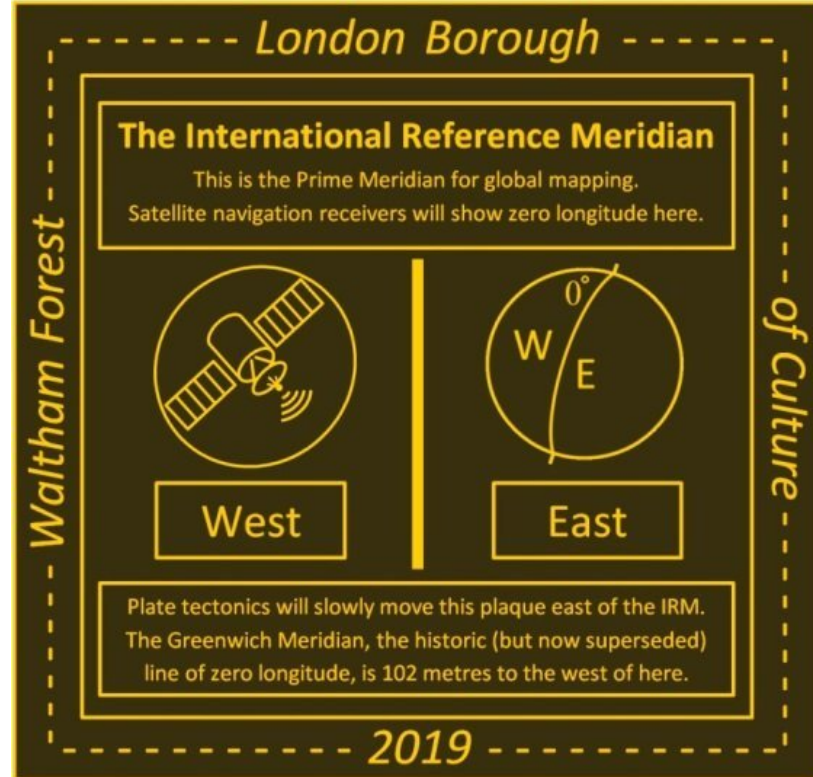


Fig 1. The IRM Plaque



Fig 2. Where The Meridian Lines Pass through Highams Park

The unveiling of the plaque by the Mayor Chris Robbins on Tuesday 29th October.



The text in the two articles below explain in more about the plaque and the unusual position of Highams Park.

Article 1 – Highams Park and the Meridians
“East meets west in the centre of Highams Park”

The Greenwich Meridian and the International Reference Meridian (IRM) both pass through the centre of Highams Park. The map below shows the level crossing at the centre with the two lines neatly framing it, one on either side of the level crossing. The Greenwich Meridian was superseded in 1984 as the globally agreed line of zero Longitude and the new standard is known as The International Reference Meridian¹ (or “IRM”). Sat nav devices (including mobile phones) will show zero longitude on the IRM.

These two lines pass through only 8 countries of the world (including the UK) and framing a town centre as in Highams Park is very unusual, hence our desire to mark them.

The Greenwich Meridian was marked in the centre of Highams Park in 1963; the stone and brass marker is still there near the corner of Winchester Road and Selwyn Avenue. The new IRM plaque was installed in the week commencing 28th October 2019 in the pavement near the corner of Hale End Road and Beech Hall Road. We hope our new IRM marker will have a similar long life and interest residents for many years to come.

After the IRM leaves the new plaque travelling north, it passes through the middle of the station garden in Highams Park Station. When people sit on the bench in the garden and then get up to board a train they unknowingly move across the IRM from the eastern hemisphere to the western hemisphere.

Article 2 – The new IRM Plaque in Highams Park

“East meets west in the centre of Highams Park”

Many people do not know that the Greenwich Meridian was superseded in 1984 as the globally agreed line of zero Longitude. The new standard is known as The International Reference Meridian¹ (or “IRM”) and the line runs through the middle of Highams Park, some 102 metres to the east of the Greenwich Meridian and parallel to it.

Despite its importance, and for reasons that are not totally clear, there is no tradition of marking the IRM. A group of local residents from the Highams Park Planning Group and the Highams Park Forum decided that Highams Park should mark it (and possibly be the first to do so; anywhere). They have designed an elegant pavement plaque which was installed in the week commencing 28th October 2019 in the pavement near the corner of Hale End Road and Beech Hall Road.

Although the plaque looks like a traditional marker and indeed can be used as such (stand with one leg either side?), its true purpose is to act as “an invitation to the curious”. It is intended to encourage people to explore for themselves by using their smartphone or other satellite navigation receiver. They can display Longitude and Latitude on their screen and see where the zero line goes.

Exploring the subject on the internet reveals links to History, Geography, Geology, Science, Astronomy, Space and even old TV programmes (check out Only Fools and Horses: "Time on our hands").

An unusual feature of the IRM line is that it effectively floats in space just above the surface of the earth (rather than being attached to it). It is fixed by reference to space, and the earth's continents slowly move underneath it (plate tectonics).

Over time, the UK (with the plaque attached to it) will move relative to the IRM. This movement is tiny but after many years the movement will be detectable and visitors will be able to see what movement has occurred since the date on the plaque (2019). It is estimated that the IRM will appear to move to the west of the plaque at a rate of around 18mm per year (whereas in reality the UK itself will have moved in the opposite direction).

The project was organised by residents from The Highams Park Planning Group and Highams Park Forum. It was funded by a grant from Hale End & Highams Park ward as part of Waltham Forest London Borough of Culture 2019.

1. There are a number of alternative names for the IRM depending on context. You may see references to: IERS Reference Meridian, WGS84, The International Terrestrial Reference System (ITRS), and its realization, the International Terrestrial Reference Frame (ITRF).