

From: [REDACTED]
To: [Local Plan](#)
Cc: [REDACTED]
Subject: South Warrington Development proposals up to 2037
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Dear local planners. I do not consider the Local Plan to be sound, justified or deliverable within the timescale, cost estimate or civil engineering requirements for the following reasons.

Firstly there does not appear to be any appreciation of the infrastructure demands relating to access to the Grappenhall Garden Suburb nor to the significant amount of amenities required by 5000 dwellings,(in the first instance) and the traffic generation.

Access will be needed to these developments south of the Manchester Ship Canal (MSC). The MSC has a number of Victorian swing bridges which are in a very poor state of preservation, as reported in the local paper. Also these swing bridges are over 120years old and as they were built at about the same time any fault on one bridge could, by common mode, occur on any other bridge. What reliability and repair strategy (spare parts readily available) has Peel Holdings in hand and published, to reassure the public that access across the MSC can be delivered to a high degree of probability through proper maintenance of the reliability of these ageing bridges?

Peel holdings have future plans for the use of the MSC by way of increased shipping to and from Manchester. This increase will have a number of effects on the access to Grappenhall Garden Suburb. More MSC traffic will mean traffic delays as swing bridges are more frequently closed and this increase in usage will accelerate wear and tear on the swing bridges, hence the need for a reliability strategy.y to be in place.p

There is another canal that significantly affects traffic access moving north /south to the Grappenhall Garden Suburb which seems rarely to be mentioned, namely The Bridgewater Canal (TBC). Consider the current crossing points from Stockton Heath (A49) eastwards to the A50. At Stockton Heath the A49 (London road) offers a main road crossing of TBC. To the east the A50 also offers a road crossing. Between these two crossing there are three other routes over or under TBC, all of 18th century construction (about 250 years old). These crossings are (1 at Grappenhall village , single carriageway bridge, (2 at Stanny Lunt bridge, single carriageway, traffic lights control, and at Lumb Brook, a single carriageway, traffic lights controlled tunnel under TBC. Due to extreme age, obsolete design and severe approach difficulties these crossings cannot serve the Grappenhall Garden Suburb. Consider, for a moment the civil engineering problem of trying to drive a second tunnel under TBC at Lumb Brook. The tunnelling runs the risk of destabilising the overburden of soil making up the embankment and thereby damaging the clay puddled seal of the canal releasing the canal's contents onto the land below. The canal is too fragile to tunnel under. The conclusion is that it is unfeasible to try and create modern crossings of TBC. Also the topography, locally, is not amenable to modern highway bridges, and alternative routes must be found. This could be achieved by building lateral, east-west and west-east feeder roads from the A49 and A50 respectively into the Grappenhall Garden Suburb. Has the non feasibility of new crossings over TBC and the need for feeder roads been built into the Development Proposal?? The Grappenhall Garden Suburb will have 5000 dwellings planned leading to 10,000 extra vehicles being used in the area, as modern households have at least two cars and many have more. This increase will lead to a greatly increased emission of combustion gases to the local atmosphere. What studies have been completed on the effects of these extra emissions on local air quality and its impact on health??

The significant increase in population will need amenities such as schools, doctors surgeries, convenience shops, recreation areas and bus routes. Have these needs been built into the Development Proposal as these amenities will require land and space. The Grappenhall Garden Suburb is not going to be just a dormitory area alone, surely, but a neighbourhood to enhance the quality of life for the inhabitants?

For the reasons stated above I find the Development Proposals to be unsound an in need of a significant amount of rethinking. Yours sincerely Raymond F Cox, BSc(Eng) FIMechE, FRSoc, Chartered Engineer. Telephone [REDACTED]