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TRANSPORT RISK ASSESSMENT

For

**MORLEY DRIVE
PRIVATE & CONFIDENTIAL**

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1. INTRODUCTION & SCENE SETTING

- 1.1 Praesium Limited services were requested by residents of Morley Drive in July 2020 to review traffic movements on Morley Drive and more specifically access to the former Morley Importers Limited which at the time operated on a site at the end of Morley Drive. Initial instructions were to review the amount and type of traffic interactions using Morley Drive and Bridge 74 (Locketts Bridge) over the Macclesfield Canal, which is a Grade 2 listed asset under the control of the Canal and Rivers Trust.
- 1.2 Morley Drive is an unadopted road situated in the village of Hightown, Congleton off Biddulph Road. On entering Morley Drive there are a number of residential properties, with front and wrap round gardens being walled, indeed one of the walls is over 1.8 metres high. Morley Drive has no pedestrian footpaths on either side, but is however used as an access and egress point to Macclesfield Canal via the staired access on Bridge 74. Morley Drive is best described a single track road with vehicles approaching from opposite directions unable to pass.
- 1.3 Morley Drive is approximately 105 metres in length, this is from Biddulph Road entrance to the boundary of Morley's. Bridge 74 is approximately 24 metres in length. The width of Morley Drive is variable depending on which section a measurement is taken, the actual opening on Biddulph Road is approximately 15 metres, this however quickly restricts to approximately 5 metres. The centre section of Bridge 74 measures approximately 3.7 metres wide at the narrowest point. (Note measurements were taken from Google Earth)
- 1.4 As you enter Morley Drive and travel the 70 metres to the bridge mouth the bridge turns left with an approximate angle of 40 degrees.
- 1.5 With the overview above it is clear to see even without the observations contained within section 2 of this report that Morley Drive is not suitable for heavy goods vehicle use. However, at the time we were appointed it was to review what reasonably practicable measures Morley's should incorporate to ensure safety of pedestrians, the Grade 2 listed Bridge 74 and other road users. As the access was difficult to manoeuvre HGV down to the bridge because of Morley Drives width after entrance to Morley Drive and then the turn of 40 degrees onto a bridge (that was rapidly

deteriorating), before navigating over where the width of the bridge left little room on either side of a modern day HGV.

- 1.6 A modern day HGV with 6 axles can carry approximately 44 tonnes, is 16.5 metres and 2.55 metres wide. It should be noted from these dimensions and correspondence we have seen dated 22nd November 1977 from the British Waterways Board stating clearly that *“the Board’s liability, in this case, is to provide and maintain a 3 ton capacity bridge and whilst masonry and brick arch type will take loads in excess of 3 tons, eventually the bridge will deteriorate if subjected to greater loads”*. Clearly the amount of use and excessive loads placed on the bridge and impact damage led to the Canal and Rivers Trust having to undertake substantial renovation works in 2023. It is clear from the measurements supplied that Morley Drive is not suitable for HGV use, it is also axiomatic that we will discuss vehicle use of any type given the width of the road, the width of the bridge and lack of pedestrian footpaths should not be used by any vehicles save for those vehicles needing to access the properties on Morley Drive.
- 1.7 As time has moved on Morley’s Importers and newest owners have now vacated the site and the vacated site is proposed (subject to planning approval) for forty new dwellings, with Morley Drive proposed as a staff entrance via vehicle.

2. OBSERVATIONS AND SUMMARY OF FINDINGS

- 2.1 We visited Morley Drive on numerous occasions since our first visit on 9th July 2020 and on the following dates, 19th January 2021, 28th October 2021, 9th November 2021, 19th May 2022, 16th September 2022 and 22nd November 2023. During our visits we witnessed multiple vehicle interactions with HGV, cars and pedestrians. This section of the report captures some of those observations. For brevity we will not include commentary on all of the correspondence we have seen or observations made, but rather stick to salient points, naturally there is a lot of information available from our reviews over a sustained period of time. For clarity we are not structural or consulting engineers and commentary on the bridge and road condition is from a lay persons perspective, this report relates to the safety of persons using Morley Drive and Macclesfield Canal footpath and road users using Morley Drive and Bridge 74.
- 2.2 Bridge 74 and Morley Drive is the only access and egress point to Morley's Importers when it was trading, although another entrance could have been formed from the residential development that is accessed over Bridge 73, Henshall Hall Drive and onto Worsley Drive. It should be noted that during the development of the Henshall Hall project Bridge 73 was substantially upgraded for increased traffic volumes. As we have already discussed the weight limit on Bridge 74 and width are prohibitive for HGV use and also difficult for cars and vehicles passing if coming in the opposite direction is impossible. Pedestrians have to walk in Morley Drive as there are no footpaths for them to use.
- 2.3 During my first review in July 2020, it was noted and of much concern that the first course of stones and coping stones to the bridge top arch were displaced, and if impacted in a severe way could be displaced to the canal footpath below. This was a concern over my many visits. On multiple occasions, we noted impact damage to the bridge and whilst the bridge was not measured to give scientific analysis of the movement over the course of time you could clearly see deterioration in the bridge's condition and widening of gaps on the bridge arch stones. Indeed, during my last visit on 22nd November 2023, you could see the extent of the renovation works undertaken by the Canal and Rivers Trust to repair the bridge.

2.4 It could easily be seen that there was a depression and fall away over the bridge surface and the top wearing course of the road surface had broken up and there was several notable pot holes, these areas frequently held water and during winter months would ice over creating a skid risk for vehicles and HGV. The road surface deterioration is no doubt from HGV stopping to manoeuvre left on access to Morley's and transversely exiting Morley's and having to turn right to align their vehicles to the bridge because of the tight width. It is also noted that Armco barrier on exit from Morley's was constantly damaged as HGV struggled to make the turn onto the bridge.

2.5 The hazards from vehicle use on Morley Drive from the observations made over the period of time I have visited Morley Drive, are as follows:

- a) Vehicles speeding, no speed controls other than a 5mph sign on the tarmac on Morley Drive
- b) Vehicles reversing including HGV onto Biddulph Road when Morley Drive was already in use
- c) No vehicle / pedestrian segregation – high risk of a pedestrian being seriously injured especially in periods where daylight is restricted such as winter months, we also observed pedestrians using the Morley Drive access to walk to Morley's Importers
- d) Deterioration of the bridge leading to collapse or partial collapse onto the canal walkway below
- e) Vehicles using the bridge and potentially collapse ending up in the canal
- f) Vehicles crashing over the side of the drive walls, note the bridge walls are not very high
- g) Icy weather and standing water increasing the likelihood of an accident

A hazard is something with the potential to cause harm, when analysing risk the severity and likelihood of the hazard being realized needs to be calculated. I am afraid that all vehicle interactions (because of the bridge and weight/width limitations) and pedestrian interactions will be high risk and therefore danger to life.

2.6 We observed on multiple occasions vehicles speeding along Morley Drive and also seen CCTV footage of the same, interactions between HGV and cars, where HGV were forced to reverse (without a banksman) on to Biddulph Road, a main 'A' road in Congleton and interactions between HGV and pedestrians and cars and pedestrians.

On my first visit to Morley Drive we observed a HGV accessing Morley's Importers, you can clearly see that there is little room on either side of the HGV, leaving little room for error and also nowhere for pedestrians to safely escape to if a HGV was to access the bridge whilst in use by pedestrians. We also believe that the turn towards the bridge is a blind turn when approaching the former Morley's site.

3. RECOMMENDATIONS

- 3.1 Ideally the use of Morley Drive to access (over Bridge 74) the new development should not be used for HGV or vehicular access. Vehicle use on Morley Drive should be restricted to accessing the limited number of existing dwellings. This is largely due to the width of the bridge and prior weight restrictions.
- 3.2 Item 3.1 also extends to the actual construction phase of the development.
- 3.3 By restricting vehicle use on Bridge 74, this will reduce the likelihood of an accident occurring between vehicles and pedestrians and also impact damage to the bridge which could displace heavy stones from the bridge arch onto the canal footpath below. Both scenarios have the potential to result in a fatal event.
- 3.4 As pedestrians use Morley Drive and in particular Bridge 74, signage indicating the presence of pedestrians and that pedestrians have priority should be considered on Morley Drive.