

Time	Background	Construction Trips	Impact
<b>Via N20 Commons Road</b>			
Daily	5,932	57	+0.9%
Peak Hour	1,661	12	+0.7%
<b>Via Redforge Road</b>			
Daily	1,734	57	+3.2%
Peak Hour	477	12	+2.5%

The impact on the local road network of construction traffic associated with the construction activities in this area is considered **temporary imperceptible**.

## Zone H – Orchard Court



**Figure 8: Works Areas within Zone H**

The works in this zone cover Areas 6A, 6B, 6C and 6D.

The works in Area 6A comprise construction of a cast in-situ reinforced concrete culvert, pre-cast concrete culvert sections and a pumping station, and associated works to the west of existing residential properties along the Old Commons Road, to the south of the N20 Blackpool Bypass. Area 6A is expected to be undertaken after Area 6B and 6C, and also independently of the works on Fitz' Boreen.

The works in Area 6B involve the removal of an existing access bridge and construction of a cast in-situ reinforced concrete culvert and pumping station in the lands at the junction of the Old Commons Road and Orchard Court. Area 6B is expected to take place prior to Area 6A, but after Area 6C.

The works in Area 6C include the construction of a cast in-situ reinforced concrete culvert, precast concrete culvert sections and a pumping station in lands to the southern end of Orchard Court. These works are envisaged to take place prior to Area 6B and Area 6A, and also independently of any works in Area 4.

The works in Area 6D comprise service and drainage diversions and reinstatement and resurfacing works internally within Orchard Court, and are envisaged to be undertaken prior to Areas 6A, 6B and 6C.

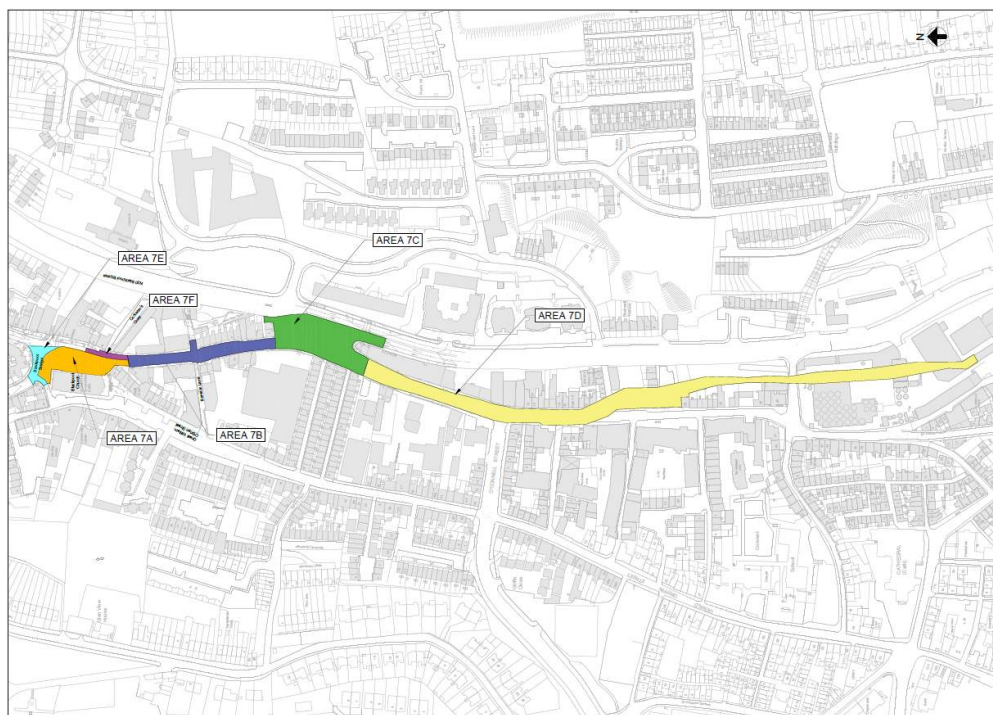
The construction activities in this zone are expected to generate a total of 806 two-way HGV trips and 4,800 two-way personnel trips over a period of 48 weeks. The average daily construction volumes therefore correspond to a maximum of 27 two-way trips, which in turn, equates to a peak hourly volume of 6 two-way trips (note that the construction workers will only arrive, and not depart in the AM Peak hour and will only depart, and not arrive during the PM Peak hour).

The construction access will be located on the Old Commons Road and this is where the impact will be mainly notable. Based on the flows from the SWRM, the impact of construction trips generated by works in this zone will equate to 2.1% daily and 1.6% during the hourly peak.

Time	Background	Construction Trips	Impact
Daily	1,299	27	+2.1%
Peak Hour	379	6	+1.6%

The impact on the local road network of construction traffic associated with the construction activities in this area is considered **temporary imperceptible**.

## Zone I – Blackpool Church



**Figure 9: Works Areas within Zone I**

The works in this zone cover Areas 7A, 7E and 7F.

The works in Area 7A comprise the construction of cast in-situ reinforced concrete culvert sections, precast concrete culvert sections and a pumping station in lands adjacent to Blackpool Church, to the west of Thomas Davis Street. Works in Area 7A are to be undertaken separately to Area 4A, 4B, 6B, 6C, 7B and 7C.

The works in Area 7E involve the repair and repointing of the existing culvert to the north of Blackpool Church, on the Commons Road approach to Thomas Davis Street.

The works in Area 7F involve the construction of cast in-situ reinforced concrete culvert sections, precast concrete culvert sections and other associated works, on the eastern side of Watercourse Road at the junction with Corkeran's Quay.

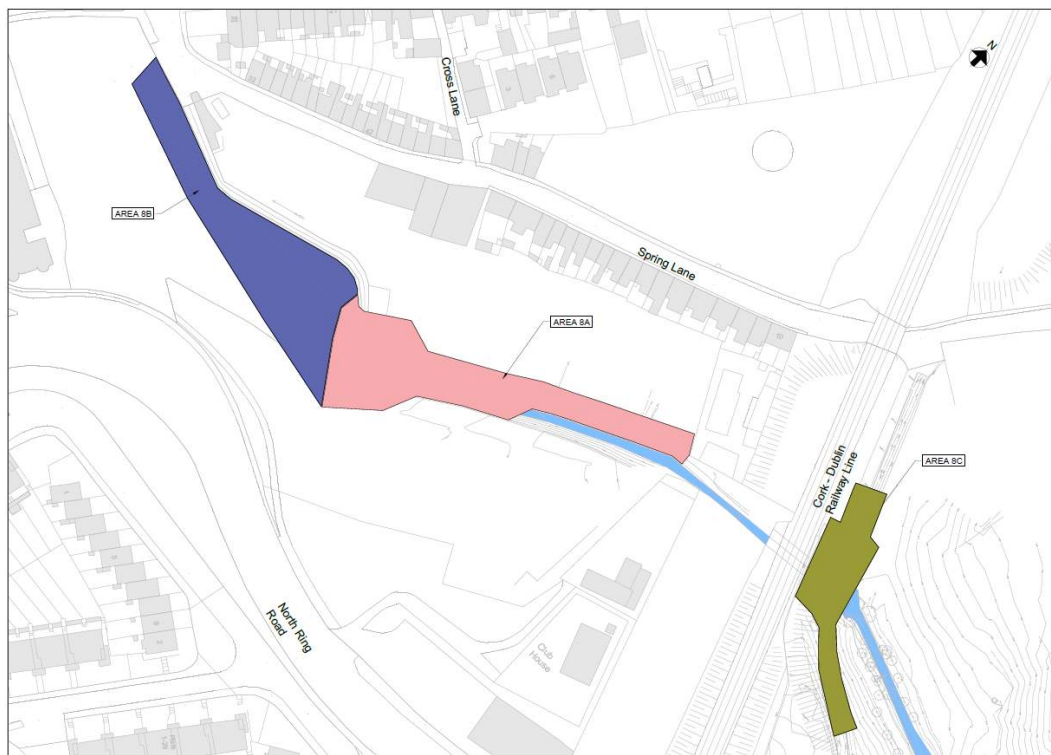
The construction activities in this zone are expected to generate a total of 175 two-way HGV trips and 1,500 two-way personnel trips over a period of 15 weeks. The average daily construction volumes therefore correspond to a maximum of 25 two-way trips, which in turn, equates to a peak hourly volume of 6 two-way trips (note that the construction workers will only arrive, and not depart in the AM Peak hour and will only depart, and not arrive during the PM Peak hour).

The construction access will be located on the N20 Blackpool Bypass or via Watercourse Road/Thomas Davis Street and this is where the impact will be mainly notable. Based on the flows from the SWRM, the impact of construction trips generated by works in this zone will equate to a maximum of 1% daily and under 1% during the hourly peak.

Time	Background	Construction Trips	Impact
<b>Via N20 Blackpool Bypass</b>			
Daily	5,932	25	+0.4%
Peak Hour	1,661	6	+0.3%
<b>Via Watercourse Road/Thomas Davis Street</b>			
Daily	2,497	25	+1.0%
Peak Hour	861	6	+0.6%

The impact on the local road network of construction traffic associated with the construction activities in this area is considered **temporary imperceptible**.

## Zone J – Spring Lane



**Figure 10: Works Areas within Zone J**

The works in this zone cover Areas 8A, 8B and 8C.

The works in Area 8A, 8B and 8C comprise reinforced concrete flood defence walls, a rough screen, a maintenance access platform and flow control structure, construction of an access and working area and construction of palisade fencing and a gate, along Spring Lane, to the east and west of the Cork-Dublin railway line.

The construction activities in this zone are expected to generate a total of 22 two-way HGV trips and 1,400 two-way personnel trips over a period of 14 weeks. The average daily construction volumes therefore correspond to a maximum of 21 two-way trips, which in turn, equates to a peak hourly volume of 5 two-way trips (note that the construction workers will only arrive, and not depart in the AM Peak hour and will only depart, and not arrive during the PM Peak hour).

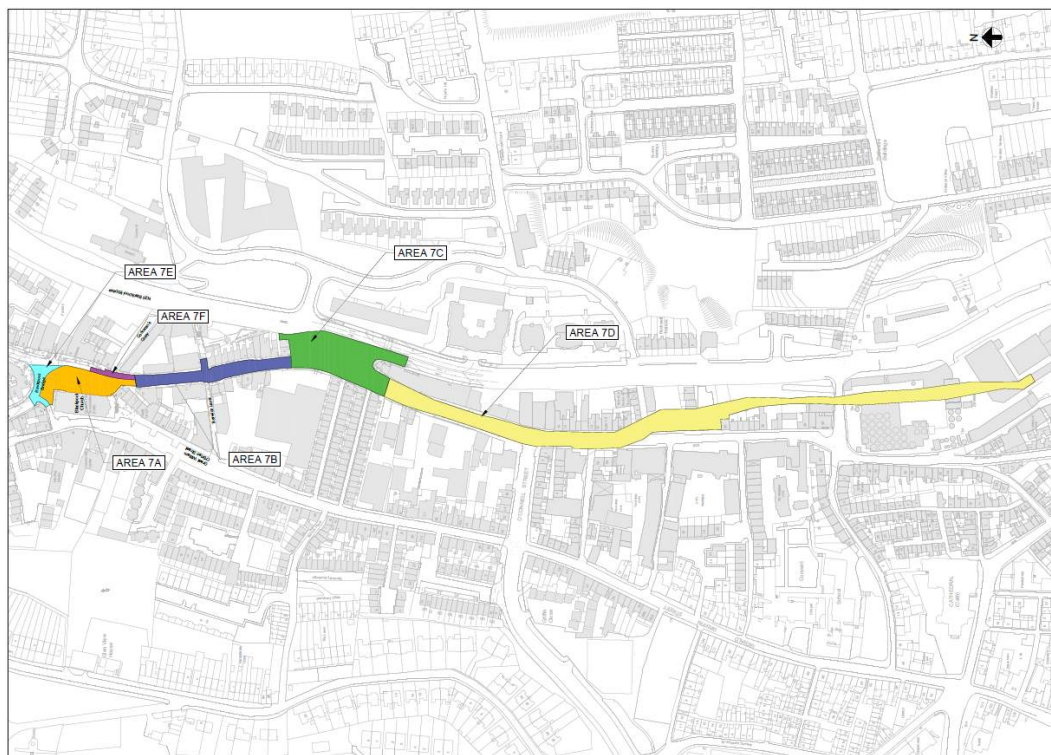
The construction access to Spring Lane will be via the junction with Dublin Street and this is where the impact will be mainly notable. Based on the flows from the SWRM, the impact of construction trips generated by works in this zone will equate to <1% daily and <1% during the hourly peak.

Time	Background	Construction Trips	Impact
Daily	4,436	21	+0.4%
Peak Hour	1,518	5	+0.3%

The impact on the local road network of construction traffic associated with the construction activities in this area is considered **temporary imperceptible**.



## Zone K – Blackpool Church to Madden’s Junction



**Figure 11: Works Areas within Zone K**

The works in this zone cover Areas 7B and 7C.

The works in Area 7B include the construction of cast in-situ reinforced concrete flap valve chambers along Watercourse Road. These works are to be undertaken separately to Area 4A, 4B, 6B, 6C, 7A and 7C.

The works in Area 7C include the construction of a reinforced concrete bifurcation structure at the junction of Watercourse Road and the N20 (Madden’s Junction). These works are to be undertaken separately to Area 4A, 4B, 6B, 6C, 7A and 7B. It is expected that this Area will be undertaken over a number of discrete phases, with extensive traffic management required.

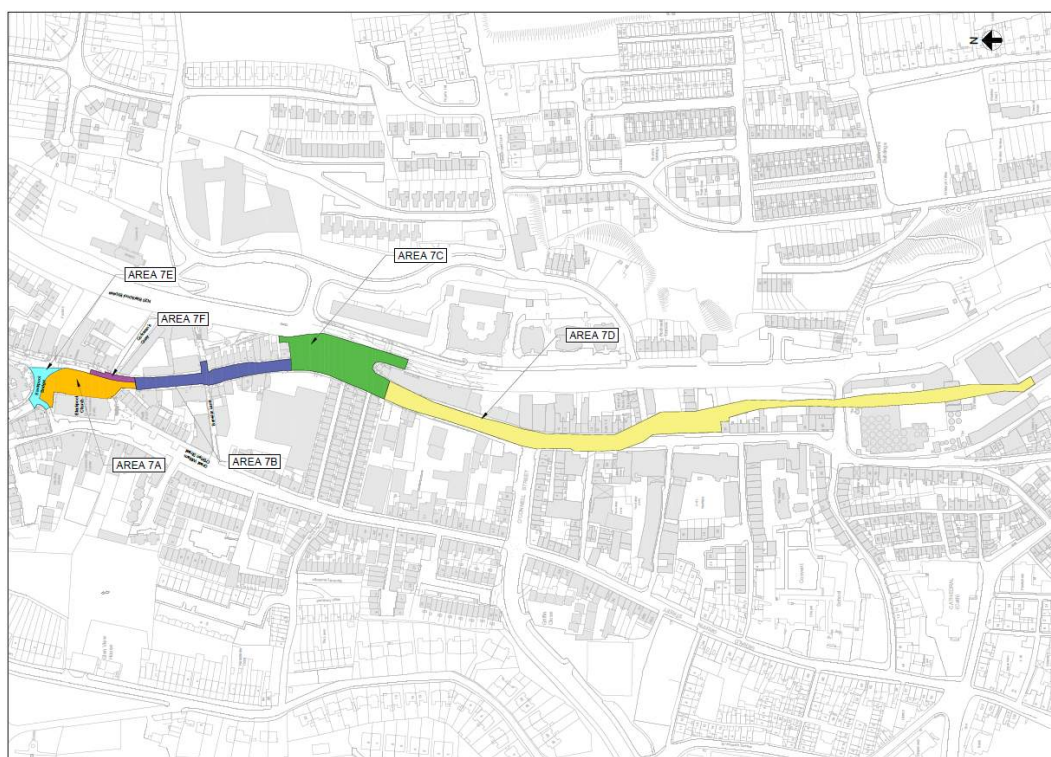
The construction activities in this zone are expected to generate a total of 22 two-way HGV trips and 1,400 two-way personnel trips over a period of 14 weeks. The average daily construction volumes therefore correspond to a maximum of 21 two-way trips, which in turn, equates to a peak hourly volume of 5 two-way trips (note that the construction workers will only arrive, and not depart in the AM Peak hour and will only depart, and not arrive during the PM Peak hour).

The construction access via the junction of the N20 Blackpool Bypass and Watercourse Road (Madden’s Junction) or alternatively via Watercourse Road from the south, and these are where the impacts will be mainly notable. Based on the flows from the SWRM, the impact of construction trips generated by works in this zone will equate to 1% daily and 1% during the hourly peak for both routes.

Time	Background	Construction Trips	Impact
<b>Via N20 Blackpool Bypass</b>			
Daily	5,932	21	+0.3%
Peak Hour	1,661	5	+0.3%
<b>Via Watercourse Road</b>			
Daily	2,497	21	+0.8%
Peak Hour	861	5	+0.5%

The impact on the local road network of construction traffic associated with the construction activities in this area is considered **temporary imperceptible**.

### Zone L – Madden’s Junction to end of Scheme



**Figure 12: Works Areas within Zone L**

The works in this zone cover Areas 7D.

The works in Area 7D include the repair and repointing of the existing culvert network on Watercourse Road, to the south of Madden’s Junction.

The construction activities in this zone are expected to generate a total of 10 two-way HGV trips and 600 two-way personnel trips over a period of 14 weeks. The average daily construction volumes therefore correspond to a maximum of 21 two-way trips, which in turn, equates to a peak hourly volume of 5 two-way trips (note that the construction workers will only arrive, and not depart in the AM Peak hour and will only depart, and not arrive during the PM Peak hour).

The construction access will be via Watercourse Road or the N20, and these are where the impacts will be mainly notable. Based on the flows from the SWRM, the impact of construction trips generated by works in this zone will equate to less than 1% daily and less than 1% during the hourly peak via Watercourse Road or via the N20.

Time	Background	Construction Trips	Impact
<b>Via N20</b>			
Daily	7,286	21	+0.3%
Peak Hour	2,232	5	+0.2%
<b>Via Watercourse Road</b>			
Daily	2,497	21	+0.8%
Peak Hour	861	5	+0.6%

The impact on the local road network of construction traffic associated with the construction activities in this area is considered **temporary imperceptible**.

## Construction Compound

A potential location for the construction compound, in the immediate vicinity of the works, has been considered at Commons Inn.

The proposed Construction compound will be located within the 'Indicative Extent of Works' areas as shown in Drawings **SK-3-01**.

The final selection of the compound will be made by the Contractor appointed to construct the works in consultation with the OPW, Cork City Council, Cork County Council and the project ecologist.

Due to the extent of the overall works areas involved, the Contractor may choose to move the compound(s) during the construction period, in which case the same selection process shall apply.

Trip generation to and from the site compounds will mainly be associated with the occasional delivery of materials and the arrival and departure of staff. With regards to the latter, staff numbers are likely to be in the region of 10 to 15 at a compound, which, at a robust assumption that 80% of them will be by car as driver, is expected to equate to about 12 car trips in and 12 car trips out. If 50% of these trips take place between 8.00 and 9.00 and between 17.00 and 18.00, the peak vehicular trips generated by a site compound will equate to 6 one-way trips.

Staff numbers	Car trips (@ 80%)		Peak Hour Car Trips	
	In	Out	8.00-9.00 (50%)	17.00-18.00 (50%)
15	12	12	6	6

On the basis of the traffic volumes and link capacities on the local road network, the estimated trip generation is very unlikely to be notable during the peak times, regardless of the location of the site compounds.

In recognition of the overall works duration (estimated at 29 months) it is therefore considered that the impact on the local road network of construction traffic associated with the construction staff movements is considered **short-term imperceptible**.

## 1.5 Assessment of Worst-Case Scenario

The above assessment was carried-out for individual work areas. However, the indicative construction programme, described in **Chapter 3, Section 3.3** of the EIAR Addendum, suggests that works at a number of these areas will be concurrent and therefore need to be assessed as such with regards to traffic impact on the local road network.

The construction has been analysed to identify the peaks in terms of the number of construction activities that are likely to be simultaneous over any given month. It is evident that the summer periods will be the busiest as they provide a short window or opportunity to carry out a number of ecology-constrained works.

As outlined above, there are 12 discrete ‘zones’ of works associated with the construction of the scheme. These are detailed in Section 1.4.5 above and referenced as Zones A-L (zone letters added by this author and not relating to any specific ordering of zones that may be applied by others for construction purposes).

According to the indicative programme, works at a number of separate zones will occur concurrently. A maximum of 4 different zones are estimated to occur concurrently, during which time the following zones are anticipated to be constructed in parallel:

- Zone G – Blackpool Retail Park/Shopping Centre;
- Zone J – Spring Lane;
- Zone K – Blackpool Church to Madden’s Junction; and
- Zone L – Madden’s Junction to end of Scheme.

The occurrence of these works in parallel represents the worst-case scenario in terms of overall traffic flows during the scheme implementation. On this basis of this, an estimation of total construction trips (both daily and hourly) was made using the same rationale as for the assessment of individual activities’ impact.

For clarity and to re-cap, the average daily volumes have been doubled to represent a busier day and the average hourly volumes have been factored by 20% to reflect a peak within the day.

Therefore, the total trips across these 4 separate zones are estimated to be 119 two-way trips per day and 27 trips per hour (peak).

The impact of these trips will be felt on different links across the whole scheme. Since it is impossible to allocate these trips without losing accuracy, it has been decided that the assessment should consider the theoretical impact of the daily and hourly trips on relevant links of the network, which are likely to be common with regards to the access and egress of most work areas.



These links, selected on the basis of their strategic importance for the scheme are as follows:

- N20 Commons Road;
- Dublin Street/Spring Lane; and
- Watercourse Road.

An analysis of the impact of all the daily and hourly trips on each of these individual road links is presented in the table below:

Road Link	Background Traffic Volumes		Construction Traffic Volumes		Traffic Impact	
	Daily	AM Peak	Daily	AM Peak	Daily	AM Peak
N20 Commons Road	6,332	1,825	119	27	+1.9%	+1.5%
Dublin Street/Spring Lane	4,436	1,518	119	27	+2.7%	+1.8%
Watercourse Road	2,497	861	119	27	+4.8%	+3.1%

The above analysis is extremely robust, as it is not likely that all trips from the concurrent construction activities will use all links. For example, trips to and from works in the Spring Lane area are very unlikely to use the N20 Commons Road (instead are likely to use Watercourse Road to get to Dublin Street).

Nevertheless, these impacts need to be considered in the context of the actual spare capacity of these links with the addition of construction trips. As illustrated below, the road links will be operating well below capacity, even considering a robust set of assumptions as described in this analysis.

Road Link	Peak Hour Traffic Volumes (Background + Construction)	Link Capacity (hourly)	Spare Capacity
N20 Commons Road	1,852	2,540	27.1%
Dublin Street/Spring Lane	1,545	1,900	18.7%
Watercourse Road	888	1,900	53.2%

On the basis of the above, the impact of the traffic generated by the construction of the scheme under a worst-case scenario whereby a number of construction activities are carried-out simultaneously, is considered **temporary not significant**.

## 1.6 Potential Impact of Traffic Management Measures

The various work activities will require, in some cases, temporary modifications to the traffic operation of the immediate road network. These traffic management measures and their predicted impact are described in this section.

It is likely that temporary road closures will be required during the construction zone of the works at the following locations:

- Area 2B (Rose Cottage) – requires single lane closure;
- Area 2C (Commons Road/N20) – requires extensive traffic management and reduction of N20 slip to a single lane;
- Area 3D – Commons Inn entrance – requires temporary stop/go system during road regrading works;
- Area 3J – Topaz Bridge – requires extensive traffic management;
- Area 4A – Fitz' Boreen – requires significant traffic management and full closure of Fitz' Boreen for a period of 2-3 months;
- Area 4B – Dulux (Pumping Station P02) – requires significant traffic management and full closure of Fitz' Boreen for a period of 2-3 months;
- Area 4J – Sunbeam – requires localised traffic restrictions to Sunbeam and Millfield Industrial Estate Access Road;
- Area 4K – Millfield Industrial Estate – requires traffic restrictions to Millfield Industrial Estate Access Road and through to Northpoint Business Park;
- Area 6B – Orchard Court – requires closure of the existing bridge at the junction with the Old Commons Road for a temporary period;
- Area 6C – Orchard Court (South) – requires closure of Commons Road from the junction with Watercourse Road to the junction of Brocklesby Street;
- Area 7A – Blackpool Church – requires temporary closure of one lane of Watercourse Road;
- Area 7B – Watercourse Road (Blackpool Church to Madden's Junction) – requires traffic diversions;
- Area 7C – Watercourse Road (Madden's Junction) – requires extensive traffic diversions and works to be carried out in a number of individual phases, with traffic management for each phase);
- Area 7E – Watercourse Road (Blackpool Church) – requires traffic diversions;
- Area 7F – Watercourse Road (Corkeran's Quay) – requires traffic diversions; and
- Area 7D – Watercourse Road (South of Madden's Junction) – requires localised traffic management measures.

Localised traffic disruption will occur at locations of proposed works on, or in the immediate vicinity of the road network. In many instances it may be possible to complete works elements in phases, thus necessitating a partial road closure only. However, for a number of locations a full road closure will be required to facilitate the works.

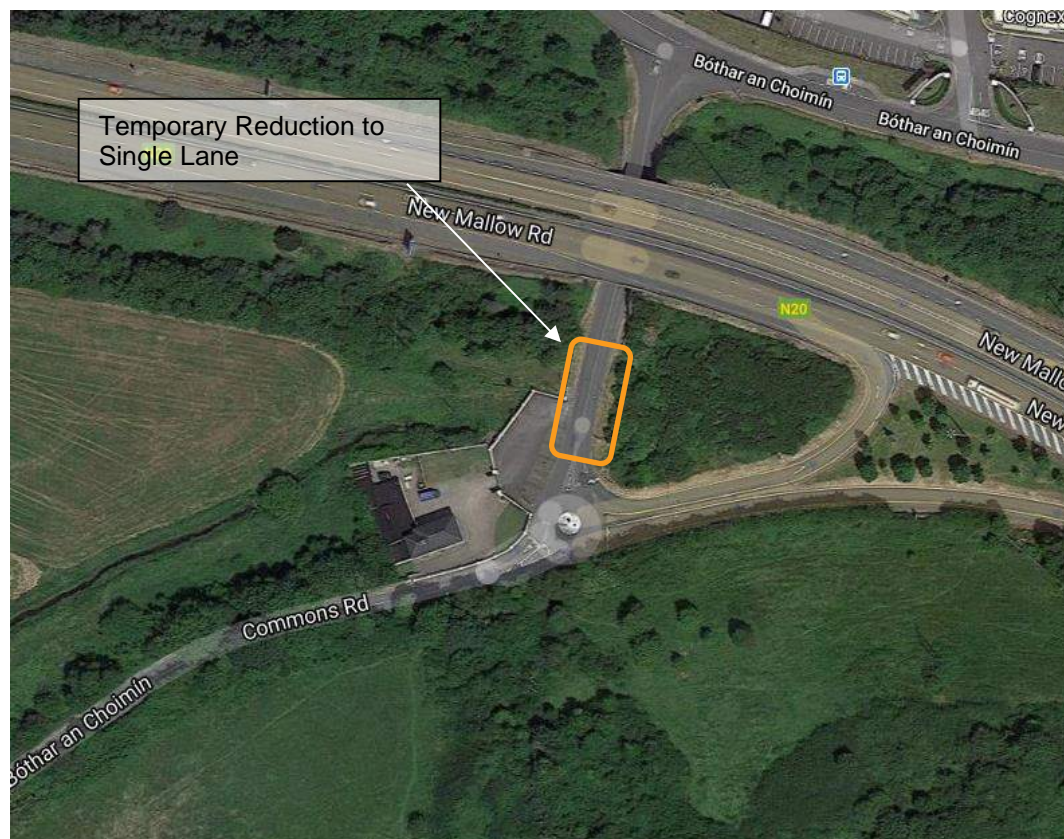
Replacement of existing culverts will be possible in phases, which will only necessitate partial road closures. There are also a number of pumping stations to be constructed, although the majority of these are located offline.

Localised road re-grading will also be possible in phases, again only necessitating partial road closures.

The impact of the above closures on each of the affected individual areas is described below.

### Area 2B – Rose Cottage

The N20 underpass adjacent to Rose Cottage will require temporary reduction to a single lane to facilitate road re-grading. It is estimated that this closure will be for approximately 1 week. Pedestrian access and one vehicular lane operating on a stop-go system will be maintained at all times, as will vehicle access to Rose Cottage itself.

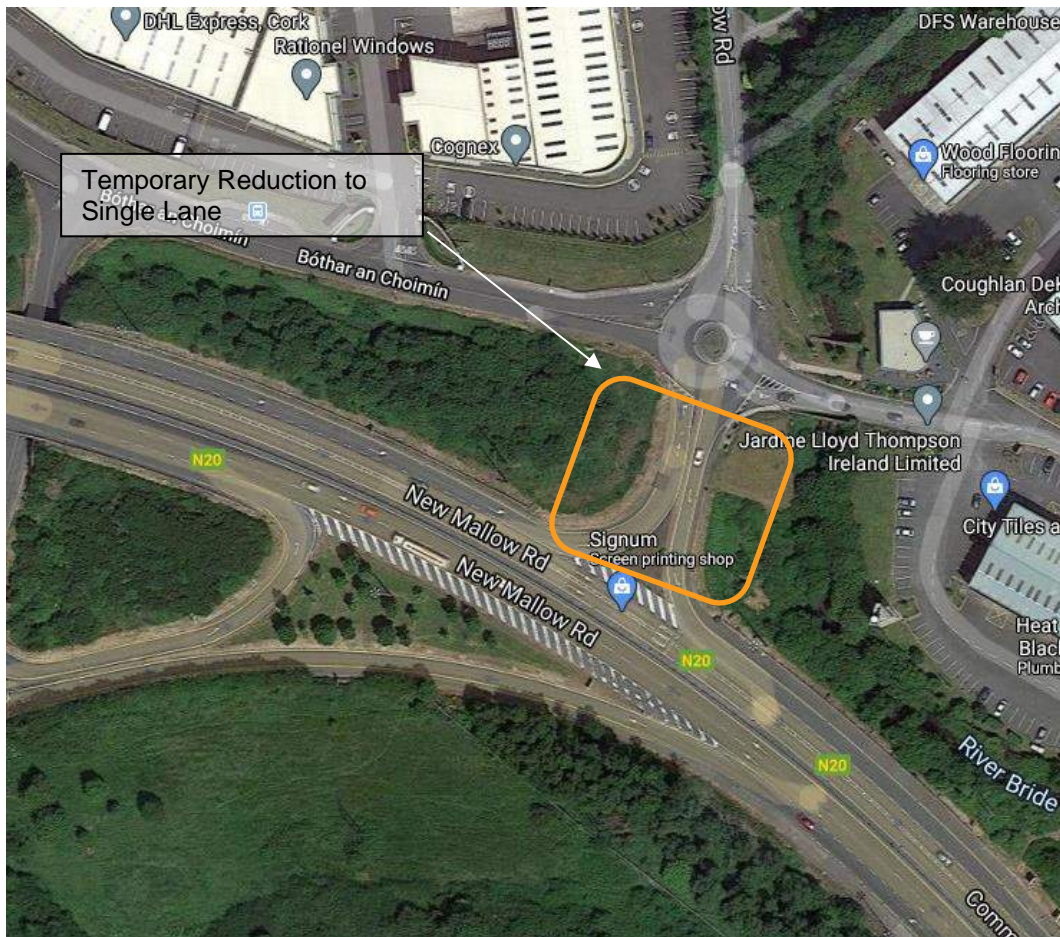


Due to the relatively low traffic volumes, it is estimated that the impact of this partial closure on delays or queues will be negligible, and therefore the impact of the partial closure is considered to be **temporary slight**.



## Area 2C – Commons Road/N20

The N20 off/on slip lane at Area 2C will require temporary traffic management measures to be implemented in order to facilitate the construction of the N20 culvert. This temporary measure will last for approximately 3 weeks. However, the N20 slip road will have one lane maintained at all times.

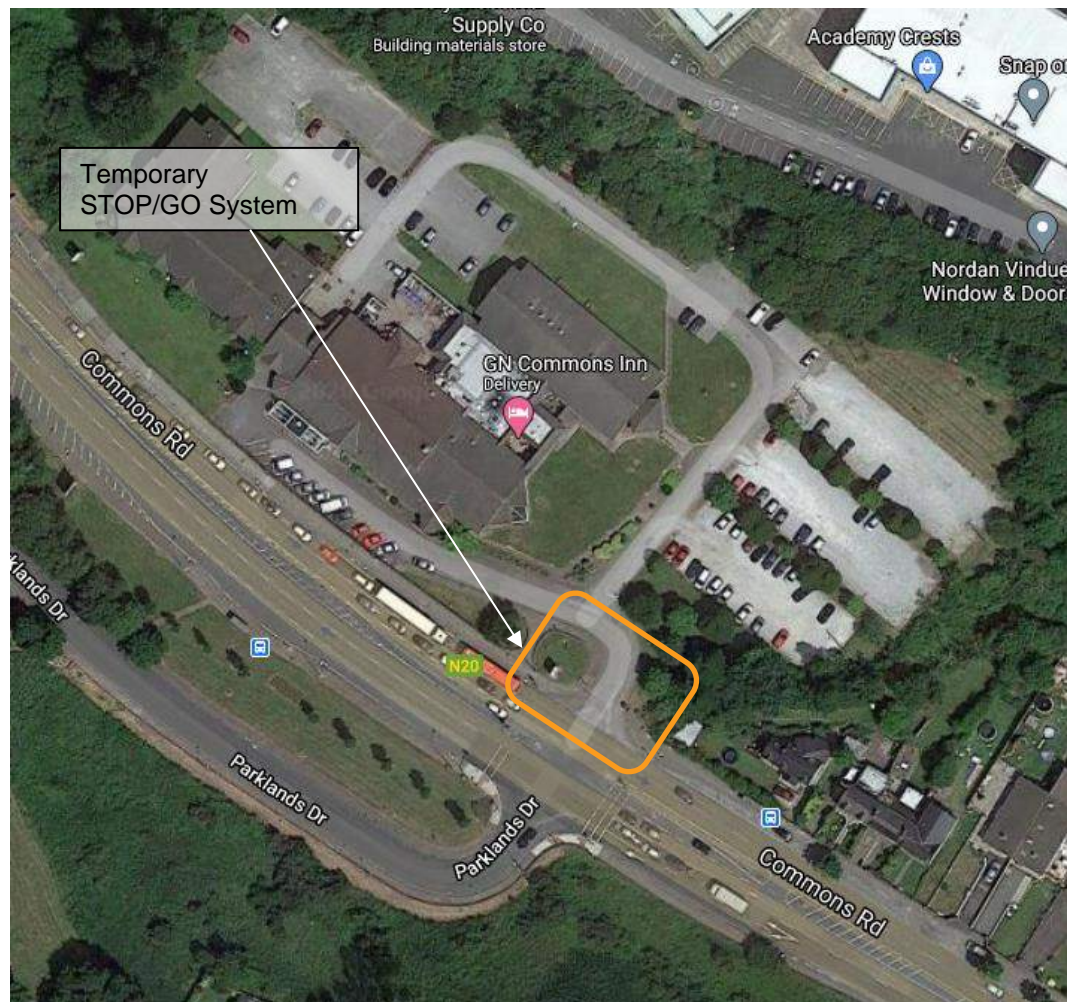


Due to the relatively low traffic volumes, it is estimated that the impact of this partial closure on delays or queues will be minor, and therefore the impact of the partial closure is considered to be **temporary slight**.



### Area 3D – Common's Inn Entrance

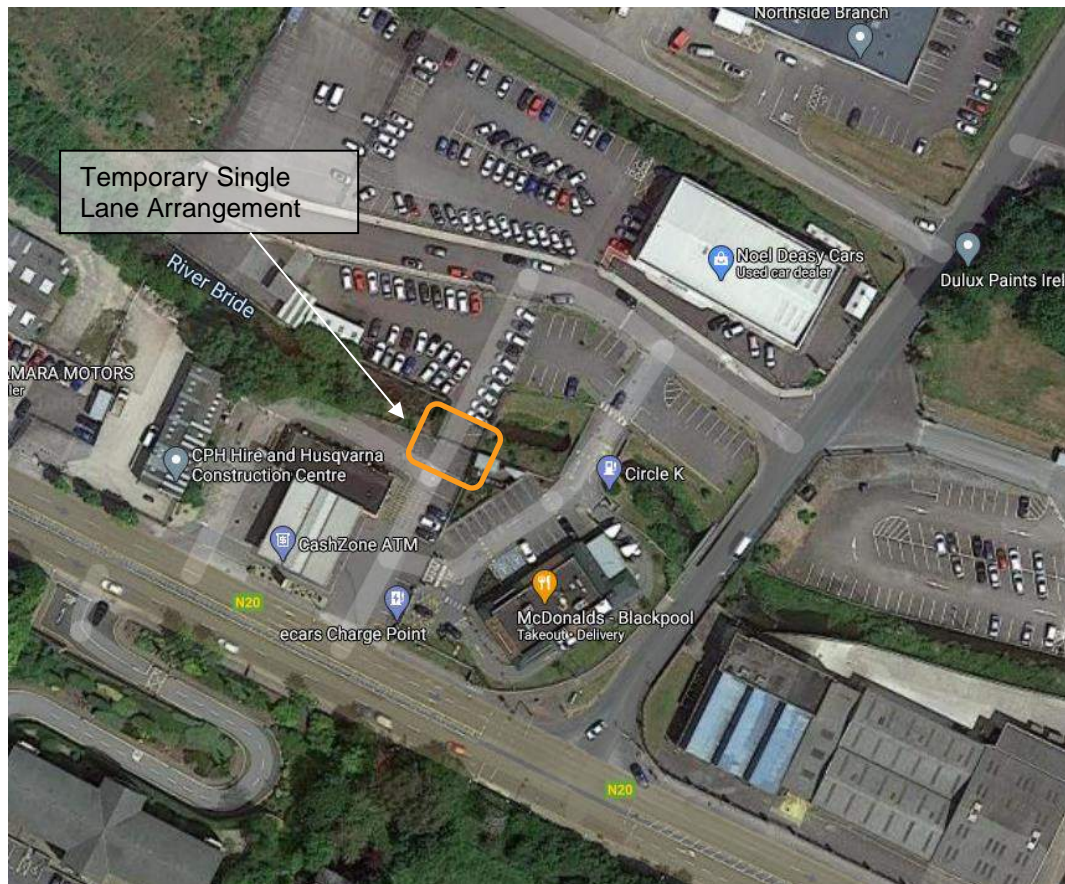
The entrance to the Common's Inn from the N20 will require a temporary STOP/GO system to be put in place during road re-grading works. It is estimated that this will be for approximately 1 week.



Due to the low traffic volumes using this junction, it is estimated that the impact of this partial closure on delays or queues will be negligible, and therefore the impact of the STOP/GO system is considered to be **temporary not significant**.

## Area 3J – Topaz Bridge

The entrance to Noel Deasy Cars through the Topaz Bridge forms part of Area 3J. The works in this area will require a degree of traffic management; however, one lane will be retained for access to Noel Deasy Cars (which also has an alternative access elsewhere). This arrangement is expected to be in place for 3-4 months.

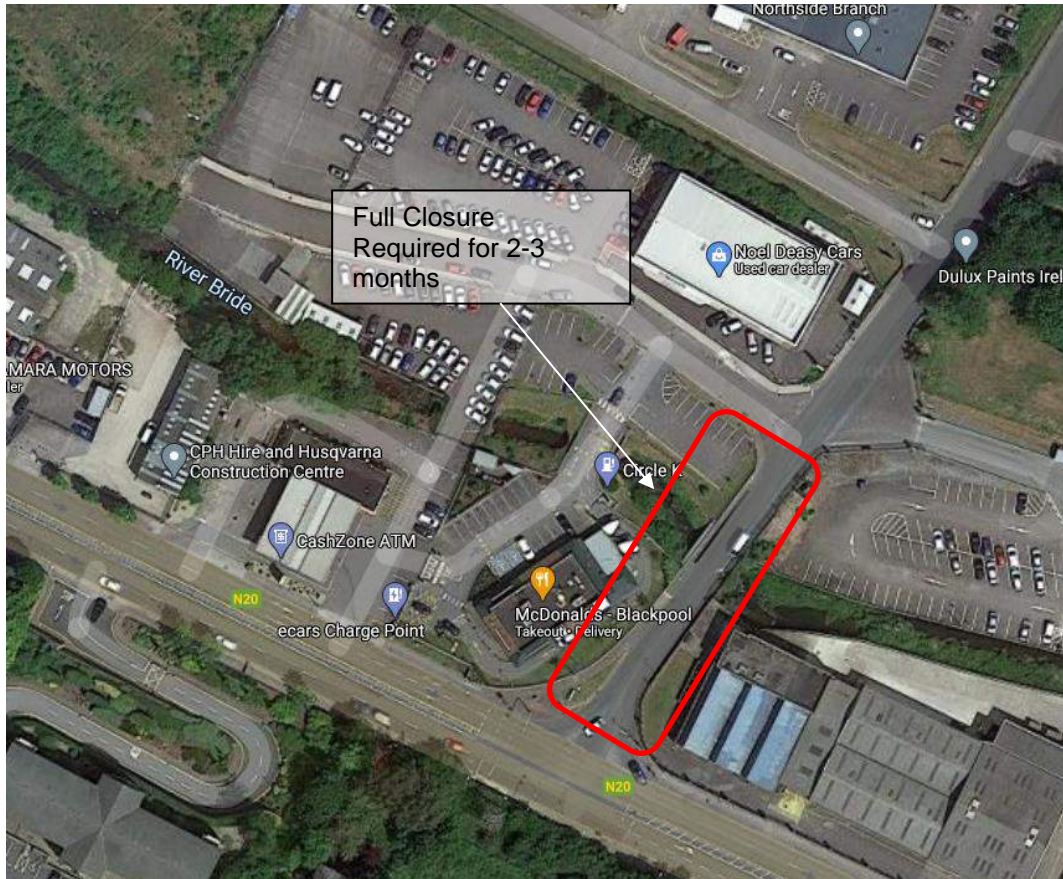


Due to the low traffic volumes using this connecting route and the alternatives available, it is estimated that the impact of this partial closure on delays or queues will be negligible, and therefore the impact of the partial closure is considered to be **temporary not significant**.



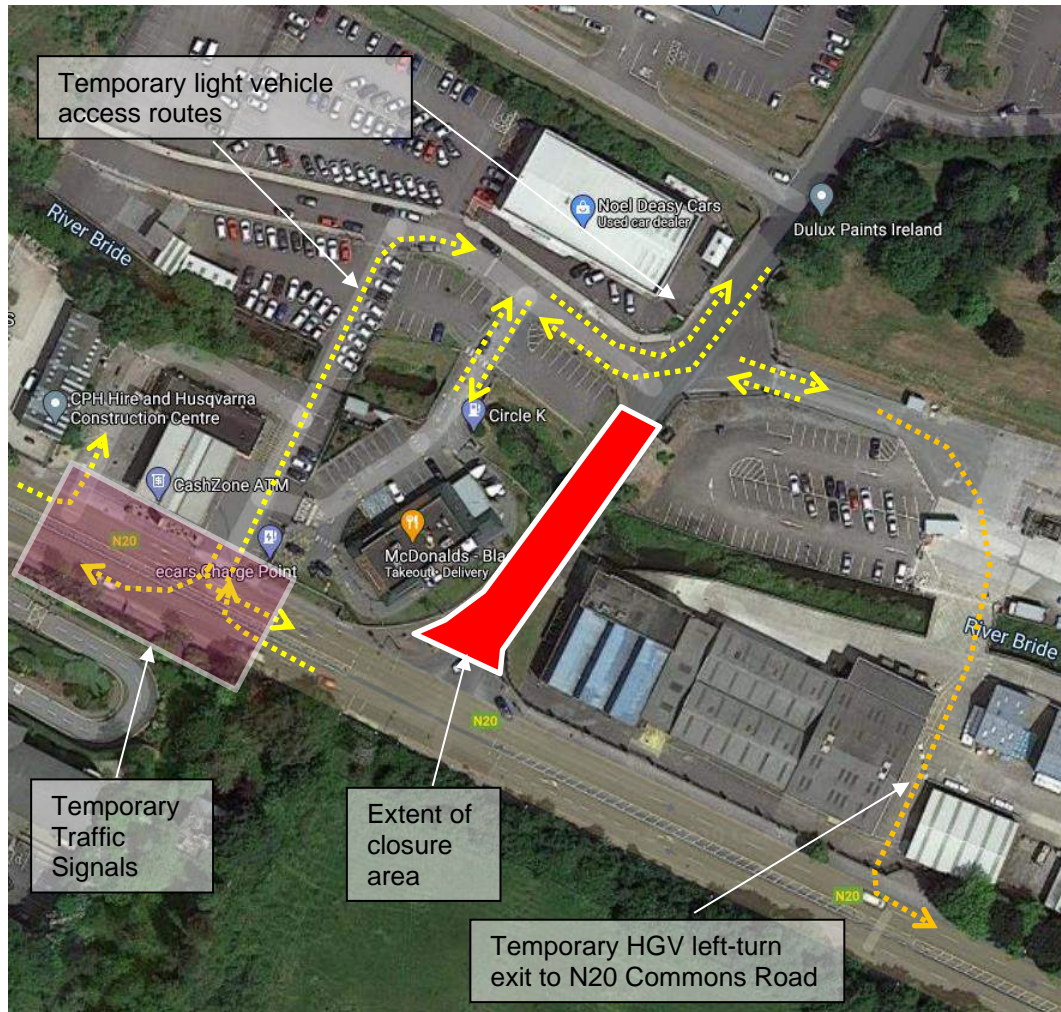
## Area 4A & 4B – Fitz' Boreen & Dulux Pumping Station

The replacement of the existing Fitz' Boreen Bridge will require extensive traffic management measures, with the full closure of Fitz' Boreen required for a period of 2-3 months (with associated temporary traffic management works likely to extend this to 4-5 months overall). The proposed Pumping Station P02 is located within the same area. The period requiring full closure of the road will be limited to the bridge only; the portion of Fitz' Boreen that connects up to the Old Mallow Road will remain open.



Temporary traffic management measures will include the use of temporary traffic signals on the N20 Commons Road in order to facilitate vehicle routing through the Topaz garage and through the access roadway at Noel Deasy Cars (which will be for light vehicle use only) and to access the McDonalds restaurant. These temporary signals would replace the signalised junction at Fitz' Boreen and would provide a light vehicle access and egress to the west of Fitz' Boreen.

HGV traffic will be routed via Redforge Road and the Old Mallow Road to enter the Dulux site, and will also be permitted to exit the Dulux site and to turn left onto the N20 Commons Road via a new temporary exit.

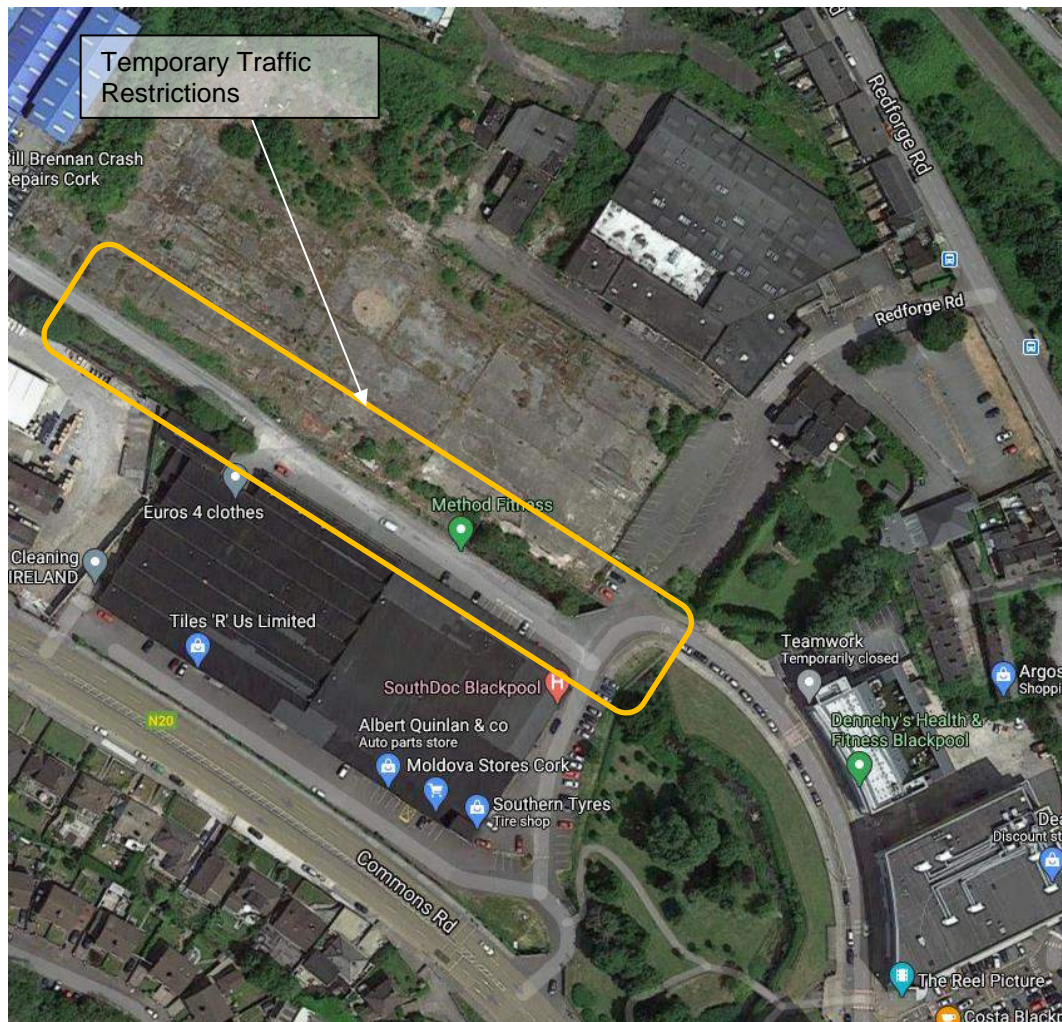


Despite the relatively low traffic volumes using Fitz' Boreen, due to the closure of a portion of the route and the number of accesses impacted by this temporary closure it is estimated that the impact of this closure on delays or queues will be notable, and therefore the impact of the partial closure is considered to be **temporary significant**. However, alternative routes will be available as a result of the temporary traffic management measures, and the installation of temporary traffic signals will replace the existing signals at the Fitz' Boreen junction with the N20 Commons Road (i.e. these temporary signals will replace the permanent signals for the duration of the works).



## Area 4J & 4K – Sunbeam & Millfield Industrial Estate

The works in Area 4J and Area 4K will require temporary traffic restrictions to the Sunbeam and Millfield Estate access road and through to Northpoint Business Park. This is to facilitate the construction of reinforced concrete flood defence walls and is estimated to last 3-4 months.



Due to the low traffic volumes, it is estimated that the impact of this partial closure on delays or queues will be minor, and therefore the impact of the temporary restrictions is considered to be **temporary not significant**.

## Area 6B – Orchard Court

The works in Area 6B will require the closure of the existing access bridge at the Old Commons Road/Orchard Court junction for a temporary period, estimated to be 4-5 weeks. An alternative temporary access will be provided further south, close to Wherlands Medical Centre.



Due to the relatively low traffic volumes, it is estimated that the impact of this closure on delays or queues will be minor, and therefore the impact of the closure is considered to be **temporary not significant**.



## Area 6C – Orchard Court South

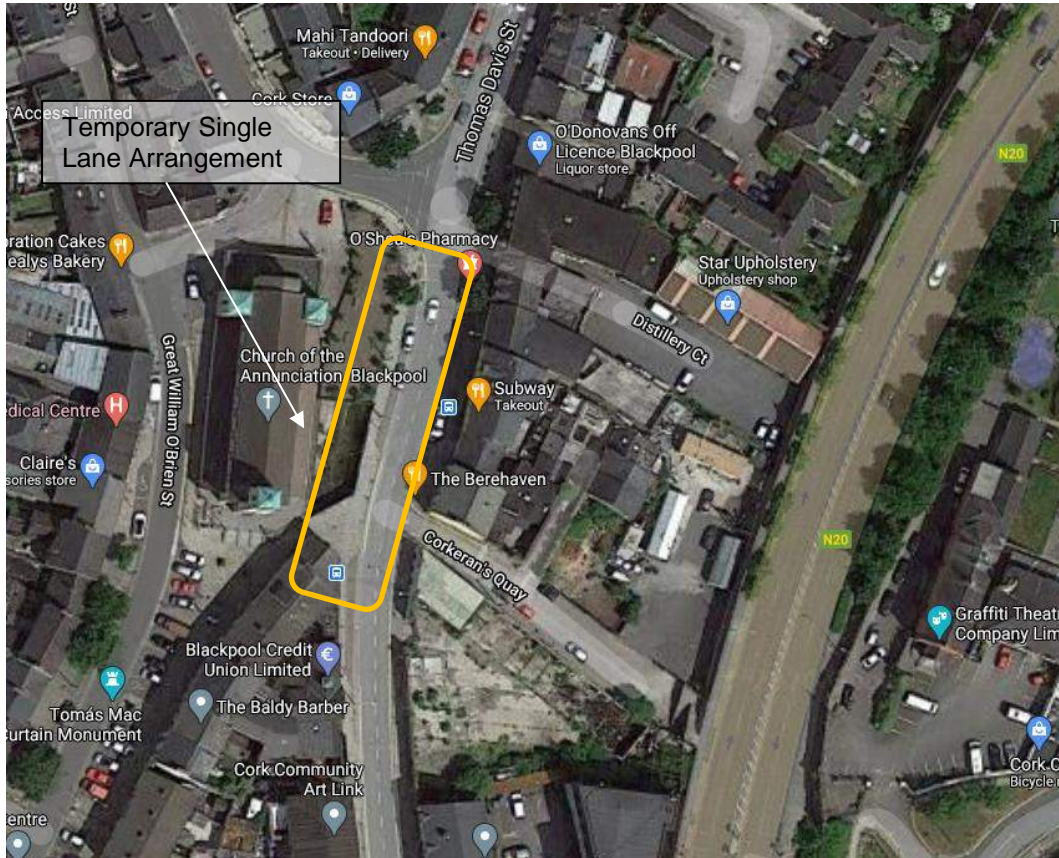
The works in Area 6C will require the closure of the Commons Road from the junction with Watercourse Road to the junction with Brocklesby Street for a temporary period, potentially for up to 4 months. Pedestrian access will be maintained, but traffic diversions will be required for vehicular traffic – this will be via Brocklesby Street.



Due to the moderate traffic volumes and the duration of the temporary closure, it is estimated that the impact of this closure on delays or queues will be moderate, and therefore the impact of the closure is considered to be **temporary moderate**.

## Area 7A – Blackpool Church

The works in Area 7A will require the short-term closure of one lane of Watercourse Road (outbound) to facilitate culvert tie-in works. This partial closure is envisaged to be for up to 4 months. Outbound traffic will be diverted to the N20 outbound at the Madden's Junction and will route back via the N20/Popham's Road junction.

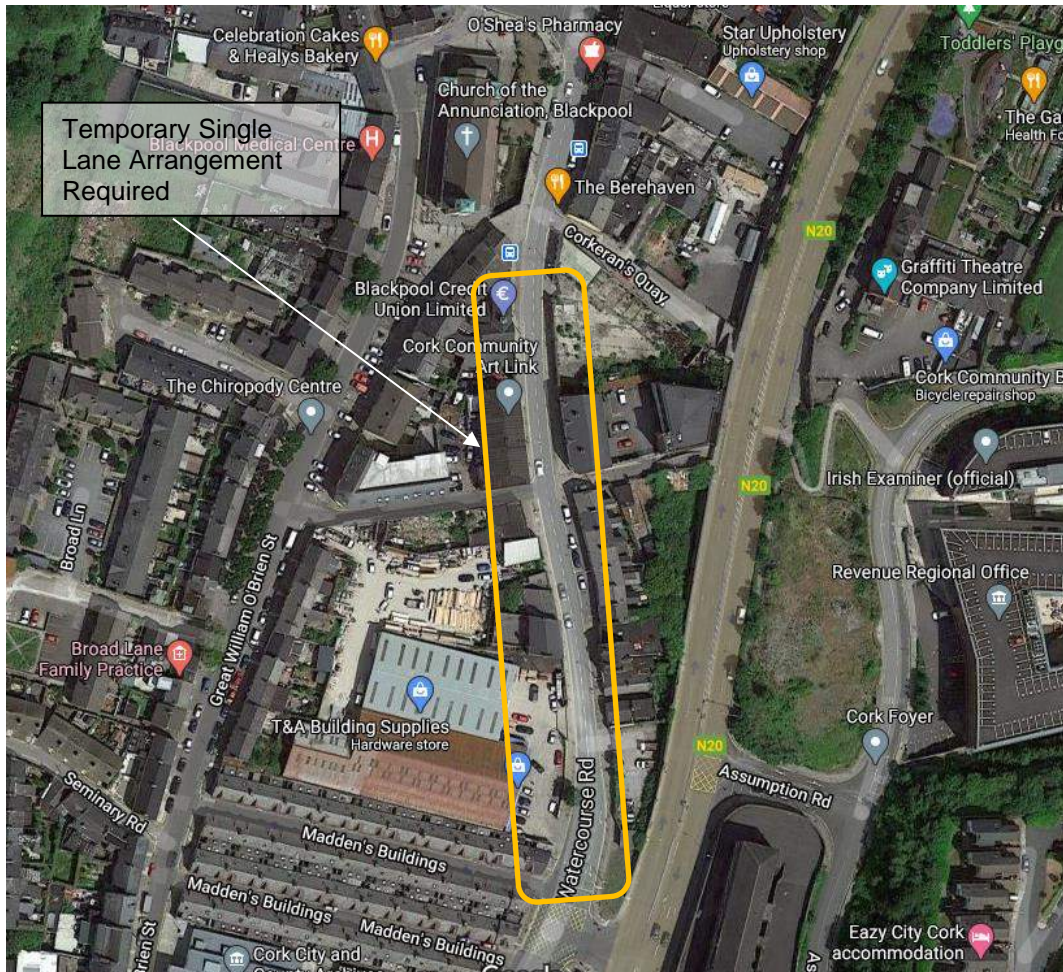


Due to the relatively low traffic volumes on Watercourse Road, it is estimated that the impact of this partial closure on delays or queues will be minor, and therefore the impact of the partial closure is considered to be **temporary slight**.



## Area 7B – Watercourse Road (Blackpool Church to Madden's Junction)

The works in Area 7B will require traffic diversions on Watercourse Road to enable the construction of concrete flap valve chambers. Access to local properties will be maintained at all times. Diversions are expected to be required for approximately 6-8 weeks. Diversions are also expected to be implemented locally around work zones along the extent of the works, alternating on both sides as the work progresses.



Due to the moderate traffic volumes, it is estimated that the impact of this partial closure on delays or queues will be moderate, and therefore the impact of the partial closure is considered to be **temporary moderate**.



## Area 7C – Watercourse Road (Madden's Junction)

The works in Area 7C will require extensive traffic diversions at this junction to enable the construction of a concrete structure. The works will require a number of discrete phases and traffic diversions will be in place for each phase, primarily comprising reductions in the number of traffic lanes on the N20 mainline and full road closures on the adjacent side streets, with the total works expected to last for approximately 4 months. Access to local properties will be maintained at all times.

The N20 at this location comprises two outbound lanes and two inbound lanes. In the vicinity of Area 7C, one of the two outbound lanes also facilitates left-turning traffic on to Watercourse Road, or right-turning traffic to Assumption Road, and therefore there is typically only one outbound lane used for straight-ahead traffic flow on the N20. Similarly, one of the inbound traffic lanes on the N20 also caters for straight-ahead traffic and right-turning traffic to Watercourse Road, which also typically results in straight-ahead traffic on the N20 avoiding this lane when vehicles are waiting to turn right.



The works are to be undertaken in four phases, detailed as follows:

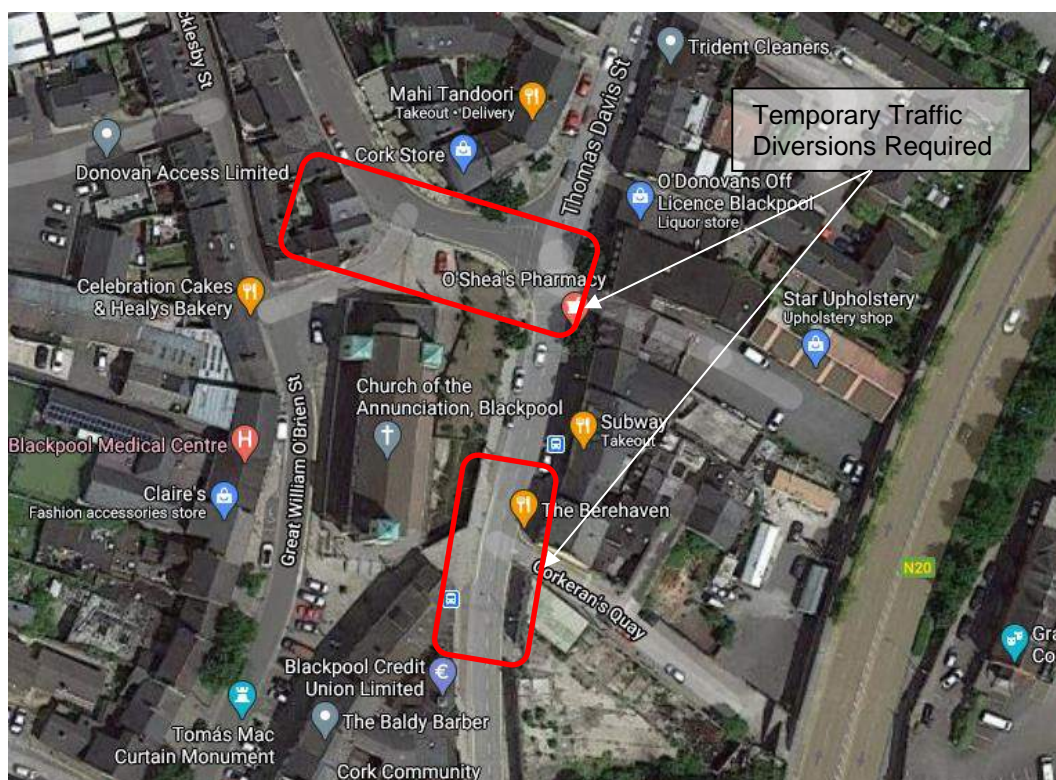
- First phase:** For the first phase, it is expected that the left-turning lane from Watercourse Road on to the N20 would be closed. The N20 would also be reduced to three lanes, with one straight ahead lane in each direction and the central lane used for right-turning movements to Assumption Road or Watercourse Road. Furthermore, the right-turn movement from the N20 to Assumption Road is also likely to be removed for the duration of the first phase.

As outlined above, although there are two outbound traffic lanes and two inbound traffic lanes on the N20 at this location, typically only one lane in each direction is used for straight-ahead traffic due to the other lanes facilitating turning movements; therefore in Phase 1 the retention of a single lane inbound and outbound for straight-ahead traffic ensures that this flow is not impacted. The remaining central lane can be used to facilitate turning traffic to Watercourse Road or to Assumption Road (with Assumption Road likely to be closed to right-turning traffic for Phase 1). Alternative routes are available for traffic seeking to turn right from the N20 to Assumption Road. Therefore, for the first phase of the works the impact of the partial closure is expected to be **temporary moderate**;

- **Second Phase:** For the second phase, the entire junction into Watercourse Road will be closed temporarily. The N20 outbound will be reduced to a single lane as it passes the junction with Watercourse Road, immediately widening to two lanes thereafter to facilitate the right-turning movement to Assumption Road (which may potentially be removed for the duration of this phase). Closing the junction at Watercourse Road removes the right-turning movement for N20 inbound traffic at this location, and consequently the N20 inbound will be temporarily reduced to a single lane. Again, as this lane is typically used for right-turning traffic which will not be present during this phase, the impact of the diversions during this phase is expected to be **temporary moderate**;
- For the third phase, the junction at Watercourse Road will be partially reopened (with the northern half of the Watercourse Road side of the junction remaining closed. During this phase, the N20 will return to two lanes in each direction. Immediately to the north of the junction, a temporary left-turn only access will be created from the N20 to Watercourse Road north. Northbound traffic on Watercourse Road will be able to utilise the temporary ramp through the junction. Southbound traffic on Watercourse Road north will be able to use alternative routes. For this phase, the impact of the diversions is expected to be **temporary slight**;
- For the final phase, the N20/Watercourse Road junction will again be closed, and the N20 will retain two outbound and two inbound traffic lanes. The temporary ramp to Watercourse Road north will still be in place, and outbound traffic on the N20 can utilise this ramp to access Watercourse Road. Outbound traffic on Watercourse Road will be permitted to continue through the junction onto Watercourse Road north, however inbound traffic on Watercourse Road will be diverted to alternative routes. For this phase, the impact of the diversions is expected to be **temporary slight**.

## Area 7E & 7F – Watercourse Road (Blackpool Church & Corkeran's Quay)

The works in Areas 7E and 7F will require traffic diversions to enable the repair of the existing culvert at Blackpool Church and the construction of a concrete culvert at Corkeran's Quay. Access to properties and pedestrian access will be maintained at all times. These works are likely to be undertaken in the same time period as Area 7A and are likely to require a period of 4-8 weeks within the overall 4-month program in Area 7A. Access to Corkeran's Quay will also be maintained at all times.



Due to the relatively low traffic volumes, it is estimated that the impact of this partial closure on delays or queues will be moderate, and therefore the impact of the partial closure is considered to be **temporary moderate**.

### 1.6.1 Operational Impacts

Upon completion of the works, there are likely to be minor ongoing operational elements associated with regular maintenance of various elements of the scheme. Typically, these works may last for a short duration, ranging from half of a day to up to 4 days. These works will typically be minor, with minimal requirements for maintenance vehicles and staff, and will have a **temporary not significant impact**.



## 1.7 Evaluation of Traffic Impacts – Conclusion

The potential impacts of the construction and operation of the River Bride (Blackpool) Certified Drainage Scheme have been assessed in the EIAR submitted in 2018. In light of RFI no. 9, a more granular assessment has been carried-out, also taking into account more detailed information regarding the scheme and its construction, which is now available.

Regarding construction traffic impact, the assessment has taken into account the impact of the additional traffic volumes generated by construction activities (haulage of excavated material which is not reused on site, the delivery of materials to site and the movements of workforce traffic), as well as the impacts of the temporary traffic management measures, required as part of the construction activities.

The traffic impact of all work elements on each of the proposed areas has been assessed individually, showing that no notable traffic capacity impact is predicted. However, the overlap of a number of these areas in terms of the construction programme was also considered.

The construction phase of the proposed scheme will have a temporary impact on traffic volumes in the Blackpool area and their environs. The proposals will not result in any residual changes to the existing traffic network once completed.

However, temporary effects will arise during the construction stage of the scheme, particularly associated with the full and partial road closure that will be required to enable some construction activities. These impacts will be primarily associated with restriction on access to certain portions of the existing road network due to ongoing works.