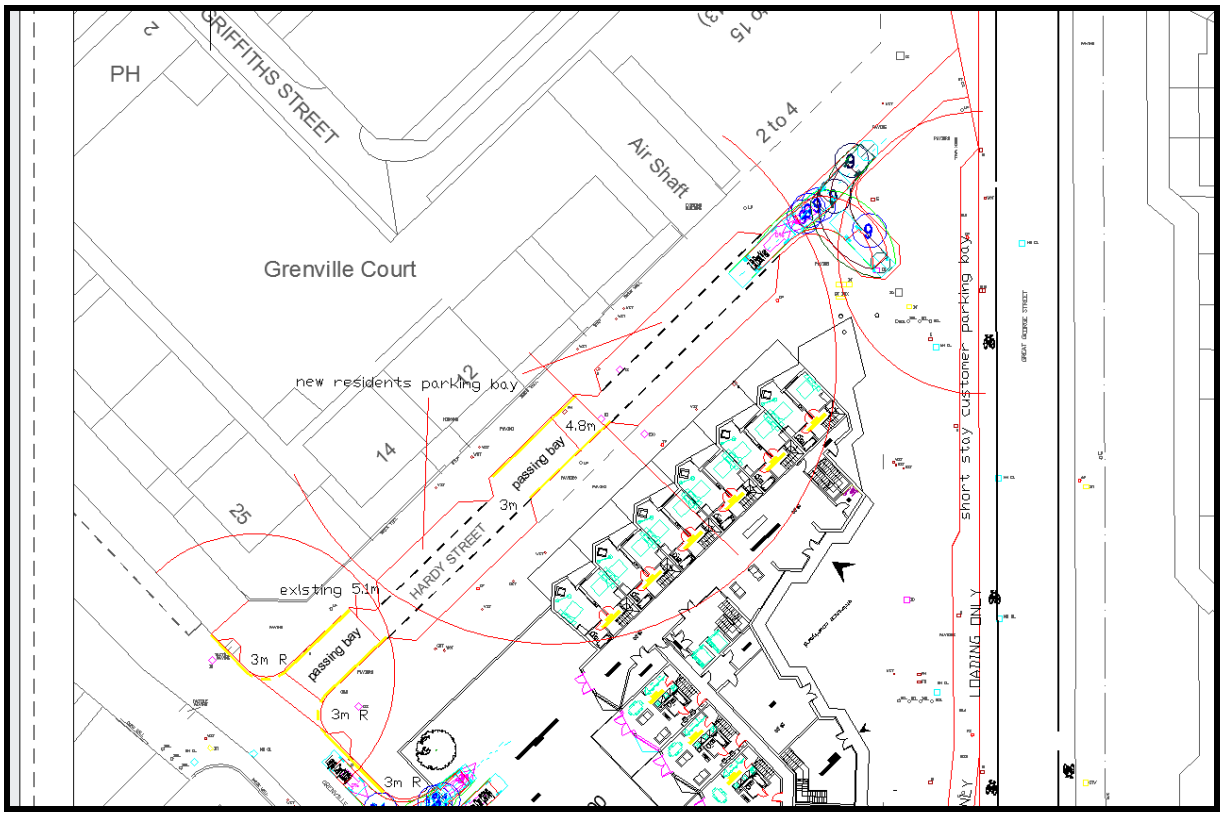
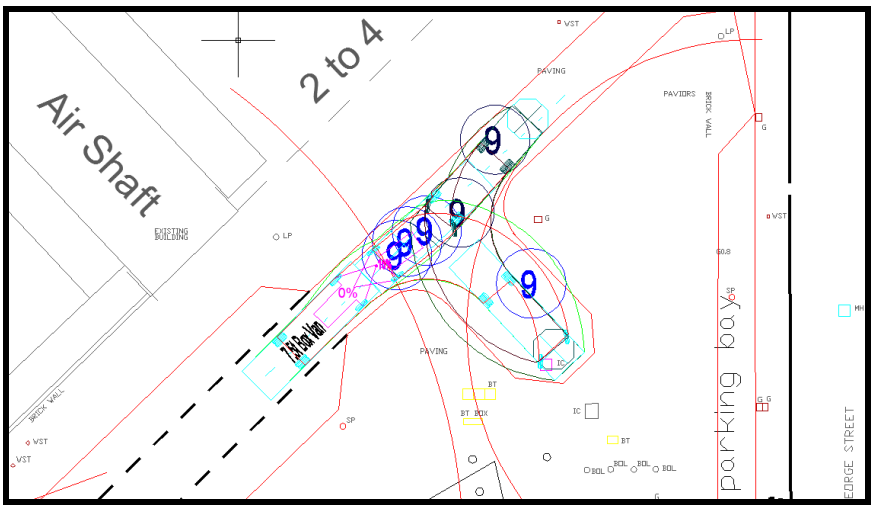
Phase 1 detailed feedback

Hardy St

The existing Hardy Street route is 5.1m wide with residents parking n the SE side narrowing the road, it has no turning head for larger vehicles and is blocked off at the Great George St end.



The design sets out additional parking bays on the NE side of the road thus pr0viding parking for the existing residents and the new units on Hardy St, a 3m route with passing bays. It is terminated by a turning head for cars and upto 7.5t panel vans only.



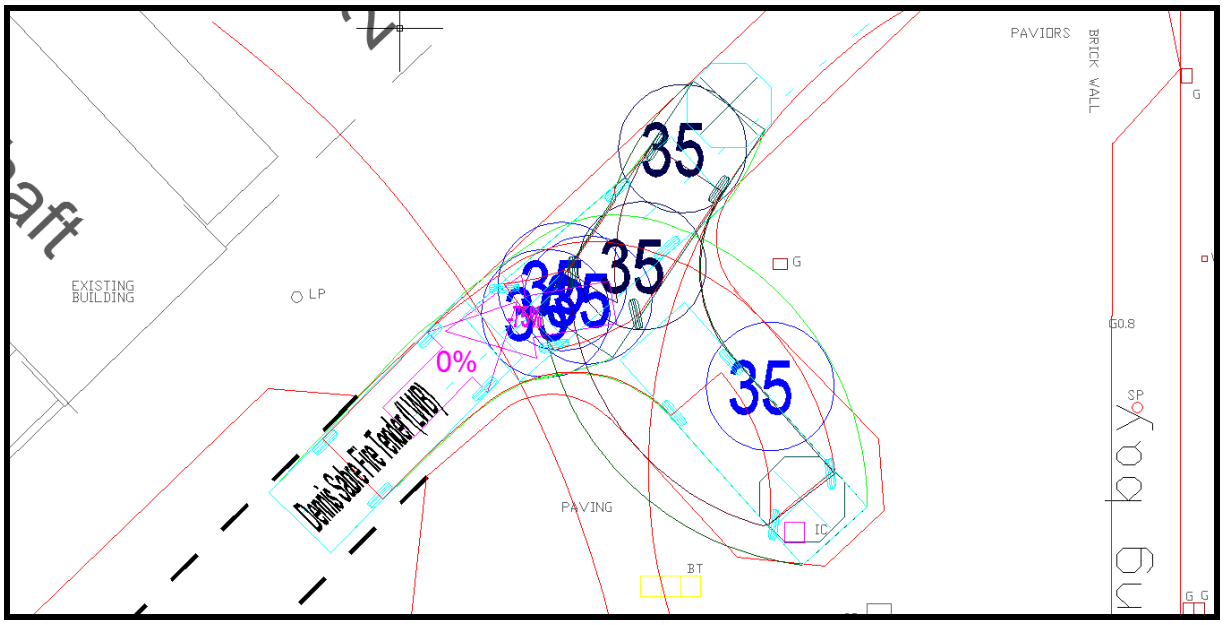
A 3m wide cycle lane is shown connecting to the Great George St route, this will be constructed to accommodate a fire engine weight to allow through access.

The red hemispheres indicate the 30m refuse bin drag length for residents and the 25m max drag length for refuse operatives as per MFS which states:

Residents should not be required to carry waste more than 30m (excluding vertical distance) to the storage point;

Waste collection vehicles should be able to get to within 25m of the storage point from Building regs however BS 5906: 2005 provides guidance and recommendations on good practice

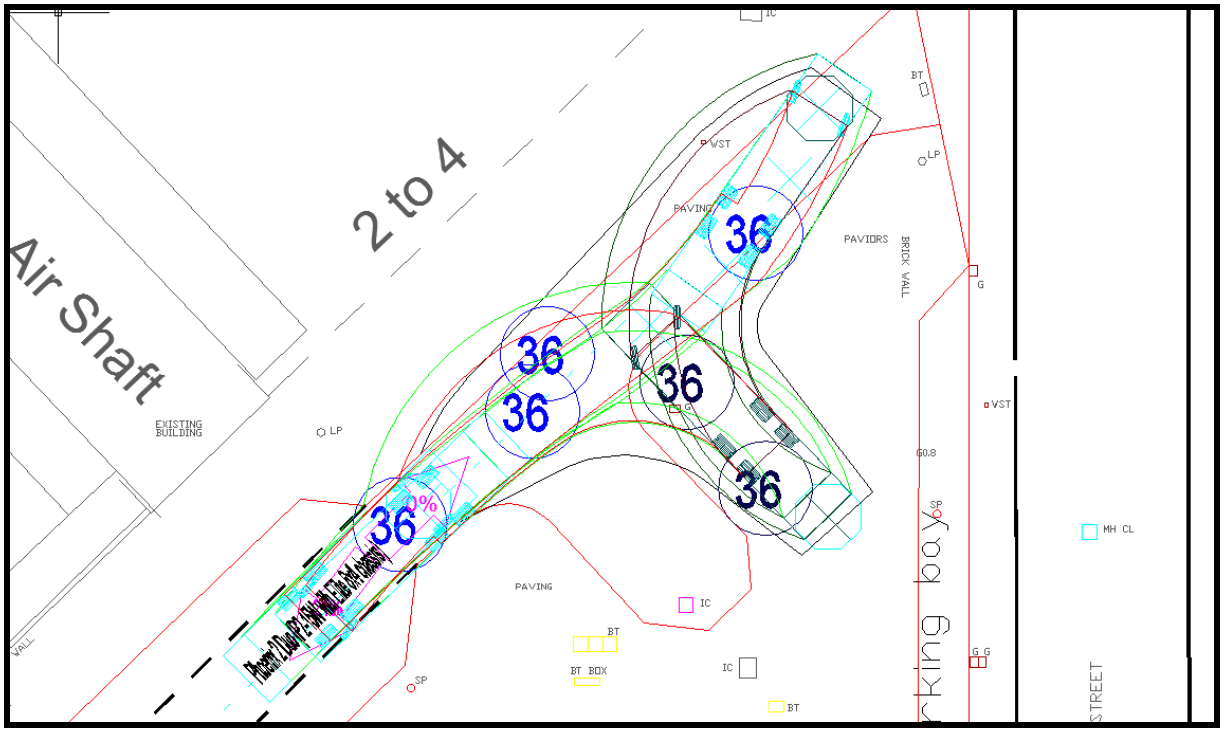
This would suggest that the need for a refuse vehicle to access the area is not required, please note this is only for the existing residents and the new units would have access to the internal bin area in the car park.



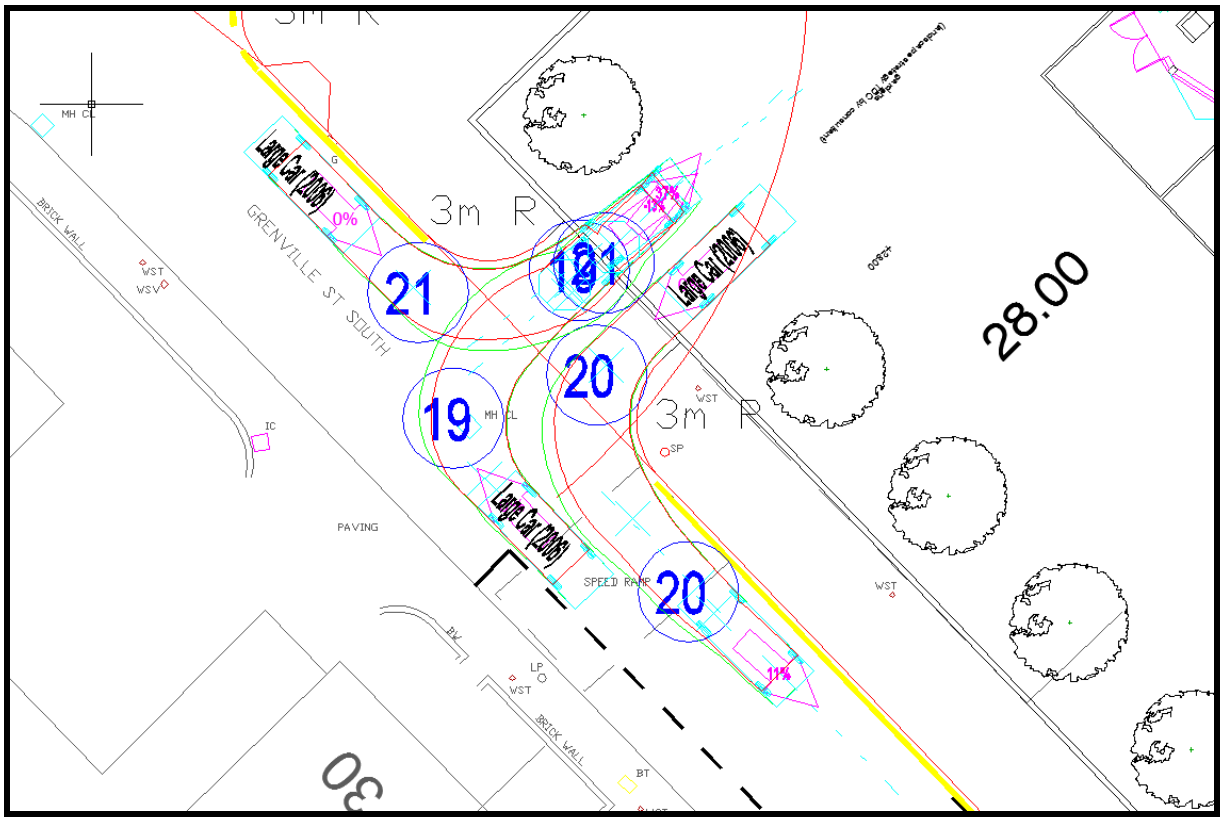
If the emergency route is not supported then the turning head can accommodate a fire engine as shown, naturally no vertical st furniture will be placed in the over sail areas.

For clarity the red line on the paths is the wheel track and the green lane the edge of the vehicle which can over sail the kerb etc as happens in normal practice to minimise the road widths.

The alternative to the above is to provide access for refuse size vehicles and thus fire engines by having a full turning head as the termination point, the drawings show the overall effect of this and the junction movements to show the route can be delivered, it is however recommended that the access for vehicles over 7.5t is restricted.

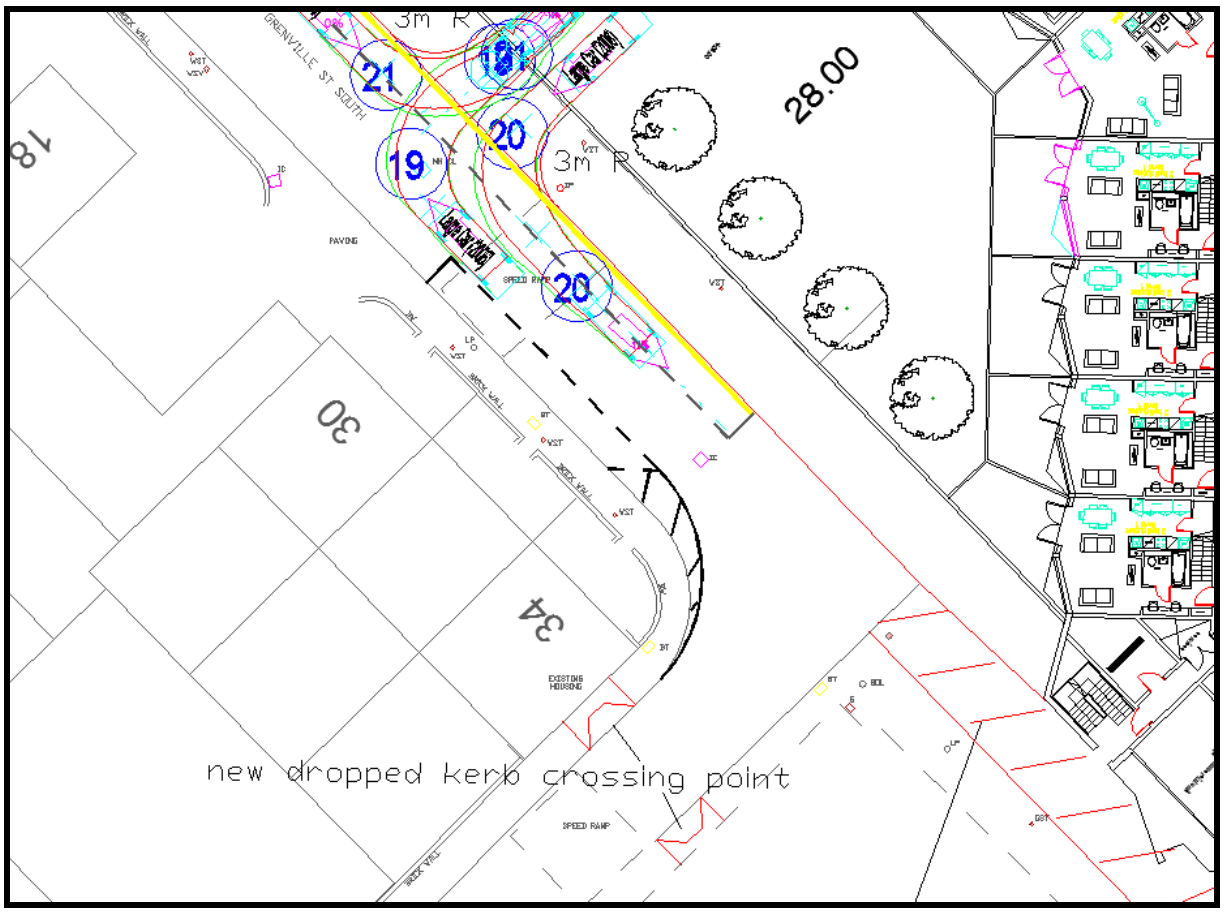


The car park entrance has been tracked for the in/out and shows no issues with the movements.

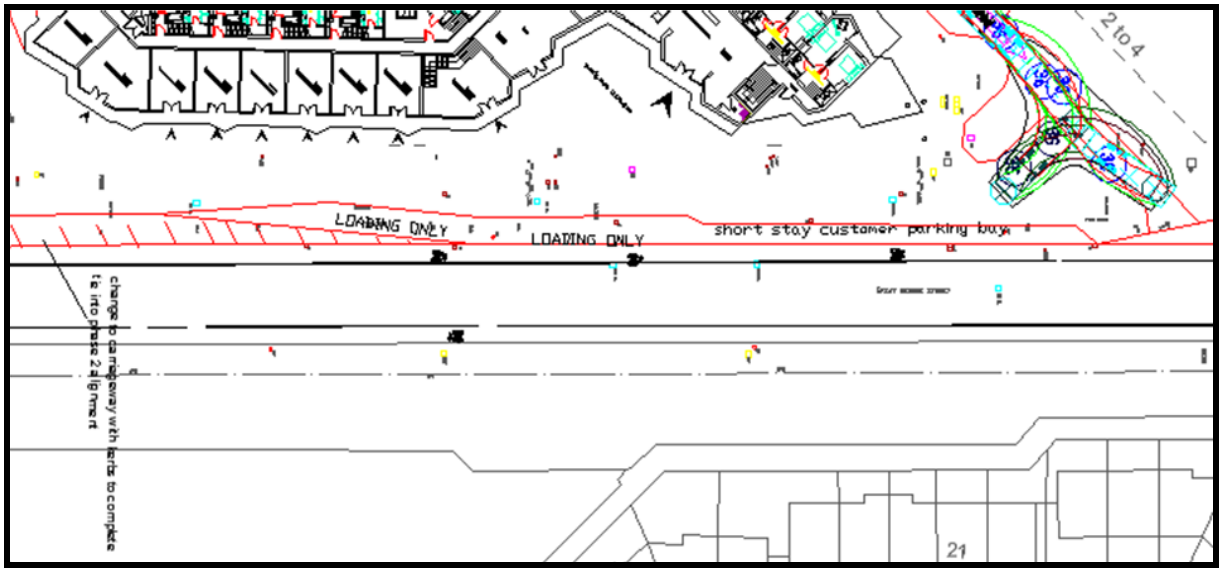


The parking bay has been reduced in scale to accommodate the drive location.

The bay has been relocated from the NE side to the SW side, the TRO will need amending.



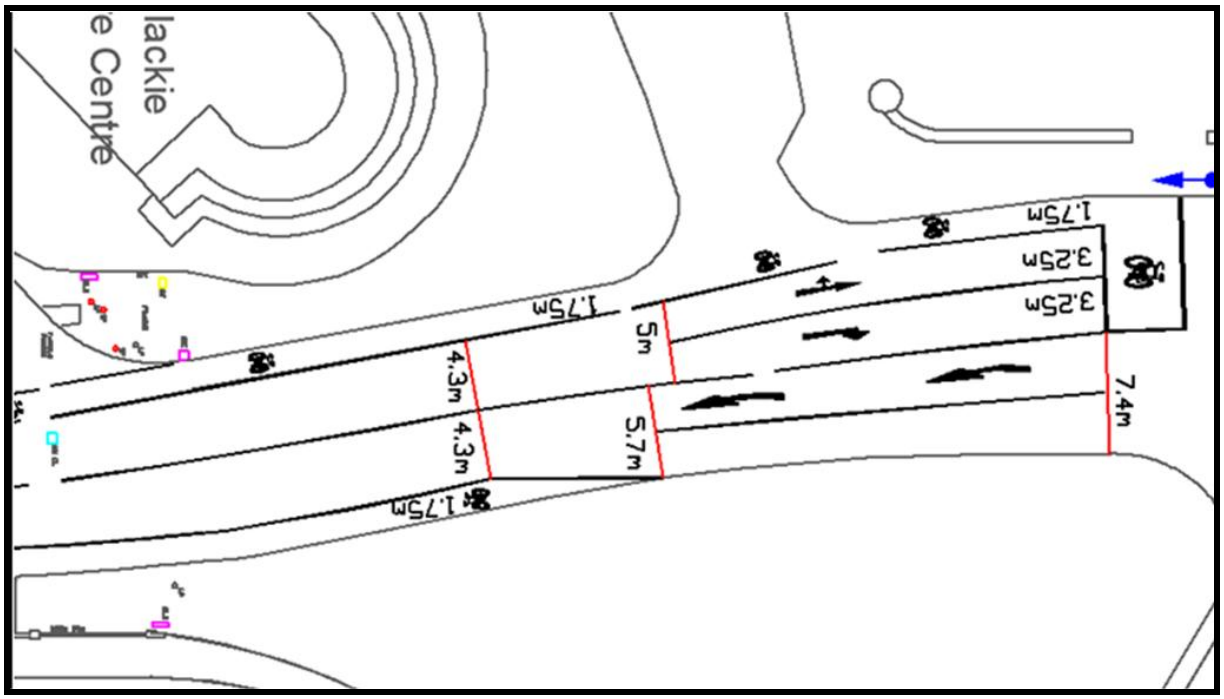
A new crossing point is to be provided as shown.



The Great George St frontage will have a 3m loading bays and 2m wide parking area for short stay/shoppers, controls to be agreed but limited waiting of 1 hr max is suggested.

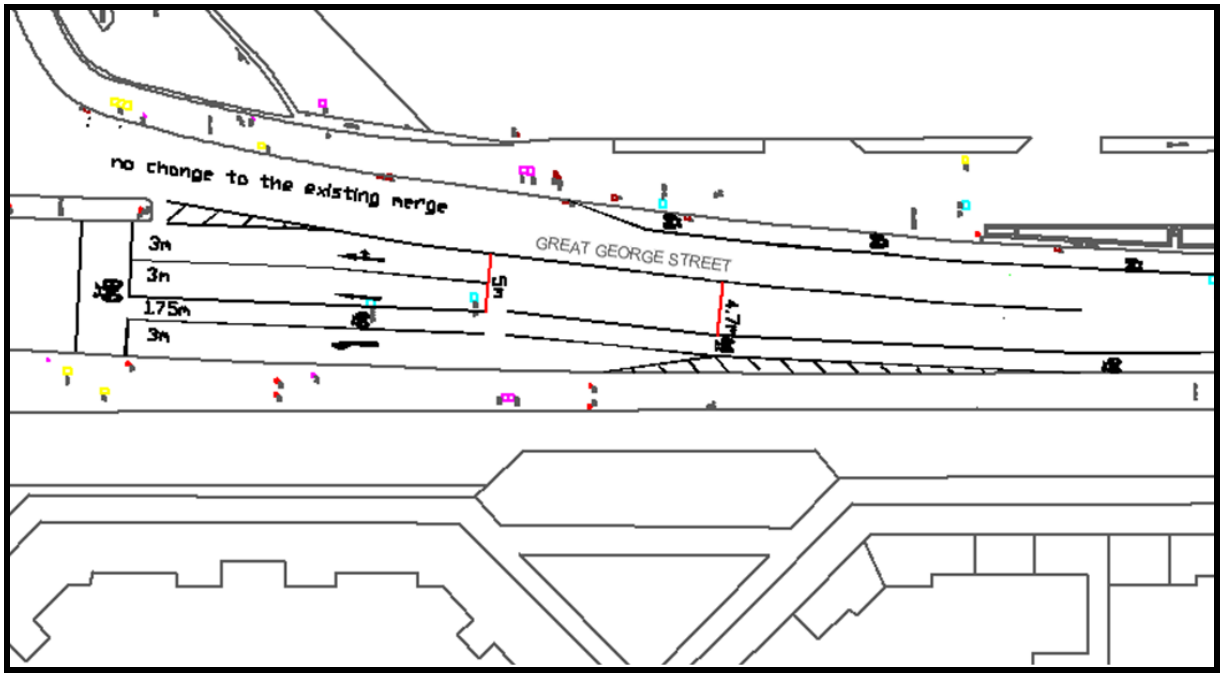
The road will be widened to accommodate the phase 2/3 right turn by delivering the loading bay kerb line, in the interim the extra area can be used for temporary parking.

Along Great George St a 1.75m cycle lane will be provided in each direction leaving 3.25m running lanes.



The approach to the Duke St signals is shown above and allows the development of the cycle lane in the southerly direction.

The southerly approach to the signals has 3 number 3m lanes and the 1.75m cycle lane extended between the ahead and left turn
lanes.



Full site mitigation

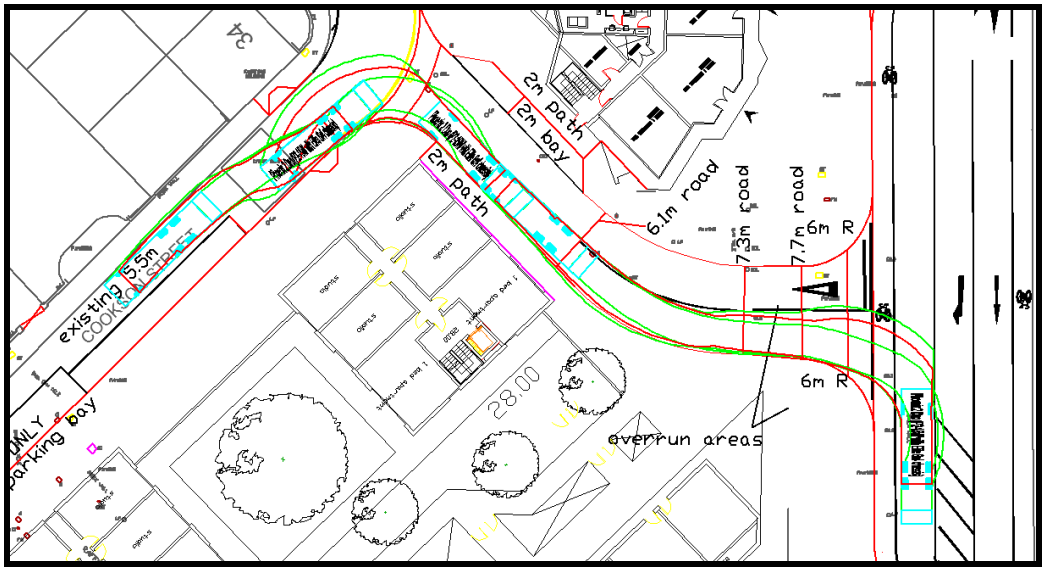
The full site takes on board the phase 1 works and extends it further including the link road.

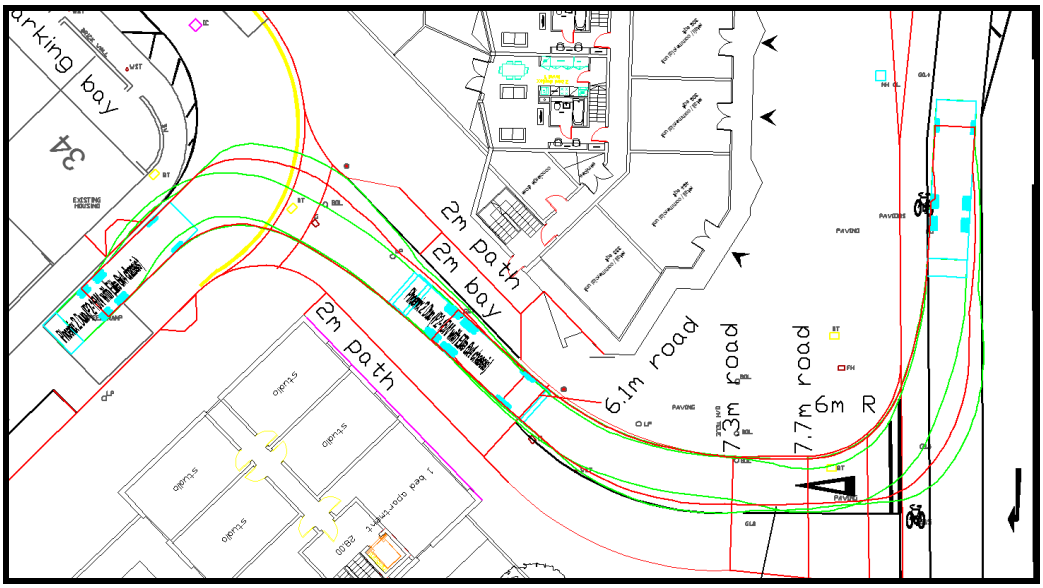
Link Road

This new route passes between the two new buildings,.

The space allows a 6m road, 2 number 2m paths and a 2m parking bay, short stay for 1 hour for shoppers or shop owners to use for van type delivery.

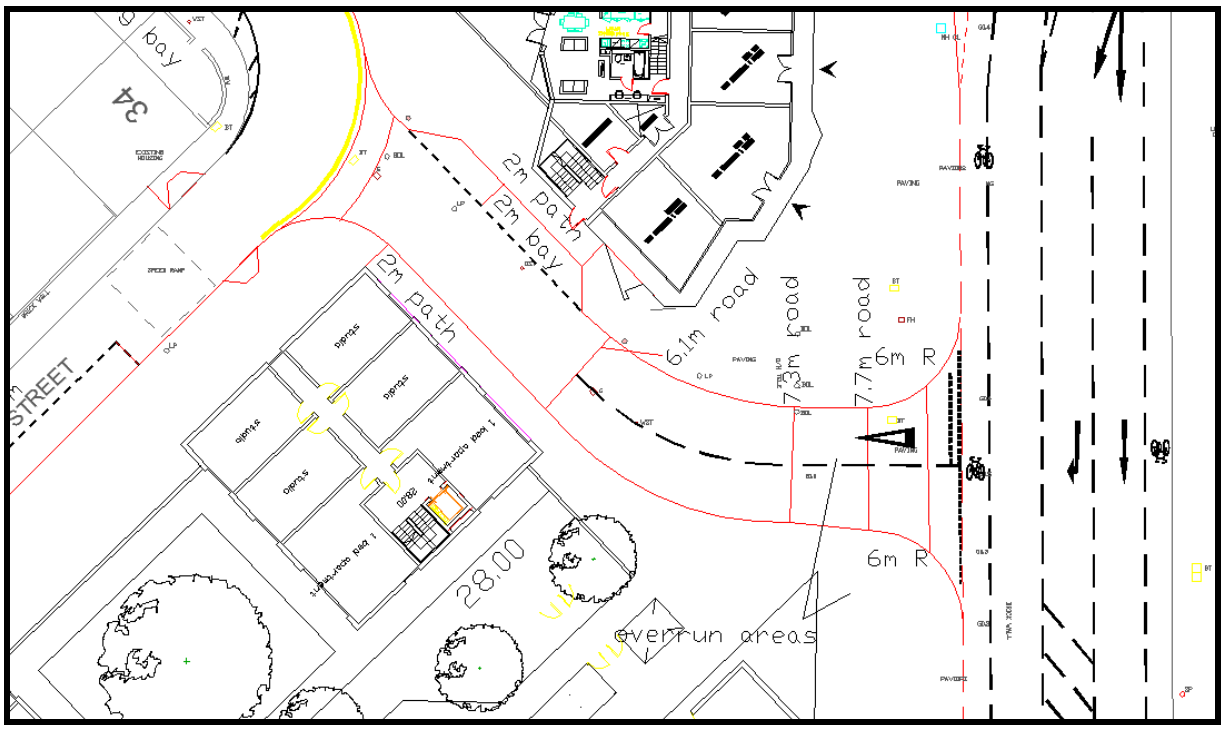
The following two images show the paths of a 11.2m refuse vehicle in each direction showing the first section from the right turn ghost island can accommodate both movements with no overlap of the paths. The left out and right in do overlap but this is in an area with lower flows and is similar to the situation for refuse etc on residential streets. The flow levels are low in nature thus conflicts if any would be minimised.





The layout without paths is shown below. The small triangle area on phase 1 over sails the highway at the upper levels and a licence will be needed.

It is proposed that the link as a minimum and in reality the local network to the west of the site be restricted to rigid hgv;s no articulated vehicles. The report sets out the implication of a 16.5m artic to support this conclusion.



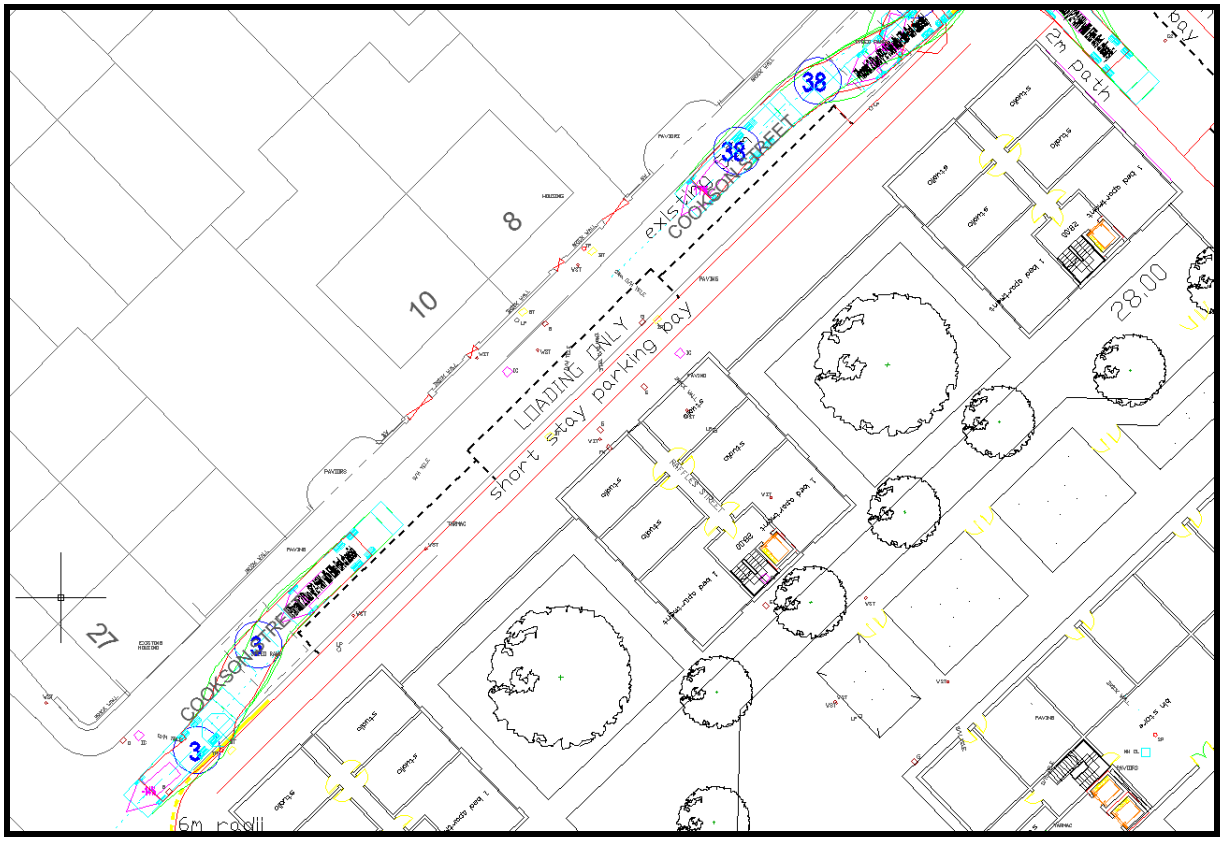
Cookson Street

The street is 5.5m in width now, no change proposed. It has no on street parking for residents.

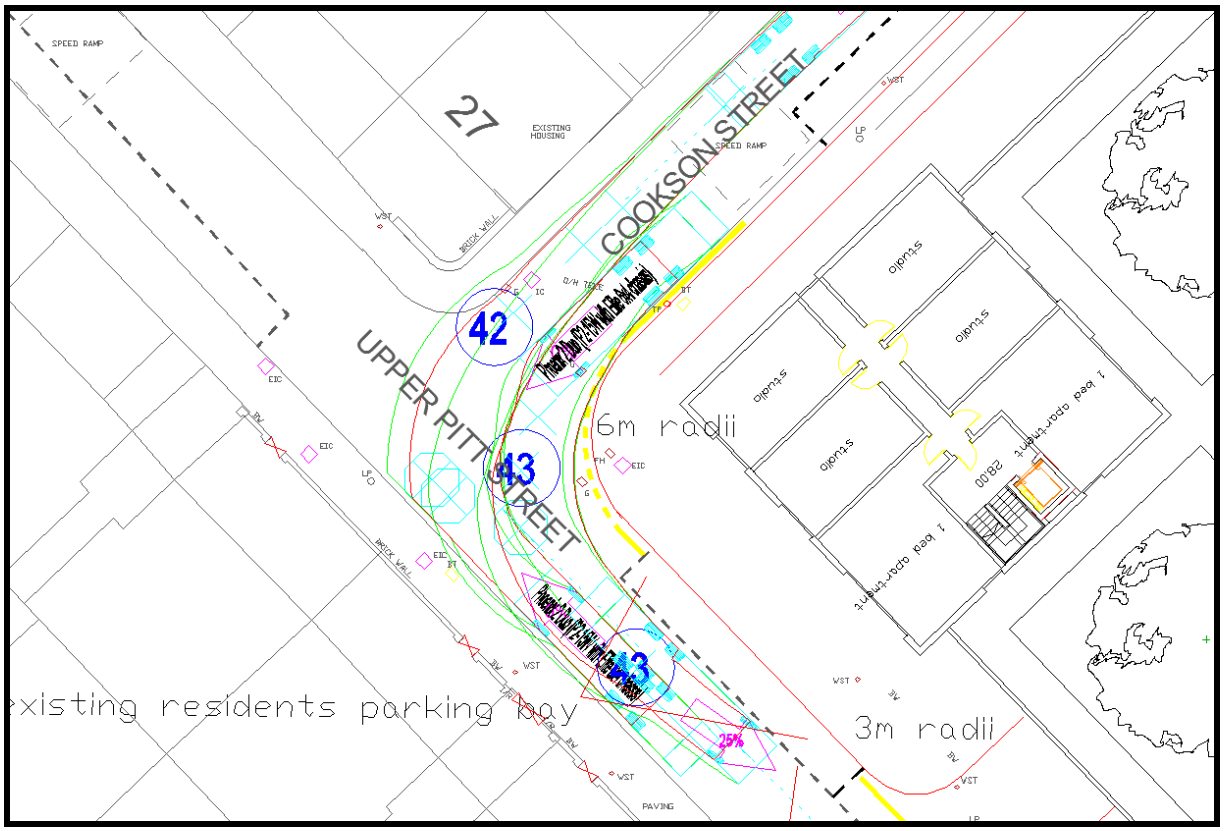
MFS shows that a 5.5m width can accommodate two hgv's but at low speeds.

A loading bay and short stay parking is proposed accommodated by a 0.5m widening to 6m. The two traffic humps will need to be adjusted.

The paths how the movements can take place is the parking or loading bays is occupied.

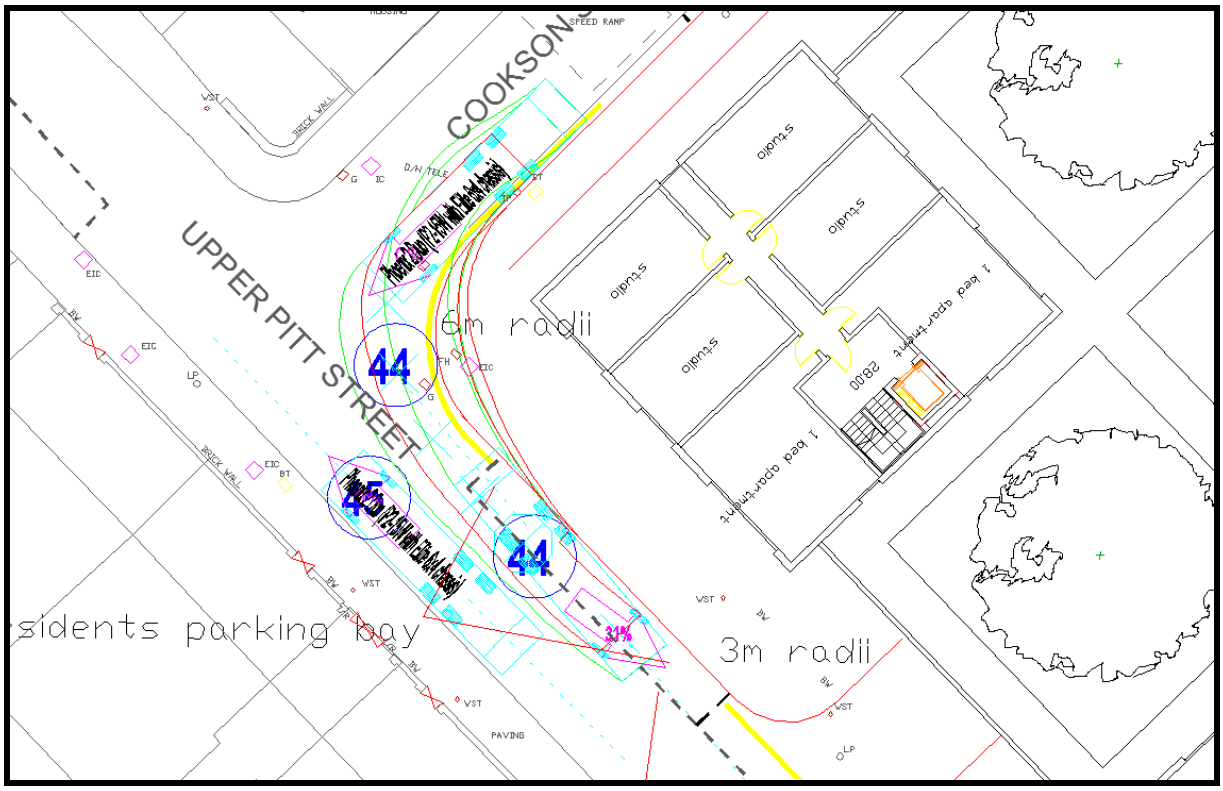


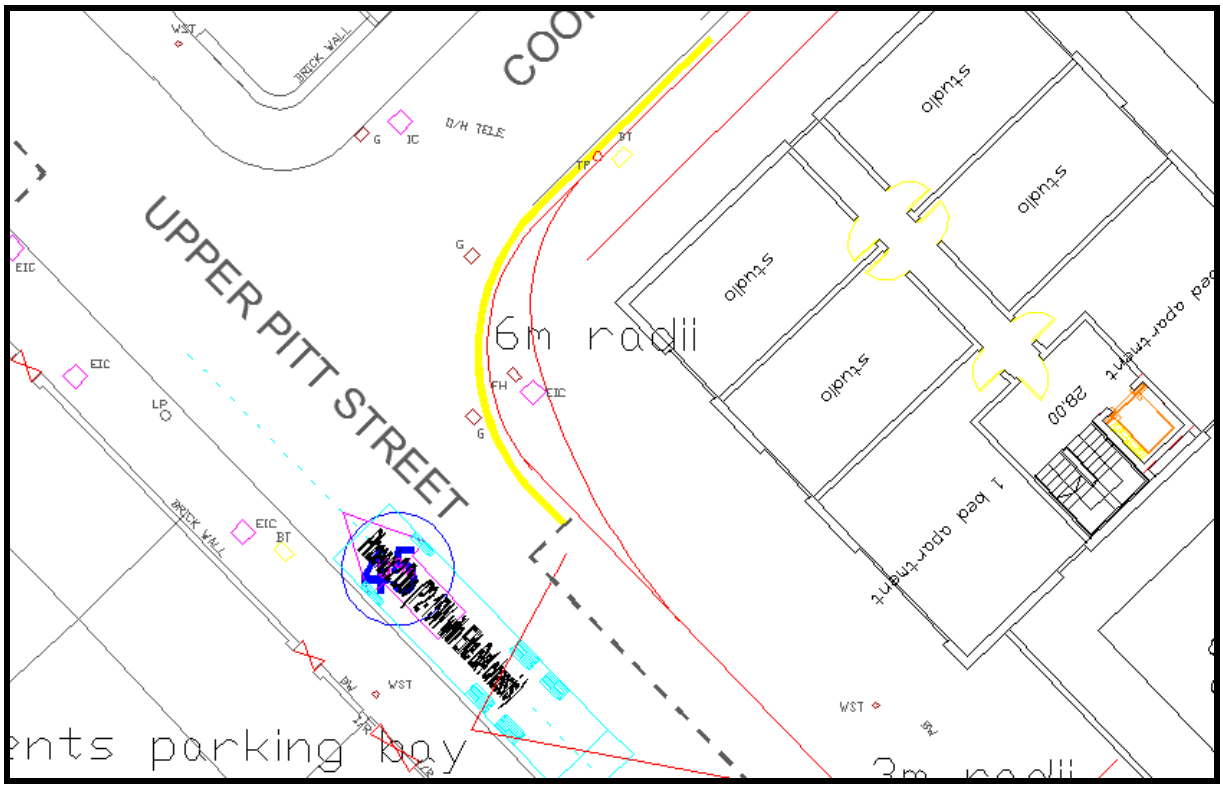
Upper Pitt Street



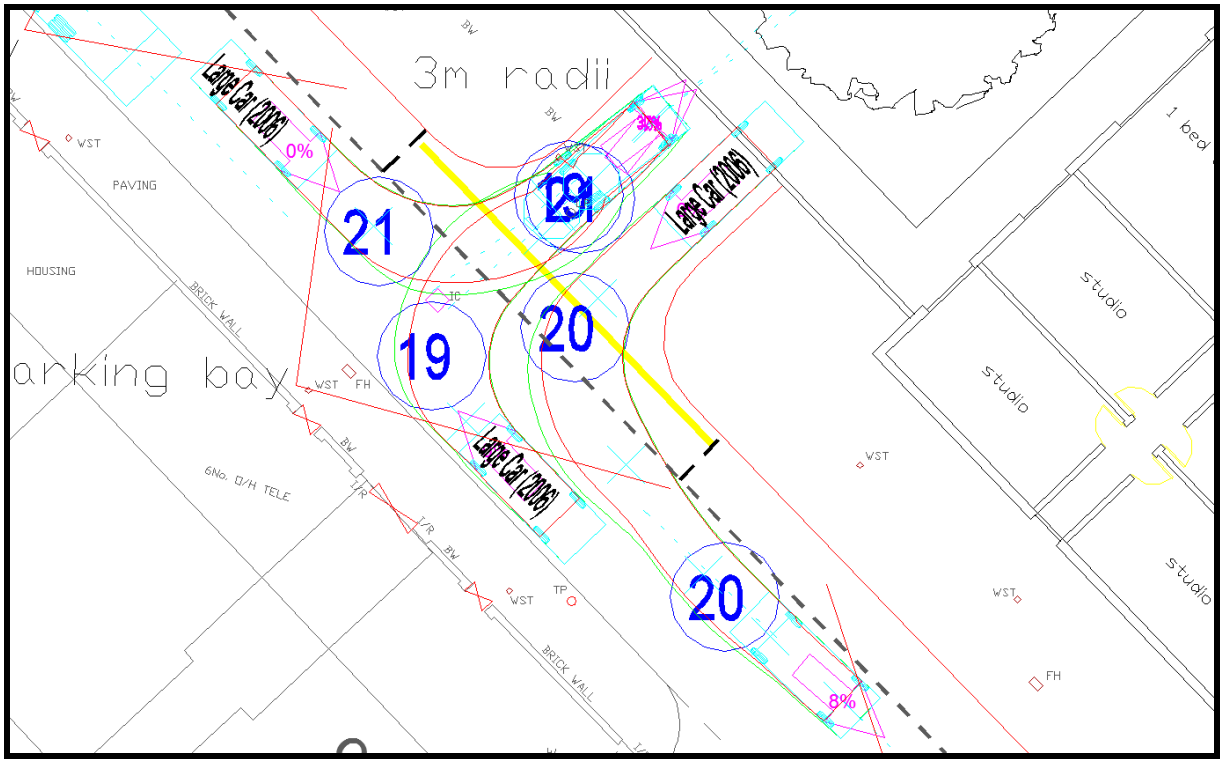
The existing junction layout does not accommodate two way movements with no overlap.

The proposal keeps this status quo and the parking on Upper Pitt Street. If the parking was removed to the detriment of the residents the overlap a can be reduced/removed with a change to the kerb alignment as shown below to create and overrun strip. This is not recommended as the number of large vehicles will be low.





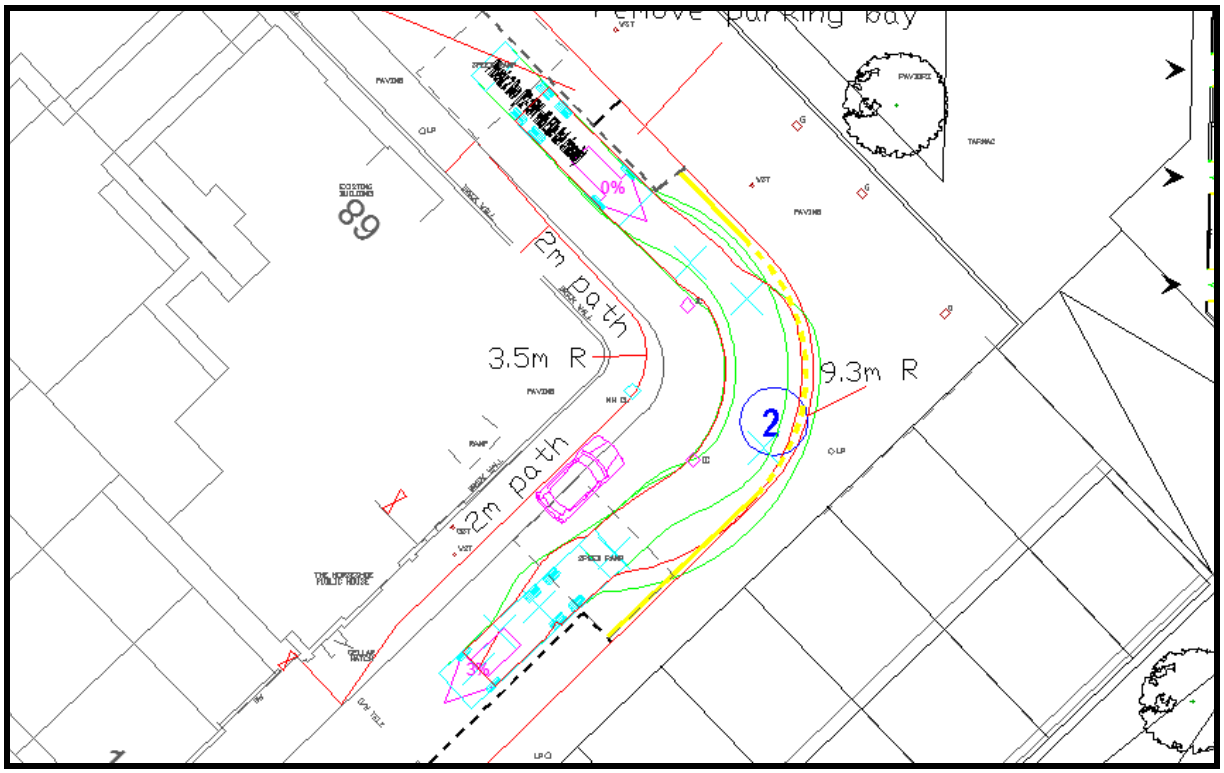
The car park is tracked and can easily accommodate the movements needed.



The parking bays is adjusted to suit the new changes.

Upper Pitt St/Duncan St corner

The corner turns 90 degrees now and thus cannot accommodate two large vehicle without overlaps.

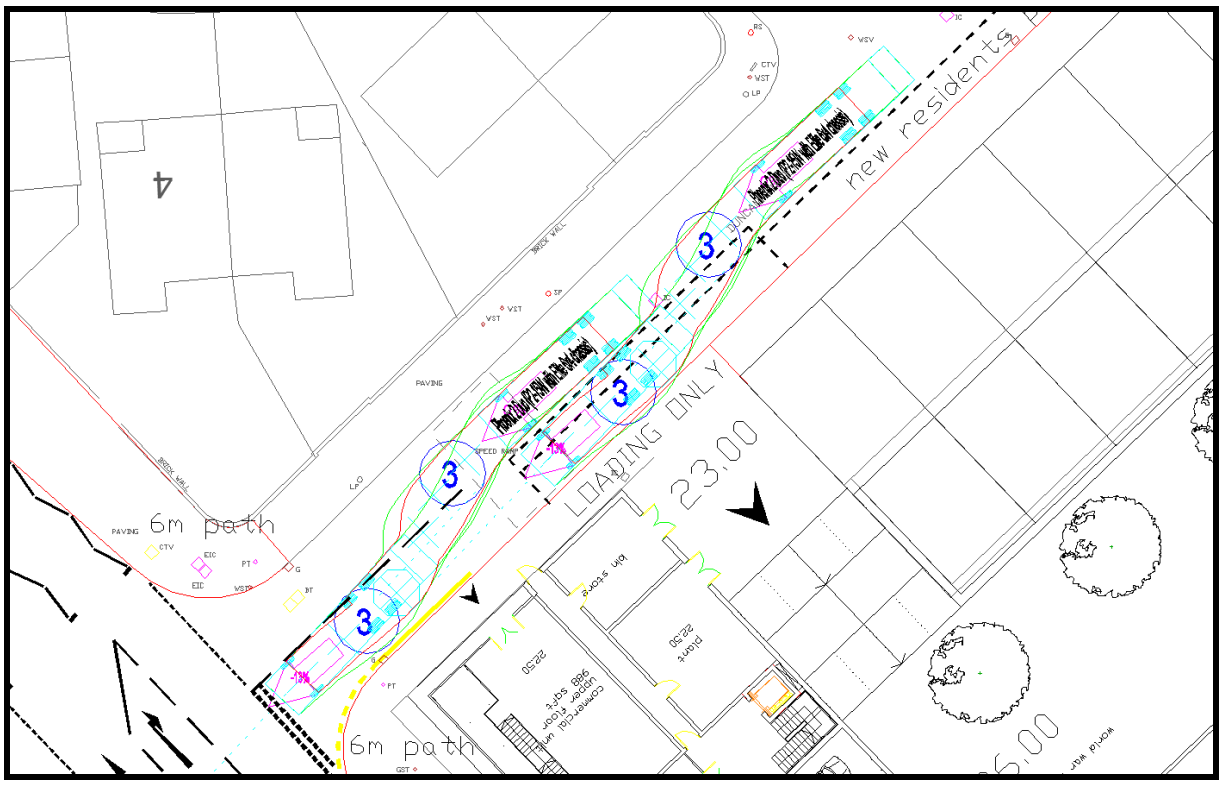


Upper Pitt St is 7m wide, 1.8m for the car leaves 5.2m which is too narrow to accommodate two hgvs's. Widening by 0.8m gives 6m thus two way for HGV's after the bend is negotiated. The approach inter visibility is 27m.

The parking to the new properties is adjusted to accommodate the hgv movement.

Duncan Street

Duncan St is 7.4m wide thus 5.6 even if parking occurs in the resident bays, it should be noted that the residents parking is not occupied to any great extend during the day.

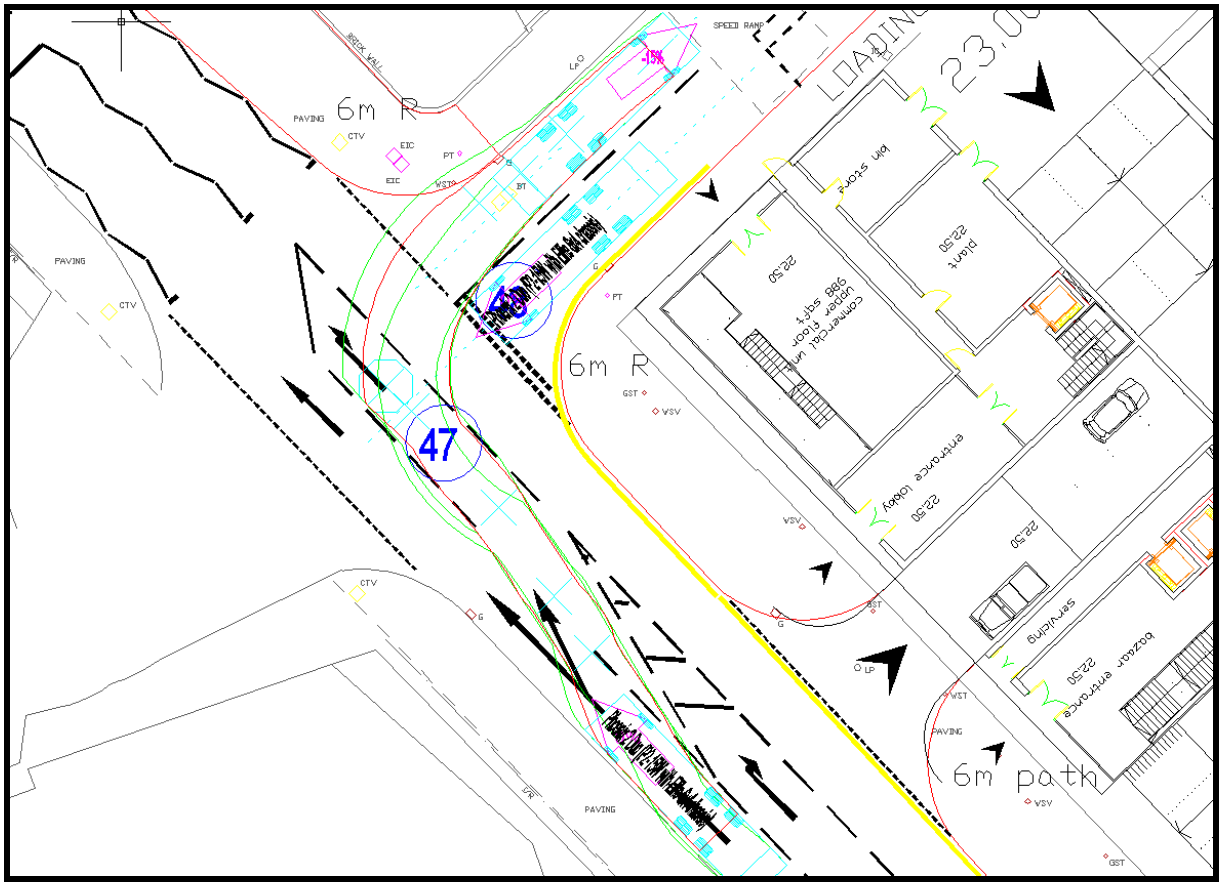


The lower section of Duncan Street has a loading bay provided and this can be dual use with the residents overnight. There is enough space for a hgv to approach the junction and wait until a gap in traffic allows it to exit even if a hgv occupies the loading bay.

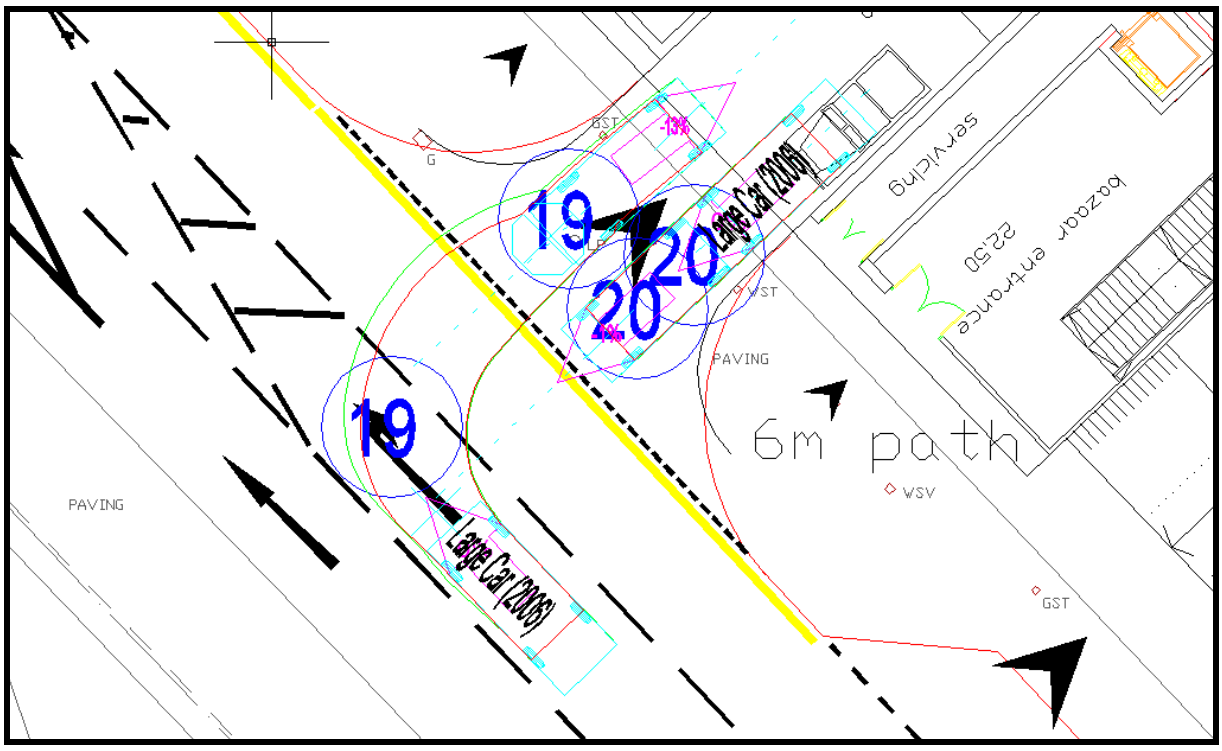
St James Street

The exit onto St James St is shown overleaf, the right turn in can be undertaken with a vehicle at the give way.

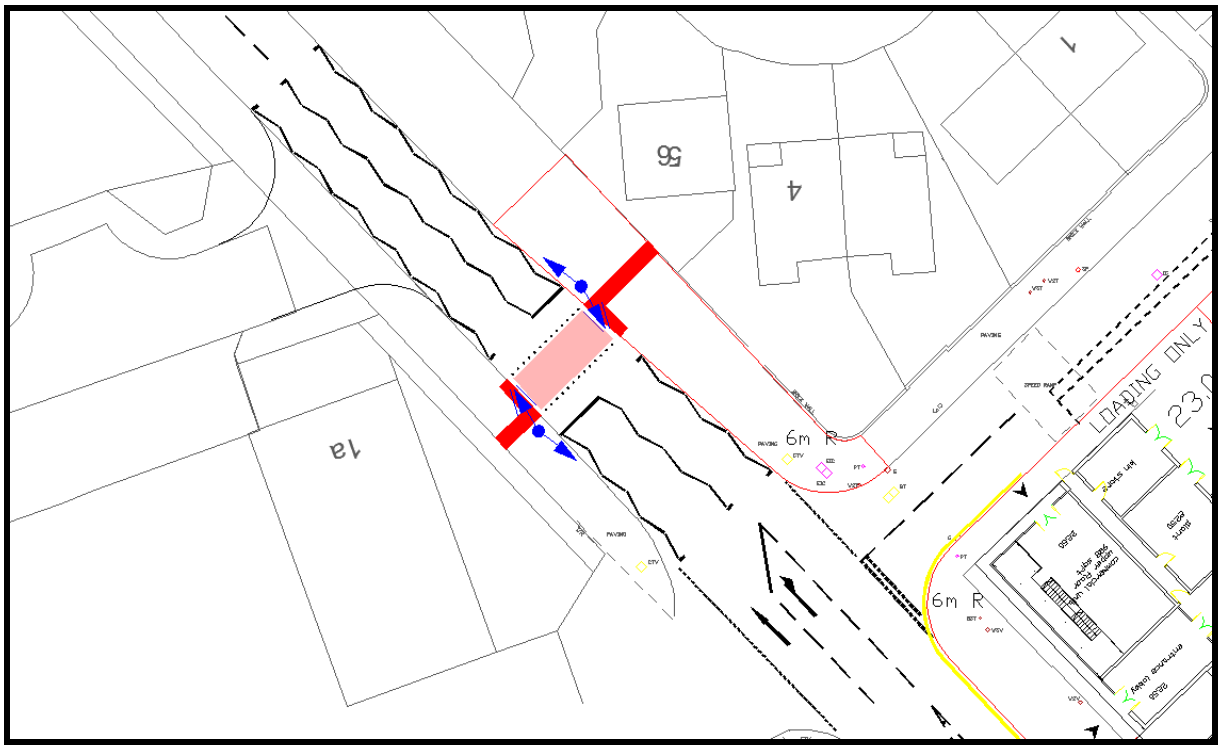
The left turn out does over run the right turn area so will need a gap however this occurs in a number of locations and is part of the urban network arrangements.

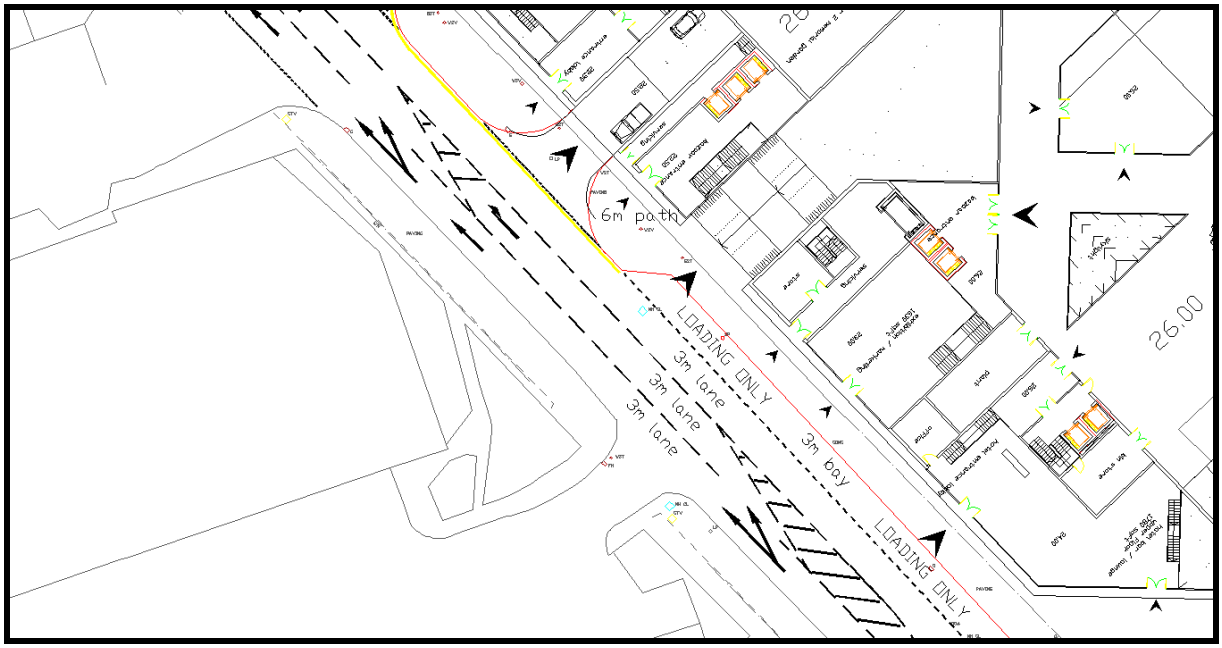


The car park has been tracked and has no issues.

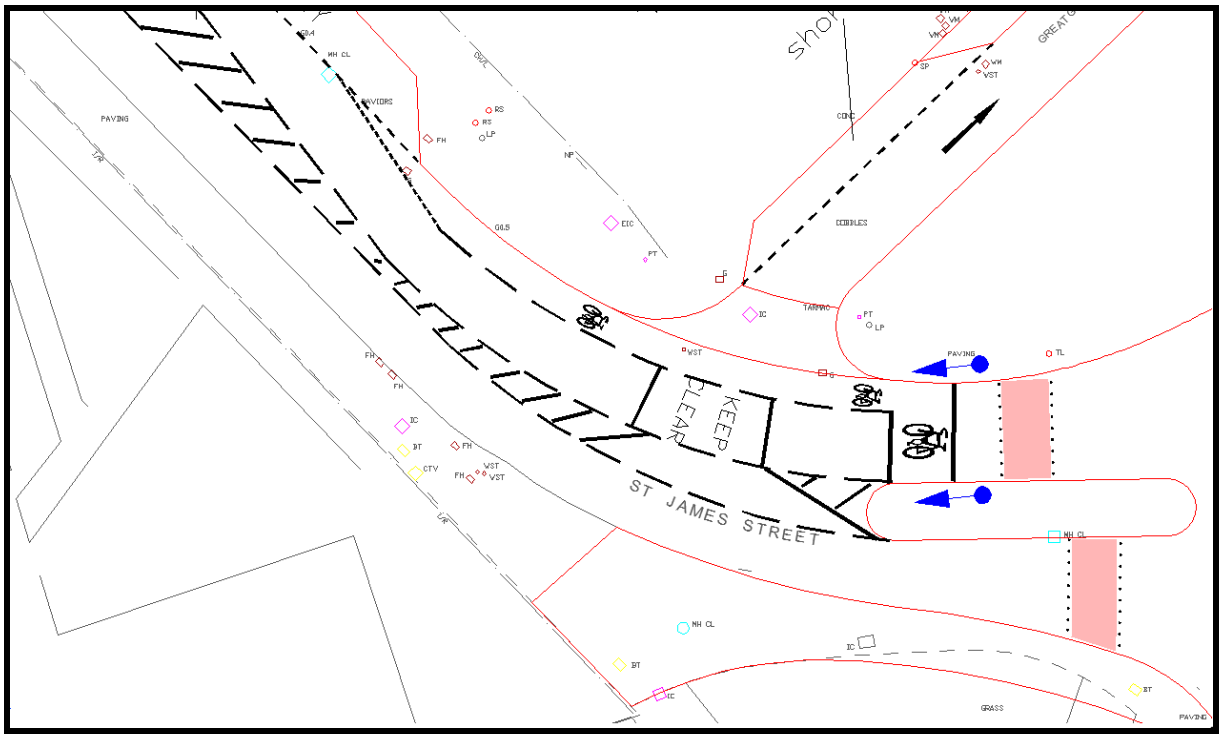


The St James ST is 3m lanes, a new puffin crossing to link to the Baltic Triangle and a ghost island right turn for the car park and the Duncan St junction. Shown in section for clarity. A 3m wide loading bay is also provided. This can be used as par other sites for taxi drop off etc.

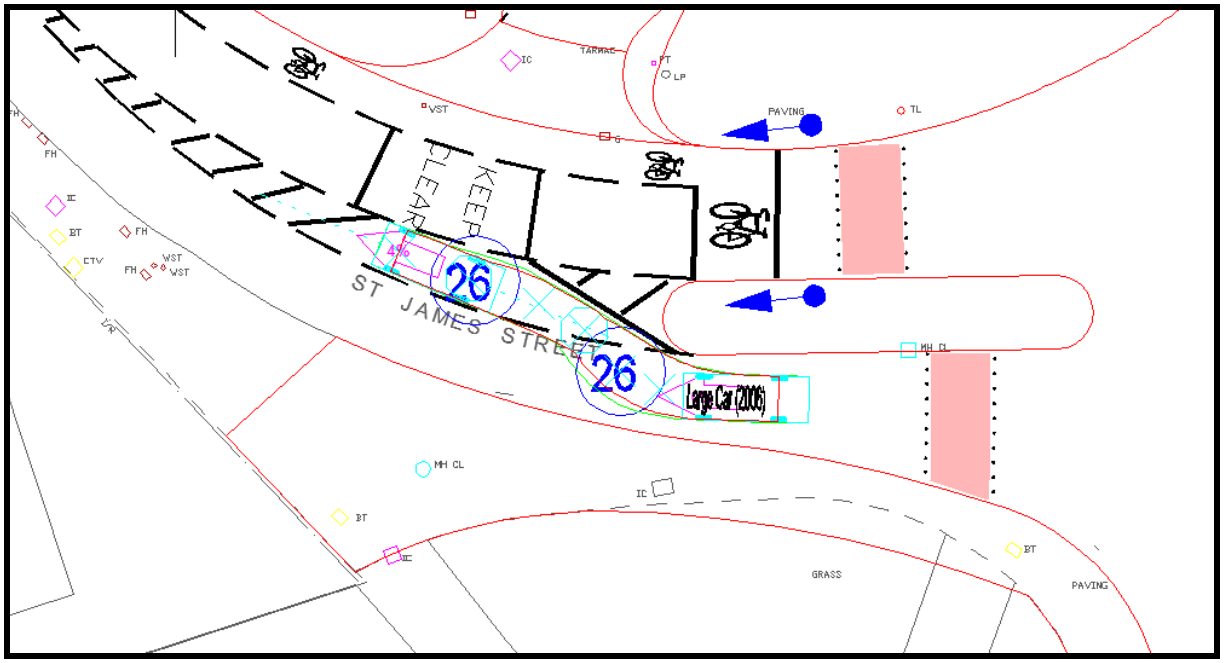




A 1.75m cycle lane is provided as a new feature on the route to the signals stop line along with a pedestrian crossing/splitter island which is new.

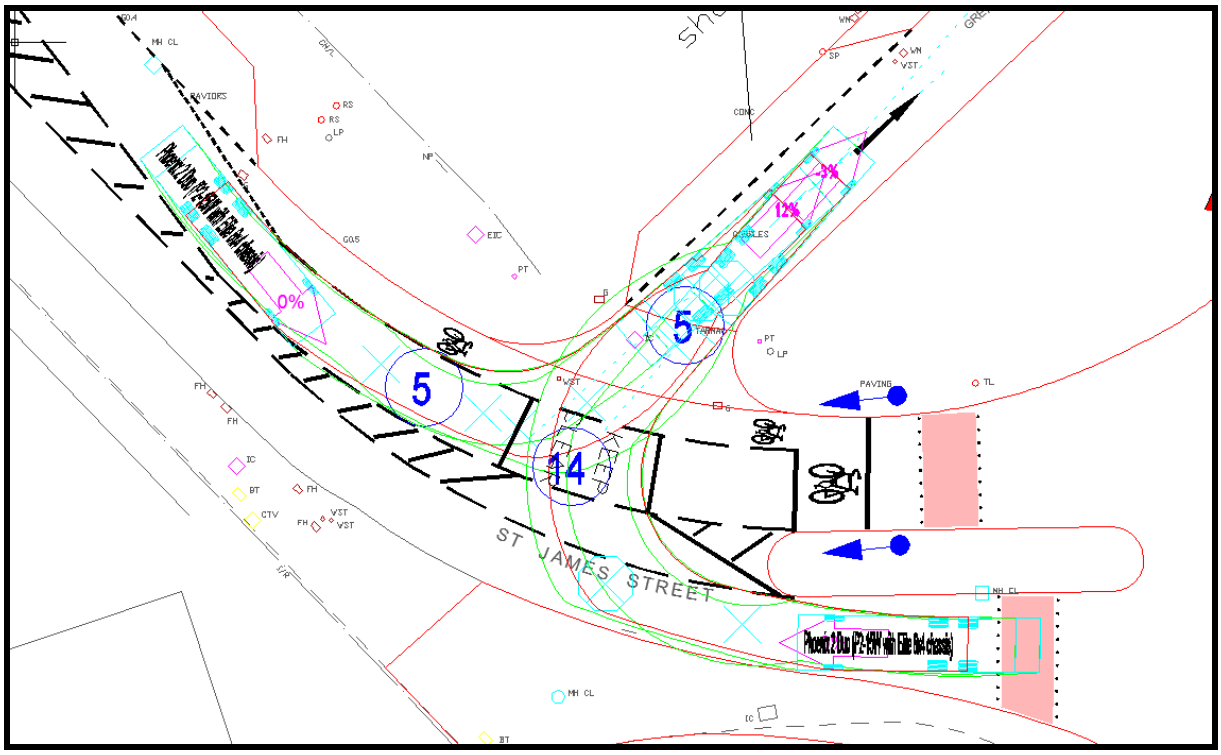


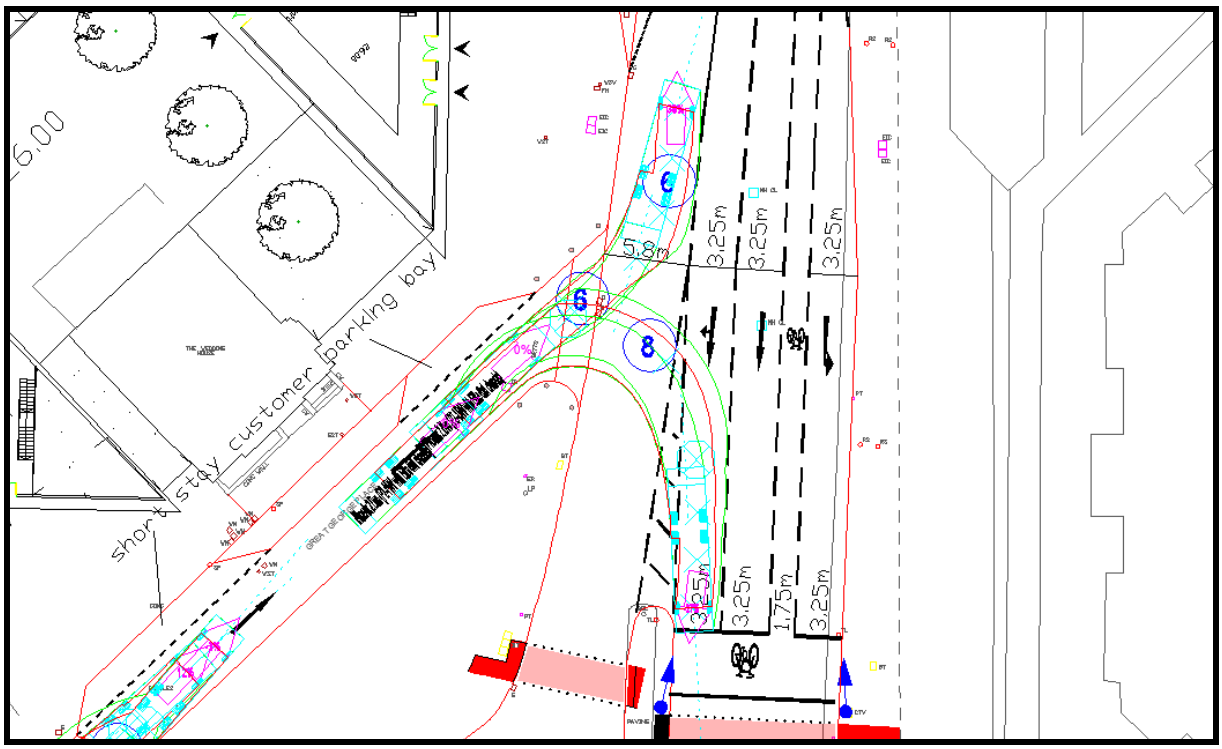
The Wedding Building access is largely unchanged but as the central area of St james St has been hatched the ability to provide a short right turn area for cars has been actioned. It should be noted that the existing situation is that the right turners of any type block the ahead movements at the signalised junction. It is not anticipated that the movements will noticeably increase.



The route will be one way from St James Street, with short stay parking for customers, this may be 3 hours max for the fitting use etc to be agreed.

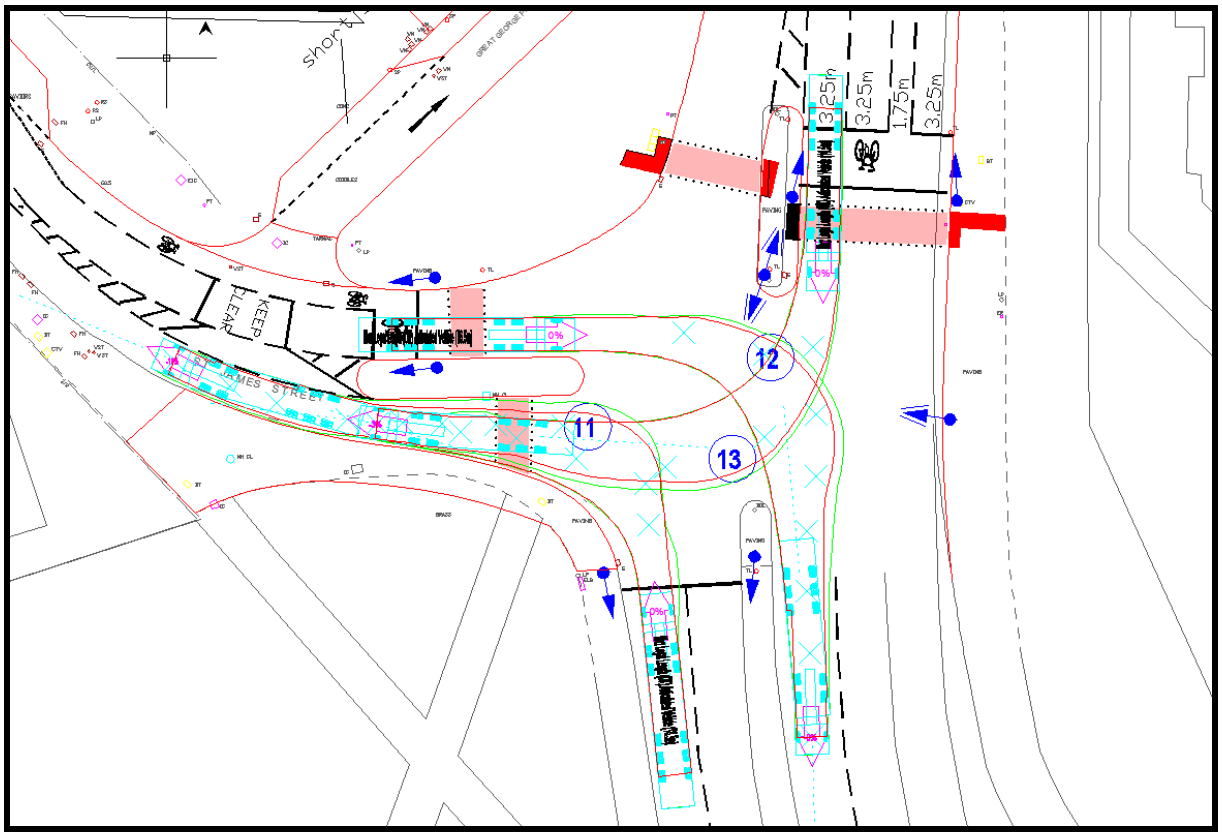
The in from the left and right is tracked, and shows a keep clear area for the movements to take place if the lights are on red. The forward area is 6m long so a car can wait in advance of the keep clear.





The out is shown left and right, the worst case right out and then right back into St James St at the stop line is shown and can be accommodated.

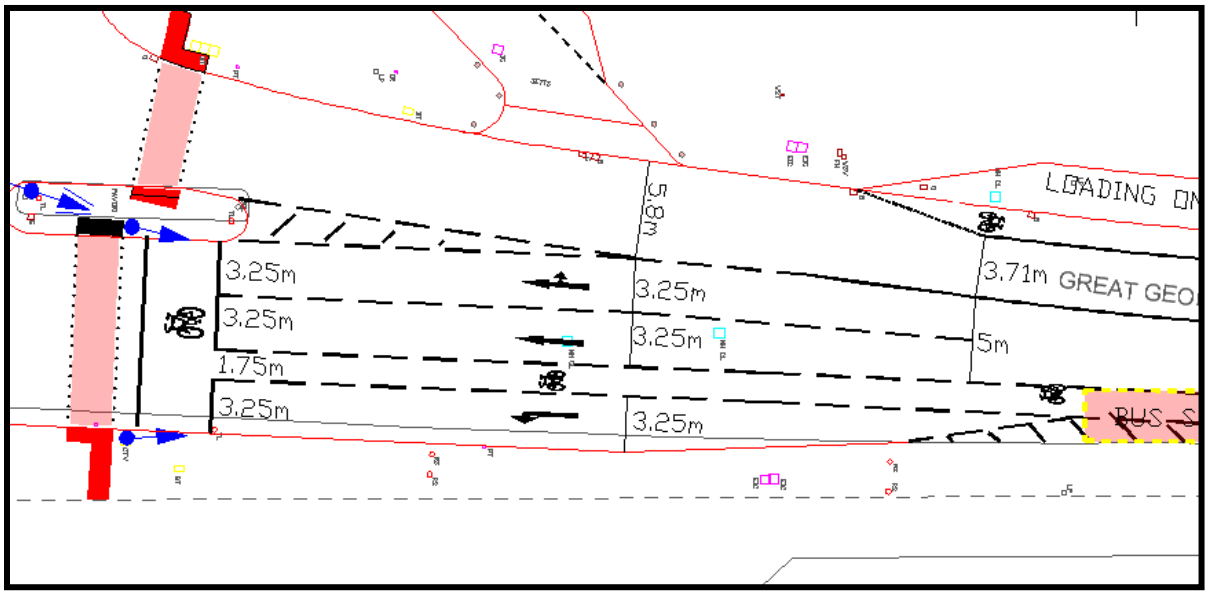
Great George St/St James St junction



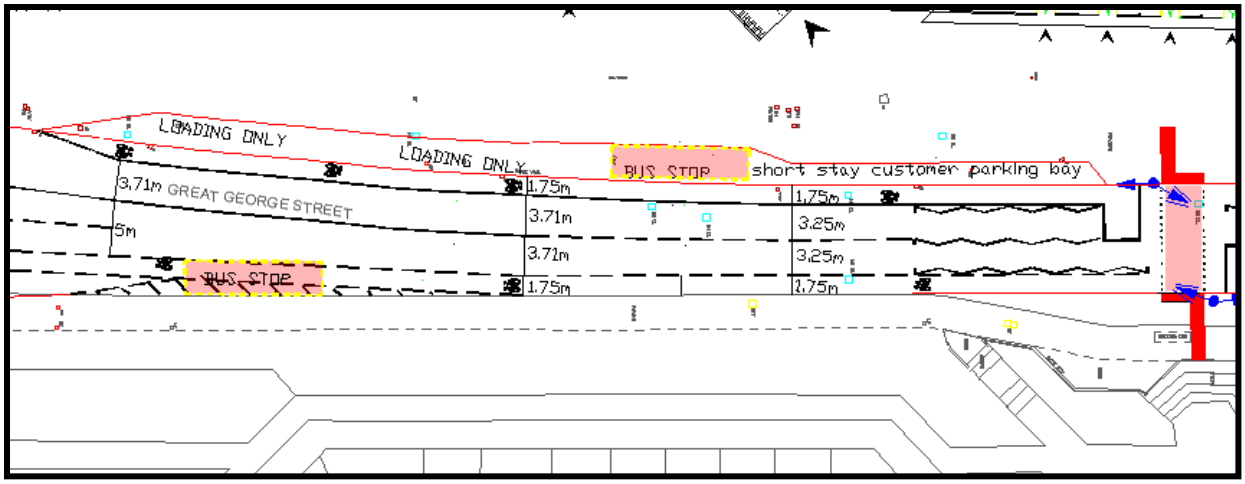
The route has been designed with new pedestrian crossings and has been tracked for the worst case HGV a 16.5m artic vehicle and has no operational issues.

Great George St

The phase 1 changes are accommodated to the approach but to deliver the 3.25m lane widths a 0.75m widening has been designed to the left turn approach area.

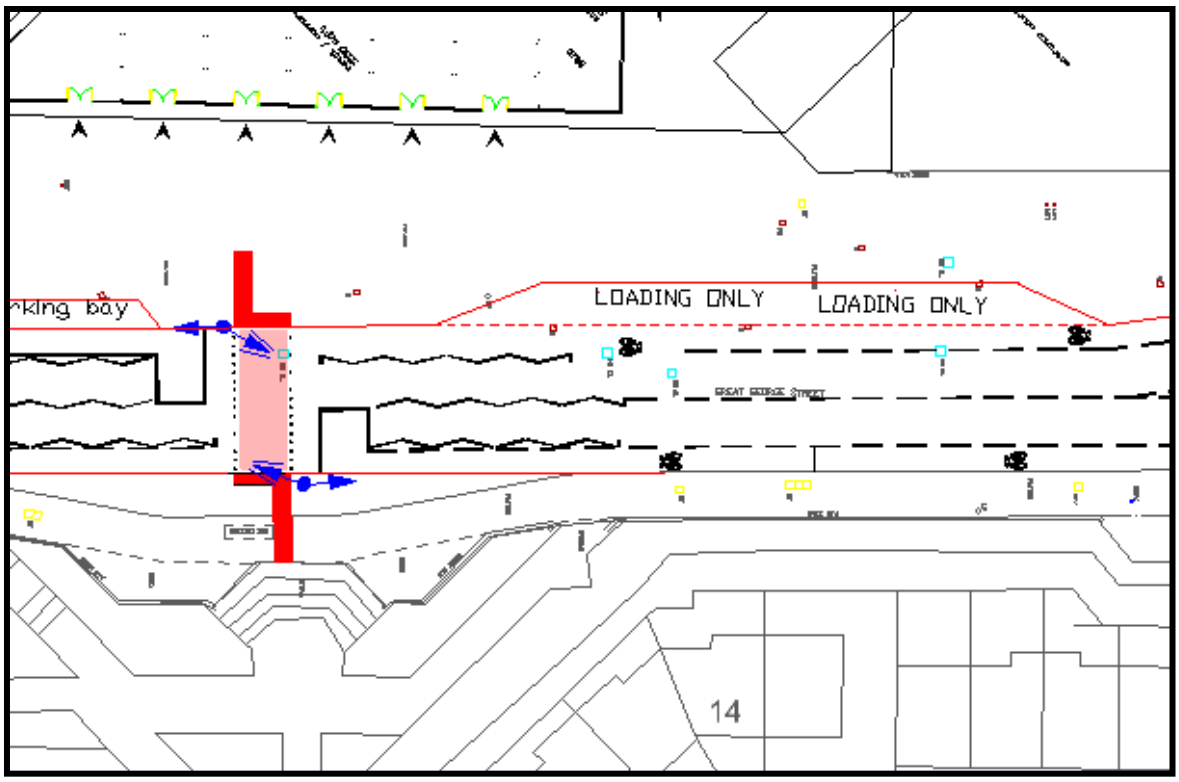


The next section provides a 3m loading bay and 2m short stay parking times to be agreed, indicative bus stops are shown for review by Mersey Travel. The 3.25m lanes and 1.75m cycle lanes are accommodated in the existing road width.



A new puffin crossing is provided near the cathedral steps to link the east side of the residential area into the new commercial area. It is suggested advance stop lines for cycles are provided.

The next section accommodates a further loading bay for the commercial area for larger hgv's. Smaller 7.5 t/vans etc will be accommodated in the underground car park area.



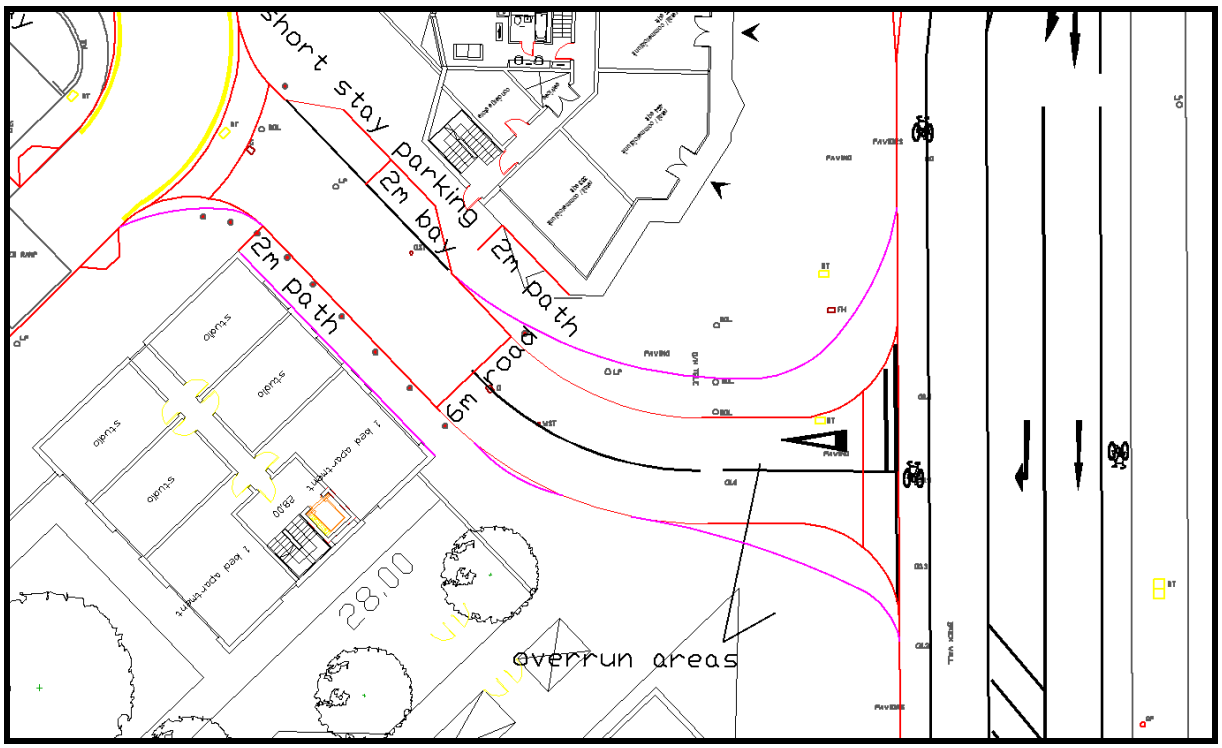
The right turn ghost island is designed to accommodate mainly cars but at 3.25m width can accommodate a HGV.

The northern section remains the same as phase 1.

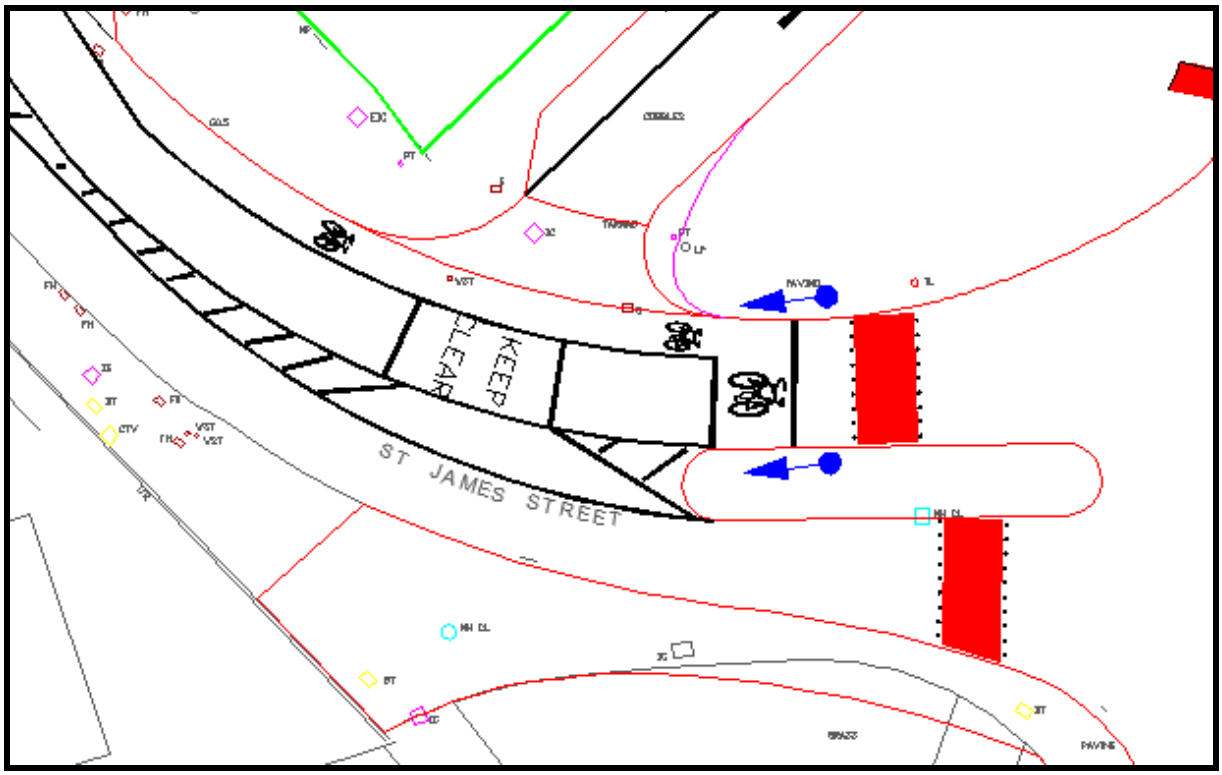
Full HGV 16.5m artic effects

Although not considered the way forward the internal and the junctions have been tested for a 16.5m artic and the overrun/extra carriageway changes shown in purple.

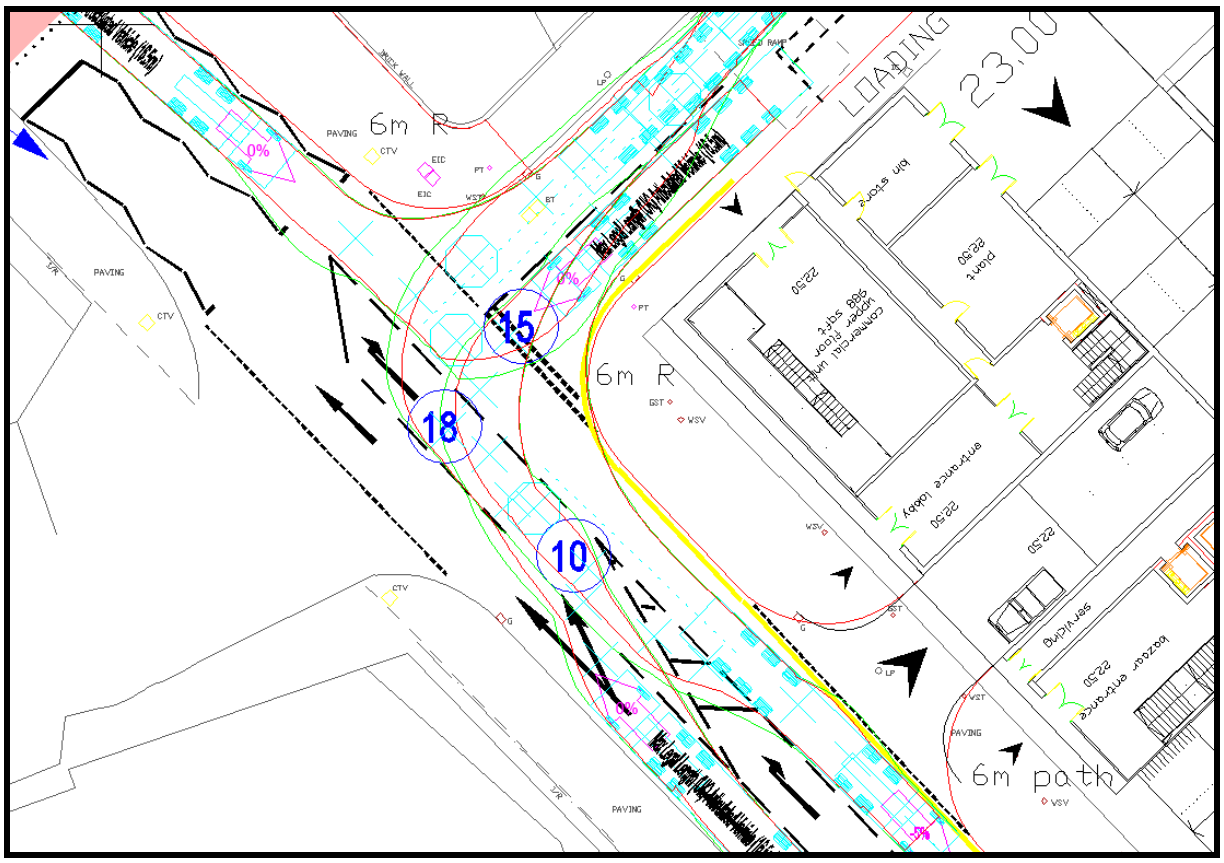
The link road is the worst affected by the left in/out. In any event the area between the two buildings cannot be widened so the junction need to remain free running.



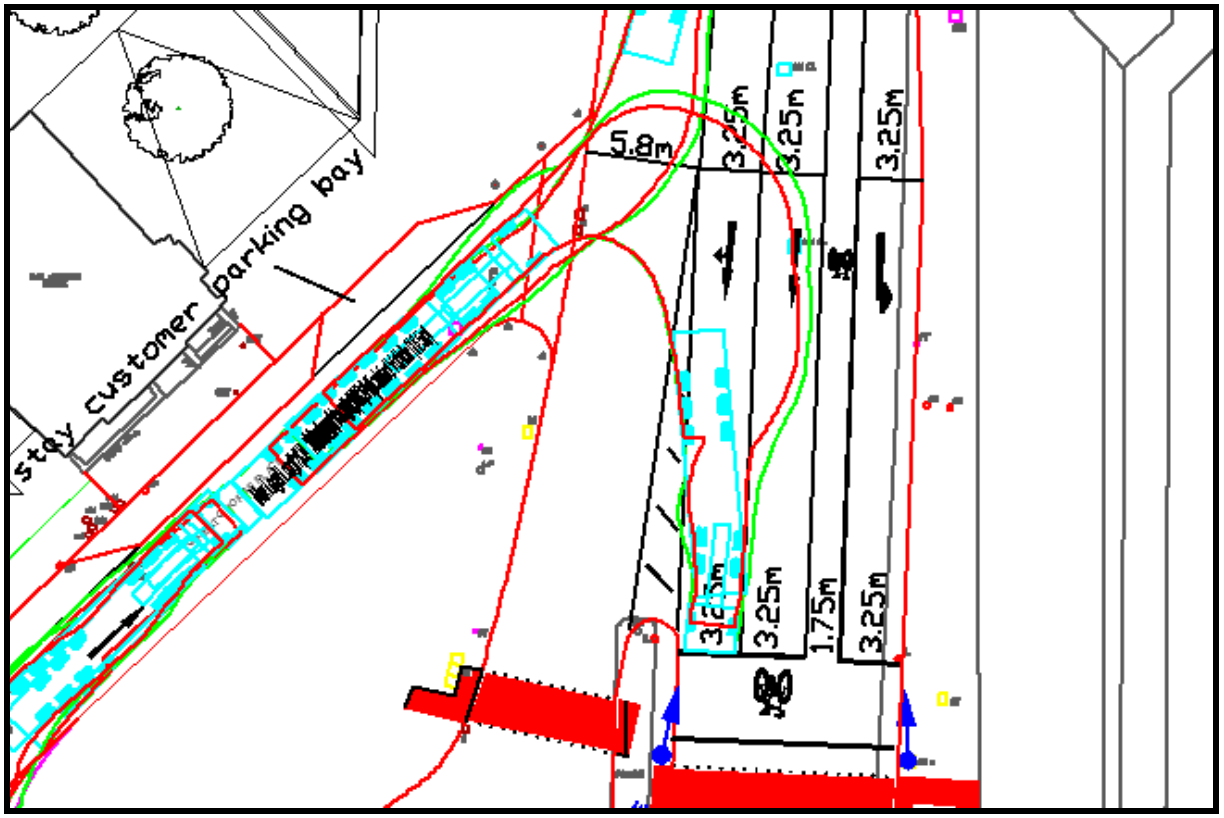
The wedding building area should not need an artic access but if needed would require the overrun strip shown.

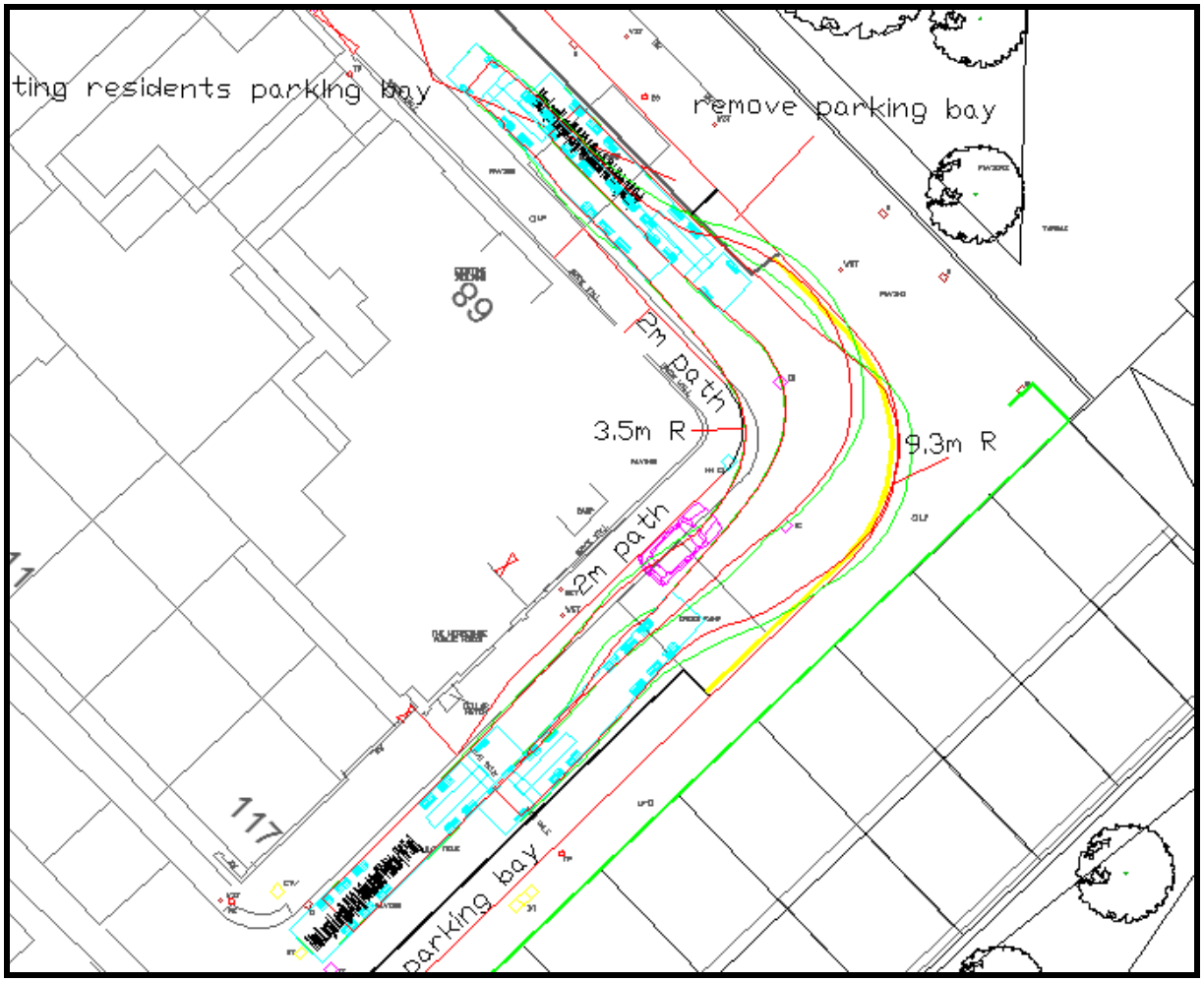


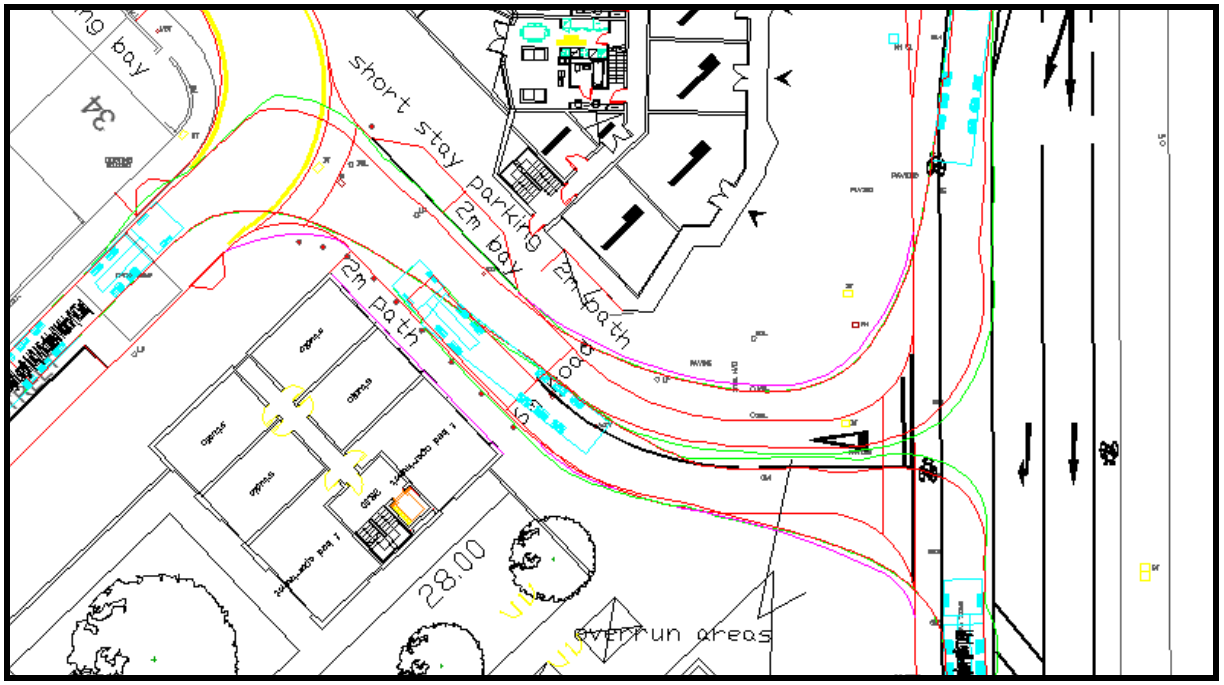
The Duncan Street junction can accommodate the arctic but overruns the ghost island and the centre lane, no physical changes would significantly change this.



Cookson Street is even further restricted. For completeness extra tracks shown.




ting residents parking bay
remove parking bay
89
2m path
3.5m R
9.3m R
2m path
117
parking bay


short stay parking bay
2m path
2m path
28.00
overrun areas