

6.4.1 Site Access

In Chapter 5 it was stated that a further assessment of the ability to provide an access to sites L and M was needed. At this stage in the project, detailed access proposals have not been drawn up to enable a full junction capacity assessment to be undertaken. However, there is enough data for an initial assessment of the potential impact on the Trunk Road to be undertaken.

An estimate of the potential morning peak hour trips generated by the Park and Ride has been made. Using data collected from the existing facility at the football stadium it is expected that 47% of the 950 car parking spaces are filled in the morning peak, equating to 447 vehicle arrivals. Assuming that buses depart every 15 minutes, there will be four services in the peak hour. If the arrivals are split equally between each bus, this equates to 112 arrivals every 15 minutes, approximately 8 per minute. This assumes an even distribution of arrivals across the peak hour however within this there will be more concentrated peaks.

The distance between the existing private access road to Maiden Castle Cottages and Stadium Roundabout is approximately 50m. Clearly there is the potential for right turning vehicles to obscure traffic movements on Stadium Roundabout which would draw an objection from the Highways Agency. This could be overcome by signalling both the roundabout and the access into the Park and Ride. However, it is understood that signalling Stadium Roundabout has been considered by the Highways Agency as part of the study into the programmed upgrades and subsequently rejected. On this basis there is no adequate means of entry to site L and it is rejected.

Vehicles approaching site M from the A352 and A35 corridors will turn left into the site in the morning peak hour, therefore vehicle queues will be less significant, and it will not have the same impact on Stadium Roundabout.

6.4.2 Potential Impact on the Trunk Road

The DEC 2002 SATURN model has been used to establish an understanding of the traffic impacts of the location of a Park and Ride site located at locations I, J, K, L and M and R and S. The SATURN model runs have been undertaken by DEC. It is accepted that the SATURN model data and network require updating to more accurately estimate the impact of the Park and Ride. For example, the proposed upgrades to Stadium and Stinsford Roundabouts are not included in the model. However, the model provides the most appropriate tool at this time for considering the potential impacts on the A35.

To provide an estimate of the traffic impact of the Park and Ride locations the SATURN model has been adapted by relocating existing long stay parking from County Hall to the proposed locations. This is a simple test that broadly replicates West Dorset District Council's Policy of relocating long stay parking out from Dorchester Town Centre.

Survey data collected from the existing Park and Ride site at the football ground reports that 47% of the car park capacity arrives during the morning peak hour. For a 950 space Park and Ride this accounts for 447 vehicles.

The following tests have been undertaken using the SATURN model:

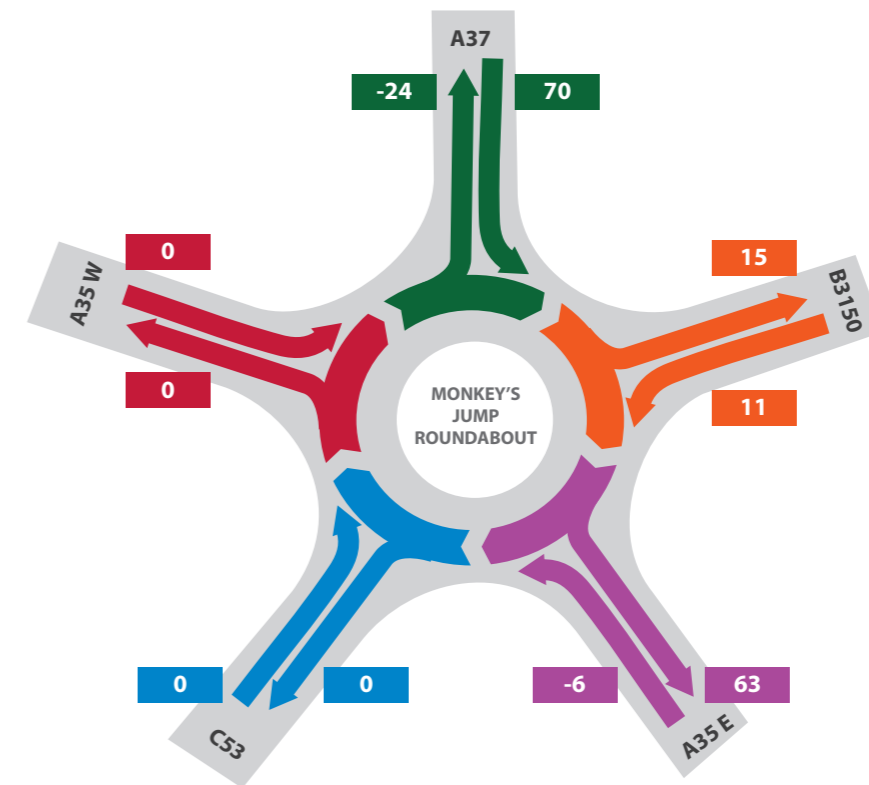
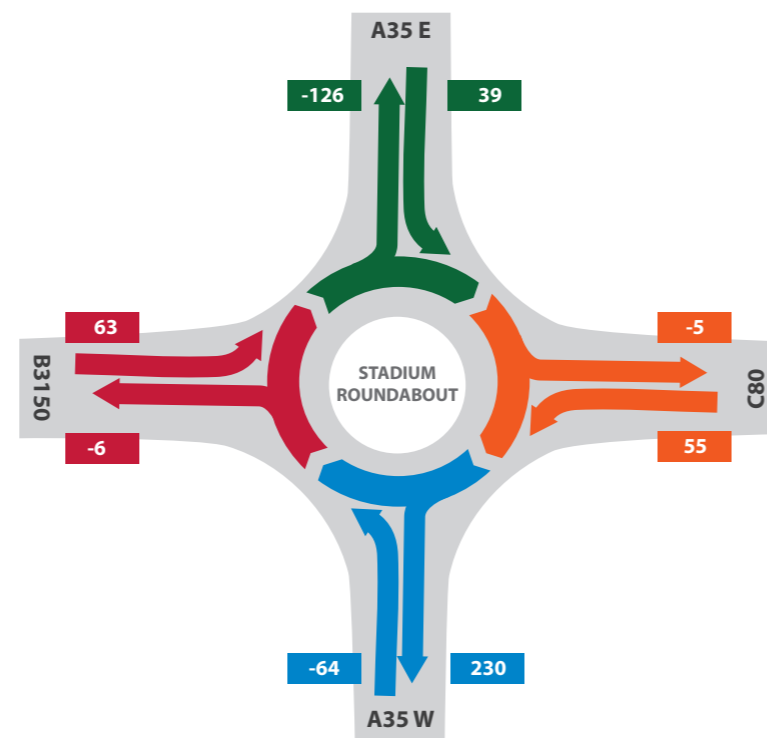
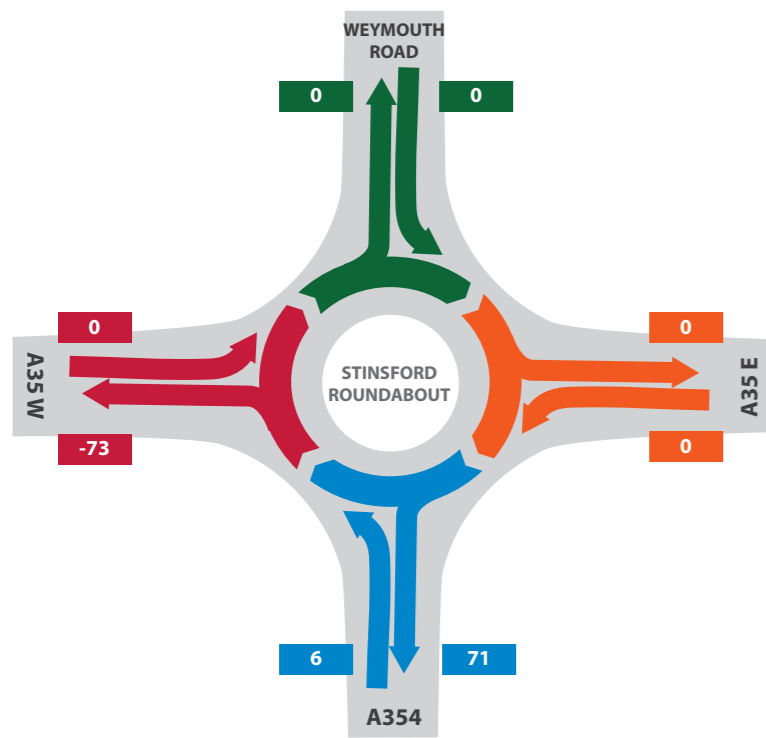
- Relocating the County Hall car park (483 arrivals in the morning peak) to the proposed sites
- Relocating Town Centre car parks (Wollaston Field and Acland Road) (216 arrivals in the morning peak) to the proposed sites

The relocation of the County Hall car park presents the most appropriate comparison in terms of both duration of stay, likely travel patterns and number of arrivals. The County Hall arrivals are within 10% of the estimated arrivals to the proposed Park and Ride which is considered to be a reasonable comparison.

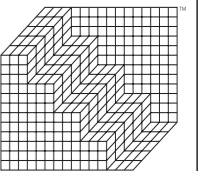
The SATURN model results of this analysis are included in Appendix F and described below.

6.4.3 Park and Ride Located at Stadium Roundabout

The SATURN traffic model zone relating to County Hall has been relocated to the south of Stadium Roundabout. The result of the SATURN model analysis are presented in Figure 6—2.



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PROJECT
DORCHESTER PARK AND RIDE

DRG
IMPACT OF PARK AND RIDE SOUTH OF STADIUM ROUNDABOUT - SATURN RESULTS

DRAWN BY **BH**

DATE **07 SEP 2010**

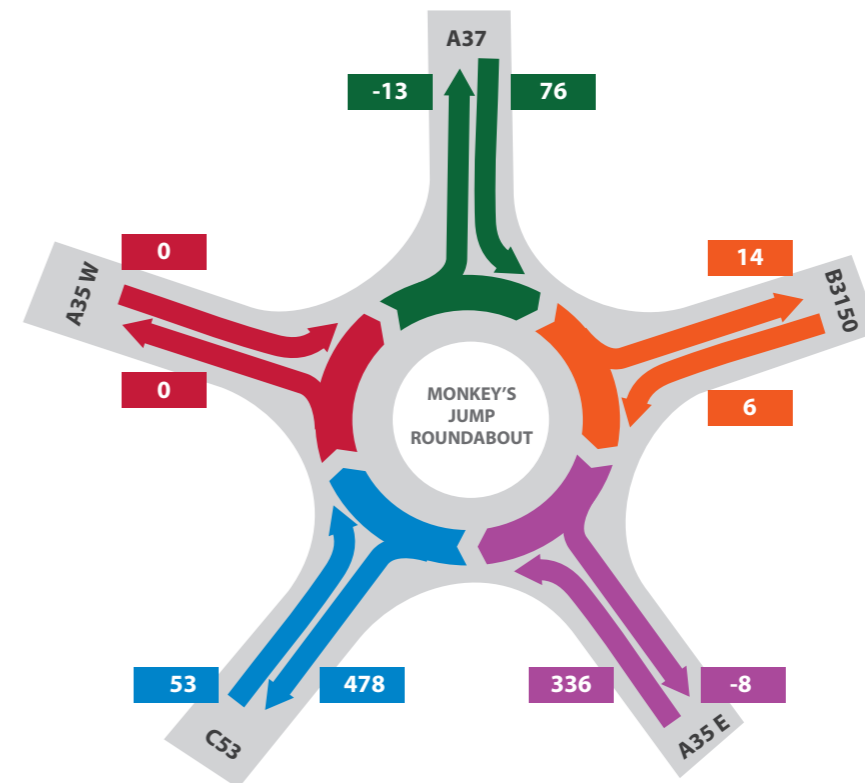
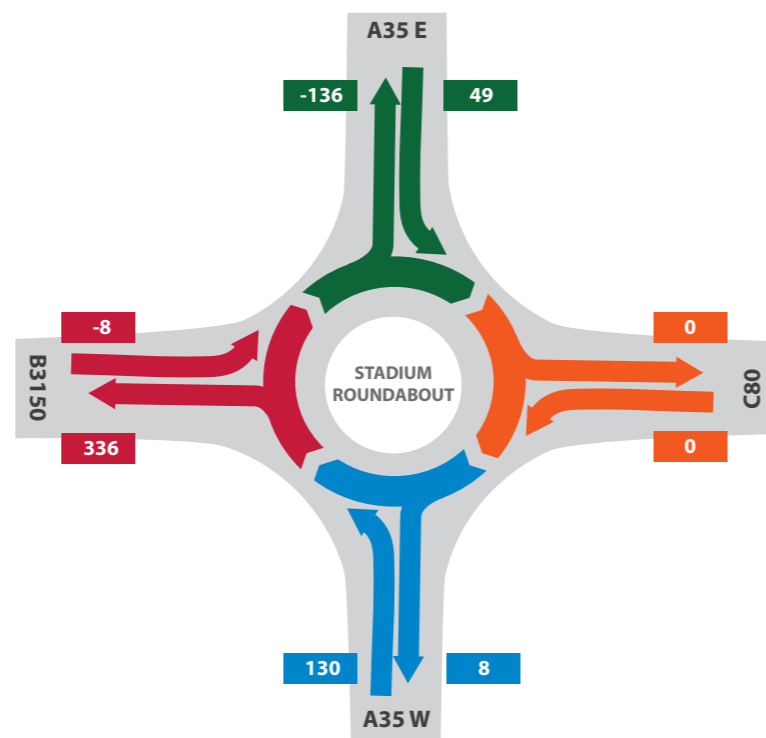
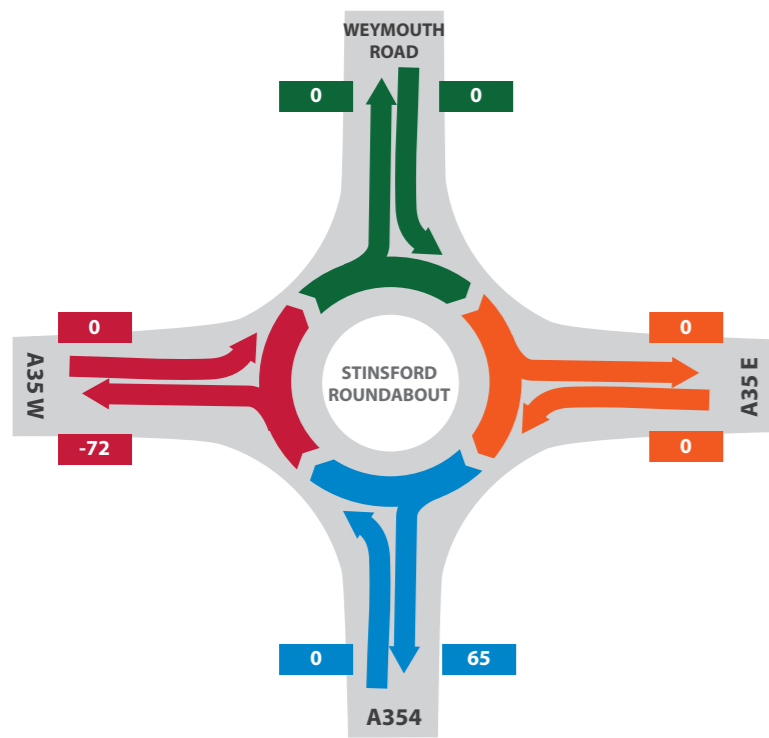
JOB NO. **0208088**

DRG NO. **FIGURE 6-2**

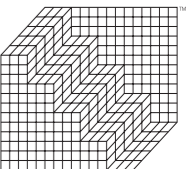
The results, in particular, reiterate that the main draw for a Park and Ride will be from Weymouth and the north west (A37). The strategic nature of the SATURN model means that minor movements are not well represented. As would be expected, the most significant impact is on Stadium Roundabout itself with traffic being intercepted from the Weymouth direction.

6.4.4 Park and Ride Located at Monkey's Jump Roundabout

The SATURN traffic model zone relating to County Hall has been relocated to the south west of Monkey's Jump Roundabout. The result of the SATURN model analysis are shown in Figure 6-3



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PROJECT
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DRG
**IMPACT OF PARK AND RIDE
SOUTH WEST OF MONKEY'S
JUMP - SATURN RESULTS**

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DATE **07 SEP 2010**

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DRG NO. **FIGURE 6-3**

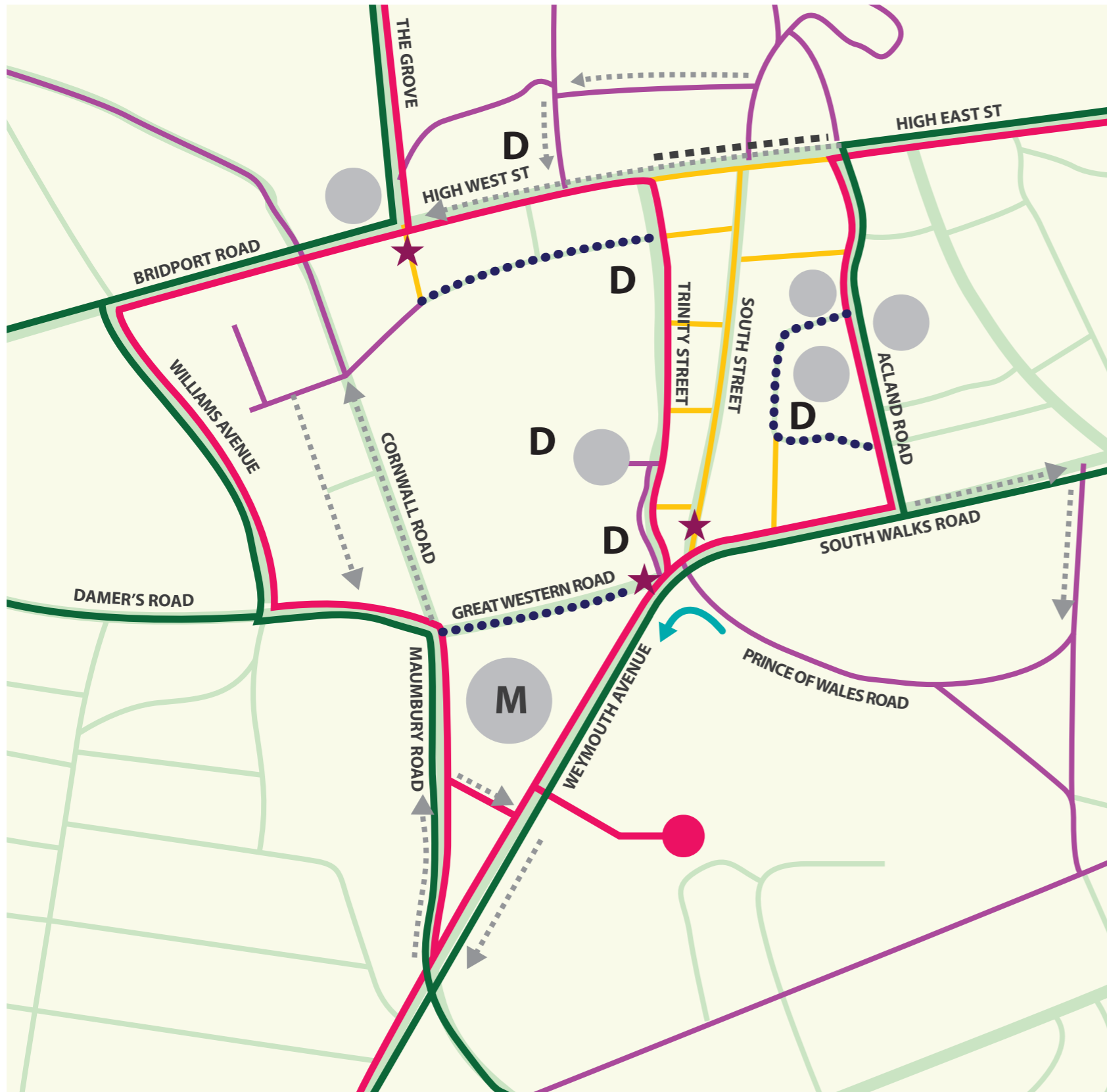
The results, in particular, reiterate that the main draw for a Park and Ride will be from Weymouth and the north west (A37). The strategic nature of the SATURN model means that minor movements are not well represented. As would be expected, the most significant impact is on Monkey's Jump although there are equally significant impacts on Stadium Roundabout with traffic being drawn from the Weymouth direction.














6.4.5 Conclusion

Travel to Dorchester is primarily from Weymouth and the A37, with Weymouth being the main draw. This is validated by the SATURN modelling and demonstrates that a Park and Ride site at Monkey's Jump would have the largest impact on the Trunk Road network.

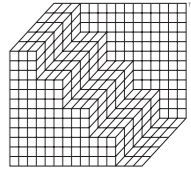
6.4.6 Dorchester Transport and Environment Plan

DTEP is a scheme to enhance the Town Centre for pedestrians and for public transport services. The planned improvements will affect the circulation of traffic around the town centre, this is illustrated in Figure 6-4.



-  Primary vehicular route
-  Secondary vehicular route
-  Public transport route
-  Pedestrianised area
-  One way
-  Road closed/access only
-  Partial closure
-  Public transport interchange
-  Car Parks
-  Disabled parking
-  Left turn only
-  Road closed
-  Market site

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DORCHESTER TRANSPORT AND ENVIRONMENT PLAN

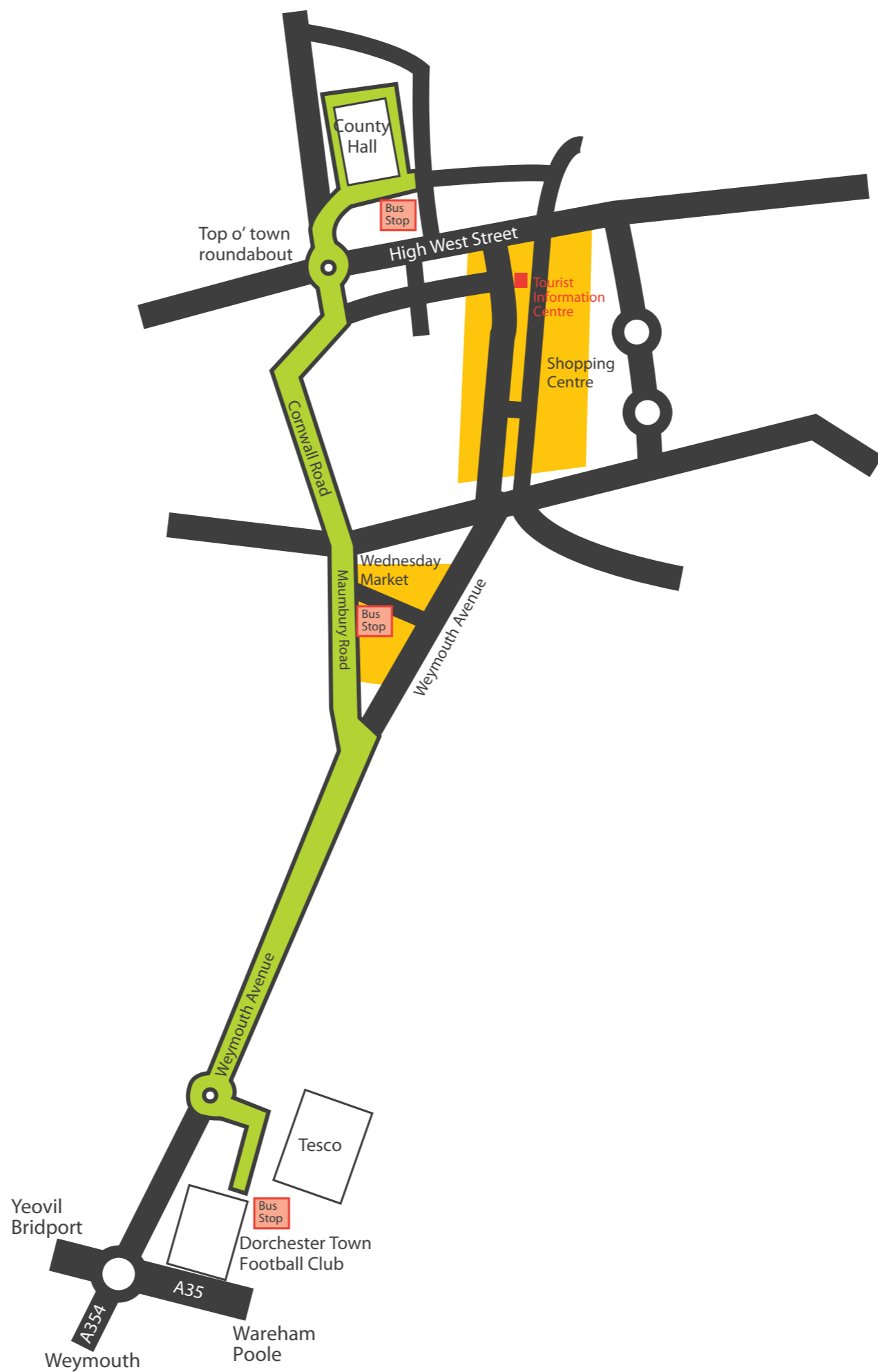
DRAWN BY	GT (BH)
DATE	07 SEP 2010
JOB NO.	0208088
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6.4.7 Existing Park and Ride Service

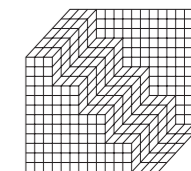
A temporary Park and Ride service currently operates between Dorchester Town Football Club and County Hall. This provides 217 car parking spaces at present and the cost to use the service is £1 per car. Park and Ride buses operate between Monday and Friday except on bank holidays.

The service starting at Dorchester Town Football Club is routed along Weymouth Avenue, Maumbury Road, Cornwall Road, Albert Road and The Grove, before dropping off near to the library at County Hall. The route is shown in Figure 6-5.

The first two buses depart the Football Club at 0715am and 0745. After this, there is a service every quarter of an hour until 1800. Return buses also operate on a 15 minute frequency, with the last bus leaving County Hall at 1815.



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PROJECT
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DRG
**DORCHESTER PARK AND RIDE
 BUS ROUTE**

DRAWN BY **BH**

DATE **07 SEP 2010**

JOB NO. **0208088**

DRG NO. **FIGURE 6-5**

6.4.8 Proposed Bus Routes

The alignment of suitable bus routes connecting each of the preferred sites with the main employment destinations, have been identified. There are three main corridors:

- Weymouth Road (sites I, J, K, L and M);
- Bridport Road (sites R and S);
- A37 and B3147 (sites R and S).

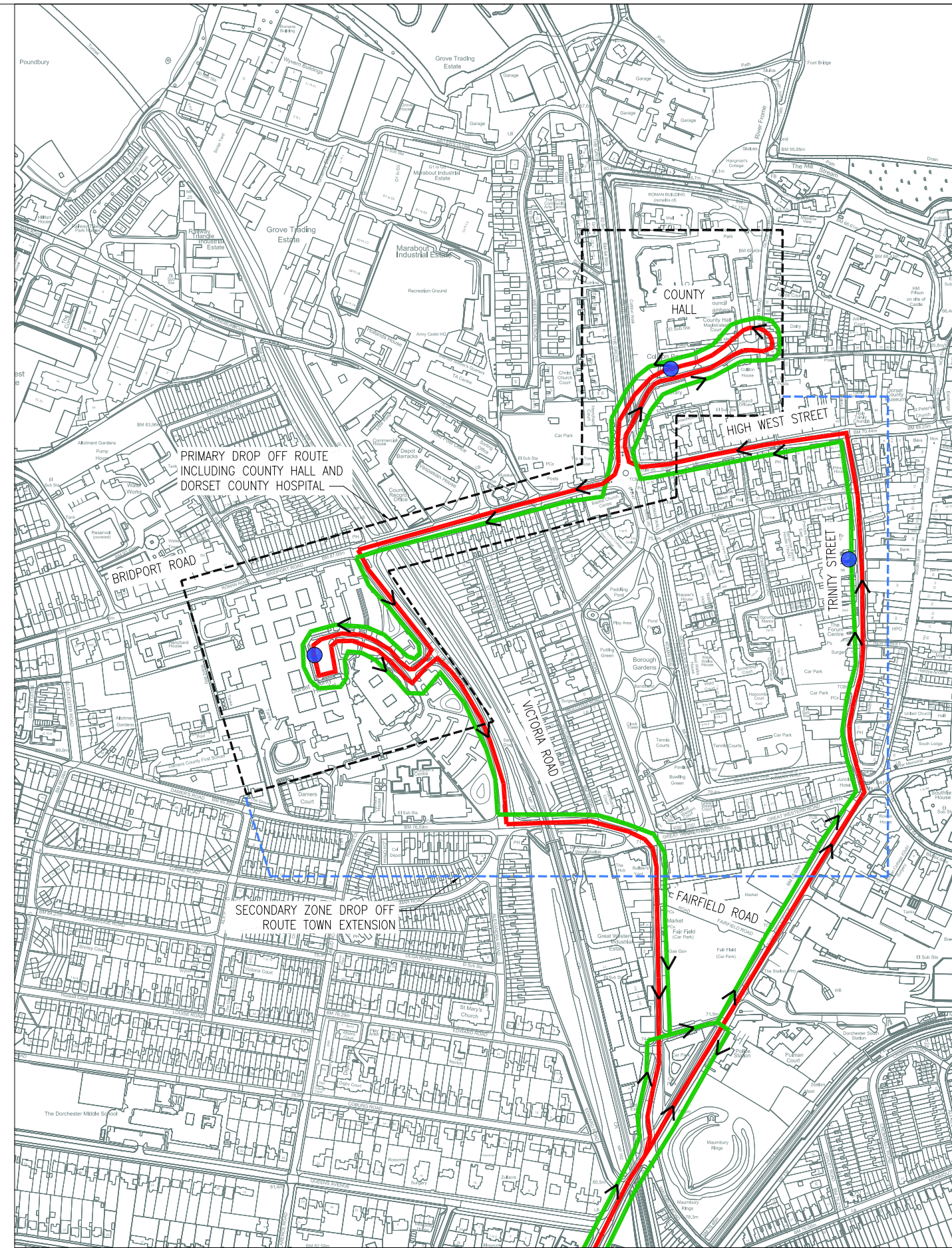
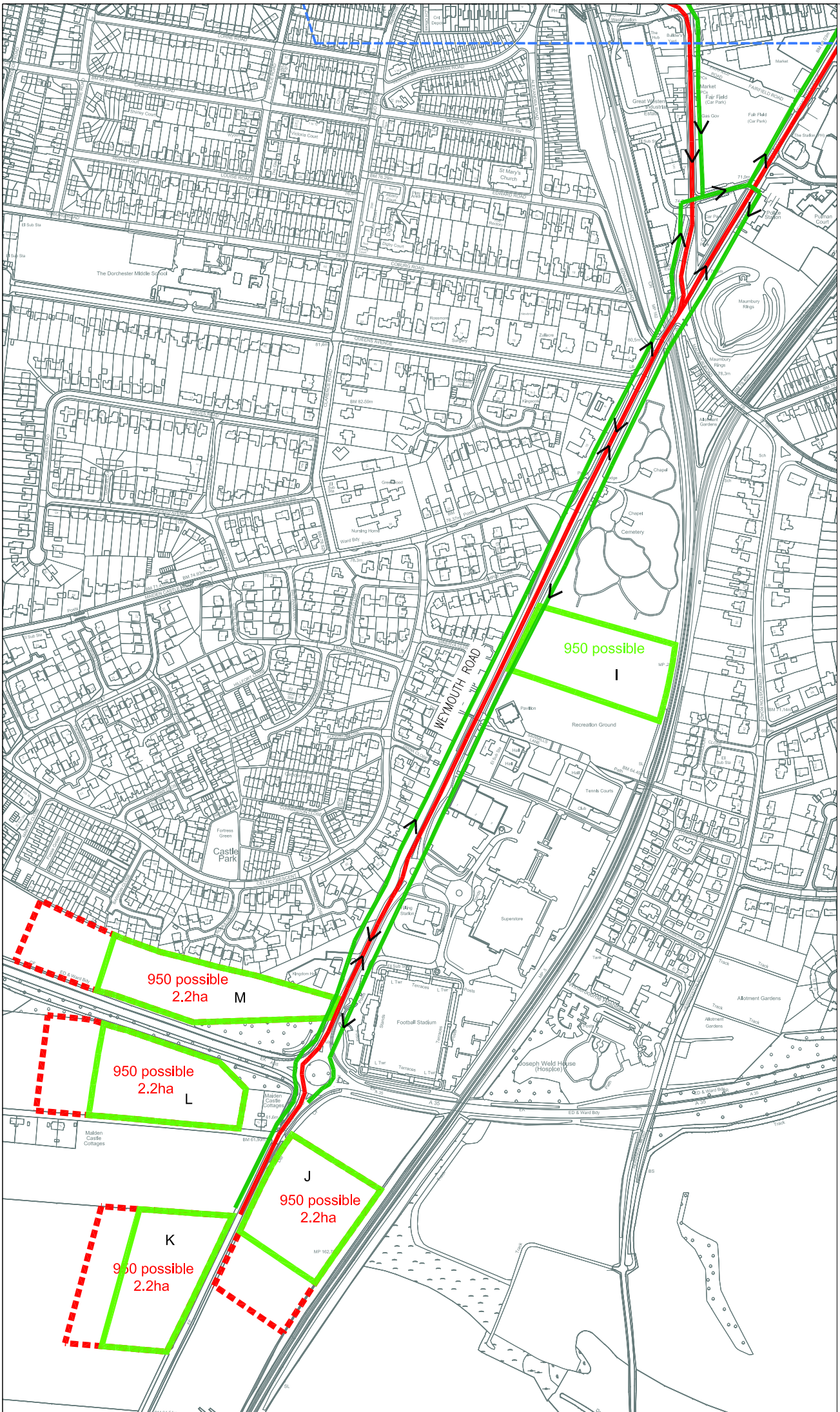
Bus routes along each of these connecting County Hall (Dorset County Council), Stratton House (West Dorset District Council) and Dorset County Hospital have been identified. The alignment of these may be affected by proposed changes to the highway network resulting from DTEP. For each corridor, bus routes both with and without DTEP have been considered.

In the first instance, bus stops will be located immediately adjacent to County Hall and Dorset County Hospital. The stop at County Hall is also conveniently located for those travelling to Stratton House or into the Town Centre. If appropriate, a further bus stop could be provided in the Town Centre on Trinity Street.

6.4.9 Weymouth Road Corridor Bus Route

Figure 6-6 shows the alignment of a bus route that could connect sites I, J, K, L or M to the main employment destinations in Dorchester Town Centre.

At present a bus is able to pass along the length of Weymouth Avenue without any diversion. However, DTEP will reconfigure the way traffic circulates in this part of the network. A one way gyratory will be created around the Skate Park incorporating Maumbury Road, Upper Fairfield Road and Weymouth Avenue. Following DTEP buses that are bound for the Town Centre will be diverted onto Maumbury Road and Upper Fairfield Road before rejoining Weymouth Avenue, this is illustrated in Figure 6-6.



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HEALTH AND SAFETY INFORMATION
 THE DESIGNER HAS CONSIDERED THE HEALTH AND SAFETY ASPECTS OF THE WORK DESCRIBED IN THIS DRAWING. THE FOLLOWING INFORMATION IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A CONTRACT DOCUMENT.

Notes

KEY

- BUS ROUTE BEFORE DTEP
- BUS ROUTE AFTER DTEP
- - - 2nd OPTION AFTER DTEP
- > BUS ROUTE FLOW
- DROP OFF / PICK UP POINT

INFORMATION

Client: Dorset Council
 Project: DORCHESTER PARK AND RIDE
 Drawing No: 028088
 Drawing Title: BUS ROUTES BEFORE AND AFTER DTEP
 Figure 6-6

Drawn by: SBN
 Checked by: KSC
 Date: 26 AUG 2010

Job No: 028088
 Drawing No: CSK004
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6.4.10 Bridport Road Corridor

Figure 6-7 shows the route that has been identified to link sites R and S with Dorset County Hospital, County Hall and the Town Centre, using Bridport Road. To minimise journey distance and time, a bus stop to serve Dorset County Hospital could be provided on Bridport Road. From here the bus could continue onto County Hall.

If a further stop in the Town Centre is necessary, the bus will be required to make a sizable diversion. As part of DTEP High West Street will become a west bound one-way street between Church Street and the roundabout junction with The Grove. Therefore following the implementation of DTEP, the Park and Ride bus, after leaving County Hall will be diverted along Cornwall Street, Albert Road, Victoria Road and Damer's Road before arriving at the Town Centre bus stop on Trinity Street.