

3 Country Region

3.1 Colne Valley (CFA₇)

Colne Valley (CFA₇) SES₃ and AP₄ revised scheme changes

- 3.1.1 The original scheme in this area is as described in section 7.3 of the main TA. This has since been amended by the SES and AP₂ scheme described in section 3.1 of the SES and AP₂ TA.
- 3.1.2 The principal SES₃ and AP₄ revised scheme changes of relevance to traffic and transport in the assessment of this area are:
- SES₃-007-004 the revised construction assumptions relating to the use of M25 slip roads and routing of construction traffic in the Colne Valley area.
 - The following AP₄ amendments have the potential to change the construction traffic vehicle trips by road within CFA₇:
 - AP₄-006-002 additional land required for the amended sustainable placement proposals in CFA₆ and CFA₇ and realignment of footpath U50
 - AP₄-006-004 additional land required for the provision of a haul road through Uxbridge Golf Course. This road is located on the boundary of CFAs 6 and 7 and its impacts on the wider highway network are reported in CFA 6
 - AP₄-009-001 extension to the Chiltern tunnel from Mantle's Wood portal to South Heath green tunnel north portal and associated works in CFA₉
- 3.1.3 Additional traffic surveys have been undertaken at the following junctions and on sections of highway in the Colne Valley area to supplement the information reported in the main TA and SES and AP₂ TA:
- A₄₁₂ Denham Avenue/ Old Rectory Lane;
 - A₄₁₂ Denham Avenue/ Moorfield Road; and
 - A₄₁₂ Denham Way/ Chalfont Road.
- 3.1.4 A change to the workforce trip assignment has been made on the A₄₀ (between A₄₁₂ Denham Way and A₄₁₃) and the A₄₁₂ within this area, resulting in a change in all vehicle construction trips. However, the changes in forecast traffic flows are less than four car/LGV two-way trips a day (12 hour) and is not considered to have a substantial impact upon the main TA and SES and AP₂ TA.
- 3.1.5 Additional construction excavated material is generated at the Chiltern tunnel main compound by the extension of the Chiltern tunnel amendment. This material is to be routed via Chalfont Lane and the M25 temporary slip lanes. This additional material will not increase daily construction traffic. It will, however, will extend the duration of the movement of excavated material at this location from approximately one year to approximately four years.

- 3.1.6 The revisions to construction routes in the Colne Valley area, relating to the use of the dedicated M25 slip roads by HGV construction traffic. The M25 slip lanes are to be used as a construction route for HGVs generated by: the Chiltern tunnel main compound/Chiltern tunnel south portal (rail systems), the Colne Valley viaduct main compound, the Colne Valley viaduct north embankment satellite compound, the Colne Valley viaduct north launch satellite compound and the Colne Valley viaduct laydown satellite compound. It is assumed that 50% of HGV traffic from the remaining two compounds in the Colne Valley area (Colne Valley viaduct jetty storage and Colne Valley viaduct storage satellite compounds) will use the temporary M25 slips (and then Chalfont Lane, the A412 Denham Way and Moorfield/Moorhall Road), with the remaining 50% using the M40, A40, A412 Denham Way and Moorfield/Moorhall Road.
- 3.1.7 The supplementary traffic data and the changes to construction routes, relating to the use of the dedicated M25 slip roads by HGV construction traffic, lead to a number of changes to the traffic and transport assessment in the Colne Valley (CFA7) area reported in the main TA and SES and AP2 TA, and these are described later in this chapter. Noted changes to paragraphs are in relation to the main TA or the SES and AP2 TA.
- 3.1.8 The changes to the sustainable placement areas within CFA7 affect traffic and transport. Although material will be moved on haul roads within the worksites, a temporary crossing of Harvil Road is required. In addition, PRoW U50 will be temporarily diverted around the southern stockpile area.
- 3.1.9 The northern extent of the proposed haul route through Uxbridge Golf Course (AP4-006-004) will result in PRoW U50 being crossed by the haul road.
- 3.1.10 As with the SES and AP2 TA, impacts upon the A40 Western Avenue, the B467 Swakeleys Road and Harvil Road are solely reported in CFA 6.

Assessment methodology

- 3.1.11 The assessment methodology is as described in Section 7.2 of the main TA.

Existing baseline

- 3.1.12 Baseline conditions in this area are as described in Section 5.9 of the main TA and in the SES and AP2 TA, updated by the additional traffic survey data.

Future baseline

- 3.1.13 Future baseline conditions are as described in Section 7.3 of the main TA and in the SES and AP2 TA, updated by the additional traffic survey data.

Construction description

Construction trip assumptions

- 3.1.14 Table 7-7 of the main TA is changed. The average-peak daily two-way HGV trips generated by the Chiltern tunnel main compound/Chiltern tunnel south portal (rail systems), compound is 350-430, compared to 400-430 in the main TA scheme and 350-370 as reported in the SES and AP2 TA. Car/LGV trips are also amended from 350-370 in the SES and AP2 TA to 350-430. The changes are due to the proposed Chiltern Tunnel extension amendment in CFA9 (AP4-009-001).

Construction lorry routes

3.1.15 Paragraph 7.3.50 of the main TA is changed so that relevant bullet points be replaced with those below.

- 'Colne Valley viaduct main compound will be accessed via M25, the temporary M25 slip roads and Chalfont Lane';
- 'Colne Valley viaduct storage satellite compound will be accessed via M40, A40, A412 Denham Way/North Orbital Road and Moorhall Road, or via M25, the temporary M25 slip roads, Chalfont Lane and A412 Denham Way/North Orbital Road';
- 'Colne Valley viaduct jetty storage satellite compound will be accessed via M40, A40, A412 Denham Way/North Orbital Road and Moorhall Road, or via M25, the temporary M25 slip roads, Chalfont Lane and A412 Denham Way/North Orbital Road';
- 'Colne Valley viaduct laydown satellite compound will be accessed via the temporary M25 slip roads, Chalfont Lane and A412 Denham Way/North Orbital Road';
- 'Colne Valley viaduct north launch satellite compound will be accessed via the temporary M25 slip roads, Chalfont Lane and A412 Denham Way/North Orbital Road';
- Colne Valley viaduct north embankment satellite compound will be accessed via the temporary M25 slip roads, Chalfont Lane and A412 Denham Way/North Orbital Road'; and
- 'Chiltern tunnel main construction compound and Chiltern tunnel south portal (rail systems) satellite compound will be accessed via the temporary M25 slip roads, Chalfont Lane and A412 Denham Way/North Orbital Road'.

PRoW closures and diversions

3.1.16 Table 7-9 of the main TA is also changed to add the following PRoW, which is subject to temporary diversion under the AP4 revised scheme, due to additional land required for the amended sustainable placement proposals in CFA6 and CFA7 and realignment of footpath U50 (AP4-006-002). In addition, a controlled crossing will be provided for Footpath U50 across the proposed haul road through Uxbridge Golf Course (AP4-006-004).

Table 7-9: Colne Valley temporary footpath, cycleway and bridleway closures and diversions – partial replacement

PRoW/ pedestrian route	Location	Location (chainage)	Diversion length (Approx.)	Reason for diversion and diversion route
Footpath U50	South Harefield	25+400	350m	Additional land required for amended sustainable placement proposals in CFA6 and CFA7. Temporary diversion around the edge of the temporary material stockpile and Harvil Road.

Assessment of construction impacts

Highway network

- 3.1.17 Changes to forecast traffic flows, primarily due to the revision to construction routes for HGVs (but also as a result of the AP4 revised scheme) are presented in the following sections. Other than revisions to the baseline as necessary arising from the new survey information, there are no changes to other forecast flows presented in the main TA and SES and AP2 TA.
- 3.1.18 The main changes due to the revision to construction route assumptions compared to the relevant SES and AP2 TA are:
- A412 Denham Way (between A40 and satellite compounds) and the A40 (between M40 J1 and A412 Denham Way) - decrease in HGV construction vehicles by approximately 35 two-way trips a day;
 - A412 Denham Way /North Orbital Road (between satellite compounds and Chalfont Lane) - increase in HGV construction vehicles by approximately 35 two-way trips a day;
 - A412 Denham Way /North Orbital Road (north of Chalfont Lane) and A405 Denham Way /North Orbital Road (north of A412) - decrease in HGV construction vehicles by approximately 55 two-way trips a day;
 - M25 junction 16 to 17 - increase in HGV construction vehicles by approximately 160 two-way trips a day (south of temporary slip roads); and
 - M25 temporary slip lanes - increase in HGV construction vehicles by approximately 40 a day, on each slip lane.
- 3.1.19 It should be noted that the 'A412 Denham Way/ North Orbital Road (south of satellite compounds)' link has been revised and split into two separate links: 'A412 Denham Way /North Orbital Road (between satellite compounds and Denham Green Lane)' and ' A412 Denham Way /North Orbital Road (between Moorfield Rd and Denham Green Lane)'.

Strategic road network

- 3.1.20 Table 7-10 and 7-11 of the main TA (and accounting for changes presented in the SES and AP2 TA) are replaced by the following tables.

SES₃ and AP₄ ES Appendix TR-001-000 (CFA7)

Table 7-2: Colne Valley strategic road network construction traffic flows (vehicles) - AM peak

Location	Direction	2012 baseline	2021 baseline	2021 with HS2 construction traffic		With HS2 actual change from 2021 baseline		With HS2 % change from 2021 baseline	
		All vehicles	All vehicles	All vehicles	HGVs	All vehicles	HGVs	All vehicles	HGVs
M25 Junction 17	CW ¹ Offslip	343	367	511	153	511	132	39%	617%
	AC Onslip	527	564	697	148	697	132	24%	823%
	CW Onslip	524	561	561	9	561	0	0%	0%
M25 Junction 16 to 17 (north of temp slip roads)	AC J17 to J16	4681	5009	5142	611	133	132	3%	28%
	CW J16 to J17	5102	5459	5603	688	144	132	3%	24%
M25 Junction 16 to 17 (south of temp slip roads)	AC J17 to J16	4681	5009	5076	546	67	67	1%	14%
	CW J16 to J17	5102	5459	5537	623	78	67	1%	12%
A40 (between Denham Roundabout and A412)	NB	2077	2681	2755	69	74	4	3%	6%
	SB	1785	2176	2184	180	8	4	0%	2%
A40, between the A412 Denham Way and the A413 (Note: new link in SES and AP2 TA with a 10% or more change in all veh or HGV peak hour flow)	EB	884	1349	1355	32	6	2	0%	8%
	WB	1164	1822	1834	27	12	2	1%	10%

¹ CW – clockwise, AC – anti-clockwise

SES3 and AP4 ES Appendix TR-001-000 (CFA7)

Location	Direction	2012 baseline	2021 baseline	2021 with HS2 construction traffic		With HS2 actual change from 2021 baseline		With HS2 % change from 2021 baseline	
		All vehicles	All vehicles	HGVs	All vehicles	HGVs	All vehicles	HGVs	
A412 Denham Way (between A40 and Moorfield Road)	NB	953	953	1015	42	62	1	7%	4%
	SB	1293	1284	1286	107	2	1	0%	1%
A412 Denham Way /North Orbital Road (between Moorfield Rd and Denham Green Lane)	NB	354	388	443	10	56	1	14%	16%
	SB	551	603	611	17	8	1	1%	9%
A412 Denham Way /North Orbital Road (between satellite compounds and Denham Green Lane) (‘A412 Denham Way/ North Orbital Road (south of satellite compounds)’ in main TA)	NB	354	388	449	10	62	1	16%	16%
	SB	551	603	757	19	154	3	26%	19%
A412 Denham Way/ North Orbital Road (north of satellite compounds)	NB	354	388	401	16	16	7	3%	78%
	SB	551	603	817	24	24	9	35%	54%
A412 Denham Way/ North Orbital Road	NB	418	458	458	18	0	0	0%	0%
	SB	715	783	844	31	61	0	8%	0%
A405 Denham Way/ North Orbital Road	NB	739	807	807	25	0	0	0%	0%
	SB	1169	1277	1310	78	33	0	3%	0%

SES₃ and AP₄ ES Appendix TR-001-000 (CFA7)

Table 7-3: Colne Valley strategic road network construction traffic flows (vehicles) - PM peak

Location	Direction	2012 baseline	2021 baseline	2021 with HS2 construction traffic		With HS2 actual change from 2021 baseline		With HS2 % change from 2021 baseline	
		All vehicles	All vehicles	All vehicles	HGVs	All vehicles	HGVs	All vehicles	HGVs
M25 Junction 17	CW Offslip	300	315	438	135	123	122	39%	972%
	AC Onslip	221	232	366	132	134	122	58%	1295%
	CW Onslip	648	680	702	4	22	0	3%	0%
M25 Junction 16 to 17 (north of temp slip roads)	AC J17 to J16	5028	5279	5413	463	134	122	3%	36%
	CW J16 to J17	6285	6599	6722	534	123	122	2%	30%
M25 Junction 16 to 17 (south of temp slip roads)	AC J17 to J16	4681	5009	5352	402	73	61	1%	18%
	CW J16 to J17	5102	5459	6661	473	62	61	1%	15%
A40 (between Denham Roundabout and A412)	NB	2180	2368	2374	64	6	3	0%	4%
	SB	1238	1285	1358	56	73	3	6%	5%
A40, between the A412 Denham Way and the A413 (Note: new link in SES and AP2 TA with a 10% or more change in all veh or HGV peak hour flow)	EB	518	527	538	16	11	2	2%	14%
	WB	1884	2110	2116	24	6	2	0%	9%

SES3 and AP4 ES Appendix TR-001-000 (CFA7)

Location	Direction	2012 baseline	2021 baseline	2021 with HS2 construction traffic		With HS2 actual change from 2021 baseline		With HS2 % change from 2021 baseline	
		All vehicles		All vehicles	HGVs	All vehicles	HGVs	All vehicles	HGVs
A412 Denham Way (between A40 and Moorfield Road)	NB	990	979	979	44	1	0	0%	1%
	SB	1050	1081	1142	43	61	0	6%	1%
A412 Denham Way /North Orbital Road (between Moorfield Rd and Denham Green Lane)	NB	596	657	664	5	7	0	1%	10%
	SB	433	477	532	4	55	0	11%	12%
A412 Denham Way /North Orbital Road (between satellite compounds and Denham Green Lane) (‘A412 Denham Way/ North Orbital Road (south of satellite compounds)’ in main TA)	NB	596	657	684	5	27	0	4%	10%
	SB	433	477	552	5	75	1	16%	27%
A412 Denham Way/ North Orbital Road (north of satellite compounds)	NB	596	657	740	7	83	2	13%	46%
	SB	433	477	500	7	22	3	5%	74%
A412 Denham Way/ North Orbital Road	NB	810	893	954	13	61	0	7%	0%
	SB	412	454	454	10	0	0	0%	0%
A405 Denham Way/ North Orbital Road	NB	977	1072	1105	14	33	0	3%	0%
	SB	723	793	793	30	0	0	0%	0%

- 3.1.21 A revision to construction route assumptions within the area has primarily resulted in a decrease in forecast HGV construction traffic on the A412 Denham Way /North Orbital Road (between A40 and satellite compounds; and north of Chalfont Lane), the A40 (between M40 J1 and A412 Denham Way) and the A405 Denham Way /North Orbital Road (north of the A412). It has also resulted in an increase in forecast HGV construction traffic on the A412 Denham Way /North Orbital Road (between satellite compounds and Chalfont Lane) and M25 between junctions 16 and 17. The changes in flows have also accounted for the minor changes due to the AP4 revised scheme.
- 3.1.22 Table 7-12 of the main TA is replaced. The revision to construction route assumptions and the AP4 revised scheme have resulted in an increase in construction traffic using the temporary slip roads during construction, in comparison to the SES scheme.

Table 7-12: Colne Valley 2021 M25 temporary slip road construction traffic flows

Location	Direction	Total veh (HGVs)
M25 anti-clockwise (Temporary offslip to revised scheme compounds)	AM peak	74
	PM peak	64
M25 clockwise (Temporary onslip to revised scheme compounds)	AM peak	74
	PM peak	64

Junction capacity

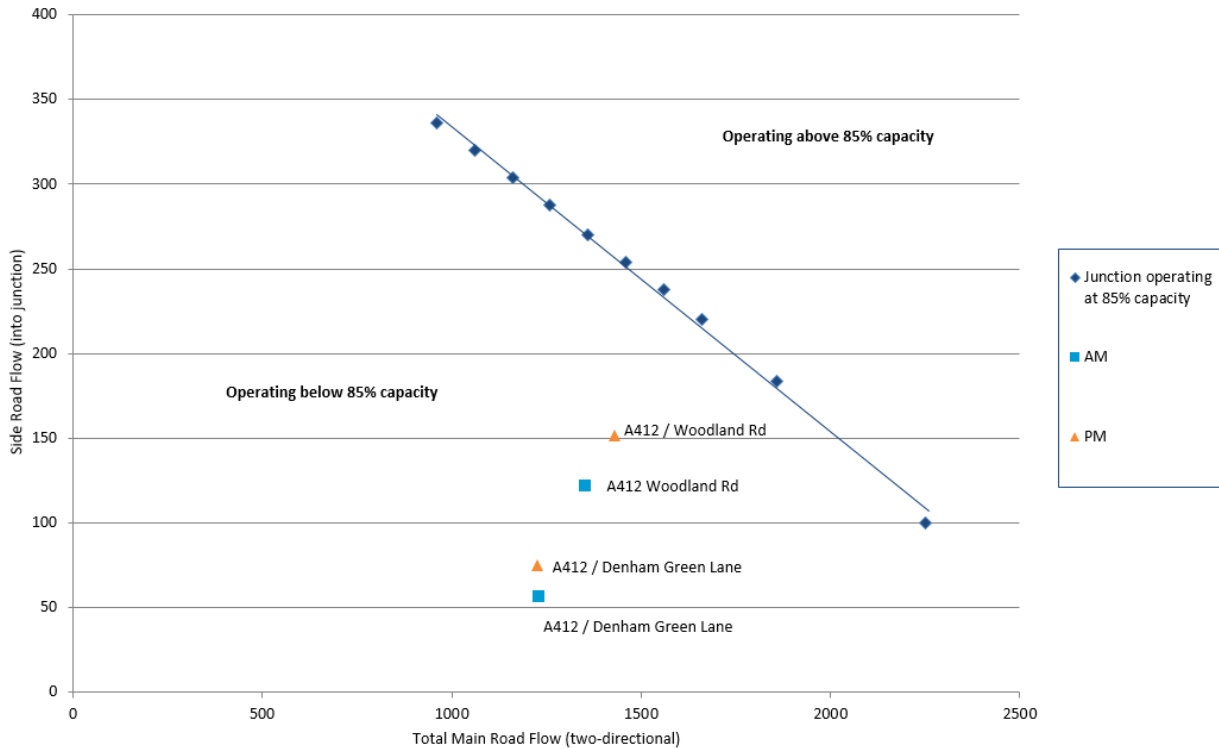
- 3.1.23 The assessment of junctions where additional traffic surveys were undertaken in 2015 have been reviewed.
- 3.1.24 The A412 North Orbital Road with Denham Green Lane and A412 Denham Way with Woodland Road priority junctions have been re-assessed based upon the traffic flows for the SES3 and AP4 revised scheme. Table 7-15 of the SES and AP2 TA (which updated the main TA) is changed by the following table.

Table 7-15: Colne Valley priority junction flows – partial replacement

Junction	2021 With HS2 construction traffic			
	AM peak		PM peak	
	Main road flow (PCUs)	Side road flow (PCUs)	Main road flow (PCUs)	Side road flow (PCUs)
A412 North Orbital Road /Denham Green Lane	1229	57	1226	75
A412 Denham Way /Woodland Road	1350	122	1431	152

- 3.1.25 Figure 7-2 in the SES and AP2 TA (which updated the figure in the main TA) is replaced by the following figure.

Figure 7-2: Colne Valley priority junction assessment 2021



- 3.1.26 This indicates that the A₄₁₂ North Orbital Road/Denham Green Lane and A₄₁₂ Denham Way/Woodland Road junctions fall below the 'threshold' of capacity during both the AM and PM peaks and are forecast to operate within their theoretical capacity during construction of the SES₃ and AP₄ revised scheme. As a result, it is not considered necessary to assess these individually with junction assessment software.
- 3.1.27 Using the supplementary survey data, additional assessment of the A₄₁₂ Denham Avenue/Chalfont Road junction has been carried out, using industry standard software (two models were required for assessment of this junction). The results are shown in Table 7-15.1 and Table 7-15.2 and update the assessment within the main TA and SES and AP₂ TA for this junction.
- 3.1.28 The modelling results indicate that the A₄₁₂ Denham Avenue/Chalfont Road junction will operate within capacity during construction, during both the AM and PM peak periods. This updates the assessment within the main TA and SES and AP₂ TA (paragraph 3.1.21 in the SES and AP₂ TA) for this junction, which indicated that construction traffic may potentially cause additional intermittent traffic congestion and delay in the AM peak period.

SES₃ and AP₄ ES Appendix TR-001-000 (CFA7)

Table 7-15.1: Forecast baseline and construction scenario performance at A412 Denham Avenue/Chalfont Road junction

0800-09:00		2021 baseline			2021 with HS2 construction traffic		
Approach (from)	Flow (All PCU)	Flow/ capacity %	Max queue	Flow (All PCU)	Flow/ capacity %	Max queue	
A412 Denham Way South	516	0%	0	516	0%	0	
Chalfont Road	302	49%	1	346	56%	1	
A412 Denham Way North	975	0%	0	1036	0%	0	
Total	N/A	49%	N/A	N/A	56%	N/A	
17:00-18:00		2021 baseline			2021 with HS2 construction traffic		
Approach (from)	Flow (all PCU)	Flow/ capacity %	Max queue	Flow (all PCU)	Flow/ capacity %	Max queue	
A412 Denham Way South	976	0%	0	1037	0%	0	
Chalfont Road	249	52%	1	275	59%	2	
A412 Denham Way North	660	0%	0	660	0%	0	
Total	N/A	52%	N/A	N/A	59%	N/A	

Table 7-15.2: Forecast baseline and construction scenario performance at A412 Denham Avenue/Chalfont Road junction

0800-09:00		2021 baseline			2021 with HS2 construction traffic		
Approach (from)	Flow (All PCU)	Flow/ capacity %	Max queue	Flow (All PCU)	Flow/ capacity %	Max queue	
Denham Way N Right Ahead Left	1173	72%	14	1264	77%	15	
Denham Way S Right Ahead Left	530	37%	6	530	37%	6	
Maple Lodge Close Right Ahead Left	58	36%	2	58	36%	2	
Total	N/A	72%	N/A	N/A	77%	N/A	
17:00-18:00		2021 baseline			2021 with HS2 construction traffic		
Approach (from)	Flow (all PCU)	Flow/ capacity %	Max queue	Flow (all PCU)	Flow/ capacity %	Max queue	
North Orbital Rd Ahead Left	981	57%	7	1019	58%	7	
South Orbital Rd Right Ahead	969	68%	18	1030	73%	20	
Moorfield Rd Left Right	82	53%	3	82	53%	3	
Total	N/A	68%	N/A	N/A	73%	N/A	

- 3.1.29 Using the supplementary survey data, assessment of the A412 Denham Avenue/Old Rectory Lane and A412 Denham Avenue/Moorfield Road junctions has been undertaken. The results are shown in Table 7-15.3 and Table 7-15.4.
- 3.1.30 The modelling results indicate that the A412 Denham Avenue/Old Rectory Lane junction will operate within capacity during construction of the revised scheme in the AM peak, with the highest percentage of flow to capacity at 84% on the Denham Avenue (south) arm. Within the PM peak, however, the highest percentage of flow to capacity is 90% on the Denham Avenue (south) arm, which indicates that the junction may experience intermittent traffic congestion and delay during the evening peak, during construction. However, there is no substantial difference in operation following addition of revised scheme construction traffic, with the junction also forecast to operate over capacity in the 2021 baseline.
- 3.1.31 The modelling results indicate that the A412 Denham Avenue/Moorfield Road junction will operate over capacity during construction of the revised scheme during both the AM peak and PM peak, with the highest percentage of flow to capacity at 108% and 113% on the Moorfield Road arm, respectively. However, although there is an increase of up to 11% in the flow to capacity ratio, the junction is forecast to operate over capacity in the 2021 baseline.

Table 7-15.3: Forecast baseline and construction scenario performance at A412 Denham Avenue/Old Rectory Lane junction

0800-09:00	2021 baseline			2021 with HS2 construction traffic		
Approach (from)	Flow (All PCU)	Flow/ capacity %	Max queue	Flow (All PCU)	Flow/ capacity %	Max queue
A412 Denham Ave North Right Ahead	1403	82%	28	1406	82%	29
Old Rectory Lane Left Right	138	79%	6	138	79%	6
A412 Denham Ave South Ahead Left	1201	79%	30	1266	84%	34
Total	N/A	82%	N/A	N/A	84%	N/A
17:00-18:00	2021 baseline			2021 with HS2 construction traffic		
Approach (from)	Flow (all PCU)	Flow/ capacity %	Max queue	Flow (all PCU)	Flow/ capacity %	Max queue
A412 Denham Ave North Right Ahead	1130	74%	24	1192	78%	27
Old Rectory Lane Left Right	311	89%	14	311	89%	14
A412 Denham Ave South Ahead Left	1174	90%	38	1175	90%	38
Total	N/A	90%	N/A	N/A	90%	N/A

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Table 7-15.4: Forecast baseline and construction scenario performance at A₄₁₂ Denham Avenue with Moorfield Road

0800-09:00	2021 baseline			2021 with HS2 construction traffic		
Approach (from)	Flow (All PCU)	Flow/capacity %	Max queue	Flow (All PCU)	Flow/capacity %	Max queue
North Orbital Rd Ahead Left	821	99%	31	801	107%	50
South Orbital Rd Right Ahead	963	99%	22	1100	107%	55
Moorfield Rd Left Right	491	99%	20	495	108%	33
Total	N/A	99%	N/A	N/A	108%	N/A
17:00-18:00	2021 baseline			2021 with HS2 construction traffic		
Approach (from)	Flow (all PCU)	Flow/capacity %	Max queue	Flow (all PCU)	Flow/capacity %	Max queue
North Orbital Rd Ahead Left	832	101%	36	857	112%	69
South Orbital Rd Right Ahead	1027	100%	24	1102	109%	64
Moorfield Rd Left Right	501	103%	26	513	113%	43
Total	N/A	103%	N/A	N/A	113%	N/A

3.1.32 The A₄₁₂ Denham Way/ Chalfont Lane and A₄₁₂ Denham Way/A₄₀₅ North Orbital Road/ A₄₁₂ Uxbridge Road junctions have been re-modelled, based upon adjusted traffic flows within CFA7 as a result of the SES₃ changes (including revised construction traffic route assumptions) and the AP₄ revised scheme, Table 7-16 and Table 7-17 of the SES and AP₂ TA are replaced by those below.

3.1.33 There is no substantial change to the result of the assessment carried out and reported in the main TA and SES and AP₂ TA, whereby the modelling results indicate that both the A₄₁₂ Denham Way/ Chalfont Lane and A₄₁₂ Denham Way/A₄₀₅ North Orbital Road/ A₄₁₂ Uxbridge Road junctions will operate within capacity during construction.

Table 7-16: Forecast baseline and construction scenario performance at A₄₁₂ Denham Way/Chalfont Lane junction

0800-09:00	2021 baseline			2021 with HS2 construction traffic		
Approach (from)	Flow (All PCU)	Flow/capacity %	Max queue	Flow (All PCU)	Flow/capacity %	Max queue
Chalfont Lane (E)	239	29%	1	239	31%	1
A ₄₁₂ (S)	476	32%	1	494	33%	1
Chalfont Lane (W)	87	13%	1	105	16%	0
A ₄₁₂ (N)	814	47%	1	875	51%	1
Total	N/A	47%	N/A	N/A	51%	N/A

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17:00-18:00	2021 baseline			2021 with HS2 construction traffic		
Approach (from)	Flow (all PCU)	Flow/ capacity %	Max queue	Flow (all PCU)	Flow/ capacity %	Max queue
Chalfont Lane (E)	371	36%	1	371	37%	1
A412 (S)	906	63%	2	985	68%	2
Chalfont Lane (W)	53	13%	1	71	19%	0
A412 (N)	464	26%	1	464	26%	0
Total	N/A	63%	N/A	N/A	68%	N/A

Table 7-17: Forecast baseline and construction scenario performance at A412 Denham Way/ A405 North Orbital Road/ A412 Uxbridge Road

0800-09:00	2021 baseline			2021 with HS2 construction traffic		
Approach (from)	Flow (All PCU)	Flow/ capacity %	Max queue	Flow (All PCU)	Flow/ capacity %	Max queue
A412 (N) Uxbridge Road	939	50%	1	967	52%	1
A412 (S) Denham Way	476	19%	1	476	19%	0
A405 North Orbital Road	1355	53%	2	1388	54%	1
Total	N/A	53%	N/A	N/A	54%	N/A

17:00-18:00	2021 baseline			2021 with HS2 construction traffic		
Approach (from)	Flow (all PCU)	Flow/ capacity %	Max queue	Flow (all PCU)	Flow/ capacity %	Max queue
A412 (N) Uxbridge Road	693	31%	1	693	31%	1
A412 (S) Denham Way	906	35%	1	967	38%	1
A405 North Orbital Road	823	34%	1	823	34%	1
Total	N/A	35%	N/A	N/A	38%	N/A

Pedestrians, cyclists and equestrians

3.1.34 Table 7-19 of the main TA is amended to add the following PRow which is subject to diversion under the AP4 revised scheme, due to additional land required for the amended sustainable placement proposals in CFA6 and CFA7 and temporary realignment of footpath U50 (AP4-006-002).

3.1.35 In addition, Footpath U50 will be crossed by the proposed haul road through Uxbridge Golf Course (AP4-006-004). A controlled crossing will be provided for Footpath U50 across the haul road.

Table 7-19: Colne Valley summary of P_{RoW} severance (construction)

P_{RoW}	Location	Location (chainage)	Construction Activity	Temporary Diversion Route	Daily Users	Maximum Diversion Length	Maximum Diversion Journey Time (nearest minute)
Footpath U50	South Harefield	25+400	Amended sustainable placement proposals in CFA6 and CFA7.	Temporary diversion around the edge of the temporary material stockpile and Harvil Road.	Up to 200	350m	5 mins

Operation description and assessment of operation impacts

- 3.1.36 There is no change to section 7.3 of the main TA with regard to the assessment of the original scheme during operation.