

Transport Assessment (Planning Statement Appendix F) Addendum 2

Prepared for: Kronospan Ltd

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3333-01-TAA02

1.1 Introduction

1. This second Transport Assessment (TA) Addendum has been prepared to augment the TA that accompanied the initial planning application submission made to Wrexham County Borough Council (WCBC) in December 2022 and the subsequent (first) TA Addendum submitted to WCBC in July 2023. In particular, this second TA Addendum considers the traffic generation implications of an increase in the amount of soil that is expected to be exported from the Site during the construction phase as a result of a further revision to the Proposed Development design; the design change predominately relates to the removal of part of the previously proposed bund adjacent the B5070 between the northern extent of the proposed lorry park and the proposed roundabout. Subsequently, a larger amount of soil would need to be exported from the Site than was previously considered during the production of the TA and the first TA Addendum.

1.2 Construction Phase

2. Details of the proposed construction phase are considered in Chapter 5 of the TA. For the purpose of this TA Addendum, it is expected that the proposed construction durations would remain the same as previously considered.
3. The assumptions made in regard to the construction phase are as follows:
 - i) The proposed construction would take place over a period of 42 months (comprising the whole construction period, including earthworks, installation of substation, construction of the northern access road etc.);
 - ii) The core construction hours would be 7:30am – 6:00pm from Monday to Friday and 8:00am – 2:00pm during Saturdays. No work is planned on Sundays or Bank Holidays, however there may be occasions when construction would need to be undertaken outside of the core hours, for example, during major concrete pours or the transfer of abnormal loads; and,

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- iii) During the peak construction period, there could be expected to be a maximum of 20 staff on-site per day.
4. The TA states that the Proposed Development could be expected to result in 200 two-way heavy goods vehicles (HGV) movements per day during the peak construction period. This figure made an allowance for earthworks required during construction; however it was predicated on the assumption that cut and fill activities would result in no surplus soil i.e no export or import of soil would be required. As the Proposed Development would now result in additional excess soil that would be exported off-site, the additional HGV traffic is therefore considered in this TA Addendum.
5. In addition to the assumptions outlined above, the following information has also been ascertained to calculate the traffic generating potential of the proposed soil export:
- i) The amount of excess soil to be exported would be circa 22,195m³.
 - ii) Assuming a conversion factor of 1.5 tonnes per m³, this equates to 33,293 tonnes.
 - iii) Earthworks and soil exports would take place over a 120-day period.
 - iv) Soil would be transported in HGVs with 25-tonne payloads.
6. The traffic generating potential of the proposed soil export has been established utilising a first-principles approach based on the above assumptions. A more detailed breakdown of the first-principles exercise is included in **Appendix A**.
7. As set out in **Appendix A**, the proposed soil export is expected to result in 24 additional two-way HGV trips per weekday or approximately 5 additional two-way movements per hour. During Saturdays, the proposed soil export is expected to result in 14 additional two-way HGV trips per day or approximately 5 two-way movements per hour. The soil export is not expected to generate any additional requirement for construction staff.
8. The total construction traffic generation of the Proposed Development is the traffic generation set out in the TA, plus the above traffic generation relating to the soil export. Therefore, in total the Proposed Development is expected to result in 224 two-way HGV movements per day or 22 two-way HGV movements per hour.

1.3 Construction Traffic Impact



9. The above traffic generation exercise has been applied to baseline traffic data to establish the percentage impact of the Proposed Development on key local links during the construction phase.
10. The distribution of construction traffic follows the same assumptions set out in the TA, with 100% of HGV traffic routed to / from the A483 (North) to the north-east of the Site and staff trips distributed proportionately to the observed turning proportions at surrounding junctions.
11. The impact of the proposed construction traffic has been considered at two key junctions:
 - B5070 Holyhead Road / A5 roundabout; and,
 - A5 / A483 roundabout (Halton Roundabout).
12. The following tables present the predicted changes in traffic flow at each of the above junctions:

Table 1 - B5070 Holyhead Road / A5 Roundabout Percentage Link Assessment

2026 AM Scenario						
Link	Base vehicles	Base HGVs	Construction Vehicles	Construction HGVs	% Impact vehicles	% Impact HGVs
1	781	124	36	22	4.6%	17.7%
2	658	73	5	0	0.8%	0.0%
3	944	156	31	22	3.3%	14.1%
2026 PM Scenario						
1	874	70	36	22	4.1%	31.4%
2	632	27	5	0	0.8%	0.0%
3	945	80	31	22	3.3%	27.5%

Link 1 – B5070 Holyhead Road (south of the B5070 Holyhead Road / A5 roundabout);

Link 2 – A5 (west of the B5070 Holyhead Road / A5 roundabout);

Link 3 – A5 (east of the B5070 Holyhead Road / A5 roundabout);

Table 2 - A5 / A483 Roundabout (Halton Roundabout) Percentage Link Assessment

2026 AM Scenario						
Link	Base vehicles	Base HGVs	Construction Vehicles	Construction HGVs	% Impact vehicles	% Impact HGVs
1	948	153	31	22	3.3%	14.4%
2	2483	316	28	22	1.1%	7.0%
3	234	17	1	0	0.4%	0.0%
4	1965	272	2	0	0.1%	0.0%
2026 PM Scenario						
1	947	88	31	22	2.7%	19.3%
2	2501	204	28	22	0.9%	8.3%
3	210	4	1	0	0.5%	0.0%
4	2011	223	2	0	0.1%	0.0%

Link 1 – A5 (west of the Halton Roundabout);

Link 2 – A483 (north of the Halton Roundabout);

Link 3 – Unnamed road (east of the Halton Roundabout);

Link 4 – A483 (south of the Halton Roundabout);

13. **Table 1** and **Table 2** show that the proposed construction phase would result in minimal impact on the assessed study area, with increases in total vehicle traffic that are low in absolute terms. It is not expected that the proposed construction phase would result in any impact that could be considered severe.

Appendix A – First Principles Traffic Generation Exercise



KRONOSPAN SOIL EXPORT - HGV FORECASTS BASED ON FIRST PRINCIPLES APPROACH**Main assumptions**

The total volume of material to be imported is	22195	m ³ of soil		
The conversion factor between a cubic metre of soil and a tonne is	1.5	tonnes per m ³		
Therefore the total amount of material to be imported is	33293	tonnes		
Restoration would take place over a	120	day period		
which equals	100	weekdays		
and	20	saturdays		
The weekday (Monday - Friday) working hours would be	7:30am - 6:00pm			
Which equates to a	10.5	hour workday		
The Saturday working hours would be	8:00am - 2:00pm			
Which equates to a	6	hour workday		
The proportion of material imported on weekdays would be	90%	or	29878	tonnes total
The proportion of material imported on Saturdays would be	10%	or	3415	tonnes total
HGV deliveries would take place at a constant rate throughout the working day.				
The average payload of HGVs importing material will be	25	tonnes		

Weekday Trip Generation

The amount of soil exported per weekday would be	299	tonnes		
There would be this many HGV movements per weekday	12	one-way movements		
Which equates to	24	two-way movements		
There would be this many HGV movements per hour	2	one-way movements		
Which equates to	5	two-way movements		

Saturday Trip Generation

The amount of soil exported per Saturday would be	171	tonnes		
There would be this many HGV movements per weekday	7	one-way movements		
Which equates to	14	two-way movements		
There would be this many HGV movements per hour	2	one-way movements		
Which equates to	5	two-way movements		