MEMORANDUM

From:	Chief Officer, Environment & Technical	**To:**	Chief Officer Planning & Regulatory
		FAO:	Matthew Phillips
Our Ref:	ET/DC/AC/P/2024/1466	**Your Ref:**	P/2024/1466
Date:	12/11/2025		

PROPOSAL: OUTLINE APPLICATION FOR ERECTION FOR 1450 DWELLINGS (APPEARANCE, LANDSCAPING, LAYOUT AND SCALE RESERVED) AND PROVISION OF LAND FOR PRIMARY SCHOOL / CAIS AMLINELLOL AR GYFER CODI 1450 O ANHEDDAU (EDRYCHIAD, TIRWEDDU, CYNLLUN A GRADDFA WEDI'U CADW) A DARPARU TIR AR GYFER YSGOL GYNRADD

LOCATION: LAND AT LOWER BERSE FARM, RUTHIN ROAD, WREXHAM, LL14 4HP

I refer to your consultation / email in respect of the above.This note provides a review of the following documents:

- **Transport Assessment Dated July 2024**
- **Technical Report – Sustainable Transport Improvements and Potential Modal Shift July 2024**

Site Access
Site access is proposed to be provided as follows:

- The A525 Ruthin Road / A5152 signalised T-junction will be upgraded to provide a 4-arm signalised crossroads with the proposed site access forming the southern arm.
- A priority ghost island junction with A525 Ruthin Road around 60m east of the junction with Berse Lane (which will be closed to traffic as part of proposals).
- A priority T-junction along Bersham Road, approximately 450m to the west of the existing junction with Homestead Lane.
- A priority T-junction will be provided along Bersham Road, approximately 190m to the west of the junction with Homestead Lane.
- The 30mph traffic speed limit along the A525 Ruthin Road will be extended approximately 445m to the west of the existing location. The entirety of Berse Lane will also be reduced from 50mph to 30mph. All proposed accesses will therefore be along a road with a mandatory speed limit of 30mph.

The LHA requires a Road Safety Audit Stage 1 to be undertaken for the proposed site access junctions and the offsite highway works to inform the determination process.

Transport proposals around the site

The proposals around the edge of the site appear minimal for a development of the size and scale proposed. The applicant states that the following measures are under consideration:

- Provide shared footways, cycleways along the A525 Ruthin Road and Bersham Road. **The LHA does not consider these proposals extend far enough to be of benefit for onward travel and wider connectivity. The LHA would advise that this needs to extend as a minimum to the Victoria CP School.**
- Signalised pedestrian crossing facilities are to be added at the proposed north eastern access at the Ruthin Road junction with Croesnewydd Road. **The LHA would expect that cycle crossing facilities should also be provided.**
- Footway provision and uncontrolled crossing facilities along the eastern side of Homestead Lane which links to PRoW 13 which is intended to be retained / upgraded. **No details have been provided in regards to this. The applicant should provide further details regarding these works.**
- Potential to close Homestead Lane and Berse Lane to motorised traffic allowing only pedestrians, cyclists and equestrian users. **It is unclear what impact this will have on the wider highway network or residents in these areas as this provides limited onward connectivity. The LHA has since clarified that on network management grounds the closure of these two roads to motorised traffic is not acceptable to the Highway Authority.**
- Additional uncontrolled crossing points where appropriate – Limited details are provided in this regard – the plan in the rear of the TA report is difficult to interpret. **The LHA will require more detail on locations and measures proposed. This should reference the Welsch Active Travel Guide and the choice of crossings should be based on vehicle speeds / volumes.**

WCBC's Active travel officer recommends that routes along Ruthin Road and Bersham Road are key, and that these should be to the highest standard possible, providing connecting to further routes or and key destinations, for these to be beneficial and be utilised. Therefore, it is deemed that the provision of segregated walking and cycling routes is most appropriate for these two corridors. Shared use routes are to be used only if segregation of the two active modes is not possible, due to constraints. These routes should be tied into the existing routes along Croesnewydd Road, the Morrisons access road and Centenary Road.

Wider Measures for Wrexham

There has been extensive discussion about wider measures detailed for the A525, the A534 Holt Road, the A5152 Chester Road, the A541 Mold Rd & Regent Street. Through a collaboration between Transport for Wales and Wrexham Council focusing on Active Travel.

Two options have been proposed, a medium intervention package with a uni-direction cycle track (2m wide) on either side of Mold Road with separated footways of 2-3m width and a high intervention package with new Bi-directional cycle tracks (4m wide) along the northern side of the Mold Road corridor with separated footway of 2-3m width. There is currently funding in place to construct Phase 1a on Regent Street as well as making minor improvements between the railway station and Wrexham Maelor Hospital.

The wider strategy of how this site links to the city centre and major employment, education, leisure and transport infrastructure is not evaluated and should be as this will; help highlight where gaps exist in connectivity.

Technical Report – Sustainable Transport Improvements and Potential Modal Shift

The LHA considers that the analysis included in the technical is too light touch given the development is a major site allocation. It is welcome that the analysis in the technical note recognises in paragraph 4.8 that '*area wide measures are more likely to be successful in inducing modal shift than stand-alone measures'* The LHA does not consider the proposed active travel measure detailed in the TA to be area wide. The applicant has undertaken a minimal approach to improvements**. It is recommended that a comprehensive Transport Strategy be prepared to support the development.**

Walking

The applicant has stated that a comprehensive network of segregated cycling and walking routes is proposed both within and external to the site. The LHA do not consider the proposals are sufficient given the size of the development proposals. The TA has not considered improvements to key junctions along the A525 Ruthin Road. The applicant should propose a package of measures to improve walking connectivity in line with Welsh Government policy (Llwybr Newydd) and to support the aspirations of the potential modal shift.

The report states in paragraph 6.12 that:

"The walking distance from the centre of the Lower Berse Farm Development site to Wrexham centre is more than 2km (~30 minutes' walk time). This is not a comfortable walking distance for regular trips for most people and therefore there is expected to be minimal diversion from private car to walk for such trips."

The report goes on to state that 80% of all walk trips are within 1.5km or less and that as there are a range of potential trip generators within this distance, the applicant concludes that a conservative estimate of 5% of external trips generated by the development might comprise local walk trips when compared to a 'typical' car led development. The applicant has not provided any evidence to substantiate this 5% value or detailed what would constitute a 'typical' car led development and how the proposals for the site differ. Such evidence could include case studies or surveys of other sites. Moreover, the applicant should use empirical data to underpin any assumption or estimates used in determining the multi-modal trip generation, detailed in the subsequent sections of this response.

A more comprehensive analysis of the infrastructure for pedestrians in the vicinity of the site, where gaps exist and where improvements would be beneficial is required. The LHA requires an audit (in keeping with the Welsh Active Travel Act Guidance) to be undertaken of existing provision and proposals identified to provide facilities that comply with The Welsh Government's Active Travel Act Guidance.

Further detail is required regarding the interface with the PRoWs and should be undertaken with the Council's PRoW Officer; Mr Hanratty and The Council's Active Travel officer; Gwen Thomas. Public Footpath 5 for Bersham and PRoW Wrexham 25, appear to be missing from the active travel network plan and should be added. Consideration should be given of infrastructure and facilities to access these routes.

In the first instance for routes that experience over 2,000 AADT segregated cycling and walking routes should be the priority.

Cycling

In terms of active travel the analysis of cycling trips has utilised the DfT's Cycling Propensity Tool to estimate what might be feasible under different scenarios. This is a nationwide web-based tool for estimating cycling potential which covers travel behaviour data for commuting and travel to school, based on the 2011 census data. It presents baseline data and how cycling would change under different scenarios such as trip distance and hilliness. It should be noted that the tool is not intended to be used as a forecast model and provides a indication of what cycling levels could look like for different scenarios depending on infrastructure improvements. It must be noted that this tool predates and does not align with the current Welsh Governments targets for active travel as noted in the Wales Transport Strategy, Llwybr Newydd.

The propensity tool has been used which indicates that a 2-6% increase in cycling under a government target scenario could be delivered. While the Propensity to Cycle Tool (PCT) offers valuable insights into potential cycling uptake under various scenarios, it is not a forecasting model and should not be used as the sole basis for reducing vehicular trip rates associated with the proposed development. The tool is based on 2011 census data and does not align with current Welsh Government active travel targets, including those set out in Llwybr Newydd. The LHA considers the current proposals to be insufficient to trigger the level of modal shift suggested by the PCT outputs. Without a comprehensive and seamless cycle network, secure cycle parking, and supporting behavioural measures, the assumptions made using the PCT lack realism. **Therefore, any reduction in trip rates must be substantiated by a validated multi-modal trip generation methodology, supported by detailed infrastructure commitments and a delivery strategy aligned with Welsh Active Travel Guidance.**

Wrexham Gateway Transport Hub

There was discussion around the development of the Wrexham Gateway transport hub in the vicinity of Wrexham General Railway station. It is not clear if this is aspiration or if any works have been undertaken towards making this a reality.

The report states that it will improve the interchange facilities between modes, improve walking and cycling connectivity to and from the railway station and nearby destinations, it will improve the user experience at the railway station, enhanced setting of the station and welcome to the city of Wrexham, and finally, a WelTAG Stage 2 study.

Some small scale changes are likely to be put into place within the railway station curtilage this financial year but there is no funding committed to the delivery of the remainder of the work. Accordingly, the resultant uncertainty means that this should not be used as a justification for reducing trip rates.

Bus travel

The report states sets out the assessment of transport modes, starting off with public transport looking at likely patronage resulting from bus service enhancements proposed in conjunction with the Lower Berse Farm development. The assessment makes use of ONS 2021 census data which was still during the pandemic, the LHA is concerned that the baseline data might be uncharacteristically low as only essential workers were travelling to work at this time. The census survey data indicated that 2.9% were travelling to work by bus at that time compared to 5% in 2011 and 4% in 2001 in the Lower Berse farm area.

The centre of the site is over 400m from the nearest existing bus service. The report states that the applicant has considered a number of different bus proposals but recommends a new service operating north from the site via Maelor Hospital, Central Station and Wrexham Bus Station

Ultimately it is recommended a staged implementation would be the best use of resources. It is clear that there needs to be a service in operation from first occupation or that the areas of development should be phased and delivered/prioritised closest to locations which fall within 400m of existing bus stops.

The applicant has recommended that a new service 'A' should be developed to facilitate mode shift and secure the largest reduction of peak hour car trips. It is proposed that the existing bus mode share for this area could increase from 3% to somewhere between 5% and 8% following implementation of proposed bus service enhancements and wider bus network improvements. Whilst a new bus service could be pump primed there is concern that without adequate patronage the service may fail and be withdrawn.

Consultation and discussion should be undertaken with the Councils Active Travel Team's Gwen Thomas and Andrew Mytton in regards to public transport services. Gwen Thomas has provided comments on the application detailing that it is of paramount importance that there is a comprehensive sustainable transport offer for residents and that all options are available as soon as the first people are in residence which means active travel 'flagship routes' to key destinations as well as associated facilities, and high frequency and good quality public transport services, options for ticket purchase and easily navigated detailed service information. It is also recommended that to ensure high levels of Active Travel that the applicant contribute towards the creation or enhancement of active travel routes to Wrexham General Railway Station and Wrexham Bus Station (Routes 3 and 5 from the Do-maximum options in the WelTag 2025 report).

The report concludes with a forecast change in person trip mode share which has been used to determine vehicle trip rates for the development. The applicant has not provided a person trip rates so it is difficult to see how this could have derived or estimated.

Trip Generation

The trip rates proposed in the TA are considered too low to provide a robust or realistic assessment. The applicant has provided a range of trip rates to the LHA and has insisted that the vehicular trips rates for the site should be lower due to the proposed active travel measures or trip internalisation measures which will result in a higher level of trips being made by non-car modes. For avoidance of doubt, the LHA has not agreed to any of the trip rates submitted by the applicant.

The applicant should provide an assessment of person trip generation. This data is not provided in the TA. The calculation of trips by all modes is considered essential to inform the assessment of the suitability of infrastructure, whether existing or proposed being adequate.

It is understood that the development may incorporate a primary school and local commercial centre, with potentially a nursery, shops, café, public house and community facilities to reduce trips outside the site. The assessment work undertaken to date does not consider the trips into the site for people accessing these from external locations, pass by or diverted trips could result from such a destination. Moreover, it is not sufficient to state without providing any evidence that the proposed local centre would only be used by residents of the development and therefore will not attract external trips. **These types of trips could fundamentally change the turning proportions at the access junctions and therefore should be considered or evidence clearly provided by the applicant to justify their omission**. Furthermore, a pragmatic approach should be taken as a small size of food store / corner shop is unlikely to serve residents full food shopping requirements but may provide effective top up shops. The applicant should provide clarify on the methodology for calculating these trips. In addition the applicant has stated for developments of a similar scale to the Lower Berse Farm Development, estimates of internal trips usually fall within the range of 5-10%. Similarly the proposed school could well be attended by pupils who do not live on site and this could

therefore also result in external trip attraction. **The applicant should provide evidence to substantiate a reduction in trip numbers as a result of trip internalisation.**

The trip distribution set out in the transport assessment utilizes 2011 journey to work census data. The LHA view is that the distribution developed by WSP as part of the WG Western Gateway Study is more appropriate due to the age of the Census data. The applicant has been provided this previously and the overarching principle of the distribution is accepted by the LHA. **However, clarity is required regarding the methodology used by the applicant to disaggregate the vehicle trips between access points.**

Junction Assessments
The applicant has assessed the following junctions in the revised Transport Assessment (TA):

- Proposed A525 Ruthin Road / Croesnewydd Road / Site Access Signal Junction
- Proposed North-Western Site Access on A525 Ruthin Road
- Proposed South-Western Priority Access along Bersham Road
- Proposed South-Eastern Priority Access along Bersham Road
- A525 Ruthin Road / A5152 Victoria Road
- A525 Ruthin Road / B5098 Berse Lane
- B5098 / Vicarage Hill
- A525 Ruthin Road / A5152 Ruabon Road
- Croesnewydd Road / Rhyd Broughton Lane / Wrexham Maelor Hospital Access
- Roundabout
- B5101 Berse Road / Rhyd Broughton Lane Roundabout
- Junction 4 of the A483

In addition to the above, the LHA require assessment of the Centenary Road / A525 Ruthin Road / Morrisons signal controlled junction or a suitable justification as to why this junction has been omitted from the analysis.

Traffic surveys
The traffic surveys used in the assessment are from Thursday 10th November 2022 and are therefore considered to be out of date and will therefore require updating in any future assessment.

Modelled scenarios
The applicant has assessed the following scenarios:

- **All junctions except Junction 4 of A483 strategic junctions**
  - 2028 reference case (existing highway configuration, no development traffic).
  - 2028 above, with development.
- **Junction 4 of A483**
  - 2030 reference case (existing highway configuration, no development traffic)
  - 2030 above, with development.
  - 2040 reference case (existing highway configuration, no development traffic)
  - 2040 above, with development.

The applicant should provide an assessment of the existing conditions and provide details of the junction model validation so that the LHA can have full confidence in the accuracy of any assessment.

The future year of 2028 is not considered appropriate given the site is unlikely to be more than partly built out in three years' time. Therefore, the LHA requested that assessment year of the 2040 be included for all junctions.

Background Growth
The applicant has not provided TEMPro outputs within TA. The outputs should be provided in any future assessments for LHA review.

Redistribution of Background Traffic
The applicant has made a number of assumptions regarding the reassignment of background traffic. In paragraph 7.13 of theTA, they state:

- *'B5098 Berse Lane: No traffic reassignment; all through traffic would continue to use this route.*
- *Homestead Lane: This road is of a significantly lower standard than the proposed parallel internal development roads. As such, through traffic would be expected to reassign to the higher standard route and this has been assumed in the highway network analysis described in Chapter 8. School-related traffic is assumed to remain on Homestead Lane.'*

A review of the traffic flow diagrams indicates a "50% split for redistributed traffic" at the south of Homestead Lane, which is assumed to mean an east/west distribution. The applicant has reduced flows in a northbound direction by 102 and 55 vehicles in the AM and PM peak hours respectively, and in the southbound direction by 87 in the AM peak hour and 52 in the PM peak hour.

The LHA considers the assumption of full reassignment to be unrealistic. This is primarily because the application is outline in nature and the internal road alignment is not yet fixed, meaning future design changes could influence route choice. Furthermore, traffic approaching from the east will still need to pass through the proposed signalized junction, which introduces additional delay and may discourage complete diversion away from Homestead Lane. These factors suggest that a scenario assuming 100% reassignment does not provide a robust basis for assessment.

The applicant may wish to undertake sensitivity testing to assess the impact of varying levels of traffic reassignment, including scenarios with no reassignment, partial reassignment (e.g., 50%, 75%), and the originally assumed level. All assumptions regarding the direction and extent of redistributed traffic must be substantiated with evidence, such as observed traffic counts at the A525 Ruthin Road / Homestead Lane junction and the Bersham Road / Homestead Lane junction. In addition, a full assessment scenario assuming no reassignment must be provided to ensure the robustness of the TA and to allow the LHA to understand the potential worst-case impacts on the existing highway network.

Committed Development
The applicant has included the following committed developments within the assessments:

- P/2021/0955 - 112 dwellings along Gatewen Road
- P/2021/0255 - 70 dwellings along Heritage Way
- P/2021/0135 - 189 dwellings along Main Road
- P/2019/0923 - 455 dwellings along Stantsy Chain Road
- P/2019/0546 - 450 dwellings at Brymbo Park–
- P/2021/0094 - 90 dwellings at Plas Coch

The applicant has provided a flow diagram showing the 'total committed' traffic flows. These should be disaggregated by each development so that they can be checked.

Junction Capacity Modelling
The applicant has provided junction models for review along with junction capacity assessments. **Comments on the impact of the development in traffic terms and proposed mitigation will only be possible once trip generation, distribution and assignment has been agreed and accepted, and when junction models have been checked**. It should be noted that the applicant does not provide details of how the models have been validated or provided a narrative regarding queuing and journey time impacts due to the development of the site. These should be included with any future assessments and base models should be validated to ensure that onsite conditions are reflected accurately prior to future year assessment being undertaken.

The analysis and detail provided within the TA is limited junction level reporting. **The LHA requests that analysis of each arm of the junction is provided separately within the TA analysis**.

The provision of a base year, development year and future year assessment is requested. By providing assessment of immediate years due to phasing it may be possible to determine when particular mitigation schemes are necessary.

Further to this there is no detail of proposed vehicle flows or pedestrian / cycle flows as a result of the development on the wider network and this information is required and should inform the design of the required mitigation measures including appropriate cycle / footpath arrangements and any required crossings, for example on Bersham Road.

As the applicant will be aware, the highway network within the vicinity of the site is complex with a significant number of junction interactions. **The LHA recommends that in order to assess the impact of the scheme correctly and robustly, the traffic modelling would be more appropriately delivered within a microsimulation model.** It is noted that this approach has been used for the KSS2 and KSS3 sites each of which is smaller in scale than this application. To reiterate, this is due to the complexity of the highway network and sensitive issues within the vicinity of the site. The LHA considers this to be an appropriate and proportionate approach given the development proposals are to deliver c.1500 new dwellings which by any measure can be considered a significant development. Transport For Wales have recently updated their model, which should be used as the basis for this.

Summary

Before Highway Authority can reach a view of the acceptability of the proposals and the details therein, further information is required from the applicant – this is as follows:

- **General Requirements**
  - Future responses must directly address LHA comments, not just update the Transport Assessment (TA).
  - A Road Safety Audit Stage 1 is required for all proposed site access junctions and offsite highway works.
  - A comprehensive Transport Strategy is recommended to support the development.
  - Trip generation must be based on a validated multi-modal methodology, not just assumptions or vehicle trip rates.

- **Transport & Connectivity**
  - Cycle crossing facilities should be added at signalised pedestrian crossings.

- Details lacking for Homestead Lane footway and PRoW 13 upgrades.
- Closure of Homestead and Berse Lane to motor traffic is not acceptable to the LHA.
- More detail needed on uncontrolled crossings and justification is required, referencing Welsh Active Travel Guidance.
- Segregated walking and cycling routes preferred over shared use routes where spatial constraints allow.

- **Wider Strategic Measures**
  - Connectivity to Wrexham city centre and key destinations must be evaluated. This includes assessments of existing walking and cycling infrastructure. Audit required of pedestrian infrastructure per Welsh Active Travel Act Guidance.
  - Active travel routes should be high quality and continuous, especially along Ruthin and Bersham Roads.
  - Cycling analysis using PCT is insufficient to forecast increases in cycling demand and cannot be relied upon to justify reduced vehicle trip rates. Any trip rate reductions must be justified with infrastructure commitments and delivery strategy.

- **Public Transport**
  - New bus service ('Service A') proposed, but must operate from first occupation and should serve other developments nearby. A high frequency (5–6 buses/hour) and 7-day service is recommended.
  - Travel incentives (e.g., free/discounted passes) should be included in the Travel Plan.
  - Consultation required with Active Travel Team (Gwen Thomas, Andrew Mytton).

- **Trip Generation & Modelling**
  - LHA has not agreed to any trip rates submitted by the applicant.
  - Person trip generation assessment is essential and still missing.
  - Internal trip assumptions (5–10%) must be evidenced, especially for school and local centre.
  - Disaggregation of vehicle trips between access points must be clarified and evidence / rationale provided.
  - Updates to re-distribution assumptions on Homestead Lane and an assessment without any redistribution of traffic.
  - All junctions listed must be assessed, including Centenary Road/Morrisons junction.
  - Traffic surveys from 2022 are outdated and must be redone.
  - Existing base year assessments (2025) must be undertaken.
  - A future assessment year of 2028 is not appropriate to assess a site of this nature. A year of 2040 should be the future assessment year or a detailed phasing plan provided to justify an alternative assessment year. Note that the end of the Local Plan Period is not considered an appropriate justification.
  - All TEMPro outputs including assumptions must be included in future assessments.

- **Junction Capacity & Microsimulation**
  - Junction models must be validated and include queuing/journey time impacts.
  - Each arm of junctions should be analysed separately.
  - The LHA feel that Microsimulation modelling is recommended due to network complexity. It considered that the proportionate assessment approach given the

large scale of this development. The LHA understands that Transport for Wales' have recently updated there model which could be used for the assessment work.

The LHA are unable to support this application until the above outstanding information is provided.

KWEdwards

Contracts & Engineering Manager
On behalf of the Chief Officer, Environment & Technical

Supplementary Notes

The applicant's attention should be drawn to item nos. *.*.* 1, 2, 3, 4 & 5 of the supplementary notes.

Appendix

Highways Development Control Standard Advisory Note

In the interests of maintaining highway safety, and to avoid obstruction of the public highway (in contravention of the Highways Act), The Applicant is advised to coordinate with the highway authority at highwayroadworks@wrexham.gov.uk in advance of commencement of the development/works with respect to:

1. Skip, scaffolding, hoarding or A frame/signage (Permit required for these items, if on the public highway);
2. Use of a parking space for a set down/delivery area;
3. Record a dilapidation survey of the adjacent carriageway prior to commencement (to avoid being ask to repair damage by the Applicant whilst carrying out their works);
4. If any lane closure or obstruction of the highway is required for a crane or similar;
5. Protection against dust and debris blowing onto the public highway
6. Construction traffic parking locally avoiding nuisance to others;
7. If the Applicant's scope of work includes new apparatus in the highway, such as new mains services then a Section 50 licence will be required. *Insurances and demonstration of competency to carry out works in the public highway will be required.*
8. Lowering of kerbs or minor pavement alterations require Section 184 agreement. *Insurances and demonstration of competency to carry out works in the public highway will be required.*
9. A section 278 agreement works agreement is required for more significant alterations to the existing highway
10. Any temporary works affecting traffic lights, [pedestrian/cycle road crossings, or bus stops require pre-planning and permits;
11. For applications with a private driveway (either existing or proposed) connecting onto the public highway, the following conditions of approval apply:

    - No surface water from the applicants site should be allowed to drain onto the public highway,
    - The first 5m* minimum (for residential property) should be hard paved, avoiding gravel or loose chippings form spreading.
    - No gate should be built in a location where it would result in a car obstructing the highway whilst being unlocked, and it should not swing out and over a pavement or any other part of the highway.

*The hard paved length and set back if required is subject to the applicants proposed vehicular length

The applicants should allow a minimum of 4 weeks' notice for any of the above standard requirements, and 6-8 weeks for lane closures & road closures (lead times may change without notice subject to workload and complexity). Any works involving Trunk roads should be coordinated separately and directly with the North & Mid Wales trunk Road Agency. For larger sites with a significant impact upon the highway, a Construction Traffic Management Plan will be required.