

Contact: Stephanie Penney DDI No. 01494 421823

App No : 17/05825/FUL App Type : FUL

Application for : Creation of compound with 2.4 m high boundary fence & gates housing 20 x banks of battery units, 20 x transformer units, 1 x metering room and 1 x 132/33kv transformer to provide energy balancing services to the national grid.

At Bumpers Farm, Ilmer Lane, Ilmer, Buckinghamshire, HP27 9RE

Date Received : 03/04/17 Applicant : Harmony Energy Storage

Target date for decision: 29/05/17

1. **Summary**

- 1.1. This report recommends approval of a full planning application for the installation of an energy storage facility to the west of Ilmer in the North of the District.
- 1.2. Members will recall that they considered this application at the meeting on 14 February 2018 when the application was deferred for Officers to seek further comments in relation to the following:
 - a) Further investigate alternative access arrangements and to provide photographs or video of the type of vehicles that would be used to bring plant and materials to the site.
 - b) Further investigate moving the location of the transformer to a less intrusive location as suggested by the Landscape Officer; and investigate the provision of a more immediate and robust landscaping scheme;
 - c) Provide transformer "noise in service" levels and background noise information.

2. **The Application**

- 2.1. The original report is attached as Appendix B to this report, accordingly this report will consider the additional information requested in relation to the points above.
- 2.2. The following additional information was submitted:-
 - Construction Traffic Management Plan
 - Landscaping Strategy and updated Landscape and Visual Appraisal.
 - Noise Impact Report

3. **Further investigate alternative access arrangements and to provide photographs or video of the type of vehicles that would be used to bring plant and materials to the site.**

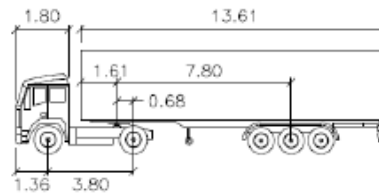
- 3.1 The Agent has advised that the applicant is prevented from using the land between the solar farm and the A4129 because this land is subject to an option which prevents it from being encumbered in any way. The Agent agrees using access directly off the A4129 would be preferable, however this is simply not an option. The Agent has advised that there appears to be some confusion over the relationship between Harmony energy and the solar developer. The Agent has confirmed that the two developments and the two applicants have no connection whatsoever. There is no option to use the access off the A4129 that the solar developer used.
- 3.2 A Construction Traffic Management Plan (CTMP) has been submitted to identify the off-site works required to facilitate the development construction and ensure the suitability of Ilmer Lane to withstand the development construction traffic.
- 3.3 Further information has been provided on the types and number of vehicles generated during the construction phase. The proposed operational hours are below:

Table 1: Operational Hours

Phase	Operational Hours			Expected Duration
	Monday - Friday	Saturday	Sunday	
1: Site Preparation	08:00 – 18:00	None	None	2 Weeks
2: Construction & Installation	08:00 – 18:00	None	None	12 Weeks
3: Grid Connection, Commissioning & Testing	08:00 – 18:00	None	None	2 Weeks

3.4 Parts of the construction process will require the movement of material and components to and from the site using Heavy Commercial Vehicles (HCVs). Deliveries of the battery storage containers, powerpacks and invertors etc. are expected to be made to the site compound using standard 16m articulated HCVs, profile shown below:

Figure 9: Articulated Heavy Commercial Vehicle Profile

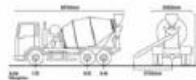


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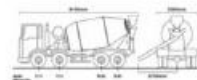
Tractor Width	: 2.55	Lock to Lock Time	: 6.0
Trailer Width	: 2.55	Steering Angle	: 42.6
Tractor Track	: 2.55	Articulating Angle	: 70.0
Trailer Track	: 2.55		

3.5 Deliveries of ready-mix concrete for the battery foundations will be made by either 6m³ or 8m³ truck mixer vehicles. Depending on the type of concrete, a fully loaded 6m³ truck will weigh approximately 26 tonnes and an 8m³ truck will weigh approximately 33 tonnes, profiles shown below:

6m³ Truckmixer 8m³ Truckmixer

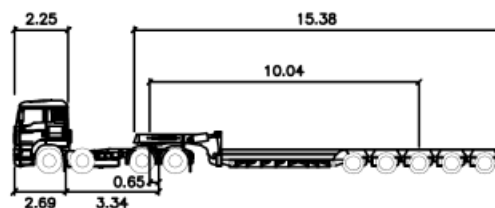


Length = 8.7m
Height = 3.75m
Width = 2.55m
Chute = 2.75m



Length = 9.15m
Height = 3.75m
Width = 2.55m
Chute = 2.75m

3.6 A custom vehicle capable of hauling 75 tonnes will be required for the delivery of the transformer to the site. This consists of an articulated vehicle with a 15.38m trailer, 5 no. axles with rear wheel steering hauled by an 8 x 4 tractor unit, profile shown below:



SL semi-low load

Tractor Width	: 2.55	Lock to Lock Time	: 6.0
Trailer Width	: 2.75	Steering Angle	: 24.5
Tractor Track	: 2.55	Articulating Angle	: 70.0
Trailer Track	: 2.75		

At the committee meeting, concerns were raised about the potential works to Ilmer Lane and how traffic would be managed along this road if it used for access.

- 3.7 The CTMP demonstrates that the turning movements to and from Ilmer Lane can be accommodated at the existing junction. It is expected that the abnormal loads will have an escort vehicle in advance to warn approaching drivers when it is manoeuvring at the junction. The required visibility to the right of the access is not achievable. Therefore, temporary three way traffic signals are proposed throughout the construction phase to control traffic on Ilmer Lane.
- 3.8 The key risks associated with the construction traffic relate to:
- Potential damage to the highway along Ilmer Lane, particularly the possible catastrophic failure of the Ray Farm culvert, as a result of the increased HCV trips;
 - Potential delays / congestion on Ilmer Lane due to the narrow carriageway widths and vehicles unable to pass each other; and,
 - Depositing of construction material and detritus by construction plant leaving the site.
- 3.9 It is proposed that a 'before' special inspection report of the culvert is undertaken to determine its condition and defects at that time. If appropriate, a temporary heavy duty bridging structure would be provided at the culvert to accommodate HCV movements. Following the construction works an 'after' special inspection would be undertaken on the culvert, and if required a programme of works to rectify defects would be proposed.
- 3.10 If a temporary bridging solution is not appropriate then a detailed design for the repair and / or replacement of culvert including a detailed construction method statement would be prepared. The applicant would fund the replacement / repairs for the culvert.
- 3.11 The width of Ilmer Lane is between 4m and 5m which is insufficient to allow the two way movement of HCVs. Four new passing places are proposed and improvement of the existing informal passing place. The new and upgraded passing places will ensure that a minimum width of 6m is provided over a length of 25m at each passing place. It is proposed that the new passing places are of permanent construction and can be retained in perpetuity. A location plan of the proposed and improved passing places has been provided and will be available in the Officer's presentation to Planning Committee.
- 3.12 Comments from BCC Highways are as follows:

Having assessed the proposed Construction Traffic Management Plan in conjunction with the prior Highway Access Appraisal document, the Highway Authority considers the proposals to have proposed sufficient mitigation for the impact of the predicted construction traffic subject to additional minor alterations. These measures for mitigation can adequately be secured by planning condition.

I note that section 2.4.1 states that the highway width of Ilmer Lane between Thame Road (A4129) and the proposed site access is between 4 – 5 metres in width and that this is sufficient to allow personal vehicles and construction traffic to safely pass each other. Following Manual for Streets guidance, a minimum of 4.8 metres width is required for such a manoeuvre along a section of road with a straight horizontal alignment. On a site visit I found that Ilmer Lane regularly falls below 4.8 metres in width and the horizontal alignment of the road in many places is not straight.

The Highway Authority previously requested the proposal of passing bays in order to overcome the above issue, presented by restricted carriageway width and horizontal alignment. Due to the proposal of passing bays, the restricted width is considered to have been adequately addressed by the applicant.

The current version of the Construction Traffic Management Plan refers to the proposed passing bays as being a permanent feature. I note that the arrangement could be temporary, so as to mitigate for construction traffic during the construction

phase, but to be removed afterwards and the highway verges reinstated to their previous conditions in line with the pre-commencement condition and post-construction condition surveys. Such an arrangement would be considered by the Highway Authority to sufficiently provide for the safety of the publically maintained highway.

The request for passing bays was in order to ensure the safety of simultaneous two-way vehicular traffic and prevent reversing manoeuvres for extended distances. As such, temporary materials capable of accommodating personal vehicles, such as grasscrete, would be considered adequate materials for a temporary arrangement if such a proposal were to be proposed.

As previously requested by the Highway Authority, the applicant has committed to carry out pre-commencement condition surveys, to be followed up by post-construction condition surveys. These are proposed to be used to identify any damage to the carriageway and verges caused by the construction traffic associated with the development. I request that the applicant include a commitment to repair damage done to the highway carriageway during the construction phase should damage to the highway occur during the construction period.

Transport for Buckinghamshire has arranged for a SCANNER vehicle to survey Ilmer Lane so as to inspect the road condition of the base and sub base due to the limited construction depth of the highway in this location. The results of this survey and a subsequent follow up survey should be included as a part of the pre-commencement and post-construction surveys in order to determine any deep structural effects from the construction traffic that may not be immediately evident in a visual survey. The Construction Traffic Management Plan should be amended to include the condition surveys of the Highway Authority.

My colleague Jonathan Clark, a Strategic Access Officer for Buckinghamshire County Council, has also requested information and commitments to be included in a Construction Traffic Management Plan, in a letter dated 4th May 2018. One request is for pre-commencement and dilapidation surveys to be carried out for the section of the proposed access that is shared with a public footpath. I therefore request that the Construction Traffic Management Plan be amended to include the public footpath in the pre-commencement and dilapidation surveys, with a commitment to repair any damage to the public footpaths resulting from the proposed construction traffic.

I also note that Jonathan Clark requested the inclusion of measures to inform construction vehicle drivers of the presence of pedestrians, and to notify pedestrians of the presence of construction traffic. As Ilmer Lane is a section of highway used by walkers, cyclists and horse riders to access the local rights of way network, I request that the Construction Traffic Management Plan includes a commitment by the applicant to ensure that all construction vehicle drivers are informed of the likely presence of these users within the vicinity of the site and along Ilmer Lane itself, prior to their being employed to drive construction vehicles to the site.

Proposals have also been submitted as a part of the Construction Traffic Management Plan to address the weight-limited culvert along Ilmer Lane. Having consulted the Highway Authority's structures team, I can confirm that the proposed two-tier approach to the culvert is considered appropriate. This approval is subject to the details of the proposals being agreed by the Local Planning Authority, in consultation with the Highway Authority, prior to their implementation.

Delivery times for construction vehicles are to be restricted to between the hours of 0900 – 1500. This time restriction is in order to prevent the use of Ilmer Lane by construction traffic during peak hours therefore preventing impact on peak hour flows by the construction traffic.

In order to overcome the issue of limited visibility to the right of the site access towards the railway bridge, the applicant has proposed the use of three way signalled lights at the site access onto Ilmer Lane. Exact details for this proposal should be agreed with the Local Planning Authority in consultation with the Highway Authority at a later date, however I can confirm that this proposal sufficiently addresses the limited visibility of the proposed site access.

My comments are given on the basis that the signalised arrangement will only change to allow egress of the site when it is required by construction vehicles, and that the signalised lights will not be on a timed loop.

Mindful of the above, I therefore request that the Construction Traffic Management Plan be amended to reflect my comments. I shall provide my final response once in receipt of this amended information.

3.13 The CTMP was then updated in accordance with the comments submitted by BCC Highways. The Final comments of BCC Highways are:

Ilmer Lane is an unclassified rural lane that is subject to derestricted speed limits and therefore the national speed restriction applies. There are no parking or waiting restrictions in place on Ilmer Lane. The road does not benefit from pedestrian footways or street lighting. The road is between 4.2 – 4.3 metres in width with wider road widths provided at bends along the road. Prior to the site access, the carriageway of Ilmer Lane crosses a culvert (Q77061 Ray Farm) with a weight limit of 40T, the carriageway width is restricted to 3.8 metres in this location.

I note that the Highway Authority has provided three previous sets of formal comments for the proposed application. This letter should therefore be read in conjunction with my previous sets of comments dated 4th December 2017, 19th December 2017, and 8 June 2018.

The application proposes the creation of a compound containing energy infrastructure connecting to the National Grid. The applicant has recently submitted additional information in the form of a Construction Traffic Management Plan. I note that the Highway Authority has previously raised concerns as to the capacity of the local highway network, specifically the length of Ilmer Lane between Thame Road (A4129) and the proposed site access.

Having assessed the proposed Construction Traffic Management Plan in conjunction with the prior Highway Access Appraisal document, the Highway Authority considers the proposals to have proposed sufficient mitigation for the impact of the predicted construction traffic. I believe that these measures for mitigation can adequately be secured by planning condition.

Mindful of the above, I have no objections to the proposed development subject to conditions and informative points:

4. Further investigate moving the location of the transformer to a less intrusive location as suggested by the Landscape Officer and Investigate the provision of a more immediate and robust landscaping scheme

4.1 During the Committee meeting, it was raised as to whether the transformer could be relocated to the southern edge of the site. The applicant has discussed this issue with the DNO (district network operator) UKPN. Prior to applying for planning permission, Harmony Energy made an application to UKPN to connect to the grid, based on the layout submitted and the position of the transformer. The point of connection is a key component to the application, and if any changes are made, the applicant would have to reapply to UKPN. All applications are based on grid capacity at that point in time, meaning if a new application was made now, there is

no guarantee a grid offer would be forthcoming – this could potentially jeopardise the whole project.

- 4.2 It is noted that the landscape officer would have preferred to see the transformer moved to the south of the site, but that even in its current location, they felt the landscape and visual impact of the proposed development was acceptable and they no longer objected to the scheme.
- 4.3 However, notwithstanding this, to try and address public and member concerns, a landscaping strategy for the site has been submitted, which was originally requested by condition. The Landscape and Visual Appraisal has also been updated. The scheme includes tree planting at the southern and northern edges of the site, with species to be planted with heights of 4 – 4.5m from the off. Specifically, specimen trees on the landscape strategy within the eastern site boundary (around the northern transformer end of the development) will ensure views from the footpath LCI/34/1 to the north-east/east and Ilmer Road will experience at least some filtering of the transformer during year 1. In addition, native hedgerow will be planted continuously around the site edge. The scheme was further amended to include additional planting on the south eastern boundary, as requested from the Landscape Officer. No objection has been raised to this amended scheme and accordingly the siting of the transformer and proposed landscaping scheme is considered acceptable.

5. Provide transformer “noise in service” levels and background noise information.

- 5.1. A noise Impact Assessment has been submitted. An assessment of the noise emissions from the proposed battery storage facility has been undertaken and compared with the guidelines contained within the WHO Guidelines and BS8233 “Sound insulation and noise reduction for buildings.” The assessment indicates that the proposed development at the nearest noise sensitive receiver would be low, and additional receivers that are further away would experience lesser impacts. It has also been established that the level of noise within habitable rooms are so low as to be inaudible and will be masked by internal noise sources such as people breathing and internal mechanical equipment such as refrigeration. No objection has been received from Environmental Services accordingly it is not considered that there will be any material harm on nearby properties.

6. Weighing and balancing of issues – overall assessment

- 6.1. This section brings together the assessment that has so far been set out in order to weigh and balance relevant planning considerations in order to reach a conclusion on the application.
- 6.2. In determining the planning application, section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that proposals be determined in accordance with the development plan unless material considerations indicate otherwise. In addition, Section 143 of the Localism Act amends Section 70 of the Town and Country Planning Act relating to the determination of planning applications and states that in dealing with planning applications, the authority shall have regard to the provision of the development plan insofar as they are material and any other material considerations.

Positive Factors

- 6.3. The proposed development achieves sustainable development due to the proposal coming as a result of the closure of thermal generation plants and the need for battery storage facilities charged from renewable energy.
- 6.4. The proposed development is not considered to materially harm the wider landscape as a result of the proposed landscaping scheme.
- 6.5. The prior Highway Access Appraisal document CTMP has demonstrated sufficient mitigation for the impact of predicted construction traffic.
- 6.6. The proposal will not have a material impact on nearby occupiers in relation to noise.

Neutral Factors

- 6.7. There could be very slight economic benefits derived from this development in terms of the construction phase contributing to the local economy. However, any positive benefit is so small as to be afforded neutral weight in the planning balance.

Negative Factors

- 6.8. There is no requirement for the mitigation (new passing places and passing place laybys) to Ilmer Lane to be temporary, accordingly the engineering works to Ilmer Lane would have an urbanising effect on the rural lane. This is afforded negative weight in the planning balance.

Conclusion and Recommendation

- 6.9. Overall it is considered that the proposed development would accord with the development plan policies. The potential harm to Ilmer Lane is afforded limited weight given that the scheme achieves sustainable development with acceptable access, no material harm to the landscape and nearby occupiers.
- 6.10. As such it is considered that the application be permitted.

Recommendation: Application Permitted

- 1 The development hereby permitted shall be begun before the expiration of three years from the date of this permission.
Reason: To comply with the requirements of Section 91 of the Town and Country Planning Act 1990 (As amended).
- 2 The development hereby permitted shall be built in accordance with the details contained in the planning application hereby approved and plan numbers WDC1, WDC3 rev D, 001J, Edp3924-d005c and GM0001 unless the Local Planning Authority otherwise first agrees in writing.
Reason: In the interest of proper planning and to ensure a satisfactory development of the site.
- 3 This grant of planning permission shall expire no later than 25 years from the date when the site becomes operational. Written notification of this shall be given to the Local Planning Authority within 14 days of its occurrence.
Reason: To ensure that the site is suitably restored upon cessation of the use permitted given the renewable use being of a temporary nature.
- 4 Within 12 months of the site becoming operational, of which written notification shall be submitted in accordance with condition 2, a Decommissioning and Restoration Scheme shall be submitted to and approved in writing with the Local Planning Authority. This statement shall include details of the timescale and management of the decommissioning works; the removal of all equipment and all other associated structures and the reinstatement of the land to its former condition. The works shall be carried out in accordance with the approved details.
Reason: To ensure there is a satisfactory scheme to restore the site upon cessation of the use permitted given the renewable use being of a temporary nature.
- 5 All planting, seeding or turfing comprised in the approved details of landscaping shall be carried out in the first planting and seeding season following the the completion of the development. Any trees, plants or areas of turfing or seeding which, within a period of 3 years from the completion of the development, die are removed or become seriously damaged or diseased, shall be replaced in the next planting season with others of similar size and species, unless the Local Planning Authority first gives written consent to any variation.
Reason: In the interests of amenity and to ensure a satisfactory standard of landscaping.

- 6 The submitted Construction Traffic Management Plan detailing the management of construction traffic (including vehicle types, frequency of visits, expected daily time frames, use of a banksman, on-site loading/unloading arrangements, and parking of site operatives vehicles) shall be applied to all vehicular movements and construction traffic associated with the development. Hereafter, the development shall be carried out in accordance with such approved management plan.
Reason: This is a construction management condition as development construction cannot be allowed to take place, which in the opinion of the Highway Authority, could cause danger, obstruction and inconvenience to users of the highway and of the development.
- 7 No other part of the development shall commence until the off-site highway works have been laid out and constructed in accordance with details to be submitted to and first approved in writing by the Local Planning Authority in consultation with the Highway Authority.
Reason: In order to minimise danger, obstruction and inconvenience to users of the highway and of the development.
- 8 Prior to the site becoming operational details of the surface material to be used for the construction of Public Footpath LC/12/2 shall be submitted to an approved in writing by the Local Planning Authority, then laid out and constructed in accordance with the approved details.
Reason: In order to minimise danger, obstruction and inconvenience to users of the highway and of the development.
- 9 No construction work shall be carried out outside the hours of 07:00 to 19:00 on Mondays to Fridays, 08:00 to 13:00 on Saturdays and not at any time on Sundays, Bank or Public Holidays
Reason: To protect the amenities of nearby residents.

INFORMATIVE(S)

- 1 In accordance with paragraphs 186 and 187 of the NPPF Wycombe District Council (WDC) take a positive and proactive approach to development proposals focused on solutions. WDC work with the applicants/agents in a positive and proactive manner by:
- offering a pre-application advice service,
 - as appropriate updating applicants/agents of any issues that may arise in the processing of their application and where possible suggesting solutions, and,
 - by adhering to the requirements of the Planning & Sustainability Customer Charter
- The application has been amended significantly since it was originally submitted reducing the overall height of the storage units by 2.2m, inverters reduced in height by 1.5m. In addition a Highways Access Appraisal has been prepared with regard to access safety and potential impact on the local highway network. Following the receipt of no objections from the Highways Officer, the application progressed without delay and an extension of time agreed.
- 2 The applicant is advised that the off-site works will need to be constructed under a section 278 of the Highways Act legal agreement. This agreement must be obtained from the Highway Authority before any works are carried out on any footway, carriageway, verge or other land forming part of the highway. A minimum period of 8 weeks is required to draw up the agreement following the receipt by the Highway Authority of a completed Section 278 application form. Please contact the Transport Development Control Section at the following address for information:-

Development Management
Buckinghamshire County Council
9th Floor
County Hall
Walton Street
Aylesbury

Buckinghamshire
HP20 1UY
Tel: 01296 395000

- 3 It is an offence under S151 of the Highways Act 1980 for vehicles leaving the development site to carry mud onto the public highway. Facilities should therefore be provided and used on the development site for cleaning the wheels of vehicles before they leave the site.
- 4 No vehicles associated with the building operations on the development site shall be parked on the public highway so as to cause an obstruction. Any such wilful obstruction is an offence under S137 of the Highways Act 1980.
- 5 This permission shall not be deemed to confer any right to obstruct the public footpath now crossing the site which shall be kept open and unobstructed until legally stopped up or diverted under section 257 of the Town and Country Planning Act 1990.
- 6 The comments received from Network Rail are drawn to your attention:

The developer should contact the Network Rail Asset Protection using the reference: WM/NAJ2/27/3/LF - in all correspondence.

When designing proposals, the developer and LPA are advised, that any measurements must be taken from the operational railway / Network Rail boundary and not from the railway tracks themselves. From the existing railway tracks to the Network Rail boundary fence, the land will include critical infrastructure (e.g. cables, signals, overhead lines, communication equipment etc.) and boundary treatments which might be adversely impacted by third party proposals unless the necessary asset protection measures are undertaken. No proposal should increase Network Rail's liability.

The developer/applicant must ensure that their proposal, both during construction and as a permanent arrangement, does not affect the safety, operation or integrity of the existing operational railway / Network Rail land. The works on site must not undermine or damage or adversely impact any railway land and structures. There must be no physical encroachment of the proposal onto Network Rail land, no over-sailing into Network Rail air-space and no encroachment of foundations onto Network Rail land and boundary treatments. Any future maintenance must be conducted solely within the applicant's land ownership.

- (1) The developer is to submit directly to Network Rail, a Risk Assessment and Method Statement (RAMS) for all works to be undertaken within 10m of the operational railway under Construction (Design and Management) Regulations, and this is in addition to any planning consent. Network Rail would need to be re-assured the works on site follow safe methods of working and have also taken into consideration any potential impact on Network Rail land and the existing operational railway infrastructure. Review and agreement of the RAMS will be undertaken between Network Rail and the applicant/developer. The applicant /developer should submit the RAMs directly to:
AssetProtectionLNWSouth@networkrail.co.uk
- (2) The fence must be constructed and maintained wholly within the applicant's land ownership footprint. The foundations must be constructed and maintained wholly within the applicant's land ownership footprint, without over-sailing or encroaching onto or over the Network Rail boundary. The fence must not prevent Network Rail from maintaining and/or renewing its boundary treatments. Network Rail's existing boundary treatment must not be removed, altered or damaged in anyway both during construction and as a permanent arrangement.

- (3) Any scaffolding which is to be constructed within 10 metres of the Network Rail / railway boundary must be erected in such a manner that at no time will any poles over-sail the railway and protective netting around such scaffolding must be installed. The applicant / applicant's contractor must consider if they can undertake the works and associated scaffolding / access for working at height within the footprint of their land ownership boundary. The applicant is reminded that when pole(s) are erected for construction or maintenance works, must have at least a 3m failsafe zone between the maximum height of the pole(s) and the railway boundary.
- (4) If vibro-compaction machinery / piling machinery or piling and ground treatment works are to be undertaken as part of the development, details of the use of such machinery and a method statement must be submitted to the Network Rail Asset Protection Engineer for agreement.
- All works shall only be carried out in accordance with the method statement and the works will be reviewed by Network Rail. The Network Rail Asset Protection Engineer will need to review such works in order to determine the type of soil (e.g. sand, rock) that the works are being carried out upon and also to determine the level of vibration that will occur as a result of the piling.
 - The impact upon the railway is dependent upon the distance from the railway boundary of the piling equipment, the type of soil the development is being constructed upon and the level of vibration. Each proposal is therefore different and thence the need for Network Rail to review the piling details / method statement.
- Maximum allowable levels of vibration - CFA piling is preferred as this tends to give rise to less vibration. Excessive vibration caused by piling can damage railway structures and cause movement to the railway track as a result of the consolidation of track ballast. The developer must demonstrate that the vibration does not exceed a peak particle velocity of 5mm/s at any structure or with respect to the rail track.
- (5) All surface water is to be directed away from the direction of the railway. Soakaways, as a means of storm/surface water disposal must not be constructed near / within 20 metres of Network Rail's boundary or at any point which could adversely affect the stability of Network Rail's property. Once water enters a pipe it becomes a controlled source and as such no water should be discharged in the direction of the railway.
- Storm/surface water must not be discharged onto Network Rail's property or into Network Rail's culverts or drains.
 - Suitable drainage or other works must be provided and maintained by the developer to prevent surface water flows or run-off onto Network Rail's property.
 - Proper provision must be made to accept and continue drainage discharging from Network Rail's property.
 - Suitable foul drainage must be provided separate from Network Rail's existing drainage.
 - Drainage works could also impact upon culverts on developers land.
- Water discharged into the soil from the applicant's drainage system and land could seep onto Network Rail land causing flooding, water and soil run off onto lineside safety critical equipment / infrastructure; or lead to de-stabilisation of land through water saturation.
- (6) Network Rail will need to review and agree all excavation and earthworks within 10m of the railway boundary to determine if the works impact upon the support zone of our land and infrastructure as well as determining relative levels in relation to the railway. Network Rail would need to agree to the following:
- Alterations to ground levels
 - De-watering works
 - Ground stabilisation works

Network Rail would need to review and agree the methods of construction works on site to ensure that there is no impact upon critical railway infrastructure. No excavation works are to commence without agreement from Network Rail. The LPA are advised that the impact of third party excavation and earthworks can be different depending on the geography and soil in the area. The LPA and developer are also advised that support zones for railway infrastructure may extend beyond the railway boundary and into the proposal area; therefore consultation with Network Rail is requested.

Alterations in loading within 15m of the railway boundary must be agreed with Network Rail.

- (7) Network Rail requests that the developer ensures there is a minimum 2 metres gap between the buildings and structures on site and the railway boundary. Less than 2m from the railway boundary to the edge of structures could result in construction and future maintenance works being undertaken on Network Rail land. This would not be acceptable. All the works undertaken to facilitate the design and layout of the proposal should be undertaken wholly within the applicant's land ownership footprint.
- (8) As the proposal includes works which may impact the existing operational railway and in order to facilitate the above, a BAPA (Basic Asset Protection Agreement) will need to be agreed between the developer and Network Rail. The developer will be liable for all costs incurred by Network Rail in facilitating this proposal, including any railway site safety costs, possession costs, asset protection costs / presence, site visits, review and agreement of proposal documents and any buried services searches. The BAPA will be in addition to any planning consent.

The applicant / developer should liaise directly with Asset Protection to set up the BAPA.

For major works / large scale developments an Asset Protection Agreement will be required with further specific requirements.

AssetProtectionLNWSouth@networkrail.co.uk