

INTERNAL MEMORANDUM  
TECHNICAL SERVICES

From: Head of Technical Services  
To: Head of Planning  
FAO: Simon Grundy  
CC: Planning Administration

|   |       |             |     |  |
|---|-------|-------------|-----|--|
| Proposal: Revised outline application for residential development of up to 550 dwellings, local centre up to 2500m2 and means of access | Date: | 13/05/14    |     |  |
| Location: Land At Little Maltby Farm, Low Lane, Ingleby Barwick   | Ref:  | 14/0569/REV | Rev |  |

| BANE Consultation           |  | Consultation Other        |  |
|-----------------------------|--|---------------------------|--|
| Network Safety              |  | Countryside & Green Space |  |
| Highways Network Management |  | Consultancy Practice      |  |
| Environmental Policy        |  |                           |  |
| Flood Risk Management       |  |                           |  |
| Community Transport         |  |                           |  |
| Connect Tees Valley         |  |                           |  |

I refer to your memo dated: 12 March 2014

**Executive Summary**

This development would increase the number of residential properties on the site up to 900 units. There is also a separate application on the site currently being considered (14/0562/OUT) for a further 70 dwellings, taking the total number of properties on the site up to 970 units.

The Head of Technical Services considers subject to detailed design and subject to a Section 278 Agreement with the Highway Authority that the provision of a second access onto Low Lane using the proposed emergency access via a left-in / left-out junction arrangement would provide a safe access for the development.

The impact of the proposed development on the highway network has been assessed using a micro-simulation transport model developed by Technical Services. The results show that the development could be accommodated with improvements to the highway network. If the site is recommended for approval the S106 Heads of Terms should include a contribution towards the provision of:

- The Ingleby Barwick western highway improvements; and
- Highway works to provide a dedicated and segregated left turn lane on the Ingleby Way approach to the A1044 Thornaby Road / Ingleby Way / Stockwell Avenue roundabout.

In addition if the site is recommended for approval the S106 Heads of Terms should include a contribution towards the provision of a bus service (and associated bus stop infrastructure) to

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

serve the site for a minimum of three years. The applicant has demonstrated a willingness to provide a public transport connection and is currently liaising with Tees Valley Unlimited.

The additional 550 dwellings should be incorporated into the Travel Plan for the wider site which requires the provision of incentives to encourage sustainable travel at a value up to £100 per dwelling (£55,000).

This development should also be included in the Construction Traffic Management Plan for the wider site and this must be secured by planning condition. The Construction Traffic Management Plan must give consideration to the operation of the Free School and ensure traffic is managed accordingly to keep construction traffic segregated from school traffic.

In landscape and visual terms, the retention of approximately 350m of Green Wedge between the eastern edge of the proposed development and Thornaby Road is considered too broadly accord with the Inspectors decision in terms of retaining separation between communities. The provision of an increased landscaped buffer zone of varying width 15-20m of structure planting on the eastern site boundary is considered to provide the necessary screening of the proposed buildings, assist their integration into their surroundings and retain the character and functionality of the remaining area of green wedge. This buffer must also be provided on the south eastern boundary. On maturity of the buffer planting (after 15 years) the impact of development on the local landscape character is not considered to be significant. The inspector also considered that a properly designed landscape buffer should be provided to act as an edge and screen to the development.

It is considered that the area of Public Open Space (POS) on the Indicative Masterplan TAG 5 is not acceptable both in terms of size and shape for the development. The increase in POS provision and the increased buffer planting is likely to reduce the yield of the site in terms of housing numbers. These requirements would be dealt with as part of any Reserved Matters application.

## **Highways Comments**

### **Overview**

The proposed development is for up to 550 residential dwellings and a local centre (2,500sqm) on land accessed off Low Lane, Ingleby Barwick. This is a revised application following the refusal of application reference number 13/3107/OUT. One of the reasons for refusal was lack of information to satisfactorily demonstrate that the proposed development would not have a detrimental impact on highway safety and the free flow of traffic or that the impact could be satisfactorily mitigated. A Transport Assessment has been submitted in support of the application and additional highway modelling has now been undertaken using the Council's strategic AIMSUN traffic model. A Transport Assessment Addendum report containing the results from the AIMSUN model has been submitted and reviewed by the Head of Technical Services.

### **Access**

The adjacent site was granted consent in 2012 (12/5217/OUT) for a Secondary School and 350 residential units. Access into the school development is via a new roundabout onto Low Lane. A separate emergency access into the Free School site is to be provided onto Low Lane to the east of the roundabout. The proposed access into this development for up to 550 additional units would use the same access arrangements.

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

The submission documents were therefore based on up to 900 properties and a secondary school accessed from a single access road. The Head of Technical Services considered that this number of properties and a school from one vehicular access would not be good highway design. The applicant has proposed that the emergency access could provide a second access via a left-in / left-out priority controlled arrangement. This would be acceptable in principle but would need to be designed accordingly to manage the left-in / left-out arrangement. The detailed design of the access would be subject to a Road Safety Audit and Section 278 Agreement with the Local Highway Authority as part of the Free School development.

It is anticipated that the emergency access will be constructed early in the construction phase for the Free School development. If this development is approved it would further increase construction activity on the site. Given that the school is likely to be operating whilst construction of the residential areas is still on-going, the Construction Management Plan would need to clearly address the development phasing and advise how construction traffic could be managed to maintain safe and unobstructed access for school children, school employees and residents.

Even with the second access, it should be reiterated that the Head of Technical Services would encourage a comprehensive masterplanning approach which seeks to provide an alternative access, including a direct linkage with Thornaby Road. This would improve the balance of vehicular movement through the site and make the site more viable in the long-term for a commercial bus route. Any access onto Thornaby Road would need to be set in the landscape with minimal frontage. Manual for Streets 1 (Department for Transport, 2007) highlights that to encourage bus penetration development layouts should be designed with strong connections to the local highway network and avoid long one-way loops. If an appropriate access could be achieved onto Thornaby Road the Highway Authority may seek in the future to close an access onto Low Lane.

**Development Layout**

The application is in outline only with all matters except access reserved. The masterplan is therefore indicative only and the detailed design of the development should be designed and constructed in accordance with the Councils Design Guide and Specification (Residential and Industrial Estates Development) current edition and in accordance with Manual for Streets (Department for Transport, 2007) guidance.

The access into the site would be taken from the neighbouring development which proposes a new roundabout junction on Low Lane and the proposed upgrade of the emergency access to provide a second access. From the new roundabout to the first internal junction, it was recommended that the road be at least 7.3m wide. This width was recommended to serve 350 dwellings and should be sufficient to accommodate lane closures for maintenance etc. without the need to close the road. It was similarly recommended that the main internal residential roads be 6.7m in width to accommodate a bus route if a service is routed through the site. The documents submitted for this application vary the description of the access road (e.g. the Design and Access statement refers to a 10m wide boulevard whereas Drawing SK04 shows a 6.1m wide carriageway). Regardless of the information submitted with this application, the detailed design of the roundabout on Low Lane and the access road will be subject to a Section 278 Agreement with the Highway Authority for the Free School development (12/2517/OUT) with the design requirements to be agreed accordingly. Similarly, the emergency access, which the applicant now proposes to upgrade to a second access, would be subject to a Section 278 Agreement.

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

Car and cycle parking for each dwelling would need to be in accordance with Supplementary Planning Document 3: Parking Provision for New Developments, 2011. Each incurtilage parking space should be 6m in length to ensure that parked cars do not overhang the footway. In accordance with the parking standards, a garage will only be counted as a parking space if it meets the minimum internal dimensions of 6m x 3m. Car and cycle parking would also be required for the proposed local centre in accordance with the parking standards.

Any Reserved Matters application for the detailed elements of the site would also need to be supported by information on refuse collection and storage along with autotracking of large vehicles around the site. A Construction Management Plan would be required in order to ensure that construction works do not have a detrimental impact on the highway, taking note of the point above regarding access being maintained to the neighbouring Free School development.

The applicant would need to enter into a Section 38 Agreement for the highway and footpaths which would become highway maintainable at the public expense.

### Trip Generation

The vehicular trip rates and forecast vehicle trips associated with 550 dwellings in the AM peak hour is shown in Table 1.

**Table 1: Average Residential Trip Rates and Trips (AM Peak Hour)**

|   | In   | Out  | Tot  |
|---|------|------|------|
| Trip Rate – Average for all Ingleby Barwick               | 0.23 | 0.59 | 0.82 |
| Trip Rate – Average for Ingleby Barwick areas with school | 0.23 | 0.53 | 0.76 |
| Trips (based on trip rate with school)                    | 129  | 297  | 426  |

The average residential trip rates have been derived from cordon surveys of the six villages within Ingleby Barwick. The average trip rates from the survey throughout Ingleby Barwick were slightly higher (as shown in Table 1) than the rates applied in the Transport Assessment, which have been reduced as it is considered that the close proximity of a school to the residential units would remove some car trips from the network in the peak periods. The cordon surveys showed that the areas within Ingleby Barwick without a school had higher trip rates than those areas with a school. The trip generation methodology is therefore considered acceptable.

Trip rates for the proposed local centre have not been provided. The local centre is proposed to provide day to day convenience shopping and ancillary services for the local community. It is therefore assumed that the majority of vehicular trips would be pass-by trips but it would have been beneficial to have an estimate of the likely trip generation of the centre to enable this to be factored into the highway impact assessment.

### Highway Impact

The highway impact at the site access roundabout has been assessed using ARCADY. ARCADY results refer to Ratio of Flow to Capacity (RFC) and predicted queue lengths in Passenger Car units (PCUs). A RFC value of 1 indicates that the arm of a junction is operating at its theoretical capacity.

The assessment is based on 900 units accessed off one road (i.e. without the use of the emergency access as a second access). The results indicate that during the AM peak hour the A1044 Low Lane westbound approach would experience a RFC of 0.84 with a queue of 6

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

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vehicles. The access arm of the roundabout would experience a RFC of 0.82 with a queue length of 4 PCUs. The results indicate the junction would operate within capacity but the RFC values do indicate that the junction, with the development, would be approaching capacity which would be a concern if there was only one access into the site. The RFC on the site access arm of the junction in particular increases quite substantially with an additional 550 units (from 0.43 RFC to 0.82 RFC). As noted in earlier sections of this report, it is envisaged that if there was just one single access it would be heavily congested during the network peaks. The provision of a second access, using what was proposed as the emergency access, would therefore balance trips across two points and should improve vehicular circulation around the site.

It is not clear if the ARCADY assessment presented in the Transport Assessment has considered other recently consented developments which have been demonstrated as having an impact on this part of the network. Additional traffic could result in higher RFC values and queue lengths than forecast in the Transport Assessment. It should however be noted that the operation of the roundabout has also been considered in the Council's AIMSUN model. The results from the AIMSUN model also demonstrate that the junction would operate within capacity in the future year scenario, with the additional 550 dwellings increasing the maximum queue length on the site access arm by 4 vehicles in the AM peak.

With regards to the impact on the wider network, the highway impact assessment outlined in the Transport Assessment utilised a VISSIM model developed for a base year of 2009 with a future year assessment for 2019. The issue raised with this approach for the original planning application (13/3107/OUT) was that the modelling in the Transport Assessment was based on a different future year scenario to that now proposed. It was recommended that the assessment should use a micro-simulation transport model, which has been developed and validated by Technical Services, to review the impact of this development and the suitability of proposed mitigation measures. A micro-simulation model has been developed by the Council as it is considered to be the most appropriate tool to assess the impact of a number of proposed development sites alongside options for highway improvements.

The development has subsequently provided an Addendum report to the original Transport Assessment assessing the impact of the proposed development on the local highway network using the Council's traffic model. The AIMSUN model uses a forecast year of 2022 and tests the impact of the development with and without highway mitigation proposals. The traffic from the proposed development has been allocated based on the distribution previously agreed for the Free School development. This assumes 48% of traffic would travel through Ingleby Barwick with 26% travelling towards Thornaby, 12% to Low Lane east and 14% to Low Lane west.

The results from the model show that during the morning peak the greatest impact would be on Ingleby Way eastbound as traffic exiting the development adds to the existing queue of traffic wishing to turn left at the roundabout junction with Thornaby Road. The applicant proposes a scheme to mitigate this impact through the provision of a dedicated left turning lane on the Ingleby Way approach to the roundabout. The results from the model suggest that this mitigation would mitigate the impact of this development and improve conditions at the roundabout over the baseline conditions. If approved, the Heads of Terms for this development should include a commitment from the applicant to enter into a Section 278 Agreement with the Highway Authority for the improvements at the roundabout.

The model shows vehicle queue lengths also significantly increase at the Thornaby Road / Low Lane junction which is to be signalised as part of the previously approved Free School mitigation.

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |



The results show that during the morning peak hour the queue length on Thornaby Road would increase from a base of 10 PCUs to 25 PCUs. On Low Lane eastbound the queue would increase by 17 PCUs, from a base of 12 PCUs. However the journey time increases are relatively minor with a journey time increase travelling southbound on Thornaby Road of 26 seconds and an eastbound increase in journey time on Low Lane of 16 seconds.

During the evening peak, the routes into Ingleby Barwick experience the greatest impact, with the southbound journey time on Queen Elizabeth Way increasing by 1 minute and 43 seconds. With mitigation at the Ingleby Way / Thornaby Road roundabout there is still a journey time increase but the mitigation at the roundabout does appear to be effective by reducing the increase in journey time to 33 seconds.

The future year results are based on the assumption that all other highway improvement schemes associated with local developments are implemented. This includes the comprehensive package of highway improvements on the western side of Ingleby Barwick including the dualling of Myton Way and Ingleby Way which are not currently fully funded (following the decision by Tesco to no longer extend their store and thereby withdraw their funding for highway works associated with the extension). Previous modelling work has shown that these improvements (referred to as the 'western highway improvements') are required to accommodate development on this site and the Section 106 Agreement for the Free School development (12/2517/OUT) includes a contribution towards the implementation of the western highway improvement works.

The Free School contribution was calculated based on the impact of the development on journey times through Ingleby Barwick using outputs from the Council's AIMSUN model. The Free School increased journey times on Queen Elizabeth Way by 43% without the improvements; with a funding gap for the west side improvements of £1.17m the development was therefore requested to contribute £503,000 towards the highway works.

The addition of a further 550 units would increase the impact of the development on the west side of Ingleby Barwick. The Transport Assessment Addendum acknowledges that the site would benefit from the highway improvements proposed on the west side of Ingleby Barwick and notes that any further request for contributions towards the western highway improvements should be on a fair and reasonable basis and proportionate with the level of traffic impact.

The Free School contribution towards the west side improvements was based on the increase in journey time that would be experienced travelling back to the site in the evening peak along Queen Elizabeth Way and Myton Way without the benefit of the additional capacity. The highway modelling in the Transport Assessment Addendum does not present a comparative evening peak hour scenario. If the impact of the additional dwellings was assessed in the highway model the level of contribution towards the western highway improvements would be allocated based on the previous methodology. In the absence of the comparable model data, a pro-rata contribution based on the housing numbers is considered to be a reasonable methodology. The previous contribution amounted to approximately £1400 per dwelling (a contribution of £503,000 for 350 units). On this basis, an additional 550 dwellings would amount to a total contribution of £770,000 towards the western highway improvements. However, this would result in the combined contribution exceeding the total costs of the necessary highway works. Furthermore, the application on the neighbouring site for an additional 70 dwellings (14/0562/OUT) by the same applicant is required to contribute £98,000 towards the western highway improvements should the additional 70 dwellings be approved.

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

It is therefore recommended that the total amount payable towards the western highway improvements should be capped at £456,400 for this development and 14/0562/OUT (if approved). This does not affect the planning obligations agreed for the Free School site (12/2517/OUT). £456,400 is the total amount outstanding to deliver the highway works on the west side of Ingleby Barwick. This contribution would fund the necessary highway works and thereby mitigate the impact of this development. The funding should be secured via a Section 106 Agreement with trigger points to be agreed. It is suggested that any trigger points should be agreed with consideration to the cumulative impact of the three separate developments on this site.

In addition to the contribution towards the western highway improvements, this development should mitigate the impact at the A1044 Thornaby Road/Ingleby Way/Stockwell Avenue roundabout. This requires the provision of a dedicated and segregated left turn lane on the Ingleby Way approach to the roundabout. These works should be secured via a Section 106 Agreement.

**Sustainable Transport and Travel Plan**

Within the Transport Assessment it states that it is proposed that a Travel Plan would be agreed and implemented prior to occupation – this is not acceptable. Should this development be approved it should be conditioned that a Full Travel Plan is submitted prior to the commencement of the development. The full Travel Plan must include

- Contact details for the Travel Plan Coordinator (TPC);
- Timescales for the TPC to be in place (minimum of 5 years). For a residential development this post should be in place as part of the marketing stage of the development to promote the aims and objectives of the Travel Plan to prospective new occupants. The time period for the coordinator to be in position should not start until after the baseline survey have been undertaken;
- Details of when the Travel Plan is to be monitored and reviewed including timescales for when travel surveys are to be carried out. The baseline survey should be carried out after an appropriate number of properties have been occupied to ensure an adequate sample size;
- Modal split targets and measures to achieve these targets, which must be SMART: Specific, Measurable, Achievable, Realistic and Timebound. These should be agreed with the Council’s Sustainable Travel officer following the completion of the baseline survey; and
- Details of an exit strategy of how the Travel Plan will be continued once the TPC has left the site (e.g. a community Travel Plan forum/group established).

The proposed production of a welcome pack for new occupants is a positive measure to provide information about sustainable modes of travel. This should also include incentives in the form of discount bus transport and cycle vouchers. The welcome pack should provide Travel Plan incentives for residents of a minimum of £100 per dwelling. These works should be secured via a Section 106 Agreement.

To assist with the development of the electric vehicle infrastructure the applicant should provide a minimum of 2 charging points, including the installation of an adequate power supply, at the local centre in accordance with the Charge Your Car framework/specification current at the time of installation or other recognised code of practice current at that time. The Travel Plan will specify how these charging points will be managed for a period of 25 years and how payments for charging, if any, would be recovered.

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

An additional measure which the applicant is encouraged to explore to help improve sustainable methods of travel to and from the proposed development would be the inclusion of a car club at the development – this would benefit not only this development but the neighbouring approved 12/2517/OUT.

As this development is a continuation of the neighbouring approved residential and Free School development (12/2517/OUT) the Travel Plan should be combined to cover both residential developments; the school should remain as a separate Travel Plan.

A pedestrian and cycle access is proposed through the northern part of the site using an existing Public Right of Way that connects the site to the wider residential area of Ingleby Barwick. Connections are also proposed to Beckfields Avenue to the north via Wellbrook Close and Chalfield Close.

To the south there is a pedestrian route proposed connecting to Barwick Way to connect to the toucan crossing on Barwick Way to be delivered as part of 12/2517/OUT. A toucan crossing will also be provided on the western arm of the access roundabout to cross Low Lane to provide a facility for pedestrians accessing the convenience store located within the petrol filling station. When developing the internal layout the developer should ensure the cycle route through the development connects to the local centre and to the Free School to be delivered as part of planning application reference number 12/2517/OUT.

The Transport Assessment notes that a bus strategy has been discussed previously with Arriva but there was little interest for the secondary school application (12/2517/OUT) in diverting bus services or providing a new route into the site. The Transport Assessment identifies that the layout has been designed to accommodate a bus route in the future if required. Given the scale and layout of the proposed development and the distance parts of the site lie from the existing bus route, significant areas of proposed housing would be outside the desirable walking distance to a bus stop (400m). The development must therefore provide a bus service connection to ensure the eastern extents of the site are within an acceptable walking distance of a bus service.

The applicant has subsequently agreed to provide a bus service to serve this development and the already approved neighbouring site (12/2517/OUT). As a minimum, this service should provide an hourly daytime connection between the site and a neighbouring town centre (expected to be Thornaby but routing to be agreed).

**Summary**

In summary, the additional highway modelling work has shown that the impact of the development traffic could be mitigated through the provision of additional capacity at the Ingleby Way/Thornaby Road roundabout and a contribution to deliver the Ingleby Barwick western highway improvements. Should the application be approved, the following items should be included within the Heads of Terms:

- Commitment by the applicant to enter into a Section 278 Agreement for the dedicated and segregated left turn lane on the Ingleby Way approach to the A1044 Thornaby Road/Ingleby Way/Stockwell Avenue roundabout;
- A contribution (capped at £456,400 for this development and 14/0562/OUT) towards the western highway improvements;

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |



- A contribution (capped at £300,000 paid in three equal annual instalments) towards the provision of a bus service to serve the site for a minimum of three years; and
- Provision of a £100 Travel Plan incentive per dwelling (£55,000).

An update to the Travel Plan and inclusion of this site in a Construction Traffic Management Plan must be secured by planning condition.

### **Landscape & Visual Comments**

A revised Landscape and Visual Impact Assessment (LVIA) of the development has been submitted including a revised Indicative Landscape Masterplan TAG 5 and landscape details of the structure planting on the eastern site boundary representing an increased landscape buffer.

### **Environmental Impact assessment and Indicative Landscape Masterplan**

The proposed access to the site is to be gained from Low Lane (A1044) through the approved housing area to the south. Much of the existing hedgerow and tree planting is proposed to be retained and enhanced where necessary to assist the integration of the proposed development into the site.

In the previous memo submitted for this site as part of planning application 13/3107/OUT, a number of discrepancies were identified within the LVIA submitted with the application as listed in italics below in points 1-6:

1. *The current viewpoints in the LVIA do not acknowledge the extant permission for the houses and school;*
2. *A longer distant viewpoint to the south of the site is taken from the public footpath ref FP2 Maltby (Photograph 11), but this viewpoint has not been assessed as a current viewpoint in the LVIA. Also the photograph is incorrect as the public right of way is highlighted incorrectly and appears to be heading east not north;*
3. *There appears to be a discrepancy over the location of the nearest views from the south. Photograph 1, although correct on the plan ref Photograph Viewpoint Locations TAG 4 has the southern boundary in the wrong location and Photograph 2 is in the wrong location on the plan and should be positioned south at the start of the Public Bridleway ref. BR13 Maltby;*
4. *There appears to be a discrepancy over the visibility of the site from the viewpoint shown in photo 7(from the junction of Thornaby Road and Low Lane). Section 5.1.13 states that the site will be visible; whereas section 4.5.5 (current views from the east) states that the site will be screened by existing hedges and fences;*
5. *Longer distant eastern views of the site from the High Lane road bridge shown in photo 8. There appears to be confusion in the L&VIA over the visibility of the site from this viewpoint. Section 5.1.14 considers it to be visible with clear panoramic views of the site whereas section 4.5.5 (current views from the east) states that the site will not be visible from this location;*
6. *Section 5.1.16 states that views from the public Bridleway ref. BR13 Maltby are screened by an existing hedge that runs along the southern site boundary. This is not correct as the*

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

*hedge in question does not form this boundary with the actual southern site boundary lying in the middle of a grazed open field.*

These issues have largely been addressed in the revised LVIA with the exception of points 4 and 5 where confusion over the views is still presented in the report. Our comments in the previous memo considered the site to be visible from these viewpoints and the LVIA (sections 4.5.5 Views from the east) should be corrected to reflect this and it is noted that in the LVIA summary in section 6 views from Thornaby Road and Low Lane (point 4) are considered Major Adverse at the construction stage of the development.

#### Current Viewpoints

Comments made in the previous memo still apply to this revised application as outlined in italics below. Comments regarding the impact of the increased landscape buffer are provided in the section on landscape and visual impacts.

*Views into the site from the north as demonstrated in the LVIA along Thornaby Road are currently screened by Thornaby Plantation and the boundary hedgerows surrounding the residential property of Thornbrook as shown in Photograph 5.*

*Further south along Thornaby Road past Thornbrook, views of the site from the east open up as shown in Photograph 6. Views of the site can be seen to be partly softened in places by the unmanaged hedgerow (that includes the occasional hedgerow tree) that runs along the eastern site boundary and the site is viewed in the context of the existing houses of the Ingleby Barwick Estate to the west. A second view (Photograph 7) is taken from the junction of Thornaby Road and Low lane which presents a similar view of the site although the existing hedgerows soften views of the south eastern parts of the site. The LVIA states that existing boundary hedges and fences screen the site from this location, but this is not considered correct and the predicted visual impact is discussed in more detail in the section on landscape and visual impact below. Longer distant views of the site from the east are assessed from the High Lane road overbridge on the A19 (Photograph 8 at approx. 0.9km distance from the south eastern edge of the site. The LVIA considers that the site is not visible from this viewpoint due to intervening vegetation and topography. However it is considered that the site can be seen beyond the existing eastern boundary hedgerow with the edges of Ingleby Barwick in view beyond. Again the predicted visual impact on this view is discussed in more detail in the section on landscape and visual impact below.*

*Stockton Borough Council (SBC) considers that views from the public bridleway BR13 Maltby north toward the site would largely be restricted by the extant permission (12/5217/OUT). Initially, views would be restricted by the built form and later following maturity of the screen planting. Views from Low Lane (Photograph 13) would again be blocked by the extant development. Similarly longer distance views of the site as shown in Photograph 12 (at a distance of approximately 1.4 km the site and taken from the A19 Redhill overbridge on Yarm Road would be similarly restricted. These effects of the extant permission on the views from the south need to be picked by the applicant in the LVIA.*

*There are glimpsed views of the site from the informal footpath located on Stockton Borough Council owned land just to the west, as shown on Photograph 9 and from some of the private residential properties along Priorwood Gardens with the existing hedgerows and trees, providing some filtering of the views. Longer distant views of the site from the west would be seen in the*

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

*context of the existing residential development of Ingleby Barwick with views restricted by house, trees and fences as shown in Photograph 10.*

*Generally, vegetation on site is deciduous in nature, therefore any screening benefit would be substantially reduced in winter following leaf fall. It is unknown if the current hedgerow trees that currently provide a degree of screening, notably on the eastern site boundary hedgerow, are Ash which are at risk of death due to Chalara dieback. The type of hedgerow tree should be confirmed.*

#### Visual impacts

The LVIA notes that it is the trees at maturity that would provide the necessary level of screening. It can, therefore, be concluded that on day of opening that there would be little in the way of any visual separation between the development and the stated viewpoints. For the purposes of this consultation response it is noted that it could take a minimum of 15 years for the proposed buffer planting to reach a height which could provide a reasonable level of screening.

It is noted that only annotated photographs have been included within the planning submission. The developer has made it clear that photomontages could only be provided with a detailed layout including house types/height etc. which has not been submitted as part of this application. Without the benefit of photomontages that accurately demonstrate the buildings in context the assessment of development impact of the buildings on this site is based solely on site observations.

As panoramic views from Thornaby Road to the north and north east of the site are not possible (being screened by existing vegetation) the LVIA considers effects on visual amenity to be therefore negligible and SBC agree with this conclusion.

In considering views from Thornaby Road directly east of the site as shown in Photograph 6, the impact would be greatest during the construction phase and is considered to be significant and adverse. However as mentioned above SBC consider that the screen planting would take at least 15 years before any meaningful screening of the development was provided and therefore SBC disagree with the LVIA that the visual impact would be short lived. A 15-20m planting buffer on a mound has been indicated on the Landscape Masterplan and this is discussed in detail in the Landscape Impact section below. Similar views of the site would be gained from the location shown in Photograph 7 at the junction of Thornaby Road and Low Lane. It is considered that the site would be visible when viewed from this viewpoint and that the eastern site boundary would be prominent until the proposed screen planting along this boundary has established notably during the construction phase where impact would again be major adverse in agreement with the revised LVIA .

Longer distant eastern views of the site shown in Photograph 8 and SBC consider that the site would be visible when viewed from this viewpoint, although views will be in the main be from motorists as there are no footpaths along the road from which the view is taken. Taking this point into account, together with the distance of the view (approx. 0.9 km) it is considered that the development would create only a minor adverse visual impact that would reduce as the boundary screen planting developed.

Views southeast of the site are shown in Photograph 11 from the public footpath ref FP2 Maltby and given the distance of the view (approx. 0.6km) and the presence of intervening trees, hedges and buildings the visual impact is only considered to be minor adverse.

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

Close views of the site from the bridleway BR 13 Maltby would largely be blocked by the housing proposed as part of the extant permission and it is considered that views of the site would be minor adverse through gaps in the existing hedge (that grows along the northern edge of the bridleway) across the football fields proposed as part this consent. The proposed boundary planting on the southern site boundary of this development would further soften these views as it grows.

Longer distant views of the site from the south (Photograph 12) would be seen to the north the housing and school proposed as part of the extant consent and therefore views would be blocked by this development. It is therefore considered that the visual impact on these views would be negligible.

Glimpsed views of the site from the west have been identified from the informal footpath on land owned by Stockton Council and from some of the houses in Priorwood Gardens (Photograph 9) and although the existing planting provides some screening of the site, the visual impact on the users of this path it is considered to be minor adverse. Views would be greater in the winter months following leaf fall. Longer distant views of the site from the west would be seen in the context of the existing residential development of Ingleby Barwick with views of the site blocked so it is therefore considered that the visual impact on these views would be negligible.

Housing numbers may have to be reduced to accommodate the required wider 15 - 20m wide landscape buffer. The requirement for the increased landscape buffer zones would require the applicant to agree revised wording for the application so as to agree a maximum figure of 550 houses subject to the provision of the required buffer planting. It is noted that the revised Landscape Masterplan has not allowed for the reduction in house numbers to accommodate the increased landscape buffer.

The buffer planting should be located within open space and not form part of individual residential plots and managed to ensure its long term retention (see section on maintenance).

Within the site, the landscape Masterplan and LVIA assessment allow for boulevard tree planting along the main spine roads to further soften views of the site. The Local Highway authority could consider adoption of Street Trees subject to agreement of details and maintenance costs. Further details are noted below under Street Trees.

The existing water course that runs through the site is integrated into the landscape proposals to run alongside a linear area of open space. Existing hedgerows are retained and enhanced (with new planting) within the scheme to maintain site character including those that follow the water course. Footpath links together with cycleways are planned through the areas of open space and along the watercourse and these should link to the existing footpath network in Ingleby Barwick.

Areas for Sustainable Urban Drainage (SUDs) are also likely to be required to achieve green field run off rates. This matter is considered within the Flood Risk Management comments. The inclusion of SUDs may also affect housing numbers.

#### Landscape impacts

Our previous comments noted that without appropriate mitigation the landscape character of the area would be substantially changed from one of open grazing land to one of built development. It was considered that a buffer zone ranging from 10-20m width of structure planting

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |



incorporating the existing hedge planting should be provided on the eastern and south eastern site boundaries to provide the necessary screening of the proposed houses and to assist their integration into their surroundings and maintain the character of the remaining green wedge. The revised Landscape Masterplan provides for a landscape buffer zone of 15-20 m width planted on a low mound of 1.5-2.5 m height on the eastern boundary, plus an additional 8 m wide habitat and buffer zone comprised of the existing hedgerow planting. However the detailed plan and section drawing of this structure planting (ref dwg. no.1835.21) only indicates a 15-20m width of both the new planting and the existing hedgerow planting. The smaller total width of planting would be acceptable in line with our previous requests to screen the eastern side of the development. However the buffer planting on the south east boundary should be increased from the 8m indicated on the plan to match the 10-20m on the eastern boundary as previously requested.

The previous comments requested that ‘the buffer planting should be in the form of a native woodland block style and all tree and shrub species used on the site should be comprised of native planting of local provenance with an element of evergreen planting’. The details of this planting buffer shown on the detail plan/section drawing are considered acceptable and would create meaningful screening of the development after 15 years as highlighted in our previous memo. The drawing should however be amended so the width of the landscape buffer matches the Landscape Masterplan as mentioned in the above paragraph.

The Landscape Masterplan also provides for smaller buffers on the northern boundary of 4 m width. An 8 m wide landscape habitat/buffer zone is also planned on the western site boundary but still appears to form part of the existing woodland buffer. Any buffer planting on this western boundary should form part of the development site and not utilise the existing woodland planting.

**Impact on the Green Wedge**

The site is located in the western section of the Green Wedge that is designated to separate Ingleby Barwick from the Teesside Industrial Estate in Thornaby. It is considered that the open character of this part of the Green Wedge would be irrevocably changed by this development, changing the landscape from one of open fields to housing. However at the recent planning appeal for the extant permission for houses and school to the south of this site, the planning inspector concluded that the existing green wedge ‘has little to offer in terms of landscape quality’. He also concluded that ‘the degree of harm that the previous application would cause to the green wedge designation would be limited’. The inspector also considered that a properly designed landscape buffer be provided to act as an edge and screen to the development. Whilst a further loss of part of the Green Wedge would be a direct consequence of this application the provision of a landscape buffer zone of minimum width 15-20m as proposed in this application would act as an edge and screen to the development in line with the Inspectors recommendations and retain approximately 350m of green wedge (between the eastern edge of the development and Thornaby Road) and therefore in line with the Inspectors decision that the function of this green wedge in this location is retained. An existing hedgerow is used to define the limits of incursion into the Green Wedge. The use of this existing landscape feature to define the limits of development is considered reasonable. Notwithstanding that, this incursion changes the character of the area.

**Planting Strategy**

The parameters plan regarding landscaping Indicative Landscape Masterplan ref TAG 5 and plan/section drawing of this structure planting (ref dwg. no.1835.21) is in broad accordance with the Inspectors decision providing a landscape buffer of 15-20m on the eastern boundary but as

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |



already mentioned this must be extended to the south eastern boundary. A condition should be added to any recommendation for approval that requires that full landscaping details for the full site will be required to be agreed. This should include full long-term management details for the planting.

**Street Trees within the Adopted Highway**

The layout proposes some tree planting on green corridors along the highway and some green corridor footpath links. It is assumed that these trees will not form part of the adopted highway. If the trees are to be placed within the corridor offered for adoption under S38 of the Highway Act, then the Local Highway Authority (LHA) could (subject to agreement of details and commuted sums) accept Street Trees and other functional vegetation in highway verges. The informative section includes details on highway street trees.

**Hard Landscaping, Street Furniture, Lighting and Enclosure**

As part of any reserved matters application details of enclosure would have to be agreed. However it is worth noting that enclosure facing adopted highways must be constructed of brickwork. Hard landscaping, Street Furniture including Lighting and Enclosure details would be required to be conditioned.

**Public Art**

The artistic enhancement of the public realm would assist in providing a ‘sense of place’ for the development. It is considered for site that this would be best achieved with bespoke enhancements to the hard landscape elements such as fencing and site furniture. Public Art provision should be agreed as part of the Hard Landscaping, Street Furniture condition.

**Ground Levels**

Details of existing and proposed levels would need to be demonstrated, such as relating to creating mounds around the site to enhance the screening capacity of the proposed woodland planting and level areas for recreational areas and SUDs. This requirement would need to be conditioned.

**Existing Site Trees**

A full tree survey including an ‘Arboricultural Impact Assessment’ should be undertaken of any existing trees on site as their retention would help assimilate the development into the site. BS5837 Trees in relation to design, demolition and construction 2012 is the appropriate Code of Practice for the assessment and the production of a The Tree Protection Plan and Arboricultural Method Statement. This requirement would need to be conditioned.

**Open Space Provision**

An area of public open space (POS) with suitable buffer zones and in line with the open space standards should be provided to serve the needs of active recreational pursuits. The Indicative Landscape Masterplan identifies one area of longitudinal open space within the development at size 0.63ha. Notwithstanding the masterplan, this open space must take the form of a square, level and well drained area of a minimum size 0.6ha set within a wider POS of 1.0ha, so as not to cause a nuisance to future neighbouring properties. The POS must also accord with the PPG 17 calculator as set out in the SPD 2 Open Space, Recreation and Landscaping. To provide a reasonable estimate of area the following calculation is based on 550 no. houses with a split of 50 no. 3 bed houses, 450 no. 4 beds and 50 no. 5 beds and would equate to an area of amenity green space of 2.29 hectares, 1 play unit and 1.32 hectares of allotments and as it would be

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

development in excess of 1000 people a strategic approach would be required to determine if outdoor sports facilities were required on the site.

At Reserved Matters stage the actual numbers of property types would be used to calculate the actual open space provision. It is therefore considered that the area of open space provided on the landscape masterplan does not satisfy these criteria both in terms of size and shape and the plan should be amended to provide such a suitable area. When redesigning the open space the 'active' area should not be adjacent to any major roads or other hazards and buffer planting would be required if this area abuts the existing stream. The masterplan should be designed to reflect this requirement prior to determination of the application.

The POS should also include a fixed play area of approximately 0.25 ha. Details for a formal area of play within the development details are provided in the informative section.

**Maintenance**

The open space areas including the buffers zones and any Sustainable Drainages Areas (SUDs) will have to be maintained and managed in perpetuity. This may be through Title Transfer to SBC or through a management company or other appropriate organisations as deemed acceptable by the LA if not transferred to SBC.

A condition should be added to any recommendation for approval that requires the reserved matters application to provide long term management proposals for the POS on this site a period of 25 years.

**Summary**

In summary it is considered that the existing open character of the Green Wedge designation where the development is planned would be irrevocably changed by the development from one of open fields to built development. However the provision of an increased landscaped buffer zone varying in width between 15-20m of structure planting and located on a low mound, has been provided on the eastern site boundary and is considered to provide the necessary screening of the proposed buildings, assist their integration into their surroundings and retain the character and functionality of the remaining area of green wedge. However this buffer must also be provided on the south eastern boundary as requested in the previous memo. The increase in buffer planting along the south east boundary must be illustrated on the Indicative Landscape Masterplan to match the eastern boundary.

Until the planting matures, the proposed development would have a significant and adverse impact on the Green Wedge designation. This development would also change the character of the local landscape. However, on maturity of the buffer planting, the impact of development on the local landscape character is not considered to be significant.

It is considered that the area of POS indicated on the Indicative Masterplan TAG 5 is not acceptable both in terms of size and shape for the development and the plan should be amended to provide a suitable area.

The increase in POS provision and the buffer planting is likely to reduce the yield of the site in terms of housing numbers.

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

**Environmental Policy**

Information has not been provided on renewables or energy supply / demand. Whilst it is accepted that detailed design proposals may not be expected at this stage, the broad principles of achieving compliance with Core Strategy Policy 3 (CS3 – Sustainable Living and Climate Change) through carbon reduction measures and incorporation of renewable energy supply are required. A condition should be added to any recommendation for approval that requires how compliance with Core Strategy Policy 3 will be achieved.

**Flood Risk Management**

A flood risk assessment (FRA), dated November 2013, has been prepared by Sanderson Associates (Consulting Engineers) Ltd (SA). The FRA concludes the following:

- The development site is predominantly within Flood Zone 1 with a small area of Zone 3 in close proximity to Bassleston Beck.
- The development site is currently undeveloped.
- The risk of flooding to the site from watercourses, overland flow, sewers and groundwater is considered to be low. Specific reference has been made to the drainage serving Low Lane owned by the Council and could pose a risk of overland flows if its capacity is exceeded.
- It is suggested that it is unlikely that infiltration drainage techniques will be appropriate refer to FRA section 9.3.
- The greenfield flow rate for the site has been calculated using the method set out in Institute of Hydrology Report 214 (IH124).
- The equivalent greenfield run-off rate of 48.3 l/s for the 1 in 1 year storm has been agreed with the EA.
- Surface water run-off will be restricted to greenfield rates for all events up to the 1 in 100 year storm, plus an allowance for climate change.
- Surface water will be discharged to watercourse or sewer at the greenfield run-off rate.
- Storage for surplus flows will need to be provided within the surface water drainage system. This storage could be a combination of green roofs, pervious pavements, geocellular tanks, ponds, swales or oversized pipes.
- The FRA recommends that each phase has a form of attenuation to deal with the surface water run off at source. Smaller pond structures are considered feasible within each phase.

Development of the site, and the provision of a drainage system designed in accordance with current standards, is unlikely to contribute to any potential flooding issues. An assessment of overland flow routes should be undertaken by the developer, to ensure that exceedance flows that are unable to enter the watercourse or pond system do not exacerbate any existing local flooding issues.

In order that the developer considers and agrees SUDS measures with the Council as part of their design, the following sample text should be used as the basis for a planning condition text relating to the provision, management and maintenance of a sustainable drainage system:

*No development permitted by this planning permission shall be commenced until details of a scheme for the provision of surface water management has been submitted to and approved in*

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

writing by the Local Planning Authority in consultation with Northumbrian Water. The details shall include:-

- details of the drainage during the construction phase;
- details of the final drainage scheme, including sustainable drainage measures proposed;
- provision for exceedance pathways and overland flow routes;
- a timetable of construction;
- a construction quality control procedure;
- a plan for the future maintenance and management of the system and overland flow routes.

**Reason:**

To prevent the increased risk of flooding and minimise the risk of pollution of surface water by ensuring the provision of a satisfactory means of surface water control and disposal during and after development.

### Environment Agency

The Environment Agency (EA) has been consulted regarding the planning application. The EA reviewed the FRA, and recommended the following conditions if the outfall is to Bassleston Beck:

#### Condition 1: Flood Risk Assessment

The development permitted by this planning permission shall only be carried out in accordance with the approved Flood Risk Assessment (FRA) Ref: 13/3107 and the following mitigation measures detailed within the FRA:

1. Limiting the surface water run-off generated up to and including the 100 year (plus climate change) critical storm so that it will not exceed the run-off from the undeveloped site and not increase the risk of flooding off-site.
2. The discharge should be restricted to the equivalent greenfield runoff rate for the undeveloped site of 48.3 l/s. Attenuation will need to be provided for rates above this as stated in section 7.8.5.

The mitigation measures shall be fully implemented prior to occupation and subsequently in accordance with the timing / phasing arrangements embodied within the scheme, or within any other period as may subsequently be agreed, in writing, by the local planning authority.

**Reason**

1. To prevent flooding by ensuring the satisfactory storage of/disposal of surface water from the site.
2. To reduce the risk of flooding to the proposed development and future occupants.

#### Condition 2: Buffer Zone

No development shall take place until a scheme for the provision and management of an 10 metre wide buffer zone (measured from the bank top) alongside both sides of the Bassleston Beck shall be submitted to and agreed in writing by the local planning authority. Thereafter the development shall be carried out in accordance with the approved scheme and any subsequent amendments shall be agreed in writing with the local planning authority. The buffer zone scheme shall be free from built development including lighting, domestic gardens and formal landscaping; and could form a vital part of green infrastructure provision. The schemes shall include:

- plans showing the extent and layout of the buffer zone
- details of any proposed planting scheme (for example, native species)

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

- *details demonstrating how the buffer zone will be protected during development and managed/maintained over the longer term including adequate financial provision and named body responsible for management plus production of detailed management plan*
- *details of any proposed footpaths, fencing, lighting etc.*
- *where a green roof is proposed for use as mitigation for development in the buffer zone ensure use of appropriate substrate and planting mix.*

**Reasons**

*Development that encroaches on watercourses has a potentially severe impact on their ecological value. Land alongside watercourses is particularly valuable for wildlife and it is essential this is protected.*

This condition is supported by the National Planning Policy Framework (NPPF), paragraph 109 which recognises that the planning system should aim to conserve and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. The Natural Environment and Rural Communities Act which requires Local Authorities to have regard to nature conservation and article 10 of the Habitats Directive which stresses the importance of natural networks of linked corridors to allow movement of species between suitable habitats, and promote the expansion of biodiversity.

Paragraph 118 of the NPPF also states that opportunities to incorporate biodiversity in and around developments should be encouraged.

Such networks may also help wildlife adapt to climate change and will help restore watercourses to a more natural state as required by the Northumbria River Basin Management Plan.

**Potential SUDS measures and maintenance implications**

In determining SUDS measures that can be incorporated into a surface water drainage scheme, the developer should refer to the advice given in CIRIA report C697, *The SUDS Manual*. The developer should consider the provision of SUDS measures closer to source, within the development site, rather than an 'end of pipe' solution such as a pond, may offer advantages in terms of water quality, amenity, and a reduction in required pond volumes.

The following is a summary of SUDS measures that may be incorporated into the drainage scheme by the developer.

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |



**Roadside swales**

Swales are shallow vegetated channels designed to convey road runoff and treat pollutants, and can be used for treatment, attenuation and storage. There may need to be additional land take in order to provide space for swales between highways and footways. Maintenance requirements are as follows:

- Monthly inspections to identify mowing requirements;
- Monthly litter removal;
- Scarifying and spiking as required following inspection;
- Repair damaged vegetation as required following inspection.

**Bio retention Areas**

Bio retention areas are shallow landscaped depressed areas that are under drained and rely on enhanced vegetation and filtration to reduce runoff volumes and remove pollutants. They often rely on infiltration, but positive outfalls can be provided where ground conditions are unsuitable for infiltration.

There may need to be additional land take in order to provide space within footway for bio retention areas, although often these areas can form part of the general landscape strategy. They rely on small catchment areas to avoid clogging. Maintenance requirements are as follows:

- Monthly inspections;
- Weed control, as required, following inspections;
- Annual replacement of top mulch layer;
- Replace damaged vegetation, as required following inspection;
- Spiking or scarifying every 3 years.

**Ponds**

Ponds are basins that embody a permanent pool of water in the base. These may be formed within natural depressions or formed by excavation. The permanent pool provides the required treatment with temporary storage above providing flood attenuation for the required rainfall events. The development indicates a number of green spaces, and it may be possible to incorporate ponds into these green spaces that would provide both amenity and SUDS benefits.

Maintenance requirements are as follows:

- Monthly inspections to determine frequency of maintenance activities;
- Grass cutting following inspection, if required;
- Bank clearance annually following inspection, if required;
- Manage and repair landscaping following inspection, as required;
- Forebay sediment removal, as required;
- Sediment removal from main pond area, typically 25 years or greater.

**Basins**

Basins are either naturally occurring vegetated depressions, or excavated depressions in the ground designed to retain surface water runoff for the required period of time to allow treatment and attenuation to take place. If it is not appropriate to have permanent bodies of water incorporated into the green spaces, then shallow basins that only fill during periods of heavy rainfall may still be possible. Maintenance requirements:

- Monthly inspections to determine frequency of maintenance activities;
- Grass cutting following inspection, if required;
- Bank clearance annually following inspection, if required;
- Manage and repair landscaping following inspection, as required.

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

### Private SUDS measures

In addition to the above, and in accordance with Building Regulations Approved Document H3, 2.6-2.13, the developer should consider the use of permeable surfacing to driveways and other private paved areas, or draining these areas onto/into soft landscaping in preference to a positive outfall. Permeable surfacing could comprise blockwork, or gravel driveways with flagged wheel tracks. Whilst underlying ground conditions may still result in some run-off from these areas, permeable surfacing may provide benefits in terms of attenuation and water quality improvements.

### Development Phasing

There are 10 proposed phases. The drainage strategy for the whole development should be planned such that it isn't reliant on future phases.

The philosophy of SUDS is that surface water is managed as close to source as possible. The incorporation of swales, ponds and basins alongside highways and in open green spaces will contribute towards a surface water drainage system that follows this philosophy.

The provision of SUDS throughout the development, rather than relying on an end of pipe solution such as the pond, should reduce the volume required for the pond.

### Adoptability

SBC highways are not averse to the use of SUDS features such as swales and ponds. As part of the surface water drainage strategy, the developer should prepare a SUDS management and maintenance strategy to be discussed and agreed with SBC.

The design of the drainage system should be carefully considered and discussed with both SBC and Northumbrian Water (NW) in order to ensure that the provision of elements within the system does not compromise the adoptability of other elements (for example, any piped systems that would be offered to NW for adoption under a Section 104 agreement).

Particular elements of the drainage system, together with the potential adopter of each element, are summarised in the table below:

| Drainage Element   | Potential Adopter  |
|--|--------------------|
| Piped surface water drainage from buildings and highways, including oversized pipes used for storage | Northumbrian Water |
| Piped surface water drainage taking only run-off from highways and/or footways                       | Local Authority    |
| Roadside swales  | Local Authority*   |
| Bio retention areas  | Local Authority*   |

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

| Drainage Element | Potential Adopter  |
|------------------|--|
| Ponds and basins | Local Authority/Private management company on behalf of developer* |

\* Please note, the Local Authority will only adopt the SUDS once Schedule 3 of the Flood and Water Management Act comes into force (expected in October 2014). If the development is implemented prior to this, then the SUDS would need to be maintained by a management company.

Private SUDS measures would be maintained by the relevant home owners.

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

**Informative**

**STREET TREES**

The Street Trees shall be planted at a maximum of 10m centres and shall be of a stock size of 20 - 25cm girth, rootballed stock type. Trees in grass verges shall be triple staked with wire tree guards. Trees in hard surfaces would require tree grills and guards. Such details would be agreed as part of the Hard Landscape proposals submitted as part of any reserved matters application. Details of the area required for the planting of avenue trees shall be agreed as part of any reserved matters application. The construction details and planting establishment and maintenance specifications for the trees and surfaced pits would be agreed as part of the S38 Agreement for adoption.

**OPEN SPACE**

Details of any costs associated with the establishment and maintenance of POS including the provision of a bond to ensure that the POS is provide to the agreed standard should be included in the Heads of Terms for attached to any planning consent would form part of a condition attached to any consent.

**EQUIPPED PLAY SPACE**

Any formal equipped play area should be provided in a self contained area with necessary buffer zones (min 20m, preferred 30m). Based on existing schemes that require fixed play equipment the surface area requirement would be broadly square in shape and in the region of 2500m<sup>2</sup>. The play equipment should cater for age groups 4-8 and 8–13 (with partial separation in line with good design) with safer surfacing (grass mat preferred) together with associated infrastructure such as fencing, cycle racks and drainage.

In addition good access, from footways, cycleways and adopted highway access, together with good natural surveillance will be required. It is recommended that prior to any detail submission that the developer contacts the Countryside & Greenspace team to discuss play equipment that is suitable. Reference should also be made the Councils design guides on open space and play equipment.

For proximity to roads, consideration should be given to appropriate fencing, gates and barriers need to be provided. ROSPA would be able to offer detailed advice.

**CONSTRUCTION OF HIGHWAYS FOR NEW DEVELOPMENTS**

The works may or may not require alterations or extensions to the existing adopted highway.

Where a development involves works requiring either improvement or alteration to the existing highway, the Developer may be required to enter into an agreement with the Council as Highway Authority under Section 278 of the Highways Act 1980. This requirement often occurs as a condition on the grant of planning permission.

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |

As part of the new Development you may wish the Council to adopt highways (including carriageways, footways, verges, cycleways, highway drainage and street lighting) which would then be maintainable at public expense. In order to achieve this you would be required to enter into an agreement with the Council as Highway Authority under Section 38 of the Highways Act 1980.

The Council would only consider adoption provided any highways are designed and constructed in accordance with the 'Design Guide and Specification for Residential and Industrial Estates' which can be downloaded from the Stockton Council website.

It is important for Developers to appreciate that obtaining a planning consent does not imply that a layout is suitable for adoption or give permission to work on an adopted Highway.

It is recommended that the Council is consulted about any of the above at an early stage as the Council are unlikely to adopt the highway without the Developer entering into a Bond with the Council for inspecting the construction and short term maintenance of the proposed highway at regular intervals.

If you require any further information please do not hesitate to contact:

Highway Asset Manager  
 Highway Network Management  
 Stockton-on-Tees Borough Council  
 Technical Services  
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 Billingham, TS23 2YL  
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**DAMAGE TO HIGHWAY VERGE**

The Developer is reminded that it is an offence to cause damage to the Highway or to deposit any item on the Highway that causes a nuisance or danger. Any damage to the Highway caused by the development must be repaired at the developer's expense. The Highway Authority will seek, wherever possible, to recover any expenses incurred repairing the Highway surfaces and prosecute persistent offenders. (Highways Act 1980 sections 131, 148, 149).

The developer should contact the Care For Your Area Highway technicians prior to any works on site to arrange an inspection of the Highway surfaces fronting the development.

**CONSTRUCTION DELIVERIES**

It should be ensured that, during construction, deliveries to the site do not obstruct the highway. If deliveries are to be made which may cause an obstruction to the highway then early discussion should be had with the Highway Authority on the timing of these deliveries and measures that may be required so to mitigate the effect of the obstruction to the general public.

| Approval    |          | Date                 | Approval    |    | Date     | Approval    |  | Date |
|-------------|----------|----------------------|-------------|----|----------|-------------|--|------|
| UD Officer: | NH<br>RB | 08/05/14<br>13/05/14 | Authorised: | PS | 19/05/14 | Authorised: |  |      |