16 August 2024

Our ref: 157/10067
Your ref: IPS Representation

Isle of Wight Council
Planning & Housing Services, Isle of Wight Council, Seaclose Offices, Fairlee Road, Newport,
Isle of Wight PO30 2QS
by email (Policy.Consultation@IOW.GOV.UK)

Dear Sirs

RE: LAND AT SOMERTON FARM, COWES. REGULATION 19 ISLAND PLAN STRATEGY (IPS) REPRESENTATIONS

This representation and the supporting technical appendices have been prepared by BCM on behalf of the landowner and in response to the Council's Regulation 19 IPS consultation, and specifically in relation to Somerton Farm, Cowes, PO31 8PE.

Somerton Farm is located to the south of Cowes, and to the south-east of an existing industrial site at Somerton. It forms 2 parcels of land (Appendix 1). Parcel 1 (known as Phase 1) forms a current planning application which has resolution to grant outline consent (reference 22/01720/OUT). It forms a mixed-use development with an indicative yield of 163 dwellings and 4,200m² of commercial floorspace. A plan showing Phase 1 & 2 is attached as Appendix 1.

Phase 2 consists of the existing farmland to the east of Phase 1 and forms the principle focus of this representation, and its consideration as a residential allocation.

For the purpose of this representation, it will consider:

(1) Why the site should be allocated in strategic terms, and:

(2) Consider three core technical disciplines which, in our opinion, identify why the site is suitable, albeit not dismissing the fact that via an allocation (or planning application) that wider ranging material considerations would need to be collated to inform the design and execution of the development.

Red Barn | Cheeks Farm | Merst1 Lane | Merst1 | Isle of Wight | PO30 3DE
[redacted]

The technical appendices cover;

(1) Highways and Transport,

(2) Settlement coalescence, and

(3) Ecology/Nature Conservation.

There are several parts of the IPS which are inconsistent with the NPPF and are unsound. The IPS should be a 'forward looking' plan which meets the objective of paragraphs 15 & 16 of the NPPF. It is questionable, given the state of play, whether it:

- Has been prepared positively, in a way that is aspirational but deliverable.
- Is clearly written and unambiguous (as it defers several obligations to a future plan or decision making process).

It is also unsound because it fails the requirement of paragraph 22 (NPPF) in that it should "should look ahead over a minimum 15-year period from adoption, to anticipate and respond to long-term requirements and opportunities, such as those arising from major improvements in infrastructure. Where larger scale developments such as new settlements or significant extensions to existing villages and towns form part of the strategy for the area, policies should be set within a vision that looks further ahead (at least 30 years), to take into account the likely timescale for delivery".

For example, the IPS is based on a 2022 iteration which has not evolved or been adopted in a substantive way. Being some 2 years forward, even when reviewing housing supply, it now includes completions from 2022/23 and 2023/24. If one were to take out those completions for 2022/23 (357 dwellings) they would need to be replaced and provided for in subsequent years.

The above is even before contemplating the Council's housing approach to deliver an average of 453 dwellings per annum (based on exceptional circumstances) which is well below the current Standard Method of 703 dwellings or the elevated Proposed Method which equates to 1104 dwellings per annum - an uplift of 499 dwellings per annum.

As outlined throughout, the exceptional circumstances presented by the Council via the suggested 'ceiling' is premeditated on the fact the Island has developed no clear strategy and allocations since the adoption of the historic Unitary Development Plan (1996-2011). The UDP established a range of small and large scale allocations which gave the confidence and stability for investment and growth. That meant, at the back end of the UDP cycle that various housebuilders, including two national housebuilders, were exceeding delivery rates because large scale allocations were being built. The current Island Plan (2012) set to defer allocations via Area Action Plans. At adoption stage of the Island Plan, the Inspector

was critical with such approach and requested the Council take prompt action as to not severely hinder delivery, stating that:

> "*the Councils 5-year land supply sees a delivery of some sites that are not presently allocated. Clearly the prompt preparation of forthcoming AAP's, notably those for the Medina Valley and Ryde (apposed in the Local Development Scheme) submission in 2012 and 2013 respectively, will be a significant factor in brining sites forward to meet both the 5-year requirement and the longer term Core Strategy total*".

It cannot be said that prompt action has been taken since 2012 to bring sites forward by an allocations process considering the Island is now 12 years post the adoption of the Core Strategy. The Island is marred with uncertainty, risk, considerable time delay and frustration. To frame other reasons for an 'exceptional circumstance' is disingenuous and misleading, albeit there is common ground that the Island does have some practical challenges (which are not insurmountable).

The IPS has been deflated since the 2018 version and has now removed a considerable swath of allocations spread across the Island. It does not readily or actively deal with allocations in the Rural Service Centres and only leaves a handful of focussed polices to be applied to the Sustainable Rural Settlements. They will very unlikely assist small-scale Island builders who develop the large majority of windfall sites. There is still an expectation that windfall sites will deliver a considerable amount of the housing supply, but the marginalised policy structure and the lack of small site allocations is disconcerting and unsound.

In correlation with the above, the IPS is premeditated on a plan wide viability assessment which evolved via various iterations up to 2022. Since 2022 the IPS has set to change the preference toward affordable housing tenures and discount levels and introduced a swath of new S.106 contributions. This is even before recognising the considerable inflationary rises and mortgage rate instability caused by the 'Liz Truss' mini budget. In that regard the IPS is not deliverable and is unsound.

Somerton Farm – The Location

The location of Somerton Farm complies, in general, with draft IPS policy G2 (Priority Locations for Housing Developments and Growth). It is adjacent to the Primary Settlement of Cowes and Northwood. As expressed by the Council, the Primary Settlements are areas where the Council would like to see the most growth, albeit, via the IPS, those sites which have not been allocated would need to be within the settlement boundary unless the Council does not have a 5-year land supply.

There is common ground with the Council, as determined by planning reference 22/01720/OUT, that the site is sustainable. Disbarring the draft IPS, the Council, via current Policy SP1 (Spatial Strategy) considers

land adjacent to the settlement boundary to be sustainable and acceptable (in principle) for development. The Council's assessment report (dated 27th September 2023) under 22/0170/OUT referred to that application site specifically as being "within a sustainable location" and further confirmed:

> *"The application site is located immediately adjacent to the settlement boundary for Cowes and Northwood, with the boundary running concurrent with the northern and western boundaries of the site. The site is also located adjacent to the Newport to Cowes highway, with good pedestrian links to the supermarket to the northwest, a doctor's survey to the northwest, the employment uses close to the site, a nearby primary school and Cowes Town Centre. There are also bus stops located within nearby Newport Road and the applicant has agreed to provide a new cycle link within the site, that would link Newport Road, the site and the Cowes to Newport cycle track, which allows convenient foot and cycle links to both Cowes and Newport"*
>
> *"The site therefore allows for all forms of available transport for potential residents or employees, with good links to nearby towns and existing employment sites. Moreover, the surrounding area includes existing housing and large employment sites that adjoin or that are within close proximity to the site".*
>
> *"The Council's brownfield register does include numerous sites, that may or may not be suitable for redevelopment. However, it is apparent that many of the sites would realise small to medium housing developments, which would provide only a proportion of the housing that is needed over the period of the current and future development plan. The Planning Authority considers that based on current required housing numbers, a combination of brownfield and non-previously developed land would be required to deliver the Island's housing needs. Moreover, to deliver meaningful numbers of affordable housing, larger sites would be required. In this case, the application site is adjacent to the settlement of Cowes, offering an opportunity to deliver both housing and commercial development within an accessible location".*
>
> *"Therefore, the site would offer a mixed-use development that could deliver up to 163 houses and 4,200 square metres of commercial uses within a sustainable location and these matters weigh significantly in favour of the proposals. The principle of the proposed development is therefore considered to be in accordance with the housing and employment related guidance contained within policies SP1, SP3 and DM8 of the Island Plan, as well as the guidance contained within the NPPF".*

Furthermore, the Council's own evidence – the Rural Sustainability Matrix Review (April 2022) – attached as Appendix 3 - has been developed to help create a hierarchy of settlements across the Island based

upon their access to facilities and services to identify settlements which have the ability to accommodate sustainable growth. This report states that (on page 3): "Any settlement scoring 24 points or more is identified as a suitable location for additional growth", and calculates that "*Northwood has a sizeable population with good access to a range of facilities and services, including a shop and primary school. It has good public transport links and lies adjacent to Cowes. Though it does not have its own GP surgery, it does lie within easy distance of Cowes Medical Centre. The settlement scores well [27] and it is considered that could accommodate some planned growth*."

From a locational perspective, the land and area is well served by pedestrian, cycle and bus routes. It is also well serviced by a wide range of amenities (including local shops, the Somerton Park & Ride, shops, restaurants, bus routes, sustainable cycle and pedestrian routes, supermarkets and medical services) and employment opportunities (including BAE, Ascensos, Building 41, Somerton Industrial Estate, Three Gates Industrial Estate, Northwood Business Park). Those themes (in highway terms) are better discussed within Appendix 4. Thus, there is no reason to believe that the site, when considered against the Council's evidence is not in a sustainable location.

Through the allocation of the Phase 2 land and themes applied within Phase 1, such as further internal connections and alternative transport modes can be provided to improve permeability and accessibility. In effect, the Phase 2 land is situated in a location that is sustainable and can be made even more sustainable; for example, enabling further pedestrian and cycle links onto the multiuser link: the Newport-Cowes Cycleway.

Disbarring the Council not seeking to allocate the Phase 2 land (for reasons which have not been disclosed), there is common ground that the land is deliverable as confirmed by the Strategic Housing Land Availability Assessment (SHLAA – Appendix 2). The Phase 2 land does not fall within a protected designation nor are there any obvious land use constraint to affect the deliverability of the land coming forward beyond normal planning considerations which would inform the design and layout.

The above comes in the backdrop of the Council seeking to allocate sites within the Primary Settlements of Newport and Cowes, some of which seem dubious and include:-

(1) KPS1:-HA39 Former Camp Hill,

(2) KPS2:-HA44 Newport Harbour

(3) Medina Yard (with no affordable homes) defined by planning reference P/00496/16.

For Medina Yard, the site has gained consent for 535 units. It is understood that it has now been purchased for commercial purposes and that there is no intention to develop the subject land. Even if it

were capable of delivering the residential consent, it is extremely dubious whether it would be financially viable given the quantum of development, the build costs, sales values and sales rates. As testament to its dubious viability, within the determination of P/00496/16, the applicants presented a viability assessment to demonstrate that no on-site affordable housing would be delivered. It was demonstrated by the applicant that financial contributions would also be unviable, albeit the Council requested a contribution of £1,000,000 within the S.106. That application was determined Pre-Covid and before considerable inflationary build costs and an unstable market. It is therefore extremely dubious whether Medina Yard will ever be built.

Against housing allocation KPS1 (former Camp Hill), this site has been rumoured for several decades. HM have never materialised it coming forward since 2013. This is also set against the backdrop of the government acknowledging that new or refurbished prisons are required to take care of additional capacity and the shortfall in current prison places. Therefore, this site is questionable.

With respect to KPS2 (Newport Harbour), and as a similar theme applied to Medina Yard, the Council would like to deliver at least 250 homes (essentially as a flatted development). It is extremely dubious whether this site is deliverable considering the capability of the build out rate, construction costs, sales rates and sales values.

Even if one were to justify that KPS1, KPS2 and Medina Yard were deliverable, this does not dismiss the fact that the Government, via the NPPF consultation (August 2024) would like to reintroduce mandatory local housing targets. On the Isle of Wight, the Councils preference to deliver 453 dwellings per year (Policy H1) is unsound against the 'Current Method' which places delivery rates at 703 units. This is even before the uplift to the 'Proposed Method' of 1,104 dwellings per annum; being an uplift of 499 dwellings per annum.

Irrespective of the final quantum, it is clear is that there needs to be a considerable uplift beyond the parameters of policy H1 and the Current Method of calculating local housing need. When placed in that context, and in the knowledge that Cowes is a Primary Settlement, there is no question that the Phase 2 land would deliver considerable benefits to assist in sustainable and deliverable housing growth.

As a point in case, the subject Phase 1 and 2 land has been subject to discussions with local and regional house builders who, subject to option agreement, would take on the land and deliver both elements.

This is counter to the Council's suggestion that there are barriers to the delivery of housing sites, as framed in the IPS via Section 1, paragraph 1.4, paragraph 2.25 (onwards) and paragraph 2.30. One of the biggest and largest barriers to delivery has been the lack of allocations since 2012 where the Planning Inspectorate, at the adoption stage of the Core Strategy, noted that *"the Council's 5 year land supply sees a delivery of some sites that are not presently allocated. Clearly the prompt preparation of forthcoming*

AAP's, notably those for the Medina Valley and Ryde (apposed in the Local Development Scheme) submission in 2012 and 2013 respectively, will be a ***significant factor in bringing sites forward to meet both the 5 year requirement and the longer term Core Strategy total****".*

With regards to our client's land, the draft IPS strategic policy G2 identifies Cowes (including Gurnard and Northwood) as a Primary Settlement in which the focus is for sustainable housing growth within their settlement boundaries. Given this focus for housing, it is disappointing that the IPS does not allocate any further development in Cowes (including Gurnard and Northwood) as a Primary Settlement and only relies on applications already approved or inside the settlement boundary. It is therefore questioned where Cowes (including Gurnard and Northwood) is to grow.

Paragraph 6.13 of the draft IPS states that the approach of policy G2 is to direct new development to settlements that are already considered sustainable (where there are services, facilities, homes and jobs, and where there are the most sustainable modes of transport). And Policy G1 states that "will be located in the most sustainable settlements on the Island, and through managed growth a number of settlements will see their sustainability improve".

The site is immediately adjacent to the defined Settlement boundary (in principle acceptable under the current local plan and Policy SP1) and which can be delivered. However, under the draft IPS as set out now, this would be precluded and sterilised by the inappropriate and restrictive Settlement Gap set out in Policy EV10. This site was included within the Council's Strategic Housing Land Availability Assessment (SHLAA) (November 2018) (see Appendix 2), which was prepared to inform the draft Island Plan. It was also included within previous SHLAA reports. SHLAA Site IPS323 was recognised by the Council as being Developable. The 2018 SHLAA Report states that "*If a site has been assessed as deliverable or developable there is an expectation that this site will come forward within the Island Planning Strategy period*." An extract of the 2018 SHLAA Report, showing this site (a combination of Phases 1 & 2) and its assessment, is included as Appendix 2. The site (Phase 2) is not included in the Reg 19 IPS. There is no logical reason why this site should not be allocated, subject, of course to appropriate conditions.

In fact, the 2018 (Regulation 18) IPS made a far more positive approach to deliver development and allocated land across the Island in general. There is no practical reason, bar political objection, why allocations should not be made. The Council's Rural Sustainability Matrix defined a clear rational for accepting growth (including for Northwood, as discussed above).

This is then not consistent with national policy, as per the NPPF: Paragraph 27: "Strategic policies should provide a clear strategy for bringing sufficient land forward, and at a sufficient rate, to address objectively assessed needs over the plan period, in line with the presumption in favour of sustainable development.

This should include planning for and allocating sufficient sites to deliver the strategic priorities of the area".

Considering the suggested revisions of the NPPF and the recent publication of housing need for each local authority based on standard methodology as set out by the Right Honourable Angela Rayner, Deputy Prime Minister, with mandatory housing targets which shows a significant uplift on the Island, and the consideration within the Council's previous evidence, including the Rural Matrix and the SHLAA assessments, and as set out in the IPS, that Northwood is a sustainable location for growth then the Parish of Northwood can clearly sustain more growth.

In recognising this, in our opinion this area should include site allocations such as Phase 2 of our client's land which has previously been seen as 'developable' by the Council, and the draft IPS, in its Regulation 19 form, contains housing policies and lack of site allocations which are unsound.

The LGA Peer Review (2022) also highlighted several important recommendations including:

- Urgently review the constitution and procedural rules to effectively deliver the council's democratic function.
- Support this through member and officer training and development opportunities on both the democratic function and planning matters.
- A need to rebuild trust between councillors, officers and the community.
- Urgently finalise and adopt the Island Plan.
- Improve communication.
- Need for Improvements in planning outcomes.

It also confirmed that *"The local plan provides a degree of certainty for communities, businesses and investors, and a framework for guiding decisions on individual planning applications. Without one it is possible for the submission and acceptance of developments that are deemed not in the public interest and outside of the needs and priorities of local people, as outlined in a local plan".*

Since 2012, the political unrest has created a fractured planning system which has absorbed resources and delayed delivery rates significantly. By creating a stable platform through informed allocations will guide development, limit the scope of objection, reduce risk and give greater certainty for investment. In doing so, the Phase 2 land at Somerton Farm is deliverable.

The SHLAA Assessment for Somerton Farm is attached as Appendix 2. The SHLAA frames (in high level terms) the constraints and opportunities to demonstrate that the land in principle is deliverable. Beyond the scope of the SHLAA, the following technical appendices have been collated to give reassurance and an evidence that the site is deliverable.

(1) Highways and Transport (Appendix 4)

The Technical Note (TN) prepared by PJA has, through section 2.3 onwards, outlined the context of the site's accessibility by reason of its location and in relation to a range of amenities and alternative transport modes.

It has been recognised by the Council within their determination of the Phase 1 land (22/01720/OUT) that Somerton Farm is sustainable in locational and transport terms.

The TN considers that the Phase 1 junction designs are acceptable and can accommodate further growth of up to 350 additional units in Phase 2. There is no barrier and no adverse danger or safety issue.

In capacity terms, it is interesting to note that the original Transport Assessment (TA) produced for the determination of 22/01720/OUT essentially double-counted Medina Yard because the TA selected it as an individual application, as well being inbuilt within the Tempro Model. This double counting has meant that even against the baseline traffic flows, the Phase 2 land can easily be accommodated if Medina Yard gets built or not.

Irrespective, even when scoping in Medina Yard, the TN demonstrates that the junctions and capacity for an additional residential allocation would not result in an adverse impact on highways safety or a severe impact on congestion.

(2) Settlement Coalescence (Appendix 5)

At present, the Phase 2 land falls outside of the settlement boundary of the Primary Settlement of Cowes. However, it falls adjacent to the settlement boundary in accordance with the current adopted Local Plan (Policy SP1 – Spatial Strategy) which was the policy basis for the Phase 1 application to be granted permission.

Within the IPS, the Council acknowledge that if they cannot demonstrate a 5-year housing land supply, that the presumption in favour of sustainable development can be granted on land immediately adjacent to the settlement boundary. Although this fallback position is acknowledged, this does not dismiss the structural and strategic representations noted earlier as to why the site should be allocated.

However, against both an allocation and application, it is noted by the IPS there is a desire to preserve settlement identity (Policy EV10). Paragraph 4.86 confirms that "*where development proposals are located with areas identified in the policy, and shown on the policy's map*, *the Council will assess whether it would have significant adverse impact by considering such issues as:*

- *The sense of openness or enclosure.*
- *The pattern and complexity of settlements and the landscape.*
- *The experience derived from a particular settlement and/or landscape character.*
- *The relationship to existing settlement edges and the cultural pattern.*
- *The visual sensitivities and intervisibility of settlements and/or the landscape."*

In evidence, Appendix 5 provides a Landscape and Visual Gap Appraisal when considered against the SHLAA, national guidance, the current Local Plan and the draft IPS and the Isle of Wight Settlement Coalescence Study (SCS) 2018.

It is noted that the Phase 1 land (which sits at a higher and more exposed level) was considered appropriate by the Council in landscape and visual terms.

The conclusions of the appraisal confirm provide a clear rebuttal both to the SCS and to the Settlement Gap proposed in Policy EV10 and confirm:

- The strong pattern of undulating landform and woodland limits views along the length of the valley (to the north or south), restricting intervisibility between Northwood and West Cowes and also limiting any sense of openness.

- The intrinsic function of a Settlement Gap is to offer an experience of leaving one settlement, as visual and physical break, before entering another. In relation to the West Cowes–Northwood Gap, this Gap experience is seemingly not identifiable at all. It is a fact that is accepted by the Isle of Wight Settlement Coalescence Study (SCS)(LUC, April 2018), which suggests that there remains little separation between Cowes and Northwood and where limited physical gaps are present, they are visually influenced by adjacent development. Indeed, this more meaningful remaining section of the Gap, to the east of Newport Road.

- IPS Policy EV10 (also covered within the SCS) does not preclude development from taking place within a gap, only that proper consideration is given to settlement coalescence.

- If views over the Settlement Gap to the east were available from Northwood or in the vicinity of Newport Road (which they are not due to intervening hedgerows and buildings), development on the Site would not likely be visible due to topographical changes. Furthermore, views over the River Medina to the opposing valley to the east would be retained.

- The distinct lack of settlement intervisibility and a very contained landscape would suggest that development could take place on the Site with limited harm to the West Cowes– Northwood Settlement Gap.

Furthermore, it should be noted that in the SHLAA (Appendix 2 – IPS323 - Stage F) the Panel noted "no issue of settlement coalescence."

Thus, for the purposes of draft Policy EV10, there is no reason why the allocation would not preserve settlement identity between Cowes and Northwood, or Cowes and Newport.

(3) Ecology and Nature Conservation (Appendix 6)

Appendix 6 provides a cover note by consultant ecologists E3S. It includes a range of supplemental appendices which includes the surveys undertaken over successive years (and which are still in date). Although the extent of surveys cover the majority of the Phase 2 land, some smaller field parcels were not scoped in (intentionally). However, E3S have confirmed that there is no distinctive character change on those smaller field parcels and there is nothing to suggest that the conclusions of their previous surveys would change.

From an ecological and nature conservation perspective, when the development is treated as a whole (including the development, SANG, open space or similar) there is no ecological barrier to hinder the allocation.

It is clear the site, whilst accepting growth, can be undertaken in a sensitive and responsible way to both mitigate any potential harms but also to significantly enhance through Biodiversity Net Gain. Indeed, the E3S cover note specifically declares that **"the development has the potential to increase the site's biodiversity."**

Other Considerations

Beyond the scope of the above material considerations, it would not be unreasonable for the Council to place conditions on the allocation (or a planning permission) so that usual technical matters surrounding drainage, archaeology or similar are scoped into further assessment to inform the design and layout.

Disbarring the above, the IPS makes several policy recommendations which do not seem to be evidenced and/or are contrary to established industry standards and guidance.

Policy EV2 (Ecological Assets and Opportunities for Enhancement) considers, under paragraph 4.29, that buffer strips of between 8m and 16m should be provided between rivers and/or ordinary watercourses. Although buffering can be considered, it would seem more appropriate that the exact extent of buffering is considered at technical design stage and informed by surveys and explicit and detailed mitigation and enhancement packages. To set prescriptive measurements would seem to be unnecessary and unreasonable when the Council have presented no evidence why the measurements have been used.

Policy EV5 (Trees, Woodland and Hedgerows) requires at least 50m buffering between new development and ancient woodland. This buffering is excessive and unreasonable when standing guidance from Natural England and the Forestry Commission recommends 15m. This specific request for buffering of 50m was presented to the House of Lords on 21st October 2021 and was voted down. Disbarring the buffering at Somerton Farm, this general policy approach would unreasonably stifle development: Imposing a 50m buffer on ancient woodland may ultimately lead to a significant reduction in housing delivery for the island especially those delivering affordable and starter homes, as such the existing National Policy supporting 15m buffers should remain and be referenced in the IPS. Furthermore, the inappropriate imposition of the proposed mandatory 50m buffer would inevitably result in inefficient land use by having the effect of requiring additional green field sites to be utilised to deliver equivalent housing numbers.

Policy EV8 (Protecting High Grade Agricultural Land) is not particularly applicable to Somerton Farm because the land is not 'best or most versatile', but for the purposes of policy, if there is a desire to protect agricultural land, the policy and its subtext should factor in that development (which is identified to be 'in need') can act as an overriding material consideration to outweigh Policy EV8.

Conclusion

It can be seen that as a strategic starting point, the growth applied by the draft IPS does not correlate with either the Current or Proposed Method of calculating local housing need. The Council indicates that there are barriers to development, but this is marred against the lack of allocations since 2012 and the political instability which has increased time, risk and costs.

Somerton Farm sits in an area which is capable of delivering growth and is adjacent to the current settlement boundary and is within scope of being within the Primary Settlement of Cowes. As testament to the Phase 1 application, the Council consider the site is sustainable in all respects, inclusive of transport and highways.

19 August 2024

The site (as part of a larger site including Phase 1) was assessed as part of the SHLAA (Appendix 2 – IPS323) as developable, available, suitable and achievable with, as the Panel (Stage F) noted 'no issue of settlement coalescence.

There is no landscape, visual or environmental barrier to the delivery of development subject to a careful approach to the mitigations, enhancements and layout.

The landowner is willing and has engaged with local and regional housing providers who are advanced in their ability to deliver the Phase 1 land and beyond.

Thus, from a structural perspective, there is no reason why the land should not be allocated for residential purposes.

Significant and favourable weight should be given to this representation and the IPS allocations must be reevaluated.

Yours sincerely,

David Long BA (Hons) P&D MA MRTPI
t 01983 828800
e dlong@bcm.co.uk

Please note: Letter sent by email only; original filed at BCM

Appendices:-

(1) Phase 1 and 2 Land

(2) SHLAA Agreement

(3) Rural Sustainability Matrix Review April 2022

(4) Technical Note – Highways and Transport

(5) Landscape and Visual Gap Appraisal *[see separate document]*

(6) Ecology & Nature Conservation *[see separate document]*

Appendix 1 - Phase 1 and 2 Land

PHASE 1

Phase 1 Somerton Farm (22/01720/OUT Land South Of Somerton Industrial Park Newport Road Cowes Isle Of Wight) Resolution to Grant Planning Permission (September 2023).

PHASE 2

N
W E
S

CYCLEWAY LINK

1) This drawing is the copyrighted and may not be altered or reproduced in any way without written permission

2) Written dimensions supersede manual or electronically scaled dimensions. All dimensions must be checked on site by Contractor before commencement of the works or fabrication

3) This drawing is to be used only for the purposes intended as described in the Drawing Title box

4) This drawing must be read in conjunction with all other Consultants drawings & specifications applicable to this project

5) The information contained herein is confidential and may not be copied or disclosed to any other person or used for any purpose other than that for which is was originally prepared and supplied without the prior written consent

CONSTRUCTION DESIGN & MANAGEMENT REGULATIONS 2015

DESIGNERS HAZARD INFORMATION FOR CONSTRUCTION

The notes below refer specifically to the information shown on this drawing. Refer to the Construction Phase Health and Safety Plan for further information.

1) If you do not fully understand the risks involved during the construction of the items indicated on this drawing ask your Manager, Health & Safety Advisor or a member of the Design Team before proceeding.

LEGEND

PHASE 1 SOMERTON FARM (22/01720/OUT LAND SOUTH OF SOMERTON INDUSTRIAL PARK NEWPORT ROAD COWES ISLE OF WIGHT) RESOLUTION TO GRANT PLANNING PERMISSION (SEPTEMBER 2023).

PHASE 2

APPROXIMATE ROUTE OF CYCLEWAY LINK

0m 30m 60m 90m 120m 150m

VISUAL SCALE 1:1500 @ A1

Ref	Date	Description	By	Ch'kd

Above references apply to revisions on this sheet

P1 Planning Issue

Status Code Issue Purpose

raineypetrie ARCHITECTURE

01983 242500 www.raineypetrie.co.uk info@raineypetrie.co.uk

Client

Mr S. Biles

Project Title

Proposed Development at Somerton
Land off Newport Road, Cowes
Isle of Wight

Drawing Title / Description

Somerton Farm Development Phases 1&2

Our Project Ref.	Scale	Date	Drawn	Ch'kd
2615	As indicated @ A1	16/04/24	TH	.

Client Project Ref	Originator	Zone	Level	Type	Role	Drawing No.	Rev
2615	RP	00	00	DR	A	0011	.

Appendix 2 - SHLAA Agreement

SHLAA Site Assessments - Deliverable

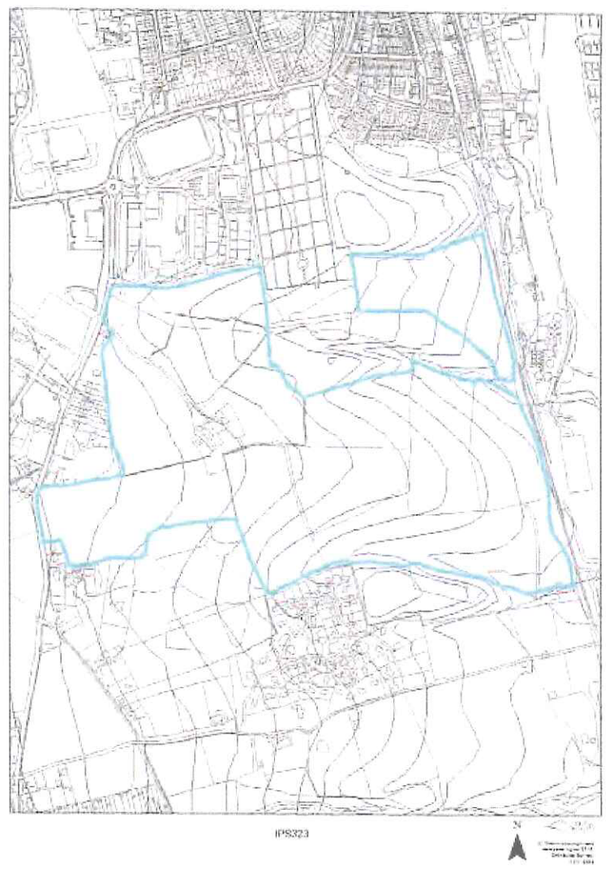
SHLAA Ref No: IPS323

SHLAA Ref No: IPS323

Site Area: 42.14

Site Address: Somerton Farm, Newport Road, Cowes

Site location



Site Description: The site is a large site on the edge of Cowes. It is immediately adjacent to an existing employment site to the north and west and some sporadic residential. The site is undulating within the boundaries but gently slopes towards the River Median to the east. It is bounded by substantial hedgerows interspersed with trees.

Stages A and B - Discounting

Environmental designations A1:	The site is not located within any environmental designations including, ancient woodland, LNR, marine conservation zone, NNR, RAMSAR, SAC, SINC, SPA, SSSI, scheduled ancient monument or RIGG.	☐ Discount
Environmental designations A2:	The site is not located within any environmental designations including heritage coast, historic park or garden, open space.	☐ Discount
Flood zones/agricultural class/size:	The site is located in FZ1 and is not class 1 or 2 agricultural land.	☐ Discount

Stage C - Assessment - Suitability

Proximity to settlement:	The site is located outside but immediately adjacent to the current settlement boundary which is along a section of the northern boundary.
It is brownfield/greenfield:	The site is greenfield, the farm incudes various buildings, barns and farmhouse relating to the farm.
Potential landscape impact:	The site is not located in an AONB. It's on the edge of the settlement with a semi-rural feel having lots or trees and greenery in the vicinity. If development is considered appropriate, the impact on the wider area and views into and out of the site will need to be considered and reflected in any design principles
Potential biodiversity impact:	The site is not located in an environmental designation but is adjacent to a number of

SHLAA Site Assessments - Deliverable SHLAA Ref No: IPS323

SINCs and ancient woodlands to the south and north. Parts of the site are located with the buffers of these designations. There are no TPOs on the site but there are a number of large trees individual and groupings that need to be considered. There is a watercourse that runs through the site to the north. Biodiversity studies will be required. The site is also in a biodiversity enhancement area.

Potential heritage impact: The site is not located in a conservation area and there are no listed buildings close by.

Site access aspects: The site is accessed off Newport Road

Access to public transport: There is a bus stop close by, this is Route 1 serving Newport | St Mary's Hospital | Parkhurst | Northwood | Park & Ride | Cowes and runs Mon - Sat up to every 7 minutes | Sundays up to every 10 minutes

Access to pedestrian/ cycle: There is a public right of way running just beyond the southern boundary (CS33). There is a multi-user track to the east linking Cowes to Newport. The main road has a pavement on the site side.

Access to services/ facilities: There are a number of facilities close by and Northwood has some further facilities and Cowes to the north has a range of services and facilities.

Access to open spaces: There are some public open space facilities nearby. The site has good access to the countryside.

Air quality sensitivities: None known

Agricultural land class: The classification is Grade 3 with a small section of urban to the east.

Mineral resources?: A part of the western section of the site is located within a mineral safeguarding area. This will need to be considered further should the site be considered appropriate

Is there a loss to employment?: No

Potential constraints to delivery: There is more one landowner but there are no known covenants or legal issues.

Infrastructure capacity aspects: The site has some utilities but may require extensions to be factored in

Potential compatibility impacts: The site is close to existing residential, whilst no compatibility issues are envisaged, the site is on the edge of the area where the context is more rural.

Brief planning history: No recent planning history.

Overarching policy context: The site is located outside but immediately adjacent to the settlement boundary

Steering group's conclusion: The steering group concluded that the northern part of the site is suitable. The site is immediately adjacent to the settlement boundary and could provide a mixed use housing led development. The site is within walking distance to a supermarket, school, bus and employment. Development should be contained within the north western section of the site, using the farm complex as a boundary. The employment should be located immediately adjacent to the existing in the north corner. Landscape buffers should be incorporated.

☑ Site suitable if ticked

☑ Site available if ticked

Stage D - Assessment - Availability

Availability: The site is immediately available with a reasonable prospect of development taking place within 5 years. Once commenced could be achieved within 1 - 10 years

Put forward for: The site has been put forward for general housing, mixed development (housing led) and non-housing development. As well as part university, part golf course

Conversion?: Conversion of the existing farm building stock would need to be determined

Rural exception?: Not applicable

SHLAA Site Assessments - Deliverable SHLAA Ref No: IPS323

Stage E - Assessment - Achievability

Steering group's conclusions: The steering group concluded that the site is suitable and achievable. The final yield will be depend on the layout and buffers but could be in the region of 50-70 and could come forward in years 1-5

Indicative yield: 80

☑ Site achievable if ticked

Stage F - Assessment - SHLAA Panel Comments

Panel comments: The SHLAA panel agreed with the steering group's conclusions making the following additional comments: Potential for employment to south between scrape yard and Northwood business park. Consider no issue of settlement coalescence.

Stage G - SHLAA Conclusion

Final conclusions: Following the panel discussions and the overall SHLAA assessment process the steering group concluded that the site is suitable for the purposes of SHLAA, deliverable and could be considered for potential allocation.

☑ Site could be considered for allocation if ticked

The site is considered: Deliverable

☐ Site is suitable for BFR if ticked

Appendix 3 - Rural Sustainability Matrix Review April 2022

Rural Sustainability Matrix Review

April 2022

Introduction

A sustainability matrix has been developed to help create a hierarchy of settlements across the Island based upon their access to facilities and services including for example, local shops, transport networks, schools, employment and health provision. This provides a way to identify settlements which have the ability to accommodate sustainable growth and where that settlement fits within the 'settlement hierarchy' across the island. The settlements assessed in this study are predominantly those in rural areas and do not include the current primary and secondary settlements (as defined in the Core Strategy) in the regeneration areas of Newport, Cowes, East Cowes, Ryde, the Bay, Ventnor or West Wight (including Totland and Freshwater). The sustainability matrix gives a total score for each settlement based on the availability of its services and facilities. Some of the smaller settlements (but not exclusively) tend to have fewer facilities and services in place and therefore not score as highly.

The sustainability matrix was originally developed in 2008 to support the Core Strategy that was adopted in 2012. This has now been updated to take account of any changes to facilities and services in each of the settlements and an additional criterion has been added on local employment. The purpose of the matrix is to help support draft IPS policy G2 when considering priority locations for growth and where settlements fit within the settlement hierarchy. High scoring settlements may move up in the hierarchy and low scoring settlements may move down. For information, Bembridge and Wootton were not included in the version of the matrix supporting the Core Strategy as they had a population of over 3,000, however they have been included in this version to ascertain how they score against some of the other settlements.

Methodology

Each of the settlements have been given a weighted score based upon the services and facilities within them. Some facilities are given a higher weighting as they are essential to daily living needs e.g., primary school, GP surgery and provision of an hourly bus service. Settlements with a higher population have also been given a greater weighting. This is because higher populations are likely to be able to support and sustain more services and facilities, even if they are not currently present, and may be more attractive to investment in that regard.

Since the 2008 study was undertaken, an additional criterion has been added on local employment. The availability of local employment is considered important to a settlement's viability and suitability for further growth. To score on this criterion, the definition of employment is limited to activities arising from office, industrial or warehousing use. It is recognised that employment can be generated from many other activities including shops, car showrooms, and leisure uses. However, these activities have already been considered by the other existing criteria. However, employment opportunities arising from offices, industrial or warehousing activities have not been included up to this point. This new criterion gives settlements with 3 or more employment units 2 points and those with 1 or 2 units 1 point.

Any settlement scoring 24 points or more is identified as a suitable location for additional growth. The level of growth within the IPS is dependent on other factors including for example, the availability of suitable sites and the overall spatial strategy for the island. Settlements scoring 23 points or fewer are not identified for further growth.

Results from the Sustainability Matrix analysis

The settlements covered by the Sustainability Matrix and a general overview of their position are summarised below. This reflects the analysis of their facilities and services set out in *Table 1 Settlement Population and facilities and Table 2 Settlement Facilities and Services and overall score.*

Settlement analysis

Arreton has one of the smaller village populations but scores very well overall in terms of its services and facilities. These include shops, a post office, primary school, village hall and the village has good transport links. It is therefore a sustainable location and could therefore accommodate some further growth.

Bembridge has the highest population of settlements outside of the key regeneration areas. It has good access to facilities including shops, a post office, primary school, a GP surgery and a village hall along with good public transport access, including an hourly bus service. Overall, it has the highest score of all the settlements in the study (one of only 4 scoring over 30 points) and could accommodate further growth. Consideration to move from Rural Service Centre to Secondary Settlement.

Brading - good access to a local shop and other facilities including a post office, primary school and public house along with good public transport access which includes an hourly bus service and a railway station with links to Ryde and the Bay area. Overall it scores highly and as a result could accommodate growth.

Brighstone has a mid-sized population of the settlements in the study. It has the facilities of some of the larger settlements including shops, a primary school and a GP surgery. Residents also have access to a permanent library. Its drawback is poor public transport services and relative isolation from urban centres. However, overall, it scores highly (over 30 points) and could accommodate some growth.

Calbourne has a small population and a much more limited range of services and facilities but it has good public transport links. It has a village shop; however, it does not have a post office or a local primary school and so does not score as highly as some of the other settlements and is therefore not likely to be able to accommodate further growth.

Chale has more limited access to services and facilities with only access to a village shop, post office (at Chale Green) and a village hall but it has good public transport links. It is however 7 miles away from Newport. It is unlikely to be a suitable location for planned growth.

Fishbourne has a small population. It has a regular bus service but does not have access to any local shops or post office and does not have a local primary school or health services. Overall, it has a low score and is unsuitable to accommodate planned growth.

Chillerton and Gatcombe have the smallest population of the settlements in the study. Facilities include a primary school and a village hall. However, it lacks other services and facilities including a local shop and post office and as a result is not likely to be able to accommodate planned growth.

Godshill scores highly overall with access to a number of local shops, a post office, primary school and a public house. It also has good public transport links and a GP surgery and therefore is a sustainable location and could accommodate planned growth.

Gurnard scores highly overall. It has good access to a range of services and facilities, including a primary school, has good public transport links and lies adjacent to Cowes. It therefore could support planned growth.

Havenstreet & Ashey have a combined population of over 700. Public transport access to both settlements is poor. However, Havenstreet does have a steam rail station. Havenstreet does have access to more service and facilities than Ashey, but neither settlement has access to a village shop, post office or local primary school so do not score highly overall and are unlikely to be able to accommodate further growth.

Together, **Nettlestone and Seaview** have a population around 2,700. Most of the facilities and services are concentrated in Seaview and include a shop, post office, primary school and village hall. However, there is no GP surgery in either village. There is good access to public transport and potentially some further growth could be accommodated.

Newchurch, like Brading, has one of the higher populations and a reasonable range of facilities and services including a primary school, village hall and post office. However, it lacks a local convenience store and a GP surgery and has limited public transport services**.** It is not likely to accommodate further growth.

Niton and Whitwell combined have a population of 2,178 and score over 30 points. They both have good access to a range of services and facilities along with good public transport access. Niton has a primary school, GP Clinic and a permanent library. Overall, Niton has more facilities and services and is better placed to accommodate limited growth.

Northwood has a sizeable population with good access to a range of facilities and services, including a shop and primary school. It has good public transport links and lies adjacent to Cowes. Though it does not have its own GP surgery, it does lie within easy distance of Cowes Medical Centre. The settlement scores well and it is considered that could accommodate some planned growth.

Rookley has one of the smallest populations of any of the rural settlements included in the study. It has good access to local facilities and services with a local shop, a post office, village hall and good public transport links. However, it has no primary school or GP surgery. Overall, it has a medium score and based on the facilities and services available it is considered that it could accommodate some limited growth.

St Helens has a mid-range population and access to a very good range of facilities and services including a primary school and GP surgery as well as having good public transport access. It therefore could accommodate some planned growth.

Together, **Shalfleet and Newbridge** have a population of over 1,500 people. Shalfleet has greater access to a range of services and facilities and therefore scores higher overall. Both settlements have good public transport access but are over 5 miles from the nearest urban centre. Although together their scores are high, individually their scores are low and so would only be able to accommodate limited growth.

Shorwell is a small settlement and although it has access to a village shop, a local post office, a village hall and open space it does not have a local primary school or a GP surgery and is over 5 miles from Newport. As a result, it is unsuitable for further growth.

Whippingham has reasonable access to facilities and services, including a primary school, has good public transport links and adjoins East Cowes. It lacks a local shop and GP surgery. It is not considered that it could accommodate further planned growth.

Wootton has one of the highest populations outside of the named key regeneration areas. It has good access to shops and facilities including shops, a primary school, GP surgery and village hall along with a bus service every 10 minutes and is in close proximity to both Newport and Ryde. Overall, it scores highly (over 30 points) and as a result could accommodate further growth. Consideration to move from Rural Service Centre to Secondary Settlement.

Wroxall has a good range of facilities and services located in the settlement including a shop, post office, primary school and a village hall. It has good public transport links and is just over 2 miles from Ventnor. It therefore could accommodate some further growth.

Yarmouth has a small population, but it has good access to a range of facilities and services including a village shop, post office, primary school and village hall. It has good public transport links and is only 2 miles from Freshwater and Totland. It could therefore accommodate some limited growth.

Table 1 Settlement Population and facilities (Points in this table are carried forward to Table 2 where total points are calculated)												
Parish	Population		Village shop	Post office	Primary school	Village hall	Public house	Bus service	Rail service	Distance from nearest urban centre	Points	Sub-total points
	Under 300 300-599 600-899 900-1199 1200-1499 1500-3000+ *ONS population estimate 2020	0 1 2 3 4 5	2 points	2 points	3 points	2 points	1 point	Hourly – 3 point Less than hourly – 1 point	1 point	10 miles or more = 0 points 5-10 miles = 1 <5 miles = 3		
Arreton	1,056	3	2	2	3	2	1	3		4	3	19
Bembridge	3,646	5	2	2	3	2	1	3		6.6	1	19
Brading	2,126	5	2	2	3	2	1	3	1	4.1	3	22
Brighstone	1,594	5	2	2	3	2	1	1		5.6	1	17
Calbourne	844	2	2				1	3		4.8	3	11
Chale	632	2	2	2		2	1	3		7	1	13
Fishbourne	736	2					1	3		2.7	3	9
Chillerton and Gatcombe	421	1			3	2		1		2.9	3	8
Godshill	1,490	4	2	2	3		1	3		3.8	3	18
Gurnard	1,923	5	2		3	2	1	3		1.8	3	19
Havenstreet and Ashey	767	2				2	1		1	3.8	3	9
Nettlestone and Seaview	2,688	5	2	2	3	2	1	3		3.3	3	21
Newchurch	2,537	5		2	3	2	1	1		3.6	3	17
Niton and Whitwell	2,178	5	2	2	3	2	1	3		4	3	21
Northwood	2,345	5	2	2	3	2	1	3		1.7	3	21
Rookley	611	2	2	2		2	1	3		3.4	3	15
St Helens	1,207	4	2	2	3		1	3		4	3	18
Shalfleet and Newbridge	1,591	5	2	2	3	2	1	3		6	1	19

Shorwell	712	2	2	2		2	1	1		5	1	11
Whippingham	906	3		2	3	2	1	3		1.7	3	17
Wootton	3,517	5	2	2	3	2	1	3		3.7	3	21
Wroxall	1,724	5	2	2	3	2	1	3		2.6	3	21
Yarmouth	791	2	2	2	3	2	1	3		2	3	18

Table 2 Settlement facilities, services and overall score											
Parish	Other shops/facilities	Recreation facilities	Organisations and clubs	Recycling facilities	Public open space	Church or chapel	Library	GP clinic	Employment	Points	Total points
	2 points	1 point	1 point	1 point	1 point	1 point	Mobile – 1 point Permanent – 3 points	3 points	Industrial estate of 3 units or more 2 points Under 3 units 1 point		
Arreton	2	1	1		1	1	1		1(glass blowing workshop)	7	27
Bembridge	2	1	1	1	1	1	3	3	2	13	**34**
Brading	2	1	1		1	1	1			10	29
Brighstone	2	1	1	1	1	1	3	3	1(county fencing)	13	**31**
Calbourne		1			1	1	1			4	15
Chale	2	1	1			1	1			6	19
Fishbourne	2		1				1			5	14
Chillerton and Gatcombe	2	1	1			1	1			6	14
Godshill	2	1			1	1	1	3		9	27
Gurnard	2	1	1		1	1	1			7	26
Havenstreet and Ashey	2					1	1			4	13
Nettlestone and Seaview	2	1	1		1	1	1			7	28
Newchurch	2					1	1			4	21
Niton and Whitwell	2	1	1		1	1	3	3		12	**33**
Northwood	2	1	1		1		1			6	27
Rookley	2	1	1	1*	1		1		2	7	24

St Helens	2	1	1		1	1	1	3		10	28
Shalfleet and Newbridge	2	1	1		1	1	1			7	26
Shorwell		1	1		1	1	1			5	16
Whippingham		1	1			1	1		1	4	22
Wootton	2	1	1	1	1	1	1	3	1	12	**33**
Wroxall	2	1		1	1	1	1			7	28
Yarmouth	2	1	1		1	1	1			7	25

*Limited to clothing recycling at the Co-op convenience store

Appendix 4 - Technical Note – Highways and Transport

Technical Note

Project: Somerton Farm, Cowes

Subject: Local Plan Representation - Transport Technical Note

Client:	Mr Sam Biles		
Project No:	05864	**Version:**	E
Document Ref:	T-01	**Author:**	LK
Date:	14/08/2024	**Approved:**	MF

1 Introduction

1.1.1 This Technical Note (TN) has been prepared by PJA to support a representation to the Local Plan (LP) process in relation to land at Somerton Farm in Cowes, PO31 8PE.

Figure 1-1: Site Location

LOCATION 3rd Floor
TW12VE
12 Forbury Road
Reading
RG1 1SB
UK

TELEPHONE 0118 956 0909
EMAIL reading@pja.co.uk

WEBSITE pja.co.uk

1.1.2 An Outline planning application for part of the site (hereafter referred to as Phase 1) has been submitted to the Isle of Wight Council (reference 22/01720/OUT) in September 2022, with an indicative yield of 163 residential units and 43 employment units (circa 29 acres) with access taken via two simple priority junctions onto Newport Road. The Transport Assessment (TA) for this Phase 1 application was prepared by Mayer Brown. This development received a letter of Resolution to Grant dated 27th September 2023 subject to concluding the S106 Agreement.

1.1.3 The remainder of the farm, covering an area of circa 65 acres, has potential to accommodate a Phase 2 development. This would provide additional dwellings, as well as land for SANG, BNG, recreation, open space, nature reserve etc. This Technical Note considers the potential for Phase 2 to accommodate 350 dwellings. It is noted that there may be scope for a greater number of dwellings to be accommodated within Phase 2 on the basis of the assessment within this Technical Note, subject to further modelling of the wider development impact and the consideration of alternative forms of access such as signalised junctions.

1.1.4 This Technical Note has been prepared to demonstrate that Phase 2 would be deliverable from a highways perspective, in support of a representation made in relation to the Draft Island Planning Strategy (DIPS) Regulation 19 Consultation. To this end, the TN includes the following chapters:

- Chapter 2: Site Context, including a transport sustainability appraisal using GIS software
- Chapter 3: Travel Demand Assessment, based on the Phase 1 assessment and uplifted to reflect the additional dwellings, as well as considering traffic growth and committed developments to 2036
- Chapter 4: Site Accesses, setting out the results of modelling undertaken for the site accesses and the rationale for providing simple priority junctions

2 Site Context

2.1 Site Location

2.1.1 The site is located circa 1.5km from the centre of Cowes, and lies adjacent to the A3020 Newport Road which forms the main road linking Newport and Cowes.

2.2 Planning History

2.2.1 The Phase 1 outline planning application for the site was accompanied by a TA prepared by Mayer Brown and dated September 2022. This assessment considered the impact of a development of 163 residential units and an industrial / business zone. Access was proposed via

two simple priority junctions from Newport Road. This development received a letter of Resolution to Grant dated 27th September 2023 subject to concluding the S106 Agreement.

2.2.2 To support the Phase 1 access arrangement, PJA prepared a letter which set out the suitability of simple priority junctions based on guidance and standards, research, and capacity analysis. This letter is in part reproduced later in this report, with similar conclusions remaining with the addition of the Phase 2 traffic. As part of the Phase 1 proposals, a new pedestrian and cycle connection from the site to the off-road shared cycle / pedestrian route which links Cowes with Newport will be delivered. This would benefit the future residents and employees, as well as those currently travelling through this area.

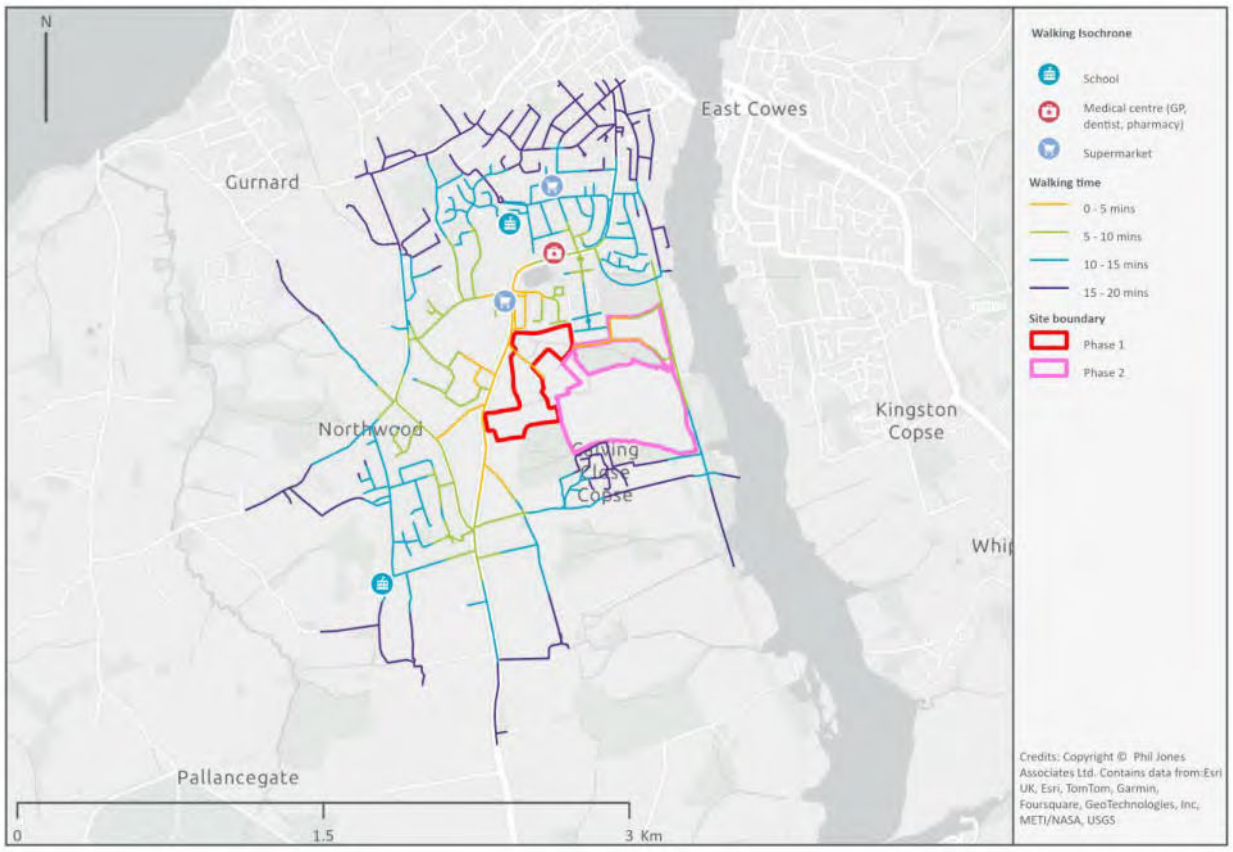
2.3 Sustainable Accessibility

Pedestrian Accessibility

2.3.1 Pedestrians can walk north from the site along Newport Road into Cowes town centre, where a range of amenities can be found including local schools, shops, restaurants and wider transport links. The route into Cowes passes by an ALDI supermarket and Cowes Medical Centre. There are also a number of employment sites located along this section of Newport Road which can also be reached on foot from the site meaning that, for many future residents, walking will be a viable option for a significant number of journeys.

2.3.2 Pedestrians could alternatively reach Cowes via the shared pedestrian / cycle route to the east of the site, which provides a direct connection between Cowes and Newport. As part of the Phase 1 development, a new connection to this route will be delivered. The proposal will therefore significantly enhance travel choice by creating new routes through the site and onto the existing network. Further pedestrian links can be provided by Phase 2 to the Newport-Cowes Cycle Route.

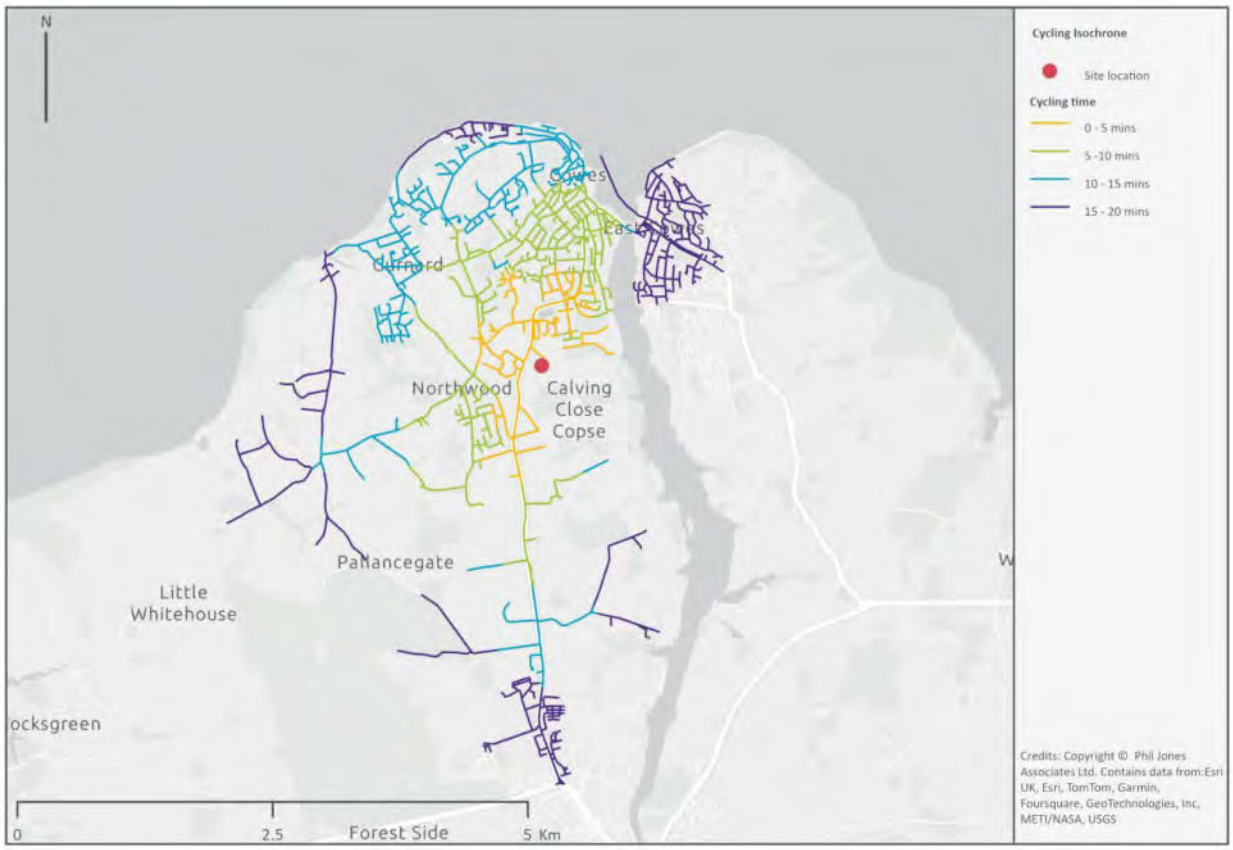
Figure 2-1: Walk Isochrones



Cycle Accessibility

2.3.3 To the east of the site, there is a good quality off-road shared cycle / pedestrian route which links Cowes with Newport. As part of the Phase 1 development, a new connection to this route will be delivered, enhancing cycle connectivity in the area. The cycle time from the site to Newport is circa 20 minutes via this traffic free route, whilst Cowes town centre can be reached by cycle in circa five minutes. The proximity of the site to these principal destinations along with the quality of the infrastructure will make cycling a viable and attractive option for future residents.

Figure 2-2: Cycle Isochrones

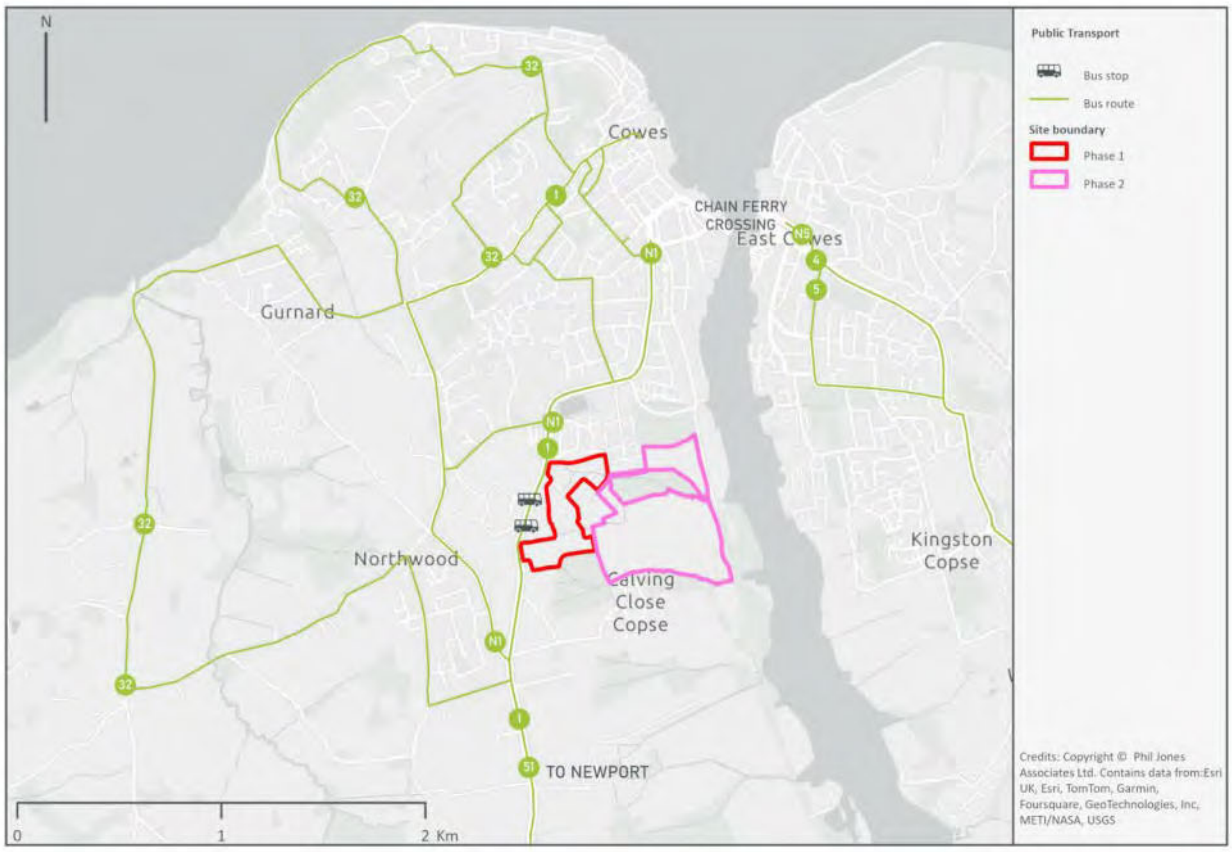


Bus Accessibility

2.3.4 Bus stops are located close to the site on Newport Road, providing access to services 1 and N1 which run between Cowes and Newport. Service no. 1 operates seven days a week, with long operating hours and additional night buses (service no. N1) on Friday and Saturday nights. During the day, service 1 operates with a frequency of one bus every 10 minutes.

2.3.5 It is further worth noting that the site is located close to the Somerton Park and Ride, which provides long stay commuter car parking for £2 for 24 hours. Buses 1 and N1 both stop at the Park and Ride car park, linking with the Red Jet ferry to Southampton.

Figure 2-3: Public Transport Access



Ferry Accessibility

2.3.6 For trips to the mainland, the Red Funnel Red Jet terminal is located within Cowes and can be accessed by bus in circa 15 minutes. From here, regular Red Jet services depart to Southampton, with a journey time of circa 28 minutes.

2.3.7 Locally, the Cowes-East Cowes chain ferry provides a means to cross the River Medina between east and west Cowes. The chain ferry operates Monday to Saturday between 05:00 and 00:30, and Sundays between 06:30 and 00:30.

Summary

2.3.8 The site benefits from excellent connectivity by sustainable modes of travel, particularly for trips to Cowes and Newport from where onward sustainable journeys across the island and beyond are possible. A future housing allocation on the site will therefore be highly sustainable from a transport perspective and maximise the number of journeys undertaken by non-car modes.

Furthermore, by providing new pedestrian and cycle links through the site the proposals would also enhance travel choice for those currently living or working in the vicinity.

2.4 Local Highway Network

2.4.1 The site benefits from two frontages onto the A3020 Newport Road, which is the main road between Cowes and Newport. Newport Road is a two-way single carriageway road subject to a 40mph speed limit, with a footway and regular street lighting. Based on previous Mayer Brown estimates (which were based on a combination of recent (during COVID) and historic surveys) in the vicinity of the site the A3020 carries some 10,000 vehicles per day.

2.4.2 There are many existing priority junctions along the A3020, including industrial accesses, between Cowes and Newport. Only one priority junction is provided with a right turn lane, to serve St Mary's Hospital which is a very busy site, with the remainder taking the form of simple priority junctions.

Baseline Traffic

2.4.3 Baseline traffic flows along the A3020 Newport Road for 2022 have been obtained from the Phase 1 TA, and are shown in Table 1.

Table 1: 2022 Base Traffic Flows (PCU)

	Northern Site Access Junction		Southern Site Access Junction	
	Northbound	Southbound	Northbound	Southbound
AM Peak	421	475	452	477
PM Peak	477	401	464	482

Phase 1 Access Arrangement

2.4.4 The Phase 1 development would be served by two simple priority junctions, with one on each section of highway frontage. The Mayer Brown preliminary junction designs are provided as **Appendix A** of this Technical Note. The Mayer Brown assessment identified that both accesses could achieve visibility of the 'requisite length', being 101m within the 40mph zone.

2.4.5 The access roads would benefit from 5.5m-6.0m carriageway widths, and 10m kerb radii. Alongside this, 2.0m wide footways would be provided to facilitate pedestrian access.

2.4.6 The existing Somerton Farm access would be downgraded, to a private access serving a single dwelling (128 Newport Road).

3 Travel Demand Assessment

3.1 Trip Generation

3.1.1 Trip rates have also been obtained from the Phase 1 TA. These trip rates have been derived from the TRICS database for both the dwellings and industrial units, as shown in Table 2.

Table 2: Trip Rates (extracted from Mayer Brown TA)

	AM Peak			PM Peak		
	Arrivals	Departures	Two-Way	Arrivals	Departures	Two-Way
Dwellings	0.142	0.396	0.538	0.361	0.180	0.541
Industrial	0.299	0.130	0.429	0.123	0.293	0.416

3.1.2 The resulting trip generation, for the Phase 1 and Phase 2 development proposals, are presented in Table 3. Across both phases of development, circa 296 two-way vehicle trips are forecast to be generated in each peak which would be split between the two consented access locations. Given the excellent sustainable accessibility as presented in the previous chapter, this is likely to represent a robust assessment as in reality a significant proportion of journeys could be undertaken on foot, bicycle or public transport.

Table 3: Trip Generation

	AM Peak			PM Peak		
	Arrivals	Departures	Two-Way	Arrivals	Departures	Two-Way
Phase 1 Dwellings (163)	23	65	88	59	29	88
Phase 1 Industrial (4425sqm)	13	6	19	5	13	18
Phase 2 Dwellings (350)	50	139	188	126	63	189
Total (350 in Phase 2)	**86**	**209**	**295**	**191**	**105**	**296**

3.2 Trip Distribution and Assignment

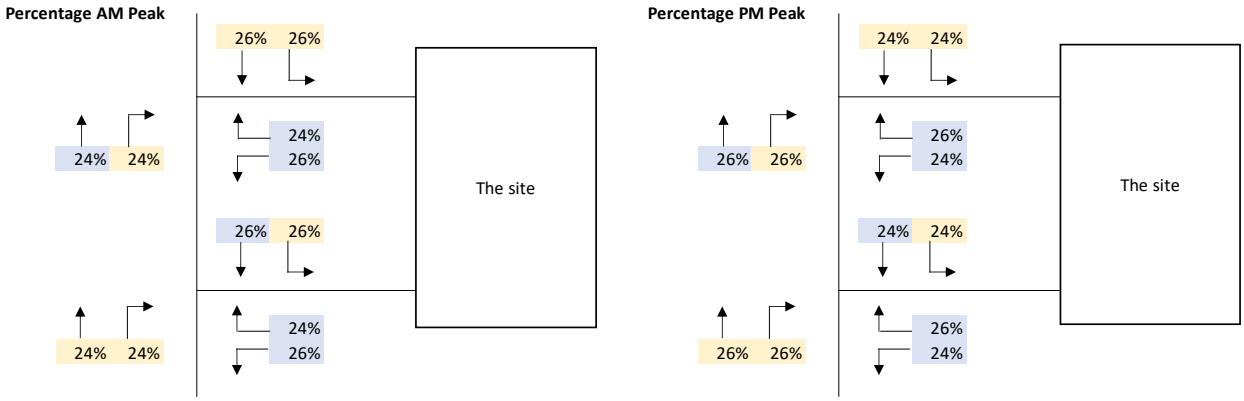
3.2.1 The Mayer Brown TA modelled the site accesses based on the assumption that development traffic would use the two junctions equally. The likely directions of development traffic were based on the proportion of traffic flowing in each direction past the site, being 52% southbound and 48% northbound in the AM peak and the opposite in the PM peak.

3.2.2 The resulting development traffic turning movements across the two site accesses, for the Phase 1 and Phase 2 developments combined, is shown in Figure 3-1, based on the same assumptions as used by Mayer Brown.

3.2.3 It is worth noting that, owing to the change of Development Control personnel at Island Roads, their preferred methodology for distributing development traffic on the highway network has changed since the Phase 1 TA was prepared. Island Roads' current preference is for the use of

Census data to forecast origin and destination for journeys to / from work, rather than their previously preferred practice of distributing traffic based on currently observed splits at junctions. Whilst this alternative methodology would alter the turning movements generated by the site, it is not expected that this would alter the conclusions reached in relation to the site accesses, with the total traffic through the junctions remaining unchanged.

Figure 3-1: Trip Distribution and Assignment – Site Accesses



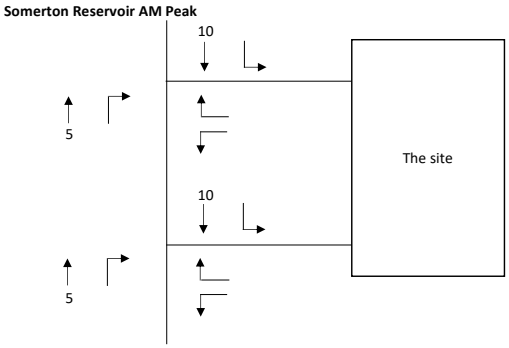
3.3 Traffic Growth

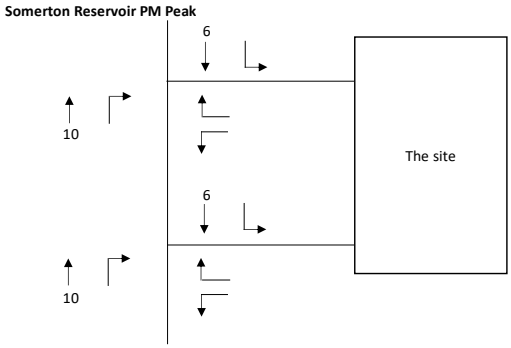
3.3.1 Within the Mayer Brown TA, baseline traffic flows for 2027 were obtained by adding a growth factor of 1.05 to the June 2022 traffic surveys, based on the Isle of Wight TEMPro Version 7.2. In addition, Medina Yard (P/00496/16) and Somerton Reservoir (P/00356/18) were included as committed developments.

3.3.2 As well as it now seeming very unlikely that the Medina Yard development will ever come to fruition, its development traffic was effectively double counted in the Phase 1 assessment. It is understood that this site was both factored into the TEMPro modelling (noting that this applies a blanket growth factor only) and explicitly included using turning movements obtained from the application TA.

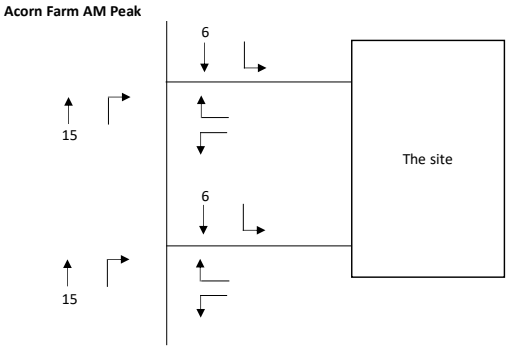
3.3.3 This updated PJA assessment has been prepared for a future year of 2036, which is the assessment horizon used in the Local Plan Evidence Base. The following committed developments were included:

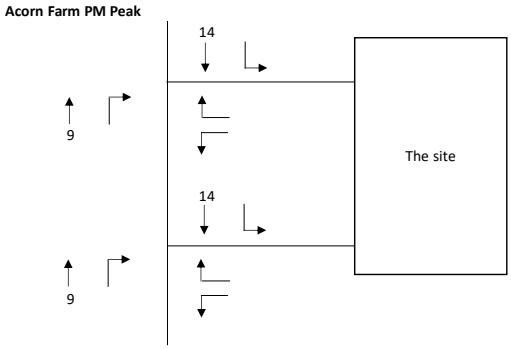
- Somerton Reservoir – P/00356/18, for 146 residential units



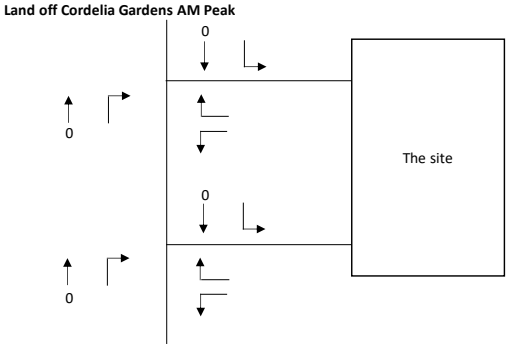


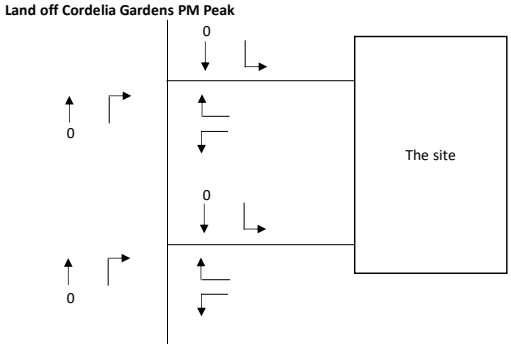
- Acorn Farm – 23/01538/FUL, for 203 dwellings (noting that this was, in part, allocated for employment within the Core Strategy)





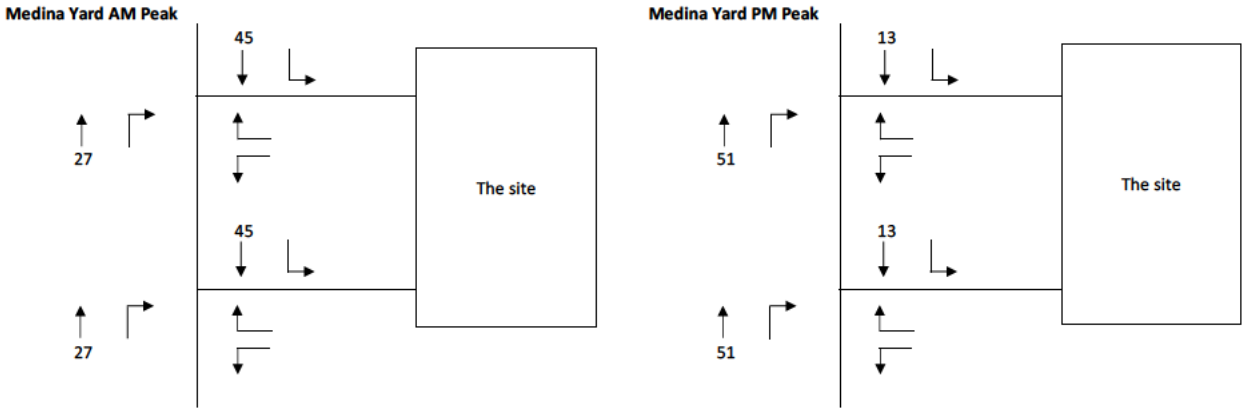
- Land off Cordelia Gardens – 23/01430/FUL, for 117 dwellings





3.3.4 Medina Yard has now been excluded from the main assessment within this Technical Note, as it is very unlikely that this development will come forward. Nonetheless, to ensure a robust approach a sensitivity test with the addition of Medina Yard traffic has been undertaken.

Figure 3-2: Medina Yard development traffic, used for sensitivity test



3.3.5 In order to determine the growth in baseline traffic between 2022 and 2036, TEMPro version 8.1 was interrogated. The Core scenario for Middle Super Output Area (MSOA) Isle of Wight 002 was used, with this covering the area in which the site is located. The resulting growth factors are shown in Table 4.

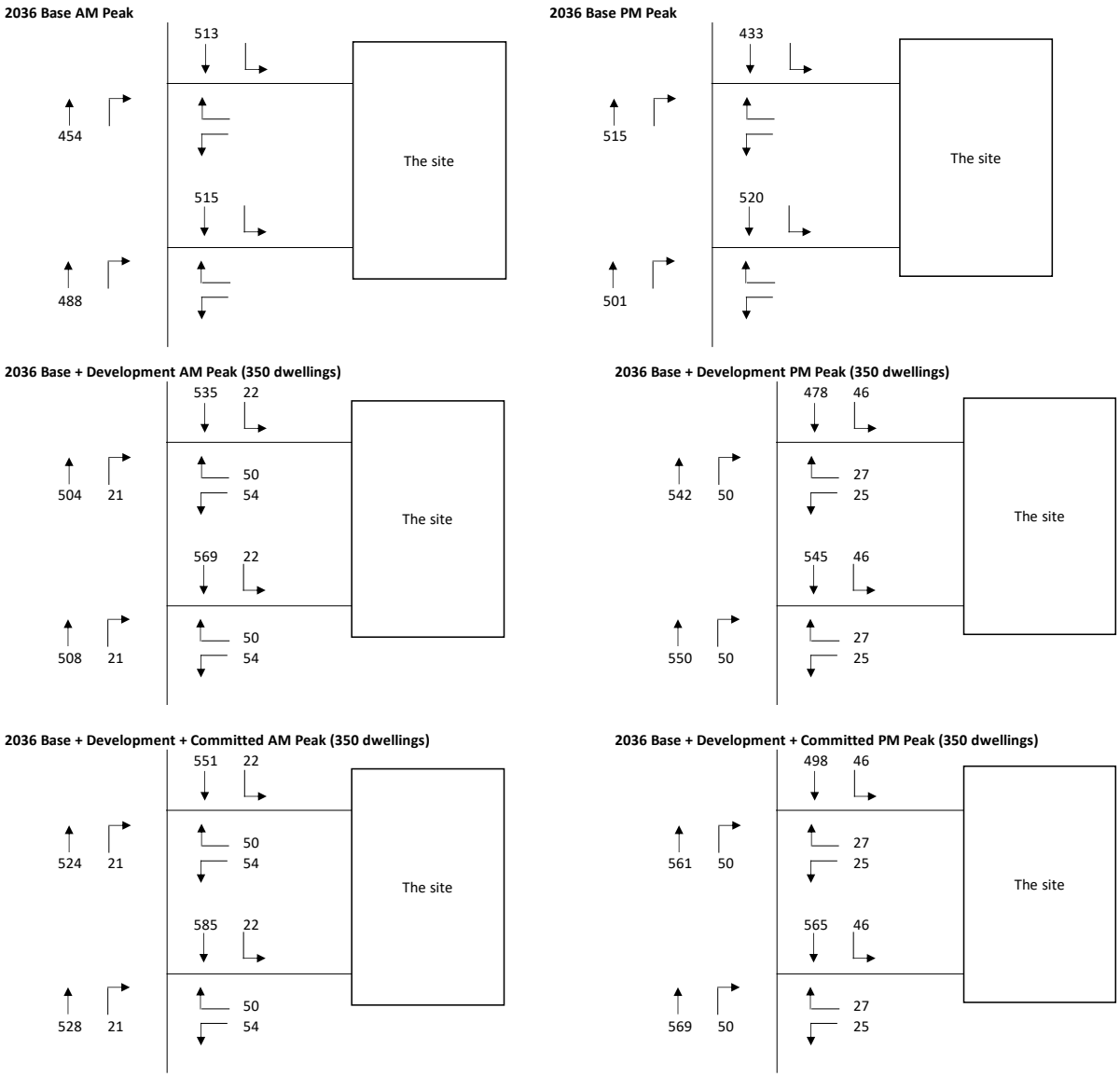
3.3.6 It is noted that MSOA Isle of Wight 002 includes the Somerton Reservoir development and Land off Cordelia Gardens, whilst both Acorn Farm and Medina Yard are not located within this MSOA. Given the low volume of traffic forecast to route past the Somerton Farm site as a result of the two sites within the MSOA, no adjustments have been made in TEMPro in relation to the forecast housing and jobs growth in the area, thus providing a robust assessment. For information, TEMPro forecasts that between 2022 and 2036 the number of households in MSOA Isle of Wight 002 will increase from 3,761 to 3,948 and the number of jobs will increase from 3,213 to 3,336.

Table 4: TEMPro Growth Factors

	AM Peak	PM Peak
2022 -> 2036	1.0789	1.0789

3.3.7 The resultant 2036 'Baseline' and 'With Development' traffic flows are illustrated in Figure 3-2.

Figure 3-3: 2036 Baseline and With Development Traffic Flows



4 Site Accesses

4.1 Junction Modelling

4.1.1 Junction modelling has been undertaken using the PICADY module of Junctions10 for the two proposed priority junction site accesses. The model geometry was extracted from the previous Mayer Brown assessment.

4.1.2 The results of the modelling undertaken for the northern site access priority junction are shown in Table 5, with the full model outputs included in **Appendix B**.

Table 5: Northern Site Access Model Results

	AM Peak			PM Peak		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
2036 Base + Development (350 dwellings in Phase 2)						
Site Access	0.4	14.12	0.31	0.2	11.83	0.16
Newport Rd NB	0.1	4.77	0.07	0.5	4.86	0.17
2036 Base + Development (350 dwellings in Phase 2) + Committed Developments						
Site Access	0.5	14.50	0.32	0.2	12.14	0.16
Newport Rd NB	0.1	4.73	0.07	0.5	4.83	0.17

4.1.3 The southern site access is forecast to experience similar queuing and delays as the northern access, as shown in Table 6 and in the full model results in **Appendix B.**

Table 6: Southern Site Access Model Results

	AM Peak			PM Peak		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
2036 Base + Development (350 dwellings in Phase 2)						
Site Access	0.5	14.65	0.32	0.2	12.64	0.17
Newport Rd NB	0.1	4.80	0.07	0.5	4.94	0.18
2036 Base + Development (350 dwellings in Phase 2) + Committed Developments						
Site Access	0.5	15.06	0.32	0.2	13.00	0.17
Newport Rd NB	0.1	4.75	0.07	0.6	4.90	0.18

4.1.4 The modelling results show that the junctions are forecast to operate well within capacity, with minimal queuing or delays, particularly on Newport Road. The proposed priority junction access arrangement is thus considered appropriate to service up to 350 dwellings in Phase 2, with queuing on Newport Road forecast to remain negligible up to this development threshold. It is noted that there is potential for in excess of 350 dwellings to be provided, subject to consideration of other access types and a review of the wider development impact.

Sensitivity Test

4.1.5 As a sensitivity test, Medina Yard development traffic has been added to the assessed flows. The resulting model outputs are provided in Table 7, with the full model outputs included in **Appendix B**. This demonstrates that the impact of adding traffic associated with the Marina Yard development is negligible.

Table 7: Sensitivity Testing Site Access Model Results

	AM Peak			PM Peak		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
Northern Site Access (350 dwellings in Phase 2)						
Site Access	0.5	15.47	0.33	0.2	12.58	0.17
Newport Rd NB	0.1	4.69	0.07	0.6	4.70	0.18
Southern Site Access (350 dwellings in Phase 2)						
Site Access	0.5	16.12	0.34	0.2	13.52	0.18
Newport Rd NB	0.1	4.71	0.08	0.6	4.77	0.19

4.2 Rationale for Simple Priority Junctions

4.2.1 This section sets out the rationale for providing simple priority junctions for the site accesses, in lieu of ghost island junction provision.

Guidance and Standards

4.2.2 The Design Manual for Roads and Bridges (DMRB) Figure 2.3.1 sets out the approximate junction provision required for single carriageway roads. Figure 2.3.1 indicates that simple priority junctions are typically suitable where the major road two-way AADT is 13,000 or less, whilst the minor road AADT is 300 or less. The thresholds are based on flows only, with more detailed traffic modelling needed to check capacity.

4.2.3 Whilst the proposed development would generate in excess of 300 AADT movements, the major road flows on the A3020 can be expected to remain less than 13,000.

4.2.4 DMRB is a Standard produced by National Highways (formerly Highways England) in collaboration with the other national Highway / Roads authorities of the UK. These authorities apply the requirements set out DMRB when motorway and all-purpose trunk roads are designed, improved and maintained. DMRB is made up of a series of documents; Document GG101 forms the introduction to DMRB and states:

"1.1 The DMRB provides requirements which shall be applied to the appraisal, design, maintenance, operation and disposal of motorway and all-purpose trunk roads for which one of the Overseeing Organisations is highway or road authority.

NOTE DMRB requirements can be applied to other roads with the approval of the specific highway or local authority acting as the Overseeing Organisation.

1.1.1 Where DMRB requirements are applied to other roads, the specific highway or local road authority acting as the Overseeing Organisation should decide on the extent to which the requirements are appropriate in any given situation."

GG101 also defines the meaning of the following terms:

- The verb 'must' indicates a statutory or legislative requirement.
- The verb 'shall' indicates a requirement of the Overseeing Organisation.
- The verb 'should' indicates advice expressed as a recommendation.
- The verb 'may' indicates advice expressed as a permissible approach.

4.2.5 While the A3020 is a classified road which links two of the main towns on the Isle of Wight, it does not form part of the trunk road network and therefore the extent to which DMRB is applied is a matter for the specific highway authority, in this case Island Roads, who are free to apply it as they see fit.

4.2.6 The status of DMRB in relation to non-trunk roads is made clear in both Manual for Streets (MfS) and Manual for Streets 2 (MfS2), which are respectively published and endorsed by the Department for Transport and form the Government's overarching guidance documents for the design of local (non-trunk) highways.

4.2.7 While MfS focuses on residential and lightly-trafficked streets, MfS2 explains how the principles of the latter can be applied to non-trunk roads, helping to fill the perceived gap in design guidance between MfS and DMRB.

4.2.8 MfS2 goes on to state that *"as a starting point for any scheme affecting non-trunk roads, designers should start with MfS"* (Para 1.3.2) and that *"DMRB or other standards and guidance is only used where the guidance in MfS is not sufficient or where particular evidence leads a designer to conclude that MfS is not applicable"*.

4.2.9 DMRB document CD123 'Geometric design of at-grade priority and signal-controlled junctions' states in Para 2.3.1 that the type of priority junction should be determined by traffic flows on the major and minor roads, as well as the standard of the major road itself. Figure 2.3.1 follows, which illustrates approximate levels of provision on single carriageway roads for varying traffic flows. A note below Figure 2.3.1 advises that *"The 2-way AADT design year flows are used to determine the approximate level of junction provision prior to more detailed traffic modelling to check capacity"*.

4.2.10 Figure 2.3.1 indicates that DMRB recommends, subject to detailed traffic modelling, that ghost islands should be provided at new trunk road junctions which would carry the volumes of traffic forecast at the site accesses. The limiting values are a major road flow of 13,000 vehicles per day and a minor road flow of 300 vehicles per day. The flows at the proposed site accesses would exceed with the latter but not the former. However, it should be noted that DMRB recommends a ghost island junction would be suitable for much higher traffic flows – up to 5,000 vehicles per

day at this level of major road flow, and therefore the forecast flow is towards the lower limit of the ghost island range.

4.2.11 MfS2 provides advice on the use of ghost islands which, as noted above, is applicable to non-trunk roads such as the A3020. Para 9.4.7 refers to an earlier DMRB document, TD 42/95, Geometric Design of Major/Minor Priority Junctions. This standards recommended that ghost islands be considered above a higher side road flow – 500 vehicles per day – but MfS2 notes that this applies to trunk roads.

4.2.12 MfS2 goes on to state that *"It (ie 500 vehicles per day) is a relatively low flow, and junctions without right turn lanes will often be able to cater for higher levels of turning traffic without resulting in significant congestion".* Clearly 300 vehicles per day can be considered a low flow based on the advice in MfS2. Para 9.4.8 notes that right turning lanes *"lead to higher traffic speeds and authorities should therefore consider carefully all of the effects before deciding to provide them"*.

4.2.13 Although it no longer forms part of DMRB, TD 42/95 provided further guidance on the factors affecting the choice of junction type, noting in Para 2.5 that *"sequences of junctions should not involve many different layout types"*.

Research

4.2.14 Research into Accidents at Rural T-junctions was carried out by TRL (formerly the Transport and Road Research Laboratory) in Research Report 65, published in 1986. This examined traffic accidents occurring at some 300 T-junctions on rural carriageway roads with a speed limit of 50mph or higher – i.e. higher than at the site in question.

4.2.15 The report includes a number of regression models for the many different types of collision that can occur at T-junctions and includes an assessment of whether physical features, including ghost islands, have a significant effect on the frequency of collisions. In some types of collision – e.g. rear end shunts – the study found that ghost islands do have a beneficial effect but for others – e.g. right turners from the minor arm colliding with major road vehicles approaching from the right – ghost islands were associated with a higher number of collisions.

4.2.16 Overall the report concludes that *"over the junction sample as a whole, i.e. including junctions with lower flow, the presence of ghost islands…had no significant effect on total accidents…"*

4.2.17 A similar study was carried out by TRL on urban T-junctions in TRL Report 184, published in 1996. This studied the accident risk at 980 urban T-junctions with 30mph and 40mph speed limits. This study again investigated different types of collision and the effect of different features. Overall the study found that the presence of a ghost island increased the overall accident rate from 11.2

to 12.5 per 100 million vehicles. Accident severity also increased slightly, from 22.1% to 23.8% KSIs.

4.2.18 Stephen Windass of Local Transport Projects prepared a Technical Paper at the JCT Symposium of 2015 on the effects of ghost islands on road safety and capacity. This study reviewed the two TRL reports described above, and drew similar conclusions. The report endorsed the guidance set out in MfS2. It also used the industry-standard PICADY program (now part of the Junctions 10 suite) to assess the effect of a range of geometries on junction capacity and predicted collisions.

4.2.19 The closest set of parameters to the Somerton site[1] analysed by Mr Windass found that a simple junction would perform suitably, and that the introduction of a ghost island would increase the number of Personal Injury Collisions from 0.33 to 0.39 per annum.

Capacity Analysis

4.2.20 As expected, the site access modelling demonstrates that there would be very low levels of delay to traffic during the peak hours, including south-north through traffic on the A3020.

4.2.21 The delay per vehicle to through traffic is forecast to be circa five seconds per vehicle on average, during the worst 15 minute modelled period (i.e. assuming the default 'bell curve' peak). The maximum Ratio of Flow to Capacity for this movement is well below the 0.85 normally taken as the practical limit of capacity.

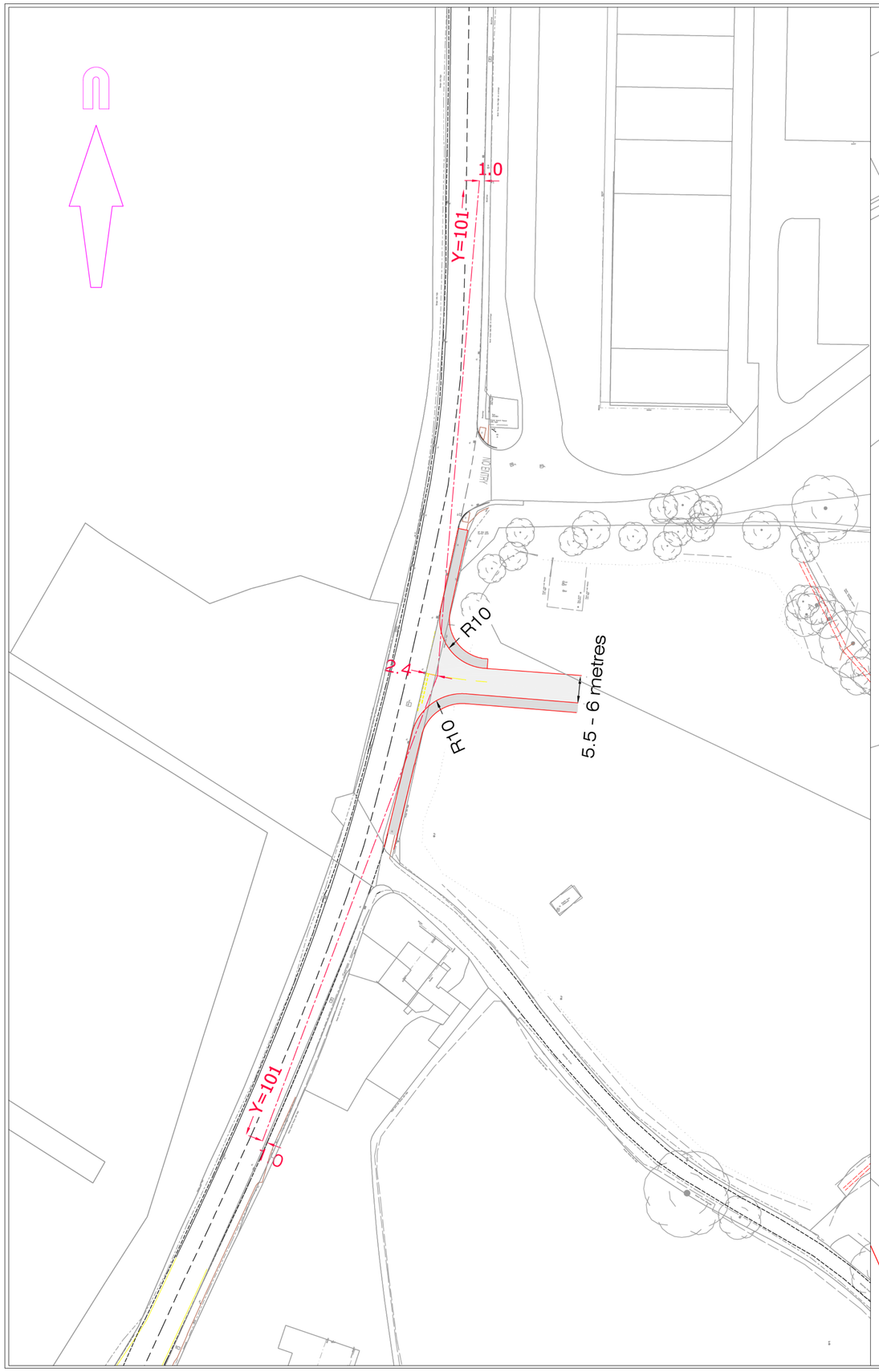
5 Summary and Conclusions

5.1.1 This Technical Note has been prepared by PJA to support a representation to the Local Plan process in relation to land at Somerton Farm in Cowes, PO31 8PE. The Technical Note illustrates that the site is in an excellent location for trips to Cowes and Newport to be made by sustainable modes of travel.

5.1.2 The note further demonstrates that safe and appropriate access to the site can be achieved via the two simple priority junctions onto the A3020 Newport Road that will be delivered to support Phase 1. Capacity modelling has confirmed that the junctions will continue to operate with minimal queuing or delay following the addition of traffic associated with up to 350 additional dwellings and assumed traffic growth up to a future assessment horizon of 2036. There would therefore be no reason to suggest that an additional residential allocation at Somerton Farm would result in an adverse impact on highway safety or a severe impact on congestion.

[1] Medium Major Road flow, Medium Minor Road flow, Low turning flow, Simple B layout (7.3m carriageway)

Appendix A Mayer Brown Priority Junctions



rev.	amendment	date

mayer brown

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client
MR S BILES

project
SOMERTON FARM
MIXED USE DEVELOPMENT

scale	drawn by	checked by
1: 500 @ A1	GRT	KWF

date	cad file
JULY 2021	Somerton Working.dwg

title
INDICATIVE JUNCTION LAYOUT
& VISIBILITY SPLAYS

drawing number	rev.
24963/1	

Appendix B PICADY Modelling Outputs

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.4.1693

For sales and distribution information, program advice and maintenance, contact TRL Software:
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

Filename: 05864-M-01-D-Site Access North.j10
Path: C:\PJA\Phil Jones Associates\SharedData - 05864 Somerton Farm Cowes\3. Technical\3.2 Modelling
Report generation date: 14/08/2024 14:08:06

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2036 Base + 350 Dev									
Stream B-AC	D1	0.4	14.12	0.31	B	D2	0.2	11.83	0.16	B
Stream C-AB		0.1	4.77	0.07	A		0.5	4.86	0.17	A
	2036 Base + 350 Dev + Comm									
Stream B-AC	D11	0.5	14.50	0.32	B	D12	0.2	12.14	0.16	B
Stream C-AB		0.1	4.73	0.07	A		0.5	4.83	0.17	A
	2036 Base + 350 Dev + Comm SENSITIVITY TEST									
Stream B-AC	D13	0.5	15.47	0.33	C	D14	0.2	12.58	0.17	B
Stream C-AB		0.1	4.69	0.07	A		0.6	4.70	0.18	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

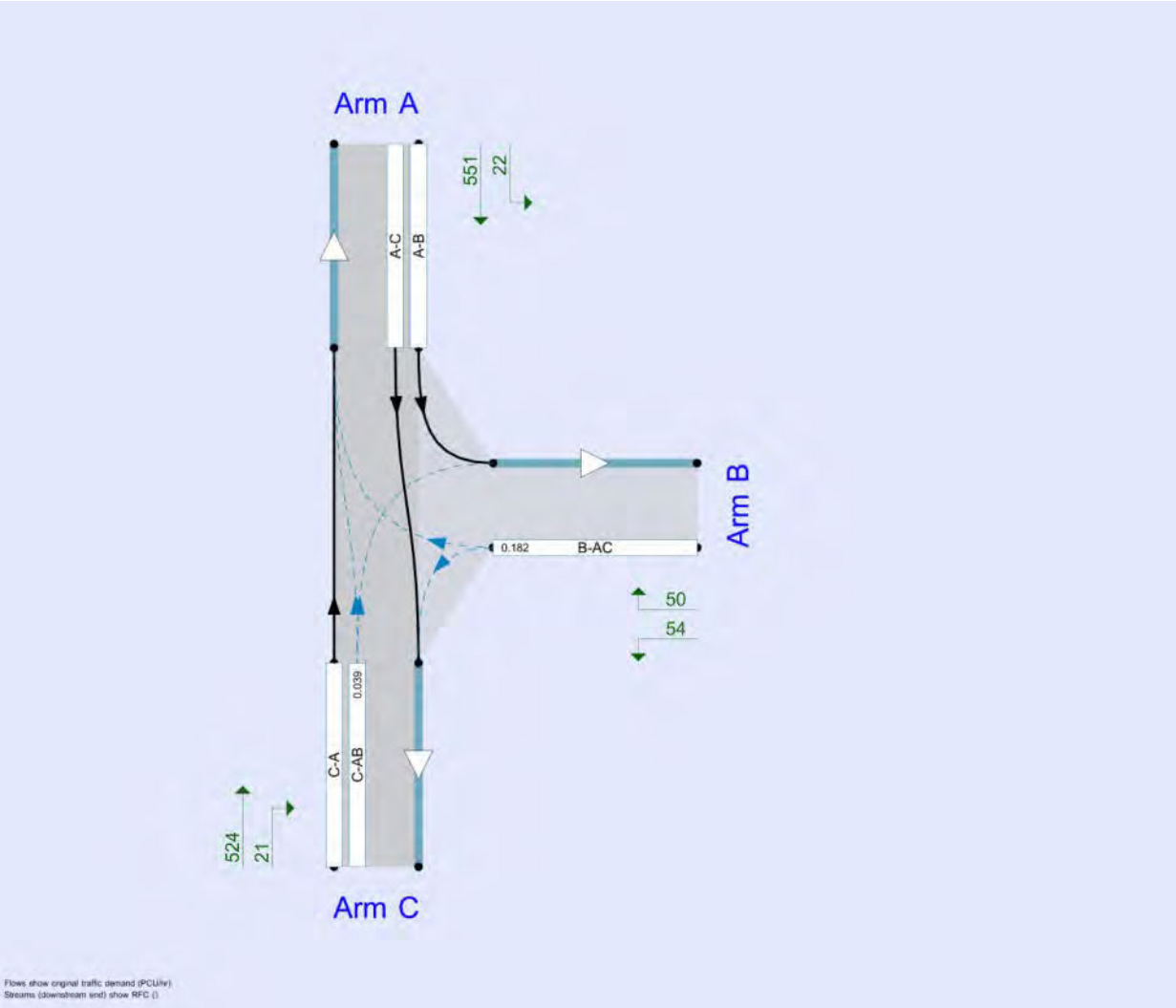
File summary

File Description

Title	
Location	
Site number	
Date	29/07/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PJA\LucyKing
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2036 Base + 350 Dev	AM	ONE HOUR	07:30	09:00	15
D2	2036 Base + 350 Dev	PM	ONE HOUR	16:15	17:45	15
D11	2036 Base + 350 Dev + Comm	AM	ONE HOUR	07:30	09:00	15
D12	2036 Base + 350 Dev + Comm	PM	ONE HOUR	16:15	17:45	15
D13	2036 Base + 350 Dev + Comm SENSITIVITY TEST	AM	ONE HOUR	07:30	09:00	15
D14	2036 Base + 350 Dev + Comm SENSITIVITY TEST	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2036 Base + 350 Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.43	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.43	A

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.99			89.4	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.74	115	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	516	0.090	0.227	0.143	0.325
B-C	626	0.092	0.232	-	-
C-B	626	0.232	0.232	-	-

The slopes and intercepts shown above include custom intercept adjustments only.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2036 Base + 350 Dev	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	557	100.000
B		✓	104	100.000
C		✓	525	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	22	535
	B	50	0	54
	C	504	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.31	14.12	0.4	B
C-AB	0.07	4.77	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	435	0.180	77	0.2	10.053	B
C-AB	30	785	0.038	30	0.1	4.761	A
C-A	354			354			
A-B	17			17			
A-C	391			391			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	408	0.229	93	0.3	11.436	B
C-AB	41	821	0.050	41	0.1	4.610	A
C-A	418			418			
A-B	20			20			
A-C	467			467			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	369	0.310	114	0.4	14.060	B
C-AB	61	873	0.069	60	0.1	4.425	A
C-A	501			501			
A-B	24			24			
A-C	572			572			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	369	0.310	114	0.4	14.122	B
C-AB	61	873	0.069	61	0.1	4.433	A
C-A	501			501			

A-B	24			24			
A-C	572			572			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	408	0.229	94	0.3	11.501	B
C-AB	41	821	0.050	41	0.1	4.622	A
C-A	418			418			
A-B	20			20			
A-C	467			467			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	435	0.180	79	0.2	10.122	B
C-AB	30	785	0.038	30	0.1	4.771	A
C-A	354			354			
A-B	17			17			
A-C	391			391			

2036 Base + 350 Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.03	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.03	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2036 Base + 350 Dev	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	524	100.000
B		✓	52	100.000
C		✓	592	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	46	478
	B	27	0	25
	C	542	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.16	11.83	0.2	B
C-AB	0.17	4.86	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	429	0.091	39	0.1	9.220	A
C-AB	74	817	0.091	74	0.2	4.843	A
C-A	367			367			
A-B	35			35			
A-C	353			353			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	401	0.117	47	0.1	10.153	B
C-AB	103	859	0.120	103	0.3	4.760	A
C-A	424			424			
A-B	41			41			
A-C	421			421			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	362	0.158	57	0.2	11.805	B
C-AB	155	920	0.168	154	0.5	4.706	A
C-A	491			491			
A-B	51			51			
A-C	516			516			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	362	0.158	57	0.2	11.825	B
C-AB	155	921	0.169	155	0.5	4.716	A
C-A	491			491			
A-B	51			51			
A-C	516			516			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	401	0.117	47	0.1	10.178	B
C-AB	103	860	0.120	104	0.3	4.777	A
C-A	424			424			
A-B	41			41			
A-C	421			421			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	429	0.091	39	0.1	9.250	A
C-AB	75	818	0.092	75	0.2	4.859	A
C-A	367			367			
A-B	35			35			
A-C	353			353			

2036 Base + 350 Dev + Comm, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.43	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.43	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2036 Base + 350 Dev + Comm	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	573	100.000
B		✓	104	100.000
C		✓	545	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	22	551
	B	50	0	54
	C	524	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.32	14.50	0.5	B
C-AB	0.07	4.73	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	430	0.182	77	0.2	10.175	B
C-AB	31	793	0.039	30	0.1	4.716	A
C-A	368			368			
A-B	17			17			
A-C	403			403			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	402	0.232	93	0.3	11.632	B
C-AB	42	831	0.051	42	0.1	4.558	A
C-A	434			434			
A-B	20			20			
A-C	481			481			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	363	0.316	114	0.5	14.435	B
C-AB	63	886	0.071	63	0.1	4.372	A
C-A	520			520			
A-B	24			24			
A-C	589			589			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	363	0.316	114	0.5	14.504	B
C-AB	63	886	0.071	63	0.1	4.378	A
C-A	520			520			
A-B	24			24			
A-C	589			589			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	402	0.232	94	0.3	11.703	B
C-AB	42	831	0.051	42	0.1	4.572	A
C-A	434			434			
A-B	20			20			
A-C	481			481			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	430	0.182	79	0.2	10.248	B
C-AB	31	794	0.039	31	0.1	4.728	A
C-A	368			368			
A-B	17			17			
A-C	403			403			

2036 Base + 350 Dev + Comm, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.03	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.03	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2036 Base + 350 Dev + Comm	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	544	100.000
B		✓	52	100.000
C		✓	611	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	46	498
	B	27	0	25
	C	561	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.16	12.14	0.2	B
C-AB	0.17	4.83	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	424	0.092	39	0.1	9.342	A
C-AB	76	824	0.093	76	0.2	4.808	A
C-A	379			379			
A-B	35			35			
A-C	368			368			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	395	0.118	47	0.1	10.334	B
C-AB	106	868	0.122	106	0.3	4.724	A
C-A	438			438			
A-B	41			41			
A-C	439			439			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	354	0.162	57	0.2	12.107	B
C-AB	161	932	0.173	161	0.5	4.674	A
C-A	505			505			
A-B	51			51			
A-C	538			538			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	354	0.162	57	0.2	12.139	B
C-AB	162	932	0.174	162	0.5	4.685	A
C-A	505			505			
A-B	51			51			
A-C	538			538			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	395	0.118	47	0.1	10.358	B
C-AB	107	869	0.123	108	0.3	4.743	A
C-A	437			437			
A-B	41			41			
A-C	439			439			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	424	0.092	39	0.1	9.373	A
C-AB	77	825	0.093	77	0.2	4.827	A
C-A	379			379			
A-B	35			35			
A-C	368			368			

2036 Base + 350 Dev + Comm SENSITIVITY TEST, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.44	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.44	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2036 Base + 350 Dev + Comm SENSITIVITY TEST	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	618	100.000
B		✓	104	100.000
C		✓	572	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	22	596
	B	50	0	54
	C	551	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.33	15.47	0.5	C
C-AB	0.07	4.69	0.1	A
C-A				

A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	420	0.186	77	0.2	10.473	B
C-AB	32	801	0.040	32	0.1	4.676	A
C-A	387			387			
A-B	17			17			
A-C	436			436			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	390	0.240	93	0.3	12.110	B
C-AB	44	841	0.053	44	0.1	4.513	A
C-A	456			456			
A-B	20			20			
A-C	520			520			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	347	0.330	114	0.5	15.380	C
C-AB	67	899	0.075	67	0.1	4.322	A
C-A	545			545			
A-B	24			24			
A-C	637			637			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	347	0.330	114	0.5	15.470	C
C-AB	67	899	0.075	67	0.1	4.330	A
C-A	545			545			
A-B	24			24			
A-C	637			637			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	390	0.240	94	0.3	12.194	B
C-AB	44	841	0.053	45	0.1	4.529	A
C-A	455			455			
A-B	20			20			
A-C	520			520			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	420	0.186	79	0.2	10.552	B
C-AB	32	801	0.040	32	0.1	4.688	A
C-A	387			387			
A-B	17			17			
A-C	436			436			

2036 Base + 350 Dev + Comm SENSITIVITY TEST, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.02	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.02	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2036 Base + 350 Dev + Comm SENSITIVITY TEST	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	557	100.000
B		✓	52	100.000
C		✓	662	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	46	511
	B	27	0	25
	C	612	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.17	12.58	0.2	B
C-AB	0.18	4.70	0.6	A
C-A				

A-B				
A-C				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	417	0.094	39	0.1	9.500	A
C-AB	81	849	0.096	81	0.2	4.683	A
C-A	413			413			
A-B	35			35			
A-C	377			377			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	387	0.121	47	0.1	10.573	B
C-AB	115	899	0.128	114	0.3	4.593	A
C-A	475			475			
A-B	41			41			
A-C	450			450			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	344	0.167	57	0.2	12.549	B
C-AB	178	970	0.183	177	0.6	4.545	A
C-A	545			545			
A-B	51			51			
A-C	552			552			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	343	0.167	57	0.2	12.575	B
C-AB	178	971	0.184	178	0.6	4.558	A
C-A	544			544			
A-B	51			51			
A-C	552			552			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	387	0.121	47	0.1	10.604	B
C-AB	115	900	0.128	116	0.3	4.613	A
C-A	474			474			
A-B	41			41			
A-C	450			450			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	417	0.094	39	0.1	9.531	A
C-AB	82	850	0.096	82	0.2	4.701	A
C-A	412			412			
A-B	35			35			
A-C	377			377			

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.4.1693

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Filename: 05864-M-02-D-Site Access South.j10
Path: C:\PJA\Phil Jones Associates\SharedData - 05864 Somerton Farm Cowes\3. Technical\3.2 Modelling
Report generation date: 14/08/2024 14:09:25

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	2036 Base + 350 Dev									
Stream B-AC	D1	0.5	14.65	0.32	B	D2	0.2	12.64	0.17	B
Stream C-AB		0.1	4.80	0.07	A		0.5	4.94	0.18	A
	2036 Base + 350 Dev + Comm									
Stream B-AC	D11	0.5	15.06	0.32	C	D12	0.2	13.00	0.17	B
Stream C-AB		0.1	4.75	0.07	A		0.6	4.90	0.18	A
	2036 Base + 350 Dev + Comm SENSITIVITY TEST									
Stream B-AC	D13	0.5	16.12	0.34	C	D14	0.2	13.52	0.18	B
Stream C-AB		0.1	4.71	0.08	A		0.6	4.77	0.19	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

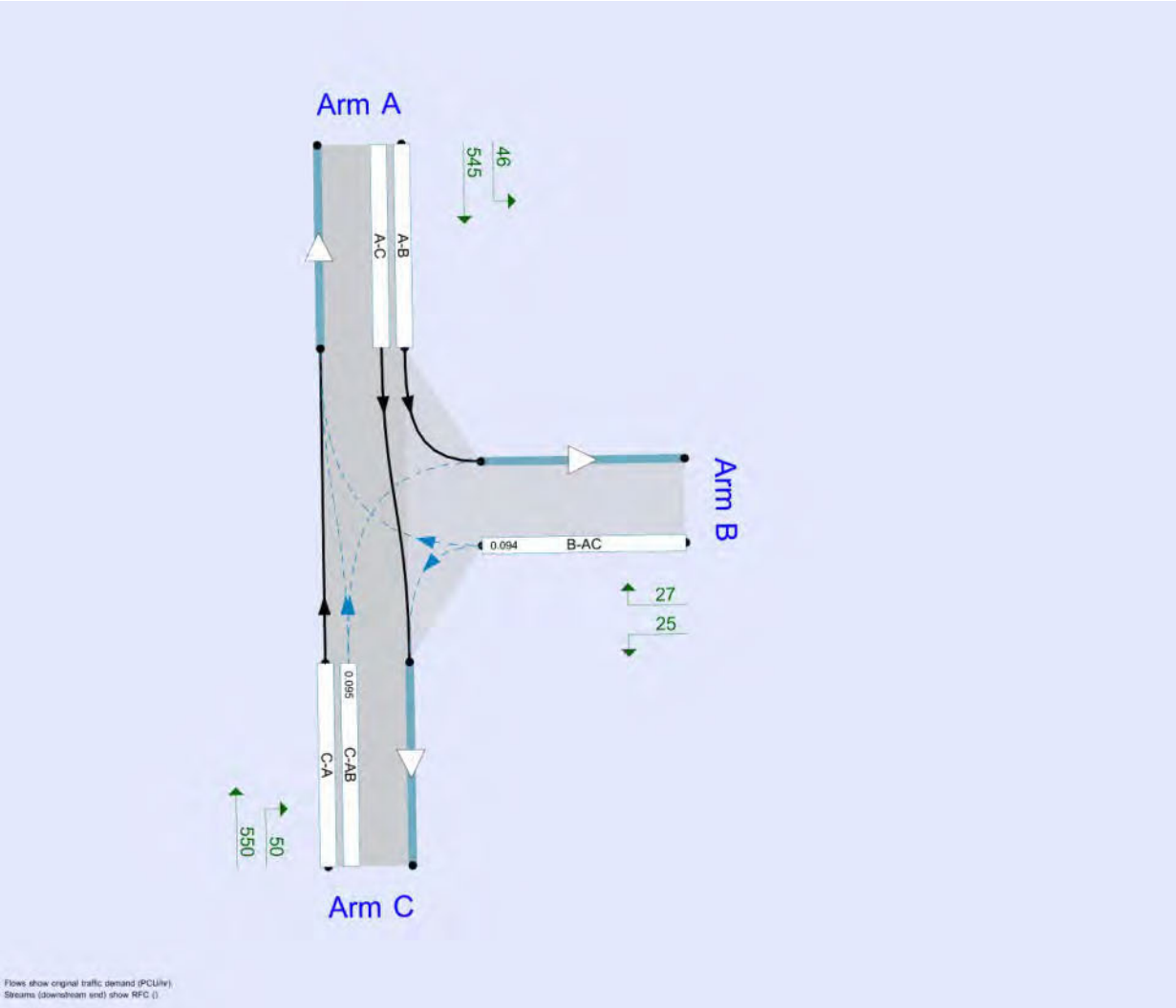
File summary

File Description

Title	
Location	
Site number	
Date	29/07/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PJA\LucyKing
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2036 Base + 350 Dev	AM	ONE HOUR	07:45	09:15	15
D2	2036 Base + 350 Dev	PM	ONE HOUR	16:45	18:15	15
D11	2036 Base + 350 Dev + Comm	AM	ONE HOUR	07:45	09:15	15
D12	2036 Base + 350 Dev + Comm	PM	ONE HOUR	16:45	18:15	15
D13	2036 Base + 350 Dev + Comm SENSITIVITY TEST	AM	ONE HOUR	07:45	09:15	15
D14	2036 Base + 350 Dev + Comm SENSITIVITY TEST	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2036 Base + 350 Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.44	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.44	A

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.00			77.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.75	33	63

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	506	0.088	0.223	0.140	0.318
B-C	647	0.095	0.240	-	-
C-B	619	0.229	0.229	-	-

The slopes and intercepts shown above include custom intercept adjustments only.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2036 Base + 350 Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	591	100.000
B		✓	104	100.000
C		✓	529	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	22	569
	B	50	0	54
	C	508	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.32	14.65	0.5	B
C-AB	0.07	4.80	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	430	0.182	77	0.2	10.197	B
C-AB	30	782	0.039	30	0.1	4.788	A
C-A	360			360			
A-B	17			17			
A-C	416			416			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	401	0.233	93	0.3	11.687	B
C-AB	42	819	0.051	42	0.1	4.633	A
C-A	425			425			
A-B	20			20			
A-C	497			497			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	360	0.318	114	0.5	14.572	B
C-AB	63	872	0.072	62	0.1	4.444	A
C-A	509			509			
A-B	24			24			
A-C	608			608			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	360	0.318	114	0.5	14.646	B
C-AB	63	872	0.072	63	0.1	4.449	A
C-A	509			509			

A-B	24			24			
A-C	608			608			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	401	0.233	94	0.3	11.760	B
C-AB	42	819	0.051	42	0.1	4.642	A
C-A	425			425			
A-B	20			20			
A-C	497			497			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	430	0.182	79	0.2	10.270	B
C-AB	31	782	0.039	31	0.1	4.796	A
C-A	360			360			
A-B	17			17			
A-C	416			416			

2036 Base + 350 Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.03	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.03	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2036 Base + 350 Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	591	100.000
B		✓	52	100.000
C		✓	600	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	46	545
	B	27	0	25
	C	550	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.17	12.64	0.2	B
C-AB	0.18	4.94	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	416	0.094	39	0.1	9.522	A
C-AB	76	808	0.095	76	0.2	4.918	A
C-A	371			371			
A-B	35			35			
A-C	402			402			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	386	0.121	47	0.1	10.608	B
C-AB	107	850	0.125	106	0.3	4.841	A
C-A	428			428			
A-B	41			41			
A-C	480			480			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	342	0.167	57	0.2	12.611	B
C-AB	162	912	0.178	161	0.5	4.807	A
C-A	493			493			
A-B	51			51			
A-C	588			588			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	342	0.167	57	0.2	12.636	B
C-AB	162	912	0.178	162	0.5	4.819	A
C-A	492			492			
A-B	51			51			
A-C	588			588			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	386	0.121	47	0.1	10.640	B
C-AB	107	851	0.126	108	0.3	4.863	A
C-A	427			427			
A-B	41			41			
A-C	480			480			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	416	0.094	39	0.1	9.555	A
C-AB	77	808	0.095	77	0.2	4.938	A
C-A	371			371			
A-B	35			35			
A-C	402			402			

2036 Base + 350 Dev + Comm, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.44	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.44	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2036 Base + 350 Dev + Comm	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	607	100.000
B		✓	104	100.000
C		✓	549	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	22	585
	B	50	0	54
	C	528	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.32	15.06	0.5	C
C-AB	0.07	4.75	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	425	0.184	77	0.2	10.327	B
C-AB	31	790	0.039	31	0.1	4.741	A
C-A	374			374			
A-B	17			17			
A-C	428			428			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	396	0.236	93	0.3	11.893	B
C-AB	43	829	0.052	43	0.1	4.581	A
C-A	441			441			
A-B	20			20			
A-C	511			511			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	353	0.324	114	0.5	14.983	B
C-AB	65	885	0.074	65	0.1	4.389	A
C-A	528			528			
A-B	24			24			
A-C	625			625			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	353	0.324	114	0.5	15.064	C
C-AB	65	885	0.074	65	0.1	4.394	A
C-A	528			528			
A-B	24			24			
A-C	625			625			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	395	0.236	94	0.3	11.973	B
C-AB	43	829	0.052	44	0.1	4.592	A
C-A	441			441			
A-B	20			20			
A-C	511			511			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	425	0.184	79	0.2	10.402	B
C-AB	31	790	0.040	31	0.1	4.751	A
C-A	374			374			
A-B	17			17			
A-C	428			428			

2036 Base + 350 Dev + Comm, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.03	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.03	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2036 Base + 350 Dev + Comm	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	611	100.000
B		✓	52	100.000
C		✓	619	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	46	565
	B	27	0	25
	C	569	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.17	13.00	0.2	B
C-AB	0.18	4.90	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	411	0.095	39	0.1	9.652	A
C-AB	78	815	0.096	78	0.2	4.882	A
C-A	383			383			
A-B	35			35			
A-C	417			417			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	380	0.123	47	0.1	10.809	B
C-AB	110	859	0.128	110	0.3	4.806	A
C-A	441			441			
A-B	41			41			
A-C	498			498			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	334	0.171	57	0.2	12.973	B
C-AB	169	924	0.183	168	0.5	4.772	A
C-A	506			506			
A-B	51			51			
A-C	610			610			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	334	0.171	57	0.2	13.002	B
C-AB	169	924	0.183	169	0.6	4.787	A
C-A	506			506			
A-B	51			51			
A-C	610			610			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	379	0.123	47	0.1	10.843	B
C-AB	111	860	0.129	112	0.3	4.827	A
C-A	441			441			
A-B	41			41			
A-C	498			498			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	411	0.095	39	0.1	9.686	A
C-AB	79	816	0.097	80	0.2	4.902	A
C-A	383			383			
A-B	35			35			
A-C	417			417			

2036 Base + 350 Dev + Comm SENSITIVITY TEST, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.45	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.45	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2036 Base + 350 Dev + Comm SENSITIVITY TEST	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	652	100.000
B		✓	104	100.000
C		✓	576	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	22	630
	B	50	0	54
	C	555	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.34	16.12	0.5	C
C-AB	0.08	4.71	0.1	A
C-A				

A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	415	0.189	77	0.2	10.635	B
C-AB	32	798	0.041	32	0.1	4.699	A
C-A	393			393			
A-B	17			17			
A-C	460			460			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	383	0.244	93	0.3	12.400	B
C-AB	45	839	0.054	45	0.1	4.532	A
C-A	463			463			
A-B	20			20			
A-C	550			550			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	338	0.339	114	0.5	16.019	C
C-AB	70	899	0.077	69	0.1	4.338	A
C-A	553			553			
A-B	24			24			
A-C	673			673			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	338	0.339	114	0.5	16.121	C
C-AB	70	899	0.078	70	0.1	4.343	A
C-A	553			553			
A-B	24			24			
A-C	673			673			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	383	0.244	94	0.3	12.492	B
C-AB	46	839	0.054	46	0.1	4.543	A
C-A	462			462			
A-B	20			20			
A-C	550			550			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	415	0.189	79	0.2	10.717	B
C-AB	33	798	0.041	33	0.1	4.707	A
C-A	393			393			
A-B	17			17			
A-C	460			460			

2036 Base + 350 Dev + Comm SENSITIVITY TEST, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.03	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.03	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2036 Base + 350 Dev + Comm SENSITIVITY TEST	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	624	100.000
B		✓	52	100.000
C		✓	670	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	46	578
	B	27	0	25
	C	620	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.18	13.52	0.2	B
C-AB	0.19	4.77	0.6	A
C-A				

A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	405	0.097	39	0.1	9.825	A
C-AB	84	841	0.099	83	0.2	4.751	A
C-A	416			416			
A-B	35			35			
A-C	427			427			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	371	0.126	47	0.1	11.079	B
C-AB	119	890	0.134	118	0.3	4.668	A
C-A	478			478			
A-B	41			41			
A-C	509			509			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	324	0.177	57	0.2	13.484	B
C-AB	186	963	0.194	185	0.6	4.639	A
C-A	545			545			
A-B	51			51			
A-C	624			624			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	324	0.177	57	0.2	13.519	B
C-AB	187	963	0.194	187	0.6	4.653	A
C-A	544			544			
A-B	51			51			
A-C	624			624			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	371	0.126	47	0.1	11.115	B
C-AB	120	891	0.134	121	0.3	4.691	A
C-A	477			477			
A-B	41			41			
A-C	509			509			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	405	0.097	39	0.1	9.862	A
C-AB	84	841	0.100	85	0.2	4.772	A
C-A	416			416			
A-B	35			35			
A-C	427			427			