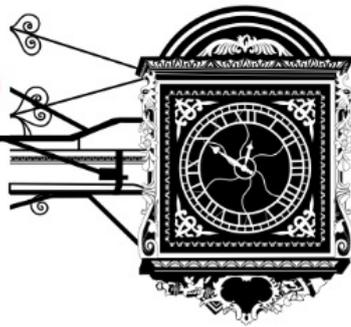


GUILDFORD VISION GROUP



A Unique Opportunity to develop a 21st Century transport hub for the Guildford Region based on the Railway Station

September 2018



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Contents

Background	5
Guildford Vision Group	5
Purpose of Report	5
Summary	7
Headline Facts for a Redeveloped Station	8
The Opportunity.....	8
GVG Proposal	9
Perils of Piecemeal Planning	10
The Report	13
1/ Guildford in Context	13
1.1/ Town	13
1.2/ Economic Importance.....	13
1.3/ Geography and Transport links	14
1.4/ Tackling Constraints	15
2/ Current Train Station	17
2.1/ Train Station history and Location	17
2.2/ Passenger Volumes and Routes	18
3/ Rail Services	19
3.1/ Current Services	19
3.2/ Drivers of Demand.....	19
3.3/ Proposed Changes and Additions to Rail Services and Frequency.....	21
4/ Guildford Station Expanding Capacity.....	27
4.1/ Current Operations.....	27
4.2/ Current Plans to improve Station Operations	28
4.3/ GVG View - Platform Capacity Required	29
4.4/ Clearing Guildford Throats	31
4.5/ Guildford Station Footprint.....	33
4.6/ Stabling.....	34
4.7/ Other Rail developments.....	35
5/ Encouraging Modal Shift to Rail	37
5.1/ Traffic Congestion.....	37
5.2 / Local Stations.....	37
5.3/ Rail as a Local Metro.....	38
5.4/ Park and Ride.....	39

6/ Creating a Transport Hub	41
6.1/ Station Access.....	41
6.2/ Sustainable Transport Corridor	41
7/ Station Public Realm.....	43
7.1/ Passenger Access.....	43
7.2 Retail Offer	43
7.3/ Disabled Access	43
7.4. Modal Integration	44
7.5 Summary	44
8/ A Vision for the Future	45
8.1/ The redevelopment potential for the site.....	45
8.2/ What is currently proposed.....	46
8.3/ A Vision for the Station Quarter is required.....	47
8.4/ GVG Vision for the Station.....	48
9/ Funding.....	53
10/ Conclusion	55
Appendix A - Proposed New services through or too Guildford Station	57
Appendix B - GVG Comments on Proposed New Services.....	58
Appendix C – GVG proposed revised Road Layout	64
Appendix D - GVG Plans for Guildford Station.....	65
Appendix E - Northern Flyover.....	69
Appendix F - Information Sources	70

Background

Guildford Vision Group

Guildford Vision Group (GVG) is a residents group mostly with professional backgrounds seeking to ensure Guildford Town Centre has plans developed that both improve the town and meet its obligations to the region over the next 10-30 years. This includes addressing the severe infrastructure deficit, improving sustainable transportation, tackling congestion, pollution, and safety issues.

The GVG has developed a vision for Guildford Town Centre (published in February 2017). The vision opens up the town centre for pedestrian use, separates out road traffic to a revised road layout, and enables the development of the town centre in an optimal fashion for housing, business, retail, tourist and civic purposes.

Central to our vision for Guildford is a new Station Quarter, on land owned by Network Rail a small number of other landowners, centred on a totally rebuilt station which facilitates a 21st century interchange and transport hub. More details can be found at www.guildfordvisiongroup.com

Purpose of Report

The station can play a central role in redeveloping the Town Centre. This report provides more detail on what we as GVG believe is required and proposes how the station can be redeveloped. This paper details GVG proposals on

- a) Likely identified demand for new improved rail services
- b) Changes required to the station operational infrastructure (Platforms etc)
- c) How the station could act as a transport hub for Guildford and the wider area
- d) Unlocking the development potential of the station hub to maximise use of the land for all stakeholders.
- e) How the rail system can improve transport links within the wider Guildford Borough area.

This report is based on published information, which we have referenced, in the document, where possible. The opinions in this report are those solely of GVG and don't represent any official policy.

We acknowledge the help and assistance of various professional organisations, especially Leonard Design Architects www.leonard.design.com

No liability is accepted for the contents of the report.

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Summary

The current Station and surrounding area present a unique opportunity to develop a 21st Century Transport hub serving Guildford and the wider Surrey area.

Potentially services on the Guildford rail network over the next 20 to 30 years could see a doubling of train movements at the station. Plans to accommodate this growth need accelerating; together with the appropriate safeguarding of land and management of encroaching development put in place.

Current published plans show a lack of ambition for the station area. Guildford Vision Group ((GVG) propose that with proper planning and execution the Station can provide:

- *Enlarged operational station to support the requirements of new rail services*
- *Both sides redeveloped in the context of a masterplan will provide better integration with the town centre and connectivity across the town*
- *Options to support modal shift, modal interchange, and achieve modal separation.*
- *Mitigation of effects (Pollution and Accidents) of road traffic flows within the town.*
- *Options for a series of new local and regional traffic flows using the rail network and other transport modes*
- *A new passenger environment at the station to handle growth and provide true access for all*
- *Increased resilience of the town centre by infrastructure improvements*
- *A development area of circa 6HA providing a mixture of housing and commercial space located on a transport interchange.*

The time is NOW to create an integrated plan for the Station area that serves Surrey for the next 100 years. Failure to do so will be a major failure of the planning system

Headline Facts for a Redeveloped Station

See Section 8 for details

	Current	Solum	Scheme A	Scheme B
Platforms	7	7	11 (12)	11 (12)
Capacity	Almost at Capacity	Almost at Capacity	Double Capacity	Double Capacity
Potential for a North Rail Flyover			Y	Y
Bus Stops	(2 on Bridge)	2-3 Forecourt	6-8 West and East side	6-8 West and East side
Car Parking Spaces	330	644	1100	1100
New West Entrance		No	Yes	Yes
Retail Space GEA SQ/M		3642	3,249	3,278
Office Space GEA SQ/M		2104	6,440	7,967
Dwellings		438	520	612
Station Area GEA SQ/M		923	2,554	2,960
Bike Access	Yes		Improved	Improved
Pedestrian Access	Yes		Improved	Improved
Resilient Road Layout	No		Yes	Yes

Note: Balance of Residential, Commercial and Retail is indicative. Parking for Solum/GVG schemes includes residential spaces

The Opportunity

Guildford Station is an ageing part of the town's infrastructure being essentially unchanged for 100 plus years. The station is well used with over 8 million passengers a year compared to a design capacity of 5 million, plus over 1m interchange passengers. It is the busiest station in the Wessex area outside the London Travel Card Area and is one of the 60 busiest stations in the country.¹

The station site is almost unique in the country is having rail services along five rail corridors, including ultimately to two major airports, and fast rail access to London, road access to the major road

network including M25, whilst being situated close to the attractive town centre.

The total site is circa 6HA and with a proper plan could be financially extremely viable for Network Rail whilst also supporting infrastructure improvement for the wider area.

In the report by Guildford Borough Council (GBC) on 'Guildford Town and Approaches Movement Study' 2015, Professor Glen Lyons of the University of the West of England writes:

"A strategy to 2050 for Guildford will face some significant unknowns and turbulence politically as well as economically in the journey to implementation. It is

¹ ORR Station Usage Statistics).

nevertheless a golden opportunity to be able to contemplate shaping the county town of Surrey over the next three to four decades - a period of time that will pass more quickly than we might imagine.

What we do to the transport system in Guildford will, over time, influence the town's very character, its built environment and the people and activities that comprise its identity and sense of place."

GVG supports these comments and the principles promoted in the report. GVG is less optimistic than the council on reliance on modal shift but predicates its plans on vehicle traffic at current levels, with increasing demand being achieved through use of other modes of transport. We agree that promoting modal shift should take every opportunity to reduce vehicular traffic over the coming decades. GVG is also supportive of all measures to increase safety, and reduce pollution in the town centre.

The Independent Transport Commission² set out a series of principles to create the best value from the rail network and stations including:

- 1 Be responsive to change – over time, infrastructure needs to adapt to changing lifestyles, expectations and modes of operation.*
- 2 Make the place a catalyst for growth – the full benefits of major infrastructure investment will only*

GVG Proposal

The GVG vision³ for the Town Centre was published in 2017. The vision opens up the town centre for pedestrian use, separates out road, Bus, Cyclists, and pedestrians to separate corridors with benefits to safety, pollution. This layout also makes modal shift more attractive. This enables the

be realised by each place if it serves as a place of vitality, where people want to come and stay.

- 3 Be connected and accessible – strong interconnectivity between high speed and classic rail networks will allow for long-term operational flexibility and the ease of interchange for passengers.*
- 4 Make stations as places of arrival and exchange – the station should be a place of interchange, exchange and transition that has the potential to generate income and contribute to non-operational functions such as retail and public services.*
- 5 Collaborate to succeed – city regions gain distinct advantages when they have internally shared economic interests and values; this is often enhanced by working together through a combined transport authority.*

GVG supports these principles and believes they are absolutely relevant and wholly applicable to Guildford.

Currently there is a once in a hundred years opportunity to create a modern station and 21st Century interchange as a transport hub for Guildford and the surrounding area.

development of the town centre in an optimal fashion.

A key part of the vision is tackling the transport infrastructure in the town centre.

² Classic Rail and Connected Cities: Capturing the Benefits from Rail System Development 2017

³ Full Details of GVG Masterplan are at www.guilfordvisiongroup.com



The increased use of the Rail System, including commuting growth both inward and outward from the town, is seen as critical element in preserving Guildford as a vibrant economic centre whilst enhancing the centre to be more attractive than at present

The redevelopment of the station is a critical element in all plans for the town.

Redevelopment must enable not stifle opportunity. Ad hoc schemes for limited purposes lose the opportunity for a development to deliver multi-faceted benefits. A redeveloped Station Area must enable:

- The operational needs of the railway – including enhanced rail services
- Enable interchange for all users between differing modes of transport.
- Provide good linkages to the Town in all directions via enhanced sustainable infrastructure (Roads, Pedestrian Access etc.)

Perils of Piecemeal Planning

Developing the Station, to full effect, as a transport hub is a complex operation. The balance between operational rail needs, interchange with other modes of transport, commercial value and public demand must be carefully struck, within the context of the wider plans for Guildford, surrounding area, and the wider transport network. In addition, a view needs to be taken as to likely societal,

- Unlock land at the station for development both commercial and housing.

GVG has created two options for redeveloping the station to create a true 21st century transport hub. Both proposals share common elements in that both:

- a) Provide an increase in platforms at the station to 11 compared to the 7 in use at present
- b) Provide for revised rail (signals and junctions), including examining option for a northern flyover
- c) Rebuild Station Public Spaces to provide better and expanded platform access, and retail areas
- d) Provide a rebuilt and updated eastern and western booking hall
- e) Provide easily accessible bus stops to the West and East of the station
- f) Change the current station car park to a Multi-storey Car Park
- g) Provide access for pedestrians and Cyclists which is safer and less polluted than the current arrangements.
- h) Provide extensive residential and commercial floorspace

The proposals differ in that one option builds over part of the operational station (Note this is over new build platforms that won't be operational during building works). This creates more space for housing and offices.

technological, and population changes over the longer term.

Current planning around the station is showing concerning signs of a piecemeal approach e.g. the Solum Development, Walnut Tree Close traffic plans. Network Rail and Guildford Borough Council and other stakeholders need a strategic approach to create a truly integrated Station Quarter to ensure the

station works effectively in the future and also create value from surrounding sites and preserve opportunities for the future.

The GVG plans for the station quarter as presented in the report are an example of taking a master planning approach to the site. We would hope it provides a stimulus to

creating a detailed masterplan for the station and surrounding sites.

The time is NOW to create a plan for the Station area that serves Surrey for the next 100years.

Failure to do so will be a major failure of the planning system.

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The Report

1/ Guildford in Context

Guildford is the county town of Surrey which is at the heart of one of the most vibrant areas of the national economy. Guildford is a critical commercial and administrative location. The Town is in a very attractive area, which does place constraints on the town due to geography and protected countryside. Balancing the needs for supporting economic activity with protecting a heritage and countryside will be a challenge

1.1/ Town

Guildford is the county town of Surrey and has a population of circa 77,000, with a wider of an estimated 146,00 inhabitants (2015 figures). Guildford is the county town of Surrey (Despite the Surrey County Council being headquartered in Kingston).

It acts as important centre of Health Services and Professional Services (including the courts). The town also supports University, Acting School, Law College, and technical college together with highly regarded schools.

1.2/ Economic Importance

The Enterprise M3 Local Enterprise Partnership (M3 LEP) covers the South West Quadrant of the country stretching down the M3 from London. Guildford is one of the key towns in its area. The M3 LEP abuts the LEP for Thames Valley & Berkshire, London, Coast to Capital, and Solent. The M3 LEP in a recent report⁴ has highlighted that

'Our area is a national economic asset for the UK. Despite only having 2.3% of the UK's residents, we are home to 2.5% of UK jobs, 2.9% of the UK's economic output (or Gross Value Added / 'GVA'), and 3.1% of the UK's businesses. Our GVA per resident is 26.1% higher than the national average and the fourth highest of any LEP area. Indeed, the LEP area has a bigger economy

than many UK cities, including the Greater Birmingham & Solihull LEP area and the Liverpool City Region.

Over the past five years Enterprise M3's GVA has grown by 20%, compared to 17.8% nationally, demonstrating the importance of our economy in driving national growth and our resilience in the face of relatively weak economic conditions.

We have an internationally focussed business base, with the highest number of foreign owned firms of any LEP outside of London. Our firms are responsible for a very high level of goods exports: £14.6bn in 2015, or £19,600 of goods exports per job in Enterprise M3 compared to £14,600 in Thames Valley Berkshire and £7,900 in

⁴ EM3 – Developing an industrial strategy for our area – Consultation Paper Autumn 2017

Coast to Capital. 60% of goods exports are to non-EU countries.'

This report also highlights that the area is 'home to a highly skilled population. 43.5% of our residents have NVQ4+ skills (roughly equivalent to degree-level), far higher than the national average of 37.9%. Because of this highly skilled population, 79.5% of our working-aged residents are in employment, compared to 74.4% nationally. The proportion of our residents employed in more professional positions

(managerial and technical positions) is higher than the national average (54.4% compared to 45.8% nationally).

Guildford and surrounding areas are the heart of the UK's video games industry, an internationally significant cluster of a growing sector.⁵

The town and surrounding area also has many high tech businesses e.g. Space Technology on the Research Park, Life Sciences at Pirbright.

1.3/ Geography and Transport links

Guildford is hemmed in by geography and the much valued 'Surrey Hills' countryside.

Developing new road capacity, particularly in the town centre, is very difficult. The likely costs of 'solving' the A3 congestion issues are likely to be very high.

The Victorians bequeathed to Guildford an extensive rail network that can be better utilised to serve the town.

Rail is a vital transport mode for the future, both for London commuting, long distance travel and access within the town and immediate area.



Figure 1 Guildford a Gap Town BLUE = Rail Lines, RED = A3

⁵ The M3 LEP area has 8,500 digital businesses, employing 50,000 people and accounting for 7.4% of all Enterprise

1.4/ Tackling Constraints

Guildford is at the centre of this South West Quadrant, but also in a wider Arc of economically vibrant communities from Cambridge to Ashford. There are indicators that Guildford economic activity is being constrained by traffic issues and that the town centre is suffering from critical levels of pollution, congestion,⁶ and planning blight.

Two recent reports highlighted the need to improve links along this arc around London. Missing Links - How better South East transport links can improve UK economic potential⁷ highlighted as one of it's 5 key projects for the region.

North Downs Rail – from Oxford, through Reading and Gatwick Airport to Ashford in Kent (existing corridor). Provides better direct links between major South East economic centres will improve travel for millions of commuters, businesses and holiday makers, including a step change in public transport access to the UK's second busiest airport at Gatwick. The route also has significant potential to relieve pressure on rail congestion in London by removing the need for travellers to change trains in London when moving from one part of the South East to another.

The recent report on the M25 south west quadrant⁸ summarised the value of wider Guildford Area to the UK and some of the issues it faces.

“The south east in general, and the South West Quadrant of M25 corridor, in particular, is ideally placed to perform a vital role for UK plc for years to come.

⁶ INRIX Congestion Data

⁷ Published by South East England Councils, South East Strategic Leaders, South East Directors of



Figure 2 The Arc of Economic Activity around London

The potential for economic growth is very clear, not least in the current growth plans of the LEPs in the region.

Demand for movement in the area will continue to grow, adding to the current level of suppressed demand in the transport system.

If nothing is done, congestion will increase, and journeys will become even more unreliable. The continued worsening of already poor travelling conditions will gradually reduce the competitiveness and attractiveness of the area, with the attendant risk that economic growth aspirations in the local area will be thwarted “

Whilst our residents' skills levels are relatively high generally, more businesses in Enterprise M3 than any other LEP reported skills issues as being a barrier to recruitment. Evidence suggests that skills shortages are particularly acute in very small firms, firms with a requirement for relatively high skill levels, and firms in the Information and Communications sectors.

Environment, Economy, Planning and Transport
January 2016

⁸ M25 South West Quadrant Strategic Study M25 Highways Agency

This implies that our start-up SMEs, and our established high productivity firms are most likely to be affected by skills shortages. So attracting, developing and retaining skilled people to the area is paramount.

Some of the most significant challenges relate to infrastructure and places to sustain economic growth in the area.

The Infrastructure – particularly the quality and provision of:

- housing
- transport
- commercial space
- mobile / broadband connectivity

Could be a major blocker to the area.

Transport links are important but there are risks that these are becoming less attractive compared to other places. In

particular the Guildford area needs to respond to

- London is overheating: which is an opportunity for our area to position itself to attract skilled people priced out of housing in the capital, as well as companies looking to invest.
- There is a significant inflow of young people to live and to work. Many of these who work in our area could also live here if housing prices were more affordable.
- House prices are high and increasing rapidly, which undermines our economic resilience.
- Commercial property markets look to be under strain. We need to ensure access to appropriate and affordable premises to maximise the ability for companies to grow and locate in our area.

2/ Current Train Station

The station layout is unchanged from Victorian times, including local road infrastructure. A single ageing, built in 1845, two lane road bridge crossing the railway acts as the sole east to west road connection in the town centre. The station is now one of the busiest outside a major conurbation handling almost double the passenger load the most recent additions were designed for.

2.1/ Train Station history and Location

Guildford Station was initially constructed in the 19th century as a station on the line from London via Woking that was eventually extended to Portsmouth. Lines were added to Aldershot, Redhill and a second route to London via Effingham (Referred to as the New Line – although it opened in 1885). This prompted a major revamp of the station in 1880's.

The station is on a site constrained by a tunnel to the south and housing to East and West Sides.

A bridge (Farnham Rd Bridge) carrying the only road over the railway in the town centre crosses the station just to the south of the platforms. This bridge is of considerable age, the oldest section may date to the 1850's and carrying heavier

traffic than ever envisaged by its Victorian designers.

To the north of the railway is a bridge (Yorkie's Bridge) that was built for farm access. The date of this bridge is probably about 1880.

The station has been modified over the years with the old Steam Engine shed being replaced by a multi-storey (Farnham Rd) carpark. The goods yard replaced by a car park. The most recent change was to provide a new booking hall on the West Side of the station about 30 years ago.

Access to the station is by a main East Side Town Side entrance, with a secondary West Side Access.

2.2/ Passenger Volumes and Routes

Guildford station is now one of the busiest outside the major conurbations. Handling circa 8 million passenger entries and exits per annum per annum. This is estimated to grow to 12M per annum. In addition to entries and exits circa 1million interchanges take place at the station, this number is also likely to rise as new interchange options open up with links to Heathrow and more frequent services reducing interchange dwell times.



Although commuting to London is a significant contributor to this number, number commuting into the town are also significant.

Guildford Station has services on five main routes

- London-Portsmouth
- Gatwick to Reading
- Guildford to Farnham, Aldershot, Ascot.
- Guildford to London (via new line through Effingham)
- Guildford to Leatherhead.

3/ Rail Services

Several plans exist to substantially increase the rail services calling at Guildford and the interchange opportunities offered. Total train movements per hour could increase by 130% if all come to fruition. Several proposals exist for new or improved services e.g. the proposed link to Heathrow airport (Although this is mainly aimed at local travel it may attract considerable interchange traffic). The use of local rail services to promote modal shift is important and is discussed more fully in section 4.

3.1/ Current Services

In summary the station is served by trains during the weekday on the following frequency

Mon-Fri non-peak time table provides in each direction	Train Per Hour (TPH)
Waterloo – Haslemere/Portsmouth, 4TPH	4
North Downs Line, 2TPH	2
Guildford via Cobham to Waterloo 2TPH (New Line)	2
Guildford via Leatherhead to Waterloo 2TPH (New Line)	2
Guildford to Ascot via Aldershot 2TPH	2
Return services to London Bridge	3 per Day
Cross Country Service to the Midlands.	1 Per Day

3.2/ Drivers of Demand

Overall Demand is forecast by Network Rail to rise by 40% by 2043 in the Service Group (Wessex) that encompasses the lines through Guildford. This figure is derived from the London and South East Market study conducted by Network Rail. This demand has been used as a key input to the Wessex Route Study (RUS) published by Network Rail in 2015.

The Proposed Guildford Borough Local Plan 2017 proposes two new stations in the Guildford Area subject to funding.

- a) Mellow to serve the east of the town, plus an estate proposed for Gosden

Farm (Identified as a Strategic Site⁹) and a Park & Ride facility access from the A3

- b) West Guildford to serve the Hospital, Research Park, Sports Park, and the proposed development of a new estate at Blackwells Farm (Identified as a Strategic Site¹⁰).

The Guildford Borough Plan proposes strategic developments in an east West axis across Guildford several of which are served by existing stations.

Total dwelling build in the Guildford area will be circa 13,000 by 2030 with a population increase of 30,000.

Our summary of major new housing as it relates to rail network is set out below:

Development	Station Serving Area	Homes	School
Ash and ¹¹ Tongham	Ash	1970	
Blackwells Farm (Strategic Site)	Guildford West	1800 (1500 in plan period)	P
Guildford Town	Guildford London Road	1010	
Guildford North Street Development (Strategic Site)	Guildford	400	
Godsden Hill Farm (Strategic Site)	Merrow	1800 (1700 in plan period)	P S
Send ¹² Area	Clandon Woking	870	
Wisley (Strategic Site)	Effingham ¹³	2000	P S

⁹ Guildford Borough Proposed Submission Local Plan: strategy and Sites 2017, 2018

¹⁰ Guildford Borough Proposed Submission Local Plan: strategy and Sites 2017, 2018

¹¹ Multiple Sites in the area, Ash Station will be upgraded with Road Bridge

¹² Multiple Sites from which access could be to Clandon or Woking Stations

¹³ Will need Bus Service to connect into Site

Slyfield Area Regeneration Project (Strategic Site)	Guildford East, Worplesdon, Guildford London Rd all some distance away.	1500 (1000 in plan period)	
Proposed in 2016 but withdrawn			
Normandy	Wanborough	1100	S

P = Primary School S= Secondary School

All the above developments will increase demand on the Rail network. Developments outside the borough will increase demand, including significant extra housing in the Aldershot area, and A3 Corridor under consideration.

Surrounding towns which rely on rail services passing through Guildford are also scheduled for expansion e.g. Woking, Aldershot .

3.3/ Proposed Changes and Additions to Rail Services and Frequency

Network rail operate under a series of five year control periods within which projects are budgeted for and delivered. Currently we are in Control Period Five that ends in 2019 and plans are being developed up to the end of Control Period 7 2029

Services could be enhanced by the following to end of CP7. Trains Per Hour (TPH) are the number of trains in a service in one direction

<p>Proposed</p> <p>Waterloo - Portsmouth</p> <p>The proposal is to up the service from 4TPH to 6TPH.</p> <p>Southwestern Railways in their timetable consultation are planning for 6 TPH over the peak periods.</p> <p>It is understood to achieve this increase reliably over and above limited peak hours service critical infrastructure improvement is required in the form of a Woking Flyover.</p> <p>There has been some discussion on the viability of providing Portsmouth with fast trains to London running fast Fratton to Guildford non-stop, to enable this a dynamic passing loop in the Petersfield area would be required. The assumption is also that some fast trains will pass stopping services at Guildford. The service frequency may rise to 8TPH over a 20-30 year timescale.</p>
--

North Downs Line, including service extension to Oxford

Will increase from 2TPH to 3TPH by the implementation of an extra fast service to Gatwick is imminent, once the new platform at Redhill is bought into use.

A recent report by Surrey County Council¹⁴ proposes an extra stopping service. There are concerns over level crossing down time in Reigate, and the ability for Fast and Slow services to pass at Guildford. The report is also supportive of the whole line being electrified to make services faster and more environmentally friendly.

The current Franchisee GWR has announced plans to replace the current Diesel multiple Units with longer Class 769 Tri mode trains (25Kv, 600DC, Diesel). These are a conversion and rebuild of old Thameslink Stock.

New Line to Waterloo

A rise in the slow stopping services to Waterloo via Cobham/Leatherhead from 4TPH to 6TPH in the peak period is currently proposed by the current Franchisee SWR. There is a desire to run 6 trains an hour over a longer period during the day. To achieve this reliably a new platform on the eastern side of the Guildford station (Platform 0) is proposed.¹⁵

Ascot Service via Aldershot

The new South West Franchise is committed to splitting the service to provide 2 Trains per hour to Farnham, with passengers for Ascot changing at Aldershot. The level crossing at Farnham limits service frequency on the Alton-Farnham line.

Possible termination of 2 TPH slow trains that currently terminate at Woking Platform 3 at Guildford. (part of Woking Flyover proposals)

The Wessex Route Study shows plans to revise Woking station and build a flyover at the western end. The plan will provide an extra through platform at Woking, a flyover for the Up line from Portsmouth and will remove the current Woking Platform 3 and replace it by a turn back siding on the Portsmouth line or extend the two stopping services an hour to turn back at Guildford.¹⁶

Until Platform 3 was built at Woking these services used to extend to Guildford

¹⁴ Surrey County Council Surrey Rail Strategy North Downs Line Assessment Final Report | June 2015

¹⁵ Network Rail Wessex RUS 2015

¹⁶ Network Rail Wessex RUS 2015

In addition, we are aware of two schemes that are under consideration

2 TPH Heathrow Southern Rail Access (Terminate Guildford).

There now appear to be at least two schemes involving private capital being proposed to link Guildford to Heathrow airport. Southern Rail access to Heathrow is economically viable without a 3rd runway. The plans as currently available show 2 trains per hour turning back at Guildford.¹⁷

2TPH Ashford to Oxford Service (SE Franchise Brief)

The recent South Eastern Rail Franchise Public Consultation March 2017 proposes an example of a service

“ 6.14 For instance the Ashford to Tonbridge line, which connects on to Redhill and Reading under other operators, could form part of a fast and frequent London orbital service, taking pressure away from the M20 and M25. As it is journeys are faster via London and this potential link is underused.”

The discussion on this orbital service appears to have gone quiet recently

Other Services

It is noted that in the past there have been other services at Guildford

- CrossCountry currently one train per day the July 2018 public consultation¹⁸ is asking for views as to whether this should be discontinued or increased.
- Southern Trains runs a very sporadic service to Guildford via the New Line, this might be upgraded
- Thameslink in the past have connected to Guildford via the New Line

There needs to be allowance in the station capacity for new services.

There are two schemes that have been promoted in the past that could impact the station, both are believed to not now affect Guildford.

Crossrail 2

The current plan is that the nearest stations it will operate to related to Guildford are Surbiton & Epsom. The main impact of Crossrail2 will be to free up capacity on longer distance services using Waterloo

Guildford - Cranleigh re-opening.

Understood to be discounted, particularly as the council are committed to walking & cycle schemes that use the track bed.

Any Cranleigh re-opening would critically impact junction capacity at Peaslake just south of Guildford

¹⁷ Heathrow Southern Railway & Windsor Link Railway Proposals

¹⁸ Cross Country Passenger Rail Franchise Public Consultation 7-2018

The potential overall change to the services through the Guildford if plans come to fruition over the next 20 to 30 years is dramatic. There could be approximately a doubling of train movements at the station. Plans to accommodate this growth need accelerating and the appropriate safeguarding of land and management of encroaching development put in place.

Draft - GVG Sept 2018

Dr.

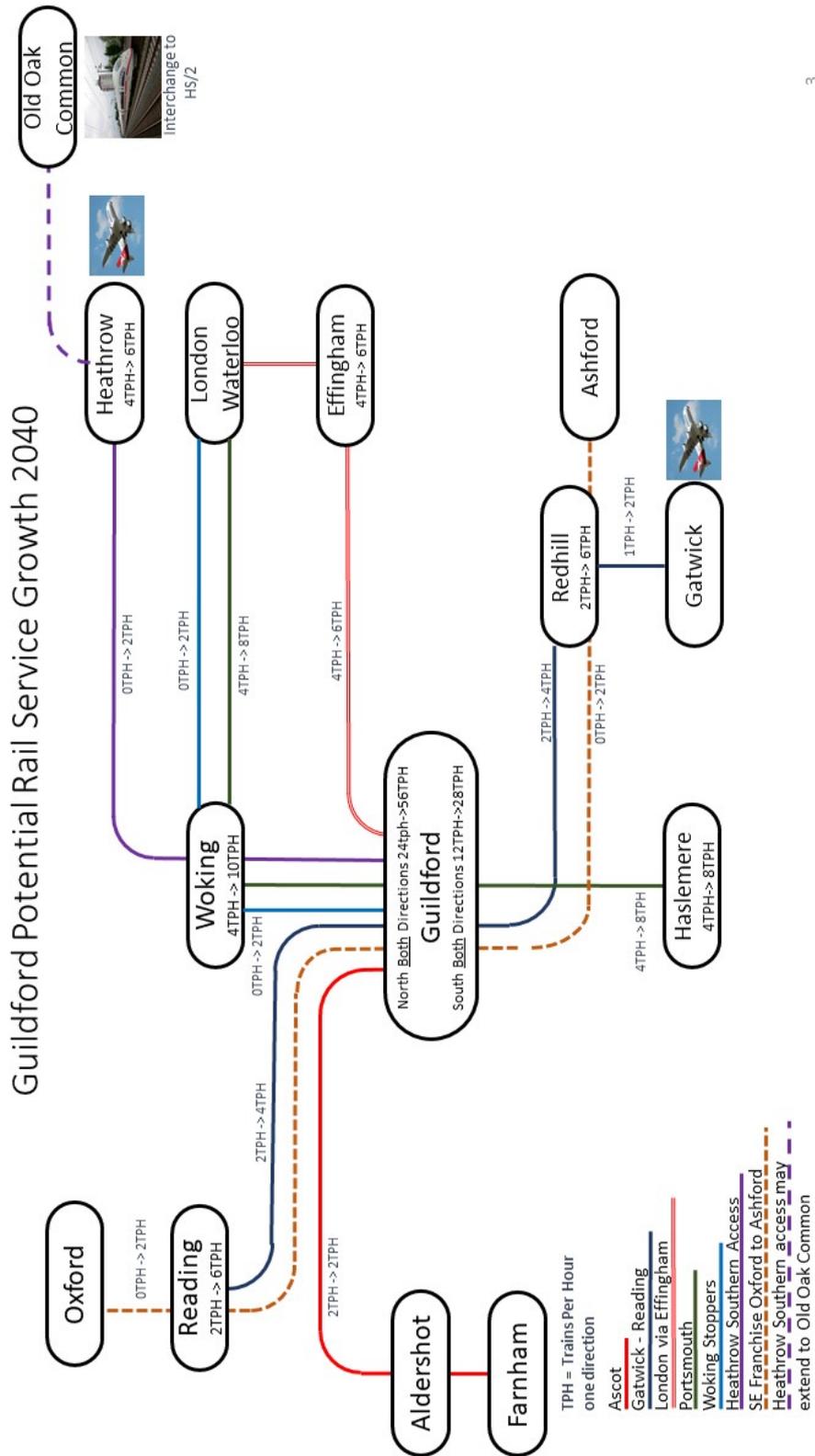


Figure 3 Potential Rail Services 2040 - Also larger size at Appendix B

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Draft - GVG Sept 2018

4/ Guildford Station Expanding Capacity

The operational station needs considerable expansion to allow for potential new services identified for the next 10-20 years. This is a potential opportunity to solve some of the current issues with the constrained layout of the station whilst also promoting new services. This section examines options for the station including unlocking capacity at the northern junctions (throat) of the station and easing curves into the tunnel to the south. Safeguarding of land at the site is essential.

4.1/ Current Operations

Operationally Guildford is complex with 5 lines interacting with three lines diverging at the north, line to Reading to west, line to Woking to North, and New Line to London via Cobham to East. At the south at Peasmarsh junction (circa 2kms south through St Catherine's tunnel, the North Downs line leaves the main line to the east. North Downs services (Reading to Gatwick) cross the station layout either at the north end or at the south just before entering St Catherine's tunnels at the south.

platforms to the west of the station layout is constrained by sharp curves, resulting in low speed of entry, that are almost at the recommended NR limits for mainline operational curvature. All junctions in the current layout are flat at present.

If all services come into operation it is likely Guildford, over circa 20 years, would see an increase in total movements of over 100% compared with the 24 today. The table below shows how the station normally operates.

The St Catherine's tunnels is a simple plain double line, the entry and exit to trains to

Platform		
1	New Line to London via Effingham Terminating Services	Only accessible from New Line
2	Normally New Line Terminating Services although it is also a through Line	Access from Woking and New Line from North and all lines south North Downs and Portsmouth)
3	Through Services to the South	Access from Woking and New Line from North and all lines south North Downs and Portsmouth)
4	Through Services to the South	Access from Reading, Woking from North and all lines south (North Downs and Portsmouth)

5	Through Services to North	Access from Reading, Woking and all lines south (North Downs and Portsmouth)
6	Through Services to North or South (North Downs Line) or Terminating Trains on the service to Ascot/Farnham	Access from Reading, Woking all lines south (North Downs and Portsmouth)
7	Not Used - old platform, for postal services, opposite a single line served by Platform 6	
8	Through Services to North or South (North Downs Line) or Terminating Trains on the service to Ascot/Farnham.	Access from Reading, Woking all lines south (North Downs and Portsmouth)

Schematic of Current Station

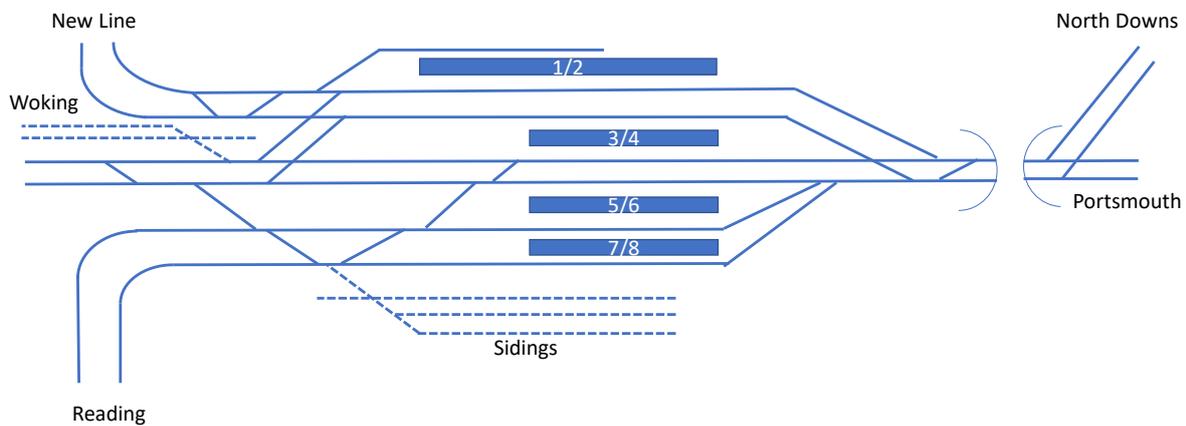


Figure 4 Current Station Layout

4.2/ Current Plans to improve Station Operations

The plan to build a Platform 0¹⁹ to the east side of the station will create an extra terminating platform for New Line Terminating Services. This would allow New Line services to become a self-contained service into the station with minimal impact on other station operations and allow services to be

increased. Currently new line trains also use Platform 2 and 3 as turnback platforms. At slack times of the day Platform 2 can also be used as stabling platform

In addition, there are emerging plans for the west side to be extended to provide more platforms, these were briefly

¹⁹ South West Main Line Route Utilisation Strategy March 2006

discussed in the Network Rail Wessex RUS²⁰, but are hindered by constraints

including the current Farnham Road Bridge and access to Farnham Road Car Park.

4.3/ GVG View - Platform Capacity Required

In principle, without constraints, the station could operate with its existing platforms, as through trains may stop for a little as 90 Seconds and turning around a reversing train can take about 3-5 minutes on the current timetable (with Stepping Up). However, the rail network does need resilience including stations where trains can wait to form regular service patterns and to form realistic connections. It should be assumed that services to Heathrow and London will use Guildford as a station to pause stock, joining and splitting sets, as required rather than occupy platforms at Waterloo, Paddington/Old Oak Common, and Heathrow unnecessarily.

Heathrow and Woking Stopper Services plus more services on the Portsmouth Direct will impact North downs services in the southbound direction in that these services will have less access to platform 4 so that platforms on the west side will need to be used. If North Downs Services increase to 4TPH this will likely mean two dedicated platforms (North South). There will be an issue with traffic crossing the south throat in the southerly direction and there will be pressure for slicker operation at Peasmarsh junction. The ²¹Surrey County Council North Downs Line Study also identifies Guildford as a station where slow North Downs Lines services may be overtaken by fast services. The Surrey County Council²² overall rail study also predicates fast Portsmouth services overtaking slow services at Guildford.

The 2015 Network Rail Wessex RUS states:

*"It should also be noted that the layout at Guildford would allow for improved regulation of services and provide overtaking opportunities to manage the mix of fast and stopping services that operate on all routes through Guildford. The RUS also states that Some preliminary investigation has been carried out through this Route Study to look at what track and platform layout would meet the most conditional outputs and therefore provide the most benefit. These include the addition of **platforms** on the west side of the station and an additional platform on the east side, providing a new Platform 0"*

It is recognised that the use of Digital signalling should make a more intensive and reliable service possible. However, the digital signal system with still need to allow for a headway (circa 110 Seconds), normal station dwell times of circa 90 seconds and safe times of passing over and clearing flat junctions (this is probably at least 110 seconds headway plus 120 seconds for crossing the junction)

The layout of stations also affects performance. Crossing moves should be minimised i.e. a train crossing a track used by services in the opposite direction. It is for this reason Turnback/Terminating platforms are often sited in between the main running lines.

Turnback sidings in the centre of the station are considered advisable for the

²⁰ South West Main Line Route Utilisation Strategy March 2006

²¹ Surrey County Council North Downs Line Study

²² Surrey County Council Overall Transport Study

services to Heathrow and Woking stoppers if extended.

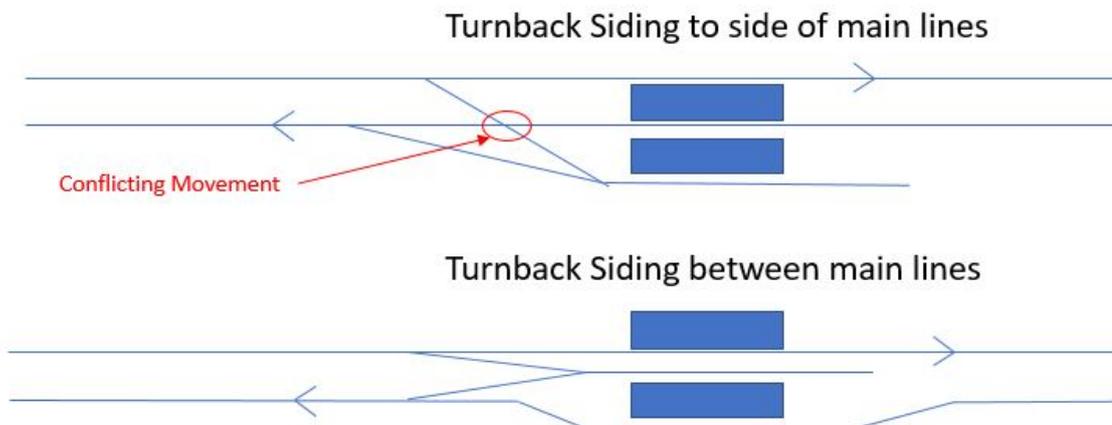


Figure 5 Turnback Siting Options

GVG proposes a total redevelopment of the station Quarter (See Section 8). In detail we propose extra platforms at Guildford for the potential services might be:

Platform	Service	Notes
0	New Line Terminators	Terminator Platform
1	New Line Terminators	Existing platform 1
2	Portsmouth Direct South	Existing platform 2
3	Portsmouth Direct South	Existing platform 3
4	Heathrow Service Terminators	Existing platform 4 kept as a through line for flexibility but normally used for terminators
5	Waterloo via Woking Terminators	Existing platform 5 kept as a through line for flexibility but normally used for terminators
6	Portsmouth Direct North	Existing platform 6
7	Portsmouth Direct North	Relocated platform 7 bought back into use
8	Reading - Gatwick Through Services	Relocated platform 8
9	Reading – Gatwick Through Services	New Platform 9/10 for terminator use only.
10	Farnham Terminators	

Schematically a 11 platform face station would look like:

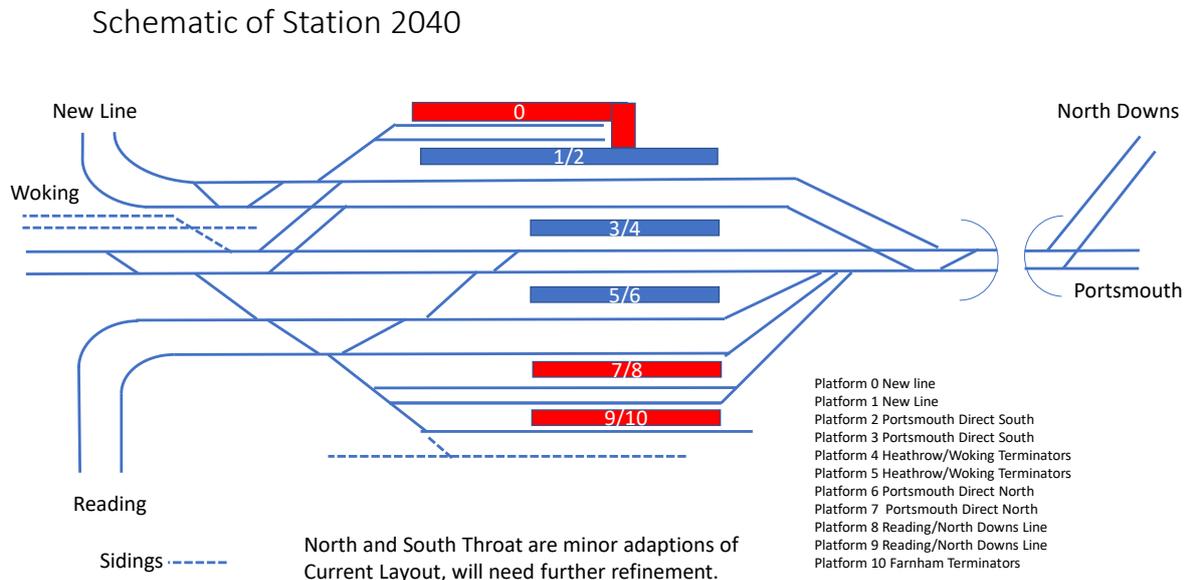


Figure 6 Station Layout 2040

The above scheme assumes that most Reading – Gatwick services cross the formation at south end of station. Crossing the north side of Guildford station when the Woking line may have 10 trains an hour in each direction could be operationally problematic.

The above layout also allows for some layover of Slow services being passed by

4.4/ Clearing Guildford Throats

The Throat of a station is the complex of lines and points that allow access to the platforms. Guildford has two Throats North and South of the Station.

Operationally Guildford has issues at both North and South Throats.

The North Throat is inflexible in that Reading Line services for the North Downs Line are limited in that they can only access platform 4 upwards.

fast services, this may be especially important for the North Downs Line.

All platforms used, except for 0,1,10, for termination preserve southern access for flexibility. It is believed a 12th platform face could be included at the far west of the station layout.

This means that in practice most southbound Reading to Redhill services use the platform 6 upwards then cross the southern throat just before the St Catherine’s Tunnel. A total revamp of the northern throat can probably allow trains to cross to platform 2 and 3 above with a ladder starting to the north of Yorkies Bridge.

However, two factors limit this scheme

- A) The grade differences between the Reading line and Woking line
- B) The up to 24 movements per hour on the Woking line may make a flat crossing of limited use.

An option to remove these limitations and facilitate Reading Line Trains gaining the east side of the station would be to provide a single line flyover from the Reading Line across the Woking – Portsmouth line.

The line from Reading comes in at approximately 6m above the main line to Woking and drops to Guildford Station, reaching station level at Yorkies Bridge to the north of the station. A flyover for southbound traffic from the Reading line would need major ramps on the southern end only.

It is envisaged the south ramp would be on the line of the access to North Box Sidings with access to sidings relocated further north. The flyover would have steep approach ramps, especially on the southern ramp, but well within the capabilities of a modern EMU. The plan would keep the existing two lines on the

West Side to Reading to provide capacity for less agile trains and possibly lay-over capability. A detailed diagram is at Appendix E.

This approach has several advantages

- a) Makes the station simpler operationally
- b) Facilitates cross platform interchanging between Portsmouth and North Downs services
- c) Creates an option to extend London New Line services across Guildford onto the Reading Line and/or Farnham Aldershot services onto the New Line to create a local service on a east west axis (Note the flyover line would need to have bi-directional signalling)

As Yorkies Bridge will be extensively revamped for the proposed Sustainable Transport Corridor clearances could be increased to make this achievable with minimal land take in the industrial park to the north of the station.

Schematic of Station 2040 – North Flyover

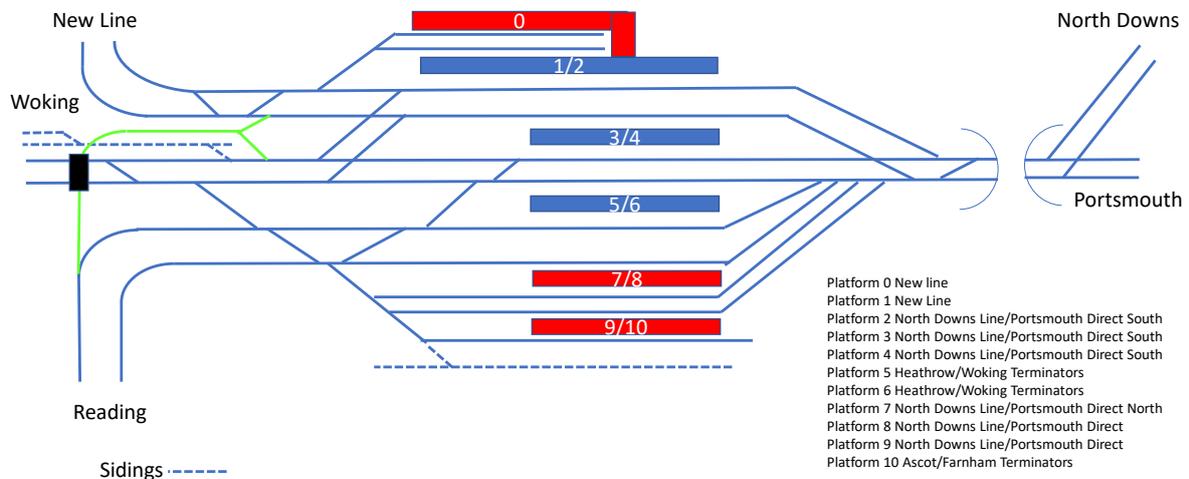


Figure 7 Station Layout 2040 including Northern Flyover

This layout does provide a very easy to manage layout with New Lines Self Contained, 3 platforms for North South Traffic in each direction, 3 platforms dedicated for terminators.

The South Throat of the station is a complex set of point work much of it on sharp curve to get access to the west platforms. It does impose speed limitations on the Station approach 25mph from South and 15MPH for traffic from the west platforms going south. The use of a North Flyover will mitigate this issue for southbound trains. There is a potential issue if the mooted Portsmouth non-stop trains ever come about as they may not

stop at Guildford; the south throat should allow a higher speed (35MPH currently) to facilitate non-stop running.

St Catherine's Tunnel is signalled for bi-directional movements (up line only). The proposed resignalling for Guildford should look at making both lines bi-directional for flexibility.

Peasmarsh Junction does impose a slow speed on North Downs Line Trains of 40mph; there may be potential to increase this with some realignment of the junction.

4.5/ Guildford Station Footprint

Terminating in the centre of the formation, on the assumption that the station cannot now extend to the east, due to the Solum redevelopment, would require services from the south to use platforms to the west which will require a sharp curve from the St

Catherine's tunnel unless amelioration is undertaken.

For the purposes of this paper it is assumed that the track running along platform 2 is not moved, which then drives positioning of all other platforms/lines.

This is a plan with issues which need resolution:

a) Platform 0 Accommodation

The agreed Solum development has yet to provide detailed plans as to how platform 0 is to be accommodated – a Platform 0 appears to conflict with the agreed car park building line.

b) Curvature

Curvature is at the Network Rail limit for platform access from the south for the current platform 8 in the current layout. This will be slightly ameliorated as the track alongside platform 8 will be moved eastwards when a new 7/8 platform is completed (The current platform width of 7/8 is wider than the two lines between rebuilt platforms.

Access to a platform 9 will have a tight curve as it is accessed from South.

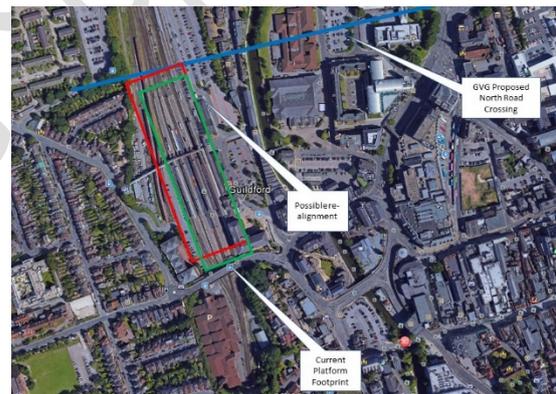
Platform 8 & 9 and its associated track will be an issue. Curvature limits will be exceeded for these new west platforms. (As an example, Guildford in the past has had cross country services, these might return if access to Gatwick becomes more attractive)

c) Westward Expansion

Provided Platform 0 causes no need to re-align platform 2 and that

platforms are built that are at least the width of the current platforms, the expansion to the west will encroach on the access to the Farnham Road Car park, and associated roads by circa 15-20 metres. The Farnham Road Car park is only circa 4m away from the operational railway- it is through this gap that the access road is run. This will need to be heavily revised, maybe in the form of a direct link to a revised/rebuilt Farnham Rd Bridge.

Ideally the station needs to be moved slightly (25-50 metres) East and North, note this does assume a modification to Solum plans. (The proposed second crossing, from GVG vision is shown in blue.)



This eases the curvature issues and speeds up access to the western platforms. There is still an issue with providing Farnham Rd Car park access.

4.6/ Stabling

Currently Guildford has stabling sidings to West and North of the station. These would need reconfiguring. The west siding would have to be reduced by one siding, but there is also unused land to the north of the current siding that could be used.

The north sidings (North Box) can remain undisturbed, it is noted there is space to extend further north if required. Access to North Box sidings would need revision if a north flyover was ever provided.

4.7/ Other Rail developments

In addition to the new station mentioned above the Guildford Borough Plan proposes replacing the current level crossing at Ash with a bridge. GVG support this proposal as it makes road and rail infrastructure safer and more robust, allows for an increase in services over the coming decades, and supports the use of Ash station to serve new housing.

There are also a series of enabling projects elsewhere on the network that have a bearing on Guildford Station including:

- Upgrade the Train Electrical supply capacity
- Woking Station Enhancement and Woking flyover
- New passing loop in the Petersfield area.
- Southern Rail Link to Heathrow
- Ash Level Crossing removal
- Further revisions at Redhill
- Digital Signalling/ Resignalling of North Downs Line, South West Main line etc.
- Ameliorate Level Crossing issues in Reigate
- New Stations at Guildford East (Merrow) and West
- Electrification of North Downs Lines as proposed by Surrey County Council
- Crossrail2 – which will free up capacity at Waterloo

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5/ Encouraging Modal Shift to Rail

Guildford is one of the UKs most heavily congested towns, in in a heavily congested wider area. Better Rail services including better connections would aid promote modal shift.

5.1/ Traffic Congestion

Surrey (population 1.2 million), Berkshire and Hertfordshire are the most densely populated non-metropolitan counties in England. According to the 2011 census, Surrey has circa 1.5 cars per household. .

Surrey County Council figures indicate that there are 687,000 cars for Surrey's households, only 13% of Surrey households have no car. Nationally, more than 25% of households have no car.

Car growth continues with, car ownership levels in Surrey increasing by 53,000 (8.4%)

5.2 / Local Stations

New Estates increase demand on local stations e.g. Ash, Effingham

GVG believe there will be an increase in rail usage into the town centre and across the town, particularly if enabled by easy to use smart ticketing as proposed by GBC. There is already evidence of transfer of passengers to very local services to catch mainline services e.g. London Rd to Guildford to get to Waterloo.

GVG also believes that more frequent train services will be very attractive to users in the villages along the North Down Line especially if supplemented by some additional parking, Gomshall, Shalford.

GVG are supportive of the addition of a stations at Guildford East (Merrow/Burpham) and at the Guildford West (Hospital/Research Park).

between 2001 and 2011. Recent Department of Transport traffic counts (2017) show that the number of miles travelled on Surrey's main roads is 6.2 billion miles per annum.

Guildford Town Centre is heavily congested as it provides a through route for traffic in the southerly direction joining the A3 which runs on a South West to North East Axis to the north of the town. Rail services with changes could perform a valuable role in promoting movement from car to other modes of transport.

GVG understands the that Guildford East (Merrow/Burpham) will act as a rail station. Park and Ride from the A3 will be serviced by a bus to the town centre. GVG believe there also needs to be links from the P&R car park to handle commuting via Guildford East.

The Guildford West (Hospital/Research Park) station needs locating carefully so that it can service Hospital, Research Park and the proposed Blackwells Farm development. This may involve using travellers or buses to provide compelling connectivity to surrounding facilities.

There is an opportunity to develop a better local station north of the town. With frequency increasing on the Guildford – Woking line it is worth investigating the use of Worplesdon Station to provide a Guildford North Station. There is obviously a timetabling issue related to stopping

more trains. This could either be in the form of better access and parking facilities at Worpleston (which is being investigated

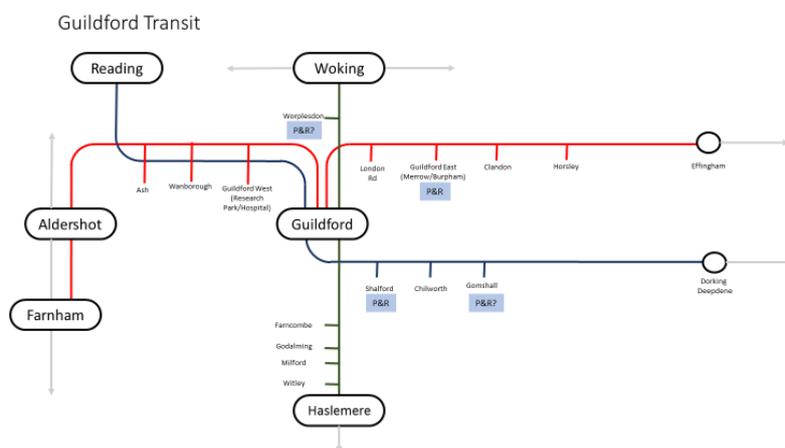
by the council), or even relocation to just north of Salt Box Rd, where access is more easily provided.

5.3/ Rail as a Local Metro.

The council are proposing a better ticketing regime for Guildford. GVG are fully supportive of this and believe it could be launched in the form of a Guildford transit offer.

Based on existing services but supplemented over time by planned service improvements.

the 6TPH (and rising) service on the New Line. By integrating these services to promote cross Guildford travel this would unlock good travel opportunities for the existing and new housing on the east west axis to link to employment activities in Guildford and provide access to the new schools etc.



Green Line --- The main Portsmouth line is proposed to go to 5 or 6 trains per hour, 2 Fast nonstop Fratton to Guildford, 2-4 semi fast/fast. The additional 2 stoppers to Woking would also be in this group. It is noted South West Railways timetable proposals also include extra stops at Godalming

Blue Line --- Reading to Dorking 2 Stoppers an Hour to Dorking (1 at present) plus 2 fast trains to Gatwick.

that will improve connectivity.

This proposal would link the villages along the north downs more effectively to Guildford and provide better links Research Park (new Station etc).

As a marketing initiative, the above could be implemented now with appropriate Branding, Maps and Ticketing

Note to avoid level crossing issues in Reigate it may be necessary to turn one of the stopping services at

The Northern Flyover as proposed at para 4.4. would enable services on an east west access to be linked to avoid having to change trains at Guildford to form a seamless Farnham/Ascot to Effingham service to further improve East West connectivity across the town and form a viable adjunct to the A3.

Red Line --- Aldershot to Effingham. Based on the proposed 2 TPH Farnham service, the North Downs Services circa 4TPH, and

5.4/ Park and Ride

Parking at Guildford Station and stations in the surrounding area needs to be designed to encourage modal shift and intercept car users at peripheral stations. Guildford has several opportunities to encourage the use of rail by providing Car Parking and also improving interchange to other modes of transport.

We propose keeping parking at Guildford Station at about current levels. If modal shift is achieved in future there may be opportunity to repurpose Multi-Storey car parks for other uses.

Outside the town centre we believe the following stations could be reviewed for provision of parking.

Guildford East (Merrow), current plans propose a Park and Ride facility for Guildford served by buses. The plan also should consider access from this car park to the station to provide car users with access to rail services.

Shalford has room to more parking, the current station yard is currently used as a Storage Business using containers at present.

Worplesdon has been discussed above.

Ash station is another possible candidate for parking particularly if the council proposal to close Ash level crossing simplifies traffic management in the area.

Artington already has a bus served Park and Ride Facility. It is noted that there is room for a turn back siding on the Portsmouth Line, a long-term future enhancement could be Guildford South station serving the Park and Ride.

Gomshall has potential for more parking.

Milford is a candidate, provided Portsmouth line stopping services are improved, to have increased parking and provide a rail head off the A3.

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6/ Creating a Transport Hub

To create a proper hub at Guildford Station the ability to access and interchange between all modes of transport needs to be addressed. Currently the station is inadequately linked to other transport modes. To make best use of an expanded Rail Transport offer there needs to be consideration of integrating transport modes effectively at the station. The limited scheme represented by the Solum Development, does little to provide interchange with Taxi, Car, Bus, Cycle and Pedestrian transport modes

6.1/ Station Access

Passenger Access from both East and West sides requires major improvement, current station plans focus on the East main town side but creating good access from West is important, particularly to the University. Note, the GVG town centre proposals offer the opportunity to provide good all mode access to the station from East, West and North.

Disabled access to the station does not comply with modern standards and needs a substantial upgrade.

The GVG vision for the town includes separation of pedestrian and cycle traffic from the road network with an attractive network centred on the station.

Bus access station would be by stands on the East and West sides, both in roads only

6.2/ Sustainable Transport Corridor

Guildford Borough Council commissioned a report in 2015 on 'Guildford Town and Approaches Movement Study' this proposed a sustainable transport corridor comprising a Bus/Cycle/Walking route through critical parts of the town. The Rail

used for drop-off traffic and on the east side access to the car park.

Passenger Interchange – several the developments are likely to put pressure on interchange at Guildford Station. These include:

- New Line to Reading Line, passengers from new estates east of town going to Research Park via new Guildford West Station etc.
- Use of local stations to access mainline services at Guildford
- Linkage from Gatwick to Heathrow

Parking, GVG believe due to geography and costs of an ideal infrastructure e.g. Tunnel under town, traffic should be limited to current levels and reduced by modal shift. Parking at the station should be limited to current levels.

plans act as a useful adjunct to these ideas, with the sustainable movement corridors being routed or extended to link to outlying stations.

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7/ Station Public Realm

The current station has a public realm that is cramped and provides limited modal transfer and access. To make public transport attractive, major interchanges need to be attractive, accessible, and have good facilities.

7.1/ Passenger Access

Passenger access is adequate on the eastern side of the station with a relatively new (1980's) Ticket Hall. The Station is running at capacity and the gate line needs extending. At the West the ticket hall is small with a very small totally inadequate gate line.

Passenger circulation in the station is accomplished by a foot bridge connecting to all platforms that also connects to the western ticket hall and the eastern ticket

hall (via Platform 1). The bridge is narrow and provides only steep access to platforms (No Lifts).

Platforms are also connected by a tunnel to the Eastern Ticket Hall (via Platform 1). The tunnel connects by ramps to the platforms, it was originally built for postal traffic.

The station lacks escalators and lifts to meet modern accessibility requirements.

7.2 Retail Offer

The current station has some retail space in the eastern ticket hall and refreshment kiosks on some of the platforms

7.3/ Disabled Access

Disabled access can only be achieved from the eastern ticket hall via the subway. The station is a disabled unfriendly environment. The bridge and walkway over the station needs major changes to provide lifts, and by doing so open up

disabled access from the West side of the station. The tunnel access has very steep ramps, in excess of current Health and Safety Requirements.

7.4. Modal Integration

The current station has bad modal integration. The Solum redevelopment of

the eastern entrance lacks any meaningful improvement in modal integration

Mode	Eastern Entrance	Western Entrance
Bus Stops	Considerable walk for the eastern entrance, two nearest poorly situated on the narrow Farnham Rd bridge	Two by the entrance but poorly situated as block traffic flows
Taxi	Good Taxi Rank – but situated on congested one-way system can suffer delays	Very limited
Drop Off, Short Term Parking	Limited Drop Off	No Facilities apart from Layby some way from entrance
Pedestrian	Main routes along polluted one-way system on narrow pavements or via unattractive concrete underpasses	Via normal pavements
Cycle	Access along congested roads, Bike Rack	No Cycle facilities

Parking provided in Farnham Rd Car Park, entrance congested in peak times, Eastern Car Park and Guild Park Road Car Park

(currently being rebuilt as a multi-storey car park).

7.5 Summary

The station badly needs connection to the transport network by upgrading passenger facilities, adding bus stops within easy walking distance. Providing better safer

Pedestrian and Cycling access. Car parking is probably sufficient as it is not desirable to add to congestion in the town centre.

8/ A Vision for the Future

The Guildford Station site provides a unique opportunity for development in the South East. The total area of the station and surrounding sites is circa 6.2Ha. This is a site with good road access, to the A3, M25 etc. Situated just 500metres from the Town Centre. Situated on five Rail routes (two of which provide access to Gatwick, and in time Heathrow)

8.1/ The redevelopment potential for the site

The platform operational area is approx. 1.5 Ha. We assume building above a operational railway is probably not cost effective in Guildford (unless a phased rebuild from west to east could be accomplished). New platforms to the west of the station can be built over as the necessary deck can be installed as part of the build process, before new rail platforms and lines become operational.

It is worth noting that London City Airport are decking 7.5HA of the adjoining dock for a contract cost of £85m²³ which indicates

decking might be viable over a wider area. GVG consider complete decking of the station area undesirable for the passenger environment but replacing the Farnham Rd Bridge by a deck might make access to Farnham Rd Carpark easier as well as providing much needed capacity across station at the south end of the station.

A plan for the whole station site would unlock considerable commercial value and bring ongoing benefits in attracting traffic to the railway.

The total area available at the station is:

A	Solum Site	2.2 HA	GBC Figure
B	Ranger house	0.1 HA	Derived from Google Maps
C	Station West Side	1.1 HA	GBC Figure
D	1 Farnham Rd and West Side Extension	0.6 HA	Derived from Google Map. Assumes building above NEW west site platforms.
E	Signal Box Site	0.64 HA	GBC Figure
	Total	4.64 HA	
	Station Platform Area	1.5Ha	Derived from Google Maps

²³ <http://www.infrastructure-intelligence.com/article/feb-2018/bam-nuttall->

[appointed-carry-out-london-city-airport's-£85m-concrete-deck-extension](#)

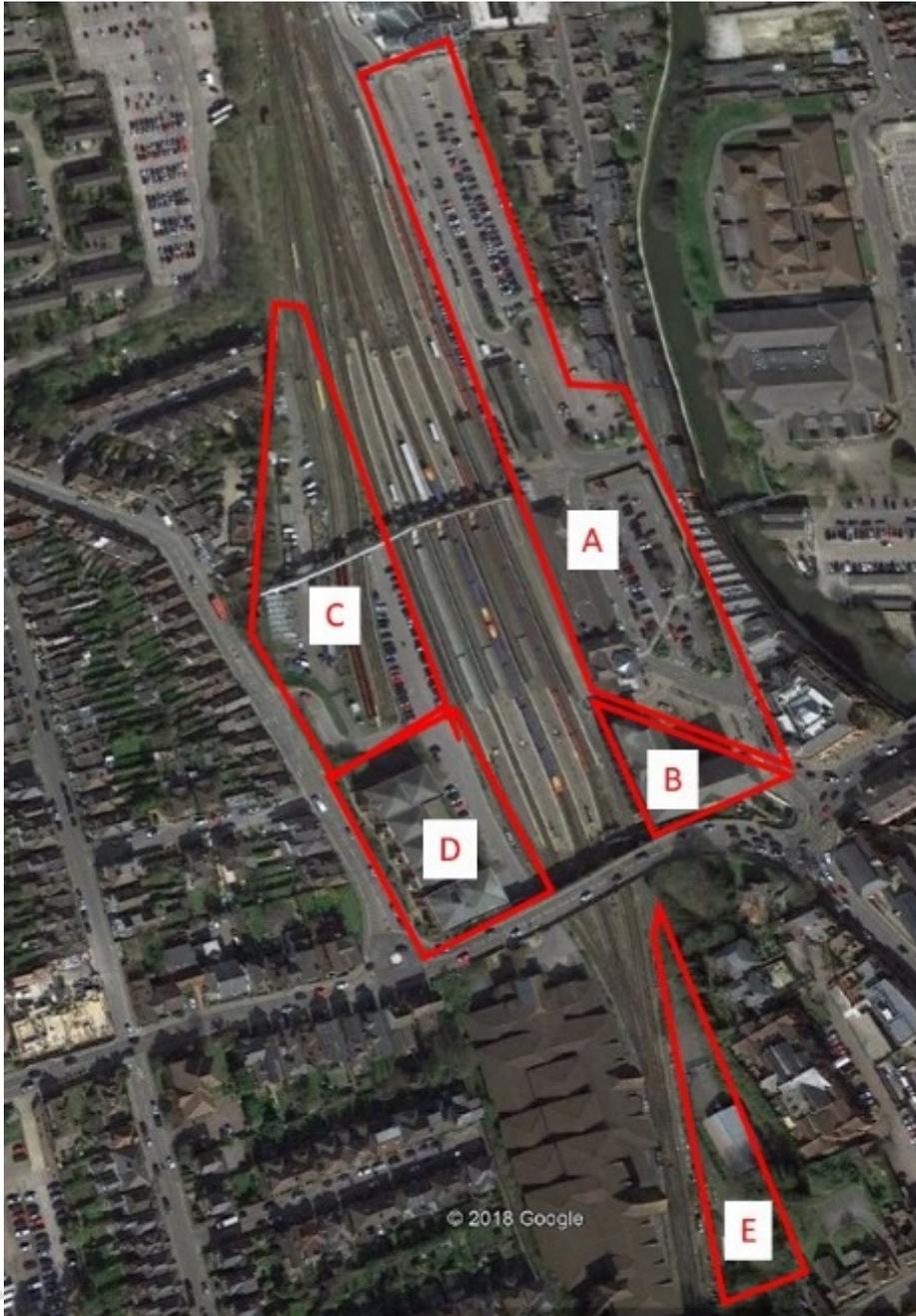


Figure 8 Plots Available at Station

8.2/ What is currently proposed

Network rail has through its Joint Venture with Keir, Solum, obtained planning permission to rebuild the eastern entrance of the station and add housing over the car park (The Solum Site). This plan development fails a number of ways:

- a) As planned it constrains the expansion of the existing platforms to the east that will be required for services to London (the Platform 0 proposal), and extra platforms for Heathrow Southern access
- b) It provides very limited improvement to interchange facilities.
- c) The passenger experience for those coming from the West of the station and the North (University) side remains poor.
- d) As currently planned it blocks a second road bridge and associated

transport corridor which would aid Guildford traffic flows and would allow for the relatively easy replacement of the existing Farnham Road bridge which is not suited to modern traffic.

Note: The Solum plan could be easily modified to allow for a second road corridor across the station site, with little or no prejudice to viability.

The only other plan at present is for the Signal Box Site GBC Policy A3 in submitted Guildford Local Plan

The council also recognise that there may be opportunities to develop other land around the station as evidenced by their 2016 Pamphlet for MIPIM²⁴

8.3/ A Vision for the Station Quarter is required

The Guildford Borough Council Local Plan has now been subject to a public hearing. The inspector has asked for major modifications including looking at more mixed-use development in the town centre, infrastructure improvements, particularly for pedestrianisation, and more housing. A result of this is likely to be renewed interest by the council in other building sites at the station, over and above the agreed Solum plan. GBC published sites in September 2016 suitable for regeneration, including the west side of the station and Ranger House to the east. 1 Farnham Road is not on the list, being about the same vintage as Ranger House it might also be a candidate for

redevelopment. The council has also identified the site occupied by Guildford signalling centre for redevelopment. (A larger diagram of the station is at Appendix C)

Network Rail are looking at Guildford Station with narrow and disconnected objectives. There are several, what appear to be disconnected, initiatives:

1. Platform 0 but the Solum Development appears to block platform zero on the eastern side
2. The Solum Development
3. A joint Network Rail and GBC study looking at the station

²⁴ Invest in Surrey: GUILDFORD TOWN CENTRE REGENERATION

www.investinsurrey.co.uk/assets/documents/guildford-town-centre

4. The West side of the station has no plans, although the site has been identified by GBC in the 2016 Pamphlet for MIPIM
5. Ageing Infrastructure in the form of Farnham Rd Bridge, where some temporary strengthening is being scheduled.
6. Yorkies Bridge part of GBC's Sustainable Movement Corridor is having to be rebuilt.
7. The impact of a possible Heathrow Link is, as yet, not factored in e.g. increase in Drop Off Road Traffic and/or interchange.

Network Rail have a once in a century opportunity to create a modern operationally robust station that acts as an effective traffic interchange for the town and sub region. At the same time the true potential for the entire station site can be unlocked for commercial and housing use.

There is a clear need to create an integrated plan to place a rebuilt station into the context of the town and particularly for supporting infrastructure. This may require delaying some projects

8.4/ GVG Vision for the Station

Our Vision for the Station is to take a development approach to the whole site that would create an operationally robust and accessible railway station, acting as a transport hub via improved infrastructure in the Guildford town area, with Commercial and Housing space.

The aim of the GVG approach is to create from the site

- a) A modern Transport Hub
- b) Allow for Rail Service Growth

for a few months; but the potential gains of a total station plan appear compelling.

Ideally, GBC and Network Rail would have created a partnership, such as the one recently announced, for Waverly Station in Edinburgh.

“Network Rail is working to improve the long-term future of Edinburgh Waverley.

It has appointed Arup to shape a masterplan for the station, which is Scotland's second busiest.

A partnership between NR and City of Edinburgh Council is leading the plans, which will take shape over the next 12 months. Future growth, urban planning trends and enhancing the station to encourage further growth will all be considered, with short, medium and long-term objectives due to be assessed.

Arup will use expertise from architects, real estate experts, cost consultants, heritage professionals and consultation specialists.”

- c) Make roads in the Town Centre more resilient
- d) Allow all modes of transport good but separate access to the station
- e) Create a proper interchange to a bus services
- f) Allow redevelopment of railway land to provide commercial and housing space.
- g) Maximise

Two options for the station have been developed by GVG. Both provide for:

- a) Create Space for the station platforms to be expanded to West and East to a total of 11 platform faces with a possible passive provision for wither a stabling siding or an extra platform face
- b) Ease Rail access from South by removing access road to Farnham Rd Car Park and replace this with a link to a rebuilt Farnham Road Bridge
- c) Redevelop the public areas of the Station to include new booking halls at East and West, and a new access bridge across the station.
- d) Create redeveloped or new station forecourts at east and west of the station.
- e) Create a proper bus interchange at the west side of the station, this will be in addition to bus stops created in Bridge Street and Onslow Street in the GVG scheme. Current bus stops on the Farnham Road Bridge would be removed.
- f) Rebuild the current Farnham Rd Bridge with improved junctions at East and West including access to Farnham Rd Car Park.
- g) Redevelop the current Signal Box site as Railway use on ground floor with parking above with parking linked to Farnham Rd Car Park via the rebuilt and widened Farnham Rd Bridge.
- h) Construct a new link road, and transport corridor along the west side of the station, together with a new bridge for road traffic across the railway to the north of the current station. This is part of GVG proposals to increase resilience of our transport infrastructure by:
 - i. Removal of the town centre gyratory
 - ii. Move main traffic flows onto new infrastructure running around the station – See Appendix C for more details

This provides major benefits for

 - o The environment e.g. opening up the riverside
 - o Health and safety – removing maximum vehicle movements from the area of maximum pedestrian conflict.
- i) Redevelop the West side of the station for Commercial and Housing Use
- j) Redevelop the East Side of the Station for Commercial and Housing Use, this will also include a Multi-storey Car Park easily accessible from main Guildford Traffic Routes.

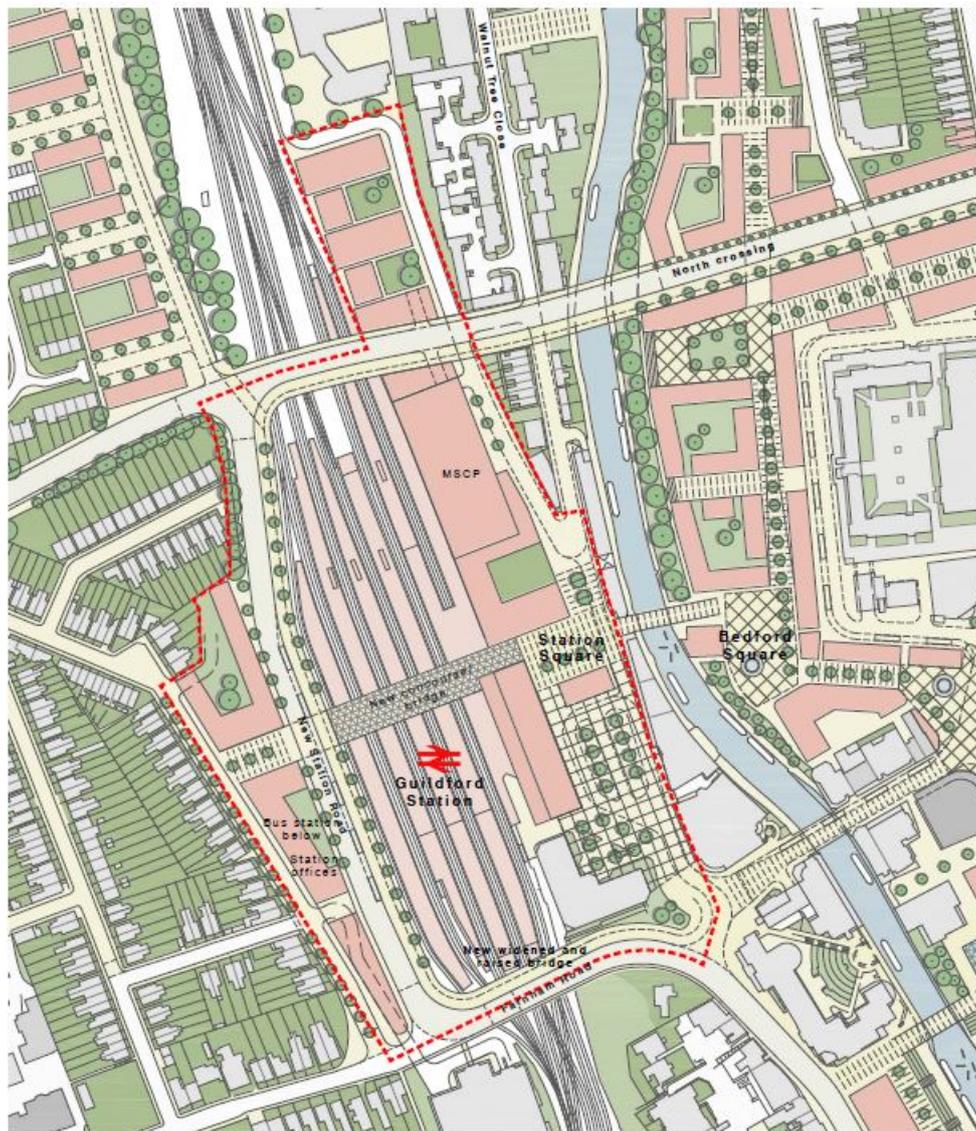
GVG have developed two strategies for the station quarter which differ in the amount of building conducted over the railway. Strategy B would see building over the new platforms at the west side of the station. The allocation of space between accommodation and commercial is indicative at present.

Illustrations of what a fully redeveloped station might look like are below.



Appendix D provides these illustrations and others in full page format.

The current strategies don't illustrate the use of the signal box site. Preliminary work proposes the Signal Box site is incorporated in the Station site as a car park with possible rail use at ground level. A rebuilt Farnham Rd Bridge would allow the car park to be integrated with the existing Farnham Road Car Park site

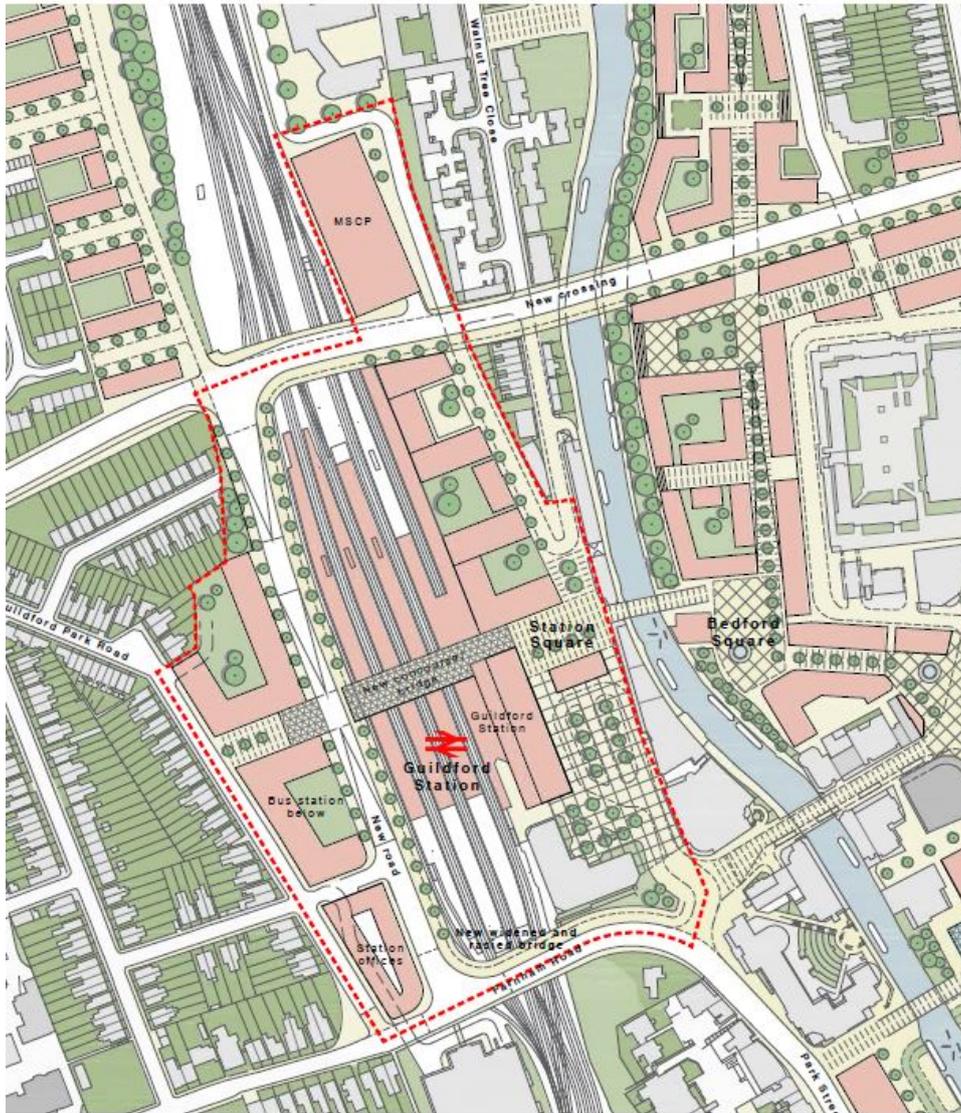


Strategy A Minimum development over railway

- Reduced construction cost
- Reduced development area

Summary of Strategy A

	Station Strategy A
Residential GEA SQ/M	53,182
Office GEA SQ/M	6,440
Retail GEA SQ/M	3,249
Station GEA SQ/M	2,554
Multi-storey Car Park Spaces	1100
Bus Stands GEA SQ/M	1,450



Strategy B Development over railway

- Increased construction cost
- Increased development area

Summary of Strategy B

	Station Strategy B
Residential GEA SQ/M	62591
Office GEA SQ/M	7,967
Retail GEA SQ/M	3,278
Station GEA SQ/M	2,960
Multi-storey Car Park Spaces	1100
Bus Stands GEA SQ/M	1,450

9/ Funding.

Funding of the scheme will need creative thinking. The value of the development is considerable and the necessary infrastructure improvements proposed for the GVG scheme are not outlandish for a scheme of this magnitude and benefits.

Undoubtedly, Financing/Funding a comprehensive development is an issue particularly with Network Rail having to operate within Treasury Rules.

We note that Norrie Courts has recently commented (Rail Magazine 1-8-2018) that *"Funding is easy to bring into Network Rail, financing is difficult as Government accounting measures stop us from bringing in third-party financing measures at the moment. There is lots of pension money and lots of foreign companies out there who want to invest, but because we can't transfer the risk properly we appear under the Government balance sheet"*.

Potentially, the financing options being proposed for Heathrow Western and Southern Links using Private Finance 2 Schemes may show a route by which a Guildford redevelopment can attract in Private Finance.

We also note that the Department of Transport has written in the South Eastern franchise prospectus

"The recently announced East West rail line, running from Oxford to Cambridge, has demonstrated the Government's commitment to seek private sector funding

to design, build and operate routes which have traditionally been the responsibility of

Network Rail. We will build on this and encourage innovative proposals for private sector funding, including from the train operator and wider industry. This could range from upgrading and sharing in the success of part of the South Eastern network, including infrastructure, through to providing new shops in stations. Proposals will be judged on whether they deliver improvements to passengers and value for money for the taxpayer."

This might be an avenue to attract funding for Guildford Rail Upgrades e.g. North Downs Line could be funded by private sector to complete electrification, revamp level crossings, and renew signalling. At Guildford Station the rebuild of the platforms and Station, potential northern Flyover could also attract funding.

The GVG Infrastructure additions to a straight Station redevelopment are a rebuilt Farnham Road Bridge, New North Crossing, and a Road alongside the West side of the station.

If a total comprehensive Station quarter was developed building costs are likely to be in the order of £300m-£400m²⁵ for high

²⁵ Costs based on Turner and Townsend: International Construction market survey 2018 - cost tables

quality buildings and infrastructure. It should be noted the infrastructure elements for the GVG plan, will be incurred anyway for the Farnham Road Bridge which needs replacement. The West Side Highway can be incorporated in Station

redevelopment, leaving the North Bridge to be funded. No allowance has been made for the Northern Flyover but it is likely to be in the order of £20-£30.²⁶

²⁶ (Based on Published figure of £45Million for the more complex Reading Flyover of 2015)

10/ Conclusion

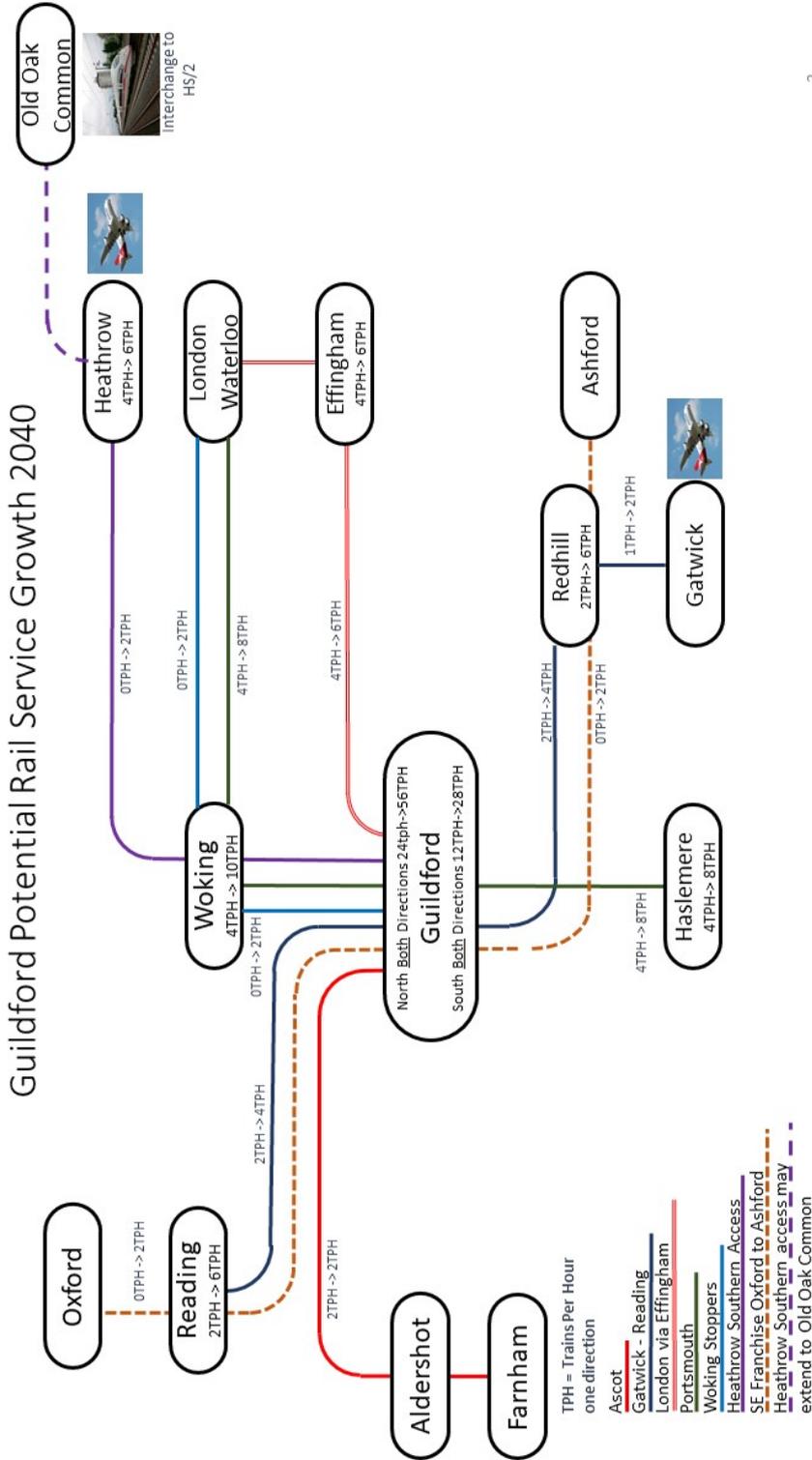
We hope we have demonstrated that the station and surrounding area have a critical role to play in the future of Guildford and surrounding area. Getting the station right and turning it into a transport hub, plus a vibrant commercial and housing quarter will benefit the whole of the south east of England. This paper has focused on the station, but it is only a part, probably the most significant, of our whole documented Town Master Plan.

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Appendix A - Proposed New services through or too Guildford Station



Appendix B - GVG Comments on Proposed New Services

Proposed	GVG Comment
<p>Waterloo - Portsmouth</p> <p>The proposal is to up the service from 4TPH to 6TPH.</p> <p>Southwestern Railways in their timetable consultation are planning for 6 TPH over the peak periods.</p> <p>It is understood to achieve this increase reliably over and above limited peak hours service a critical infrastructure improvement is required in the form of a Woking Flyover,</p> <p>There has been some discussion on the viability of providing Portsmouth with fast trains to London running fast Fratton to Guildford non-stop, to enable this a dynamic passing loop in the Petersfield area would be desirable. The assumption is also that some fast trains will pass stopping services at Guildford.</p> <p>If these fast services are implemented the service frequency may rise to 8TPH and Guildford station will need to allow for this.</p>	<p>We support this increase in services as it increases connectivity both south and north. We believe that with the flyover and more services that there is case of running Guildford to Clapham/Waterloo non-stop twice an hour. This could be on the proposed Portsmouth-Fratton-Guildford fast service proposed.</p> <p>The station layout may need to be sized to accommodate up to 8 trains an hour on the direct Portsmouth Route?</p>

<p>North Downs Line, including service extension to Oxford</p> <p>An extra fast service to Gatwick is imminent (end 2017) once the new platform at Redhill is bought into use. The aspiration is to add in an extra stopping service at a later date.</p>	<p>The North Downs line is the fastest growing of all the lines operated in the Great Western franchise. GVG believe that it is an underutilised asset in that the current very sparse stopping service doesn't adequately serve the villages between Guildford and Dorking. Two services an hour to 'the villages' would be highly desirable as at that frequency Park and Ride and local usage would climb.</p> <p>Extending some services to Oxford is highly desirable as it would allow links to East West Rail initiative.</p> <p>The capacity issues at Reigate with the Level Crossing are an issue to upgrading the North Downs service frequency, one option might be to turn one or more of stoppers at Dorking Deepdene or at Betchworth (where a crossing exists) to avoid level crossings, or to join and split fast and slow portions of the service at Dorking Deepdene/Betchworth.</p>
<p>New Line to Waterloo</p> <p>A rise in the slow stopping service to Waterloo via Effingham from 4TPH to 6TPH. Dependent on the building of an extra platform at Guildford Station.</p>	<p>GVG support this as this aids linkage to east of the town particularly if a new station at Meroo (Guildford East). A 6TPH service is at a frequency where travellers cease to worry about timetables which encourages use of rail.</p>

<p>Ascot Service via Aldershot</p> <p>The new South West Franchise is committed to adding 2 Trains per hour to Farnham.</p>	<p>This is going to be accomplished by the splitting of the existing Guildford Ascot service into Guildford to Farnham and Aldershot to Ascot services. With the provision of a Guildford West station it is possible that extra services will be required combined with the North Downs Services to provide connectivity along the Guildford to Farnham Corridor.</p> <p>This may depend on the rolling stock used, using electric (faster accelerating trains) on stopping services towards ash may provide operational benefits compared with the current diesel North downs stock.</p>
<p>Possible termination of 2 TPH slow trains that currently terminate at Woking Platform 3 at Guildford. (part of Woking Flyover proposals)</p> <p>The Wessex Route Study shows plans to revise Woking station and build a flyover at the western end. The plan will provide an extra through platform at Woking, a flyover for the Up line from Portsmouth and will remove the current Woking Platform 3 and replace it by a turn back siding on the Portsmouth line <u>or</u> extend the two stopping services an hour to turn back at Guildford.</p> <p><i>RUS Reference</i> 5.4.42 This scheme would also provide a turnback on the line to Guildford to permit a grade-separated turnround facility for London Waterloo trains that terminate at Woking. This would have a beneficial impact on Main Line capacity and performance. It should be noted that any potential scheme at Guildford to increase terminating capacity at that station could also provide this function whilst improving connectivity at Guildford, as described later in this chapter.</p>	<p>This change is reverting to an earlier pattern of slow trains. It has much to commend it in that it makes travel easier to SW mainline stations from Woking to London (no change at Woking), and allows Worplesdon station to maybe get a 4TPH service.</p> <p>It is noted that South Western Railways proposed 2018 timetable has limited the use of Platform 3 at Woking as stopper paths are extended past Woking.</p> <p>Operationally if the Turnback for stoppers extended from Woking, is provided at Guildford, it should be situated BETWEEN the main lines to Waterloo/Portsmouth for operational ease.</p>

In addition, we are aware of two schemes that are under consideration

<p>2 TPH Heathrow Southern Rail Access (Terminate Guildford).</p> <p>Southern Rail access to Heathrow is economically viable without a 3rd runway. The plan shows 2 trains per hour turning back at Guildford.</p> <p>There now appear to be two schemes involving private capital being proposed to link Guildford to Heathrow airport.</p>	<p>We would support this service as it provides a good alternative to the M25, supports the local economy with links to Heathrow, and can provide a Heathrow – Gatwick link.</p> <p>This development is likely to promote changing between the Reading – Gatwick and Guildford Heathrow Services as it will be a viable service between the two airports, and will enable worker access to both airports.</p> <p>Operationally the Turnback for Heathrow should be situated BETWEEN the main lines to Waterloo/Portsmouth for operational ease. Guildford is likely to be a point where trains rest between services to allow regulation.</p>
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<p>2TPH Ashford to Oxford Service (SE Franchise Brief)</p> <p>The recent South Eastern Rail Franchise Public Consultation March 2017 proposes a example of a service</p> <p>“ 6.14 For instance the Ashford to Tonbridge line, which connects on to Redhill and Reading under other operators, could form part of a fast and frequent London orbital service, taking pressure away from the M20 and M25. As it is journeys are faster via London and this potential link is underused.”</p> <p>The response to the consultation mentions “Improved connectivity to Gatwick Airport, including new services from Redhill/Gatwick to Tonbridge, Maidstone and Ashford were frequently mentioned.”</p> <p>Although the final service specification fails to request a new service it does state “We have also incentivised bidders to make proposals for further service enhancements, above the minimum specified requirement, where there would be benefit for passengers and sufficient demand.”</p>	<p>This is very new idea proposed in the South East Franchise document, and apparently supported by the current Secretary of State for Transport.</p> <p>The service is likely to operate as an extension to the current North Downs service Ashford-Redhill-Gatwick-Redhill-Guildford-Reading</p> <p>GVG think this would be a useful service particularly if it integrates with the East West Line (Oxford – Cambridge)</p> <p>As mentioned above for the North Downs services GVG are concerned that capacity issues at Reigate with the Level Crossing needs to be addressed. The Redhill south end junction may also be a constraint.</p> <p>If Oxford is electrified operation via Guildford would be possible but would depend on electrification or the use of Tri-Modes (The class 319 conversion could be a solution).</p>
<p>Other Services</p> <p>It is noted that in the past there have been other services at Guildford e.g. CrossCountry services through to Gatwick and Southern Services. There needs to be allowance in the station capacity for new services.</p>	

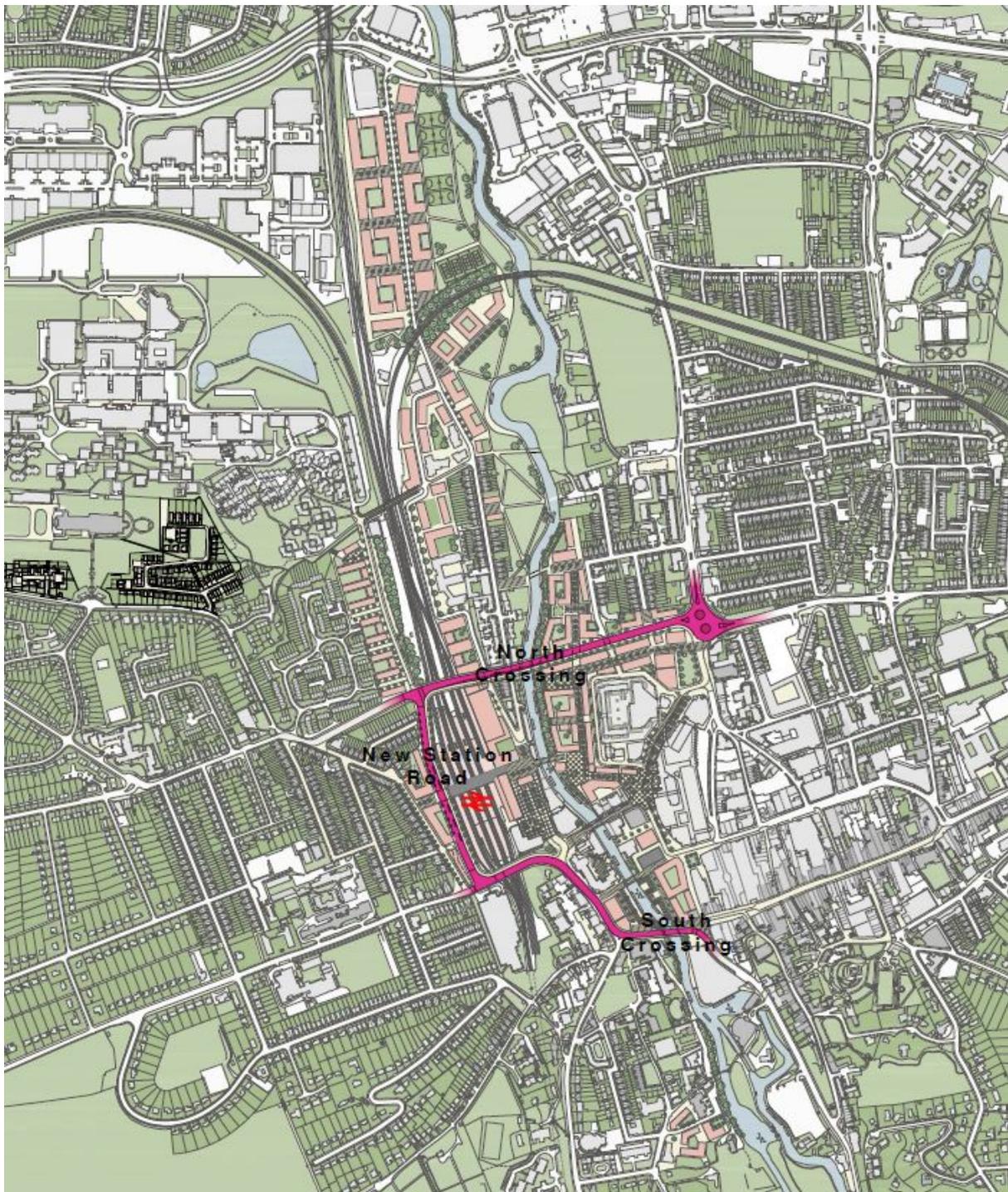
There are two schemes that have been promoted in the past that could impact the station, both are believed to not now affect Guildford.

<p>Crossrail 2 The current plan is that the nearest stations it will operate too related to Guildford are Surbiton & Epsom.</p>	<p>GVG support this scheme as it will aid capacity to Waterloo to Guildford's benefit, Crossrail 2 will lead to a major recast of services and interchange into CrossRail 2 at stations like Wimbledon may be an issue.</p>
<p>Guildford - Cranleigh re-opening. Understood to be discounted, particularly as the as council are committed to walking & cycle schemes that use the track bed.</p>	<p>GVG believe this scheme unlikely to be economically viable. It also requires the re-instatement of the flat junction in the Peasmarsh area. It is also noted that the line when operational was never economically robust</p>

The potential overall change to the services through the Guildford plans come to fruition over the next 20 to 30 years is dramatic. There could be approximately a doubling of train movements at the station.

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Appendix C – GVG proposed revised Road Layout



Note Gyratory and Onslow Street turned over to Pedestrians and Bus Traffic

GUILDFORD STATION AMBITION

- A 21st century transport hub
- An integrated station for road, rail, buses, cycle and footpaths encouraging modal shift
- The best railway quarter with the best commercial solutions.
- Mutually beneficial outcome for Network Rail, Guildford, and the community.
- A new future for Guildford





Figure 9 Strategy B looking from South East

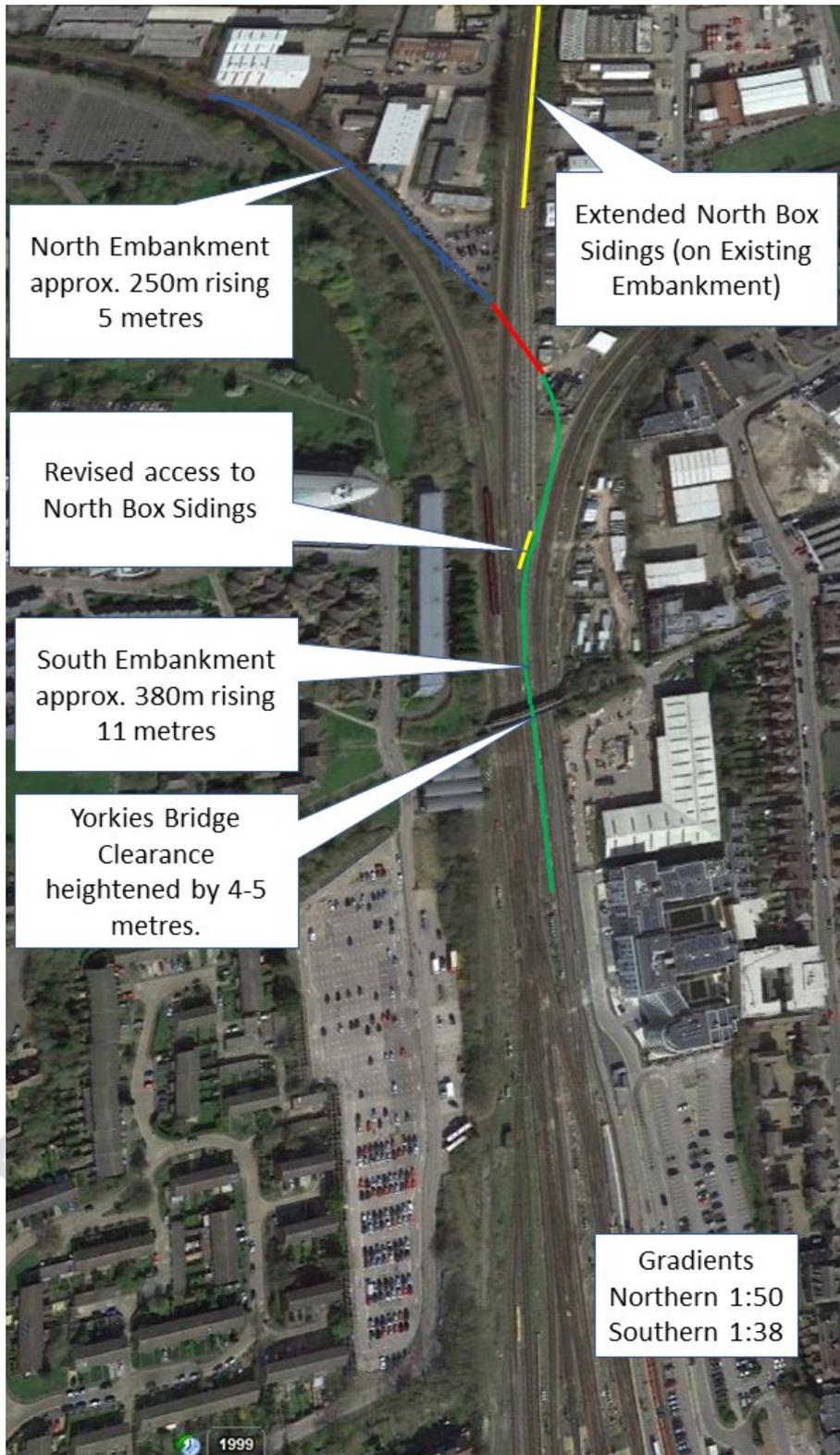


Figure 10 Strategy B Looking from North West – (Note new crossing)



Figure 11 Strategy B Looking from East

Appendix E - Northern Flyover.



Appendix F - Information Sources

- Classic Rail and Connected Cities: Capturing the Benefits from Rail System Development 2017
- EM3 – Developing an industrial strategy for our area – Consultation Paper Autumn 2017
- INRIX Congestion Data
- Published by South East England Councils, South East Strategic Leaders, South East Directors of Environment, Economy, Planning and Transport January 2016
- M25 South West Quadrant Strategic Study M25 Highways Agency
- Guildford Borough Proposed Submission Local Plan: strategy and Sites 2017, 2018
- Surrey County Council Surrey Rail Strategy North Downs Line Assessment Final Report | June 2015
- Network Rail Wessex RUS 2015
- Heathrow Southern Railway & Windsor Link Railway Proposals
- Cross Country Passenger Rail Franchise Public Consultation 7-2018
- South West Main Line Route Utilisation Strategy March 2006
- Surrey County Council Overall Transport Study
- ORR Station Usage Statistics
- Invest in Surrey: GUILDFORD TOWN CENTRE REGENERATION
www.investinsurrey.co.uk/assets/documents/guildford-town-centre