

# UHB Bristol Wayfinding Guidelines Document

This working document outlines the structure and contents of the UHB Bristol Wayfinding Guidelines.

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# UHB Bristol Wayfinding Guidelines

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## **A. Introduction.**

Every day in the UK millions of people enter new or unfamiliar environments as they go about their daily lives. As we navigate our way around we rely on a range of natural processes and man-made help. The latter usually takes the form of signs and other forms of visual communications.

In more complex environments like UHB Bristol, if people are to navigate effectively, there is a need for a more logical and considered approach to the help we give. This document aims to highlight the considerations we need to make and offers guidance on how this help can be best delivered.

## **B Introduction to Wayfinding at UHB Bristol**

### **B1 What is Wayfinding?**

Wayfinding is not signage. Wayfinding is spatial problem solving. It is the term given to describe the cognitive process by which people navigate their way around places and spaces.

The term "wayfinding" was first used in 1960 by architect Kevin Lynch in his book, *"The Image of the City"*, where he referred to maps, street numbers, directional signs and other such elements as "way-finding" devices. This narrow description helps explain the continued misunderstanding that wayfinding is essentially the same as "signage."

Although signage does play an important roll in wayfinding, the process doesn't rely exclusively on signs. This human process is carried out with the assistance of many physical elements including landscape, lighting and landmarks. Although many of the characteristics of the processes are common to all (Human behavior), some are affected by an individuals experience (conditioning).

Wayfinding seeks to understand and analyse the needs of all user groups within society so they gain maximum benefit from the environments they inhabit.

It is the job of good wayfinding to facilitate the most efficient movement of people around any given place or space, ensuring the most positive image possible is taken from the experience received.

### **B2. Why is Wayfinding so Important?**

On entering the Hospital site there is a public expectation that they will be able to find their way around and that all the information they require will be provided. If this is not the case then the Hospital's public image will suffer.

When people enter unfamiliar environments it can be a stressful experience. hospital visits in particular can be very stressful because generally people are either visiting people who are sick or sick themselves. Although stress levels may not reach clinical proportions, they will be significant enough to hinder a person's ability to function effectively. With heightened stress, the less information they are able to take in, process or retain. Having difficulty navigating can lead to yet more stress and the visitors experience will suffer.

In the UK over 250,000 working hours are lost each day because of poor wayfinding strategies. Lost and disorientated visitors will turn to members of staff for assistance. This will have a negative impact on the ability of staff members to carry out their jobs efficiently and impact on performance. In extreme cases delays to treatment may result which will have a detrimental affect on the hospitals operational efficiency. Stressed and disorientated visitors will not maximise their visit, with much of their time taken up with resolving navigation issues, there visiting or treatment time may well be reduced. Those who feel unsure of their abilities to navigate through the site may need to be accompanied or make additional demands on members of staff. On each occasion, however small, the consequence to the hospital is financial.

### **B3 The Purpose of the UHB Bristol Wayfinding Strategy**

The purpose of UHB Bristol Wayfinding Strategy is to benefit the hospital both operationally and economically. Primarily the strategy aims to provide visitors unfamiliar with the hospital a means of support, to aid them in navigating in out and around the site and its buildings. From a commercial perspective the strategies aim is to ensure visitors do not miss out on valuable experiences and carry a positive impression of their visit away with them once they leave.

### **B4 Developing a Wayfinding Strategy**

When human beings navigate they use a number of in-built cognitive processes and mechanisms to process sensory information. It is the purpose of the wayfinding strategy to leave the right messages in the right place at the right time, for users to find. In order to design effective wayfinding, strategies we must first accept the importance of human behavior in determining how our messages will be interpreted. We must then look to harness these mechanisms effectively through the ways our messages are given.

Once a wayfinding issue has been highlighted, simply placing new signs in place of old ones will not improve the situation, nor will adding more signs. A clear wayfinding strategy is required.

To maximise the wayfinding system, a defined approach is needed which will explore many factors. A wayfinding consultant will be able to provide these skills and the necessary framework. (Wayfinding Strategy Document)

Some projects may have major impact on the Hospital's Wayfinding Strategy. If so the financial consequences are high and it is recommended a Wayfinding Consultant is involved to ensure the changes are carried out in line with the strategy document. However, if the required changes are small and are not likely to have a significant impact on the overall site strategy they can be carried out locally. Even changes of this nature will need to be considered in line with the Wayfinding Strategy Document as explained below.

## **C The Wayfinding Strategy Document**

### **C1 What is the Wayfinding Strategy Document?**

The most important consideration of any wayfinding strategy is consistency. The purpose of the Wayfinding Strategy Document is to provide a detailed framework to ensure a consistent and structured strategy remains in place across the whole of the UHB Bristol site.

### **C2 Why is a Wayfinding Strategy Document so Important?**

Without a detailed framework to work to guide, control and check the work carried out inconsistencies will appear. A disjointed strategy will develop and effectiveness will be reduced.

### **C3 Producing a Wayfinding Strategy Document**

In order to develop a successful wayfinding strategy document a great deal of information is required about the environment and its user groups.

#### **C3.1 Wayfinding Analysis**

For the purpose of wayfinding analysis it is important for the wayfinder to place his/herself in the position of the first time user. Having said this, anyone familiar with the site will find it extremely difficult to appreciate wayfinding problems. Much of the processes we use to navigate are passive and crucially their experience has allowed them to build a cognitive map of the facility, which they now use subconsciously to navigate. In addition to specific experience and specialist knowledge, unfamiliarity is the greatest advantage the wayfinder possesses.

To be truly effective the wayfinder must be allowed to build up his/her knowledge of the subject in a manner, which will allow them to break down the complexities effectively, make the correct observations and arrive at the correct conclusions. This can only be properly achieved if the wayfinder is allowed to view the situation through the eyes of the first time visitor, free of an effective cognitive map.

If the cognitive map is allowed to develop prematurely, (and not as part of the wayfinding process) there is no way back. The wayfinder is compromised and additional constraints are imposed.

#### **C3.2 Essential Considerations**

##### **Human factors**

The wayfinders analysis should be structured and focus on the following, acting on fact not assumptions. It is essential that the wayfinder,

- Identify all user groups and discover their individual needs.
- Accurately translate issues to spatial problem solving.
- Understand and simplify complexity.
- Identify architectural and environmental factors, lighting, landscape
- Understand all cultural issues
- Evaluate the effect of historical factors
- Consider security implications
- Identify and reduce visual noise
- Understand and embrace current legislation
- Consider forward planning and anticipate future needs
- Justify all decisions and remain accountable.

## **Commercial**

The wayfinder must consider the commercial needs of the site including.

- Brand Identity
- Image management
- Marketing considerations
- Operational constraints
- Delivering competitive advantage
- Customer and staff satisfaction.

## **Physical**

Finally the Wayfinder needs to understand the functionality required of any proposed signage/information systems.

- Materials considerations/suitability
- Durability/ Flexibility
- Quality inspections
- After-sales back up and service
- Material lead times

## **Stake Holder/User Group Consultation**

Observation forms an important part of the wayfinders analysis. “Where do things go wrong” and “why?”

An important part of the necessary understanding is gained through consultation with key stakeholders and user group representatives.

An ideal stake holder/user group will be large enough as to represent the commercial and operational interests of the hospital site as well as the needs of its users, yet small enough in number so as to be manageable.

## **Composition of Consultation Groups**

An ideal consultation group will include at least one representative from

1. Operations/Services
2. Clinical Staff
3. Marketing
4. Health and Safety
5. Security
6. Estates and Facilities
7. Patients Group

## **Assimilation**

Once the Analysis has been completed and the wayfinder is happy he/she has gained all the required information to carry out the brief, the assimilation can take place and proposals considered.

The analysis and assimilation process is conducted in accordance with the Wayfinding Methodology and Process, which offers a framework that can be used to undertake wayfinding projects of any size or complexity.



#### **C4 Sign Strategy (Sign Trail) Development**

Following the assimilation stage, work can commence on developing the essential Sign Schedule or “Sign Trails”. This is the timely means by which the users are delivered all the information they require to navigate the space effectively. This information must be presented in a manner, which will be best understood by all users.

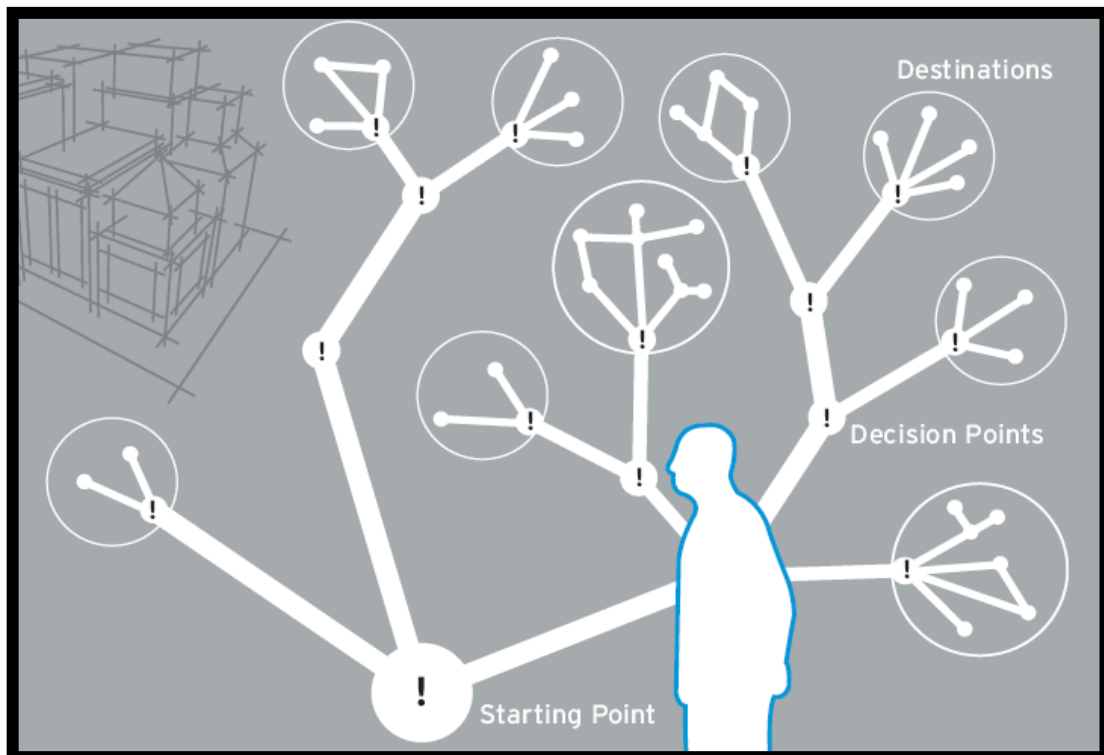
In order to achieve this, the information learned during the analysis is used in conjunction with an understanding of human navigational processes and an appreciation of fundamental wayfinding rules. .

#### **D Fundamental Wayfinding Rules**

It is important to rationalise the volume of signage as much as possible. In order to achieve this some simple rules must be followed. The following includes basic principles and considerations, which must be followed in the development of the Sign Schedule.

- Visitors need different information at each stage of their journey. The information needs to be provided in a timely manner and in a way, which can be easily understood.
- Always sign for the first time user. This may not always be the quickest route, but the easiest to follow. In more complicated areas like UHB Bristol, with multiple entrances they will be routes most suitable to the majority of users.
- Remember to consider the paths common to the many different user groups and build these into the strategy wherever possible.
- Remember the commercial objectives of wayfinding. And consider routes via shops and other important activities. (VIP Routes)
- Do not sign every destination from everywhere. Create only sign trails for people to follow and do not sign for people who are lost.
- Establish logical hierarchies and stick to them. In much the same way as you would use road signs to direct you on a journey from Glasgow to an address in London. The first direction you would follow would be “The South”. The hierarchical structure is illustrated in “The Decision Process” (below).
- Once a destination appears for the first time on a sign, it must be replicated on each following sign within the sign trail until arrival. This again illustrates the importance of hierarchies in minimising the volume of signs required.
- Position clear signage at all junctions and decision points as shown in the “The Decision Process” (below).
- Wherever possible use systems and patterns that are familiar to the user from their everyday lives rather than those specific to the environment. I.e consecutive numbering systems and Alphabetical order. The use of such regular patterns will serve to significantly aid orientation.

## The decision process



- Always use consistent terminology throughout the whole site sign strategy. It is not sufficient to limit this consistency to individual hierarchy blocks.
- Do not use clinical Jargon. If the terminology is not understood by all it must be simplified.
- Stairs and lifts can be particularly disorientating so additional signage may be required for reassurance.
- Level identification signs must be clearly visible on each floor from inside lifts and within stairwells.
- Signs and other information should not be placed in locations where they can be affected by reflection caused by direct sunlight or artificial light.
- For some visitors, it may be some time before they return to their vehicles. Therefore they must be given a strong and clear point of reference on arrival in a car park, in order to find it on their return
- It is important to sign "Way Out" but remember to link it to specific reasons or refer to these reasons in isolation from the prompt "Way Out" i.e. car parks, taxis or other modes of onward transport.
- Landmarks are important wayfinding tools used by all. The nature and choice of landmarks is often down to an individuals conditioning. This essential

difference to most of the other cognitive processes must be recognised by the Wayfinder if he/she aims to offer help by providing landmarks.

- Consideration of colours for sign use is very important. Text and sign panel colours must not be just simply chosen because they offer good colour contrast, but also in consideration of the following.
  - They do not compete with other commercial/branded activity on site
  - Are in keeping with the Trust's corporate identity and brand manual
  - Aesthetically pleasing
- The Trust's environmental policy should be reflected in the choice of materials
- All sign systems and communication aids used in the sign strategy throughout the site must be as consistent as possible in appearance, content and layout. Every type of sign used must be taken from the approved family of signs. When used, each sign type i.e. direction signs, door signs or information display must be chosen because it is considered to be the best choice for the individual location.
- Branding opportunities should not be viewed as an essential part of the main visitor/user sign strategy. The design characteristics chosen for the trust's signage have been specified in line with the *NHS* design guideline and as such the signs colour and consistency will aid brand reinforcement. With regard to the sites main site directional and identification signage strategy, the placement of corporate identity markings, branding or logos must be considered carefully. If they are used, it must be remembered that excessive branding will complicate the signs message and reduce its effectiveness. In many cases making signs much slower to read. Opportunity is available to include branding on certain signs, where users will have more time to digest the information. Having said this, corporate branding and identity should not be considered as a separate entity. In certain cases "Brand reinforcement" can serve to add importance to a message. (i.e safety notices or instructions). Furthermore, there are a number of occasions where corporate branding is an important part of the wayfinding strategy.
  - Welcome notices
  - Identification
  - Landmark signage

For this reason it important that the site's Corporate Identity Strategy is considered in line with it's Wayfinding Strategy, though this does not affect the signs wayfinding content.

## **E Human Behaviour**

The Human behaviour factor is the single most important consideration in formulating any Sign Strategy. This factor is vital to the way the information is identified and interpreted by the user.

As we have touched on before, human beings navigate using a number of conscious and sub-conscious processes. The active mechanisms, such as use of our senses to collect information are easily appreciated. We use our eyes to read signs, our ears to listen for announcements and our nose to smell the coffee shop. However our passive mechanisms play an equally important roll in wayfinding and are often overlooked. These mechanisms are a mixture of conditioned reflexes and evolution and have a far greater impact on how information is identified and interpreted than

we might first believe. It is vital we harness them correctly if the strategy is to be successful.

In providing Wayfinding information we need to consider the following Human factors.

- Understanding for the means and mechanisms by which people navigate.
- Information retention
- Spatial awareness
- Relation to media
- Human relationships and issues
- Environmental factors
- Less is more

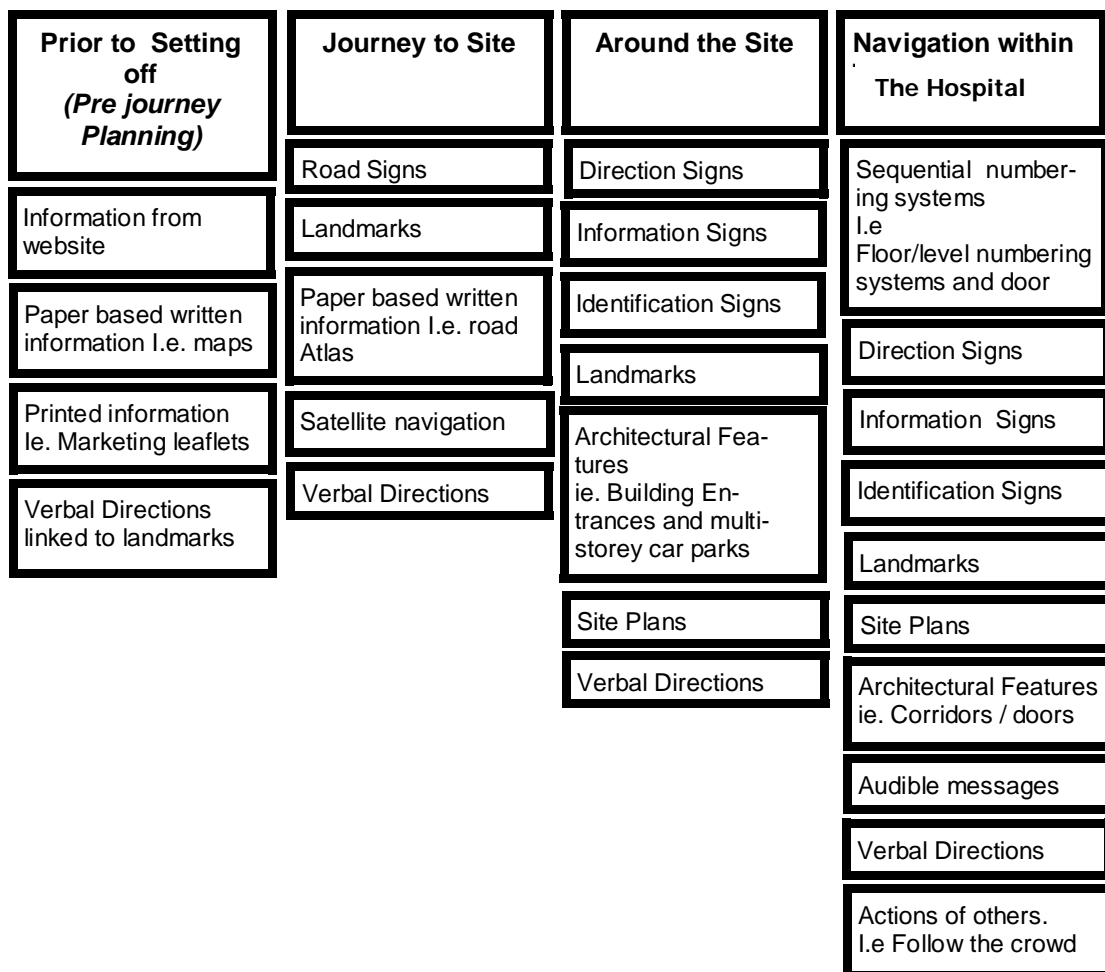
## **E1 Key Behavioural Considerations**

- Essentially people want to be told where to go. No matter what their reason for being there, as they navigate they are asking 3 main questions.
  - What direction to I head in?
  - How will I know I've arrived?
  - What do I do next?

The strategy must offer the answers.

- People visiting Hospitals are often anxious because they are visiting someone who is sick, or they are sick themselves. Giving them information before their visit will enable them to plan their journey, so easing anxiety. Journey planning is an important part of the wayfinding process. We must consider how the following relate to the information given out once a user arrives on site.
  - Website
  - Corporate brochures and promotional information
  - Site diagrams/maps
- Visiting unfamiliar and complicated environments is stressful. Add this to the unique stresses already being experienced by the typical hospital visitors and the situation can become very stressful indeed. When under stress we do not function as efficiently and our reactions are slower. As a result more help than normal may be required. One of the considerations resulting from this is that in some circumstances additional signage may be needed for reassurance.
- The mechanisms that support Human spatial awareness evolved as a means of navigating in open space. As a result when we move inside they are less effective. Efforts should be made to avoid generic space. If obvious landmarks are not available they should be introduced where possible. (Placement of artwork)
- There is a limit to our abilities to retain information. Do not burden the visitor with too much detail. All the information should not be offered up front. All the visitor needs is enough information to take he/she to their next decision point.
- The needs of visually impaired and other disabled people should receive particular consideration. If the wayfinding information is easy for a first-time visitor with sensory impairments to follow, it follows that it will be clear for all site users.

- Maps and diagrams should be used with care. Maps should not be relied on as a primary source of direction. The limitations of human spatial awareness means 95% of the population have difficulty in reading them and can become more confused as a result. For Hospitals in particular, maps are of limited use as human spatial cognition diminishes with age. Aging hinders the egocentric and allocentric processes which are essential to our appreciation of our position in relation to objects and landmarks. This is something which is fundamentally necessary to the effective interpretation maps. If “fixed” maps are used, care should be taken to orientate them correctly within their chosen location. The user must be able to use the map without having to mentally adjust his/her viewpoint.
- Once on site, in addition to road signs, people will rely on architectural features i.e. building entrances as guides. Inside a building, they will concentrate more on spoken directions and signs. It is important to consider all the navigation aids used and how they combine to work together. The diagram below offers examples of the navigation aids used on a typical journey through the Hospital



- A user's ability to identify and understand signs and site diagrams are greatly affected by the environment, colour, light and sound. For example, sign colours and other design characteristics must be chosen which stand out from the environment rather than blend in. A sign's design characteristics should be chosen in consideration of the types of environments they are to be used.
- It is important when considering sign design characteristics to develop hierarchies into the system. Hierarchies are understood as part of our conditioned navigating processes. If hierarchies are utilised correctly the user will be able to recognise where they are within their journey. This will help his/her spatial awareness and he/she will feel more comfortable.
- Attempts to reinforce hierarchies through design characteristics are commonplace (i.e. by the colour of the text). Great care should be taken in this practice. It is important to remember the user will not know the importance of each colour straight away and therefore will fail to recognise its significance immediately. Determining the importance of different colours in this way can be like breaking a code and he/she will have to see a number of signs before he/she makes the connection.
- Every effort must be made to combat the effect of "visual noise". If unchecked important signs will be missed. Information needs to be as concise as possible. The least signs is the best solution. If too many signs are used important information will simply disappear into the crowd. "visual noise" is one of the main causes of sign blindness.
- A second major factor leading to sign blindness is inconsistency. A user will gain preconceptions about the site from visiting the website or reading a brochure. From this he/she may be expecting the information to be delivered in a certain format using a particular design or colour scheme. If he/she does not find this on arrival then it may cause confusion or a sign to be missed. On arriving at site a user will identify with certain characteristics from how information is given. If the characteristics then change as his journey progresses, (i.e. font type, text or sign background colours change) a sign can be easily missed. These reactions are explained by a human behavioural response called Attention Bias. A user will take sign characteristics into his/her sub conscious, passively seeking them out as they navigate. This is an important part of our navigation process therefore if these characteristics are not matched a sign can be easily missed. It is important to appreciate this identification takes place very quickly. For this reason it is very important to maintain consistency throughout the whole site beginning at the earliest possible point.

## **F Legislation**

Legislative constraints play an important role in defining the make-up of any sign strategy. Compliance with current Government legislation must be adhered to in the development of any Sign Strategy.

### **F.1 Compliance with the Requirements of The Disabled Discrimination Act (DDA)**

Sensory impairments are regarded as physical impairments and are dealt with as such under the DDA, Signage and other visual communications are therefore covered under the act because of their dependence on sight.

It is advised that all elements of the solution should comply with current accepted recommendations on best practice, the result of work carried out by such groups as the (Royal national Institute for the Blind (RNIB) and Joint Mobility Unit (JMU)

Wayfinding is predominantly concerned about visual impairments and for the purpose of this document any comments are made in line with this area alone.

Below is a list of considerations, which should be considered when designing and implementing any sign strategy.

- **Colour Contrast - Text and Panel**  
**Always aim to achieve as high as possible colour contrast between the text and panel**  
Partial sight, ageing and congenital colour deficits all produce changes in perception that reduce the visual effectiveness of certain colour combinations. Two colours that contrast sharply to someone with normal vision may be far less distinguishable to someone with a visual disorder. It is the contrast of the colours, one against another that makes them more or less discernible rather than the difference between individual colours. I.e. Blue and red are different colours, but if their light values, saturation levels or hue factors are similar there will be little contrast.
- **Colour Contrast – Panel and Background**  
**Always aim to achieve as high as possible colour contrast between the sign panel and the background**  
Sign panel colours should offer a strong colour contrast to the background. This is just as important an issue as the contrast between panel and text colours. We accept this is difficult to achieve while maintaining consistency in sign layout, however contrast is maintained by thoughtful sign positioning or in extreme cases by adding a border to contrast with the background.
- **Choice of Typeface**  
**Use none serif typefaces. (Font)**  
Serif typefaces are not recommended for use under any circumstances
- **Use of Upper and Lower Case Letters**  
**Use a mixture of upper and lower case letters**  
With regard to DDA recommendations, a combination of upper and lowercase letters is preferred to upper case only, as the distinction between words is made easier. .
- **Gloss Factor and Surface Reflection**  
**Use none reflective surfaces.**  
The recommendations in line with the requirements of DDA state reflective surfaces or surface finishes with a high gloss factor (above 15%) should be avoided.
- **Character Spacing.**  
**Use increased character spacing when signs need to be read from distance.**  
If signs are to be read from long distance it is recommended that the space between the text characters be increased slightly to maximise legibility.
- **Braille/Tactile Signs**  
**Careful consideration of Braille/Tactile Signs**  
Wholesale inclusion of Braille/tactile signage is not required as a result of DDA recommendations. Practical solutions are preferred which are inclusive of all. Braille and Tactile is however advised for certain situations i.e. toilet doors and lift buttons.

For the practical function of the building it is recommended that the major part of the schedule should concentrate on clarity and visibility, following the guidelines above.

## F.2 Fire Safety, Emergency and Statutory Signs

All other health and safety related signs are covered by legislation.

All Emergency exit and statutory safety signs must conform to BS 5378 Part 1 (1980), BS 5499 Part 1 (1990) and the signs and signals regulations 1996.

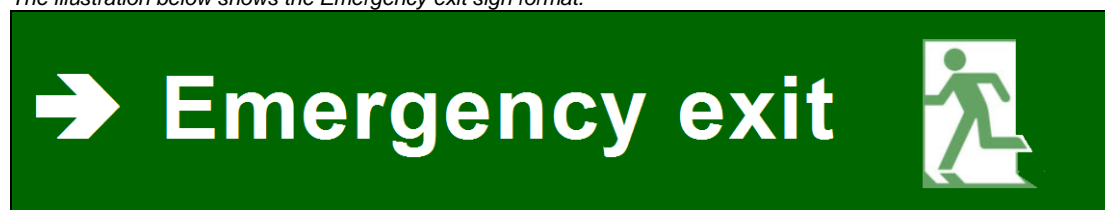
## F.3 Emergency Exit Signs

- To avoid any confusion, all fire exit and other emergency exit signs will be consistently signed “ **Emergency exit**” or “**Fire Exit**”
- Emergency exit signs will often be separate from the main visitor direction signage. Emergency exit signs should be kept separate from other signs whenever possible. However if they are combined with the main visitor identification signs, there position should always be consistent (see sign design Characteristics for further information).
- Emergency exit signs may need to be included within the main user direction sign strategy, therefore it is important their layouts are as sympathetic as possible to the Hospital's sign design characteristics. This must be done while observing all the following legislative requirements.

Emergency exit signs should always be presented in the following format.

- White text on a green background (RAL 6029. **colour TBC**)
- Upper and lower text
- Green running man, exiting white door. – Legislation dictates that the running man must exit a white door if the sign is none illuminated. Therefore to keep the design of all signs consistent this will be the rule even for illuminated signs.
- Direction arrow. - With the exception of the final door, which takes you to the outside of the building, direction arrows must be present on every Emergency exit sign in the sign trail.

*The illustration below shows the Emergency exit sign format.*



## F.4 Health and Safety Signs

All other safety signs are to be displayed in their statutory format as and when required.

- **Black and yellow – warning Signs.** These signs show potential hazards and are represented by black text on yellow signs and are accompanied by an appropriate pictogram



- **Red Circle with diagonal bar. - Prohibitory signs.** Shown with the appropriate pictogram, these signs are to prevent an action in the interest of safety.
- **Red - Fire Safety Signs.** Shown with white text on a red background these signs relate to fire safety specific information and are accompanied with the appropriate pictogram.
- **Blue – Mandatory Signs.** These signs accompanied by the appropriate pictogram show what action or precautions are required in order to remain safe.
- **Green – Safe Condition** These signs are green with white text. Accompanied by the appropriate pictogram they identify equipment which is for use in an emergency.
- **On all matters relating to safety signage and statutory requirements please consult with the Trust's Safety Manager**

## **G Wayfinding Management**

The following Section outlines the key aspects of the management and control of the wayfinding and signage in place at UHB Bristol.

### **G1 Development and Maintenance**

It is important to remember that the Wayfinding Strategy is a dynamic working entity and as such it will require continued review as development work takes place and new practice and working processes are introduced.

The same is true of the Wayfinding Guidelines. However, built on many unchanging fundamental principles and designed as a framework to manage change the document is less likely to be affected by the Trust's physical change. Amendments will however still be required to account for new legislation, restructuring and internal working practice.

If the guidelines are to be observed correctly and the Wayfinding Strategy to remain as efficient as possible, all change must be managed in a structured and co-ordinated manner. The following section details how this should be done.

### **G2 Control.**

Consistency and control are the key factors in maintaining the integrity of the Trust's Wayfinding Strategy. For this reason, there should be a single point of control with responsibility for all wayfinding and signage across the entire site.

The nominated person or department is ultimately responsible for all wayfinding and signage related decisions across the whole site, including:

- Approving all temporary or permanent sign requests
- Approval of all sign types used on site
- Sanctioning and supervising all temporary and permanent sign installations

- Development and maintenance of all signage
- Development and Implementation of the Wayfinding Guidelines.
- Responsibility for the Policing of signage on site and the removal of any unauthorised materials.

### **G3 Control Measures.**

The following control measures should be part of the Hospital's quality control procedures and any failure to observe them will be treated as a non-conformance and dealt with accordingly.

#### **G3.1 Defect Reporting**

UHB Bristol covers a large city centre site and it is the collective responsibility of all Trust staff to maintain the image of the site. This includes reporting any defects relating to signage in their respective areas.

All defects should be reported to the controlling department on the appropriate defect report form within 24 hours and the appropriate corrective action should be taken within 3 working days. Failure to report a defect should be treated as a non-conformance within the Trust's quality procedures

#### **G3.2 Permanent Signage Requests.**

All new signage requests must be made to the controlling department on the appropriate request form. Once the request has been received it will be acted upon and initial feedback should be sent within 7 working days. Approval of the request would be subject to assessment based on the impact of the proposed signage on the current Wayfinding Strategy. After the initial feedback, further communication relating to the approval, manufacture and installation of requested signage would be ongoing.

- The decision to allow any signage request remains with the controlling department alone and the department's decision is final.

#### **G3.3 Temporary/Emergency Signage Requests.**

All new temporary signage requests must be made to the controlling department on the appropriate request form. Once the request has been received it should be acted upon and initial feedback sent within 3 working days. Approval of the request would be subject to assessment based on the impact of the proposed signage on the current Wayfinding Strategy. After the initial feedback, further communication relating to the approval, manufacture and installation of requested signage would be ongoing.

Once approved all temporary signage should be given an individual reference number. This reference number must be displayed in 5mm capital height text in the bottom right hand corner of each sign.

- The decision to allow any signage request remains with the controlling department alone and the department's decision is final

In the event of emergency signage being required i.e. to advise users following an incident there will not be sufficient time to make a formal written request. In such an event, the manager responsible at the scene is authorised to fabricate emergency signs in-line with the temporary sign guidelines (as laid out in the Trust's Sign Design Characteristics). Once the immediate emergency has passed and initial temporary

signs are in place, the controlling department must be contacted and the appropriate course of action will be discussed.

### **G3.4 Wayfinding Support.**

Wayfinding support in the form of an external Wayfinding Consultant should be called upon in the event of major development work, which will require a re-evaluation of a significant part of the Trust's Wayfinding Strategy. External Wayfinding support may also be required if it is felt the signs proposed are deemed to have an impact on the primary visitor wayfinding strategy.

## **H Sign Design Characteristics**

### **H1 Sign Types**

Sign types define the function of a sign and fall into 3 basic categories.

1. Direction
2. Identification
3. Information

These 3 sign types perform separate functions within a sign strategy. Under most circumstances each individual sign within a strategy should be confined to a single sign type. I.e. identification signs should not carry directions

### **H2 Fundamental Sign Design Characteristics**

One of the most important factors ensuring the success of any signage strategy is consistency. With the exception of road signs, which have accepted design characteristics, all The UHB Hospital signs will follow a consistent format as defined in the **Sign Family Document**. (*Sign Schedule*)

Some design characteristics will remain constant across each of the 3 sign type formats. These are known as “**Fundamental Sign Design Characteristics**”.

Consistency is desirable in both the physical shape (i.e. chosen *system or family of signs*) and graphic content. There are 3 main factors, which should always remain constant across all sign types. These 3 factors, mainly associated with the graphic content of the sign are as follows:

1. Colour of text
2. Sign Panel/Background Colour
3. Type of font used

These 3 factors form the basis of the Sign Design Characteristics and there should be no deviation from these characteristics across any of the sign types.

#### **H2.1 Text Colour**

**White** (R255 G255 B255) & Yellow (where applicable ) R247 G247 B20)

The decision on text colour must be made in conjunction with that of background/panel colour for two main reasons.

- Aesthetic appeal.
- Colour contrast. There needs to be sufficient colour contrast between the background panel and the text. (*see section, referring to the guidelines laid down in line with the requirements of DDA, in respect to signage for the visually impaired*)

As a result of analysis the decision was taken to use White for the following reasons:

- Offered excellent colour contrast against background.
- In Line with *NHS Corporate Guidelines*
- Best demonstrated practice in other areas where clear signage is paramount
- No conflict with colour combinations used for statutory signage. (i.e health/safety and emergency signs)
- Operated efficiently for both internally and externally illuminated applications.

## **H2.2 Sign Panel/ Background Colour**

Level 1 Hierarchy Destination - Black (RAL 9005)

Level 2 Hierarchy Destination – Quartz Grey (RAL7039)

Emergency Department - Red (Pantone 485)

(Details and justification - As above)

## **H2.3 Specified Font**

**Frutiga** (with standard character spacing)

There are two primary issues affecting choice of font.

- Brand – The font needs to be acceptable in relation to the organisations brand.
- None Serif font - The choice of font must be of a none serif type (*see section referring to the guidelines laid down in line with the requirements of DDA, in respect to signage for the visually impaired*)

Frutiga was agreed acceptable for the following reasons:

- The font is None Serif.
- The font is readily available to all sign manufacturers. This is important for contractors and those responsible for creating temporary signs.
- Best demonstrated practice at other Hospitals and public buildings
- In line with NHS brand guidelines.
- Frutiga's design and considered character spacing renders it acceptable in all circumstances of use. (*i.e individual lines of text for direction signs or blocks of text for information signs*)

## **H3 Sign Design Characteristics Specific to Sign type**

Each of the 3 sign types will perform a different function within the Sign

Strategy and as such their formats will include different characteristics. Therefore, in addition to the 3 broader "Fundamental Characteristics", the following elements must be carefully considered.

### **H3.1 Pictograms/Graphics**

Pictograms are a design issue and an aid to recognition, however excessive use of pictograms and other graphic images will create visual noise and can prevent signs from functioning effectively.

To prevent the overuse of pictograms their application should be limited to those meeting the following criteria.

1. A pictograms should only be used if; It's meaning is unambiguous and can be reasonably understood without the support of text,
2. The pictogram's inclusion reduces or precludes the need for accompanying text.

### **Permitted Pictograms**

In meeting with the criteria above a family of pictograms has been approved for use and they can be seen below



1. Male, Female and Disabled Toilet pictograms



2. Walking man pictogram – Pedestrian signs



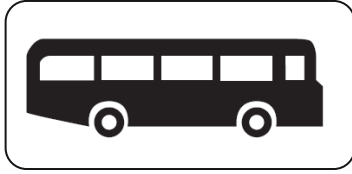
3. Lift pictogram



4. Restaurant pictogram



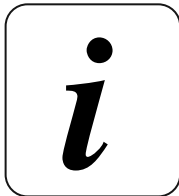
5. Stairs pictogram



6. Bus Stop pictogram



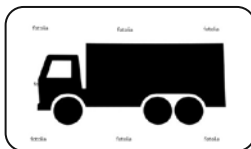
7. Car Park pictogram



8. Information pictogram



9. Car Pictogram



10. Deliveries Pictogram

### Pictogram Application

- Pictograms used in direction signs must always follow on at the end of the line of text
- Pictograms must always be placed with the same uniform distance between it and the end of the line of text. This distance must remain proportionate to the height of text.
- If more than 1 pictogram is used the distance between pictograms must always be uniform. This distance must remain proportionate to the height of text.

- When a line of text is accompanied by more than 1 pictogram, the pictograms should always appear in the same order.
- All pictograms must be the same height and the height must be directly proportionate to the capital height of the accompanying text.
- If a destination is signed via lift/stairs/escalator, the pictogram for either lift/stairs/escalator is to appear after the pictogram to represent the destination (if used)

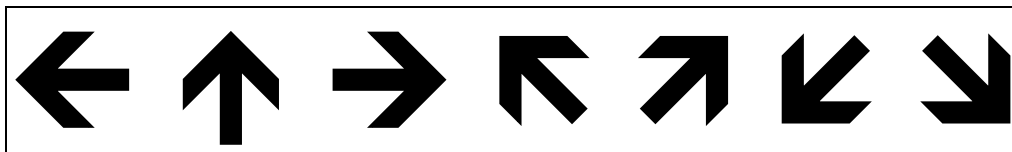
### H3.2 Direction Arrows

Direction arrows are a design issue. However arrow design should be consistent with the chosen font and remain clear and unambiguous if the sign is to perform effectively.

1. The direction arrow should be limited to a single design for all signs within the Hospital wayfinding strategy.
2. The direction arrow should always be the same size relative to the height of the text.
3. Arrow design should relate consistently with the font

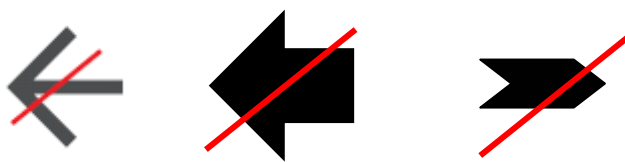
#### Permitted Arrow

In meeting with the criteria above, the following Design has been approved for use in Hospital signage. No other design should be used.



*Arrow design illustrated is an option taken from Zapf Essentials Arrows*

The arrow is distinctive in the fact the tail of the arrowhead is open and parallel to the main stem rather than being cut at 90 degrees.



(The arrow can be viewed at [www.fonts.com](http://www.fonts.com). Search “zaph essentials arrows”)

#### Application of Arrows

- All arrows must appear as illustrated above
- All direction arrows are to be justified to the right of the text.
- Direction arrows must always be placed with the same uniform distance from the right hand edge of the panel, relative to text height.
- Arrow height and distance from text must always remain directly proportionate to the height of text.
- Each single destination is to be accompanied by a direction arrow
- Only one arrow is to be used for each line of text.
- All arrows used on an individual sign must be the same height.

### H3.4 Text Height and Reading Distance

The choice of text height for each sign may vary with reading distance. Although reading distance is an important factor in the decision, the selection of text height must be considered both in relation to the message the sign is conveying and its position within the strategy.

Text height is an important factor in sign recognition and it is important that the text heights of all signs within a sign trail remain as consistent as possible. The text height of a sign should not be chosen on required reading distance alone, or simply to fit into the space available. These are common failings

The following formula is used to calculate the text height (Capital letter height) in order to achieve the reading distance required for the majority of the population under normal viewing conditions in reasonable light.

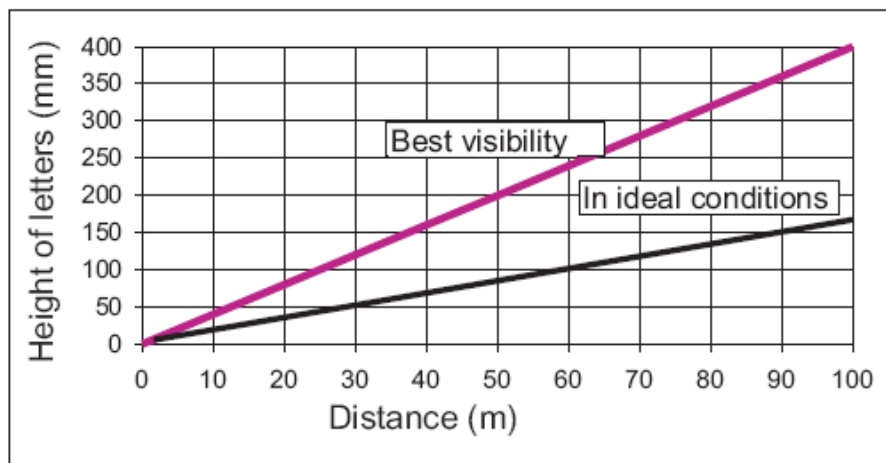
$$\frac{\text{Required reading distance (in mm)}}{250} = \text{Capital letter Text height (in mm)}$$

The example below shows how to calculate the text height required to achieve good visibility under normal conditions at a reading distance of 12metres

$$\frac{12000\text{mm}}{250} = 48\text{mm}$$

Therefore the required text height to achieve good visibility at 12 metres in normal conditions is 48mm

This calculation is supported by the guide chart below.



The calculation is based on Capital letter height therefore the lower case text height must be calculated before the sign can be constructed. This can be done by means of a simple calculation.



### H3.5 Character Spacing for Text

Character spacing should be considered in relation to the required reading distance and the resulting text height. We would suggest that standard character spacing should be increased by 10% for the main visitor information signs to maximise legibility when read from greater distances.

eg:

**Character Spacing** - Standard character spacing

**Character Spacing** - 10% increase over standard character

## I The Manufacture and installation of Temporary Signs.

Before we can define the design characteristics of a Temporary Sign it is important to make clear what is meant by the term “Temporary Sign” in the context of UHB Hospital

With respect to UHB Hospital, temporary sign refers more to cost, quality and speed of construction, than to purpose or period of use. Therefore temporary signs are only permissible under certain circumstances.

Temporary signs are used by the Hospital or it's contractors when a cost effective or fast response is required to such situations as are listed below. So long as they are only to be in place for a period no longer than 90 days

- Mark out detours in operation during construction/refurbishment work
- Help users navigate around temporary obstructions
- Offer immediate guidance following unforeseen circumstances.
- When an immediate response is needed while an alternative is sourced

The term “Temporary Sign” cannot be applied to Main visitor Direction Signs. If short-term change is required to these signs, the change must be planned. This will allow sufficient time to install replacements, which achieve the same quality of construction and observe all the same required sign Design Characteristics as the signs they replace.

Nor can temporary signs be used to replace emergency exit or statutory health and safety signs governed by British Standards Guidelines

### I.1 Minimum Requirement for Temporary Signs

Because of their nature and limitation of use, it is permissible that temporary signs not to exhibit all of the design characteristics specific to sign type. However it is important that all temporary signs follow the minimum required standards as outlined below.

- Exhibit the 3 Fundamental Sign Design Characteristics.
- Manufactured from non reflective materials. (DDA)
- Temporary sign producers must ensure the signs they make follow as close as possible the relevant sign design characteristics outlined for the type of sign they are producing.
- The controlling department should reserve the right to remove without prior warning any signs which it feels, do not meet with the required standards for temporary signs.