AbilityNet

Royal Pump Rooms

Headline Accessibility Review

18 April 2020

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Executive Summary

A Headline Review of the **Royal Pump Rooms** website has been conducted. This is a rapid, light-touch accessibility review.

The overall accessibility health score is detailed in Scores, along with a breakdown of the scores on each page. The pages in scope are detailed in Pages Reviewed.

The review consists of 8 tests, detailed in Appendix A. For each test, the page is rated using the following scale.

- **3 / Green:** minimal or no issues found.

- **2 / Amber:** issues were found that could delay or confuse users.

- **1 / Red:** issues were found that will likely cause severe difficulties or block users entirely from completing user journeys.

- **N/A:** the test was not relevant for the page.

Tests rated as 1 or 2 will also mean that the pages are non-complaint with the Web Content Accessibility Guidelines 2.1 Level AA.

Recommendations for solving these issues are detailed in Appendix B.

Please note that issue caused by repeated components, such as mega menus, have only been included on the first page in scope with the relevant component.

Let us help you

If you have any questions or would like to arrange an online session to go through this review, please email accessibility.services@abilitynet.org.uk.

Scores

Using the below scales, each page has been given an accessibility score. This is represented as a percentage.

- **100%** to a score of 3 for all tests.

- **50%** equivalent to a score of 2 for all tests.

- **0%** would be equivalent to a score of 1 for all tests.

This allows a means of presenting an average score per page to compare accessibility with different sampling sizes.

Please note that issue caused by repeated components, such as mega menus, have only been included on the first page in scope with the relevant component.

Score Average

Average Score	75%

Score by Page

Pages	1	2	3	4	5
Average Scores	75%	75%	83%	57%	86%

Score Breakdown

Pages, Checks	1	2	3	4	5
Structure	3	1	2	1	2
Keyboard	2	3	3	3	3
Skip Links	3	N/A	N/A	N/A	N/A
Fields and Components	3	3	3	3	3
Alternative Text	2	2	2	1	2
Layout	2	3	3	3	3
Colour	2	3	3	3	3
Moving Content and Multimedia	3	N/A	N/A	1	3

Pages Reviewed

The following 5 pages were reviewed for this headline review:

Page 1: Homepage
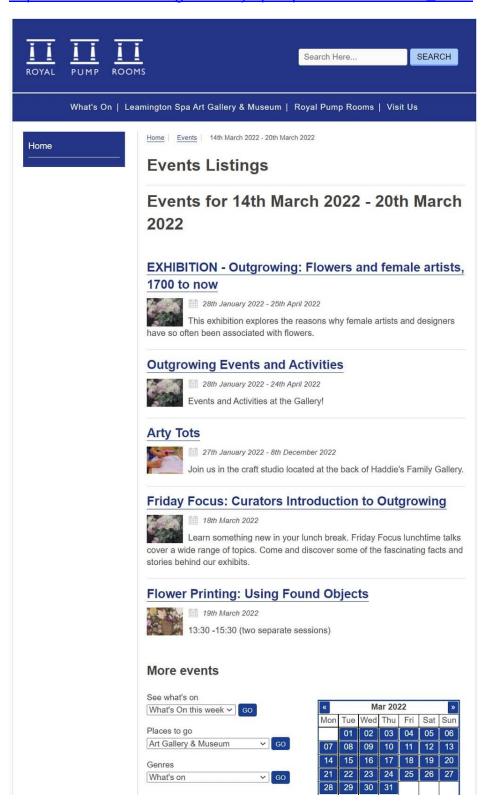https://www.warwickdc.gov.uk/royalpumprooms/site/index.php

Page 2: Events Listings

https://www.warwickdc.gov.uk/royalpumprooms/events/this_week

Page 3: Leamington Spa Art Gallery & Museum - Schools
https://www.warwickdc.gov.uk/royalpumprooms/info/32/schools

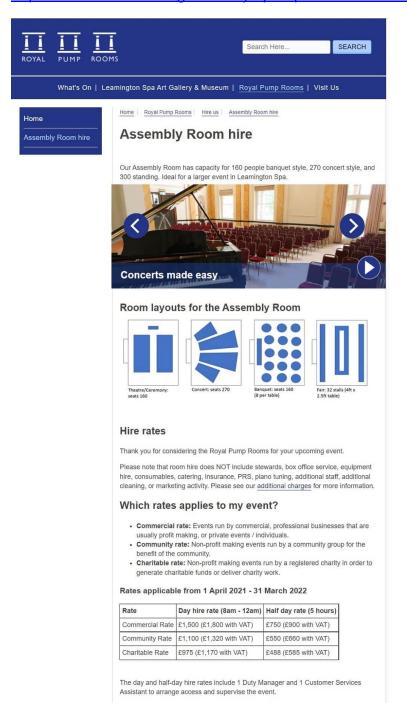## Page 4 - Welcome to Leamington Spa Art Gallery & Museum's dedicated family's page

https://www.warwickdc.gov.uk/royalpumprooms/info/45/welcome_to_leamington_spa_art_gallery_and_museums_dedicated_families_page

Page 5: Assembly Room hire

https://www.warwickdc.gov.uk/royalpumprooms/info/47/assembly_room

Review breakdown

This section details the issues found during the review and suggested amendments.

Page 1 – Homepage

Check	Score	Notes
Structure	3	Heading structure is logical. Heading semantics used appropriately.
Keyboard	2	The focus order is illogical.
Skip Links	3	The skip links become visible when receiving keyboard focus. They correctly move the focus down the page.
Fields and Components	3	All elements have labels and names. All labels are associated correctly.
Alternative Text	2	Less than 10 images have inappropriate alternative text.
Layout	2	There is lost content at 200%, 300% or 400% zoom.
Colour	2	Less than 5 instances of text that fails the colour contrast requirements.
Moving and Multimedia Content	3	Moving content can be stopped.

Figure 1: page 1 – Illogical focus order. The search element receives focus before the "Royal Pump Rooms" logo that is visually presented as the first element on the page.
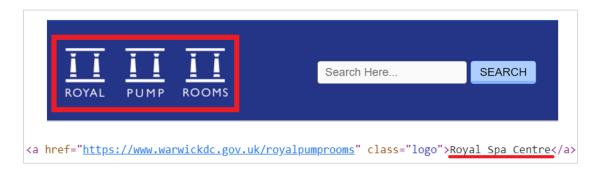
Figure 2: Page 1 - The "Royal Pump Rooms" interactive logo CSS background has an inappropriate alternative text of "Royal Spa Centre", instead of the visual text
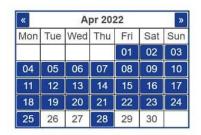

Figure 3: Page 1 - The "Enjoy our new family Treasure Trail" interactive image has an inappropriate alternative text of " Haddies Carousel"

Figure 4: Page 1 - Decorative images that do not convey meaning or unique information have inappropriate/redundant text alternative. They should use an empty `alt` attribute
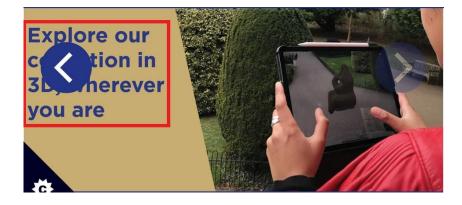

Figure 5: Page 1 – Previous and Next arrow buttons cover text on carousel image at 200%, 300% or 400% zoom. This occurs across all carousel slide images.
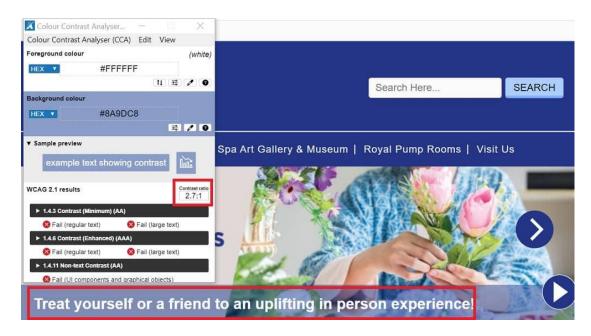
Figure 6: Page 1 – Parts of the carousel white text (24px bold) on semi-transparent background have a contrast ratio of 2.7:1 which does not pass the minimum requirement of 3:1 for large sized text

Page 2 – Events Listings

Check	Score	Notes
Structure	1	5 or more headings use the wrong level.
Keyboard	3	No keyboard trap. Every component can be used with a keyboard or has an alternative. Logical focus order. Everything indicates focus. The illogical focus order within the header area was already reported on page 1.
1Skip Links	N/A	This has already been reported on page 1.
Fields and Components	3	All elements have labels and names. All labels are associated correctly.
Alternative Text	2	Less than 10 images have inappropriate alternative text.
Layout	3	Browser zoom works. There is no lost content or functionality. The page reflows appropriately at 400% browser zoom.
Colour	3	Content or functionality does not rely on colour.
Moving and Multimedia Content	N/A	There is no multimedia, moving or blinking content on the page.

Figure 7: Page 2 - parent and child headings are using the same level `<h2>`

Figure 8: Page 2 – Decorative images that do not convey meaning or unique information have inappropriate/redundant text alternative. They should use an empty `alt` attribute

Page 3 – Leamington Spa Art Gallery & Museum - Schools

Check	Score	Notes
Structure	2	Less than 3 headings use the wrong level.
Keyboard	3	No keyboard trap. Every component can be used with a keyboard or has an alternative. Logical focus order. Everything indicates focus.
Skip Links	N/A	This has already been reported on page 1.
Fields and Components	3	All elements have labels and names.
Alternative Text	2	Less than 10 informative images have inappropriate alternative text.
Layout	3	Browser zoom works. There is no lost content or functionality. The page reflows appropriately at 400% browser zoom.
Colour	3	Content or functionality does not rely on colour. All text pass contrast.
Moving and Multimedia Content	N/A	There is no multimedia, moving or blinking content on the page.

<h1>Schools</h1>

<h1>Schools Programme</h1>

Learning is at the heart of Leamington Spa Art Gallery & Museum, with exciting schools workshops, creative adult courses, inspiring projects and participatory programmes.

Get more from your visit with our online resources and on-site activities.

All of our trips are run by qualified teachers and can be adapted to suit K.S1 or K.S2. You can choose either a half day or a whole day experience.

<h3>Victorian Leamington</h3>

This cross curricular trip brings to life the story of Leamington, it's Spa water and circus elephants. It includes an entertaining tour of the Royal Pump Rooms and their gardens,

```
<h1 class="page-title">Schools</h1>
▼<div class="row_divider"> flex
  ▼<div class="new_widget  width100  lastWidget100 ">
    ▼<div class="widgetPadding   widget--content">
      ▼<div class="widget_content byEditor by_editor editor">
        ▼<div class="imageCaption">
          <h1>Schools Programme</h1>
          ▶<p>…</p>
```

Figure 9: Page 3 - parent and child headings are using the same level `<h1>`

Victorian Leamington

This cross curricular trip brings to life the story of Leamington, it's Spa water and circus elephants. It includes an entertaining tour of the Royal Pump Rooms and their gardens characters dressed in historic costumes, Victorian games and a craft. You can choose from Victorian toy making or pottery elephants. A 'must' trip for any local child who will leave with an understanding of how our town grew into what it is today.

```
▼<div class="imageCaption">
    <img alt="victorian" src="/royalpumprooms/images/victorian.jpg">
    <p> </p>
  </div>
```

Animation

Have a tour of our artworks and then use tablets and software to create stop motion animation films. A fun and creative way of bringing our collection to life and perhaps giving children a taste for a career as a film maker!

```
▼<div class="imageCaption">
    <img alt="animation" src="/royalpumprooms/images/animation.jpg">
    <p> </p>
  </div>
```

Figure 10: Page 3 - Informative images have inappropriate text alternative. Informative images that convey meaningful or unique information need a descriptive `alt` attribute

Page 4 – Welcome to Leamington Spa Art Gallery & Museum's dedicated family's page

Check	Score	Notes
Structure	1	3 or more headings have not been marked-up.
Keyboard	3	No keyboard trap. Every component can be used with a keyboard or has an alternative. Logical focus order. Everything indicates focus.
Skip Links	N/A	This has already been reported on page 1.
Fields and Components	3	All elements have labels and names.
Alternative Text	1	More than 10 informative images have inappropriate alternative text.
Layout	3	Browser zoom works. There is no lost content or functionality. The page reflows appropriately at 400% browser zoom.
Colour	3	Content or functionality does not rely on colour. All text pass contrast.
Moving and Multimedia Content	1	Moving content cannot be stopped.

Figure 11: Page 4 – Visually styled headings are not marked up semantically as headings

Figure 12: Page 4 - Decorative images that do not convey meaning or unique information have inappropriate/redundant text alternative. They should use an empty `alt` attribute

Figure 13: Page 4 - The "Discover Leamington Spa" image heading has an inappropriate text alternative of "Discover Leam"

Figure 14: Page 4 - Animated hero image cannot be stopped

Figure 15: Page 4 - the "Sketch Fab" animated image cannot be stopped

Page 5 – Assembly Room hire

Check	Score	Notes
Structure	2	Less than 3 elements use headings inappropriately.
Keyboard	3	No keyboard trap. Every component can be used with a keyboard or has an alternative. Logical focus order. Everything indicates focus.
Skip Links	N/A	This has already been reported on page 1.
Fields and Components	3	All elements have labels and names.
Alternative Text	2	Less than 10 informative images have inappropriate alternative text.
Layout	3	Browser zoom works. There is no lost content or functionality. The page reflows appropriately at 400% browser zoom.
Colour	3	Content or functionality does not rely on colour. All text pass contrast.
Moving and Multimedia Content	3	Moving content can be stopped.

Figure 16: Page 5 - The image of text is using heading inappropriately. The image is contained in `<h2>` heading tag that does not title or categorise other content.

Figure 17: Page 5 - Carousel Informative images have inappropriate alternative text, for example: "New Pic", "Layout", "Pic" etc
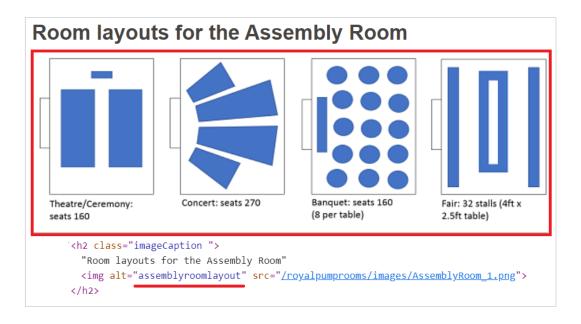

Figure 18: Page 5 – The image of text describing Assembly Room layouts with seats number has inappropriate alternative text of "assemblyroomlayout"

Appendix A: Headline Review Tests

The following tests are used during the Headline Review process. Due to the brevity of the process, these tests are not designed to pick up all accessibility issues but instead give an indication of where accessibility issues need further investigation.

Check	WCAG Equivalent(s)	Evaluation
Structure	Info and Relationships	Check that the heading structure is logical and appropriate. Check that the heading elements are using heading semantics. Check that non-heading elements are not using heading semantics.
Keyboard	Keyboard No Keyboard Trap Focus Order Focus Visible	Check that the interactive elements are keyboard operable. Check there are no keyboard traps. Check that the focus order is logical. Check that focus indicator is displayed throughout.
Skip Links	Bypass Blocks	Check that there are navigational skip links. Check that the skip links become visible when they receive focus. Check that the skips links move focus appropriately.
Fields and Components	Labels and Instructions Info and Relationships Error Identification Name, Role, Value	Check that all interactive elements (form fields and components) have labels or accessible names, this includes icon buttons. Check that any labels are associated with the fields. Check that any errors are described through text. Check that errors are associated with the fields.

Alternative Text	Non-Text Content	Check that images have appropriate alt attributes. This includes decorative and informative images, as well as image links.
Layout	Resize Text Reflow	Check that browser zoom works. Check that content or functionality is not lost at 200%, 300%, 400% Check with 400% browser zoom that content reflows correctly.
Colour	Contrast Use of Colour	Check that there is not text colour contrast failures. Check that colour is not relied upon to communicate content or functionality.
Moving and Multimedia Content	Audio-only and Video-only (Prerecorded) Audio Description or Media Alternative (Prerecorded) Captions (Prerecorded) Captions (Live) Pause, Stop, Hide	Check that automatically moving content (e.g. a carousel) can be paused or stopped. Check that multimedia has captions and a transcript, as appropriate. Check that captions are generally accurate.

Appendix B: Solution Suggestions

Structure

The heading structure must be logical and uses heading semantics. Avoid using CSS to create headings. These are not exposed correctly to assistive technology.

Avoid this `<span class="mainHeading">Welcome to ACME</span>`.

Use heading levels to create a logical structure. Avoid using the levels for the style bundled with them. As well, use the levels to establish parent and child sections. Do not use the same levels and then use CSS to differentiate parent and child sections.

For example, avoid the following.

```
<h2 class="mediumHeading">News Stories</h2>
<h2 class="smallHeading">Record Profits in Q1</h2>
<h2 class="smallHeading">Lost dog found in CEO Safe</h2>
```

Avoid using heading semantics when the text in question does not title or categorise content. Do not add heading semantics for any large text.

For best practice on headings, see WAI Tutorials - Headings. You can test headings using Web Developer, Headings Map (Chrome) or Headings Map (Firefox).

Keyboard

Users must be able to use Tab and Shift + Tab to navigate forwards and backwards through interactive elements. The order in which elements receive focus as you tab through the page should be logical, which is usually top-left to bottom-right.

There should be no areas where a keyboard user is trapped and cannot tab forwards or backwards. There are a few exceptional circumstances where traps are allowed, such using a temporary keyboard trap on a closable modal dialog.

When tabbing onto interactive elements, the focus must be visible. Avoid the `outline: none` CSS rule, unless you are creating your own focus styles.

Interactive elements should also respond to Return, Space, and Arrow keys. Return and Space are used to activate elements, such as buttons and links. Arrow keys are used to adjust elements, such as a dropdown list with several options.

For more information, see W3 - Perspective Video - Keyboard, MDN - Keyboard, BBC GEL - Focus, and CSS Tricks - Focusing on Focus Styles.

Skip Links

When keyboard users navigate onto a new web page, the keyboard focus defaults to the top of the page. This is expected behaviour, which is driven by web browsers.

The challenge is that keyboard users have to then tab through the page again. This can be time-consuming, particularly when there are large navigation menus.

Such that keyboard users can easily navigate pages; it is necessary to have skip links that allow users to jump over the blocks of content. With navigational skip links, it is standard to move focus onto the `<h1>` that opens the `<main>` container.

These need to be visible when users tab onto them, respond to the user pressing Return or Space, and move focus beyond whatever content is being skipped.

For more information on skip links, see [a11y Project - Skip Links](#), [WCAG - G1 Adding a link at the top of each page](#), and [Your skip links are broken](#).

Fields and Components

Assistive technology interface with the semantics. They use the name, role, and states, which are particularly important with form fields and components.

Many elements are named through internal text. For example, `<button>Submit</button>` is named "Submit" through the internal text.

Other elements are named through association. In the following example, the input field is named through the association created by the `<label>` semantics.

```
<label for="memAnswer">Where was your first job?</label>
<input id="memAnswer" type="text">
```

It can be necessary to specify names. This often happens with icons buttons with no visible text. The following example is named by the `aria-label`.

```
<button class="closeIcon" aria-label="Close"></button>
```

There can also be informative information that does not name the element. This is commonly seen with error messages, which describe fields rather than naming them. This is where `aria-describedby` is useful. In the following example, the error message is mapped to the hint of the input field. It does not overrule the label.

```
<label for="memAnswer">Where was your first job?</label>
<input id="memAnswer" type="text" aria-describedby="error">
<span id="error">The information entered does match our records</span>
```

For more information, see [WAI Tutorials - Labels](#) and [WAI Tutorials - Notifying Users](#).

Alternative Text

Images are used in different ways to communicate different information. These require distinct approaches in order to make them accessible to all users.

There are decorative images. There are images or icons that do not convey more meaning than already present on the page.

These images should be marked as decorative. This prompts assistive technology to ignore the images, such that users are not told about decorative content.

This is done with an empty alt attribute. For example, `<img src="…" alt"">`.

There are informative images. There are images or icons that communicate information that is not otherwise available on the page.

These images should have alt text that describes the unique information. This prompts assistive technology to communicate the information to users.

For example, `<li><img src="phn.png" alt="phone">01443 256590</li> <li><img src="fx.png" alt="faxe">01443 256990</li>`.

There are functional images. There are images or icons that have some functionality associated with them, such as activating a link.

These images should have alt text that describes the functionality. This prompts assistive technology to communicate the functionality to users.

For example, `<a href="…"><img src="…" alt="ACME Homepage"></a>`.

For more information, see [WAI Tutorials - Decorative Images](#), [Functional Images](#), and [Informative Images](#).

If the image is an SVG file, use the `<title>` and `<desc>` attributes, or `aria-hidden`. For more information, see [CSS Tricks - Accessible SVGs](#).

Layout

Different viewports can be more or less useful for different user groups. Diverse users access the same content on different devices with various browser settings.

To help support this, WCAG requires that websites allow users to increase the text size by 200%, which is most commonly achieved through browser zoom.

As well users must be able to zoom up to 400%, and the page must reflow into a single column, without requiring the user navigate up, down, left, and right.

Users must be able to perform the above without losing content or functionality.

The experience does not need to be identical. Different orientations give more or less access to screen real estate.

However, the content and functionality should be comparable. They should be able to complete the same core user journeys and access the same essential information.

Use the appropriate techniques for supporting various viewports. For example, use Flexbox techniques, such as CSS Tricks - A Complete Guide to Flexbox.

Colour

When colour is used as the exclusive means of perceiving information, it can create serious barriers, particularly for low vision and colour blind users.

Make sure that colour vision is not required to differentiate elements. For example, graphs can utilise patterns or textures, as well as text to communicate values. For more information, see PSU - Charts & Accessibility and Princeton - Colour Alone.

As well, to make sure that information is easily perceivable, WCAG requires that that the colour of text passes contrast requirement with the background colours.

For regular size text (e.g. 14pt bold, or 18pt, and below), the contrast ratio must be at least 4.5:1. For large text, the contrast ratio must be at least 3:1.

The colour contrast ratio between foreground and background colours can be tested with tools such as Colour Contrast Analyser

WCAG AA compliant colour palettes can be generated with tools such as Colorsafe and Accessible Colour Matrix.

Multimedia and Moving Content

Automatically moving content generally includes videos and carousels.

Avoid anything that start playing automatically. Such elements can be distracting and can cause difficulties, particularly for those with motion sensitivity.

If you must have automatically playing animations, such as a carousel, make sure that users can pause or stop this behaviour.

It is not acceptable to just pause the animation on mouse hover or keyboard focus. The user must be able to stop the moving content and navigate the rest of the page.

For an example carousel, see WAI Tutorials - Carousel Concepts.

As well, multimedia content must be accessible to all users. This involves communicating the audio or visual information in multiple formats.

For example, video-only or audio-only content must have an alternative, such as a podcast with a text transcript.

Videos that require captions have captions, as well as transcripts and/or audio descriptions. The exact requirements differ based on the video and WCAG levels.

WCAG Level A allows for audio descriptions or a transcript. WCAG Level AA is stricter and requires audio descriptions. Both can be time consuming and expensive.

We recommend the following approach.

First, caption your videos. Then use the captions to create transcripts. Note that captions and transcripts serve different user groups. Captions aid usage without hearing. Transcripts are particularly useful for those using screen readers and refreshable braille devices. These technologies cannot access captions.

Include the transcript adjacent the videos. For example, include a disclosure element under your videos, with which users can open and close a transcript panel.

Otherwise, review whether your videos require audio descriptions. Check whether they have visual information that gives users access to exclusive information.

WCAG has relaxed provisions for "Talking head" videos, where a transcript can be used in place of audio descriptions, due to the lack of meaningful visual information.

It is common that minor editorial decisions can mean that a video can require audio descriptions, or instead that a transcript is sufficient.

For example, a video where the speaker introduces themselves is distinct from a video where this same information is only available through some on-screen text.

For more information, see WAI - Audio Content and Video Content, which has articles such Transcripts, Audio Descriptions and Captions.

The WAI also have examples of videos with captions, audio descriptions, and interactive transcripts. For these videos, see WAI - Perspective Videos.

For information on implementing captions in common video players, see YouTube - Add your own subtitles and closed captions and Vimeo - Captions and subtitles.