

D48 sheet billboard on the land at corner of Aberdare Rd & Dynevor Street – Pre application information

Our proposal is to replace the current static signage with modern sleek digital 48 sheet billboard on the land at corner of Aberdare Rd & Dynevor Street



Placement

The proposed billboards mounting height will be installed approximately 1.6m from ground level giving it sufficient clearance from the ground.

The Area

Land on corner of Aberdare Rd & Dynevor Street is just off and is visible from Penry Street, Merthyr Tydfil.



(Proposed site as seen from Dynevor Street, Merthyr Tydfil)

The area is considered an E4 area in accordance to the institute of lighting professionals (ILP)– lighting guide. See Below

Table 3: Environmental zones			
Zone	Surrounding	Lighting Environment	Examples
E0	Protected	Dark	UNESCO Starlight Reserves, IDA Dark Sky Parks
E1	Natural	Intrinsically dark	National Parks, Areas of Outstanding Natural Beauty etc
E2	Rural	Low district brightness	Village or relatively dark outer suburban locations
E3	Suburban	Medium district brightness	Small town centres or suburban locations
E4	Urban	High district brightness	Town/city centres with high levels of night-time activity

The below provides the recommended levels at night as per the ILP – lighting guide that is also attached as a part of this application.

8 Recommendations

The maximum value of luminance anywhere on the surface of an advertisement at any time during the night is given in Table 4. This guide makes no recommendations about the luminance distribution across the advertisement as this is a matter of design and the message that the sign has to convey.

Table 4: Maximum permitted recommended luminance (cdm ⁻²)					
Illuminated area (m ²)	Zone E0	Zone E1	Zone E2	Zone E3	Zone E4
Up to 10	0	100	400	600	600
Over 10	0	n/a	200	300	300

Our brightness sensors will be pre programmed to operate bellow the recommended level of <300 cd/m², as with our Digital 48 billboard in Llanelli (See Below) at night we bring the brightness to bellow 50 cd/m² so the brightness is less than that of a standard Led /SVL street light – thus giving off less light polution than the surrounding lamp posts.

During the day the sign will never exceed a max cm/d² of – 2500, half of the max recommended day time of 5000 cm/d².

Lighting

There are two standard LED / SVL lampposts in the immediate area of the proposed billboard, with our billboards programmed to operate at a far lower illuminance than lamp posts, this will eliminate the possibility of added light pollution in the area. (See attached imagine).



(Above image show's several of the lamp posts in the immediate area surrounding the sign bringing the area under the E4 zone as per IPL lighting guide.)

Speed Limit – The speed limit on Penry Street approaching the sign is 20MPH.

Traffic lights – There are no traffic lights near the proposed billboard, with the speed limit being 20mph the maximum breaking distance would be 40 feet (12 Meters) according to Crashmap.co.uk the site has had no incidents in the vicinity in the last four years.

Safety particulars

1. The proposed screen would contain absolutely no moving images, and no form of animation, eliminating the chance of distracting drivers.
2. Billboard will be fitted with brightness sensors, automatically adjusting the brightness of the screen to the amount of ambient light present at that time, as an extra fail safe the billboards have a redundant brightness sensor in the event the priority sensor malfunctions as well as time based adjustments (6pm onwards the billboards will dim every 10 minutes guaranteeing that the brightness will never exceed agreed limits).

3. Use of low Illuminance panels – All of our LED installations strictly follow the guidance set out by the institute of lighting professionals in the Professional lighting guide 05/23 (The brightness of illuminated advertisements including digital displays).

Daytime Lighting Recommendations

Table 10.5 – Recommended maximum daytime permitted values of sign luminance.

Daylight ambient Illuminance (Eh) [lux]	Sign Luminance [cd/m ²]
Up to 3,500	≤ 400
3,501 to 8,500 (overcast day)	≤ 1,000
8,501 to 15,000 (bright day with cloud cover)	≤ 2,500
15,001 to 25,000 (bright sunny day)	≤ 3,500
25,001 to 42,000 (direct sunlight)	≤ 5,000
42,001 and above	> 5,000

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Nighttime Lighting Recommendations

10 Considered performance requirements

Table 10.4: Recommended maximum night-time permitted values of display luminance

Light Technical Parameter	Maximum sign luminance (L _s) cd/m ²				
	Environmental zones				
Sign surface area	E0	E1	E2	E3	E4
0 to < 5 m ²	0	25	200	300	300
5 to < 20 m ²	0	0	200	300	300
≥ 20 m ²	0	0	100	200	300

Our strict application of the above recommendations ensures our panels cause no additional light pollution to areas, but make our LED installations statistically as safe as static non digital panels.

4. Transition between adverts will be around 2 seconds the same as scrolling billboards as to not distract on coming drivers.

Footpath

Feeder Pillar

The feeder pillar will be located to the rear of the billboard eliminating any chance of a trip hazard to the public

Advert length and rotation

The digital billboard will work on a rotation of 6 adverts and the advert dwell time will be 10 seconds, double the recommended safety length stated in ILP – Lighting guide.

Note:

1. For digital signs when the content may change then the rate of change should be limited to once every five seconds. Moving images, animation, video or full motion images should not be displayed at locations where they could present a hazard for example if they could be seen by drivers in moving traffic. During the daytime sign luminance should never exceed $5,000\text{cdm}^{-2}$.

The rotation between adverts will be subtle and last around 2 seconds.

Similar installations

Having 21 digital screens roadside in Wales, and an immaculate safety record the most similar installation to the proposed site on Dynevor Street, is our site

on 28 Alexandra Road, Swansea which has a lot of the same features, with the screen being installed on the corner of two streets, with the set up of the screen and the slow transition of adverts, since its installation in 2020 there has not been a single accident in the immediate area since its installation.

This gives me great confidence that the proposed site with its low speed, lack of traffic lights and static nature make the proposed site a perfect site in all areas for a modernisation to a digital billboard over the current static billboard in place.



(installation at 28 Alexandra Road, Swansea)

Safety Record

To date since our first installation in May 2019 we have never had a single incident or complaint regarding road safety this is in part due to the primary aim with any of our sites is to make sure that the board is safe and does not interfere with road safety. We have put many features in place to reduce any features that may cause distraction to drivers.

Any recommendations you can provide during the audit would be invaluable to us in further maintaining our extremely high safety records.

