

**LAND USE, PLANNING  
& TRANSPORTATION DEPT.**

**21 NOV 2022**

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South Dublin County Council  
Planning Department  
Town Hall  
Tallaght  
Dublin 24

16 November 2022

Re: SDCC Ref: SD22A/0409

Retention of erection of new electronic of 8 x 5.5ft electronic digital sign at the Orchard Road boundary of Áras Chrónáin Irish Cultural Centre, Clondalkin, Dublin 22

Dear Sir or Madam,

We wish to object to the retention of a digital electronic display visible from Orchard Road at the premises of Áras Chrónáin, Clondalkin, for the following reasons:

1. There is a growing body of international scientific research indicating that digital electronic signage distracts the attention of oncoming vehicle drivers for a sufficient time to make their driving unsafe for themselves, other road users and pedestrians. (See some quotations and extensive list of scientific research at the end of this letter).

Orchard Road is a particularly busy thoroughfare and drivers of all ages and vehicles must give prevailing conditions their full and undivided attention. Experience proves that if there is a traffic accident or hold-up on Orchard Road, it affects the traffic flow in the rest of the village. At the start of Orchard Road, at the Garda Station, there are 2 pedestrian/traffic lights, with three opposing lanes of traffic merging from Tower Road, the 9<sup>th</sup> Lock Road and The Mill Shopping Centre car park. Shortly after the start of Orchard Road, the bus lane halves the available roadspace for other vehicles, and soon there is a busy bus stop where householders join the traffic and adjacent to the digital electronic sign, on a sweeping bend in the road. In addition and despite SDCC's best efforts, Orchard Road regularly floods after rainfall, rendering the "other traffic" lane impassable for many yards just before traffic reaches the bus stop and the roadway near the sign in question. This sign is even more visible during the hours of dusk and darkness.

2. Neither of the 2 retention notices on display at Áras Chrónáin seem to be in accordance with what is required by SDCC. They may both be invalid notices.

Following contact from a member of the public with SDCC, two retention notices were posted at both of the public entrances to Áras Chrónáin. The notice at the Orchard Road entrance is placed some feet inside the gate (usually locked for most of the day) and is not legible from the public pathway. The notice at the Watery Lane entrance is affixed to a gate pillar and also cannot be read from the road.

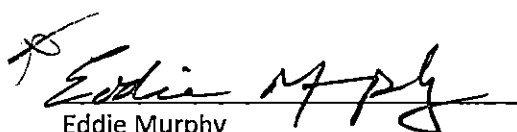
3. The electronic/digital signage now seeking retention was erected and made operational without seeking the necessary permission from the planning authority. Allowing it to remain may encourage other concerns to follow suit, thereby undermining the planning process and the authorities entrusted with its command (South Dublin County Council and, possibly later, An Bórd Pleanála).

4. Áras Chrónáin has evidenced its energetic support for all Irish culture. However, is it not a pity that i"the Áras" should see fit to erect such a sign at Orchard Road - the delineation of one of the ramparts of our 7<sup>th</sup> century monastic settlement established by St Crónán Mochua (RIP 630AD) after whom the Áras itself is named and the reason Clondalkin village became established?

Just because Orchard Road was omitted from Clondalkin's ACA – some say by mistake – it does not negate its importance in our ancient local history.

On account of the foregoing, I respectfully request SDCC not to grant retention of any digital/electronic sign or signs which are visible from the roads along any of the boundaries of Áras Chrónáin.

Yours faithfully,



Eddie Murphy  
"Camac Cottage"  
Orchard Road  
Clondalkin  
Dublin 22

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26 Monastery Crescent  
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The following are some quotations from international scientific research concerning the link between digital electronic roadside signage and driver distraction. Further references concerning driver distractive elements are listed on page 3.

Note: Driver distractions can be further affected at the same time by these additional factors:

- Mobile phone conversations
- Inclement weather conditions – Orchard Road regularly floods after heavy rain.
- Driver fatigue
- Drink driving
- Driver's emotional state and health
- Extended driving
- In-car distractions, e.g. children.

(a) From: CEDR Transnational Road Research Programme Call 2016 Safety [CEDR = Conference of European Directors of Roads]: "Assessing Distraction of Vehicle drivers in Europe from Roadside Technology-based Signage. [ADVERTS]", p 33

Funded by Belgium-Flanders, Ireland, Netherlands, Slovenia, Sweden, United Kingdom  
<https://www.cedr-adverts.eu>storage>minisites>

The 50% of drivers who do look at billboards “look more often and longer at static digital billboards (in particular at moments that the advertisement switches) and even more so at video billboards than at traditional static billboards. ... when they look at billboards at raised level they tend to look longer.

“Young novice drivers are inclined to look at static digital billboards and video billboards the most. Drivers rarely look longer than two seconds at a billboard. However, sometimes they do, especially when it is a static digital billboard or a video billboard. This is worrying as long glances at objects outside the vehicle increase the crash risk substantially (Dingus et al., 2016).

“There is quite strong evidence that lane keeping deteriorates when drivers look at billboards. Billboards do not seem to have a strong impact on speed. In some studies it was found that headways get shorter in particular when drivers pass static digital billboards and video billboards. This is dangerous because response latencies are longer when drivers look at billboards.

“[Drivers] brake later in time when they look at a billboard and a lead vehicle suddenly brakes. Drivers also more often overlook road signs and tend to forget to signal when they change lanes near billboards.

“... It seems that most drivers are capable of regulating adequately the attentional resources the driving task requires (Young et al., 2017). However, in traffic the task demands can suddenly increase and these events (e.g. a lead vehicle that suddenly brakes) are not always properly anticipated. In those circumstances looking at billboards can have detrimental effects.”

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(b) From: Ahlstrom, Patten, et al: *Effects of electronic billboards on driver distraction, Results*, National Library of Medicine, Bethesda, Maryland, USA, 2013, <https://pubmed.ncbi.nlm.nih.gov/23682577/>

“The visual behavior data showed that drivers had a significantly longer dwell time, a greater number of fixations, and longer maximum fixation duration when driving past an electronic billboard compared to other signs on the same road stretches. No differences were found for the factors day/night, and no effect was found for the driving behavior data.”

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(c) From: Belyusar, D. et al: *Are Digital Billboards Dangerously Distracting?* New England University Transportation Center & MIT AgeLab, and the Association for Psychological Science, 2016, <https://www.psychologicalscience.org/news/motr/are-digital-billboards-dangerously-distracting.html>

“These digital billboards are inventive and visually attractive — so much that they may cause drivers to take their eyes off the road. ... The researchers, led by psychological researcher Daniel Belyusar, explained that the flashing lights in ad-rotating digital billboards may be enough to evoke ‘obligatory shifts of covert visual attention’ due to automatic, sensory reactions that take less than 100 milliseconds.

“Since drivers might find it difficult to avoid being covertly drawn to a flashing billboard, it is logical that glances to the billboard, may follow,” the researchers write. For this reason, Belyusar and colleagues believe that digital billboards have the potential to be dangerous because more glances and longer glances away from the road are associated with more frequent automobile accidents.”

### Further references:

Beijer, D., Smiley, A., & Eizenman, M. (2004). Observed driver glance behavior at roadside advertising signs. *Transportation Research Record*, 1899(1899), 96–103. doi:10.3141/1899-13.

Bendak, S., & Al-Saleh, K. (2010). The role of roadside advertising signs in distracting drivers. *International Journal of Industrial Ergonomics*, 40(3), 233–236. doi:10.1016/j.ergon.2009.12.001.

Belyusar, D., Reimer, B., Mehler, B., & Coughlin, J. F. (2016). A field study on the effects of digital billboards on glance behavior during highway driving. *Accident Analysis and Prevention*, 88, 88–96. doi:10.1016/j.aap.2015.12.014.

Costa, M., Bonetti, L., Vignali, V., Bichicchi, A., Lantieri, C., & Simone, A. (2019). Driver's visual attention to different categories of roadside advertising signs. *Applied Ergonomics*, 78, 127–136. doi:10.1016/j.apergo.2019.03.001.

Crundall, D., Van Loon, E., & Underwood, G. (2006). Attraction and distraction of attention with roadside advertisements. *Accident Analysis and Prevention*, 38(4), 671–677. doi:10.1016/j.aap.2005.12.012.

Decker, J. S., Stannard, S. J., McManus, B., Wittig, S. M. O., Sisiopiku, V. P., & Stavrinou, D. (2015). The Impact of Billboards on Driver Visual Behavior: A Systematic Literature Review. *Traffic Injury Prevention*, 16(3), 234–239. doi:10.1080/15389588.2014.936407.

Domke, K., Wandachowicz, K., Zalesińska, M., Mroczkowska, S., & Skrzypczak, P. (2011). Digital billboards and road safety. *WIT Transactions on the Built Environment*, 121, 119–131. doi:10.2495/LIGHT110111.

Dukic, T., Ahlstrom, C., Patten, C., Kettwich, C., & Kircher, K. (2013). Effects of Electronic Billboards on Driver Distraction. *Traffic Injury Prevention*, 14(5), 469–476. doi:10.1080/15389588.2012.731546.

Edquist, J., Horberry, T., Hosking, S., & Johnston, I. (2011). Effects of advertising billboards during simulated driving. *Applied Ergonomics*, 42(4), 619–626. doi:10.1016/j.apergo.2010.08.013.

Farbry J, Wochinger K, Shafer T, Owens N, Nedzesky A. (2001). Research review of potential safety effects of electronic billboards on driver attention and distraction. Office of Real Estate Services and Safety Core Business Unit Federal Highway Administration, Washington, United States. Available online: <https://rosap.ntl.bts.gov/view/dot/37216> (accessed on Jan 2022).

Gazder, U., & Assi, K. J. (2022). Determining driver perceptions about distractions and modeling their effects on driving behavior at different age groups. *Journal of Traffic and Transportation Engineering (English Edition)*, 9(1), 33–43. doi:10.1016/j.jtte.2020.12.005.

Gitelman, V., Doveh, E., & Zaidel, D. (2019). An examination of billboard impacts on crashes on a suburban highway: Comparing three periods—Billboards present, removed, and restored. *Traffic Injury Prevention*, 20(sup2), S69–S74. doi:10.1080/15389588.2019.1645330.

Harasimczuk, J., Maliszewski, N. E., Olejniczak-Serowiec, A., & Tarnowski, A. (2021). Are longer advertising slogans more dangerous? The influence of the length of ad slogans on drivers' attention and motor behavior. *Current Psychology (Vol. 40, Issue 1, pp. 429–441)*. doi:10.1007/s12144-018-9955-y.

Herrstedt, L., Greibe, P., & Andersson, P. K. (2013). Driver attention is captured by roadside advertising signs. In 16th International Conference Road Safety on Four Continents. Beijing, China.

Herrstedt, L., Greibe, P., Andersson, P., & la Cour Lund, B. (2017). Do LED-advertising signs affect driver attention? In 5th International Driver Distraction and Inattention (DDI) Conference, Paris, France.

Jazayeri, A., Martinez, J. R. B., Loeb, H. S., & Yang, C. C. (2021). The Impact of driver distraction and secondary tasks with and without other co-occurring driving behaviors on the level of road traffic crashes. *Accident Analysis and Prevention*, 153. doi:10.1016/j.aap.2021.106010.

Kim, H. S., Choi, M. H., Choi, J. S., Kim, H. J., Hong, S. P., Jun, J. H., Tack, G. R., Kim, B., Min, B. C., Lim, D. W., & Chung, S. C. (2013). Driving performance changes of middle-aged experienced taxi drivers due to distraction tasks during unexpected situations. *Perceptual and Motor Skills*, 117(2), 411–426. doi:10.2466/22.25.PMS.117x23z6.

Klauer, C., Dingus, T. A., Neale, V. L., Sudweeks, J. D., & Ramsey, D. J. (2006). The impact of driver inattention on near-crash/crash risk: An analysis using the 100-car naturalistic driving study data. Available online: <https://vtechworks.lib.vt.edu/handle/10919/55090>.

Klauer, S. G., Guo, F., Simons-Morton, B. G., Ouimet, M. C., Lee, S. E., & Dingus, T. A. (2014). Distracted Driving and Risk of Road Crashes among Novice and Experienced Drivers. *New England Journal of Medicine*, 370(1), 54–59. doi:10.1056/nejmsa1204142.

Land, M. F., & Lee, D. N. (1994). Where we look when we steer. *Nature*, 369(6483), 742–744. doi:10.1038/369742a0.

Lee, S. E., McElheny, M. J., & Gibbons, R. (2007). Driving Performance and Digital Billboards Final Report. Virginia Tech Transportation Institute, Center for Automotive Safety Research, Virginia, United States.

Li, X., Oviedo-Trespalcios, O., Rakotonirainy, A., & Yan, X. (2019). Collision risk management of cognitively distracted drivers in a car-following situation. *Transportation Research Part F: Traffic Psychology and Behaviour*, 60, 288–298. doi:10.1016/j.trf.2018.10.011.

Megías, A., Maldonado, A., Catena, A., Di Stasi, L. L., Serrano, J., & Cándido, A. (2011). Modulation of attention and urgent decisions by affect-laden roadside advertisement in risky driving scenarios. *Safety Science*, 49(10), 1388–1393. doi:10.1016/j.ssci.2011.06.001.

Meuleners, L., Roberts, P., & Fraser, M. (2020). Identifying the distracting aspects of electronic advertising billboards: A driving simulation study. *Accident Analysis and Prevention*, 145(105710). doi:10.1016/j.aap.2020.105710.

Molino, J. A., Wachtel, J., Farby, J. E., Hermosillo, M. B., & Granda, T. M. (2009). The effects of commercial electronic variable message signs (CEVMS) on driver attention and distraction: An update (No. FHWA-HRT-09-018). Turner-Fairbank Highway Research Center (THFRC), Virginia, United States.

Mollu, K., Cornu, J., Brijs, K., Pirdavani, A., & Brijs, T. (2018). Driving simulator study on the influence of digital illuminated billboards near pedestrian crossings. *Transportation Research Part F: Traffic Psychology and Behaviour*, 59, 45–56. doi:10.1016/j.trf.2018.08.013.

Oviedo-Trespalcios, O., Truelove, V., Watson, B., & Hinton, J. A. (2019). The impact of road advertising signs on driver behaviour and implications for road safety: A critical systematic review. *Transportation Research Part A: Policy and Practice*, 122, 85–98. doi:10.1016/j.tra.2019.01.012.

Oviedo-Trespalcios, O., Haque, M. M., King, M., & Washington, S. (2017). Self-regulation of driving speed among distracted drivers: An application of driver behavioral adaptation theory. *Traffic Injury Prevention*, 18(6), 599–605. doi:10.1080/15389588.2017.1278628.

Oviedo-Trespalacios, O., Haque, M. M., King, M., & Washington, S. (2017). Effects of road infrastructure and traffic complexity in speed adaptation behaviour of distracted drivers. *Accident Analysis and Prevention*, 101, 67–77. doi:10.1016/j.aap.2017.01.018.

Regan, M. A., Hallett, C., & Gordon, C. P. (2011). Driver distraction and driver inattention: Definition, relationship and taxonomy. *Accident Analysis and Prevention*, 43(5), 1771–1781. doi:10.1016/j.aap.2011.04.008.

Schieber, F., Limrick, K., McCall, R., & Beck, A. (2014). Evaluation of the visual demands of digital billboards using a hybrid driving simulator. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 58, No. 1, pp. 2214-2218). SAGE Publications, Los Angeles, United States. doi:10.1177/1541931214581465.

Simons-Morton, B. G., Guo, F., Klauer, S. G., Ehsani, J. P., & Pradhan, A. K. (2014). Keep your eyes on the road: Young driver crash risk increases according to duration of distraction. *Journal of Adolescent Health*, 54(5 SUPPL.), S61–S67. doi:10.1016/j.jadohealth.2013.11.021.

Smiley, A., Persaud, B., Bahar, G., Mollett, C., Lyon, C., Smahel, T., & Leslie Kelman, W. (2005). Traffic safety evaluation of video advertising signs. *Transportation Research Record*, 1937(1937), 105–112. doi:10.3141/1937-15.

Sodhi, M., Reimer, B., & Llamazares, I. (2002). Glance analysis of driver eye movements to evaluate distraction. *Behavior Research Methods, Instruments, and Computers*, 34(4), 529–538. doi:10.3758/BF03195482.

Stavrinos, D., Jones, J. L., Garner, A. A., Griffin, R., Franklin, C. A., Ball, D., Welburn, S. C., Ball, K. K., Sisiopiku, V. P., & Fine, P. R. (2013). Impact of distracted driving on safety and traffic flow. *Accident Analysis and Prevention*, 61, 63–70. doi:10.1016/j.aap.2013.02.003.

Stavrinos, D., Mosley, P. R., Wittig, S. M., Johnson, H. D., Decker, J. S., Sisiopiku, V. P., & Welburn, S. C. (2016). Visual behavior differences in drivers across the lifespan: A digital billboard simulator study. *Transportation Research Part F: Traffic Psychology and Behaviour*, 41, 19–28. doi:10.1016/j.trf.2016.06.001.



Stutts, J., Feaganes, J., Reinfurt, D., Rodgman, E., Hamlett, C., Gish, K., & Staplin, L. (2005). Driver's exposure to distractions in their natural driving environment. *Accident Analysis and Prevention*, 37(6), 1093–1101. doi:10.1016/j.aap.2005.06.007.

Targosiński, T. (2017). Preliminary simulation research of driver behaviour in response to outdoor advertisements. *MATEC Web of Conferences*, 122, 1–9. doi:10.1051/mateconf/201712203009.

Tomczuk, P., Chrzanowicz, M., & Jaskowski, P. (2022). Procedure for Measuring the Luminance of Roadway Billboards and Preliminary Results. *LEUKOS - Journal of Illuminating Engineering Society of North America*, 18(1), 2–20. doi:10.1080/15502724.2020.1803752.

Topolšek, D., Areh, I., & Cvahte, T. (2016). Examination of driver detection of roadside traffic signs and advertisements using eye tracking. *Transportation Research Part F: Traffic Psychology and Behaviour*, 43, 212–224. doi:10.1016/j.trf.2016.10.002.

Wallace, B. (2003). External-to-vehicle driver distraction. Development Department Research Programme Scottish Executive Social Research, Edinburgh, Scottish Government. Available online: <http://www.fordgreene.com/lit/sign/dr168.pdf> (accessed on January 2022).

World Health Organization (W.H.O). (2018). Global Status Report on Road Safety 2018. Available online: <https://www.who.int/publications/i/item/9789241565684> (accessed on December 2021).

Young, M. S., Mahfoud, J. M., Stanton, N. A., Salmon, P. M., Jenkins, D. P., & Walker, G. H. (2009). Conflicts of interest: The implications of roadside advertising for driver attention. *Transportation Research Part F: Traffic Psychology and Behaviour*, 12(5), 381–388. doi:10.1016/j.trf.2009.05.004.

Young, K. L., Stephens, A. N., Logan, D. B., & Lenné, M. G. (2017). Investigating the impact of static roadside advertising on drivers' situation awareness. *Applied Ergonomics*, 60, 136–145. doi:10.1016/j.apergo.2016.11.009.

Zalesinska, M. (2018). The impact of the luminance, size and location of LED billboards on drivers' visual performance—Laboratory tests. *Accident Analysis and Prevention*, 117, 439–448. doi:10.1016/j.aap.2018.02.005.

[end]

Eddie Murphy & Monica McGill  
c/o Camac Cottage  
Orchard Road  
Clondalkin  
Dublin 22

Date: 21-Nov-2022

Dear Sir/Madam,

**Register Ref:** SD22A/0409  
**Development:** Retention of erection of new electronic of 8 x 5.5ft sign which replaces existing 9 x 6ft wooden sign inside the boundary wall on Orchard Road side of the site, in the curtilage of Áras Chrónáin (Protected Structure).  
**Location:** Aras Chronain, Botha an Ulloird, Cluain Docain, Baile Átha Cliath 22.  
**Applicant:** Muintir Chrónáin Cuideachta Faoi Theorainn Ráthaíochta  
**Application Type:** Retention  
**Date Rec'd:** 28-Oct-2022

I wish to acknowledge receipt of your submission in connection with the above planning application. The appropriate fee of €20.00 has been paid and your submission is in accordance with the appropriate provisions of the Planning and Development Regulations 2001(as amended). The contents of your submission will be brought to the attention of the Planning Officer during the course of consideration of this application.

This is an important document. You will be required to produce this document to An Bord Pleanála if you wish to appeal the decision of the Council when it is made. You will be informed of the decision in due course. Please be advised that all current applications are available for inspection at the public counter and on the Council's Website, [www.sdblincoco.ie](http://www.sdblincoco.ie).

You may wish to avail of the Planning Departments email notification system on our website. When in the *Planning Applications* part of the Council website, [www.sdblincoco.ie](http://www.sdblincoco.ie), and when viewing an application on which a decision has not been made, you can input your email address into the box named *"Notify me of changes"* and click on *"Subscribe"*. You should automatically receive an email notification when the decision is made. Please ensure that you submit a valid email address.

**Please note:** If you make a submission in respect of a planning application, the Council is obliged to make that document publicly available for inspection as soon as possible after receipt. Submissions are made available on the planning file at the Planning Department's public counter and with the exception of those of a personal nature, are also published on the Council's website along with the full contents of a planning application.

Yours faithfully,

  
for Senior Planner