

INFORMATION

GROUND ANCHOR INSTALLATION



Comhairle Cathrach
Bhaile Átha Cliath
Dublin City Council

Environment & Transportation, Road Maintenance Services, Civic Offices, Block 2, Floor 4, Wood Quay, Dublin 8, D08 RF3F Information: 01 222 2255

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1. INTRODUCTION

Dublin City Council acting in its statutory role as the Roads Authority has decided to establish standards, protocols and procedures to cover the issuing of licences to third parties who wish to install ground anchors or similar structural support devices under or within areas, lands, roads, public domain etc. under the ownership or control of DCC.

These standards, protocols and procedures have been adopted by Order of the City Engineer and are available to view in full on the Dublin City Council website, together with details of how to apply for the requisite licence.

2. STANDARDS SPECIFIED BY ROAD AUTHORITY

In order to preserve the availability of space under roads for maintenance or installation of existing or future services the DCC Environment & Transportation (E & T) Department will only consider applications for the installation of temporary ground anchors (referred to as 'ground anchors' in this Information document) under areas/lands in its charge. The anchors shall be designed and constructed as a temporary structural support and only be required to have a structural role for a clearly defined period (the "anchor support period"). This "anchor support period" is limited to a point in time where the permanent works are constructed and the structural support provided by ground anchors is no longer required.

Ground anchors must be capable of being easily broken/cut if required in the future e.g. a Glass Fibre Reinforced Plastic (GFRP) anchor.

Ground anchors shall be constructed and such measures taken following construction as are required so that, immediately following the conclusion of the "anchor support period", normal excavations, whether by open cut trenches, tunnelling or directional drilling or any other method of excavation can be carried out safely and without any obstruction or additional risk or cost arising from the presence of the ground anchors.

3. Application Procedure for Installation of Ground Anchors:

3.1 All applications for a Ground Anchor Installation Licence (GAIL) must be made by the Developer of the site in whose name the Planning Permission has been granted or their Agent (the Applicant).

3.2 All Applicants must complete a GAIL Application Form. A minimum fee of €500 is payable with each application. A separate application must be made for each road affected. If it is proposed to excavate the road surface a Road Opening Licence Application must be submitted to DCC. The GAIL application form must be submitted to DCC Roads Maintenance Department 8 weeks prior to the issuing by the Developer of the Commencement Notice or the commencement of construction, whichever is the earlier.

3.3 Full details of the type of anchor proposed, materials to be used etc., and the length of time the anchors are required as a structural support are to be submitted as part of the application. If steel couplers are required to be installed within the anchor bond length the coupler location should be staggered.

3.4 Accurate and detailed drawings are to be provided showing location of proposed anchors in plan and in section with XYZ Coordinates of the anchor head, toe, coupling location, top and base of bonded length and type of bonded length provided.

3.5 Detailed cross section and plan, showing proposed anchors and clearances to existing services are to be submitted showing:

- » Location, levels and diameter of all existing services (when required these cross-sections should be verified on site by trial holes and witnessed by relevant statutory utility staff. A Road Opening Licence is required for excavation of trial holes.)
- » Location and angle of installation of proposed ground anchors and clearances horizontal and vertical relative to existing services.
- » Cross sectional area and longitudinal extent, with XYZ coordinates, indicating an available corridor within the road-space which may be excavated/tunnelled through if necessary during the period when the anchors are structurally required.

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3.6 The Application shall be accompanied by a Certificate, signed by a Chartered Structural Engineer or Chartered Geotechnical Engineer or appropriately qualified person, stating that the corridor identified in para. 3.5, above, is available for use by a third party for excavation/tunnelling purposes during the anchor support period. The Certificate shall confirm that excavation within this corridor can take place without any impact on the required performance of the anchor. Contact details of the anchor designer should be provided as part of the application for which any correspondence relating to a proposed excavation of a public area where anchors are installed and still structurally required can be directed.

3.7 The applicant is to develop a baseline topographic survey encompassing the public area where the anchors are proposed to be installed. Subsequent and in addition to the approved baseline survey the applicant is required to establish a suitable monitoring system which is to be maintained throughout the course of the "anchor support period". The survey and monitoring proposals are required to be submitted to DCC in advance as part of the application process.

3.8 Confirmation by the Applicant that all the relevant Utilities have been contacted and agreement reached regarding the proposal in advance of license application. Please note that Utility Providers may have detailed requirements in this regard including submission of a bond and/or indemnities, supervision of works, etc.

3.9 DCC does not accept any responsibility for establishing/verifying the ground conditions in the public domain. All design information relating to ground conditions located in the public domain are the responsibility of the Applicant.

3.10 The Applicant is to confirm that there is a valid Safety Statement in place, which incorporates the proposed anchor installation works and which complies with all relevant Health & Safety Legislation. The Safety Statement should identify the relevant parties, their registered offices and it should be signed by an authorised person, with their name and position within the company identified.

3.11 A detailed method statement should be submitted demonstrating that an appropriate system is proposed for installation of the anchors which ensures that there is no negative impact or disturbance to existing infrastructure / structures / property etc.

3.12 Notwithstanding the submission of details as requested, an application for a Ground Anchor Installation Licence (GAIL) may be refused, where, in the view of the E&T Department the installation of ground anchors may have an adverse impact in terms of safety and /or cost on the maintenance or installation of existing or future services in the road.

3.13 A fee of €1,000 per anchor must be lodged with the DCC Road Maintenance Services as part of the GAIL application prior to works commencing.

3.14 The Ground Anchor Installation Licence relates only to the public domain and lands/areas under the ownership or control of DCC. The GAIL does not provide or imply permission to install ground anchors in any other property.

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4. Applicant Requirements during GAIL Period (“anchor support period”):

4.1 All relevant statutory utilities (i.e. services which have been identified as per para. 3.5) are to be advised 7 days in advance of any anchor installation taking place.

4.2 The Applicant shall Indemnify and save harmless the Roads Authority (with minimum indemnity of €6,500,000 for any one claim in respect of all claims, proceedings, liabilities, losses or expenses of whatever nature, howsoever arriving in connection with the activities covered by this application). The period of cover shall be from the start of the ground anchor installation works through until one year after Applicant has fully completed installation and decommissioning of all ground anchors (i.e. one year after expiry of “anchor support period”).

4.3 Any persons wishing to excavate a road where anchors have already been installed and remain structurally required (as per approved GAIL details) shall be referred by DCC Road Maintenance Services to the anchor Design Engineer (whose details are submitted as part of the GAIL application). The anchor Design Engineer is required to assess the risk in undertaking the proposed excavation works and provide guidance and direction to the relevant party, with no fee required. This assessment should also be provided to DCC Road Maintenance Services so that they are aware of the anchor designer’s review of the proposed works.

4.4 Drilling logs and anchor design drawings shall be made available to the DCC Road Maintenance Services upon request. These logs are to include full details in respect of anchors installed including, installation time, date, location, length, volume of grout used etc. (as per relevant guidance documents and standards).

4.5 The applicant is required to monitor, record and report to DCC Roads Maintenance Services (or other relevant DCC department) any ground movement and /or disturbances to the public road where anchors have been installed. A baseline grid survey should be established in advance of works taking place, as outlined in para. 3.7. Routine and regular checks of the grid should be undertaken thereafter, particularly during and directly after drilling has taken place, as per para. 3.7. The installation of an inclinometer may be applicable in certain cases (as advised with guidance from the anchor Design Engineer or to be installed as required on instruction by Road Maintenance Services).

5. Expiry of GAIL (end of “anchor support period”):

5.1 Any extension of the Licence is at the discretion of the Roads Authority and will be subject to an additional application process.

5.2 At the end of the “anchor support period” (strands and/or bars) are to be decommissioned and de-stressed (if applicable). The DCC Roads Maintenance Department shall be informed 1 week in advance so that they can attend and witness the process. A Design Certificate is to be submitted by the Applicant’s anchor Designer confirming that, for all anchors installed, the entire anchor length is no longer structurally required and has been fully decommissioned and de-stressed (if applicable). This certificate must be signed by a Chartered Structural Engineer or Chartered Geotechnical Engineer and submitted to DCC Roads Maintenance.

5.3 Once the cuttable anchor has been decommissioned and any remaining steel strand removed, the headblock shall be immediately securely capped or buried within the completed structure. This is to ensure that the redundant anchor pre-stressed free length cannot remove itself in the event the anchor is cut at a later date. The presence of the headblock is to be confirmed by the Anchor Designer as part of the Design Certificate.

5.4 As constructed detailed drawings are to be provided to the DCC Roads Maintenance Department (or other relevant DCC department) showing the location and details of installed anchors in plan and in section with additional information provided for all materials used.

5.5 Once the anchors have been decommissioned and removed from service a final survey is to be undertaken (similar to that as detailed in para. 3.7) and submitted to DCC Road Maintenance Services. This survey is to be submitted within 2 months of the end of the anchor support period.

5.6 The deposit fee of €1,000 per anchor will only be refunded when all items outlined in this document have been submitted and are deemed satisfactory to DCC Road Maintenance Services.

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PRIVACY NOTICE - ROAD MAINTENANCE SERVICES

Your information is collected to process requests for service to manage the maintenance of the public road network, license street furniture and telecommunication apparatus in the Dublin City administrative area. The legal basis is provided for under Section 13 of the Roads Act 1993, Sections 101D of the Road Traffic Act, 1991, as inserted by Section 9 of the Dublin Transportation Authority (Dissolution) Act 1987 and S.I. No. 139/2015 – Road Traffic (Co-ordination of Roadworks) Regulations 2015, Section 254 of the Planning and Development Act 2000 and Article 201 of the Planning and Development Regulations 2001. Information collected by us is generally limited to contact details provided in respect of requests made for road maintenance and licensing measures.

The information may be shared internally with:

- » Other sections within the Environment and Transportation Department – whose assistance is necessary to process work associated with your request;
- » Dublin City Council Local Area Offices - in respect of road maintenance related requests made on your behalf;
- » Other departments - all road maintenance and licensing queries forwarded to relevant section/department or contractors working on our behalf for processing.

Your information may be retained electronically for up to 20 years as part of the record of road management measures requested throughout Dublin City Council's administrative area.

For more information:

Road Maintenance Services,
Environment and Transportation Department,
Dublin City Council,
Block 2, Floor 4,
Civic Offices,
Wood Quay,
Dublin 8.

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