An Bord Pleanála,
64 Marlborough Street,

Rotunda,

Dublin 1,

D01V902

Re: Objection to the Proposed 110kw Electricity Substation at Moyvannan and approximately 6.5km underground electricity cables (ABP-319042-24)

Dear Sir/Madam,

I am writing to formally submit our objection to the proposed development of an electricity substation at Moyvannion, as outlined in planning application number [ABP-319042-24] As residents of the local area (N37 A8N5), we have serious concerns regarding the potential impact of this development on both the environment and the well-being of the community. We respectfully ask that the application be reconsidered based on the following reasons:

1. **Flooding Risk and Impact on Local Properties**

- The proposed site for the electricity substation is located less than 3km from Lough Funshinagh and the complex turlough's and flood plains which surround it. This raises significant concerns regarding the potential exacerbation of flood risks, which could have severe consequences for both the local environment and nearby properties, including agricultural lands, homes, and infrastructure. The Environmental Impact Assessment suggests minimal downstream flooding risk but relies heavily on theoretical models without robust real-world testing or independent verification. The proposed drainage system, including settlement ponds and silt traps, depends on consistent maintenance and monitoring, which may not be sufficient during extreme weather events.

Historical Flooding in the Area

1. The area surrounding Lough Funshinagh has a well-documented history of flooding, which has already affected local roads, farms and residential properties. As can be seen in image 1 below, the proposed development is less than 200 metres from an existing flood plain (B in image) and another adjacent flood plain (C in image), whilst the roadway at point D in the image has had to be raised significantly to avoid further flooding. This demonstrates that the area is particularly vulnerable to waterlogging and flooding, especially during periods of intense rainfall or when water levels in the lake rise. With the complex array of turloughs and floods any increase in flood waters at Lough Funsinagh itself has knock on impact to the water table in the surrounding areas. We are concerned that given the extremely close proximity of the proposed development to the farm (A in image) and adjacent properties (E & F in image) that the development will cause an increased risk of flooding.

   In the past, heavy rainfall and seasonal high-water levels have caused significant flooding in nearby fields, including the flooding of agricultural land. Our own

farm & sheds (A in image – less than 100 metres from the proposed development) have been directly impacted in previous years, with our shed, slurry tank and field being flooded as a result of work conducted near the proposed substation site. Our farmland is directly downhill from the proposed development and we are concerned any excess water flow will divert directly onto our farmland impacting our livelihood and cause an environmental disaster due to slurry and silage being released into the surrounding fields. I've attached a photo (image 2) of our farmland flooded following nearby development work which diverted water flow directly downhill onto our farmland (Image 2 = January 2016).

Image1

Image 2

Potential for Increased Flooding Due to Development

2. The construction of an electricity substation, with the associated disruption to the natural landscape and drainage systems, could potentially worsen the flooding risk in this area. The large-scale earthworks required for the substation, including excavation, the creation of new access roads, and the installation of infrastructure such as foundations and cables, could alter the natural flow of water. Without adequate flood risk mitigation measures, this development could contribute to surface water runoff, further saturating the ground and increasing the likelihood of flooding downstream.

Inadequate Drainage and Flood Prevention Measures

3. The planning application does not appear to sufficiently address how potential flood risks will be mitigated, particularly in light of the area's history of flooding. There is no indication of any flood risk assessments or measures to ensure that floodwaters will be properly managed, such as the installation of flood barriers, stormwater drainage systems, or retention ponds to control surface runoff. Without proper planning for drainage, the construction of the substation could increase the volume of water entering the already saturated land surrounding Lough Funshinagh.

Impact on Nearby Farms and Properties

4. The increased risk of flooding due to the development could have disastrous consequences for local farms and properties. Flooding could damage crops, disrupt farming activities, and cause long-term soil erosion, particularly in the fields adjacent to the site. Additionally, the potential for damage to buildings, including sheds and storage tanks, could result in significant financial losses for the affected landowners. The impact on agricultural land, which forms a vital part of the local economy and food production, could be devastating, and the long-term viability of farming operations in the area could be jeopardized.

Environmental Impact on Local Ecosystem

5. The nearby Lough Funshinagh is an important natural feature of the area and is home to a variety of wildlife species. Flooding can have significant environmental impacts, potentially disrupting habitats and altering local ecosystems. Furthermore, flooding in the area could lead to the contamination of the water, including runoff from agricultural land that may contain pollutants such as fertilizers, pesticides, and other chemicals. This could further harm the delicate balance of the ecosystem surrounding the lake, impacting both wildlife and water quality.

Lack of Evidence of Comprehensive Flood Risk Assessment

6. The planning application lacks a detailed flood risk assessment that specifically addresses the potential for flooding from both natural and development-related sources. Given the site's proximity to Lough Funshinagh and the recurring flooding issues in the area, it is essential that a full, independent flood risk study be conducted. The absence of such a study is a significant concern and raises questions about the project's potential to increase flooding in an already vulnerable area.

We request that an independent verification of the flood risk assessment be conducted, alongside enhanced mitigation measures to address extreme weather scenarios. These measures should include stricter monitoring protocols and guarantees for long-term drainage maintenance.

2. **Traffic and Pedestrian Safety Concerns Due to Inadequate Road Infrastructure**

The L7551 road is a narrow, rural route that was not designed or constructed to accommodate heavy construction traffic or the increased volume of vehicles that would be generated by the development of a substation. L7551 serves as a connection to an extremely busy farm with a constant flow of heavy duty tractors, machinery and cattle lorries. The existing level of use is a cause of concern as a large number of local residents and young families who use the road primarily for vehicular access, walks, cyclists, fitness and recreation (the loop road is very popular with locals).

The width of the road in place is barely 2 metres wide, so when a pedestrian meets an oncoming vehicle there is no choice but to step into the hedgerow to allow the vehicle to pass. For example, our local waste collection company will not send its collection

vehicles up L7551 and we have constantly had issues with delivery trucks refusing to deliver given the narrow and unsuitable roads. As such, the proposed development raises several critical concerns regarding the safety of both pedestrians and road users. Visibility splays of 70 meters in both directions are planned, but no upgrades or widening of the road are included in the development plan.

These concerns include the following:

1. **Safety and practicality of road infrastructure:**

The proposed substation near the L7551 presents significant concerns regarding the safety and practicality of the road infrastructure. The L7551 is a narrow, single-lane road that lacks sufficient space for vehicles to safely pass one another. (See image 3 below that shows how narrow the roadway is). With no designated areas for vehicles to pull in or pass, the addition of construction traffic and maintenance vehicles associated with the substation could lead to hazardous situations. In particular, the limited width of the road could result in congestion, delays, and potential accidents, especially if large vehicles are required to access the site. This situation is made worse by the lack of alternative routes or turning areas, further complicating any effort to manage oncoming traffic. The planning document submitted refers to an estimated 3,714 HGV journeys during the construction phase. (https://moyvannansubstation.ie/media/0f3lxyag/chapter-13-interactions-of-the-foregoing.pdf) In practical terms, if, on any of these 3,714 journeys (not to mention any of the construction staff or associated vehicles), a HGV meets an oncoming tractor or a cattle lorry or my wife and I who have to walk (600m to the N61 with our bins) there is nowhere safe to pull in given the narrow nature of the road.

Looking at image 4 below, Point A is the roadway adjacent to the proposed development and point B is the access to the main Roscommon – Athlone road (N61). This is a distance of 750metres as per google maps. If a HGV travelling on this route meets a cattle lorry or tractor and trailer at the top of the hill (point C on image 4) there is nowhere for either vehicle to pull in to allow the other vehicle to pass for the full 750 metres. This would require one of the vehicles to reverse up a hill and back around a corner at point A or around the S-bend turn in the road and back onto the N61 at point B which is extremely extremely dangerous. This is before any pedestrians or our children are in the vicinity which highlights how dangerous this is. This will also cause significant delays to my family and I from accessing our home and work on a daily basis. According to the natura impact assessment – all suppliers will be instructed to use national roads to access the development, which would increase the frequency of these dangerous journeys.

The same situation exists along the road to L2019 with nowhere to allow oncoming vehicles to pull in. This is a distance of 700metres with a similar combination of blind turns and a lack of anywhere to pull in safely.

During some of the road closures that have been proposed the lack of passing spaces not only endangers the safety of drivers but could also cause significant disruption to the local community – for example emergency vehicle access to homes.

We request that a comprehensive Traffic Impact Assessment be conducted, including a commitment to road widening and safety upgrades before construction begins. Without such measures, the development risks significant disruption and danger to residents.

Image3:

Image 4:

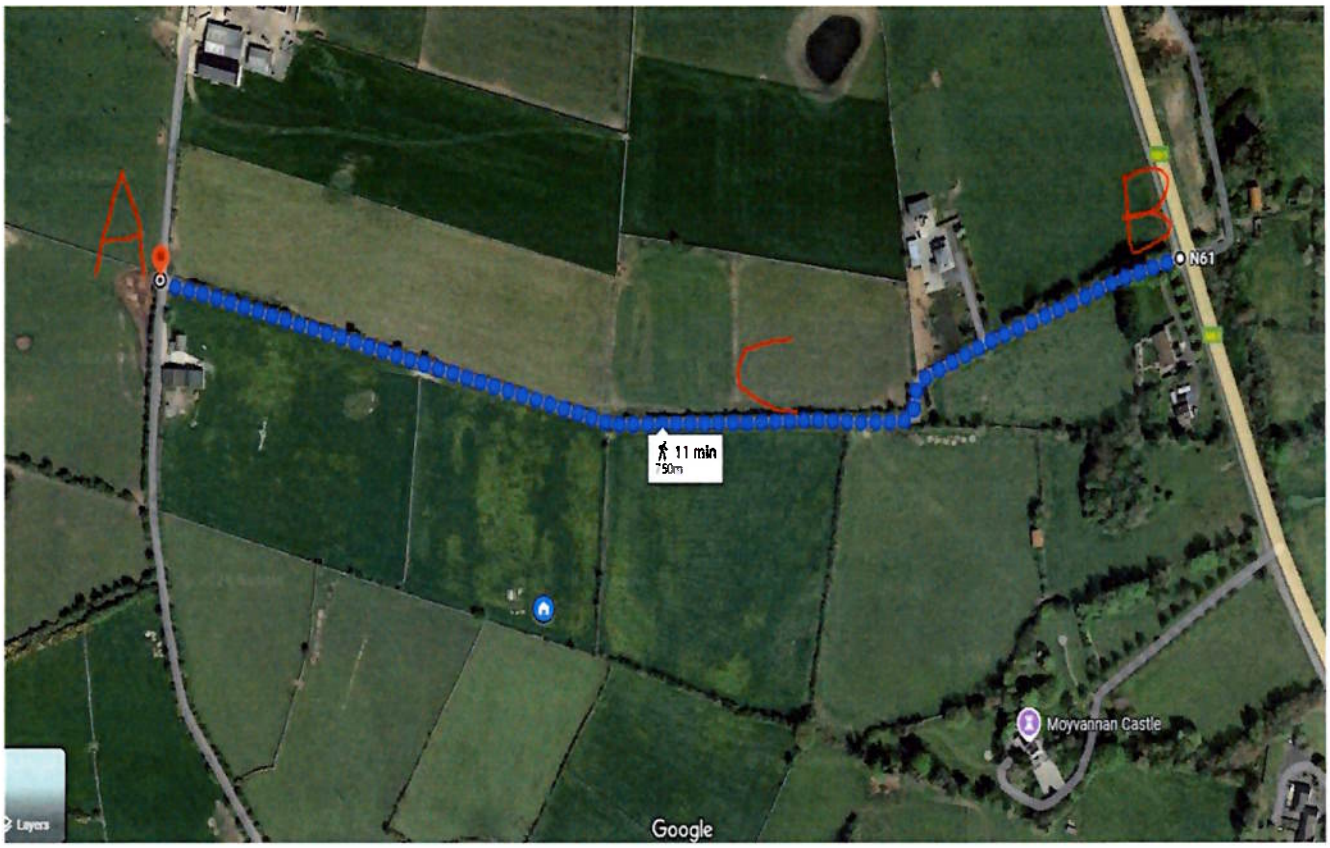

Image 5:

2. **Insufficient Road Capacity for Heavy Traffic**
   The L7551 is a small, rural road with limited capacity to handle large vehicles, especially construction machinery and heavy goods trucks that would be required during both the construction phase and potentially for ongoing maintenance. The road is currently used for local access and by a large farmyard with tractors, machinery, and cattle lorries already over-using a small existing road. These additional vehicles will cause significant disruption, including road congestion, delays, and an increased risk of accidents. Furthermore, the road surface is not designed to bear the weight of such vehicles, potentially leading to damage or deterioration of the road, increasing the risk of damage to vehicles. See image 6 below showing the current road condition at the proposed site – the roadway has been reduced to sludge with muck and excess water. The planning submission assesses that the road is 'of a sufficient condition for the likely volume of traffic" - This image clearly shows that the road is not suitable for 3,741 HGV trips along with the 100's of daily trips – (including construction staff and smaller associated vehicles) especially given the large volume of tractors and heavy machinery.

Image 6:

3. **Increased Risk of Road Accidents**
   Due to the narrow nature of the L7551, the introduction of large vehicles (e.g., cranes, trucks, and machinery) would pose a serious risk to the safety of other road users, including local residents, cyclists, and pedestrians. The lack of overtaking lanes and limited visibility around bends and narrow sections of the road would make it difficult for smaller vehicles to pass safely. There is a high potential for collisions, especially given that this road is used by local residents, including families, and is in close proximity to walking routes and rural dwellings.

   i. **The Dangerous S-Bend Turn:**
   One of the most hazardous features of the L7551 is the extremely tight and dangerous S-bend, which presents significant risks for drivers, particularly when navigating it at speed. The road's narrowness, combined with the sharp curves, makes it particularly challenging for large vehicles, which may struggle to make the turn safely, increasing the risk of accidents and damage to surrounding property.

   ii. **Blind Turns and Steep Hill**:
   In addition to the S-bend, there are several other blind turns on the road that reduce visibility for drivers, making it even more difficult to navigate, especially when larger vehicles are involved. Furthermore, the section of the road leading up to a steep incline adds to the danger, particularly in inclement weather, as it would be more challenging for heavy vehicles to ascend or descend safely.

4. **Pedestrian Safety**
   The L7551 is also used by pedestrians, particularly residents walking to nearby farms, schools & gaa clubs. There is a lack of dedicated footpaths or safe walking zones along all of the road, which means that pedestrians are forced to walk on the road itself, often very close to moving traffic. This usually involves stepping into the hedgerow or wall to avoid oncoming traffic. During the construction phase, when large vehicles would be navigating the area, the risk to pedestrians would be substantially higher. Even after the substation is operational, the increase in road traffic, including lorries and service vehicles, would continue to pose a serious threat to pedestrian safety.

5. **Lack of Safe Traffic Management Plan**
   The current planning proposal appears to lack a comprehensive traffic management plan to ensure the safety of local residents and the general public during construction and operation.

6. **Impact on Local Emergency Services**
   The increased traffic congestion and potential road blockages caused by large construction vehicles could have a significant impact on emergency services' ability to access the area in a timely manner. Ambulances, fire services, and other emergency responders may face delays in reaching residents or addressing emergencies, which could result in severe consequences in the event of an accident or medical emergency.

7. **Lack of Upgrades to Road Infrastructure**
   Given the road's limited width, the absence of proper shoulders, and its potential vulnerability to damage from heavy vehicles, it would be necessary to carry out significant upgrades to ensure that it can safely accommodate such traffic. However, there is no indication that such infrastructure improvements are included in the planning proposal. Without these upgrades, the road would remain unsuitable for the heavy construction traffic that would be generated by the substation.

3. **Non-Compliance with Local Development Plans**

The proposed development does not align with key objectives of the Roscommon County Development Plan 2022-2028:

Road Network Policy:

The County Development Plan prioritizes the protection and enhancement of rural road networks. The reliance on the L7551 without sufficient upgrades contradicts these objectives.

Environmental Protection:

The development's potential impacts on local hydrology and flood risks are inconsistent with policies aimed at protecting natural water systems and preventing environmental degradation.

We request a detailed review of the proposal's compliance with the Roscommon County Development Plan, with specific reference to rural road policies and environmental protections.

4. **Health and Wellbeing Concerns**
   Proximity to Residential Property and Potential Health Risks from Electromagnetic Fields (EMFs)

Our property is located less than 300 metres from the proposed development (N37 A8N5). We have significant concerns regarding the potential health effects of electromagnetic fields (EMFs) generated by the substation. Research has shown that long-term exposure to high levels of EMFs could pose health risks, including potential links to cancer and other health conditions.

Proximity to Residential Areas:

The substation's proximity to our newly constructed home presents a direct concern for the health and safety of our family, particularly given the uncertainty surrounding the long-term effects of EMF exposure.

Lack of Comprehensive Assessment:

The Environmental Impact Assessment does not adequately address the potential health impacts of EMFs on nearby residents, nor does it propose sufficient mitigation measures.

Request for Action: We request that an independent health impact assessment be conducted to evaluate the risks associated with EMF exposure. Additionally, alternative site locations further from residential areas should be considered to mitigate these concerns.

5. Potential Devaluation of Property and Farmland

The proximity of the proposed substation to our property and farmland raises significant concerns about its potential to negatively impact the value of both residential and agricultural holdings:

- **Impact on Residential Property Value:**
    - Research has consistently shown that large infrastructure developments, particularly those involving industrial or utility installations, can lead to reduced property values in nearby areas. The substation's visibility, potential noise, and perceived health risks associated with EMFs contribute to this issue.
- **Impact on Farmland Value and Agricultural Activities:**
    - Our farmland, located adjacent to the proposed development, may be devalued due to its proximity to the substation and associated infrastructure. The perceived industrialization of the area could deter future buyers or lessees of agricultural land.
    - Construction activities, including traffic and potential drainage issues, could further disrupt farming operations and reduce the land's productivity.
- **Limitations on Future Residential Use:**
    - The proximity of the substation would likely prevent family members from constructing future homes on land adjacent to the proposed development. This significantly reduces the flexibility and potential use of the farmland for residential purposes, limiting the land's value and utility for our family.

We request that an independent valuation study be conducted to assess the potential impacts of the proposed substation on property and farmland values. Additionally, we ask that mitigation measures, such as visual screening and enhanced compensation schemes, be considered to address these concerns

6. Environmental Impact and Threat to Local Wildlife

The site is home to a variety of local wildlife, including some rare species. The development could result in the destruction of natural habitats and could disrupt the local ecosystem. We are concerned about the long-term environmental impact, including the disturbance to wildlife, and the potential threat to biodiversity in the area.

In light of these concerns, we respectfully request that the planning application be refused.

The proposed development is not just a matter of inconvenience, it's a matter of being fundamentally unsafe for our family and for our neighbours.

We trust that the Council and Bord Pleanala will carefully consider these points and take appropriate action to protect the community, the environment, and the well-being of all residents.

Le Meas,

Gearóid Cunniffe & Gráinne Ní Mheachair,

Moyvannion,

Kiltoom

Athlone,

N37 A8N5