

1 Qualifications and Experience

1.1 My name is Conall Mac Aongusa and I am a Director of RPS with responsibility for the provision of traffic and transport planning consultancy and advisory services. I hold a Bachelor of Engineering Degree from UCD, a Master of Engineering Science Degree in Transportation Engineering from UCD and a Master of Arts Degree from UCC. I have over 20 years professional experience in consultancy and in the areas of traffic and transport planning and engineering design, including the delivery of major roads and public transport infrastructure such as Dublin Light Rail Transport - LUAS and the M50 and other major national routes. I am a member of the Institute of Engineers of Ireland.

1.2 I have acted as Project Manager on numerous major planning and transport projects at a national, regional and local level including the Cork Area Strategic Plan Update 2008 and the Greater Dublin Area Regional Planning Guidelines (2004). I have also been responsible for a number of regional studies in the West of Ireland and for the preparation of Traffic and Transport Impact Assessments at commercial developments throughout the country in urban as well as rural locations.

1.3 I am responsible for the preparation of the Traffic and Transport Impact Assessment (TIA) for the proposed development. This is provided in Appendix F of the EIS and summarised in Chapter 7 of the EIS. The Construction Traffic Management Plan (TMP) which is included in Appendix E was prepared by a team led by my colleague Mr Conor Byrne of SEPIL and Tobin Consulting Engineers.

2 Scope of Evidence

2.1 The objective of my evidence is to clarify and highlight key aspects of the EIS. My evidence deals with the two interrelated aspects of traffic and roads. The traffic aspect gives consideration to the levels of traffic flow and the extent to which the proposed development will give rise to additional traffic activity which may have impacts on the capacity and operation of the road network and on other road users. The roads aspect gives consideration to the road network itself including width, geometry and pavement structure and the extent to which parts of the road network may need to be strengthened, maintained and improved.

2.2 When the Onshore Pipeline is complete and operational it will have a very small or negligible impact in terms of traffic. The Traffic and Transport Impact Assessment (TIA) as set out in Chapter 7 and Appendix F therefore focuses primarily on the temporary traffic impacts associated with the construction phase of the proposed development. This is the phase in which potential traffic impacts will occur. The Construction Traffic Management Plan (TMP) is included in Appendix E. My evidence describes the range of mitigation measures that SEPIL will implement to minimise the impact of traffic on the community and on all road users. This includes driver safety training, speed management and reduction and road safety measures, traffic management measures, additional road warning signs,

measures to ensure the safety of school children, pedestrians and cyclists as well as ongoing and preventative road maintenance.

3 Assessment Approach

3.1 The study area was chosen to take in the extent of the road network over which traffic impacts are likely to be observed and this is shown in **Slide 1**. This area includes two regional roads, the R313 (the main road from Bangor to Belmullet) and the R314 (the road from Belmullet to Glenamoy), and a number of local roads of varying width and quality as can be seen in the photographs of the L1202 the Poll a Tomais Road (Slide 2) and the Léana Mhianaigh road (Slide 3) Eight key road junctions in the local road network were included in the assessment. One of these junctions for example is the junction of the Glenamoy Road (R314) with the Ceathrú Thaidhg Road (L1203) as shown in the photograph above (Slide 4).

3.2 Traffic surveys were undertaken to understand and describe traffic patterns and characteristics. They were carried out within the study area during the tourist season (August 2007) and again during the school term (September 2007) at the locations shown on Slide 5. These survey periods were selected to record traffic data during the two different seasonal periods, the busy tourist period during the summer months and the typical traffic levels during the school term. Further surveys were carried out in Rossport in February 2009 at the junction of the Rossport Road and the Léana Mhianaigh Road and this data is included as an appendix to this brief. Information was also collated in relation to local school times and school transport arrangements. Surveys were also carried out in relation to pedestrians and cyclists in the area.

3.3 The data was used to examine the patterns and characteristics of existing traffic and transport in the area. This provided a good basis on which to predict future traffic and transport movements.

3.4 The road network in the vicinity of the proposed pipeline was assessed for its capacity to cater for the volumes of vehicle movements associated with the proposed development. This assessment included a review of the road widths and lengths, road and junction geometry, junction visibility and the impact of HGV turning movements on those roads. The assessment showed that some roads have been improved and widened such as for example the L1202 near Glengad as seen in this photo (Slide 6) whereas other roads have narrower carriageways as for example the L52453-0, the Barrthamh Road, as seen in this photo (Slide 7).

3.5 In addition to assessing the road network we assessed the traffic flows. The Annual Average Daily Traffic (AADT) at various locations on the road network was estimated from the collated traffic survey data (See Appendix F of the EIS). The traffic flows show the highest movements are on the R313 near Belmullet. The traffic flows in the area generally are low and are typical of remoter rural areas. They do not exceed an average weekday flow of 1,000 vehicles throughout the majority of the road network. The average weekday flows only exceed 1,000 vehicles on some of the regional roads.

The regional roads are a higher standard of road compared to local roads and are capable of catering for this traffic volume.

3.6 (Slide 8) The traffic capacity of the road network was assessed by identifying the theoretical capacity and the current traffic demand. A comparison of these two pieces of data allowed us to estimate the percentage capacity currently being used. The estimated percentage capacity being used ranges from 2.8% on the L1202 to 43.2% on the R313. Overall the results showed that there is spare traffic capacity and there is no congestion on the current road network in the study area.

3.7 Road Safety is a particular concern for SEPIL as it is for local communities and all road users. I am aware that there have unfortunately been two fatalities on the R313 near Belmullet in recent weeks. SEPIL maintains records of all road safety incidents and accidents in the area of the development as part of a comprehensive and wide ranging approach to minimising risks and maximising safety on the project. An assessment was also undertaken of the most recent accident data available from the database maintained by the Road Safety Authority (RSA). This included accident data within the Study Area between 1996 – 2006. The assessment of records was undertaken to determine if there were any significant accident patterns on the road network. The results show that the majority of accidents between 1996-2006 were recorded on the R313 and fewer accidents on the local roads.

3.8 A review of recent relevant planning applications was undertaken to establish the levels of other committed development within the vicinity of the proposed development. This information determines if other committed development would result in increased traffic levels within the vicinity of the proposed development. Given that the Gas Terminal construction is likely to finish in 2009, there may be a potential overlap with the construction of the onshore pipeline. In order to undertake a robust assessment, updated traffic data relating to the Gas Terminal construction phase was obtained and these traffic flows were included in this current traffic impact assessment. The remaining committed developments in the study area relate to one-off houses or amendments to existing dwellings, which would not add a significant traffic contribution to the road network in this locality. They were therefore discounted from the traffic assessment for this development.

3.9 The future forecast traffic volumes within the study area were calculated using the National Roads Authority's (NRA) traffic growth figures (*NRA Future Traffic Forecasts 2002 – 2040, August 2003*). These growth factors were applied to the existing traffic flows on the road network surrounding the development. A number of scenarios, described later, were tested to assess the traffic impact of the proposed development on the surrounding road network.

3.10 The main haulage route for the construction traffic will be via the national primary and secondary road network as far as possible. The N5 Castlebar to Dublin road is designated as a National Primary Route and the N59 from Ballina to Bangor is designated as a National Secondary

Route. Materials being delivered over long distances including the pipeline components will be carried along the national road network as far as possible.

3.11 When the construction vehicles leave the N59 at Bangor, the roads used for access will be the R313 from Bangor to Srahmore, the upgraded L1204 along Carrowmore lake as far as the R314, the Belmullet to Glenamoy Road, and then use either the L1202 to Pollathomas and Glengad or the L1203 to Rossport as appropriate. Construction vehicles travelling to and from the onshore pipeline on the northern side will then use the L5245-0, Barrthamh Road, the Léana Mhianaigh Road L52453-0 and L52453-25, the Sean Mhachaire Road to access the construction sites on the north of Sruwaddacon bay (Slide 9). The haulage route for the construction traffic travelling to and from the proposed construction site at the LVI at Glengad, will use the R313, the upgraded L1204, the R314 and the L1202 (Slide 10). The construction traffic for the proposed development will use the temporary working area to access other areas of construction as much as possible. Where this is not possible the local road network will be used.

4 Potential Construction Phase Impacts

4.1 Trip Generation Assessment

4.1.1 The plan for the organisation of transport during the construction phase is set out in the TMP (Appendix E of the EIS). The level of traffic movements generated by the project will be related to the intensity and duration of various onsite construction activities. The highest number of traffic movements generated by the onshore pipeline project is associated with the peat removal and the construction of the stone road in the peat areas. In addition to these traffic movements, other construction activities generating traffic movements will include gas pipeline stringing, importing bedding material, peat disposal, delivery of LVI materials, construction of the LVI and micro-tunnelling across the estuary. These highest traffic generating activities will be of a planned and scheduled duration. Therefore these high levels of construction traffic will not occur continuously over the entire duration of the project.

4.1.2 In addition to the traffic movements associated with the onshore pipeline, we have also assessed additional traffic movements that will be generated by road maintenance works and the construction activities at the Gas Terminal site. All these traffic movements have been included in this trip generation assessment. It is estimated that the highest number of construction traffic movements will be in the order of 1158 vehicle movements per day. This will occur during month 4 which will be the busiest month from a traffic point of view. This 1158 movements includes 259 round trips by Heavy Goods Vehicles (HGV) and 320 round trips by construction personnel.

4.2 Traffic Assessments

4.2.1 Two alternative scenarios were assessed to consider how much extra construction traffic would be on the local roads. This assessment included consideration of the capacity of the roads and key junctions to handle the additional volumes of traffic generated by the proposed development. The first scenario assessed the impact of the construction traffic during the peak month of construction

activity, which is the fourth month of construction, and the second scenario assessed the impacts of the construction traffic flows if all construction activities were to peak in the same month. This is unlikely to occur but we have assessed it as a worst case scenario.

4.2.2 The assessment estimated that during the peak month of construction there will be 8 round trips per hour by HGVs to the Northern Side of Sruwaddacon Bay during the 12 hour working day. We have estimated that there will be 13 round trips per hour by HGVs on the Pollathomas Road L1202. The construction staff engaged during the peak month will go direct to the working areas at Glengad, Aghoos and Rossport.

4.2.3 The results for both scenario assessments indicate that the road network surrounding the development will operate well within capacity during the construction stage of the proposed development. It is my view that significant queuing and delays will not occur on the road network during this period. The road network is therefore expected to perform satisfactorily from a traffic demand perspective during the construction stage.

4.2.4 The results for the junction capacity assessments on four main priority junctions Sites 4, 5, 6 and 8 (Slide 11) indicate that all the junctions will operate within capacity at the peak hour during the construction period. It is my view that significant queuing and delays are unlikely to occur at these junctions. The junctions are therefore expected to perform satisfactorily from a traffic demand perspective.

4.2.5 Traffic capacity on the road network surrounding Sruwaddacon Bay will not be a significant issue. The area has a low and dispersed population pattern and it is associated with low levels of observed and recorded traffic. Measures have been outlined in the Construction Traffic Management Plan which build on previous road works, lessons learned and experience of implementing similar TMPs for the Gas Terminal project, the Offshore Pipeline and other SEPIL projects. Road improvements in the area have been carried out recently by Mayo County Council and funded by SEPIL, for example, along the L1202 Pollathomas Road (Slide 12). Temporary easement and improvement is also proposed to the layout of the tee-junction on the L53453-25 Léana Mhianaigh Road at Sean Mhachaire. (Slide 13) Further road measures outlined in the TMP will be similarly funded by SEPIL.

4.2.6 Road Safety is a particular concern for SEPIL as it is for local communities and all road users. The Construction Traffic Management Plan includes details of the range of measures to be implemented to ensure that highest standards of safety for project construction staff, HGV lorry drivers, members of the local community and all road users including pedestrians cyclists and schoolchildren. These measures are consistent with best practice in relation to road safety management. The Construction TMP builds on the lessons learnt and the experience gained from previous TMPs prepared for the Gas Terminal and Onshore Pipeline projects. The TMP has been

prepared in consultation with Mayo County Council. It is a “live” document which is subject to ongoing monitoring, review and improvement.

4.2.7 Particular attention has been given to the safety of pedestrians, cyclists and school children. It was noted during the traffic count surveys carried out in August and September 2007 that low volumes of pedestrian and cyclists were observed within the study area. This is now typical of rural areas throughout the country. However due to the increase in the volume of vehicles, especially heavy goods vehicles in the area, it is recognised that the safe movement of pedestrians and cyclists on the key affected roads is important. During the construction stage, measures will be put in place and implemented as part of the TMP to ensure the safety of pedestrians and cyclists. SEPIL will continue to operate its successful school bus warden system in cooperation with the local school transport providers. This ensures the safety of school children and other road users during the boarding and alighting at the schools and at the various drop-off points in the area.

5 Mitigation Measures

5.1 (Slide 14) The traffic assessment has determined that the existing road network has the traffic capacity to cater for the additional volumes of construction traffic. The assessment of the road network has confirmed that the regional and local road network is suitable for carrying the construction traffic loads. Ongoing and preventative maintenance will be required in order to provide for a safe and adequate road network.

5.2 SEPIL is anxious to minimise the overall impact of the construction phase on residents and other road users including pedestrians, cyclists and school children and on the general environment within the study area. The Construction Traffic Management Plan (TMP) in Appendix E has been developed to actively control and manage the number and types of vehicles arriving/departing from the development and the times at which such traffic movements can occur. The TMP also includes a range of active traffic management measures to be implemented including driver safety training, speed management and reduction and road safety measures. It also includes proposals for both ongoing and preventative maintenance works where required along the proposed haulage route. This TMP is modeled on a similar plan prepared and agreed with Mayo County Council and currently being successfully implemented for the construction of the Gas Terminal. It incorporates the best elements of these plans while also learning lessons and improving on the previous plans. This general approach has been discussed and developed in cooperation with Mayo County Council as part of the pre-planning discussions and has been broadly agreed.

5.3 Heavy construction traffic can cause damage to roads that carry heavy traffic loads. As part of the preparation of the TMP, the condition of the road pavement was assessed to identify those parts of the road network where ongoing and preventative maintenance works are likely to be required during the construction phase. It is proposed that the road network in these identified locations would be

improved by Mayo County Council and funded by SEPIL, building on the successful implementation of road improvements already carried out in the area by Mayo County Council and funded by SEPIL. The road network in the study area has had significant improvements and strengthening works carried out in recent years where the need for such improvements has been identified including improvements to the L1204 and the L1202.

5.4 There are stretches of the road network particularly the L52453-0 (the Léana Mhianaigh Road) in Rossport where the need for road strengthening has been identified. It would be the preferred solution to have the identified road strengthening works implemented in this area in advance of the intensification of the main construction works. Surveys have been carried out of the proposed construction haul route which indicated areas where both preventative and ongoing maintenance works are likely to be required, during the construction phase. It is anticipated that Mayo County Council would carry out preventative and ongoing maintenance work as required throughout the construction phase, funded by SEPIL.

5.5 The road width on some of the roads in Rossport is 3.0m particularly along the Léana Mhianaigh Road and the Barrthamh Road (L5245-0). SEPIL has successfully demonstrated in the case of the Glengad Landfall Site that a well managed and controlled convoy haulage system can provide sufficient scope and capacity to allow materials to be efficiently moved on and off the site without giving rise to undue delays to other road users while managing the road safety issues. It is estimated that at the peak of construction 8 HGV trucks per hour will need to access and depart from the construction site near Léana Mhianaigh Road L52453-0. From our traffic surveys we have identified that there are at between 8 and 15 vehicle movements in total on the Léana Mhianaigh Road during the busiest hours. A managed convoy system will minimise the disruption to local traffic while allowing the construction traffic to access the site.

5.6 These measures have been discussed with Mayo Co. Co. as part of the pre-application consultation process. The costs of any strengthening, repair and maintenance works of the haul route, during the construction phase, will be borne by the developer.

5.4 The TMP includes a wide range of traffic management and road safety measures designed to mitigate the impacts of the proposed development on all road users and on the local communities. Amongst the key recommended measures to provide for an ordered and regulated system of traffic management for this operation are the following listed below. The full list of measures is set out in the TMP in Appendix E of the EIS:

- To avoid delay to the areas used by school buses and peak hour traffic, all trips to the site by site operatives are to be made before 8AM each morning to avoid the morning rush.
- Priority will be given to the school bus runs in the operation of the convoy haulage system.
- SEPIL will continue to operate its school bus warden system to ensure the safety of school children and all road users.

- An enhanced system of temporary road signage will be put in place including hazard warning signs and directional signs as set out in the TMP.
- Parking will be provided on site for both employees and visitors. Parking will not be allowed on the local roads surrounding the developments construction sites.
- Driver road safety training programme will continue to be provided to all drivers engaged in the materials haulage operation.
- All materials deliveries by road will be carried out on a planned basis and all drivers will be instructed to keep to the designated haul routes.
- At points where significant numbers of construction related vehicles travel from the works area onto the public road network they will be inspected and cleaned where necessary either manually or with automated wheel washers. The public road network in the vicinity of the works will be inspected daily and will be maintained as required. Road cleanliness will be maintained using road sweepers.
- The HGVs associated with the construction stage will normally be restricted to the hours of 07:00 – 19:00, Monday to Friday and 07.00 -16.00 on Saturdays.
- A maximum speed limit of 60 km/hr will be imposed for HGVs on the Haul Route on the R313, L1204, R314 and will extend along the L1202 and L1203 with the exception of roads where the convoy system will be implemented where a maximum speed limit of 50km/hr will be imposed. This will be extended to the minor roads branching from the L1202 and L1203. The operation of this speed limit for all project related HGVs will be enforced by the deployment of a pacing vehicle which will ensure vehicles travel at a safe speed.

6. Response to conditions suggested by Mayo County Council

6.1 Inspector, I now wish to address some of the Conditions which have been suggested as being appropriate by Mayo County Council in their observation to the Board, in the event that Approval is granted for the proposed development.

In this regard, I intend to read the Condition as sought by Mayo County Council (or the relevant clause of that Condition), followed by the suggested amendment and the associated reasoning for seeking the proposed change.

6.2 Condition number 1(iv) seeks that:

“Prior to the commencement of development the developers (and their successors in title) shall enter into legally binding agreement(s) with the planning authority under section 47 of the Planning and Development Act, 2000.. The agreement(s) shall provide for the following:

(iv) full implementation of the Traffic Management Plan in the EIS submitted to the An Bord Pleanála and any subsequent amendments arising from reviews of that TMP approved by the Project Monitoring Committee...”

6.3 The amendment that is sought to this Condition is as follows:

“The agreement shall provide for the following:

(iv) full implementation of the Traffic Management Plan in the EIS submitted to the An Bord Pleanála and any subsequent amendments arising from reviews of that TMP approved by Mayo County Council following consultation with the Project Monitoring Committee.”

6.4 The reasoning for the change that is sought is that Mayo County Council is the competent body for making decisions in relation traffic management and road safety. Therefore, while SEPIL does not disagree with the need to consult with the Project Monitoring Committee, it is considered that subsequent amendments to the TMP should ultimately be agreed with MCC.

6.5 Condition number 4(a) seeks that:

“The following traffic management measures shall apply:

(a) haulage of all excavated peat from the pipeline wayleave site to the Deposition site shall be restricted to the designated Haul Route. No haulage of peat shall commence until such time as the proposed improvements of the Haul Route and the return route are completed...”

6.6 The amendment that is sought to this Condition is as follows:

“The following traffic management measures shall apply:

(a) haulage of all excavated peat from the pipeline wayleave site to the Deposition site shall be restricted to the designated Haul Route.

(b) Use of any given section of the designated Haul Route for haulage of peat shall not, unless otherwise agreed with Mayo County Council, commence until such time as any necessary preventative maintenance works to that section of the Haul Route, are completed. The scope of the preventative maintenance works shall be agreed with Mayo County Council.”

6.7 In relation to the reasoning for this change, it should be noted that SEPIL agrees that peat haulage should be restricted to the designated haul route. However, it should be noted that the Traffic Management Plan contained in Appendix E of Volume 2 of the EIS does not propose ‘improvements’ in the form of realignment or widening of the roads making up the Haul Route; rather, sections of road that would benefit from ‘preventative maintenance’ are identified. It is considered that the wording of this Condition should reflect this fact. Moreover, it is not considered necessary for preventative maintenance to have been completed along the entire network of roads that will be used for peat haulage before the commencement of peat haulage operations. Rather it is sought that only the preventative maintenance on those roads that will be required to gain access to any given section of the pipeline route to haul peat from that section to the Srahmore Peat Deposition Site be complete. Works to other roads in the haul route can then progress in tandem with the peat haulage operations.

6.8 Condition number 4(d) requires that:

“The following traffic management measures shall apply:

(d) A school traffic warden shall be engaged to travel on each of the school buses using the Haul Route so as to facilitate the safe embarking / alighting and road crossing by children at all times during the haulage of peat.”

6.9 The amendment that is sought to this Condition is as follows:

“The following traffic management measures shall apply:

(d) A school traffic warden shall be engaged to travel on each of the school buses using the Haul Route, or in a separate vehicle travelling with each of the school buses, so as to facilitate the safe embarking / alighting and road crossing by children at all times during the haulage of peat.”

(It should be noted that if the proposed changes relating to clause 4(a) are accepted, this clause would then become clause 4(e).)

6.10 With regard to the reasoning for this request, it should be noted that SEPIL fully supports measures which will help to ensure the safety of all road users during peat haulage operations (and indeed during the entire construction programme). However, there are operational issues which mean it is not possible to have a traffic warden on each of the buses. This being the case, it is proposed that the Condition provides for a school traffic warden to travel in a separate vehicle accompanying each school bus using the Haul Route.

6.11 Condition 7(a) seeks that:

“All vehicles leaving the construction areas of the sites shall pass through a wheel wash.”

6.12 The amendment sought to this Condition changes clause (a) and inserts a new clause (b) (the existing clause (b) would then become clause (c)). The proposed changes are that:

“(a) All construction related vehicles travelling from the construction areas of the sites onto the public road network shall be inspected and cleaned where necessary, either manually or with automated wheel washers.

(b) During construction, road cleanliness shall be maintained through the use of road sweepers.”

In this regard, SEPIL recognises the need to maintain the public road network in a clean condition and to this end has outlined mitigation measures to ensure this in the TMP (contained in Appendix E of Volume 2 of the EIS). However, due to the nature of the development and associated constraints, it would not be possible to install a wheel wash at all points where vehicles will travel onto the public road network. It is therefore proposed that, in line with the mitigation measures proposed in the TMP, the Condition make allowance for manual or automated wheel washers to be used where cleaning is necessary and that, in any event, road sweepers be used to maintain the cleanliness of the public road network.

6.13 Condition 9 seeks that:

“An independent safety audit on the upgraded haul route shall be carried out and agreed with the planning authority prior to the commencement of haulage of peat and construction materials”

6.14 The amendment proposed to this Condition seeks that:

“Prior to the commencement of haulage of peat and construction materials along any given section of the haul route, an independent safety audit on that section of the haul route shall be carried out and agreed with the planning authority.”

6.15 With regard to the reasoning for this change, it is essentially the same as that relating to Condition 4(a) covered previously, in that given the fact that the haul route is made up of a network of roads that will not all necessarily be required to enable construction to commence, it is sought that it

be allowed for the safety audit be undertaken in a series of stages. This would occur prior to commencement of haulage of peat or construction materials along any given section of the haul route. This will help prevent unforeseen delays to the project in the event that not all necessary maintenance works can be completed in a timely manner.

6.16 Condition number 36 seeks that:

“The developer shall pay a special contribution under section 48(2)(c) of the Planning and Development Acts 2000 – 2006 in respect of road improvement works required to facilitate the haulage of materials to the pipeline wayleave, namely the strengthening, widening and realignment of local roads specified in Table 2.1 of Appendix E – the Traffic Management Plan of the EIS submitted to An Bord Pleanála...”

6.17 The amendment sought to this Condition is as follows:

“The developer shall pay a special contribution under section 48(2)(c) of the Planning and Development Acts 2000 – 2007 in respect of road improvement works required to facilitate the haulage of materials to the pipeline wayleave, namely the necessary works to those local roads specified in Table 2.1 of Appendix E – the Traffic Management Plan of the EIS submitted to An Bord Pleanála...”

6.18 With regard to the reasoning behind this request, SEPIL accepts the principle of what this Condition seeks. However, it is considered that some minor re-wording is necessary in order to be factually correct in terms of what is proposed and necessary to facilitate the proposed development. Specifically, as set out in Appendix E of Volume 2 of the EIS, only preventative maintenance and on-going maintenance (as required) is proposed in order to facilitate the haulage of materials pertaining to the proposed development, along with a temporary easement at the junction of the L52453-0 and L52453-25. No other widening or realignment of roads is proposed. It is therefore sought that the wording of the Condition be amended to reflect this fact.

7. Conclusions

7.1 Mr Inspector, as you can see we have carried out a comprehensive and robust assessment of the traffic and transport impacts of this proposed development. We have identified the amount of additional traffic that will be generated by the proposal. We are satisfied that the road network has sufficient capacity to accommodate it. We have assessed the condition of the road network and pavement. We have identified those parts of the network where ongoing and preventative maintenance works will be needed to ensure a safe and adequate road network capable of carrying the construction loads. SEPIL has demonstrated in Glengad that it can safely and satisfactorily operate a managed and controlled convoy haulage system to efficiently move materials on and off site to meet the project requirements.

7.2 A programme of mitigation measures will be implemented including road safety measures, driver training, speed management and reduction measures and road signage to ensure that the safety of all road users is protected. These ongoing measures build on the lessons learnt and

experience gained from previous projects. SEPIL will continue to operate its successful school bus warden system to ensure the safety of school children.

7.3 It has been my objective in this brief of evidence to clarify and highlight the key elements of the EIS in relation to traffic and roads. In my expert opinion, there will be an impact on the road network during the construction period in terms of traffic delays and congestion but it will not be a significant impact. There will also be potential impacts on pedestrians, cyclists and schoolchildren. By implementing the mitigation measures that I have highlighted, I believe negative impacts will be minimised and the safety of all road users will be protected. There will also be positive impacts by way improvements to the road network. In conclusion, there will be an overall moderate but temporary impact on the local road network and on other road users during the construction stage. When it is complete, the traffic impact of the onshore pipeline will be imperceptible.