COMMENTS ON GWP DRAFT REPORT FOR COMMENT ISSUED OCTOBER 2008
(RPA Reference: Version 3 (RJS/GFE))

Para No	Query	Response
4.1.6	Opinion of issues considered in the EIS	The report states "*along with an opinion on where in the EIS this has been considered*". We would expect the final report to comment on the appropriate issues considered in the EIS rather than simply note where they are addressed. For example, only one opinion is given in item 4.1.6 and no opinions appear in other areas.
4.1.6	Fan noise confusing and clarification required	We understand that following your discussions with ERM this is no longer an issue.
4.5.12 a)	Structure condition surveys	RPA will be providing condition surveys for private homes along the route as part of the Property Owners' Protection Scheme. Other premises will be surveyed as deemed necessary by InfraCo.
5.2.2 bullet 6	Property protection scheme	RPA will be providing a Property Owners' Protection Scheme for private homes only and not for commercial premises. Details of this scheme will be sent to eligible property owners in due course, well before any construction work commences. Participation in the scheme is in addition to, and will not in any way impede, people's normal legal rights.
5.3.1	**Noise**	
	How noisy will the work be?	Existing and predicted noise levels are given in the EIS Vol. 2, Ch 4 for each area, and Volume 3, book 1 of 2, part 3. We would expect your final report would help explain these levels to the residents.
	When will noisy operations take place (e.g. hours of working)?	The actual sequence and timing of works will be decided by the contractor, who is bound by the noise limits specified in the EIS.
	How long will noisy operations last, and what will be the cumulative effects?	The length of time will be decided by the contractor, within the noise limits specified in the EIS. The predicted values in the EIS assume all operations are concurrent, i.e. they represent the worst case scenario.
	How will noise emissions be controlled?	The contractor is required to measure actual noise at 70 locations during the works, and take any appropriate measures to ensure compliance.
	What limits will be set for noise, how will breaches be controlled?	The noise limits are set in the EIS. RPA will be monitoring the contractor's performance against the EIS. Enforcement of planning conditions is also a function of the local authorities.
	Will residents have	A large amount of detailed technical data will

	access to monitoring results?	be generated by the various monitoring requirements. RPA is happy to communicate information on the monitoring to the public and will consider how best to in an easily understandable format.
	What arrangements for dealing with complaints?	Residents will be given a phone number for reporting complaints. This phone will be manned at all times that construction is taking place by a person competent to answer questions or obtain an answer within a short period of time. Further details of this will be developed in due course, well before construction commences.
5.3.2	Will underground trains be audible at street level?	No. We would expect the final report would help explain operational noise levels to the residents.
	Will surface trams be audible?	Yes. The predicted noise levels are given in the EIS Vol 3, book 1, part 3. We would expect the final report would help explain these operational noise levels to the residents.
	Will vents give rise to continuous or intermittent noise, and will it be audible at night?	Emergency fans will be tested intermittently, for approximately 30 minutes every two weeks, within the noise limits stated. Testing will not take place at night. Plant room fans within the underground stops will operate continuously at very low levels.
5.3.4	**Tunnelling Impacts**	
	What will be the hours of working?	The approach taken is not to limit the hours of work of the tunnel boring machines, but to limit the permissible noise and vibration levels at any inhabited building at various times of day and night.
	How long will noisy operations last, and what will be the cumulative effects?	The length of time will be decided by the contractor, within the noise limits specified in the EIS. The predicted values in the EIS assume all operations are concurrent, i.e. they represent the worst case scenario.
	Will vibration cause damage to houses?	Vibration limits have been chosen to avoid structural damage. Where any damage does occur, repairs will be made under the Property Owners' Protection scheme. This does not affect owners' statutory rights.
	What limits have been set for vibration and groundborne noise?	Groundborne noise and vibration limits are set out in Volume 2 Chapter 5 of the EIS.
	Will residents have access to vibration monitoring?	A large amount of detailed technical data will be generated by the various monitoring requirements. RPA is currently considering how best to communicate information on the monitoring to the public.
	What arrangements for complaints?	Residents will be given a phone number for reporting complaints. This phone will be manned at all times that construction is taking

		place by a person competent to answer questions or obtain an answer within a short period of time. Further details of this will be developed in due course, well before construction commences.
	How far from the tunnels will vibration travel?	Refer to EIS. We would expect the final report would help explain these effects to the residents.
	Is there a depth below which no vibration will be felt?	Yes, but this would be at depths which are impracticable for the construction of the stops and tunnels.
	What arrangement for dealing with any damage?	RPA will be providing a Property Owners' Protection Scheme for private homes only and not for commercial premises. Details of this scheme will be sent to eligible property owners in due course, well before any construction work commences. Participation in the scheme is in addition to, and will not in any way impede, people's normal legal rights.
5.3.13	**Dust control**	
	Will there be baseline and works monitoring?	A baseline dust study is in preparation. Dust levels will be monitored throughout construction.
5.3.14	**Traffic**	
	Inadequate width of streets	Construction traffic will be confined to a limited number of appropriate streets, defined in the EIS, and agreed with the Roads Authorities.
	Noise, dust, emissions and congestion impacts	These impacts, and necessary mitigation measures, are covered by the EIS.
	Danger to pedestrians and school children	Routes chosen for traffic are of adequate standard. The contractor will be obliged to manage the works in accordance with all applicable Health and Safety legislation.
	Workers Parking	RPA will require the contractor to provide adequate off-road parking and to bus workers to sites where this is not available. However, RPA cannot prevent the contractor's workers parking in legally acceptable spaces.
5.3.18	**Flooding**	
	Discharge from Tunnels	During construction, *discharge flows will be to the local sewers, and will be limited to avoid increasing flood risk. For example, water may be stored on site during rainfall events. In the long term, discharge* from the tunnels will be small compared with stream flows at the designated discharge points, and will be limited to acceptable values.
	Work in the floodplain of the Broad Meadow River	Drainage has been designed to limit runoff to acceptable values in accordance with the Greater Dublin Strategic Drainage Study. Infiltration areas and attenuation ponds have been included to avoid any increase in the

		flood risk to the rivers or surrounding ground. The works are not in the 'floodplain' as such, only in the catchment of the River. All culverts etc are designed to comply with the OPW requirements for flood protection.
5.3.19	Flood Risk Assessment for Broad Meadow or Tolka.	Compliance with the Greater Dublin Strategic Drainage Study is in effect a flood risk assessment. Discharges will be limited to agreed levels.
5.3.23	**Settlement**	
5.3.23	Managing Settlement	The exact system for managing settlement will be a matter for the contractor, subject to the acceptance of RPA. The general approach is outlined in some detail in Volume 2 Chapter 9 of the EIS.
5.3.24	**Human Health**	
	Airborne particulates	This is covered in the Air Quality chapters of the EIS, which concludes that the ventilation shafts do not represent a significant source of environmental PM_{10} emissions.
	Electromagnetic Radiation	This is covered in Chapter 6 of the EIS.
	Stress associated with anticipation of the scheme.	RPA understands the anxiety that the scheme causes. We have engaged in extensive public consultation and attended many open days and evenings to help explain the potential impacts to residents. We have also engaged the services of an independent expert to explain impacts impartially and in easily understood terms to the residents. We will continue to make every effort to minimise the stress caused by the anticipation of the scheme, and would be happy to meet anyone affected to reduce uncertainty and mitigate impacts where possible.
	Long term exposure to low level noise and vibration	The EIS does not predict any long term significant impacts associated with noise and vibration.
	Danger to pedestrians along construction traffic routes	Routes have been chosen that have adequate pedestrian safety measures in place. All existing pedestrian crossings will be maintained.
	Radon Risk	This is covered in Chapter 6 of the EIS.
	Migration of vermin	This can only be controlled on an incident by incident basis.
5.3.26	**Effect on property prices**	
	Loss of value over tunnels	There is no evidence to suggest that the presence of a tunnel beneath a property affects the property value. An examination of sales of property over Dublin Port Tunnel suggests that the presence of the tunnel does not affect the sales price. Experience is that property values increase in the vicinity of high

		quality public transport services.
	Metro encouraging development	Part of the benefit of Metro is that it will allow development along its length, contributing to economic growth. Development along the route of Metro will be controlled by the normal planning process, so that only appropriate development should result. The presence of Metro will reduce the need for future developments to incorporate very high volumes of car parking spaces.
5.3.27	**Control of Contractor Performance**	
	24 hour hotline	Residents will be given a phone number for reporting complaints. This phone will be manned at all times that construction is taking place by a person competent to answer questions or obtain an answer within a short period of time. Where construction takes place 24 hour per day, the phone line will be manned 24 hours per day. Further details of this will be developed in due course, well before construction commences.
	Process for complaints	Contact phone numbers for complaints will be communicated to residents in regular construction updates. These phone numbers will also be prominently displayed on each construction site. RPA will set up local liaison arrangements in each area where works are taking place.
	Correcting any damage	RPA will be providing a Property Owners' Protection Scheme for private homes only and not for commercial premises. Details of this scheme will be sent to eligible property owners in due course, well before any construction work commences. Participation in the scheme is in addition to, and will not in any way impede, people's normal legal rights.
	Information on how to complain	Contact phone numbers for complaints will be communicated to residents in regular construction updates. These phone numbers will also be prominently displayed on each construction site. RPA will set up local liaison arrangements in each area where works are taking place.
	Local Representatives	RPA will set up local liaison arrangements in each area where works are taking place.
	Updates on progress	RPA will be issuing regular construction updates to residents and businesses along the route. This is our standard practice and is currently happening on the B1 and C1 projects which are under construction.
	Provision of monitoring information.	A large amount of detailed technical data will be generated by the various monitoring requirements. RPA is currently considering

		how best to communicate this information to the public.
5.4.1	**Colaiste Scoil Mhuire**	
	'not practical to move students'	RPA has met with the school. They have actually indicated that relocating classrooms may be a means of mitigation to move students away from the building facade. We will continue to liaise with the school to try and reach agreement on suitable mitigations.
5.4.4	**Drumcondra**	
	Visual impact of façade on Drumcondra Road	The façade was designed by architects MucCullough Mulvin to highlight the proposed development as new - and to indicate the importance of the stop at Drumcondra. There will always be differences of opinion when it comes to architectural merit. Ultimately this is a matter for the planning authority. RPA will continue to discuss the design with DCC architects to ensure they are satisfied with the end result.
	Crossing of Road	The existing pedestrian crossing layout cannot be improved without major impacts on traffic flows, which would be unacceptable to DCC. The existing crossings are sufficient for normal pedestrian flows. There is not sufficient room to provide a bridge or underpass without major impact on other property, and these in any event would not cater for passenger numbers on event days. Event crowds will continue to be controlled by the Garda. The forecourt proposed at Drumcondra stop will assist in this process.
5.4.5	**St Patrick's Shaft**	We have previously answered a detailed set of questions from local residents in relation to the shaft.
5.4.7	**St Pat's Crossover tunnel**	
	Blasting impact	The main potential impact of blasting relates to vibration. The EIS recommends limits on vibration.
	Spoil removal routes	If the crossover tunnel is constructed in advance of the main bored tunnels, spoil would be removed via the ventilation shaft excavation. Spoil trucks would be routed via Millmount Avenue.
	Effect of installing rock bolts	Rock bolts are installed to provide to provide stability to the rock during excavation. The installation of the rock bolts is not likely to have any impact on overhead properties.
5.4.9	**Griffith Stop**	
	Anti-social behaviour and impact on trees	The stop forecourt will be adequately lit and have full CCTV coverage. The stop will be staffed at all times during operational hours, and emergency help intercom points will be

		located throughout the stop. There will be some loss of trees within the lands owned by DCU. This will be minimised. The trees lost are largely not visible from any public space and do not currently provide screening to any properties as they form part of a large stand of trees, most of which will be preserved. While a small number of trees will be lost, it is proposed to plant approximately 50 new trees around the stop as part of the landscaping plans for the scheme.
5.4.11	**Tunnelling under Corpus Christi GNS**	
	Settlement and vibration during construction	The school Board of Management has met with each of RPA's experts in the areas of tunnelling, settlement, noise and vibration and human health who have addressed all of the issues raised. The EIS also addresses
	Long term effects of operations	The EIS has identified no significant long term effects.
	Moving the tunnels laterally	Moving the tunnels laterally would not necessarily reduce the impacts on the school.
5.4.15	**Albert College Park Launch Site**	
	Noise, dust etc impacts	Mitigation measures and permissible levels are specified in the EIS. The contractor will be monitored to ensure compliance with the requirements of the EIS. As the contractor's detailed proposals are developed, further information can be made available to local residents.
5.4.16	**DCU Stop**	
5.4.16	Station location	There was a considerable amount of consultation in relation to the station location, and divided public views on the alternatives considered. The arguments for the preferred choice have been explained to residents in the area.
5.4.17	Two ends unnecessary	Two entrances are required for fire safety reasons. While one of the entrances could be exclusively for emergencies, this could result in excessively uneven loading of the platform, as the stairs and lifts serve the ends of the platform in order to minimise the overall width, and thus the construction impact, of the stop. While there are single entrance stops on the scheme, these are deep stops and the vertical circulation has been designed to bring passengers to various points along the platform.
5.4.20	**Fingallians GAA**	
	Safety Audit	The audit shows that the at-grade crossings are acceptable. It does not compare the

		footbridge with at-grade crossings. The footbridge is not attractive to all, and those that cross at-grade are at high risk at present. The bridge has sub-standard gradients, so that the mobility impaired may find it inaccessible. It also creates conflict between pedestrians and cyclists. However RPA are considering an alternative footbridge crossing to the north in additional to the new signalised pedestrian crossing at the junction and will discuss this with Fingallians. This will impact the playing areas at Balheary pitches and on lands owned by Fingallians.
	Carlton Court	
5.4.23	Pinnock Hill underpass	The gradients of the lands in the area make an underground crossing of the Pinnock Hill roundabout impractical without greatly lowering the level of Fosterstown stop.
	Belinstown	
5.4.26	Strategic planning of infrastructure.	The depot, stop, park and ride and landscaping has been designed in close consultation with Fingal County Council who are developing the Swords local area plan. compliment the FCC masterplan.
5.4.27	Internal access road	An internal road would still have to be accessed from some point on Batter Lane as a direct exit from the M1 motorway would be unacceptable to the NRA. Such a road would also require additional land. It would not give same flexibility of access to the depot and P+R in case of incidents.
	Car park too near residences.	A main purpose of Metro is to encourage P+R. This would not be as attractive if the car park was not centred on the stop.
	Flood Risk	Drainage has been designed to limit runoff to acceptable values in accordance with the Greater Dublin Strategic Drainage Study. Infiltration areas and attenuation ponds have been included to avoid any increase in the flood risk to the rivers or surrounding ground. The works are not in the 'floodplain' as such, only in the catchment of the river. All culverts etc are designed to comply with the OPW requirements for flood protection.