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Porterstown Level Crossing Assessment

	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Do Nothing	Do Minimum	Option 1
					Leave the current level crossings in place.	Closure of the existing crossings with no alternative provided. All traffic would be diverted to alternative routes around the crossing location.	Pedestrian / Cycle Links parallel to canal and rail to ramped access to Diswellstown Viaduct
1	Economy	1.1	**Construction and Land Cost**	Assessment of cost of construction of option, land costs and temporary works	**Significant comparative advantage over other options** The level crossing is currently manned. The ongoing cost associated with this control mechanism on the railway is significant.	**Significant comparative advantage over other options** Cost of removing crossing is low in comparison to provision of road crossing.	**Significant comparative disadvantage over other options** This scheme is similar to other bridge options but it includes an additional 600m of 5.0m wide cycleway and the land acquisition costs associated with it.
		1.2	**Long Term Maintenance costs**	Ongoing annual maintenance costs associated with varied options	**Significant comparative disadvantage over other options** The do-nothing scenario would maintain the existing maintenance costs of the level crossing.	**Significant comparative advantage over other options** The closure of the level crossing would remove the maintenance requirement of the level crossing.	**Significant comparative advantage over other options** The maintenance costs are associated with regular inspection and maintenance of the cycleway and the ramp structures
		1.3	**Traffic Functionality /economic benefit**	Benefits to vehicular traffic through reduction in journey time lengths and delays through removal of level crossings. Consideration of potentially longer routes for traffic.	**Comparable to other options** Existing connectivity maintained, albeit with increased disruption from increased train frequencies. Economic disbenefit to rail.	**Comparable to other options** Displacement of traffic onto alternative routes; increase in journey times for local residents, New Link road already serves for commuter traffic.	**Comparable to other options** Displacement of traffic onto alternative routes; increase in journey times for local residents, New Link road already serves for commuter traffic.
2	Integration	2.1	**Transport Integration**	Impact on scope for and ease of interchange between modes. Impact on the operation of other transport services both during construction and in operation. New interchange nodes and facilities; Reduced walking and wait times associated with interchanges. Modal shift figures during construction and operations. Changes to journey times to transport nodes.	**Some comparative advantage over other options** Existing connectivity maintained, albeit with increased disruption from increased train frequencies. There is no cycle route proposed on Porterstown Road in the GDA Cycle Network Plan.	**Some comparative disadvantage over other options** Reduction in local permeability. The provision of the Porterstown Viaduct has reduced the utility of Porterstown Road for anything more than local traffic.	**Some comparative disadvantage over other options** Some indirect access provided for pedestrians and cyclists, but less preferable than other options. No access provided for other transport modes.
		2.2	**Land Use Integration**	Impact on land use strategies and local plans. Assessment of support for land use factors local land use and planning. Inclusion of project in relevant local planning documents.	**Some comparative advantage over other options** This option supports local planning policy map based "*Objective 137: Preserve the existing pedestrian and vehicular right of way at the level crossing at Porterstown*". There is also a Specific Objective on Porterstown Road running north south for an "Indicative Cycle/Pedestrian Route" that would be impacted. However, it is considered that there would be modifications required to the current road widths and narrow bridge over the canal should this objective be realised as it could not be safely implemented in it's current form.	**Some comparative disadvantage over other options** At local level, The Do - Minimum Option goes against Fingal DP map-based Specific Objectives; Specific Objective 137 "Preserve the existing pedestrian and vehicular right of way at the level crossing at Porterstown" and the Specific Objective of "Indicative Cycle/Pedestrian Route". The closure of the level crossing with no alternative would sever vehicular and pedestrian/cycle access to lands to the south zoned for "Residential Area", for which the Draft Kellystown LAP will apply (map based objective LAP13.C) - currently at consultation stage. The Draft LAP supports the DART Expansion programme. The LAP includes the potential development of a 'Future train station and/ or Metro West node' on the southern side of the tracks on Porterstown Road.	**Some comparative disadvantage over other options** This Option does not support Fingal DP map-based Specific Objective 137; "Preserve the existing pedestrian and vehicular right of way at the level crossing at Porterstown". Option 1 supports pedestrian access to Dr Tory Bridge (Porterstown Viaduct) which would provide a pedestrian link to proposed 'light rail corridor' and a light rail stop at Porterstown (travelling north south along the R121). The surrounding area is zoned for 'Residential Area" for which the Draft Kellystown LAP will apply (map based objective LAP13.C) - currently at consultation stage. he Draft LAP supports the DART Expansion programme. The LAP includes the potential development of a 'Future train station and/ or Metro West node' on the southern side of the tracks on Porterstown Road.

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	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Do Nothing	Do Minimum	Option 1
		2.3	**Geographical Integration**	Alternative level crossing options are mostly neutral in respect of Geographical Integration due to localised nature of the level crossings. As a consequence all options are rated comparable to one another.	**Comparable to other options**	**Comparable to other options**	**Comparable to other options**
					No impact on Geographical Integration	No impact on Geographical Integration	No impact on Geographical Integration
		2.4	**Other Government Policy Integration**	Integration with the other Government policy such as the NPF and RSES.	**Some comparative disadvantage over other options**	**Some comparative disadvantage over other options**	**Some comparative advantage over other options**
					This option would not support the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF- (NS04), RSES & GDA Transport Strategy).	This option would support the delivery of the DART Expansion programme in the higher level national and regional planning policies however it would impact on Smarter Travel policy.	This option would support the delivery of the DART Expansion programme in the higher level national and regional planning policy documents.
		3.1	**Noise and Vibration**	Estimated number of sensitive properties within 100m of the works. Options closer to more sensitive locations will have an increased risk of generating a noise impact. However, qualative criteria are also used where necessary to differentiate between the options.	**Some comparative disadvantage over other options**	**Some comparative advantage over other options**	**Some comparative advantage over other options**
					Retains vehicular traffic which will impact the low number of sensitive receptors in proximity.	Removes vehicular traffic and minimal construction phase.	9 dwelling within 100m. Note that only construction stage impacts expected as this is a pedestrian crossing.
		3.2	**Air Quality and Climate**	Estimated number of number of receptors within 50m reviewed as part of appriasal. Options closer to more sensitive locations will have an increased risk of changes in air quality during construction or operational phases. However, qualative criteria are also used where necessary to differentiate between the options.	**Some comparative disadvantage over other options**	**Some comparative advantage over other options**	**Some comparative advantage over other options**
					Retains vehicular traffic which will impact the low number of sensitive receptors in proximity.	Removes low level of vehicular traffic onto Diswellstown Viaduct 300m away and the construction phase is minimal. Potential for construction phase dust impact is not significant when mitigation measures are put in place.	3 dwelling within 50m. Note that only construction stage impacts expected as this is a pedestrian crossing. No bridge so lower construction impacts. Potential for construction phase dust impact is not significant when mitigation measures are put in place.
		3.3	**Landscape and Visual (including light)**	Key landscape characteristics affected; Impact on landscape character; Impacts on landscape features, protected landscapes. Key visual characteristics affected; Impacts on properties, amenities, protected views, key views.	**Significant comparative advantage over other options**	**Significant comparative advantage over other options**	**Some comparative advantage over other options**
					No impact on existing landscape or visual characteristics	Loss of local connectivity. Minimal impact on existing landscape or visual characteristics - no likely significant landscape or visual impacts.	Significant impact on trees to north of canal - which provide screening for residential property.
		3.4	**Biodiversity (flora and fauna)**	Potential compliance/conflict with biodiversity objectives; Indirect impacts on protected species, designated sites; Overall effect on nature conservation resource.	**Significant comparative advantage over other options**	**Significant comparative advantage over other options**	**Some comparative disadvantage over other options**
					No likely significant impacts.	No likely significant impacts.	Hydrologically connected to South Dublin Bay and River Tolka Estuary SPA. No risk of LSE. Potential impacts to Royal Canal pNHA. Potential impact to woodland habitat adjacent to canal. Potential impacts to bats foraging and roosting in existing bridge, buildings and trees nearby. Given that that this option will follow existing pedestrian bridge at Porterstown Viaduct there is less impact to canal corridor than option 2 and 3.

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	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Do Nothing	Do Minimum	Option 1
3	Environment	3.5	Cultural, Archaeological and Architectural Heritage	Overall effect on cultural, archaeological and architecture heritage resource. Likely effects on RPS, National Monuments, SMRs, Conservation areas, etc. Number of designated sites/structures (by level of designation) directly impacted by scheme (landtake)	Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
					No direct impacts.	No direct impacts.	Potential indirect impacts on Keeper's Cottage (RPS No. 699) and Former Clonsilla School (RPS No. 700) and the Royal Canal (RPS No. 944a). Potential to encounter archaeological deposits that may survive in undeveloped areas.
		3.6	Water Resources	Overall potential significant effects on water resource attributes likely to be affected during construction and operation.	Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
					Potential negative impact on surface water quality during operational phase. Has some comparative disadvantage over other options.	Removes vehicular traffic borne pollutants and minimal construction phase. The Do Minimum Option has some comparative advantages over other options.	Option likely to have no significant effect on flood regime. Potential for minor impact on surface water quality during construction though removal of vehicular traffic likely to have a positive impact on water quality of Royal Canal overall. Likely minimal impact on groundwater quality.
		3.7	Agriculture and Non-Agricultural	Overall impact on land take & property. Number of properties to be impacted/acquired. Likely temporary or permanent severance effects, etc.	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
					No direct impacts.	No direct impacts to property however severence to local land uses in the area.	Option 1 will have a direct impact on non-agricultural lands in use as a car park for St. Mochta's GAA club.
		3.8	Geology and Soils (including Waste)	Soils and Geology and likely impact on geological resources based on preliminary/likely construction details. Soil or topsoil resources to be developed/removed based on cut or fill requirements and potential for soft ground which may also need replaced. Existing information relating to potential to encounter contaminated land. High-level assessment based on the likely structures/ works required and the potential for ground contamination due to historic landfills, pits and quarries.	Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
					No significant direct impacts.	No significant direct impacts.	Comparative disadvantage is considered as construction is proposed, no likely significant impacts.
		3.9	Radiation and Stray Current		Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
				Overall likely impact on existing sources of electromagnetic radiation.	No changes from an EMI perspective transverse to the railway therefore advantage over other options.	No changes from an EMI perspective transverse to the railway therefore advantage over other options.	It is assumed that the routing of the cabling, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. All Do-Something options are comparable from an EMI perspective at this stage in the assessment.
		4.1	Impact on Vulnerable Groups	Impacts on low income groups, non-car owners, mobility impaired, visually impaired and people with a disability.	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
					With the level crossing becoming effectively closed on implementation of the proposed working timetable and with no provision for supplementaty infrastructure for vulnerable groups, the majority of users will be diverted onto the adjacent viaduct.	With removal of the level crossing and with no provision for supplementary infrastructure for vulnerable groups, the majority of users will be diverted onto the adjacent viaduct.	The alternative access proposed as part of this option for vulnerable groups includes a diversion of approximately 1.0km. This if not evident for other bridge options
		4.2	Stations Accessibility	Quantification of increased service levels to the vulnerable groups.	Comparable to other options	Comparable to other options	Comparable to other options
					It is considered that alterations at Porterstown will not significantly affect access to stations in the locality	It is considered that alterations at Porterstown will not significantly affect access to stations in the locality	It is considered that alterations at Porterstown will not significantly affect access to stations in the locality

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	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Do Nothing	Do Minimum	Option 1
4	**Accessibility & Social inclusion**	4.3	**Social Inclusion**	Service levels impacts including severance of community groups; Severance from community facilities consequent on an option.	**Significant comparative disadvantage over other options** Cross Railway journey = nil as crossing remains in place; Inaccessible when crossing is closed. Diversion for cars, pedestrians and cyclists when level crossing closed 1.1km The principal affected amenities in the vicinity of the level crossing include St Mochta's football grounds south of the railway, Scoil Choilm and Luttrelstown Community College and Centre south of the railway, St Mochta's National School and the Healthwell Clinic, north of the railway. Removal of the level crossing require detour for access to each of them.	**Significant comparative disadvantage over other options** Cross Railway journey = nil as crossing remains in place; Inaccessible when crossing is closed. Premanent diversion for cars, pedestrians and cyclists 1.1km The principal affected amenities in the vicinity of the level crossing include St Mochta's football grounds south of the railway, Scoil Choilm and Luttrelstown Community College and Centre south of the railway, St Mochta's National School and the Healthwell Clinic, north of the railway. Removal of the level crossing require detour for access to each of them.	**Significant comparative disadvantage over other options** Cross Railway journey = nil as crossing remains in place; Full access remains for pedestrians and cyclists on closure of the level crossing. Diversion for cars when level crossing closed 1.1km. Diversion for pedestrians, cyclists and mobility impaired - ~1km The principal affected amenities in the vicinity of the level crossing include St Mochta's football grounds south of the railway, Scoil Choilm and Luttrelstown Community College and Centre south of the railway, St Mochta's National School and the Healthwell Clinic, north of the railway. Removal of the level crossing require detour for access to each of them.
5	**Safety**	5.1	**Rail Safety**	Safety for Rail users – removal of Level crossings is considered a significant safety enhancement	**Significant comparative disadvantage over other options** Maintaining the crossing would have a significant disadvantage to rail safety for people still crossing the rail.	**Significant comparative advantage over other options** Closing the crossing will remove the interface between rail and other traffic.	**Significant comparative advantage over other options** All overbridges have a significant advantage as they are a great crossing alternative
		5.2	**Vehicular Traffic Safety**	Quality of Access for these road users, lengths of diversions, removal of interface with rail and other modes of transport	**Comparable to other options** With the level crossing becoming effectively closed on implementation of the proposed working timetable and with no additional road access proposed, traffic will be diverted onto the adjacent viaduct resulting a slight increase in traffic.	**Comparable to other options** Closure of the level crossing with no additional road access proposed, traffic will be diverted onto the adjacent viaduct resulting a slight increase in traffic.	**Comparable to other options** Closure of the level crossing with no additional road access proposed, traffic will be diverted onto the adjacent viaduct resulting a slight increase in traffic.
		5.3	**Pedestrian, Cyclist and Vulnerable Road user Safety**	Quality of Access for these road users. removal of interfaces	**Some comparative disadvantage over other options** With the level crossing becoming effectively closed on implementation of the proposed working timetable and with no provision for supplementaty infrastructure for vulnerable road users, the majority of users will be diverted onto the adjacent viaduct.	**Some comparative disadvantage over other options** With removal of the level crossing and with no provision for supplementaty infrastructure for vulnerable road users, the majority of users will be diverted onto the adjacent viaduct.	**Some comparative disadvantage over other options** The alternative access proposed as part of this option for vulnerable road users includes a diversion of approximately 1.0km. This if not evident for other bridge options

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	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Do Nothing	Do Minimum	Option 1
6	Physical Activity	6.1	**Connectivity to adjoining cycling facilities**	Analysis of the extent that the scheme connects with cycle tracks.	**Significant comparative disadvantage over other options**	**Significant comparative disadvantage over other options**	**Significant comparative advantage over other options**
					No cycle tracks currently present on the immediately surrounding road network, but increased closures of the level crossing would reduce access to the Royal Canal Greenway. See also Transport Integration above.	No cycle tracks on the immediately surrounding road network, but the closure of the level crossing would reduce access to the Royal Canal Greenway. See also Transport Integration above.	Local severance on Porterstown Road mitigated to a degree by access to Porterstown Viaduct
		6.2	**Permeability and local access opportunity**	Journey Time and lengths of diversions for active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions related to active mode	**Significant comparative disadvantage over other options**	**Significant comparative disadvantage over other options**	**Significant comparative disadvantage over other options**
					Cross Railway journey = nil as crossing remains in place; Inaccessible when crossing is closed. Diversion for cars, pedestrians and cyclists when level crossing closed 1.1km The principal affected amenities in the vicinity of the level crossing include the Royal canal,and the amenity zoned lands south west of the level crossing. Removal of the level crossing require detour for access to each of them.	Cross Railway journey = nil as crossing remains in place; Inaccessible when crossing is closed. Premanent diversion for cars, pedestrians and cyclists 1.1km The principal affected amenities in the vicinity of the level crossing include the Royal canal,and the amenity zoned lands south west of the level crossing. Removal of the level crossing require detour for access to each of them.	Cross Railway journey = nil as crossing remains in place; Full access remains for pedestrians and cyclists on closure of the level crossing. Diversion for cars when level crossing closed 1.1km. Diversion for pedestrians, cyclists and mobility impaired - ~1km The principal affected amenities in the vicinity of the level crossing include the Royal canal,and the amenity zoned lands south west of the level crossing. Removal of the level crossing require detour for access to each of them.

	Criteria		Do Nothing	Do Minimum	Option 1
1	**Economy**		Significant comparative disadvantage over other options	Significant comparative advantage over other options	Significant comparative disadvantage over other options
2	**Integration**		Significant comparative advantage over other options	Significant comparative disadvantage over other options	Some comparative disadvantage over other options
3	**Environment**		Some comparative advantage over other options	Significant comparative advantage over other options	Some comparative disadvantage over other options
4	**Accessibility and social inclusion**		Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options
5	**Safety**		Significant comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
6	**Physical Activity**		Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Some comparative disadvantage over other options
	Progress To Stage 2		**No**	**No**	**No**

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	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 2	Option 3	Option 4
					Pedestrian / Cycle Bridge with Nested Ramps in Sports Grounds and Grounds of Disused School	Pedestrian / Cycle Bridge with Ramps extending along Porterstown Road; realignment of Porterstown Road South to Accommodate this.	Pedestrian / Cycle Bridge with Nested Ramps (Same as Option 2 except the northern ramps and abutment are to the east of the Porterstown Road)
1	Economy	1.1	Construction and Land Cost	Assessment of cost of construction of option, land costs and temporary works	**Some comparative advantage over other options** The costs presented here are the capital costs for the proposed bridge structure and those of turnign facilities to be provided on closure of the proposed road. An estimated of land acquisition costs is also included.	**Some comparative disadvantage over other options** The costs presented here are the capital costs for the proposed bridge structure and those of turnign facilities to be provided on closure of the proposed road. An estimated of land acquisition costs is also included.	**Some comparative advantage over other options** The costs presented here are the capital costs for the proposed bridge structure and those of turnign facilities to be provided on closure of the proposed road. An estimated of land acquisition costs is also included.
		1.2	Long Term Maintenance costs	Ongoing annual maintenance costs associated with varied options	**Significant comparative advantage over other options** The maintenance costs are associated with regular inspection and maintenance of the bridge structure.	**Significant comparative advantage over other options** The maintenance costs are associated with regular inspection and maintenance of the bridge structure. No additional maintenance cost is allocated to the realigned section of Porterstown Road as this is currently in the charge of Fingal county Council and it is likely to remain so.	**Significant comparative advantage over other options** The maintenance costs are associated with regular inspection and maintenance of the bridge structure.
		1.3	Traffic Functionality /economic benefit	Benefits to vehicular traffic through reduction in journey time lengths and delays through removal of level crossings. Consideration of potentially longer routes for traffic.	**Comparable to other options** Displacement of traffic onto alternative routes; increase in journey times for local residents, New Link road already serves for commuter traffic.	**Comparable to other options** Displacement of traffic onto alternative routes; increase in journey times for local residents, New Link road already serves for commuter traffic.	**Comparable to other options** Displacement of traffic onto alternative routes; increase in journey times for local residents, New Link road already serves for commuter traffic.
2	Integration	2.1	Transport Integration	Impact on scope for and ease of interchange between modes. Impact on the operation of other transport services both during construction and in operation. New interchange nodes and facilities; Reduced walking and wait times associated with interchanges. Modal shift figures during construction and operations. Changes to journey times to transport nodes.	**Some comparative advantage over other options** Reasonable access provided for pedestrians and cyclists. No access provided for other transport modes.	**Some comparative advantage over other options** Reasonable access provided for pedestrians and cyclists. No access provided for other transport modes.	**Some comparative advantage over other options** Reasonable access provided for pedestrians and cyclists. No access provided for other transport modes.
		2.2	Land Use Integration	Impact on land use strategies and local plans. Assessment of support for land use factors local land use and planning. Inclusion of project in relevant local planning documents.	**Some comparative disadvantage over other options** This Option does not support Fingal DP map-based Specific Objective 137; "Preserve the existing pedestrian and vehicular right of way at the level crossing at Porterstown". However, an alternative right of way for pedestrians is being provided as part of this option at the existing level crossing location. This option supports the future development of lands zoned for "Residential Area" as part of the future Kellystown LAP by maintaining pedestrian and cycle access at this location. The Draft LAP supports the DART Expansion programme. The LAP includes the potential development of a 'Future train station and/ or Metro West node' on the southern side of the tracks on Porterstown Road.	**Some comparative disadvantage over other options** This Option does not support Fingal DP map-based Specific Objective 137; "Preserve the existing pedestrian and vehicular right of way at the level crossing at Porterstown". However, an alternative right of way for pedestrians and also the development of cycling infrastructure is provided therefore would support the 'indicative-Cycle/Pedestrian access' at the existing level crossing location (gradients & length not taken into consideration). This option supports the future development of lands zoned for "Residential Area" as part of the future Kellystown LAP by maintaining pedestrian and cycle access at this location. he Draft LAP supports the DART Expansion programme. The LAP includes the potential development of a 'Future train station and/ or Metro West node' on the southern side of the tracks on Porterstown Road.	**Some comparative disadvantage over other options** At local level, Option 4 goes against Fingal DP map-based Specific Objective 137; "Preserve the existing pedestrian and vehicular right of way at the level crossing at Porterstown" by closing the existing level crossing. However, an alternative right of way for pedestrians is being provided as part of this option at the existing level crossing location. This option supports the future development of lands zoned for "Residential Area" as part of the future Kellystown LAP by maintaining pedestrian and cycle access at this location. The Draft LAP supports the DART Expansion programme. The LAP includes the potential development of a 'Future train station and/ or Metro West node' on the southern side of the tracks on Porterstown Road.

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	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 2	Option 3	Option 4
		2.3	**Geographical Integration**	Alternative level crossing options are mostly neutral in respect of Geographical Integration due to localised nature of the level crossings. As a consequence all options are rated comparable to one another.	**Comparable to other options**	**Comparable to other options**	**Comparable to other options**
					No impact on Geographical Integration	No impact on Geographical Integration	No impact on Geographical Integration
		2.4	**Other Government Policy Integration**	Integration with the other Government policy such as the NPF and RSES.	**Some comparative advantage over other options**	**Some comparative advantage over other options**	**Some comparative advantage over other options**
					This option would support the delivery of the DART Expansion programme in the higher level national and regional planning policy documents.	This option would support the delivery of the DART Expansion programme in the higher level national and regional planning policy documents.	This option would support the delivery of the DART Expansion programme in the higher level national and regional planning policy documents.
		3.1	**Noise and Vibration**	Estimated number of sensitive properties within 100m of the works. Options closer to more sensitive locations will have an increased risk of generating a noise impact. However, qualative criteria are also used where necessary to differentiate between the options.	**Some comparative advantage over other options**	**Some comparative advantage over other options**	**Some comparative advantage over other options**
					27 dwelling within 100m. Note that only construction stage impacts expected as this is a pedestrian crossing.	13 dwelling within 100m. Note that only construction stage impacts expected as this is a pedestrian crossing.	8 dwelling within 100m. Note that only construction stage impacts expected as this is a pedestrian crossing.
		3.2	**Air Quality and Climate**	Estimated number of number of receptors within 50m reviewed as part of appriasal. Options closer to more sensitive locations will have an increased risk of changes in air quality during construction or operational phases. However, qualative criteria are also used where necessary to differentiate between the options.	**Some comparative advantage over other options**	**Some comparative advantage over other options**	**Some comparative advantage over other options**
					4 dwelling within 50m. Note that only construction stage impacts expected as this is a pedestrian crossing.Potential for construction phase dust impact is not significant when mitigation measures are put in place. No traffic distribution data available to assess impact on new receptors therefore assessment only considers current receptors close to the level crossing.	5 dwelling within 50m. Note that only construction stage impacts expected as this is a pedestrian crossing. Potentially more embodied carbon due to additional construction material required. Potential for construction phase dust impact is not significant when mitigation measures are put in place. No traffic distribution data available to assess impact on new receptors therefore assessment only considers current receptors close to the level crossing.	5 dwelling within 50m. Note that only construction stage impacts expected as this is a pedestrian crossing.Potential for construction phase dust impact is not significant when mitigation measures are put in place. No traffic distribution data available to assess impact on new receptors therefore assessment only considers current receptors close to the level crossing.
		3.3	**Landscape and Visual (including light)**	Key landscape characteristics affected; Impact on landscape character; Impacts on landscape features, protected landscapes. Key visual characteristics affected; Impacts on properties, amenities, protected views, key views.	**Significant comparative disadvantage over other options**	**Significant comparative disadvantage over other options**	**Significant comparative disadvantage over other options**
					Significant impact on trees to north of canal - which provide screening for residential property. Significant visual impact for old cottages at level crossing. Visual impact on setting of Keenan bridge, with proposed bridge elevated directly over.	Significant impact on roadside trees and hedgerows. Significant visual impact for old cottages at level crossing and for properties on Porterstown Road, north of the canal. Visual impact on setting of Keenan bridge, with proposed bridge elevated directly over.	Significant impact on trees to north of canal - which provide screening for residential property. Significant visual impact for old cottages at level crossing. Visual impact on setting of Keenan bridge, with proposed bridge elevated directly over.
		3.4	**Biodiversity (flora and fauna)**	Potential compliance/conflict with biodiversity objectives; Indirect impacts on protected species, designated sites; Overall effect on nature conservation resource.	**Significant comparative disadvantage over other options**	**Significant comparative disadvantage over other options**	**Significant comparative disadvantage over other options**
					Hydrologically connected to South Dublin Bay and River Tolka Estuary SPA. No risk of LSE. Potential impacts to Royal Canal pNHA. Potential impacts to bats foraging and roosting in existing bridge, buildings and trees nearby. Loss of trees and vegetation at new bridge crossing and adjacent to canal and railway.	Hydrologically connected to South Dublin Bay and River Tolka Estuary SPA. No risk of LSE. Potential impacts to Royal Canal pNHA. Potential impacts to bats foraging and roosting in existing bridge, buildings and trees nearby. Loss of trees at new bridge crossing and along Porterstown Road.	Hydrologically connected to South Dublin Bay and River Tolka Estuary SPA. No risk of LSE. Potential impacts to Royal Canal pNHA. Potential impacts to bats foraging and roosting in existing bridge, buildings and trees nearby. Loss of trees and vegetation at new bridge crossing and adjacent to canal and railway.

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	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 2	Option 3	Option 4
3	**Environment**	3.5	**Cultural, Archaeological and Architectural Heritage**	Overall effect on cultural, archaeological and architecture heritage resource. Likely effects on RPS, National Monuments, SMRs, Conservation areas, etc. Number of designated sites/structures (by level of designation) directly impacted by scheme (landtake)	**Some comparative disadvantage over other options** Potential indirect impacts on Keeper's Cottage (RPS No. 699), Former Clonsilla School (RPS No. 700). This Option crosses the canal at the same location and has the potential to indirectly impact the Kennan Bridge (RPS No. 698) and the Royal Canal (RPS No. 944a)	**Some comparative disadvantage over other options** Potential indirect impacts on Keeper's Cottage (RPS No. 699), Former Clonsilla School (RPS No. 700). This Option crosses the canal at the same location and has the potential to indirectly impact the Kennan Bridge (RPS No. 698) and the Royal Canal (RPS No. 944a)	**Some comparative disadvantage over other options** Potential indirect impacts on Keeper's Cottage (RPS No. 699), Former Clonsilla School (RPS No. 700). This Option crosses the canal at the same location and has the potential to indirectly impact the Kennan Bridge (RPS No. 698) and the Royal Canal (RPS No. 944a).
		3.6	**Water Resources**	Overall potential significant effects on water resource attributes likely to be affected during construction and operation.	**Some comparative disadvantage over other options** Option likely to have no significant effect on flood regime. Potential for minor impact on surface water quality during construction though removal of vehicular traffic likely to have a positive impact on water quality of Royal Canal overall. Likely minimal impact on groundwater quality.	**Some comparative disadvantage over other options** Option likely to have no significant effect on flood regime.Potential for minor impact on surface water quality during construction though removal of vehicular traffic likely to have a positive impact on water quality of Royal Canal overall. Likely minimal impact on groundwater quality.	**Some comparative disadvantage over other options** Option likely to have no significant effect on flood regime. Potential for minor impact on surface water quality during construction though removal of vehicular traffic likely to have a positive impact on water quality of Royal Canal overall. Likely minimal impact on groundwater quality.
		3.7	**Agriculture and Non-Agricultural**	Overall impact on land take & property. Number of properties to be impacted/acquired. Likely temporary or permanent severance effects, etc.	**Some comparative disadvantage over other options** Option 2 will have a direct impact on non-agricultural lands in use as a car park for St. Mochta's GAA club.	**Some comparative disadvantage over other options** Option 3 will impact on lands used by St. Mochta's GAA club, St. Mochta's FC and St. Mochta's National School	**Some comparative disadvantage over other options** Option 4 will have a direct impact on non-agricultural lands in use as a car park for St. Mochta's GAA club.
		3.8	**Geology and Soils (including Waste)**	Soils and Geology and likely impact on geological resources based on preliminary/likely construction details. Soil or topsoil resources to be developed/removed based on cut or fill requirements and potential for soft ground which may also need replaced. Existing information relating to potential to encounter contaminated land. High-level assessment based on the likely structures/ works required and the potential for ground contamination due to historic landfills, pits and quarries.	**Some comparative disadvantage over other options** Comparative disadvantage is considered as construction is proposed, no likely significant impacts.	**Some comparative disadvantage over other options** Comparative disadvantage is considered as construction is proposed, no likely significant impacts.	**Some comparative disadvantage over other options** Comparative disadvantage is considered as construction is proposed, no likely significant impacts.
		3.9	**Radiation and Stray Current**	Overall likely impact on existing sources of electromagnetic radiation.	**Some comparative disadvantage over other options** It is assumed that the routing of the cabling, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. All Do-Something options are comparable from an EMI perspective at this stage in the assessment.	**Some comparative disadvantage over other options** It is assumed that the routing of the cabling, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. All Do-Something options are comparable from an EMI perspective at this stage in the assessment.	**Some comparative disadvantage over other options** It is assumed that the routing of the cabling, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. All Do-Something options are comparable from an EMI perspective at this stage in the assessment.
		4.1	**Impact on Vulnerable Groups**	Impacts on low income groups, non-car owners, mobility impaired, visually impaired and people with a disability.	**Some comparative advantage over other options** High Quality access for vulnerable groups proposed with the inclusion of bridge infrastructure in this option.	**Some comparative advantage over other options** High Quality access for vulnerable groups proposed with thhe inclusion of bridge infrastructure in this option.	**Some comparative advantage over other options** High Quality access for vulnerable groups proposed with thhe inclusion of bridge infrastructure in this option.
		4.2	**Stations Accessibility**	Quantification of increased service levels to the vulnerable groups.	**Comparable to other options** It is considered that alterations at Porterstown will not significantly affect access to stations in the locality	**Comparable to other options** It is considered that alterations at Porterstown will not significantly affect access to stations in the locality	**Comparable to other options** It is considered that alterations at Porterstown will not significantly affect access to stations in the locality

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	Parameter		**Criteria**	**Sub-Criteria (Quantitative/ Qualitative)**	**Option 2**	**Option 3**	**Option 4**
4	**Accessibility & Social inclusion**	4.3	**Social Inclusion**	Service levels impacts including severance of community groups; Severance from community facilities consequent on an option.	**Significant comparative advantage over other options** Cross Railway journey = nil as crossing remains in place; Full access remains for pedestrians and cyclists on closure of the level crossing. Diversion for cars when level crossing closed 1.1km. Diversion for pedestrians, cyclists and mobility impaired - ~0.35km The principal affected amenities in the vicinity of the level crossing include St Mochta's football grounds south of the railway, Scoil Choilm and Luttrelstown Community College and Centre south of the railway, St Mochta's National School and the Healthwell Clinic, north of the railway. Removal of the level crossing require detour for access to each of them.	**Significant comparative advantage over other options** Cross Railway journey = nil as crossing remains in place; Full access remains for pedestrians and cyclists on closure of the level crossing. Diversion for cars when level crossing closed 1.1km. Diversion for pedestrians, cyclists and mobility impaired - ~0.35km The principal affected amenities in the vicinity of the level crossing include St Mochta's football grounds south of the railway, Scoil Choilm and Luttrelstown Community College and Centre south of the railway, St Mochta's National School and the Healthwell Clinic, north of the railway. Removal of the level crossing require detour for access to each of them.	**Significant comparative advantage over other options** Cross Railway journey = nil as crossing remains in place; Full access remains for pedestrians and cyclists on closure of the level crossing. Diversion for cars when level crossing closed 1.1km. Diversion for pedestrians, cyclists and mobility impaired - ~0.35km The principal affected amenities in the vicinity of the level crossing include St Mochta's football grounds south of the railway, Scoil Choilm and Luttrelstown Community College and Centre south of the railway, St Mochta's National School and the Healthwell Clinic, north of the railway. Removal of the level crossing require detour for access to each of them.
5	**Safety**	5.1	**Rail Safety**	Safety for Rail users – removal of Level crossings is considered a significant safety enhancement	**Significant comparative advantage over other options** All overbridges have a significant advantage as they are a great crossing alternative	**Significant comparative advantage over other options** All overbridges have a significant advantage as they are a great crossing alternative	**Significant comparative advantage over other options** All overbridges have a significant advantage as they are a great crossing alternative
		5.2	**Vehicular Traffic Safety**	Quality of Access for these road users, lengths of diversions, removal of interface with rail and other modes of transport	**Comparable to other options** Closure of the level crossing with no additional road access proposed, traffic will be diverted onto the adjacent viaduct resulting a slight increase in traffic.	**Comparable to other options** Closure of the level crossing with no additional road access proposed, traffic will be diverted onto the adjacent viaduct resulting a slight increase in traffic.	**Comparable to other options** Closure of the level crossing with no additional road access proposed, traffic will be diverted onto the adjacent viaduct resulting a slight increase in traffic.
		5.3	**Pedestrian, Cyclist and Vulnerable Road user Safety**	Quality of Access for these road users. removal of interfaces	**Some comparative advantage over other options** High Quality access for vulnerable road users proposed with thhe inclusion of bridge infrastructure in this option.	**Some comparative advantage over other options** High Quality access for vulnerable road users proposed with thhe inclusion of bridge infrastructure in this option.	**Some comparative advantage over other options** High Quality access for vulnerable road users proposed with thhe inclusion of bridge infrastructure in this option.

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	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 2	Option 3	Option 4
6	Physical Activity	6.1	**Connectivity to adjoining cycling facilities**	Analysis of the extent that the scheme connects with cycle tracks.	**Significant comparative advantage over other options** Severance overcome by provision of direct replacement.	**Significant comparative advantage over other options** Severance overcome by provision of direct replacement.	**Significant comparative advantage over other options** Severance overcome by provision of direct replacement.
		6.2	**Permeability and local access opportunity**	Journey Time and lengths of diversions for active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions related to active mode	**Significant comparative advantage over other options** Cross Railway journey = nil as crossing remains in place; Full access remains for pedestrians and cyclists on closure of the level crossing. Diversion for cars when level crossing closed 1.1km. Diversion for pedestrians, cyclists and mobility impaired - ~0.35km The principal affected amenities in the vicinity of the level crossing include the Royal canal,and the amenity zoned lands south west of the level crossing. Removal of the level crossing require detour for access to each of them.	**Significant comparative advantage over other options** Cross Railway journey = nil as crossing remains in place; Full access remains for pedestrians and cyclists on closure of the level crossing. Diversion for cars when level crossing closed 1.1km. Diversion for pedestrians, cyclists and mobility impaired - ~0.35km The principal affected amenities in the vicinity of the level crossing include the Royal canal,and the amenity zoned lands south west of the level crossing. Removal of the level crossing require detour for access to each of them.	**Significant comparative advantage over other options** Cross Railway journey = nil as crossing remains in place; Full access remains for pedestrians and cyclists on closure of the level crossing. Diversion for cars when level crossing closed 1.1km. Diversion for pedestrians, cyclists and mobility impaired - ~0.35km The principal affected amenities in the vicinity of the level crossing include the Royal canal,and the amenity zoned lands south west of the level crossing. Removal of the level crossing require detour for access to each of them.

	Criteria		Option 2	Option 3	Option 4
1	Economy		Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
2	Integration		Some comparative advantage over other options	Some comparative advantage over other options	Some comparative advantage over other options
3	Environment		Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options
4	Accessibility and social inclusion		Significant comparative advantage over other options	Significant comparative advantage over other options	Significant comparative advantage over other options
5	Safety		Significant comparative advantage over other options	Significant comparative advantage over other options	Significant comparative advantage over other options
6	Physical Activity		Significant comparative advantage over other options	Significant comparative advantage over other options	Significant comparative advantage over other options
	Progress To Stage 2		Yes	Yes	Yes