

**MCA CONNOLLY STATION**

Connolly Station Multi Criteria Assessment MCA						
Parameter	Criteria	Sub-Criteria (Quantitative Qualitative)	Option 1	Option 2	Option 3	
1	Economy	1,1	Construction and Land Cost Assessment of cost of construction of option, land costs, acquisition costs and temporary works	Significant comparative disadvantage over other options	Significant comparative advantage over other options	Some comparative disadvantage over other options
				The three options have similar solutions for the construction of the platform level. Land acquisition is not needed in Option 1. The construction of Option 1 would be more challenging due to the structural constraints of the entrance area. The construction concept cost estimate is around 15M€.	The three options have similar solutions for the construction of the platform level. Land acquisition is not needed in Option 2. The construction concept cost estimate is around 10M€.	The three options have similar solutions for the construction of the platform level. The acquisition of the Faite Ireland car park is needed to develop Option 3. The construction concept cost estimate is around 13M€ (including land acquisition).
		1,2	Long Term Maintenance costs Maintenance and reinvestments,	Comparable to other options	Comparable to other options	Comparable to other options
				All options are similar in terms of long term maintenance costs.	All options are similar in terms of long term maintenance costs.	All options are similar in terms of long term maintenance costs.
		1,3	Train Operation Functionality /economic benefit Benefits to train operation through operation flexibility.	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
				Option 1 entrance needs to be operated with a tag-on poles validation system. There is no room for the number of entry and exit gates needed.	Option 2 entrance needs to be operated with a tag-on poles validation system. There is no room for the number of entry and exit gates needed.	Option 3 entrance can be operated both with gates and with tag-on poles.
		1,4	Passenger Demand Comparative Demand Profiles associated with the options	Comparable to other options	Comparable to other options	Comparable to other options
				Same passenger demand profiles for the three options.	Same passenger demand profiles for the three options.	Same passenger demand profiles for the three options.
		1,5	Journey time reduction /economic benefit Benefits to passengers through journey time reduction	Comparable to other options	Comparable to other options	Comparable to other options
				There is no difference in journey times.	There is no difference in journey times.	There is no difference in journey times.
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.	Significant comparative advantage over other options	Some comparative advantage over other options	Significant comparative disadvantage over other options
				The three options provide similar interchange solutions between trains within the station. Option 1 provides a better interchange connection with the Luas compared with the other two options since the entrance is placed 180 metres away from the Luas stop.	The three options provide similar interchange solutions between trains within the station. Option 2 provides a limited interchange connection with the Luas since the entrance is placed 330 metres away from the Luas stop.	The three options provide similar interchange solutions between trains within the station. Option 3 provides a limited interchange connection with the Luas since the entrance is placed 560 metres away from the Luas stop.

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	2,2	Land Use Integration	Impact on land-use strategies and regional and local plans. Assessment of support for land use factors local land use and planning. Inclusion of project in relevant local and regional planning documents.	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options	
				The new entrance at Sheriff Street Lower takes into consideration the planning of the future Connolly Quarter development as it is located in its proximity, in a similar location that the one envisaged in the Connolly Quarter Masterplan document.	This solution does not consider any relevant local or regional plan.	The new entrance at Seville Place takes into consideration the planning of the future Connolly Quarter development as it is located in its proximity with a short connection through Seville Place.	
				2,3	Geographical Integration	Impact on improvement of external links. Desire to link various geographical. Link to Public Transportation Modes	Significant comparative advantage over other options
	The new entrance at Sheriff Street lower would be a good location for most of the passengers that want to get to the City Centro & IFSC.	The new entrance at Preston Street may not be as good as the location of Option 1 entrance, but it still gets reasonably well connected with the City Centre & IFSC via Amiens Street.	It is difficult to see many passengers using the Seville Place entrance as a means to access platforms 6 & 7.				
	2,4	Other Government Policy	Integration with Government Policy, Smarter Travel, Investment Programmes, rail safety, electrification, etc.				Some comparative advantage over other options
				The 'bunker' location has been identified within the Dublin City Development Plan objectives as a potential DART entrance location. Out of the three options, this is the second one that is located closer to the 'bunker' building.	The 'bunker' location has been identified within the Dublin City Development Plan objectives as a potential DART entrance location. Out of the three options, this is the one that is located closer to the 'bunker' building.	The 'bunker' location has been identified within the Dublin City Development Plan objectives as a potential DART entrance location. Out of the three options, this is the second one that is located further to the 'bunker' building.	
3				Environment	3,1	Noise and Vibration	Estimated number of people likely to be affected by transport-related noise with the scheme within 50m.
	Temporary construction impacts. No operational phase impact anticipated.	Temporary construction impacts. No operational phase impact anticipated.	Temporary construction impacts. No operational phase impact anticipated.				
	3,2	Air Quality and Climate	Local air quality effects. Number of receptors within 50m.				
Mitigatable & temporary construction impacts. No operational phase impact anticipated.				Mitigatable & temporary construction impacts. No operational phase impact anticipated.	Mitigatable & temporary construction impacts. No operational phase impact anticipated.		
3,3				Landscape and Visual (including light)	Key landscape characteristics affected; Effects on listed/ key views; Impact on landscape character.	Comparable to other options	Comparable to other options
	No protected views. Changes to RPS and setting/landscape character as a result of the access however to be integrated with the planned Connolly Quarter development	No protected views. Changes to RPS and setting/landscape character as a result of the access along Preston road.	No protected views. Changes to RPS and setting/landscape character as a result of the access however approved planning application has already considered these potential impacts. [Significant redevelopment proposed for the area and major landscape changes due to occur. Public realm integration to be explored with private landowner in order to integrate the proposed works.]				

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	3,4	<b>Biodiversity (flora and fauna)</b>	Potential compliance/conflict with biodiversity objectives; Indirect impacts on protected species, designated sites; Overall effect on nature conservation resource.	<b>Comparable to other options</b>	<b>Comparable to other options</b>	<b>Comparable to other options</b>
				There are no advantages or disadvantages in terms of biodiversity across all other options.	There are no advantages or disadvantages in terms of biodiversity across all other options.	There are no advantages or disadvantages in terms of biodiversity across all other options.
	3,5	<b>Cultural, Archaeological and Architectural Heritage</b>	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 (land take)	<b>Some comparative disadvantage over other options</b>	<b>Some comparative advantage over other options</b>	<b>Some comparative advantage over other options</b>
				Direct impacts to Connolly Station (RPS 130 Connolly Station: all 19th century portions of main railway station) and indirect impact on the Store house (NIAH: 50010132), however the store house is due to altered as part of the Connolly Quarter Development	Direct impacts on Connolly Station (RPS 130: all 19th century portions of main railway station) and indirect impacts on 4 NIAH registered buildings and Post Office building (NIAH: 50010042)	Direct impacts to Connolly Station (RPS 130 Connolly Station: all 19th century portions of main railway station) . Impact to the vaults in the bridge structure leading to private carpark.
	3,6	<b>Water Resources</b>	Overall potential significant effects on water resource attribute likely to be affected during construction and operation.	<b>Comparable to other options</b>	<b>Comparable to other options</b>	<b>Comparable to other options</b>
				There are no advantages or disadvantages in terms of water resources across all other options.	There are no advantages or disadvantages in terms of water resources across all other options.	There are no advantages or disadvantages in terms of water resources across all other options.
	3,7	<b>Agriculture and Non-Agricultural</b>	Overall impact on land take & property. Number of properties to be impacted/acquired. Likely temporary or permanent severance effects, etc.	<b>Significant comparative advantage over other options</b>	<b>Significant comparative advantage over other options</b>	<b>Significant comparative disadvantage over other options</b>
				No land take required for this option	No land take required for this option	The acquisition of the Failte Ireland car park is required. No direct impact on agricultural property.
	3,8	<b>Geology and Soils (including Waste)</b>	Soils and Geology and likely impact on geological resources based on preliminary/likely construction details. % of soil resources to be developed/removed. 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.	<b>Comparable to other options</b>	<b>Comparable to other options</b>	<b>Comparable to other options</b>
There are no advantages or disadvantages across all other options.				There are no advantages or disadvantages across all other options.	There are no advantages or disadvantages across all other options.	
3,9	<b>Radiation and Stray Current</b>	Overall likely impact on existing sources of electromagnetic radiation.	<b>Comparable to other options</b>	<b>Comparable to other options</b>	<b>Comparable to other options</b>	
			There are no advantages or disadvantages across all other options.	There are no advantages or disadvantages across all other options.	There are no advantages or disadvantages across all other options.	

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4	Accessibility & Social inclusion	4,1	Impact on Vulnerable Groups	Impacts on low-income groups, non-car owners, people with a disability. Quantification of increased service levels to these groups; Quantification of infrastructure and rolling stock improvements aimed at these groups; distribution of consumers surplus	Comparable to other options	Comparable to other options	Comparable to other options
					The three solutions are similar from an impact on vulnerable groups perspective.	The three solutions are similar from an impact on vulnerable groups perspective.	The three solutions are similar from an impact on vulnerable groups perspective.
		4,2	Stations Accessibility	Quantification of increased service levels to the vulnerable groups.	Significant comparative advantage over other options	Some comparative advantage over other options	Significant comparative disadvantage over other options
	The three solutions increase the station accessibility by providing new accessible means to access platforms 5, 6 & 7. Option 1 is the one that provides a better connection with relevant areas of the city.				The three solutions increase the station accessibility by providing new accessible means to access platforms 5, 6 & 7. Option 2 also provides a good connection with relevant areas of the city.	The three solutions increase the station accessibility by providing new accessible means to access platforms 5, 6 & 7. Option 3 does not provide a good connection with relevant areas of the city.	
	4,3	Social Inclusion	Quantification of service levels impacts including severance to all groups	Comparable to other options	Comparable to other options	Comparable to other options	
				The three solutions are similar from the social inclusion perspective.	The three solutions are similar from the social inclusion perspective.	The three solutions are similar from the social inclusion perspective.	
5	Safety	5,1	Rail Safety	Safety for Rail users	Comparable to other options	Comparable to other options	Comparable to other options
					The three options allow the evacuation of the passengers from the station platforms considering the agreed passenger demand figures for the station. An emergency exit is needed at Seville Place and another one at the IÉ staff car park.	The three options allow the evacuation of the passengers from the station platforms considering the agreed passenger demand figures for the station. Emergency exits are needed at Preston Street and at Seville Place.	The three options allow the evacuation of the passengers from the station platforms considering the agreed passenger demand figures for the station. An emergency exit is needed at Failte Ireland car park and another one at Seville Place.
		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	Comparable to other options	Comparable to other options
	This option does not modify the safety levels for vehicular traffic access.				This option does not modify the safety levels for vehicular traffic access.	This option does not modify the safety levels for vehicular traffic access.	
	5,3	Pedestrian, Cyclist and Vulnerable Road user Safety	Quality of Access for these road users. removal of interfaces	Comparable to other options	Comparable to other options	Comparable to other options	
				This option does not modify the pedestrians, cyclist and vulnerable road users safety.	This option does not modify the pedestrians, cyclist and vulnerable road users safety.	This option does not modify the pedestrians, cyclist and vulnerable road users safety.	
6	Physical Activity	6,1	Connectivity to adjoining cycling facilities	Analysis of the extent that the scheme connects with cycle tracks.	Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
					Sheriff street Lower is not included in the city main cycling routes.	Amiens street is included in the city main cycling routes and protected cycle facilities are planned for the street.	Seville Place is not included in the city main cycling routes.
	6,2	Permeability and local connectivity opportunity	Journey Time and lengths of diversions for active modes and numbers affected. Analysis of the connectivity with green areas/key attractions related to active mode	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	
				Option 1 entrance is better located than the other two options as it is closer to the current access to the station, it is very close to the future Connolly Quarter development and to other key attraction areas.	Option 2 entrance does not provide an attractive location in relation to the connectivity with key attractions.	Option 3 entrance does not provide an attractive location in relation to the connectivity with key attractions.	

MCA SUMMARY CONNOLLY STATION					
Parameter			Option 1	Option 2	Option 3
1	Economy	The inversion needed for the construction of option 1 would be higher than for the other two options since the connection with Sheriff Street Lower is longer than the others, and the construction within the Rotunda building will be more challenging. The land acquisition required in option 3 makes this option less attractive than option 2 in economic terms. Options 1 and 2 have the constraint of only being operated with a tag-on poles system since the numbers of gates required cannot be placed in the station due to the lack of space.	Significant comparative disadvantage over other options	Significant comparative advantage over other options	Some comparative advantage over other options
2	Integration	Option 1 is better than the other two options in terms of integration because its entrance has a better connection with the Connolly station Luas stop. It is also better located in the city regarding urban integration, mainly due to the proximity to the Connolly Quarter future development. Option 2 is also well integrated. It is close to the 'bunker' building location, which has been identified within the Dublin City Development Plan objectives as a potential DART entrance location.	Significant comparative advantage over other options	Some comparative advantage over other options	Significant comparative disadvantage over other options
3	Environment	Options 1 and 2 have a significant comparative advantage over Option 3, as landtake is not required. The impact of Option 1 on Cultural, Archaeological and Architectural Heritage is comparably disadvantageous over the other options.	Some comparative advantage over other options	Significant comparative advantage over other options	Significant comparative disadvantage over other options
4	Accessibility & Social inclusion	The three solutions increase the station accessibility by providing new accessible means to access platforms 5, 6 & 7. Options 1 and 2 provide a better connection with relevant areas of the city.	Significant comparative advantage over other options	Some comparative advantage over other options	Significant comparative disadvantage over other options
5	Safety	The three options allow the passengers' evacuation from the station platforms considering the agreed passenger demand figures for the station. Also, the three options are similar from a vehicular traffic, pedestrian and cyclist perspective.	Comparable to other options	Comparable to other options	Comparable to other options
6	Physical Activity	Option 3 is less attractive than the other options regarding the connection with cycle routes and other key attractions.	Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
Preferred options			No	Yes	No