

					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Asses	sment		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Do Nothing	Do Minimum (Close LX)	Option 1 (Online Obr)	
					Leave the current level crossings in place Electrification is implemented without removal of the road traffic interface but with implementation of CCTV control on the barrier system	Closure of the existing crossings with no alternative provided. All traffic would be diverted to alternative routes around the crossing location.	This scheme would require an online structure spanning over the railway and canal. This would fit the existing carriageway by approximately 7.2m above the railway line, accomneduting a cross section of a 5.5m carriageway with 2m loopaths across the bridge. There would be insufficient withit for a cycleway across the bridge. The topography is such that the northern approach (where the ground fails away wounds the Totak Review yould necessarily be very steep and would also require significant modifications to the northern acide would be approximately 220m and be at a maximum gradent of 8% and 140m on the southern side at a maximum gradent of 5%. The bridge over the rail line would be at an approximate level of 51.9m OD.	
					Significant comparative advantage over other options	Significant comparative advantage over other options	Some comparative disadvantage over other options	
		1.1	Construction and Land Cost	Assessment of cost of construction of option, land costs, acquisition costs and temporary works	The proposed signalling system will need augmentation to accommodate the level crossing left in place.	Cost of removing crossing is nominal in comparison to provision of read crossing. Set down and Turning areas requires both sides of the railway.	This option is considered to be impracticable due to the direct impacts on the community immediately in the vicinity of the level crossing. The multistorey complex to the north incorporates a streetscope and extensive underground carpark. The impact on these properties of a bridge over or under the streetscope would be incrdinately impactful.	
					Significant comparative disadvantage over other options	Significant comparative advantage over other options	Some comparative disadvantage over other options	
1	Economy	1.2	Long Term Maintenance costs	Ongoing annual maintenance costs associated with varied options	The existing crossing is manned resulting in an ongoing annual cost. The level crossing equipment incurs an annual maintenance cost and replacement cost on a 15yr cycle.	The closure of the level crossing would remove the maintenance requirement of the level crossing.	This option is characterised on the basis of fixed unmovable structures and a robust structural interface with the multistorey structure to the north of the level crossing.	
					Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Some comparative advantage over other options	
		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.	Reduced capacity as train frequencies increase; increase in journey times for local residents. Baseline traffic flow of approx 450 in AM peak and 370 in PM peak. Additional Traffic flow Do Somethy sv Do Minimum, of approx 269 in AM peak and 174 in PM peak, Two devesion routes available for local traffic. 4. Than and 5. Tkn. Thrugh Two devesion routes available to for local traffic. 4. Than and 5. Tkn. Thrugh Two devesion routes available to for local traffic. 4. Than and 5. Tkn. Thrugh Two devesion routes available to for local traffic. 4. Than and 5. Tkn. Thrugh Two devesion routes and the traffic devesion and the traffic devesion routes and the traffic devesion routes and the traffic devesion and the traffic devesion routes and the traffic devesion and the traffic devesion routes and the transformation routes and the traffic devesion routes and the tradius and tradius and the traffic devesion routes and the tra	Diversion to other crossings for local traffic. Severance for Pedestrians and cyclistis Baseline traffic flow of approx 450 in AM peak and 370 in PM peak. Additional Traffic flow Do Something vs Do Minimum, of approx 269 in AM peak and 174 in PM peak, Two devision routes available for local traffic, 4 and the traffic flow Do Something vs Do Minimum, of approx 269 in AM peak and 174 in PM peak, Two devision routes available for local traffic, 4 of traffic. No road improvements are proposed with this option to ameliorate impact.Estimated Additional Vehicle km per day = 2754	General reduction in journey times due to removal of level crossing and minimal diversion associated with the option. The route is on the desire line of transport customers. Potenial for induced tirgs along River Road; Potenial to increase congestion at Ashtown Roundabout and on the R147. General reduction in journey times for pedestrians and cyclists. Baseline traffic flow of approx 450 in AM peak and 370 in PM peak. Additional Traffic flow Do Something vs Do Minimum, of approx 259 in AM peak and 174 in PM peak, no diversion.	



					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Asses	sment		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 2 (Underbridge on Mill Lane)	Option 3 (Overbridge on Mill Lane)	Option 4 & 4a (Road bridge West + PedCycUndBridge)	
					Bridge under railway and canal at Mill Lane: This option would entail re-routing Anthown Road along its old alignment (pre Royal Canai) on Mill Lane and passing under both the railway and the Royal Canal. To curtail the impact on Athonen Stabled road traffic only is proposed to be carried under the railway. The option can accommodate a cross section of a 56. mcarriagoway with 1.5 m zublig strips on both sides between walled approaches. An at-grade turning head and drop-off will be provided to the south of Ashtown Stabled and at-grade turning head and drop-off will be provided to the south of Ashtown Road under the railway which is a at elevel of 45.6 m. An even while the option is approximately 150m on the northerm side and 300m south of the railway to the construction of 44.5 m. An even while the option is approximately 150m on the northerm side and 300m south of the railway to accommodate traffic interactions. A new multi roundabout is proposed at the junction of Mill Lane and Ashtown Road the option would of the railway to accommodate traffic interactions. This requires the existing sertance gates to Ashton House to be relocated and the portion of the boundary forting Mill Lane noth of the train station. This option would require some property acquisition.	Bridge over railway and canal at Mill Lane. This option would entail re-routing Achtown Road along its off alignment (rer. Royal Cenal) on Mill Lane and passing over both the railway and the Royal Cenal. To carting life impact on Astronon Stabled road artific only is proposed to be carried along the roadway. The option can accommodate a cross section of a 5.0 carriageway with 1.5 on tubits Gradents on the proposed road north of the railway would be in excess of 8.0%. An al-grade turning head and drop-off will be provided to the south of Asthown Stabled road The length of the copion is approximately 150m on the northern side and 300m south of the mail line. The option would rise to an approximately form of onther torino would be required atimilar to the adjacent Ratash Road Bridge. A new mini roundabout is proposed the hip vicinicity of Mill. The action Road south of the railway to a la a level of 4.5 m. And Hrough horige form of construction would be required atimilar to the adjacent Ratash Road Bridge. A new mini roundabout is proposed at the invinction of Mill. The addocent the the construction of a new podetismin cycleic sing on the footning of the action. This the option would re-reference on the interactions. This option roundabout immediately north of athtom Note and would be roundabout immediately north of athtom towards the proposed is to be into the walled atom, the vector of Mills He athway to accommodate the file. Arothom Note would reaction as the optimum of Arbitron Matter and will be accommodate the proposed is be constructed one the acted passing through the states. The propose is to be into the walled atom, the vector of Mills haddings. A portion of the into the details haddings. A portion of the into the action house would need to be down index the house him indicated north of asthom Nullage. Aportion of the boundary wall to Arbitron house would require some property acquisition.	Roadbridge at Navan Parkway with link to River Road, Selected upgrade works to River Road as far as Ashtown, Pedestitian and cycle underpasa at Ashtown This and the selection of the selection of the selection of the Nava Road serving Phonein Park Railway Station. At this location there is accept to construct a new road link over the canal and railway to link to River Road. This could either descend to lise into River Road and the Duraisk lends. The list care as a state that the Road serving Phonein Park Railway Station. At this location there is accept to construct a new road link over the connection to the Duraisk lends. The list care as a state to the River and Isolitate an orward connection to the Duraisk lends. The list care as a state to the row the set of the second which would need upgrade as far as Ashtown in both cases this con accommodate a cross section of a 5.8 no crangeway with 2m Coopstitut and 1.36 no cycle tracks on both sides. Short term connection to River road is likely to be in the form of a mini coundaburd. Here and would regist upgrade to Ashtown with a new footpath constructed along the northern boundary of the road and requiring the removal of the associated both Mark Hand before descending to be into the level of the River Road at level of AJ.7m. The road on the northem side would be at a radia ta level of approximably 56% our 300m if permitted to follow a meandering roude. This option also includes the construction of a new bridge under the canal and railway at Ashtown to provide pedestrian and cycle access (Cyclion AA). This option would north of the rall line yorking advection and cycle under the canal and railway at Ashtown to provide pedestrian and cycle access (Cyclion AA). This option would line with a 4m wide cross section.	
		1.1	Construction and Land Cost	Assessment of cost of construction of option, land costs, acquisition costs and temporary works	Some comparative disadvantage over other options Construction cost impacts are high due to direct impacts on canal and existing rail and more difficult construction. Land costs lower than option to east into zoned lands. Additional pedestrian / cycle bridge required in Ashtown and reconfiguration of the station.	Significant comparative disadvantage over other options This option requires a crossing of the canal and railway on skew and an extended road alignment through the lated Ashton House property to facilitate a tie in to the north of the canal and railway. Additional pedestrian / cycle bridge required in Ashtown and reconfiguration of the station.	Some comparative disadvantage over other options Some realignment and improvement works required on River Road. A two or three span bridge configuration is anticipated here requiring construction activity between the canal and the railway. Additional pedestrian / cycle underbridge required in Ashtown.	
1	Economy	1.2	Long Term Maintenance costs	Ongoing annual maintenance costs associated with varied options	Some comparative disadvantage over other options A fixed bridge will reduce maintenance requirements over a level crossing or other mechanical solution. Bridge option would determine overall maintenance costs.	Some comparative disadvantage over other options A fixed bridge will reduce maintenance requirements over a level crossing or other mechanical solution. Bridge option would determine overall maintenance costs. The life by need for elevated approach range along the northern approach to the bridge from the level crossing results in an additional ongoing maintenance cost.	Some comparative advantage over other options A fixed bridge will reduce maintenance requirements over a level crossing or other mechanical solution. Bridge option would determine overall maintenance costs, 2No. In this case.	
		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.	Some comparative advantage over other options Reduces Traffic in Ashtown village. General reduction in journey times due to removal of level crossing and minimal diversion associated with the option. The route is largely on the desire line of transport customers. Potential for induced trips along River Road; Potential to increase congestion at Ashtown Roundabout and on the R147. General reduction in journey times for pedestrians and cyclists. Baseline traffic flow of approx 450 in AM peak and 370 in PM peak. Additional Traffic flow Do Something vs Do Minimum, of approx 269 in AM peak and 174 in PM peak, 0.1km diversion. Estimated Additional Vehicle km per day = 270 Does not cater for cyclists on the roadway - through cyclists will need to	Some comparative advantage over other options Reduces Traffic in Ashtown village. General reduction in journey times due to removal of level crossing and minimal diversion associated with the option. The route is largely on the desire line of transport customers. Potential to induced trips along River Road; Potential to increase congestion at Ashtown Roundabout and on the R147. General reduction in journey times for podestrians and cyclists. Baseline traffic flow of apport A50 in AM peak and 371 in PM peak, Additional Traffic flow Do Something vs Do Minimum, of approx 269 in AM peak and 174 in PM peak, 0.1km diversion. Estimated Additional Vehicle km per day = 270 Does not cater for cyclists on the readway - through cyclists will need to negotiate	Reduces Traffic in Ashtown village. Reduces Traffic in Ashtown village. This option requires whickes to divert from Ashtown to cross the railway. Reducino in Traffic or R47 and at Ashtown Roundabout. Patential for induced trips along River Road. Cycle, pedestriat, mobility impaired and disabled access proposed at station. Traffic flow of approx 450 in AM peak and 370 in PM peak diverted for approx. Additional Traffic To Bo Something vs Do Minimum, of approx 260 in AM peak and 174 in PM peak. Takm minimum diversion. Through traffic diversions small, relates to approx 45% of traffic. Estimated Additional Vehicle km per day = 810	



				DART+ WEST - MCA Stage 1		
				Ashtown Level Crossing Asse	essment	
Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 4 & 4b (Road bridge West + PedCycOvBridge)	Option 5 (Low Clearance UndBridge East)	Option 6 (Fixed Road OvBridge East of Station)
				Roadbridge at Navan Parkway with link to River Road, Selected upgrade works to River Road as far as Ahtown, Pedestrian and cycle overbridge on the fortprint of the reconfigured attains at Ahtown. This populari located grade separated junction on the Navan Road serving Pheens Park Railway station. At this location there is socio to construct a new road link over the canal and railway to link to River Road. This could either descend to lie into River Road or be designed by basis over its orces the Tolika River and facilitate an onward connection to the Durainik fluids. In the latter case, a short sour would be provided to link to River Road which wold new durgada sa far as Akhown. Ih both cases order on accommodate a cross section of a 6.5m carriageway with 2m dotphate or 1.7m cycle tervel tophate. Short term connection to River road is likely to be in the form of a mini roundabout. River road would require upgrade to Ashown with an et dotphate wold at a similar to the about and the model and requiring the removal of the associated boundary treatment - walls, trees, trush. The road would be at a similar level as the existing junction Phoenik Park rossing would be at a gradent of approximately 65 wor 500 m term connecting to fail into the level of the resting cable stated forbindape at the level crossing and the weisting cable stated forbindape at level soloum. The range on either sides of a short will be abord descending to lie into the level of the method at level of 3.3m with the bridge level over the railway size soloum. The maps on either side to provided with this option as well to ease podestrain cycles or for sprades or the provided with this option as well to ease pacetarian access and rails or patience of required.	Low clearance underbridge at railway and canal east of Ashtown Road. This option would involve construction of a new road link parallel to and south of the Raithorne Avenue north of Ashtown Yillago. This roate would descript for the Ashtown Road and and the Ashtown Road and and underway and canal at right angles before raining in a cutting to join into the existing pirculatory roads to the north of the Pelitsburn Development. The option can accommodate a cross section of a 5km may with 2m togatast and 1.5m cycle tasks on hold hades. The railway is at a level of 4.25m OD and the ground fewel at the canal is 325m OD with this road point lowered to a level of 32.0m OD provides on the nortex of the thermal section of a 5km. The index of the disadentage that it would nevel be estimated realized and the section of a soft the railway would have to be substandard. This option would have the advantage at the canaros for dovide locar barses of the higher dalayme, which is not applied to be disadentage that the would require a burger as the statement of the option would have to be substandard. The underpase would also require a pumped drainage system. The option canaros for dovide soft barses of the option condit requires the statement to be disadent and the other substandard. The underpase would also require a pumped drainage system. The option dalaym and the soft be substandard the targe construction would require the statement to be disadent to be to file condit condit option the data barses. The option condit requires the totage the most totage of the statement of the	Road Overhridge East of Ashtown Road. This option would cross the railway and crant approximately 250 meants of the anti-large decrossing. It is to the trailway and stato. The link would traverse the great marked base would be an anti-large decrossing the train the stato. The link would traverse the great marked bases when Shatom Shatom and Marin Sanage Park and would climb to cross over the railway and canal to be into the new circulation cast strucy the Peterlatistrom Development. The option can accommodate a cross section of a 6.5m carriageway with 2m tooppaths and 1.75m optie tracks to obth sides. The structure of th
				Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
	1.1	Construction and Land Cost	Assessment of cost of construction of option, land costs, acquisition costs and temporary works	Some realignment and improvement works required on River Road. A two or three span bridge configuration is anticipated here requiring construction activity between the canal and the railway. Requires land acquisition in former demense lands north of the railway. The costs for this option includes the fixed pedestrian and cycle bridge over the canal and railway with associated ramps, station alterations, turning facilities and set down facilities, and associated land acquisition costs.	Construction of the bridge under the train station presents significant engineering challenges. The station structure is supported on piles and the track is supported on the ground. It is considered a subcillor of the train station would need to be demolished and reconstructed to facilitate this option. This option also requires construction in rock below care all level to provide a structure of substandard vertical clearance which would only cater for cars and small commercial vehicles.	Construction cost lowest of road bridge options but impact on zoned lands to the north and impact on sports facilities to the south would result in higher costs.
				Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
1 Economy	1.2	Long Term Maintenance costs	Ongoing annual maintenance costs associated with varied options	Maintenance costs include a Composite Steal Railway and Canal Overbridge, extensive retaining walls and 0.6km of new roadway . It also includes a steel pedestrian/cyclist overbridge at the station .	There is additional costs for maintenance of a pumped drainage system associated with this option.	An overbridge would increase the maintenance requirements over a level crossing, though it would not be significantly more so than other options.
				Significant comparative advantage over other options	Some comparative advantage over other options	Some comparative advantage over other options
	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.	Reduces Traffic in Ashtown village. This option requires vehicles to divert from Ashtown to crose the railway. Potential for induced trips along River Road. Cycle, pedestrian, mobility impaired and disabled access proposed at station. Traffic flow of approx 450 in AM peak and 370 in PM peak diverted for approx. Additional Traffic flow Do Something vs Do Minimum, of approx 280 in AM peak and 17a in PM peak. LSw minimum diversion. Through traffic diversions small, relates to approx 45% of traffic. Estimated Additional Vehicle km per day = 810	Reduces Traffic in Ashtown village. General reduction in journey times due to removal of level erocsing and The route is largely on the desire line of transport customers. Protential for induced trips along River Road; Potential to increase congestion at Ashtown Roundabout and on the R147. General reduction in journey times for podestrians and cyclists. Baseline traffic flow of approx 450 in AM peak and 710 in PM peak. Additional Traffic flow Do Something vs Do Minimum, d approx 269 in AM peak and 174 in PM peak, 0.1 km diversion. Estimated Additional Vshile km per darg - 174 Route not suitable for large delivery vehicles, service vehicles and double decker buses. Two diversion routes available 4.7km and 5.7km.	Reduces Traffic in Ashtown village. General reduction in journey times due to removal of level crossing and minimal diversion associated with the option. The route is largely on the derive final or transport customers. Potential for induced trips along River Road: Outstand to increase congestion at Ashtown Roundabout and on the R147. General reduction in journey times for pedestrians and cyclists. Baseline traffic flow of approx 450 in AM peak and 370 in PM peak. Additional Traffic flow Do Something vs Do Minimur, d'approx 280 in AM peak and 174 in PM peak, 0.1km diversion. Estimated Additional Vehicle km per day = 270





					DART+ WEST - MCA Stage 1		
					Ashtown Level Crossing Assessm	nent	
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 7 (Fixed Road OvBridge East of Station from Navan Road)	Option 8 (PedCycOvbridge Only on Station footprint with reconfiguration of the station)	Option 9 (Lower the Railway with at grade roadbridge at LX)
					Road Overbridge East of Ashtown Road with link to Navan Road. This option would involve the construction of a new road in front of Kempton Gardens from the Navan Road and a new bridge over the canal and railway accommodating a cross section of a 6.5m carriageway with 3m Cologanis and 1.7m on yole tancks on both sales. The option would bridge over the railway and canal with approach gradients of 6% either side. The road level the crossing is approximately 42.1m. On Main Head and the canal at 33m with the bridge level over the railway and canal with approach greaters to a height of 52.0m. 60m south of the rail before descending over the rail and canal. The totak would then is into the new circulation roads through the Pelletstown Development to the north of the canal. Begreate 4m wide shared to the proposed option. This toque rough the canal disability access along the seatern boundary would be provided of south of the canal insign Ashion Roads to the proposed option. This togotin introduce traffic to the near of Martin Savage Park and along Kempton Gardens. Furthermore, It would require the construction of as gringing and would be located on the Navan Road. There would also be impacts on St Oliver Pulker's GAA club to the south of the railway and would be located with zoned houring development and within the Ashtown - Pelletstown SD2 to the north of the rail line and canal. The option can be wolld or can be constructive with option enters to provide a softher texture to the scheme. The provision of landscaped embankments would result in a need for more land acquisation.	This option includes the provision of a new pedestrian and cycle bridge. 5 0m in width with set down facilities only. The bridge would provide a connection between Abtown road south of the level crossing and a proposed platform between the carel and the atlaway. The arrangement of the bridge utilies range parallel to and to the rear of the station platforme rising to the east before turning perpendicular to the track to cross the railway. The rail level at the crossing is approximately 42 in QD Malin Head, and the conal at 39.3 m with the bridge level over the malkey at 50.00m. The range on either side of the bridge will not exceed 50% gradient. Separate pedestrian statirs could be provided with this cption as well to asse pedestrian access and rails for pushing cycle on if required. Constraints on bridge crossing here include the train station, the Royal Canal, the listed raikway structures, and the canal bridge. Vehicular traffic will need to divert around the crossing, the diversion being an estimated 4.3km.	Lower railway, new road underbridge at level crossing, demolish Canal bridges. This option provides for lowering the existing railway sufficient to allow the railway pass under a bridge constructed at the level of the existing level crossing. It would require limited road infrancourse centred on the existing freek crossing. The makery would require lowering bedwe the existing water level of the canal upstream and downstream of the level crossing. It would require demolition and reconstruction of the train station at a lower level. The canal would need to be channelised or related and retaining walk would be required to support the canal west of the existing level crossing. The existing predicted canab field are block would likely need to be demolished and replaced. It is considered that traffic on the canal and railway would need to be suspended for the duration of the works.
					Significant comparative disadvantage over other options	Some comparative advantage over other options	Significant comparative disadvantage over other options
		1.1	Construction and Land Cost	Assessment of cost of construction of option, land costs, acquisition costs and temporary works	Construction costs higher than option 6 and greater impact on lands north and south would result in higher costs.	The costs for this option include the fixed pedestrian and cycle bridge over the canal and railway with associated ramps, station reconfiguration, turning facilities and set down facilities and associated and acquisition costs. There is no read bridge associated with this option.	The railway will need to be lowered over a length of approximately 2km by a maximum of 7.0m at the level crossing where a new bridge would be required to carry traffic over the railway. The width of the proposed bridge would be constrained by the width of the construction of the canal voca end the construction of the train station at a lower level. The lowered ratively would be below water level on the canal voca - significant length east of the level crossing and between longford bridge and Navan Parkway Station. This would prevent a substantial engineering challenge with retaining structures designed to prevent water leaking from the canal. The drainage system along the depressed action. Take would resent a substantial engineering challenge with retaining the depressed action. Take would resent a substantial length. It may note to preserve all of the listed structures along the canal. Retaining structures would also be required along the southern boundary of the works to restrict the impact on adjacent lands.
	-				Some comparative advantage over other options	Some comparative advantage over other options	Significant comparative disadvantage over other options
1	Economy	1.2	Long Term Maintenance costs	Ongoing annual maintenance costs associated with varied options	An overbridge would increase the maintenance requirements over a level crossing, though it would not be significantly more so than other options.	A pedestrian/cyclist overbridge would require minimal maintenance in short term with regular inspections and remedial works in the long term. The long term maintenance low compared to other options.	In dropping the railway adjacent to the canal a new drainage system will be needed which is likely to be sealed and pumped. In addition the earth retaining structured required over the full length of the proposed cut will require maintenance.
					Some comparative advantage over other options	Significant comparative disadvantage over other options	Some comparative advantage over other options
		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.	Reduces Traffic in Ashtown village. General reduction in journey times due to removal of level crossing and minimal diversion associated with the option. The route is largely on the desire line of transport customers. Potential for induced trips along River Road; Potential to increase congestion at Ashtown Roundabout and on the R147. General reduction in journey times for pedestrians and cyclists. Baseline traffic flow of approx 450 in AM peak and 774 in PM peak. O Something vs Do Minimum, of approx 269 in AM peak and 174 in PM peak; 0. Sime Version. Estimated Additional Vehicle Knipe at 270 Improvement in journey times; potential for induced trips; potential to increase congestion on Navan Road due to proposed new junction and potential for delay on a high frequency multi-modal corridor into the City.	Improved access for mobility impaired and cycle traffic via ramped alternative routes; Baseline traffic flow of approx 450 in AM peak and 370 in PM peak. Additional Traffic flow Do Something vs Do Minimum, of approx 260 in AM peak and 174 in PM peak, Two diversion routes available for floor lartific, 4/rem and 5.7km. Through traffic diversions small, telates to approx 45% of traffic. No road improvements are proposed with vits option to anellorate impact.Estimated Additional Vehicle km per day = 2754	Increases Traffic through Ashtown village - Additional Traffic flow Do Something vs Do Minimum, of approx 299 in AM peak and 174 in PM peak. General reduction in journey times due to removal of level crossing and minimal diversion associated with the option. Traffic flow will however be constrained by the width of the existing tasked cnail bridge in Ashtown. This option offers shortest journey times for all modes of transport. Potential to increase congestion at Ashtown Roundabout as a result of induced traffic.





					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Assessme	nt		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 10 (UnBridge West of Mill, PedOvBridge at Station)	Option 11 (Improvements on Local Road Network, PedOvBridge at Station)		
					Road and cycleway bridge under Railway and Canal West of the Mill and linking to Mill Lane at each end: This option would enail are-cruing Ashtonn Road along its old alignment (pre railway) along a section of Mill.cane, detering through commercial lands to the west of the protected mill and passing under both the railway and the Royal Canal to be into Mill Lane enoth of the railway. The option is proposed to accommodal and to sea section of a Bio company. The option appropriate law of the railway the routing the railway fragment of the could be provided to the south of Aaltown Station and a set down area north of the canal. The length of the option is appropriate level of 35.2 mO Main Head, under the rail Nuch the option would for to an approximate level of 35.2 mO Main Head, under the rail Nuch the option would for to an approximate level of 35.2 mO Main Head, under the rail Nuch is proposed to construct a perform or optic bidge and under some. The option would provide for a settlem, maintenance and emergency whicular access to the station. It is proposed that pedestrians, cyclists and disabled users would be accommodated by the construction of a new pedestrians, cyclists and disabled users would be accommodated by the construction of a new pedestrians, cyclists and disabled users would be accommodated by the construction of a new pedestrians, cyclists and disabled users would be accommodated by the construction of a new pedestrians, cyclists and disabled users would be accommodated by the construction of a new pedestrians, cyclists and disabled users would be accommodated by the construction of a new pedestrians, cyclists and disabled users would be accommodated by the construction of a new pedestrians, cyclists and disabled users would be accommodated by the construction of a set a settlow, maintenance and emergency whicular access to the station. This will require access the bioceal on the tothing of the estation. This will require access the acceser naiwy the displace the statem of the double lock on the c	This option includes the provision of a new pedestrian and cycle overbridge at the location of the train station and local road improvements. The bridge would provide for disabled and mobility station patients in the state of the provide provide provide provide provide the disabled and mobility station patients integrated to the provide provide provide provide provide provide provide trains provide the provide provide provide provide provide provide provide and the provide provide provide provide provide provide provide disponsibility of the provide provide provide provide provide the null well at the crossing is approximately 42.1 m to D0 Main Head and the canal water level is approximately 50.0m. The proposed paragress will be approximately 13.5 m high remote the term the model of approximately 50.0m. The proposed paragress will be approximately 50.5 m high remote the term state provide the constraints of the proposed to be provided by the train term the model of approximately 62.0 m. The proposed paragress will be approximately 50.5 m high remote the term the state protection access of the state on the proceed by the provide the train term the model of the constraints on a bridge constraint term the model of the constraints on a bridge constraint term the provide train access and the for purphic by close could be instated for direct pedetism as the state of the provided with this option allow to provide to direct states. After Road with the product the constraction of a 2.0 m pedetism away dire to orther adde to the road west of Anthown and localised improvements to the east. Where this is adjacent to Anthon Anthow is adde proposed to the provide public horder the provide public lighting along the provide public lighting along the protecheat statu		
					Some comparative disadvantage over other options	Some comparative advantage over other options		
		1.1	Construction and Land Cost	Assessment of cost of construction of option, land costs, acquisition costs and temporary works	Construction cost impacts are high due to direct impacts on canal and existing railway and more difficult construction. The costs for this option includes the fixed pedestrian and cycle bridge over the canal and railway with associated rames, station alterations, turning facilities and set down facilities, and associated land acquisition costs.	The costs for this option include the fixed padestrian and cycle bridge over the canal and railway with associated ramps, station alterations, turning facilities and set down facilities and associated and acquisition costs. There is no rout bridge associated with this option. Upgrades are proposed along the local road network including new footpaths, signalling at the River Road junction with Rateath Road, shuttle working at locations and improvements on bends.		
					Some comparative disadvantage over other options	Some comparative advantage over other options		
1	Economy	1.2	Long Term Maintenance costs	Ongoing annual maintenance costs associated with varied options	Maintenance costs include a Composite Concrete bridge under Railway and Canal, a single span access bridge over the proposed road and retaining walls along sections of the readway. It also includes a steel pedestrian/cyclist overbridge at the station .	A pedestrian/cyclist overbridge would require minimal maintenance in short term with regular inspections and remedial works in the long term. The long term maintenance low compared to other options.		
					Some comparative advantage over other options	Some comparative disadvantage over other options		
		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.	Reduces Traffic in Ashtown village. General reduction in journey times due to removal of level crossing and minimal diversion associated with the option. The route is largely on the desire line of transport customers. Potential for induced trips abong River Road, Potential to increase congestion at Ashtown Roundabout and on the R147. General reduction in journey times for pedestrians and cyclists. Baseline traffic flow of approx 450 m AM peak and 310 m IPM peak. Additional Traffic flow Do Something vs Do Minimum, of approx 269 in AM peak and 174 in PM peak, 0.1km diversion. Estimated Additional Vehicle km per day = 270	Reduces Traffic in Ashtown village. General increase in journey time due to diversion along local road network and the introduction of controlled single lane stutile running on sections of River Read. Journey time savings for pedestrians and cyclists. Potential for negative impact along diversion routes with up to 2.0mins additional delay at existing junctions. Baseline traffic flow of approx 450 in AM peak and 173 in PM peak. Additional Traffic flow Do Somethy as Do Minimum, of approx 269 in AM peak and 174 mN peak. They diversion routes available for local traffic, Artm and 5.7km. Through traffic diversions small, relates to approx 50% or traffic. Read moreovenens will ameliorate impact.Estimated Additional Vehicle km per day = 2754		





					DART+ WEST - MCA Stage 1	
					Ashtown Level Crossing Assessment	
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 12 (Road OvBridge West from Navan Parkway Stn, PedCycOvBridge at Ashtown Station)	Option 13 (OvrBridge West of Mill, PedOvBridge at Station)
					Road link between Navan Parkway Station and the Road network immediately north of Ashtown Village incorporating a bridge over the railway and canal and a pedestrian cycle bridge over the station in Ashtown. This option would entail <i>n</i> -outing through road traffic away from Ashtown village. The option can accommodate a cross section of a 65 no carriageway with 2m footpath on both sides and 25 mm to way cycle track on the eastern side. An argrade turning head and drop-off will be provided to the south of Ashtown Station. The length of the option is approximately 300m each side of 45 mm Od the crossing point. On the southern side a separate pedestrian and cycle til his and link to the riding school are proposed to maintain access for non-motivated use these would have cross section of 4.0m. It is feasible to cross at this location, as it is upstream of the double lock on the canal and the canal is at the same approximate level as the adjacent railway. This cyclon would require some property acquisition and modifications to existing accesses. It would pase through the grounds of the listed Ashtom House. The cyclon will provide for a setdown, maintenance and emergency vehicular access to the station. It is proposed that pedestrian, cyclists and disabed users would be accommodated by the construction of a new pedestrian / cycle bridge on the locating of the train station. This will require reconstruction of the train station.	Road with cycleway under Raitway and Canal West of the Hill and linking to Hill Lane at each end: This option would entail re-roating Asthourn Road along its dia diagreent (pre railway) along a section of Mill Lane, diverting through connectical lands to the west of the protected mill and passing under both the railway and the Rogal Canal to be into Mill Lane end to the protected mill and passing under both the railway and the Rogal Canal to be into Mill Lane end of the protected mill and passing under both the railway and the Rogal Canal to be into Mill Lane end of the Vost and a 3 GBm cycleway to the east. An al-grade turning head and drop-df would be provide to be south of Asthourno Station and a set down area moth of the canal. An al-grade turning head and drop-off will be provided to the south of Asthourn Station. The length of the option is approximately 150m on the northern side and 300m south of the rail line. The both routing is to an approximate level of 52. Sho Oblin Head core the railway that is at a level of 45.6m. A half through bridge form of construction would be required similar to the adjacent Rataba Road Bridge. A new mini roundabout is proposed at the junction of Mil Lane and Ashboun Road south of the railway to accommodate traffic interactions. This option coates through the ground of Ashtov House and will require an addisional bridge to the sisting train station. This will require an addisional bridge to be build along the exert parsing through the stating train station. This would head routing the stating round of Ashtov House and will require an addisional bridge to be build along the exert parsing through the stating train station. This would head to be demolished to accommodate the link road. This option would require some property acquisiton.
					Significant comparative disadvantage over other options	Some comparative disadvantage over other options
		1.1	Construction and Land Cost	Assessment of cost of construction of option, land costs, acquisition costs and temporary works	This option requires a crossing of the canal and railway on skew and an extended road alignment through the listed Ashton House property to facilitate a tie in to the north of the canal and railway. The costs for this option includes the fixed podestrian and cyclo bridge over the canal and railway with associated ramps, station alterations, turning facilities and set down facilities, and associated land acquisition.	This option requires a crossing of the canal and railway on skew and an extended road alignment through the listed Astron House property to facilitate a tie in to the north of the canal and railway. The costs for this option includes the fixed pedestrian and cycle bridge over the canal and railway with associated range, station alterations, turning facilities and set down facilities, and associated land acquisition.
					Some comparative disadvantage over other options	Some comparative disadvantage over other options
1	Economy	1.2	Long Term Maintenance costs	Ongoing annual maintenance costs associated with varied options	Maintenance costs include a Composite Steel Railway and Canal Overbridge, a single span bridge for access to Ashton House, extensive retaining walls and 1km of new roadway . It also includes a steel pedestrian/cyclist overbridge at the station .	Maintenance costs include a Composite Steel Railway and Canal Overbridge, a single span bridge for access to Ashton House, and extensive retaining walls . It also includes a steel pedestrian/cyclist overbridge at the station .
					Significant comparative advantage over other options	Some comparative advantage over other options
		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.	Reduces Traffic in Ashtown village. This option requires whicks to divert from Ashtown to cross the railway. Reduction in Traffic on R147 and Ashtown Roundabout. Potential for induced trips adnormal Ashtown Roundabout. Cycle, pedestriam, mobility impaired and disabled access proposed at station. General reduction in journey times for pedestrians and cyclists. Traffic flow of approx 450 in AM peak and 370 in PM peak. Advanced for approx. Additional Traffic flow Do Something vo Do Minimum, of approx 261 in AM peak and 174 in PM peak. Its Traffic flow diversion. Through traffic diversions small, relates to approx 45% of traffic. Estimated Additional Vehicle km per day = 810	Reduces Traffic in Ashtown village. General reduction in journey times due to removal of level crossing and minimal diversion associated with the option. The route is largely on the desire line of transport customers. Potential for induced trips abong River Road; Potential to increase congestion at Ashtown Roundabout and on the R147. General reduction in journey times for pedestrians and cyclists. Baseline traffic two of approx 450 nA M peak and 310 nPM peak. Additional Traffic flow Do Something vs Do Minimum, d approx 266 in AM peak and 174 in PM peak, 0.1km diversion. Estimated Additional Vehicle km per day = 270





					DART+ WEST - MCA Stage 1		
					Ashtown Level Crossing Asses	sment	
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Do Nothing	Do Minimum (Close LX)	Option 1 (Online Obr)
					Leave the current level crossings in place Electrification is implemented without removal of the road traffic interface but with implementation of CCTV control on the barrier system	Closure of the existing crossings with no alternative provided. All traffic would be diverted to alternative routes around the crossing location.	This scheme would require an online structure spanning over the railway and canal. This would lit the existing carriagevery by approximately 7.2m above the railway line, accommoding a cross section of a 4.5m carriageway with 2m obopaths across the bridge. There would be insufficient width for a cycleway across the bridge. The topography is such that the northern approach (where the ground fails away towards the Total River) would necessarily be very steep and would also require significant modifications to the record willings centre developments of the area oxeground. The length of the approach on the northern side would be approximately 220m and be at a maximum gradient of 8% and 140m on the southern side at a maximum gradient of 5%. The bridge our that line would be at an approximate level of 51.9m OD.
		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 disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options
					The train timetable will result in the level crossing being closed for extensive periods of time. GDA Cycle Network Plan cannot be realised with such poor connective, Reduced access to train station. Akhtown Village. And local businesses caused by extensive queuing along Ashtown Road.	Inconsistent with GDA Cycle Network Plan - which shows a secondary route on Ashtown Road, Reduction in accessibility to and from the train station, local businesses and Ashtown Village Centre. Severance issue for all modes.	General reduction in journey times. Cycle and pedestrian routes not provided for due to narrow corridor available. Possible negative impact on cyclists due to increased traffic (induced demand). Reduction in accessibility to and from train station.
					Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options
2	Integration	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 planning documents.	The retention of the level crossing in it's current form would not support the delivery of a sustainable public transport system for a growing population. Do- Nothing would no thing forward objectives regarding supporting the DART Expansion contained in Dublin MASP, FDP and DCC .	At local planning policy level, this option would not significanly impact on either the Fingal DP or DCC planning policies/objectives. However, closure of the level crossing with no cycle or vehicular atternatives provided will negatively impact connectivity in the area and all modes of transport. No alternatives access is likely to impact on existing and future planning & transport development which is due to take place in the area. (e.g. lands associated with Navan Road Parkway LAP and the Ashtown – Peletstown LAP 2014. (subject to details of these plans and traffic studies).	The Ashtown – Pelletstown LAP 2014 has defined the area north of the level crossing as "village node" which is an established mixed use local retail and commercial space. The area has a high quality public readm and community function. The introduction of an overbridge option and raised nordway along Ashtown Road would result in significant planning/development, landscape impacts, community severance and connectivity issues that would negatively impact on the function of this core retail area. These changes would also influence future land use factors.
			Geographical	Alternative level crossing options are mostly neutral in respect of Geographical	Comparable to other options	Comparable to other options	Comparable to other options
		2.3	Integration	Integration due to localised nature of the level crossings.	No significant effect on geographical integration.	No significant effect on geographical integration.	No significant effect on geographical integration.
					Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options
		2.4	Other Government Policy Integration	Integration with the other Government policy such as the NPF and RSES.	This option would not support the delivery of the higher level national and regional planning policies regarding the DART + programme (NPF- (NS04), RSES & GDA Transport Strategy).	Closing the level crossing would support national and regional planning policy and sustainable mobility (NS04 of the NPF) with regards to the delivery of the DART - West however the provision of no alternatives for cyclists and vehicular traffic would lead to impacts on Smarter Trave policy. GBD Transport Strategy and other modes of transport.	This option supports government policies relating to DART + programme. However, likely significant impacts due to overbridge option along Ashtown Road particlarly regarding landscape, access issues, integeration affecting social & economic development of Rathborne/Ashtown core village area.



2

DART+ WEST - MCA Stage 1



Ashtown Level Crossing Assessment Sub-Criteria (Quantitative/ Option 2 Option 3 Option 4 & 4a Parameter Criteria Qualitative) (Underbridge on Mill Lane) (Overbridge on Mill Lane) (Road bridge West + PedCvcUndBridge) Bridge over railway and canal at Mill Lane: This option would entail re-routing Asht Road along its old alignment (rer Royal Cana) on Mill Lane and passing over both the aliway and the Royal Canal. To curtail the impact on Asthorm Stabled road traffic only is proposed to be carried along the roadway. The option can accommodate a cross section f a 6.5m carriageway with 1.5m rubbing strips on both sides between walled approaches. oadbridge at Navan Parkway with link to River Road, Selected upgrade works to River Road as far as Ashtown, Pedestrian and cycle underpass at Ashtown. This option is located approximately 1km to the west of the existing level crossing at Ashtown at the grade separated junction on the Navan Road serving Phoenix Park. Bridge under railway and canal at Mill Lane: This option would entail re-routing Ashtown Road along its old alignment (pre Royal Canal) on Mill Lane and passing under both the railway and the Royal Canal. To curtail the impact on Ashtown Stablec Antitown at the grade separated junction on the Navan Road serving Phoenix Park Railway Sillion, At this location there is scope to construct new road link over the canal and railway to link to Rover Road. This could either descard to the into Rover construction of the Road Rover Road. This could either descard to the into Rover concertion to the Bhanki Illiand. In Norther roads, a short pay would be provided to link to Rover Road which would need upgrade as far as Astronom. In both cases this option would involve some vehicular term connection to Rover raid at listic y be in the Rover Road which would need upgrade as far as Astronom. In both cases the Josh or del tracks on other alder. Short term connection to Rover raid at listicly to be in the form of a min roundwould. There road would negarit segmate to Astronom with a removed the associates boundary treatment—vehicly teres. road traffic only is proposed to be carried under the railway. The option can accommodate a cross section of a 6.5m carriageway with 1.5m rubbing strips on bott sides between walled approaches. Gradients on the proposed road north of the railway would be in excess of 8.0%. An at-grade turning head and drop-off will be provided to the south of Ashtown Station An at-grade turning head and drop-off will be provided to the south of Ashtown Statio he length of the option is approximately 150m on the northern side and 300m south of the rail line. The option would rise to an approximate level of 52.5m OD Malin Head over the ailway which is a at a level of 45.6m. A half through bridge form of construction would be The length of the option is approximately 150m on the porthern side and 300m south of the rail line. The option is approximately found in the horizont action and south of the rail line. The option would drop to an approximate level of 37.5m OD Malin Head, under the railway which is a at a level of 45.6m. red similar to the adjacent Ratoath Road Bridge new mini roundabout is proposed at the junction of Mill Lane and Ashtown Road south of A new mini roundabout is proposed at the junction of Mill Lane and Ashtown Road the railway to acco nodate traffic inte removal of the associated boundary treatment - walls, trees, brush south of the railway to accommodate traffic interar It is proposed that pedestrians, cyclists and disabled users would be accommodated by The road would be at a similar level as the existing junction Phoenix Park crossing the rail at a level of approximately 55.4m OD Malin Head before descending to tie into the level of the River Road at a level of 34.7m. The road on the northern side would be at It is proposed that pedestrians, cyclists and disabled users would be accommodated b the construction of a new pedestrian / cycle bridge on the footbridge of the existing train station. This will require reconstruction of the train station. struction of a new pedestrian / cycle bridge on the footbridge of the existing train station. This will require reconstruction of the train station a gradient of approxi mately 6% over 300m if permitted to follow a meandering route This option crosses through the grounds of Ashton House and will require an additional This option closes allociding the globalis of valuer house and will require all additional indige to be constructed over the access road to the house. It is anticipated the proposed roadway would be walled along the extent passing through the estate. The proposal so the into the existing roundabout immediately north of ashtown village. A portion of the boundary wall to Ashton house would need to be demolished to accommodate the link. This requires the existing entrance gates to Ashton House to be relocated and the portion of the boundary fronting Mill Lane north of the canal to be taken down and a This option also includes the construction of a new bridge under the canal and railway at Ashtown to provide pedestrian and cycle access (Option 4A). This option would drop to a level of approximately 40.1m above MSL to tie in with the existing road to the north of the rail line providing a pedestrian and cycling link north and south of the rail new higher wall constructed on a new boundary This option would require some property acquisition road. line with a 4m wide cross section. This option would require some property acquisition. Some comparative disadvantage over other options Some comparative disadvantage over other options Some comparative advantage over other options Impact on scope for and ease of interchange between modes. Impact on the operation of other transport services General reduction in journey times. The route is largely on the desire line of both during construction and in operation transport customers. Cycle, pedestrian, mobility impaired and disabled access General reduction in journey times. The route is largely on the desire line of New interchange nodes and facilities; nproved interchange between modes. The route is largely on the desire line o 2.1 Transport Integration proposed at station. transport customers. Cycle, pedestrian, mobility impaired and disabled access Reduced walking and wait times transport customers. Cycle, pedestrian, mobility impaired and disabled access proposed at station proposed at station associated with interchanges. Modal shift ubstandard (narrow and two way) cycle track, due to lack of space, pedestria figures during construction and footpath proposed along the western side of the new road ends just north of bend coming out of the tunnel. Not as effective as options 10 and 13 due to narrow width of roadway corridor. No Cycle track or pedestrian access proposed along roadway due to lack of space Cycle track provided Not as effective as options 10 and 13 due to narrow width of roadway corridor operations. Changes to journey times to transport nodes. Significant comparative advantage over other options Some comparative advantage over other options Some comparative disadvantage over other options Overbridge on Mill Lane: At local planning policy level. Option 3 is similar to Option 2, however its entire extent is located within the FDP area only: relevant zoning ncludes "High Technology" (to the south of the Canal). This route travels along the Underbridge online option on mill lane: At local planning policy level, a small astern boundary of a large area of land zoned 'High Amenity' (north of the canal). The introduction of a new overbridge in a High Amenity area would not work At local level, the majority Ontion 4 is located within lands zoned by Finnal DP section of this option is located on DCC (DP) lands close to Ashtown Station, zoned Z11 and also contains the conservation area of the Royal Canal. The as "High Amenity". The route travels close to the boundary of the existing towards 'Objective NH51 (FCDP) "Protect High Amenity areas from inappropriate Coolmine Rugby Club and could support Fingal DP local map-based Specific Impact on land use strategies and remainder of this option is located in FDP area: relevant zoning includes "High Technology' (to the south of the Canal) and travel north of the canal into the development and reinforce their character, distinctiveness and sense of place. However, for the most part this option follows the edge of High Amenity lands Objective 136 "Facilitate pedestrian access from Coolmine Rugby Club grounds over the Canal adjacent to the Phoenix Park Railway Station". regional and local plans. Assessment of start of a large area of land zoned 'High Amenity'. This option is within close Land Use Integration support for land use factors local land use which would reduce the overal impact on those lands. The option travels east of ever, the introduction of a new road infrastructure in 'High Amenity' zoned 2.2 proximity to the future Navan Road Parkway LAP (map based objective: LAP 13.B) and is likely to support overall land use and transport planning integration Integration the future Navan Road Parkway LAP (map based objective: LAP 13.B) which land would go against Objective NH51 (FCDP) "Protect High Amenity areas and planning. Inclusion of project in from inappropriate development and reinforce their character, distinctiveness and sense of place". However, in terms of future land use factors, Option 4 could create a direct link into map based objective (LAP13.B - Navan Road would be linked by vehicular, pedestrian and cycle access. This option is likely to Subject to further deison and traffic data. relevant local planning documents. work towards overall land use and transport planning integration in this local area. Subject to further deisgn and traffic data. The pedestrian and cyclist overbridge is located entirely within the Dublin CDF Parkway Local Area Plan) and also linking into LAP13.C. Option 4a section area. The bridge is located within lands zoned for Z9 (Amenity, Open Space, Green Network) and Z11 (canal, coastal and river amenities) associated with The pedestrian and cyclist overbridge is located entirely within the Dublin CDP would result in a direct pedestrian and cycle access from the station into the area. The bridge is located within lands zoned for Z9 (Amenity, Open Space, Green Network) and Z11 (canal, coastal and river amenities) associated with the "The Village Centre" via a new underbridge structure. This option has some the Royal Canal. The overbridge will provide an improved walking and cycling comparative disadvantage due to the impact on zoned high amenity lands. access into the Village Centre. Royal Canal. The overbridge will provide an improved walking and cycling access into the Village Centre. Comparable to other options Alternative level crossing options are Comparable to other options Comparable to other options Geographical mostly neutral in respect of Geographical 23 Integration due to localised nature of the Integration No significant effect on geographical integration No significant effect on geographical integration No significant effect on geographical integration. level crossings. Significant comparative advantage over other options Significant comparative advantage over other options Significant comparative advantage over other options Other Government Integration with the other Government 2.4 policy such as the NPF and RSES. Policy Integration This option supports the delivery of the higher level national and regional planning This option supports the delivery of the higher level national and regional planning This option supports the delivery of the higher level pational and regional planning

policies regarding the DART + programme (NPF, RSES, GDA Transport Strategy).

policies regarding the DART + programme (NPF, RSES, GDA Transport Strategy).

policies regarding the DART + programme (NPF, RSES, GDA Transport Strategy).



				DART+ WEST - MCA Stage 1			
				Ashtown Level Crossing Asse	essment		
Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 4 & 4b (Road bridge West + PedCycOvBridge)	Option 5 (Low Clearance UndBridge East)	Option 6 (Fixed Road OvBridge East of Station)	
				Readbridge at Neuran Protway with link to River Read. Selected upgrade works to Dikr Kosai far as a Ahonom. Relativita and cycle overhidge on the footprint of the reconfigured station at Abhown. This option is located approximately link to the west of the existing level crossing at Abhown at the grade separated junction on the Navan Road serving Phoene Park Railway Station. At this location there is accose the Tolka River and facilitate an orward or be designed to pass over it to cross the Tolka River and facilitate an orward or be designed to pass over its cross the Tolka River and facilitate an orward to link to River Road. This could either descend to lis into River Road to link to River Road. This could either descend to lis into River Road to link to River Road which would need upgrade as far at Abhown. It both cases and 1.75m cycle tracks on obth sides. Short term connection to River road is likely to be in the form of a mini crundabout, artific diversion and land acquidation. The option can accommodate a cross section of a 6.5m carriageway with 2m totpather to trait. The road which would need upgrade to during the road and frequing the removal of the associated boundary treatment - walls, trees, trait. The road would be associated boundary treatment - walls, trees, trait. The road would be at a similar level as the existing junction Phoenix Park crossing meandering tous. It includes the demolitor of the existing cables targed foothidge at the level crossing and the existing cables targed foothidge at the level crossing and the existing cables targed foothidge at the level crossing and the existing cables targed foothidge at the level crossing and the existing cables targed foothidge at the level crossing and the existing cables targed foothidge at the level crossing and the existing cables targed foothidge at the level crossing and the existing cables targed foothidge at the level crossing and the existing cables targed foothidge at the level crossing and the existing to the tr	Low clearance underbridge at railway and canal east of Ashtown Road. This option would incolve construction of a new road link parallel to and sould of the nalway before turning north, crossing under the rail and canal to corned with Rathome Avenue north Ashtown Nilaga. This route would descend from the Ashtown Railway Statem and Martin Sawage Park residential easter. The oute would cross under the railway and canal at right angles before rain gin a cutoring to pin mich weaking and canada constant of the Palestown Development. The option can asymmetrize to cost section of a 6.5m cost of the state	Road Overbridge East of Achteren Road. This option would cross the railway and canal approximately 250m east of the existing level crossing. It incorporates a lightly curved plan layout which facilitates a link to the existing Achteren road at the train station. The link would clarence the grean area between Achteren Station and Martin Savage Park and would climb to cross over the railway and canal to be link on the would climb to cross over the railway and canal to be link on the optie tracks on both sides. The option would bridge over the railway and canal to the rail line differs and the level at the crossing is approximately 2.1 makove MSL and the canal at 3.3 m above MSL with the bridge level over the railway at 30.0m above MSL. The road level remains provide a softer tabute to the science. The provision of landscaped enthematic provide a softer tabute to the science. The provision of landscaped enthematical soften and would regardle or can be acquisition.	
			Impact on scope for and ease of	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	
	2.1	Transport Integration	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.	Improved interchange between modes due to veh access to PnR. Route encourages customers away from Ashtown. Cycle, pedestrian, mobility impaired and disabled access proposed at station. Cycletrack provided along New roadway, not practicable on River Road.	Improved interchange between modes, subject to satisfactory access to train station platforms. General reduction in journey limes. Vehicular access actors the railway would be curtailed to cars and small vans. Slightly more circulious route for podestimas & cyclists. Cycle track provided. No drop off at he station Commercial and bus traffic would need to divert along the local road network. Option would require closure of railway station and canal traffic during construction period.	Improved interchange between modes, subject to satisfactory access to train station platforms. General reduction in journey times. There may be severance to existing connectivity on the northern side of the canal and railway as a result of the construction of the required approach ramps. Slightly more circuitous route for pedestrians & cyclists. Cycle track provided. No drop off at the station.	
				Some comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	
2 Integration	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 planning documents.	At local level, the majority Option 4 is located within lands zoned by Fingal DP as "High Amenity". The route travels close to the boundary of the existing Coolmine Rugby Club and could support Fingal DP local map- based Specific Opticetriva 13° creatilate predestina access from Coolmine Rugby Club grounds over the Canal adjacent to the Phoenix Park Railway Station" However, the introduction of a new road infrastructure in "High Amenity zoned land would go against Objective NH51 (FCOP) "Protect High Amenity zares from inappropriate development and reinforce their character, distinctiveness and sense of place". However, in terms of future land use factors. Dpton 4 could create a direct link into map based objective (LAP13.B - Navan Road Parkway Local Area Plan) and also linking into LAP13.C. Option 45 action would result in a direct predestrian and cycle access from the station into residential zoned lands associated disadvantage due to the impact on zoned high amenity lands.	Option 5 (is similar to 6 and 7), located entirely within the DCDP area. This option is located on lands zoned 211 'canal, coastal and river amenities associated with the royal canal and travels along the north edge of the (29 zoned) existing Martin Savage Park (GAA ptch). North of the Canal it travels trough currently agreentide site, soned for residential use in the Pellestown Action Area Plan 2014. This option goes against the LAP residential zoning however, subject to traffic and design studies it may support the overal future land use and transport planning integration. Option 5 is at some disadvantage due to the ingeation of flects on zoned residential land. (even though it is less than options 6 and 7). On the north side of the canal, Option 5 is routed through a permitted residential is likely to have an impact on this development.	Option 6 (is similar to 5 and 7) located entirely within the DCDP area. This option is located on lands zoned 211 'canal, coastal and river amenities' associated with the royal cana and travels along the north edge of the existing Martin Savage Park (GAA pitch) (22 zoned - recreational, amenity and open space). North of the Canal it travels through currenty a greenleid site, zoned for residential use in the Pelletstown Action Area Plan 2014. This option goes against the LAP residential zonig. Option 6 is at some advantage (over option 7) as it will have less of an impact on the functionality of the GAA/ amenity lands however it will also have a disadvantage due on future zoned residential land. On the north side of the canal, Option 6 is routed through a permitted residential development (DCC Ref. 3666/15, ABP ref. PL29N.246373).	
		Geographical	Alternative level crossing options are	Comparable to other options	Comparable to other options	Comparable to other options	
	2.3	Integration	Integration due to localised nature of the level crossings.	No significant effect on geographical integration.	No significant effect on geographical integration.	No significant effect on geographical integration.	
				Significant comparative advantage over other options	Significant comparative advantage over other options	Significant comparative advantage over other options	
	2.4	Other Government Policy Integration	Integration with the other Government policy such as the NPF and RSES.	This option supports the delivery of the higher level national and regional planning policies regarding the DART + programme (NPF, RSES, GDA Transport Strategy).	This option supports the delivery of the higher level national and regional planning policies regarding the DART + programme (NPF, RSES, GDA Transport Strategy).	This option supports the delivery of the higher level national and regional planning policies regarding the DART + programme (NPF, RSES, GDA Transport Strategy).	





					DART+ WEST - MCA Stage 1		
					Ashtown Level Crossing Assessn	nent	
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 7 (Fixed Road OvBridge East of Station from Navan Road)	Option 8 (PedCycOvbridge Only on Station footprint with reconfiguration of the station)	Option 9 (Lower the Railway with at grade roadbridge at LX)
					Road Overbridge East of Ashtown Road with link to Navan Road. This option would involve the construction of a new road in front of Kempton Gardens from the Navan Road and a new bridge over the canal and maivay accommodating a cross section of a 5 Gm carriageway with 2m clopets and 1.75m copie tancks on both sides. The option would bridge over the railway and canal with approach gradients of 6% either side the rail level at the crossing is approximately 42.1m. Ob Nauh Head and the canal at 393 with the bridge level over the railway and canal with approach gradients of 6% either side. The road would then the into the new circulation roads through the Pelletstown Development to the north of the canal. Segnate 4m wide shared greater to rehise. Dipoles and podestrime the canal segnate 4m wide shared greater the rehises. Dipoles and podestrime the canal experiment of the canal experiment of the canal experiment. This option introduce traffic to the near of Martin Savage Park and along Kempton Gardens. Furthermore, it would require the construction of a significant rev junction on the Navan Road Three would also be impacts on St Oliver Plunker's GAA club to the south of the railway and would be located whilth anoth construction of a significant weight withown. Pelletstown Newlet of cona the walled or can be constructed with one en thomes. The option and between the scheme. The provision of landscaped embankments would result in a need for more land acquisition.	This option includes the provision of a new padestrian and cycle bridge, 5.0m in width with set down facilities only. The bridge would provide a connection between Ashtewn road aouth of the level crossing and a propage platform between the caral and the allway. The arrangement of the bridge utilises range parallel to and to the rear of the station platforme rising to the east before turning perpendicular to the track to cross the railway. The ratil level at the crossing is approximately 42.1m OD Main Nead, and the canal at 59.3m with the bridge level over the nullway at 50.00m. The ramps on either side of the bridge will not exceed 5% gradient. Seven well to ease pedestrian cocess and rails or public you in frequined. Constraints on bridge crossing here includes the train station, the Royal Canal, the listed railway structures, and the canal bridge. Vehicular traffic will need to divert around the crossing, the diversion being an estimated 4.3km.	Lower railway, new road underbridge at level crossing, demolish Canal bridges. This option provides for lowering the existing railway sufficient to allow the naiway pass under a bridge coastnucted at the level of the existing level crossing. It would require limited road infrastructure centred on the existing level crossing. The railway would require lowering blow the existing water level of the canal upstream and downstream of the level crossing. It would require demolition and reconstruction of the train station at a lower level. The canal would need to be channelised or related not raining walk would be required to support the canal weat of the existing level crossing. The existing protected canab field end close would likely need to be demolished and replaced. It is considered that traffic on the canal and railway would need to be suspended for the duration of the works.
				Impact on second for and second of	Some comparative disadvantage over other options	Significant comparative disadvantage over other options	Some comparative disadvantage over other options
		2.1	Transport Integration	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.	Potential for improved interchange between modes, subject to satisfactory access to train station platforms. General reduction in journey times. There may be severance to existing connocitiy on the northem side of the canal and railways as result of the construction of the required approach ramps. Cycle track provided.	This option reduces the scope for interaction between modes of transport in comparison to all other options.	General reduction in journey times. Disimproved interchange between modes - Ramp/steps and/or elevator required for access to platforms. cycle track not provided on new bridge sue to tie-in with existing bridge.
					Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Some comparative advantage over other options
2	Integration	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 planning documents.	Option 7 (is similar to 5 and 6) and is located entirely within the DCDP area. This option is located on lands zoned 211 'canal, coastal and river amenities' associated with the royal canal and travels through Zoned 25 (associated with Amenity, Open Space, Green Network) associate with the existing Martin Savage Park (GAA pltch). North of the Canal travels through zoned 25 (associated with Amenity, Open Teismoné disadvariageous than 5 and 6 due to impact to the continued functionality of the GAA/ amenity lands, larger area of zoned residential land impacted and impacts to residential amenity. On the north side of the canal, Option 7 is routed through a permitted residential development. (DCC Ref. 366/15, ABP ref. PL29N,246373). This option will impact on this permitted development.	Option 8 is located entirely within the DCDP area. Option 8 is located within lands zoned for 29 (Amenity, Open Space, Green Network) and 211 (canal, coastal and river amenities) associated with the Royal Canal. Option 8 provides walking and cycling access only which would impact vehicular connectivity to existing and future developments. The GDATS includes an objective to enhance linkages to planned developments.	Upgrades the Irish Rail's railway infrastructure. No direct impacts to planning policy/ zoned lands. Significant land use integration during construction stage due to requirement to close railway for approximately years during construction phase impacting rail uses.
			Coographical	Alternative level crossing options are	Comparable to other options	Comparable to other options	Comparable to other options
		2.3	Integration	Integration due to localised nature of the level crossings.	No significant effect on geographical integration.	No significant effect on geographical integration.	No significant effect on geographical integration.
					Significant comparative advantage over other options	Significant comparative disadvantage over other options	Significant comparative advantage over other options
		2.4	Other Government Policy Integration	Integration with the other Government policy such as the NPF and RSES.	This option supports the delivery of the higher level national and regional planning policies regarding the DART + programme (NPF, RSES, GDA Transport Strategy).	This option would not support the delivery of the higher level national and regional planning policies regarding the DART + programme (NPF-(NSO4), RSES & GDA Transport Strategy).	This option supports the delivery of the higher level national and regional planning policies regarding the DART + programme (NPF, RSES, GDA Transport Strategy).





					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Assessme	nt		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 10 (UnBridge West of Mill, PedOvBridge at Station)	Option 11 (Improvements on Local Road Network, PedOvBridge at Station)		
					Read and cycleway bridge under Railway and Canal West of the Mill and linking to Mill Lane at each end: This option would ential in-cruing Aditom Road datos its old alignment (pre railway) along a section of Mill.cane, devining fravogation more all and to the west of the protected mill and passing under both the railway and the Royal Canal to be into Mill Lane north of the railway. The option is proposed to accommodal a canadia section and the section of the section 1.5m rubbing strip to the west and a 3.5m cycleway to the east. An expande turning head and dop of would be protected to the south of Adatom Station and a set down area north of the east of the option appropriate level of 35. 2m OO Main Head, under the rail which is at the option would drop to an approximate level of 35. 2m OO Main Head, under the rail which is at a level d 45.6m at the crossing point. It is proposed to construct a predestities level of 35. 2m OO Main Head, under the rail which is at the option would drop to a sproximate level of 35. 2m OO Main Head, under the rail which is at a level d 45.6m at the crossing point. It is proposed to construct a predestitien, cycle bridge or the footbridge of the existing trans station. The swill require econstruct on the trans tastion. The bridge will cater for construction of a new podestition, cycle bridge on the footbridge of the existing trans station. This will require econstruction of the trans tastion. This will require econstruction of the and station. This will require econstruction of the trans tastion. This will require econstruction the and station station. This acquisition and modifications to existing accesses.	This option includes the provision of a new pedestrian and cycle overbridge at the location of the train station and local road improvements. The bridge would provide for disabled and mobility impaired users. The arrangement of the bridge would tails nested ramps parallel to and over the station paralorms rising to the east before turning perpendicular to the track to cross the raikwy. This option requires reconstructions proposed toolfford, the split neuroscience in the state of the track to cross the raikwy. The rail level at the crossing is approximately 42.1 m to OD Main Head and the canal water level is approximately 30.0 m. The walking statice on the progoed bridge over the raikwy rises to a level of approximately 30.0 m. The proposed paragets will be approximately 3.5 m high remote from the bridge interval in the process of approximately 42.1 m to OD Main Head and the canal water level is highly and "using the over and signature on the progoed bridge over the raikwy rises to a level of approximately 30.0 m. The proposed paragets the blue and way. Theoremat, on the rises 4.0 m the bridge the rain access and rain for pushing bricycles could be instated if required. Constraints on a bridge crossing here include the train station, the Royal Canal, the listed raikwy structures, and the canal bridge. This option provides for motorised traffic to be diverted along the local road network. Upgrades will be necessary to River Road with the construction of a 2.0 m destation work young the oxidhem edge of the road wast of Ashtown and localised improvements to the east. Where this is adjacent be abaten House bridge road the property. It would be necessary to provide public blighing along the Ratawith Road between hier road and the Nawn Road. These improvements will include the implementation of signal control on the junction of River Road and the Ratoath Road.		
		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 This option does not enhance access to the Navan Road Park and Ride facility. General reduction in journey times due to removal of level crossing and minimal diversion associated with the option. The route is largely on the desire line of transport customers. Cycle, pedestrian, mobility impaired and disabled access proposed at station. Cycletrack provided along New roadway.	Some comparative disadvantage over other options This option does not enhance access to the Navan Road Park and Ride facility. This option divers traffic onto the local road network increasing congestion. Where this arises on River road it is not practicable to provided dedicated facilities for cyclists. Cycle, pedestrian, mobility impaired and disabled access proposed at station. Cycletrack not practicable on River Road.		
					Significant comparative advantage over other options	Significant comparative disadvantage over other options		
2	Integration	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 planning documents.	Option 10 consists of two structures, an overbridge west of Mill Lane and a pedestrian overbridge at Ashtown Station. A local planning policy level, the extents the underholding more primarily located within Fingal COP area, Lands and with the suffer the underholding the south of the Canal) and travels not if the canal in the bate of a large sense of land zoned High Amenity. This option is within the future Navan Read Parkway LAP (map-based cipicefue: LAP 13.0) and is likely to support overall and use and transcort planning integration. Subject to further design and traffic data. Northern extents of Option 10 are located within high Amenity lands however, for mets part the option follows the existing roan entwerk which would reduce at simpact on this land use. Read works proposed as part of Option 10 are a also located within a small section of Obtim COP area. The bridge is located a within flands zoned for 29 (Amenity, Open Space, Green Network), and 211 (canal, coastal and river amenities) associated within the Royal Canal. The overbridge will provide an improved walking and cycling access into the Village Centre.	Option 11 consists of upgrade works to River Road and the construction of a pedestrian and cyclist bridge at Ashtown Station. Option 11 is within Dublin CDP and Fingal CDP areas. The road upgrade works are confined largely to the footprint of the existing road, however widening works will be required into lands zoned 29 (Amenity, Open Space, Green Network) under the Dublin CDP Por Dan alands zoned High Amenity Under Fingal CDP. The improvement works proposed as part of Option 11 support the realisation of Objective MTO31 of the Dublin CDP 10 ⁻¹ Daniata and/or implement the following road improvement schemes and bridges' which lists River Road as one of the roads to be improved. The pedestrian and cyclist overbridge is located entities with in the Dublin CDP area. The bridge is located within lands zoned for Z9 (Amenity, Open Space, Green Network) and z11 (cana. coastal and revelopments the biolwork Social dwith the Koyal Canal. Although Option 11 maintains pedestrian and cyclist access at Ashtown Station, vehicular connectively to enhance linkages to planned developments.		
			Geographical	Alternative level crossing options are	Comparable to other options	Comparable to other options		
		2.3	Geographical Integration	Integration due to localised nature of the level crossings.	No significant effect on geographical integration.	No significant effect on geographical integration.		
					Significant comparative advantage over other options	Significant comparative advantage over other options		
		2.4	Other Government Policy Integration	Integration with the other Government policy such as the NPF and RSES.	This option supports the delivery of the higher level national and regional planning policies regarding the DART + programme (NPF, RSES, GDA Transport Strategy).	This option supports the delivery of the higher level national and regional planning policies regarding the DART + programme (NPF, RSES, GDA Transport Strategy).		





					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Assessment			
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 12 (Road OvBridge West from Navan Parkway Stn, PedCycOvBridge at Ashtown Station)	Option 13 (OvrBridge West of Mill, PedOvBridge at Station)		
					Road link between Navan Parkway Station and the Road network immediately north of Ashtown Village incorporating a bridge over the railway and canal and a pedestrain cycle bridge over the station in Ashtown. This option would entail re-counting through not attracting away from Ashtown willage. The option can accommodate a cross section of a 5.5m carriageway with 2m tooptants on both aides and 2.5m two-way cycle track on the eastern side. An arginate turning head and drop-off will be provided to the south of Ashtown Station. The length of the option is approximately 300m each side of the rail line and canal. The option would rise to an approximate deck level of 52.5m. OD which is a at a level of 45.6m OD at the crossing point. On the	Road with cycleway under Rullway and Canal West of the Mill and linking to Mill Lane at each end. This cyclew would entail re-routing Ashtown Road along its old alignment (pre railway) along associan of Mill Lane, dwering through commercial lands to the west of the protected mill The cycles is proposed to accommodiate a roots section of a 55m carraigway with 15m holling strip to the West and a 3 65m cyclewary to the east. An at-grade turing head and drog-dil would be provided to the south of Ashtown Station and a set down area north of the canal. An at-grade turing head and drog-off will be provided to the south of Ashtown Station. The length of the option is approximately 150m on the northern side and 30m south of the rail line. The plone would rise to an approximately 150m on the northern side and 30m south of the rail line. The plone would rise to an approximately 852 m OD Mailn Head over the railway with h is no at a level of 45.6m. A nat through lange form of construction would be required similar to the south of ashtown being the south of the south of the south of the rail line.		
					access for non-motorised use these would have cross section of 4.0m. It is feasible to cross at this location, as it is upstream of the double lock on the canal and the canal is at the same approximate level as the adjustment of the double lock on the canal and the canal is at the modifications to existing accesses. It would pass through the grounds of the lated Ashton House. The option will provide for a setdown, maintenance and emergency vehicular access to the station. It is proposed that pedestrians, cyclists and disabid users would be accommodated by the construction of a new pedestrian / cycle bridge on the footbridge of the existing train station. This will require reconstruction of the train station.	adjacent Ratabil Road Bridge. A new mini roundabout is proposed at the junction of Mil Lane and Ashtown Road south of the railweyto accommodas traited interactions. It is proposed thap adsettions, cyclistia and disabled users would be accommodated by the construction of a new pedestrain cycle knings on the foothige of the asting train station. This will require reconstruction of the train station. This be constructed on the access road to the house. It is anticipated the proposed roadway would be welled along the extern passing through the estate. The proposal is to be into the esting roundabot immediately north of attriow village. A portion of the boundary would be Attrin would need to be demolished to accommodate the link road. This option would require some properly acquisition.		
			Transport Integration		Significant comparative advantage over other options	Some comparative advantage over other options		
		2.1		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.	Improved interchange between modes. General reduction in journey times. The route results in some diversion of motorised transport customers. Cycle, pedestrian, mobility impaired and disabled access proposed at station. Cycle track provided.	This option does not enhance access to the Navan Road. Park and Ride facility, General reduction in journey times due to removal of level crossing and minimal diversion associated with the option. The route is largely on the desire line of transport customers. Cycle, pedestrian, mobility impaired and disabled access proposed at station. Cycletrack provided along New roadway, not practicable on River Road.		
					Some comparative disadvantage over other options	Some comparative disadvantage over other options		
2	Integration	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 planning documents.	Option 12 consists of two structures, a vehicular overbridge from Navan Road Parkway station connecting to Ashtown Village Centre and a pedestrian overbridge at Ashtown Station. At local planning policy level, the vehicular overbridge are located within Fingal CDP area. Lands are zoned for High Technology (to the south of the Canal) and travel north of the canal into the start of a large area of land zoned 'High Amenity'. The introduction of a new overbridge in a High Amenity' area would not work towards' Objective NH3' (FCDP) "roteet High Amenity and would have a greater impact on trappropriate development and reinforce their character, distinctiveness and sense of place". Option 12 crosses through the middle of lands zoned for 'High Amenity' and would have a greater impact on the Royal Canal are within undeveloped lands zoned for development under future Navan Road Parkway LAP (map-based objective: LAP 13.B). Option 12 may reduce the area of land to be developed a part of the LAP to Will likely to support overall land use and transport planning integration. Subject to further design and traffic data. The pedestrian and cyclist overtriding is located entriely within the Dublic CDP area. The bridge is located within lands zoned for 25 (Amenity, Open Space, Green Network) and 211 (canal, cosstal) and river amenites) associated with the Royal Canal. The overbridge will provide an improved waiking and cycling access into the Village Centre. This option has some comparative disadvantage due to the impact on zoned high amenity lands.	Option 13 consists of two structures, an all-user overbridge west of Mil Lane and a podestrian overbridge at Ashtown Station. At local planning policy level, the overbridge is located within Fingal CDP area. Lands are zowed for High Technology (Ib the sould that Canada) and travel north of the canal info the start of a large area of land zoned 'High Amenity'. The introduction of a new overbridge in a High Amenity area would no work lowards' Objective NH51' (CPOP) 'Protect High distinctiveness and sense of place'. Option 13 crosses through the middle of lands zoned for High Amenity area sould not people in place structures and and pravely Low for the start of a large of the source structure and the lands and Parkway Low (map-based objective: LAP 13.8) and is likely to support overall land use and transport planning integration. Subject to further design and traffic data. The pedestrian and cyclist overbridge is located entirely within the Dublin CDP area. The bridge is located within lands zoned for 29 (Amenity), copen Space. Green Network', and 211 (canal, coastal and river amenities) associated with the Royal Canal. The overbridge will provide a improved walking and cycling access into the Village Centre. This option has some comparative disadvantage due to the impact on zoned high amenity lands.		
			Coographical	Alternative level crossing options are	Comparable to other options	Comparable to other options		
		2.3	Integration	Integration due to localised nature of the level crossings.	No significant effect on geographical integration.	No significant effect on geographical integration.		
					Significant comparative advantage over other options	Significant comparative advantage over other options		
		2.4	Other Government Policy Integration	Integration with the other Government policy such as the NPF and RSES.	This option supports the delivery of the higher level national and regional planning policies regarding the DART + programme (NPF, RSES, GDA Transport Strategy).	This option supports the delivery of the higher level national and regional planning policies regarding the DART + programme (NPF, RSES, GDA Transport Strategy).		



				DART+ WEST - MCA Stage 1		
			-	Ashtown Level Crossing Asses	sment	
Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Do Nothing	Do Minimum (Close LX)	Option 1 (Online Obr)
				Leave the current level crossings in place Electrification is implemented without removal of the road traffic interface but with implementation of CCTV control on the barrier system	Closure of the existing crossings with no alternative provided. All traffic would be diverted to alternative routes around the crossing location.	This scheme would require an online structure spanning over the railway and canal. This would lit the existing carriageway by sportomately 7 Jm above the railway line, accommenting a cross steel of a 4.5m carriageway with 2m doorpaths across the bridge. There would be insufficient withit for a cycleway across the bridge. The topography is such that the northern approach (where the ground fails away towards the Tokia River) would necessarily be very steep and would also require significant molicitations to the receiver uligage certre devipments of the area overground. The length of the approach on the northern side would be approximately 220m and be at a maximum gradient of 9% and 140m on the southern side at a maximum gradient of 5%. The bridge over the rail line would be at an approximate level of 51.9m OD.
	3.1		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	Significant comparative advantage over other options	Significant comparative disadvantage over other options
		Noise and Vibration		Retains vehicular traffic which will impact a low number of sensitive receptors in proximity.	Removes vehicular traffic and minimal construction impacts.	For the overbridge option the elevated rood way will result in significant elevated structures which is likely to increase noise levels at local receptors and require noise mitigation measures along its extent as it would run directly in front of a number of measures along its extent is it would run indexiby in forto a number of measures indexiby the core village area along Ashtown Road. The construction phase noise and vibration impacts would also be significant. The noise environment has the potential to change for the 199 properties located within 100m.
		Air Quality and Climate	Estimated number of number of recentors	Some comparative advantage over other options	Significant comparative advantage over other options	Some comparative disadvantage over other options
Environment	3.2		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.	Retains vehicular traffic with which will impact a low number of sensitive receptors in proximity.	Removes vehicular traffic and minimal construction phase. No assessemtn of traffi redistribution has been completed	Online options is similar to the current scenario however due to the elevated nature of the structure air impacts would be located closer to sensitive receptors particularly in the core willings area at the multi-storey buildings in Asthown mixed use area. However no new sensitive receptors impacted. This option does not reduce the number of sensitive receptors within 50m of the route - 112 dwellings within 50m. Potential for construction phase dust impacts particularly at Asthown village core.
				Significant comparative advantage over other options	Significant comparative advantage over other options	Significant comparative disadvantage over other options
	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.	No impact on existing landscape or visual characteristics. Maintains existing environmental conditions.	Minimal impact on existing landscape or visual characteristics - no likely significant landscape or visual impacts. Loss of local connectivity. Potential for some negative townscape / visual effects on the surrounding road network.	Online overbridge option is likely to have a significant negative impact on landscape and visual amenity and public realm of Rathborne Village Centre and along the extent of Ashborn Road. Significant visual impact on the archiverment of Objective CH43 of Fingal Development Plan. Significant impact due to renoval of roadside tree- lined hedgerows leading to railway - significant visual impact for properties in Martin Savage Para and for Ashborn Stables. [Objective CH43 Protect and enhance the built and natural heritage of the Royal Canal and ensure that development within its visual para is visinity is ensitively designed and does not have a detrimental effect on the character of the Canal, its built elements and its natural heritage values and that it adheres to the Waterways Irelands Heritage Plan 2016-2020.)



				DART+ WEST - MCA Stage 1	ART+ WEST - MCA Stage 1			
				Ashtown Level Crossing Asses	sment			
Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 2 (Underbridge on Mill Lane)	Option 3 (Overbridge on Mill Lane)	Option 4 & 4a (Road bridge West + PedCycUndBridge)		
				Bridge under railway and canal at Mill Lane: This option would entail re-routing Astroom Road along its old alignment (pre Royal Canal) on Mil Lane and passing under both the nilways and the Royal Canal. To curtail tie Impact on Aktrown Stabled road traffic only is proposed to be carried under the railway. The option can accommodiae a conservation of a Schoren transform of the Tamber of the provided to the south of Astrown Statelout An at-grade turning head and drop-off will be provided to the south of Astrown Statelout. The length of the option is approximately 150 no nthe northern side and 300m south of the rail line. The option would drop to an approximate level of 3.5 m OD Malin Head, under the railway which is a at a level of 45.6 m. A new mini roundbout is proposed at the junction of Mil Lane and Astrown Road south of the railway have accommodate traffic interactions. It is proposed that padestrian, cyclicits and disabled users would be accommodated by the construction of a new production for Mil Lane and Astrown Road maturation. This will require reconstruction of the train station. This regimes the usisting antrance gates to Adhon Huses to be relacated and the portion of the existing antrance gates to Adhon Huses to be taken down and a mark higher wall constructed on a new boundary line. This option would require some property acquisition.	Prige over railway and canal at Mill Lane: This option would estail re-routing Ashtown Road along its oid alignment (pre Royal Canal) or Mill Lane and passing over both the railway and the Royal Canal: To cutting the impact on Ashtom Stabled road artiflic only is proposed to be carried along the madway. The option can accommodate a cross section of a 5m carriageway with 1.5m cutting strips on their stables between walled approaches. Gradents on the proposed road north of the nailway would be in excess of 8.0%. An at-grade turning head and drop-off will be provided to the south of Ashtown Stabled road pro- main the option is approximately 150m on the northern side and 300m south of the mail Inne. The option would rise to an approximate level of 52.5m OD Main Head over the aniway which is an table via 6.5m. An athrough being form of construction would be required similar to the adjacent Ratasth Road Bridge. A new mini roundabout is proposed at the junction of Mill Lane and Ashtown Road south of the inalway to accommodate bridle interactions. This option crosses through the grounds of Ashton House and will require an additional advary or the aveiland to a circle their on the foothding of the asisting trans station. This will require reconstruction of the transition. This option crosses through the grounds of Ashton House and will require an additional advary wall to Ashton house would need to be demolished to accommodate the link roud. This option noud require some property acquisition.	Readbridge at Navan Parkway with link to River Road, Selected upgrade works to River Road as far as Antown, Pederatina and cycle underpass at Antown The Road as far as Antown, Pederatina and cycle underpass at Antown The Antown at the grade separated purchan on the Navan Road serving Phenem Park Railway Slaton. At this location there is scope to construct a new road law road Phenem Park Railway Slaton. At this location there is scope to construct a new road link over the construction of the Nave Road which would need upgrade as far as Antown. In the provided to link to River Road which would need upgrade as far as Antown. In the construct a new road which would need upgrade as far as Antown. In the construction and the access section of a 45 m correlignment with the host cases this con accommoders a cross section of a 45 m correlignment with the host met in the form of a mini roadhoud. Never card would require upgrade to Antown with new loopath constructed along the northern boundary of the road and requiring the removal of the associated boundary treatment - while, tresh, bruts. The road would be as a similar lowel as the sing the removal of the associated boundary treatment - while, tresh, bruts. The road would be at a similar lowel as the auxieting function Phonein Road construction and and the River Road at a lawel of 347m. The road on the northern side would be at a lawel of approximately 645. No exert 300 m the descripting to law in the level of the River Road at a lawel of 347m. The road on the northern side would be the north on topode padestinia and cycle access (Cyclin 44). This copton would level with the exercising a padestinia and cycle access (Cyclin 44). This road on the north of the real line proxiding a padestinia and cycling link corth and south of the real level with a 4m wide cross section.		
		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 disadvantage over other options	Some comparative advantage over other options		
	3.1			Moves traffic to rear of apt block from current road layout. This option will introduce additional noise to the rear apartments while also decreasing road traffic nose levels to the apartments currently facing the front of the apartment block. Construction phase of this option will be more significant due to the excavation required. 198 properties within 100m.	Moves traffic to rear of apt block from current road layout. This option will introduce additional noise to the rear apartments while also decreasing road traffic noise levels to the apartments currently facing the front of the apartment block. Construction phase of this option will be less significant than Option 2 due to less excavation required. 150 dwellings within 100m.	Operational traffic impacts only affects 2 dwellings. Pedestrian crossing will have impacts during construction. 130 dwellings within 100m of both vehicular route and pedestrian crossing. 2 properties within 100m of the vehicular route.		
	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 disadvantage over other options	Some comparative advantage over other options		
Environment				Moves traffic to rear of act block from current road layout. 130 dwellings within 50m where traffic has been moved from from to back. Embodied carbon for new bridge. Potential for construction phase due impact is not significant when mitigation measures are put in place.	Pedestrian crossing will have impacts during construction. 52 dwellings within 50m of both vehicular route and pedestrian crossing. Potential for construction phase dust impact is not significant when mitigation measures are put in place.	Pedestrian crossing will have impacts during construction. 48 dwellings within 50m of pedestrian crossing. Pedestrian crossing will have impacts during construction. Only 1 property within 50m of the vehicular route of operational traffic. Two separate bridges will increase embodied carbon for this option. Potential for construction phase due impact is not significant when miligation measures are put in place.		
				Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Some comparative disadvantage over other options		
	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.	Option will have a very significant impact on boundary trees/woodlands, entrance gates and lodge at Ashton (Ashtown) House, a protected structure (No. 690). Lands of Ashton House and the corridor of the Royal Canal west of Longford Bridge are zoned High Arennity and identified as a Nature Development Area in the Fingal Development Plan. Very significant visual impact for setting of 10th Lock on Royal Canal. Significant impact due to removal of roadside tree-lined hedgerows leading to railway. Very significant impact for the setting of Ashtown Stables.	Option will have a very significant impact on boundary trees/woodlands, entrance gates and bdge at Ashton (Ashtown) House, a protected structure (No. 690). Lands of Ashton House and the coridor of the Royal Caral west of Longford Bridge are zoned High Amenity and identified as a Nature Development Area in the Fingal Development Plan. Very significant visual impact for setting of 10th Lock on Royal Canal. Significant impact due to removal of roadside tree-lined hedgerows leading to railway. Significant impact for setting of Ashtown Stables.	Alignment will have a very significant impact on the landscape character and structure, trees and voodiands of lands between Ashtown Lodge (and its associated lodge) and Coolmine Rugby Club. Alignment will impact existing landscape character of River Road and lands north to the Tolka River. The majority of the lands are laid out in mature parkland with trees, walks and boundary woodnard- ail of which will be impacted by the alignment. The lands and the corrider of the Royal Canal are zoned High Amenity and identified as a Nature Development Area in the Fingal Development Plan. Tree and Woodland preservation cbjectives in Fingal Development Plan. Trees and Woodland preservation cbjectives in Fingal Development Plan. Trees and Woodland preservation cbjectives in Fingal Development Plan. Trees and Woodland preservation cbjectives in Fingal Development Plan. Side slopes (if proposed) would have significant impact to hourdary trees/woodlands, protected hedgerows leading to railway - significant impact for Ashtown Stables.		



				DART+ WEST - MCA Stage 1			
				Ashtown Level Crossing Asse	essment		
Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 4 & 4b (Road bridge West + PedCycOvBridge)	Option 5 (Low Clearance UndBridge East)	Option 6 (Fixed Road OvBridge East of Station)	
				Roadbridge at Navan Parkway with link to River Road, Selected upgrade works to River Road as Ir as Ashirown, Pedestrian and cycle overhridge on the footprint of the recompared to the selection of the selection of the recompared to the recompare	Low clearance underhridge at nalivary and canal east of Abitevin Read. This option multil inclute construction of a rear road link scralit to and south of the nalivary before turing north, crossing juring the relian dia canal to connect with Rathorne Avenue north of Aattevin Village. This route would descrand from the Asthorne Road and run between Abitevin Railway Station and Matrin Savage Park, residential easter. The route would cross under the railway and canal at right angles before rising in a cuting to join into the existing circulatory roads to the north of the Pelletsburn Development. The option can accommodate a cross section of a Sam carrageway with 2m tooghast and 1.2m cycle tarks on both side. The railway list at level of 4.25m OD and the ground level at the canal is 30.5m OD with the isoad option lowered to a level of 32.0m OD providing 3.7m clearance envelope under the railway would have to be substandard. This option would have the substandard. This option would have the substandard. This option would have the substandard. This under a present. As the option would be in a cuting form most of at length this would option. The canadit would be in a cuting form most of at length the substance for busing in the level of the canal. The option would have the disadvertage that it would not have the moceanary design that use this to be closed during construction and would require reconstruction would pass under Abstrom station which is constructed on highs. Construction would require the station. The canal would provide the of the canal. The option would require landtate from SO (laver planters GAA during construction would require the station. The canal would plan the of the substandard. The option would have the substance and the base of the canal. The option would have the substance to the close of the during construction would require the station to be closed to the option the rain during construction would require the station. The canal would plan the rain during constructi	Roed Overbridge End of Ashtorm Roed. This option would cross the tailway and consequences of the sector of the se	
			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 disadvantage over other options	Some comparative disadvantage over other options	
	3.1	Noise and Vibration		Operational traffic impacts only effects 2 dwellings. Pedestrian crossing will have impacts during construction. 148 dwellings within 100m of both vehicular route and pedestrian crossing. 2 properties within 100m of the vehicular route.	Moves traffic to near of apt block from current road layout and along the northern edge of Martin Savage Part. This option will introduce additional holes to the near gartments while also decreasing road traffic noise levels to the apartments ourrently facing the front of the apartment block. Construction phase is potentially more significant than Option 6 due to greater excavation required. 119 dwellings within 100m.	Moves traffic to rear of apt block from current road layout. This option will introduce additional noise to the rear apartments while also decreasing road traffic noise levels to the apartments currently facing the front of the apartment block. Construction phase is potentially less significant than Option 5 due to lesser excavation required. 220 dwellings within 100m.	
	3.2	Air Quality and Climate	Estimated number of number of receptors	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	
Environment			Estmated 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.	Pedestrian crossing will have impacts during construction. 32 dwellings within 50m of pedestrian crossing. Pedestrian crossing will have impacts during construction. Only 1 roperative within 50m of the vehicular route of operational traffic. Two separate bridges will increase embodied carbon for this option. Peternial for construction phase dust impact is not significant when mitigation measures are put in place.	22 dwellings within 50m. Moves traffic to rear of apt block from current road layout. Potential for construction phase dust impact is not significant when mitigation measures are put in place.	Moves traffic to new route away from current route and therefore impacts on properties. 91 dwellings within 50m. This option also brings additional traffic to proximity of a school (highly sensitive receptor). Potential for construction phase dust impact is not significant when mitigation measures are put in place.	
				Some comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	
	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.	Alignment will a very significant impact on the landscape character and structure, trees and voodlands of lands between Ashtown Lodge (and its associated lodge) and Coolmine Rugby Citu. Alignment will impact existing landscape character of River Road and lands noth to the Tokk River. The majority of the lands are laid out in mature parkland with trees, valks, and boundary woodland - all of which will be impacted by the alignment. The lands and the corridor of the Royal Canal are zoned Hiph Amenity and landtrified as a Nature Development Arae in the Fingal Development Plan. Tree and Woodland preservation objectives in Fingal Development Plan. Tree and Woodland preservation objectives in Fingal Development Plan. The bridge oversave along the toryal canal and on open space north of Marin Savage Park. The bridge oversaves and on open space north of Marin Development Plan. Lands south of the canal are acid open space (29) for the protection, provision and improvement of recreational amenity, open space and green networks.	Option cuts through a permitted residential development on north side of canal - with very significant implications for the permitted layout (DCC Ref. 3668/15, ABP ref. PL29N 246373). Option will have a significant impact on boundary trees-fhodgreex along the railway canal cortifor (a conservation area in the Dublin City Development Plan). Option will have a significant impact on open space at Martin Savage Park, including on Oliver Plunket's GAA pitches. Option will have very significant visual impact for properties at the north end of Martin Savage Park, including no Oliver Plunket's GAA pitches. Option will have very significant visual impact for properties at the north end of Martin Savage Park, inderest of the Royal Canal. NOTE: Further design detail provided for full assessment of likely impact. Note: Option cuts through a permitted residential development on north side of canal - with very significant implications for the permitted layout (DCC Ref. 3666/15, ABP ref. PL29N.246373 - Active planning application 2596/20).	Option will have a significant impact on boundary trees/hedgerows along the railway / anal corridor (a conservation area in the Dublin City Development Plan). Option will have a very significant impact on open space and Oliver Plunket's GAA clubpichtes at Martin Savage Park. Options would have a very significant impact on mature tree-lined hedgerow and linear open space between the established residential developments of Kempton Green and Ashbrook. NOTE: Option cuts through a permitted residential development on toris dei or cana' with very significant impact on Sector 246373 - Active Jenning application 2569(20). Option will have very significant visual impact for properties at Ashbrook, Kempton Green, and for users of Martin Savage Open Space and the Royal Canal.	





					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Assessm	ent		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 7 (Fixed Road OvBridge East of Station from Navan Road)	Option 8 (PedCycOvbridge Only on Station footprint with reconfiguration of the station)	Option 9 (Lower the Railway with at grade roadbridge at LX)	
					Road Overbridge East of Ashtown Road with link to Navan Road. This option would involve the construction of a new road in front of Kempton Gardens from the Navan Road and a new bridge over the canal and railway accommodating a cross section of a 8.5 m contragency with 2m Gordsmas and 1.75m, or pole tracks on both sides. The option would bridge over the railway and canal with approach pradents of 9% either side. The nail level at he crossing is approximately 42, m, Oo Main Head and the canal at 33 and with the bridge level over the railway and canal with approach pradents of 9% either side. The route would then the into the new circulation roads through the Pelletstrown Development to the north of the canal. Begranet is white shared to head and 1.5 beycles and pedestriam with a dedicated disabled access along the eastern boundary would be provided of south of the canal intig Ashtom Road to the proposed option. This option introduce traffic to the rear of Martin Swage Park and along Kempton Gardense. Furthermore, it would require the construction of a significant well uncircus on the Navan Road. There would also be impacts on St. Oliver Plunker's GAA club to the south of the railway and would be located this zone house construction of an option with the Ashtom. Pelletstrown SB22 to the north of the rail line and canal. The option ant wellad or can be construction of an agring one mbankments to provide a softer more land acquisition.	This option includes the provision of a new pedsetrian and cycle bridge. 5.0m in width with set down facilities only. The bridge would provide a connection between Astrown news south of the level crossing and a proposed platform between the caral and the atuality. The arrangement of the bridge uillos arrange parallel to and to the rara of the station platforme rising to the aea before turning perpendicular to the track to cross the railway. The arrangement of the bridge uillos caraby parallel to ado to the rara of the station platforme rising to the aeab before turning perpendicular to the track to cross the railway. The rail level at the crossing is approximately 42 Jun OD Malin Head, and the canal at 38.3m with the bridge level core the railway at 50.00m. The range on either side of the bridge level core the rainway at 50.00m. The range on either side of the bridge level core the rainway at 50.00m. The range on either side of the bridge level core the rainway at 50.00m. The range on either side of the bridge level core the rainway at 50.00m. The range on either side of the bridge level core the rainway at 50.00m. The range on either side of the bridge crossing here include the train station, the Royal Canal, the listed railway structures, and the canal bridge. Vehicular traffic will need to dever around the crossing, the diversion being an estimated 4.3km.	Lower railway, new road underbridge at level crossing, demolish Canal bridges. This option provides for lowering the existing railway sufficient to allow the railway pass under a bridge constructed at the level of the existing level crossing. I would require limited toad infrastructure scentro on the existing level crossing. The railway sudfice to the problem be existing water level of the canal upstream and downstream of the level crossing. It would require demolition and reconstruction of the train station at a lower level. The canal would need to be channelised or reliand and retaining walls would be required to support the canal weat of the existing level crossing. The would protoche channelised or reliand and retaining walls would be required to support the canal weat of the existing level crossing. The would protoche canal hidge crossing. The existing protoche canal hidge and clock would likely need to be suspended for the duration of the works.	
					Significant comparative disadvantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options	
		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.	Moves traffic to new route away from current route and therefore introduces traffic - related impacts on other properties. 316 properties within 100m.	Pedestrian crossing will have impacts during construction. 147 dwellings within 100m of both vehicular route and pedestrian crossing. Traffic is removed in during the operational phase and diverted to Ratoath Road, River Road, Nephin Road and the Navan Road.	The construction stage impacts of this option are potentially significant on a greater number of properties due to the 2km extent either side. Operational noise impacts are not expected to change compared to the Do Nothing scenario.	
			Air Quality and Climate	Estimated number of number of recenters	Some comparative disadvantage over other options	Significant comparative advantage over other options	Significant comparative disadvantage over other options	
	Environment	3.2		Estimated number of number of receptors within 50m reviewed as part of appriasal. Options closer to more sensitive locations will have an increased rick of changes in air quality during construction or operational phases. However, qualative criteria are also used where necessary to differentiate between the options.	Moves traffic to new route away from current route and therefore impacts on properties. 100 properties within 50m. Additional road infrastructure would increase embodied carbon for this option. Potential for construction phase dust impact is not significant when mitigation measures are put in place.	Pedestrian crossing will have impacts during construction. 30 dwellings within 50m of pedestrian crossing with only construction phase impacts. Potential for construction phase dust impact is not significant when miligation measures are put in place. Traffic is diverted onto the local read network during the operational phase. Traffic requires rerouting a significant distance however traffic redistribution has not been considered.	The construction stage impacts of this option are potentially significant on a greater number of properties due to the 2km extent either side. The construction phase is also likely to have a great embodied energy and due to the closure of the railway for an extended preiod impact on potential rail users. Potential for construction phase dust impact is not significant when mitigation measures are put in place.	
					Significant comparative disadvantage over other options	Some comparative advantage over other options	Significant comparative disadvantage over other options	
		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.	Option will have a significant visual impact along the canal corridor and for users of the canal (a conservation area in the Dublin City Development Plan). Option will have a very significant visual impact for properties at the north savage Park. Option will have very significant visual impact for properties at the north end of Martin Savage Open Space. Note: Option cuts through a permitted residential development on onth side of canal - with very significant visual for the permitted layout (DCC Ref. 3666/15, ABP ref. PL29N 246373 - Active planning application 2596/20).	The bridge overswings the canal in a visually incongruous manner. Royal canal corridor is identified as a conservation area in the Dublin City Development Plan. Lands south of the canal are zoned open space (29) for the protection, provision and improvement of recreational amenity, open space and green networks.	Significant loss of trees and vegetation along canal and railway corridor. Visual impact for properties along lowered railway / works areas. Significant construction period with associated significant landscape and visual disruption.	





				DART+ WEST - MCA Stage 1			
				Ashtown Level Crossing Assessme	nt		
Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 10 (UnBridge West of Mill, PedOvBridge at Station)	Option 11 (Improvements on Local Road Network, PedOvBridge at Station)		
				Road and cycleway bridge under Railway and Canal West of the Mill and linking to Mill Lane at each end: This option would enail re-cruing Ashtonn Road along its old alignment (pre railway) along assism of Mill.cane, devining through commercial lands to the west of the the railway. The option is proposed to accommodate a consessence of a 68 characteristic of the sector of the railway. The option is proposed to accommodate a cost sector of Mill cane corring date with the failway. The option is proposed to construct a sector of Mill cane and a 3.5 m cycleway to the weat, An expands and dop of would be protein a theoretistic level of Sa. Do Mill Nead, under the railway. The option would console to an approximate level of Sa. Do Mill Nead, under the rail which is a the explose would core to an approximate level of Sa. Do Mill Nead, under the rail which is a the explose would core to an approximate level of Sa. Do Mill Nead, under the rail which is a level of 45.6m at the crossing point. It is proposed to construct a predesting nor cycle bridge at the rain station. The bridge will cater for construction of a new pedestrian, cycle bridge of the existing train station. The will regular exostruct on other dates and emergency whicular access to the station. It is proposed that pedestrian, cycle bridge of the existing train station. This will regular exostruction of the and station. This will regular exostruction of the train station. This will regular exostruction of the train station. This will regular exostruction of the assistant. This solution additional states are approximate level at the displacet area station.	This option includes the provision of a new pedestrian and cycle overbridge at the location of the tran station and local road improvements. The bridge would provide for disabled and mobility impained users. The arrangement of the bridge would allow new for disabled and mobility transmitted the strangement of the bridge would allow new form the station under the footprint of the proposed locativity. The strangement of the bridge would allow new form the strand transmitted to and over the proposed locativity. The strangement of the strand station under the footprint of the proposed locativity. The strangement of the strand station under the footprint of the proposed locativity. The strange strand the strand strange strand strangement and the strand strangement of a sproximately 50.0m. The proposed parapets will be approximately 1.35m high monites income the strangement of the strand strangement of the strand strangement and the strand strangement and approximately 50.0m. The proposed parapets will be approximately 1.35m high monites income the strangement and strangement and the strand strangement the strand strangement and the strand strangement and the strand strangement and the strand strangement production access and rais for purphic byclesc could be installed for direct predestima strains are proposed to be provided with this option also to provide for direct predestima strains are proposed to be provided with this option also to provide for direct predestima strains are proposed to be constrained on a strain charge as straines, and the canal indices. This proper straines are bridge as the new straines are bridge constrained that the straines are bridge constrained the strain station, the Royal Canal, the lister raines and the straines are bridge constrained the straines to the assochargement straines are bridge constrained and the straines are majorimeter straines are bridge constrained and the straines are assochargementation of signal control on the junction of River Road and the R		
				Some comparative advantage over other options	Significant comparative advantage over other options		
	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.	Moves traffic to rear of apt block from current read layout. This option will introduce additional noise to the rear againments while also decreasing road traffic noise levels to the apartments currently facing the front of the apartment block. Construction phase of this option will be more significant due to the excavation required. 206 properties within 100m.	The pedestrian bridge and station upgrades will have some impacts during construction. 673 dwellings within 100m of both vehicular route and pedestrian crossing, however, this option is expected to reduce noise impacts within Ashtown and is expected to result in small scale change in noise levels elsewhere due to traffic redistribution during the operational phase.		
	3.2		Estimated number of number of recenters	Some comparative disadvantage over other options	Significant comparative advantage over other options		
Environment		Air Quality and Climate	Contract number of number of apprisal. 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.	Moves traffic to rear of apt block from current road layout. 117 dwellings within 50m where traffic has been moved from from to back. Embodied carbon for new over and under bridge. Potential for construction phase dus timpact is not significant when mitigation measures are put in place.	Pedestrian cycle bridge and station reconstruction will have minor impacts during construction. 158 dwellings within 50m of both vehicular route and pedestrian crossing, however, this option is expected to reduce air emission impacts within Ashtown. This rating is chosen on the assumption that congestion is not increased elsewhere as a result of the new road arrangement.		
				Some comparative advantage over other options	Some comparative disadvantage over other options		
	3.3	Landscape and Visual (including light)	Key landscape characteristics affected; Impact on landscape character; Impacts on landscapes landscapes. Key visual characteristics affected; Impacts on properties, amenities, protected views, key views.	Option will have a very significant impact on boundary trees/woodlands, entrance gates and lodge at Asbine Methiony House, a protected structure (No 600) Londs of Asbine Thouse and the corridor of the Royal Conal west of Longford Bridge are zoned High Amenity and identified as a Nature Development Area in the Fingal Development Pinc. Option undergassess canal, which reduces landscape and visual impact on canal corridor. Moderate visual impact for setting of 10th Lock on Royal Canal and for mill buildings south of canal. Moderate impact due to removal of roadside tree-lined hedgerows leading to railway.	The footbridge overowings the canal in a visually incongruous manner. Royal canal corridor is identified as a conservation area in the Dublin City Development Plan. Lands south of the canal are zoned open space (29) for the protection, provision and improvement of recreational amenity, open space and green networks. Significant landscape and visual impact associated with construction works on River Road.		





				DART+ WEST - MCA Stage 1	
				Ashtown Level Crossing Assessment	
Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 12 (Road OvBridge West from Navan Parkway Stn, PedCycOvBridge at Ashtown Station)	Option 13 (OvrBridge West of Mill, PedOvBridge at Station)
				Road link between Naven Parkwey Station and the Road network immediately north of Ashtoun Village incorporating a bridge over the railway and canal and a pedestrian cycle bridge over the station in Ashtown. This option would entail re-outing through road traffic away from Ashtown village. The option can accommodate a cross section of a 5 m carrageway with 2m footpath on both sides and 25 m how-way cycle track on the eastern side. An atgrade turning head and drop-off will be provided to the south of Ashtown Station. The length of the option is approximately 300m each side of the road bries and 25 m how-way cycle an approximate deck level of 425 m O D which is a time of a fast on 0 the crossing point. On this southern side a separate potestrian and cycle time in end of 56 m O at the crossing point. On this southern side a separate potestrian and cycle time with a way cross section of 4.0m. It is feasible to cross at this location, as it is upstream of the double lock on the canal and the canal is at the same approximate level as the adjacent railway. This cyclicn would require some property acquisition and modifications to essing accesses. It would pasts through the grounds of the listed Ashton House. The option will provide for a setdown, maintenance and emergency vehicular access to the station. It is proposed that pedestrian, cyclists and disabled users would be accommodated by the construction of a new pedestrian / cycle bridge on the locating of the using train station. This will require reconstruction of the train station.	Read with cycleway under Railway and Canal West of the Mill and linking to Mill Lane at each end: This cyclor would entail re-routing Athtown Read along its of alignment (pre railway) along a section of Mill Lane, diverting through commercial links to the west of the protected mill and passing under both the railway and the Royal Canal to lie into Mill Lane north of the railway. The option is proposed to accommodate a cross section of a 5.m carraigeway with 1.5m rubing strip to the Vest and a 3.6m cycleway to the east. An argrade turning head and drop-th would be provided to be south Afaktomo Station and a set down area north of the canal. An al-grade turning head and drop-off will be provided to the south of Ashtown Station. The length of the cyclema through bridge form of construction would be required similar to the adjuster to the south of Ashtown Ratom and a set of Mill and Wall Need Station. The length of the cyclema through bridge form of construction would be required similar to the adjuster Ratom Road Bridge. A new mini roundabout is proposed at the junction of Mill Lane and Ashtown Road south of the railway to accommodate traffic interactions. It is proposed that pedestrians, cycleis and disable users would be accommodated by the construction of a new pedestrian, cycle bridge on the foothridge of the existing train station. This objetion crosses through the ground of Ashtown House and will require an addicional bridge to be been bendynessing through the system for house and will be accommodate by the construction of a new pedestrian / cycle bridge on the foothridge to the existing train station. This option crosses through the ground of Ashtown House and will require an addicional bridge to be been bendyness of the system for the house the site train station. This option would require some property acquisition.
				Some comparative advantage over other options	Some comparative advantage over other options
	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.	Moves traffic to rear of apt block from current road layout. This option will introduce additional noise to the rear apartments while also decreasing road traffic noise levels to the apartments currently facing the front of the apartment block. Construction phase of this option will be less significant than Option 2 due to less excavation required. 168 dwellings within 100m.	Moves traffic to rear of apt block from current road layout. This option will introduce additional noise to the rear apartments while also decreasing road traffic noise levels to the apartments currently facing the front of the apartment block. Construction phase of this option will be more significant due to the excavation required. 206 properties within 100m.
			Estimated number of number of receptors	Some comparative disadvantage over other options	Some comparative disadvantage over other options
Environment	3.2	Air Quality and Climate	Estimated number of number of receptors within 50m reviewed as part of apprisad. 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.	Pedestrian crossing will have impacts during construction. 94 dwellings within 50m of both vehicular route and pedestrian crossing. Potential for construction phase dust impact is not significant when mitigation measures are put in place.	Moves traffic to rear of apt block from current road layout. 114 dwellings within 50m where traffic has been moved from front to back. Embodied carbon for new bridge and executedion. Potential for construction phase dust impact is not significant when mitigation measures are put in place.
				Some comparative disadvantage over other options	Significant comparative disadvantage over other options
	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.	Option will have a very significant impact on boundary trees/woodlands, entrance gates and lodge at Ashton (Ashtown) House, a protected structure (No. 690). Lands of Ashton House and the corridor of the Royal Canal west of Longford Bridge are zoned High Amenity and identified as a Nature Development Area in the Fingal Development Plan.	Option will have a very significant impact on boundary trees/woodlands, entrance gates and lodge at Asthon (Ashtown) House, a protected structure (No. 699). Lands of Asthon House and the courdor of the Royal Canal west of Longroot Bridge are zoned High Amenity and identified as a Nature Development Area in the Fingal Development Plan.



					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Asses	sment		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Do Nothing	Do Minimum (Close LX)	Option 1 (Online Obr)	
					Leave the current level crossings in place Electrification is implemented without removal of the road traffic interface but with implementation of CCTV control on the barrier system	Closure of the existing crossings with no alternative provided. All traffic would be diverted to alternative routes around the crossing location.	This scheme would require an online structure spanning over the railway and canal. This would lift the existing carriageway by approximately 7.3m above the railway line, accommodating a cross serie of a 6.5m carriageway with 2m dootpaths across the bridge. There would be insufficient with for a cycleway across the bridge. The topography is such that the northern approach (where the ground fails away towards the Tolka River) would necessarily be very steep and would also require significant motifications to the record village cente developments of the area significant motifications to the record village cente developments of the area overground. The length of the approach on the northern side would be approximately 220m and be at a maximum gradient of 9% and 140m on the southern side at a maximum gradient of 5%. The bridge over the rail line would be at an approximate level of 51.9m OD.	
				nd 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 advantage over other options	
3		3.4	Biodiversity (flora and fauna)		No direct impacts.	No direct impacts.	This option is hydrologically connected to European Sites downstream in the Toka Estuary and Dublin Bay. There is no risk of Likey Significant Effects to these sites or any other European Site. There is portainal for impacts to Royal Canal pNHA arising from noise, antificial lighting and impacts to water quality during construction. As the new structure over the railway and canal is aligned with the existing crossing there will be minimal habitat loss and less impact on the overall integrity of the pNHA than some other options.	
					Significant comparative advantage over other options	Significant comparative advantage over other options	Some comparative disadvantage over other options	
	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)	No direct impacts.	No direct impacts.	Indirect impacts on Longford Bridge (RPS No. 693). Potential for indirect impacts to the Royal Canal (RPS No. 944a) and setting of protected structures in the area.	
					. Significant comparative advantage over other options	Significant comparative advantage over other options	. Some comparative advantage over other options	
		3.6	Water Resources	Overall potential significant effects on water resource attributes likely to be affected during construction and operation.	This Option will have neutral impacts on water resources as there will be no changes to the receiving environment. Has a significant comparative advantage over other options.	Removes vehicular traffic borne pollutants and minimal construction phase a no increased flood risk. The Do Minimum Option has a significant comparative advantage compared to other options overall.	This option has the potential to impact on water quality of the Royal Canal during the construction phase of the overbridge. Has some comparative advantage over other options.	



					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Asses	sment		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 2 (Underbridge on Mill Lane)	Option 3 (Overbridge on Mill Lane)	Option 4 & 4a (Road bridge West + PedCycUndBridge)	
					Bridge under railway and canal at MIII Lane: This option would entail re-routing Astroom Road along its old slignment (per Royal Canai) on MII Lane and passing to discomparison of the stress of the stress of the stress of the option can accommodate a cross section of a 6.5m carriageway with 1.5m rabbing strips on both sides between walled approaches. An at-grade turning head and drop-off will be provided to the south of Ashtown Station. The length of the option is approximately 150m on the northern sides and 300m south of the rail line. The point would obly be an approximate level of 32.5m. OD MIIAI Head, under the railway which is a at a level of 45.6m. A new mini roundboolt is proposed at the junction of MIL Lane and Ashtown Road south of the railway that coordinate taffic interactions. It is proposed that pedestrinar, cyclistis and disabled users would be accommodated by teriation. This will require reconstruction of the train station. This requires the switcing ertitores quests to Ashtown Road to only a be able witch or down and a new higher will constructed on a pervised the tootareb of the construction of the protoset be taken down and a new higher will constructed on a new bondary line. This option would require some property acquisition.	Bridge over railway and canal at Mil Lane: This option would entail re-routing Ashtown Road along its old alignment (per Royal Canal) on Mil Lane and passing over both the railway and the Royal Canal. To curlin life impact on Ashtown Stabled road will conly in proceed to be carried along the rad/way. The option cara accommodate a cross section, a Gradents on the proposed road work of the rad/way. The option cara accommodate a cross section, a Gradents on the proposed road work of the rad/way and the Royal Canal. To curling the rad/way. The option cara accommodate a cross section, a Gradents on the proposed road work of the railway would be in excess of 8.0%. An ary ardee turning head and drop-off will be provided to the south of Ashtown Station. The length of the option is approximately form of 25.0m OD Main Head over the railway would be to in sector of 4.6 Km. A haif through bridge form of construction would be to required similar to the adjacent Radard Road Bridge. A new mini roundabout is proposed at the junction of Mil Lane and Ashtown Road south of the railway would be predestinant. cycle bridge on the footbridge of the existing train the proposal tradies of the footbridge of the existing train the the obstitution. This will require the resting strain the two south care to accommodate be the option costese through the gravende of Ashton House and Main the proposal to be construction of a new padestrian / cycle bridge on the footbridge of the existing train the proposal for advance the data the routing would be reproposed in advance to rad throw would as the proposal and the proposal of the proposal for advance the routing would be reproposed readway would be walled along the extert passing through the examined the rain station. This will require a main the routing the costing of the costing or the option of the train station. The stating through the extern would here the accommodate the link to rad. The station house would need to be demolished to accommodate the link to rad.	Radbridge at Neven Parkvery with link to River Road, Selected upgrade works to Rover Road as far as Antown. Pedestrian and cycle underpass at Antown. This option is located approximately 14m to the west of the existing level crossing at Antown at the grade separated junction on the Navan Road serving Procein Park Railway Station. At this location there is acque to construct a new road link, our Ha Road or be designed to parso are it to cross the Toka Brieven Bodelina an onward connection to the Dunaink lands. In the latter case, a short spur would be provided to this to River Road to parso are it to cross the Toka Brieven. In both cases this option would involve some vehicular traffic diversion and land acquisition. The option can accommodate a cross section d a Sin carriageway with 2m toloptahs and Ph form of a minit roundbalout. River coal would require upgrade to Antown with a new looptah constructed along the northern buoking yot the road and requiring the removal of the associated boundary treatment - wals, trees, hursh. The road would be a similar level as the activity particular to the case and rail at a server dargoroamably 55 km cO Mailh Head balon descending to ta institue of any accommodate at a level of 30m. The road on the forecases the advect of the proximately 65 km cO Mailh Head balon descending to ta institue and the descendance of a new and approximately 65 km cO Mailh Head balon descendance the of the mode at a level of 30m. The road on the horthern alds would be at a gradient of approximately 65 km cO Mailh Head balon descendance the of the proximately 65 km cO Mailh Head balon descendance the of the fore state and the advectorial to be an advectorial on the advector the state and a state of 30m and the state theorem the advectorial and an advectorial to head of the River Road at level advectorial to be according to a gradient of approximately 65 km cO Mailh Head balon descendance theorem the state and a state theorem balon includes the construction of a new bridge	
					Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	
3		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.	This option is hydrologically connected to European Sites downstream in the Tolka Estuary and Dublin Bay. There is no risk of Likely Significant Effects to these sites or any other European Site. There is potential for impacts to Royal Canal pNHA arising from noise, artificial lighting and impacts to water quality during construction. During construction of the podestrian/cycle overhidge, water quality in the canal could be impacted during the dewatering required for the realignment of the canal in addition to the demotion of the existing bridge. Works within the canal could impact fish and native white-dawed craftsh which will have to be taken from the water in advance of the works. Demotilion works could also disturb and displace fauna. Badger and their setts could be disturbed during construction leading to set abandoment. Demotition of OId Mill Lane buildings may impact bats but further studies would be required to determine potential impacts on bats.	This option is hydrologically connected to European Sites downstream in the Tolka Estuary and Dublin Bay. There is no risk of Likely Significant Effects to these sites or any other European site. There is potential for impacts to Royal canal pMHA arising from noise, artificial lighting and impacts to water quality tin the canal could be impacted during the dewatering required for the realignment of the canal in addition to the demittion gridge. Works within the canal could be impact fish and native while-clawed craftish which will have to be taken from the water in advance of the works. Demittion works could also disturb and displace fauna. Badger and their setts could be disturbed during construction badf to set standnoment. Demotion of Vol Mit Lane buildings any impact bats but further studies would be required to determine potential impacts on bats. Loss of woodand habitat is anticipated.	This option is hydrologically connected to European sites downstream in the Tolke Estuary and Dublin Bay. There is no risk of Likely Significant Effects to this or any other European site. There is potential for impacts to Royal Canal pNHA atring from noise, artificial lighting and impacts to water quality during construction. During construction of the podestrain-cycle overhridge, water quality in the canal could be impacted during the dewatering required for the realignment of the canal in addition to the demolstrain-cycle overhridge. Works within the canal could impact (fsh and native white-clawed caryfish which will have to be taken from the water in advance of the works). Benotlibin works could also disturb and displace fauna. Works along the north side of River Road have hop total ill impact negatively on water quality in the Tolka River and European sites downstream. Loss of linear woodland and treelinehedgerows which the diver coridor. Disturbance and displacement of fauna may occur where vegetation is removed but further studies would be required to deturmine potential impacts.	
					Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	
	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)	Direct impacts on gate lodge, entrance and demesne associated with Ashton House (RPS 0690). Indirect impacts on mill and outbuildings (RPS 691). Direct impacts on Patietstown House and outbuildings (structures of architectural merit). Polential indirect impacts on Royal Canal (RPS No. 944a) and the Royal Canal 10th Lock (RPS No. 944b). Potential to encounter archaeological deposits that may survive in undeveloped areas and path of former road way.	Direct impacts on gate lodge, entrance and demesne associated with Ashion House (RPS No. 0690). Indirect impacts on mill and outbuildings (RPS No. 691). Direct impact on Pelletstrown House and outbuildings (structures of architectural merit). Potential indirect impacts on Royal Canal (RPS No. 944a) and the Royal Canal 10th. Lock (RPS No. 944b). Potential to encounter archaeological deposits that may survive in undeveloped areas and path of former road way.	Direct impacts on River Tolka and former demesne landscapes associated with Ashtrook (RPS No. 941) & Ashtrown Lodge. Direct impacts on entrance and demesne associated with Ashton House (RPS 860). Indirect impacts on mill and outbuildings (RPS 891). Direct impacts on Pallestown House and outbuildings (structures of architectural merit). Peotential Indirect impacts on Royal Canal (RPS No. 944a) and the Royal Canal 10th Lock (RPS No. 944b). Potential to encounter archaeological deposits that may survive in undeveloped areas.	
					Some comparative disadvantage over other options	Some comparative advantage over other options	Significant comparative disadvantage over other options	
		3.6	Water Resources	Overall potential significant effects on water resource attributes likely to be affected during construction and operation.	Underpass excavations pose potential risk to Groundwater quality and residual flood risk. Has some comparative disadvantage over other options.	This option has the potential to impact on water quality of the Royal Canal during the construction phase of the overbridge. Has some comparative advantage over other options.	Some works north of river road are within floodplain of the river Tolka creating potential increase in flood risk to neighbouring lands. Creates potential pathway for pollutaris to Tolka River resulting on negative impacts to Water Quality. Underpass exervations also pose potential risk to Groundwater quality. Options 44 is disadvantageous actors all sub-criteria and has a significant comparative disadvantageous actors all sub-criteria nd has a significant	



					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Asse	essment		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 4 & 4b (Road bridge West + PedCycOvBridge)	Option 5 (Low Clearance UndBridge East)	Option 6 (Fixed Road OvBridge East of Station)	
					Roadbridge at Navan Perkway with link to River Road. Selected upgrade or works to River Road as fan a Ashtorm, Perkestinin an T-pole overbridge or works to River Road as fan a Ashtorm, Perkestinin an T-pole overbridge or works to River Road as the as Ashtorm, Perkestinin an T-pole overbridge and approximately link to the weat of the existing level crossing at Ashtorm at the grade separated junction on the Navan Road serving Phroam Rafk Railway Station. At this location there is is core to construct anew road link over the canal and railway to link to River Road. This could either descend to lei into River Road or be designed bed counted by the road link over the canal and railway to link to River Road. This could either descend to lei into River Road or be designed to be asso weri it occurs the Tota River and Incluttera an onward connection to the Duraink Maria. In the latter case, a short spur would be provided to approximately to those some which call traffic diversion to River Road is River Road and the advection of a Sin carriageway with 2m dotyme to raid in the removal of the associated boundary treatment - walls, trees. Druh.	Low clearance underhridge at railway and canal east of Ashtown Road. This option would involve construction of a new road link parallel to and south of the nailway before turning onth; crossing junder the rail and canal to conned with Rathome Avenue north of Ashtown Railway Statent canal to conned with Rathome Avenue north of Ashtown Railway Statent and Matrin Sawage Park, residential easter. The route would cross under the railway and canal at right angles before raining an a cutting to join into the existing pictualized and Matrin Sawage Park, residential easter. The route would cross under the railway and canal at right angles before raining an a cutting to join into the existing pictualized and Matrin Sawage Park. The Patietsom Development. The option can accommodate a cross section of a Sam carrageway with 2m fooghards and 1.2m cycle tarkets on tobs take. The railway is at a level of 4.25m OD and the ground level at the canal: 39.25m OD would have the askingtorial of 20.20m OD provides and the fact have more than the railway outd have to be statemader. Due to the training would have to be statemader. Due to the the railway and be added the statemader and the statemade	Read Overbridge East of Achtorm Read. This option would cross the railway and canal approximately 250m east of the existing level crossing. It incorporates a tightly curved plan layout which facilitates a link to the existing Achtorm Total on and Martin Savage Park and would clime to cross over the allway and canal to be into the new circulation rads through the Petelstown Development. The option can accommodate a cross section of a 6.5m carriageway with 2m tooptates and 1.76m optie tracks no that sites. The option can be accounted to trades over the railway and canal to the rail line before descending over the rail and canal. The option can could tracks no thot sites. The option would bridge over the railway and conta with approach gradients of 5%. BL. The road level ensemble to provide a softer texture to the scheme. The protein descending over the rail and canal. The option can be walled or can be constructed with open embankments to provide a softer texture to the scheme. The provision of landscaped embankments would result in a need for more land and would require landstafes from SCIONE Prive Privarks GAA. but, it would pass through lands north of the railway, the subject of existing planning permission for reaidential development within the Aktrown - Pelletstown SDZ.	
					Some comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	
3		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.	This option is hydrologically connected to European sites downstream in the Tokie Estuary and Dublin Bay. There is no risk of Linky Significant Effects to this or any other European site. There is potential for inpacts to Rogal Canal pNHA attingfrom noise, artificial lighting and impacts to water quality during construction. During construction of the podestrain/cycle downtridge, water quality in the canal could be impacted during the dewatering required for the realignment of the canal could impact fish and native white-clawed caryfish which will have to be taken from the water law works. Demotion works could also disturb and displace fauna. Works along the north side of River Road have the potential impact have not be works. Demotinour works could also disturb and tesplace fauna. Works along the north side of River Road have the potential impact have not the request connectivity and disturb dwelling and resting platiats for fauna therefore negatively impacting biodiversity within the river corridor. Disturbance and displacement of fauna may occur where vegetation is removed but further studies would be required to determine potential impacts.	This option is hydrologically connected to European Sites downstream in the Tolka Estuary and Dublin Bay. Construction at Marin Savage Park could result in disturbance to Light-belied Brent Goose (Qualifying Interest of SPAs) which are known forage in significant numbers at this location. There is potential for impacts to Royal Canal pNHA arising from noise, antificial lighting and impacts to water quality during construction. Loss of grassland habitat anticipated.	This option is hydrologically connected to European Sites downstream in the Torka Estuary and Dublin Bay. Construction at Martin Savage Park could result in permanent loss of habitat and disturbance to Light-bellied Brent Goose (Qualifying Interest JSPAs) which are known (orage in significant numbers at this location. There is potential for impacts to Royal Canal pNHA arising from noise, artificial glaving and impacts to water quality during construction. Loss of grassland habitat anticipated.	
					Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative advantage over other options	
	Environment	3.5	Cultural, 5 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)	Direct impact on demesne landscape associated with Ashtown Lodge, which is not a protected structure. Potential for direct impact on the Royal Canal (RPS No. 944a). Potential to encourter on archaeological deposits that may survive in undeveloped areas.	Potential for indirect impacts on the Royal Canal (RPS No. 944a). Potential to encounter archaeological deposits that may survive within undeveloped areas.	Potential for indirect impacts on the Royal Canal (RPS No. 944a). Potential to encounter archaeological deposits that may survive within undeveloped areas.	
					Significant comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options	
		3.6	Water Resources	Sources Overall potential significant effects on water resource attributes likely to be affected during construction and operation.	Some works north of river road are within floodplain of the river Tolka creating potential increase in flood risk to neighbouring lands. Creates potential pathway for pollutants to Tolka River resulting on negative impacts to Water Quality. Options 4b has significant comparative disadvantage over other options.	Underpass excavations pose potential risk to Groundwater quality & residual flood risk. Has some comparative disadvantage over other options.	This option has the potential to impact on water quality of the Royal Canal during the construction phase of the overbridge. Has some comparative advantage over other options.	





					DART+ WEST - MCA Stage 1		
					Ashtown Level Crossing Assessm	nent	
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 7 (Fixed Road OvBridge East of Station from Navan Road)	Option 8 (PedCycOvbridge Only on Station footprint with reconfiguration of the station)	Option 9 (Lower the Railway with at grade roadbridge at LX)
					Road Overbridge East of Ashtown Road with link to Navan Road. This option would involve the construction of a new road in front of Kempton Gardens from the Navan Road and a new bridge over the canal and railway accommodating a cross section of a 5.5m carriageway with 2m cloudsta and 1.7m, or pole tracks on both sides. The option would bridge, over the railway and canal with approach gradients of 9% either side. The nail level at he crossing is approximately 42, mo. On Main Head and the canal at 33 and with the bridge level over the railway and canal with approach gradients of 5% either side. The route would then the into the new circulation roads through the Pelletstown Development to the north of the canal. Bedread secarity on the Pelletstown Development to the north of the canal is described with development on the through the period of south of the canal inding. Althorm Roads to the proposed option. This option introduce traffic to the rear of Martin Savage Park and along Kempton Gardens. Furthermore, it would require the construction of a significant new junction on the Navan Road. The exolution at the instruction of a significant new junction on the Navan Road. The sould also be impacts on St Oliver Pluker's GAA club to the south of the railway and would be located with zone housing development land within the Asthorm. Pelletstown SD2 to the north of the rail line and canal. The option can be walled or can be constructed with open embankments to provide a softer texture to the scheme. The providen of landscaped activation is a softer more land acquistion.	This option includes the provision of a new padestrian and cycle bridge. 5.0m in width with set down facilities only. The bridge would provide a connection between A-Ahhom road south of the level crossing and a proposed platform between the canal and the always. The arrangement of the bridge uities ramps parallel to and to the arear of the station platforme rising to the east before turning perpendicular to the track to cross the railways. The rail level at the crossing is approximately 42.1m OD Malin Head, and the canal at 33.3m with the bridge level over the nalway at 53.00m. The ramps on after side of the bridge will not eased 5% gadded. Solar the ramps on after side of the bridge will not eased 5% gadded. Solar the ramps on after side of the bridge will not eased 5% gadded on it required. Separate pedestrian stairs could be provided with this cotion as well to ease pedestrian access and rails for pushing cycle on it required. Constraints on bridge crossing here include the train station, the Royal Canal, the listed railway structures, and the canal bridge. Vehicular traffic will need to diver around the crossing, the diversion being an estimated 4.3km.	Lower railway, new road underbridge at level crossing, demolish Canal bridges. This option provides for lowering the exating railway sufficient to allow the railway pass under a bridge constructed at the level of the exating thewicrossing. It would require limited road infrastructure works but would require the exating inhwing to be lowered over a length of exponsingly 2 must be the start of the canal upstream and downstream of the level crossing. It would require demolition and reconstruction of the train station at a lower level. The canal would need to be channelised or rained and retaining walls would be required to support the canal west of the existing level crossing. The existing protected canal bridge and locks would likely need to be demoliabed and replaced. It is considered that traffic on the canal and nahway would need to be suspended for the duration of the works.
		3.4			Significant comparative disadvantage over other options	Some comparative disadvantage over other options	Significant comparative disadvantage over other options
3			Biodiversity (flora and fauna)	Potential compliance/conflict with biodiversity objectives; Indirect impacts on protected species, designated sites; Overall effect on nature conservation resource.	This option is hydrologically connected to European Sites downstream in the Tolka Estuary and Dubin Bay. Construction at Martin Savage Park could result in permanent loss of habitat and disturbance to Light-bellied Brent Gosse (Qualifying Interest of SPAs) which are known forage in significant numbers at this location. There is potential for impacts to Royal Canal pNHA arising from noise, artificial lighting and impacts to water quality during construction. Loss of grassland and treeline habitat anticipated.	This option is hydrologically connected to European Sites downstream in the Tolka Estuary and Dublin Bay. There is no risk of Likely Significant Effects to these sites or any other European Site. There is potential for construction and operational stage impacts to Ryad Canal pNHA arising from noise and artificial lighting. During construction of the podestraincycle overhridge, water quality in the canal could be impacted during the devatering required for the realignment of the canal in addition to the demolfism of the existing bridge. Works within the canal could mapact fish and native white-clawed craftish which will have to be taken from the water in advance of the works. Demolitor works could also disturb and displace fauna.	This option is hydrologically connected to European Sites downstream in the Tolka Estuary and Dublin Bay. There is no risk of Likely Significant Effects to this or any other European Site. There is potential for construction and operational stage impacts to Royal Canal pVHA straing form noise and antificial lighting. During the construction stages water quality in the canal could be impacted during the dewatering required for the channelization and reliming of the canal in addition to the demailtion of the canal bridge and locks. Works within the canal could impact fish and native white-clased corylish which will have to be taken from the water in adjunce of the works. Demoliton works could also disturb and displace fauma. Long term closure of the canal will act as barrier to connectivity for Otter and result in loss of forraging resources for Otter and tests which commute and forage along the canal. Badger and their sets could be disturbed during construction leading to set abandomment.
					Some comparative advantage over other options	Some comparative advantage over other options	Significant comparative disadvantage over other options
	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)	Potential for indirect impacts to the Royal Canal (RPS No. 944a). Potential to encounter archaeological deposits that may survive within undeveloped areas.	Potential for indirect impacts to the Royal Canal (RPS No. 944a). Potential to encounter archaeological deposits that may survive within undeveloped areas.	Potential direct impacts on Royal Canal (RPS No. 944a) and the Royal Canal 10th Lock (RPS No. 944b) and direct impact on Longford Bridge.
					. Some comparative advantage over other options	Some comparative advantage over other options	Significant comparative disadvantage over other options
		3.6	Water Resources	Overall potential significant effects on water resource attributes likely to be affected during construction and operation.	This option has the potential to impact on water quality of the Royal Canal during the construction phase of the overbridge. Has some comparative advantage over other options.	Construction works for this option are adjacent to the Royal Canal and has the potential for minor impact on surface water quality during construction. This option however, removes vehicular traffic born polutants and minimal construction phase.	The in-stream works required constitute a flood hazard and is significantly disadvantageous compared to the other options. The construction works within the Royal Canal proposed as part of Option 9 is likely to have a significant negative impact on Surface water quality. Excavations required for lowering of the ratiway vertical alignment also pose potential risk to Grounwater quality. Option is disadvantageous across all water sub-criteria and has a significant comparative disadvantage.
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					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Assessme	nt		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 10 (UnBridge West of Mill, PedOvBridge at Station)	Option 11 (Improvements on Local Road Network, PedOvBridge at Station)		
					Road and cycleway bridge under Railway and Canal West of the Mill and linking to Mill Lane at each end. This option would enail re-roung Astroam Road along its old alignment (pre- railway) along a section of Mill Lane, dweingh through commercial lands to the west of the protected mill and passing under both the railway and the Royal Canal to be into Mill Lane on the of the railway. The option is approade to a commonde a end section and a section and astroam of the odd be protected with a start of a start of the railway. The option is approade to Arithmon Station and a section of Mill and a start of the odd be protected with the railway. The odd the start of the railway is the start of the start of the start of the odd be protected by the odd be been of Arithmon Station and a station and a start of the odd be protected by the odd be protected by the start of the start. The tength of the odd be protected by the odd of the odd be protected by the start of the start start of the start start of the start	This option includes the provision of a new pedestrian and cycle overbridge at the location of the train station and local road improvements. The bridge would provide for disabled and mobility impaired usins: The arrangement of the bridge would allow new station under the footprint of the proposed locating in the bridge would allow new station under the footprint of the proposed locating. The safety area would provide the station under the footprint of the proposed locating. The safety area would provide the footprint of the proposed locating. The safety area would provide the footprint of the proposed locating. The safety area would provide the footprint of the proposed locating. The safety area would be provided bridge one the rain station under the footprint of a sproximately 50.0m. The proposed paragets will be approximately 43.5m high remote from the main access and rains for purphic provided with this option also to provide for direct predetima to access 647 sing for purphic purphics could be installed for reacting at the safety for the safety and the safety and the safety and the station, the Royal Chank. The proposed to be provided for direct predetima cores and rains for purphic purphics could be installed for reacting attracts. And the canal torigot. The safety area would be associated in the safety area would be staticated as a stratege constraint on a 12 mode and through the souther adjust of the read west of Ashton and localised improvements to the east. Where this is adjacent to Ashton House 15 sproposed to and the podestima ways and the notify ling main and the methy and the protected status of the property. It would be necessary to provide public lighting along the methy mode would be necessary to provide public lighting along the methy mode were notice radia and haven and south frames movements will include be minimentation of signal control on the junction of River Road and the Rateath Road.		
					Some comparative disadvantage over other options	Significant comparative disadvantage over other options		
3		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.	This option is hydrologically connected to European Sites downstream in the Tolka Estuary and Dublin Bay. There is no risk of Likely Significant Effects to these sites or any other European site. There is potential for impacts to Royal Canal pNHA arising from noise, and inflicial fighing and impacts to water quality during construction. During construction of the potentiary forget of the site of the site of the site of the site of the potentiary forget of the site of the site of the site of the potentiary forget of the site of the site of the site of the potentiary forget of the site of the site of the site of the potentiary of the site of the site of the site of the site of the potentiary of the site of the site of the site of the site of the site of the site of the potentiary display that Badget and their sites could be disturbed during construction leading to set abandonment. Demolition of of MIII Lare buildings may impact bats buil further studies would be required to determine potential impacts on bats. Loss of woodand habitat is anticipated.	This option is hydrologically connected to European Sites downstream in the Tolka Estuary and Dubin Bay through both the Royal Canal and Tolka River. There is no risk of Likely Significant Effects to these Sites or any other European site. There is potential for construction and operational stage impacts to Royal Canal pNHA arising from noise and artificial lighting. During construction of the podestrian/cycle overhridge, water quality in the canal could be impacted during the dewatering required for the realignment of the canal addition to the demolition of the existing bridge. Works within the canal could impact fish and naive white-cawed crayfish which will have to be taken from the water in advance of the works. Demolition works could also disturb and displace fauna. Works along the north side of River Road have the potential impact negatively on water quality the Tolka River and European sites downstream. Extensive loss of linear woodland and treelineAdegrow habitat along this road will Tagment ecological connectivity and disturb dwelling and resting habitats for fauna therefore negatively impacting biodiversity within the river corridor. Disturbance and displacement of fauna many occur where vegetation is removed but further studies would be required to determine potential impacts.		
					Significant comparative disadvantage over other options	Some comparative advantage over other options		
	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)	Indirect impacts on mill and outbuildings (RPS 691). Potential indirect impacts on Longford Bridge (RPS No. 693 FCC, 907 DCC), Royal Canal (RPS No. 944a) and the Royal Canal 10th Lock (RPS No. 944b). Direct impact on demessen of Ashton House in the immediate vicinity of the gate lodge, which is protected (RPS 0690). Petrolial to encounter archaeological deposits that may survive in undeveloped areas and path of former road way.	Potential for indirect impacts to Longford Bridge (RPS No. 693), the Royal Canal (RPS No. 944a). Potential to encounter archaeological deposits that may survive within undeveloped areas.		
					Some comparative disadvantage over other options	Some comparative advantage over other options		
		3.6	Water Resources	Overall potential significant effects on water resource attributes likely to be affected during construction and operation.	Underpass excavations pose potential risk to groundwater quality and residual flood risk. This option also has some minor potential impacts on surface water from the construction of the patentiaria / cyclet overhidge. Has some comparative disadvantage over other options.	Construction works for this option are adjacent to the River TolkaRoyal Canal and has the potential for minor impact on surface water quality during construction of the overbridge. Potential impacts on River Tolka are greater over other options. This option however, removes velocitar traffic borne pollutants by removing traffic at the Royal Canal. Overall, minimal construction works are required for this option when compared to other options.		



					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Assessment			
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 12 (Road OvBridge West from Navan Parkway Stn, PedCycOvBridge at Ashtown Station)	Option 13 (OvrBridge West of Mill, PedOvBridge at Station)		
					Road link between Navan Parkway Station and the Road network immediately north of Ashtown Village incorporating a bridge over the railway and canal and a pedestrian cycle bridge over the station in Ashtown. The option would entail re-routing through road traffic away from Ashtown Village. The option can droad the station of the station of the station of the station of the station in Ashtown. The length of the option is approximately 300m each add of the rail line and canal. The option would rest to an approximate deck level of 252 m Ob which is a state of 4.6 m Ob at the crossing point. On the southern aids a deck level of 252 m Ob which is a state of a 4.6 m Ob at the crossing point. On the southern aids a deck level of 252 m Ob which is a state of a 4.6 m Ob at the crossing point. On the southern aids a costs for non-motorised use these would have cross section of 4.0 m. It is feasible to cross at this location, as it is upstream of the double lock on the canal and the canal is at the same approximate level as the adjust pass through the grounds of the lated Ashton House. The option will provide for a settown, maintenance and emergency vehicular access to the station. It is proposed that pedestrians, cyclists and disabled users would be accommodated by the construction of new pedestrian / cycle bridge on the location due station. This will require reconstruction of the train station.	Read with cycleway under Railway and Canal West of the NIII and linking to NIII Lane at each end: This ciption would entail re-routing Althours Read along its dialignment (pre railway) along a section of MIII Lane. Here there are always along a section of MIII Lane. Yes and the Read Canal to the wise of the protected mill and present of the protected mill and the present of the protected mill and present of the protected million of the section of the section of the protected million of the section of		
					Some comparative disadvantage over other options	Some comparative disadvantage over other options		
3		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.	This option is hydrologically connected to European Sites downstream in the Tolka Estuary and Dublin Bay. There is no risk of Likely Significant Effects to these sites or any other European Site. There is potential for impacts to Royal Canal pNHA arising from noise, artificial lighting and impacts to water quality during construction. During construction of the pedestriar/ycied everhiding, water quality in the canal could be impacted during the dewatering required for the realignment of the canal in addition to the demolition of the existing bridge. Works within the canal could impact fish and native white-clawed cargifish which will have to be taken from the water in advance of the works. Demolition works could also disturb and displace fauna. Badger and their sets could be disturbed during construction leading to set abandomment. Demolition of Old Mill Lane buildings may impact bats but further studies would be required to determine potential impacts on table. Loss of woodland, scrub and grassland habitat is anticipated.	This option is hydrologically connected to European Sites downstream in the Toka Estuary and Dublin Bay. There is no risk of Likely Significant Effects to this or any other European site. There is potential for impacts to Reyal Canal pNHA arising from noise, artificial lighting and impacts to water quality during construction. During construction of the pedestrainVojcle overhrödpe, water quality in the canal could be impacted during the dewatering required for the realizing ment of the canal in addition to the demolition of the existing bridge. Works within the canal could impact fish and native white-dawed crayfish which will have to be taken from the water in advance of the works. Demolition works could also disturb and displace fauna. Demolition of Old Mill Lane buildings may impact bats but further studies would be required to determine potential inpacts on bats. Loss of woodland and grassland habitat is anticipated.		
					Significant comparative disadvantage over other options	Significant comparative disadvantage over other options		
	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)	Direct impacts on entrance and demesne associated with Ashton House and indirect impact on setting of Ashton House (RPS No. 0690). Indirect impacts on mill and outbuildings (RPS No. 0890). Indirect impacts on Royal Canal (RPS No. 944a) and the Royal Canal 10th Lock (RPS No. 944b). Potential to encounter archaeological deposits that may survive in undeveloped areas and path of former road way.	Direct impacts on entrance and demesne associated with Ashton House (RPS 0690), though at a further distance from Ashton House than option 12. Indirect impacts on mill and outbuildings (RPS 981) and Pelletstown House (structure of architectural merit). Potential indirect impacts on Ryay Canal (RPS No. 944a) and the Ryay Canal 10th Lock (RPS No. 944b). Potential to encounter archaeological deposits that may survive in undeveloped areas and path of former road way.		
					. Some comparative advantage over other options	Some comparative advantage over other options		
		3.6	Water Resources	Overall potential significant effects on water resource attributes likely to be affected during construction and operation.	This option has the potential to impact on water quality of the Royal Canal during the construction phase of the road and the pedestrian / cyclist overbridge. Has some comparative advantage over other options.	This option has the potential to inpact on water quality of the Royal Canal during the construction phase of the road and the pedestrian / cyclist overbridge. Has some comparative advantage over other options.		



					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Assess	sment		
Paran	neter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Do Nothing	Do Minimum (Close LX)	Option 1 (Online Obr)	
					Leave the current level crossings in place Electrification is implemented without removal of the road traffic interface but with implementation of CCTV control on the barrier system	Closure of the existing crossings with no alternative provided. All traffic would be diverted to alternative routes around the crossing location.	This scheme would require an online structure spanning over the railway and canal. This would lift the existing carriageway by approximately 7.3m above the railway line, accommodating a cross section of a 5.5m carriageway with 2m boopaths across the bridge. There would be insufficient with for a cycleway across the bridge. The topography is such that the northern approach (where the ground falls away bounds the Tridke New Yould Incourse) by early take and vould also require significant modifications to the northern approach (where the ground falls away compround). The length of the approach on the northern side would be approximately 220m and be at a maximum gradient of 5% and 140m on the southern side at a maximum gradient of 5%. The bridge over the all line would be at an approximate level of 61.5m OD.	
					Significant comparative advantage over other options	Significant comparative advantage over other options	. Some comparative disadvantage over other options	
		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.	No direct impacts.	No direct impacts.	The agricultural impact will have a significant impact on Ashtown Stables. The non-agricultural impact will include a significant impact on one residential property.	
				Soils and Geology and likely impact on geological resources based on	Significant comparative advantage over other options	Significant comparative advantage over other options	- Some comparative advantage over other options	
Enviro	Environment	3.8	Geology and Soils (including Waste)	preliminary/likely construction details. Soil or topsoil 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.	No direct impacts	No direct impacts	Overbridge options require fill import to the sile for construction over existing readway (Minor negative). Potential for ground contamination is considered low, subject to further investigation. Comparative advantage is considered as construction is proposed on existing route and unlikely to encounter new areas of soft ground or contamination.	
					Some comparative advantage over other options	Some comparative advantage over other options	. Some comparative disadvantage over other options	
		3.9	Radiation and Stray Current	Stray 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.	



				DART+ WEST - MCA Stage 1			
				Ashtown Level Crossing Asses	sment		
Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 2 (Underbridge on Mill Lane)	Option 3 (Overbridge on Mill Lane)	Option 4 & 4a (Road bridge West + PedCycUndBridge)	
				Bridge under railway and canal at Mill Lane: This option would entail re-routing Astitoom Road along its old alignment (pre Royal Canal) on Mil Lane and passing moder both the aliays and the Royal Canal. To curtail the impact on Ahlown Stabled road traffic only is proposed to be carried under the railway. The option can accommodate a cose section of a 6.5 million carriagent with 11.5 muching strips on both side between walled approaches. An at-grade turning head and drop-off will be provided to the south of Ashtown Station. The length of the option is approximatively 150m on the northern side and 300m south of the rail line. The option would drop to an approxamate level of 3.5 m. OD Main Head, south of the railway to accommodate of 45.6 m. A new mini roundabout is proposed at the junction of Mil Lane and Ashtown Road south of the railway to accommodate and 46.6 m. It is proposed that predestrian, cyclicle bridge on the footbridge of the existing train attrain the moderstrian / cyclic bridge on the footbridge of the existing train attrain the million of the canal to be taken down and a new higher wall construction of the train attaion. This option would require some property acquisition.	Bridge over railway and canal at Mill Lane: This option would estail re-routing Ashtown Read along its of alignment (ora Royal Canal) or Mill Lane and passing over both the alively and the Royal Canal: To cattail the impact on Ashtown Stabild road attail cony is proposed to be carried along the ondewy. The option can accommodate a cross section a 4.5m carried away mith .5m option stabils between walled approaches. Gradents on the proposed road north of the railway would be in excess of 8.0%. An at-grade turning head and drop-off will be provided to the south of Ashtown Station. The length of the colin is approximately 550m on the contriber aids and 300m or 100 Mail: Head over the railway which is, an tability 550m on the contriber aids and 300m would be required similar to the adjacent Ratasth Road Bridge. A new mini roundabout is proposed at the junction of Mill Lane and Ashtown Road south of the railway to a an evel et 45.6m. A hard through holes form of construction would be required similar to the adjacent Ratasth Road Bridge. A new mini roundabout is proposed at the junction of Mill Lane and Ashtown Road south of the railway to a new poststmain cycleib and on the foothing of the accommodate the the construction of a new poststmain cycleib and on the foothing of the accommodate the the construction of a new poststmain cycleib and on the foothing of the construction of the construction on a new poststmain and cycle bridge on the construction on the tables to the adjacent to be adjacent and the poststmain the adjacent to be a	Roadbridge at Navan Parkway with link to River Road, Selected upgrade works to River Road as the as Anthown, Pedestrian and cycle underpass at Anthown. This option is located appointantly from to be ward of the existing level crossing at appoint is located appointantly from the ward of the existing level crossing at an and any to link to New Road The Constitution and the constitution of the Railway Station. At this location there is scope to construct a new road link over the constant and railway to link to New Road The Const after Bayer and facilitate an onward concellon to the Dumik lands. In the latter case, a short and acqualitor. The option tank to designed to pass over it to cross the Tolka River and facilitate an onward link to River Road which would need uggrade as fir as Antown. In bot cases this option would incide some vehicular transf devices and that acqualision. The option can accommodule a cross section of a 8.5m campaon with 2m toppaths and her torm of an introndobul. River card would require upgrade to Antown with new loopian constructed along the northern boundary of the road and requiring the removal of the associated boundary treatment—when keys treats. The road would be at a similar fewel as the sociated boundary treatment—when the resting to be into the a gradent of approximately 65.5m cm 30m if permitted to flow a meending route as gradent of approximately 65.5m cm 30m if permitted to flow a newdring route the orther the associated boundary to alonger the case and railway at Atathown to provide pedestrian and cycle access (Option 4A). This points what the existing and route line with a 4m wide cross section.	
	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.	Significant comparative disadvantage over other options The agricultural impact will have a profound impact on Ashtown Stables. The non-agricultural impact will include a significant impact on one residential property. The remaining residential, commercial and amenity property impacts will be slight.	Significant comparative disadvantage over other options The agricultural impact will have a profound impact on Ashtown Stables. The non- agricultural impact will include a moderate impact on Ashtown House lands. The remaining residential, commercial and amenity property impacts will be slight.	Significant comparative disadvantage over other options The agricultural impact will have a profound impact on Ashtown Stables. The non-agricultural impact will have a significant impact on one residential property. The remaining residential, commercial and amenity property impacts will be stight.	
			Soils and Geology and likely impact on geological resources based on	. Some comparative disadvantage over other options	- Some comparative advantage over other options	. Some comparative disadvantage over other options	
Environment	3.8	Geology and Soils (including Waste)	georogical resources based on preliminary/likely construction details. Soil or topsoil 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, oils and ouarries	Underbridge option means that some materials may arise, which could possibly be suitable for reuse elsewhere on the project (Minor positive). This is balanced by an associated impact of interfering with the canal and existing railway, which may require specific materials be imported. Involves other geotechnical risks to design and construction which would require further studies and design information.	Overbridge options require fill import to the site for construction over existing readway (Minor negative). Potential for ground contamination is considered low, subject to further investigation. Comparative advantage is considered as construction is proposed on existing route and unlikely to encounter new areas of soft ground or contamination.	Fill import requirements (Minor negative). Option 4A footbridge has higher comparative earthworks needs, interfering with the canal and existing railway, which may require specific materials be imported. Involves other geotechnical risks to design and construction which would require further studies and design information.	
				Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	
	3.9	Radiation and Stray Current	Overall likely impact on existing sources of electromagnetic radiation.	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.	It is assumed that the routing of the cabing, 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.	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. Al Do-Something options are comparable from an EMI perspective at this stage in the assessment.	



				DART+ WEST - MCA Stage 1			
				Ashtown Level Crossing Asse	essment		
Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 4 & 4b (Road bridge West + PedCycOvBridge)	Option 5 (Low Clearance UndBridge East)	Option 6 (Fixed Road OvBridge East of Station)	
				Roadbridge at Navan Parkway with link to River Road, Selected upgrade works to River Road as far as Ashtown, Pedestrian and cycle overbridge on the footprint of the reconfigured table and attable on the solution of the approximately funn to the west of the existing level crossing at Ashtown at the solution attable west of the existing level crossing at Ashtown to the approximately funn to the west of the existing level crossing at Ashtown to the solution attable solution there is socied to be construct an evolution of the crossing at Ashtown to the crossing at Ashtown to the crossing and railway to link to River Road. This could either descend to lis into River Road or be designed and which would new durged as at rate and facilitate an onward connection to the Duraink fands. In the latter crass, a short spur would be provided to link to River Road which would new durged as the rate. Ashtown it host cases the option would involve some whickait table diversion and land acquisition. The data of 1.75m cycle trads on choh alides. Short term connection to River road is likely to be in the form of a mini crundabour. River road would require upgrade to dathown with an ediporticity and the astign junction. Phoenix Park crossing would be at a similar fewila as the existing junction. Phoenix Park crossing would be at a similar fewila as the existing junction. Phoenix Park crossing would be at a gradent of approximately 6% over 3000 file methods pairs for long a meandering route. Do Mini Head, and the containg cable approvide pairs before descending to lis in Diversition the existing cable approximately 6.2 im DO Mini Head, and the containg cable approvide pairs of a synameter podestrian ciples that contains cable approximately 4.2 im DO Mini Head, and the contain cable approximately 4.2 im Do Mini Head, and the contain as 2.3 m with the bridge level over the rainway at probase podestrian ciples access and rains for public opponent be covered 6% gradent. Separate podestrian statis access and rai	Low clearance underbridge at railway and canal east of Ashtown Road. This option would involve construction of a new road link parallel to and south of the main years where the standard of the main and canal to construct with the standard of the main and canal to construct with the standard of the main and canal to construct the standard of the main and canal to construct with the standard of th	Road Overbridge East of Ashtown Road. This option would cross the railway and carai approximately 250m aast of the existing level crossing. It nocromets a big/bit counce the in logical works for the existing head crossing. It nocromets a tai bit counce the inlowed works for the state of the existing head caral to be existing head caral to be the existing head caral to be in the new circulation rais strong the Peterletanon Development. The option can accommodate a cross section of a 6.5m carriagoway with 2m toppaties and 1.76m cycle tracks on both sides. The counce of the state of the carait and 3.3m above MSL with the bridge level over the railway add carab to be carait as 3.3m above MSL with the bridge level over the railway add carab to be railed to the caraital as 3.3m above MSL with the bridge level over the railway add carab to be carait as 3.3m above MSL with the bridge level over the railway add carab to be caraited as 3.3m above MSL with the bridge level over the railway add carab to be caraited as 3.3m above MSL with the bridge level to the tail the rail and the caraital as 3.3m above MSL with the bridge level to the state to the state to a the state of the rail and caraal. The option can be walled or can be constructed with option embankments to provide a schet rotate to be scheme. The provision of landscaped embankments would result in a need for more lind acquisition. The option would introduce traffic along the northern boundary of Martin Swage Park divide require indicates from SOID (1000 Provides active to the scheme. The provision of landscaped embankments would result in a need for the railway advelopment within the Aktown - Pelletstown SD2.	
				. Some comparative advantage over other options	. Some comparative disadvantage over other options	Some comparative disadvantage over other options	
	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.	The agricultural impact will have a slight impact on Ashtown Stables. The non-agricultural impact will have a significant impact on one residential property. The remaining residential and commercial property impacts will be slight.	The agricultural impact will have a slight impact on Ashtown Stables. The non- agricultural impact will have significant impacts on a development groomty (with planning permission (Ref. 1954/51) for residential development) and on St. Oliver Plunkett Club lands. The remaining residential and commercial property impacts will be slight.	The agricultural impact will have a slight impact on Ashtown Stables. The non- agricultural impact will have significant impacts on a development property (with planning permission (Ref. 456/15) for residential development) and on a playing pitch on St. Oliver Plunkett Club lands. The remaining residential and commercial property impacts will be slight.	
			Soils and Geology and likely impact on geological resources based on	- Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options	
Environment	3.8	Geology and Soils (including Waste)	perliminary/likely construction details. Soil or topsoil 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.	Fill import requirements (Minor negative). Option 4b limited to existing looptrint (minimal impact) however dfffculties in interaction with existing platform structures - survey / investigation required to manage geotechnical risks.	Underbridge option means that some materials may arise, which could possibly be suitable for reuse elsewhere on the project (Minor positive). This balanced by an associated impact of Interfering with the canal and existing railway, which may require specific materials be imported. Involves other geotechnical risks to design and construction which would require further studies and design information.	Some made ground on-site (requires walkover survey / investigation). Overbridge options require increased fill import to the site (Minor negative).	
				Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	
	3.9	Radiation and Stray Current	Overall likely impact on existing sources of electromagnetic radiation.	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.	It is assumed that the routing of the cabling, the location of existing subtations, hube 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.	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.	



				DART+ WEST - MCA Stage 1		
				Ashtown Level Crossing Assessm	ent	
Parameter Criteria Sub-Criteria (Quantitative/ Qualitative)		Option 7 (Fixed Road OvBridge East of Station from Navan Road)	Option 8 (PedCycOvbridge Only on Station footprint with reconfiguration of the station)	Option 9 (Lower the Railway with at grade roadbridge at LX)		
				Road Overbridge East of Abhtown Road with link to Navan Road. This option would involve the construction of a new road in front of Kempton Gardens from the Navan Road and a new bridge over the canal and railway accommodating a cross section of a 5.5m carriageney with 2m dorabats and 1.7m, or pole tancks on both sides. The option would bridge over the railway and canal with approach gradients of 6% either side. The rail level at the crossing is approximately 42, rm, OD Main Head and the canal at 33 and with the bridge level over the railway and canal with approach gradients of 5% either side. The route would then the into the new circulation roads through the Pelletstown Development to the north of the canal. Bedreads development and and the canal at 33 and pedestinam with a dedicated Galabide access along the eastern Dourdary would be provided of south of the call ining. Athiom Roads to the proposed option. This option introduce traffe to the rear of Martin Savage Park and along Kempton Gardens. Furthermore, it would require the construction of al significant two junction on the Nana Road. There would also be impacts on St Oliver Pluker's GAA club to the south of the railway and would be located within zone hous construction of al significant would require the construction of a significant would require the construction of al significant would be located with no achtower the rail line and canal. The scheme is the welled or can be constructed with given embankments to growide a softer more land acquisition.	This option includes the provision of a new padastrian and cycle bridge. 5.0m in width with set down facilities only. The bridge would provide a connection between Arabnam nead south of the level crossing and a proposed platform between the carried and the atuation platforme rising to the east before turning perpendicular to the track to cross the station platforme rising to the east before turning perpendicular to the track to cross the rail evel at the crossing is approximately 42.1m OD Malin Head, and the canal at 38.3m with the tridge level over the nailway. Segarate padestrian statirs could be provided with this option as well to ease pedestrian statirs could be provided with the isoften and could be grounded with a could be a could be train attach. The Royal Canal, the listed railway structures, and the canal bridge. Vehicular traffic will need to dever around the crossing, the diversion being an estimated 4.3km.	Lower railway, new road underbridge at level crossing, demolish Canal bridges. This option provides for lowering the existing railway sufficient to allow the railway pass under a bridge constructed at the level of the existing level crossing, it would require limited road infrastructure works on the level of the existing level crossing. It would require lower both the existing water level of the canal upstream and downstream of the level crossing. It would require demolition and reconstruction of the train station at a lower level. The canal would need to be channelsed or reliand and retaining walls would be required to support the canal west of the existing level crossing. The existing protected canal bridge and locks would level he be demolished and replaced. It he works.
				- Some comparative disadvantage over other options	Significant comparative advantage over other options	Significant comparative advantage over other options
	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.	The non-agricultural impact will have significant impacts on a development property (with planning permission (Ref. 3666/15) for residential development) and on two playing pitches in St. Oliver Plunkett's Club. The remaining residential and commercial property impacts will be slight.	The agricultural impact will have a slight impact on Ashtown Stables. The non- agricultural impact will have a slight impact on amenity lands including Martin Savage Park and St. Oliver Plunket Club lands.	The agricultural impact will have a slight impact on Ashtown Stables. The non-agricultural impact will involve impacts on the existing Ashtown train station which is proposed to be demolished and then reconstructed. The remaining works will occur within the confines of existing railway corridor therefore no significant impacts.
			Soils and Geology and likely impact on geological resources based on	Some comparative disadvantage over other options	- Significant comparative advantage over other options	Significant comparative disadvantage over other options
Environment	3.8	Geology and Soils (including Waste)	getological resoluces based off or topsoil 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, nits and quarries	Some made ground on-site (requires walkover survey / investigation). Overbridge options require increased fill import to the site (Minor negative). This option appears to have the highest earthworks needs.	Development limited to existing footprint with minimal/low fill import requirements (minimal impact) however difficulties in interaction with existing platform structures - survey / investigation required to manage geotechnical risks.	Although overbridge and approach roads construction requires less fill import to the site, the arisings from the railway lowering are much more likely to include ground contamination (considered medium to high risk, subject to further investigation). No pits or quarrise are resent. Comparative diadvantage is due to likelihood of ground contamination and more extensive length of works interfacing the canal.
				Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
	3.9	Radiation and Stray Current	Overall likely impact on existing sources of electromagnetic radiation.	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.	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.	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.



				DART+ WEST - MCA Stage 1			
				Ashtown Level Crossing Assessme	nt		
Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 10 (UnBridge West of Mill, PedOvBridge at Station)	Option 11 (Improvements on Local Road Network, PedOvBridge at Station)		
				Road and cyclevery bridge under Railway and Canal West of the MII and linking to MII Lane at each end: This option would enail re-onling Ashtonn Road along its old alignment (pre railway) along a section of MIL and e., diverting trought commercial lands to the west of the protected mII and passing under both the railway and the Royal Canal to is into MII Lane north of the railway. The option is proposed to accommodate a consistencial or a 5-an craingeway with 1.5m rubbing strip to the west and a 3.5Em cycleway to the east. An ad-rade turning head and drop of would be option is approposed to Alshtonn Station and a set down area north of the canal to the option is appropriate level of 3.5m. ON Main Head, under the rail which is a level of 4.5Em of the trans station. The bridge will caste for the option would drop to an approximate level of 3.5m. ON Main Head, under the rail which is a level of 4.5Em at the crossing point. It is proposed to construct a prodestimate level of 3.5m. ON Main Head, under the rail which is a disabled and mobility impland users. The option will provide for a setdom, main amergency whicular access to the station. It is proposed that pedestrians, cyclistis and disabled users would be accommodated by the construction of a new pedestrian's cyclistis and disabled users would be accommodated by the construction of a new pedestrians is a degree railway. This option would require some property acquisition and modifications to existing accesses.	This option includes the provision of a new padestrian and cycle overbridge at the location of the train station and local road improvements. The bridge would provide for disabled and mobility impaired users. The arrangement of the bridge would allot neested maps parallel to and over the station pations rising to the sast before turning parpedicular to the track to cross the railway. This option register excontinuition arrangement of the proposed footbridge. The rail level at the crossing is approximately 42.1 m to OD Main Need and the caral water level is approximately 30.3 m. The waking surface on the proposed Drdge over the railway rises to a level of approximately 30.3 m. The vaking surface on the proposed Drdge over the railway rises to a level approximately 30.3 m. The vaking surface on the proposed Drdge over the railway rises to a level of approximately 30.3 m. The vaking surface to the like railway. The range on ethnol way rises to a level approximately 30.3 m. The vaking surface to the like railway. The range on ethnol way rises to a level approximately 30.5 m. The proposed parapets will be approximately 3.5 m high remote for direct padestrian access and rails for purphing brightee dud be installed for direct padestrian access and rails for purphing brightee dud be level at level a level approximately 30.4 m. The Remote surface on the proposed abuse to the Rem Rouk the train station, the Royal Canal, the listed railway structures, and the canal tridge. This option provides the results of the rail way at the rail is a proposed to the property. It would be necessary to provide public lighting along the abarton those is appropated to and the kawan Ada Calas and the Researable lighting along the material method status of the property. It would be necessary to provide public lighting along the material method status of advence in dur rail of the kawan method and the kawan Ada Cala to the protected status of the property. It would be necessary to provide public lighting along the materi		
	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.	Significant comparative disadvantage over other options The agricultural impact will have a slight impact on Ashtown Stables. The non-agricultural impact will include a produoid impact on one commercial (Burke Bros Lid.) property and significant impacts on one commercial aproperty (Sowars) and development property. The remaining residential, commercial and amenity property impacts will be slight.	Significant comparative advantage over other options The agricultural and non-agricultural property impacts will have slight property impacts associated with upgrade of local road network including River road from Dunsink Lane to Rathoath Road.		
			Soils and Geology and likely impact on geological resources based on	- Some comparative disadvantage over other options	- Significant comparative advantage over other options		
Environment	3.8	Geology and Soils (including Waste)	geological resources based on preliminary/likely construction details. Soil or topsoil 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, oils and ouarries.	Underbridge option means that some materials may arise, which could possibly be suitable for reuse elsewhere on the project (Minor positive). Some made ground on-site (requires walkover survey / investigation). Associated impact of interfering with the canal and existing railway, which may require specific materials be imported. Invokes other geotechnical risks to design and construction which would require further studies and design information.	Road network improvements on-line mainly within existing footprint with minimal/ow fill import requirements (minimal impact). Minor impact for podestrian overbridge plus this has difficulties in interaction with existing platform structures - survey / investigation required to manage geotechnical risks.		
				Some comparative disadvantage over other options	Some comparative disadvantage over other options		
	3.9	Radiation and Stray Current	Overall likely impact on existing sources of electromagnetic radiation.	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.	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 form an EMI perspective at this stage in the assessment.		



				DART+ WEST - MCA Stage 1		
				Ashtown Level Crossing Assessment		
Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 12 (Road OvBridge West from Navan Parkway Stn, PedCycOvBridge at Ashtown Station)	Option 13 (OvrBridge West of Mill, PedOvBridge at Station)	
				Road link between Naver Parkwey Station and the Road network immediately north of Ashtown Village incorporating a bridge over the railway and canal and a pedestrian cycle bridge over the station in Ashtown. This option would entail re-outing through thoat traffic awy from Ashtown village. The option can accommodule a cross section of a 65 m carriageway with 2m footpath on both sides and 25 mm. We have very cycle track on the eastern side. An atgrade turning head and drop-off will be provided to the south of Ashtown Station. The length of the option is approximately 300m each side of 45 mm Oat the crossing point. On the southern side a separate pedestrian and cyclist link and link to the riding school are proposed to maintain access for non-motivised use these would have cross section of 4.0m. It is feasible to cross at the adjacent railway. This option would require some property acquisition and modifications to estimy accesses. It would pass through the ground the link of the land Ashtom House. The option will provide for a setdown, maintenance and emergency vehicular access to the station. It is proposed that pedestrian, cyclists and disabel users would be accommodated by the construction of a new pedestrian / cycle bridge on the looting of the sitian fails on the train station. This will require reconstruction of the train station.	Road with cycleway under Railway and Canal West of the Mill and linking to Mill Lane at each end: This option would ential re-routing Ashtom Road roug its old alignment (fore railway long a section of Mill Lane, diverting through commercial lands to the wate of the protected mill and passing under both the railway and the Royal Canal to the into Mill Lane north of the railway. The option is proposed to accommediate a cross section of a 5.m craitgeway with 1.5m rubbing strip to the West and a 3.66m cycleway to the east. An at-grade turning head and drop-off would be provided to the south of Ashtom Road and a set down area enoth of the canal. An at-grade turning head and drop-off will be provided to the south of Ashtom Station. The length of the option is approximately 150m on the northern side and 300m south of the rail lane. The significant of the south of Ashtom Road and Bridge. A new mini roundabout is proposed at the junction of Mill Lane and Ashtom Road south of the canal. This length of the optionsis, cyclist and disabled users would be accommodate traffic interactions. It is proposed that products and the frank and the train lane. This option croates through the grounds of Ashtom Roads and the train lane. This option croates through the grounds of Ashtom Roads and Hardom and additional bridge too will require econstruction of the train station. This option croates through the grounds of Ashtom Roads and Hardom and additional bridge too will equire econstruction of the train station. This option croates through the grounds of Ashtom Roads and Hardom and additional bridge too would need to be house. It ashtom villes, a proposed roadway would be would need to be demolifiable accommodate the link road. This option would require some property acquisition.	
	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 The non-agricultural impact will have a moderate impact on Ashtown House lands and one development property. The remaining amenity property impacts will be slight.	Significant comparative disadvantage over other options The agricultural impact will have a slight impact on Ashtown Stables. The non-agricultural impact will note a profound impact on one commercial (Burke Bros Ld.) property and significant impacts on one commercial property (Gowans) and one development property. It will also include a moderate impact on Ashtown House lands. The remaining residential, commercial and amenity property impacts will be slight.	
			Soils and Geology and likely impact on geological resources based on	- Some comparative advantage over other options	. Some comparative advantage over other options	
Environment	3.8	Geology and Soils (including Waste)	geological resources based on preliminary/likely construction details. Soil or topsoil 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, oils and ouarries.	Some made ground on-site (requires walkover survey / investigation). Road overbridge has fill import requirements (minor negative impact). Minimal impact for pedestrian/station overbridge but this has dfficulties in interaction with existing platform structures - survey / investigation required to manage geotechnical risks.	Some made ground on-site (requires walkover survey / investigation). Road overbridge has fill import requirements (minor negative impact). Minimal impact for pedestrian/station overbridge but this has difficulties in interaction with existing platform structures - survey / investigation required to manage geotechnical risks.	
				Some comparative disadvantage over other options	Some comparative disadvantage over other options	
	3.9	Radiation and Stray Current	Overall likely impact on existing sources of electromagnetic radiation.	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.	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.	



					DART+ WEST - MCA Stage 1			
			_	-	Ashtown Level Crossing Asses	sment	-	
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Do Nothing	Do Minimum (Close LX)	Option 1 (Online Obr)	
					Leave the current level crossings in place Electrification is implemented without removal of the road traffic interface but with implementation of CCTV control on the barrier system	Closure of the existing crossings with no alternative provided. All traffic would be diverted to alternative routes around the crossing location.	This scheme would require an online structure spanning over the railway and canal. The would lit the existing carriageway by approximately 7.3m above the railway line, accommodating a cross section of a 6.5m carriageway with 2m obopaths across the bridge. There would be insufficient width for a cycleway across the bridge. The toography is such that the northern approach (where the grouce fails away lowards its for 16 Relay would necessify bas way taken and would be require aignificant modifications to the recent willage contra developments of the area overground. The length of the approach on the northern side would be approximately 220m and be at a maximum gradient of %K and 140m on the southern side at a maximum gradient of 5%. The bridge over 11.1m would be at an approximate level of 51.9m OD.	
			Impact on Vulnerable Groups	Impacts on low income groups, non-car owners, mobility impaired, visually impaired and people with a disability.	. Significant comparative disadvantage over other options	. Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	
		4.1			Original Distance roundabout to roundabout 500m retained. The long closure times associated with the level crossing will, however, restrict access.	This option severs access locally across the railway	This options introduces steepened gradients north of the railway and cannot accommodate appropriate pedestrian and cycle access due to the constrained width of the available corridor. The stables represent a significant amenity for vulnerable persons. This option is likely to result in the stables being unavailable to vulnerable for up to 3yrs.	
					Significant comparative disadvantage over other options	- Significant comparative disadvantage over other options	· Significant comparative disadvantage over other options	
4	Accessibility & Social inclusion	4.2	Stations Accessibility	Quantification of increased service levels to the vulnerable groups.	Station Accessibility is addressed for all level crossing options in proximity to a station This option will require that traffic seeking to access the station from the north will divert along the existing road network due to delays at the level crossing Shortest diversion route 4.5km.(7 x diversion route. Original Distance roundabout to Rockfield Drive crossroads 500m retained.	Station Accessibility is addressed for all level crossing options in proximity to a station This option requires that all traffic accessing the station from the north must dwet allow the existing road network Shortest diversion route 4.5km (7x diversion route).	Station Accessibility is addressed for all level crossing options in proximity to a station This options introduces steepened gradients north of the railway and cannot accommodate appropriate podertrian and cycla access due to the constrained width of the available corridor.	
					Significant comparative disadvantage over other options	. Significant comparative disadvantage over other options	. Significant comparative disadvantage over other options	
		4.3	Social Inclusion	Service levels impacts including severance of community groups; Severance from community facilities consequent on an option.	This option causes severance of the community through curtailment of local access over the railway without replacement with effective alternative access. Community facilities affected by reduced access include Shopping facilities, Giraffe Childcare, Pelletstown Educate Together National School - North of the railway and Hallway House, Ashtown Post Oddice St Dominics College, Meaghers Pharmacy, Daughters of Charity - south of the railway.	This option causes severance of the community through curtailment of local access over the railway without replacement with effective alternative access. Community facilities affected by reduced access include Shopping facilities, Graffa Childcare, Pellestown Educate Together National School North of the railway and Halfway House, Ashtown Post Oddice St Dominics College, Meaghers Pharmacy, Daughters of Charity - south of the railway.	This option causes community severance for those on foot or bicycle. Community facilities affected by reduced access include Shopping facilities, Graffe Childcare, Pelletstown Educate Together National School - North of the railway and Hallway House, Achicom Post Oddies 51 Dominics College, Meaghers Pharmacy, Daughters of Charity - south of the railway and	



					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Asses	sment		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 2 (Underbridge on Mill Lane)	Option 3 (Overbridge on Mill Lane)	Option 4 & 4a (Road bridge West + PedCycUndBridge)	
					Bridge under railway and canal at Mill Lane: This option would entail re-routing Aahtoon Road along its old alignment (pre Royal Canal) on Mill Lane and passing under both the nilways and the Royal Canal. To curtail the impact on Ahtown Stabled road traffic only is proposed to be carried under the railway. The option can accommodia e cose section of a & Son carriageney with 15 mubbing strips on both addres between walled approaches. An at-grade turning head and drop-off will be provided to the south of Ashtown Stabled The length of the option is approximately 150m on the northern side and 30m south of the railine. The option would drop to an approximate level of 3.5 m OD Main Head, under the railway with is a at a level of 45.6 m. A new mini roundabout is proposed at the junction of Mill Lane and Ashtown Road south of the railine straffic interactions. N is proposed than predestrian - cyclice bridge on the lootbridge of the existing train statution. This will require reconstruction of the train statuto. This requires the existing entrance gates to Ashton House to be relocated and the portion of the toxing function of a south of the status of the costated on an entroposed with a status. This requires the existing entrance gates to Ashton House to be relocated and the portion of the toxing functuated on a new boundary litering Mill Lane north of the canal to be taken down and a new Higher wall constructed on a new provider line. They capital status of the canada provide	Firige over railway and canal at Mill Lane. This option would entail re-routing Ashtown Road along its of alignment (pre Royal Canal) or Mill Lane and passing over both the railway and the Royal Canal. To cartain life impact on Ashtown Stabild road affall cony is proposed to be carried along the roadway. The option can accommodate a cross section a 4.5 m cartaigeway with 1.5 m robits of the trailway would be in excess 48.0%. An at-grade turning head and drop-off will be provided to the south of Ashtown Statistic and the nail in the option is approximately 550m on the conthen side and 350m would be required similar to the adjacent for the adjacent for the railway would be in a south of the nail inc. The option would rise to an approximate level of 52.5m OD Main Head over the railway which is a talves of 4.5 M. An alth trough bridge form of construction would be required similar to the adjacent Ratasth Road Stridge. A new mini roundabout is proposed at the junction of Mill Lane and Ashtown Road south of the railway to a new poststrain cyclicits and disabild users would be accommodated by the construction of a new poststrain cyclicits and disabild users would be accommodated by the construction of a new poststrain cyclicits and disabild users would be accommodate that the proposed tha daving the estart passing through the state. The proposed taakwy would be wailed daving the estart passing through the state. The proposed taakwy would be wailed daving the estart passing through the saccommodate the link to accommodate and the dimension wailes the into the rails of the daving the desting through the estate. The proposed taakwy would be wailed daving the estart passing through the statem theory of the boundary wail to Ashton house would need to be demodithed to accommodate the link cond. This option house daving the grounds of Ashton wailes.	Roadbridge at Navan Parkway with link to River Road, Selected upgrade works to River Road as far as Asthown, Pederitina and cycle underpasa at Ashtown This cycles is the additional sector of the sector of the sector of the sector of the routine sector of the sector of the sector of the sector of the routine sector of the sector of the sector of the sector of the Railway Station. At this location there is scope to construct a new road link over the routine sector of the sector of the sector of the sector of the Road or be designed to pass over it to cross the Tolks River and facilitate an orward connection to the Durarik India. In the latter case, a short spur would be provided to link to River Road which would need upgrade as far as Ashtown. In both cases this popon would moves serve which until the latter case, a short spur would be rough the sector of the sector of the sector of the sector of the latter rough the sector of the sector of the sector of the sector of the rough the sector of the sector of the sector of the rough of rough the sector of the sector of the sector of the rough of rough the sector of the sector of the sector of rough the sector of the sector of the rough value (the rough the removal of the sector and the sector of the rough of the rough and requiring the removal of the sector and the rough value there would be at a gradient of approximately 55. Am DD Main Head before descending to late into the rough to also includes the construction of a new bridge under the casain and raikway at Asthown to provide pederition of rough the rough sector of rough parking rough the rough as level of rough parking rough the sector of rough parking rough as the rough to also rough a pederition of rough rough and rough reader rough and rough rough reader rough and rough rough reader rough and rough as a rough rough as a rough as rough and rough as the rough and rough as the rough and rough as the rough as the rough as rough as rough and rough as rough as the rough as roug	
					Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	. Significant comparative disadvantage over other options	
		4.1	Impact on Vulnerable Groups	Impacts on low income groups, non-car owners, mobility impaired, visually impaired and people with a disability.	Road traffic diverted distance route is 572m (1.1x diversion route). Local ped/cycle access maintained along ramped access through underpass, –340m diversion.	Road traffic diverted distance route is 750m (1.4 x diversion route) steep gradients on north side of option will be a disadvantage to vulnerable road users. Local ped/cycle access maintained along ramped access over proposed bridge400m diversion	Road traffic diverted distance route is 2.5km (1.4 x diversion route) steep gradients on north side of option will be a disadvantage to vulnerable road users. Local ped/cycle access maintained along ramped access over proposed bridge400m diversion.	
					The stables represent a significant amenity for vulnerable persons. This option is likely to require temporary relocation of the stables for 3yrs and reinstatement on a smaller site or permanent loss of the stables.	The stables represent a significant amenity for vulnerable persons. This option is likely to require temporary relocation of the stables for 3yrs and reinstatement on a smaller site or permanent loss of the stables.	The stables represent a significant amenity for vulnerable persons. This option is likely to require temporary relocation of the stables for 3yrs and reinstatement on a smaller site or permanent loss of the stables.	
					Significant comparative advantage over other options	Significant comparative advantage over other options	- Significant comparative advantage over other options	
4	Accessibility & Social inclusion	4.2	Stations Accessibility	Quantification of increased service levels to the vulnerable groups.	Station Accessibility is addressed for all level crossing options in proximity to a station This option does not significantly affect access to the station.	Station Accessibility is addressed for all level crossing options in proximity to a station. This option does not significantly affect access to the station.	Station Accessibility is addressed for all level crossing options in proximity to a station. This option does not significantly affect access to the station.	
					Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	
		4.3	Social Inclusion	Service levels impacts including severance of community groups; Severance from community facilities consequent on an option.	This option does not cause community severance, This option does not curtal access to community amenities Diverted distance route is 572m (1.1x diversion route). This option requires the demolition of Ashtown Stables which acts as a significant community resource in Ashtown.	This option does not cause community severance. This option does not significantly affect access to community amenities Diverted distance route is 750m (1.4 x diversion route). This option requires the demolion of Asthrown Subtes which acts as a significant community resource in Asthrown.	Diverted distance route 798m (1.6x diversion route) but existing vehicular route severed. Community facilities affected by reduced access include Shopping facilities, Giraffe Childcare, Pelletatown Educate Together National School - North of the railway and Halfway House, Astrown Post Oddice St Dominics College, Meaghers Pharmacy, Duaytters of Charly- south of the railway. This option requires the demolition of Astrown Stables which acts as a	



					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Asse	essment		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 4 & 4b (Road bridge West + PedCycOvBridge)	Option 5 (Low Clearance UndBridge East)	Option 6 (Fixed Road OvBridge East of Station)	
					Roadbridge at Navan Parkway with link to River Road, Selected upgrade works to River Road as far as Ashirown, Pedestrian and cycle overbridge on approximately link to the west of the existing level crossing at Ashirown at the gradow approximately link to the west of the existing level crossing at Ashirow at the gradow approximately link to the west of the existing level crossing at Ashirow at the gradow approximately link to River Road. This could elime descend to lis into River Road or be designed to pass over it to cross the Tolks River and facilitate an onward connection to the Duraliek link clink in the latter crase, a short spur would be provided bits option work involves some which are thread listicate an onward connection to the Duraliek link in the latter crase, a short spur would be provided and 125m cycle tracks on bot sides. Short term connection to River Road and 125m cycle tracks on bot sides. Short term connection to River Road and requiring the removal of the associated boundary treatment - walls, trees, brah. The road would be at a similar level as the existing junction Phoenix Park consing would be at a gradient of approximately 55% onr 500m (permitted bollow a meandering route. It includes the demolition of the existing cables tand for boroid collow a meandering route. It includes the demolition contridge to provide space for a proposed podestrian cycle contridge. The ratil evel at a 33m with the bridge level over the raike year. South Reads and the casain at 33m with the bridge level over the raike year. Bolown this naccess and rails to public work with list option as well to ease podestrian cycles of the route of the bridge with provide on firequerict.	Low clearance underbridge at railway and canal east of Abtiourn Read. This option would involve construction of a vew rand link parallel to and sould of the nailway below turning orth; cossing under the rail and canal to connect with Rathome Averue north of Abtiown Nillage. This route would discont for the Abtiown Railway Station and Martin Sawage Park residential easte. The route would cross under the railway and canal at right angles before raining an cuting to join into the existing circulatory orads to the north of the Pelitstown Development. The option can accommodate a cross section of a 5.5 million of the section of the section of the section of the section of a 5.5 million of the section of the	Read Overbridge East of Ashtown Read. This option would cross the railway and data lapproximately 250m east of the institution tool crossing. It incorporates a taptity curved plan layout which facilitates a link to the existing Ashtown road at the train station. The link outd traverse the great area between Ashtown Station and Marin Savage Park and would climb to cross over the malway and canal to the into the new circulation cast strough the Peterstown Development. The option can accommodate a cross section of a 6.5m carriageway with 2m tooptants and 1.7m optie mack on both alloss. The option would bridge over the malway and canal to the rail line before descending over the malway and canal with approach gradient of 6%. The option would cross to help in provide a softer toute to the softene. The point and the rail line before descending over the malway at 0.00m about Constructed with open embankments to provide a softer toute to the softene. The provision of landscaped embankments would result in a need for more lind and would regime landstate from \$500 FWP Perkerks GAA. but. It would pass through lands north of the nailway, the subject of waiting planning permission for residential development within the Astrown - Pelletstown SDZ.	
					- Significant comparative advantage over other options	Significant comparative advantage over other options	Some comparative advantage over other options	
		4.1	Impact on Vulnerable Groups	Impacts on low income groups, non-car owners, mobility impaired, visually impaired and people with a disability.	Road traffic diverted distance route is 2.5km (1.4 x diversion route) steep gradients on north side di option will be a disachantage to vulnerable road users. Local ped/cycle access maintained adorg ramped access over proposed bridge400m diversion.	Diverted distance route is 450m (1.0x diversion route).	Diverted distance route is 650m (1.4 x diversion route).	
		4.2			- Significant comparative advantage over other options	Significant comparative advantage over other options	Significant comparative advantage over other options	
4	Accessibility & Social inclusion		Stations Accessibility	Quantification of increased service levels to the vulnerable groups.	Station Accessibility is addressed for all level crossing options in proximity to a station. This option does not significantly affect access to the station.	Station Accessibility is addressed for all level crossing options in proximity to a station. This option does not significantly affect access to the station.	Station Accessibility is addressed for all level crossing options in proximity to a station This option does not significantly affect access to the station.	
					Some comparative disadvantage over other options	Significant comparative advantage over other options	Some comparative disadvantage over other options	
		4.3	Social Inclusion	Service levels impacts including severance of community groups; Severance from community facilities consequent on an option.	Diverted distance route 738m (1.6x diversion route) but existing vehicular route severed. Community facilities affected by reduced access include Shopping facilities, Giraffe Childcare, Pelletsiown Educate Together National School - North of the railway and Hallway House, Ashtown Post Oddice St Dominics College, Meaghers Pharmacy, Daughters of Charity - south of the railway.	This option does not cause community severance. This option does not curtail access to community amenities Diverted distance route is 450m (1.0 x diversion route).	This option does not cause community severance. This option does not curtail access to community amenities Diverted distance route is 650m (1.4 x diversion route).	



					DART+ WEST - MCA Stage 1		
					Ashtown Level Crossing Assessm	nent	
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 7 (Fixed Road OvBridge East of Station from Navan Road)	Option 8 (PedCycOvbridge Only on Station footprint with reconfiguration of the station)	Option 9 (Lower the Railway with at grade roadbridge at LX)
					Road Overhridge East of Ashtown Road with link to Navan Road. This option would involve the construction of a new road in front of Kempton Gardens from the Navan Road and a new bridge over the canal and railway accommodating a cross section of a 6.5m Carangeway with 2n. foodbatts and 1.75m coptications to not hold be the option would bridge over the railway and canal with approach gradenst of 6% either side the rail level at corsaing is approximately 24. m, OD Main Head and the canal a 39.8m with the bridge level over the railway at 50.00m. The road level cross to a height of 52.0m, 60m south of the rail line before descending over the rail and canal . The route would then le into the new circulation roads through the Pelletstown Development to the north of the canal line advert and wide singe actor which is, Dirycles and pedestriams with a dedicated disabilid access along the eastern boundary would be provided of south of the canal line advertised on a significant weight and pelletstown Development to the north of the canal line grader advection of a significant weight and pelletstown Development pedestriams with a dedicated disabilid access along the eastern boundary would be provided of south drequire the construction of a significant weight in the Navan Road. There would disclose traffic to the rear of Martin SAAQ but the proposed option . Pelletstown SD2 to the north of the rail line and canal. The option can be wailed or can be constructed with optime meahwithments to provide a softer more land acquisition.	This option includes the provision of a new padestrian and cycle bridge, 5.0m in width with set down facilities only. The bridge would provide a convection between Acheown road orouth of the level crossing and a proposed platform between the canal and the railway. The arrangement of the bridge utilises ranges parallel to and to the rear of the station platforme rising to the east before turning perpendicular to the track to cross the railway. The rangement of the bridge utilises ranges parallel to and to the rear of the bridge with the bridge level over the railway at 50.00m. The range on either side of the bridge with the bridge level over the railway at 50.00m. The range on either side of the bridge with cesceed 5% gradent. Separate pedestrian statis could be provided with this option as well to ease pedestriar access and rails for pushing cycle on if required. Constraints on bridge crossing here includes the train station, the Royal Canal, the listed railway structures, and the canal bridge. Vehicular traffic will need to dvert around the crossing, the diversion being an estimated 4.3km.	Lower railway, new road underbridge at level crossing, demolish Canal bridges. This option provides for lowering the existing railway sufficient to allow the railway pass under a bridge constructed at the level of the existing level crossing. It would require limited road infrastructure works but void frequire the existing railway to be there do use length of exposurable / 2m exists but void require the existing relative to the existing water level of the canal upstream and downstream of the level crossing. It would require demolision and reconstruction of the train station at a lower level. The canal would need to be channelised or relianting walls would be required to support the canal west of the existing level crossing. The existing protected canal bridge and locks would likely need to be demolished and replaced. It is considered that traffic on the canal and railway would need to be suspended for the duration of the works.
			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	- Significant comparative advantage over other options	Significant comparative advantage over other options
		4.1			Diverted distance route is 650m (1.4 x diversion route).	Road traffic diverted distance route is 4.3km (10 x diversion route) steep gradients on north side of option will be a disadvantage to vulnerable road users. Local ped/cycle access diversion. bridge - ~400m diversion.	Original Distance roundabout to roundabout 500m retained.
		4.2			Significant comparative advantage over other options	- Significant comparative advantage over other options	. Significant comparative advantage over other options
4	Accessibility & Social inclusion		Stations Accessibility	Quantification of increased service levels to the vulnerable groups.	Station Accessibility is addressed for all level crossing options in proximity to a station. This option does not significantly affect access to the station.	Station Accessibility is addressed for all level crossing options in proximity to a station. This option does not significantly affect access to the station.	Station Accessibility is addressed for all level crossing options in proximity to a station. This option does not significantly affect access to the station.
					Some comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative advantage over other options
		4.3	Social Inclusion	Service levels impacts including severance of community groups; Severance from community facilities consequent on an option.	This option does not cause community severance. This option does not curtail access to community amenities Diverted distance route is 650m (1.4 x diversion route).	Diverted distance for vehicular traffic 4.3km (10 x diversion route), proposed pedestrian / cycle bridge maintains local nor-vehicular access. Community facilities affected by reduced access include Shopping facilities, Giraffe Childcare, Pelletstown Educate Together National School - North of the railway and Halfway House, Ashtown Post Oddice St Dominics College, Meaghers Pharmacy, Daughters of Charity - south of the railway.	This option does not cause community severance. This option does not affect access to community amenities.



					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Assessme	nt		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 10 (UnBridge West of Mill, PedOvBridge at Station)	Option 11 (Improvements on Local Road Network, PedOvBridge at Station)		
					Road and cycleway bridge under Railway and Canal West of the Mill and linking to Mill Lane at each end: This option would entail re-routing Astroom Road along its old alignment (pre railway) along a section of Mil Lane, diverting through commercial lands to the west of the protected mill and passing under both the railway and the Road Cana to lase in Mill Lane not of the ninkiny. The option is proposed to accommodate a cross section of a 6.5m campeny with 6.5m of the option is approximately 150m on the northern side and 30m south of the railman of the option is approximately 150m on the northern side and 30m south of the railman. The length of the option is approximately 150m on the northern side and 30m south of the rail line. The option would drop to an approximately 150m on the northern side and 30m south of the rail line. The option would drop to an approximately 150m on the northern side and 30m south of the rail line. The option would drop to an approximately 150m on the northern side and 30m south of the rail line. The option would drop to an approximately 150m on the northern side and 30m south of the rail line. The option would drop to an approximately 160m on the northern side and 30m south of the rail line. The option would provide for a setdown, maintenance and emergency vehicular access to the station. It is proposed that pedestrins, cycleit and disabled users would be accommodated by the construction of a new pedestrins (cycle bridge on the fourblidge of the existing rain station. This will require reconstruction of the train station. This will require sconstruction of the train station. The states at the same approximate livel as the adjustent rainway. This option would require some propenty acquisition and modifications to existing accesses.	This option includes the provision of a new predestrian and cycle overbridge at the location of the train station and local road improvements. The bridge would provide for statished and mobility impaired users. The arrangement of the bridge would allow the for statished and mobility impaired users. The arrangement of the bridge would allow the inset anny spatial to and over the station pationms raing to the east before turning perpendicular to the track to cross the rainway. This option requires reconstruction and reconfiguration of the trains station under the footprint of the proposal dystation. The proposed pragmets will be approximately 50. The trains station under the footprint of approximately 50. The proposed pragmets will be approximately 15. Sim the state of the proposed of the state		
					Some comparative disadvantage over other options	- Significant comparative advantage over other options		
		4.1	Impact on Vulnerabl Groups	Impacts on low income groups, non-car owners, mobility impaired, visually impaired and people with a disability.	Road traffic diverted distance route is 572m (1.1x diversion route). Local ped/cycle access maintained along ramped access over ped/cycle bridge, –340m diversion. The stables represent a significant amenity for vulnerable persons. This option is likely to result in some impact on the stables during construction.	Road traffic diverted distance route is 4.3km (10 x diversion route). Local ped/cycle access maintained along ramped access over proposed bridge400m diversion.		
					Significant comparative advantage over other options	- Significant comparative advantage over other options		
4	Accessibility & Social inclusion	4.2	Stations Accessibility	Quantification of increased service levels to the vulnerable groups.	Station Accessibility is addressed for all level crossing options in proximity to a station. This option does not significantly affect access to the station.	Station Accessibility is addressed for all level crossing options in proximity to a station. This option does not significantly affect access to the station.		
					Some comparative advantage over other options	Some comparative disadvantage over other options		
		4.3	Social Inclusion	Service levels impacts including severance of community groups; Severance from community facilities consequent on an option.	This option does not cause community severance. This option does not curtail access to community amenities Diverted distance route is 572m (1.1x diversion route). This option impacts the southern extremity of Ashtown Stables only.	Diverted distance for vehicular traffic 4.3km (10 x diversion route), proposed pedestrian / cycle bridge maintains local non-vehicular access. Community facilities affected by reduced access include Shopping facilities, Giraffe Childcare, Palletstown Educate Together National School - North of the railway and Haltway House, Ashtrown Post Oddice St Dominics College, Meaghers Pharmacy, Daughters of Charity - south of the railway.		



	DART+ WEST - MCA Stage 1									
					Ashtown Level Crossing Assessment					
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 12 (Road OvBridge West from Navan Parkway Stn, PedCycOvBridge at Ashtown Station)	Option 13 (OvrBridge West of Mill, PedOvBridge at Station)				
					Road link between Naven Parkwey Station and the Road network immediately north of Ashtown Village Incorporating a bridge ower the railway and canal and a pedestrian cycle bridge over the station in Ashtown. This option would entail re-outing through road traffic away from Ashtown Village. The option can accommodate a cross section of a 64 macringway will have from Ashtown to the south of Ashtown Station. The tength of the option is approximately 300m each side of d.25 mm of the south of Ashtown Station. The tength of the option is approximately 300m each side of the row sing point. On the south of Ashtown Station. The tength of the option is approximately 300m each side of d.25 mm of the crossing point. On the southern side a separate pedestrian and cyclels link and link to the inding school are proposed to maintain access for non-motriade use these would have cross section of 4.0m. It is feasible to cross at this location, as it is upstream of the double lock on the canal and the canal is at the same approximate level as the adjacent railway. This option would require some properly acquisition and modifications to existing accesses. It would pass through the grounds of the listed Ashton House. The option will provide for a setdown, maintenance and emergency vehicular access to the station. It is proposed that pedestrian, cyclists and disabild users would be accommodated by the construction of the train station. This will require reconstruction of the train station.	Road with cycleway under Railway and Canal West of the Mill and linking to Mill Lane at each end: This option would entail re-roding Anthown Road along its old alignment (pre railway) along a section of Mill Lane, diverting through commercial lands to be west of the protected mill and passing under both the railway and the Royal Canal to be into Mill Lane entorth of the railway. The option is proposed to accommodule a cross section of a 5-m carriageway with .5m rubing strip to the Vest and a 3 dBm cycleway to the east. An al-grade turning head and drop-df would be provide to be south of Ashtown Station and a set down area morth of the canal. An al-grade turning head and drop-off will be provided to the south of Ashtown Station. The length of the option is approximately 150m on the northern side and 300m south of the rail line. The both reside is a napproximately 150m on the northern side and 300m south of the rail line. The length of the option is approximately 150m of construction would be required similar to the adjust the south of Ashtown Rauba Road Bridge. A new mini roundsbout is proposed at the junction of Mil Lane and Ashtown Road south of the callway to accommodes traffic interactions. This option croases through the grounds of Ashton House and will require an additional bridge to understructed ower the access roud to the housy his material the adjust the south program and the train station. This option croases through the grounds of Ashton House and will require an additional bridge to undedout immer the actent paraing through the statist. The proposal for allow would be availed allow the actent paraing through the statist proposal for allow would be availed allow the actent paraing through the statist. The proposal for allow to the the astisting roundabout immer the actent paraing through the statist. The proposal for allow to the the actent would need to be demolished to accommodate the link road. This option would requires some property acquisition.				
				Impacts on low income groups, non-car owners, mobility impaired, visually impaired and people with a disability.	Significant comparative advantage over other options	Some comparative disadvantage over other options				
		4.1	Impact on Vulnerable Groups		Road traffic diverted distance route is 750m (1.4 x diversion route) steep gradients on north side of option will be a disadvantage to vulnerable road users. Local ped/cycle access maintained along ramped access over proposed bridge340m diversion.	Road traffic diverted distance route is 572m (1.1x diversion route). Local ped/cycle access maintained along ramped access across overbridge, -340m diversion. The stables represent a significant amenity for vulnerable persons. This option is likely to result in a small degree of impact on the stables during construction.				
					Significant comparative advantage over other options	Significant comparative advantage over other options				
4 Acc	essibility & Social inclusion	4.2	Stations Accessibility	Quantification of increased service levels to the vulnerable groups.	Station Accessibility is addressed for all level crossing options in proximity to a station. This option does not significantly affect access to the station.	Station Accessibility is addressed for all level crossing options in proximity to a station. This option does not significantly affect access to the station.				
					Some comparative disadvantage over other options	Some comparative advantage over other options				
		4.3	Social Inclusion Social Inclusion Severance of community grad Severance from community faci consequent on an option.		Diverted distance route 798m (1.6x diversion route) but existing vehicular route severed. Community facilities affected by reduced access include Shopping facilities, Giraffe Childcare, Pelletstown Educate Together National School - North of the railway and Halfway House, Ashtown Post Oddice St Dominics College, Meaghers Pharmacy, Daughters of Charity - south of the railway.	This option does not cause community severance. This option does not curtail access to community amenities Diverted distance route is 572m (1.1x diversion route). This option impacts the southern extremity of Ashtown Stables				



					DART+ WEST - MCA Stage 1				
					Ashtown Level Crossing Asses	sment			
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Do Nothing	Do Minimum (Close LX)	Option 1 (Online Obr)		
					Leave the current level crossings in place Electrification is implemented without removal of the road traffic interface but with implementation of CCTV control on the barrier system	Closure of the existing crossings with no alternative provided. All traffic would be diverted to alternative routes around the crossing location.	This scheme would require an online structure spanning over the railway and canal. This would lift the existing carriagevery by approximately 7.3m above the railway line, accommoduling a cross sector of a 6.5m carriageway with 2m dootpaths across the bridge. There would be insufficient withit for a cycleway across the bridge. The topography is such that the northern approach (where the ground fails away towards the Tokia River) would necessarily be very steep and would also require significant modifications to the record village certic developments of the area any ground. The length of the approach on the northern aide would be approximately 220m and be at a maximum gradient of 5% and 140m on the southern side at a maximum gradient of 5%. The bridge over the rail line would be at an approximate level of 51.9m OD.		
		5.1		Safety for Rail users – removal of Level crossings is considered a significant safety enhancement	Significant comparative disadvantage over other options This Option leaves the railway level crossing in place, a characteristic which is	Significant comparative advantage over other options	Significant comparative advantage over other options		
			Rail Safety		considered negative from the perspective of railway safety. This option will require construction activity associated with signalling along the live railway associated with the level crossing.	considered positive from the perspective of railway safety. There is no significant construction activity along the railway associated with the level crossing	positive from the perspective of railway safety. There is no significant construction activity along the railway associated with the level crossing		
	-				Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Some comparative advantage over other options		
5	Safety	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	This option retains the level crossing - a significant hazard to transport users; This option will result in traffic diversions of up to 4.3km and increased congestion on the local road network.	This option closes the level crossing - removes a significant hazard to transport users; This option will result in traffic devisions of up to 4.3km and increased congestion on the local road network.	This option closes the level crossing - removes a significant hazard to transport users; This option will not significantly divert traffic.		
					Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options		
			Pedestrian, Cyclist		The curtailed availability of access over the level crossing associated with this option will divert vulnerable road users onto the existing road network.	The removal access over the level crossing associated with this option will divert vulnerable road users onto the existing road network.	The removal access over the level crossing associated with this option will divert vulnerable road users onto the existing road network.		
		5.3	and Vulnerable Road user Safety	yclist Road removal of interfaces	Diverted road users will be required to negotiate up to 6No additional junctions including traffic light junctions and roundabouts, typically turning left travelling southbound, right if travelling northbound.	Diverted road users will be required to negotiate up to 6No additional junctions including traffic light junctions and roundabouts, typically turning left travelling southbound, right if travelling northbound.	Diverted road users will be required to negotiate up to 6No additional junctions including traffic light junctions and roundabouts, typically turning left travelling southbound, right if travelling northbound.		
					This options does not provide for segregation on the diversion routes for vulnerable road users.	This options does not provide for segregation on the diversion routes for vulnerable road users.	This options does not provide for segregation on the diversion routes for vulnerable road users.		



					DART+ WEST - MCA Stage 1				
					Ashtown Level Crossing Asses	Ashtown Level Crossing Assessment			
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 2 (Underbridge on Mill Lane)	Option 3 (Overbridge on Mill Lane)	Option 4 & 4a (Road bridge West + PedCycUndBridge)		
					Bridge under railway and canal at Mill Lane: This option would entail re-routing Anitown Road along its old alignment (pre Royal Cana) on Mill Lane and passing under both the railway and the Royal Canal. To curtail the impact on Athenow Stabled road traffic only is proposed to be carried under the railway. The option can accommodate a cross section of a 6.5m carriageway with 1.5m rubbing strips on both subcommodate a cross section of a 6.5m carriageway with 1.5m rubbing strips on both subcommodate a cross section of a 6.5m carriageway with 1.5m rubbing strips on both subcommodate a cross section of a 6.5m carriageway with 4.5m rubbing strips on both subcommodate turning head and drop-off will be provided to the south of Ashtown Station. The length of the option is approximately 150m on the northern aide and 300m south of the railway with is a at all evel of 4.5m. A new mini roundabout is proposed at the junction of Mil Lane and Ashtown Road south of the railway to accommodate traffic interactions. It is proposed the podestrian / cycle bridge on the foothridge of the existing train station. This will require reconstruction of the train station. This requires the existing entrance gates to Ashton House to be taken down and a new higher wall construction an enavoindabe tradient. This coption would require some property acquisition.	Bridge over railway and canal at Mill Lane: This option would entail re-routing Ashtown Road adrog lins dir alignment (pre Royal Canal) on Mill Lane and passing over both the railway and the Royal Canal: To curtain life impact on Ashtown Stabild road affair only is proposed to be carried along the roadway. The option can accommodate a cross section a 6.5m carriageway with 1.5m cubics the trainway would be in excess of 8.0%. An al-grade turning head and drop-off will be provided to the south of Ashtown Stabild road approaches. Gradestrain the proposed road north of the railway would be in excess of 8.0%. An al-grade turning head and drop-off will be provided to the south of Ashtown Stabild road to mail Inn. The option would rise to an approximate level of \$2.5m OD Main Head over the railway which is a table of 4.5%. A hal-grade turning head and trap-off will be provided to the south of Ashtown Stabilor. An ever the at level of 4.5%. A hal-through bridge form of construction would be required alimilar to the adjacent Ratath Road Shifeya. A new mini roundabout is proposed at the junction of Mill Lane and Ashtown Road south of the railway to a new poststrain crycleib taigo on the footbridge of the eacommodate after the construction of a new poststrain crycleib taigo on the footbridge of the eachting the second of Ashton House and will require an additional station. This will require reconstruction of the train station. This option crosses through the grounds of Ashton House. It is anticipated the proposed tabway would be wailed dang the eastert passing through the estime. The proposel is boundary wail to Ashton house would need to be demonsibled to accommodate the link road. This option now during the road the second passion.	Roadbridge at Navan Parkway with link to River Road, Selected upgrade works to River Road as far as Ashtown, Pederatina and opsku underpasa at Ashtown. This optimum a thinke sproamately it human to be wat of the Asita and the associated because presenting at approximate the sproamately. It has the second second the second seco		
		5.1	Rail Safety	Safety for Rail users – removal of Level crossings is considered a significant safety enhancement	Significant comparative advantage over other options Option removes the rail - road interface	Significant comparative advantage over other options Option removes the rail - road interface	Significant comparative advantage over other options		
					Significant comparative advantage over other options	Significant comparative advantage over other options	Significant comparative advantage over other options		
5	Safety	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	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail.	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail.	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail.		
					Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options		
		5.3	Pedestrian, Cyclist and Vulnerable Road user Safety	Quality of Access for these road users. removal of interfaces	Diverted distance route is 572m (1.1x diversion route).	Diverted distance route is 565m (1.1x diversion route) steep gradients on north side of option will be a disadvantage to vulnerable road users.	Diverted distance route 798m (1.6x diversion route). With the incorporation of a pedestrian / cycle bridge in this option, any impact on prdestrians, cyclists and vulnerable road users is significantly reduced. Detour –400m		



					DART+ WEST - MCA Stage 1					
					Ashtown Level Crossing Asse	essment				
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 4 & 4b (Road bridge West + PedCycOvBridge)	Option 5 (Low Clearance UndBridge East)	Option 6 (Fixed Road OvBridge East of Station)			
					Readbridge at Navan Parkway with link to River Road, Selected upgrade works to River Road as far as Ashtown, Redestrian and cycle overbridge on the footprint of the reconfigured tables at Ashtown. This option is located and the spotterint of the reconfigured tables at Ashtown is located and asparated junction on the Navan Road serving Preent Rark Railway Satisn. At this location there is socie to construct anew road link over the canal and railway to link to River Road. This could after descend to lie into River Road or be designed by loss over it to cross the Tolka River and facilitate an onward connection to the Duraink funds. In the latter case, a short spur would be provided bink to River Road which would need upgrade as far an Ashtown. I hoth cases option can accommodate a cross section of a 6.5m carriageway with 2m dogtaher of 1.5m cyclet tacks on both sides. Short term connection to River Road and raquing the removal of the associated boundary treatment - walls, trees, brank. The road would be at a similar level as the asiting junction Phoenix Park crossing would be at a gradient of approximately 6% on Ob Main Head borde descending to fai into the River Road at a level of 3.4m. The road on the northem side would be at a gradient of approximately 6% on Ob Main Head borde descending to fai into the level of the Assiting called taped for bindings at the level crossing and the asiting called taped for bindings of the lowel cooking and the asiting called taped for bindings of the road solution. Head, and the canal at 3.3m with the bridge level over the railways 42. Im Ob Main Head, and the canal at 3.3m with the bridge level over the railways 42. Im Ob Main Head, and the canal at 3.3m with the bridge level over the raikeys at pedestrian cocess and rails to payband revel of a fragmider.	Low clearance underbridge at railway and canal east of Abtiown Read. This character have a strength of the str	Road Overbridge East of Ashtown Road. This option would cross the railway and careal approximately 250m east of the existing level crossing. It incorporates a taptiby station. The link would care the degree name between Ariborn Station and Marin Statege Park and would climb to cross over the railway and careal to the into the new circulation cast strough the Peterstown Development. The option can accommodate a cross section of a 6.5m carriageway with 2m tooptants and 1.7sm optie tracks on both sides. This option would bridge over the railway and cannal to the rail line before descending over the rail and canal. The option can care at 30.3m above MSL with the bridge level over the railway at 30.0m above MSL. The road level enset the railway is provide a softer teature to the scheme. The proteiosin of landscaped embankments would result in a need for roare land accusticate with metaffication provides a softer teature to the scheme. The provision of landscaped embankments would result in a need for roare land available. There can level matchem boundary of Martin Swage Park and would require Instates from St.000m Park Park Adv. but would pass through lands north of the nailway, the subject of existing planning permission for residential development within the Astrown - Pelletstown SDZ.			
		5.1	Rail Safety	Safety for Rail users – removal of Level crossings is considered a significant safety enhancement	Significant comparative advantage over other options	Significant comparative disadvantage over other options	Significant comparative advantage over other options			
					Option removes the rail - road interface	Option removes the rail - road interface. Limited clearance underbridge poses potential hazard to structure and in turn rail users if a bridge strike occurs.	This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety. There is no significant construction activity along the railway associated with the level crossing			
					Significant comparative advantage over other options	Significant comparative disadvantage over other options	Significant comparative advantage over other options			
5	Safety	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	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail. Limited clearance underbridge poses potential hazard to high vehicles and and their occupants.	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail.			
					- Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options			
		5.3	Pedestrian, Cyclist and Vulnerable Road user Safety	Pedestrian, Cyclist and Vulnerable Road user Safety	Pedestrian, Cyclist 5.3 and Vulnerable Road user Safety	Pedestrian, Cyclist and Vulnerable Road user Safety	Quality of Access for these road users. removal of interfaces	Diverted distance route is 798m (1.8x diversion route). With the incorporation of a pedestrian / cycle bridge in this option, any impact on prdestrians, cyclets and vulnerable road users is significantly reduced. Detour -400m	Diverted distance route is 821m (1.6x diversion route).	Diverted distance route is 1.1km (2x diversion route).



					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Assessment			
	Parameter Criteria		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 7 (Fixed Road OvBridge East of Station from Navan Road)	Option 8 (PedCycOvbridge Only on Station footprint with reconfiguration of the station)	Option 9 (Lower the Railway with at grade roadbridge at LX)	
					Road Overbridge East of Ashtown Road with link to Navan Road. This option would linkice the construction of a new road in front of Kempton Gardens from the Navan Road and a new bridge over the cannil and minway accommodating a cross section of a 6.5m Carrageway with 2m Rodgenits and 1.75m cold tracks on tobin Male the option would bridge over the railways and cannul with approach gradents of 6% either side. The option would bridge over the railways and cannul with approach gradents of 6% either side. The rail level at the crossing is approximately 42, m, OD Malin Head and the cannal at 93.3m with the bridge level over the railways at 50.00m. The road level creats to a height of 52.0m, e00 south of the rail line Heider descending over the rail and cannal. The route would then the into the new circulation creads through the Pellestown Development to the north of the cannal langhter while shared space for whiches, bridge and pedestimes with a development approach rain the Nave Road of south of the cannal linking Ashtown Road to the proposed splice. This option introduce traffic to the rear of Martin Savage Park and along Kempton Gardens. The vould alise be impaction of St Oliner Plunkter GAA cub to the south of the railway and SD2 to the north of the rail line and cannal. The option can be walled or can be constructed with open embandments would result in a need for more land acquisition.	This option includes the provision of a new pedestrian and cycle bridge, 5.0m in width with set down facilities only. The bridge would provide a connection between Ashtown road south of the level crossing and a proposed platform between the canal and the aniawy. The arrangement of the bridge utilises range parallel to and to the rear of the station platforme rising to the east before turning perpendicular to the track to cross the railway. The rail level at the crossing is approximately 42 in OD Malin Head, and the canal at 98.3m with the bridge level on the mainty as 50.0m. The range on either side of the bridge will not exceed 5% gradient. Separate pedestrian statirs could be provided with this option as well to ease pedestrian access and rails for public quells on the required. Constraints on bridge crossing here include the train station, the Royal Canal, the listed railway structures, and the canal bridge. Vehicular traffic will need to divert around the crossing, the diversion being an estimated 4.3km.	Lower railway, new read underbridge at level crossing, demolish Canal bridges. This option provides for lowering the existing railway sufficient to allow the railway pass under a bridge constraint and the register the existing railway to all the set of the provide the railway pass and the set of the control on the existing level crossing. The railway would prayer lowering teaching where existing water level of the canal upstream and downstream of the level crossing. It would require demolition and reconstruction of the train station at a lower level. The canal would need to be channelised or railway to all would be required to support the canal weat of the existing level crossing. The existing protected const bridge and lock would likely need to be demolsibled and replaced. It is considered that traffic on the canal and railway would need to be suspended for the duration of the works.	
		5.1	Rail Safety	Safety for Rail users – removal of Level crossings is considered a significant safety enhancement	Significant comparative advantage over other options This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway starty.	Significant comparative advantage over other options This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety.	Significant comparative disadvantage over other options This option removes the railway level crossing, a characteristic which is considered positive from	
					There is no significant construction activity along the railway associated with the level crossing	There is no significant construction activity along the railway associated with the level crossing	The perspective of railway safety. This option has significant and prolongues impact on the live railway during construction.	
					Significant comparative advantage over other options	Significant comparative disadvantage over other options	Significant comparative advantage over other options	
5	Safety	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	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail.	This option closes the level crossing - removes a significant hazard to transport users; This option will result in traffic diversions of up to A 3km and increased congestion on the closed reaction and network. This option incorporates good segregation for pedestrians, cyclist and cars from raiway traffic.	This option closes the level crossing – removes a significant hazard to transport users; This option will not significantly divert traffic This option incorporates good segregation for pedestrians, cyclists and cars from railway traffic.	
					Some comparative disadvantage over other options	Some comparative disadvantage over other options	- Significant comparative advantage over other options	
		5.3	Pedestrian, Cyclist and Vulnerable Road user Safety	Quality of Access for these road users. removal of interfaces	Diverted distance route is 974m (1.9x diversion route).	This option removes the level crossing. It replaces pedestrian and cycle access with a pedestrian cycle bridge. Other vulnerable road users are diverted onto the existing road network. Diverted road users will be required to negotiate up to 6No additional junctions including traffic light junctions and roundabouts, typically turning left travelling southbound, right if travelling onthbound. This options does not provide for segregation on the diversion routes for	This option closes the level crossing. It provides a new link along approximately the same line as the original; The junction strategy for vulnerable road users is unaffected by this option; This option incorporates good segregation for pedestrians, cyclists and cars from railway traffic.	



					DART+ WEST - MCA Stage 1		
					Ashtown Level Crossing Assessme	nt	
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 10 (UnBridge West of Mill, PedOvBridge at Station)	Option 11 (Improvements on Local Road Network, PedOvBridge at Station)	
					Road and cycleway bridge under Railway and Canal West of the Mill and linking to Mill Lane at each end: This option would entail re-routing Astroam Road along its old alignment (pre railway) along a section of Mill Lane, diverting through commercial lands to the west of the behavior of the commercial and the commercial section and the section of the railway. The topolon is proposed to accommodite a cost section of a 5 can carringsway with 1.5m rubbing strip to the west and a 3.56m cycleway to the east. An acyade turning head and drop of would be provided to the south of Astroam Statistican and a set down arean earth of the canal. The length of the option is approximately 150m on the northern side and 300m south of the rail line. The option would drop to an approximately 150m on the northern side and 300m south of the canal. It is proposed to construct a padentian cycle bridge at the train station. The bridge will catter for distable and mobility magned uses. The option will provide for a setdown, maintenance and emergency whicular access to the station. It is proposed that pedestrians, cyclists and disabled users would be accommodated by the construction of a new pedestrian (cycle bridge on the fourblag of the train station. This will inquire reconstruction of the train station. This will inquire reconstruction of the train station.	This option includes the provision of a new pedestrian and cycle overbridge at the location of the train station and local road improvements. The bridge would provide for disabled and mobility impaired users. The arrangement of the bridge would allow lensed arrang parallel to and over the station platforms triang to the east before turning perpendicular to the track to cross the nalway. This option regimes reconstruction and reconfiguration of the train station under the footprint of the proposed footbridge. The rail level at the crossing is approximately 4.2 min to OD Main Head and the canal water level is approximately 3.3 m. The watering surface on the proposed bridge over the trained the outprint of the proposed bridge costs phenomenal 4.2 min to OD Main Head and the canal water level is approximately 3.3 m. The watering surface on the proposed bridge over the trained station and the proposed bridge costs phenomenal 4.2 min to OD Main Head and the canal water level is approximately 3.3 m. The watering surface on the proposed bridge over the trained of the bridge would not exceed 5% gradient and landings are proposed at 10m centres. Separate pedestrian statis are proposed to be provided with six point allo to provide bridge attrack. Constrains on a bridge costs phenomical to be devined and the canal bridge. This option provides for motorised trains to be devined and provide bridge as will be necessary to River Road with the construction of a 2.0 m potestrian way along the southem to Aktoon House is proposed to run the pedestrian way along the nouthers to the east. Where this singlacent be aktoon House is a proposed to run the pedestrian way along the nouthers to the east. House the necessary to provide public lighting along the pedestrian way. It is alias proposed to run the pedestrian way along the nouthers to line states of the house and the Risen Road. Implementation of signal control on the junction of River Road and the Rataan Road.	
		5.1	Rail Safety	Safety for Rail users – removal of Level crossings is considered a significant safety enhancement	Significant comparative advantage over other options	Significant comparative advantage over other options This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety. There is no significant construction activity along the railway associated with the level crossing	
					Significant comparative advantage over other options	Some comparative disadvantage over other options	
5	Safety	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	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail.	This option closes the level crossing - removes a significant hazard to transport users; This option will result in traffic diversions of up to 4.3km and increased congestion on the local road network. This option incorporates good segregation for pedestrians, cyclists and cars from railway traffic.	
					Significant comparative advantage over other options	Some comparative disadvantage over other options	
		5.3	Pedestrian, Cyclist and Vulnerable Road user Safety	Quality of Access for these road users. removal of interfaces	Diverted distance route is 572m (1.1x diversion route).	This option removes the level crossing. It replaces pedestrian and cycle access with a pedestrian cycle bridge. Other vulnerable road users are diverted onto the existing road network. Diverted road users will be required to negotiate up to 5No additional junctions including traffic light junctions and roundext, bycically turning left travelling southbound, right if travelling northbound. This options does not provide for segregation on the diversion routes for vulnerable road users.	



					DART+ WEST - MCA Stage 1		
					Ashtown Level Crossing Assessment		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 12 (Road OvBridge West from Navan Parkway Stn, PedCycOvBridge at Ashtown Station)	Option 13 (OvrBridge West of Mill, PedOvBridge at Station)	
					Road link between Navan Parkway Station and the Road network immediately north of Ashtown Village incorporating a bridge over the railway and canal and a podestrian cycle bridge over the station in Ashtown. This option would entail re-routing through thead traffic away from Ashtown village. The option can accommodate a cross section of a 5km carriagway with 2m footpaths on both sides and 25 m how-way cycle track on the eastern side. An atgrade turring head and drop-off will be provided to the south of Ashtown Station. The length of the option is approximately 300m sech side of the Tan O the trons sing point. On the southern side a separate pedestrian and cycles link and link to the riding school are proposed to maintain access for non-motorised use these would have cross section of 4.0m. It is feasible to cross at this location, as it is upstream of the double lock on the canal and the canal is at the same approximate level as the adjacent railway. This cyclon would require some properly acquisition and modifications to existing accesses. It would past through the grounds to the listed Ashtom House. The option will provide for a setdown, maintenance and emergency vehicular access to the station. The same pedestrian , cyclics and disabed users would be accommodated by the construction of an ew pedestrian / cycle bridge on the lootforing of the wisting train station. This will require reconstruction of the train station. This will require reconstruction of the train station.	Road with cycleway under Railway and Canal West of the Nill and linking to Nill Lane at each end. This option would entail re-roting Asthown Road along its old alignment (pre railway) along a section of Nill Lane, determine through commercial lands to the wast the protected mult and passing under both the railway and the Royal Canal to ta in its Nill Lane north of the railway. The option is proposed to accommodule a cross section of a 5.m carraigeway with .5m ability strip to the Vest and a 3.56m cycleway to the east. An at-grade turning head and dop-off would be provide to be south of Asthown Station and a set down area morth of the canal. An at-grade turning head and drop-off will be provided to the south of Asthown Station. The length of the option is approximately 150m on the northern side and 300m south of the rail lane the option would rise to an approximate level of 52. mOO Main Head over the railway. The begins would read a strip and through bidge form of construction would be required similar to the adjust of the south of Asthown Station on a set of Main Head over the railway which is an at a level of 45.6m. A half through bidge form of construction would be required similar to the adjust and through bidge form of construction would be required assist. The length of the optionsis, cyclistis and disabiled users would be accommodated by the construction of a new podestrian cycle bridge on the loothidge of the existing train station. This will require construction of Main Lane and Asthown Road south of the adjust of the construction of the horuse. It is antopation the station and the analtion. This will require construction of the train station. This option couses through the grounds of Asthon House and will exist than asthom. This option results and othe horuse. It is antopation the proceed would be the wasting roundabout immediately north of aliston House. and will require an additional bridge to would need to be demolished to accommodate the link read. This option would require s	
		5.1	Rail Safety	Safety for Rail users – removal of Level crossings is considered a significant safety enhancement	Significant comparative advantage over other options	Significant comparative advantage over other options Option removes the rail - road interface	
					Significant comparative advantage over other options	Significant comparative advantage over other options	
5	Safety	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	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail	
					Significant comparative advantage over other options	Significant comparative advantage over other options	
		5.3	Pedestrian, Cyclist and Vulnerable Road user Safety	Quality of Access for these road users. removal of interfaces	Diverted distance route is 565m (1.1x diversion route) steep gradients on north side of option will be a disadvantage to vulnerable road users.	Diverted distance route is 572m (1.1x diversion route).	





					DART+ WEST - MCA Stage 1								
					Ashtown Level Crossing Asses	sment							
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Do Nothing	Do Minimum (Close LX)	Option 1 (Online Obr)						
					Leave the current level crossings in place Electrification is implemented without removal of the road traffic interface but with implementation of CCTV control on the barrier system	Closure of the existing crossings with no alternative provided. All traffic would be diverted to alternative routes around the crossing location.	This scheme would require an online structure spanning over the railway and canal. This would lit the existing carriagevay by approximately 7.3m above the railway line, accommoding a cross steel of a 4.5m carriageway with 2m obopaths across the bridge. There would be insufficient width for a cycleway across the bridge. The topography is such that the northern approach (where the ground fails away towards the Tolka Rive) would necessarily be very steep and would also require significant modifications to the recent village cartie developments of the area owground. The length of the approach on the northern side would be approximately 220m and be at a maximum gradient of 8% and 140m on the southern side at a maximum gradient of 5%. The bridge out of a 5% and 140m oth southern side at a maximum of the source of the source						
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 No formal cycle tracks currently present on the immediately surrounding road network, but increased closures of the level crossing would reduce access to the proposed Royal Canal Greenway. Access to the train station for predestrians and cyclists will be significantly inhibited by the level crossing, particularly with the planned level of service on the railway.	Significant comparative disadvantage over other options No cycle tracks currently present on the immediately surrounding road network, but removal of level crossing will sever access to the Royal Canal Greenway from the opposite side of the railway. Access to the train station for pedestrians and cyclists will be significantly inhibited by removal of the level crossing.	Significant comparative disadvantage over other options This option does not provide good linkage between existing and proposed cycle routes. The quality of access to the train station for pedestrians and cyclists is poor in respect of this option.						
	Physical Activity	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 Cross Railway journey = nil as crossing remains in place; Inaccessible when crossing is closed. Diversion for cyclists when level crossing closed 4.3km The principal high amenity greenspaces in the vicinity of the existing train station include the Royal canal, the gaelic tootball grounds south of the railway. Pheonix Park, south of the railway and the amenity zoned lands north west of the level crossing. Increased closures of the level crossing would reduce access to each of them.	Significant comparative disadvantage over other options Cross Railway journey = 4.3km as level crossing is removed. Diversion for cyclists when level crossing closed 4.3km The principal high amenity greenspaces in the vicinity of the existing train station include the Royal canal, the galeit football grounds south of the railway, Pheorik Park, south of the railway and the amenity zoned lands north west of the level crossing, Removal of the releval crossing would curtal access to each of them.	Significant comparative disadvantage over other options Cross Railway journey = nil as the proposed option is along the plan alignment of the existing Ashtown Road. This option does not effectively facilitate cycle access due to the constrained width of the corridor. The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.						
	C	riteria	1		Do Nothing	Do Minimum (Close LX)	Option 1 (Online Obr)						
1	Ec	onomy			- Some comparative disadvantage over other options	Significant comparative advantage over other options	Some comparative disadvantage over other options						
2	2 Integration			- Significant comparative disadvantage over other options	- Significant comparative disadvantage over other options	- Significant comparative disadvantage over other options							
3	3 Environment			Significant comparative advantage over other options	Significant comparative advantage over other options	Some comparative disadvantage over other options							
4	4 Accessibility and social inclusion			Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options							
5	s	afety			Significant comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options						
6	Physic	al Activ	ity		Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options						
	Progres	s To Sta	ge 2		No	No	No						



					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Asses	sment		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 2 (Underbridge on Mill Lane)	Option 3 (Overbridge on Mill Lane)	Option 4 & 4a (Road bridge West + PedCycUndBridge)	
					Bridge under railway and canal at Mill Lane: This option would entail re-routing Ashtown Road along its old alignment (pre Royal Canal) on Mil. Lane and passing under both the railway and the Royal Canal. To curtail the impact on Ashtown Stabled road traffic only is proposed to be carried under the railway. The option can accommodate a cross section of a 8 Gim Carriargeway with 1.5m wohling strips on both sides between walled approaches. An at-grade turning head and drop-off will be provided to the south of Ashtown Station. The length of the option is approximately 150m on the northern side and 300m south of the rail ins. The option would drop ta an approximate level of 37.5m OD Malin Head, under the railway which is at al televel of 45.6m. A new mini roundabout is proposed at the junction of Mil Lane and Ashtown Road south of the railway to eccommodate traffic interactions. It is proposed the pedestrians, cycle triding on the train station. This equires the existing entrunce gates to Ashtow House to be relaxed and the portion of the boundary fronting Mill. Lane north of the train station. This option would require some property acquisition.	Bridge over railway and canal at MII Lane: This option would estail re-routing Ashtown Road along its of alignment (rer. Royal Canal) on MII Lane and passing over both the proposed to be carried along the madway. The option can accommodate a cross section of a 5.0% carriageway with 1.5% nucleis between walled approaches. Gradients on the proposed road north of the railway would be in excess of 8.0%. An al-grade turning head and drop-off will be provided to the south of Ashtown Station. The length of the copies is approximately 150m on the northem aide and 300m south of the mail line. The option would rise to an approximate level of 52.5m OD Main Head own the railway with 1.5m and/station would be required atimilar to the adjacent Ratasth Road Bridge. A new mini roundabout is proposed at the junction of MII Lane and Ashtown Road south of the construction of a new podetimating cryle bridge on the footbridge of the accommodate at low the construction of a new podetimating cryle bridge on the footbridge of the accommodate at low the construction of a new podetimating cryle bridge on the footbridge of the accommodate at low the construction of a new podetimating cryle bridge on the footbridge of the accommodate at lates the construction of a new podetimating cryle bridge on the footbridge of the accommodate at lates the construction of a new podetimating cryle bridge on the footbridge of the accommodate at lates the construction of a new podetimating cryle bridge on the footbridge of the accommodate at lates the construction of a new podetimating cryle bridge on the footbridge of the accommodate at lates the advert to accommodate at lates the construction of a new podetimating cryle bridge on the footbridge of the accommodate at lates the advert to accommodate the link boundary wall to Ashton house would need to be deminished to accommodate the link roud. This option nouse of the accommodate and will require some mod	Roadbridge at Navan Parkway with link to River Road, Selected upgrade works to River Road as far as Akthown, Pederatina and cycle underpasa at Akthown This cyclic is tocating deprosimately if this in the west for the existing level crossing at a cyclic in the costing of the costing level crossing at the cost of the cost of t	
	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 This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	Significant comparative advantage over other options This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	Significant comparative advantage over other options This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	
Ũ	Thysical Activity	6.2	Permeability and local access opportunity		Significant comparative advantage over other options	Significant comparative advantage over other options	Some comparative advantage over other options	
				Permeability and local access opportunity	Permeability and local access opportunity	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	Cross Railway journey = nil as the proposed option is along the plan alignment of the existing Coolmine Road. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.
	C	riteria			Option 2 (Underbridge on Mill Lane)	Option 3 (Overbridge on Mill Lane)	Option 4 & 4a (Road bridge West + PedCycUndBridge)	
1	Ec	onomy			Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options	
2	Inte	gration			Some comparative advantage over other options	Some comparative advantage over other options	Some comparative advantage over other options	
3	Envi	ronmen	t		Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	
4	Accessibility a	nd socia	al inclusion		Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	
5	S	afety			Significant comparative advantage over other options	Some comparative advantage over other options	Significant comparative advantage over other options	
6	Physic	al Activ	ity		Significant comparative advantage over other options	Significant comparative advantage over other options	Some comparative advantage over other options	
	Progress	s To Sta	ge 2		No	No	No	



					DART+ WEST - MCA Stage 1			
					Ashtown Level Crossing Asse	essment		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 4 & 4b (Road bridge West + PedCycOvBridge)	Option 5 (Low Clearance UndBridge East)	Option 6 (Fixed Road OvBridge East of Station)	
					Roadbridge at Navan Parkway with link to River Road, Selected upgrade works to River Road as Ir as Ashirown, Pedestrian and cycle overbridge on apportantiaty link in the weat of the existing level crossing as Ashirown at the grade separated junction on the Navan Road serving Preserx Park Railway Station. At this location there is score be construct anew road link over the canal and railway to link to River Road. This could ether descend to lie into River Road to be designed to pass over it to cross the Tolka River and facilitate an onward connection to the Durasik function. In the latter case, a short spur would be provided to road count of the score score the Tolka River and Latitute an onward connection to the Durasik function. In the latter case, a short spur would be provided this option would novels some which the Tolf Control and land acquisition. The option can accommodate a cross section of a 6.5m carriageway with 2m dotyther to be in the form of a min roundabout. River road would require upgrade to Anatown with a net dotpatient tradic diversion to River road is likely to be in the form of a min roundabout. River road would require upgrade to Anatown with an dotportantely 55 Mort 00 Main Head before descending to tie into the level of the River Road at a level of 34.7m. The road on the northem side would be at a gradent of approximately 550 wor 300m to premited to follow a meandering route. It includes the demolition of the existing cable stated forthridge part the level crossing and the existing cable stated forthridge part the real weat level stoto	Lever clearance underbridge at railway and canal east of Ashtown Read. This option would involve construction of a vew rand link parallel to and sould of the nailway believe turning north, crossing under the rail and canal to connect with Rathown Read and nu between Ashtown Railway Status or and Martin Sawage Park residential estate. The route would cross under the railway and canal at right angles before raining and nu between Ashtown Railway Status or and Martin Sawage Park residential estate. The route would cross under the railway and canal at right angles before raining na cuting to join into the existing circulatory orads to the north of the Paletistown Development. The option can ascommodiate a cross section of a Sam carangewy with 2m looghest and 1.26m cojet tension or but sides. The railway is at a level of 4.25m OD and the ground level at the canal is 93.5m OD with the iroad option lowered to a level of 2.20m OD provides and the noreassary delage. This option would have the disclandratage that it would not have the incensary delage. This option would have the disclandrate and would be an acuting form most of the length this would optic declar buses, on the low provides and shortice wholes the use this route at present. As the option would be in a cuting form most of the length this would be a disadvantage that it would not use the sensary delage. The option would have the disclarabit construction and would require tencerstruction would pass under Alathown station while is constructed on aples. Construction would require the station to be disadvantage to privise delaring construction would require the station to be disclared or and to be closed during construction would require the station. The canal would pred the low should require tencerstruction would pass under Alathown station while is constructed having on Martin Sawage Park and would require landates from S0 (Direy Plankte's GAA club. It would require tencerstheution development within the Ashtown SDZ.	Road Overbridge East of Ashtown Road. This option would cross the railway and Road approximately 250n east of the initiality level crossing. It incorporates a splaty curved plan layout which halitates a link to the existing Ashtown road at the train staten. The link ould carrene the grean rare between Ashtown Station and Marin Savage Park and would clinb to cross over the malway and canal to the into the new circulation rates through the Peterstown Development. The option can accommodate a cross section of a 6.5m carriageway with 2m tooppaths and 1.7Em cycle tracks to hosh sides. The option would bridge over the malway and canal to the rail line before descending over the mal and canal. The option can be walled or can be constructed with one inhearkments is provide a softer leave to the softerne. The provision of landscaped embandments would result in a need for more land and would regime trades the provides as ofter leave to the softene. The provision of landscaped embandments would result in a need for more land and would regime landstate from \$500 Here Planks and \$12.0 m above MSL. The road leave landstate for the softenet and would regime landstate from \$500 Here Planks and \$200.1 m above lands north of the railway, the subject of wsisting planning permission for residential development within the Astrown - Pelletstown SDZ.	
		6.1	Connectivity to adjoining cycling facilities	Analysis of the extent that the scheme connects with cycle tracks.	Significant comparative advantage over other options This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	Significant comparative advantage over other options This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for petestrians and cyclists is good in respect of this option.	Significant comparative advantage over other options This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	
0		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 the proposed option is along the plan alignment of the existing Coolmine Road. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.	Significant comparative advantage over other options Cross Railway journey = nil as the proposed option is along the plan alignment of the existing Costimine Read. Diversion for cyclists when level crossing closed 0.45km The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.	Some comparative disadvantage over other options Cross Railway journey = nil as the proposed option is along the plan alignment of the existing Coolimite Road. Diversion for cyclists when level crossing closed 0.65km The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.	
	0	ritoria			Option 4 & 4b	Option 5	Option 6	
	-				(Road bridge West + PedCycOvBridge)	(Low Clearance UndBridge East)	(Fixed Road OvBridge East of Station)	
1	Eco	aration			Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options	
2	Envi	ronmen	+		Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options Some comparative disadvantage over other options	
4	Accessibility a	nd socia	l inclusion		Some comparative advantage over other options	Significant comparative advantage over other options	Some comparative advantage over other options	
5	S	afety			Significant comparative advantage over other options	Significant comparative disadvantage over other options	Some comparative advantage over other options	
6	Physic	- al Activ	ity		Significant comparative advantage over other options	Significant comparative advantage over other options	Some comparative disadvantage over other options	
	Progress	s To Sta	ge 2		Yes	No	No	





					DART+ WEST - MCA Stage 1					
					Ashtown Level Crossing Assessm	ent				
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 7 (Fixed Road OvBridge East of Station from Navan Road)	Option 8 (PedCycOvbridge Only on Station footprint with reconfiguration of the station)	Option 9 (Lower the Railway with at grade roadbridge at LX)			
					Read Overbridge East of Ashtown Road with link to Navan Road. This option would involve the construction of a new road in front of Kempton Gardens from the Navan Road and a new bridge over the canal and railway accommodating a cross section of a 6.5m carraigeway with 2m choogens and 1.7m, rouge tracks on both sides. The option would bridge over the railway and canal with approach gradients of 6% either side. The rail level at the crossing is approximately 4.2 m, OD Main Head and the canal a 33 and with the bridge level over the railway and canal with approach gradients of 6% either side. The role would then is into the new circulation roads through the Pelletstown Development to the north of the canal. Before descending over the rail and canal. The route would then is into the new circulation roads through the Pelletstown Development to the north of the canal. Begradet and wide that approach option. This option introduce traffic to the rear of Marin Savage Park and along Kenpton Gardens. Furthermore, it would require the construction of a significant wei junction on the Navan Road. The would also be impacts on St. Oliver Punker's GAA club to the south of the rail way and would be licetation. Pelletstown SB22 to the north of the rail line and canal. The option can be walled or come be construction dis option embankments to provide a soften more land acquisition.	This option includes the provision of a new pedestrian and cycle bridge, 5.0m in width with at down facilities only. The bridge would provide a connection between Akatown most south of the level crossing and a proposed platform between the canal and the rankwy. The arrangement of the bridge utilises range parallel to and to the rear of the station platforme rising to the east before turning perpendicular to the track to cross the railway. The arrangement of the bridge states are the prevention of the track to cross the railway. The rail level at the crossing is approximately 42.1m OD Malin Head, and the canal at 33.3m with the bridge level our the railway at 50.00m. The range on either side of the bridge will not exceed 5% graduet will be bridge in the case of side states. Separate potestrian static scould be provided with this cotion as well to ease pedestrian access and rails for pushing cycle on if required. Constraints on bridge crossing here include the train station, the Royal Canal, the listed railway structures, and the canal bridge. Vehicular traffic will need to divert around the crossing, the diversion being an estimated 4.3km.	Lower railway, new road underbridge at level crossing, demolish Canal bridges. This option provides for lowering the existing railway sufficient to allow the railway pass under a bridge constructed at the level of the existing railway to be lowered over a length of approximate). Zon works but would require the existing railways to be lowered over a length of approximate). Zon would require demolition and reconstruction of the train station at a lower level. The canal would need to be channelised or reliand and retaining walls would be required to support the canal would need to be channelised or reliand and retaining walls would be required to support the canal would the use to the canal level crossing. The existing protected canal bridge and locks would itikely need to be demolished and replaced, it is existence that traffic on the canal and nahway would need to be suppended for the duration of the works.			
					Significant comparative advantage over other options	Significant comparative advantage over other options	- Significant comparative advantage over other options			
6	Physical Activity	6.1	Connectivity to adjoining cycling facilities	Analysis of the extent that the scheme connects with cycle tracks.	This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for pedestrians and cyclists is good in respect of this option.			
-		6.2			Some comparative disadvantage over other options	Significant comparative advantage over other options	. Significant comparative advantage over other options			
			6.2	6.2	6.2	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	Cross Railway journey = nil as the proposed option is along the plan alignment of the existing Coolmine Road. Diversion for cyclists when level crossing closed is 0.65km. The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.	Cross Railway journey = nil as the proposed option is along the plan alignment of the existing Ashtown Road. Diversion for cyclists when level crossing closed is 0.3km. The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.
	Ci	riteria			Option 7 (Fixed Road OvBridge East of Station from Navan Road)	Option 8 (PedCycOvbridge Only on Station foctprint with reconfiguration of the station)	Option 9 (Lower the Railway with at grade roadbridge at LX)			
1	Ec	onomy			- Some comparative advantage over other options	Some comparative advantage over other options	. Significant comparative disadvantage over other options			
2	Inte	gration			Some comparative disadvantage over other options	- Significant comparative disadvantage over other options	. Some comparative advantage over other options			
3	Envi	ronment	t		Significant comparative disadvantage over other options	Some comparative advantage over other options	Significant comparative disadvantage over other options			
4	Accessibility a	nd socia	I inclusion		Some comparative advantage over other options	Some comparative advantage over other options	. Significant comparative advantage over other options			
5	S	afety			Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options			
6	Physic	al Activi	ity		Some comparative disadvantage over other options	Significant comparative advantage over other options	. Significant comparative advantage over other options			
	Progress	s To Sta	ge 2		No	No	No			



					DART+ WEST - MCA Stage 1		
					Ashtown Level Crossing Assessme	nt	
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 10 (UnBridge West of Mill, PedOvBridge at Station)	Option 11 (Improvements on Local Road Network, PedOvBridge at Station)	
					Road and cycleway bridge under Railway and Canal West of the Mill and linking to Mill Lane at each end. This option would enail re-rouing Astronn Road along its old alignment (pre railway) along a socion of Mill Lane, dweining through commercial lands the west of the protected mill and passing under both the railway and the Royal Canal to le into Mill Lane north of the railway. The option is proposed to accommodate a consection of a 8.6 Can carriageway with 1.5m rubbing strip to the west and a 3.85m cycleway to the east. An at-grade turning head and dop off would be protoin a trapposed to Alatomo Station and a set down area north of the the option vould for to an approximately 150m on the northern side and 300m south of the rail line. The length of the cyclic is appropriate level of 3.5m OV Main Head, under the rail line. The option vould for to an approximate level of 3.5m OV Main Head, under the rail which is a at a level of 45.6m at the crossing point. It is proposed to construct a pedestrine crycle bridge at the train station. The bridge will cater for disabled and mobility impaired users. The option will provide for a setdown, maintenance and emergency vehicular access to the stator. It is proposed to a set as addown, maintenance and emergency vehicular access to the stator. It is proposed to a set as addown and the association of the existing train station. This will require exostruction of the train station. This will require exostruction of the train station. This will require exostruction of the train station. This acqualition and modifications to existing accesses.	This option includes the provision of a new padestrian and cycle overbridge at the location of the train station and local road improvements. The bridge would provide to disabled and mobility impaired users. The arrangement of the bridge would allow neeted range parallel to and over the station platforms rains to the east before turning parpendicular to the tack to cross the railway. This option requires reconstruction to proposed bothings. The rail level at the crossing is agronomately 4.2 m to OD Main Head and the canal water level is approximately 30.3 m. The warking particles on the proposed tide over the rain water side of the bridge and entropy the side of the proposed paragets will be approximately 1.35m high remote from the trailway and 1.56m. The proposed paragets will be approximately 1.35m high remote from the rainway and 1.56m high over and abgoarts on the live railway. The range on ether side of the bridge would not exceed 5% gradient and landings are proposed 1 from centres. Segmentation to acceed 5% gradient and landings are proposed 1 from centres. Segments and the size of the property of parality size to a landient potentime access and rails for parality size of the indices. This option provides for motorised traffic to be diverted along the local road network. Upgrades will be necessary to New Road with the construction of a 2.0m padestrian way along the softhern bridge. This option provides for motorised traffic to be diverted along the local road network. Upgrades will be notessary to New Road with the construction of a 2.0m padestrian way along the softhern broaday of the road due to the protected status of the property. I would be necessary to Dravde public lighting along the podestrian way. It is also proposed to carry out small calcing the northern broaday of the road match Road between river road and the Navan Road. These improvements will include the implementation of signal control on the junction of Row Road and the Ratoath Road.	
		6.1	Connectivity to adjoining cycling facilities	Analysis of the extent that the scheme connects with cycle tracks.	Significant comparative advantage over other options This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	Significant comparative advantage over other options This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	
6	Physical Activity	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 the proposed colion is along the plan alignment of the existing Coolmine Road. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train station is the Royd cand. This access is maintained by the proposed tridge scheme.	Significant comparative advantage over other options Cross Railway journey = nil as the proceed option is along the plan alignment of the existing Ashtown Road. Diversion for cyclists when level crossing closed is 0.3km. The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.	
	Criteria				Option 10 (UnBridge West of Mill, PedOvBridge at Station)	Option 11 (Improvements on Local Road Network, PedOvBridge at Station)	
1	Ec	onomy			. Some comparative disadvantage over other options	Some comparative advantage over other options	
2	Inte	egration			Significant comparative advantage over other options	- Some comparative disadvantage over other options	
3	Environment				Significant comparative disadvantage over other options	Some comparative advantage over other options	
4	Accessibility and social inclusion				Some comparative advantage over other options	Some comparative advantage over other options	
5	Safety				Significant comparative advantage over other options	Some comparative disadvantage over other options	
6	Physic	cal Activ	ity		Significant comparative advantage over other options	Significant comparative advantage over other options	
	Progress	s To Sta	ige 2		Yes	Yes	





					DART+ WEST - MCA Stage 1	
					Ashtown Level Crossing Assessment	
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 12 (Road OvBridge West from Navan Parkway Stn, PedCycOvBridge at Ashtown Station)	Option 13 (OvrBridge West of Mill, PedOvBridge at Station)
					Road link between Naven Parkway Station and the Road network immediately north of Ashtown Village incorporating a bridge over the railway and canal and a pedestrian cycle bridge over the station in Ashtown. This option would netail re-counting through noat fricts away from Ashtown Willage. The option can accommodate a cross section of a 6.5m carriageway with 2m footpaths on both sides and 2.5m two-way cycle track on the eastern side. An at-grade turning head and drop-off will be provided to the south of Ashtown Station.	Road with cycleway under Railway and Canal West of the Mill and linking to Mill Lane at each end: This option would entail re-routing Ashtown Road along its old alignment (pre railway) along asscion of Mil Lane, diverting through commercial lands to the west of the proteeted mill and passing under both the railway and the Royad Canal be into Mill Lane north of the rainway. The option is proposed to accommodate a cross section of a 5.m crainageway with 1.5m rubbing sing to the West and a 3.56m cycleway to the east. An explanet turing head and drop-off would be provided to the south of Ashtown Station and a set down area north of the canal. An at-grade turning head and drop-off will be provided to the south of Ashtown Station. The laordh of the conic is accommissivel (50m on the accher side and 30m south of the rail line.
					The length of the option is approximately 300m each side of the rail line and canal. The option would rise to an approximate deak level of 52.9m O which is at a level of 45.6m O at the crossing point. On the southern side a separate pedestrian and cyclist link and link to the riding school are proposed to maintain access for non-motorised use these would have cross section of 4.0m.	The option was option and option of the second of 52.5m OD Main Head over the railway which is a at a level of 45.6m. A half through bridge form of construction would be required similar to the adjacent Ratoath Road Bridge.
					It is feasible to cross at this location, as it is upstream of the double lock on the canal and the canal is at the same approximate level as the adjacent railway. This option would require some property acquisition and modifications to existing accesses. It would pass through the grounds of the listed Ashton House.	A new mini roundabout is proposed at the junction of Mil Lane and Ashtown Road south of the railway to accommodate traffic interactions. It is proposed that pedestrians, cyclists and disabled users would be accommodated by the
					The option will provide for a setdown, maintenance and emergency vehicular access to the station.	construction of a new pedestrian / cycle bridge on the footbridge of the existing train station. This will require reconstruction of the train station.
					It is proposed that poestinans, cybists and assoled users would be accommosated by the construction of new pedestrian / cycle bridge on the foothrage of the existing train station. This will require reconstruction of the train station.	This option crosses through the grounds of Aathon House and will require an additional bridge to be constructed over the access road to the house. It is anticipated the proposed roadway would be walled along the extent passing through the estate. The proposal is to te into the existing roundabout immediately north of alantow village. A portion of the boundary wall to Aathon house would need to be demolished to accommodate the link road.
						This option would require some property acquisition.
					Significant comparative advantage over other options	Significant comparative advantage over other options
6	Physical Activity	6.1	Connectivity to adjoining cycling facilities	Analysis of the extent that the scheme connects with cycle tracks.	This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for pedestrians and cyclists is good in respect of this option.
	Thysical Activity		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	Significant comparative advantage over other options
		6.2			Cross Railway journey = nil as the proposed option is along the plan alignment of the existing Coolmine Road. Diversion for cyclists when level crossing closed 0.4km The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.	Cross Railway journey = nil as the proposed option is along the plan alignment of the existing Coolmine Road. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.
	с	riteria			Option 12 (Road OvBridge West from Navan Parkway Stn, PedCycOvBridge at Ashtown Station)	Option 13 (OvrBridge West of Mill, PedOvBridge at Station)
1	Ec	onomy			- Some comparative disadvantage over other options	. Some comparative advantage over other options
2	Inte	egration			Some comparative advantage over other options	Significant comparative advantage over other options
3	Environment				Some comparative disadvantage over other options	Some comparative disadvantage over other options
4	Accessibility and social inclusion				Some comparative advantage over other options	Some comparative advantage over other options
5	s Safety				Significant comparative advantage over other options	Significant comparative advantage over other options
6	Physic	cal Activ	rity		Significant comparative advantage over other options	Significant comparative advantage over other options
<u> </u>	Progres	s To Sta	ige 2		Yes	Yes