

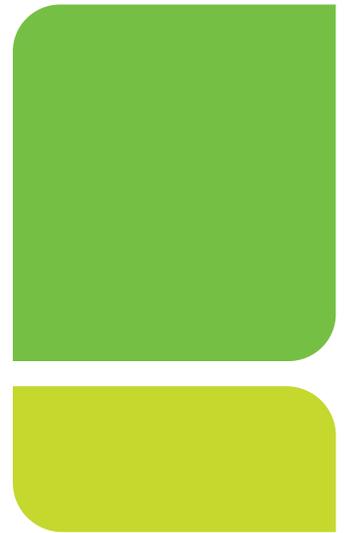
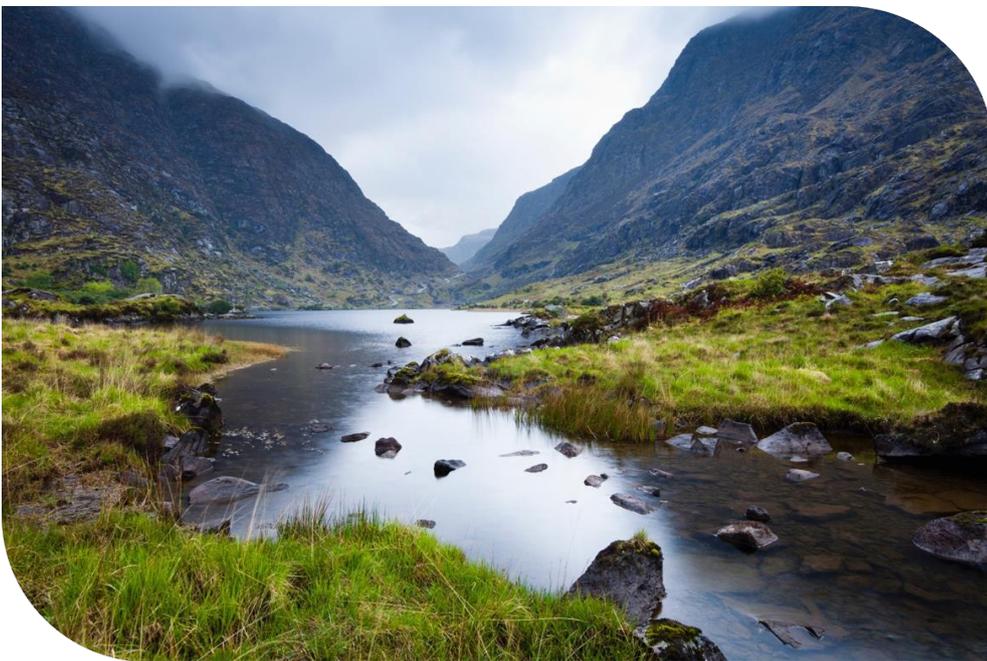
Spring 2023



Regional Water Resources Plan–South West

Natura Impact Statement

Appendix E



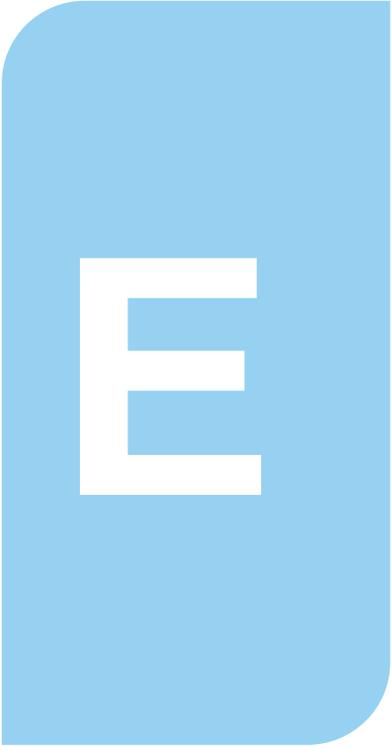
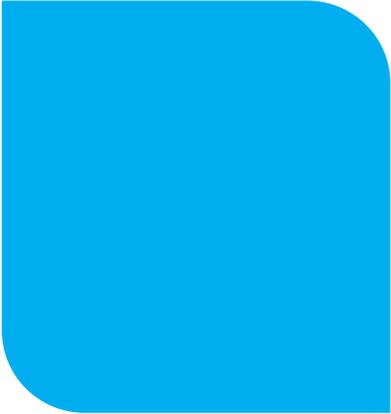
Tionscadal Éireann
Project Ireland
2040

Data disclaimer: This document uses best available data at time of writing. As data relating to population forecasts and trends are based on information gathered before the Covid-19 Pandemic, monitoring and feedback will be used to capture any updates. The National Water Resources Plan will also align to relevant updates in applicable policy. In December 2022, the Water Services (Amendment) (No. 2) Act, 2022 was signed into law. This act legislates that from the 31 December 2022, Irish Water will only be known as Uisce Éireann. It also provides that, from that date, all references in any enactment, legal proceedings or other document to Irish Water shall be construed as references to Uisce Éireann only. Therefore in this NIS, which was developed prior to the name change, all references to Irish Water shall be construed as Uisce Éireann.

Baseline data included in the RWRP-SW has been incorporated from numerous sources including but not limited to; National Planning Framework, Central Statistics Office, Regional Spatial and Economic Strategies, Local Authority data sets, Regional Assembly data sets and Uisce Éireann data sets. Data sources will be detailed in the relevant sections of the RWRP-SW. 2019 was selected as the base year to align with the planning period (2019-2025) of the NWRP.

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E



Appendix E

In-combination Tables

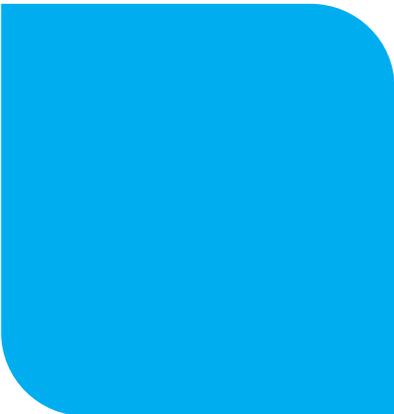


Table E1: SAH-Potential in-combination effects with other projects and options within SAH

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
STUDY AREA H					
<p>SAH-524 New GW abstraction and interconnect Abbeyfeale and Listowel</p> <p>Option study area is within and hydrologically linked to Lower River Shannon SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary. Potential pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species during construction given that the works are adjacent to the SAC boundary. Option includes new GW abstraction. However, no operational impacts are predicted.</p> <p>Option study area is within Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA. There is potential for disturbance to hen harrier during construction given the study area is within the SPA and due to hen harrier using supporting habitats in areas outside of the SPA but ecologically connected to it (e.g. grassland, arable farmland). No operational impacts are predicted.</p> <p>Option study area is in close proximity to a hydrological link to and 1.2km from River Shannon and River Fergus Estuaries SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species 	<p><u>N22 Road Improvement Scheme: 20km scheme from Farranfore to Killarney</u> Lower River Shannon SAC is approximately 21km north of the northern extent of the scheme and therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 8km north-east of the northern extent of the scheme. There is a hydrological link, but the European site is upstream of the scheme, therefore no in-combination effects are predicted. River Shannon and River Fergus Estuaries SPA is approximately 40km north of the northern extent of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N69 Listowel Bypass: 7km of road construction between Billeragh and Ballygowloge</u> Lower River Shannon SAC crosses the scheme and the LSEs identified in the NIS for this scheme were habitat loss, habitat degradation, spread of invasive species, disturbance, reduction in water quality, changes to the hydrological regime and barrier effects. Therefore, there may be in-combination effects from habitat loss, pollution, spread of invasive non-native species and disturbance. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 2km south of the scheme. There is a hydrological link, but the European site is upstream of the scheme, therefore no in-combination effects are predicted. River Shannon and River Fergus Estuaries SPA is approximately 11km north of the scheme with no direct hydrological link, therefore no in-combination effects are predicted.</p> <p><u>N70 Milltown Bypass Project</u> Lower River Shannon SAC is approximately 26km north-east of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 22km east of the scheme therefore no in-combination effects are predicted. River Shannon and River Fergus Estuaries SPA is approximately 46km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Glanbehy Bridge Road Project</u> Lower River Shannon SAC is approximately 43km north-east of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 42km north-east of the scheme therefore no in-combination effects are predicted. River Shannon and River Fergus Estuaries SPA is approximately 65km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>N86 Tralee to An Daingean: Upgrade works along road between Camp and Dingle</u> Lower River Shannon SAC is approximately 28km north-east of the eastern extent of the scheme, therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 24km north-east of the eastern extent of the scheme, therefore no in-combination effects are predicted. River Shannon and River Fergus Estuaries SPA is approximately 46km north-east of the eastern extent of the scheme, therefore no in-combination effects are predicted.</p> <p><u>Destination Killarney, Smarter Travel Killarney: Regeneration of the town centre and public realm</u> Lower River Shannon SAC is approximately 27km north of the schemes therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 16km north-east of the schemes therefore no in-combination effects are predicted. River Shannon and River Fergus Estuaries SPA is approximately 54km north of the schemes therefore no in-combination effects are predicted.</p>	<p>Yes – from habitat loss, pollution, spread of invasive non-native species and disturbance impacts on the Lower River Shannon SAC if construction phase is concurrent with the N69 Listowel Bypass works</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p><u>Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, MTU Tralee Campus STEM building</u></p> <p>Lower River Shannon SAC is approximately 14km north-east of the schemes with no hydrological links, therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 8km north-east of the schemes. There is a hydrological link, but the European site is upstream of the schemes, therefore no in-combination effects are predicted. River Shannon and River Fergus Estuaries SPA is approximately 34km north of the schemes therefore no in-combination effects are predicted.</p> <p><u>South Kerry Greenway: Construction of a 32km greenway from Reenard to Faha</u></p> <p>Lower River Shannon SAC is approximately 42km north-east of the eastern extent of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 38km north-east of the eastern extent of the scheme therefore no in-combination effects are predicted. River Shannon and River Fergus Estuaries SPA is approximately 61km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Community Hospital</u></p> <p>This development includes an extension to the current hospital and was screened out for AA, therefore there will be no potential impact on European sites. Lower River Shannon SAC is approximately 64km north-east of the scheme; no in-combination effects are possible. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 60km north-east of the scheme; no in-combination effects are possible. River Shannon and River Fergus Estuaries SPA is approximately 85km north-east of the scheme; no in-combination effects are possible.</p> <p><u>Killarney Community Nursing unit: New two-story nursing unit</u></p> <p>Lower River Shannon SAC is approximately 29km north-east of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 16km north-east of the scheme therefore no in-combination effects are predicted. River Shannon and River Fergus Estuaries SPA is approximately 55km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>Listowel Community Hospital, Listowel Food Hub</u></p> <p>This hospital development includes an extension to the current hospital. The Food Hub development will include 5 state-of-the-art food production units and a research and development suite. Both developments were screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Lower River Shannon SAC is approximately 240m south of the schemes; no in-combination effects are possible. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 10km east of the schemes; no in-combination effects are possible. River Shannon and River Fergus Estuaries SPA is approximately 11km north of the schemes; no in-combination effects are possible.</p> <p><u>Lohercannon, Tralee</u></p> <p>This development includes the construction of 61 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Lower River Shannon SAC is approximately 15km north-east of the scheme; no in-combination effects are possible. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 11km east of the scheme; no in-combination effects are possible. River Shannon and River Fergus Estuaries</p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>SPA is approximately 36km north-east of the scheme; no in-combination effects are possible.</p> <p><u>Valentia Trans-Atlantic Cable Station</u></p> <p>Lower River Shannon SAC is approximately 70km north-east of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 65km north-east of the scheme therefore no in-combination effects are predicted. River Shannon and River Fergus Estuaries SPA is approximately 89km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Town Centre Regeneration Project</u></p> <p>Lower River Shannon SAC is approximately 64km north-east of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 60km north-east of the scheme therefore no in-combination effects are predicted. River Shannon and River Fergus Estuaries SPA is approximately 85km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Baile na Fheirtéaraigh Development</u></p> <p>Lower River Shannon SAC is approximately 42km north-east of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 55km north-east of the scheme therefore no in-combination effects are predicted. River Shannon and River Fergus Estuaries SPA is approximately 69km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Ard Na Greine, Knockavota, Milltown</u></p> <p>This development includes the construction of 54 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Lower River Shannon SAC is approximately 23km north-east of the scheme; no in-combination effects are possible. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 19km north-east of the scheme: no in-combination effects are possible. River Shannon and River Fergus Estuaries SPA is approximately 49km north-east of the scheme;no in-combination effects are possible.</p>			
<p>SAH-512</p> <p>Increase GW abstraction at An Clochan. Ce Brennan and Clochan are connected - Could feed from either depending on where yield is</p> <p>Option study area is 80m from and hydrologically linked to Mount Brandon SAC. Potential pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for the spread of invasive species during construction given that the works are adjacent to the SAC boundary and the ZOC is within the SAC. Option includes increased GW abstraction. There is a risk this groundwater abstraction could lead to hydrological changes (reduced</p>	<ul style="list-style-type: none"> • Mortality risk • Habitat degradation • Spread of invasive non-native species • Water table/availability 	<p><u>N22 Road Improvement Scheme: 20km scheme from Farranfore to Killarney</u></p> <p>Mount Brandon SAC is approximately 33km west of the northern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>N69 Listowel Bypass: 7km of road construction between Billeragh and Ballygowloge</u></p> <p>Mount Brandon SAC is approximately 41km south-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Milltown Bypass Project</u></p> <p>Mount Brandon SAC is approximately 23km west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Glanbehy Bridge Road Project</u></p> <p>Mount Brandon SAC is approximately 16km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N86 Tralee to An Daingean: Upgrade works along road between Camp and Dingle</u></p> <p>Mount Brandon SAC is approximately 1km north of the scheme with no hydrological links, therefore no in-combination effects are predicted.</p> <p><u>Destination Killarney, Smarter Travel Killarney: Regeneration of the town centre and public realm</u></p>	No	N/A	N

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>flows – impacting on water quality) that could impact aquatic QI species or habitats. Therefore, there is potential for impacts on aquatic QI species utilising this European site through a reduction in flows/water levels. There is a risk this groundwater abstraction will reduce water flow in the underground aquifer. Therefore, there is potential for impacts on QI utilising watercourses hydrologically linked to this European site through a reduction in flows/water.</p>		<p>Mount Brandon SAC is approximately 41km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, MTU Tralee Campus STEM building</u></p> <p>Mount Brandon SAC is approximately 22km west of the schemes therefore no in-combination effects are predicted.</p> <p><u>South Kerry Greenway: Construction of a 32km greenway from Reenard to Faha</u></p> <p>Mount Brandon SAC is approximately 15km north of the scheme with no direct hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Community Hospital</u></p> <p>This development includes an extension to the current hospital and was screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Mount Brandon SAC is approximately 22km north of the scheme; no in-combination effects are possible.</p> <p><u>Killarney Community Nursing unit: New two-story nursing unit</u></p> <p>Mount Brandon SAC is approximately 40km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>Listowel Community Hospital, Listowel Food Hub</u></p> <p>This hospital development includes an extension to the current hospital. The Food Hub development will include 5 state-of-the-art food production units and a research and development suite. Both developments were screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Mount Brandon SAC is approximately 43km south-west of the schemes; no in-combination effects are possible.</p> <p><u>Lohercannon, Tralee</u></p> <p>This development includes the construction of 61 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Mount Brandon SAC is approximately 18km south-west of the scheme; no in-combination effects are possible.</p> <p><u>Valentia Trans-Atlantic Cable Station</u></p> <p>Mount Brandon SAC is approximately 25km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Town Centre Regeneration Project</u></p> <p>Mount Brandon SAC is approximately 22km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>Baile na Fheirtéaraigh Development</u></p> <p>Mount Brandon SAC is approximately 8km north-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ard Na Greine, Knockavota, Milltown</u></p> <p>This development includes the construction of 54 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Mount Brandon SAC is approximately 23km north-west of the scheme; no in-combination effects are possible.</p>			
<p>SAH-038 Increase Ballyheigue abstraction. Abandon existing BH at Glenderry Well and rationalise WTP</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation 	<p><u>N22 Road Improvement Scheme: 20km scheme from Farranfore to Killarney</u></p> <p>Akeragh, Banna and Barrow Harbour SAC is approximately 22km north-west of the northern extent of the scheme therefore no in-combination effects are predicted.</p> <p>Tralee Bay Complex SPA is approximately 15km north-west of the northern extent</p>	<p>Yes – from pollution impacts on Akeragh, Banna and Barrow Harbour SAC and from pollution</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>Option study area is 450m from and hydrologically linked to Akeragh, Banna and Barrow Harbour SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for the spread of invasive species during construction given that the works and ZOC are adjacent to the SAC boundary. Option includes increased GW abstraction. There is a risk this groundwater abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. Therefore, there is potential for impacts on aquatic QI species utilising this European site through a reduction in flows/water levels. There is a risk this groundwater abstraction will reduce water flow in the underground aquifer. There is potential for impacts on habitats hydrologically linked to this European site through a reduction in flows/water levels due to groundwater abstraction.</p> <p>Option study area is 700m from and hydrologically linked to Tralee Bay Complex SPA. There is potential for some loss of/damage to supporting habitats (e.g. foraging habitats) to QI species during construction works given that the works are adjacent to SPA boundary. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. There is potential for disturbance to QI birds during construction given the proximity of the study area to the SPA and due to QI birds using supporting habitats in areas outside of the SPA but ecologically connected to it (e.g. grassland, arable farmland). No operational impacts are predicted.</p> <p>Option study area mains cross and is hydrologically linked to Kerry Head SPA. There is potential for some loss of/damage to supporting habitats (e.g. foraging habitats) to QI species during construction works given that the works are within the SPA boundary. Pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact prey species relied on by QI. There is potential for pollution of waterbodies during construction that could impact on the habitat used by QI bird species. Potential pollution of watercourses during</p>	<ul style="list-style-type: none"> Disturbance Spread of invasive non-native species Water table/availability 	<p>of the scheme with no hydrological links, therefore no in-combination effects are predicted. Kerry Head SPA is approximately 31km north-west of the northern extent of the scheme, therefore no in-combination effects are predicted.</p> <p><u>N69 Listowel Bypass: 7km of road construction between Billeragh and Ballygowloge</u> Akeragh, Banna and Barrow Harbour SAC is approximately 23km west of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 23km west of the scheme therefore no in-combination effects are predicted. Kerry Head SPA is approximately 15km west of the scheme with no direct hydrological links, therefore no in-combination effects are predicted.</p> <p><u>N70 Milltown Bypass Project</u> Akeragh, Banna and Barrow Harbour SAC is approximately 17km north-west of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 10.5km north of the scheme with no hydrological link, therefore no in-combination effects are predicted. Kerry Head SPA is approximately 28km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Glanbehy Bridge Road Project</u> Akeragh, Banna and Barrow Harbour SAC is approximately 26km north of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 24km north of the scheme therefore no in-combination effects are predicted. Kerry Head SPA is approximately 39km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>N86 Tralee to An Daingean: Upgrade works along road between Camp and Dingle</u> Akeragh, Banna and Barrow Harbour SAC is approximately 6km north of the eastern extent of the scheme with a hydrological link, therefore there may be in-combination effects from pollution. Tralee Bay Complex SPA is approximately 2km north of the eastern extent of the scheme with a hydrological link, therefore there may be in-combination effects from pollution and disturbance. Kerry Head SPA is approximately 19km north of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Destination Killarney, Smarter Travel Killarney: Regeneration of the town centre and public realm</u> Akeragh, Banna and Barrow Harbour SAC is approximately 34km north-west of the schemes therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 27km north-west of the schemes therefore no in-combination effects are predicted. Kerry Head SPA is approximately 45km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, MTU Tralee Campus STEM building</u> Akeragh, Banna and Barrow Harbour SAC is approximately 9km west of the schemes with no hydrological link, therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 1.5km south-west of the schemes therefore there may be in-combination effects from disturbance and pollution. Kerry Head SPA is approximately 18km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>South Kerry Greenway: Construction of a 32km greenway from Reenard to Faha</u> Akeragh, Banna and Barrow Harbour SAC is approximately 25km north of the eastern extent of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 22km north-east of the eastern extent of the scheme therefore no in-combination effects are predicted. Kerry Head SPA is approximately 38km north of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Community Hospital</u></p>	<p>and disturbance impacts on Tralee Bay Complex SPA if construction phase concurrent with N86 Tralee to An Daingean works</p> <p>Yes - from disturbance and pollution impacts on Tralee Bay Complex SPA if construction phase concurrent with Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network and MTU Tralee Campus STEM building works</p>	<p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	

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<p>construction could have indirect effects on QI bird species through impacts upon prey species. There is potential for disturbance to QI birds given the study area is within the SPA which is a breeding site. No operational impacts are predicted.</p>		<p>This development includes an extension to the current hospital and was screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Akeragh, Banna and Barrow Harbour SAC is approximately 43km north-east of the scheme; no in-combination effects are possible. Tralee Bay Complex SPA is approximately 37km north-east of the scheme; no in-combination effects are possible. Kerry Head SPA is approximately 55km north-east of the scheme; no in-combination effects are possible.</p> <p><u>Killarney Community Nursing unit: New two-story nursing unit</u></p> <p>Akeragh, Banna and Barrow Harbour SAC is approximately 34km north-west of the scheme; no in-combination effects are possible. Tralee Bay Complex SPA is approximately 34km north-west of the scheme; no in-combination effects are possible. Kerry Head SPA is approximately 44km north-west of the scheme: no in-combination effects are possible.</p> <p><u>Listowel Community Hospital, Listowel Food Hub</u></p> <p>This hospital development includes an extension to the current hospital. The Food Hub development will include 5 state-of-the-art food production units and a research and development suite. Both developments were screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Akeragh, Banna and Barrow Harbour SAC is approximately 25km south-west of the schemes; no in-combination effects are possible. Tralee Bay Complex SPA is approximately 24km south-west of the schemes; no in-combination effects are possible. Kerry Head SPA is approximately 27km west of the schemes; no in-combination effects are possible.</p> <p><u>Lohercannon, Tralee</u></p> <p>This development includes the construction of 61 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Akeragh, Banna and Barrow Harbour SAC is approximately 6km west of the scheme; no in-combination effects are possible. Tralee Bay Complex SPA is approximately 100m south of the scheme; no in-combination effects are possible. Kerry Head SPA is approximately 16km north-west of the scheme; no in-combination effects are possible.</p> <p><u>Valentia Trans-Atlantic Cable Station</u></p> <p>Akeragh, Banna and Barrow Harbour SAC is approximately 48km north-east of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 40km north-east of the scheme therefore no in-combination effects are predicted. Kerry Head SPA is approximately 60km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Town Centre Regeneration Project</u></p> <p>Akeragh, Banna and Barrow Harbour SAC is approximately 43km north-east of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 37km north-east of the scheme therefore no in-combination effects are predicted. Kerry Head SPA is approximately 55km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Baile na Fheirtéaraigh Development</u></p> <p>Akeragh, Banna and Barrow Harbour SAC is approximately 38km north-east of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 25km north-east of the scheme therefore no in-combination effects are predicted. Kerry Head SPA is approximately 41km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Ard Na Greine, Knockavota, Milltown</u></p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>This development includes the construction of 54 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Akeragh, Banna and Barrow Harbour SAC is approximately 19km north-west of the scheme; no in-combination effects are possible. Tralee Bay Complex SPA is approximately 18km north-west of the scheme; no in-combination effects are possible. Kerry Head SPA is approximately 30km north of the scheme; no in-combination effects are possible.</p>			
<p>SAH-225 Develop TW at Brosna raw water pump house</p> <p>Option study area is within and hydrologically linked to Lower River Shannon SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary. Potential pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species given that the works are within the SAC boundary. Option includes new GW abstraction. There is a risk this groundwater abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. There is a risk this groundwater abstraction will reduce water flow in the underground aquifer. There is potential for impacts on habitats utilising watercourses hydrologically linked to this European site through a reduction in flows/water levels due to groundwater abstraction.</p> <p>Option study area is 600m from Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA. There is potential for disturbance to hen harrier during construction given the proximity of the study area to the SPA and due to hen harrier using supporting habitats in areas outside of the SPA but ecologically connected to it (e.g. grassland, arable farmland). No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>N22 Road Improvement Scheme: 20km scheme from Farranfore to Killarney</u></p> <p>Lower River Shannon SAC is approximately 21km north of the northern extent of the scheme and therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 8km north-east of the northern extent of the scheme. There is a hydrological link, but the European site is upstream of the scheme, therefore no in-combination effects are predicted.</p> <p><u>N69 Listowel Bypass: 7km of road construction between Billeragh and Ballygowloge</u></p> <p>Lower River Shannon SAC crosses the scheme and the LSEs identified in the NIS for this scheme were habitat loss, habitat degradation, spread of invasive species, disturbance, reduction in water quality, changes to the hydrological regime and barrier effects. Therefore, there may be in-combination effects from habitat loss, pollution, spread of invasive non-native species and disturbance. In-combination effects during operation may result in habitat degradation and changes to water table/availability. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 2km south of the scheme. There is a hydrological link, but the European site is upstream of the scheme, therefore no in-combination effects are predicted.</p> <p><u>N70 Milltown Bypass Project</u></p> <p>Lower River Shannon SAC is approximately 26km north-east of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 22km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Glanbehy Bridge Road Project</u></p> <p>Lower River Shannon SAC is approximately 43km north-east of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 42km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>N86 Tralee to An Daingean: Upgrade works along road between Camp and Dingle</u></p> <p>Lower River Shannon SAC is approximately 28km north-east of the eastern extent of the scheme, therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 24km north-east of the eastern extent of the scheme, therefore no in-combination effects are predicted.</p> <p><u>Destination Killarney, Smarter Travel Killarney: Regeneration of the town centre and public realm</u></p> <p>Lower River Shannon SAC is approximately 27km north of the schemes therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 16km north-east of the schemes therefore no in-combination effects are predicted.</p> <p><u>Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, MTU Tralee Campus STEM building</u></p> <p>Lower River Shannon SAC is approximately 14km north-east of the schemes with no hydrological links, therefore no in-combination effects are predicted. Stack's to</p>	<p>Yes – from habitat loss, pollution, spread of invasive non-native species and disturbance on the Lower River Shannon SAC if construction phase is concurrent with the N69 Listowel Bypass and during operation from habitat degradation and water table/availability on Lower River Shannon SAC</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 8km north-east of the schemes. There is a hydrological link, but the European site is upstream of the schemes, therefore no in-combination effects are predicted.</p> <p><u>South Kerry Greenway: Construction of a 32km greenway from Reenard to Faha</u></p> <p>Lower River Shannon SAC is approximately 42km north-east of the eastern extent of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 38km north-east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Community Hospital</u></p> <p>This development includes an extension to the current hospital and was screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Lower River Shannon SAC is approximately 64km north-east of the scheme; no in-combination effects are possible. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 60km north-east of the scheme; no in-combination effects are possible.</p> <p><u>Killarney Community Nursing unit: New two-story nursing unit</u></p> <p>Lower River Shannon SAC is approximately 29km north-east of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 16km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Listowel Community Hospital, Listowel Food Hub</u></p> <p>This hospital development includes an extension to the current hospital. The Food Hub development will include 5 state-of-the-art food production units and a research and development suite. Both developments were screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Lower River Shannon SAC is approximately 240m south of the schemes; no in-combination effects are possible. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 10km east of the scheme; no in-combination effects are possible.</p> <p><u>Lohercannon, Tralee</u></p> <p>This development includes the construction of 61 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Lower River Shannon SAC is approximately 15km north-east of the scheme; no in-combination effects are possible. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 11km east of the scheme; no in-combination effects are possible.</p> <p><u>Valentia Trans-Atlantic Cable Station</u></p> <p>Lower River Shannon SAC is approximately 70km north-east of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 65km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Town Centre Regeneration Project</u></p> <p>Lower River Shannon SAC is approximately 64km north-east of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 60km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Baile na Fheirtéaraigh Development</u></p> <p>Lower River Shannon SAC is approximately 42km north-east of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk</p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Mountains, West Limerick Hills and Mount Eagle SPA is approximately 55km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Ard Na Greine, Knockavota, Milltown</u></p> <p>This development includes the construction of 54 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Lower River Shannon SAC is approximately 23km north-east of the scheme; no in-combination effects are possible. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 19km north-east of the scheme; no in-combination effects are possible.</p>			
<p>SAH-531</p> <p>Rationalise Cahersiveen to Waterville, with Lough Currane abstraction increased to meet deficit</p> <p>Option study area is within and hydrologically linked to Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary (within Lough Currane). Potential pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could also affect QI species and hydrologically connected habitats. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species during construction given that the works are within the SAC boundary. Option includes SW abstraction. There is a risk this surface water abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. There is potential for impacts on freshwater pearl mussel and other aquatic QI utilising watercourses hydrologically linked to this European site through a reduction in flows/water levels due to surface water abstraction.</p> <p>Option study area mains cross and is hydrologically linked to Ballinskelligs Bay and Inny Estuary SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for disturbance to petalwort from construction works as mains cross near recorded site.</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>N22 Road Improvement Scheme: 20km scheme from Farranfore to Killarney</u></p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC crosses scheme and therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the N22 Scheme assumed as assessment not available at time of writing). Ballinskelligs Bay and Inny Estuary SAC is approximately 51km south-west of the southern extent of the scheme therefore no in-combination effects are predicted. Valencia Harbour/Portmagee Channel SAC is approximately 56km southwest of the southern extent of the scheme therefore no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 34km west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N69 Listowel Bypass: 7km of road construction between Billeragh and Ballygowloge</u></p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 38km south of the scheme therefore no in-combination effects are predicted. Ballinskelligs Bay and Inny Estuary SAC is approximately 79km south-west of the scheme therefore no in-combination effects are predicted. Valencia Harbour/Portmagee Channel SAC is approximately 74km south-west of the scheme therefore no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 53km south-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Milltown Bypass Project</u></p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 11.7km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Ballinskelligs Bay and Inny Estuary SAC is approximately 43km south-west of the scheme therefore no in-combination effects are predicted. Valencia Harbour/Portmagee Channel SAC is approximately 43km south-west of the scheme therefore no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 21km south-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Glanbehy Bridge Road Project</u></p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 1.2km east of the scheme. Therefore, there may be in-combination effects from mortality, pollution, disturbance and spread of invasive non-native species. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N70 Glanbehy Bridge assumed as assessment not available at time of writing). Ballinskelligs Bay and Inny Estuary SAC is approximately 23km south-west of the scheme therefore no in-combination effects are predicted. Valencia Harbour/Portmagee Channel SAC is approximately 21km south-west of the scheme therefore no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 1.4km north of the scheme with no hydrological link. Therefore, there may be in-combination effects from disturbance</p>	<p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC if construction phase concurrent with N22 Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC and disturbance impacts on Iveragh Peninsula SPA if construction phase concurrent with N70 Glanbehy Bridge Road Project works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC if construction phase concurrent with Destination Killarney and Smarter Travel Killarney works and during operation from habitat degradation and water table/availability on</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>There is also potential for the spread of invasive species during construction given that the works are within the SAC boundary. No operational impacts are predicted.</p> <p>Option study area is 1km from and hydrologically linked to Valencia Harbour/Portmagee Channel SAC. potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. No operational impacts are predicted.</p> <p>Option study area is 900m from and hydrologically linked to Iveragh Peninsula SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. There is potential for disturbance to QI birds given the proximity of the study area to the SPA and due to QI birds using supporting habitats in areas outside of the SPA but ecologically connected to it (e.g. grassland, arable farmland). No operational impacts are predicted.</p>		<p>(LSE for N70 Glanbehy Bridge assumed as assessment not available at time of writing).</p> <p><u>N86 Tralee to An Daingean: Upgrade works along road between Camp and Dingle</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 13km north-west of the scheme with no hydrological link, therefore no in-combination effects are predicted. Ballinskelligs Bay and Inny Estuary SAC is approximately 30km south of the scheme therefore no in-combination effects are predicted. Valencia Harbour/Portmagee Channel SAC is approximately 20km south of the scheme therefore no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 14km south of the scheme with no direct hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Destination Killarney, Smarter Travel Killarney: Regeneration of the town centre and public realm</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC crosses the schemes therefore there may be in-combination effects from habitat loss, mortality, pollution, disturbance and spread of invasive non-native species. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Schemes assumed as assessment not available at time of writing). Ballinskelligs Bay and Inny Estuary SAC is approximately 49km south-west of the schemes therefore no in-combination effects are predicted. Valencia Harbour/Portmagee Channel SAC is approximately 53km south-west of the schemes therefore no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 33km west of the schemes therefore no in-combination effects are predicted.</p> <p><u>Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, MTU Tralee Campus STEM building</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 24km south of the schemes therefore no in-combination effects are predicted. Ballinskelligs Bay and Inny Estuary SAC is approximately 54km south-west of the schemes therefore no in-combination effects are predicted. Valencia Harbour/Portmagee Channel SAC is approximately 53km south-west of the schemes therefore no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 31km south-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>South Kerry Greenway: Construction of a 32km greenway from Reenard to Faha</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC crosses the scheme and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from habitat loss, mortality, pollution and disturbance. In-combination effects during operation may result in habitat degradation and changes to water table/availability. Ballinskelligs Bay and Inny Estuary SAC is approximately 10km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Valencia Harbour/Portmagee Channel SAC is directly adjacent to the western extent of the scheme, and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from pollution. Iveragh Peninsula SPA crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from pollution and disturbance.</p> <p><u>Cahersiveen Community Hospital</u></p>	<p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from habitat loss, mortality, pollution and disturbance impacts on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC and from pollution impacts on Valencia Harbour/Portmagee Channel SAC and from pollution and disturbance impacts on Iveragh Peninsula SPA if construction phase concurrent with South Kerry Greenway works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from habitat loss and disturbance on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC if construction phase concurrent with Killarney Community Nursing unit works</p> <p>Yes – from pollution impacts on Valencia Harbour/Portmagee Channel SAC and from pollution and disturbance impacts on Iveragh Peninsula SPA if construction phase concurrent with Valentia Trans-Atlantic Cable Station works</p> <p>Yes – from pollution impacts on Valencia Harbour/Portmagee Channel SAC and from pollution and disturbance impacts on Iveragh Peninsula SPA if construction phase concurrent with Cahersiveen Town Centre Regeneration Project works</p>		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>This development includes an extension to the current hospital and was screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 4km north of the scheme; no in-combination effects are possible. Ballinskelligs Bay and Inny Estuary SAC is approximately 10km south of the scheme; no in-combination effects are possible. Valencia Harbour/Portmagee Channel SAC is approximately 2km west of the scheme; no in-combination effects are possible. Iveragh Peninsula SPA is approximately 800m west of the scheme; no in-combination effects are possible.</p> <p><u>Killarney Community Nursing unit: New two-story nursing unit</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 850m west of the scheme, and the LSEs identified in the NIS for this scheme were habitat loss and disturbance. Therefore, there may be in-combination effects from habitat loss and disturbance. Ballinskelligs Bay and Inny Estuary SAC is approximately 49km south-west of the scheme therefore no in-combination effects are predicted. Valencia Harbour/Portmagee Channel SAC is approximately 53km south-west of the scheme therefore no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 55km south-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>Listowel Community Hospital, Listowel Food Hub</u></p> <p>This hospital development includes an extension to the current hospital. The Food Hub development will include 5 state-of-the-art food production units and a research and development suite. Both developments were screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 31km south-east of the schemes; no in-combination effects are possible. Ballinskelligs Bay and Inny Estuary SAC is approximately 78km south-west of the schemes; no in-combination effects are possible. Valencia Harbour/Portmagee Channel SAC is approximately 77km south-west of the schemes; no in-combination effects are possible. Iveragh Peninsula SPA is approximately 78km south-west of the schemes; no in-combination effects are possible.</p> <p><u>Lohercannon, Tralee</u></p> <p>This development includes the construction of 61 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 23km south of the scheme; no in-combination effects are possible. Ballinskelligs Bay and Inny Estuary SAC is approximately 52km south-west of the scheme; no in-combination effects are possible. Valencia Harbour/Portmagee Channel SAC is approximately 50km south-west of the scheme; no in-combination effects are possible. Iveragh Peninsula SPA is approximately 29km south-west of the scheme; no in-combination effects are possible.</p> <p><u>Valentia Trans-Atlantic Cable Station</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 8km north-east of the scheme with no hydrological links, therefore no in-combination effects are predicted. Ballinskelligs Bay and Inny Estuary SAC is approximately 10km south of the scheme with no hydrological links, therefore no in-combination effects are predicted. Valencia Harbour/Portmagee Channel SAC is approximately 150m north of the scheme, therefore there may be in-combination effects from pollution. Iveragh Peninsula SPA is approximately 1km west of the scheme, therefore there may be in-combination effects from pollution and disturbance.</p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p><u>Cahersiveen Town Centre Regeneration Project</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 4km north of the scheme with no hydrological links, therefore no in-combination effects are predicted. Ballinskelligs Bay and Inny Estuary SAC is approximately 10km south of the scheme with no hydrological links, therefore no in-combination effects are predicted. Valencia Harbour/Portmagee Channel SAC is approximately 2km west of the scheme with a hydrological link, therefore there may be in-combination effects from pollution. Iveragh Peninsula SPA is approximately 800m west of the scheme with a hydrological link, therefore there may be in-combination effects from pollution and disturbance.</p> <p><u>Baile na Fheirtéaraigh Development</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 24km south-east of the scheme, therefore no in-combination effects are predicted. Ballinskelligs Bay and Inny Estuary SAC is approximately 37km south of the scheme, therefore no in-combination effects are predicted. Valencia Harbour/Portmagee Channel SAC is approximately 25km south of the scheme, therefore there no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 22km south-east of the scheme, therefore no in-combination effects are predicted.</p> <p><u>Ard Na Greine, Knockavota, Milltown</u></p> <p>This development includes the construction of 54 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 11km south of the scheme; no in-combination effects are possible. Ballinskelligs Bay and Inny Estuary SAC is approximately 42km south-west of the scheme; no in-combination effects are possible. Valencia Harbour/Portmagee Channel SAC is approximately 43km south-west of the scheme; no in-combination effects are possible. Iveragh Peninsula SPA is approximately 21km south-west of the scheme; no in-combination effects are possible.</p>			
<p>SAH-065</p> <p>New SW abstraction from Lough Gill and upgrade Castlegregory WTP</p> <p>Option study area is within and hydrologically linked to Tralee Bay and Magharees Peninsula, West to Cloghane SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary (within Lough Gill). Potential pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish relied on by otter for food. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species during construction given that the works are within the SAC boundary. Option includes SW abstraction. There is a risk this surface water abstraction could lead to hydrological</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>N22 Road Improvement Scheme: 20km scheme from Farranfore to Killarney</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 14km north-west of the northern extent of the scheme with no hydrological link, therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 15km north-west of the northern extent of the scheme with no hydrological links, therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 34km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N69 Listowel Bypass: 7km of road construction between Billeragh and Ballygowloge</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 24km south-west of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 23km west of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 38km south-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Milltown Bypass Project</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 10.5km north of the scheme with no hydrological link, therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 10.5km north of the scheme with no hydrological link, therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 20km west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Glanbehy Bridge Road Project</u></p>	<p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Tralee Bay and Magharees Peninsula, West to Cloghane SAC and from mortality, disturbance and pollution impacts on Tralee Bay Complex SPA and from pollution impacts on Dingle Peninsula SPA if construction phase concurrent with N86 Tralee to An Daingean works and during operation from habitat degradation and water table/availability on Tralee Bay and Magharees Peninsula, West to Cloghane SAC and Tralee Bay Complex SPA</p> <p>Yes – from mortality, disturbance, spread of invasive non-native</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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<p>changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. There is potential for impacts on otter utilising watercourses hydrologically linked to this European site through a reduction in flows/water levels.</p> <p>Option study area is within and hydrologically linked to Tralee Bay Complex SPA. There is potential for some loss of/damage to supporting habitats (e.g. foraging habitats) to QI species during construction works given that the works are within the SPA boundary. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. There is potential for disturbance to QI birds given the study area is within the SPA. Potential pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact prey species relied on by QI leading to mortality. Option includes SW abstraction. There is a risk this surface water abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact QI species. There is potential for impacts on QI bird species utilising watercourses hydrologically linked to this European site through a reduction in flows/water levels.</p> <p>Option study area is 1.5km from and hydrologically linked to Dingle Peninsula SPA. There is potential for pollution of waterbodies during construction that could impact on the habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are predicted.</p>		<p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 21km north of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 24km north of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 12km north of the scheme with no direct hydrological link, therefore no in-combination effects are predicted.</p> <p><u>N86 Tralee to An Daingean: Upgrade works along road between Camp and Dingle</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC crosses the scheme, therefore there may be in-combination effects from habitat loss, mortality, disturbance, spread of non-native invasive species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N86 Tralee to An Daingean assumed as assessment not available at time of writing). Tralee Bay Complex SPA is approximately 2km north of the eastern extent of the scheme with a hydrological link, therefore there may be in-combination effects from mortality, disturbance and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N86 Tralee to An Daingean assumed as assessment not available at time of writing). Dingle Peninsula SPA is approximately 400m south of the scheme with a hydrological link, therefore there may be in-combination effects from pollution (LSE for N86 Tralee to An Daingean assumed as assessment not available at time of writing).</p> <p><u>Destination Killarney, Smarter Travel Killarney: Regeneration of the town centre and public realm</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 26km north-west of the schemes therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 26km north-west of the schemes therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 34km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, MTU Tralee Campus STEM building</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 1.5km south-west of the schemes therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, and MTU Tralee Campus STEM building schemes assumed as assessment not available at time of writing). Tralee Bay Complex SPA is approximately 1.5km south-west of the schemes therefore there may be in-combination effects from mortality, disturbance, and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, and MTU Tralee Campus STEM building schemes assumed as assessment not available at time of writing). Dingle Peninsula SPA is approximately 21km west of the schemes therefore no in-combination effects are predicted.</p> <p><u>South Kerry Greenway: Construction of a 32km greenway from Reenard to Faha</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 19km north of the eastern extent of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 22km north-east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p>	<p>species and pollution impacts on Tralee Bay and Magharees Peninsula, West to Cloghane SAC and from mortality, disturbance and pollution impacts on Tralee Bay Complex SPA if construction phase concurrent with Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network and MTU Tralee Campus STEM building works and during operation from habitat degradation and water table/availability on Tralee Bay and Magharees Peninsula, West to Cloghane SAC and Tralee Bay Complex SPA</p>		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Dingle Peninsula SPA is approximately 12km north-west of the scheme with no direct hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Community Hospital</u></p> <p>This development includes an extension to the current hospital and was screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 32km north of the scheme; no in-combination effects are possible. Tralee Bay Complex SPA is approximately 37km north-east of the scheme; no in-combination effects are possible. Dingle Peninsula SPA is approximately 18km north of the scheme; no in-combination effects are possible.</p> <p><u>Killarney Community Nursing unit: New two-story nursing unit</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 31km north-west of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 34km north-west of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 34km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>Listowel Community Hospital, Listowel Food Hub</u></p> <p>This hospital development includes an extension to the current hospital. The Food Hub development will include 5 state-of-the-art food production units and a research and development suite. Both developments were screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 26km south-west of the schemes; no in-combination effects are possible. Tralee Bay Complex SPA is approximately 23km west of the schemes; no in-combination effects are possible. Dingle Peninsula SPA is approximately 47km south-west of the schemes; no in-combination effects are possible.</p> <p><u>Lohercannon, Tralee</u></p> <p>This development includes the construction of 61 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 100m south of the scheme; no in-combination effects are possible. Tralee Bay Complex SPA is approximately 100m south of the scheme; no in-combination effects are possible. Dingle Peninsula SPA is approximately 18km west of the scheme; no in-combination effects are possible.</p> <p><u>Valentia Trans-Atlantic Cable Station</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 35km north of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 40km north-east of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 21km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Town Centre Regeneration Project</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 32km north of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 37km north-east of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 18km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>Baile na Fheirtéaraigh Development</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 17km north-east of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 25km north-east of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 2km</p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>west of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ard Na Greine, Knockavota, Milltown</u></p> <p>This development includes the construction of 54 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 13km north of the scheme; no in-combination effects are possible. Tralee Bay Complex SPA is approximately 12km north of the scheme; no in-combination effects are possible. Dingle Peninsula SPA is approximately 18km west of the scheme; no in-combination effects are possible.</p>			
<p>SAH-530</p> <p>New abstraction from the lower Leane catchment and WTP at abstraction to feed deficit in Central Regional and Mid Kerry</p> <p>Option study area is within and hydrologically linked to Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary (within lower Leane catchment). Potential pollution of watercourses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species during construction given that the works are within the SAC boundary. Option includes new SW abstraction. There is a risk this surface water abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. There is potential for impacts on freshwater pearl mussel and other aquatic QI utilising watercourses hydrologically linked to this European site through a reduction in flows/water levels due to surface water abstraction. Option study area mains cross and is hydrologically linked to Castlemaine Harbour SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary. Potential pollution of watercourses during construction (associated with sediment runoff, or accidental spillage) could impact fish and restrict access to spawning habitat.</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>N22 Road Improvement Scheme: 20km scheme from Farranfore to Killarney</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC crosses scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the N22 Scheme assumed as assessment not available at time of writing). Castlemaine Harbour SAC crosses the scheme therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution (LSE for the N22 Scheme assumed as assessment not available at time of writing). Slieve Mish Mountains SAC is approximately 7km north-west of the scheme with no hydrological link, therefore no in-combination effects are predicted. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 14km north-west of the northern extent of the scheme with no hydrological link, therefore no in-combination effects are predicted. Akeragh, Banna and Barrow Harbour SAC is approximately 22km north-west of the northern extent of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 2.3km west of the scheme, therefore there may be in-combination effects from disturbance and pollution (LSE for the N22 Scheme assumed as assessment not available at time of writing). Castlemaine Harbour SPA is approximately 14km west of the scheme with a hydrological link, therefore there may be in-combination effects from pollution. Tralee Bay Complex SPA is approximately 15km north-west of the northern extent of the scheme with no hydrological links, therefore no in-combination effects are predicted.</p> <p><u>N69 Listowel Bypass: 7km of road construction between Billeragh and Ballygowloge</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 38km south of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 33km south-west of the scheme therefore no in-combination effects are predicted. Slieve Mish Mountains SAC is approximately 24km south-west of the scheme therefore no in-combination effects are predicted. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 24km south-west of the scheme therefore no in-combination effects are predicted. Akeragh, Banna and Barrow Harbour SAC is approximately 23km west of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 40km south of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 35km south-west of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 23km west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Milltown Bypass Project</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 11.7km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 1.2km west of the scheme with a hydrological link and therefore there</p>	<p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Castlemaine Harbour SAC, from disturbance and pollution impacts on Killarney National Park SPA and from pollution impacts on Castlemaine Harbour SPA if construction phase concurrent with N22 Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes –from mortality, disturbance, spread of invasive non-native species and pollution impacts on Castlemaine Harbour SAC and from pollution impacts on Castlemaine Harbour SPA if construction phase concurrent with N70 Milltown Bypass Project works</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, from mortality, disturbance, spread of invasive non-native species and pollution impacts on</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species during construction given that the works are within the SAC boundary. No operational impacts are predicted.</p> <p>Option study area is within Slieve Mish Mountains SAC. Potential pollution of watercourses during construction could affect hydrologically connected habitats. No operational impacts are predicted.</p> <p>Option study area is 140m from Tralee Bay and Magharees Peninsula, West to Cloghane SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species given that the works are adjacent to the SAC boundary. No operational impacts are predicted.</p> <p>Option study area is 260m from and hydrologically linked to Akeragh, Banna and Barrow Harbour SAC. Potential pollution of watercourses during construction could affect hydrologically connected habitats. No operational impacts are predicted.</p> <p>Option study area is within and hydrologically linked to Killarney National Park SPA. There is potential for some loss of/damage to supporting habitats (e.g. foraging habitats) to QI species during construction works given that the works are within the SPA boundary. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. There is potential for disturbance to QI birds during construction given the study area is within the SPA. No operational impacts are predicted.</p> <p>Option study area is 2.4km from and hydrologically linked to Castlemaine Harbour SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey</p>		<p>may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution (LSE for the N70 Milltown Bypass Project assumed as assessment not available at time of writing). Slieve Mish Mountains SAC is approximately 4.4km north of the scheme with no hydrological link, therefore no in-combination effects are predicted. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 10.5km north of the scheme with no hydrological link, therefore no in-combination effects are predicted. Akeragh, Banna and Barrow Harbour SAC is approximately 17km north-west of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 12km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 2.5km west of the scheme with a hydrological link and therefore there may be in-combination effects from pollution (LSE for the N70 Milltown Bypass Project assumed as assessment not available at time of writing). Tralee Bay Complex SPA is approximately 10.5km north of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>N70 Glanbehy Bridge Road Project</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 1.2km east of the scheme. Therefore, there may be in-combination effects from mortality, pollution, disturbance and spread of invasive non-native species. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N70 Glanbehy Bridge assumed as assessment not available at time of writing). Castlemaine Harbour SAC is approximately 1.5km north of the scheme with a hydrological link and therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution (LSE for N70 Glanbehy Bridge assumed as assessment not available at time of writing). Slieve Mish Mountains SAC is approximately 12km north of the scheme with no hydrological link, therefore no in-combination effects are predicted. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 21km north of the scheme therefore no in-combination effects are predicted. Akeragh, Banna and Barrow Harbour SAC is approximately 26km north of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 23km east of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 1.5km north of the scheme with a hydrological link and therefore there may be in-combination effects from pollution (LSE for N70 Glanbehy Bridge assumed as assessment not available at time of writing). Tralee Bay Complex SPA is approximately 24km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>N86 Tralee to An Daingean: Upgrade works along road between Camp and Dingle</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 13km north-west of the scheme with no hydrological link, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 3km south of the scheme with a hydrological link, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution (LSE for the N86 Tralee to An Daingean assumed as assessment not available at time of writing). Slieve Mish Mountains SAC is approximately 700m south of the scheme with no hydrological link, therefore no in-combination effects are predicted. Tralee Bay and Magharees Peninsula, West to Cloghane SAC crosses the scheme, therefore there may be in-combination effects from pollution, disturbance and spread of non-native invasive species (LSE for the N86 Tralee to An Daingean assumed as assessment not available at time of writing). Akeragh, Banna and Barrow Harbour SAC is approximately 6km north of the eastern extent of the scheme with a hydrological link, therefore there may be in-combination effects from pollution (LSE for the N86 Tralee to An Daingean assumed as assessment not available at time of writing). Killarney National Park SPA is</p>	<p>Castlemaine Harbour SAC and from pollution impacts on Castlemaine Harbour SPA if construction phase concurrent with N70 Glanbehy Bridge Road Project works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Castlemaine Harbour SAC and from pollution, disturbance and spread of non-native invasive species impacts on Tralee Bay and Magharees Peninsula, West to Cloghane SAC and from pollution impacts on Akeragh, Banna and Barrow Harbour SAC and Castlemaine Harbour SPA and from pollution and disturbance impacts on Tralee Bay Complex SPA if construction phase concurrent with N86 Tralee to An Daingean works</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, from pollution impacts on Castlemaine Harbour SAC and from habitat loss, disturbance and pollution impacts on Killarney National Park SPA if construction phase concurrent with Destination Killarney and Smarter Travel Killarney works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from disturbance, spread of invasive non-native species and pollution impacts on Tralee Bay and Magharees Peninsula, West to Cloghane SAC and from disturbance and pollution impacts</p>		

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<p>species. No operational impacts are predicted.</p> <p>Option study area is 325m from and hydrologically linked to Tralee Bay Complex SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. There is potential for disturbance to QI birds during construction given the study area is in close proximity to the SPA. No operational impacts are predicted.</p>		<p>approximately 30km south-east of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 3km south of the scheme with a hydrological link, therefore there may be in-combination effects from pollution (LSE for the N86 Tralee to An Daingean assumed as assessment not available at time of writing). Tralee Bay Complex SPA is approximately 2km north of the eastern extent of the scheme with a hydrological link, therefore there may be in-combination effects from pollution and disturbance (LSE for the N86 Tralee to An Daingean assumed as assessment not available at time of writing).</p> <p><u>Destination Killarney, Smarter Travel Killarney: Regeneration of the town centre and public realm</u></p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC crosses the schemes therefore there may be in-combination effects from habitat loss, mortality, pollution, disturbance and spread of invasive non-native species. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Schemes assumed as assessment not available at time of writing). Castlemaine Harbour SAC is approximately 8km west of the schemes with a hydrological link, therefore there may be in-combination effects from pollution (LSE for the Schemes assumed as assessment not available at time of writing). Slieve Mish Mountains SAC is approximately 20km north-west of the schemes therefore no in-combination effects are predicted. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 26km north-west of the schemes therefore no in-combination effects are predicted. Akeragh, Banna and Barrow Harbour SAC is approximately 34km north-west of the schemes therefore no in-combination effects are predicted. Killarney National Park SPA crosses the schemes therefore there may be in-combination effects from habitat loss, pollution and disturbance (LSE for the Schemes assumed as assessment not available at time of writing). Castlemaine Harbour SPA is approximately 19km north-west of the schemes therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 26km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, MTU Tralee Campus STEM building</u></p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 24km south of the schemes therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 12km south-west of the schemes with no hydrological link, therefore no in-combination effects are predicted. Slieve Mish Mountains SAC is approximately 3.5km south of the schemes with no hydrological link, therefore no in-combination effects are predicted. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 1.5km south-west of the schemes therefore there may be in-combination effects from disturbance, spread of invasive non-native species and pollution (LSE for the Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, and MTU Tralee Campus STEM building schemes assumed as assessment not available at time of writing). Akeragh, Banna and Barrow Harbour SAC is approximately 9km west of the schemes with no hydrological link, therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 24km south-east of the schemes therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 13km south-west of the schemes with no hydrological link, therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 1.5km south-west of the schemes therefore there may be in-combination effects from disturbance and pollution (LSE for the Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and</p>	<p>on Tralee Bay Complex SPA if construction phase concurrent with Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network and MTU Tralee Campus STEM building works</p> <p>Yes – from habitat loss, mortality, pollution and disturbance impacts on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC and from habitat loss, mortality, pollution and disturbance impacts on Castlemaine Harbour SAC and from pollution impacts on Castlemaine Harbour SPA if construction phase concurrent with South Kerry Greenway works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from habitat loss and disturbance on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC if construction phase concurrent with Killarney Community Nursing unit works</p>		

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		<p>Bridge Street, Tralee Wastewater Network, and MTU Tralee Campus STEM building schemes assumed as assessment not available at time of writing).</p> <p><u>South Kerry Greenway: Construction of a 32km greenway from Reenard to Faha</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC crosses the scheme and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from habitat loss, mortality, pollution and disturbance. In-combination effects during operation may result in habitat degradation and changes to water table/availability. Castlemaine Harbour SAC is approximately 1km north of the scheme with a hydrological link, and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from habitat loss, mortality, pollution and disturbance. Slieve Mish Mountains SAC is approximately 11km north of the scheme with no hydrological link, therefore no in-combination effects are predicted. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 19km north of the eastern extent of the scheme therefore no in-combination effects are predicted. Akeragh, Banna and Barrow Harbour SAC is approximately 25km north of the eastern extent of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 23km south-east of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 1km north of the scheme with a hydrological link, and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from pollution. Tralee Bay Complex SPA is approximately 22km north-east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Community Hospital</u></p> <p>This development includes an extension to the current hospital and was screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 4km north of the scheme; no in-combination effects are possible. Castlemaine Harbour SAC is approximately 21km north-east of the scheme; no in-combination effects are possible. Slieve Mish Mountains SAC is approximately 29km north-east of the scheme; no in-combination effects are possible. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 32km north of the scheme; no in-combination effects are possible. Akeragh, Banna and Barrow Harbour SAC is approximately 43km north-east of the scheme; no in-combination effects are possible. Killarney National Park SPA is approximately 41km east of the scheme; no in-combination effects are possible. Castlemaine Harbour SPA is approximately 17km north-east of the scheme; no in-combination effects are possible. Tralee Bay Complex SPA is approximately 37km north-east of the scheme; no in-combination effects are possible.</p> <p><u>Killarney Community Nursing unit: New two-story nursing unit</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 850m west of the scheme, and the LSEs identified in the NIS for this scheme were habitat loss and disturbance. Therefore, there may be in-combination effects from habitat loss and disturbance. Castlemaine Harbour SAC is approximately 7km west of the scheme, and the NIS for this scheme found no LSEs for this site, therefore no in-combination effects are predicted. Slieve Mish Mountains SAC is approximately 19km north-west of the scheme therefore no in-combination effects are predicted. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 31km north-west of the scheme therefore no in-combination effects are predicted. Akeragh, Banna and Barrow Harbour SAC is approximately 34km north-west of the scheme therefore no in-combination effects are predicted.</p>			

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		<p>Killarney National Park SPA is approximately 600m west of the scheme, and the NIS for this scheme found no LSEs for this site, therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 18km north-west of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 34km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>Listowel Community Hospital, Listowel Food Hub</u></p> <p>This hospital development includes an extension to the current hospital. The Food Hub development will include 5 state-of-the-art food production units and a research and development suite. Both developments were screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 31km south-east of the schemes; no in-combination effects are possible. Castlemaine Harbour SAC is approximately 35km south-west of the schemes; no in-combination effects are possible. Slieve Mish Mountains SAC is approximately 27km south-west of the schemes; no in-combination effects are possible. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 31km north-west of the schemes; no in-combination effects are possible. Akeragh, Banna and Barrow Harbour SAC is approximately 34km north-west of the schemes; no in-combination effects are possible. Killarney National Park SPA is approximately 42km south of the schemes; no in-combination effects are possible. Castlemaine Harbour SPA is approximately 37km south-west of the schemes; no in-combination effects are possible. Tralee Bay Complex SPA is approximately 24km south-west of the schemes; no in-combination effects are possible.</p> <p><u>Lohercannon, Tralee</u></p> <p>This development includes the construction of 61 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 23km south of the scheme; no in-combination effects are possible. Castlemaine Harbour SAC is approximately 12km south-west of the scheme; no in-combination effects are possible. Slieve Mish Mountains SAC is approximately 3.5km south of the scheme; no in-combination effects are possible. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 100m south of the scheme; no in-combination effects are possible. Akeragh, Banna and Barrow Harbour SAC is approximately 6km west of the scheme; no in-combination effects are possible. Killarney National Park SPA is approximately 25km south-east of the scheme; no in-combination effects are possible. Castlemaine Harbour SPA is approximately 12km south of the scheme; no in-combination effects are possible. Tralee Bay Complex SPA is approximately 100m south of the scheme; no in-combination effects are possible.</p> <p><u>Valentia Trans-Atlantic Cable Station</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 8km north-east of the scheme with no hydrological links, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 26km north-east of the scheme therefore no in-combination effects are predicted. Slieve Mish Mountains SAC is approximately 33km north-east of the scheme therefore no in-combination effects are predicted. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 35km north of the scheme therefore no in-combination effects are predicted. Akeragh, Banna and Barrow Harbour SAC is approximately 48km north-east of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 45km east of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 21km north-east of the scheme</p>			

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		<p>therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 40km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Town Centre Regeneration Project</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 4km north of the scheme with no hydrological links, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 21km north-east of the scheme therefore no in-combination effects are predicted. Slieve Mish Mountains SAC is approximately 29km north-east of the scheme therefore no in-combination effects are predicted. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 32km north of the scheme therefore no in-combination effects are predicted. Akeragh, Banna and Barrow Harbour SAC is approximately 43km north-east of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 41km east of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 17km north-east of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 37km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Baile na Fheirtéaraigh Development</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 24km south-east of the scheme, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 25km south-east of the scheme therefore no in-combination effects are predicted. Slieve Mish Mountains SAC is approximately 29km east of the scheme therefore no in-combination effects are predicted. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 17km north-east of the scheme therefore no in-combination effects are predicted. Akeragh, Banna and Barrow Harbour SAC is approximately 38km north-east of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 56km south-east of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 26km south-east of the scheme therefore no in-combination effects are predicted. Tralee Bay Complex SPA is approximately 25km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Ard Na Greine, Knockavota, Milltown</u></p> <p>This development includes the construction of 54 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 11km south of the scheme; no in-combination effects are possible. Castlemaine Harbour SAC is approximately 2km north-west of the scheme; no in-combination effects are possible. Slieve Mish Mountains SAC is approximately 6km north of the scheme; no in-combination effects are possible. Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 13km north of the scheme; no in-combination effects are possible. Akeragh, Banna and Barrow Harbour SAC is approximately 19km north-west of the scheme; no in-combination effects are possible. Killarney National Park SPA is approximately 12km south-east of the scheme; no in-combination effects are possible. Castlemaine Harbour SPA is approximately 3km north-west of the scheme; no in-combination effects are possible. Tralee Bay Complex SPA is approximately 18km north-west of the scheme; no in-combination effects are possible.</p>			
<p>SAH-148 Increase GW abstraction from source Lyranes BH (local important aquifer) and</p>	<ul style="list-style-type: none"> Habitat degradation Disturbance 	<p><u>N22 Road Improvement Scheme: 20km scheme from Farranfore to Killarney</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC crosses scheme, therefore there may be in-combination effects disturbance,</p>	<p>Yes – from disturbance, spread of invasive non-native species and pollution impacts on Killarney</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p>	<p>N</p>

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<p>upgrade Lyranes WTP</p> <p>Option study area is within and hydrologically linked to Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species during construction given that the works are within the SAC boundary. Option includes GW abstraction. There is a risk this groundwater abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. There is a risk this groundwater abstraction will reduce water flow in the underground aquifer. Therefore, there is potential for impacts on QI utilising watercourses hydrologically linked to this European site through a reduction in flows/water.</p>	<ul style="list-style-type: none"> Spread of invasive non-native species Water table/availability 	<p>spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the N22 Scheme assumed as assessment not available at time of writing).</p> <p><u>N69 Listowel Bypass: 7km of road construction between Billeragh and Ballygowloge</u> Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 38km south of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Milltown Bypass Project</u> Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 11.7km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>N70 Glanbehy Bridge Road Project</u> Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 1.2km east of the scheme. Therefore, there may be in-combination effects from pollution, disturbance and spread of invasive non-native species. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the N22 Scheme assumed as assessment not available at time of writing).</p> <p><u>N86 Tralee to An Daingean: Upgrade works along road between Camp and Dingle</u> Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 13km north-west of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Destination Killarney, Smarter Travel Killarney: Regeneration of the town centre and public realm</u> Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC crosses the schemes therefore there may be in-combination effects from pollution, disturbance and spread of invasive non-native species. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Schemes assumed as assessment not available at time of writing).</p> <p><u>Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, MTU Tralee Campus STEM building</u> Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 24km south of the schemes therefore no in-combination effects are predicted.</p> <p><u>South Kerry Greenway: Construction of a 32km greenway from Reenard to Faha</u> Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC crosses the scheme therefore, and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from pollution and disturbance. In-combination effects during operation may result in habitat degradation and changes to water table/availability.</p> <p><u>Cahersiveen Community Hospital</u> This development includes an extension to the current hospital and was screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 4km north of the scheme; no in-combination effects are possible.</p> <p><u>Killarney Community Nursing unit: New two-story nursing unit</u> Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 850m west of the scheme, and the LSEs identified in the NIS</p>	<p>National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC if construction phase concurrent with N22 Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from disturbance, spread of invasive non-native species and pollution impacts on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC if construction phase concurrent with N70 Glanbehy Bridge Road Project works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from disturbance, spread of invasive non-native species and pollution impacts on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC if construction phase concurrent with Destination Killarney and Smarter Travel Killarney works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from disturbance and pollution impacts on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC if construction phase concurrent with South Kerry Greenway works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC</p>	<p>Hydrogeological modelling as in Section 6.3.5</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p></p>

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		<p>for this scheme were habitat loss and disturbance. Therefore, there may be in-combination effects from disturbance.</p> <p><u>Listowel Community Hospital, Listowel Food Hub</u></p> <p>This hospital development includes an extension to the current hospital. The Food Hub development will include 5 state-of-the-art food production units and a research and development suite. Both developments were screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 31km south-east of the schemes; no in-combination effects are possible.</p> <p><u>Lohercannon, Tralee</u></p> <p>This development includes the construction of 61 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 23km south of the scheme; no in-combination effects are possible.</p> <p><u>Valentia Trans-Atlantic Cable Station</u></p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 8km north-east of the scheme with no hydrological links, therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Town Centre Regeneration Project</u></p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 4km north of the scheme with no hydrological links, therefore no in-combination effects are predicted.</p> <p><u>Baile na Fheirtéaraigh Development</u></p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 24km south-east of the scheme, therefore no in-combination effects are predicted.</p> <p><u>Ard Na Greine, Knockavota, Milltown</u></p> <p>This development includes the construction of 54 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 11km south of the scheme; no in-combination effects are possible.</p>	<p>Yes – from disturbance on impacts on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC if construction phase concurrent with Killarney Community Nursing unit works</p>		
<p>SAH-170</p> <p>New abstraction from Coomassaharn Lake, upgrade Mountain Stage WTP to treat</p> <p>Option study area is within and hydrologically linked to Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC. There is potential for some loss of/damage to QI/Annex 1 habitats, such as that of the Kerry slug, during construction works given that the works are within the SAC boundary. Pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>N22 Road Improvement Scheme: 20km scheme from Farranfore to Killarney</u></p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC crosses scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the N22 Scheme assumed as assessment not available at time of writing). Castlemaine Harbour SAC crosses the scheme therefore there may be in-combination effects from pollution (LSE for the N22 Scheme assumed as assessment not available at time of writing). Castlemaine Harbour SPA is approximately 14km west of the scheme with a hydrological link, therefore there may be in-combination effects from pollution. Iveragh Peninsula SPA is approximately 34km west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N69 Listowel Bypass: 7km of road construction between Billeragh and Ballygowloge</u></p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 38km south of the scheme therefore no in-combination effects</p>	<p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC, from pollution impacts on Castlemaine Harbour SAC and from pollution impacts on Castlemaine Harbour SPA if construction phase concurrent with N22 Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Killarney National Park,</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species during construction given that the works are within the SAC boundary. Option includes surface water abstraction. There is a risk this surface water abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats such as Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>). There is potential for impacts on QI utilising watercourses hydrologically linked to this European site, such as otter, through a reduction in flows/water due to surface water abstraction.</p> <p>Option study area is 1.4km from and hydrologically linked to Castlemaine Harbour SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. No operational impacts are predicted.</p> <p>Option study area is 1.2km from and hydrologically linked to Castlemaine Harbour SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are predicted.</p> <p>Option study area is 500m from Iveragh Peninsula SPA. There is potential for disturbance to QI birds given the study area is in close proximity to the SPA which is a breeding site. No operational impacts are predicted.</p>		<p>are predicted. Castlemaine Harbour SAC is approximately 33km south-west of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 35km south-west of the scheme therefore no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 53km south-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Milltown Bypass Project</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 11.7km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 1.2km west of the scheme with a hydrological link and therefore there may be in-combination effects from pollution (LSE for the N70 Milltown Bypass Project assumed as assessment not available at time of writing). Castlemaine Harbour SPA is approximately 2.5km west of the scheme with a hydrological link and therefore there may be in-combination effects from pollution (LSE for the N70 Milltown Bypass Project assumed as assessment not available at time of writing). Iveragh Peninsula SPA is approximately 21km south-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Glanbehy Bridge Road Project</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 1.2km east of the scheme. Therefore, there may be in-combination effects from mortality, pollution, disturbance and spread of invasive non-native species. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N70 Glanbehy Bridge assumed as assessment not available at time of writing). Castlemaine Harbour SAC is approximately 1.5km north of the scheme with a hydrological link and therefore there may be in-combination effects from pollution (LSE for N70 Glanbehy Bridge assumed as assessment not available at time of writing). Castlemaine Harbour SPA is approximately 1.5km north of the scheme with a hydrological link and therefore there may be in-combination effects from pollution (LSE for N70 Glanbehy Bridge assumed as assessment not available at time of writing). Iveragh Peninsula SPA is approximately 1.4km north of the scheme and therefore there may be in-combination effects from disturbance (LSE for N70 Glanbehy Bridge assumed as assessment not available at time of writing).</p> <p><u>N86 Tralee to An Daingean: Upgrade works along road between Camp and Dingle</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 13km north-west of the scheme with no hydrological link, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 3km south of the scheme with a hydrological link, therefore there may be in-combination effects from pollution. Castlemaine Harbour SPA is approximately 3km south of the scheme with a hydrological link, therefore there may be in-combination effects from pollution. Iveragh Peninsula SPA is approximately 14km south of the scheme with no direct hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Destination Killarney, Smarter Travel Killarney: Regeneration of the town centre and public realm</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC crosses the schemes therefore there may be in-combination effects from habitat loss, mortality, pollution, disturbance and spread of invasive non-native species. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Schemes assumed as assessment not available at time of writing). Castlemaine Harbour SAC is approximately 8km west of the schemes with a hydrological link, therefore there may be in-combination effects from pollution (LSE for the Schemes assumed as assessment not available at time of writing). Castlemaine Harbour SPA is approximately 19km north-west of the schemes therefore no in-combination effects are predicted. Iveragh Peninsula SPA</p>	<p>Macgillycuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from pollution impacts on Castlemaine Harbour SAC and from pollution impacts on Castlemaine Harbour SPA if construction phase concurrent with N70 Milltown Bypass Project works</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, from pollution impacts on Castlemaine Harbour SAC, from pollution on Castlemaine Harbour SPA, and from disturbance impacts on Iveragh Peninsula SPA if construction phase concurrent with N70 Glanbehy Bridge Road Project works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from pollution impacts on Castlemaine Harbour SAC and Castlemaine Harbour SPA if construction phase concurrent with N86 Tralee to An Daingean works</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC and from pollution impacts on Castlemaine Harbour SAC if construction phase concurrent with Destination Killarney and Smarter Travel Killarney works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillycuddy's Reeks and Caragh River</p>		

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		<p>is approximately 33km west of the schemes therefore no in-combination effects are predicted.</p> <p><u>Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, MTU Tralee Campus STEM building</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 24km south of the schemes therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 12km south-west of the schemes with no hydrological link, therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 13km south-west of the schemes with no hydrological link, therefore no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 31km south-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>South Kerry Greenway: Construction of a 32km greenway from Reenard to Faha</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from habitat loss, mortality, pollution and disturbance. In-combination effects during operation may result in habitat degradation and changes to water table/availability. Castlemaine Harbour SAC is approximately 1km north of the scheme with a hydrological link, and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from pollution. Castlemaine Harbour SPA is approximately 1km north of the scheme with a hydrological link, and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from pollution. Iveragh Peninsula SPA crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from disturbance.</p> <p><u>Cahersiveen Community Hospital</u></p> <p>This development includes an extension to the current hospital and was screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 4km north of the scheme, however when assessed it was screened out for any likely potential significant effects to any European sites, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 21km north-east of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 17km north-east of the scheme therefore no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 800m west of the scheme, however when assessed it was screened out for any likely potential significant effects to any European sites, therefore no in-combination effects are predicted.</p> <p><u>Killarney Community Nursing unit: New two-story nursing unit</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 850m west of the scheme, and the LSEs identified in the NIS for this scheme were habitat loss and disturbance. Therefore, there may be in-combination effects from habitat loss and disturbance. Castlemaine Harbour SAC is approximately 7km west of the scheme, and the NIS for this scheme found no LSEs for this site, therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 18km north-west of the scheme; therefore no in-combination effects are possible. Iveragh Peninsula SPA is approximately 55km south-west of the scheme; no in-combination effects are possible.</p>	<p>Catchment SAC</p> <p>Yes – from habitat loss, mortality, pollution and disturbance impacts on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC and from pollution impacts on Castlemaine Harbour SAC and from pollution impacts on Castlemaine Harbour SPA and from disturbance impacts on Iveragh Peninsula SPA if construction phase concurrent with South Kerry Greenway works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from disturbance impacts on Iveragh Peninsula SPA if construction phase concurrent with Valentia Trans-Atlantic Cable Station works</p> <p>Yes – from disturbance impacts on Iveragh Peninsula SPA if construction phase concurrent with Cahersiveen Town Centre Regeneration Project works</p> <p>Yes – from habitat loss and disturbance on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC if construction phase concurrent with Killarney Community Nursing unit works</p>		

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		<p><u>Listowel Community Hospital, Listowel Food Hub</u></p> <p>This hospital development includes an extension to the current hospital. The Food Hub development will include 5 state-of-the-art food production units and a research and development suite. Both developments were screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 31km south-east of the schemes; no in-combination effects are possible. Castlemaine Harbour SAC is approximately 35km south-west of the schemes; no in-combination effects are possible. Castlemaine Harbour SPA is approximately 37km south-west of the schemes; no in-combination effects are possible. Iveragh Peninsula SPA is approximately 78km south-west of the schemes; no in-combination effects are possible.</p> <p><u>Lohercannon, Tralee</u></p> <p>This development includes the construction of 61 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 23km south of the scheme; no in-combination effects are possible. Castlemaine Harbour SAC is approximately 12km south-west of the scheme; no in-combination effects are possible. Castlemaine Harbour SPA is approximately 12km south of the scheme; no in-combination effects are possible. Iveragh Peninsula SPA is approximately 29km south-west of the scheme; no in-combination effects are possible.</p> <p><u>Valentia Trans-Atlantic Cable Station</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 8km north-east of the scheme with no hydrological links, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 26km north-east of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 21km north-east of the scheme therefore no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 1km west of the scheme, therefore there may be in-combination effects from disturbance.</p> <p><u>Cahersiveen Town Centre Regeneration Project</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 4km north of the scheme with no hydrological links, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 21km north-east of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 17km north-east of the scheme therefore no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 800m west of the scheme, therefore there may be in-combination effects from disturbance.</p> <p><u>Baile na Fheirtéaraigh Development</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 24km south-east of the scheme, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 25km south-east of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 26km south-east of the scheme therefore no in-combination effects are predicted. Iveragh Peninsula SPA is approximately 22km south-east of the scheme, therefore no in-combination effects are predicted.</p> <p><u>Ard Na Greine, Knockavota, Milltown</u></p> <p>This development includes the construction of 54 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p>			

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		<p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 11km south of the scheme; no in-combination effects are possible. Castlemaine Harbour SAC is approximately 2km north-west of the scheme; no in-combination effects are possible. Castlemaine Harbour SPA is approximately 3km north-west of the scheme; no in-combination effects are possible. Iveragh Peninsula SPA is approximately 21km south-west of the scheme; no in-combination effects are possible.</p>			
<p>SAH-540 Rationalise Rathmore WTP and connect to Central Regional WRZ</p> <p>Option study area is within and hydrologically linked to Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC. There is potential for some loss of/damage to QI/Annex 1 habitats, such as that of slender naiad, during construction works given that the works are within the SAC boundary (within lower Leane catchment). Potential pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species given that the works are within the SAC boundary. Option includes a surface water abstraction. There is a risk this surface water abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats, such as slender naiad. There is potential for impacts on otter and other aquatic QI utilising watercourses hydrologically linked to this European site through a reduction in flows/water levels due to surface water abstraction.</p> <p>Option study area is 8.4km from and hydrologically linked to Castlemaine Harbour SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. No operational impacts are predicted.</p> <p>Option study area is 2.2km from and hydrologically linked to Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, specifically freshwater pearl mussel and lamprey which are found within the area. No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>N22 Road Improvement Scheme: 20km scheme from Farranfore to Killarney</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC crosses scheme therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the N22 Scheme assumed as assessment not available at time of writing). Castlemaine Harbour SAC crosses the scheme therefore there may be in-combination effects from pollution (LSE for the N22 Scheme assumed as assessment not available at time of writing). Blackwater River (Cork/Waterford) SAC is approximately 13km east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 2.3km west of the scheme therefore there may be in-combination effects from disturbance and pollution (LSE for the N22 Scheme assumed as assessment not available at time of writing).</p> <p><u>N69 Listowel Bypass: 7km of road construction between Billeragh and Ballygowloge</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 38km south of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 33km south-west of the scheme therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC is approximately 30km south-east of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 40km south of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Milltown Bypass Project</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 11.7km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 1.2km west of the scheme with a hydrological link and therefore there may be in-combination effects from pollution. Blackwater River (Cork/Waterford) SAC is approximately 32km east of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 12km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>N70 Glanbehy Bridge Road Project</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 1.2km east of the scheme. Therefore, there may be in-combination effects from mortality, pollution, disturbance and spread of invasive non-native species. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N70 Glanbehy Bridge assumed as assessment not available at time of writing). Castlemaine Harbour SAC is approximately 1.5km north of the scheme with a hydrological link and therefore there may be in-combination effects from pollution (LSE for N70 Glanbehy Bridge assumed as assessment not available at time of writing). Blackwater River (Cork/Waterford) SAC is approximately 50km east of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 23km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>N86 Tralee to An Daingean: Upgrade works along road between Camp and Dingle</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 13km north-west of the scheme with no hydrological link,</p>	<p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, from pollution impacts on Castlemaine Harbour SAC and from disturbance and pollution impacts on Killarney National Park SPA if construction phase concurrent with N22 Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from pollution impacts on Castlemaine Harbour SAC if construction phase concurrent with N70 Milltown Bypass Project works</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC and from pollution impacts on Castlemaine Harbour SAC if construction phase concurrent with N70 Glanbehy Bridge Road Project works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from pollution impacts on Castlemaine Harbour SAC if construction phase concurrent with N86 Tralee to An Daingean</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>Option study area is within and hydrologically linked to Killarney National Park SPA. There is potential for some loss of/damage to supporting habitats (e.g. foraging habitats) to QI species during construction works given that the works are within the SPA boundary. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. There is potential for disturbance to QI birds using supporting habitats in areas outside of the SPA but ecologically connected to it (e.g. grassland, arable farmland), as well as within the SPA given the study area is within the SPA. No operational impacts are predicted.</p>		<p>therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 3km south of the scheme with a hydrological link, therefore there may be in-combination effects from pollution. Blackwater River (Cork/Waterford) SAC is approximately 50km east of the scheme, therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 30km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Destination Killarney, Smarter Travel Killarney: Regeneration of the town centre and public realm</u></p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC crosses the schemes therefore there may be in-combination effects from habitat loss, mortality, pollution, disturbance and spread of invasive non-native species. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Schemes assumed as assessment not available at time of writing). Castlemaine Harbour SAC is approximately 8km west of the schemes with a hydrological link, therefore there may be in-combination effects from pollution (LSE for the Schemes assumed as assessment not available at time of writing). Blackwater River (Cork/Waterford) SAC is approximately 20km east of the schemes therefore no in-combination effects are predicted. Killarney National Park SPA crosses the schemes therefore there may be in-combination effects from habitat loss, pollution and disturbance (LSE for the Schemes assumed as assessment not available at time of writing).</p> <p><u>Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, MTU Tralee Campus STEM building</u></p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 24km south of the schemes therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 12km south-west of the schemes with no hydrological link, therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC is approximately 32km south-east of the schemes therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 24km south-east of the schemes therefore no in-combination effects are predicted.</p> <p><u>South Kerry Greenway: Construction of a 32km greenway from Reenard to Faha</u></p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from habitat loss, mortality, pollution and disturbance. In-combination effects during operation may result in habitat degradation and changes to water table/availability. Castlemaine Harbour SAC is approximately 1km north of the scheme with a hydrological link, and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from pollution. Blackwater River (Cork/Waterford) SAC is approximately 50km east of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 23km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Community Hospital</u></p> <p>This development includes an extension to the current hospital and was screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is approximately 4km north of the scheme: no in-combination effects are possible. Castlemaine Harbour SAC is approximately 21km north-east of the scheme; no in-combination effects are possible. Blackwater River (Cork/Waterford) SAC is approximately 67km north-east of the scheme; no in-combination effects are</p>	<p>works</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC, from pollution impacts on Castlemaine Harbour SAC and from habitat loss, disturbance and pollution impacts on Killarney National Park SPA if construction phase concurrent with Destination Killarney and Smarter Travel Killarney works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from habitat loss, mortality, pollution and disturbance impacts on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC and from pollution impacts on Castlemaine Harbour SAC if construction phase concurrent with South Kerry Greenway works and during operation from habitat degradation and water table/availability on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC</p> <p>Yes – from habitat loss and disturbance on Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC if construction phase concurrent with Killarney Community Nursing unit works</p>		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>possible. Killarney National Park SPA is approximately 41km east of the scheme; no in-combination effects are possible.</p> <p><u>Killarney Community Nursing unit: New two-story nursing unit</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 850m west of the scheme, and the LSEs identified in the NIS for this scheme were habitat loss and disturbance. Therefore, there may be in-combination effects from habitat loss and disturbance. Castlemaine Harbour SAC is approximately 7km west of the scheme, and the NIS for this scheme found no LSEs for this site, therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC is approximately 16km east of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 600m west of the scheme and the NIS for this scheme found no LSEs for this site, therefore no in-combination effects are predicted.</p> <p><u>Listowel Community Hospital, Listowel Food Hub</u></p> <p>This hospital development includes an extension to the current hospital. The Food Hub development will include 5 state-of-the-art food production units and a research and development suite. Both developments were screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 31km south-east of the schemes; no in-combination effects are possible. Castlemaine Harbour SAC is approximately 35km south-west of the schemes; no in-combination effects are possible. Blackwater River (Cork/Waterford) SAC is approximately 36km south-east of the schemes; no in-combination effects are possible. Killarney National Park SPA is approximately 42km south of the schemes; no in-combination effects are possible.</p> <p><u>Lohercannon, Tralee</u></p> <p>This development includes the construction of 61 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 23km south of the scheme; no in-combination effects are possible. Castlemaine Harbour SAC is approximately 12km south-west of the scheme; no in-combination effects are possible. Blackwater River (Cork/Waterford) SAC is approximately 35km south-east of the scheme; no in-combination effects are possible. Killarney National Park SPA is approximately 25km south-east of the scheme; no in-combination effects are possible.</p> <p><u>Valentia Trans-Atlantic Cable Station</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 8km north-east of the scheme with no hydrological links, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 26km north-east of the scheme therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC is approximately 72km north-east of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 45km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Town Centre Regeneration Project</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 4km north of the scheme with no hydrological links, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 21km north-east of the scheme therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC is approximately 67km north-east of the scheme therefore no in-combination effects are predicted. Killarney National Park</p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>SPA is approximately 41km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Baile na Fheirtéaraigh Development</u></p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 24km south-east of the scheme, therefore no in-combination effects are predicted. Castlemaine Harbour SAC is approximately 25km south-east of the scheme therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC is approximately 78km east of the scheme therefore no in-combination effects are predicted. Killarney National Park SPA is approximately 56km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Ard Na Greine, Knockavota, Milltown</u></p> <p>This development includes the construction of 54 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 11km south of the scheme; no in-combination effects are possible. Castlemaine Harbour SAC is approximately 2km north-west of the scheme; no in-combination effects are possible. Blackwater River (Cork/Waterford) SAC is approximately 31km south-east of the scheme; no in-combination effects are possible. Killarney National Park SPA is approximately 12km south-east of the scheme; no in-combination effects are possible.</p>			
<p>SAH-122</p> <p>Amalgamate all sources in WRZ to one WTP and rationalise smaller WTP - Upgrade an Fheothanach WTP.</p> <p>Option study area is 550m from and hydrologically linked to Mount Brandon SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as Northern Atlantic wet heaths. There is potential for the spread of invasive species given that the works are within the ZOC shared with the SAC. Option includes a groundwater abstraction. However, no operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat degradation Spread of invasive non-native species 	<p><u>N22 Road Improvement Scheme: 20km scheme from Farranfore to Killarney</u></p> <p>Mount Brandon SAC is approximately 33km west of the northern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>N69 Listowel Bypass: 7km of road construction between Billeragh and Ballygowloge</u></p> <p>Mount Brandon SAC is approximately 41km south-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Milltown Bypass Project</u></p> <p>Mount Brandon SAC is approximately 23km west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Glanbehy Bridge Road Project</u></p> <p>Mount Brandon SAC is approximately 16km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N86 Tralee to An Daingean: Upgrade works along road between Camp and Dingle</u></p> <p>Mount Brandon SAC is approximately 1km north of the scheme with no hydrological links, therefore no in-combination effects are predicted.</p> <p><u>Destination Killarney, Smarter Travel Killarney: Regeneration of the town centre and public realm</u></p> <p>Mount Brandon SAC is approximately 41km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, MTU Tralee Campus STEM building</u></p> <p>Mount Brandon SAC is approximately 22km west of the schemes therefore no in-combination effects are predicted.</p> <p><u>South Kerry Greenway: Construction of a 32km greenway from Reenard to Faha</u></p> <p>Mount Brandon SAC is approximately 15km north of the scheme with no direct hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Community Hospital</u></p>	No	N/A	N

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>This development includes an extension to the current hospital and was screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Mount Brandon SAC is approximately 22km north of the scheme; no in-combination effects are possible.</p> <p><u>Killarney Community Nursing unit: New two-story nursing unit</u></p> <p>Mount Brandon SAC is approximately 40km north-west of the scheme; no in-combination effects are possible.</p> <p><u>Listowel Community Hospital, Listowel Food Hub</u></p> <p>This hospital development includes an extension to the current hospital. The Food Hub development will include 5 state-of-the-art food production units and a research and development suite. Both developments were screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Mount Brandon SAC is approximately 43km south-west of the schemes; no in-combination effects are possible.</p> <p><u>Lohercannon, Tralee</u></p> <p>This development includes the construction of 61 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Mount Brandon SAC is approximately 18km south-west of the scheme; no in-combination effects are possible.</p> <p><u>Valentia Trans-Atlantic Cable Station</u></p> <p>Mount Brandon SAC is approximately 25km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Town Centre Regeneration Project</u></p> <p>Mount Brandon SAC is approximately 22km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>Baile na Fheirtéaraigh Development</u></p> <p>Mount Brandon SAC is approximately 8km north-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ard Na Greine, Knockavota, Milltown</u></p> <p>This development includes the construction of 54 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Mount Brandon SAC is approximately 23km north-west of the scheme; no in-combination effects are possible.</p>			
<p>SAH-173 WTP Upgrade - No deficit</p> <p>Option study area is 1.5km from and hydrologically linked to Castlemaine Harbour SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. No operational impacts are predicted.</p> <p>Option study area is 450m from and hydrologically linked to Dingle Peninsula SPA. There is potential for pollution of waterbodies during construction that could impact on the habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI</p>	<ul style="list-style-type: none"> Habitat degradation Disturbance 	<p><u>N22 Road Improvement Scheme: 20km scheme from Farranfore to Killarney</u></p> <p>Castlemaine Harbour SAC crosses the scheme therefore there may be in-combination effects from pollution. Dingle Peninsula SPA is approximately 34km north-west of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 14km west of the scheme with a hydrological link, therefore there may be in-combination effects from pollution.</p> <p><u>N69 Listowel Bypass: 7km of road construction between Billeragh and Ballygowloge</u></p> <p>Castlemaine Harbour SAC is approximately 33km south-west of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 38km south-west of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 35km south-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Milltown Bypass Project</u></p> <p>Castlemaine Harbour SAC is approximately 1.2km west of the scheme with a hydrological link and therefore there may be in-combination effects from pollution</p>	<p>Yes – from pollution impacts on Castlemaine Harbour SAC and from pollution impacts on Castlemaine Harbour SPA if construction phase concurrent with N22 Road Improvement Scheme works</p> <p>Yes – from pollution impacts on Castlemaine Harbour SAC and from pollution impacts on Castlemaine Harbour SPA if construction phase concurrent with N70 Milltown Bypass Project works</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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<p>bird species through impacts upon prey species. There is potential for disturbance to QI birds given the study area is in close proximity to the SPA which is a breeding site. No operational impacts are predicted.</p> <p>Option study area is 1.5km from and hydrologically linked to Castlemaine Harbour SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are predicted.</p>		<p>(LSE for the N70 Milltown Bypass Project assumed as assessment not available at time of writing). Dingle Peninsula SPA is approximately 20km west of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 2.5km west of the scheme with a hydrological link and therefore there may be in-combination effects from pollution (LSE for the N70 Milltown Bypass Project assumed as assessment not available at time of writing).</p> <p><u>N70 Glanbehy Bridge Road Project</u></p> <p>Castlemaine Harbour SAC is approximately 1.5km north of the scheme with a hydrological link and therefore there may be in-combination effects from pollution (LSE for N70 Glanbehy Bridge assumed as assessment not available at time of writing). Dingle Peninsula SPA is approximately 12km north of the scheme with no direct hydrological link, therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 1.5km north of the scheme with a hydrological link and therefore there may be in-combination effects from pollution (LSE for N70 Glanbehy Bridge assumed as assessment not available at time of writing).</p> <p><u>N86 Tralee to An Daingean: Upgrade works along road between Camp and Dingle</u></p> <p>Castlemaine Harbour SAC is approximately 3km south of the scheme with a hydrological link, therefore there may be in-combination effects from pollution. Dingle Peninsula SPA is approximately 400m south of the scheme with a hydrological link, therefore there may be in-combination effects from pollution and disturbance. Castlemaine Harbour SPA is approximately 3km south of the scheme with a hydrological link, therefore there may be in-combination effects from pollution.</p> <p><u>Destination Killarney, Smarter Travel Killarney: Regeneration of the town centre and public realm</u></p> <p>Castlemaine Harbour SAC is approximately 8km west of the schemes with a hydrological link, therefore there may be in-combination effects from pollution (LSE for the Schemes assumed as assessment not available at time of writing). Dingle Peninsula SPA is approximately 34km north-west of the schemes therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 19km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, MTU Tralee Campus STEM building</u></p> <p>Castlemaine Harbour SAC is approximately 12km south-west of the schemes with no hydrological link, therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 21km west of the schemes therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 13km south-west of the schemes with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>South Kerry Greenway: Construction of a 32km greenway from Reenard to Faha</u></p> <p>Castlemaine Harbour SAC is approximately 1km north of the scheme with a hydrological link, and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from pollution. Dingle Peninsula SPA is approximately 12km north-west of the scheme with no direct hydrological link, therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 1km north of the scheme with a hydrological link, and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from pollution.</p> <p><u>Cahersiveen Community Hospital</u></p>	<p>Yes – from pollution impacts on Castlemaine Harbour SAC and from pollution impacts on Castlemaine Harbour SPA if construction phase concurrent with N70 Glanbehy Bridge Road Project works</p> <p>Yes – from pollution impacts on Castlemaine Harbour SAC and Castlemaine Harbour SPA and from pollution and disturbance impacts on Dingle Peninsula SPA if construction phase concurrent with N86 Tralee to An Daingean works</p> <p>Yes – from pollution impacts on Castlemaine Harbour SAC if construction phase concurrent with Destination Killarney and Smarter Travel Killarney works</p> <p>Yes – from pollution impacts on Castlemaine Harbour SAC and from pollution impacts on Castlemaine Harbour SPA if construction phase concurrent with South Kerry Greenway works</p>		

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		<p>This development includes an extension to the current hospital and was screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Castlemaine Harbour SAC is approximately 21km north-east of the scheme; no in-combination effects are possible. Dingle Peninsula SPA is approximately 18km north of the scheme; no in-combination effects are possible. Castlemaine Harbour SPA is approximately 17km north-east of the scheme; no in-combination effects are possible.</p> <p><u>Killarney Community Nursing unit: New two-story nursing unit</u></p> <p>Castlemaine Harbour SAC is approximately 7km west of the scheme and the NIS for this scheme found no LSEs for this site, therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 34km north-west of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 18km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>Listowel Community Hospital, Listowel Food Hub</u></p> <p>This hospital development includes an extension to the current hospital. The Food Hub development will include 5 state-of-the-art food production units and a research and development suite. Both developments were screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Castlemaine Harbour SAC is approximately 35km south-west of the schemes; no in-combination effects are possible. Dingle Peninsula SPA is approximately 47km south-west of the schemes; no in-combination effects are possible. Castlemaine Harbour SPA is approximately 37km south-west of the schemes; no in-combination effects are possible.</p> <p><u>Lohercannon, Tralee</u></p> <p>This development includes the construction of 61 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Castlemaine Harbour SAC is approximately 12km south-west of the scheme; no in-combination effects are possible. Dingle Peninsula SPA is approximately 18km west of the scheme; no in-combination effects are possible. Castlemaine Harbour SPA is approximately 12km south-west of the scheme; no in-combination effects are possible.</p> <p><u>Valentia Trans-Atlantic Cable Station</u></p> <p>Castlemaine Harbour SAC is approximately 26km north-east of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 21km north of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 21km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Town Centre Regeneration Project</u></p> <p>Castlemaine Harbour SAC is approximately 21km north-east of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 18km north of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 17km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Baile na Fheirtéaraigh Development</u></p> <p>Castlemaine Harbour SAC is approximately 25km south-east of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 2km west of the scheme with no hydrological link, therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 26km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Ard Na Greine, Knockavota, Milltown</u></p>			

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		<p>This development includes the construction of 54 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Castlemaine Harbour SAC is approximately 2km north-west of the scheme; no in-combination effects are possible. Dingle Peninsula SPA is approximately 18km west of the scheme; no in-combination effects are possible. Castlemaine Harbour SPA is approximately 3km north-west of the scheme; no in-combination effects are possible.</p>			
<p>SAH-138 New GW abstraction from Aughacasma BHs and upgrade existing Aughacasma WTP to supply deficit. Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones</p> <p>Option study area is 3km from and hydrologically linked to Tralee Bay and Magharees Peninsula, West to Cloghane SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. No operational impacts are predicted.</p> <p>Option study area is 3km from and hydrologically linked to Castlemaine Harbour SPA. There is potential for pollution of waterbodies during construction that could impact on the habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>N22 Road Improvement Scheme: 20km scheme from Farranfore to Killarney</u> Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 14km north-west of the northern extent of the scheme with no hydrological link, therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 14km west of the scheme with a hydrological link, therefore there may be in-combination effects from pollution.</p> <p><u>N69 Listowel Bypass: 7km of road construction between Billeragh and Ballygowloge</u> Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 24km south-west of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 35km south-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Milltown Bypass Project</u> Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 10.5km north of the scheme with no hydrological link, therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 2.5km west of the scheme with a hydrological link and therefore there may be in-combination effects from pollution (LSE for the N70 Milltown Bypass Project assumed as assessment not available at time of writing).</p> <p><u>N70 Glanbehy Bridge Road Project</u> Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 21km north of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 1.5km north of the scheme with a hydrological link and therefore there may be in-combination effects from pollution (LSE for N70 Glanbehy Bridge assumed as assessment not available at time of writing).</p> <p><u>N86 Tralee to An Daingean: Upgrade works along road between Camp and Dingle</u> Tralee Bay and Magharees Peninsula, West to Cloghane SAC crosses the scheme, therefore there may be in-combination effects from pollution impacts. Castlemaine Harbour SPA is approximately 3km south of the scheme with a hydrological link, therefore there may be in-combination effects from pollution.</p> <p><u>Destination Killarney, Smarter Travel Killarney: Regeneration of the town centre and public realm</u> Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 26km north-west of the schemes therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 19km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, MTU Tralee Campus STEM building</u> Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 1.5km south-west of the schemes therefore there may be in-combination effects from pollution. Castlemaine Harbour SPA is approximately 13km south-west of the schemes with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>South Kerry Greenway: Construction of a 32km greenway from Reenard to Faha</u></p>	<p>Yes –from pollution impacts on Castlemaine Harbour SPA if construction phase concurrent with N22 Road Improvement Scheme works</p> <p>Yes –from pollution impacts on Castlemaine Harbour SPA if construction phase concurrent with N70 Milltown Bypass Project works</p> <p>Yes –from pollution impacts on Castlemaine Harbour SPA if construction phase concurrent with N70 Glanbehy Bridge Road Project works</p> <p>Yes – from pollution impacts on Tralee Bay and Magharees Peninsula, West to Cloghane SAC and Castlemaine Harbour SPA if construction phase concurrent with N86 Tralee to An Daingean</p> <p>Yes –from pollution impacts on Tralee Bay and Magharees Peninsula, West to Cloghane SAC if construction phase concurrent with Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network and MTU Tralee Campus STEM building works</p> <p>Yes – from pollution impacts on Castlemaine Harbour SPA if construction phase concurrent with South Kerry Greenway works</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 19km north of the eastern extent of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 1km north of the scheme with a hydrological link and the LSEs identified in the NIS for this scheme were habitat loss and alteration, habitat or species fragmentation, disturbance and reduction in water quality. Therefore, there may be in-combination effects from pollution.</p> <p><u>Cahersiveen Community Hospital</u></p> <p>This development includes an extension to the current hospital and was screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 32km north of the scheme; no in-combination effects are possible. Castlemaine Harbour SPA is approximately 17km north-east of the scheme; no in-combination effects are possible.</p> <p><u>Killarney Community Nursing unit: New two-story nursing unit</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 31km north-west of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 18km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>Listowel Community Hospital, Listowel Food Hub</u></p> <p>This hospital development includes an extension to the current hospital. The Food Hub development will include 5 state-of-the-art food production units and a research and development suite. Both developments were screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 26km south-west of the schemes; no in-combination effects are possible. Castlemaine Harbour SPA is approximately 37km south-west of the schemes; no in-combination effects are possible.</p> <p><u>Lohercannon, Tralee</u></p> <p>This development includes the construction of 61 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 100m south of the scheme; no in-combination effects possible. Castlemaine Harbour SPA is approximately 12km south-west of the scheme; no in-combination effects are possible.</p> <p><u>Valentia Trans-Atlantic Cable Station</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 35km north of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 21km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Town Centre Regeneration Project</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 32km north of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 17km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Baile na Fheirtéaraigh Development</u></p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 17km north-east of the scheme therefore no in-combination effects are predicted. Castlemaine Harbour SPA is approximately 26km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Ard Na Greine, Knockavota, Milltown</u></p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>This development includes the construction of 54 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Tralee Bay and Magharees Peninsula, West to Cloghane SAC is approximately 13km north of the scheme; no in-combination effects are possible. Castlemaine Harbour SPA is approximately 3km north-west of the scheme; no in-combination effects are possible.</p>			
<p>SAH-533 Increase GW abstraction from Tobar Bhreandáin WTP BH and supply Dun Chaoin</p> <p>Option study area is 250m from and hydrologically linked to Blasket Islands SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for disturbance to marine mammals from construction works. No operational impacts are predicted.</p> <p>Option study area is within and hydrologically linked to Dingle Peninsula SPA. There is potential for some loss of/damage to supporting habitats (e.g. foraging habitats) to QI species during construction works given that the works are within the SPA boundary. Pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact prey species relied on by QI. There is potential for pollution of waterbodies during construction that could impact on the habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. There is potential for disturbance to QI birds given the study area is within the SPA which is a breeding site. Option includes a groundwater abstraction. However, no operational impacts are predicted.</p>	<ul style="list-style-type: none"> • Habitat loss • Mortality risk • Habitat degradation • Disturbance 	<p><u>N22 Road Improvement Scheme: 20km scheme from Farranfore to Killarney</u> Blasket Islands SAC is approximately 62km west of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 34km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N69 Listowel Bypass: 7km of road construction between Billeragh and Ballygowloge</u> Blasket Islands SAC is approximately 73km south-west of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 38km south-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Milltown Bypass Project</u> Blasket Islands SAC is approximately 51km west of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 20km west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70 Glanbehy Bridge Road Project</u> Blasket Islands SAC is approximately 33km west of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 12km north of the scheme with no direct hydrological link, therefore no in-combination effects are predicted.</p> <p><u>N86 Tralee to An Daingean: Upgrade works along road between Camp and Dingle</u> Blasket Islands SAC is approximately 13km west of the western extent of the scheme with no hydrological link, therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 400m south of the scheme with a hydrological link, therefore there may be in-combination effects from habitat loss, mortality, pollution and disturbance.</p> <p><u>Destination Killarney, Smarter Travel Killarney: Regeneration of the town centre and public realm</u> Blasket Islands SAC is approximately 65km west of the schemes therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 34km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>Positioning Tralee as an Economic Driver, Tralee Flood Relief Scheme, Tralee Northern Relief Road, Phase 1 Tralee Town Centre - Rock Street, Russell Street and Bridge Street, Tralee Wastewater Network, MTU Tralee Campus STEM building</u> Blasket Islands SAC is approximately 54km south-west of the schemes therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 21km west of the schemes therefore no in-combination effects are predicted.</p> <p><u>South Kerry Greenway: Construction of a 32km greenway from Reenard to Faha</u> Blasket Islands SAC is approximately 16km north-west of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 12km north-west of the scheme with no direct hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Community Hospital</u> This development includes an extension to the current hospital and was screened out for AA, therefore there will be no potential impact on European sites.</p>	<p>Yes - from habitat loss, mortality, pollution and disturbance impacts on Dingle Peninsula SPA if construction phase concurrent with N86 Tralee to An Daingean works</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Blasket Islands SAC is approximately 18km north-west of the scheme; no in-combination effects are possible. Dingle Peninsula SPA is approximately 18km north of the scheme; no in-combination effects are possible.</p> <p><u>Killarney Community Nursing unit: New two-story nursing unit</u></p> <p>Blasket Islands SAC is approximately 65km west of the scheme; no in-combination effects are possible. Dingle Peninsula SPA is approximately 34km north-west of the scheme; no in-combination effects are possible.</p> <p><u>Listowel Community Hospital, Listowel Food Hub</u></p> <p>This hospital development includes an extension to the current hospital. The Food Hub development will include 5 state-of-the-art food production units and a research and development suite. Both developments were screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Blasket Islands SAC is approximately 75km south-west of the schemes, no in-combination effects are possible. Dingle Peninsula SPA is approximately 47km south-west of the schemes; no in-combination effects are possible.</p> <p><u>Lohercannon, Tralee</u></p> <p>This development includes the construction of 61 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Blasket Islands SAC is approximately 51km south-west of the scheme; no in-combination effects are possible. Dingle Peninsula SPA is approximately 18km west of the scheme; no in-combination effects are possible.</p> <p><u>Valentia Trans-Atlantic Cable Station</u></p> <p>Blasket Islands SAC is approximately 16km north-west of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 21km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cahersiveen Town Centre Regeneration Project</u></p> <p>Blasket Islands SAC is approximately 18km north-west of the scheme therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 18km north of the scheme therefore no in-combination effects are predicted.</p> <p><u>Baile na Fheirtéaraigh Development</u></p> <p>Blasket Islands SAC is approximately 4km south-west of the scheme with no hydrological links, therefore no in-combination effects are predicted. Dingle Peninsula SPA is approximately 2km west of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ard Na Greine, Knockavota, Milltown</u></p> <p>This development includes the construction of 54 units for social housing. The development has been screened out for AA, therefore there will be no potential impact on European sites.</p> <p>Blasket Islands SAC is approximately 50km west of the scheme; no in-combination effects are possible. Dingle Peninsula SPA is approximately 18km west of the scheme; no in-combination effects are possible.</p>			
<p>All Preferred Options</p> <p>The European sites that may be impacted by options within Study Area H are Lower River Shannon SAC, Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA, River Shannon and River Fergus Estuaries SPA, Mount Brandon SAC, Akeragh, Banna and Barrow Harbour SAC, Tralee Bay Complex SPA, Kerry Head SPA, Killarney National Park,</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>All Preferred Approach Options</u></p> <p>There is potential for in-combination effects from the projects within SAH to Lower River Shannon SAC given that options SAH-524 and SAH-225, have the potential for impacts. Potential for in-combination from habitat loss (all options), mortality (all options), spread of invasive non-native species (all options), disturbance (all options) and pollution (all options) impacts during construction.</p> <p>There is potential for in-combination effects from the projects within SAH to Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA given that</p>	<p>Yes – from habitat loss, mortality, spread of invasive non-native species, disturbance and pollution impacts on Lower River Shannon SAC if construction of options is concurrent</p> <p>Yes – from disturbance impacts on Stack's to Mullaghareirk</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>With the implementation</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>Macgillycuddy's Reeks and Caragh River Catchment SAC, Ballinskelligs Bay and Inny Estuary SAC, Valencia Harbour/Portmagee Channel SAC, Iveragh Peninsula SPA, Tralee Bay and Magharees Peninsula, West to Cloghane SAC, Dingle Peninsula SPA, Castlemaine Harbour SAC, Slieve Mish Mountains SAC, Killarney National Park SPA, Castlemaine Harbour SPA, Blackwater River (Cork/Waterford) SAC and Blasket Islands SAC.</p>		<p>options SAH-524 and SAH-225 have the potential for impacts. Potential for in-combination from disturbance during construction (all options).</p> <p>There is potential for in-combination effects from the projects within SAH to Mount Brandon SAC given that options SAH-512 and SAH-122 have the potential for impacts. Potential for in-combination from spread of invasive non-native species (all options), and pollution (all options) impacts during construction.</p> <p>There is potential for in-combination effects from the projects within SAH to Akeragh, Banna and Barrow Harbour SAC given that options SAH-038 and SAH-530 have the potential for impacts. Potential for in-combination from pollution during construction (all options).</p> <p>There is potential for in-combination effects from the projects within SAH to Tralee Bay Complex SPA given that options SAH-038, SAH-065 and SAH-530 have the potential for impacts. Potential for in-combination from habitat loss (options 038 and 065 only), disturbance (all options) and pollution (all options) impacts during construction.</p> <p>There is potential for in-combination effects from the projects within SAH to Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC given that options SAH-531, SAH-530, SAH-148, SAH-170 and SAH-540 have the potential for impacts. Potential for in-combination from habitat loss (SAH-531, SAH-530, SAH-170 and SAH-540), mortality (SAH-531, SAH-530, SAH-170 and SAH-540), spread of invasive non-native species (all options), disturbance (all options) and pollution (all options) impacts during construction, and hydrological changes (all options) and water table/availability (all options) impacts during operation.</p> <p>There is potential for in-combination effects from the projects within SAH to Iveragh Peninsula SPA given that options SAH-531 and SAH-170 have the potential for impacts. Potential for in-combination from disturbance during construction (all options).</p> <p>There is potential for in-combination effects from the projects within SAH to Tralee Bay and Magharees Peninsula, West to Cloghane SAC given that options SAH-065, SAH-530 and SAH-138 have the potential for impacts. Potential for in-combination from disturbance (options 065 and 530 only), spread of invasive non-native species (options 065 and 530 only) and pollution (all options) during construction.</p> <p>There is potential for in-combination effects from the projects within SAH to Dingle Peninsula SPA given that options SAH-065, SAH-173 and SAH-533 have the potential for impacts. Potential for in-combination from disturbance (options 173 and 533 only), and pollution (all options) during construction.</p> <p>There is potential for in-combination effects from the projects within SAH to Castlemaine Harbour SAC given that options SAH-530, SAH-170, SAH-540 and SAH-173 have the potential for impacts. Potential for in-combination from pollution during construction (all options).</p> <p>There is potential for in-combination effects from the projects within SAH to Killarney National Park SPA given that options SAH-530 and SAH-540 have the potential for impacts. Potential for in-combination from habitat loss (all options), disturbance (all options) and pollution (all options) impacts during construction.</p> <p>There is potential for in-combination effects from the projects within SAH to Castlemaine Harbour SPA given that options SAH-530, SAH-170, SAH-173 and SAH-138 have the potential for impacts. Potential for in-combination from pollution during construction (all options).</p> <p>Option SAH-524 is the only option within SAH with potential for impacts on River Shannon and River Fergus Estuaries SPA. Therefore, there is no potential for in-combination effects to this European site.</p>	<p>Mountains, West Limerick Hills and Mount Eagle SPA if construction of options is concurrent.</p> <p>Yes – from spread of invasive non-native species and pollution impacts on Mount Brandon SAC if construction of options is concurrent</p> <p>Yes – from pollution impacts on Akeragh, Banna and Barrow Harbour SAC if construction of options is concurrent.</p> <p>Yes – from habitat loss, disturbance, and pollution impacts on Tralee Bay Complex SPA if construction of options is concurrent.</p> <p>Yes – from habitat loss, mortality, spread of invasive non-native species, disturbance and pollution impacts on Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC if construction of options is concurrent and during operation from habitat degradation and water table/availability.</p> <p>Yes – from disturbance impacts on Iveragh Peninsula SPA if construction of options is concurrent.</p> <p>Yes – from spread of invasive non-native species, disturbance and pollution impacts on Tralee Bay and Magharees Peninsula, West to Cloghane SAC if construction of options is concurrent.</p> <p>Yes – disturbance and pollution impacts on Dingle Peninsula SPA if construction of options is concurrent.</p> <p>Yes – from pollution impacts on Castlemaine Harbour SAC if</p>	<p>of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Option SAH-038 is the only option within SAH with potential for impacts on Kerry Head SPA. Therefore, there is no potential for in-combination effects to this European site.</p> <p>Option SAH-531 is the only option within SAH with potential for impacts on Ballinskelligs Bay and Inny Estuary SAC. Therefore, there is no potential for in-combination effects to this European site.</p> <p>Option SAH-531 is the only option within SAH with potential for impacts on Valencia Harbour/Portmagee Channel SAC. Therefore, there is no potential for in-combination effects to this European site.</p> <p>Option SAH-530 is the only option within SAH with potential for impacts on Slieve Mish Mountains SAC. Therefore, there is no potential for in-combination effects to this European site.</p> <p>Option SAH-540 is the only option within SAH with potential for impacts on Blackwater River (Cork/Waterford) SAC. Therefore, there is no potential for in-combination effects to this European site.</p> <p>Option SAH-533 is the only option within SAH with potential for impacts on Blasket Islands SAC. Therefore, there is no potential for in-combination effects to this European site.</p>	<p>construction of options is concurrent.</p> <p>Yes – from habitat loss, disturbance and pollution impacts on Killarney National Park SPA if construction of options is concurrent.</p> <p>Yes – from pollution impacts on Castlemaine Harbour SPA if construction of options is concurrent.</p>		

Table E2: SAI-Potential in-combination effects with other projects and options within SAI.

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
STUDY AREA I					
<p>SAI-011</p> <p>New SW abstraction and upgrade WTP.</p> <p>The option study area is 1.2km from the Mullaghanish to Musheramore Mountains SPA. There is potential for the disturbance of Hen Harrier as the works are adjacent to the SPA boundary and supporting habitats connected to the SPA. No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Disturbance 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 750m east from the scheme. However, the AA screening concluded that there were no likely significant effects (LSEs), so no in-combination effects are possible.</p> <p><u>Coláiste Íosagáin Campus: Repurposing of existing building and grounds</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 750m west from the scheme. No NIS available and it is assumed there is potential for in-combination effects from disturbance during construction to hen harrier. (LSE for the Coláiste Íosagáin Campus assumed as assessment not available at time of writing).</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 44km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Denroche’s Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is approximately 35km west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is approximately 35km west from the scheme, therefore no in-combination effects predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is approximately 35km west from the scheme, therefore no in-combination effects predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40south Ring Road to the Port in Ringaskiddy.</u></p> <p>Mullaghanish to Musheramore Mountains SPA approximately 35km west from the scheme, therefore no in-combination effects predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is approximately 35km west from the scheme, therefore no in-combination effects predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>Mullaghanish to Musheramore Mountains SPA is approximately 35km west from all these schemes and therefore no in-combination effects predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>Mullaghanish to Musheramore Mountains SPA is approximately 50km west from these schemes, therefore no in-combination effects predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p>	<p>Yes - from disturbance on the Mullaghanish to Musheramore Mountains SPA if construction phase is concurrent with Coláiste Íosagáin Campus works.</p> <p>Yes - from disturbance on the Mullaghanish to Musheramore Mountains SPA if construction phase is concurrent with N22 Baile Bhuirne to Macroom Road Development works.</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Mullaghanish to Musheramore Mountains SPA is approximately 50km west from these schemes, therefore no in-combination effects predicted.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 5km north from these schemes, however given the location of these schemes within Macroom it is not likely for there to be in-combination effects from disturbance to hen harrier</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 26.7km north-west from the scheme and therefore no in-combination effects predicted</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 36.3km north from the scheme and therefore no in-combination effects predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 79km north-east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 76.7km east from the scheme and therefore no in-combination effects predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 41.8km north-west from the scheme and therefore no in-combination effects predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 19km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 100m north-east of the scheme. No NIS available and it is assumed there is a potential for in-combination effects from disturbance to hen harrier during construction. (LSE for the N22 Baile Bhuirne to Macroom Road Development assumed as assessment not available at time of writing).</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 51km north-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 44km north-east of the scheme and therefore no in-combination effects are predicted.</p>			

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		<p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 30km north-east of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>Mullaghanish to Musheramore Mountains SPA is 44.1km north from the scheme and therefore no in-combination effects predicted.</p>			
<p>SAI-060</p> <p>Increase SW from Bunsheelin River and upgrade WTP.</p> <p>The option study area is hydrologically linked to The Gearagh SAC which is 14.2km away. Potential pollution of watercourses during construction impacting hydrologically connected QI habitats and otter. No operational impacts predicted.</p> <p>The option study area is hydrologically linked to The Gearagh SPA which is 14.2km away. Potential pollution of watercourses during construction could affect the hydrologically connected SPA and supporting habitats used by QI bird species. No operational impacts predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 10km east from the scheme. However, the AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosagáin Campus: Repurposing of existing building and grounds</u></p> <p>The Gearagh SAC and The Gearagh SPA are 10km east and downstream of this scheme. No NIS available and it is assumed there is the potential for in-combination effects from pollution during construction. (LSE for the Coláiste Íosagáin Campus assumed as assessment not available at time of writing).</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Gearagh SAC and The Gearagh SPA are 39.3km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 30km west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 30km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 30km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 30km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 30km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 30km west from these schemes and therefore no in-combination effects predicted.</p>	<p>Yes - from pollution impacts on The Gearagh SAC and The Gearagh SPA if construction phase is concurrent with Coláiste Íosagáin Campus works.</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 50km west from these schemes and therefore no-in-combination effects predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtohill.</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 50km west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Gearagh SAC and The Gearagh SPA are 1.8km south from these schemes. However, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 18.2km north-west from the scheme, however they are upstream of this scheme so no in-combination impacts predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 28.3km north from the scheme and therefore no in-combination effects predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 83km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 85.5km east from the scheme and therefore no in-combination effects predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 34.5km north-west from the scheme and therefore no in-combination impacts predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 25km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 1.5km south-west of the scheme. However, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>The Gearagh SAC and The Gearagh SPA are 48km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 52km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 38km east of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 38.5km north from the scheme and therefore no in-combination impacts predicted.</p>			
<p>SAI-193</p> <p>New GW abstraction (karstic region) and new WTP to supply deficit.</p> <p>The option study area is close to a hydrological link to Ballycotton Bay SPA which is 3.5km away. Potential pollution of watercourses during construction could affect the hydrologically connected SPA and supporting habitats used by QI bird species. No operational impacts predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Ballycotton Bay SPA is 79km east from the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosagáin Campus: Repurposing of existing building and grounds</u></p> <p>The Ballycotton Bay SPA is 79km east from the scheme and therefore no in-combination effects predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Ballycotton Bay SPA is 24.7km east from the scheme, however, there is no hydrological link and therefore no in-combination effects predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Ballycotton Bay SPA is approximately 30km east from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Ballycotton Bay SPA is approximately 30km east from the scheme and therefore no in-combination effects predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Ballycotton Bay SPA is approximately 30km east from the scheme and therefore no in-combination effects predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Ballycotton Bay SPA is approximately 30km east from the scheme and therefore no in-combination effects predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Ballycotton Bay SPA is approximately 30km east from the scheme and therefore no in-combination effects predicted.</p>	No	N/A	N

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p><u>Schemes within Cork City*:</u></p> <p>The Ballycotton Bay SPA is approximately 30km east from these schemes and therefore no in-combination effects predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Ballycotton Bay SPA is approximately 12km south-east from these schemes, however, there is no hydrological link and therefore no in-combination effects predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Ballycotton Bay SPA is approximately 12km south-east from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroon Community Hospital, Macroon Garda Station:</u></p> <p>The Ballycotton Bay SPA is 65.2km east from these schemes and therefore no in-combination effects predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Ballycotton Bay SPA is 48.5km east from the scheme and therefore no in-combination effects predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Ballycotton Bay SPA is 64.5km east from the scheme and therefore no in-combination impacts predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Ballycotton Bay SPA is 148km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Ballycotton Bay SPA is 153.4km east from the scheme and therefore no in-combination effects predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Ballycotton Bay SPA is 36.7km east from the scheme and therefore no in-combination effects predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Ballycotton Bay SPA is 33km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroon Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroon to a dual carriageway.</u></p> <p>The Ballycotton Bay SPA is 62km east of the scheme and therefore no in-combination effects are predicted.</p>			

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		<p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Ballycotton Bay SPA is 13km east of the scheme. However, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Ballycotton Bay SPA is 120km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Ballycotton Bay SPA is 107km east of the scheme and therefore no in-combination effects are predicted. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Ballycotton Bay SPA is 90.2km north-east from the scheme and therefore no in-combination impacts predicted.</p>			
<p>SAI-457</p> <p>Increase SW abstraction from Goleen Intake and upgrade Goleen WTP. Significant reduction in yield in 2018.</p> <p>The option study area is within The Barley Cove to Ballyrisode Point SAC. There is the potential for the spread of invasive species during upgrade constructions which occur within the SAC. Construction also has the potential habitat degradation via pollution to watercourses and habitats within the SAC. During operation there is potential for habitat degradation of hydrologically connected habitats due to reduced flow and changes in water quality/availability.</p>	<ul style="list-style-type: none"> Habitat degradation Spread of invasive species Water table/availability 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 60km south from the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaagáin Campus: Repurposing of existing building and grounds</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 60km south from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>Barley Cove to Ballyrisode Point SAC is 94.2km south-west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p>	No	N/A	N

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		<p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 110km south-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 110km south-west from from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>Barley Cove to Ballyrisode Point SAC is 64.9km south-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 63.9km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 54km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 30km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 49.5km south-east from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 81.7km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 88km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Barley Cove to Ballyrisode Point SAC is 59km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 108km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 39km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 41km south of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 28.2km west from the scheme and there is no hydrological link. Therefore, no in-combination effects are predicted.</p>			
<p>SAI-468</p> <p>Upgrade existing WTP for water quality improvements. The WRZ is not in deficit.</p> <p>The option study area is adjacent to the Caha Mountains SAC which is 100m away. There is a potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats. There is also the potential for the spread of invasive species given that the works are adjacent to the SAC boundary. No operational impacts are predicted.</p> <p>The option study area is also adjacent to the Glengarriff Harbour and Woodland SAC which is 800m away. There is a potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats. There is also the potential for disturbance to otters, bats and spread of invasive species given that the works are in close proximity to the SAC boundary. No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat degradation Disturbance Spread of invasive species 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Caha Mountains SAC is approximately 30km and the Glengarriff Harbour and Woodland SAC is approximately 30km west from the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaigáin Campus: Repurposing of existing building and grounds</u></p> <p>The Caha Mountains SAC is approximately 30km and the Glengarriff Harbour and Woodland SAC is approximately 30km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Caha Mountains SAC is 80.4km and the Glengarriff Harbour and Woodland SAC is 77.8km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Caha Mountains SAC is approximately 75km and the Glengarriff Harbour and Woodland SAC is approximately 70km west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Caha Mountains SAC is approximately 75km and the Glengarriff Harbour and Woodland SAC is approximately 70km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p>	No	N/A	N

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>The Caha Mountains SAC is approximately 75km and the Glengarriff Harbour and Woodland SAC is approximately 70km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Caha Mountains SAC is approximately 75km and the Glengarriff Harbour and Woodland SAC is approximately 70km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Caha Mountains SAC is approximately 75km and the Glengarriff Harbour and Woodland SAC is approximately 70km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Caha Mountains SAC is approximately 75km and the Glengarriff Harbour and Woodland SAC is approximately 70km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Caha Mountains SAC is approximately 100km and the Glengarriff Harbour and Woodland SAC is approximately 95km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Caha Mountains SAC is approximately 100km and the Glengarriff Harbour and Woodland SAC is approximately 95km west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Caha Mountains SAC is 41.8km and the Glengarriff Harbour and Woodland SAC is 41.4km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Caha Mountains SAC is 51.1km and the Glengarriff Harbour and Woodland SAC is 48.5km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Caha Mountains SAC is 46.6km and the Glengarriff Harbour and Woodland SAC is 43.9km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Caha Mountains SAC is 29km and the Glengarriff Harbour and Woodland SAC is 42km east of the scheme and therefore no in-combination effects are predicted.</p>			

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		<p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Caha Mountains SAC is 35.8km and the Glengarriff Harbour and Woodland SAC is 45.4km east from the scheme and therefore no in-combination effects predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Caha Mountains SAC is 70.9km and the Glengarriff Harbour and Woodland SAC is 68.2km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Caha Mountains SAC and the Glengarriff Harbour and Woodland SAC are 69km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Caha Mountains SAC and the Glengarriff Harbour and Woodland SAC are 33km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Caha Mountains SAC and the Glengarriff Harbour and Woodland SAC are 92km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Caha Mountains SAC is 8km and the Glengarriff Harbour and Woodland SAC is 14km south of the scheme. However, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Caha Mountains SAC is 9km and the Glengarriff Harbour and Woodland SAC is 11km south of the scheme. However, the AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Caha Mountains SAC is 29.5km and the Glengarriff Harbour and Woodland SAC is 26.1km north from the scheme and therefore no in-combination effects predicted.</p>			
<p>SAI-480</p> <p>New GW abstraction to supply deficit and upgrade WTP. Abandon existing SW source.</p> <p>The option study area is close to a hydrological link to the Beara Peninsula SPA which is 360m away. There is the potential for habitat loss, disturbance, and the spread of invasive species within the SPA and supporting habitats during upgrade</p>	<ul style="list-style-type: none"> Physical loss of habitat Habitat degradation Disturbance Water table/availability 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Beara Peninsula SPA is approximately 55km west from the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>The Beara Peninsula SPA is approximately 55km west from the scheme and therefore no in-combination effects are predicted.</p>	<p>Yes – from disturbance on the Beara Peninsula SPA if construction phase is concurrent with Dursey Island Cable Car and Visitor Centre works.</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>constructions due to its proximity. Potential pollution of supporting habitats adjacent to the SPA and used by QI bird species. During operation there is potential for habitat degradation of hydrologically connected habitats due to reduced flow and changes in water quality/availability affecting bird species.</p>		<p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Beara Peninsula SPA is 100.9km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Beara Peninsula SPA is approximately 95km west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Beara Peninsula SPA is approximately 95km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Beara Peninsula SPA is approximately 95km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Beara Peninsula SPA is approximately 95km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Beara Peninsula SPA is approximately 95km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Beara Peninsula SPA is approximately 95km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Beara Peninsula SPA is approximately 115km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Beara Peninsula SPA is approximately 115km west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Beara Peninsula SPA is 65.9km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Beara Peninsula SPA is 70.7km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p>		<p>there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>The Beara Peninsula SPA is 63.3km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Beara Peninsula SPA surrounds this scheme. NIS available which identified disturbance as an LSE for this European site. There is the potential for in-combination effects from disturbance during construction.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Beara Peninsula SPA is 21.9km south from this scheme but there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Beara Peninsula SPA is 89.9km west from this scheme and therefore no in-combination effects are predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Beara Peninsula SPA is 92km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Beara Peninsula SPA is 67km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Beara Peninsula SPA is 112km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Beara Peninsula SPA is 24km south-west of the scheme. The Kenmare River hydrologically connects the scheme to this SPA, however, NIS available and no LSEs predicted for this European site.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Beara Peninsula SPA is 42km south-west of the scheme. The Kenmare River hydrologically connects the scheme to this SPA however the AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Beara Peninsula SPA is 39.1km north-west from the scheme and therefore no in-combination effects are predicted.</p>			
<p>SAI-498 New GW abstraction and upgrade Toormore WTP to supply deficit. The option study area is close to a</p>	<ul style="list-style-type: none"> Habitat degradation Disturbance Spread of invasive species 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 60km south from the scheme. The Roaringwater Bay and Islands SAC is approximately 45km south from the scheme. Sheep's Head to Toe Head SPA is approximately 55km south-west from</p>	<p>Yes – from pollution on the Roaringwater Bay and Islands SAC if construction phase is concurrent with Skibbereen</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>hydrological link to The Barley Cove to Ballyrisode Point SAC which is 1.4km away. There is the potential for habitat degradation and the spread of invasive species within the SPA and supporting habitats during upgrade constructions. No operational impacts predicted</p> <p>The option study area is close to a hydrological link to The Roaringwater Bay and Islands SAC which is 2.8km away There is the potential for habitat degradation by pollution within the SPA and supporting habitats during upgrade constructions. No operational impacts predicted.</p> <p>The option study area is close to a hydrological link to Sheep's Head to Toe Head SPA which is 6.5km away. Potential pollution of watercourses during construction could affect the hydrologically connected SPA and supporting habitats used by QI bird species. No operational impacts predicted.</p>	<ul style="list-style-type: none"> • 	<p>the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 60km south from the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is approximately 45km south from the scheme and therefore no in-combination effects are predicted. Sheep's Head to Toe Head SPA is approximately 55km south-west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>Barley Cove to Ballyrisode Point SAC is 94.2km south-west from the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 75.1km south-west from the scheme and therefore no in-combination effects are predicted. Sheep's Head to Toe Head SPA is 95.9km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from these schemes. The Roaringwater Bay and Islands SAC is approximately 75km west from these schemes. Sheep's Head to Toe Head SPA is approximately 90km south-west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is approximately 75km south-west from the scheme and therefore no in-combination effects are predicted. Sheep's Head to Toe Head SPA is approximately 90km west and therefore no in-combination effects are predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is approximately 75km south-west from the scheme and therefore no in-combination effects are predicted. Sheep's Head to Toe Head SPA is approximately 90km west and therefore no in-combination effects are predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is approximately 75km south-west from the scheme and therefore no in-combination effects are predicted. Sheep's Head to Toe Head SPA is approximately 90km west and therefore no in-combination effects are predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is approximately 75km south-west from the scheme and therefore no in-combination effects are predicted. Sheep's Head to Toe Head SPA is approximately 90km west and therefore no in-combination effects are predicted.</p>	<p>Community Hospital works.</p>	<p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	

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		<p><u>Schemes within Cork City*:</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from these schemes and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is approximately 75km south-west from these schemes and therefore no in-combination effects are predicted. Sheep's Head to Toe Head SPA is approximately 90km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 110km south-west from these schemes and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is approximately 90km south-west from these schemes and therefore no in-combination effects are predicted. Sheep's Head to Toe Head SPA is approximately 110km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 110km south-west from these schemes. The Roaringwater Bay and Islands SAC is approximately 90km south-west from these schemes. Sheep's Head to Toe Head SPA is approximately 110km west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>Barley Cove to Ballyrisode Point SAC is 64.9km south-west from these schemes and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 48.9km south-west from these schemes and therefore no in-combination effects are predicted. Sheep's Head to Toe Head SPA is 63.2km south-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 63.9km west from the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 45.2km west from the scheme and therefore no in-combination effects are predicted. Sheep's Head to Toe Head SPA is 65.2km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 54km west from the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 34.3km west from the scheme and therefore no in-combination effects are predicted. Sheep's Head to Toe Head SPA is 57.7km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 30km south of the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 37km south of the scheme and therefore no in-combination effects are predicted.</p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Sheep’s Head to Toe Head SPA is 25km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 49.5km south-east from the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 57.6km south-east from the scheme and therefore no in-combination effects are predicted. Sheep’s Head to Toe Head SPA is 44km south-east from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 81.7km west from the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 62.2km west from the scheme and therefore no in-combination effects are predicted. Sheep’s Head to Toe Head SPA is 83.7km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 88km south-west of the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 71km south-west of the scheme and therefore no in-combination effects are predicted. Sheep’s Head to Toe Head SPA is 89km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 59km south-west of the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 46km south-west of the scheme and therefore no in-combination effects are predicted. Sheep’s Head to Toe Head SPA is 59km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 108km west of the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 89km west of the scheme and therefore no in-combination effects are predicted. Sheep’s Head to Toe Head SPA is 108km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 39km south of the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 38km south of the scheme and therefore no in-combination effects are predicted. Sheep’s Head to Toe Head SPA is 34km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 41km south of the scheme. The Roaringwater Bay and Islands SAC is 36km south of the scheme. Sheep’s Head</p>			

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		<p>to Toe Head SPA is 40km south of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 28.2km west from the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 11.2km west from the scheme and hydrologically linked via the River Ilen. No NIS available and it is assumed there is potential for in-combination effects from habitat degradation by pollution. (LSEs for Skibbereen Community Hospital are assumed as assessment not available at time of writing). Sheep’s Head to Toe Head SPA is 32km west from the scheme and therefore no in-combination effects are predicted.</p>			
<p>SAI-630</p> <p>New SW abstraction from Kenmare River and new WTP</p> <p>The option study area is hydrologically linked to the Kenmare River SAC which is 2.2km away. There is a potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats. There is also the potential for disturbance to otters and spread of invasive species. No operational impacts predicted.</p>	<ul style="list-style-type: none"> Habitat degradation Disturbance Spread of invasive species 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Kenmare River SAC is approximately 30km west of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>The Kenmare River SAC is approximately 30km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Kenmare River SAC is 82.2km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche’s Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Kenmare River SAC is approximately 75km west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Kenmare River SAC is approximately 75km west from these schemes and therefore no in-combination effects predicted.</p>	<p>Yes – from pollution on the Kenmare River SAC if construction phase is concurrent with Dursey Island Cable Car and Visitor Centre works.</p> <p>Yes – from pollution, spread of invasive non-native species and disturbance on the Kenmare River SAC if construction phase is concurrent with Gteic Uíbh Ráthaigh works.</p> <p>Yes – from pollution, spread of invasive non-native species and disturbance on the Kenmare River SAC if construction phase is concurrent with N70 Sneem to Blackwater Bridge works.</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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		<p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Kenmare River SAC is approximately 95km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Kenmare River SAC is approximately 95km west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Kenmare River SAC is 42.1km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Kenmare River SAC is 55.1km north-west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Kenmare River SAC is 54.4km north-west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Kenmare River SAC is 0m from the scheme. NIS available which identified pollution to some habitats during construction and habitat loss during operation as LSEs for this European site. There is the potential for in-combination effects from pollution during construction.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Kenmare River SAC is 9.8km south from this scheme and hydrologically linked via Ballinskelligs Bay. No NIS available and it is assumed there is potential for in-combination effects from pollution, disturbance and spread of invasive species. (LSE for the <u>Gteic Uíbh Ráthaigh</u> works assumed as assessment not available at time of writing).</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Kenmare River SAC is 75km north-west of the scheme and therefore no in-combination effects predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Kenmare River SAC is 63km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Kenmare River SAC is 28km south of the scheme and therefore no in-combination effects are predicted.</p>			

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		<p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Kenmare River SAC is 91km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Kenmare River SAC is adjacent to the site. NIS available which identified pollution to some habitats, spread of invasive species, disturbance, and habitat loss as LSEs for this European site. There is the potential for in-combination effects from pollution, spread of invasive species and disturbance to otter.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Kenmare River SAC is 1km south of the scheme. The Finnihy River connects the scheme to this SAC. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Kenmare River SAC is 41.2km north-west of the scheme and therefore no in-combination effects are predicted.</p>			
<p>SAI-643</p> <p>Increase SW abstraction from Lough Dromtine</p> <p>The option study area is hydrologically linked to the Kenmare River SAC which is 3.5km away. There is a potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats. No operational impacts predicted.</p> <p>The option study area is adjacent to the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC which is 400m away. There is a potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats and QI species such as FWPM. And there is a potential for disturbance to otter and the spread of invasive given the proximity to the SAC. No operational impacts predicted.</p>	<ul style="list-style-type: none"> Habitat degradation Disturbance Spread of invasive species 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Kenmare River SAC is approximately 30km west of the scheme. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 6.5km north of this scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>The Kenmare River SAC is approximately 30km west of the scheme and therefore no in-combination effects are predicted. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 6.5km north of this scheme however no hydrological link exists and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Kenmare River SAC is 82.2km west of the scheme and therefore no in-combination effects are predicted. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is 55.9km west of this scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Kenmare River SAC is approximately 75km west from these schemes. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 45km north-west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects are predicted. The Killarney National Park,</p>	<p>Yes – from pollution on the Kenmare River SAC if construction phase is concurrent with Dursey Island Cable Car and Visitor Centre works.</p> <p>Yes – from pollution on the Kenmare River SAC if construction phase is concurrent with Gteic Uíbh Ráthaigh works.</p> <p>Yes – from pollution on the Kenmare River SAC if construction phase is concurrent with N70 Sneem to Blackwater Bridge works.</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 45km north-west of this scheme and therefore no in-combination effects are predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects are predicted. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 45km north-west of this scheme and therefore no in-combination effects are predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects are predicted. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 45km north-west of this scheme and therefore no in-combination effects are predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects are predicted. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 45km north-west of this scheme and therefore no in-combination effects are predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Kenmare River SAC is approximately 75km west from these schemes and therefore no in-combination effects are predicted. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 45km north-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Kenmare River SAC is approximately 95km west from these schemes and therefore no in-combination effects are predicted. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 65km north-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Kenmare River SAC is approximately 95km west from these schemes. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 65km north-west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Kenmare River SAC is 42.1km west from these schemes and therefore no in-combination effects are predicted. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is 16.9km north from these schemes and there is no hydrological link therefore no in-combination effects are predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Kenmare River SAC is 55.1km north-west of the scheme and therefore no in-combination effects are predicted. The Killarney National Park, Macgillycuddy's</p>			

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		<p>Reeks and Caragh River Catchment SAC is 37.8km north-west of this scheme and therefore no in-combination effects are predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Kenmare River SAC is 54.4km north-west of the scheme and therefore no in-combination effects are predicted. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is 47.4km north of this scheme and therefore no in-combination effects are predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Kenmare River SAC is 0m from this scheme. NIS available which identified pollution to some habitats during construction and habitat loss during operation as LSEs for this European site. There is the potential for in-combination effects from pollution of watercourses during construction. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is 18.8km north of this scheme. However, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Kenmare River SAC is 9.8km south from this scheme and hydrologically linked via Ballinskelligs Bay. No NIS available and it is assumed there is potential for in-combination effects from pollution. (LSE for the <u>Gteic Uíbh Ráthaigh</u> works assumed as assessment not available at time of writing). The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is 6.6km east of this scheme, However, there is no hydrological link and therefore no in-combination impacts predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Kenmare River SAC is 75km north-west of the scheme and therefore no in-combination effects are predicted. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is 54.1km north-west of this scheme and therefore no in-combination effects are predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Kenmare River SAC is 63km south of the scheme and therefore no in-combination effects are predicted. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is 27.7km west of this scheme. However, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Kenmare River SAC is 28km south of the scheme and therefore no in-combination effects are predicted. The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is 4.7km north of this scheme. However, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Kenmare River SAC is 91km south of the scheme and therefore no in-combination effects are predicted. The Killarney National Park, Macgillycuddy's</p>			

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		<p>Reeks and Caragh River Catchment SAC is 61km west of this scheme. However, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Kenmare River SAC is adjacent to the site. NIS available which identified pollution to some habitats, spread of invasive species, habitat loss and disturbance to otter as LSEs for this European site. There is the potential for in-combination effects from pollution of watercourses during construction. The Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is 2.1km north of the scheme. However, there is no hydrological link and the NIS did not identify any LSEs therefore no in-combination effects predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Kenmare River SAC is 1km south of the scheme. The Finnihy River connects the scheme to this SAC. The Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is 3.5km north of this scheme but is not hydrologically linked. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Kenmare River SAC is 41.2km north-west of the scheme and therefore no in-combination effects are predicted. The Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is 46.1km north of this scheme and therefore no in-combination effects are predicted.</p>			
<p>SAI-645</p> <p>New GW abstraction and new WTP.</p> <p>The option study area is hydrologically linked to the Kilgarvan Ice House SAC which is 1.4km away. There is a potential for physical loss of habitat/supporting habitat as within 1.4km of lesser horseshoe (LHS) SAC. Works within the 2.5km core foraging range from SAC. Vegetation, hedgerow or tree clearance associated with the works could sever important commuting routes for LHS bats commuting between their roost site in the SAC and foraging areas outside the confines of the SAC. This would require further assessment to ensure impacts are avoided. There is a potential for disturbance to bat species during construction. No operational impacts predicted.</p> <p>The option study area is hydrologically linked to the Kenmare River SAC which is 10.3km away. There is a potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats. No operational impacts predicted.</p>	<ul style="list-style-type: none"> Physical loss of habitat Disturbance 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Kilgarvan Ice House SAC is approximately 20km west of the scheme. The Kenmare River SAC is approximately 30km west of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>The Kilgarvan Ice House SAC is approximately 20km west of the scheme. The Kenmare River SAC is approximately 30km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Kilgarvan Ice House SAC is 74.2km west of the scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is 82.2km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Kilgarvan Ice House SAC is approximately 65km west from these schemes. The Kenmare River SAC is approximately 75km west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Kilgarvan Ice House SAC is approximately 65km west of the scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is approximately 75km west and therefore no in-combination effects are predicted.</p>	<p>Yes – from pollution on the Kenmare River SAC if construction phase is concurrent with Dursey Island Cable Car and Visitor Centre works.</p> <p>Yes – from pollution on the Kenmare River SAC if construction phase is concurrent with Gteic Uíbh Ráthaigh works.</p> <p>Yes – from pollution on the Kenmare River SAC if construction phase is concurrent with N70 Sneem to Blackwater Bridge works.</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Kilgarvan Ice House SAC is approximately 65km west of the scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is approximately 75km west and therefore no in-combination effects are predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Kilgarvan Ice House SAC is approximately 65km west of the scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is approximately 75km west and therefore no in-combination effects are predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Kilgarvan Ice House SAC is approximately 65km west of the scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is approximately 75km west and therefore no in-combination effects are predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Kilgarvan Ice House SAC is approximately 65km west from these schemes and therefore no in-combination effects are predicted. The Kenmare River SAC is approximately 75km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Kilgarvan Ice House SAC is approximately 85km west from these schemes and therefore no in-combination effects are predicted. The Kenmare River SAC is approximately 95km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Kilgarvan Ice House SAC is approximately 85km west from these schemes. The Kenmare River SAC is approximately 95km west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Kilgarvan Ice House SAC is 33.3km west from these schemes and therefore no in-combination effects predicted. The Kenmare River SAC is 42.1km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Kilgarvan Ice House SAC is 47.2km north-west of the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is 55.1km north-west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Kilgarvan Ice House SAC is 49km north-west of the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is 54.4km north-west of the scheme and therefore no in-combination effects predicted.</p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Kilgarvan Ice House SAC is 56.7km east of the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is 0m from the scheme. NIS available which identified pollution to some habitats during construction and habitat loss during operation as LSEs for this European site. There is the potential for in-combination effects from pollution during construction.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Kilgarvan Ice House SAC is 54.8km east of the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is 9.8km south from this scheme and hydrologically linked via Ballinskelligs Bay. No NIS available and it is assumed there is potential for in-combination effects from pollution. (LSE for the <u>Gteic Uíbh Ráthaigh</u> works assumed as assessment not available at time of writing).</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Kilgarvan Ice House SAC is 67.5km north-west of the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is 75km north-west of the scheme and therefore no in-combination effects predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Kilgarvan Ice House SAC is 55km west of the scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is 63km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Kilgarvan Ice House SAC is 19km west of the scheme. However, there is no hydrological link and therefore no in-combination effects are predicted. The Kenmare River SAC is 28km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Kilgarvan Ice House SAC is 83km west of the scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is 91km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Kilgarvan Ice House SAC is 22km east of the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is adjacent to the site. The NIS identified pollution to some habitats, spread of invasive species, habitat loss and disturbance to otter as LSEs for this European site. There is the potential for in-combination effects from pollution during construction.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Kilgarvan Ice House SAC is 8km east of the scheme. However, there is no hydrological link and therefore no in-combination effects are predicted. The Kenmare River SAC is 1km south of the scheme. The Finihy River connects the scheme to</p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>this SAC. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Kilgarvan Ice House SAC is 39.2km north of the scheme. The Kenmare River SAC is 41.2km north-west of the scheme and therefore no in-combination effects are predicted.</p>			
<p>SAI-652</p> <p>New SW abstraction from Glenmore Lake and upgrade WTP</p> <p>The option study area is hydrologically linked to the Kenmare River SAC which is 2.3km away. There is a potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats. During operation there is potential for habitat degradation of hydrologically connected habitats due to reduced flow and changes in water quality/availability.</p> <p>The option study area is in close proximity to the Caha Mountains SAC which is 350m away. There is a potential for disturbances to species.</p>	<ul style="list-style-type: none"> Habitat degradation Water table/availability Disturbance 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Caha Mountains SAC is approximately 30km west from the scheme. The Kenmare River SAC is approximately 30km west from the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>The Caha Mountains SAC is approximately 30km west from the scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is approximately 30km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Caha Mountains SAC is 80.4km west from the scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is 82.2km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Caha Mountains SAC is approximately 75km west from these schemes. The Kenmare River SAC is approximately 75km west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Caha Mountains SAC is approximately 75km west from the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Caha Mountains SAC is approximately 75km west from the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Caha Mountains SAC is approximately 75km west from the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Caha Mountains SAC is approximately 75km west from the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is</p>	<p>Yes – from pollution on the Kenmare River SAC if construction phase is concurrent with Dursey Island Cable Car and Visitor Centre works.</p> <p>Yes – from pollution on the Kenmare River SAC if construction phase is concurrent with Gteic Uíbh Ráthaigh works.</p> <p>Yes – from pollution on the Kenmare River SAC if construction phase is concurrent with N70 Sneem to Blackwater Bridge works.</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>approximately 75km west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Caha Mountains SAC is approximately 75km west from these schemes and therefore no in-combination effects predicted. The Kenmare River SAC is approximately 75km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Caha Mountains SAC is approximately 100km west from these schemes and therefore no in-combination effects predicted. The Kenmare River SAC is approximately 95km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Caha Mountains SAC is approximately 100km west from these schemes and therefore no in-combination effects predicted. The Kenmare River SAC is approximately 95km west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Caha Mountains SAC is 41.8km west from these schemes and therefore no in-combination effects predicted. The Kenmare River SAC is 42.1km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Caha Mountains SAC is 51.1km west of the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is 55.1km north-west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Caha Mountains SAC is 46.6km west of the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is 54.4km north-west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Caha Mountains SAC is 56.7km east of the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is 0m from the scheme. NIS available which identified pollution to some habitats during construction and habitat loss during operation as LSEs for this European site. There is the potential for in-combination effects from pollution during construction.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Caha Mountains SAC is 35.8km east of the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is 9.8km south from this scheme and hydrologically linked via Ballinskelligs Bay. No NIS available and it is</p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>assumed there is potential for in-combination effects from pollution. (LSE for the <u>Gteic Uíbh Ráthaigh</u> works assumed as assessment not available at time of writing).</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Caha Mountains SAC is 70.9km west of the scheme and therefore no in-combination effects predicted. The Kenmare River SAC is 75km north-west of the scheme and therefore no in-combination effects predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Caha Mountains SAC is 69km south-west of the scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is 63km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Caha Mountains SAC is 33km west of the scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is 28km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Caha Mountains SAC is 92km west of the scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is 91km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Caha Mountains SAC is 8km south of the scheme. However, the NIS did not identify any LSEs for this European site. Therefore, no in-combination effects are predicted. The Kenmare River SAC is adjacent to the site. The NIS identified pollution to some habitats, spread of invasive species, habitat loss and disturbance to otter as LSEs for this European site. There is the potential for in-combination effects from pollution during construction.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Caha Mountains SAC is 9km south of the scheme. However, the NIS did not identify any LSEs for this European site. Therefore, no in-combination effects are predicted. The Kenmare River SAC is 1km south of the scheme. The Finnihy River connects the scheme to this SAC. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Caha Mountains SAC is 29.5km north of the scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is 41.2km north-west of the scheme and therefore no in-combination effects are predicted.</p>			
<p>SAI-660</p> <p>New GW abstraction and abandon existing GW source. New WTP</p> <p>The option study area is adjacent to the Sheep's Head SAC which is 440m away. Construction has the potential for species</p>	<ul style="list-style-type: none"> Habitat degradation Water table/availability Disturbance 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Farranamanagh Lough SAC is approximately 50km south-west of the scheme. Sheep's Head SAC is approximately 55km south-west of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p>	No	N/A	N

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>disturbance and habitat degradation via pollution to watercourses and habitats within the SAC. During operation there is potential for habitat degradation of hydrologically connected habitats due to reduced flow and changes in water quality/availability.</p> <p>The option study area is hydrologically linked to the Farranamanagh Lough SAC which is 690m away. Construction has the potential for habitat degradation via pollution to watercourses and habitats within the SAC. No operational impacts predicted</p>		<p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>The Farranamanagh Lough SAC is approximately 50km south-west of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is approximately 55km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Farranamanagh Lough SAC is 93.1km west of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is 86.4km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Farranamanagh Lough SAC is approximately 90km west from these schemes. Sheep's Head SAC is approximately 80km west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Farranamanagh Lough SAC is approximately 90km west of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is approximately 90km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Farranamanagh Lough SAC is approximately 90km west of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is approximately 90km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Farranamanagh Lough SAC is approximately 90km west of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is approximately 90km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Farranamanagh Lough SAC is approximately 90km west of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is approximately 90km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Farranamanagh Lough SAC is approximately 90km west from these schemes and therefore no in-combination effects are predicted. Sheep's Head SAC is approximately 90km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Farranamanagh Lough SAC is approximately 110km west from these schemes and therefore no in-combination effects are predicted. Sheep's Head SAC is</p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>approximately 100km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Farranamanagh Lough SAC is approximately 110km west from these schemes. Sheep's Head SAC is approximately 100km west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Farranamanagh Lough SAC is 60.9km south-west from these schemes and therefore no in-combination effects are predicted. Sheep's Head SAC is 52.8km south-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Farranamanagh Lough SAC is 62.8km west of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is 55.8km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Farranamanagh Lough SAC is 54.2km west of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is 48.6km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Farranamanagh Lough SAC is 31km south-east of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is 25km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Farranamanagh Lough SAC is 48.7km south-east of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is 44km south-east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Farranamanagh Lough SAC is 81.4km west of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is 75.1km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Farranamanagh Lough SAC is 86km south-west of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is 89km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>The Farranamanagh Lough SAC is 55km south-west of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is 59km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Farranamanagh Lough SAC is 81km south-west of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is 108km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Farranamanagh Lough SAC is 29km south of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is 34km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Farranamanagh Lough SAC is 34km south of the scheme. Sheep's Head SAC is 40km south of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Farranamanagh Lough SAC is 29.6km north-west of the scheme and therefore no in-combination effects are predicted. Sheep's Head SAC is 24.5km west of the scheme and therefore no in-combination effects are predicted.</p>			
<p>SAI-768</p> <p>New raw water storage for this WRZ. Based on requiring 100 days' supply of 13m³/d deficit.</p> <p>The option study area is hydrologically linked to the Kenmare River SAC which is 260m away. There is the potential for the spread of invasive species within the SAC and supporting habitats during upgrade constructions due to its proximity. Construction also has the potential for species disturbance of otter and habitat degradation via pollution to watercourses and habitats within the SAC. No operational impacts expected.</p> <p>The option study area is within the Beara Peninsula SPA. There is the potential for habitat loss, disturbance, and the spread of invasive species within the SPA and supporting habitats constructions due to its proximity. Potential pollution of SPA habitats and supporting habitats used by QI bird species. No operational impacts expected.</p>	<ul style="list-style-type: none"> Physical loss of habitat Habitat degradation Disturbance Spread of invasive species 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Kenmare River SAC is approximately 30km west from the scheme. The Beara Peninsula SPA is approximately 55km west from the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>The Kenmare River SAC is approximately 30km west of the scheme and therefore no in-combination effects are predicted. The Beara Peninsula SPA is approximately 55km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Kenmare River SAC is 82.2km west of the scheme and therefore no in-combination effects are predicted. The Beara Peninsula SPA is 100.9km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Kenmare River SAC is approximately 75km west from these schemes. The Beara Peninsula SPA is approximately 95km west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted. The Beara Peninsula SPA is approximately 95km west from the scheme and therefore no in-combination effects predicted.</p>	<p>Yes – from pollution on the Kenmare River SAC if construction phase is concurrent with Dursey Island Cable Car and Visitor Centre works.</p> <p>Yes – from pollution, spread of invasive non-native species and disturbance on the Kenmare River SAC if construction phase is concurrent with Gteic Uíbh Ráthaigh works.</p> <p>Yes – from pollution, spread of invasive non-native species and disturbance on the Kenmare River SAC if construction phase is concurrent with N70 Sneem to Blackwater Bridge works.</p> <p>Yes – from disturbance on the Beara Peninsula SPA if construction phase is concurrent with Dursey Island Cable Car and</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted. The Beara Peninsula SPA is approximately 95km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted. The Beara Peninsula SPA is approximately 95km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted. The Beara Peninsula SPA is approximately 95km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Kenmare River SAC is approximately 75km west from these schemes and therefore no in-combination effects predicted. The Beara Peninsula SPA is approximately 95km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Kenmare River SAC is approximately 95km west from these schemes and therefore no in-combination effects predicted. The Beara Peninsula SPA is approximately 115km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Kenmare River SAC is approximately 95km west from these schemes. The Beara Peninsula SPA is approximately 115km west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Kenmare River SAC is 42.1km west from these schemes and therefore no in-combination effects predicted. The Beara Peninsula SPA is 65.9km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Kenmare River SAC is 55.1km north-west of the scheme and therefore no in-combination effects predicted. The Beara Peninsula SPA is 70.7km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Kenmare River SAC is 54.4km north-west of the scheme and therefore no in-combination effects predicted. The Beara Peninsula SPA is 63.6km west from the scheme and therefore no in-combination effects predicted.</p>	Visitor Centre works.		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Kenmare River SAC is 0m from the scheme. NIS available which identified pollution to some habitats during construction and habitat loss during operation as LSEs for this European site. There is the potential for in-combination effects from pollution during construction. Beara Peninsula SPA surrounds this scheme. NIS available which identified disturbance as an LSE for this European site. There is the potential for in-combination effects from disturbance during construction.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Kenmare River SAC is 9.8km south from this scheme and hydrologically linked via Ballinskelligs Bay. No NIS available and it is assumed there is potential for in-combination effects from pollution, disturbance and spread of invasive species. (LSE for the <u>Gteic Uíbh Ráthaigh</u> works assumed as assessment not available at time of writing). The Beara Peninsula SPA is 21.9km south from this scheme but no hydrological connection exists and therefore no in-combination effects are predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Kenmare River SAC is 75km north-west of the scheme and therefore no in-combination effects predicted. The Beara Peninsula SPA is 89.9km west from this scheme and therefore no in-combination effects are predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Kenmare River SAC is 63km south of the scheme and therefore no in-combination effects are predicted. The Beara Peninsula SPA is 92km west of these schemes and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Kenmare River SAC is 28km south of the scheme and therefore no in-combination effects are predicted. The Beara Peninsula SPA is 67km west of these schemes and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Kenmare River SAC is 91km south of the scheme and therefore no in-combination effects are predicted. The Beara Peninsula SPA is 112km west of these schemes and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Kenmare River SAC is adjacent to the site. The NIS identified pollution to some habitats, spread of invasive species, habitat loss and disturbance to otter as LSEs for this European site. There is the potential for in-combination effects from pollution, spread of invasive species and disturbance to otter. The Beara Peninsula SPA is 24km south-west of the scheme. The Kenmare River hydrologically connects the scheme to this SPA however, the NIS did not identify any LSEs for this European site.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Kenmare River SAC is 1km south of the scheme and there is a hydrological connection via the Finnihy River. The Beara Peninsula SPA is 42km south-west of the scheme. The Kenmare River hydrologically connects the scheme to this SPA. The</p>			

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		<p>AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>Kenmare River SAC is 41.2km north-west of the scheme and therefore no in-combination effects are predicted. The Beara Peninsula SPA is 39.1km north-west from the scheme and therefore no in-combination effects are predicted.</p>			
<p>SAI-771</p> <p>Upgrade existing WTP for water quality improvements. The WRZ is not in deficit.</p> <p>The option study area is hydrologically linked to The Gearagh SAC which is 7.4km away. There is a potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats. No operational impacts predicted.</p> <p>The option study area is hydrologically linked to The Gearagh SPA which is 8.5km away. Potential pollution of watercourses during construction could affect the hydrologically connected SPA and supporting habitats used by bird species. No operational impacts predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 10km east from the scheme. However, the AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosagáin Campus: Repurposing of existing building and grounds</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 10km east and downstream of this scheme. No NIS available and it is assumed there is the potential for in-combination effects from habitat degradation via pollution during construction. (LSE for the Coláiste Íosagáin Campus assumed as assessment not available at time of writing).</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Gearagh SAC and The Gearagh SPA are 39.3km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 30km west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 30km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 30km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 30km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 30km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 30km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p>	<p>Yes - from pollution impacts on The Gearagh SAC and The Gearagh SPA if construction phase is concurrent with Coláiste Íosagáin Campus works</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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		<p>The Gearagh SAC and The Gearagh SPA are approximately 50km west from these schemes and therefore no-in-combination effects predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Gearagh SAC and The Gearagh SPA are approximately 50km west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Gearagh SAC and The Gearagh SPA are 1.8km south from these schemes. However, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 18.2km north-west from the scheme, however they are upstream of this scheme so no in-combination impacts predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 28.3km north from the scheme and therefore no in-combination effects predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 83km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 85.5km east from the scheme and therefore no in-combination effects predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 34.5km north-west from the scheme and therefore no in-combination impacts predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 25km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 1.5km south-west of the scheme. However, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtobhill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtobhill to Midleton.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 48km west of the scheme and therefore no in-combination effects are predicted.</p>			

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		<p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 52km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 38km east of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Gearagh SAC and The Gearagh SPA are 38.5km north from the scheme and therefore no in-combination impacts predicted.</p>			
<p>SAI-779</p> <p>Upgrade existing WTP for water quality improvements. The WRZ is not in deficit.</p> <p>The option study area is hydrologically linked to the Courtmacsherry Estuary SAC which is 11.2km away. There is a potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats. No operational impacts predicted.</p> <p>The option study area is hydrologically linked to the Courtmacsherry Bay SPA which is 11.2km away. Potential pollution of watercourses during construction could affect the hydrologically connected SPA and supporting habitats used by bird species. No operational impacts predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 40km south of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosagáin Campus: Repurposing of existing building and grounds</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 40km south of the scheme therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 25.5km south-west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 30km south-west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 30km south-west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 30km south-west of the scheme and therefore no in-combination effects predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 30km south-west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p>	No	N/A	N

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		<p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 30km south-west of the scheme and therefore no in-combination effects predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 30km south-west from these schemes and therefore no in-combination impacts predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 40km south-west from these schemes and therefore no in-combination impacts predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 40km south-west from these schemes and therefore no in-combination impacts predicted. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 30.6km south from these schemes and therefore no in-combination impacts predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 8.3km west of the scheme. However, there is no hydrological link and therefore no in-combination impacts predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 9.3km east of the scheme. However, there is no hydrological link and therefore no in-combination impacts predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 95km south-east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 105.7km east of the scheme and therefore no in-combination impacts predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 11.2km west of the scheme. However, there is no hydrological link and therefore no in-combination impacts predicted.</p>			

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		<p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 29km south-east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 27km south-east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 39km south-east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 72km south-east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 61km south-east of the scheme and therefore no in-combination effects are predicted. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 35.1km east of the scheme and therefore no in-combination effects are predicted.</p>			
<p>SAI-784</p> <p>Upgrade existing WTP for water quality improvements. The WRZ is not in deficit.</p> <p>The option study area is within the Barley Cove to Ballyrisode Point SAC. There is a potential for habitat degradation by pollution of watercourses during construction impacting QI habitats within the SAC and surrounding supporting habitats. There are no operational impacts predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 60km south from the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 60km south from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>Barley Cove to Ballyrisode Point SAC is 94.2km south-west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from the scheme and therefore no in-combination effects are predicted.</p>	No	N/A	N

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 90km south-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 110km south-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>Barley Cove to Ballyrisode Point SAC is approximately 110km south-west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>Barley Cove to Ballyrisode Point SAC is 64.9km south-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 63.9km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 54km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 30km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 49.5km south-east from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p>			

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		<p>Barley Cove to Ballyrisode Point SAC is 81.7km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 88km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 59km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 108km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 39km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 41km south of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>Barley Cove to Ballyrisode Point SAC is 28.2km west from the scheme and there is no hydrological link. Therefore, no in-combination effects are predicted.</p>			
<p>Group 877 (TG2-SAI-231, TG2-SAI-293)</p> <p>Increase existing GW abstraction from infiltration gallery and supply deficit. Rationalise Dungourney WTP to Mogeely WRZ.</p> <p>The option study area is hydrologically linked to the Ballymacoda (Clonpriest and Pilmore) SAC which is 9.3km away. There is a potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats. No operational impacts predicted.</p> <p>The option study area is hydrologically linked to the Ballymacoda Bay SPA which is 6.7km away. Potential pollution of watercourses during construction could affect the hydrologically connected SPA and supporting habitats used by bird species. No operational impacts predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 85km east of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 85km east of the scheme and therefore no in-combination effects predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 33.4km east of the scheme and therefore no in-combination effects predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 35km east from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p>	No	N/A	N

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 35km east of the scheme and therefore no in-combination effects predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 35km east of the scheme and therefore no in-combination effects predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 35km east of the scheme and therefore no in-combination effects predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 35km east of the scheme and therefore no in-combination effects predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 35km east from these schemes and therefore no in-combination effects predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 16km east from these schemes. However, there is no hydrological link and therefore no in-combination effects predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 16km east from these schemes. However, there is no hydrological link. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroon Community Hospital, Macroon Garda Station:</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 71.5km east from these schemes and therefore no in-combination effects predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 55.9km east of the scheme and therefore no in-combination effects predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 74km north-east of the scheme and therefore no in-combination effects predicted.</p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 155km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 160.6km north-east of the scheme and therefore no in-combination effects predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 46.1km east of the scheme and therefore no in-combination effects predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 38km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 68km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 17km east of the scheme. However, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 127km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 113km east of the scheme and therefore no in-combination effects are predicted. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 98.8km north-east of the scheme and therefore no in-combination effects are predicted.</p>			
<p>Group 897 (TG2-SAI-399, TG2-SAI-434)</p> <p>Increase SW abstraction from Curraghlicky Lake and upgrade WTP. Interconnect Dunmanway and Drinagh</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Bandon River SAC is approximately 18km south of the scheme, however, there is no hydrological link. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p>	No	N/A	N

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>WRZ. Supply deficit from Curraghlicky Lake.</p> <p>The option study area is hydrologically linked to the Bandon River SAC which is 1km away. There is the potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats and QI species such as FWPM. No operational impacts predicted.</p>		<p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>The Bandon River SAC is approximately 18km south of the scheme, however, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Bandon River SAC is 48.1km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Bandon River SAC is approximately 45km west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Bandon River SAC is approximately 45km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Bandon River SAC is approximately 45km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Bandon River SAC is approximately 45km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Bandon River SAC is approximately 45km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Bandon River SAC is approximately 45km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Bandon River SAC is approximately 65km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Bandon River SAC is approximately 65km west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Bandon River SAC is 16.8km south from these schemes, however, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>The Bandon River SAC is 18.1km west and of the scheme. There is a hydrological link, however, the SAC is upstream of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Bandon River SAC is 15km north-west of the scheme, however, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Bandon River SAC is 73km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Bandon River SAC is 79.5km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Bandon River SAC is 37.4km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Bandon River SAC is 40km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Bandon River SAC is 16km south-west of the scheme. However, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Bandon River SAC is 35km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Bandon River SAC is 47km south-east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Bandon River SAC is 35km south-east of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Bandon River SAC is 19.9km north of the scheme, however, there is no hydrological link and therefore no in-combination effects are predicted.</p>			
Group 923 (TG2-SAI-641, TG2-SAI-642)	<ul style="list-style-type: none"> Mortality of species Habitat degradation 	<u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u>	Yes – from pollution on The Kenmare River SAC if construction phase is concurrent	General Mitigation Measures are outlined in Section 6.3.3	N

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>Increase abstraction from Lough Currane and supply Caherdaniel. Supplement Caherdaniel from Waterville.</p> <p>The option study area is within the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC. There is the potential for the spread of invasive species within the SAC and supporting habitats during upgrade constructions. Construction also has the potential for species disturbance to otter and bat, and habitat degradation via pollution to watercourses and habitats within the SAC. During operation there is potential for habitat degradation of hydrologically connected habitats due to reduced flow and changes in water quality/availability.</p> <p>The option study area is hydrologically linked to The Kenmare River SAC which is 200m away. There is the potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats and QI species. There is also the potential for disturbance to QI species, such as otter, and the spread of invasive due to the proximity to the SAC boarder. No operational impacts predicted.</p> <p>The option study is hydrologically linked to The Ballinskelligs Bay and Inny Estuary SAC which is 1.5km away. There is the potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats and QI species. No operational impacts predicted.</p>	<ul style="list-style-type: none"> Disturbance Water table/availability Spread of invasive species 	<p>The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 6.5km north of this scheme. The Kenmare River SAC is approximately 30km west of the scheme. The Ballinskelligs Bay and Inny Estuary SAC is approximately 70km west of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 6.5km north of this scheme however no hydrological link exists and therefore no in-combination effects are predicted. The Kenmare River SAC is approximately 30km west of the scheme and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is approximately 70km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is 55.9km west of this scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is 82.2km west of the scheme and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is 123.1km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 45km north-west from these schemes. The Kenmare River SAC is approximately 75km west from these schemes. The Ballinskelligs Bay and Inny Estuary SAC is approximately 115km west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 45km north-west of this scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is approximately 115km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 45km north-west of this scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is approximately 115km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 45km north-west of this scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects are predicted. The</p>	<p>with Dursley Island Cable Car and Visitor Centre works.</p> <p>Yes – from pollution, spread of invasive non-native species and disturbance on The Kenmare River SAC if construction phase is concurrent with Gteic Uíbh Ráthaigh works.</p> <p>Yes – from pollution, spread of invasive non-native species and disturbance on The Kenmare River SAC if construction phase is concurrent with N70 Sneem to Blackwater Bridge works.</p> <p>Yes – from pollution, on the Ballinskelligs Bay and Inny Estuary SAC if construction phase is concurrent with Gteic Uíbh Ráthaigh works.</p>	<p>Hydrological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Ballinskelligs Bay and Inny Estuary SAC is approximately 115km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 45km north-west of this scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is approximately 115km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 45km north-west from these schemes and therefore no in-combination effects are predicted. The Kenmare River SAC is approximately 75km west from these schemes and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is approximately 115km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 65km north-west from these schemes and therefore no in-combination effects are predicted. The Kenmare River SAC is approximately 95km west from these schemes and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is approximately 135km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is approximately 65km north-west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible. The Kenmare River SAC is approximately 95km west from these schemes and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is approximately 135km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is 16.9km north from these schemes and there is no hydrological link therefore no in-combination effects are predicted. The Kenmare River SAC is 42.1km west from these schemes and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is 83.1km west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC is 37.8km north-west of this scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is 55.1km north-west of the scheme and therefore no in-combination effects are predicted. The Ballinskelligs Bay and</p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Inny Estuary SAC is 94.7km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is 47.4km north of this scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is 54.4km north-west of the scheme and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is 89.9km north-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is 18.8km north of this scheme. However, there is no hydrological link and the NIS did not identify any LSEs therefore no in-combination effects predicted. The Kenmare River SAC is 0m from this scheme NIS available which identified pollution to some habitats during construction and habitat loss during operation as LSEs for this European site. There is the potential for in-combination effects from pollution during construction. The Ballinskelligs Bay and Inny Estuary SAC is 19km north of the scheme, the NIS did not identify any LSEs and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is 6.6km east of this scheme, However, there is no hydrological link and therefore no in-combination impacts predicted. The Kenmare River SAC is 9.8km south from this scheme and hydrologically linked via Ballinskelligs Bay. No NIS available and it is assumed there is potential for in-combination effects from pollution, disturbance and spread of invasive species. The Ballinskelligs Bay and Inny Estuary SAC is 600m south of the scheme and hydrologically linked via streams. No NIS available and it is assumed there is potential for in-combination effects from pollution during construction. (LSE for the Gteic Uíbh Ráthaigh assumed as assessment not available at time of writing).</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is 54.1km north-west of this scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is 75km north-west of the scheme and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is 114.5m north-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is 27.7km west of this scheme. However, there is no hydrological link and therefore no in-combination effects are predicted. The Kenmare River SAC is 63km south of the scheme and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is 108km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>The Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is 4.7km north of this scheme. However, there is no hydrological link and therefore no in-combination effects are predicted. The Kenmare River SAC is 28km south of the scheme and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is 69km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is 61km west of this scheme. However, there is no hydrological link and therefore no in-combination effects are predicted. The Kenmare River SAC is 91km south of the scheme and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is 133km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is 2.1km north of the scheme. However, there is no hydrological link and the NIS did not identify any LSEs therefore no in-combination effects predicted. The Kenmare River SAC is adjacent to the site. NIS available which identified pollution to some habitats, spread of invasive species, habitat loss and disturbance to otter as LSEs for this European site. There is the potential for in-combination effects from pollution, spread of invasive species and disturbance to otter. The Ballinskelligs Bay and Inny Estuary SAC is 22km west of the scheme and therefore no in-combination effects predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is 3.5km north of this scheme but is not hydrologically linked. The AA screening concluded that there were no LSEs, so no in-combination effects are possible. The Kenmare River SAC is 1km south of the scheme. The Finnihy River connects the scheme to this SAC. The Ballinskelligs Bay and Inny Estuary SAC is 40km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC is 46.1km north of this scheme and therefore no in-combination effects are predicted. The Kenmare River SAC is 41.2km north-west of the scheme and therefore no in-combination effects are predicted. The Ballinskelligs Bay and Inny Estuary SAC is 68.2km north of the scheme and therefore no in-combination effects are predicted.</p>			
<p>Group 949 (TG2-SAI-830, TG2-SAI-831, TG2-SAI-832, TG2-SAI-833)</p> <p>New GW abstraction (karstic) and new WTP to supply deficit. Rationalise Knockadoon, Ballymacoda and Kilcraheen to Youghal (new GW source).</p> <p>The option study area is within The Ballymacoda (Clonpriest and Pilmore) SAC. There is the potential for habitat loss</p>	<ul style="list-style-type: none"> Physical loss of habitat Mortality of species Habitat degradation Water table/availability Disturbance Spread of invasive species 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 85km east of the scheme. The Blackwater River SAC is approximately 12km east from the scheme, however, there is no hydrological link. The Blackwater Estuary SPA is approximately 85km east of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaigáin Campus: Repurposing of existing building and grounds</u></p>	<p>Yes – from pollution, spread of invasive non-native species and disturbance on the Blackwater River (Cork/Waterford) SAC if construction phase is concurrent with N/M20 Cork to Limerick Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Blackwater</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>Hydrological modelling as in Section 6.3.5</p>	<p>N</p>

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<p>and the spread of invasive species within the SAC and supporting habitats during upgrade constructions. Construction also has the potential for species disturbance and habitat degradation via pollution to watercourses and habitats within the SAC. During operation there is potential for habitat degradation of hydrologically connected habitats due to reduced flow and changes in water quality/availability.</p> <p>The option study area is close to a hydrological link to The Blackwater River SAC which is 900m away. There is the potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats and QI species such as FWPM. There is also the potential for disturbance to QI species, such as otter, and the spread of invasive due to the proximity to the SAC boarder. During operation there is potential for habitat degradation of hydrologically connected habitats due to reduced flow and changes in water quality/availability.</p> <p>The option study area is within the Ballymacoda Bay SPA. There is the potential for habitat loss and the spread of invasive species within the SPA and supporting habitats constructions due to its proximity. Potential pollution of SPA habitats and supporting habitats used by QI bird species. There is also the potential for disturbance and mortality of QI bird species via pollution of habitats, spread of invasive species and construction activities. During operation there is potential habitat degradation of habitats during operation due to reduced flow and changes in water quality/availability causing habitat impacts on birds using habitats.</p> <p>The option study area is close to a hydrological link to The Blackwater Estuary SPA which is 900m away. Potential pollution of watercourses during construction could affect the hydrologically connected SPA and supporting habitats used by bird species. Potential pollution of watercourses during construction could affect the hydrologically connected SPA and supporting habitats used by bird species. There is also the potential for disturbance of QI bird species and spread of invasive species during construction. During operation there is potential for habitat degradation of hydrologically connected</p>		<p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 85km east of the scheme and therefore no in-combination effects predicted. The Blackwater River SAC is approximately 12km east from the scheme, however, there is no hydrological link and therefore no in-combination effects are predicted. The Blackwater Estuary SPA is approximately 85km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 33.4km east of the scheme and therefore no in-combination effects predicted. The Blackwater River SAC is 24.4km east from the scheme and therefore no in-combination effects predicted. The Blackwater Estuary SPA is 38.7km east of the scheme and therefore no in-combination effects predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 35km east from these schemes. The Blackwater River SAC is approximately 15km east from these schemes, however, there is no hydrological link. The Blackwater Estuary SPA is approximately 40km east from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 35km east of the scheme and therefore no in-combination effects are predicted. The Blackwater River is approximately 15km east from the scheme, however, there is no hydrological link and therefore no in-combination effects are predicted. The Blackwater Estuary SPA is approximately 40km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 35km east of the scheme and therefore no in-combination effects are predicted. The Blackwater River is approximately 15km east from the scheme, however, there is no hydrological link and therefore no in-combination effects are predicted. The Blackwater Estuary SPA is approximately 40km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 35km east of the scheme and therefore no in-combination effects are predicted. The Blackwater River is approximately 15km east from the scheme, however, there is no hydrological link and therefore no in-combination effects are predicted. The Blackwater Estuary SPA is approximately 40km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 35km east of the scheme and therefore no in-combination effects are predicted. The Blackwater River is approximately 15km east from the scheme, however, there is no hydrological link and therefore no in-combination effects are predicted. The Blackwater Estuary SPA is approximately 40km east of the scheme and therefore no in-combination effects are predicted.</p>	<p>River (Cork/Waterford) SAC.</p>	<p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	

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habitats due to reduced flow and changes in water quality/availability.		<p><u>Schemes within Cork City*:</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 35km east from these schemes and therefore no in-combination effects are predicted. The Blackwater River is approximately 15km east from these schemes, however, there is no hydrological link and therefore no in-combination effects are predicted. The Blackwater Estuary SPA is approximately 40km east from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 15km east from these schemes. However, there is no hydrological link and therefore no in-combination effects predicted. The Blackwater River SAC is approximately 13km north from these schemes, however, there is no hydrological link and therefore no in-combination effects predicted. The Blackwater Estuary SPA is approximately 20km east from these schemes, however, there is no hydrological link and therefore no in-combination effects predicted</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are approximately 15km east from these schemes. However, there is no hydrological link. The Blackwater River SAC is approximately 13km north from these schemes, however, there is no hydrological link. The Blackwater Estuary SPA is approximately 20km from these schemes, however, there is no hydrological link. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 71.5km east from these schemes and therefore no in-combination effects predicted. The Blackwater River SAC is 15.2km north from these schemes, however, there is no hydrological link and therefore no in-combination effects predicted. The Blackwater Estuary SPA is 73.9km east from these schemes and therefore no in-combination effects predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 55.9km east of the scheme and therefore no in-combination effects predicted. The Blackwater River SAC is 35.9km north from the scheme and therefore no in-combination effects predicted. The Blackwater Estuary SPA is 62.4km east of the scheme and therefore no in-combination effects predicted</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 74km north-east of the scheme and therefore no in-combination effects predicted. The Blackwater River SAC is 47.2km north from the scheme and therefore no in-combination effects predicted. The Blackwater Estuary SPA is 80.1km east of the scheme and therefore no in-combination effects predicted</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p>			

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		<p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 155km east of the scheme and therefore no in-combination effects are predicted. The Blackwater River SAC is 80km north-east from the scheme and therefore no in-combination effects predicted. The Blackwater Estuary SPA is 161km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 160.6km north-east of the scheme and therefore no in-combination effects predicted. The Blackwater River SAC is 74.6km north from the scheme and therefore no in-combination effects predicted. The Blackwater Estuary SPA is 164.2km east of the scheme and therefore no in-combination effects predicted</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 46.1km east of the scheme and therefore no in-combination effects predicted. The Blackwater River SAC is 36.3km north-east from the scheme and therefore no in-combination effects predicted. The Blackwater Estuary SPA is 52.4km east of the scheme and therefore no in-combination effects predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 38km east of the scheme and therefore no in-combination effects are predicted. The Blackwater River SAC is 0m from the scheme. No NIS available and it is assumed there is potential for in-combination effects from pollution, disturbance, and the spread of invasive non-native species during construction. In-combination effects during operation may result in habitat degradation and changes to water table/availability. (LSE for the N/M20 Cork to Limerick Road Improvement Scheme assumed as assessment not available at time of writing). The Blackwater Estuary SPA is 42km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 68km east of the scheme and therefore no in-combination effects are predicted. The Blackwater River SAC is 13km north-east from the scheme, however there is no hydrological link and therefore no in-combination effects are predicted. The Blackwater Estuary SPA is 72km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 17km east of the scheme. However, there is no hydrological link and therefore no in-combination effects are predicted. The Blackwater River SAC is 12km north of this scheme, however, there is no hydrological link and therefore no in-combination effects are predicted. The Blackwater Estuary SPA is 21km east of the scheme. However, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 127km east of the scheme and therefore no in-combination effects are predicted.</p>			

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>The Blackwater River SAC is 40km east of the scheme and therefore no in-combination effects predicted. The Blackwater Estuary SPA are 131km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 113km east of the scheme and therefore no in-combination effects are predicted. The Blackwater River SAC and is 30km east from the scheme and therefore no in-combination effects predicted. The Blackwater Estuary SPA is 117km east of the scheme and therefore no in-combination effects are predicted. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 98.8km north-east of the scheme and therefore no in-combination effects are predicted. The Blackwater River SAC is 40km north of the scheme and therefore no in-combination effects predicted. The Blackwater Estuary SPA is 105km east of the scheme and therefore no in-combination effects are predicted.</p>			
<p>Group 950 (TG2-SAI-836, TG2-SAI-837)</p> <p>Increase GW abstraction (karstic) and supply deficit. Rationalise Ballykilty to Killeagh WRZ.</p> <p>The option study area is hydrologically linked to The Ballymacoda (Clonpriest and Pilmore) SAC which is 2.8km away. There is the potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats and QI species. No operational impacts predicted.</p> <p>The option study area is hydrologically linked to The Ballymacoda Bay SPA which is 2.8km away. Potential pollution of watercourses during construction could affect the hydrologically connected SPA and supporting habitats used by bird species. No operational impacts predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are approximately 85km east of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are approximately 85km east of the scheme and therefore no in-combination effects predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are 33.4km east of the scheme and therefore no in-combination effects predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are approximately 35km east from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are approximately 35km east and therefore no in-combination effects predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are approximately 35km east and therefore no in-combination effects predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are approximately 35km east and therefore no in-combination effects predicted.</p>	No	N/A	N

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		<p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are approximately 35km east and therefore no in-combination effects predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are approximately 35km east from these schemes and therefore no in-combination effects predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are approximately 15km east from these schemes. However, there is no hydrological link and therefore no in-combination effects predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are approximately 15km east from these schemes. however, there is no hydrological link. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are 71.5km east from these schemes and therefore no in-combination effects predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are 55.9km east of the scheme and therefore no in-combination effects predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are 74km north-east of the scheme and therefore no in-combination effects predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are 155km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and The Ballymacoda Bay SPA are 160.6km north-east of the scheme and therefore no in-combination effects predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 46.1km east of the scheme and therefore no in-combination effects predicted.</p>			

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		<p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 38km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 68km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 17km east of the scheme. However, there is no hydrological link and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 127km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 113km east of the scheme and therefore no in-combination effects are predicted. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Ballymacoda (Clonpriest and Pilmore) SAC and the Ballymacoda Bay SPA are 98.8km north-east of the scheme and therefore no in-combination effects are predicted.</p>			
<p>Group 955 (TG2-SAI-861, TG2-SAI-862, TG2-SAI-863, TG2-SAI-864, TG2-SAI-865)</p> <p>New Inchybegga Impoundment (Cullomane) and new WTP. To supply Bantry deficit and transfer west to supply WRZs full demands. Rationalise Castletownbere, Glengarriff, Adrigole and Reenmeen west to Bantry.</p> <p>The option study area is within the Caha Mountains SAC. There is the potential for habitat loss, particularly that of the lesser horseshoe bat, and the spread of invasive species within the SAC and supporting habitats during upgrade constructions. Construction also has the potential for species disturbance, mortality, and habitat degradation via pollution to watercourses and habitats within the SAC. No operational impacts predicted.</p>	<ul style="list-style-type: none"> Physical loss of habitat Mortality of species Habitat degradation Disturbance Spread of invasive species 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Caha Mountains SAC and Glengarriff Harbour and Woodland SAC are approximately 30km west from the scheme. The Roaringwater Bay and Islands SAC is approximately 45km south from the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>The Caha Mountains SAC and Glengarriff Harbour and Woodland SAC are approximately 30km west from the scheme and therefore no in-combination effects predicted. The Roaringwater Bay and Islands SAC is approximately 45km south from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Caha Mountains SAC is 80.4km and the Glengarriff Harbour and Woodland SAC is 77.8km west from the scheme and therefore no in-combination effects predicted. The Roaringwater Bay and Islands SAC is 75.1km south-west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p>	<p>Yes – from pollution on the Roaringwater Bay and Islands SAC if construction phase is concurrent with Skibbereen Community Hospital works.</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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<p>The option study area is within The Glengarriff Harbour and Woodland SAC. There is the potential for habitat loss and the spread of invasive species within the SAC and supporting habitats during upgrade constructions. Construction also has the potential for species disturbance (in particular bats and otter), mortality and habitat degradation via pollution to watercourses and habitats within the SAC. No operational impacts predicted.</p> <p>The option study area is hydrologically connected to The Roaringwater Bay and Islands SAC which is 20km away. There is the potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats and QI species. No operational impacts predicted.</p>		<p>The Caha Mountains SAC and Glengarriff Harbour and Woodland SAC are approximately 70km west from these schemes. The Roaringwater Bay and Islands SAC is approximately 70km south-west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Caha Mountains SAC and Glengarriff Harbour and Woodland SAC are approximately 70km west from the scheme. The Roaringwater Bay and Islands SAC is approximately 70km south-west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Caha Mountains SAC and Glengarriff Harbour and Woodland SAC are approximately 70km west from the scheme. The Roaringwater Bay and Islands SAC is approximately 70km south-west from the scheme and therefore no in-combination effects predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Caha Mountains SAC and Glengarriff Harbour and Woodland SAC are approximately 70km west from the scheme. The Roaringwater Bay and Islands SAC is approximately 70km south-west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Caha Mountains SAC and Glengarriff Harbour and Woodland SAC are approximately 70km west from the scheme. The Roaringwater Bay and Islands SAC is approximately 70km south-west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Caha Mountains SAC and Glengarriff Harbour and Woodland SAC are approximately 70km west from these schemes and therefore no in-combination effects predicted. The Roaringwater Bay and Islands SAC is approximately 70km south-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Caha Mountains SAC and Glengarriff Harbour and Woodland SAC are approximately 95km west from these schemes and therefore no in-combination effects predicted. The Roaringwater Bay and Islands SAC is approximately 90km south-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Caha Mountains SAC and the Glengarriff Harbour and Woodland SAC are approximately 95km west from these schemes. The Roaringwater Bay and Islands SAC is approximately 90km south-west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p>			

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		<p>The Caha Mountains SAC and the Glengarriff Harbour and Woodland SAC is approximately 40km west from these schemes and therefore no in-combination effects predicted. The Roaringwater Bay and Islands SAC is 48.9km south-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Caha Mountains SAC is 51.1km and the Glengarriff Harbour and Woodland SAC is 48.5km west from the scheme and therefore no in-combination effects predicted. The Roaringwater Bay and Islands SAC is 45.2km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Caha Mountains SAC is 46.6km and the Glengarriff Harbour and Woodland SAC is 43.9km west from the scheme and therefore no in-combination effects predicted. The Roaringwater Bay and Islands SAC is 34.3km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Caha Mountains SAC is 29km and the Glengarriff Harbour and Woodland SAC is 42km east of the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 37km south of the scheme and therefore no in-combination effects are predicted and therefore no in-combination effects predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Caha Mountains SAC is 35.8km and the Glengarriff Harbour and Woodland SAC is 45.4km east from the scheme and therefore no in-combination effects predicted. The Roaringwater Bay and Islands SAC is 57.6km south-east from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Caha Mountains SAC is 70.9km and the Glengarriff Harbour and Woodland SAC is 68.2km west from the scheme and therefore no in-combination effects predicted. The Roaringwater Bay and Islands SAC is 62.2km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Caha Mountains SAC and The Glengarriff Harbour and Woodland SAC are 69km south-west of the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 71km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Caha Mountains SAC and The Glengarriff Harbour and Woodland SAC are 33km south-west of the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 46km south-west of the scheme and therefore no in-combination effects are predicted.</p>			

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		<p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Caha Mountains SAC and The Glengarriff Harbour and Woodland SAC are 92km west of the scheme and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 89km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Caha Mountains SAC is 8km and the Glengarriff Harbour and Woodland SAC is 14km south of the scheme. However, there is no hydrological link and therefore no in-combination effects are predicted. The Roaringwater Bay and Islands SAC is 38km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Caha Mountains SAC is 9km and the Glengarriff Harbour and Woodland SAC is 11km south of the scheme. The Roaringwater Bay and Islands SAC is 36km south of the scheme. However, the AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Caha Mountains SAC is 29.5km and the Glengarriff Harbour and Woodland SAC is 26.1km north from the scheme and therefore no in-combination effects predicted. The Roaringwater Bay and Islands SAC is 11.2km west from the scheme and hydrologically linked via the River Ilen No NIS available and it is assumed there is potential for in-combination effects from habitat degradation by pollution during construction (LSE for the Skibbereen Community Hospital assumed as assessment not available at time of writing).</p>			
<p>Group 960 (TG2-SAI-882, TG2-SAI-883)</p> <p>Rationalise Allihies to Ballydonegan GWS. Rationalise Cluain Court Allihies to Allihies.</p> <p>The option study area is hydrologically linked to the Kenmare River SAC which is 100m away. There is the potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats and QI species. There is also the potential for disturbance to otters and spread of invasive species. No operational impacts predicted.</p> <p>The option study area is hydrologically linked to the Beara Peninsula SPA which is 100m away. Potential pollution of watercourses during construction could affect the hydrologically connected SPA and supporting habitats used by bird species. Due to its proximity, there is potential for the disturbance of bird species and the spread of invasive species. No operational impacts predicted.</p>	<ul style="list-style-type: none"> Habitat degradation Disturbance Spread of invasive species 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Kenmare River SAC is approximately 30km west from the scheme. The Beara Peninsula SPA is approximately 55km west from the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaqáin Campus: Repurposing of existing building and grounds</u></p> <p>The Kenmare River SAC is approximately 30km west of the scheme and therefore no in-combination effects are predicted. The Beara Peninsula SPA is approximately 55km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Kenmare River SAC is 82.2km west of the scheme and therefore no in-combination effects are predicted. The Beara Peninsula SPA is 100.9km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Kenmare River SAC is approximately 75km west from these schemes. The Beara Peninsula SPA is approximately 95km west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p>	<p>Yes – from pollution on the Kenmare River SAC and from disturbance on the Beara Peninsula SPA if construction phase is concurrent with Dursey Island Cable Car and Visitor Centre works</p> <p>Yes – from pollution, spread of invasive non-native species and disturbance on the Kenmare River SAC if construction phase is concurrent with Gteic Uíbh Ráthaigh works.</p> <p>Yes – from pollution, spread of invasive non-native species and disturbance on the Kenmare River SAC if construction phase is concurrent with N70 Sneem to Blackwater Bridge works.</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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		<p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted. The Beara Peninsula SPA is approximately 95km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted. The Beara Peninsula SPA is approximately 95km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted. The Beara Peninsula SPA is approximately 95km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Kenmare River SAC is approximately 75km west of the scheme and therefore no in-combination effects predicted. The Beara Peninsula SPA is approximately 95km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Kenmare River SAC is approximately 75km west from these schemes and therefore no in-combination effects predicted. The Beara Peninsula SPA is approximately 95km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Kenmare River SAC is approximately 95km west from these schemes and therefore no in-combination effects predicted. The Beara Peninsula SPA is approximately 115km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Kenmare River SAC is approximately 95km west from these schemes. The Beara Peninsula SPA is approximately 115km west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Kenmare River SAC is 42.1km west from these schemes and therefore no in-combination effects predicted. The Beara Peninsula SPA is 65.9km west from these schemes and therefore no in-combination effects predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Kenmare River SAC is 55.1km north-west of the scheme and therefore no in-combination effects predicted. The Beara Peninsula SPA is 70.7km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p>			

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		<p>The Kenmare River SAC is 54.4km north-west of the scheme and therefore no in-combination effects predicted. The Beara Peninsula SPA is 63.6km west from the scheme and therefore no in-combination effects predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Kenmare River SAC is 0m from the scheme. NIS available which identified pollution to some habitats during construction and habitat loss during operation as LSEs for this European site. There is the potential for in-combination effects from pollution during construction. Beara Peninsula SPA surrounds this scheme. NIS available which identified disturbance as an LSE for this European site. There is the potential for in-combination effects from disturbance during construction.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Kenmare River SAC is 9.8km south from this scheme and hydrologically linked via Ballinskelligs Bay. No NIS available and it is assumed there is potential for in-combination effects from pollution, disturbance and spread of invasive species. (LSE for the Gteic Uíbh Ráthaigh assumed as assessment not available at time of writing). The Beara Peninsula SPA is 21.9km south from this scheme but no hydrological connection exists and therefore no in-combination effects are predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Kenmare River SAC is 75km north-west of the scheme and therefore no in-combination effects predicted. The Beara Peninsula SPA is 89.9km west from this scheme and therefore no in-combination effects are predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Kenmare River SAC is 63km south of the scheme and therefore no in-combination effects are predicted. The Beara Peninsula SPA is 92km west of these schemes and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Kenmare River SAC is 28km south of the scheme and therefore no in-combination effects are predicted. The Beara Peninsula SPA is 67km west of these schemes and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Kenmare River SAC is 91km south of the scheme and therefore no in-combination effects are predicted. The Beara Peninsula SPA is 112km west of these schemes and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Kenmare River SAC is adjacent to the site. The NIS identified pollution to some habitats, spread of invasive species, habitat loss and disturbance to otter as LSEs for this European site. There is the potential for in-combination effects from pollution and disturbance to otter. The Beara Peninsula SPA is 24km south-west of the scheme. The Kenmare River hydrologically connects the scheme to this SPA, however, the NIS did not identify any LSEs for this European site.</p>			

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		<p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Kenmare River SAC is 1km south of the scheme. The Finnihy River connects the scheme to this SAC. The Beara Peninsula SPA is 42km south-west of the scheme. The Kenmare River hydrologically connects the scheme to this SPA. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>Kenmare River SAC is 41.2km north-west of the scheme and therefore no in-combination effects are predicted. The Beara Peninsula SPA is 39.1km north-west from the scheme and therefore no in-combination effects are predicted.</p>			
<p>Group 962 (TG2-SAI-887, TG2-SAI-888)</p> <p>Upgrade Ballyhilty WTP and supply spare capacity to Skibbereen 2 - Baltimore and Schull WRZ. Upgrade Lake Cross WTP and supply deficit from Skibbereen 1 WRZ.</p> <p>Option study area is hydrologically linked to the Roaringwater Bay and Islands SAC which is 1.7km away. There is the potential for habitat degradation by pollution of water courses during construction impacting hydrologically connected QI habitats and QI species. There is also the potential for disturbance to otter during construction. No operational impacts predicted.</p> <p>The option study area is hydrologically linked to the Lough Hyne Nature Reserve and Environs SAC which is 3.9km away. There is the potential for habitat degradation by pollution of water courses during construction impacting hydrologically connected QI habitats and QI species. There is also the potential for the spread of invasive species during construction. No operational impacts predicted.</p>	<ul style="list-style-type: none"> Habitat degradation Disturbance Spread of invasive species 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Roaringwater Bay and Islands SAC is approximately 45km south from the scheme. The Lough Hyne Nature Reserve and Environs SAC is approximately 45km south of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaáin Campus: Repurposing of existing building and grounds</u></p> <p>The Roaringwater Bay and Islands SAC is approximately 45km south from the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is approximately 45km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>The Roaringwater Bay and Islands SAC is 75.1km south-west from the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is 69.8km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Roaringwater Bay and Islands SAC is approximately 75km south-west from these schemes. The Lough Hyne Nature Reserve and Environs SAC is approximately 70km south-west from these schemes. The AA screening for both projects concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Roaringwater Bay and Islands SAC is approximately 75km south-west from the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is approximately 70km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Roaringwater Bay and Islands SAC is approximately 75km south-west from the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is approximately 70km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p>	<p>Yes – from pollution and disturbance on the Roaringwater Bay and Islands SAC if construction phase is concurrent with Skibbereen Community Hospital works.</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	

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		<p>The Roaringwater Bay and Islands SAC is approximately 75km south-west from the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is approximately 70km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Roaringwater Bay and Islands SAC is approximately 75km south-west from the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is approximately 70km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Roaringwater Bay and Islands SAC is approximately 75km south-west from these schemes and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is approximately 70km south-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Roaringwater Bay and Islands SAC is approximately 90km south-west from these schemes and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is approximately 85km south-west from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Roaringwater Bay and Islands SAC is approximately 90km south-west from these schemes. The Lough Hyne Nature Reserve and Environs SAC is approximately 85km south-west from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>The Roaringwater Bay and Islands SAC is 48.9km south-west from these schemes and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is 48.8km south from these schemes and therefore no in-combination effects are predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers</u></p> <p><u>N/ and removal of 10 combined sewer overflows.</u></p> <p>The Roaringwater Bay and Islands SAC is 45.2km west from the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is 40.9km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Roaringwater Bay and Islands SAC is 34.3km west from the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is 28.4km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p>			

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		<p>The Roaringwater Bay and Islands SAC is 37km south of the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is 60km east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Roaringwater Bay and Islands SAC is 57.6km south-east from the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is 74.8km south-east of the scheme and therefore no in-combination effects are predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Roaringwater Bay and Islands SAC is 62.2km west from the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is 56.2km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>The Roaringwater Bay and Islands SAC is 71km south-west of the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is 71km south-west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Roaringwater Bay and Islands SAC is 46km south-west of the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is 47km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Roaringwater Bay and Islands SAC is 89km west of the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is 85km west of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Roaringwater Bay and Islands SAC is 38km south of the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is 50km south of the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Roaringwater Bay and Islands SAC is 36km south of the scheme and therefore no in-combination effects are predicted. The Lough Hyne Nature Reserve and Environs SAC is 46km south of the scheme and therefore no in-combination effects are predicted. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p>			

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		<p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Roaringwater Bay and Islands SAC is 11.2km west from the scheme and hydrologically linked via the River Ilen. No NIS available and it is assumed there is potential for in-combination effects from habitat degradation by pollution and disturbance during construction (LSE for the Skibbereen Community Hospital assumed as assessment not available at time of writing). The Lough Hyne Nature Reserve and Environs SAC is 6.4km south of the scheme. However, there is no hydrological link and therefore no in-combination impacts predicted.</p>			
<p>Group 963 (TG2-SAI-889, TG2-SAI-890, TG2-SAI-964)</p> <p>New GW abstraction and upgrade Minane Bridge WTP. Interconnect Nohoval and Minane Bridge WRZs and supply deficit from Minane WRZ.</p> <p>The option study area is hydrologically linked to the Cork Harbour SPA which is 2.6km away. There is the potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats and QI species. No operational impacts predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>Cork Harbour SPA is approximately 50km east of the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosaigáin Campus: Repurposing of existing building and grounds</u></p> <p>Cork Harbour SPA is approximately 50km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>Cork Harbour SPA is 0m south of the scheme, no NIS available and it is assumed there is potential for in-combination effects from pollution during construction (LSE for the Carrigaline Western Relief Road assumed as assessment not available at time of writing).</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>Cork Harbour SPA is <5km east from these schemes. However, the AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>Cork Harbour SPA is 5 km downstream, and the NIS concluded that there was LSEs predicted for pollution, spread of invasive species and disturbance. There is the potential for in-combination effects from pollution during construction.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>Cork Harbour SPA is 200m downstream, and the NIS concluded that there was LSEs predicted for pollution and disturbance. There is the potential for in-combination effects from pollution during construction.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>Cork Harbour SPA is 1.3km downstream, and the NIS concluded that there was LSEs predicted for habitat loss, pollution, and disturbance. There is the potential for in-combination effects from pollution during construction.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>Cork Harbour SPA is 1.4km downstream, the and the NIS concluded that there was LSEs predicted for pollution and disturbance. There is the potential for in-combination effects from pollution during construction.</p> <p><u>Schemes within Cork City*:</u></p> <p>Cork Harbour SPA is <5km east from these schemes No NIS available and it is assumed there is potential for in-combination effects from habitat degradation by</p>	<p>Yes – from pollution on the Cork Harbour SPA if construction phase is concurrent with Carrigaline Western Relief Road works.</p> <p>Yes – from pollution on the Cork Harbour SPA if construction phase is concurrent with Blackpool FRS works.</p> <p>Yes – from pollution on the Cork Harbour SPA if construction phase is concurrent with Glashaboy FRS works.</p> <p>Yes – from pollution on the Cork Harbour SPA if construction phase is concurrent with M/N28 Cork to Ringaskiddy Road works.</p> <p>Yes – from pollution on the Cork Harbour SPA if construction phase is concurrent with Remediation of Haulbowline Island works.</p> <p>Yes – from pollution on the Cork Harbour SPA if construction phase is concurrent with the Schemes within Cork City.</p> <p>Yes – from pollution on the Cork Harbour SPA if construction phase is concurrent with Midleton Flood Relief Scheme, Midleton Main Street works, Midleton Permeability package of proposals, Midleton Water Supply</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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		<p>pollution during construction (LSE for the schemes within Cork City assumed as assessments not available at time of writing).</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>Cork Harbour SPA is approximately 800msouth from these schemes. No NIS available and it is assumed there is potential for in-combination effects from habitat degradation by pollution during construction (LSE for these schemes assumed as assessments not available at time of writing).</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>Cork Harbour SPA is approximately 800msouth from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Macroom Community Hospital, Macroom Garda Station:</u></p> <p>Cork Harbour SPA is 37km east from these schemes and therefore no in-combination impacts predicted.</p> <p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>Cork Harbour SPA is 24.5km north-east of the scheme and therefore no in-combination impacts predicted.</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>Cork Harbour SPA is 42km north-east of the scheme and therefore no in-combination impacts predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>Cork Harbour SPA is 122km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>Cork Harbour SPA is 125.8km east of the scheme and therefore no in-combination impacts predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>Cork Harbour SPA is 14.2km north-east of the scheme. However, there is no hydrological link and therefore no in-combination impacts predicted.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p> <p>Cork Harbour SPA is 7km south-east of this scheme, the River Martin and River Lee hydrologically connect the scheme to this SPA. No NIS available and it is assumed there is potential for in-combination effects from pollution during construction (LSE for the N/M20 Scheme assumed as assessment not available at time of writing).</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p>	<p>Scheme works.</p> <p>Yes – from pollution on the Cork Harbour SPA if construction phase is concurrent with N/M20 Cork to Limerick Road Improvement Scheme works.</p> <p>Yes – from pollution on the Cork Harbour SPA if construction phase is concurrent with N25 Carrigtwohill to Midleton Upgrade Scheme works.</p>		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Cork Harbour SPA is 34km south-east of the scheme. The Sullane River and River Lee hydrologically connect the scheme to this SPA however, no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>Cork Harbour SPA is 0m from this scheme, the River Lee hydrologically connects the scheme to this SPA. No NIS available and it is assumed there is potential for in-combination effects from pollution during construction (LSE for the N25 Scheme assumed as assessment not available at time of writing).</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>Cork Harbour SPA is 79km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>Cork Harbour SPA is 79km south-east of the scheme therefore no in-combination effects are predicted. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>Cork Harbour SPA is 66.6km north-east of the scheme therefore no in-combination effects are predicted.</p>			
<p>Group 971 (TG2-SAI-939, TG2-SAI-940, TG2-SAI-941, TG2-SAI-942, TG2-SAI-943, TG2-SAI-944, TG2-SAI-945, TG2-SAI-946, TG2-SAI-947, TG2-SAI-948, TG2-SAI-949, TG2-SAI-950, TG2-SAI-951, TG2-SAI-952, TG2-SAI-953, TG2-SAI-954, TG2-SAI-955, TG2-SAI-956, TG2-SAI-957, TG2-SAI-958, TG2-SAI-959, TG2-SAI-960)</p> <p>Increase abstraction at Inniscarra and upgrade WTP. Interconnect with Bandon Regional and Clonakilty. Maintain allowable abstraction from Owenacurra River and supply deficit from Inniscarra for Midleton WRZ. Rationalise Knockburden, Templemartin & Garranes, Aghabullogue, Coolineagh, Corbally, Clash Leamleara, Ballincurrag Lisgoold, Walshtown, Grenagh, Stoneview Blarney, Cullen, Ballyshoneen, Vicarstown, Ballinagree, Rylane, Bayview, Tibbotstown and Clashanamid WRZs.</p> <p>The option study area is within the Courtmacsherry Estuary SAC. There is the potential for habitat loss and the spread of invasive species within the SAC and supporting habitats during upgrade constructions. There is also the potential for habitat degradation by pollution of</p>	<ul style="list-style-type: none"> Physical loss of habitat Mortality of species Habitat degradation Disturbance Spread of invasive species 	<p><u>Ballyvourney and Ballymakeera FRS: Flood Relief Scheme for Ballyvourney to Ballymakeera.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 40km south of the scheme. Cork Harbour SPA is approximately 50km east of the scheme. The Great Island Channel SAC is approximately 55km east of the scheme. The Sovereign Islands SPA is approximately 55km south-east from the scheme. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Coláiste Íosagáin Campus: Repurposing of existing building and grounds</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 40km south of the scheme therefore no in-combination effects are predicted. Cork Harbour SPA is approximately 50km east of the scheme therefore no in-combination effects are predicted. The Great Island Channel SAC is approximately 55km east from the scheme therefore no in-combination effects are predicted. The Sovereign Islands SPA is approximately 55km south-east from the scheme therefore no in-combination effects are predicted.</p> <p><u>Carrigaline Western Relief Road: 750m road and bridge to bypass main street</u></p> <p>Cork Harbour SPA is 0m south of the scheme, no NIS available and it is assumed there is potential for in-combination effects from pollution during construction. Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 25.5km south-west of the scheme and therefore no in-combination effects predicted. The Great Island Channel SAC is 8.5km north from the scheme, no NIS available and it is assumed there is potential for in-combination effects from pollution during construction. The Sovereign Islands SPA is 15.5km west from the scheme, no NIS available and it is assumed there is potential for in-combination effects from pollution</p>	<p>Yes – from pollution on the Cork Harbour SPA, the Great Island Channel SAC and the Sovereign Islands SPA if construction phase is concurrent with the Carrigaline Western Relief Road works.</p> <p>Yes – from pollution on the Cork Harbour SPA and the Great Island Channel SAC if construction phase is concurrent with the Blackpool FRS works.</p> <p>Yes – from pollution on the Cork Harbour SPA and the Great Island Channel SAC if construction phase is concurrent with the Glashaboy FRS works.</p> <p>Yes – from pollution on the Cork Harbour SPA and the Great Island Channel SAC if construction phase is concurrent with the M/N28 Cork to</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>watercourses during construction impacting hydrologically connected QI habitats. No operational impacts predicted.</p> <p>The option study area is within the Courtmacsherry Bay SPA. There is the potential for habitat loss and the spread of invasive species within the SPA and supporting habitats constructions due to its proximity. Potential pollution of SPA habitats and supporting habitats used by QI bird species. There is also the potential for disturbance and mortality of QI bird species via pollution of habitats, spread of invasive species and construction activities. No operational impacts predicted.</p> <p>The option study area is hydrologically linked to The Cork Harbour SPA which is 1km away. Potential pollution of watercourses during construction could affect the hydrologically connected SPA and supporting habitats used by bird species. No operational impacts predicted.</p> <p>The option study area is hydrologically linked to The Great Island Channel SAC which is 1.5km away. There is the potential for habitat degradation by pollution of watercourses during construction impacting hydrologically connected QI habitats and QI species. No operational impacts predicted.</p> <p>The option study area is hydrologically linked to The Sovereign Islands SPA which is 11.9km away. Potential pollution of watercourses during construction could affect the hydrologically connected SPA and supporting habitats used by bird species. No operational impacts predicted.</p>		<p>during construction (LSE for the Carrigaline Western Relief Road assumed as assessment not available at time of writing).</p> <p><u>Denroche's Cross: 43 social housing units and Miles Stream: 42 social housing units.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 20km south-west from these schemes. Cork Harbour SPA is <5km east from these schemes, however the AA screening did not identify LSEs for this European site so no in-combination effects predicted. The Great Island Channel SAC is <10km east from these schemes, however the AA screening did not identify LSEs for this European site so no in-combination effects predicted. The Sovereign Islands SPA is approximately 20km south from these schemes. The AA screening did not identify LSEs for these European sites so no in-combination effects predicted.</p> <p><u>Blackpool FRS: flood relief scheme for Blackpool, Cork city.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 30km south-west of the scheme and therefore no in-combination effects predicted. Cork Harbour SPA is 5 km downstream, and the NIS concluded that there was LSEs predicted for pollution, spread of invasive species and disturbance. There is the potential for in-combination effects from pollution during construction. Great Islands Channel SAC is 9km downstream and the NIS concluded that there was LSEs predicted for pollution and spread of invasive species. There is the potential for in-combination effects from pollution during construction. The Sovereign Islands SPA is approximately 20km south from the scheme, however, the NIS did not identify LSEs for these European sites so no in-combination effects predicted.</p> <p><u>Glashaboy FRS: Flood Relief Scheme for Glashaboy, Cork City.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 30km south-west of the scheme and therefore no in-combination effects predicted. Cork Harbour SPA is 200m downstream, and the NIS concluded that there was LSEs predicted for pollution and disturbance. There is the potential for in-combination effects from pollution during construction. Great Islands Channel SAC is 5km downstream and the NIS concluded that there was LSEs predicted for pollution. There is the potential for in-combination effects from pollution during construction. The Sovereign Islands SPA is approximately 20km south from the scheme, however, the NIS did not identify LSEs for these European sites so no in-combination effects predicted.</p> <p><u>M/N28 Cork to Ringaskiddy Road: upgrade of 12.8km of N28 from the N40 south Ring Road to the Port in Ringaskiddy.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 30km south-west of the scheme and therefore no in-combination effects predicted. Cork Harbour SPA is 1.3km downstream, and the NIS concluded that there was LSEs predicted for habitat loss, pollution, and disturbance. There is the potential for in-combination effects from pollution during construction. Great Islands Channel SAC is 6km downstream and the NIS concluded that there was LSEs predicted for pollution. There is the potential for in-combination effects from pollution during construction. The Sovereign Islands SPA is approximately 20km south from the scheme, however, the NIS did not identify LSEs for these European sites so no in-combination effects predicted.</p> <p><u>Remediation of Haulbowline Island: remediation project for the east tip of the island.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 30km south-west of the scheme and therefore no in-combination effects predicted. Cork Harbour SPA is 1.4km downstream, the and the NIS</p>	<p>Ringaskiddy Road works.</p> <p>Yes – from pollution on the Cork Harbour SPA and the Great Island Channel SAC if construction phase is concurrent with the Remediation of Haulbowline Island works.</p> <p>Yes – from pollution on the Cork Harbour SPA and the Great Island Channel SAC if construction phase is concurrent with the Schemes within Cork City works.</p> <p>Yes – from pollution on the Cork Harbour SPA and the Great Island Channel SAC if construction phase is concurrent with the Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals and Midleton Water Supply Scheme works.</p> <p>Yes – from pollution on Sovereign Islands SPA if construction phase is concurrent with Bandon Water Main works</p> <p>Yes – from pollution on Sovereign Islands SPA if construction phase is concurrent with Kinsale Community Hospital works</p> <p>Yes – from pollution on the Cork Harbour SPA and the Great Island Channel SAC if construction phase is concurrent with the N/M20 Cork to Limerick Road Improvement Scheme works.</p> <p>Yes – from pollution on the Cork Harbour SPA and the Great Island Channel SAC if construction phase is concurrent with the N25 Carrigtohill to</p>		

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		<p>concluded that there was LSEs predicted for pollution and disturbance. There is the potential for in-combination effects from pollution during construction. Great Islands Channel SAC is 4.2km and the NIS concluded that there was LSEs predicted for pollution. There is the potential for in-combination effects from pollution during construction. The Sovereign Islands SPA is approximately 20km south from the scheme, however, the NIS did not identify LSEs for these European sites so no in-combination effects predicted.</p> <p><u>Schemes within Cork City*:</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 30km south-west from these schemes and therefore no in-combination effects predicted. Cork Harbour SPA is <5km east from these schemes. No NIS available and it is assumed there is potential for in-combination effects from habitat degradation by pollution during construction. The Great Island Channel SAC is <10km east from these schemes. No NIS available and it is assumed there is potential for in-combination effects from habitat degradation by pollution. (LSE for these schemes assumed as assessment not available at time of writing). The Sovereign Islands SPA is approximately 20km south from these schemes, however, the NIS did not identify LSEs for these European sites so no in-combination effects predicted.</p> <p><u>Midleton Flood Relief Scheme, Midleton Main Street, Midleton Permeability package of proposals, Midleton Water Supply Scheme</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 40km south-west from these schemes and therefore no in-combination impacts predicted. Cork Harbour SPA is 800m south from these schemes. No NIS available and it is assumed there is potential for in-combination effects from habitat degradation by pollution during construction. The Great Island Channel SAC is 800m south from these schemes. No NIS available and it is assumed there is potential for in-combination effects from habitat degradation by pollution. (LSE for these schemes assumed as assessment not available at time of writing). The Sovereign Islands SPA is approximately 30km south from the scheme and therefore no in-combination impacts predicted.</p> <p><u>Midleton Wastewater Network and Midleton Wastewater transfer project: New pumping stations, 6.2km watermains and construction/upgrades to networks between Midleton and Carrigtwohill.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are approximately 40km south-west from these schemes and therefore no in-combination impacts predicted. Cork Harbour SPA is 800m south from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible. The Great Island Channel SAC is 800m south from these schemes. The AA screening concluded that there were no LSEs, so no in-combination effects are possible. The Sovereign Islands SPA is approximately 30km south from these schemes and therefore no in-combination impacts predicted.</p> <p><u>Macroon Community Hospital, Macroon Garda Station:</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 30.6km south from these schemes and therefore no in-combination impacts predicted. Cork Harbour SPA is 37km east from these schemes and therefore no in-combination impacts predicted. The Great Island Channel SAC is 43.8km east from these schemes and therefore no in-combination impacts predicted. The Sovereign Islands SPA is 44km south from these schemes and therefore no in-combination impacts predicted.</p>	Midleton Upgrade Scheme works.		

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		<p><u>Bandon Water Main and Sewer Network Upgrade: upgrading of 5km of combined sewers and removal of 10 combined sewer overflows.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 8.3km west of the scheme. However, there is no hydrological link and therefore no in-combination impacts predicted. Cork Harbour SPA is 24.5km north-east of the scheme and therefore no in-combination impacts predicted. The Great Island Channel SAC is 30.6km north-east from the scheme and therefore no in-combination impacts predicted. The Sovereign Islands SPA is 19.9km south and is hydrologically linked via Bandon River. No NIS available and it is assumed there is potential for in-combination effects from habitat degradation by pollution during construction. (LSE for Bandon Water Main and Sewer Network Upgrade assumed as assessment not available at time of writing).</p> <p><u>Beechgrove, Clonakilty: 57 social housing units being delivered.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 9.3km east of the scheme. However, there is no hydrological link and therefore no in-combination impacts predicted. Cork Harbour SPA is 42km north-east of the scheme and therefore no in-combination impacts predicted. The Great Island Channel SAC is 49.1km north-east from the scheme and therefore no in-combination impacts predicted. The Sovereign Islands SPA is 31.6km east from the scheme and therefore no in-combination impacts predicted.</p> <p><u>Dursey Island Cable Car and Visitor Centre: upgrade cable car from Dursey Island to mainland and new visitor center.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 95km south-east of the scheme and therefore no in-combination effects are predicted. Cork Harbour SPA is 122km south-east of the scheme therefore no in-combination effects are predicted. The Great Island Channel SAC is 129km west from the scheme therefore no in-combination effects are predicted. The Sovereign Islands SPA is 117km west from the scheme and therefore no in-combination effects are predicted.</p> <p><u>Gteic Uíbh Ráthaigh: construct a Digital Hub that will provide workspace for up to 50 people.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 105.7km east of the scheme and therefore no in-combination impacts predicted. Cork Harbour SPA is 125.8km east of the scheme and therefore no in-combination impacts predicted. The Great Island Channel SAC is 132.6km east from the scheme and therefore no in-combination impacts predicted. The Sovereign Islands SPA is 126.2km east from the scheme and therefore no in-combination impacts predicted.</p> <p><u>Kinsale Community Hospital - Phase 1: construct three new buildings.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 11.2km west of the scheme. However, there is no hydrological link and therefore no in-combination impacts predicted. Cork Harbour SPA is 14.2km north-east of the scheme. However, there is no hydrological link and therefore no in-combination impacts predicted. The Great Island Channel SAC is 23.1km north-east from the scheme and therefore no in-combination impacts predicted. The Sovereign Islands SPA is 6.5km south from the scheme and is hydrologically linked via the port of Kinsale. No NIS available and it is assumed there is potential for in-combination effects from habitat degradation by pollution during construction, (LSEs for Kinsale Community Hospital assumed as assessment not available at time of writing)</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: upgrade/construct the N/M20 between Cork and Limerick.</u></p>			

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		<p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 29km south-east of the scheme and therefore no in-combination effects are predicted. Cork Harbour SPA is 7km south-east of this scheme, the River Martin and River Lee hydrologically connect the scheme to this SPA. No NIS available and it is assumed there is potential for in-combination effects from pollution during construction. The Great Island Channel SAC is 10km south from the scheme, the River Martin and River Lee hydrologically connect the scheme to this SPA. No NIS available and it is assumed there is potential for in-combination effects from pollution during construction. (LSEs for the N/M20 Scheme assumed as assessment not available at time of writing). The Sovereign Islands SPA is 27km south from the scheme and therefore no in-combination effects are predicted.</p> <p><u>N22 Baile Bhuirne to Macroom Road Development: 22km upgrade of the N22 National Primary Route from Ballyvourney to Macroom to a dual carriageway.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 27km south-east of the scheme and therefore no in-combination effects are predicted. Cork Harbour SPA is 34km south-east of the scheme. The Sullane River and River Lee hydrologically connect the scheme to this SPA however, no in-combination effects are predicted. The Great Island Channel SAC is 41km east from the scheme. The Sullane River and River Lee hydrologically connect the scheme to this SPA however, no in-combination effects are predicted. The Sovereign Islands SPA is 40km south from the scheme and therefore no in-combination effects are predicted.</p> <p><u>N25 Carrigtohill to Midleton Upgrade Scheme: upgrade 5km of N25 from Carrigtohill to Midleton.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 39km south-east of the scheme and therefore no in-combination effects are predicted. Cork Harbour SPA is 0m from this scheme, the River Lee hydrologically connects the scheme to this SPA. No NIS available and it is assumed there is potential for in-combination effects from pollution during construction. The Great Island Channel SAC is also 0m from the scheme. A number of streams hydrologically connects the scheme at a number of points to this SPA and no NIS available and it is assumed there is potential for in-combination effects from pollution during construction. (LSE for the N25 Scheme assumed as assessment not available at time of writing). The Sovereign Islands SPA is 28km south from the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70 Sneem to Blackwater Bridge: upgrade 4.5km of the N70.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 72km south-east of the scheme and therefore no in-combination effects are predicted. Cork Harbour SPA is 92km south-east of the scheme therefore no in-combination effects are predicted. The Great Island Channel SAC is 99km south-east from the scheme therefore no in-combination effects are predicted. The Sovereign Islands SPA is 93km south-east from the scheme and therefore no in-combination effects are predicted.</p> <p><u>N70/71 Gortamullen: safety improvement scheme, adding 2m wide footpaths, lighting, crossings along 1.3km of road.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 61km south-east of the scheme and therefore no in-combination effects are predicted. Cork Harbour SPA is 79km south-east of the scheme therefore no in-combination effects are predicted. The Great Island Channel SAC is 86km south-east from the scheme therefore no in-combination effects are predicted. The Sovereign Islands SPA is 82km south-east from the scheme and therefore no in-combination effects are</p>			

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		<p>predicted. The AA screening concluded that there were no LSEs, so no in-combination effects are possible.</p> <p><u>Skibbereen Community Hospital (St Annes): construction of three new buildings and refurbishment of existing hospital.</u></p> <p>The Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA are 35.1km east of the scheme and therefore no in-combination effects are predicted. Cork Harbour SPA is 66.6km north-east of the scheme therefore no in-combination effects are predicted. The Great Island Channel SAC is 73.1km north-west from the scheme therefore no in-combination effects are predicted. The Sovereign Islands SPA is 57.3km east from the scheme and therefore no in-combination effects are predicted.</p>			
<p>All Preferred Options</p> <p>The European sites that may be impacted by options within Study Area I are Mullaghanish to Musheramore Mountains SPA, The Gearagh SAC, The Gearagh SPA, Cork Harbour SPA, Ballymacoda (Clonpriest and Pilmore) SAC, Ballymacoda Bay SPA, Blackwater River SAC, Blackwater Estuary SPA, Barley Cove to Ballyrisode Point SAC, Caha Mountains SAC, Glengarriff Harbour and Woodland SAC, Beara Peninsula SPA, Roaringwater Bay and Islands SAC, Kenmare River SAC, Killarney National Park, Macgillicuddy’s Reeks and Caragh River Catchment SAC, Courtmacsherry Estuary SAC, Courtmacsherry Bay SPA, Ballycotton Bay SPA, Kilgarvan Ice House SAC, Farranamanagh Lough SAC, Sheep’s Head SAC, Sheep’s Head to Toe Head SPA, Bandon River SAC, Ballinskelligs Bay and Inny Estuary SAC, Great Island Channel SAC, Sovereign Islands SPA, Lough Hyne Nature Reserve and Environs SAC.</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>All Preferred Options</u></p> <p>Option SAI-011 is the only option with potential for impacts on the Mullaghanish to Musheramore Mountains SPA, Therefore, there is no potential for in-combination effects to this European site.</p> <p>There is potential for in-combination effects from the projects within SAI to The Gearagh SAC given that options SAI-060 and SAI-771 have the potential for impacts. Potential for in-combination effects from pollution during construction.</p> <p>There is potential for in-combination effects from the projects within SAI to The Gearagh SPA given that options SAI-060 and SAI-771 have the potential for impacts. Potential for in-combination effects from pollution during construction (all options).</p> <p>There is potential for in-combination effects from the projects within SAI to the Cork Harbour SPA given that options SAI-963 and SAI-971 have the potential for impacts. Potential for in-combination effects from pollution during construction (all options).</p> <p>There is potential for in-combination effects from the projects within SAI to the Ballymacoda (Clonpriest and Pilmore) SAC given that options SAI-877, SAI-949 and SAI-950 have the potential for impacts. Potential for in-combination effects from pollution during construction (all options).</p> <p>There is potential for in-combination effects from the projects within SAI to the Ballymacoda Bay SPA given that options SAI-877, SAI-949 and SAI-950 have the potential for impacts. Potential for in-combination effects from pollution during construction (all options).</p> <p>Option SAI-949 is the only option within SAI with potential for impacts on the Blackwater River SAC therefore, there is no potential for in-combination effects to this European site.</p> <p>Option SAI-949 is the only option within SAI with potential for impacts on the Blackwater Estuary SPA therefore, there is no potential for in-combination effects to this European site.</p> <p>There is potential for in-combination effects from the projects within SAI to the Barley Cove to Ballyrisode Point SAC given that options SAI-457, SAI-498 and SAI-784 have the potential for impacts. Potential for in-combination effects from pollution during construction (all options).</p> <p>There is potential for in-combination effects from the projects within SAI to the Caha Mountains SAC given that options SAI-468, SAI-652 and SAI-955 have the potential for impacts. Potential for in-combination effects from disturbance during construction (all options), and from pollution and spread of invasive species during construction (SAI-468 and SAI-955).</p>	<p>Yes – from pollution impacts on The Gearagh SAC if construction of options is concurrent.</p> <p>Yes – from pollution impacts on The Gearagh SPA if construction of options is concurrent.</p> <p>Yes – from pollution impacts on Cork Harbour SPA if construction of options is concurrent.</p> <p>Yes – from pollution impacts on Ballymacoda (Clonpriest and Pilmore) SAC if construction of options is concurrent.</p> <p>Yes – from pollution impacts on Ballymacoda Bay SPA if construction of options is concurrent.</p> <p>Yes – from pollution impacts on Barley Cove to Ballyrisode Point SAC if construction of options is concurrent.</p> <p>Yes – from pollution, disturbance and spread of invasive non-native species impacts on Caha Mountains SAC if construction of options is concurrent.</p> <p>Yes – from pollution, disturbance and spread of invasive non-native species impacts on Glengarriff Harbour and Woodland SAC if</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>There is potential for in-combination effects from the projects within SAI to the Glengarriff Harbour and Woodland SAC given that options SAI-468 and SAI-955 have the potential for impacts. Potential for in-combination effects from pollution, spread of invasive species and disturbance during construction (all options).</p> <p>There is potential for in-combination effects from the projects within SAI to The Beara Peninsula SPA given that options SAI-480, SAI-768 and SAI-960 have the potential for impacts. Potential for in-combination effects from habitat loss (SAI-480 and SAI-768), pollution (all options), disturbance (all options) and spread of invasive non-native species (all options) during construction.</p> <p>There is potential for in-combination effects from the projects within SAI to The Roaringwater Bay and Islands SAC given that options SAI-498, SAI-955 and SAI-962 have the potential for impacts. Potential for in-combination effects from pollution during construction (all options).</p> <p>There is potential for in-combination effects from the projects within SAI to The Kenmare River SAC given that options SAI-630, SAI-643, SAI-645, SAI-652, SAI-768, SAI-923 and SAI-960 have the potential for impacts. Potential for in-combination effects from pollution during construction (all options), spread of invasive species during construction (SAI-630, SAI-768, SAI-923 and SAI-960) and disturbance during construction (SAI-630, SAI-768, SAI-923 and SAI-960).</p> <p>There is potential for in-combination effects from the projects within SAI to the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC given that options SAI-643 and SAI-923 have the potential for impacts. Potential for in-combination effects from pollution, spread of invasive species, and disturbance during construction (all options).</p> <p>There is potential for in-combination effects from the projects within SAI to the Courtmacsherry Estuary SAC given that options SAI-779 and SAI-971 have the potential for impacts. Potential for in-combination effects from pollution during construction (all options).</p> <p>There is potential for in-combination effects from the projects within SAI to the Courtmacsherry Bay SPA given that options SAI-779 and SAI-971 have the potential for impacts. Potential for in-combination effects from pollution during construction (all options).</p> <p>Option SAI-193 is the only option within SAI with potential for impacts on the Ballycotton Bay SPA. Therefore, there is no potential for in-combination effects to this European site.</p> <p>Option SAI-645 is the only option within SAI with potential for impacts on the Kilgarvan Ice House SAC. Therefore, there is no potential for in-combination effects to this European site.</p> <p>Option SAI-660 is the only option within SAI with potential for impacts on the Farranamanagh Lough SAC. Therefore, there is no potential for in-combination effects to this European site.</p> <p>Option SAI-660 is the only option within SAI with potential for impacts on the Sheep's Head SAC. Therefore, there is no potential for in-combination effects to this European site.</p> <p>Option SAI-498 is the only option within SAI with potential for impacts on Sheep's Head to Toe Head SPA. Therefore, there is no potential for in-combination effects to this European site.</p>	<p>construction of options is concurrent.</p> <p>Yes – from habitat loss, pollution, disturbance and spread of invasive non-native species impacts on Beara Peninsula SPA if construction of options is concurrent.</p> <p>Yes – from pollution impacts on Roaringwater Bay and Islands SAC if construction of options is concurrent.</p> <p>Yes – from pollution, disturbance and spread of invasive non-native species impacts on Kenmare River SAC if construction of options is concurrent</p> <p>Yes – from pollution, disturbance and spread of invasive non-native species impacts on the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC if construction of options is concurrent</p> <p>Yes – from pollution impacts on the Courtmacsherry Estuary SAC if construction of options is concurrent</p> <p>Yes – from pollution impacts on the Courtmacsherry Bay SPA if construction of options is concurrent</p>		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Option SAI-897 is the only option within SAI with potential for impacts on the Bandon River SAC. Therefore, there is no potential for in-combination effects to this European site.</p> <p>Option SAI-923 is the only option within SAI with potential for impacts on the Ballinskelligs Bay and Inny Estuary SAC. Therefore, there is no potential for in-combination effects to this European site.</p> <p>Option SAI-971 is the only option within SAI with potential for impacts on the Great Island Channel SAC. Therefore, there is no potential for in-combination effects to this European site.</p> <p>Option SAI-971 is the only option within SAI with potential for impacts on the Sovereign Islands SPA. Therefore, there is no potential for in-combination effects to this European site.</p> <p>Option SAI-962 is the only option with potential for impacts on the Lough Hyne Nature Reserve and Environs SAC. Therefore, there is no potential for in-combination effects to this European site.</p>			

*** Cork City projects with no NIS available (within 5km buffer):**

Ballyvolane and Monard Wastewater Network: new Ballyvolane Pumping Station and watermains to cater for growth in the area.

Cork City Docklands: this project is complementary to the Port of Cork project and will facilitate enabling infrastructure for the Cork Docklands and relates to a) the Eastern Gateway Bridge, and b) Land acquisition of City Docks north and south Quays

Cork City Docklands 2: this project will unlock Cork City Docklands potential to develop as a vibrant, high-quality district that will attract investment in relation to mixed use development, leisure, and cultural facilities.

Cork City Events Centre: construction of a 6,000-capacity venue along the River Lee

Cork City Water Supply Scheme - Ballynora Ballincollig Reservoir: new high-level reservoir being built in greenfield site

Cork City Water Supply Scheme - Upgrade of Water Treatment Plant: Lee Road WTP upgrade

Cork City Wastewater Network: drainage area plans are being prepared by Irish Water for Glanmire, Glounthaune and Little Island which drain to Carrigrenan wastewater treatment plant, as well as the Ballincollig wastewater network

Rochestown, Cork City: Building a new nursing home on a greenfield site.

Cork University Business School (CUBS): demolition and construction of new building on south terrace in Cork City

Cork University Hospital Paediatric Phase 2: five story building extension to Cork University Hospital

Cork University Hospital, New Helipad - Phase 1: Replace carpark with helipad and construction of new 2 story car park.

Grand Parade Quarter: development of the Grand Parade Quarter will include a new library, rejuvenation of parks and other public spaces

Green Lane, Blackpool, Cork City: 112 new social housing units in apartments.

Kent Station Yard (site enabling): Remediation works for future developments. Potentially complete. Limited information online

Lower Lee (Cork City) FRS: Flood Relief Scheme for Cork City up to Inniscarra Dam

M8/N25 Dunkettle Interchange: Upgrading of the Dunkettle Interchange to a fully free flow junction (except for the M8 to N8south west movement). A new dumbbell interchange will be provided to the east of the main interchange for Little Island. Improvements will also be made to the Silversprings junction on the N8 into the City.

Mercy University Hospital Ward Block: New ward with 30 beds being build replacing existing buildings

MTU Cork Campus Learning Resource Centre: A new Learning Resource Centre building which will consist of classrooms, learning resource spaces and administration spaces.

Passage west Ringaskiddy Carrigaline Harbour Cluster: project planning and design and the initial site assembly that will facilitate the future delivery of a suite of co-ordinated and linked transformative projects targeted at the towns of Carrigaline and Passage west. Include urban renewal and extension of an existing cycleway.

Phase 1C Knocknaheeny: 41 Social Housing units being delivered.

Phase 2B Knocknahee: 38 Social Housing units being delivered.

Redforge Road, Blackpool, Cork City: 72 Units for social housing will be delivered.

Regeneration of Town Centre and the Development of a future vision for the disused former Courthouse: This proposal is for the regeneration of the town centre through public realm renewal and the redevelopment of a disused former Courthouse as a visitor experience

Springville House, Bulls Lane, Blackrock Road, Cork: Demolish office block. 35 Social Housing units being delivered

Tivoli Docks: This project and the Cork City Docklands project are complementary. This relates to the proposed relocation of the Port to Ringaskiddy and funding relates to preparatory programme for relocation and redevelopment of Tivoli Docks.

Upgrading of the Tyndall National Institute: Demolition of former industrial building and construction of new research facility

Watercourse Road, Blackpool, Cork: 37 Social Housing units being delivered.

Table E3: SAJ-Potential in-combination effects with other projects and options within SAJ

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
STUDY AREA J					
<p>SAJ-291 Upgrade existing WTP for water quality improvements. The WRZ is not in deficit.</p> <p>Option study area is 2.6km from and hydrologically linked to Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. No operational impacts are predicted.</p> <p>Option study area is 6.5km from and hydrologically linked to Blackwater Estuary SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 44km east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u> Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from pollution (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 52km south-east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. Therefore, there may be in-combination effects from pollution. Blackwater Estuary SPA is approximately 61km south-east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 55km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 2.1km north-east of the eastern extent of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 55km south-east of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u> Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois</p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC and from pollution impacts on Blackwater Estuary SPA if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing).</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 29km south-east of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 82km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 73km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from pollution. Blackwater Estuary SPA is approximately 52km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 70km south-east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater Estuary SPA is approximately 40km south-east of the scheme therefore no in-combination effects are predicted.</p>	<p>works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works</p>		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 94km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 28km south-east of the scheme; no in-combination effects are possible.</p>			
<p>SAJ-223</p> <p>Upgrade existing WTP for water quality improvements. The WRZ is not in deficit.</p> <p>Option study area is 4.8km from and hydrologically linked to Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as lamprey, as well as freshwater pearl mussel as the study area is within the FWPM catchment area. No operational impacts are predicted.</p> <p>Option study area is 13.8km from and hydrologically linked to Blackwater Estuary SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 44km east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from pollution (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 52km south-east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. Therefore, there may be in-combination effects from pollution. Blackwater Estuary SPA is approximately 61km south-east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 55km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 2.1km north-east of the eastern extent of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC and from pollution impacts on Blackwater Estuary SPA if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 55km south-east of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing).</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 29km south-east of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 82km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 73km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from pollution. Blackwater Estuary SPA is approximately 52km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p>	<p>Library works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works</p>		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 70km south-east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater Estuary SPA is approximately 40km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 94km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 28km south-east of the scheme; no in-combination effects are possible.</p>			
<p>SAJ-272</p> <p>Upgrade existing WTP for water quality improvements. The WRZ is not in deficit.</p> <p>Option study area is in close proximity to a hydrological link to and 2.4km from Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing).</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from pollution (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing).</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. Therefore, there may be in-combination effects from pollution.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing).</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. <u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. <u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). <u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. <u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). <u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). <u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from pollution. <u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. <u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative</u></p>	<p>construction phase concurrent with Mallow Town Regeneration works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works</p>		

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		<p><u>signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing).</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible.</p>			
<p>SAJ-128</p> <p>Conjunctive use of existing spring and trial well and upgrade existing Castletownroche WTP.</p> <p>Option study area is within and hydrologically linked to Blackwater River (Cork/Waterford) SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary. Pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species given that the works are within the SAC boundary. Option includes a GW abstraction. There is a risk this groundwater abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. Therefore, there is potential for impacts on aquatic QI species utilising this European site through a reduction in flows/water levels. There is a risk this groundwater abstraction will reduce water flow in the underground aquifer. This groundwater abstraction is within a karstic aquifer, which the SAC overlies. Therefore, there is potential for impacts on QI</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 44km east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 52km south-east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. LSE from pollution during operation also identified. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance and pollution. Blackwater Estuary SPA is approximately 61km south-east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 55km south-east of the scheme therefore no in-combination effects are predicted.</p>	<p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, habitat loss, disturbance and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works and during operation from habitat degradation on Blackwater River (Cork/Waterford) SAC</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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<p>utilising watercourses hydrologically linked to this European site through a reduction in flows/water.</p> <p>Option study area is 14.8km from and hydrologically linked to Blackwater Estuary SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are predicted.</p>		<p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 2.1km north-east of the eastern extent of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 55km south-east of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing).</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 29km south-east of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 82km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability</p>	<p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC and from pollution impacts on Blackwater Estuary SPA if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality,</p>		

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		<p>(LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 73km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability. Blackwater Estuary SPA is approximately 52km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 70km south-east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater Estuary SPA is approximately 40km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 94km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 28km south-east of the scheme; no in-combination effects are possible.</p>	<p>disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p>		
<p>SAJ-188 Upgrade existing WTPs for water quality improvements. The WRZ is not in deficit.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p>	<p>N</p>

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<p>Option study area is 2.8km from and hydrologically linked to Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. No operational impacts are predicted.</p>		<p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). <u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u> Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from pollution (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). <u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. Therefore, there may be in-combination effects from pollution. <u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). <u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. <u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. <u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u> Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). <u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. <u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing).</p>	<p>with N/M20 Cork to Limerick Road Improvement Scheme works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works</p>	<p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	

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		<p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing).</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from pollution.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing).</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible.</p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works</p>		
<p>SAJ-262</p> <p>Upgrade existing WTP for water quality improvements. The WRZ is not in deficit.</p> <p>Option study area is in close proximity to a hydrological link to and 2.5km from Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. No</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing).</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from pollution (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing).</p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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operational impacts are predicted.		<p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. Therefore, there may be in-combination effects from pollution.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing).</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u> Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing).</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing).</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing).</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p>	<p>with N72/N73 Mallow Relief Road works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking</p>		

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		<p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from pollution.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing).</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible.</p>	Enhancement works		
<p>SAJ-162</p> <p>Increase GW abstraction from Kilgobnet (Spring) and upgrade Laharan Abbeys Well WTP to supply deficit.</p> <p>Option study area is 2km from and hydrologically linked to Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing).</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from pollution (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing).</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. Therefore, there may be in-combination effects from pollution.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing).</p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	N

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		<p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing).</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing).</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing).</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from pollution.</p> <p><u>Banteer Amenities Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible.</p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works</p>		

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		<p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing).</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible.</p>			
<p>SAJ-167</p> <p>Increase GW abstraction from Lyre spring and upgrade Lyre WTP to supply deficit.</p> <p>Option study area is in close proximity to a hydrological link to and 1.8km from Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing).</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from pollution (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing).</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. Therefore, there may be in-combination effects from pollution.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing).</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible.</p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works and during operation from habitat degradation</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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		<p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing).</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing).</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing).</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from pollution.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p>	<p>with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works</p>		

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		<p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing).</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible.</p>			
<p>SAJ-281 Upgrade existing WTP for water quality improvements. The WRZ is not in deficit.</p> <p>Option study area is 1.8km from and hydrologically linked to Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. No operational impacts are predicted.</p> <p>Option study area is 8.9km from and hydrologically linked to Blackwater Callows SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 24km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from pollution (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 23km east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. Therefore, there may be in-combination effects from pollution. Blackwater Callows SPA is approximately 31km south-east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 26km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 22km north of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 28km east of the scheme; no in-combination effects are possible.</p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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		<p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 21km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 450m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 57km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 45km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from pollution. Blackwater Callows SPA is approximately 25km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 44km east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative</u></p>	<p>Hospital, Millstreet works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works</p>		

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		<p><u>signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater Callows SPA is approximately 12.4km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 67km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 7km north-east of the scheme; no in-combination effects are possible.</p>			
<p>SAJ-531</p> <p>Rationalise Gortnaskehy to Ballyheaphy WRZ. Increase GW abstraction from Ballyheaphy BH and upgrade Ballyheaphy WTP to supply spare capacity to neighbouring scheme.</p> <p>Option study area is within and hydrologically linked to Blackwater River (Cork/Waterford) SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary. Pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species given that the works are within the SAC boundary. Option includes a GW abstraction. There is a risk this groundwater abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. Therefore, there is potential for impacts on aquatic QI species utilising this European site</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 24km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 23km east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. LSE from pollution during operation also identified. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance and pollution. Blackwater Callows SPA is approximately 31km south-east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Mallow Town</p>	<p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, habitat loss, disturbance and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works and during operation from</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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<p>through a reduction in flows/water levels. There is a risk this increased groundwater abstraction will reduce surface water flows in the SAC due to the hydrological link between the ZOC and the SAC. Therefore, there is potential for impacts on QI habitats and species utilising watercourses hydrologically linked to this European site through a reduction in flows/water levels due to the groundwater abstraction. However, the abstraction is not expected to impact any GWDTHs due to the distance from the abstraction to the habitats, and due to the impact being on the surface water flow.</p> <p>Option study area is 6km from and hydrologically linked to Blackwater Callows SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are predicted.</p>		<p>Regeneration assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 26km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 22km north of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 28km east of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 21km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 450m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 57km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability</p>	<p>habitat degradation on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p>		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>(LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 45km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability. Blackwater Callows SPA is approximately 25km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 44km east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater Callows SPA is approximately 12.4km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 67km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 7km north-east of the scheme; no in-combination effects are possible.</p>	<p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p>		
<p>SAJ-601 Increase existing GW abstraction from Ballybeg BHs and new GW from no. TWs upgrade Mitchelstown South WTP to</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). Blackwater Callows SPA</p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>supply deficit. Improve interconnectivity between Mitchelstown North and Mitchelstown South WSZs. Rationalise Glenduff to Mitchelstown (planned for 2022).</p> <p>Option study area is 3.9km from and hydrologically linked to Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. No operational impacts are predicted.</p> <p>Option study area is 9km from and hydrologically linked to Blackwater Callows SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are predicted.</p>		<p>is approximately 24km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from pollution (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 23km east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. Therefore, there may be in-combination effects from pollution. Blackwater Callows SPA is approximately 31km south-east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 26km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 22km north of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 28km east of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 21km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. Blackwater Callows</p>	<p>Improvement Scheme works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works</p>	<p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	

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		<p>SPA is approximately 450m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 57km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 45km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from pollution. Blackwater Callows SPA is approximately 25km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 44km east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater Callows SPA is approximately 12.4km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 67km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings,</u></p>	Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works		

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		<p><u>footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 7km north-east of the scheme; no in-combination effects are possible.</p>			
<p>SAJ-597 Increase GW abstraction at Box Cross and upgrade Box Cross WTP to supply deficit. Rationalise Gortnagreige, Ballinamona, Monaperson, Bottlehill, Killavullen, Knoppogue, Monee & Knockabrack and Rahan to Mallow.</p> <p>Option study area is within and hydrologically linked to Blackwater River (Cork/Waterford) SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary. Pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species given that the works are within the SAC boundary. Option includes a GW abstraction. There is a risk this groundwater abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. Therefore, there is potential for impacts on aquatic QI species utilising this European site through a reduction in flows/water levels. There is a risk this increased groundwater abstraction will reduce water flow in the underground aquifer. This groundwater abstraction is within a karstic aquifer adjacent to the SAC, and the SAC overlies this aquifer. However, the ZOC for the abstraction does not overlap with the SAC, so the SAC is less likely to be impacted by the abstraction, but impacts cannot be ruled out at this stage. Therefore, there is potential for impacts on QI utilising watercourses hydrologically linked to this European site through a reduction in flows/water.</p> <p>Option study area is 17.5km from and hydrologically linked to Blackwater Callows</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 24km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 23km east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. LSE from pollution during operation also identified. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance and pollution. Blackwater Callows SPA is approximately 31km south-east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 26km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 22km north of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. Blackwater Callows</p>	<p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, habitat loss, disturbance and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works and during operation from habitat degradation on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Option specific mitigation as in Section 6.3.4</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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<p>SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are predicted.</p>		<p>SPA is approximately 28km east of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 21km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 450m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 57km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 45km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability. Blackwater Callows SPA is</p>	<p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive</p>		

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		<p>approximately 25km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 44km east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater Callows SPA is approximately 12.4km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 67km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 7km north-east of the scheme; no in-combination effects are possible.</p>	<p>non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p>		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>SAJ-520</p> <p>Increase GW abstraction from Mount North (spring) and upgrade Mountnorth WTP to supply spare capacity to neighboring WRZ. Increase GW abstraction from Mountnorth & Ballyclough (spring) and upgrade Ballyclough WTP to supply spare capacity to neighboring WRZ. Rationalise Boherascrub to Ballyclough & Mount North WRZ.</p> <p>Option study area is 3.2km from and hydrologically linked to Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing).</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u> Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from pollution (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing).</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. LSE from pollution during operation also identified Therefore, there may be in-combination effects from pollution.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing).</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u> Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing).</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing).</p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works</p> <p>Yes – from pollution impacts on Blackwater River</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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		<p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects pollution (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing).</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from pollution.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing).</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible.</p>	<p>(Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works</p>		
<p>SAJ-611</p> <p>Increase GW at Grallagh and rationalise Tiknock/Tinnabina, Ballycurrane and Clashmore/Whitewell WRZs</p> <p>Option study area is within and hydrologically linked to Blackwater River (Cork/Waterford) SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary. Pollution of water courses during construction</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 44km east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from mortality,</p>	<p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works</p> <p>Yes – from mortality, disturbance, spread of invasive non-native</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Option specific mitigation as in Section 6.3.4</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the</p>	<p>N</p>

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<p>(associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species given that the works are within the SAC boundary. No operational impacts are predicted.</p> <p>Option study area is 465m from and hydrologically linked to Blackwater Estuary SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. There is potential for disturbance to QI birds given the proximity of the study area to the SPA and due to QI birds using supporting habitats in areas outside of the SPA but ecologically connected to it (e.g. grassland, arable farmland). No operational impacts are predicted.</p>		<p>disturbance, spread of invasive non-native species and pollution (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 52km south-east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance and pollution. Blackwater Estuary SPA is approximately 61km south-east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 55km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 2.1km north-east of the eastern extent of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 55km south-east of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 340m east of the schemes therefore there may be in-combination effects from disturbance and pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing).</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. Blackwater Estuary</p>	<p>species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works</p> <p>Yes – from mortality, habitat loss, disturbance and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC and from disturbance and pollution impacts on Blackwater Estuary SPA if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works</p>	<p>integrity of this European site, either alone or in-combination with other plans or projects.</p>	

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		<p>SPA is approximately 29km south-east of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 82km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 73km south-east of the scheme therefore no in-combination effects are predicted</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. Blackwater Estuary SPA is approximately 52km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 70km south-east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater Estuary SPA is approximately 40km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing).</p>	<p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works</p>		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Blackwater Estuary SPA is approximately 94km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 28km south-east of the scheme; no in-combination effects are possible.</p>			
<p>SAJ-627</p> <p>Increase GW abstraction at Downing Bridge BH and upgrade existing Dowling. Increase GW abstraction from existing Spring and upgrade Castletownroche. Rationalise Macronee to Ballyhooly WRZ (Downing Bridge WTP).</p> <p>Option study area is within and hydrologically linked to Blackwater River (Cork/Waterford) SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary. Pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species given that the works are within the SAC boundary. Option includes GW abstractions. There is a risk these groundwater abstractions could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. Therefore, there is potential for impacts on aquatic QI species utilising this European site through a reduction in flows/water levels. There is a risk these groundwater abstractions will reduce water flow in the underground aquifer. These groundwater abstractions are within the SAC and overlie a karstic aquifer. Therefore, there is potential for impacts on QI utilising watercourses hydrologically linked to this European site through a reduction in flows/water.</p> <p>Option study area is 1.3km from and hydrologically linked to Blackwater Callows</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 24km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 23km east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. LSE from pollution during operation also identified. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance and pollution. Blackwater Callows SPA is approximately 31km south-east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 26km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 22km north of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p>	<p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, habitat loss, disturbance and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works and during operation from habitat degradation on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works and during operation from</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Option specific mitigation as in Section 6.3.4</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
<p>SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. There is potential for disturbance to QI birds given the proximity of the study area to the SPA and due to QI birds using supporting habitats in areas outside of the SPA but ecologically connected to it (e.g. grassland, arable farmland). No operational impacts are predicted.</p>		<p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 28km east of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 21km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 450m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 57km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 45km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species</p>	<p>habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works and during operation from habitat degradation and water table/availability on Blackwater River</p>		

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		<p>and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability. Blackwater Callows SPA is approximately 25km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 44km east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater Callows SPA is approximately 12.4km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 67km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 7km north-east of the scheme; no in-combination effects are possible.</p>	<p>(Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p>		
<p>SAJ-609</p> <p>New GW abstraction in karstic region and new WTP to supply deficit. Rationalise Kilmore-Kilbeg to Tallow WRZ. Rationalise Ballymoate Upper to Tallow WRZ.</p> <p>Option study area is 150m from and hydrologically linked to Blackwater River (Cork/Waterford) SAC. Pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for disturbance to otter from</p>	<ul style="list-style-type: none"> • Mortality risk • Habitat degradation • Disturbance • Spread of invasive non-native species • Water table/availability 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 44km east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 52km south-</p>	<p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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<p>construction works. There is also potential for the spread of invasive species given that the works are in close proximity to the SAC boundary. Option includes a GW abstraction. There is a risk this groundwater abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. Therefore, there is potential for impacts on aquatic QI species utilising this European site through a reduction in flows/water levels. There is a risk this groundwater abstraction will reduce water flow in the underground aquifer. This groundwater abstraction is adjacent to the SAC, and both the abstraction and the SAC overly a karstic aquifer. The aquifer and the river may be linked, and so a reduction of water flow in the aquifer may reduce the surface water flow of the river within the SAC. The impacts are unlikely due to the depths the boreholes will be drilled at and the scale of the abstraction (3% of Q95) but cannot rule out impacts at this stage. Therefore, there is potential for impacts on QI utilising watercourses hydrologically linked to this European site through a reduction in flows/water.</p> <p>Option study area is 10.3km from and hydrologically linked to Blackwater Estuary SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are predicted.</p>		<p>east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. LSE from pollution during operation also identified. Therefore, there may be in-combination effects from mortality, disturbance and pollution. Blackwater Estuary SPA is approximately 61km south-east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 55km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 2.1km north-east of the eastern extent of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 55km south-east of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing).</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. Blackwater Estuary</p>	<p>(Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works and during operation from habitat degradation on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC and from pollution impacts on Blackwater Estuary SPA if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community</p>		

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		<p>SPA is approximately 29km south-east of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 82km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 73km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability. Blackwater Estuary SPA is approximately 52km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 70km south-east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater Estuary SPA is approximately 40km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p>	<p>Hospital, Millstreet works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p>		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing). Blackwater Estuary SPA is approximately 94km south-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible. Blackwater Estuary SPA is approximately 28km south-east of the scheme; no in-combination effects are possible.</p>			
<p>SAJ-595</p> <p>Increase existing GW abstraction from infiltration gallery alongside Blackwater River and upgrade Coolrue WTP. Additional treatment is provided when the infiltration gallery floods. Rationalise Ballyvadonna, Strawhall, Knockdrumalough, Coolagown and Kilmagnier to Fermoy WRZ.</p> <p>Option study area is within and hydrologically linked to Blackwater River (Cork/Waterford) SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary. Pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species given that the works are within the SAC boundary. Option includes a GW abstraction. There is a risk this groundwater abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. Therefore, there is potential for impacts on aquatic QI species utilising this European site through a reduction in flows/water levels. There is a risk this groundwater abstraction will reduce water flow in the underground aquifer. This groundwater abstraction is within the SAC, and both the abstraction and the</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 24km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 23km east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. LSE from pollution during operation also identified. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance and pollution. Blackwater Callows SPA is approximately 31km south-east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 26km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m</p>	<p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, habitat loss, disturbance and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works and during operation from habitat degradation on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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<p>SAC overly a karstic aquifer. Therefore, there is potential for impacts on QI utilising watercourses hydrologically linked to this European site through a reduction in flows/water.</p> <p>Option study area is 415m from and hydrologically linked to Blackwater Callows SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. There is potential for disturbance to QI birds given the proximity of the study area to the SPA and due to QI birds using supporting habitats in areas outside of the SPA but ecologically connected to it (e.g. grassland, arable farmland). No operational impacts are predicted.</p>		<p>north-east of the eastern extent of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 22km north of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 28km east of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 21km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 450m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 57km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 45km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p>	<p>impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent</p>		

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		<p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability. Blackwater Callows SPA is approximately 25km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 44km east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater Callows SPA is approximately 12.4km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 67km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 7km north-east of the scheme; no in-combination effects are possible.</p>	<p>with Mallow Wastewater Treatment Plant works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p>		
<p>SAJ-616 Rationalise Bweeng to Donoughmore WRZ (SAI-212) Option study area is 5.9km from and hydrologically linked to Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing).</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u> Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from pollution (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing).</p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either</p>	<p>N</p>

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area. No operational impacts are predicted.		<p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. Therefore, there may be in-combination effects from pollution.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing).</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u> Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing).</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing).</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing).</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p>	<p>with N72/N73 Mallow Relief Road works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with the St Joseph's Community Hospital, Millstreet works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking</p>	<p>alone or in-combination with other plans or projects.</p>	

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		<p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from pollution.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing).</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible.</p>	Enhancement works		
<p>SAJ-617 New GW and new WTP for Glanworth / Ballykenley/Johnstown & rationalise Knockanevin</p> <p>Option study area is 6.8km from and hydrologically linked to Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. No operational impacts are predicted.</p> <p>Option study area is 7.7km from and hydrologically linked to Blackwater Callows SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 24km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from pollution (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 23km east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. Therefore, there may be in-combination effects from pollution. Blackwater Callows SPA is approximately 31km south-east of the southern extent of the scheme therefore no in-combination effects are predicted.</p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
predicted.		<p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u> Blackwater River (Cork/Waterford) SAC crosses the scheme therefore there may be in-combination effects from pollution (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 26km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 22km north of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 28km east of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u> Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 21km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 450m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 57km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time</p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with the St Joseph's Community Hospital, Millstreet works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works</p>		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>of writing). Blackwater Callows SPA is approximately 45km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from pollution. Blackwater Callows SPA is approximately 25km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 44km east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater Callows SPA is approximately 12.4km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 67km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 7km north-east of the scheme; no in-combination effects are possible.</p>			
<p>SAJ-614</p> <p>Rationalise Kilmurry (Mitchelstown) to Inchinleamy (SAK Waterford) WRZ. This WRZ is not in deficit and spare capacity can cover the demand in Kilmurry (Mitchelstown).</p> <p>Option study area is 610m from and hydrologically linked to Blackwater River (Cork/Waterford) SAC. Pollution of water courses during construction (associated with</p>	<ul style="list-style-type: none"> • Mortality risk • Habitat degradation • Disturbance • Spread of invasive non-native species • Water table/availability 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 24km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p>	<p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Blackwater</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted</p>	<p>N</p>

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<p>sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species given that the works are in close proximity to the SAC boundary. Option includes a GW abstraction. There is a risk this groundwater abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. Therefore, there is potential for impacts on aquatic QI species utilising this European site through a reduction in flows/water levels. There is a risk this groundwater abstraction will reduce water flow in the underground aquifer. This groundwater abstraction is within 1km of the SAC, and the SAC overlies both a karstic aquifer and productive fissured bedrock. Therefore, there is potential for impacts on QI utilising watercourses hydrologically linked to this European site through a reduction in flows/water.</p> <p>Option study area is 615m from and hydrologically linked to Blackwater Callows SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. There is potential for disturbance to QI birds given the proximity of the study area to the SPA and due to QI birds using supporting habitats in areas outside of the SPA but ecologically connected to it (e.g. grassland, arable farmland). No operational impacts are predicted.</p>		<p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 23km east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. LSE from pollution during operation also identified. Therefore, there may be in-combination effects from mortality, disturbance and pollution. Blackwater Callows SPA is approximately 31km south-east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 26km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 22km north of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 28km east of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 21km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p>	<p>River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works and during operation from habitat degradation on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on</p>	<p>above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	

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		<p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 450m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 57km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 45km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability. Blackwater Callows SPA is approximately 25km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 44km east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater Callows SPA is approximately 12.4km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p>	<p>Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p>		

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		<p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 67km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 7km north-east of the scheme; no in-combination effects are possible.</p>			
<p>SAJ-613</p> <p>Rationalise Labbamollogga to Ballylanders WRZs (SAK).</p> <p>Option study area is 9.8km from and hydrologically linked to Lower River Suir SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. No operational impacts are predicted.</p> <p>Option study area is 15.1km from and hydrologically linked to Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. No operational impacts are predicted.</p> <p>Option study area is 19.6km from and hydrologically linked to Blackwater Callows SPA. There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species. No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Lower River Suir SAC is approximately 31km east of the scheme therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 24km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Lower River Suir SAC is approximately 33km north-east of the eastern extent of the scheme therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from pollution (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 23km east of the eastern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Lower River Suir SAC is approximately 22km east of the northern extent of the scheme therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. Therefore, there may be in-combination effects from pollution. Blackwater Callows SPA is approximately 31km south-east of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Lower River Suir SAC is approximately 37km north-east of the scheme therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 26km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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		<p>This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Suir SAC is approximately 36km north of the scheme; no in-combination effects are possible. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 22km north of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Suir SAC is approximately 38km north-east of the scheme; no in-combination effects are possible. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 28km east of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Lower River Suir SAC is approximately 35km north of the schemes therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from pollution (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 21km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Suir SAC is approximately 16km north-east of the scheme; no in-combination effects are possible. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 450m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Lower River Suir SAC is approximately 68km north-east of the scheme therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 57km north-east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Lower River Suir SAC is approximately 54km north-east of the scheme therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from pollution (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 45km east of the scheme therefore no in-combination effects are predicted.</p>	<p>Public Library works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works</p> <p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works</p>		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Lower River Suir SAC is approximately 36km north-east of the scheme therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from pollution. Blackwater Callows SPA is approximately 25km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Suir SAC is approximately 54km north-east of the scheme; no in-combination effects are possible. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 44km east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Lower River Suir SAC is approximately 9km east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted. Blackwater Callows SPA is approximately 12.4km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Lower River Suir SAC is approximately 75km north-east of the scheme therefore no in-combination effects are predicted. Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from pollution (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing). Blackwater Callows SPA is approximately 67km east of the scheme therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Suir SAC is approximately 23km north-east of the scheme; no in-combination effects are possible. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible. Blackwater Callows SPA is approximately 7km north-east of the scheme; no in-combination effects are possible.</p>			
<p>SAJ-600 Rationalise Stagmount to Rockchapel WRZ (planned for 2022). Rationalise</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Lower River Shannon SAC is approximately 30km west of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West</p>	<p>Yes – from habitat loss and disturbance impacts on Stack's to Mullaghareirk Mountains, West</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p>	<p>N</p>

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<p>Stagmount to Rockchapel WRZ (planned for 2022). Supply spare capacity.</p> <p>Option study area is within and hydrologically linked to Lower River Shannon SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary. Pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species given that the works are within the SAC boundary. No operational impacts are predicted.</p> <p>Option study area is within Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA. There is potential for some loss of/damage to supporting habitats (e.g. foraging habitats) to QI species during construction works given that the works are within the SPA boundary. There is potential for disturbance to hen harrier given the study area is within the SPA and due to hen harrier using supporting habitats in areas outside of the SPA but ecologically connected to it (e.g. grassland, arable farmland). No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat degradation Disturbance Spread of invasive non-native species 	<p>Limerick Hills and Mount Eagle SPA is approximately 20km west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Lower River Shannon SAC is approximately 34km north-west of the western extent of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 28km north-west of the western extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Lower River Shannon SAC is approximately 29km west of the southern extent of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 22km west of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Lower River Shannon SAC is approximately 36km north-west of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 30km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Shannon SAC is approximately 81km north-west of the western extent of the scheme; no in-combination effects are possible. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 70km north-west of the western extent of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Shannon SAC is approximately 34km north-west of the scheme; no in-combination effects are possible. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 28km north-west of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u></p> <p>Lower River Shannon SAC is approximately 94km north-west of the schemes therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 88km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Shannon SAC is approximately 61km north-west of the scheme; no in-combination effects are possible. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 56km north-west of the scheme; no in-combination effects are possible.</p>	<p>Limerick Hills and Mount Eagle SPA if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works</p>	<p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects</p>	

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		<p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Lower River Shannon SAC is approximately 23km north-west of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 17km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u></p> <p>Lower River Shannon SAC is approximately 18km north-west of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 11km north-west of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Lower River Shannon SAC is approximately 38km north-west of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 31km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Shannon SAC is approximately 26km north-west of the scheme; no in-combination effects are possible. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 16km north-west of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Lower River Shannon SAC is approximately 58km west of the scheme therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 52km west of the scheme therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Lower River Shannon SAC is approximately 7.5km north of the scheme with no hydrological link, therefore no in-combination effects are predicted. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA crosses the scheme, therefore there may be in-combination effects from habitat loss and disturbance (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing).</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Shannon SAC is approximately 61km north-west of</p>			

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<p>SAJ-628 Rationalise Monabricka to South West Regional Scheme WRZ. Option study area is 19km from and hydrologically linked to Lower River Shannon SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats. No operational impacts are predicted.</p>	<ul style="list-style-type: none"> Habitat degradation 	<p>the scheme; no in-combination effects are possible. Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA is approximately 56km north-west of the scheme; no in-combination effects are possible.</p> <p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u> Lower River Shannon SAC is approximately 30km west of the scheme therefore no in-combination effects are predicted.</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u> Lower River Shannon SAC is approximately 34km north-west of the western extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u> Lower River Shannon SAC is approximately 29km west of the southern extent of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u> Lower River Shannon SAC is approximately 36km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Shannon SAC is approximately 81km north-west of the western extent of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Shannon SAC is approximately 34km north-west of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u> Lower River Shannon SAC is approximately 94km north-west of the schemes therefore no in-combination effects are predicted.</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Shannon SAC is approximately 61km north-west of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Lower River Shannon SAC is approximately 23km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Lower River Shannon SAC is approximately 18km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p>	No	N/A	N

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Lower River Shannon SAC is approximately 38km north-west of the scheme therefore no in-combination effects are predicted.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Shannon SAC is approximately 26km north-west of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Lower River Shannon SAC is approximately 58km west of the scheme therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Lower River Shannon SAC is approximately 7.5km north of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Lower River Shannon SAC is approximately 61km north-west of the scheme; no in-combination effects are possible.</p>			
<p>SAJ-629 New GW abstraction and upgrade Charleville WRZ to supply deficit. Rationalise Castlewrixon and Skahanagh WRZs to Charleville/Doneraile WRZ.</p> <p>Option study area is within and hydrologically linked to Blackwater River (Cork/Waterford) SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary. Pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species given that the works are within the SAC boundary. Option includes GW abstractions. There is a risk these groundwater abstractions could lead to hydrological changes (reduced flows – impacting on water</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing).</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing). </p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. LSE from pollution during operation also identified. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance and pollution. </p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result</p>	<p>Yes – from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, habitat loss, disturbance and pollution impacts</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Option specific mitigation as in Section 6.3.4</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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<p>quality) that could impact aquatic QI species or habitats. Therefore, there is potential for impacts on aquatic QI utilising this European site through a reduction in flows/water levels. There is a risk these groundwater abstractions will reduce water flow in the underground aquifer. These groundwater abstractions are all within 2km of the SAC, and the SAC overlies both a karstic aquifer and productive fissured bedrock. Therefore, there is potential for impacts on QI utilising watercourses hydrologically linked to this European site through a reduction in flows/water.</p>		<p>in habitat degradation and changes to water table/availability (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing). <u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible. <u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible. <u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u> Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing). <u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible. <u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing). <u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing). <u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u> Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and</p>	<p>on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works and during operation from habitat degradation on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent</p>		

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		<p>habitats including disturbance and mortality. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing).</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible.</p>	<p>with Kanturk Community Hospital works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p>		
<p>SAJ-630 New GW abstraction (karstic) and new WTP to supply full demand. Decommission Freemount WTP. Rationalise Kilbrin Garran an Darra to Allow regional WRZ.</p> <p>Option study area is 3.9km from and hydrologically linked to Blackwater River (Cork/Waterford) SAC. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. There is potential for the spread of invasive species. Option includes GW abstraction. There is a risk this groundwater abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. Therefore, there is potential for impacts on aquatic QI utilising this European site through a reduction in flows/water levels.</p>	<ul style="list-style-type: none"> Habitat degradation Spread of invasive non-native species Water table/availability 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing).</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing).</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. LSE from pollution during operation also identified. Therefore, there may be in-combination effects from pollution.</p>	<p>Yes – from spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N72/N73 Mallow Relief Road works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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<p>There is a risk this groundwater abstraction will reduce water flow in the underground aquifer. This groundwater abstraction is within 5km of the SAC, and the SAC overlies a karstic aquifer. Therefore, there is potential for impacts on QI utilising watercourses hydrologically linked to this European site through a reduction in flows/water.</p>		<p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing).</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u> Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing).</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing).</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing).</p> <p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p>	<p>Yes – from pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works and during operation from habitat degradation on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works and during operation from</p>		

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		<p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing).</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible.</p>	<p>habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p>		
<p>SAJ-631</p> <p>New GW abstraction in the vicinity of Ballinatona WTP, upgrade existing Ballinatona WTP and supply deficit. New GW abstraction from Ketragh Springs and new WTP to supply deficit. Rationalise Ballydesmond/Kiskeam to Newmarket WRZ. Interconnect Newmarket with Banteer and rationalise Toureen Derry to Banteer. Interconnect Newmarket with Millstreet and rationalise Glenleigh and Kilcorney to Millstreet.</p> <p>Option study area is within and hydrologically linked to Blackwater River (Cork/Waterford) SAC. There is potential for some loss of/damage to QI/Annex 1 habitats during construction works given that the works are within the SAC boundary. Pollution of water courses during construction</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>N/M20 Cork to Limerick Road Improvement Scheme: 80km from Cork to Limerick</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N/M20 Cork to Limerick Road assumed as assessment not available at time of writing).</p> <p><u>N72/N73 Mallow Relief Road: 5km relief road outside of Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 1km south of the eastern extent of the scheme, therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for N72/N73 Mallow Relief Road assumed as assessment not available at time of writing).</p> <p><u>Cork Line Level Crossings: works between Fantstown and Buttevant train stations spanning across approximately 25km of railways and associated infrastructure</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, and the LSEs identified in the NIS for this scheme were habitat fragmentation, habitat/supporting habitat loss, habitat degradation including pollution, mortality and disturbance. LSE</p>	<p>Yes – from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with N/M20 Cork to Limerick Road Improvement Scheme works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Option specific mitigation as in Section 6.3.4</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either alone or in-combination with other plans or projects.</p>	<p>N</p>

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<p>(associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel. Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats, such as freshwater pearl mussel as the study area is within the FWPM catchment area. There is potential for disturbance to otter from construction works. There is also potential for the spread of invasive species given that the works are within the SAC boundary. Option includes GW abstractions. There is a risk these groundwater abstractions could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats. Therefore, there is potential for impacts on aquatic QI utilising this European site through a reduction in flows/water levels. There is a risk these groundwater abstractions will reduce water flow in the underground aquifer. One of these groundwater abstractions is within 1km of the SAC, and the SAC overlies both a karstic aquifer and productive fissured bedrock. Therefore, there is potential for impacts on QI utilising watercourses hydrologically linked to this European site through a reduction in flows/water.</p>		<p>from pollution during operation also identified. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance and pollution.</p> <p><u>Mallow Town Regeneration: development of Mallow Castle Visitor Centre, Mallow Town Centre and Main Street Public realm, and the redevelopment of brownfield sites</u> Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Mallow Town Regeneration assumed as assessment not available at time of writing).</p> <p><u>MY Greenway - Midleton to Youghal: development of a 22km greenway from Midleton to Youghal</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 240m north-east of the eastern extent of the scheme; no in-combination effects are possible.</p> <p><u>Mallow General Hospital Ward Block: development of two medical wards with 48 new single bedrooms</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 1.8km north of the scheme; no in-combination effects are possible.</p> <p><u>Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library: works associated with two separate residential care centres and the renovation and extension of a public library</u> Blackwater River (Cork/Waterford) SAC is approximately 340m east of the schemes therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library schemes assumed as assessment not available at time of writing).</p> <p><u>St Patrick's Community Hospital Fermoy: construction of a single extension to an existing ward, a single-story extension to another ward, and external works including alterations to the 'service access' road</u> This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 20m north of the scheme; no in-combination effects are possible.</p> <p><u>St Joseph's Community Hospital, Millstreet: includes demolition of sections of hospital, construction of single-storey extension to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Blackwater River (Cork/Waterford) SAC is approximately 400m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the St Joseph's Community Hospital, Millstreet scheme assumed as assessment not available at time of writing).</p> <p><u>Kanturk Community Hospital: includes demolition of sections of hospital, construction of three single-storey extensions to existing hospital, provision of landscaped outdoor amenities and extension of carparking facilities</u> Blackwater River (Cork/Waterford) SAC is approximately 385m north-east of the scheme therefore there may be in-combination effects from mortality, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for the Kanturk Community Hospital scheme assumed as assessment not available at time of writing).</p>	<p>with N72/N73 Mallow Relief Road works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, habitat loss, disturbance and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cork Line Level Crossings works and during operation from habitat degradation on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Town Regeneration works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Cois Abhainn, Greencloyne, Youghal, Youghal Community Hospital (St Raphael's), Youghal Public Library works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with St Joseph's Community Hospital, Millstreet works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p>		

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p><u>Mallow Wastewater Treatment Plant: includes the alteration of Mallow Wastewater Treatment Plant to increase wastewater treatment capacity, construction of a new pump station, and upgrading of sections of the sewer network in Mallow</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme and the LSEs identified in the NIS for this scheme were impacts on water quality during construction and/or operation, spread of invasive species, impacts on migration of fish species, flooding impacts, loss of or damage to habitats and impacts to aquatic QI species and habitats including disturbance and mortality. Therefore, there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability.</p> <p><u>Banteer Amenity Project: upgrade of recreational and commercial facilities in Banteer including a multi-purpose Astro turf pitch and spectator area and sports pavilion, a museum/exhibitor area, café, shop, car park, and a communal area for events</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC is approximately 370m east of the scheme; no in-combination effects are possible.</p> <p><u>Georgian Cultural/Heritage Quarter, Mitchelstown: includes a church being refurbished as an Arts, Heritage and Cultural Centre, development of interpretative signage, information points and landscaping along Georges Street and Kings Square, and the development of a three hectare woodland park</u></p> <p>Blackwater River (Cork/Waterford) SAC is approximately 8.3km south-east of the scheme with no hydrological link, therefore no in-combination effects are predicted.</p> <p><u>Ballydesmond Village Public Realm and Placemaking Enhancement: key village centre improvements, including enhanced streetscapes, walkways and park areas to support the social and economic development of the village</u></p> <p>Blackwater River (Cork/Waterford) SAC crosses the scheme, therefore there may be in-combination effects from mortality, habitat loss, disturbance, spread of invasive non-native species and pollution. In-combination effects during operation may result in habitat degradation and changes to water table/availability (LSE for Ballydesmond Village Public Realm and Placemaking Enhancement assumed as assessment not available at time of writing).</p> <p><u>R639 Public Realm and Streetscape Regeneration Scheme, Rathcormac: part of the Rathcormac Development Plan 2030. Includes upgrading pedestrian crossings, footpath and junction alterations, installation of new signage and road markings, new tree planting, new central medians and narrowing of carriageway lanes</u></p> <p>This development was screened out for AA, therefore there will be no potential impact on European sites. Blackwater River (Cork/Waterford) SAC crosses the scheme; no in-combination effects are possible.</p>	<p>River (Cork/Waterford) SAC</p> <p>Yes – from mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Kanturk Community Hospital works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Mallow Wastewater Treatment Plant works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p> <p>Yes – from habitat loss, mortality, disturbance, spread of invasive non-native species and pollution impacts on Blackwater River (Cork/Waterford) SAC if construction phase concurrent with Ballydesmond Village Public Realm and Placemaking Enhancement works and during operation from habitat degradation and water table/availability on Blackwater River (Cork/Waterford) SAC</p>		
<p>All Preferred Options</p> <p>The European sites that may be impacted by options within Study Area J are Blackwater River (Cork/Waterford) SAC, Blackwater Estuary SPA, Blackwater Callows SPA, Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA, Lower River Suir SAC and Lower River Shannon SAC.</p>	<ul style="list-style-type: none"> Habitat loss Mortality risk Habitat degradation Disturbance Spread of invasive non-native species Water table/availability 	<p><u>All Preferred Approach Options</u></p> <p>There is potential for in-combination effects from the projects within SAJ to Blackwater River (Cork/Waterford) SAC given that options SAJ-291, SAJ-223, SAJ-272, SAJ-128, SAJ-188, SAJ-262, SAJ-162, SAJ-167, SAJ-281, SAJ-531, SAJ-601, SAJ-597, SAJ-520, SAJ-611, SAJ-627, SAJ-609, SAJ-595, SAJ-616, SAJ-617, SAJ-614, SAJ-613, SAJ-629, SAJ-630 and SAJ-631 have the potential for impacts. Potential for in-combination from habitat loss (options 128, 531, 597, 611, 627, 595, 629 and 631 only), mortality (options 128, 531, 597, 611, 627, 609, 595, 614, 629 and 631 only), spread of invasive non-native species (options 128, 531, 597, 611, 627, 609, 595, 614, 629, 630 and 631 only), disturbance (options 128, 531, 597, 611, 627, 609, 595, 614, 629 and 631 only) and pollution (all options) impacts during construction, and hydrological changes (options 128, 531, 597, 627, 609, 595, 614, 629, 630 and 631 only) and water table/availability (options 128, 531, 597, 627, 609, 595, 614, 629, 630 and 631 only) impacts during operation.</p>	<p>Yes – from habitat loss, mortality, spread of invasive non-native species, disturbance and habitat degradation impacts on Blackwater River (Cork/Waterford) SAC if construction of options is concurrent and during operation from habitat degradation and water table/availability.</p> <p>Yes – from habitat degradation impacts on Blackwater Estuary SPA if construction of options is</p>	<p>General Mitigation Measures are outlined in Section 6.3.3</p> <p>Option specific mitigation as in Section 6.3.4</p> <p>Hydrological modelling as in Section 6.3.5</p> <p>Hydrogeological modelling as in Section 6.3.5</p> <p>With the implementation of mitigation as noted above there will be no adverse effects on the</p>	<p>N</p>

Preferred Option	Potential Impacts – Key Types	Potential for In-combination Implications on European Sites Project(s) being assessed against identified underlined	Potential for Likely Significant Effects in-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>There is potential for in-combination effects from the projects within SAJ to Blackwater Estuary SPA given that options SAJ-291, SAJ-223, SAJ-128, SAJ-611 and SAJ-609 have the potential for impacts. Potential for in-combination effects from pollution during construction (all options).</p> <p>There is potential for in-combination effects from the projects within SAJ to Blackwater Callows SPA given that options SAJ-281, SAJ-531, SAJ-601, SAJ-597, SAJ-627, SAJ-595, SAJ-617, SAJ-614 and SAJ-613 have the potential for impacts. Potential for in-combination from disturbance (options 627, 595 and 614 only) and pollution (all options) during construction.</p> <p>There is potential for in-combination effects from the projects within SAJ to Lower River Shannon SAC given that options SAJ-600 and SAJ-628 have the potential for impacts. Potential for in-combination from pollution (all options) during construction.</p> <p>Option SAJ-600 is the only option within SAJ with potential for impacts on Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA. Therefore, there is no potential for in-combination effects to this European site</p> <p>Option SAJ-613 is the only option within SAJ with potential for impacts on Lower River Suir SAC. Therefore, there is no potential for in-combination effects to this European site.</p>	<p>concurrent.</p> <p>Yes – from disturbance and habitat degradation impacts on Blackwater Callows SPA if construction of options is concurrent.</p> <p>Yes – from habitat degradation impacts on Lower River Shannon SAC if construction of options is concurrent.</p>	<p>integrity of this European site, either alone or in-combination with other plans or projects.</p>	

Table E4: Potential in-combination effects between SAs within the SW region

European Site	Study Areas with Potential for Impacts on this European Site	Potential Impact on European Site	Potential for Likely Significant Effects In-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
Ballinskelligs Bay and Inny Estuary SAC (000335)	<ul style="list-style-type: none"> SAH SAI 	<p>Habitat degradation – Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats (all SAs).</p>	Yes – from habitat degradation (all SAs) if construction of options within these SAs is concurrent.	<ul style="list-style-type: none"> General Mitigation Measures are outlined in Section 6.3.3 <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either from the options within individual SAs or in-combination between SAs.</p>	N
Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC (000365)	<ul style="list-style-type: none"> SAH SAI 	<p>Habitat degradation – Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats (all SAs).</p> <p>Disturbance – There is potential for disturbance to otter during construction (all SAs).</p> <p>Spread of invasive non-native species – There is the potential for the spread of invasive non-native species during construction (all SAs).</p> <p>Habitat degradation – A new/increase in abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats during operation (all SAs).</p> <p>Water table/availability – There is potential for impacts on aquatic QI species utilising watercourses hydrologically linked to this European site through a reduction in flows/water levels during operation (all SAs).</p>	Yes – from habitat degradation (all SAs), disturbance (all SAs) and spread of invasive non-native species (all SAs) if construction of options within these SAs is concurrent, and during operation from water table/availability (all SAs) and habitat degradation impacts (all SAs).	<ul style="list-style-type: none"> General Mitigation Measures are outlined in Section 6.3.3 Hydrogeological modelling as in Section 6.3.5 Hydrological modelling as in Section 6.3.5 <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either from the options within individual SAs or in-combination between SAs.</p>	N
Blackwater River (Cork/Waterford) SAC (002170)	<ul style="list-style-type: none"> SAH SAI SAJ 	<p>Habitat degradation – Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats (all SAs).</p> <p>Disturbance – There is potential for disturbance to otter during construction (SAI and SAJ only).</p> <p>Spread of invasive non-native species – There is the potential for the spread of invasive non-native species during construction (SAI and SAJ only).</p> <p>Habitat degradation – A new/increase in abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats during operation (SAI and SAJ only).</p> <p>Water table/availability – There is potential for impacts on aquatic QI species utilising watercourses hydrologically linked to this European site through a reduction in flows/water levels during operation (SAI and SAJ only).</p>	Yes – from habitat degradation (all SAs), disturbance (SAI and SAJ only) and spread of invasive non-native species (SAI and SAJ only) if construction of options within these SAs is concurrent, and during operation from water table/availability (SAI and SAJ only) and habitat degradation impacts (SAI and SAJ only).	<ul style="list-style-type: none"> General Mitigation Measures are outlined in Section 6.3.3 Option specific mitigation measures are outlined in Section 6.3.4 Hydrogeological modelling as in Section 6.3.5 Hydrological modelling as in Section 6.3.5 <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either from the options within individual SAs or in-combination between SAs.</p>	N
Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (004161)	<ul style="list-style-type: none"> SAH SAJ 	<p>Disturbance – There is potential for disturbance during construction to hen harrier using habitats situated within the immediate hinterland of the SPA or in areas outside of the SPA but ecologically connected to it (e.g. grassland, arable farmland) (all SAs).</p>	Yes – from disturbance (all SAs) if construction of options within these SAs is concurrent.	<ul style="list-style-type: none"> General Mitigation Measures are outlined in Section 6.3.3 <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either from the options within individual SAs or in-combination between SAs.</p>	N
Lower River Shannon SAC (002165)	<ul style="list-style-type: none"> SAH SAJ 	<p>Habitat loss – There is potential for some loss of/damage to QI/Annex 1 habitats during construction works (all SAs).</p> <p>Mortality risk – Pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel (all SAs).</p> <p>Habitat degradation – Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats (all SAs).</p>	Yes – from habitat loss (all SAs), mortality risk (all SAs), habitat degradation (all SAs), disturbance (all SAs) and the spread of invasive non-native species (all SAs) if construction of options within these SAs is concurrent.	<ul style="list-style-type: none"> General Mitigation Measures are outlined in Section 6.3.3 <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either from the options within individual SAs or in-combination between SAs.</p>	N

European Site	Study Areas with Potential for Impacts on this European Site	Potential Impact on European Site	Potential for Likely Significant Effects In-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
		<p>Disturbance – There is potential for disturbance to otter during construction (all SAs).</p> <p>Spread of invasive non-native species – There is the potential for the spread of invasive non-native species during construction (all SAs).</p>		options within individual SAs or in-combination between SAs.	
Blackwater Estuary SPA (004028)	<ul style="list-style-type: none"> • SAI • SAJ 	<p>Habitat degradation – There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species (all SAs).</p> <p>Disturbance – There is potential for disturbance during construction to QI birds using habitats situated within the immediate hinterland of the SPA or in areas outside of the SPA but ecologically connected to it (e.g. grassland, arable farmland) (all SAs).</p>	Yes – from habitat degradation (all SAs) and disturbance (all SAs) if construction of options within these SAs is concurrent.	<ul style="list-style-type: none"> • General Mitigation Measures are outlined in Section 6.3.3 <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either from the options within individual SAs or in-combination between SAs.</p>	N

Table E5: Potential in-combination effects between the SW region and the EM region

European Site	Regions with Potential for Impacts on this European Site	Potential Impact on European Site	Potential for Likely Significant Effects In-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
Lower River Suir SAC (002137)	<ul style="list-style-type: none"> SW EM 	Habitat degradation – Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats (all regions).	Yes – from habitat degradation (all regions) if construction of options within these regions is concurrent.	<ul style="list-style-type: none"> General Mitigation Measures are outlined in Section 6.3.3 <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either from the options within individual regions or in-combination between regions.</p>	N
Blackwater River (Cork/Waterford) SAC (002170)	<ul style="list-style-type: none"> SW EM 	Habitat degradation – Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats (all regions).	Yes – from habitat degradation (all regions) if construction of options within these regions is concurrent.	<ul style="list-style-type: none"> General Mitigation Measures are outlined in Section 6.3.3 <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either from the options within individual regions or in-combination between regions.</p>	N
Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (004161)	<ul style="list-style-type: none"> SW EM 	Disturbance – There is potential for disturbance during construction to hen harrier using habitats situated within the immediate hinterland of the SPA or in areas outside of the SPA but ecologically connected to it (e.g. grassland, arable farmland) (all regions).	Yes – from disturbance (all regions) if construction of options within these regions is concurrent.	<ul style="list-style-type: none"> General Mitigation Measures are outlined in Section 6.3.3 <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either from the options within individual regions or in-combination between regions.</p>	N
Lower River Shannon SAC (002165)	<ul style="list-style-type: none"> SW EM 	<p>Habitat loss – There is potential for some loss of/damage to QI/Annex 1 habitats during construction works (all regions).</p> <p>Mortality risk – Pollution of water courses during construction (associated with sediment runoff, or accidental spillage) could impact fish, restrict access to spawning habitat and smother freshwater pearl mussel (all regions).</p> <p>Habitat degradation – Potential pollution of watercourses during construction could affect QI species and hydrologically connected habitats (all regions).</p> <p>Disturbance – There is potential for disturbance to otter during construction (all regions).</p> <p>Spread of invasive non-native species – There is the potential for the spread of invasive non-native species during construction (all regions).</p> <p>Habitat degradation – A new/increase in abstraction could lead to hydrological changes (reduced flows – impacting on water quality) that could impact aquatic QI species or habitats during operation (all regions).</p> <p>Water table/availability – There is potential for impacts on aquatic QI species utilising watercourses hydrologically linked to this European site through a reduction in flows/water levels during operation (all regions).</p>	Yes – from habitat loss (all regions), mortality risk (all regions), habitat degradation (all regions), disturbance (all regions) and the spread of invasive non-native species (all regions) if construction of options within these regions is concurrent, and during operation from water table/availability (all regions) and habitat degradation impacts (all regions).	<ul style="list-style-type: none"> General Mitigation Measures are outlined in Section 6.3.3 Hydrogeological modelling as in Section 6.3.5 Hydrological modelling as in Section 6.3.5 Option specific mitigation measures are outlined in Section 6.3.4 <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either from the options within individual regions or in-combination between regions.</p>	N
River Shannon and River Fergus Estuaries SPA (004077)	<ul style="list-style-type: none"> SW EM 	Habitat degradation – There is potential for pollution of waterbodies during construction that could impact on the wetland habitat used by QI bird species. Potential pollution of watercourses during construction could have indirect effects on QI bird species through impacts upon prey species (all regions).	Yes – from habitat degradation (all regions) if construction of options within these regions is concurrent.	<ul style="list-style-type: none"> General Mitigation Measures are outlined in Section 6.3.3 <p>With the implementation of mitigation as noted above there will be no adverse effects on the integrity of this European site, either from the</p>	N

European Site	Regions with Potential for Impacts on this European Site	Potential Impact on European Site	Potential for Likely Significant Effects In-combination (Yes/No)	Mitigation and Conclusion	In-combination Adverse Effects on Site Integrity (Y/N)
				options within individual regions or in-combination between regions.	