

# OPTION COMPARISON ESTIMATES (PHASE 2)

Project Name	Galway to Athlone Cycleway					TII Ref.	WH19/17962			
						Phase	Phase 2	X-Sec		
Possible Mid-Construction Date	2025	Current Year		Inflation-Construction	0%		Inflation Land & Property	0%	% Prog. Risk	5%
Option Number / Reference	Route 1	Route 2	Route 3	Route 4	Route 5	Ballinasloe Link				
Mainline Length	143	83	117	174	182	20				
Grade Separated Junctions	0	0	0	0	0	0				
No. of Bridges (Ordinary)	24	27	22	35	30	1				
No. Viaducts / Signature Structures	0	0	0	0	0	0				

## OPTIONS COSTS

### BASE COSTS (Incl VAT & Project Specific Risk Contingencies) - €million

Main Contract Construction	79.4	73.3	69.7	98.8	96.3	8.0				
Main Contract Supervision	3.5	3.2	3.1	4.4	4.2	0.4				
Archaeology	2.8	2.6	2.5	3.5	3.4	0.3				
Advance Works and Other Contracts	2.1	1.9	1.8	2.6	2.5	0.2				
Public Transport Connectivity/Asset Renewal	0.0	0.0	0.0	0.0	0.0	0.0				
Land & Property	13.0	10.8	10.6	13.5	15.8	0.4				
Planning & Design	4.2	3.9	3.7	5.2	5.1	0.4				
<b>Subtotal</b>	<b>105.0</b>	<b>95.7</b>	<b>91.4</b>	<b>128.0</b>	<b>127.3</b>	<b>9.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Total Inflation Allowance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TII Programme Risk	5.3	4.8	4.6	6.4	6.4	0.5	0.0	0.0	0.0	0.0
<b>Option Comparison Estimate</b>	<b>110.3</b>	<b>100.5</b>	<b>96.0</b>	<b>134.4</b>	<b>133.7</b>	<b>10.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Signatures

Regional Manager

Senior Engineering Inspector

Head of Roads Capital Programme

## Estimate Assumptions Sheet

PROJECT TITLE	Galway to Athlone Cycleway	DATE OF CURRENT ESTIMATE	Jun-22
CURRENT PHASE	Phase 2	BASE DATE FOR RATES	2022
PROJECT MANAGER		ESTIMATOR (CURRENT ESTIMATE)	RPS

1	<b>Main Construction Contract (Insert Information where available – use Preferred Option at Phase 2)</b>				
	A	Mainline Length Total		km Section Type	
		Mainline – extent of any overlay		km % in Urban Environment	%
		Links Road Length		km Section Type	
		Side Roads Length		km Section Type	
		Grade Separated Junctions		Nr. Interchanges (Freeflow)	Nr.
		At-Grade Junctions – Mainline Only		Nr. Other Locations	Nr.
		Overbridges		Nr. Number on Mainline	Nr.
		Underbridges		Nr. Number on Mainline	Nr.
		Signature Structures - Span		m Structure Type	
		Tunnels		km Pavement Detail	
		Earthworks – Cut Volume		m <sup>3</sup> Fill Volume	m <sup>3</sup>
	Earthworks – Import of Acceptable		m <sup>3</sup> EO for Hard Material	m <sup>3</sup>	
	B	Earthworks – Ground Conditions (please describe briefly anticipated ground conditions)			
	C	Accommodation Works - Underpasses		Nr.	
	Accommodation Works – Access Tracks		km		
D	Other Information on the Main Construction Contract (e.g. Active Travel, Key Constraints or Challenges)				
2	<b>Land and Property (Additional Information to that contained in the estimate summary and back-up)</b>				
	Land and Property payments in line with Code of Best Practice National and Regional Greenways Greenway Sustainability Payments (GSP)				
	- Value per m taken as mean value per meter for all bands(GSP)				
	Property valuation for Agricultural Lands sourced from <a href="https://scsi.ie/annual-scsi-teagasc-agricultural-land-market-review-outlook-2022/">https://scsi.ie/annual-scsi-teagasc-agricultural-land-market-review-outlook-2022/</a>				
	Zoned land value estimate from 2013 increased by 9% based on change in agricultural land value to 2021 plus 6% for 2022 estimated inflated.				
3	<b>Programme</b>				
	{Outline anticipated or actual dates for Statutory Process/CPO. Notice to Treat and Main Construction Contract Tender Issue and other key milestones.}				
4	<b>Any Other Relevant Information (including notes on the other 5 Cost Headings)</b>				

{At Option Selection, outline justification for the preferred route including details of key issues on other routes}

{Outline details of any previous or planned contract awards for pre-construction works including enabling works contracts, other contracts, site investigations or surveys.}

Route Option 5 with the addition of the Ballinasloe Link has been chosen as the Emerging Preferred Route Corridor as it delivers the best user experience and aligns with the 'Five S' Criteria in the strategy for Cycleway development.

Public Transport Connectivity.  
Set to 0% instead of the default 7.5%.

Planning and Design.  
Set to 6% instead of the default 8%.

Main Contract Supervision  
Set to 5% instead of the default 8%.

Archaeology.  
Set to 4% instead of the default 7.5%, as much of the route uses existing infrastructure, Archaeological costs should be minimal.

Advance Works and Other Contracts.  
Set to 3% instead of the default 5%, as no significant advance works or other contract costs expected.

Fencing has been excluded from the following types of cycleway: BnaM rail; Bog Road; Planned Walk; On Road Shared; Cycle Track (fencing allowed on one side only); Boardwalk; Flood Embankment; Existing Trail; Forest Road; Forest Fireline; Motorway Access Track  
Where fencing is required it is assumed that some boundaries can be reused.

Earthworks assumptions include

- excavation of 300mm topsoil strip where cycleways are not being constructed on existing roads.
- allowance of 500m<sup>3</sup> of excavation of unacceptable material class U1 per km
- allowance of 0.5m depth of imported fill per km on new construction
- allowance of 200m of 0.5m depth imported fill per km where on existing trails

Pavements

- Allowance of surface, base and 150mm sub-base for full construction trail type
- Allowance of surface, base and 20% sub-base for pavement intervention trail type
- Allowance of cold milling and surface course for resurfacing trail type

Kerbs, Footways and Paved Areas - No allowance has been included for any kerbing or footways except for the following types of cycleway: On Road Shared; Cycle Lane;

Traffic Signs

- Allowance of 5 signs/km applies to all types of cycleway
- Allowance of 5 zebra crossings per km excluding BnaM Rail; Bog Road; Planned Walk; On Road Shared; Rothar Road; Boardwalk; Flood embankment; Existing Trail; Forest Road; Forest Fireline; Motorway Access Track
- Cycle Lane includes 2 toucan crossings per km, 2 zebra crossings per km and 4 bolards per km

Road Markings assumptions include

- allowance of 1000m of 100mm wide continuous line per km;
- allowance of 4 No. cycle track yield markings per km
- allowance of 10 No. letters per km
- allowance of 5 No. cycle symbols per km

Additional road markings has been allowed in the Cycle Lane for carriageway markings  
Road markings have been excluded from the Boardwalk

Lighting and Electrical - No allowance has been made for public lighting across any types of cycleways

Landscaping and Environmental assumptions include

- 1m wide topsoiling and seeding on each side of cycleway per km (excluding the following types of cycleway: Existing Track; BnaM Rail; Bog Road; On Road Shared; Rothar Road; Cycle Lane; Boardwalk; Flood Embankment; Existing Trail; Motorway Access Track
- 1m wide topsoiling and seeding on one side only of cycleway per km for Cycle Track; Forest Road; Forest Fireline
- 50 No. trees per km (excluding the following types of cycleway: BnaM Rail; Bog Road; On Road Shared; Rothar Road; Cycle Lane; Boardwalk; Flood Embankment; Existing Trail; Forest Road; Forest Fireline; Motorway Access Track
- 25 No. trees per km for Cycle Track
- 500m per km for environmental screening (excluding the following types of cycleway: Existing Track; BnaM Rail; Bog Road; On Road Shared; Rothar Road; Cycle Lane; Boardwalk; Flood Embankment; Existing Trail; Forest Road; Forest Fireline; Motorway Access Track
- 250m per km for environmental screening for Cycle Track
- €5,000/km for environment and ecology

Accommodation Works - No allowance has been made for Accommodation Works across any types of cycleways

Statutory Authorities & Utilities - No allowance has been made for Statutory Authorities and Utilities

Any Other Relevant Information (including notes on the other 5 Cost Headings)

Baseline Rates tab includes the rates used across the estimate and where they were sourced.

We based rates on the TII's Schedule of Rates 2019, where directly comparable items were available. Otherwise rates are based on 'N59 Moycullen bypass tender received June 2021. An inflation rate of 22% was added to TII 2019 rates and 15% on N59 Moycullen rates.

Structures cost estimate based on 2019 rates. An inflation rate of 22% was added to these rates.

Note: Above information should include for example notes on key exclusions from base cost or any key assumptions on which rates and prices have been based.

## Level 2 Estimate Summary Sheet

Galway to Athlone Cycleway Route Option 1

DATE OF ESTIMATE: June 2022

Phase 2

BASE DATE FOR RATES: 2020

INSERT NAME OF TECHNICAL ADVISOR: RPS		INSERT NAME OF ESTIMATOR RPS			
Mainline Section Type :		3m Cycleway	Mainline Length :	142.72	
Link Roads Section Type :			Link Roads Length :		
1	<b>Main Construction Contract (See attached for breakdown presented to Level 2 detail)</b>		Quantity	Unit	Rate €
	a	New build greenway on Farmland	29.602	km	€ 369,247
	b	New build greenway on Non-Farm Land	12.173	km	€ 395,356
	c	New build greenway parallel to rail	7.853	km	€ 466,603
	d	Existing track	18.371	km	€ 236,082
	e	BnM railway	28.888	km	€ 276,348
	f	Old farm road	2.195	km	€ 270,123
	g	Bog road	8.554	km	€ 164,180
	h	Planned walk	3.706	km	€ 275,143
	j	On road shared surface	1.021	km	€ 563,476
	k	Rothar road	1.869	km	€ 128,966
	m	Cycle track next to rural road	13.785	km	€ 354,650
	n	Urban cycle lane	1.274	km	€ 600,811
	o	Raised boardwalk	0	km	€ 7,513,809
	p	Flood embankment path	2.724	km	€ 194,087
	q	Existing recreational trail	7.789	km	€ 156,463
	r	Forest road	1.344	km	€ 299,174
	s	Forest fireline	1.073	km	€ 258,976
	t	Motorway access track	0.501	km	€ 178,167
	u	Bridges	-	Nr.	-
	v	Culverts	-	Nr.	-
	w	Other Structures	-	Nr.	-
Total Base Cost for Main Construction Contract					€60,864,400
Add Project Specific Risk Contingency					15% €9,129,660
Sub Total Exclusive of Vat					€69,994,060
Add VAT at					13.5% €9,449,198
Total MCC Base Cost plus Project Specific Risk Contingency					€79,443,258
2	<b>Land and Property - All-In Costs</b>		Quantity	Unit	Rate €
	a	Early Sign on payment			-
	b	Co-Operation Payment			-
	c	Mainline (Private Agricultural)	-	Ha.	-
	d	Mainline (Private Forestry)	-	Ha.	-
	e	Mainline (Private Other)	-	Ha.	-
	f	Mainline (Zoned)	-	Ha.	-
	g	Mainline (Public)	-	Ha.	-
	h	Injurious Affection / Severance	-	No.	-
	j	General Disturbance	-	No.	-
	k	Agronomist Costs and other fees	-	No.	-
Total Base Cost for Land and Property					€11,308,786
Add Project Specific Risk Contingency					15% €1,696,318
Total L&P Base Cost plus Project Specific Risk Contingency					€13,005,104
3	<b>Planning and Design</b>				Total €
	Provision based on percentage of Main Construction Contract Base Cost			6%	€3,651,864
	Add Project Specific Risk Contingency			15%	€547,780
	Total P&D Base Cost plus Project Specific Risk Contingency				€4,199,644
4	<b>Archaeology</b>				Total €
	Provision to take account of Actual Costs and Contract Amounts where known			4.0%	€2,434,576

## Level 2 Estimate Summary Sheet

	Add Project Specific Risk Contingency	15%	€365,186
	Total Archaeology Base Cost plus Project Specific Risk Contingency		€2,799,762
<b>5</b>	<b>Advance Works and Other Contracts</b>		Total €
	Provision to take account of Actual Costs and Contract Amounts where known	3%	€1,825,932
	Add Project Specific Risk Contingency	15%	€273,890
	Total Advance Works Base Cost plus Project Specific Risk Contingency		€2,099,822
<b>6</b>	<b>Main Contract Supervision (Employer's Costs)</b>		Total €
	Provision to take account of Actual Costs and Contract Amounts where known	5%	€3,043,220
	Add Project Specific Risk Contingency	15%	€456,483
	Main Contract Supervision Base Costs plus Project Specific Risk Contingency		€3,499,703
<b>7</b>	<b>Public Transport Connectivity/Asset Renewal</b>		Total €
	Provision based on percentage of Main Construction Contract Base Cost	0.0%	€0
	Add Project Specific Risk Contingency	15%	€0
	Total Residual Network Base Cost plus Project Specific Risk Contingency		€0
<b>TOTAL LEVEL 2 ESTIMATE INCLUSIVE OF VAT</b>			<b>€105,047,293</b>
	Mainline Length	142.722 km	Rate per km
			€736,027
<p>N.B. Figures above are INCLUSIVE of VAT - VAT rates utilised are : { 13.5% }</p> <p>Figures above are EXCLUSIVE of provision for Inflation - base date to be stated if different from date of estimate.</p> <p>Total base costs to include for ALL qualifying costs under each cost heading.</p> <p>Refer to the TII Cost Management Manual for information on coverage and format of back-up.</p> <p>See attached Estimate Assumptions Sheet for Further Project Information.</p>			

## Level 2 Estimate Summary Sheet

Galway to Athlone Cycleway Route Option 2

DATE OF ESTIMATE: June 2022

Phase 2

BASE DATE FOR RATES: 2022

INSERT NAME OF TECHNICAL ADVISOR:		RPS	INSERT NAME OF ESTIMATOR		RPS
Mainline Section Type :			3m Cycleway	Mainline Length :	83.04
Link Roads Section Type :				Link Roads Length :	
1	Main Construction Contract (See attached for breakdown presented to Level 2 detail)	Quantity	Unit	Rate €	Total €
a	New build greenway on Farmland	8.141	km	€ 369,247	€3,006,040
b	New build greenway on Non-Farm Land	2.661	km	€ 395,356	€1,052,042
c	New build greenway parallel to rail	53.004	km	€ 466,603	€24,731,825
d	Existing track	1.712	km	€ 236,082	€404,172
e	BnM railway	0	km	€ 276,348	€0
f	Old farm road	2.159	km	€ 270,123	€583,196
g	Bog road	0	km	€ 164,180	€0
h	Planned walk	5.342	km	€ 275,143	€1,469,814
j	On road shared surface	0.156	km	€ 563,476	€87,902
k	Rothar road	1.579	km	€ 128,966	€203,637
m	Cycle track next to rural road	2.082	km	€ 354,650	€738,381
n	Urban cycle lane	0.401	km	€ 600,811	€240,925
o	Raised boardwalk	0	km	€ 7,513,809	€0
p	Flood embankment path	0.507	km	€ 194,087	€98,402
q	Existing recreational trail	2.476	km	€ 156,463	€387,402
r	Forest road	2.821	km	€ 299,174	€843,970
s	Forest fireline	0	km	€ 258,976	€0
t	Motorway access track	0	km	€ 178,167	€0
u	Bridges	-	Nr.	-	€19,586,060
v	Culverts	-	Nr.	-	€1,714,116
w	Other Structures	-	Nr.	-	€1,000,000
Total Base Cost for Main Construction Contract					€56,147,884
Add Project Specific Risk Contingency				15%	€8,422,183
Sub-Total Exclusive of VAT					€64,570,067
Add VAT at				13.5%	€8,716,959
Total MCC Base Cost plus Project Specific Risk Contingency					€73,287,026
2	Land and Property - All-In Costs	Quantity	Unit	Rate €	Total €
a	Early Sign on payment			-	€1,982,336
b	Co-Operation Payment			-	€1,982,336
c	Mainline (Private Agricultural)	-	Ha.	-	€1,137,017
d	Mainline (Private Forestry)	-	Ha.	-	€64,699
e	Mainline (Private Other)	-	Ha.	-	€103,856
f	Mainline (Zoned)	-	Ha.	-	€733,815
g	Mainline (Public)	-	Ha.	-	€0
h	Injurious Affection / Severance	-	No.	-	€0
j	General Disturbance	-	No.	-	€2,279,000
k	Agronomist Costs and other fees	-	No.	-	€1,139,500
Total Base Cost for Land and Property					€9,422,559
Add Project Specific Risk Contingency				15%	€1,413,384
Total L&P Base Cost plus Project Specific Risk Contingency					€10,835,943
3	Planning and Design	Total €			
Provision based on percentage of Main Construction Contract Base Cost				6%	€3,368,873
Add Project Specific Risk Contingency				15%	€505,331
Total P&D Base Cost plus Project Specific Risk Contingency					€3,874,204
4	Archaeology	Total €			
Provision to take account of Actual Costs and Contract Amounts where known				4.0%	€2,245,915

Level 2 Estimate Summary Sheet			
	Add Project Specific Risk Contingency	15%	€336,887
	Total Archaeology Base Cost plus Project Specific Risk Contingency		€2,582,802
<b>5</b>	<b>Advance Works and Other Contracts</b>		Total €
	Provision to take account of Actual Costs and Contract Amounts where known	3%	€1,684,437
	Add Project Specific Risk Contingency	15%	€252,666
	Total Advance Works Base Cost plus Project Specific Risk Contingency		€1,937,103
<b>6</b>	<b>Main Contract Supervision (Employer's Costs)</b>		Total €
	Provision to take account of Actual Costs and Contract Amounts where known	5%	€2,807,394
	Add Project Specific Risk Contingency	15%	€421,109
	Main Contract Supervision Base Costs plus Project Specific Risk Contingency		€3,228,503
<b>7</b>	<b>Public Transport Connectivity/Asset Renewal</b>		Total €
	Provision based on percentage of Main Construction Contract Base Cost	0.0%	€0
	Add Project Specific Risk Contingency	15%	€0
	Total Residual Network Base Cost plus Project Specific Risk Contingency		€0
<b>TOTAL LEVEL 2 ESTIMATE INCLUSIVE OF VAT</b>			<b>€95,745,581</b>
	Mainline Length	83.041 km	Rate per km
			€1,152,992
<p>N.B. Figures above are INCLUSIVE of VAT - VAT rates utilised are : { 13.5% }</p> <p>Figures above are EXCLUSIVE of provision for Inflation - base date to be stated if different from date of estimate.</p> <p>Total base costs to include for ALL qualifying costs under each cost heading.</p> <p>Refer to the TII Cost Management Manual for information on coverage and format of back-up.</p> <p>See attached Estimate Assumptions Sheet for Further Project Information.</p>			



## Level 2 Estimate Summary Sheet

Galway to Athlone Cycleway Route Option 3

DATE OF ESTIMATE: June 2022

Phase 2

BASE DATE FOR RATES: 2022

INSERT NAME OF TECHNICAL ADVISOR:			RPS		INSERT NAME OF ESTIMATOR		RPS		
Mainline Section Type : Link Roads Section Type :			3m Cycleway		Mainline Length :		116.73		
					Link Roads Length :				
1	Main Construction Contract (See attached for breakdown presented to Level 2 detail)			Quantity	Unit	Rate €	Total €		
	a	New build greenway on Farmland		26.256	km	€ 369,247	€9,694,949		
	b	New build greenway on Non-Farm Land		14.474	km	€ 395,356	€5,722,383		
	c	New build greenway parallel to rail		8.093	km	€ 466,603	€3,776,218		
	d	Existing track		10.679	km	€ 236,082	€2,521,120		
	e	BnM railway		16.45	km	€ 276,348	€4,545,925		
	f	Old farm road		3.57	km	€ 270,123	€964,339		
	g	Bog road		5.861	km	€ 164,180	€962,259		
	h	Planned walk		7.214	km	€ 275,143	€1,984,882		
	j	On road shared surface		0.341	km	€ 563,476	€192,145		
	k	Rothar road		2.54	km	€ 128,966	€327,574		
	m	Cycle track next to rural road		8.739	km	€ 354,650	€3,099,286		
	n	Urban cycle lane		1.309	km	€ 600,811	€786,462		
	o	Raised boardwalk		0	km	€ 7,513,809	€0		
	p	Flood embankment path		1.056	km	€ 194,087	€204,956		
	q	Existing recreational trail		4.328	km	€ 156,463	€677,172		
	r	Forest road		5.322	km	€ 299,174	€1,592,204		
	s	Forest fireline		0	km	€ 258,976	€0		
	t	Motorway access track		0.501	km	€ 178,167	€89,262		
	u	Bridges		-	Nr.	-	€12,890,980		
	v	Culverts		-	Nr.	-	€2,395,632		
w	Other Structures		-	Nr.	-	€1,000,000			
Total Base Cost for Main Construction Contract							€53,427,748		
Add Project Specific Risk Contingency					15%		€8,014,162		
Sub-Total Exclusive of VAT							€61,441,910		
Add VAT at					13.5%		€8,294,658		
Total MCC Base Cost plus Project Specific Risk Contingency							€69,736,568		
2	Land and Property - All-In Costs			Quantity	Unit	Rate €	Total €		
	a	Early Sign on payment				-	€2,258,508		
	b	Co-Operation Payment				-	€2,258,508		
	c	Mainline (Private Agricultural)		-	Ha.	-	€930,762		
	d	Mainline (Private Forestry)		-	Ha.	-	€130,073		
	e	Mainline (Private Other)		-	Ha.	-	€239,724		
	f	Mainline (Zoned)		-	Ha.	-	€825,413		
	g	Mainline (Public)		-	Ha.	-	€0		
	h	Injurious Affection / Severance		-	No.	-	€0		
	j	General Disturbance		-	No.	-	€1,696,000		
	k	Agronomist Costs and other fees		-	No.	-	€848,000		
	Total Base Cost for Land and Property							€9,186,988	
	Add Project Specific Risk Contingency					15%		€1,378,048	
Total L&P Base Cost plus Project Specific Risk Contingency							€10,565,036		
3	Planning and Design						Total €		
Provision based on percentage of Main Construction Contract Base Cost					6%		€3,205,665		
Add Project Specific Risk Contingency					15%		€480,850		
Total P&D Base Cost plus Project Specific Risk Contingency							€3,686,515		
4	Archaeology						Total €		
Provision to take account of Actual Costs and Contract Amounts where known					4.0%		€2,137,110		

## Level 2 Estimate Summary Sheet

	Add Project Specific Risk Contingency	15%	€320,567
	Total Archaeology Base Cost plus Project Specific Risk Contingency		€2,457,677
<b>5</b>	<b>Advance Works and Other Contracts</b>		Total €
	Provision to take account of Actual Costs and Contract Amounts where known	3%	€1,602,832
	Add Project Specific Risk Contingency	15%	€240,425
	Total Advance Works Base Cost plus Project Specific Risk Contingency		€1,843,257
<b>6</b>	<b>Main Contract Supervision (Employer's Costs)</b>		Total €
	Provision to take account of Actual Costs and Contract Amounts where known	5%	€2,671,387
	Add Project Specific Risk Contingency	15%	€400,708
	Main Contract Supervision Base Costs plus Project Specific Risk Contingency		€3,072,095
<b>7</b>	<b>Public Transport Connectivity/Asset Renewal</b>		Total €
	Provision based on percentage of Main Construction Contract Base Cost	0.0%	€0
	Add Project Specific Risk Contingency	15%	€0
	Total Residual Network Base Cost plus Project Specific Risk Contingency		€0

**TOTAL LEVEL 2 ESTIMATE INCLUSIVE OF VAT** **€91,361,148**

Mainline Length	<b>116.733</b> km	Rate per km	<b>€782,651</b>
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N.B. Figures above are INCLUSIVE of VAT - VAT rates utilised are : { 13.5% }  
 Figures above are EXCLUSIVE of provision for Inflation - base date to be stated if different from date of estimate.  
 Total base costs to include for ALL qualifying costs under each cost heading.  
 Refer to the TII Cost Management Manual for information on coverage and format of back-up.  
 See attached Estimate Assumptions Sheet for Further Project Information.

## Level 2 Estimate Summary Sheet

Galway to Athlone Cycleway Route Option 4

DATE OF ESTIMATE: June 2022

Phase 2

BASE DATE FOR RATES: 2022

INSERT NAME OF TECHNICAL ADVISOR:			RPS		INSERT NAME OF ESTIMATOR		RPS		
Mainline Section Type : Link Roads Section Type :			3m Cycleway		Mainline Length :		174.46		
					Link Roads Length :				
1	Main Construction Contract (See attached for breakdown presented to Level 2 detail)			Quantity	Unit	Rate €	Total €		
	a	New build greenway on Farmland		31.36	km	€ 369,247	€11,579,586		
	b	New build greenway on Non-Farm Land		18.337	km	€ 395,356	€7,249,643		
	c	New build greenway parallel to rail		3.639	km	€ 466,603	€1,697,968		
	d	Existing track		11.054	km	€ 236,082	€2,609,650		
	e	BnM railway		20.509	km	€ 276,348	€5,667,621		
	f	Old farm road		2.01	km	€ 270,123	€542,947		
	g	Bog road		6.438	km	€ 164,180	€1,056,991		
	h	Planned walk		2.756	km	€ 275,143	€758,294		
	j	On road shared surface		1.388	km	€ 563,476	€782,105		
	k	Rothar road		3.797	km	€ 128,966	€489,684		
	m	Cycle track next to rural road		23.901	km	€ 354,650	€8,476,490		
	n	Urban cycle lane		1.274	km	€ 600,811	€765,433		
	o	Raised boardwalk		0	km	€ 7,513,809	€0		
	p	Flood embankment path		7.114	km	€ 194,087	€1,380,735		
	q	Existing recreational trail		7.7	km	€ 156,463	€1,204,765		
	r	Forest road		25.654	km	€ 299,174	€7,675,010		
	s	Forest fireline		6.62	km	€ 258,976	€1,714,421		
	t	Motorway access track		0.912	km	€ 178,167	€162,488		
	u	Bridges		-	Nr.	-	€16,652,780		
	v	Culverts		-	Nr.	-	€3,593,448		
	w	Other Structures		-	Nr.	-	€1,600,000		
	Total Base Cost for Main Construction Contract							€75,660,059	
	Add Project Specific Risk Contingency					15%		€11,349,009	
	Sub-Total Exclusive of VAT							€87,009,068	
	Add VAT at					13.5%		€11,746,224	
Total MCC Base Cost plus Project Specific Risk Contingency							€98,755,292		
2	Land and Property - All-In Costs			Quantity	Unit	Rate €	Total €		
	a	Early Sign on payment				-	€2,702,006		
	b	Co-Operation Payment				-	€2,702,006		
	c	Mainline (Private Agricultural)		-	Ha.	-	€1,300,743		
	d	Mainline (Private Forestry)		-	Ha.	-	€71,169		
	e	Mainline (Private Other)		-	Ha.	-	€317,756		
	f	Mainline (Zoned)		-	Ha.	-	€644,805		
	g	Mainline (Public)		-	Ha.	-	€0		
	h	Injurious Affection / Severance		-	No.	-	€0		
	j	General Disturbance		-	No.	-	€2,692,400		
	k	Agronomist Costs and other fees		-	No.	-	€1,346,200		
	Total Base Cost for Land and Property							€11,777,085	
	Add Project Specific Risk Contingency					15%		€1,766,563	
	Total L&P Base Cost plus Project Specific Risk Contingency							€13,543,648	
3	Planning and Design						Total €		
Provision based on percentage of Main Construction Contract Base Cost					6%		€4,539,604		
Add Project Specific Risk Contingency					15%		€680,941		
Total P&D Base Cost plus Project Specific Risk Contingency							€5,220,545		
4	Archaeology						Total €		
Provision to take account of Actual Costs and Contract Amounts where known					4.0%		€3,026,402		

Level 2 Estimate Summary Sheet			
	Add Project Specific Risk Contingency	15%	€453,960
	Total Archaeology Base Cost plus Project Specific Risk Contingency		€3,480,362
<b>5</b>	<b>Advance Works and Other Contracts</b>		Total €
	Provision to take account of Actual Costs and Contract Amounts where known	3%	€2,269,802
	Add Project Specific Risk Contingency	15%	€340,470
	Total Advance Works Base Cost plus Project Specific Risk Contingency		€2,610,272
<b>6</b>	<b>Main Contract Supervision (Employer's Costs)</b>		Total €
	Provision to take account of Actual Costs and Contract Amounts where known	5%	€3,783,003
	Add Project Specific Risk Contingency	15%	€567,450
	Main Contract Supervision Base Costs plus Project Specific Risk Contingency		€4,350,453
<b>7</b>	<b>Public Transport Connectivity/Asset Renewal</b>		Total €
	Provision based on percentage of Main Construction Contract Base Cost	0.0%	€0
	Add Project Specific Risk Contingency	15%	€0
	Total Residual Network Base Cost plus Project Specific Risk Contingency		€0
<b>TOTAL LEVEL 2 ESTIMATE INCLUSIVE OF VAT</b>			<b>€127,960,572</b>
	Mainline Length	174.463 km	Rate per km
			€733,454
<p>N.B. Figures above are INCLUSIVE of VAT - VAT rates utilised are : { 13.5% }</p> <p>Figures above are EXCLUSIVE of provision for Inflation - base date to be stated if different from date of estimate.</p> <p>Total base costs to include for ALL qualifying costs under each cost heading.</p> <p>Refer to the TII Cost Management Manual for information on coverage and format of back-up.</p> <p>See attached Estimate Assumptions Sheet for Further Project Information.</p>			

## Level 2 Estimate Summary Sheet

Galway to Athlone Cycleway Route Option 5

DATE OF ESTIMATE: June 2022

Phase 2

BASE DATE FOR RATES: 2022

INSERT NAME OF TECHNICAL ADVISOR: RPS		INSERT NAME OF ESTIMATOR: RPS			
Mainline Section Type :		3m Cycleway	Mainline Length :		181.88
Link Roads Section Type :			Link Roads Length :		
1	<b>Main Construction Contract (See attached for breakdown presented to Level 2 detail)</b>		Quantity	Unit	Rate €
	a	New build greenway on Farmland	36.125	km	€ 369,247
	b	New build greenway on Non-Farm Land	15.967	km	€ 395,356
	c	New build greenway parallel to rail	0.77	km	€ 466,603
	d	Existing track	10.945	km	€ 236,082
	e	BnM railway	20.44	km	€ 276,348
	f	Old farm road	4.877	km	€ 270,123
	g	Bog road	6.495	km	€ 164,180
	h	Planned walk	0	km	€ 275,143
	j	On road shared surface	0.616	km	€ 563,476
	k	Rothar road	11.708	km	€ 128,966
	m	Cycle track next to rural road	21.849	km	€ 354,650
	n	Urban cycle lane	1.545	km	€ 600,811
	o	Raised boardwalk	0.612	km	€ 7,513,809
	p	Flood embankment path	7.115	km	€ 194,087
	q	Existing recreational trail	11.28	km	€ 156,463
	r	Forest road	21.004	km	€ 299,174
	s	Forest fireline	10.527	km	€ 258,976
	t	Motorway access track	0	km	€ 178,167
	u	Bridges	-	Nr.	-
	v	Culverts	-	Nr.	-
	w	Other Structures	-	Nr.	-
Total Base Cost for Main Construction Contract					€73,816,812
Add Project Specific Risk Contingency					15%
Sub-Total Exclusive of VAT					€84,889,334
Add VAT at					13.5%
Total MCC Base Cost plus Project Specific Risk Contingency					€96,349,394
2	<b>Land and Property - All-In Costs</b>		Quantity	Unit	Rate €
	a	Early Sign on payment			-
	b	Co-Operation Payment			-
	c	Mainline (Private Agricultural)	-	Ha.	-
	d	Mainline (Private Forestry)	-	Ha.	-
	e	Mainline (Private Other)	-	Ha.	-
	f	Mainline (Zoned)	-	Ha.	-
	g	Mainline (Public)	-	Ha.	-
	h	Injurious Affection / Severance	-	No.	-
	j	General Disturbance	-	No.	-
	k	Agronomist Costs and other fees	-	No.	-
Total Base Cost for Land and Property					€13,743,277
Add Project Specific Risk Contingency					15%
Total L&P Base Cost plus Project Specific Risk Contingency					€15,804,769
3	<b>Planning and Design</b>				Total €
	Provision based on percentage of Main Construction Contract Base Cost			6%	€4,429,009
	Add Project Specific Risk Contingency			15%	€664,351
	Total P&D Base Cost plus Project Specific Risk Contingency				€5,093,360
4	<b>Archaeology</b>				Total €

## Level 2 Estimate Summary Sheet

	Provision to take account of Actual Costs and Contract Amounts where known	4.0%	€2,952,672
	Add Project Specific Risk Contingency	15%	€442,901
	Total Archaeology Base Cost plus Project Specific Risk Contingency		€3,395,573
<b>5</b>	<b>Advance Works and Other Contracts</b>		Total €
	Provision to take account of Actual Costs and Contract Amounts where known	3%	€2,214,504
	Add Project Specific Risk Contingency	15%	€332,176
	Total Advance Works Base Cost plus Project Specific Risk Contingency		€2,546,680
<b>6</b>	<b>Main Contract Supervision (Employer's Costs)</b>		Total €
	Provision to take account of Actual Costs and Contract Amounts where known	5%	€3,690,841
	Add Project Specific Risk Contingency	15%	€553,626
	Main Contract Supervision Base Costs plus Project Specific Risk Contingency		€4,244,467
<b>7</b>	<b>Public Transport Connectivity/Asset Renewal</b>		Total €
	Provision based on percentage of Main Construction Contract Base Cost	0.0%	€0
	Add Project Specific Risk Contingency	15%	€0
	Total Residual Network Base Cost plus Project Specific Risk Contingency		€0
<b>TOTAL LEVEL 2 ESTIMATE INCLUSIVE OF VAT</b>			<b>€127,434,243</b>
	Mainline Length	181.875 km	Rate per km
			€700,669

N.B. Figures above are INCLUSIVE of VAT - VAT rates utilised are : { 13.5% }  
 Figures above are EXCLUSIVE of provision for Inflation - base date to be stated if different from date of estimate.  
 Total base costs to include for ALL qualifying costs under each cost heading.  
 Refer to the TII Cost Management Manual for information on coverage and format of back-up.  
 See attached Estimate Assumptions Sheet for Further Project Information.

## Level 2 Estimate Summary Sheet

Galway to Athlone Cycleway Ballinasloe Link

DATE OF ESTIMATE: June 2022

Phase 2

BASE DATE FOR RATES: 2022

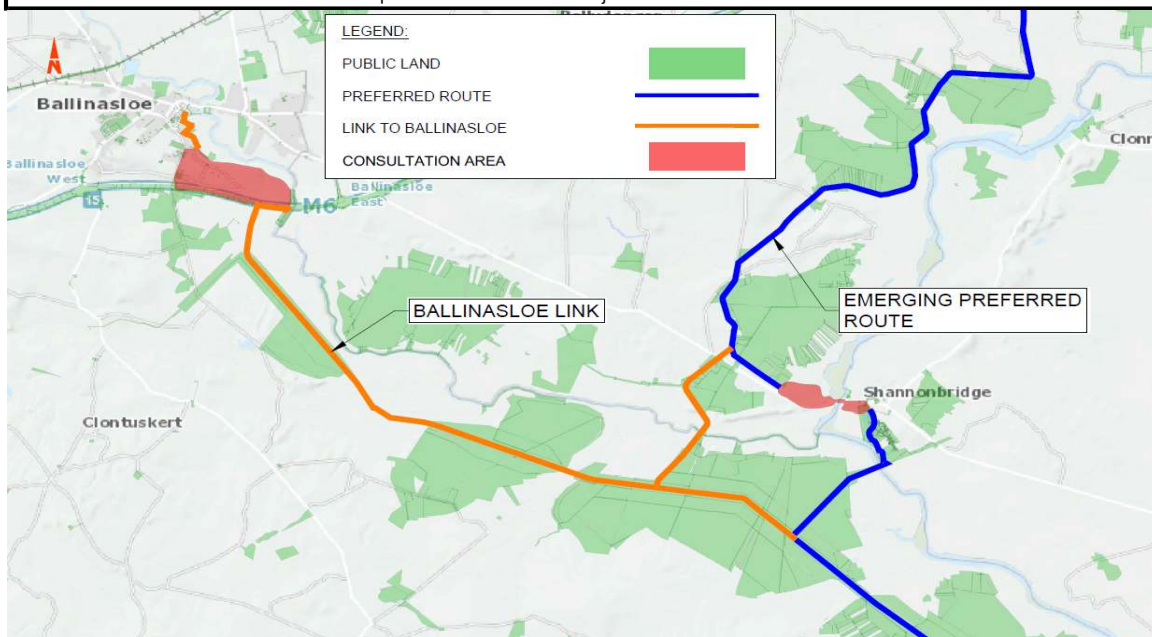
INSERT NAME OF TECHNICAL ADVISOR: RPS			INSERT NAME OF ESTIMATOR RPS			
Mainline Section Type :			3m Cycleway	Mainline Length :	19.52	
Link Roads Section Type :				Link Roads Length :		
1	Main Construction Contract (See attached for breakdown presented to Level 2 detail)		Quantity	Unit	Rate €	Total €
	a	New build greenway on Farmland	0.79	km	€ 369,247	€291,705
	b	New build greenway on Non-Farm Land	1.104	km	€ 395,356	€436,473
	c	New build greenway parallel to rail	0	km	€ 466,603	€0
	d	Existing track	9.902	km	€ 236,082	€2,337,684
	e	BnM railway	6.013	km	€ 276,348	€1,661,681
	f	Old farm road	0	km	€ 270,123	€0
	g	Bog road	0	km	€ 164,180	€0
	h	Planned walk	0	km	€ 275,143	€0
	j	On road shared surface	0	km	€ 563,476	€0
	k	Rothar road	1.022	km	€ 128,966	€131,803
	m	Cycle track next to rural road	0	km	€ 354,650	€0
	n	Urban cycle lane	0.192	km	€ 600,811	€115,356
	o	Raised boardwalk	0	km	€ 7,513,809	€0
	p	Flood embankment path	0	km	€ 194,087	€0
	q	Existing recreational trail	0	km	€ 156,463	€0
	r	Forest road	0	km	€ 299,174	€0
	s	Forest fireline	0	km	€ 258,976	€0
	t	Motorway access track	0.501	km	€ 178,167	€89,262
	u	Bridges	-	Nr.	-	€639,400
	v	Culverts	-	Nr.	-	€392,388
	w	Other Structures	-	Nr.	-	€0
	Total Base Cost for Main Construction Contract					€6,095,752
	Add Project Specific Risk Contingency				15%	€914,363
	Sub-Total Exclusive of VAT					€7,010,115
	Add VAT at				13.5%	€946,366
	Total MCC Base Cost plus Project Specific Risk Contingency					€7,956,481
	2	Land and Property - All-In Costs		Quantity	Unit	Rate €
	a	Goodwill Payments	-	No.	-	€79,833
	b	Exgratia	-	Km	-	€79,833
	c	Land acquisition (Private Agricultural)	-	Ha.	-	€22,659
	d	Land acquisition (Private Forestry)	-	Ha.	-	€0
	e	Land acquisition (Private Other)	-	Ha.	-	€21,210
	f	Land acquisition (Public)	-	Ha.	-	€0
	g	Injurious Affection / Severance	-	No.	-	€0
	h	General Disturbance	-	No.	-	€106,000
	j	Agronomist Costs and other fees	-	No.	-	€53,000
	Total Base Cost for Land and Property					€362,535
Add Project Specific Risk Contingency				15%	€54,380	
Total L&P Base Cost plus Project Specific Risk Contingency					€416,915	
3	Planning and Design				Total €	
	Provision based on percentage of Main Construction Contract Base Cost			6%	€365,745	
	Add Project Specific Risk Contingency			15%	€54,862	
	Total P&D Base Cost plus Project Specific Risk Contingency				€420,607	
4	Archaeology				Total €	
	Provision to take account of Actual Costs and Contract Amounts where known			4.0%	€243,830	
	Add Project Specific Risk Contingency			15%	€36,575	



## Level 2 Estimate Summary Sheet

Total Archaeology Base Cost plus Project Specific Risk Contingency		€280,405
<b>5 Advance Works and Other Contracts</b>		Total €
Provision to take account of Actual Costs and Contract Amounts where known	3%	€182,873
Add Project Specific Risk Contingency	15%	€27,431
Total Advance Works Base Cost plus Project Specific Risk Contingency		€210,304
<b>6 Main Contract Supervision (Employer's Costs)</b>		Total €
Provision to take account of Actual Costs and Contract Amounts where known	5%	€304,788
Add Project Specific Risk Contingency	15%	€45,718
Main Contract Supervision Base Costs plus Project Specific Risk Contingency		€350,506
<b>7 Public Transport Connectivity/Asset Renewal</b>		Total €
Provision based on percentage of Main Construction Contract Base Cost	0.0%	€0
Add Project Specific Risk Contingency	15%	€0
Total Residual Network Base Cost plus Project Specific Risk Contingency		€0
<b>TOTAL LEVEL 2 ESTIMATE INCLUSIVE OF VAT</b>		<b>€9,635,218</b>
Mainline Length	19.524 km	Rate per km
		€493,506

N.B. Figures above are INCLUSIVE of VAT - VAT rates utilised are : { 13.5% }  
 Figures above are EXCLUSIVE of provision for Inflation - base date to be stated if different from date of estimate.  
 Total base costs to include for ALL qualifying costs under each cost heading.  
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Greenway Sustainability Payments				
Private Landowner Bands	Band Length	Total Greenway Sustainability Payment	Average Length	Average Cost Per m in each band
Band 1	1 - 100	6750	50	135
Band 2	101 - 250	12000	175.5	68.4
Band 3	251 - 400	17250	325.5	53
Band 4	401 - 550	22500	475.5	47.3
Band 5	550+	22500	550	40.9
Average Cost Per m				68.9
Early Sign on payment (Based on average costs/m across all bands)				34.5
Co-Operation Payment(Based on average costs/m across all bands)				34.5

Land Aquisition Costs		
Inflation	6%	Expected Inflation for 2022 (SCSI/Teagasc 2022)
	Price per Acre (€)	Price per Acre(€) with inflation
Agricultural	10962	€11,619.72
Bog/Marginal/Forestry	5308	€5,626.48
Zoned Land (15% inflation)	45000	€51,750.00
Public	0	€0.00
	Price per Case (€)	Price per Acre(€) with inflation
Injurious Affection / House	10000	€10,600.00
Injurious Affection / Severance		€0.00
General Disturbance	10,000	€10,600.00
Agonomist Costs and other fees	5,000	€5,300.00

Distance of land on each route						
Average Width of Land required for Cycleway	10					m
	Route 1	Route 2	Route 3	Route 4	Route 5	Link
No. of Houses	150	87	64	166	151	0
No. of Landowners	247	215	160	254	295	10
Privat Agricultural Land(m)	40729	39597	32414	45301	48071	790
Private Forestry (m)	4811	4653	9355	5118	5026	0
Private Other (m)	20449	7471	17242	22858	33731	1524
Zoned Land (m)	6642	5738	6453	5042	5803	0
Public Land (m)	70091	25582	51269	96144	89244	17210
Total Length of Route (km)	142.722	83.041	116.733	174.463	181.875	19.524

Land Aquisition Costs Route 1			
Main Aquisition Costs		(m)	Rate € per unit
a	Early Sign on payment	72631	€ 34.5
		(m)	Cost Per m
b	Co-Operation Payment	72631	€ 34.5
		(Acre)	Cost Per (Acre)
c	Land acquisition (Agricultural)	100.65	€ 11,620
d	Land acquisition (Forestry)	11.89	€ 5,626
e	Land acquisition (Other)	50.53	€ 5,626
f	Land acquisition (Zoned Land)	16.41	€ 51,750

g	Land acquisition (Public)	173.20		€ 0
		(No.)	Rate € per unit	
h	Injurious Affection / Severance	247	€ 0	€ 0
j	General Disturbance	247	€ 10,600	€ 2,618,200
k	Agronomist Costs and other fees	247	€ 5,300	€ 1,309,100
Total Land aquisition Costs				€11,308,786

Land Aquisition Costs Route 2				
Main Aquisition Costs		(m)	Rate € per unit	Total €
a	Early Sign on payment	57459	€ 34.5	€ 1,982,336
		(m)	Cost Per m	
b	Co-Operation Payment	57459	€ 34.5	€ 1,982,336
		(Acre)	Cost Per (Acre)	
c	Land acquisition (Agricultural)	97.85	€ 11,620	€ 1,137,017
d	Land acquisition (Forestry)	11.50	€ 5,626	€ 64,699
e	Land acquisition (Other)	18.46	€ 5,626	€ 103,856
f	Land acquisition (Zoned Land)	14.18	€ 51,750	€ 733,815
g	Land acquisition (Public)	63.22	€ 0	€ 0
		(No.)	Rate € per unit	
h	Injurious Affection / Severance	215	€ 0	€ 0
j	General Disturbance	215	€ 10,600	€ 2,279,000
k	Agronomist Costs and other fees	215	€ 5,300	€ 1,139,500
Total Land aquisition Costs				€9,422,559

Land Aquisition Costs Route 3				
Main Aquisition Costs		(m)	Rate € per unit	Total €
a	Early Sign on payment	65464	€ 34.5	€ 2,258,508
		(m)	Cost Per m	
b	Co-Operation Payment	65464	€ 34.5	€ 2,258,508
		(Acre)	Cost Per (Acre)	
c	Land acquisition (Agricultural)	80.10	€ 11,620	€ 930,762
d	Land acquisition (Forestry)	23.12	€ 5,626	€ 130,073
e	Land acquisition (Other)	42.61	€ 5,626	€ 239,724
f	Land acquisition (Zoned Land)	15.95	€ 51,750	€ 825,413
g	Land acquisition (Public)	126.69	€ 0	€ 0
		(No.)	Rate € per unit	
h	Injurious Affection / Severance	160	€ 0	€ 0
j	General Disturbance	160	€ 10,600	€ 1,696,000
k	Agronomist Costs and other fees	160	€ 5,300	€ 848,000
Total Land aquisition Costs				€9,186,988

Land Aquisition Costs Route 4				
Main Aquisition Costs		(m)	Rate € per unit	Total €
a	Early Sign on payment	78319	€ 34.5	€ 2,702,006
		(m)	Cost Per m	

b	Co-Operation Payment	78319	€ 34.5	€ 2,702,006
		(Acre)	Cost Per (Acre)	
c	Land acquisition (Agricultural)	111.94	€ 11,620	€ 1,300,743
d	Land acquisition (Forestry)	12.65	€ 5,626	€ 71,169
e	Land acquisition (Other)	56.48	€ 5,626	€ 317,756
f	Land acquisition (Zoned Land)	12.46	€ 51,750	€ 644,805
g	Land acquisition (Public)	237.58	€ 0	€ 0
		(No.)	Rate € per unit	
h	Injurious Affection / Severance	254	€ 0	€ 0
j	General Disturbance	254	€ 10,600	€ 2,692,400
k	Agronomist Costs and other fees	254	€ 5,300	€ 1,346,200
Total Land aquisition Costs				<b>€11,777,085</b>

Land Aquisition Costs Route 5				
Main Aquisition Costs		(m)	Rate € per unit	Total €
a	Early Sign on payment	92631	€ 34.5	€ 3,195,770
		(m)	Cost Per m	
b	Co-Operation Payment	92631	€ 34.5	€ 3,195,770
		(Acre)	Cost Per (Acre)	
c	Land acquisition (Agricultural)	118.79	€ 11,620	€ 1,380,340
d	Land acquisition (Forestry)	12.42	€ 5,626	€ 69,875
e	Land acquisition (Other)	83.35	€ 5,626	€ 468,927
f	Land acquisition (Zoned Land)	14.34	€ 51,750	€ 742,095
g	Land acquisition (Public)	220.53	€ 0	€ 0
		(No.)	Rate € per unit	
h	Injurious Affection / Severance	295	€ 0	€ 0
j	General Disturbance	295	€ 10,600	€ 3,127,000
k	Agronomist Costs and other fees	295	€ 5,300	€ 1,563,500
Total Land aquisition Costs				<b>€13,743,277</b>

Land Aquisition Costs Ballinasloe Link				
Main Aquisition Costs		(m)	Rate € per unit	Total €
a	Early Sign on payment	2314	€ 34.5	€ 79,833
		(m)	Cost Per m	
b	Co-Operation Payment	2314	€ 34.5	€ 79,833
		(Acre)	Cost Per (Acre)	
c	Land acquisition (Agricultural)	1.95	€ 11,620	€ 22,659
d	Land acquisition (Forestry)	0.00	€ 5,626	€ 0
e	Land acquisition (Other)	3.77	€ 5,626	€ 21,210
f	Land acquisition (Zoned Land)	0.00	€ 51,750	€ 0
g	Land acquisition (Public)	42.53	€ 0	€ 0
		(No.)	Rate € per unit	
h	Injurious Affection / Severance	10	€ 0	€ 0
j	General Disturbance	10	€ 10,600	€ 106,000
k	Agronomist Costs and other fees	10	€ 5,300	€ 53,000
Total Land aquisition Costs				<b>€362,535</b>

### Cost Estimate Structures Route 1

Bridges		Maximum Span (m)	No.	Total Span (m)	Width (m)	Rate €/m <sup>2</sup> (Including 22% Inflation)	Total €	Comments
a	Single Span Timber Beam	10	17	170	4	€ 4,735	€ 3,219,800	Small River marked with thin blue line on OSI 50k map - 10m bridge
b	Single Span MY Concrete Beam	20	2	40	4	€ 3,930	€ 628,800	1. Bunowen River Ballinasloe, 2. Canal Ballinasloe Town
c	Single Span Steel Beam	20	0	0	4	€ 4,937	€ 0	
d	Single Span Glulam Beam	20	0	0	4	€ 6,327	€ 0	
e	Single Span TY Concrete Beam	30	1	30	4	€ 4,103	€ 492,360	Bridge over Railway Athenry
f	Single Span Steel Vierendeel Truss	25	0	0	4	€ 5,042	€ 0	
g	Single Span Steel Warren Truss	35+	1	35	4	€ 4,908	€ 687,120	Bridge over Railway near GMIT in Galway
h	Single Span High Glulam Arch	35	0	0	4	€ 7,669	€ 0	
j	Single Span Through Glulam Arch	35	0	0	4	€ 7,669	€ 0	
k	Single Span High Steel Arch	35+	0	0	4	€ 5,183	€ 0	
m	Single Span Through Steel Arch	35+	0	0	4	€ 5,183	€ 0	
n	Single Span Steel Box Girder	40	0	0	4	€ 10,355	€ 0	
o	Single Span Steel Warren Truss / Glulam Deck	45	1	45	4	€ 11,778	€ 2,120,040	N18 Dual Carrageway Oranmore
p	Multiple Span Varying Depth Glulam Beam	50+	0	0	4	€ 14,030	€ 0	
q	Two Span Steel Box Girder	50+	2	105	4	€ 8,695	€ 3,651,900	1. M6 Motorway Athenry, 2. M18 Motorway Athenry
r	Structure at Poolboy Lock	-	1	20	3	€ 250,000	€ 250,000	Motorway underpass structure at Poolboy Lock Ballinasloe
s	Railway Underpass Near Merlin Park	-	1	30	4	€ 2,000,000	€ 2,000,000	Railway underpass near Merlin Park Galway
t	Existing Bridge Aliviation Works	-	1	-	-	€ 150,000	€ 150,000	BnM Bridge Shannonbridge East
Total structures Base Cost							€13,200,020	
Culverts			Quantity		Rate €		Total €	
a	Culverts	284		€ 5,750		€ 1,633,000		
b	Headwalls	568		€ 2,288		€ 1,299,584		
Total Culvert Base Cost							€2,932,584	
Other Structures		Total No.	Total Span (m)	Width (m)	Height (m)	Rate €	Total €	
a	Access Ramps /m <sup>3</sup>	0	0	0	0	€ 110	€ 0	
b	Underpass Works/m <sup>3</sup> +B/sloe Lock	0	0	0	0	€ 600,000	€ 0	
c	Allowance for retaing walls etc						€ 1,000,000	
Total other structures Base Cost							€1,000,000	

### Cost Estimate Structures Route 2

Bridges		Maximum Span (m)	No.	Total Span (m)	Width (m)	Rate €/m <sup>2</sup> (Including 22% Inflation)	Total €	Comments
a	Single Span Timber Beam	10	21	210	4	€ 4,735	€ 3,977,400	Small River marked with thin blue line on OSI 50k map - 10m bridge
b	Single Span MY Concrete Beam	20	0	0	4	€ 3,930	€ 0	
c	Single Span Steel Beam	20	0	0	4	€ 4,937	€ 0	
d	Single Span Glulam Beam	20	0	0	4	€ 6,327	€ 0	
e	Single Span TY Concrete Beam	30	0	0	4	€ 4,103	€ 0	
f	Single Span Steel Vierendeel Truss	25	0	0	4	€ 5,042	€ 0	
g	Single Span Steel Warren Truss	35+	1	35	4	€ 4,908	€ 687,120	Bridge over Railway near GMIT in Galway
h	Single Span High Glulam Arch	35	0	0	4	€ 7,669	€ 0	
j	Single Span Through Glulam Arch	35	0	0	4	€ 7,669	€ 0	
k	Single Span High Steel Arch	35+	0	0	4	€ 5,183	€ 0	
m	Single Span Through Steel Arch	35+	0	0	4	€ 5,183	€ 0	
n	Single Span Steel Box Girder	40	0	0	4	€ 10,355	€ 0	Replacment structure at halls bridge
o	Single Span Steel Warren Truss / Glulam Deck	45	1	45	4	€ 11,778	€ 2,120,040	
p	Multiple Span Varying Depth Glulam Beam	50+	1	60	4	€ 14,030	€ 3,367,200	
q	Two Span Steel Box Girder	50+	3	185	4	€ 8,695	€ 6,434,300	
r	Road Underpass		1	30	4	€ 1,000,000	€ 1,000,000	
s	Railway Underpass	-	1	30	4	€ 2,000,000	€ 2,000,000	1. Railway Underpass at Oranmore
t	Existing Bridge Aliviation Works	-	0	-	-	€ 0	€ 0	
Total structures Base Cost							€19,586,060	
Culverts			Quantity			Rate €	Total €	
a	Culverts		166			€ 5,750	€ 954,500	
b	Headwalls		332			€ 2,288	€ 759,616	
Total Culvert Base Cost							€1,714,116	
Other Structures		Total No.	Total Span (m)	Width (m)	Height (m)	Rate €	Total €	
a	Access Ramps /m <sup>3</sup>	0	0	0	0	€ 110	€ 0	
b	Tunnel Underpass Works/m <sup>3</sup>	0	0	0	0	€ 600,000	€ 0	
c	Allowance for retaing walls etc						€ 1,000,000	
Total other structures Base Cost							€1,000,000	

### Cost Estimate Structures Route 3

Bridges		Maximum Span (m)	No.	Total Span (m)	Width (m)	Rate €/m <sup>2</sup> (Including 22% Inflation)	Total €	Comments
a	Single Span Timber Beam	10	16	160	4	€ 4,735	€ 3,030,400	Small River marked with thin blue line on OSI 50k map - 10m bridge
b	Single Span MY Concrete Beam	20	1	20	4	€ 3,930	€ 314,400	Raford River
c	Single Span Steel Beam	20	0	0	4	€ 4,937	€ 0	
d	Single Span Glulam Beam	20	0	0	4	€ 6,327	€ 0	
e	Single Span TY Concrete Beam	30	0	0	4	€ 4,103	€ 0	
f	Single Span Steel Vierendeel Truss	25	0	0	4	€ 5,042	€ 0	
g	Single Span Steel Warren Truss	35+	2	70	4	€ 4,908	€ 1,374,240	1. Bridge over Railway Athenry, 2. Bridge over Railway near GMIT in Galway
h	Single Span High Glulam Arch	35	0	0	4	€ 7,669	€ 0	
j	Single Span Through Glulam Arch	35	0	0	4	€ 7,669	€ 0	
k	Single Span High Steel Arch	35+	0	0	4	€ 5,183	€ 0	
m	Single Span Through Steel Arch	35+	0	0	4	€ 5,183	€ 0	
n	Single Span Steel Box Girder	40	0	0	4	€ 10,355	€ 0	
o	Single Span Steel Warren Truss / Glulam Deck	45	1	45	4	€ 11,778	€ 2,120,040	N18 Dual Carrageway Oranmore
p	Multiple Span Varying Depth Glulam Beam	50+	0	0	4	€ 14,030	€ 0	
q	Two Span Steel Box Girder	50+	2	105	4	€ 8,695	€ 3,651,900	1. M6 Motorway Athenry, 2. M18 Motorway Athenry
r	Structure at Poolboy Lock	-	1	20	3	€ 250,000	€ 250,000	Motorway underpass structure at Poolboy Lock Ballinasloe
s	Railway Underpass Near Merlin Park	-	1	30	4	€ 4,000,000	€ 2,000,000	Railway underpass near Merlin Park Galway
t	Existing Bridge Aliviation Works	-	1	-	-	€ 150,000	€ 150,000	BnM Bridge Shannonbridge East
Total structures Base Cost							€12,890,980	
Culverts		Quantity			Rate €		Total €	
a	Culverts	232			€ 5,750		€ 1,334,000	
b	Headwalls	464			€ 2,288		€ 1,061,632	
Total Culvert Base Cost							€2,395,632	
Other Structures		Total No.	Total Span (m)	Width (m)	Height (m)	Rate €	Total €	
a	Access Ramps /m <sup>3</sup>	0	0	0	0	€ 110	€ 0	
b	Underpass Works/m <sup>3</sup> +B/sloe Lock	0	0	0	0	€ 600,000	€ 0	
c	Allowance for retaing walls etc						€ 1,000,000	
Total other structures Base Cost							€1,000,000	

### Cost Estimate Structures Route 4

Bridges		Maximum Span (m)	No.	Total Span (m)	Width (m)	Rate €/m <sup>2</sup> (Including 22% Inflation)	Total €	Comments
a	Single Span Timber Beam	10	28	280	4	€ 4,735	€ 5,303,200	Small River marked with thin blue line on OSI 50k map - 10m bridge
b	Single Span MY Concrete Beam	20	1	20	4	€ 3,930	€ 314,400	Dooyertha River Kilconirein
c	Single Span Steel Beam	20	0	0	4	€ 4,937	€ 0	
d	Single Span Glulam Beam	20	0	0	4	€ 6,327	€ 0	
e	Single Span TY Concrete Beam	30	0	0	4	€ 4,103	€ 0	
f	Single Span Steel Vierendeel Truss	25	0	0	4	€ 5,042	€ 0	
g	Single Span Steel Warren Truss	35+	2	70	4	€ 4,908	€ 1,374,240	1. Bridge over Railway Athenry 2. Bridge over Railway near GMIT in Galway
h	Single Span High Glulam Arch	35	0	0	4	€ 7,669	€ 0	
j	Single Span Through Glulam Arch	35	0	0	4	€ 7,669	€ 0	
k	Single Span High Steel Arch	35+	0	0	4	€ 5,183	€ 0	
m	Single Span Through Steel Arch	35+	0	0	4	€ 5,183	€ 0	
n	Single Span Steel Box Girder	40	0	0	4	€ 10,355	€ 0	
o	Single Span Steel Warren Truss / Glulam Deck	45	1	45	4	€ 11,778	€ 2,120,040	N18 Dual Carrageway Oranmore
p	Multiple Span Varying Depth Glulam Beam	50+	0	0	4	€ 14,030	€ 0	
q	Two Span Steel Box Girder	50+	3	155	4	€ 8,695	€ 5,390,900	1. M18 Motorway Athenry, 2. M6 Motorway Athenry 3. Duniry River Sawmagh Portumna
r	Railway Underpass Near Merlin Park	-	1	30	4	€ 4,000,000	€ 2,000,000	Railway underpass near Merlin Park Galway
s	Existing Bridge Aliviation Works	-	1	-	-	€ 150,000	€ 150,000	BnM Bridge Shannonbridge South
Total structures Base Cost							€16,652,780	
Culverts		Quantity			Rate €		Total €	
a	Culverts	348			€ 5,750		€ 2,001,000	
b	Headwalls	696			€ 2,288		€ 1,592,448	
Total Culvert Base Cost							€3,593,448	
Other Structures		Total No.	Total Span (m)	Width (m)	Height (m)	Rate €	Total €	
a	Access Ramps /m <sup>3</sup>	0	0	0	0	€ 110	€ 0	
b	Tunnel Underpass Works/m <sup>3</sup>	1	20	5	3	€ 600,000	€ 600,000	Exinting M6 motorway underpass south of Athenry
c	Allowance for retaing walls etc						€ 1,000,000	
Total other structures Base Cost							€1,600,000	



### Cost Estimate Structures Route 5

Bridges		Maximum Span (m)	No.	Total Span (m)	Width (m)	Rate €/m <sup>2</sup> (Including 22% Inflation)	Total €	Comments
a	Single Span Timber Beam	10	22	220	4	€ 4,735	€ 4,166,800	Small River marked with thin blue line on OSI 50k map - 10m bridge
b	Single Span MY Concrete Beam	20	3	60	4	€ 3,930	€ 943,200	Derrywee River Derrybrien Gort River Clarín River Clarínbridge
c	Single Span Steel Beam	20	0	0	4	€ 4,937	€ 0	
d	Single Span Glulam Beam	20	0	0	4	€ 6,327	€ 0	
e	Single Span TY Concrete Beam	30	3	90	4	€ 4,103	€ 1,477,080	1. Bridge over Railway in Gort, 2. Bridge over Railway near GMIT in Galway 3. Gort River
f	Single Span Steel Vierendeel Truss	25	0	0	4	€ 5,042	€ 0	
g	Single Span Steel Warren Truss	35+	1	35	4	€ 4,908	€ 687,120	Dunkellin River Kilcolgan
h	Single Span High Glulam Arch	35	0	0	4	€ 7,669	€ 0	
j	Single Span Through Glulam Arch	35	0	0	4	€ 7,669	€ 0	
k	Single Span High Steel Arch	35+	0	0	4	€ 5,183	€ 0	
m	Single Span Through Steel Arch	35+	0	0	4	€ 5,183	€ 0	
n	Single Span Steel Box Girder	40	0	0	4	€ 10,355	€ 0	
o	Single Span Steel Warren Truss / Glulam Deck	45	0	0	4	€ 11,778	€ 0	
p	Multiple Span Varying Depth Glulam Beam	50+	0	0	4	€ 14,030	€ 0	
q	Two Span Steel Box Girder	50+	1	50	4	€ 8,695	€ 1,739,000	2. Duniry River Sawnagh Portumna
r	Railway Underpass Near Merlin Park	-	1	30	4	€ 2,000,000	€ 2,000,000	Railway underpass near Merlin Park Galway
s	Existing Bridge Aliviation Works	-	1	-	-	€ 150,000	€ 150,000	BnM Bridge Shannonbridge South
Total structures Base Cost							€11,163,200	
Culverts		Quantity			Rate €		Total €	
a	Culverts	362			€ 5,750		€ 2,081,500	
b	Headwalls	724			€ 2,288		€ 1,656,512	
Total Culvert Base Cost							€3,738,012	
Other Structures		Total No.	Total Span (m)	Width (m)	Height (m)	Rate €	Total €	
a	Access Ramps /m <sup>3</sup>	0	0	0	0	€ 110	€ 0	
b	Underpass Works/m <sup>3</sup>	0	0	0	0	€ 600,000	€ 0	
c	Allowance for retaining walls etc						€ 1,000,000	
Total other structures Base Cost							€1,000,000	



### Cost Estimate Structures Ballinasloe Link

Bridges		Maximum Span (m)	No.	Total Span (m)	Width (m)	Rate €/m <sup>2</sup> (Including 22% Inflation)	Total €	Comments
a	Single Span Timber Beam	10	1	10	4	€ 4,735	€ 189,400	Small River marked with thin blue line on OSI Discovery map 10m bridge
b	Single Span MY Concrete Beam	20	0	0	4	€ 3,930	€ 0	
c	Single Span Steel Beam	20	0	0	4	€ 4,937	€ 0	
d	Single Span Glulam Beam	20	0	0	4	€ 6,327	€ 0	
e	Single Span TY Concrete Beam	30	0	0	4	€ 4,103	€ 0	
f	Single Span Steel Vierendeel Truss	25	0	0	4	€ 5,042	€ 0	
g	Single Span Steel Warren Truss	35+	0	0	4	€ 4,908	€ 0	
h	Single Span High Glulam Arch	35	0	0	4	€ 7,669	€ 0	
j	Single Span Through Glulam Arch	35	0	0	4	€ 7,669	€ 0	
k	Single Span High Steel Arch	35+	0	0	4	€ 5,183	€ 0	
m	Single Span Through Steel Arch	35+	0	0	4	€ 5,183	€ 0	
n	Single Span Steel Box Girder	40	0	0	4	€ 10,355	€ 0	
o	Single Span Steel Warren Truss / Glulam Deck	45	0	0	4	€ 11,778	€ 0	
p	Multiple Span Varying Depth Glulam Beam	50+	0	0	4	€ 14,030	€ 0	
q	Two Span Steel Box Girder	50+	0	0	4	€ 8,695	€ 0	
r	Structure at Poolboy Lock	-	1	20	4	€ 250,000	€ 250,000	Motorway underpass structure at Poolboy Lock Ballinasloe
s	Existing Bridge Aliviation Works	-	1	-	-	€ 200,000	€ 200,000	BnM Bridge Shannonbridge
Total structures Base Cost							€639,400	
Culverts			Quantity		Rate €		Total €	
a	Culverts	38		€ 5,750		€ 218,500		
b	Headwalls	76		€ 2,288		€ 173,888		
Total Culvert Base Cost							€392,388	
Other Structures		Total No.	Total Span (m)	Width (m)	Height (m)	Rate €	Total €	
a	Access Ramps /m <sup>3</sup>	0	0	0	0	€ 110	€ 0	
b	Underpass Works/m <sup>3</sup>	0	0	-	-	€ 250,000	€ 0	
c	Allowance for retaining walls etc							
Total other structures Base Cost							€0	

## Cycleway Width Calculator

= Dropdown menu  
= User Input  
= Program Output

Cycleway Location Galway to Athlone

Build Type Greenway on Farmland

Route All

Cycle Manual				DMURS
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity
0	0	0	0	0
=> Required Width		0.00	m	

### 1) Site Clearance

General Site Clearance / m2

1,000	5	1.04	5,200.00
Total Site Clearance			5,200.00

### 2) Fencing

Steel Guardrail / m  
Rumble Strip / m  
Residential Fence / m  
Agricultural Fence / m  
Mesh/Concrete Fence / m  
Timber Post & Rail / m  
Gate / no

0	214.69	0.00
0	8.11	0.00
0	37.19	0.00
1,500	37.82	56,730.00
0	64.05	0.00
0	37.19	0.00
5	969.54	4,847.70
Total Fencing		61,577.70

### 3) Drainage and Service Ducts

Carrier Drains / m  
Filter Drains / m  
Gullies / no  
Pipe Crossings / no  
Manholes / no  
Allowance for drainage % of MCC

0	56.73	0.00
0	88.55	0.00
0	738.10	0.00
0	6,173.80	0.00
0	2,300.00	0.00
€319,663.66	0.05	15,983.18
Total Drainage and Service Ducts		15,983.18

### 4) Earthworks

Excavation; Acceptable material Class 5A  
Excavation; Unacceptable material Class U1  
Excavate Hard Material (Rock) / m3  
Excavate Hard Material (Pavement) / m3  
Disposal; Acceptable material Class 5A  
Disposal; Unacceptable material Class U1  
Importing Fill / m3  
Compacting Fill / m3

1,000	5	0.3	5.47	8,205.00
		500	4.40	2,200.00
		50	24.29	1,214.50
			9.90	0.00
1,000	5	0.3	2.21	3,315.00
		500	17.15	8,575.00
1,500	5	0.5	16.93	63,487.50
1,000	5	0.5	2.84	7,100.00
Total Earthworks				94,097.00

### 5) Pavements

Trail Type

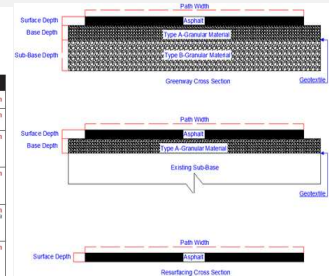
Description

Width  
Length  
Surface Depth  
Base Depth  
CBR  
Sub-Base Depth

Full Construction

3	m
1000	m
0.035	m
0.1	m
2	%
0.15	m

A Inside Edge	B Cycling Regime	C Outside Edge	D Additional Features
Width 0.25m	Single File 0.75m	Width 1.5m also lane 0.50m	Width 0.25m
Channel Gully 0.25m	Single File 1.00m	Width 1.5m also lane 0.75m	Width 0.25m
Width 0.85m	Single File 1.25m	Width 1.5m also lane 0.50m	Width 0.25m
Width 0.50m	Single File 1.00m	Width 1.5m also lane 0.25m	Width 0.25m
Width 0.50m	Single File 1.00m	Width 1.5m also lane 0.25m	Width 0.25m
Width 0.50m	Single File 1.00m	Width 1.5m also lane 0.25m	Width 0.25m



Surface course / m2  
Base course / m2  
Sub-Base 150mm deep / m2  
Fill/m2  
Geotextile / m2  
Cold Milling / m2

3,000	12.25	36,750.00
3,200	16.99	54,368.00
3,200	4.67	14,944.00
	5.86	0.00
5,000	2.14	10,700.00
0	4.88	0.00

Total Pavements 116,762.00

### 6) Kerbs, Footways and Paved Areas

Footway / m2

0	45.75	0.00
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Kerb / m	0	30.50	0.00	
			<b>Total Kerbs, Footways and Paved Areas</b>	<b>0.00</b>
<b>7) Traffic Signs</b>				
Information Signs / no	1	427.00	427.00	
Traffic Signs / no	1	610.00	610.00	
			<b>Total Signage</b>	<b>1,037.00</b>
<b>8) Access Control, Traffic Signals and Crossings</b>				
Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	2	575.00	1,150.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
			<b>Total Access Control, Traffic Signals and Crossings</b>	<b>1,150.00</b>
<b>9) Road Markings</b>				
No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
			<b>Total Road Markings</b>	<b>3,974.96</b>
<b>10) Lighting and Electrical</b>				
LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no		0	274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
			<b>Total Lighting and Electrical</b>	<b>0.00</b>
<b>11) Landscaping and Environmental</b>				
Topsoiling / m2	2,000		2.14	4,280.00
Grass Seeding / m2	2,000		0.73	1,460.00
Tree Planting / no		20	143.75	2,875.00
Environmental Screening / m	250		32.20	8,050.00
Environment & Ecology				6,100.00
			<b>Total Landscaping and Environmental</b>	<b>22,765.00</b>
<b>12) Accommodation Works</b>				
Accommodation works / m	0	0.00	0.00	
			<b>Total Accommodation Works</b>	<b>10,000.00</b>
<b>13) Statutory Authorities &amp; Utilities</b>				
Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no		0	1,403.00	0.00
			<b>Total Utilities Diversions</b>	<b>0.00</b>
<b>14) Other Costs</b>				
Ancillary Facilities (see tab)				3,100.00
<b>15) Preliminaries</b>				
Preliminaries			10%	33,600.00
			<b>Total Estimated Cost Rural Construction per Km</b>	<b>€369,246.84</b>
<b>General Comments</b>				
This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway. Excludes Land acquisition costs.				

## Width Calculator

= Dropdown menu  
= User Input  
= Program Output

Cycleway Location Galway to Athlone

Build Type Greenway on Non-Farming Land

Route All

Cycle Manual				DMURS
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity
0	0	0	0	0

=> Required Width 0.00 m

### 1) Site Clearance

General Site Clearance / m2

1,000	5	1.04	5,200.00
Total Site Clearance			5,200.00

### 2) Fencing

Steel Guardrail / m  
Rumble Strip / m  
Residential Fence / m  
Agricultural Fence / m  
Mesh/Concrete Fence / m  
Timber Post & Rail / m  
Gate / no

0	214.69	0.00
0	8.11	0.00
0	37.19	0.00
0	37.82	0.00
0	64.05	0.00
1,500	37.19	55,785.00
5	969.54	4,847.70
Total Fencing		60,632.70

### 3) Drainage and Service Ducts

Carrier Drains / m  
Filter Drains / m  
Gullies / no  
Pipe Crossings / no  
Manholes / no  
Allowance for drainage % of MCC

0	56.73	0.00
0	88.55	0.00
0	738.10	0.00
0	6,173.80	0.00
0	2,300.00	0.00
€342,243.66	0.05	17,112.18
Total Drainage and Service Ducts		17,112.18

### 4) Earthworks

Excavation; Acceptable material Class 5A  
Excavation; Unacceptable material Class U1  
Excavate Hard Material (Rock) / m3  
Excavate Hard Material (Pavement) / m3  
Disposal; Acceptable material Class 5A  
Disposal; Unacceptable material Class U1  
Importing Fill / m3  
Compacting Fill / m3

1,000	5	0.3	5.47	8,205.00
		500	4.40	2,200.00
		50	24.29	1,214.50
			9.90	0.00
1,000	5	0.3	2.21	3,315.00
		500	17.15	8,575.00
2,000	5	0.5	16.93	84,650.00
1,000	5	0.5	2.84	7,100.00
Total Earthworks				115,259.50

### 5) Pavements

Trail Type  
Description

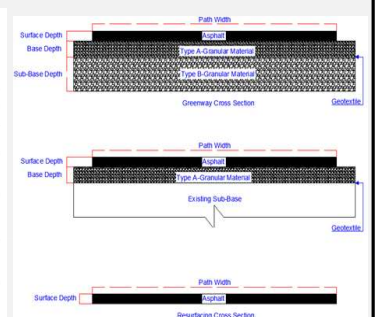
Width  
Length  
Surface Depth  
Base Depth  
CBR  
Sub-Base Depth

Full Construction

3	m
1000	m
0.035	m
0.1	m
2	%
0.15	m
3,000	
3,200	
3,200	
5,000	
0	

Surface course / m2  
Base course / m2  
Sub-Base / m3  
Fill/m2  
Geotextile / m2  
Cold Milling / m2

A Inside Edge	B Cycling Regime	C Outside Edge	D Additional Features
Kerb 0.25m	Single File 0.75m	Shoulder 0.75m	Shoulder 0.25m
Channel Drains 0.25m	Single File - Overlapping 1.25m	Shoulder 0.75m	Cycleway 0.50m
Grid, Trench or Crush Barrier 0.65m	Single File - Overlapping 1.75m	Shoulder 0.75m	Shoulder 0.25m
Paint or Bollards 0.50m	Single File - Overlapping 2.00m	Shoulder 0.75m	Shoulder 0.25m
2 Rows or over 2.50m	Single File - Overlapping 2.50m	Shoulder 0.75m	Shoulder 0.25m



12.25	36,750.00
16.99	54,368.00
4.67	14,944.00
5.86	0.00
2.14	10,700.00
4.88	0.00
Total Pavements	
	116,762.00

### 6) Kerbs, Footways and Paved Areas

Footway / m2  
Kerb / m

0	45.75	0.00
0	30.50	0.00

Total Kerbs, Footways and Paved Areas 0.00

### 7) Traffic Signs

Information Signs / no

1	427.00	427.00
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Traffic Signs / no	1	610.00	610.00	
			<b>Total Signage</b>	<b>1,037.00</b>
<b>8) Access Control, Traffic Signals and Crossings</b>				
Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	2	575.00	1,150.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
			<b>Total Access Control, Traffic Signals and Crossings</b>	<b>1,150.00</b>
<b>9) Road Markings</b>				
No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
			<b>Total Road Markings</b>	<b>3,974.96</b>
<b>10) Lighting and Electrical</b>				
LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no		0	274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
			<b>Total Lighting and Electrical</b>	<b>0.00</b>
<b>11) Landscaping and Environmental</b>				
Topsolling / m2	2,000		2.14	4,280.00
Grass Seeding / m2	2,000		0.73	1,460.00
Tree Planting / no		50	143.75	7,187.50
Environmental Screening / m	500		32.20	16,100.00
Environment & Ecology				6,100.00
			<b>Total Landscaping and Environmental</b>	<b>35,127.50</b>
<b>12) Accommodation Works</b>				
Accommodation works / m	0	0.00	0.00	
			<b>Total Accommodation Works</b>	<b>0.00</b>
<b>13) Statutory Authorities &amp; Utilities</b>				
Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no		0	1,403.00	0.00
			<b>Total Utilities Diversions</b>	<b>0.00</b>
<b>14) Other Costs</b>				
Ancillary Facilities (see tab)				3,100.00
<b>15) Preliminaries</b>				
Preliminaries			10%	36,000.00
			<b>Total Estimated Cost Rural Construction per Km</b>	<b>€395,355.84</b>
<b>General Comments</b>				
This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway. Excludes Land acquisition costs.				

[illegible]

Traffic Signs / no	1	610.00	610.00	
			<b>Total Signage</b>	<b>1,037.00</b>
<b>8) Access Control, Traffic Signals and Crossings</b>				
Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	2	575.00	1,150.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
			<b>Total Access Control, Traffic Signals and Crossings</b>	<b>1,150.00</b>
<b>9) Road Markings</b>				
No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
			<b>Total Road Markings</b>	<b>3,974.96</b>
<b>10) Lighting and Electrical</b>				
Lighting Columns / no	0	0	1,543.30	0.00
Underbridge Lantern / no		0	274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
			<b>Total Public Lighting</b>	<b>0.00</b>
<b>11) Landscaping and Environmental</b>				
Topsoiling / m2	2000		2.14	4,280.00
Grass Seeding / m2	2000		0.73	1,460.00
Tree Planting / no		50	143.75	7,187.50
Environmental Screening / m	500		32.20	16,100.00
Environment & Ecology				6,100.00
			<b>Total Landscaping</b>	<b>35,127.50</b>
<b>12) Accommodation Works</b>				
Accommodation works / m	0	0.00	0.00	
			<b>Total Accommodation Works</b>	<b>0.00</b>
<b>13) Statutory Authorities &amp; Utilities</b>				
Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no		0	1,403.00	0.00
			<b>Total Utilities Diversions</b>	<b>0.00</b>
<b>14) Other Costs</b>				
Ancillary Facilities (see tab)				3,100.00
<b>15) Preliminaries</b>				
Preliminaries			10%	42,500.00
			<b>Total Estimated Cost Urban Construction per Km</b>	<b>€466,602.92</b>
<b>General Comments</b>				
This is a cost estimate per km for Urban section of the Galway to Athlone Cycleway. Excludes Land acquisition costs.				



## Width Calculator

= Dropdown menu  
= User Input  
= Program Output

Cycleway Location Galway to Athlone

Build Type Existing Track

Route All

Cycle Manual				DMURS
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity
0	0	0	0	0

=> Required Width 0.00 m

### 1) Site Clearance

General Site Clearance / m2

1,000	5	1.04	5,200.00
Total Site Clearance			5,200.00

### 2) Fencing

Steel Guardrail / m  
Rumble Strip / m  
Residential Fence / m  
Agricultural Fence / m  
Mesh/Concrete Fence / m  
Timber Post & Rail / m  
Gate / no

0	214.69	0.00
0	8.11	0.00
0	37.19	0.00
0	37.82	0.00
0	64.05	0.00
1,500	37.19	55,785.00
5	969.54	4,847.70
Total Fencing		60,632.70

### 3) Drainage and Service Ducts

Carrier Drains / m  
Filter Drains / m  
Gullies / no  
Pipe Crossings / no  
Manholes / no  
Allowance for drainage % of MCC

0	56.73	0.00
0	88.55	0.00
0	738.10	0.00
0	6,173.80	0.00
0	2,300.00	0.00
€204,363.46	0.05	10,218.17
Total Drainage and Service Ducts		10,218.17

### 4) Earthworks

Excavation; Acceptable material Class 5A  
Excavation; Unacceptable material Class U1  
Excavate Hard Material (Rock) / m3  
Excavate Hard Material (Pavement) / m3  
Disposal; Acceptable material Class 5A  
Disposal; Unacceptable material Class U1  
Importing Fill / m3  
Compacting Fill / m3

		5.47	0.00
	500	4.40	2,200.00
	50	24.29	1,214.50
		9.90	0.00
		2.21	0.00
	500	17.15	8,575.00
200	5	16.93	8,465.00
200	5	2.84	1,420.00
Total Earthworks			21,874.50

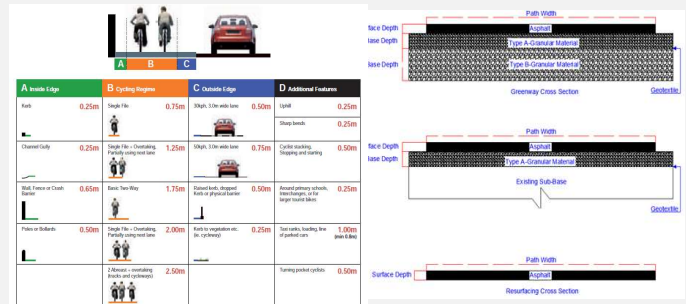
### 5) Pavements

Trail Type  
Description

Width  
Length  
Surface Depth  
Base Depth  
CBR  
Sub-Base Depth

Pavement Intervention

3	m
1000	m
0.035	m
0.1	m
2	%
0	m



Surface course / m2  
Base course / m2  
Sub-Base / m3  
Fill/m2  
Geotextile / m2  
Cold Milling / m2

3,000	12.25	36,750.00
3,200	16.99	54,368.00
640	4.67	2,988.80
0	5.86	0.00
0	2.14	0.00
0	4.88	0.00
Total Pavements		94,106.80

### 6) Kerbs, Footways and Paved Areas

Footway / m2  
Kerb / m

0	45.75	0.00
0	30.50	0.00
Total Kerbs, Footways and Paved Areas		0.00

### 7) Traffic Signs

Information Signs / no  
Traffic Signs / no

1	427.00	427.00
1	610.00	610.00
Total Signage		1,037.00



### 8) Access Control, Traffic Signals and Crossings

Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	2	575.00	1,150.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
Total Access Control, Traffic Signals and Crossings				1,150.00

### 9) Road Markings

No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
Total Road Markings				3,974.96

### 10) Lighting and Electrical

LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no		0	274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
Total Public Lighting				0.00

### 11) Landscaping and Environmental

Topsailing / m2	0		2.14	0.00
Grass Seeding / m2	0		0.73	0.00
Tree Planting / no		50	143.75	7,187.50
Environmental Screening / m	0		32.20	0.00
Environment & Ecology				6,100.00
Total Landscaping				13,287.50

### 12) Accommodation Works

Accommodation works / m	0	0.00	0.00	
Total Accommodation Works				0.00

### 13) Statutory Authorities & Utilities

Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no		0	1,403.00	0.00
Total Utilities Diversions				0.00

### 14) Other Costs

Ancillary Facilities (see tab)				3,100.00
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### 15) Preliminaries

Preliminaries			10%	21,500.00
Total Estimated Cost Rural Construction per Km				€236,081.63

### General Comments

This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway.  
Excludes Land acquisition costs.

[rpsgroup.com](http://rpsgroup.com)

Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	0	575.00	0.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
Total Access Control, Traffic Signals and Crossings				0.00

## 9) Road Markings

No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
Total Road Markings				3,974.96

## 10) Lighting and Electrical

LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no		0	274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
Total Lighting and Electrical				0.00

## 11) Landscaping and Environmental

Topsailing / m2	0		2.14	0.00
Grass Seeding / m2	0		0.73	0.00
Tree Planting / no		0	143.75	0.00
Environmental Screening / m	0		32.20	0.00
Environment & Ecology				6,100.00
Total Landscaping and Environmental				6,100.00

## 12) Accommodation Works

Accommodation works / m	0	0.00	0.00	
Total Accommodation Works				0.00

## 13) Statutory Authorities & Utilities

Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no		0	1,403.00	0.00
Total Utilities Diversions				0.00

## 14) Other Costs

Ancillary Facilities (see tab)				3,100.00
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## 15) Preliminaries

Preliminaries			10%	25,200.00
Total Estimated Cost Rural Construction per Km				€276,347.88

## General Comments

This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway.  
Excludes Land acquisition costs.

## Cycleway Width Calculator

= Dropdown menu  
= #  
= Program Output

Cycleway Location Galway to Athlone

Build Type Old Farm Road

Route All

Cycle Manual				DMURS
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity
0	0	0	0	0

=> Required Width 0.00 m

### 1) Site Clearance

General Site Clearance / m2

1,000	5	1.04	5,200.00
Total Site Clearance			5,200.00

### 2) Fencing

Steel Guardrail / m  
Rumble Strip / m  
Residential Fence / m  
Agricultural Fence / m  
Mesh/Concrete Fence / m  
Timber Post & Rail / m  
Gate / no

0	214.69	0.00
0	8.11	0.00
0	37.19	0.00
1,500	37.82	56,730.00
0	64.05	0.00
0	37.19	0.00
5	969.54	4,847.70
Total Fencing		61,577.70

### 3) Drainage and Service Ducts

Carrier Drains / m  
Filter Drains / m  
Gullies / no  
Pipe Crossings / no  
Manholes / no  
Allowance for drainage % of MCC

0	56.73	0.00
0	88.55	0.00
0	738.10	0.00
0	6,173.80	0.00
0	2,300.00	0.00
€233,830.96	0.05	11,691.55
Total Drainage and Service Ducts		11,691.55

### 4) Earthworks

Excavation; Acceptable material Class 5A  
Excavation; Unacceptable material Class U1  
Excavate Hard Material (Rock) / m3  
Excavate Hard Material (Pavement) / m3  
Disposal; Acceptable material Class 5A  
Disposal; Unacceptable material Class U1  
Importing Fill / m3  
Compacting Fill / m3

		5.47	0.00
	500	4.40	2,200.00
	50	24.29	1,214.50
1,000	5	9.90	6,682.50
		2.21	0.00
	500	17.15	8,575.00
200	5	16.93	8,465.00
200	5	2.84	1,420.00
Total Earthworks			28,557.00

### 5) Pavements

Trail Type

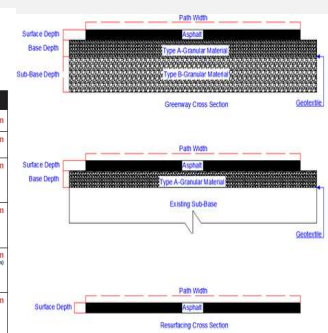
Description

Width  
Length  
Surface Depth  
Base Depth  
CBR  
Sub-Base Depth

Pavement Intervention

3	m
1000	m
0.035	m
0.1	m
2	%
0	m

A Inside Edge	B Cycling Regime	C Outside Edge	D Additional Features
kerb 0.25m	Single File 0.75m	Shoulder, 1.0m wide lane 0.50m	kerb 0.25m
Channel Gully 0.25m	Single File - Channeling, parallel to kerb lane 1.25m	Shoulder, 1.0m wide lane 0.75m	Cycle marking, chequering and dotting 0.50m
Wall, Fence or Crash Barrier 0.65m	Basic Two Way 1.75m	Shoulder, 1.0m wide lane 0.50m	Round primary schools, playgrounds, wider larger roundabouts 0.25m
Fence or Barrier 0.50m	Single File - Channeling, parallel to kerb lane 2.00m	Park to vegetation etc. (as specified) 0.25m	Tree sapling, bedding line of parked cars 1.00m (over 50m)
	2 Lanes - one-way (one-way and cycleway) 2.50m		Running parallel cycleway 0.50m



Surface course / m2  
Base course / m2  
Sub-Base / m3  
Fill/m2  
Geotextile / m2  
Cold Milling / m2

3,000	12.25	36,750.00
3,200	16.99	54,368.00
640	4.67	2,988.80
0	5.86	0.00
0	2.14	0.00
0	4.88	0.00

Total Cycleway Design 94,106.80

### 6) Kerbs, Footways and Paved Areas

Footway / m2  
Kerb / m

0	45.75	0.00
0	30.50	0.00

Total Kerbs, Footways and Paved Areas 0.00

### 7) Traffic Signs

Information Signs / no	1	427.00	427.00	
Traffic Signs / no	1	610.00	610.00	
<b>Total Signage</b>				<b>1,037.00</b>

### 8) Access Control, Traffic Signals and Crossings

Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	2	575.00	1,150.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
<b>Total Access Control, Traffic Signals and Crossings</b>				<b>1,150.00</b>

### 9) Road Markings

No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
<b>Total Road Markings</b>				<b>3,974.96</b>

### 10) Lighting and Electrical

LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no		0	274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
<b>Total Lighting and Electrical</b>				<b>0.00</b>

### 11) Landscaping and Environmental

Topsolling / m2	2,000		2.14	4,280.00
Grass Seeding / m2	2,000		0.73	1,460.00
Tree Planting / no		50	143.75	7,187.50
Environmental Screening / m	500		32.20	16,100.00
Environment & Ecology				6,100.00
<b>Total Landscaping and Environmental</b>				<b>35,127.50</b>

### 12) Accommodation Works

Accommodation works / m	0	0.00	0.00	
<b>Total Accommodation Works</b>				<b>0.00</b>

### 13) Statutory Authorities & Utilities

Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no		0	1,403.00	0.00
<b>Total Utilities Diversions</b>				<b>0.00</b>

### 14) Other Costs

Ancillary Facilities (see tab)				3,100.00
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### 15) Preliminaries

Preliminaries			10%	24,600.00
<b>Total Estimated Cost Rural Construction per Km</b>				<b>€270,122.51</b>

### General Comments

This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway.  
Excludes Land acquisition costs.

## Width Calculator

= Dropdown menu  
= #  
= Program Output

Cycleway Location Galway to Athlone

Build Type Bog Road

Route All

Cycle Manual				DMURS
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity
0	0	0	0	0

=> Required Width 0.00 m

### 1) Site Clearance

General Site Clearance / m2

1,000	5	1.04	5,200.00
Total Site Clearance			5,200.00

### 2) Fencing

Steel Guardrail / m  
Rumble Strip / m  
Residential Fence / m  
Agricultural Fence / m  
Mesh/Concrete Fence / m  
Timber Post & Rail / m  
Gate / no

0	214.69	0.00
0	8.11	0.00
0	37.19	0.00
0	37.82	0.00
0	64.05	0.00
0	37.19	0.00
0	969.54	0.00
Total Fencing		0.00

### 3) Drainage and Service Ducts

Carrier Drains / m  
Filter Drains / m  
Gullies / no  
Pipe Crossings / no  
Manholes / no  
Allowance for drainage % of MCC

0	56.73	0.00
0	88.55	0.00
0	738.10	0.00
0	6,173.80	0.00
0	2,300.00	0.00
€142,075.76	0.05	7,103.79
Total Drainage and Service Ducts		7,103.79

### 4) Earthworks

Excavation; Acceptable material Class 5A  
Excavation; Unacceptable material Class U1  
Excavate Hard Material (Rock) / m3  
Excavate Hard Material (Pavement) / m3  
Disposal; Acceptable material Class 5A  
Disposal; Unacceptable material Class U1  
Importing Fill / m3  
Compacting Fill / m3

		5.47	0.00
	500	4.40	2,200.00
	50	24.29	1,214.50
1,000	5	9.90	6,682.50
		2.21	0.00
	500	17.15	8,575.00
200	5	16.93	8,465.00
200	5	2.84	1,420.00
Total Earthworks			28,557.00

### 5) Pavements

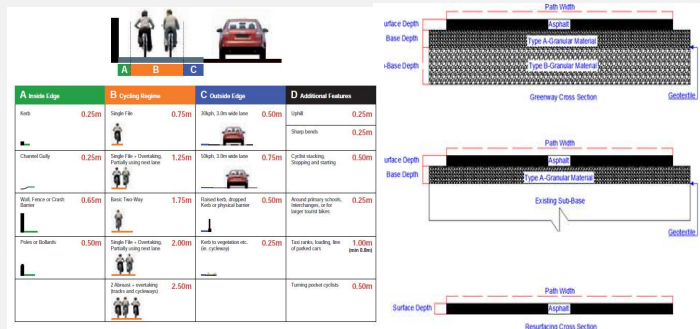
Trail Type

Description

Width  
Length  
Surface Depth  
Base Depth  
CBR  
Sub-Base Depth

Pavement Intervention

3	m
1000	m
0.035	m
0.1	m
2	%
0	m



Surface course / m2  
Base course / m2  
Sub-Base / m3  
Fill/m2  
Geotextile / m2  
Cold Milling / m2

3,000	12.25	36,750.00	
3,200	16.99	54,368.00	
640	4.67	2,988.80	
0	5.86	0.00	
0	2.14	0.00	
0	4.88	0.00	
		Total Cycleway Design	94,106.80

### 6) Kerbs, Footways and Paved Areas

Footway / m2  
Kerb / m

0	45.75	0.00
0	30.50	0.00

			Total Kerbs, Footways and Paved Areas		0.00
7) Traffic Signs					
Information Signs / no	1	427.00	427.00		
Traffic Signs / no	1	610.00	610.00		
			Total Signage		1,037.00
8) Access Control, Traffic Signals and Crossings					
Toucan Crossing / no	0	17,250.00	0.00		
Permanent Zebra Crossing / no	0	575.00	0.00		
Permanent Bollard / no	0	435.54	0.00		
Tactile / m2	0	103.70	0.00		
Raised Table / no	0	172.50	0.00		
			Total Access Control, Traffic Signals and Crossings		0.00
9) Road Markings					
No Paint	0	0	n/a	0.00	
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00	
Carriageway Road Markings / m	0		2.68	0.00	
Cycle Track Yield Marking / no	4		57.34	229.36	
Letters / no	10		63.25	632.50	
Letters (2.8m High) / no	0		110.69	0.00	
Cycle Symbol / no	5		86.62	433.10	
			Total Road Markings		3,974.96
10) Lighting and Electrical					
LED Ground Lights / no	0	0	122.00	0.00	
Underbridge Lantern / no		0	274.50	0.00	
Service Ducting with 100mm duct / m	0		29.52	0.00	
			Total Lighting and Electrical		0.00
11) Landscaping and Environmental					
Topsoiling / m2	0		2.14	0.00	
Grass Seeding / m2	0		0.73	0.00	
Tree Planting / no		0	143.75	0.00	
Environmental Screening / m	0		32.20	0.00	
Environment & Ecology				6,100.00	
			Total Landscaping and Environmental		6,100.00
12) Accommodation Works					
Accommodation works / m	0	0.00	0.00		
			Total Accommodation Works		0.00
13) Statutory Authorities & Utilities					
Ducting / m	0		32.06	0.00	
General Works / m	0		61.00	0.00	
Chambers / no		0	1,403.00	0.00	
			Total Utilities Diversions		0.00
14) Other Costs					
Ancillary Facilities (see tab)					3,100.00
15) Preliminaries					
Preliminaries			10%		15,000.00
			Total Estimated Cost Rural Construction per Km		€164,179.55
General Comments					
This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway. Excludes Land acquisition costs.					

## Width Calculator

Dropdown menu  
#  
Program Output

Cycleway Location Galway to Athlone

Build Type Planned Walk  
Route All

Cycle Manual				DMURS
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity
0	0	0	0	0

=> Required Width 0.00 m

### 1) Site Clearance

General Site Clearance / m2

1,000	5	1.04	5,200.00
Total Site Clearance			5,200.00

### 2) Fencing

Steel Guardrail / m  
Rumble Strip / m  
Residential Fence / m  
Agricultural Fence / m  
Mesh/Concrete Fence / m  
Timber Post & Rail / m  
Gate / no

0	214.69	0.00
0	8.11	0.00
0	37.19	0.00
0	37.82	0.00
0	64.05	0.00
0	37.19	0.00
0	969.54	0.00
Total Fencing		0.00

### 3) Drainage and Service Ducts

Carrier Drains / m  
Filter Drains / m  
Gullies / no  
Pipe Crossings / no  
Manholes / no  
Allowance for drainage % of MCC

0	56.73	0.00
0	88.55	0.00
0	738.10	0.00
0	6,173.80	0.00
0	2,300.00	0.00
€238,135.96	0.05	11,906.80
Total Drainage and Service Ducts		11,906.80

### 4) Earthworks

Excavation; Acceptable material Class 5A  
Excavation; Unacceptable material Class U1  
Excavate Hard Material (Rock) / m3  
Excavate Hard Material (Pavement) / m3  
Disposal; Acceptable material Class 5A  
Disposal; Unacceptable material Class U1  
Importing Fill / m3  
Compacting Fill / m3

1,000	5	0.3	5.47	8,205.00
		500	4.40	2,200.00
		50	24.29	1,214.50
			9.90	0.00
1,000	5	0.3	2.21	3,315.00
		500	17.15	8,575.00
1,000	5	0.5	16.93	42,325.00
1,000	5	0.5	2.84	7,100.00
Total Earthworks				72,934.50

### 5) Pavements

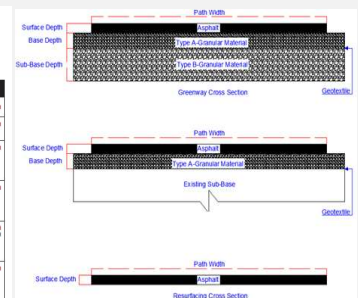
Trail Type  
Description

Width  
Length  
Surface Depth  
Base Depth  
CBR  
Sub-Base Depth

Full Construction

3	m
1000	m
0.035	m
0.1	m
2	%
0.15	m

A Inside Edge	B Cycling Regime	C Outside Edge	D Additional Features
0.25m	0.75m	0.50m	0.25m
0.25m	1.25m	0.75m	0.25m
0.65m	1.75m	0.50m	0.25m
0.50m	2.00m	0.25m	0.50m
2.50m			0.50m



Surface course / m2	3,000	12.25	36,750.00
Base course / m2	3,200	16.99	54,368.00
Sub-Base / m3	3,200	4.67	14,944.00
Fill/m2		5.86	0.00
Geotextile / m2	5,000	2.14	10,700.00
Cold Milling / m2	0	4.88	0.00

Total Cycleway Design 116,762.00

### 6) Kerbs, Footways and Paved Areas

Footway / m2	0	45.75	0.00
Kerb / m	0	30.50	0.00

Total Kerbs, Footways and Paved Areas 0.00

### 7) Traffic Signs



Information Signs / no	1	427.00	427.00	
Traffic Signs / no	1	610.00	610.00	
			<b>Total Signage</b>	<b>1,037.00</b>
<b>8) Access Control, Traffic Signals and Crossings</b>				
Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	0	575.00	0.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
			<b>Total Access Control, Traffic Signals and Crossings</b>	<b>0.00</b>
<b>9) Road Markings</b>				
No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
			<b>Total Road Markings</b>	<b>3,974.96</b>
<b>10) Lighting and Electrical</b>				
LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no		0	274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
			<b>Total Lighting and Electrical</b>	<b>0.00</b>
<b>11) Landscaping and Environmental</b>				
Topsoiling / m2	2,000		2.14	4,280.00
Grass Seeding / m2	2,000		0.73	1,460.00
Tree Planting / no		50	143.75	7,187.50
Environmental Screening / m	500		32.20	16,100.00
Environment & Ecology				6,100.00
			<b>Total Landscaping and Environmental</b>	<b>35,127.50</b>
<b>12) Accommodation Works</b>				
Accommodation works / m	0	0.00	0.00	
			<b>Total Accommodation Works</b>	<b>0.00</b>
<b>13) Statutory Authorities &amp; Utilities</b>				
Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no		0	1,403.00	0.00
			<b>Total Utilities Diversions</b>	<b>0.00</b>
<b>14) Other Costs</b>				
Ancillary Facilities (see tab)				3,100.00
<b>15) Preliminaries</b>				
Preliminaries			10%	25,100.00
			<b>Total Estimated Cost Rural Construction per Km</b>	<b>€275,142.76</b>
<b>General Comments</b>				
This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway. Excludes Land acquisition costs.				

## Width Calculator

= Dropdown menu  
= #  
= Program Output

Cycleway Location Galway to Athlone

Build Type On Road Shared

Route All

Cycle Manual				DMURS
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity
0	0	0	0	0

=> Required Width 0.00 m

### 1) Site Clearance

General Site Clearance / m2

1,000	5	1.04	5,200.00
Total Site Clearance			5,200.00

### 2) Fencing

Steel Guardrail / m  
Rumble Strip / m  
Residential Fence / m  
Agricultural Fence / m  
Mesh/Concrete Fence / m  
Timber Post & Rail / m  
Gate / no

0	214.69	0.00
0	8.11	0.00
0	37.19	0.00
0	37.82	0.00
0	64.05	0.00
0	37.19	0.00
0	969.54	0.00
Total Fencing		0.00

### 3) Drainage and Service Ducts

Carrier Drains / m  
Filter Drains / m  
Gullies / no  
Pipe Crossings / no  
Manholes / no  
Allowance for drainage % of MCC

1000	56.73	56,730.00
1000	88.55	88,550.00
10	738.10	7,381.00
10	6,173.80	61,738.00
10	2,300.00	23,000.00
	0.05	0.00
Total Drainage and Service Ducts		237,399.00

### 4) Earthworks

Excavation; Acceptable material Class 5A  
Excavation; Unacceptable material Class U1  
Excavate Hard Material (Rock) / m3  
Excavate Hard Material (Pavement) / m3  
Disposal; Acceptable material Class 5A  
Disposal; Unacceptable material Class U1  
Importing Fill / m3  
Compacting Fill / m3

		5.47	0.00
	500	4.40	2,200.00
	50	24.29	1,214.50
		9.90	0.00
		2.21	0.00
	500	17.15	8,575.00
200	5	16.93	8,465.00
200	5	2.84	1,420.00
Total Earthworks			21,874.50

### 5) Pavements

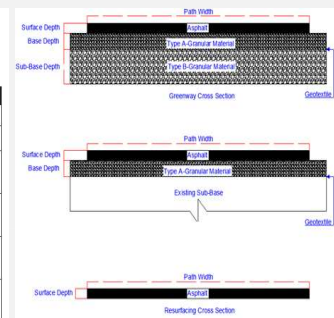
Trail Type  
Description

Width  
Length  
Surface Depth  
Base Depth  
CBR  
Sub-Base Depth

Resurfacing

3	m
1000	m
0.035	m
0	m
2	%
0	m

A Inside Edge	B Cycling Regime	C Outside Edge	D Additional Features
None	Single File	Single File	None
Channel Gully	Single File - Overlapping	Single File - Overlapping	Single File - Overlapping
High Tension or Chain Barrier	Single File - Overlapping	Single File - Overlapping	Single File - Overlapping
None or Barbed	Single File - Overlapping	Single File - Overlapping	Single File - Overlapping
2 Rows - Overlapping	Single File - Overlapping	Single File - Overlapping	Single File - Overlapping



Surface course / m2  
Base course / m2  
Sub-Base / m3  
Fill/m2  
Geotextile / m2  
Cold Milling / m2

3,000	12.25	36,750.00	
0	16.99	0.00	
0	4.67	0.00	
0	5.86	0.00	
0	2.14	0.00	
3000	4.88	14,640.00	
</			

### 6) Kerbs, Footways and Paved Areas

Footway / m2  
Kerb / m

1000	45.75	45,750.00
2000	30.50	61,000.00
Total Kerbs, Footways and Paved Areas		106,750.00

### 7) Traffic Signs

Information Signs / no

1	427.00	427.00
---	--------	--------

Traffic Signs / no	1	610.00	610.00	
			<b>Total Signage</b>	<b>1,037.00</b>
<b>8) Access Control, Traffic Signals and Crossings</b>				
Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	0	575.00	0.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
			<b>Total Access Control, Traffic Signals and Crossings</b>	<b>0.00</b>
<b>9) Road Markings</b>				
No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
			<b>Total Road Markings</b>	<b>3,974.96</b>
<b>10) Lighting and Electrical</b>				
LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no		0	274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
			<b>Total Lighting and Electrical</b>	<b>0.00</b>
<b>11) Landscaping and Environmental</b>				
Topsoiling / m2	0		2.14	0.00
Grass Seeding / m2	0		0.73	0.00
Tree Planting / no		0	143.75	0.00
Environmental Screening / m	0		32.20	0.00
Environment & Ecology			6,100.00	
			<b>Total Landscaping and Environmental</b>	<b>6,100.00</b>
<b>12) Accommodation Works</b>				
Accommodation works / m	0	0.00	0.00	
			<b>Total Accommodation Works</b>	<b>0.00</b>
<b>13) Statutory Authorities &amp; Utilities</b>				
Ducting / m	10		32.06	320.60
General Works / m	1000		61.00	61,000.00
Chambers / no		10	1,403.00	14,030.00
			<b>Total Utilities Diversions</b>	<b>75,350.60</b>
<b>14) Other Costs</b>				
Ancillary Facilities (see tab)				3,100.00
<b>15) Preliminaries</b>				
Preliminaries			10%	51,300.00
			<b>Total Estimated Cost Rural Construction per Km</b>	<b>€563,476.06</b>
<b>General Comments</b>				
This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway. Excludes Land acquisition costs.				

		= Dropdown menu		Cycleway Location Galway to Athlone																
		= #																		
		= Program Output		Build Type Rothar Road																
				Route All																
<b>Width Calculator</b>		<table border="1"> <thead> <tr> <th colspan="3">Cycle Manual</th> <th colspan="2">DMURS</th> </tr> <tr> <th>Inside Edge</th> <th>Cycling Regime</th> <th>Outside Edge</th> <th>Additional Features</th> <th>Pedestrian Activity</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table>		Cycle Manual			DMURS		Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity	0	0	0	0	0		
Cycle Manual			DMURS																	
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity																
0	0	0	0	0																
		=> Required Width		0.00 m																
<b>1) Site Clearance</b>																				
General Site Clearance / m2		<table border="1"> <tbody> <tr> <td>1,000</td> <td>5</td> <td>1.04</td> <td>5,200.00</td> </tr> </tbody> </table>		1,000	5	1.04	5,200.00	Total Site Clearance 5,200.00												
1,000	5	1.04	5,200.00																	
<b>2) Fencing</b>																				
Steel Guardrail / m	0	214.69	0.00																	
Rumble Strip / m	0	8.11	0.00																	
Residential Fence / m	0	37.19	0.00																	
Agricultural Fence / m	500	37.82	18,910.00																	
Mesh/Concrete Fence / m	0	64.05	0.00																	
Timber Post & Rail / m	0	37.19	0.00																	
Gate / no	0	969.54	0.00																	
				Total Fencing 18,910.00																
<b>3) Drainage and Service Ducts</b>																				
Carrier Drains / m	0	56.73	0.00																	
Filter Drains / m	0	88.55	0.00																	
Gullies / no	0	738.10	0.00																	
Pipe Crossings / no	0	6,173.80	0.00																	
Manholes / no	0	2,300.00	0.00																	
Allowance for drainage % of MCC	€111,586.46	0.05	5,579.32																	
				Total Drainage and Service Ducts 5,579.32																
<b>4) Earthworks</b>																				
Excavation; Acceptable material Class 5A			5.47	0.00																
Excavation; Unacceptable material Class U1			4.40	2,200.00																
Excavate Hard Material (Rock) / m3	500		24.29	1,214.50																
Excavate Hard Material (Pavement) / m3	50		9.90	0.00																
Disposal; Acceptable material Class 5A			2.21	0.00																
Disposal; Unacceptable material Class U1	500		17.15	8,575.00																
Importing Fill / m3	200	5	16.93	8,465.00																
Compacting Fill / m3	200	5	2.84	1,420.00																
				Total Earthworks 21,874.50																
<b>5) Pavements</b>																				
Trail Type	Resurfacing																			
Description																				
Width	3 m																			
Length	1000 m																			
Surface Depth	0.035 m																			
Base Depth	0 m																			
CBR	2 %																			
Sub-Base Depth	0 m																			
Surface course / m2	3,000	12.25	36,750.00																	
Base course / m2	0	16.99	0.00																	
Sub-Base / m3	0	4.67	0.00																	
Fill/m2	0	5.86	0.00																	
Geotextile / m2	0	2.14	0.00																	
Cold Milling / m2	3000	4.88	14,640.00																	
				Total Cycleway Design 51,390.00																
<b>6) Kerbs, Footways and Paved Areas</b>																				
Footway / m2	0	45.75	0.00																	
Kerb / m	0	30.50	0.00																	
				Total Kerbs, Footways and Paved Areas 0.00																
<b>7) Traffic Signs</b>																				
Information Signs / no	1	427.00	427.00																	

Traffic Signs / no	1	610.00	610.00	
			<b>Total Signage</b>	<b>1,037.00</b>
<b>8) Access Control, Traffic Signals and Crossings</b>				
Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	0	575.00	0.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
			<b>Total Access Control, Traffic Signals and Crossings</b>	<b>0.00</b>
<b>9) Road Markings</b>				
No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
			<b>Total Road Markings</b>	<b>3,974.96</b>
<b>10) Lighting and Electrical</b>				
LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no		0	274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
			<b>Total Public Lighting</b>	<b>0.00</b>
<b>11) Landscaping and Environmental</b>				
Topsoiling / m2	0		2.14	0.00
Grass Seeding / m2	0		0.73	0.00
Tree Planting / no		0	143.75	0.00
Environmental Screening / m	0		32.20	0.00
Environment & Ecology			6,100.00	
			<b>Total Landscaping</b>	<b>6,100.00</b>
<b>12) Accommodation Works</b>				
Accommodation works / m	0	0.00	0.00	
			<b>Total Accommodation Works</b>	<b>0.00</b>
<b>13) Statutory Authorities &amp; Utilities</b>				
Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no		0	1,403.00	0.00
			<b>Total Utilities Diversions</b>	<b>0.00</b>
<b>14) Other Costs</b>				
Ancillary Facilities (see tab)				3,100.00
<b>15) Preliminaries</b>				
Preliminaries			10%	11,800.00
			<b>Total Estimated Cost Rural Construction per Km</b>	<b>€128,965.78</b>
<b>General Comments</b>				
This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway. Excludes Land acquisition costs.				

## Width Calculator

= Dropdown menu  
= #  
= Program Output

Cycleway Location Galway to Athlone

Build Type Cycle Track

Route All

Cycle Manual				DMURS
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity
0	0	0	0	0

=> Required Width 0.00 m

### 1) Site Clearance

General Site Clearance / m2

1,000	5	1.04	5,200.00
Total Site Clearance			5,200.00

### 2) Fencing

Steel Guardrail / m  
Rumble Strip / m  
Residential Fence / m  
Agricultural Fence / m  
Mesh/Concrete Fence / m  
Timber Post & Rail / m  
Gate / no

0	214.69	0.00	
0	8.11	0.00	
0	37.19	0.00	
1,000	37.82	37,820.00	
0	64.05	0.00	
0	37.19	0.00	
10	969.54	9,695.40	
Total Fencing			47,515.40

### 3) Drainage and Service Ducts

Carrier Drains / m  
Filter Drains / m  
Gullies / no  
Pipe Crossings / no  
Manholes / no  
Allowance for drainage % of MCC

0	56.73	0.00
0	88.55	0.00
0	738.10	0.00
0	6,173.80	0.00
0	2,300.00	0.00
€307,000.11	0.05	15,350.01
Total Drainage and Service Ducts		15,350.01

### 4) Earthworks

Excavation; Acceptable material Class 5A  
Excavation; Unacceptable material Class U1  
Excavate Hard Material (Rock) / m3  
Excavate Hard Material (Pavement) / m3  
Disposal; Acceptable material Class 5A  
Disposal; Unacceptable material Class U1  
Importing Fill / m3  
Compacting Fill / m3

1,000	5	0.3	5.47	8,205.00
		500	4.40	2,200.00
		50	24.29	1,214.50
			9.90	0.00
1,000	5	0.3	2.21	3,315.00
		500	17.15	8,575.00
1,500	5	0.5	16.93	63,487.50
1,500	5	0.5	2.84	10,650.00
Total Earthworks				97,647.00

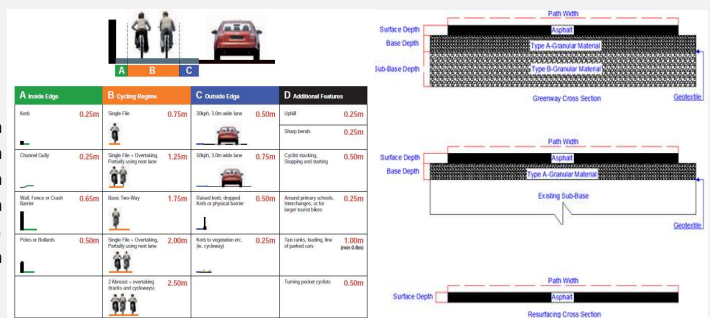
### 5) Pavements

Trail Type  
Description

Width  
Length  
Surface Depth  
Base Depth  
CBR  
Sub-Base Depth

Full Construction

3	m
1000	m
0.035	m
0.1	m
2	%
0.15	m



Surface course / m2  
Base course / m2  
Sub-Base / m3  
Fill/m2  
Geotextile / m2  
Cold Milling / m2

3,000	12.25	36,750.00	
3,200	16.99	54,368.00	
3,200	4.67	14,944.00	
	5.86	0.00	
5,000	2.14	10,700.00	
0	4.88	0.00	
		Total Pavements	116,762.00

### 6) Kerbs, Footways and Paved Areas

Footway / m2  
Kerb / m

0	45.75	0.00
0	30.50	0.00
Total Footways, Kerbs and Drainage		0.00

### 7) Traffic Signs

Information Signs / no	1	427.00	427.00	
Traffic Signs / no	1	610.00	610.00	
			<b>Total Signage</b>	<b>1,037.00</b>
<b>8) Access Control, Traffic Signals and Crossings</b>				
Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	2	575.00	1,150.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
			<b>total Access Control, Traffic Signals and Crossings</b>	<b>1,150.00</b>
<b>9) Road Markings</b>				
No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
			<b>Total Road Markings</b>	<b>3,974.96</b>
<b>10) Lighting and Electrical</b>				
LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no	0		274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
			<b>Total Public Lighting</b>	<b>0.00</b>
<b>11) Landscaping and Environmental</b>				
Topsoiling / m2	1,000		2.14	2,140.00
Grass Seeding / m2	1,000		0.73	730.00
Tree Planting / no		25	143.75	3,593.75
Environmental Screening / m	250		32.20	8,050.00
Environment & Ecology				6,100.00
			<b>Total Landscaping</b>	<b>20,613.75</b>
<b>12) Accommodation Works</b>				
Accommodation works / m	0	0.00	0.00	
			<b>Total Accommodation Works</b>	<b>10,000.00</b>
<b>13) Statutory Authorities &amp; Utilities</b>				
Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no		0	1,403.00	0.00
			<b>Total Utilities Diversions</b>	<b>0.00</b>
<b>14) Other Costs</b>				
Ancillary Facilities (see tab)				3,100.00
<b>15) Preliminaries</b>				
Preliminaries			10%	32,300.00
			<b>Total Estimated Cost Rural Construction per Km</b>	<b>€354,650.12</b>
<b>General Comments</b>				
This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway. Excludes Land acquisition costs.				



## Width Calculator

= Dropdown menu  
= #  
= Program Output

Cycleway Location Galway to Athlone

Build Type Cycle Lane  
Route All

Cycle Manual				DMURS
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity
0	0	0	0	0

=> Required Width 0.00 m

### 1) Site Clearance

General Site Clearance / m2

1,000	5	1.04	5,200.00
Total Site Clearance			5,200.00

### 2) Fencing

Steel Guardrail / m  
Rumble Strip / m  
Residential Fence / m  
Agricultural Fence / m  
Mesh/Concrete Fence / m  
Timber Post & Rail / m  
Gate / no

0	214.69	0.00
0	8.11	0.00
0	37.19	0.00
0	37.82	0.00
0	64.05	0.00
0	37.19	0.00
0	969.54	0.00
Total Fencing		0.00

### 3) Drainage and Service Ducts

Carrier Drains / m  
Filter Drains / m  
Gullies / no  
Pipe Crossings / no  
Manholes / no  
Allowance for drainage % of MCC

1000	56.73	56,730.00
1000	88.55	88,550.00
10	738.10	7,381.00
10	6,173.80	61,738.00
10	2,300.00	23,000.00
€294,011.72	0.05	14,700.59
Total Drainage and Service Ducts		252,099.59

### 4) Earthworks

Excavation; Acceptable material Class 5A  
Excavation; Unacceptable material Class U1  
Excavate Hard Material (Rock) / m3  
Excavate Hard Material (Pavement) / m3  
Disposal; Acceptable material Class 5A  
Disposal; Unacceptable material Class U1  
Importing Fill / m3  
Compacting Fill / m3

		5.47	0.00
		4.40	0.00
		24.29	0.00
		9.90	0.00
		2.21	0.00
		17.15	0.00
		16.93	0.00
		2.84	0.00
Total Earthworks			0.00

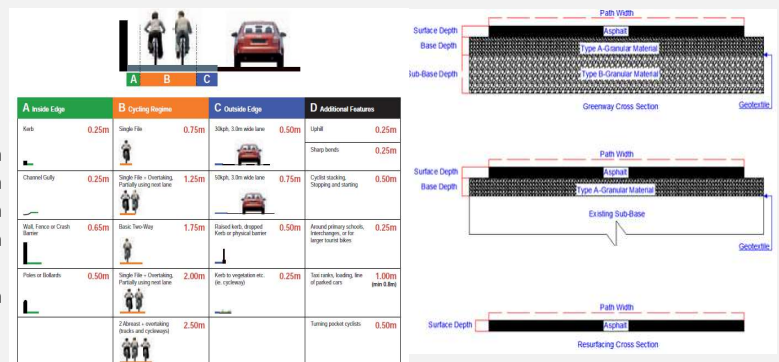
### 5) Pavements

Trail Type  
Description

Width  
Length  
Surface Depth  
Base Depth  
CBR  
Sub-Base Depth

Resurfacing

3	m
1000	m
0.035	m
0	m
2	%
0	m



Surface course / m2	3,000	12.25	36,750.00
Base course / m2	0	16.99	0.00
Sub-Base / m3	0	4.67	0.00
Fill/m2	0	5.86	0.00
Geotextile / m2	0	2.14	0.00
Cold Milling / m2	3000	4.88	14,640.00

				Total Cycleway Design		51,390.00
<b>6) Kerbs, Footways and Paved Areas</b>						
Footway / m2	1000	45.75	45,750.00			
Kerb / m	2000	30.50	61,000.00			
				Total Footways, Kerbs and Drainage		106,750.00
<b>7) Traffic Signs</b>						
Information Signs / no	2	427.00	854.00			
Traffic Signs / no	2	610.00	1,220.00			
				Total Signage		2,074.00
<b>8) Access Control, Traffic Signals and Crossings</b>						
Toucan Crossing / no	2	17,250.00	34,500.00			
Permanent Zebra Crossing / no	2	575.00	1,150.00			
Permanent Bollard / no	4	435.54	1,742.16			
Tactile / m2	0	103.70	0.00			
Raised Table / no	0	172.50	0.00			
				Total Access Control, Traffic Signals and Crossings		37,392.16
<b>9) Road Markings</b>						
No Paint	0	0	n/a	0.00		
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00		
Carriageway Road Markings / m	1000		2.68	2,680.00		
Cycle Track Yield Marking / no	4		57.34	229.36		
Letters / no	10		63.25	632.50		
Letters (2.8m High) / no	0		110.69	0.00		
Cycle Symbol / no	5		86.62	433.10		
				Total Road Markings		6,654.96
<b>10) Lighting and Electrical</b>						
LED Ground Lights / no	0	0	122.00	0.00		
Underbridge Lantern / no		0	274.50	0.00		
Service Ducting with 100mm duct / m	0		29.52	0.00		
				Total Public Lighting		0.00
<b>11) Landscaping and Environmental</b>						
Topsoiling / m2	0		2.14	0.00		
Grass Seeding / m2	0		0.73	0.00		
Tree Planting / no		0	143.75	0.00		
Environmental Screening / m	0		32.20	0.00		
Environment & Ecology				6,100.00		
				Total Landscaping		6,100.00
<b>12) Accommodation Works</b>						
Accommodation works / m	0	0.00	0.00			
				Total Accommodation Works		0.00
<b>13) Statutory Authorities &amp; Utilities</b>						
Ducting / m	10		32.06	320.60		
General Works / m	1000		61.00	61,000.00		
Chambers / no		10	1,403.00	14,030.00		
				Total Utilities Diversions		75,350.60
<b>14) Other Costs</b>						
Ancillary Facilities (see tab)					3,100.00	
<b>15) Preliminaries</b>						
Preliminaries				10%	54,700.00	
				Total Estimated Cost Rural Construction per Km		
				€600,811.31		
<b>General Comments</b>						
This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway. Excludes Land acquisition costs.						

## Width Calculator

= Dropdown menu  
= #  
= Program Output

Cycleway Location Galway to Athlone

Build Type Boardwalk

Route All

Cycle Manual				DMURS
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity
0	0	0	0	0

=> Required Width 0.00 m

### 1) Site Clearance

General Site Clearance / m2

1,000	5	1.04	5,200.00
Total Site Clearance			5,200.00

### 2) Fencing

Steel Guardrail / m  
Rumble Strip / m  
Residential Fence / m  
Agricultural Fence / m  
Mesh/Concrete Fence / m  
Timber Post & Rail / m  
Gate / no

0	214.69	0.00
0	8.11	0.00
0	37.19	0.00
0	37.82	0.00
0	64.05	0.00
0	37.19	0.00
0	969.54	0.00
Total Fencing		0.00

### 3) Drainage and Service Ducts

Carrier Drains / m  
Filter Drains / m  
Gullies / no  
Pipe Crossings / no  
Manholes / no  
Allowance for drainage % of MCC

0	56.73	0.00	
0	88.55	0.00	
0	738.10	0.00	
0	6,173.80	0.00	
0	2,300.00	0.00	
€6,505,437.00	0.05	325,271.85	
Total Drainage and Service Ducts			325,271.85

### 4) Earthworks

Excavation; Acceptable material Class 5A  
Excavation; Unacceptable material Class U1  
Excavate Hard Material (Rock) / m3  
Excavate Hard Material (Pavement) / m3  
Disposal; Acceptable material Class 5A  
Disposal; Unacceptable material Class U1  
Importing Fill / m3  
Compacting Fill / m3

		5.47	0.00
		4.40	0.00
		24.29	0.00
		9.90	0.00
		2.21	0.00
		17.15	0.00
		16.93	0.00
		2.84	0.00
Total Earthworks			0.00

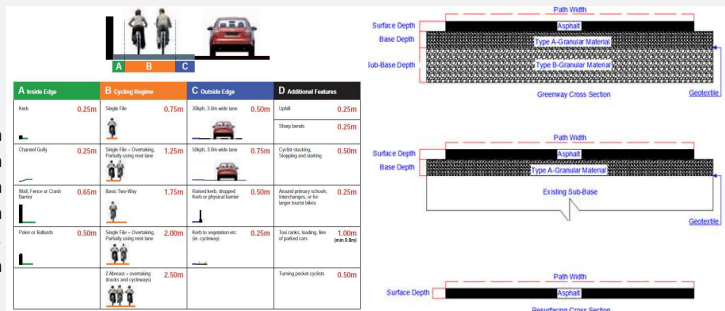
### 5) Pavements

Trail Type  
Description

Width  
Length  
Surface Depth  
Base Depth  
CBR  
Sub-Base Depth

Boardwalk

3	m
1000	m
0.035	m
0	m
2	%
0	m



KM rate for Boardwalk Construction  
Base course / m2  
Sub-Base / m3  
Fill/m2  
Geotextile / m2  
Cold Milling / m2

1,000	6,490.00	6,490,000.00
0	16.99	0.00
0	4.67	0.00
0	5.86	0.00
0	2.14	0.00
0	4.88	0.00

Total Pavements 6,490,000.00

### 6) Kerbs, Footways and Paved Areas

Footway / m2  
Kerb / m

0	45.75	0.00
0	30.50	0.00

Total Footways, Kerbs and Drainage 0.00

### 7) Traffic Signs

Information Signs / no

1	427.00	427.00
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Traffic Signs / no	1	610.00	610.00	
			<b>Total Signage</b>	<b>1,037.00</b>
<b>8) Access Control, Traffic Signals and Crossings</b>				
Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	0	575.00	0.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
			<b>Total Access Control, Traffic Signals and Crossings</b>	<b>0.00</b>
<b>9) Road Markings</b>				
No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	0		2.68	0.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	0		57.34	0.00
Letters / no	0		63.25	0.00
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	0		86.62	0.00
			<b>Total Road Markings</b>	<b>0.00</b>
<b>10) Lighting and Electrical</b>				
LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no		0	274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
			<b>Total Lighting and Electrical</b>	<b>0.00</b>
<b>11) Landscaping and Environmental</b>				
Topsailing / m2	0		2.14	0.00
Grass Seeding / m2	0		0.73	0.00
Tree Planting / no		0	143.75	0.00
Environmental Screening / m	0		32.20	0.00
Environment & Ecology			6,100.00	
			<b>Total Landscaping and Environmental</b>	<b>6,100.00</b>
<b>12) Accommodation Works</b>				
Accommodation works / m	0	0.00	0.00	
			<b>Total Accommodation Works</b>	<b>0.00</b>
<b>13) Statutory Authorities &amp; Utilities</b>				
Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no		0	1,403.00	0.00
			<b>Total Utilities Diversions</b>	<b>0.00</b>
<b>14) Other Costs</b>				
Ancillary Facilities (see tab)				3,100.00
<b>15) Preliminaries</b>				
Preliminaries			10%	683,100.00
			<b>Total Estimated Cost Rural Construction per Km</b>	<b>€7,513,808.85</b>
<b>General Comments</b>				
This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway. Excludes Land acquisition costs.				

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Traffic Signs / no	1	610.00	610.00	
			<b>Total Signage</b>	<b>1,037.00</b>
<b>8) Access Control, Traffic Signals and Crossings</b>				
Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	0	575.00	0.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
			<b>Total Access Control, Traffic Signals and Crossings</b>	<b>0.00</b>
<b>9) Road Markings</b>				
No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
			<b>Total Road Markings</b>	<b>3,974.96</b>
<b>10) Lighting and Electrical</b>				
LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no		0	274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
			<b>Total Lighting and Electrical</b>	<b>0.00</b>
<b>11) Landscaping and Environmental</b>				
Topsoiling / m2	0		2.14	0.00
Grass Seeding / m2	0		0.73	0.00
Tree Planting / no		0	143.75	0.00
Environmental Screening / m	0		32.20	0.00
Environment & Ecology			6,100.00	
			<b>Total Landscaping</b>	<b>6,100.00</b>
<b>12) Accommodation Works</b>				
Accommodation works / m	0	0.00	0.00	
			<b>Total Accommodation Works</b>	<b>0.00</b>
<b>13) Statutory Authorities &amp; Utilities</b>				
Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no		0	1,403.00	0.00
			<b>Total Utilities Diversions</b>	<b>0.00</b>
<b>14) Other Costs</b>				
Ancillary Facilities (see tab)				3,100.00
<b>15) Preliminaries</b>				
Preliminaries			10%	17,700.00
			<b>Total Estimated Cost Rural Construction per Km</b>	<b>€194,086.83</b>
<b>General Comments</b>				
This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway. Excludes Land acquisition costs.				

## Width Calculator

= Dropdown menu  
= #  
= Program Output

Cycleway Location Galway to Athlone

Build Type Existing Trail

Route All

Cycle Manual				DMURS
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity
0	0	0	0	0

=> Required Width 0.00 m

### 1) Site Clearance

General Site Clearance / m2

1,000	5	1.04	5,200.00
Total Site Clearance			5,200.00

### 2) Fencing

Steel Guardrail / m  
Rumble Strip / m  
Residential Fence / m  
Agricultural Fence / m  
Mesh/Concrete Fence / m  
Timber Post & Rail / m  
Gate / no

0	214.69	0.00
0	8.11	0.00
0	37.19	0.00
0	37.82	0.00
0	64.05	0.00
0	37.19	0.00
0	969.54	0.00
Total Fencing		0.00

### 3) Drainage and Service Ducts

Carrier Drains / m  
Filter Drains / m  
Gullies / no  
Pipe Crossings / no  
Manholes / no  
Allowance for drainage % of MCC

0	56.73	0.00
0	88.55	0.00
0	738.10	0.00
0	6,173.80	0.00
0	2,300.00	0.00
€135,393.26	0.05	6,769.66
Total Drainage and Service Ducts		6,769.66

### 4) Earthworks

Excavation; Acceptable material Class 5A  
Excavation; Unacceptable material Class U1  
Excavate Hard Material (Rock) / m3  
Excavate Hard Material (Pavement) / m3  
Disposal; Acceptable material Class 5A  
Disposal; Unacceptable material Class U1  
Importing Fill / m3  
Compacting Fill / m3

		5.47	0.00
	500	4.40	2,200.00
	50	24.29	1,214.50
		9.90	0.00
		2.21	0.00
	500	17.15	8,575.00
200	5	16.93	8,465.00
200	5	2.84	1,420.00
Total Earthworks			21,874.50

### 5) Pavements

Trail Type

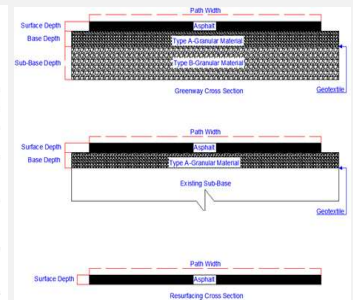
Description

Width  
Length  
Surface Depth  
Base Depth  
CBR  
Sub-Base Depth

Pavement Intervention

3	m
1000	m
0.035	m
0.1	m
2	%
0	m

A Inside Edge	B Cycling Regime	C Outside Edge	D Additional Features
kerb 0.25m	Single file 0.75m	Shoulder 0.50m	Lip 0.25m
Channel Gully 0.25m	Single file - Overlapping, Partially compacted lane 1.25m	Shoulder 0.75m	Shoulder 0.25m
Wall, fence or curb 0.65m	Basic Two Way 1.75m	Shoulder 0.50m	Shoulder 0.25m
Pavement 0.50m	Single file - Overlapping, Partially compacted lane 2.00m	Shoulder 0.25m	Shoulder 0.25m
	2.50m	Shoulder 0.25m	Shoulder 0.25m



Surface course / m2  
Base course / m2  
Sub-Base / m3  
Fill/m2  
Geotextile / m2  
Cold Milling / m2

3,000	12.25	36,750.00
3,200	16.99	54,368.00
640	4.67	2,988.80
0	5.86	0.00
0	2.14	0.00
0	4.88	0.00
Total Pavements		94,106.80

### 6) Kerbs, Footways and Paved Areas

Footway / m2

0	45.75	0.00
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Kerb / m	0	30.50	0.00	
			<b>Total Kerbs, Footways and Paved Areas</b>	<b>0.00</b>
<b>7) Traffic Signs</b>				
Information Signs / no	1	427.00	427.00	
Traffic Signs / no	1	610.00	610.00	
			<b>Total Signage</b>	<b>1,037.00</b>
<b>8) Access Control, Traffic Signals and Crossings</b>				
Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	0	575.00	0.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
			<b>Total Access Control, Traffic Signals and Crossings</b>	<b>0.00</b>
<b>9) Road Markings</b>				
No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
			<b>Total Road Markings</b>	<b>3,974.96</b>
<b>10) Lighting and Electrical</b>				
LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no	0	0	274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
			<b>Total Lighting and Electrical</b>	<b>0.00</b>
<b>11) Landscaping and Environmental</b>				
Topsailing / m2	0		2.14	0.00
Grass Seeding / m2	0		0.73	0.00
Tree Planting / no	0	0	143.75	0.00
Environmental Screening / m	0		32.20	0.00
Environment & Ecology				6,100.00
			<b>Total Landscaping and Environmental</b>	<b>6,100.00</b>
<b>12) Accommodation Works</b>				
Accommodation works / m	0	0.00	0.00	
			<b>Total Accommodation Works</b>	<b>0.00</b>
<b>13) Statutory Authorities &amp; Utilities</b>				
Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no		0	1,403.00	0.00
			<b>Total Utilities Diversions</b>	<b>0.00</b>
<b>14) Other Costs</b>				
Ancillary Facilities (see tab)				3,100.00
<b>15) Preliminaries</b>				
Preliminaries			10%	14,300.00
			<b>Total Estimated Cost Rural Construction per Km</b>	<b>€156,462.92</b>
<b>General Comments</b>				
This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway. Excludes Land acquisition costs.				

## Width Calculator

= Dropdown menu  
= #  
= Program Output

Cycleway Location Galway to Athlone

Build Type Existing Road  
Route All

Cycle Manual				DMURS
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity
0	0	0	0	0

=> Required Width 0.00 m

### 1) Site Clearance

General Site Clearance / m2

1,000	10	1.04	10,400.00
Total Site Clearance			10,400.00

### 2) Fencing

Steel Guardrail / m  
Rumble Strip / m  
Residential Fence / m  
Agricultural Fence / m  
Mesh/Concrete Fence / m  
Timber Post & Rail / m  
Gate / no

0	214.69	0.00	
0	8.11	0.00	
0	37.19	0.00	
0	37.82	0.00	
0	64.05	0.00	
0	37.19	0.00	
0	969.54	0.00	
		Total Fencing	0.00

### 3) Drainage and Service Ducts

Carrier Drains / m  
Filter Drains / m  
Gullies / no  
Pipe Crossings / no  
Manholes / no  
Allowance for drainage % of MCC

0	56.73	0.00
0	88.55	0.00
0	738.10	0.00
0	6,173.80	0.00
0	2,300.00	0.00
€259,022.46	0.05	12,951.12
Total Drainage and Service Ducts		12,951.12

### 4) Earthworks

Excavation; Acceptable material Class 5A  
Excavation; Unacceptable material Class U1  
Excavate Hard Material (Rock) / m3  
Excavate Hard Material (Pavement) / m3  
Disposal; Acceptable material Class 5A  
Disposal; Unacceptable material Class U1  
Importing Fill / m3  
Compacting Fill / m3

1,000	6	0.3	5.47	9,846.00
		500	4.40	2,200.00
		50	24.29	1,214.50
			9.90	0.00
1,000	6	0.3	2.21	3,978.00
		500	17.15	8,575.00
1,500	6	0.5	16.93	76,185.00
1,500	6	0.5	2.84	12,780.00
Total Earthworks				114,778.50

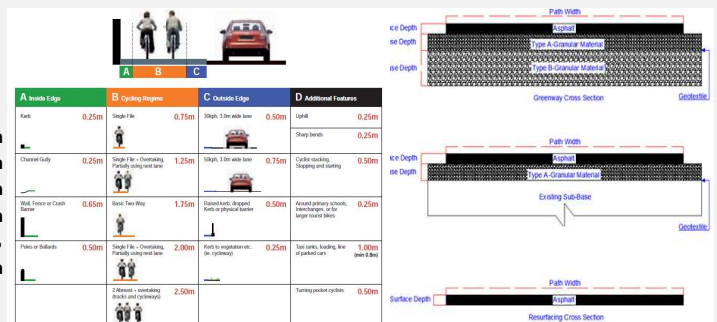
### 5) Pavements

Trail Type  
Description

Width  
Length  
Surface Depth  
Base Depth  
CBR  
Sub-Base Depth

Full Construction

3	m
1000	m
0.035	m
0.1	m
2	%
0.15	m



Surface course / m2  
Base course / m2  
Sub-Base / m3  
Fill/m2  
Geotextile / m2  
Cold Milling / m2

3,000	12.25	36,750.00
3,200	16.99	54,368.00
3,200	4.67	14,944.00
	9.76	0.00
5,000	2.14	10,700.00
0	4.88	0.00

Total Cycleway Design 116,762.00

### 6) Kerbs, Footways and Paved Areas

Footway / m2  
Kerb / m

0	45.75	0.00
0	30.50	0.00

Total Kerbs, Footways and Paved Areas 0.00

### 7) Traffic Signs

Information Signs / no	1	427.00	427.00	
Traffic Signs / no	1	610.00	610.00	
			<b>Total Signage</b>	<b>1,037.00</b>
<b>8) Access Control, Traffic Signals and Crossings</b>				
Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	0	575.00	0.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
			<b>total Access Control, Traffic Signals and Crossings</b>	<b>0.00</b>
<b>9) Road Markings</b>				
No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
			<b>Total Road Markings</b>	<b>3,974.96</b>
<b>10) Lighting and Electrical</b>				
LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no		0	274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
			<b>Total Lighting and Electrical</b>	<b>0.00</b>
<b>11) Landscaping and Environmental</b>				
Topsoiling / m2	1,000		2.14	2,140.00
Grass Seeding / m2	1,000		0.73	730.00
Tree Planting / no		0	143.75	0.00
Environmental Screening / m	0		32.20	0.00
Environment & Ecology			6,100.00	
			<b>Total Landscaping and Environmental</b>	<b>8,970.00</b>
<b>12) Accommodation Works</b>				
Accommodation works / m	0	0.00	0.00	
			<b>Total Accommodation Works</b>	<b>0.00</b>
<b>13) Statutory Authorities &amp; Utilities</b>				
Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no		0	1,403.00	0.00
			<b>Total Utilities Diversions</b>	<b>0.00</b>
<b>14) Other Costs</b>				
Ancillary Facilities (see tab)				3,100.00
<b>15) Preliminaries</b>				
Preliminaries			10%	27,200.00
			<b>Total Estimated Cost Rural Construction per Km</b>	<b>€299,173.58</b>
<b>General Comments</b>				
This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway. Excludes Land acquisition costs.				

## Width Calculator

= Dropdown menu  
#  
Program Output

Cycleway Location Galway to Athlone

Build Type Forest Fireline

Route All

Cycle Manual				DMURS
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity
0	0	0	0	0

=> Required Width 0.00 m

### 1) Site Clearance

General Site Clearance / m2

1,000	5	1.04	5,200.00
Total Site Clearance			5,200.00

### 2) Fencing

Steel Guardrail / m  
Rumble Strip / m  
Residential Fence / m  
Agricultural Fence / m  
Mesh/Concrete Fence / m  
Timber Post & Rail / m  
Gate / no

0	214.69	0.00
0	8.11	0.00
0	37.19	0.00
0	37.82	0.00
0	64.05	0.00
0	37.19	0.00
0	969.54	0.00
Total Fencing		0.00

### 3) Drainage and Service Ducts

Carrier Drains / m  
Filter Drains / m  
Gullies / no  
Pipe Crossings / no  
Manholes / no  
Allowance for drainage % of MCC

0	56.73	0.00
0	88.55	0.00
0	738.10	0.00
0	6,173.80	0.00
0	2,300.00	0.00
€224,167.46	0.05	11,208.37
Total Drainage and Service Ducts		11,208.37

### 4) Earthworks

Excavation; Acceptable material Class 5A  
Excavation; Unacceptable material Class U1  
Excavate Hard Material (Rock) / m3  
Excavate Hard Material (Pavement) / m3  
Disposal; Acceptable material Class 5A  
Disposal; Unacceptable material Class U1  
Importing Fill / m3  
Compacting Fill / m3

1,000	6	0.3	5.47	9,846.00
		500	4.40	2,200.00
		50	24.29	1,214.50
			9.90	0.00
1,000	6	0.3	2.21	3,978.00
		500	17.15	8,575.00
1,000	6	0.5	16.93	50,790.00
1,000	6	0.5	2.84	8,520.00
Total Earthworks				85,123.50

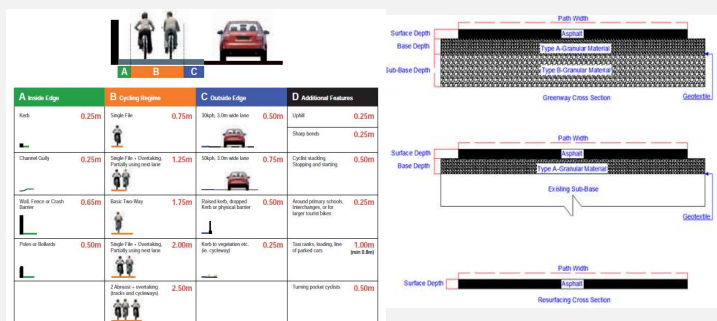
### 5) Pavements

Trail Type  
Description

Width  
Length  
Surface Depth  
Base Depth  
CBR  
Sub-Base Depth

Full Construction

3	m
1000	m
0.035	m
0.1	m
2	%
0.15	m



Surface course / m2  
Base course / m2  
Sub-Base / m3  
Fill/m2  
Geotextile / m2  
Cold Milling / m2

3,000	12.25	36,750.00	
3,200	16.99	54,368.00	
3,200	4.67	14,944.00	
	9.76	0.00	
5,000	2.14	10,700.00	
0	4.88	0.00	
Total Cycleway Design			116,762.00

### 6) Kerbs, Footways and Paved Areas

Footway / m2  
Kerb / m

0	45.75	0.00
0	30.50	0.00
Total Footways, Kerbs and Drainage		0.00

### 7) Traffic Signs

Information Signs / no	1	427.00	427.00	
Traffic Signs / no	1	610.00	610.00	
			<b>Total Signage</b>	<b>1,037.00</b>
<b>8) Access Control, Traffic Signals and Crossings</b>				
Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	0	575.00	0.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
			<b>Total Access Control, Traffic Signals and Crossings</b>	<b>0.00</b>
<b>9) Road Markings</b>				
No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
			<b>Total Road Markings</b>	<b>3,974.96</b>
<b>10) Lighting and Electrical</b>				
LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no	0	0	274.50	0.00
Service Ducting with 100mm duct / m	0		29.52	0.00
			<b>Total Lighting and Electrical</b>	<b>0.00</b>
<b>11) Landscaping and Environmental</b>				
Topsoiling / m2	1,000		2.14	2,140.00
Grass Seeding / m2	1,000		0.73	730.00
Tree Planting / no	0	0	143.75	0.00
Environmental Screening / m	0		32.20	0.00
Environment & Ecology				6,100.00
			<b>Total Landscaping and Environmental</b>	<b>8,970.00</b>
<b>12) Accommodation Works</b>				
Accommodation works / m	0	0.00	0.00	
			<b>Total Accommodation Works</b>	<b>0.00</b>
<b>13) Statutory Authorities &amp; Utilities</b>				
Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no	0	0	1,403.00	0.00
			<b>Total Utilities Diversions</b>	<b>0.00</b>
<b>14) Other Costs</b>				
Ancillary Facilities (see tab)				3,100.00
<b>15) Preliminaries</b>				
Preliminaries			10%	23,600.00
			<b>Total Estimated Cost Rural Construction per Km</b>	<b>€258,975.83</b>
<b>General Comments</b>				
This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway. Excludes Land acquisition costs.				

## Width Calculator

= Dropdown menu  
= #  
= Program Output

Cycleway Location Galway to Athlone

Build Type Motorway Access Track  
Route All

Cycle Manual				DMURS
Inside Edge	Cycling Regime	Outside Edge	Additional Features	Pedestrian Activity
0	0	0	0	0

=> Required Width 0.00 m

### 1) Site Clearance

General Site Clearance / m2

1,000	5	1.04	5,200.00
Total Site Clearance			5,200.00

### 2) Fencing

Steel Guardrail / m  
Rumble Strip / m  
Residential Fence / m  
Agricultural Fence / m  
Mesh/Concrete Fence / m  
Timber Post & Rail / m  
Gate / no

0	214.69	0.00
0	8.11	0.00
0	37.19	0.00
1,500	37.82	56,730.00
0	64.05	0.00
0	37.19	0.00
5	969.54	4,847.70
Total Fencing		61,577.70

### 3) Drainage and Service Ducts

Carrier Drains / m  
Filter Drains / m  
Gullies / no  
Pipe Crossings / no  
Manholes / no  
Allowance for drainage % of MCC

0	56.73	0.00
0	88.55	0.00
0	738.10	0.00
0	6,173.80	0.00
0	2,300.00	0.00
€154,254.16	0.05	7,712.71
Total Drainage and Service Ducts		7,712.71

### 4) Earthworks

Excavation; Acceptable material Class 5A  
Excavation; Unacceptable material Class U1  
Excavate Hard Material (Rock) / m3  
Excavate Hard Material (Pavement) / m3  
Disposal; Acceptable material Class 5A  
Disposal; Unacceptable material Class U1  
Importing Fill / m3  
Compacting Fill / m3

		5.47	0.00
	500	4.40	2,200.00
	50	24.29	1,214.50
		9.90	0.00
		2.21	0.00
	500	17.15	8,575.00
200	5	16.93	8,465.00
200	5	2.84	1,420.00
Total Earthworks			21,874.50

### 5) Pavements

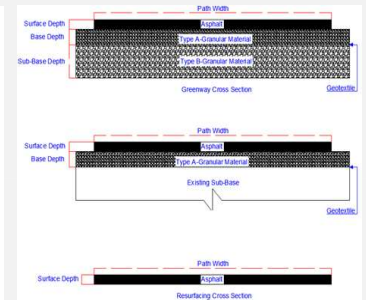
Trail Type  
Description

Width  
Length  
Surface Depth  
Base Depth  
CBR  
Sub-Base Depth

Resurfacing

3	m
1000	m
0.035	m
0	m
2	%
0	m

A Inside Edge	B Cycling Regime	C Outside Edge	D Additional Features
0.25m	0.75m	0.50m	0.25m
0.25m	1.25m	0.75m	0.25m
0.65m	1.75m	0.50m	0.25m
0.50m	2.00m	0.25m	0.25m
2.50m			0.50m



Surface course / m2  
Base course / m2  
Sub-Base / m3  
Fill/m2  
Geotextile / m2  
Cold Milling / m2

3,000	12.25	36,750.00
0	16.99	0.00
0	4.67	0.00
0	5.86	0.00
0	2.14	0.00
3000	4.88	14,640.00

Total Pavements 51,390.00

### 6) Kerbs, Footways and Paved Areas

Footway / m2  
Kerb / m

0	45.75	0.00
0	30.50	0.00

Total Kerbs, Footways and Paved Areas 0.00

## 7) Traffic Signs

Information Signs / no	1	427.00	427.00	
Traffic Signs / no	1	610.00	610.00	
Total Signage				1,037.00

## 8) Access Control, Traffic Signals and Crossings

Toucan Crossing / no	0	17,250.00	0.00	
Permanent Zebra Crossing / no	0	575.00	0.00	
Permanent Bollard / no	0	435.54	0.00	
Tactile / m2	0	103.70	0.00	
Raised Table / no	0	172.50	0.00	
Total Access Control, Traffic Signals and Crossings				0.00

## 9) Road Markings

No Paint	0	0	n/a	0.00
Cont. White 100mm Cycle Markings / m	1000		2.68	2,680.00
Carriageway Road Markings / m	0		2.68	0.00
Cycle Track Yield Marking / no	4		57.34	229.36
Letters / no	10		63.25	632.50
Letters (2.8m High) / no	0		110.69	0.00
Cycle Symbol / no	5		86.62	433.10
Total Road Markings				3,974.96

## 10) Lighting and Electrical

LED Ground Lights / no	0	0	122.00	0.00
Underbridge Lantern / no		0	274.50	0.00
Service Ducting with 100mm duct/ m	0		29.52	0.00
Total Lighting and Electrical				0.00

## 11) Landscaping and Environmental

Topsoiling / m2	0		2.14	0.00
Grass Seeding / m2	0		0.73	0.00
Tree Planting / no		0	143.75	0.00
Environmental Screening / m	0		32.20	0.00
Environment & Ecology			6,100.00	
Total Landscaping and Environmental				6,100.00

## 12) Accommodation Works

Accommodation works / m	0	0.00	0.00	
Total Accommodation Works				0.00

## 13) Statutory Authorities & Utilities

Ducting / m	0		32.06	0.00
General Works / m	0		61.00	0.00
Chambers / no		0	1,403.00	0.00
Total Utilities Diversions				0.00

## 14) Other Costs

Ancillary Facilities (see tab)				3,100.00
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## 15) Preliminaries

Preliminaries			10%	16,200.00
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<b>Total Estimated Cost Rural Construction per Km</b>	<b>€178,166.87</b>
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## General Comments

This is a cost estimate per km for Rural section of the Galway to Athlone Cycleway.  
Excludes Land acquisition costs.



### Rest / Shelter / Information Areas

Shelters =	€5,000	/ unit
Picnic Tables =	€300	/ unit
Bins =	€350	/ unit
Seating =	€400	/ unit
Info Boards =	€600	/ unit



### Bike Facilities

Secure Bike Racks =	€1,000	/ unit
E Charging Points =	€500	/ unit
Bike Repair Stations =	€400	/ unit



### Public Toilets & Car Parking Facilities

Toilet Blocks =	€2,000	/ unit
Car Park (10 bays) =	€20,000	



### Rough Summary Costs:

Rest / Shelter / Information Areas =	€176,500
Bike Facilities =	€53,000
Public Toilets & Car Parking Facilities =	€140,000
<b>Average Ancillary Cost / km =</b>	<b>€3,079.17</b>

# Baseline Rates

1	EC Material	Upper	Lower	Cost	Including Inflation	Unit	Rate Obtained From
	Surface Course			€10.65	€12.25	per m <sup>2</sup>	Moycullen 35mm thick
	Base Type A			€14.77	€16.99	per m <sup>2</sup>	Moycullen 100mm thick
	Sub Base Type B 150mm deep			€4.06	€4.67	per m <sup>2</sup>	Moycullen 150mm thick
	300mm Class 1 Fill			€4.80	€5.86	per m <sup>2</sup>	TII Schedule of Rates 2019 (Ref: 600.57)
	500mm Class 1 Fill			€8.00	€9.76	per m <sup>2</sup>	TII Schedule of Rates 2019 (Ref: 600.57)
	Geotextile	€1.50	€2.00	€1.75	€2.14	per m <sup>2</sup>	TII Schedule of Rates 2019 (Ref: 600.19)
	Geotextile BnM			€10.00	€11.50	per m <sup>2</sup>	Moycullen
	Pedestrian Guardrail			€186.69	€214.69	per m	Moycullen SCD00401
	Rumble Strip	€5.50	€7.80	€6.65	€8.11	per m	TII Schedule of Rates 2019 (Ref: 1200.76)
	Information Sign			€350.00	€427.00	per sign	TII Schedule of Rates 2019 (Ref: 1200.16)
	Traffic Sign			€500.00	€610.00	per sign	TII Schedule of Rates 2019 (Ref: 1200.18)
	Residential Timber Fence			€32.34	€37.19	per m	Moycullen SCD00301
	Agricultural Fence	€24.00	€38.00	€31.00	€37.82	per m	TII Schedule of Rates 2019 (Ref: 300.2)
	Timber Post & Rail			€32.34	€37.19	per m	Moycullen SCD00301
	2.4m Palisade Security Fence	€85.00	€140.00	€85.00	€103.70	per m <sup>2</sup>	TII Schedule of Rates 2019 (Ref: 300.24)
	Gate			€843.08	€969.54	per m	Moycullen SCD00309
	Permanent Bollards	€272.00	€442.00	€357.00	€435.54	per m	TII Schedule of Rates 2019 (Ref 1200.107)
	Mesh/Concrete Fence	€40.00	€65.00	€52.50	€64.05	per m	TII Schedule of Rates 2019 (Ref 300.8)
	Kinvara Boardwalk			€5,643.48	€6,490.00	per m	Total project cost €6,631,090 for 1175m
	Cont. White 100mm wide Cycle Markings	€1.30	€3.10	€2.20	€2.68	per m	TII Schedule of Rates 2019 (Ref 1200.59)
	Carriageway Road Markings	€1.30	€3.10	€2.20	€2.68	per m <sup>1</sup>	TII Schedule of Rates 2019 (Ref 1200.59)
	Yield Triangle (1875mm in Size)	€31.00	€47.00	€47.00	€57.34	per marking	TII Schedule of Rates 2019 (Ref 1200.78)
	Letters (1.6m High)			€55.00	€63.25	per marking	Moycullen M114
	Letters (2.8m High)			€96.25	€110.69	per marking	Moycullen M114 pro rata
	Cycle Symbol (0.75m High)	€56.00	€86.00	€71.00	€86.62	per marking	TII Schedule of Rates 2019 (Ref 1200.91)
	Kerb	€20.00	€30.00	€25.00	€30.50	per m	TII Schedule of Rates 2019 (Ref 1100.3)
	Carrier Drains	€39.00	€67.00	€46.50	€56.73	per m	TII Schedule of Rates 2019 (Ref 500.3)
	Gullies (inc connections)	€450.00	€760.00	€605.00	€738.10	per gully	TII Schedule of Rates 2019 (Ref 500.91+500.37*5)
	Manholes			€2,000.00	€2,300.00	per manhole	Moycullen
	Filter Drains			€77.00	€88.55	per m	Moycullen 225mm Type K 2m deep + Contiguous
	Pipe Crossings			€5,368.52	€6,173.80	per Pipe	Moycullen 600mm culvert type Z 1.575m deep 10m long + 2 No. headwalls
	Allowance for drainage % of MCC				5%	% of MCC	Kinvara is 10% - allow 5% for significantly less drainage
	Tactile	€55.00	€85.00	€85.00	€103.70	per m <sup>2</sup>	TII Schedule of Rates 2019 (Ref 1100.23)
	Raised Table			€150.00	€172.50	per m <sup>2</sup>	Clontarf Amiens Street
	Toucan Crossing			€15,000.00	€17,250.00	per toucan	Kells Road
	Permanent Zebra Crossing			€500.00	€575.00	per toucan	Monastery Road
	Footway (Inc Sub-base)	€30.00	€45.00	€37.50	€45.75	per m <sup>2</sup>	TII Schedule of Rates 2019 (Ref 1100.16)
	8m Road Lighting Column & 150w Lantern	€990.00	€1,540.00	€1,265.00	€1,543.30	per column	TII Schedule of Rates 2019 (Ref 1300.4)
	Cable Trenching (2m) with 100mm duct			€25.67	€29.52	per m	Moycullen 1 No. 100mm
	150w Underbridge Lantern	€150.00	€300.00	€225.00	€274.50	per lantern	
	Feeder Pillar	€550.00	€1,650.00	€1,100.00	€1,342.00	per unit	TII Schedule of Rates 2019 (Ref 1400.20)
	Earth Electrodes	€45.00	€70.00	€57.50	€70.15	per unit	TII Schedule of Rates 2019 (Ref 1400.23)
	Chamber	€800.00	€1,500.00	€1,150.00	€1,403.00	per unit	TII Schedule of Rates 2019 (Ref 500.105)
	220mm ESB and Eircom Service Ducts			€27.88	€32.06	per m	Moycullen 2 No. 100mm
	Service Chambers	€800.00	€1,500.00	€1,150.00	€1,403.00	per unit	TII Schedule of Rates 2019 (Ref 500.105)
	General Utility Works			€50.00	€61.00	per m	
2	Clearance	Upper	Lower	Cost	Including Inflation	Unit	Rate Obtained From
	General Site Clearance			€0.90	€1.04	per m <sup>2</sup>	Moycullen
	Cold Milling	€2.00	€6.00	€4.00	€4.88	per m <sup>2</sup>	TII Schedule of Rates 2019 (Ref 700.20)
	Excavation; Acceptable material Class 5A			€4.76	€5.47		Moycullen
	Excavation; Unacceptable material Class U1			€3.83	€4.40		Moycullen
	Excavation of Hard Material (Rock)			€21.12	€24.29	per m <sup>3</sup>	Moycullen
	Excavation of Hard Material (Pavement)			€8.61	€9.90	per m <sup>3</sup>	Moycullen
	Disposal; Acceptable material Class 5A			€1.92	€2.21		Moycullen
	Disposal; Unacceptable material Class U1			€14.91	€17.15		Moycullen
	Excavation of Cuttings (Topsoil)			€4.76	€5.47	per m <sup>3</sup>	Moycullen
3	Landscaping	Upper	Lower	Cost	Including Inflation	Unit	Rate Obtained From
	Topsoiling	€0.50	€3.00	€1.75	€2.14	per m <sup>2</sup>	TII Schedule of Rates 2019 (600.26)
	Imported Topsoil	€12.50	€25.00	€18.75	€22.88		TII Schedule of Rates 2019 (600.13)
	Imported Acceptable Fill			€14.72	€16.93		Moycullen
	Compaction of acceptable fill			€2.47	€2.84		Moycullen
	Imported Capping	€15.00	€28.00	€21.50	€26.23		TII Schedule of Rates 2019 (600.15)
	Grass Seeding	€0.30	€0.90	€0.60	€0.73	per m <sup>2</sup>	TII Schedule of Rates 2019 (600.29)
	Tree Planting			€125.00	€143.75	per tree	Monastery Road
	Environmental Screening	€23.00	€28.00	€28.00	€32.20	per m	Monastery Road
4	Structures			Cost	Including Inflation	Unit	Rate Obtained From
	Culverts			€5,000.00	€5,750.00	per no.	Moycullen 1 No. 10m
	Headwalls	€750.00	€3,000.00	€1,875.00	€2,287.50	per no.	TII Schedule of Rates 2019 (500.137)
5	General			Cost	Including Inflation	Unit	Rate Obtained From
	Preliminaries				10.0%	% of Total	TII Schedule of Rates 2019 (Ref 100.1..17.5%) - reduced for cycleway project
	Environmental & Ecology			€5,000.00	€6,100.00	per km	

## Cost Comparison for each build type

INSERT SCHEME TITLE:		Galway to Athlone Castle Cycleway	
INSERT DATE OF ESTIMATE:		01 September 2021	
INSERT CURRENT PHASE:		Phase 2	
INSERT BASE DATE FOR RATES:		01 September 2021	
INSERT NAME OF CONSULTANT:		RPS	
Main Construction Costs		Rate €	Comment
a	New build greenway on Farmland	€ 369,247	Base for comparison new build on farmland with agricultural fencing.
b	New build greenway on Non-Farm Land	€ 395,356	Decreased cost due to less expensive Post and Rail fencing.
c	New build greenway parallel to rail	€ 466,603	Increased costs due to Pallisade fencing on Railway side.
d	Existing track	€ 236,082	Pavement intervention only and reduced costs for landscaping /earthworks.
e	BnM railway	€ 276,348	More expensive geotextile, reduced costs for earthworks and no fencing required.
f	Old farm road	€ 270,123	Pavement intervention only, reduced costs for landscaping /earthworks, agricultural fencing required.
g	Bog road	€ 164,180	Pavement intervention and no fencing required.
h	Planned walk	€ 275,143	New build no fencing required.
j	On road shared surface	€ 563,476	Urban area, resurfacing only increased costs for kerbs, drainage and utilities.
k	Rothar road	€ 128,966	Resurfacing only, fill and fencing may be required
m	Cycle track next to rural road	€ 354,650	New build next to existing road fencing needed on one side.
n	Urban cycle lane	€ 600,811	Same as shared surface with increased costs for road marking and crossings
o	Raised boardwalk	€ 7,513,809	Cost of boardwalk construction
p	Flood embankment path	€ 194,087	Same as BnM Rail with reduced cost for geotextile
q	Existing recreational trail	€ 156,463	Existing trails resurfacing, surface markings and signs only
r	Forest road	€ 299,174	New build with no fencing, extra cost for increased fill
s	Forest fireline	€ 258,976	same as forest road
t	Motorway access track	€ 178,167	same as rothar road
Lowest Cost Per Km		€ 128,966	
Highest Cost Per Km		€ 7,513,809	
Average Cost Per Km		€ 705,648	