NORTH AYRSHIRE COUNCIL

21 March 2023

Cabinet

Title:	**Roads, Structures and Street Lighting Maintenance Programme 2023/24**
Purpose:	To seek Cabinet approval of the proposed Roads, Structures and Street Lighting Maintenance Programme for 2023/24.
Recommendation:	That the Cabinet (a) notes the approach taken to determining the asset maintenance programme for roads, structures and street lighting; (b) approves the maintenance programme for 2023/24, as shown at Appendix 1a and 1b; (c) approves the additional works up to the value of £1m, identified for 2023/24 at Appendix 1c should the Council realise an underspend of £1m or more for 2022/23 and (d) notes that the programme will be issued to the Locality Planning Partnerships for information.

1. Executive Summary

1.1 North Ayrshire Council has a statutory obligation under the Roads (Scotland) Act 1984 to manage and maintain its public road network. The adopted road network within North Ayrshire has a total length of 1044km. The core roads assets are currently estimated at a value of approximately £1.7billion.

1.2 The Council's Roads Service has adopted an asset management approach to road maintenance to allocate available road maintenance funds to locations that will offer the most beneficial return on the investment.

1.3 The Roads Asset Management Plan (RAMP) and the roads assets maintenance strategy follows the recommendations contained within the 'Well Maintained Highway's Code of Practice, ensuring that the Council's statutory obligations as delegated Roads Authority are met.

1.4 In complying with the Code of Practice, an effective regime of inspection, assessment and condition recording is well established which assists in not only providing a road network for the future but one that promotes social inclusion and contributes to economic growth within the area. This approach also ensures the Council is providing value for money on any investment attributed to road maintenance.

1.5 The proposed Roads, Structures and Street Lighting Maintenance Programme 2023/24 is attached in Appendix 1a and 1b. The Programme is based on approved Revenue and Capital budgets, including an additional £0.5m which will be funded from approved capital infrastructure investment. At the Council's budget setting me on 1

March 2023 an extra (up to) £1m was agreed for roads infrastructure subject to the Council realising an underspend for Financial Year 2022/23. Details of proposed additional works are attached at Appendix 1c.

2. Background

2.1 North Ayrshire Council is responsible for the maintenance of the adopted local road network including lighting and structures assets as well as its other non-adopted road assets. However, the Council has no responsibility for the maintenance of the Trunk Road Network which falls to Transport Scotland and their management contractor, Amey. The Trunk Road network includes the A78, the A737 from Kilwinning to the Renfrewshire Boundary and A738 from the Pennyburn Roundabout to the A737 Dalry Road Kilwinning.

2.2 North Ayrshire Council's roads are the Council's largest community asset and play a vital role in supporting the local and wider economy by facilitating the movement of people, goods and services and connecting people with economic and social opportunities.

2.3 The proposed Roads, Structures and Street Lighting Maintenance Programme for 2023/24 has been developed in accordance with the strategy contained within the Roads Asset Management Plan (RAMP) to deliver the maximum return on investment and ensures the provision of an effective road network throughout North Ayrshire.

2.4 Road Condition is measured nationally through the Scottish Road Maintenance Condition Survey (SRMCS). The measure in place, the Road Condition Index (RCI), records the percentage of the Council's roads which should be considered for maintenance. North Ayrshire's RCI has been improving in recent years and is currently 33.9%.

2.5 The estimated carriageway maintenance backlog figure for North Ayrshire is currently £34.8m. The 'steady state' figure for maintaining our roads at present condition is £4.3m per year. The capital budget supported by revenue funding is £4.45m for 2023/24. This includes £100,000 carried forward from 2022/23 for planned works. An additional £0.5m has been identified from the 'core infrastructure, property and vehicles renewal investment' capital budget allocation, taking the total investment in the road network to £4.95m for 2023/24. Additionally, at the Council's budget setting meeting on 1 March 2023 an extra (up to) £1m was allocated to roads revenue investment for 2023/24 should the year end outturn for 2022/23 deliver an underspend of £1m or more. This level of investment outpaces the 'steady state' figure and should therefore contribute to an improvement in the road network condition over time.

2.6 Road lighting condition is measured through programmes of structural and electrical assessment and testing and is complemented through the ongoing review of age profile and material type life expectancy. The results are categorised and recorded in the lighting asset management database to inform a prioritised list of replacement schemes. Lighting is allocated an annual Capital budget of £1m to address a 'steady state' position of maintaining our lighting at present annualised depreciation rate.

2.7 Bridge and retaining wall condition is also evaluated through a robust inspection programme. General inspections are undertaken every 2 years, while an in-depth

'principal inspection' is carried out every 6 years and the results of the inspections are used to inform work programmes. The results of the inspections are input into a Structures database which is then used to calculate an average Bridge Structure Condition Index (BSCIav) based on the total number of assets. The BSCIav is currently 85.79 (2021/22 figure) which is within the 'good' classification of 85 to 94. This figure is a slight fall on the previous year. The allocated capital budget of £935,000 is supported by a small amount of revenue funding giving a total of £1.07m.

2.8 Details of how condition assessments are carried out and how roads, structures and lighting locations are prioritised for inclusion in our maintenance programme are provided in Appendix 2. The assessment matrix used for scoring and ranking structures for inclusion in the Structures Maintenance Programme is attached in Appendix 3.

2.9 The road maintenance programme in 2022/23 mitigated high inflationary cost increases through two factors - by forecasting higher projected costs and building this into the programme early in the financial year and, secondly, the Ayrshire Minor Works Framework contract price being held for the 6 months to September 2022. Works completed by the operational team and any works tendered since then were subject to inflationary rises in material and plant costs as well as contractor price increases. The 2023/24 road maintenance programme has been prepared based on a 20% contingency increase in 2022/23 costs to allow for further inflationary rises in operational costs and to ensure that programmed works can be completed.

3. Proposals

3.1 That Cabinet notes the approach taken to determining the asset maintenance programme for roads, structures and street lighting.

3.2 That Cabinet approves the maintenance programme for 2023/24, as shown at Appendix 1a and 1b.

3.3 That Cabinet approves Appendix 1c which will deliver an additional up to £1m of road infrastructure works for 2023/24 should the year end outturn for 2022/23 realise an underspend of £1m.

3.4 That Cabinet notes that the programme will be issued to Locality Planning Partnerships for information.

4. Implications/Socio-economic Duty

Financial

4.1 The Roads, Structures and Street Lighting Maintenance Programme will be delivered from allocated Capital and Revenue budgets. Estimated costs are detailed within the appendices.

Human Resources

4.2 Delivery of the programme will be met from existing staff resources.

Legal

4.3 North Ayrshire Council has a statutory obligation to manage and maintain its public road network under the terms of the Roads (Scotland) Act 1984.

Equality/Socio-economic

4.4 There are no equality implications. The maintenance programme contributes to the Council's socio-economic duty, as well-maintained roads are essential for the social and economic prosperity of North Ayrshire.

Environmental and Sustainability

4.5 Effective programming and management of these assets will assist in reduced carbon associated with mobilisation of unplanned reactive maintenance resources and extends the use of assets in a cost effective and sustainable manner.

Key Priorities

4.6 Effective management of these assets contributes to a number of Council plan objectives ensuring that North Ayrshire is well-connected with effective infrastructure and that we maximise resources and provide value for money.

Community Wealth Building

4.7 The maintenance programme contributes to Community Wealth Building through community benefits clauses associated with maintenance contracts. It is also the case that a proportion of the maintenance programme is also delivered in-house by the Roads Operations Team and Building Services.

5. Consultation

5.1 The maintenance programme will be shared with each Locality Partnership.

RUSSELL McCUTCHEON
Executive Director (Place)

For further information please contact **Thomas Reaney, Head of Neighbourhood Services,** on **Tel: 01294 324570**.

Background Papers
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Mainland Roads Programme 2023/24

Carriageway Resurfacing			
Street	*Town*	*Location*	*Estimate Cost*
Stanley Road / Galloway Place	Saltcoats	Carried forward from 22/23	£100,000
B706 Dunlop Road	Barrmill	Roundabout and exit towards A736 include circle at McHardy Crescent	£120,000
The Strand / Townhead	Beith	Eglinton Street to Kirk Road	£65,000
B780	Kilbirnie	Loadingbank towards Roundabout	£140,000
Stuart Street	Millport	Cardiff Street to Clifton Street	£180,000
Parkhouse Road	Ardrossan	McDowall Avenue to Garage	£110,000
Sorbie Road	Saltcoats	Approach to Traffic Lights	£55,000
Shore Road	Stevenston	near the level crossing	£55,000
Ardeer Road	Stevenston	From Railway Bridge to Roundabout	£140,000
Old High Road	Stevenston	Mayville Street to A738	£105,000
Mayville Street / Glebe Street	Stevenston	High Road to Boglemart Street	£80,000
Middleton Road	Irvine	Part Length	£150,000
East Road / High Street	Irvine	mini roundabout to Kirk Vennel	£60,000
Braehead	Dalry	Braehead to speed limit signs	£160,000
Netherlee Crescent	Dalry	Including Ryeside and Templand Road	£80,000
Caledonia Road / Argyle Road	Saltcoats	Sorbie Road to Jacks Road	£210,000
Main Street	West Kilbride	West Kilbride Parish church to Headrigg Gardens	£75,000
Merlewood Road	West Kilbride	Full Length	£15,000
Castlepark Gardens	Fairlie	Full Length	£60,000
Alexander Avenue	Largs	Holehouse Road to Burnside Road	£95,000
Brisbane Road	Largs	Boyd Street to Seamore Street	£25,000
Waterside Street	Largs	Including junctions at Silverdale	£80,000
Stakehill	Largs	Part Length	£65,000
Anderson Terrace	Ardrossan	Part Length	£60,000
Chapelhill Mount	Ardrossan	Part Length	£100,000
Carson Drive	Irvine	Ayr Road to just passed Gray Crescent	£60,000
Castlepark circle	Irvine	Leven Place to existing joint	£130,000
Harbour Road	Irvine	Victoria Roundabout to Portland Roundabout	£140,000
Station Road	Springside	Part Length	£95,000
Barra Crescent / Place / Lane	Irvine	3 cul de sacs and part of main entrance road	£70,000
Gigha Crescent	Irvine	From Roundabout to end	£50,000
Greenside/Mid-rig/Chapelgill	Irvine	Part Length	£40,000
B778	Kilwinning	South of Mossculloch to Goldcraigs Depot	£150,000
Beechwood	Kilwinning	Part Length	£50,000
Corsehill Road	Kilwinning	Part Length	£110,000

Mainland Roads Programme 2023/24

Kennedy Road	Saltcoats	Full Length, Including West Doura Junction	£114,000
Station Road	Skelmorlie	Part Length	£30,000
Seton Terrace	Skelmorlie	Skelmorlie Castle Road for approx 50m	£20,000
Hillview	Skelmorlie	Part Length	£25,000
Martin Square	Saltcoats	Part Length	£60,000
Sannox Drive	Saltcoats	Even side	£60,000
Greenhead Avenue	Stevenston	Full Length	£75,000
Ardchoille Drive	Stevenston	Full Length	£20,000
			£3,684,000

Carriageway Surface Dressing

Street	*Town*	*Location*	*Estimate Cost*
B781	West Kilbride	Blackshaw Farm to Gill Farm	£16,000
			£16,000

Mainland Roads Programme 2023/24

Carriageway Screeding			
Street	*Town*	*Location*	*Estimate Cost*
Glebe Street	Saltcoats	Springvale Street to Glebe Place	£14,000
Lawson Drive / Ashgrove Street	Ardrossan	Lawson Drive past shops to Ashgrove	£24,000
Whitlees court	Ardrossan	Part Length	£18,000
Pollock Crescent	Kilwinning	Part Length	£22,000
C68	Beith	Junction with U42 to A736	£45,000
U42 Lugtonridge Road	Beith	South Nettlehirst and Lugtonridge	£28,000
Dipple Road	Kilbirnie	Part Length	£67,000
C99	Dalry	Stoopshill to the joint before the B707	£106,000
C20	Kilwinning	South Lodge cottage to Torranyard	£71,000
U8 Boag Road	Beith	Part Length	£46,000
Brownmuir farm to boundary	Beith	Full Length	£17,000
Woodside	Beith	Woodside to boundary	£22,000
Bogside	Beith	Part Length	£50,000
Kilruskin Road	West Kilbride	Part Length	£20,000
			£550,000

Mainland Roads Programme 2023/24

Footway Resurfacing			
Street	*Town*	*Location*	*Estimate Cost*
Thorntree Avenue	Beith	Part Length (Full Length Odd Nos, 38-56 Even Nos)	£26,000
St Margarets Avenue	Dalry	Kittyshaw to Houston Crescent (incl 2 cul-de-sacs)	£50,000
North Street / Braehead	Dalry	Regal Court to Braehead Place	£43,000
St Andrews Road	Ardrossan	Number 1 to Number 35	£28,000
Kilruskin Drive	West Kilbride	Full Length	£29,000
Provosts Loan	Cumbrae	Full Length	£17,000
Braeside Ave and Meadowbank Rd	Largs	Part Lengths	£36,000
Main Street	Dreghorn	One side only from No.108 to change in surface	£10,000
Stronsay court	Irvine	Full Length	£5,000
Clements Place	Stevenston	Full Length	£9,000
Oakland Drive	Stevenston	Full Length	£5,500
West Doura Way / Court	Kilwinning	Whitehirst Park PS to shop, including car park and shop footpaths and the slabbed area outside shop	£17,500
Murray Avenue	Saltcoats	Mid Dykes Road to road end (Both Sides)	£15,000
Longfield Avenue	Saltcoats	Part Length	£14,000
Wellpark Road	Saltcoats	Number 23 to Number 31 (One side only)	£4,000
Kenilworth Drive	Saltcoats	Footpath from Kenilworth Drive to Munro Place	£6,000
Miller Road	Saltcoats	Full Length	£15,000
			£330,000

Mainland Roads Programme 2023/24

Lighting Deteriorated Infrastructure Replacements		
Area	*Town*	*Estimate Cost*
Longhill Seton Terrace Sandy Brae Road	Skelmorlie	£90,000
Corsehill Drive	West Kilbride	£55,000
Lindsay Crescent Auchenmaid Drive Linn Avenue The Roundel Castlehill Drive	Largs	£80,000
Tarryholme Drive Warrix Avenue Kirk Vennel Parterre Benbain Place Golf Place Ravenscroft Braeside Whyte Avenue	Irvine	£205,000
Schoolwell Street Grange Road Kerelaw Road Sinclair Street Loccard Road Limekiln Road	Stevenston	£127,000
St Inans Drive Rowan Avenue Bigholm Road Backburn	Beith	£70,000
Milton Road Ladyland Drive	Kilbirnie	£87,000
Findlay Avenue West End Sharon Street	Dalry	£59,000
		£773,000

Lighting Deteriorated Column Replacements			
Area	*Town*	*Location*	*Estimate Cost*
Various Unplanned Locations			**£169,000**

Lighting Deteriorated Column Inspections			
Area	*Town*	*Location*	*Estimate Cost*
Various Locations			**£58,000**

Mainland Roads Programme 2023/24

Structures Projects			
Structure	*Road*	*Project*	*Estimate Cost*
Kersland Culvert	B714	UV liner culvert repairs	£80,000
Seven Acres Mill Bridge	U54	Bridge Replacement	£450,000
Roughwood Bridge	U12	General Repairs	£30,000
Threadmill Bridge	C99	Replacement / Strengthening	£160,000
Carsehead Bridge	B714	General Repairs	£35,000
			£755,000

Carriageway Resurfacing:	*£3,684,000*
Carriageway Surface Dressing:	*£16,000*
Carriageway Screeding:	*£550,000*
Footway Resurfacing:	*£330,000*
Lighting Infrastructure Replacements:	*£773,000*
Deteriorated Column Replacements:	*£169,000*
Deteriorated Column Inspections:	*£58,000*
Structures Projects:	*£755,000*
Overall Mainland Total:	***£6,335,000***

Arran Roads Programme 2023/24

Carriageway Resurfacing

Street	*Town*	*Location*	*Estimate Cost*
Benlister Road	Lamlash	8 Park Terrace to road end	£40,000
Golf Course Road	Blackwaterfoot	Queenscliff to Car Park	£30,000
B880 String Road	Brodick	Patching Various Locations	£200,000
A841		3 sections between Brodick & Sannox	£160,000
A841	Lochranza	Patching Works - Ballarie Bridge towards Sannox	£70,000
			£500,000

Carriageway Surface Dressing

Street	*Town*	*Location*	*Estimate Cost*
A841	Brodick	Junction B880 to slipway past Shore Lodge	£60,000
A841	Lamlash	Strathwillan Road Junction Brodick to Glenisle Hotel	£140,000
			£200,000

Structures Projects

Structure	*Road*	*Project*	*Estimate Cost*
Culvert West of Ballymeanoch	C147	Retaining wall strengthening	£70,000
Dougarie Bridge	C147	Temporary Strengthening/ Scour repairs	£50,000
Catacol Bridge	C147	Temporary Strengthening/ Scour repairs	£60,000
			£180,000

Carriageway Resurfacing:	£500,000
Carriageway Surface Dressing:	£200,000
Structures Projects:	*£180,000*
Overall Arran Total:	***£880,000***

Mainland Roads Programme 2023/24

Additional Budget £1m			
CARRIAGEWAYS			
Street	*Town*	*Location*	*Estimate Cost*
Dickson Drive	Irvine	From Redburn CC to jct Dick Terrace	£50,000
B7081 Annick Road	Irvine	Riverside Lodge to Newmoor	£57,000
Stobbs Crescent	Kilwinning	Part Length	£40,000
Pennyburn Road	Kilwinning	A738 jct to Cranberry Road jct	£66,000
B7049 Eglinton Road	Beith	From ped crossing at Main St to speed table	£97,000
A760	Kilbirnie	From Connelston to Auchencloigh Farm Rd	£225,000
C18 Ardrossan High Road	West Kilbride	Part Lengths	£36,000
Mackerston Place	Largs	Full Length incl Stanlane jct	£67,000
Brisbane Glen Road	Largs	From Douglas Street to cemetery	£114,000
B896	Cumbrae	Patching and Screeding	£80,000
Various		PATCHING CONTRACT	£80,000
FOOTWAYS			
Street	*Town*	*Location*	*Estimate Cost*
Sillars Meadow	Irvine	Full Length	£64,000
Townhead Street	Stevenston	No.103 to Post Office	£20,000
Lochlie Place	Stevenston	Full Length	£4,000
			£1,000,000

Condition Assessment and Prioritisation Process

1.1 The Audit Scotland Follow-up report, Maintaining Scotlands Roads published in August 2016 stated that Councils should use their RAMPs to establish long term investment plans for maintaining the road network taking into acount whole-life costing and treatment options.

1.2 As part of the Roads Asset Management process, annual condition assessments are carried out on the public road network as part of the inspection regime. All locations are assessed using a risk based approach.

1.3 Condition assessments are carried out simultaneously with the Safety Inspections in accordance with the pre-determined timescales contained within our Safety Inspection Manual. All faults noted during these inspections are logged within our electronic Routine Maintenance System (RMS).

1.4 For carriageways, to take account of whole-life and different treatment options the carriageway maintenance programme is developed using road asset management principles. Lifecycle planning is at the core of this approach and takes into account, hierarchies, condition and local community priorities. Preventative treatments are used to prolong the life of carriageway surfaces before their condition deteriorates and requires extensive resurfacing.

1.5 The main factors considered are:-

- Road Condition – based on detailed visual inspection and the Scottish Road Maintenance Conditions Survey (SRMCS).

- Road Hierarchy – this takes account of the strategic importance of the road and is determined from our Local Transport Plan.

- Assistance to Council and Community Priorities – this takes account of other priorities such as economic development, access to shops, amenity housing or schools.

1.6 Carriageways and footways are both condition assessed and scored in accordance with the assessment table below. These condition scores, RCI data, road hierarchy information and priorities information as above are utilised through our electronic WDM Scheme Manager to target locations for improvement works in order to optimise investment.

Assessment Table

	CONDITION			
Extent	**1 (Acceptable)**	**2 (Safe but poor appreance)**	**3 (Minor deterioration)**	**4 (Major deterioration)**
1 - Up to 25%		**5**	**9**	**13**
2 – 25% to 50%		**6**	**10**	**14**
3 – 50% to 75%		**7**	**11**	**15**
4 – 75% to 100%	**4**	**8**	**12**	**16**

Each location is also reviewed at least once a year depending on its location within the Roads Hierarchy as part of the routine inspection process.

1.7 There are various types of surfacing materials and processes available depending on the particular road type, location and level of existing deterioration. Options available for treatment include preventative measures such as surface dressing and resurfacing options such as screeding, resurfacing (inlay and overlay), depending on the severity of deterioration full reconstruction may be the most effective option.

1.8 The level of investment associated with the varying treatment types identified in the table below was established using the Society of Chief Officers of Transportation in Scotland's cost projection model, developed as part of the Roads Asset Management Planning project. The model assists with identifying the effect of various treatments on the on-going condition of the carriageway. This enables a more accurate design life for the treatments currently available to be developed and ensuring value for money on their use. Costs for works can vary from the figures below depending on restricted working arrangements, traffic management required and the extent of preparatory works necessary to enable resurfacing. There is also an additional uplift for island working of up to 50% for works on Arran and Cumbrae.

Treatment Option Table

Treatment Option	Cost per Sqm 2021/22	Cost per Sqm 2022/23	% Change	Extension to life
Surface Dressing	£3.30	£3.60	+9%	Up to 10 years
Screeding	£9.00	£11.50	+28%	5 – 10 years
Inlay HRA	£18.00	£22.00	+22%	Up to 20 years
Overlay <100mm	£20.70	£26.50	+28%	Up to 20 years
Inlay 100mm	£27.26	£32.30	+18%	Up to 20 years
Reconstruction 300mm	£112.40	£140.00	+25%	Up to 20 years

1.9 Street Lighting column replacement is prioritised through non-destructive strength testing to determine the level of deterioration associated with the columns. Following testing, columns are categorised within the Asset Management database for road lighting.

1.10 Testing is carried out in accordance with the Institute of Lighting Engineer's Technical Report No.22 Managing a Vital Asset: Lighting Supports as well as UK Lighting Board Code of Practice: Well-lit Highways.

1.11 Once results are input, the database then compares these results against the more general age profile to determine a final list of priority repairs. This produces recommendations in order of priority for both individual units and whole streets or areas.

1.12 Recommendations are generally categorised as Category A through K as follows:

A: Immediate replacement

B: Replace urgently or reinspect within 6 months

C1: Column Material failure, replace as soon as possible or reinspect within 1 year

C2: Bracket failure, sleeve where possible or replace unit within 1 year

D: Foundation failure, realign, reinstate and reinspect within 6 months

E: Material approaching failure, replace as part of planned maintenance programme or reinspect within 2 years

F: Material approaching failure, replace as part of planned maintenance programme or reinspect within 5 years

G: Condition reasonable, but age expired and certified insured for 2 year periods until replaced

H: Condition reasonable, but age expired and certified insured for 5 year periods until replaced

I: Acceptable condition but age expired and insured for 5 years periods until replaced.

J: Sound condition but age expired & visually poor (evidence of concrete cracking etc.)

K: Sound condition and not age expired – no current requirement for strength structural inspection, visual only at planned maintenance cycle.

1.13 Where non-urgent replacement recommendations (Category F through to J) are on an individual column basis, the data is further analysed to determine a percentage value for recommended replacement numbers against the balance of units in a street. If this figure exceeds 30% then the entire street will be considered for higher prioritisation which will address the design class standard of the street beyond individual replacement for safety reasons only.

1.14 The structures programme is identified based on the structures prioritisation matrix which ranks assets based on a number of factors including its condition, safety, and usage.

Structure Name:
Date when the scoring is carried out:

Enter score based on the description in the following coloured cells

Priority Ranking for structure capital programme

No.	Factors	Maximum Score			Structure Name: Structure Score Input	Net score	% of total Score	Additional commentry
1	Type of Bridge	1	Score 1 if road bridge and 0 if foot bridge	Culverts, Subways which carry road shall be considered as road bridge as per this scoring system. Structures which carry only pedestrians, cyclists and equestrians shall be considered as footbridge.		NA		
2	Route Factor	**40**	Score based on NAC route hierachy	Route hierachy Cat 2 - SPT/ NAC strategic routes - 40 Cat 3a - Main distributor routes - 30 Cat 3b - secondary distributor routes - 20 Any other category - 10 Routes serving fewer than 5 properties - 5		0	0%	
3	HGV Restriction factor	**60**	Score based on weight capacity	Weight restriction 3 tonnes - 60 7.5 to 13 tonnes tonnes - 50 18 tonnes - 40 26 tonnes - 30 No weight restriction - 0		0	0%	
4	Condition factor	**10**	Score based on the condition of the bridge	Sliding score based on 0 for very good condition to 10 for poor condition. (10 - (BCI crit/ 10))		0	0%	
5	Deterioration factor	**10**	Score based on the rate of deterioration of the structure	Sliding score based on 0 for very slow deterioration to 10 for rapid deterioration		0	0%	
6	Pedestrian factor	**20**	Score based on pedestrian usage. Bridges with footways of heavy pedestrian usage shall score a maximum of **30**.	Structures with footways in heavily used urban areas score 20. Score 20 if route is access to a school or railway station. Apply a sliding scale going down to 0 for rural structures without footways.		0	0%	
7	Flooding factor	**40**	Score based on the potential for the existing structure to contrubute to flooding	A structure that makes no contribution to flooding risk will score 0. Structures that are know to increase the risk of flooding due to restrictions in width or soffit height will score 30.		0	0%	
8	Scour factor	**60**	Score based on risk of collapse due to expose to scour in heavy flow conditions	Risk of collapse of structure due to scouring. Structures which have been deterioted severely because of inadequate scour protection and on verge of collapse score maximum. Scour risk based on a sliding scale.		0	0%	
9	Parapet Condition Factor	**15**	Score based on the condition of the parapets	Structures with substandard Parapets with poor conditon will score 15 . Structures with substandard parapets with a 'monitor only' recommendation will score 10. Structures which have parapets to current standards will score 0.		0	0%	
10	Parapet Risk Factor	**10**	Score based on risk in the event of a parapet collapse leading to high risk injuries and human casualties.	What is the likelihood of severe injury or even death while the parapet is open to use considering the condition of the structure. Risk based on a sliding scale.		-5	100%	

11	Delay factor	**10**	Score based on whether existing restrictions such as limited width cause delays at the structure	Structures where delays are caused by width, weight, height or other restrictions such as traffic lights will be given a score higher than zero. Delays less then 2 minutes at peak times will score 5 and longer than 2 minutes will score 10. Score maximum if fire station, railway station or hospital affected by delay.		0	0%	
12	Structure Risk factor	**10**	Score based on risk in the event of a Structure collapse leading to high risk injuries and human casualties.	What is the likelihood of someone getting a high risk injury or even death while the structure is open to use considering the condition of the structure. Risk based on a sliding scale.		0	0%	
13	Maintenance factor	**20**	Score based on maintenance required to keep the existing structure open.	Score based on known maintenance history and requirement. No maintenance requirement will score 0. Listed structures score 15.		0	0%	
14	Diversion factor	**10**	Score based on the length of the diversion route if the structure is closed in an unplanned manner with no finite time limit.	Score based on diversion length. Any diversion equal to or more than 20 miles scores 20. Score 1 for each 2 miles of diversion up to 20. Score 10 if a road closure adversly affects a fire or railway station or hospital. Score 10 if there is no alternative diversion.		0	0%	
						-5		

Note maximum score that can be achieved for road bridge= 500

Priority level Chart

Structure Name:

Date of Scoring: 00-Jan-00

Priority Level Indicator		**Overall works (500)**		**Structure works (100)**		**Parapet works (70)**		**Scour Protection (60)**	
		Level	Score	Level	Score	Level	Score	Level	Score
No Action Rquired									
Low Priority									
Medium Priority									
High Priority									
Immediate action required									

Note : Works are divided above into three sub categories as each work can be independent and each has its own significance in terms of attention required.