NORTH AYRSHIRE COUNCIL

17 March 2020

| | Cabinet | | |
|-----------------|---|--|--|
| Title: | Roads, Structures and Street Lighting Maintenance Programme 2020/21 | | |
| Purpose: | To seek Cabinet approval of the proposed Roads, Structures and Street Lighting Maintenance Programme for 2020/21. | | |
| Recommendation: | That Cabinet (a) notes the approach taken to determining the asset maintenance programme for roads, structures and street lighting; (b) approves the maintenance programme for 2020/21, as detailed at Appendix 1a and 1b; and (c) 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 1040km. The core roads assets are currently estimated at a value of approximately £1.7 billion.
- 1.2 The Council's Roads Service has adopted an asset management approach to allocate available road, structures and street lighting maintenance funds to locations that will offer the best 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 Highways 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 that 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 2020/21 is attached at Appendix 1a and 1b. The Programme is based on available Revenue and Capital budgets and reflects a total investment of £5.9 million for the year in our roads, structures and lighting assets.

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. The Council has no responsibility for the maintenance of the Trunk Road Network which falls to Transport Scotland and their management contractor, Scotland Transerve. 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 2020/21 has been produced using the associated Lifecycle Plans, and developed in accordance with the strategy contained within the Roads Asset Management Plan (RAMP). The Lifecycle Plans inform decisions on the location and type of maintenance treatments that will 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 current RCI is 37.3 which is an improvement from 38.1 in 2018 and from 39.1 in 2017. However, the estimated carriageway maintenance backlog figure for North Ayrshire is currently £34.8 million. The 'steady state' figure for maintaining our roads at their present condition is £4.3 million per year. The allocated capital budget supported by revenue funding is £4.3 million for 2020/21. This is therefore expected to maintain our road assets at least at steady state.
- 2.5 Road lighting condition is measured through programmes of structural and electrical assessment and testing, which are prioritised through 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. The estimated lighting maintenance backlog figure for North Ayrshire is currently £23.5 million. The 'steady state' figure to maintain lighting assets at their current condition is £1.06 million. The Capital budget for next year is £750,000, however the Capital budget has been reprofiled for 2021/22 and 2022/23 to increase expenditure to £1.25 million, before it returns to £1 million in 2023/24 onwards.
- 2.6 Bridge and retaining wall condition is 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. 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). The BSCIav is currently 86.32 (2018/19 figure) with a target of 90. The rate of decrease of the BSCIav has lessened since the capital budget for structures was introduced several years ago. It is estimated that the cost of maintaining our bridges and retaining walls in a 'steady state' is £870,000. The allocated capital budget supported by revenue

funding is currently £710,000. This will be kept under review and a reprofiling of the capital investment budget will be considered going forward.

2.7 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 footways for inclusion in our footway resurfacing programme is attached in Appendix 3. The assessment matrix used for scoring and ranking structures for inclusion in the Structures Maintenance Programme is attached in Appendix 4.

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 2020/21, as shown at Appendix 1a and 1b.
- 3.3 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 available Capital and Revenue budgets. Estimated costs for the prioritised works identified are detailed within the appendices.

Human Resources

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

<u>Legal</u>

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 assists 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, including 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 as a proportion of the maintenance programme is delivered by local contractors and inhouse by the Roads Operations Team and Building Services.

5. Consultation

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

RUSSELL McCUTCHEON Executive Director (Place)

For further information please contact **David Hammond, Interim Head of Commercial Services, on Tel: 01294 324750**.

Background Papers

| Carriageway | | | |
|------------------------------|-------------------|--|----------|
| Street | Town | Location | Estimate |
| A726 D | 1. 1 | | Cost |
| A736 Bank | Irvine | Stuart Drive to Galt Ave | £70,000 |
| Street | Kihadada | Duchung dalam ta Estimatora Davido Catas | 6420.000 |
| A737 Irvine | Kilwinning | Buckreddan to Eglinton Park Gates | £130,000 |
| Road A737 Marress | Irvine | Fullarton church to Traffic Lights, | £151.000 |
| Road | IIVIIIE | Northbound | £151,000 |
| A738 High Road | Saltcoats | Dalry Road to first island eastbound | £56,000 |
| A738 11gii 10au A738 | Stevenston | Bus lane, part lengths | £35,000 |
| Roundabout | Stevenston | bus lanc, part lengths | 133,000 |
| with B752 | | | |
| A760 | Kilbirnie | Roundabout at Main Street to Roundabout | £75,000 |
| | | at School Road and towards Milton Park | |
| A760 | Largs | Amenity Site to Crematorium | £82,000 |
| A760 | Largs | East of Mills milk entrance | £146,000 |
| A760 | Largs - Kilbirnie | West of Roudenburn Farm | £52,000 |
| B7047 | West Kilbride | Roundabout to Lawfield Ave (half width) | £65,000 |
| Meadowfoot | | | |
| Road | | | |
| B7080 Long | Irvine | Near BP to Roundabout and from | £110,000 |
| Drive | | roundabout North to Surfacing joint | |
| B7081 | Irvine | Newmoor Interchange to just past the | £70,000 |
| | | industrial estate entrance | |
| B7081 Corsehill | Irvine | Roundabout to Dunlop Crescent | £110,000 |
| Mount Road | | | |
| B714 | Dalry | C87 to St Andrews Gardens | £198,000 |
| B769 | Irvine | Cunninghamhead northwards to 7.5t limit sign | £65,000 |
| B780 | Ardrossan | Munnoch reservoir to B781 | £118,000 |
| C129 | Irvine | B769 to EAC boundary | £25,000 |
| Auchenharvie | Saltcoats | Full Length | £50,000 |
| Road | | | |
| Baidland | Dalry | Number 1 to Number 71 | £26,000 |
| Avenue | | | |
| Bankhouse | Largs | Main Road to Number 14 | £20,000 |
| Avenue | | | |
| Blairlands Drive | Dalry | Full Length | £20,000 |
| Braidwood Road | Kilwinning | Full Length | £49,000 |
| Burns Crescent | Irvine | Full Length | £70,000 |
| Caledonia Road | Saltcoats | Argyle Road to Ardrossan Road | £70,000 |
| Cathkin Place | Kilwinning | Full Length | £20,000 |
| Duddingston Avenue | Kilwinning | Cul-de-sacs | £60,000 |
| Fudstone Dr / Mossend Ave | Kilbirnie | Including Junctions | £74,000 |

| Glenriddet | Kilbirnie | Full Length | £55,000 |
|-------------------------------|------------|--|------------|
| Avenue | | | |
| Gogo Street | Largs | Stanlane Place to Railway | £17,000 |
| Hamilton Street | Saltcoats | Full Length | £97,000 |
| Houston | Dalry | Full Length | £22,000 |
| Crescent | | | |
| Kilsyth Crescent | Irvine | Full Length | £22,000 |
| Lawson Drive | Ardrossan | Ashgrove Road to St Margarets Road | £73,000 |
| Love Street | Kilwinning | Fergushill Road to No. 3 | £10,000 |
| McCluckie Drive | Kilwinning | Full Length | £58,000 |
| Montfode Drive | Ardrossan | Part Length | £85,000 |
| Old Stewarton | Irvine | Dawn Homes Site to Perceton Roundabout | £95,000 |
| Road | | | |
| Parkside | Irvine | Full Length | £30,000 |
| Park Road | Ardrossan | Full Length | £28,000 |
| Pladda Road | Saltcoats | Pladda Road | £6,000 |
| Riverwalk | Kilwinning | Full Length | £28,000 |
| Skelmorlie Castle Road | Skelmorlie | Innespark to Long Hill | £35,000 |
| Station Road | Fairlie | Junction A78 to Montgomerie Drive | £15,000 |
| Sundrum Place | Kilwinning | Sundrum Place | £36,000 |
| Sycamore | Beith | Full Length | £26,000 |
| Avenue | | | |
| Toward View | Skelmorlie | Full Length | £20,000 |
| Victoria Road / Kinnear Rd | Saltcoats | Gladstone Road to Kerr Avenue | £35,000 |
| Woodlands Avenue | Irvine | Caldon Road to Mossgiel Drive | £50,000 |
| | | | £2,860,000 |

| Carriageway | Screeding | | |
|-------------|------------|---------------------------------------|---------------|
| Street | Town | Location | Estimate Cost |
| C18 | Ardrossan | Part Length | £60,000 |
| C56 | Fairlie | Fairlie Moor Road | £80,000 |
| C69 | Beith | C68 to B706 at Greenhills | £30,000 |
| C80 | Kilbirnie | Part Length | £116,000 |
| C131 | Kilwinning | Bannoch Road to B778 Junction | £12,000 |
| U1 | Irvine | B769 to C6 | £34,000 |
| U2 | Irvine | A736 at Annick Lodge to C6 | £20,000 |
| U11 / U12 | Beith | C19 to U11 at Roughwood | £19,000 |
| U21 | Kilwinning | B778 to C5 | £27,000 |
| U26 | Kilbirnie | Geirston (Part Length) | £40,000 |
| U28 | Beith | Greenhills / Hessilhead B706 to B777 | £20,000 |
| U44 | Kilbirnie | Middleton | £4,000 |
| U52 | Kilwinning | Redwells, Fergushill Hall to Megswell | £22,000 |
| | | Bridge | |
| U54 | Kilwinning | Burrowlands to Sevenacres Mill Bridge | £16,000 |
| | | | £500,000 |

| Vehicle Restraint | System Improvements | | |
|-------------------|---------------------|----------|---------------|
| Area | Town | Location | Estimate Cost |
| Various Locations | | | £50,000 |

| Patching Contract | | | |
|-------------------|------|----------|---------------|
| Area | Town | Location | Estimate Cost |
| Various Locations | | | £150,000 |

| Footway Resurf Street | Town | Location | Estimate Cost |
|----------------------------------|---------------|---|---------------|
| Ardneil Court | Ardrossan | Part Length | £44,200 |
| Footpaths | / 10/05/01 | | 144,200 |
| Scott Place | Saltcoats | Part Length | £2,000 |
| Iona Court | Dreghorn | Numbers 22 - 27 & underpass at gable no 22 | £3,000 |
| Kilsyth Crescent | Irvine | Part Length | £2,000 |
| Moorfoot Way | Irvine | Numbers 14 - 34 | £3,000 |
| Pladda Crescent | Irvine | Numbers 6 - 10 | £1,800 |
| Craignaw Place | Irvine | Part Length | £3,000 |
| Heatherstane Bank | Irvine | Number 91 to Gable 77 | £1,000 |
| Overtoun Road | Springside | Opposite nursery and outside Premier Stores | £6,000 |
| Castlepark Circle | Irvine | Lomond Place to Katrine Place | £22,000 |
| Sillars Meadow | Irvine | Footpaths only | £13,000 |
| Fullarton Footpaths | Irvine | Including Footbridge | £9,000 |
| Sersley Drive | Kilbirnie | Full Length | £18,000 |
| Walker Street | Kilbirnie | Full Length | £5,000 |
| Prestonfield | Kilwinning | Junction Annanhill to road end, from No.32 into parking area | £30,000 |
| Gullane Place | Kilwinning | Full Length | £15,000 |
| Nairn Court | Kilwinning | Full Length | £4,000 |
| Abbots Avenue | Kilwinning | Full Length even numbers. | £15,000 |
| Annanhill Place | Kilwinning | Full Length | £15,000 |
| Evelyn Terrace | Kilwinning | Next to Number 37 + footpath to school | £9,000 |
| Brisbane Street | Largs | Part Length | £26,000 |
| Nelson Street | Largs | Part Length | £18,000 |
| Clyde Street | Millport | Part Length | £11,000 |
| Bellard Road / Weston Terrace | West Kilbride | Full Length | £24,000 |
| weston renace | | | £282,000 |

| Lighting Deteriorated Infrastr Area | Town | Estimate Cost |
|---|---------------|---------------|
| Alloway Place | | |
| Armour Place | | |
| Burnfoot Lane | | |
| Harvey Gardens | | |
| Linnburn Terrace | Ardrossan | £152,000 |
| Mossgiel Road | | |
| Whitlees Court | | |
| Afton Place | | |
| Burns Terrace | | |
| Larch Terrace | Beith | £26,000 |
| Friars Lawn | | |
| Byrehill Drive f/p to Pennyburn | | |
| Byrehill Avenue | | |
| Simpson Place | | |
| Byrehill Place | | |
| Cranberry Moss Road | Kilwinning | £175,200 |
| Abbots Place | _ | |
| Dovecot Lane | | |
| Bankhead | | |
| Church Street | | |
| Winton Avenue | | |
| Barnett Court | | |
| Berchem Place | | |
| Duguid Drive | | |
| Glebe Street | | |
| Halkett Place | | |
| Kinnier Road | Saltcoats | £90,000 |
| Lochlea Road | Sancouts | 100,000 |
| Victoria Road | | |
| Glebe Place | | |
| Glencairn Street | | |
| Chapelwell Street | | |
| Eglinton Place | | |
| South Road | | |
| Merlewood Road, Seamill | West Kilbride | £46,000 |
| Weston Terrace | | 140,000 |
| Hyndman Road, Seamill | | |
| Windsor Gardens | | |
| Viking Way | Largs | £68,000 |
| Chapelton Way | | |
| | | £557,200 |

| Lighting Deterio | orated Column Replacem | ents | |
|----------------------|------------------------|----------|---------------|
| Area | Town | Location | Estimate Cost |
| Various Unplanned Lo | cations | | £150,000 |

| Lighting Deteriorated Column Inspections | | | | |
|--|------|----------|---------------|--|
| Area | Town | Location | Estimate Cost | |
| Various Locations | | | £50,000 | |

| Structures Pro | jects | | |
|-----------------------------|------------|---|---------------|
| Structure | Town | Project | Estimate Cost |
| Stanley Place Footbridge | Saltcoats | Assessment & strengthening/ Rail bridge | £80,000 |
| Multi Storey Car Park | Irvine | Load assessment & scheme development | £250,000 |
| Kirkland Bridge | Busbiehill | Replacement (cost shared with EAC) | £60,000 |
| | | | £390,000 |

| Carriageway Resurfacing: | £2,860,000 |
|---------------------------------------|------------|
| Carriageway Screeding: | £500,000 |
| Footway Resurfacing: | £282,000 |
| Vehicle Restraint System Improvements | £50,000 |
| Patching Contract | £150,000 |
| | |
| Lighting Infrastructure Replacements: | £557,200 |
| Deteriorated Column Replacements: | £150,000 |
| Deteriorated Column Inspections: | £50,000 |
| | |
| Structures Projects: | £390,000 |
| Overall Mainland Total: | £4,989,200 |

Arran Roads Programme 2020/21

| Carriageway Re. | surfacing | | |
|--------------------|-------------|--|---------------|
| Street | Town | Location | Estimate Cost |
| A841 | Brodick | Brodick Primary School to Cloy Bridge | £102,000 |
| A841 | Brodick | North of Market Road to West of Co- | £100,000 |
| | | ор | |
| A841 | Whiting Bay | Largiemhor House to Ashdale Way | £65,000 |
| B880 | Shiskine | Bridgend to Shiskine 30 mph signs | £93,000 |
| B880 | Shiskine | Surface dressing at Balmichael to past | £62,000 |
| | | Balmichael House Junction | |
| C147 | Lochranza | West of ferry terminal southwards to | £80,000 |
| | | Sailors Grave | |
| C147 | Pirnmill | South of Lenniemore southwards to | £125,000 |
| | | South of Auchamore entrance | |
| Hospital road | Lamlash | From Margnaheglish Road Junction | £22,000 |
| Manse Road | Lamlash | Full Length | £66,000 |
| Margnaheglish Road | Lamlash | From A841 to Junction Hospital road | £25,000 |
| | | | £740,000 |

| Footway Resu | ırfacing | | |
|--------------|-------------|-------------|---------------|
| Street | Town | Location | Estimate Cost |
| The Avenues | Lamlash | Full Length | £5,000 |
| Park Terrace | Lamlash | Part Length | £8,000 |
| Silverhill | Whiting Bay | Part Length | £5,000 |
| | | | £18,000 |

| Structures Proje | ects | | |
|---------------------|----------|---|---------------|
| Structure | Town | Project | Estimate Cost |
| Catacol Burn Bridge | Catacol | Scour damage repairs | £80,000 |
| Pirnmill | Pirnmill | Replacement of road retention structure | £90,000 |
| | | | £170,000 |

| Carriageway Resurfacing: | £740,000 |
|--------------------------|----------|
| Footway Resurfacing: | £18,000 |
| Structures Projects: | £170,000 |

Overall Arran Total: £928,000

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. Where the condition assessment score (referring to table below) is assessed as being 11 or more, then a priority assessment is carried out, in accordance with the Scheme Assessment Form attached as Appendix 3.

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 that progresses onto the prioritisation process is rated using the additional criteria contained in the Scheme Assessment Form and is placed on the strategic list of priorities relative to its score. 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, micro surfacing or asphalt preservation. Resurfacing options such as screeding, resurfacing (inlay and overlay), retread and overlay and 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. An option appraisal matrix has also been developed to assist with the identification of the most appropriate treatment to be used at each location.

Treatment Option Table

| Treatment Option | Cost / Sqm | Extension to life |
|-------------------------|------------|-------------------|
| Surface Dressing | £3.30 | Up to 10 years |
| Micro Surfacing | £11.35 | 7 – 10 years |
| Asphalt Preservation | £5.00 | Up to 5 years |
| Screeding | £9.00 | 5 – 10 years |
| Retread | £22.50 | Up to 20 years |
| Inlay HRA | £18.00 | Up to 20 years |
| Inlay SMA | £18.00 | Up to 10 years |
| Overlay <100mm | £20.70 | Up to 20 years |
| Inlay 100mm | £27.26 | Up to 20 years |
| Reconstruction 300mm | £112.40 | Up to 20 years |

- 1.8 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.
- 1.9 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.
- 1.10 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.
- 1.11 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.
- 1.12 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.
- 1.13 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.

| North Ayrshire Council - Roads Carriageway Scheme Assessment | | | | rm | Nor | | | Appendix 3 <u>Number</u> | |
|---|--|---------|-------|-------------|----------|------------|----------|------------------------------|--|
| | Town: | | | | Area | | | | |
| Roa | d Name: | | | | | | | | |
| L | ocation: | | | | | | | | |
| Co | nments: | | | | | | | | |
| | Category: CONDITION RATIN | IG | | | | | IAGEWAY | | |
| F | Rated By: | | | Da | ate Rate | ed: | | | |
| | Criteria | | | Scor (S) | | Weig (V | | Priority Score (S x W) | |
| | 1. Condition | | | | | 4 | , | | |
| | 2. Maintenance Category | | | | | 2 | 2 | | |
| | 3. Public Liability Claims / Fault Reports / Complaints | | | | | 1 | | | |
| | 4. Assistance to Other Priorities | | | | | 1 | | | |
| | | | | | Total | Priority | Score: | | |
| | Treatment Type: | | | | | | | | |
| | Length: | | Bread | dth: | | | Area: | | |
| | Patching Required: | Area: | | | | | Depth: | | |
| | Kerbing Required: | Length: | | | | | | | |
| Addit | ional Comments | | | | | | | | |
| | Assessed By: | | | | Rease | sessed E | By: | | |
| | Assessment Date: | | | Rea | Issessi | ment Da | te: | | |
| | Checked By: | | | | Cł | necked E | By: | | |

North Ayrshire Council - Roads Carriageway Resurfacing Scheme Priority System

<u>General</u>

The weighting system devised enables the programme of carriageway resurfacing schemes to be objective, rated against a number of important criteria.

| Scoring System | | | | | | |
|---|---------------|-------------------------|-----|--|--|--|
| Criteria | Maximum Score | Maximum Score Weighting | | | | |
| 1. Condition | 16 | 4 | 64 | | | |
| 2. Maintenance Category | 22 | 2 | 44 | | | |
| 3. Public Liability Claims / Fault Reports / Complaints | 6 | 1 | 6 | | | |
| 4. Assistance to Other Priorities | 14 | 1 | 14 | | | |
| | | Maximum Total: | 128 | | | |

1. Condition

Taken from initial Condition Assessment Score generated during inspection

| Condition — → Extent ↓ | 1 – Acceptable | 2 – Safe but poor appearance | 3 – Minor deterioration | 4 – Major Deterioration |
|---------------------------|----------------|---------------------------------|----------------------------|----------------------------|
| 1 – Up to 25% | | 5 | 9 | 13 |
| 2 – 25% - 50% | | 6 | 10 | 14 |
| 3 – 50% - 75% | | 7 | 11 | 15 |
| 4 – 75% - 100% | 4 | 8 | 12 | 16 |

2. Maintenance Category - Local Transport Strategy (LTS)

| Maintenance Category | Score |
|--|-------|
| Strategic Routes - (A760 / A736 / A71) | 22 |
| Main Distributor Routes | 15 |
| Secondary Distributor Routes | 11 |

3. Public Liability Claims / Fault Reports / Complaints

Score according to the type / source of complaint / fault report / request for service received for the location

- 1 Public Complaint or a Fault Report resulting in a confirmed defect
- 2 Multiple Requests for service or Fault Reports resulting in confirmed defects
- 4 Elected Member Complaint or Request for Service
- 6 Public Liability Claim

4. Assistance to Other Priorities

Use your own knowledge of the surrounding area to rate the location in relation to:

- 2 Adjacent to Local Shops
- 4 Adjacent to Amenity Housing, Residential Care Homes and Medical Centres
- 6 Adjacent to Schools, Leisure Facilities and Tourist Attractions
- 8 Business Parks and Industrial Estates
- 10 Access to Train Stations and Park & Ride facilities
- 14 Town Centre



| North Ayrshire | Council - | Roads |
|----------------|-----------|-------|
|----------------|-----------|-------|

| Å | |
|----------------|--|
| NORTH AYRSHIRE | |

Area:

Date of Rated:

Footway & Footpath Scheme Assessment Form

Town:

Road Name:

Location:

Comments:

Category: CONDITION RATING

Туре: **FOOTWAY**

Rated By:

| Criteria | Score (S) | Weighting (W) | Priority Score (S x W) |
|--|--------------|--------------------|------------------------------|
| 1. Condition | | 4 | |
| 2. Importance / Accessibility | | 2 | |
| Public Liability Claims / Fault Reports / Complaints | | 1 | |
| 4. Assistance to Other Priorities | | 2 | |
| | Tota | al Priority Score: | |

| Treatment Type: | | | | |
|-------------------|---------|----------|-------|--|
| Length: | | Breadth: | Area: | |
| Kerbing Required: | Length: | | | |

Additional Comments

| Assessed By: | Reassessed By: | |
|------------------|--------------------|--|
| Assessment Date: | Reassessment Date: | |
| Checked By: | Checked By: | |



North Ayrshire Council - Roads Footway & Footpath Resurfacing Scheme Priority System

<u>General</u>

The weighting system devised enables the programme of footway & footpath resurfacing schemes to be objective, rated against a number of important criteria.

| Scoring System | | | | | | |
|--|---------------|----------------|-------|--|--|--|
| Criteria | Maximum Score | Weighting | Score | | | |
| 1. Condition | 16 | 4 | 64 | | | |
| 2. Importance / Accessibility | 5 | 2 | 10 | | | |
| 3. Public Liability Claims / RMS Faults / Complaints | 6 | 1 | 6 | | | |
| 4. Assistance to Other Priorities | 10 | 2 | 20 | | | |
| | | Maximum Total: | 100 | | | |

1. Condition

Taken from initial Condition Assessment Score generated during inspection

| Condition — → Extent ↓ | 1 – Acceptable | 2 – Safe but poor appearance | 3 – Minor deterioration | 4 – Major Deterioration |
|---------------------------|----------------|---------------------------------|----------------------------|----------------------------|
| 1 – Up to 25% | | 5 | 9 | 13 |
| 2 – 25% - 50% | | 6 | 10 | 14 |
| 3 – 50% - 75% | | 7 | 11 | 15 |
| 4 – 75% - 100% | 4 | 8 | 12 | 16 |

2. Importance / Accessibility

| | Score |
|--|-------|
| Footway / Footpath Priority 1 Gritting Route | 5 |
| Footway / Footpath Priority 2 Gritting Route | 3 |
| Footway / Footpath Priority 3 Gritting Route | 2 |
| Other Footway / Footpath | 1 |

3. Public Liability Claims / Fault Reports / Complaints

Score according to the type / source of complaint / fault report / request for service received for the location

- 1 Public Complaint or Fault Report resulting in a confirmed defect
- 2 Multiple Requests for service or Fault Reports resulting in confirmed defects
- 4 Elected Member Complaint or Request for Service
- 6 Public Liability Claim

4. Assistance to Other Priorities

Use your own knowledge of the surrounding area to rate the location in relation to:

- 1 Shared Cycle / Footways
- 2 Adjacent to Local Shops
- 4 Adjacent to Schools, Leisure Facilities and Tourist Attractions
- 6 Adjacent to Amenity Housing, Residential Care Homes and Medical Centres
- 8 Local Bus Route, access to Train Stations and Park & Ride facilities
- 10 Town Centre



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

Enter score based on the description in the following coloured cells

Additional commentry

| 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 | | 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 N Date of Sco | | 00-Jan-00 | D | | | | | |
|---------------------------|----------------------------|-------|---|-------|------------|--------------------|-------|-----------------------|-------|
| Priority Level Indicator | | | Overall works (500) Structure works (100) | | Parapet wo | 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.



