HIGHLAND COUNCIL

Agenda Item	8.
Report No	CC/11/19

RE-CIRCULATED

Committee:	Caithness Committee
Date:	15 May 2019
Report Title:	Road Structural Maintenance 2019/2020
Report By:	Director of Community Services

1 Purpose/Executive Summary

1.1 This report sets out a prioritised list of structural maintenance works for the Caithness Area

2 Recommendations

2.1 Members are asked to approve the proposed prioritised Roads Structural Maintenance Programme 2019/20 for the Caithness Area.

3. Background

- 3.1 The Roads Budget Allocation Year 2019/20 Version 1.1 (Provisional) is now available. See attached Item 1.
- 3.2 Last year's 2018/19 Highland total (Revenue and Capital) was £21,649,000. This year, 2019/20, it is £19,528,775 which is £2.1M lower. Revenue has increased by £1.5 million but Capital has decreased by £3.5 million.
- 3.3 The current Revenue budget allocation for Caithness is £1.2 million which is primarily required to cover our Labour, Plant and Salt required for Winter Maintenance for the 2019/20 season.
- 3.4 This means that there is limited capacity within the Revenue Budget to allow for the purchase of significant materials other than routine pothole repairs. It is therefore proposed that the current Capital budget allocation of £560k will be allocated towards Surface Dressing schemes and major patching works on the adopted road network, and that these will be undertaken by our in-house team.
- 3.5 The proposed Surface Dressing priorities for 2019/20 are No. 17 to No. 21 on the attached list. It is therefore important that Members are given the opportunity to review and agree the revised prioritised programme attached.
- 3.6 It is the intention to continually update this list by adding to it and adjusting priorities so that an updated rolling programme of works can be published early in each new year to eliminate the risk of the structural programme starting before gaining full Area Committee agreement.

4. Budget Allocation

- 4.1 Road Maintenance budgets are normally allocated under the following headings:-
 - Winter Maintenance (Revenue)
 - Cyclic Maintenance(Revenue) including:-
 - Drainage
 - Footpath Maintenance
 - Gully Cleansing
 - Temporary Patching Repairs
 - Road Marking Renewal
 - Sign Maintenance
 - Verge Maintenance
 - Other Cyclic and Routine maintenance
 - Structural Maintenance (Capital) including:-
 - Structural Resurfacing (Overlay/Inlay)
 - Structural Integrity Improvements
 - Surface Dressing
 - Recycling
 - Major Patching
- 4.2 This report focuses on the Structural Maintenance (Capital) programme.

5. Road Structural Maintenance Programmes

- 5.1 Schemes were selected for inclusion in these programmes on the basis of need using the information gathered from the following sources and have been prioritised with the safety of the travelling public and sustainability of the road network as the main objectives:-
 - Scottish Road Maintenance Condition Survey (SRMCS) data;
 - Safety Inspections;
 - Service Inspections; and
 - Input and feedback from Members
- 5.2 The Scottish Road Maintenance Condition Survey (SRMCS) records data which is processed to show rutting, profile, cracking and surface texture. Surface texture is principally used in the preparation of surface dressing programmes. Rutting and profile data is used for surfacing programmes, while cracking data is used in both surface dressing and surfacing programmes.
- 5.3 The SRMCS survey is undertaken according to the following schedule:-
 - A class roads annually;
 - B class roads every two years; and
 - C & U class roads every three years
- 5.4 The SRMCS survey is presently up to date. The surveys are usually undertaken throughout the spring, summer and autumn but do not include winter damage due to the freeze thaw cycle.
- 5.5 The SRMCS data is processed after the survey and is displayed on Williams Detail Management (WDM) geographical information system. WDM allows the survey information to be plotted alongside roads. The information is colour coded according to the condition of the road.
- 5.6 WDM can produce a paper plan showing the damage over a wide area but the volume of data and the scale of the plan results in the data being difficult to use or handle. The system is best used interactively, using both an over view and then closer inspection at a smaller scale. Small scale prints can be produced for specific sites.
- 5.7 Given the survey frequency, the SRMCS data is only indicative of the road conditions at any one time. Additional deterioration and repairs may not be captured on the survey. Consequently additional sources of information are used.
- 5.8 All roads are inspected either monthly, quarterly or annually for safety hazards depending on their priority. Roads are also inspected in the course of preparing the works programmes. These inspections, together with specific concerns raised through Members and Community Councils, are considered for inclusion in the works programmes.
- 5.9 The programmes are prepared over the winter months and are finalised in the spring to allow for additional damage due to freeze thaw cycle. This last winter has had a serious effect on the road network. The programmes reflect both the strategic network and the importance attached to local roads by rural communities.

5.10 Prior to finalising the programmes, each site is again visited by experienced engineers to confirm the importance of the works against the network and the details of the designs.

6. Implications

- 6.1 Resource All work will be managed within budget allocations from a resource perspective with the Council delivering its legal responsibilities.
- 6.2 Legal The combined programme for Structural Resurfacing and Structural Integrity Improvements enables the Council to meet its duty under the Roads (Scotland) Act 1984 within the Local Committee area.
- 6.3 Community (Equality, Poverty and Rural) This report has no impact on Equality, Gaelic, Climate Change or Carbon Clever considerations. However, there may be rural considerations where the lower road usage levels and distances between communities reduce the opportunity to maximize the impact of investment decisions when compared to more densely populated area /roads with greater usage levels.
- 6.4 Climate Change / Carbon Clever No implications.
- 6.5 Risk No implications.
- 6.6 Gaelic This report has no impact on Gaelic.

Designation: Director of Community Services

Date: 2 May 2019

Author: Joanne Sutherland, Acting-up Road Operations Manager

Description	Total	HQ	Caithness	Sutherland	Ross & Cromarty	Island of Skye	Nairn	Badenoch & Strathspey	Lochaber	Inverness
Parameters										
1 Total Road Length (km)	6,746		761.2	1,336.8	1,650.9	618.1	302.3	387.4	670.4	1,019.4
2 Urban Road Length (km)	1,113		124.1	109.8	305.1	35.0	54.6	71.4	72.0	341.0
3 Number of Bridges	1,332		93	282	308	112	32	96	230	179
4 Population(Year 2011)	232,132		26,486	13,820	56,666	10,177	12,566	13,664	19,930	78,823
5 Gullies (WDM db)	44,610		4,835	2,491	11,522	878	2,006	2,653	3,653	16,572
6 Winter Allocation	100%	1.62%	9.41%	21.69%	22.69%	9.99%	2.29%	9.36%	6.09%	16.85%
7 Weighted Mileage	100%		10.96%	19.49%	24.34%	8.80%	4.43%	5.65%	9.92%	16.42%
8 Watercourse	100%		11.06%	16.48%	24.36%	7.82%	4.65%	5.70%	9.62%	20.32%
9 Structural Maint. (SRMCS)	100%		10.35%	17.67%	22.40%	11.55%	4.37%	6.34%	11.26%	16.06%
10 Surface Dressing (SRMCS)	100%		11.98%	12.59%	20.06%	12.34%	4.35%	9.67%	11.12%	17.88%
REVENUE										
21 Winter Allocation	£4,980,000	£80,892	£468,849	£1,080,284	£1,129,716	£497,553	£114,283	£466,234	£303,236	£838,953
22 Cyclic Maintenance	£6,573,775	£20,000	£718,410	£1,277,192	£1,595,215	£576,624	£290,294	£369,980	£649,990	£1,076,071
23 Drainage	£200,000	,	£21,924	£38,976	£48,681	£17,597	£8,859	£11,291	£19,836	£32,838
24 Spray Injection (THC vehicle)	£100,000		£11,282	£19,815	£24,471	£9,162	£4,481	£5,742	£9,937	£15,110
25 Gully Emptying	£300,000		£32,515	£16,752	£77,485	£5,905	£13,490	£17,841	£24,566	£111,446
26 Bridges - Structural Maintenance	£480,000		£33,514	£101,622	£110,991	£40,360	£11,532	£34,595	£82,883	£64,505
27 Bridge Inspections	£200.000	£200.000						,		
28 Cattle Grids (Bid to HQ)	£80,000	£80,000								
29 Safety Barriers (Bid to HQ)	£275,000	£275,000								
30 Water Course Maintenance (Bid to HQ)	£80,000	£80,000								
31 Asset Management (Mobile Working)	£60,000	£60,000								
Total Revenue Budget	£13,328,775	£795,892	£1,286,493	£2,534,641	£2,986,558	£1,147,200	£442,938	£905,682	£1,090,447	£2,138,923
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Capital Budget (£6.2M)										
32 Structural - Overlay/Inlay	£3,090,000		£319,811	£545,901	£692,149	£356,953	£135,164	£195,758	£348,015	£496,248
33 Surface Dressing	£2,000,000		£239,652	£251,819	£401,155	£246,755	£87,054	£193,423	£222,497	£357,645
34 Timber Transport Routes (STTS)	£500,000	£500,000								
35 Bridge Maintenance (HQ/Structures)	£350,000	£350,000								
36 Road Markings	£60,000	£60,000								
37 Weather Stations (Icelert)	£50,000	£50,000								
38 Transportation Infrastructure(Bid to HQ)	£50,000	£50,000								
39 Cattle Grids(Bid to HQ)	£45,000	£45,000								
40 Safety Barriers (Bid to HQ)	£45,000	£45,000								
41 SCRIM	£10,000	£10,000								
Total Capital	£6,200,000	£1,110,000	£559,464	£797,721	£1,093,304	£603,707	£222,218	£389,181	£570,512	£853,894
	£19,528,775									

Item 1 – Roads Budget Allocation 2019/20 – Version 1.1 (Provisional)

Prioritised Caithness Surfacing and Surface Dressing 2019/2020

Priority	Activity	General Description	Average Road Width (m)	Scheme Length (m)	Total Area (m²)
1	Pothole Repairs	Caithness	1	2000	2000
2	Inlay	B874 Hoy Gillock Road Knockdee To Schoolhouse	3.5	720	2520
3	Inlay	B874 Sinclair St Halkirk Junction At The Shop	9	30	270
4	Inlay	A836 Reay School	5.5	95	522.5
5	Inlay	A882 Laid (Watten loch)	5.5	50	275
6	Overlay	C1006 Wester Bridge To Greenland @ Reaster Farm	3	1160	3480
7	Overlay	B876 Reiss Castletown Road Reiss To Killimster Farm,	1.2	870	1044
8	Overlay	U1557 Freswick Skirza Rd Jct	3	130	390
9	Patching	B9159 Harbour Quay Various Small Patches	1	60	60
10	inlay	U3618 Newton Road From Kenneth St Jct To The New High School	7	170	1190
11	Overlay	C1247 Whitebridge Scarfskerry Mey Rd @ Harrow Hrbr	3	670	2010
12	Overlay	U3618 Newton Road At Whitebridge	4.5	60	270
13	Inlay	U1865 Braal Terrace	3	50	150
14	Overlay	U1755 Bower To Gillock Rd Hall To Bradsterdorran	3	690	2070
15	Inlay	B874 Ormlie Road From Castlegreen Road To College, (Patches)	7.5	280	2100
16	Inlay	U2348 Churchill Road Castletown Police Station	5	50	250
17	Surface Dressing	C1001 Isauld Glengolly rd, shebster to westfield	5	2850	14250
18	Surface Dressing	A99 Lyth Jct To South Of Keiss	5	2500	12500
19	Surface Dressing	A836 Canisbay Cem To Brigde At Lower Warse	6	730	4380
20	Surface Dressing	A836 Warse Farm Road To Road To Upper Gills	6	1500	9000
21	Surface Dressing	B874 Hoy Gillock Road Hoy Jct To Knockdee	3.5	1400	4900
22	Surface Dressing	B874 Hoy Gillock Gillock To Corsback Jct	3.5	430	1505

23	Surface Dressing	C1025 Sordale Bishopshill At Bishopshill Jct	3	230	690
24	Surface Dressing	C1069 Poolhoy Wester Olrig Rd Durran Mains To Hoy Farm	3	1090	3270
25	Surface Dressing	C1048 Castletown Durran Mains Road At Durran Mains	3.5	640	2240
26	Surface Dressing	U4209 Sinclair St 6m Up The Centre	6	230	1380
27	Surface Dressing	U4313 Provost Cormack Drive Thurso	7.5	540	4050
28	Surface Dressing	U1360 Reiss Sibster Road A99 Jct To 30mph Signs	5	500	2500
29	Surface Dressing	U1656 Scarfskerry Jct To Old Church (Melvich Chip)	3	1520	4560
30	Surface Dressing	U2052 Forss Achrreamie Road Skaill To Forss Jct	3	2451	7353
31	Surface Dressing	U1408 Keiss Beach Whole Road	3	580	1740
32	Surface Dressing	U1434 South St Keiss Whole Road	5	365	1825
33	Surface Dressing	U1913 Plocan Brawlbin Road Plocan Jct	3	1140	3420
34	Surface Dressing	U1913 Plocan Brawlbin Road West Of Loch To Brawlbin Jct	3	678	2034
35	Surface Dressing	U4084 Mayfield Road Whole Road	6	230	1380
36	Surface Dressing	U4391 Burnett Place Thurso Whole Road	6	275	1650
37	Surface Dressing	U2052 Shebster Achreamie Road At Achreamie Jct	3	167	501
38	Surface Dressing	U2066 Buldoo Achreamie Road	3	1700	5100
39	Surface Dressing	U1113 Achow Osclay Whole Road	3	3700	11100
40	Surface Dressing	U1109 Achcastle Shore Road	3	854	2562
41	Surface Dressing	U2411 Mansville Road (Clyth)	3	742	2226
42	Surface Dressing	U2110 Lythmore Road Jct To Just Over Bridge	3	706	2118
43	Surface Dressing	U1629 Mey Foreshore East Jct To Highmeat House	3	1060	3180
44	Surface Dressing	U1629 Mey Foreshore West Jct To Sharp Bend	3	1200	3600
45	Surface Dressing	U1656 Hill Of Rattar Below Farm To Scarfskerry Jct	3	870	2610
46	Surface Dressing	U1633 Mey Rigifa Whole Road	3	755	2265
47	Surface Dressing	C1033 Everley Crockster Toll Rd From Phillips Mains To Lyth Jct	3	2100	6300
48	Surface Dressing	C1033 Canisbay Memorial To Tresdale	3	770	2310
49	Surface Dressing	U1609 Seater Canisaby Hill Of Warse Whole Road	5	1700	8500
50	Surface Dressing	C1033 Everley Crockster Toll Rd From Christian Hill To A99 Jct	3	2000	6000

51	Surface Dressing	U1360 Reiss Sibster Road A99 Jct To 30mph Signs	5	500	2500
52	Surface Dressing	B870 Lochshell Watten Mains Rd, Watten Mains To Knapperfield	3	1600	4800
53	Overlay	U1384 Ruthers Of Howe Top Leg Of Road	3	176	528
54	Overlay	U1727 Reaster Bowermadden Road Auchorn To Murza 2 Bits	3	180	540
55	Patching	U2245 Murrayfield Rd Patching	1.2	100	120
56	Inlay	C1093 Kiess Harbour Road From Jct To Hall	6	120	720
57	Overlay	Norton Place	4	34	136
58	Patching	B874 Hoy To Watten Mains Rd	1.2	100	120
59	Patching	C1041 Wick Staxigoe Nursing Home To Anderson Drive	3	20	60
60	Patching	U3547 Henrietta St Wick Various Small Patches	1	40	40
61	Overlay	U1871 Halkirk Plocan Road Gerston To Sour Hil	3	670	2010
62	Patching	C1073 Harbour Terrace Jct With Breadalbane Terrace	7	20	140
63	Patching	U3805 Union St Wick Various Msall Patches	1	40	40
64	Patching	U3583 Loch St Wick Various Small Patches	1	50	50
65	Patching	C1073 Northcote St Wick Various Small Patches	1	60	60
66	Patching	U3668 Lindsay Drive	1.2	50	60
67	Patching	B870 Old Pumping Station	1	100	100
68	Patching	C1045 Main St Lybster Various Small Patches	1	40	40
69	Patching	A836 Mey Village Small Patch At "Hawthorn House"	1	100	100
70	Overlay	C1018 Bridge St Halkirk Several Patches	1.2	1,054	1,26
71	Overlay	U1241/ 1245 Newton Row	3	1006	3018
72	Overlay	C1057 Haster To Thrumster Swartigill Burn To Thrumster Mains	3	150	450
73	Overlay	U1316 Myrelandhorn Quoybrae Road	3	1,293	3,87
74	Inlay	B870 Stanstill-Watten Mains Stanstill To Ivy Cottage	1.2	674	809
75	Overlay	U1300 Halcro To Faulds Rd At Bower Jct	3	190	570
76	Overlay	U3632 River St Wick Roundabout To Flower Shop	3	190	570
77	Overlay	U1300 Halcro To Faulds Rd At Bower Jct	3	377	1131
78	Overlay	U1731 Lochside Hunster Road @ Above Granton Mains	3	300	2800
79	Overlay	U1113 Achow Osclay Road 300m At Top Of Hill And Bulreanrob	3	1767	5301

80	Overlay	C1021 Balnabruich Braemore	3	200	600
81	Overlay	U2052 Forss Achreamie Shebster Road	3	1100	3300
82	Inlay	B870 Frameside	1.2	53	63.6
83	Overlay	C1001 Waterplant Houses	3	440	1320
84	Overlay	U1727 Reaster Bowermadden Road Hunster To Hartfield	3	100	300
85	Overlay	U1093 Burrigale From A9 Down To Shore Road Croft	3	422	1266
86	Inlay	A836 Shebster Jct	6	105	630
87	Overlay	A99 Keiss Mains Towards Dogs Nose	6	350	2,100
88	Overlay	U1913 Dorrery Rd Near Loch	3	450	1350
89	Overlay	U1360 Reiss Sibster Rd At Harland Farm	3	220	660
90	Inlay	U4115 Park Avenue Thurso No 27-35 Patch	2	46	92
91	Overlay	C1048 Castletown Durran Mains Road West Of Durran Mains	3.5	40	140
92	Overlay	C1069 Poolhoy Wester Olrig Rd @ Durran Mains	3	84	252
93	Overlay	C1069 Poolhoy Wester Olrig Rd @ Durran Mains	3	124	372
94	Overlay	C1033 Everley Crockster Toll Rd @ Phillip Mains	3	640	1920
95	Overlay	B874 Hoy Gillock Stemster To Poolhoy	3.5	482	1687
96	Overlay	B874 Watten Mains To Lochshell, Winless Farm	3.5	110	385
97	Overlay	B874 Watten Mains To Lochshell, No7 Sibster Farm	4	315	1260
98	Overlay	B874 Watten Mains To Lochshell, No4 Sibster Farm	4.5	425	1912.5
99	Overlay	U1557 Freswick Skirza Rd Near The End Of The Road	3	190	570
100	Overlay	A836 Reay Thurso Road Forss Hotel	6.5	112	728
101	Overlay	U2893 Instack Road	3	905	2715
102	Overlay	C1001 West Of West Field Bridge	6	510	3060
103	Inlay	C1001 Bardnaclavan	1.2	220	264
104	Inlay	C1001 Janetstown	1.2	266	319.2
105	Overlay	C1033 Greenland Rigifa Road Instack Brae	3	608	1824
106	Overlay	A836 Haygarth To St John Loch	5.6	1650	9240
107	Overlay	A836 Dunnet Beach	6.4	520	3328
108	Overlay	A836 Gills	5.8	1130	6554

109	Inlay	A882 Dunn To Wick (Various Sections)	6	1300	7800
110	Overlay	A99 Keiss To Rockwater	5	2900	14500
111	Overlay	U1823 Westerdale Lochmore	3	3000	9000
112	Overlay	B876 Riess Castletown @ Greenland Jct	3	290	870
113	Overlay	U3785 Wick Cemetery Rd	7.5	177	1327.5
114	Overlay	U1063 Latheronwheel Houstry	3	3400	10,200
115	Overlay	C1069 Poolhoy To Wester Rd Tister Farm	3	200	600
116	Surface Dressing	U4057 Heathfield road	6	350	2100
117	Surface Dressing	U4038 George Crescent/ U4007 Clareance st	6	185	1110
118	Surface Dressing	U4119 Pennyland drive	6	1080	6480
119	Surface Dressing	U5493 Orkney View	6	370	2220
120	Surface Dressing	U5492 Murkle View	6	220	1320
121	Surface Dressing	U3547 Henrietta St	7.5	440	3300