
Decision Session - Executive Member for Neighbourhoods and Housing

21 December 2010

Report of the Director of Communities and Neighbourhoods

HIGHWAY MAINTENANCE, ADVANCED DESIGN ON PROGRAMMES FOR 2011-2012

Summary

1. This report outlines the preparation of the provisional highway maintenance surfacing programmes. It recommends and seeks approval to begin advanced design for a list of schemes in each category of work.

Background

2. With the approval of next year's programme we can begin to carry out advanced design of some of the schemes and minimise any delay at the start of the year. This approach has proved very successful over the last ten years and it is proposed to continue with these arrangements. It is a requirement under the Traffic Management Act (TMA) 2008 to serve a minimum three months notice of intention to carry out major works.

Surveys

3. In order to produce the programmes of highway works for the next year information is drawn from a number of sources:
 - Visual safety survey of all our roads and footways.
 - Detailed condition survey of all our roads and footways.
 - UK PMS visual and machine surveys of all roads and approximately 22% of the footway network.
4. As in previous years we carried out a full coarse visual condition survey of all our roads and footways in June and July – “the annual condition survey”. This allowed us to grade them into three categories, grade 1 (good), grade 2 (average), and grade 3 (poor). By comparing with previous years’ survey results the survey informs us whether the condition of the city's infrastructure is improving or deteriorating and identifies those streets which need to be looked at more closely with regards to future maintenance schemes.
5. A number of modifications to the survey were introduced in 2010 as part of ongoing measures to improve the quality and efficiency of the data collection:
 - The survey was carried out by the highway asset team within highway maintenance services to provide a more consistent assessment of the condition

grading.

- The introduction of hand held technology was used to record the surveyed grading. The devices are mapped based and results can be displayed in a GIS format.
 - Survey results have been loaded into the computerized highway management system to improved quality and provide reporting functionality.
6. The use of hand held technology gave the opportunity to identify those sections of a street where the condition was variable along its length. Previously it was not possible to record differing condition grades and a more general assessment was given for the whole street. This modification will give an accurate measure of the length of each condition grade for both the footway and carriageway network.
 7. Changes in the survey method over the last 2 years mean that direct comparisons of recorded condition are not reliable. However, the results of the 2010 survey indicate an improvement in the overall condition of the roads and footpaths in York. The footways and unclassified roads show a steady improvement over the last 5 years, whilst the condition of the non principal (B and C) classified roads has remained steady. The proportion of principal (A) roads recorded in poor condition increased from last year, though the survey was carried out before the A19 (south) was resurfaced. This improvement in overall condition follows 2 years of significant additional investment in the road and footway network, together with an additional programme of large scale patching to repair the damage caused by last years severe winter weather.
 8. The results of the 2010 visual survey of the highway network are shown in Annex 1. The survey results will be made available on YorkMap following this Decision Session and a computer link will be sent to all members. The exact format for the survey in future years is under consideration in conjunction with national guidance and asset valuation financial reporting requirements.
 9. In August and September of 2010 a detailed condition survey was undertaken of all the following highways.
 - Streets identified as grade 3 by 2010 annual condition survey
 - Streets where the UK PMS survey showed that sections of them breached national intervention levels
 - Requests by Members
 - Requests by residents
 - Recommendations of the Council's Safety and Area Highway Reactive Inspectors along with other officers of the Council.
 10. Each road and footway is assessed and given a condition rating (score) based on engineering criteria and experience, with a treatment solution determined. The detailed condition survey is compiled into a listing, a copy of which will be available at the meeting.

11. Machine surveys to identify the skid resistance value and other highway defects of all principal roads and other classified roads are undertaken on an annual basis.
12. With all this condition information we are in a better position to identify where we should direct our maintenance activities and develop the programmes of work.

Programme Development

13. The standards we have adopted when improving the footway or road are that even though economic designs are required they should be to the highest possible standard of quality in terms of materials, surface evenness and value for money consistent with a whole life costing approach. We would expect that full thickness surfacing of the footways should last for at least 20 - 30 years depending on whether it is a bituminous surface or cementitious and that renewal of binder course and running course for roads should last around 20 years with only minimal repair work necessary provided they have not suffered damage from third parties in the intervening period.
14. The priorities for selection are based on a number of weighting factors: -
 - Condition - we try to achieve a reasonable balance between dealing with those roads and footways in the worst condition, i.e. structural maintenance and those where early preventative work will save more costly work in the future, i.e. preventative maintenance.
 - Safety - is the road or footway safe to use and will it deteriorate within the next twelve months to make it such that it becomes unsafe?
 - Location - is it near a school, elderly persons accommodation, public buildings, shops, post offices etc.?
 - Usage - is there a heavy use by pedestrians, cyclists, public transport?
 - Accident record - is there a history of pedestrian/vehicular traffic accidents, has there been a high level of third party highway insurance claims?
 - Hierarchy - the importance of the road and/or footway to the traffic management, public transport and the pedestrian priority route.
 - Affordability - the cost of carrying out the scheme when balanced against other potential schemes and the maintenance liability if left.
 - Structural and preventative - obtaining the right balance to extend the life of the asset. Achieving the right balance is difficult when the choices are so wide and there is insufficient funding to bring the whole infrastructure up to the desired standard in one year.
15. Our approach to preparing the programmes has been as follows:-
 - LTP funding is mainly restricted to the structural maintenance of the Council's classified roads and footways network
 - CYC funding is primarily targeted at local and residential roads and footways including the city centre.

- Over the last three years the funding split has been set at 50/50 on footways and roads. The survey results in Annex 1 and the Highway Asset Management Plan indicate that we need to invest more in our road network if we are to halt the deterioration. It is therefore recommended that the funding split be revised to 40/60 on footways and roads respectively. The provisional programme of works has been compiled on this basis, however, should the executive member approve an alternative split in the funding, this will be reflected in a revised programme of works that will be brought to Executive Member Decision Session in March 2011 as part of the Annual Highway Maintenance report.
 - The city centre, because of the high pedestrian use, should continue to receive special attention in the form of its own maintenance budget.
 - The government announced its comprehensive spending review on the 20th October 2010 and the base line reduction in the structural maintenance element of the integrated transport budget is in the region of 7% from the 2010/11 levels. In addition to the reduction in the overall budget there will be a data refresh and amendments to the funding allocation formula. At the time of writing this report the LTP structural maintenance allocation for the City of York Council (CYC) is unknown.
 - For the purpose of this report it is assumed that both the LTP and CYC capital funding levels will decrease by some 20 percent from those of 2010/11. The actual budget allocation will be confirmed in the annual highway maintenance report published in March 2011.
16. In terms of surface material choices the programmes are developed in accordance with the Council's current Paving Policy for footways. Although there is no similar approved policy for road surfaces materials, common practice has been developed which uses nationally recognised materials and techniques as follows:-
- Surface dressing on rural and minor residential roads where turning movements and event sections are minimal
 - Thin overlays on minor residential roads and junctions where turning movements are more numerous and severe
 - Bituminous macadam on more heavily trafficked roads
 - Asphalt on urban principal and urban classified roads
17. The choice of asphalt will very much depend on the scope of the work we are carrying out, in the main if there is a good foundation we will continue with the use of stone mastic asphalt as this does not require a chipping spreader and therefore means resurfacing can be carried out quicker, with less disruption and in a safe manner. However, where the base is not considered adequate for stone mastic asphalt then hot rolled asphalt will be the material of choice either 30% with pre-coated chippings or high stone content, 55% aggregate.

Proposals

18. Taking account of all the policies and procedures, the provisional programme and schemes are listed in Annexes 3 - 12.

19. Over the remaining part of this year Communities and Neighbourhoods will begin work preparing schemes so that an early start on construction can be made in the new financial year.
20. Any adjustments to the programme for next year as a result of changes in the LTP and CYC budgets will be reported to Members in the March Annual Highway Maintenance report.

Consultation

21. The Council's finance manager has read the report and is satisfied with its contents.

Options

22. There are no options applicable to this report as it only seeks approval for a programme of works.

Analysis

23. Due to paragraph 21 no analysis is required.

Corporate Priorities

24. Maintenance of the city's highways has a direct impact on several of the Council's corporate aims and priorities:
 - Decrease the tonnage of biodegradable waste and recyclable products going to landfill
 - Increase the use of public and other environmentally friendly modes of transport
 - Improve the actual and perceived condition and appearance of the city's streets, housing estates and publicly accessible spaces
 - Improve the health and lifestyles of the people who live in York, in particular among groups whose levels of health are the poorest.
 - Through the proposed schemes in this report Communities and Neighbourhoods support delivery of the Thriving City, Sustainable City, Safer City, Inclusive City and Effective Organisation themes from the corporate strategy.

Implications

Financial

25. The report has been prepared using the latest indications for the highway maintenance budget for 2011/12. However, there may be changes prior to the budget finally being approved at the Budget Council in February/March 2011. The Annexes can therefore only be classed as an indicative list only. Any adjustments to the budget for the next financial year will be reflected in the programme of work and reported to Members in the March 2011 Annual Highway Maintenance report.

Human Resources (HR)

26. Staff from Communities and Neighbourhoods will be engaged in the detailed design and management of the programme of works. The quantity of work, comparable with previous years, will not impact on staffing levels.

Equalities

27. There are no equalities implications. The Council in its capacity as the Highway Authority has a duty under Section 41 of the 1980 Highways Act to maintain the public highway.

Crime and Disorder

28. There are no crime and disorder implications.

Information Technology (IT)

29. There are no IT implications in this report.

Property

30. There are no property implications.

Other

31. There are no other implications in this report.

Risk Management

32. In compliance with the Council's risk management strategy, the main risks that have been identified in this report are:
 - Strategic Risk, arising from judgements in relation to medium term goals for the service
 - Physical Risks, arising from potential underinvestment in assets
 - Financial Risk, from pressures on budgets
 - People Risks, affecting staff if budgets decline

Measured in terms of impact and likelihood the risk score for all of the above has been assessed at less than 16. This means that at this point the risks need only to be monitored as they do not provide a real threat to the achievement of the objectives of this report.

Recommendations

33. The Executive Member is recommended to:
 - note the results of the 2010 condition surveys on the city's roads and footways.
 - approve the split in funding between footways and roads on a 40/60 basis.

- approve the provisional programme of work listed in Annex 3 - 12 of this report.

Reason: To ensure the Highway Maintenance budget is expended in the most cost effective way based on the Council's assessed priorities and approved policies.

Contact Details

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Sally Burns
Director of Communities & Neighborhoods

Report
Approved



Date 03/12/2010

Specialist Implications Officer(s)

Implication: Financial
Name: Rachel Harrison
Title: Finance Manager, Communities and Neighbourhoods
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Wards Affected:

All

For further information please contact the author of the report

Background Papers:

There are no background papers

Annexes

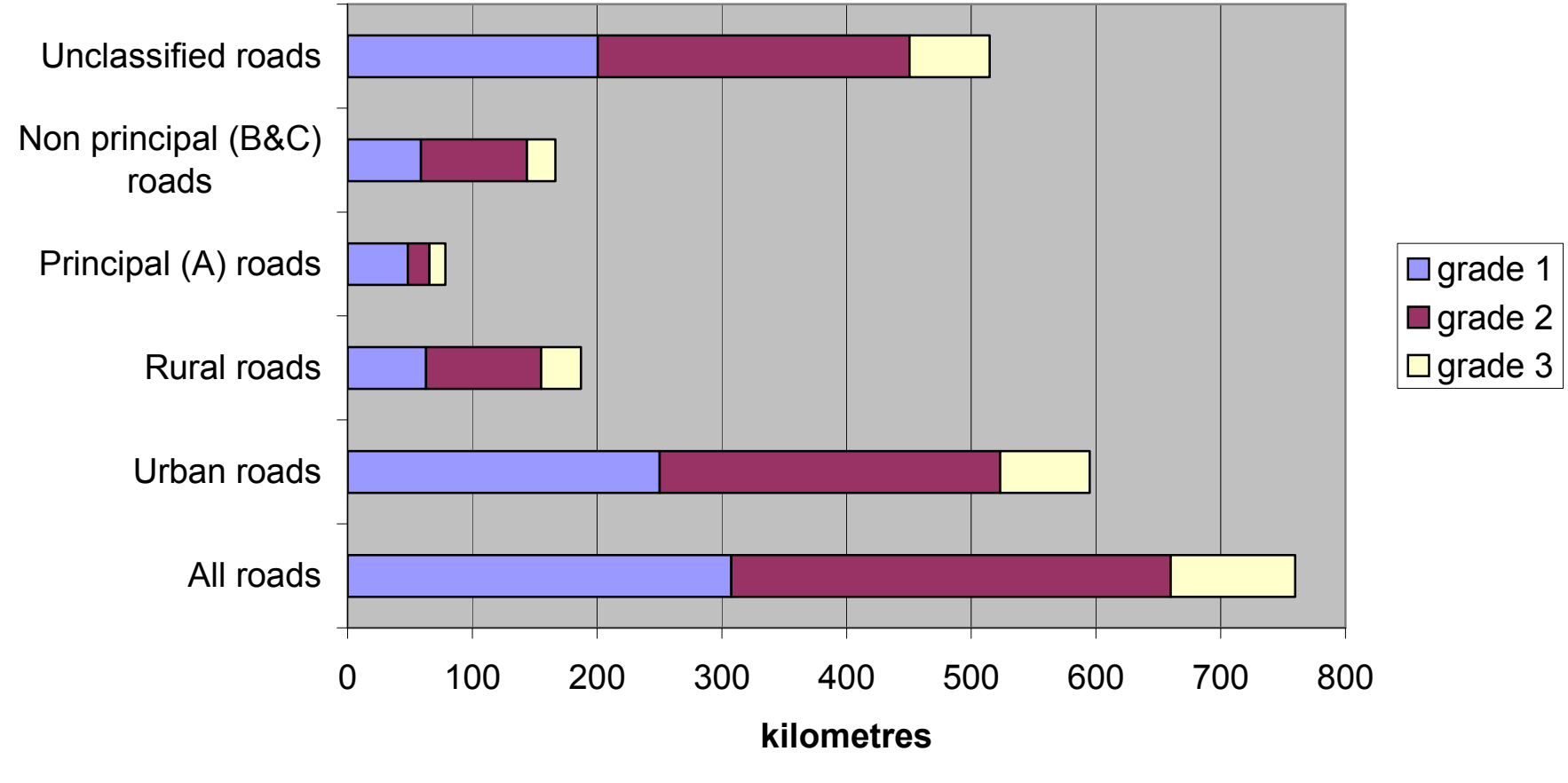
- Annex 1 - Results of the 2010 Highway Condition Survey
- Annex 2-12 - 2011/12 Advance Design Programmes

21 December 2010
Advance Programme Highway Maintenance 2011-12

	% Grade 1 - Condition Good						% Grade 2 - Condition Average						% Grade 3 - Condition Poor					
	2005	2006	2007	2008	2009	2010	2005	2006	2007	2008	2009	2010	2005	2006	2007	2008	2009	2010
All roads	29	26	28	27	34	41	52	57	56	57	48	46	19	17	16	16	18	13
All footways	30	31	31	30	38	45	62	62	62	62	55	52	8	7	7	8	7	3
Urban roads	29	28	29	28	38	43	54	57	56	57	45	45	17	15	15	15	17	12
Rural roads	28	22	26	24	22	34	47	55	55	57	57	49	25	23	19	19	21	17
Principal roads	35	34	30	27	33	62	49	51	59	63	54	22	16	15	11	10	13	16
Non-principal roads	35	28	32	30	28	35	48	58	56	56	54	51	17	14	12	14	18	14
Unclassified roads	26	25	27	26.5	36	39	54	57	55	56.5	45	49	20	18	18	17	19	12
Community footpaths	16	27	31	39	28	42	81	67	63	57	67	52	3	6	6	4	5	6
Back Lanes	12	11	13	15	25	26	68	70	67	65	64	57	20	19	20	20	12	17

	% Grades 1 and 2 - Satisfactory						% Grade 3 - Condition Poor											
	2005	2006	2007	2008	2009	2010	2005	2006	2007	2008	2009	2010						
All roads	81	83	84	84	82	87							19	17	16	16	18	13
All footways	92	93	93	92	93	97							8	7	7	8	7	3
Urban roads	83	84	85	85	83	88							17	15	15	15	17	12
Rural roads	75	77	81	81	79	83							25	23	19	19	21	17
Principal roads	84	85	89	90	87	84							16	15	11	10	13	16
Non-principal roads	83	85	88	86	82	86							17	14	12	14	18	14
Unclassified roads	80	82	82	83	81	88							20	18	18	17	19	12

Highway Condition Survey 2010



Estimated Capital Budget Allocation 2011/12

LTP Allocation 2011/12	£1,284,000
CYC Capital – R&R	£1,000,000
CYC Capital – Bridge Maintenance	£160,000
	£2,444,000

Deduct	
Bridge Maintenance (CYC)	£160,000
Street Lighting (LTP)	£68,000

Balance	£2,216,000
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R&R Budget Allocation

40/60 Split between Footway & Carriageway/Drainage	
Carriageway & Drainage	£1,330,000
Footway	£886,000

R&R Scheme Allocation

Carriageway Schemes from LTP funding	£866,000
Footway Schemes from LTP funding	£350,000
Carriageway & Drainage Schemes from CYC Capital funding	£464,000
Footway Schemes from CYC Capital funding	£536,000
Balance	£2,216,000

Estimated Revenue Budget Allocation 2011/12

Carriageway Surface Dressing	£149,000
Footway Slurry Sealing	£55,000
Balance	£204,000

Total Budget	£2,420,000
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ANNEX 3**LTP - Principal Roads Advanced Programme 2011/12**

	Road	Ward	Estimate (£)
1.	A166 Stamford Bridge Road (Part)	Derwent	51,250
2.	A1036 Malton Road (Part)	Heworth Without	147,000
3.	A19 Selby Road (Part)	Fulford	70,250
		Total	<hr/> 268,500

ANNEX 4**LTP - Non Principal Roads Advanced Programme 2011/12**

	Road	Ward	Estimate (£)
	B Roads		
1.	B1224 Wetherby Road (Part1)	Rural West York	18,250
2.	B1224 Wetherby Road (Part2)	Rural West York	14,500
3.	B1227 Micklegate (Part)	Micklegate	81,000
4.	B1228 Elvington Lane (Part)	Wheldrake	99,750
5.	B1227 Clifford Street	Guildhall	110,000
6.	B1228 Elvington Lane (Part)	Derwent	97,000
	C Roads		
1.	C308 Naburn Lane (Part)	Wheldrake	14,750
2.	C300 Howden Lane (Part)	Wheldrake	15,250
3.	C408 Tang Hall Lane (Part)	Hull Road	75,250
4.	C413 Thanet Road (Part)	Dringhouses & Woodthorpe	37,000
5.	C90 Sheriff Hutton Road (Part)	Strensall	34,750
		Total	<hr/> 597,500

LTP - Footway Advanced Programme 20011/12

	Road	Ward	Estimate(£)
A Roads			
1.	A1036 Bishopgate Street (Part)	Micklegate	9,500
2.	A1036 Tower Street (Part)	Guildhall	13,000
B & C Roads			
1.	B1222 York Road (Part)	Wheldrake	48,500
2.	C419 Water Lane (Part)	Skelton, Rawcliffe & Clifton Without	9,000
3.	Leeman Road (Part)	Holgate	12,500
4.	Huntington Road (Part)	Huntington & New Earswick	9,000
Unclassified			
1.	Chatsworth Terrace (Part)	Holgate	16,000
2.	Danebury Drive (Part)	Acomb	14,000
3.	Osbalwick Lane (Part)	Osbalwick	90,000
4.	Lansdowne Terrace (Part)	Hull Road	8,000
5.	School Lane (Part)	Bishopthorpe	35,000
6.	Harington Avenue	Hull Road	57,000
7.	Shipton Road (Part)	Skelton, Rawcliffe & Clifton Without	19,000
8.	Heslington Close (Part)	Fulford	9,500
Total			350,000

ANNEX 6**CYC Capital - Local Roads Advanced Programme 2011/12**

	Flexible Construction	Ward	Estimate (£)
1.	Burton Stone Lane (Part)	Clifton	29,000
2.	Hempland Lane (Part)	Heworth	100,000
3.	Tranby Avenue (Part)	Osballdwick	120,000
4.	Fordlands Road (Part)	Fulford	15,000
		Total	<hr/> 264,000

	Rigid Construction	Ward	Estimate (£)
1.	Bramham Road	Westfield	7,000
2.	Flaxman Avenue	Hull Road	12,250
3.	Navigation Road	Guildhall	35,500
4.	Heslington Croft	Fulford	8,250
		Total	<hr/> 63,000

ANNEX 7**CYC Capital - Surface Dressing Advanced Programme 2011/12**

	Carriageway	Ward	Estimate (£)
1.	A1237 A59 Rbt to A19 Rbt	Rural West York	54,000
2.	B1222 Naburn Lane (Part)	Fulford	29,000
3.	Stockton Lane (Part)	Heworth Without	26,000
		Total	<hr/> 109,000

ANNEX 8**CYC Capital - Footway Advanced Programme 2011/12**

	Road	Ward	Estimate (£)
1.	Acorn way	Dringhouses & Woodthorpe	62,000
2.	Moorcroft Road (Part)	Dringhouses & Woodthorpe	30,500
3.	Rawcliffe Drive (Part)	Skelton, Rawcliffe & Clifton Without	34,000
4.	Eastholme Drive (Part)	Skelton, Rawcliffe & Clifton Without	57,500
5.	Dennis Street	Guildhall	4,500
6.	Brockfield Park Drive (Part)	Huntington & New Earswick	18,000
7.	Burnholme Drive (Part)	Heworth	56,000
8.	Fosten Grove	Heworth	16,000
9.	Highmoor Road	Dringhouses & Woodthorpe	21,250
10.	Abbots Gait (Part)	Huntington & New Earswick	14,000
11.	Fulford Cross	Fishergate	45,000
12.	Fordlands Road (Part)	Fulford	54,000
13.	Howe Hill Road (Part)	Holgate	24,500
14.	Ox Carr Lane (Part)	Strensall	19,250
15.	Church Lane Remote Footway (Part)	Haxby & Wigginton	41,250
		Total	<hr/> 497,750

ANNEX 9**CYC Capital - Footway Advanced Slurry Sealing Programme 2011/12**

	Road	Ward	Estimate (£)
1.	Bowland Way/Coldbeck Close	Skelton, Rawcliffe and Clifton Without	5,250
2.	Beckfield Lane (Part)	Acomb	20,250
3.	Coniston Drive	Hull Road	1,750
4.	Foxwood Lane (Part)	Westfield	7,000
5.	Huntsman Walk	Westfield	4,000
		Total	<hr/> 38,250

ANNEX 10**CYC Capital - Drainage Programme 2011/12**

	Road	Ward	Estimate (£)
1.	Various Issues	Various	28,000
			Total 28,000

ANNEX 11**CYC Revenue - Surface Dressing Advanced Programme 2011/12**

	Road	Ward	Estimate (£)
1.	C301 Wheldrake Lane	Wheldrake	97,500
2.	Brackenhills	Rural West York	9,000
3.	Dikelands Lane	Rural West York	19,500
4.	Old Moor Lane	Dringhouses & Woodthorpe	11,000
5.	Field Lane Access Road	Heslington	12,000
			Total 149,000

CYC Revenue – Slurry Sealing Advanced Programme 2011/12

	Road	Ward	Estimate (£)
1.	Broome Close	Huntington & New Earswick	750
2.	Broome Road/Way	Huntington & New Earswick	2,750
3.	Garth Road (Part)	Huntington & New Earswick	2,000
4.	Briergate	Haxby & Wigginton	8,500
5.	Springwood	Haxby & Wigginton	3,000
6.	Appleby	Haxby & Wigginton	2,750
7.	Pinelands	Haxby & Wigginton	2,750
8.	Bracken Close	Huntington & New Earswick	1,500
9.	Fern close	Huntington & New Earswick	1,500
10.	Greenn Way	Huntington & New Earswick	750
11.	Greenacres	Huntington & New Earswick	6,500
12.	Lea Way	Huntington & New Earswick	7,250
13.	Moor Way	Huntington & New Earswick	1,000
14.	Wood Way	Huntington & New Earswick	4,500
15.	Woodland Way	Huntington & New Earswick	9,500
		Total	<hr/> 55,000