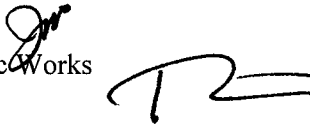


PUBLIC WORKS DEPARTMENT
MEMORANDUM #2014 – 01

DATE: January 6, 2014
TO: Honorable Mayor Joyce Downing and City Council Members
FROM: John Pick, City Manager
David H. Willett, Director of Public Works 
SUBJECT: 2014 Residential Street Program

BACKGROUND

The Pavement Condition Index (PCI) survey was conducted for all public roadways in the city of Northglenn during 2013. The data collected during the survey was used to formulate recommendations for pavement maintenance for the 2014 Residential Street Program. The PCI data is available upon request.

RESIDENTIAL STREET PROGRAM (pavement maintenance)

Recommended pavement maintenance treatments may include: milling and overlay, edge plane and overlay, chip seal and slurry seal. Note that street reconstruction is not considered a maintenance activity.

- **Mill and overlay** involves removal of the top 1-1/2 inches of existing asphalt and applying 1-1/2 inches of new asphalt pavement section per CDOT recommendation. This treatment provides structural stability and adds ten to fifteen years to the life expectancy of the pavement.
 - Rosalie Dr from E. 108th Ave to Leroy Dr
 - Switzer Ln from City Limit to Damon Dr
 - Covey Ct from Fred Dr to Lou Dr

- **Edge plane and overlay** involves removal of the top 1-1/2 inches of asphalt, but only on the outside edges of the street. The entire street is then overlaid with 1-1/2 inches of new asphalt. This application provides additional structure to the drive lanes and adds ten to fifteen years to the life expectancy of the pavement.
 - Rapp Ln from W. 99th Ave to W. 98th Ave
 - Claire Ln from Kennedy Dr to Roseanna Dr
 - Brewer Dr from Claire Ln to Roseanna Dr
 - Sante Fe St from Kennedy Dr to Roseanna Dr
 - W. 99th Ave from Croke Dr to Huron St

- **Chip seal** is an application of a bituminous binder covered with an application of clean graded aggregate to an existing asphalt surface. This type of treatment is widely used and provides a new wear surface that will extend the life expectancy of the pavement by five to seven years.
 - Bell Ln from Bruce Ln to Alamo Dr
 - Fox St from Fred Dr to City Limit
 - Bruce Ln from Belford Dr to W. 99th Ave
 - Phillips Dr from Irma Dr to High St
 - Fred Dr from Huron St to Pelon Dr

Residential Street Program

- **Slurry seal** is a mixture of emulsified asphalt, water, fine-aggregate and mineral filler. Slurry seals are used to fill existing pavement surface defects. This treatment option is recommended for structurally sound streets that are in need of preventative maintenance to extend the life expectancy of the pavement by four to six years.
 - E. 107th Pl from Lincoln St to Grant Dr
 - Muriel Dr from Northglenn Dr to Grant Dr
 - Pike St from E. 109th Ave to Carrol Ln
 - Lincoln St from E. 117th Ave to E. 116th Ave
 - Elati St from W. 112th Ave to Melody Dr
 - E. 118th Pl from Lincoln St to Grant St
 - E. 118th Ave from Grant St to Lincoln St
 - E. 114th Pl from Franklin St to Irma Dr
 - W. 118th Ave from Huron St to Acoma St
 - Pearl St from E. 117th Ave to Dead End
 - Irma Dr Cul-de-sac at Dean Dr
 - Pennsylvania St from E. 117th Ave to Dead End
 - E. 104th Pl from Madison Wy Cul-de-sac
 - E. 117th Ct from Wyco Dr to E. 117th Wy
 - Muriel Dr from Grant Dr to Washington St
 - Adams Ct from Adams St to Cul-de-sac
 - Adams St from Fox Run Pkwy to Madison Wy
 - Steele St from Fox Run Pkwy to E. 106th Ave
 - Madison Wy from Fox Run Pkwy to Adams St

STREET RECONSTRUCTION PROJECTS

- **Garland Drive** – Washington Street to (approx) Blue Jay Lane: Pavement analysis has shown that the current pavement section will not support the impact of heavy truck traffic. Note that Asphalt Specialties was the low bidder in 2013, and has agreed to hold pricing at \$196,919.

BUDGET/TIME IMPLICATIONS

- 2014 Residential Street Program has an appropriation of \$650,000 (ADCOT).
- Garland Drive Reconstruction has an appropriation of \$350,000 (General Fund)

STAFF REFERENCE

Kent Kisselman, PE, Superintendent of M&O

kkisselman@northglenn.org

(303) 450-4005

Laurie Clark, PE, Civil Engineer II

lclark@northglenn.org

(303) 450-8835

Attachments:

- *2014 Residential Street Program Cost, including proposed Garland reconstruction project*
- *City Wide Treatment Illustration*

30-Dec-13

PROPOSED CIP WORK 2014		STREET	FROM	TO	BRANCH ID	SECTION ID	2013 PCI	LENGTH (FEET)	COST PER LF	COST ESTIMATE
RECONSTRUCTION*	1	GARLAND DR	WASHINGTON ST	(WEST)	10113	2	86	480		\$220,000
	TOTAL LENGTH								480	\$450

PROPOSED RESIDENTIAL STREET WORK 2014		STREET	FROM	TO	BRANCH ID	SECTION ID	2013 PCI	LENGTH (FEET)	COST PER LF	COST ESTIMATE
MILL AND OVERLAY*	2	ROSALIE DR	E 108TH AVE	LEROY DR	11319	2	29	1070		
	3	SWITZER LN	TCL	DAMON DR	15055	0	39	300		
	4	COVEY CT	FRED DR	LOU DR	15060	0	38	550		
	TOTAL LENGTH								1920	\$44
EDGE PLANE AND OVERLAY*	5	RAPP LN	W 99TH AVE	W 98TH AVE	16003	0	39	723		
	6	CLAIRE LN	KENNEDY DR	ROSEANNA DR SOUTH	9046	1	39	1655		
	7	BREWER DR	CLAIRE LN	ROSEANNA DR	9038	1	38	1365		
	8	SANTE FE ST	KENNEDY DR	ROSEANNA DR	9049	0	34	800		
	9	W 99TH AVE	CROKE DR	HURON ST	16006	1	35	1375		
TOTAL LENGTH								5918	\$41	\$240,000
CHIP SEAL**	10	BELL LN	BRUCE LN	ALAMO DR	15066	0	41	710		
	11	FOX ST	FRED DR	TCL	15059	0	41	622		
	12	BRUCE LN	BELFORD DR	W 99TH AVE	15065	2	43	1160		
	13	PHILLIPS DR	IRMA DR	HIGH ST	2357	2	43	1130		
	14	FRED DR	HURON ST	PELON DR	15061	0	44	1549		
TOTAL LENGTH								5171	\$14	\$75,000
SLURRY SEAL**	15	E 107TH PL	LINCOLN ST	GRANT DR	10116	0	75	680		
	16	MURIEL DR	NORTHGLENN DR	GRANT DR	10125	1	75	1599		
	17	PIKE ST	E 109TH AVE	CARROL LN	10119	0	74	1750		
	18	LINCOLN ST	E 117TH AVE	E 116TH AVE	3101	2	74	440		
	19	ELATI ST	W 112TH AVE	MELODY DR	10080	0	74	855		
	20	E 118TH PL	LINCOLN ST	GRANT ST	3147	0	74	390		
	21	E 118TH AVE	GRANT ST	LINCOLN ST	3146	2	73	500		
	22	E 114TH PL	FRANKLIN ST	IRMA DR	2337	2	73	450		
	23	W 118TH AVE	HURON ST	ACOMA ST	3087	0	71	1456		
	24	PEARL ST	E 117TH AVE	DEAD END	3108	1	70	550		
	25	IRMA DR	CUL DE SAC	AT DEAN DRIVE	2205	5	70	254		
	26	PENNSYLVANIA ST	E 117TH AVE	DEAD END	3106	2	70	220		
	27	E 104TH PL	MADISON WAY	CDS	12038	1	70	395		
	28	E 117TH CT	WYCO DR	E 117TH WY	2356	0	70	556		
	29	MURIEL DR	GRANT DR	WASHINGTON ST	10125	2	70	781		
30	ADAMS CT	ADAMS ST	CDS	12028	2	66	283			
31	ADAMS ST	FOX RUN PKWY	MADISON WAY	12027	2	65	1144			
32	STEELE ST	FOX RUN PKWY	E 106TH AVE	12009	3	65	581			
33	MADISON WAY	FOX RUN PKWY	ADAMS ST	12033	3	59	648			
TOTAL LENGTH								13532	\$9	\$120,000
20% CONTINGENCY										\$130,000
TOTAL 2014 RESIDENTIAL STREET PROGRAM BUDGET										\$650,000

* Prices based on 2013 work performed in Northglenn.

** Price quote from A-1 Chipseal dated 10/28/13.



2014 Proposed Street Work

