



BIRDIE Recommendation: Yard Debris Collection



10.22.2013

Village Council Work Session



Summary

In keeping with the Village's strategic objectives of preserving the character and ambiance of the Village and protecting the environment, the BIRDIE team was tasked with performing a comprehensive review of the Village's current yard debris collection process and providing recommendations for process improvement. While working through the BIRDIE process, the committee focused on these primary perspectives: community appearance, customer convenience, cost to tax payers, efficiency, worker safety, and employee job satisfaction.

The BIRDIE committee conducted a thorough review of the current yard debris collection process, completed site visits to two North Carolina towns, investigated the impact of the current process on Streets & Grounds, and considered several potential options. Upon review, it became clear that the scope of this project had to be broadened to include the efficiency of the entire solid waste collection process with the ultimate goal to include the possibility of same day collection.

An evaluation of each solution was conducted against six primary perspectives and included the identification of each solution's potential advantages and challenges, feedback from affected staff, and thoughtful consideration of the customer's perspective. The recommended solution is **single day collection with automated yard debris collection**. This option would provide efficiency gains, increase worker safety, and reduce Streets & Grounds involvement in the yard debris collection process; resulting in \$204,511 of labor expenses being reallocated from Solid Waste back to Streets & Grounds. Time gained by Streets & Grounds would contribute to enhanced community appearance.

Primary Perspectives Considered:

- Community Appearance
- Customer Convenience
- Cost to Tax Payers
- Efficiency
- Worker Safety
- Employee Job Satisfaction

Recommendation:

1. Single-day collection of all solid waste collection services
2. Automation of yard debris collection
3. Collection system modifications for Old Town and the condominium complexes

*See page four for further information.



The financial highlights of the recommended solution are as follows:

Financial Highlights of Recommended Solution

	Current system	Proposed system	Change
Labor hours per week	488	360	26% decrease
Streets & Grounds labor	128	0	128 hours week (27% S&G labor inc.) 6,656 hours per year 3.2 FTE
S&G costs for SW services	\$204,511	\$0	\$204,511
Yard debris carts	\$0	\$150,000	\$150,000
Condo corral & cart costs	\$0	\$120,000	\$120,000
Holiday pay	\$0	\$20,021	\$20,021
Net savings/(loss) year 1	\$1,434,096	\$1,399,606	\$(85,510)
Net savings year 2	\$1,434,096	\$1,249,606	\$184,490
Cost per month	\$17.38	\$18.41	\$1.03 increase 5.9% yr-1
Cost per month year 2	\$17.38	\$15.14	\$2.24 decrease Down 12.9% yr-2
Days waste at curb	3 plus	1	67% decrease



Evaluation

In keeping with the Village's strategic objectives of preserving the character and ambiance of the Village and protecting the environment, the BIRDIE team was tasked with performing a comprehensive review of the Village's current yard debris collection process and providing recommendations for process improvement.



The BIRDIE team was comprised of the following members:

- Jeff Batton, Assistant Village Manager
- John Cashion, Village Council
- Walt Morgan, Public Services
- Randy Kuhn, Fleet Maintenance
- Tom Haughney, Public Services
- Darrell McKenzie, Public Services
- John Frye, Finance
- Scott Thomas, Planning & Inspections
- Melissa Holt, Administration

The team first educated itself on the current yard debris collection process, which included on-site observation and photo documentation. After becoming familiarized with the current process, the team identified several problems: **lack of efficiency, worker safety, and impact on community appearance**. Currently, yard debris is collected Village-wide on Wednesdays, requiring staff to cover over 105 miles of streets using a largely manual process. In order to complete this task, the entire Solid Waste staff and up to nine Streets & Grounds employees are required to work on yard debris collection each Wednesday for 9 out of 12 months. This consumes 20% of Streets & Grounds labor hours for the week and substantially impairs their ability to accomplish their department's objectives. **In addition, it is anticipated that the Moore County landfill will begin charging for yard debris in 2015.**

In order to learn from other communities, Tom Haughney and Darrell McKenzie visited Kernersville, NC and Huntersville, NC to evaluate their same-day solid waste collection processes and report back to the BIRDIE team. In addition, two sub-committees identified and investigated the various obstacles associated with collection efficiency as well as the impact of proposed solutions on Streets & Grounds. Another sub-committee prepared a proposed collection map and a cost analysis of both the current and proposed collection processes.

The BIRDIE team identified several options for consideration, but in the end, three solutions rose to the top as the best alternatives for consideration:

- Limiting number of yard debris bags
- Automation of yard debris with carts
- Single day collection with automated yard debris collection



A thorough evaluation of each potential solution was conducted, including the identification of each solution's advantages and challenges, feedback from affected staff, and thoughtful consideration of the customer's perspective. The recommended solution is option three: **single day collection with automated yard debris collection.**

Detailed Recommendations

The BIRDIE team unanimously recommends the following as the solution for the yard debris collection process:

1. Single day collection
 - a. Divide the Village into four collection zones
 - b. All waste types are collected on the same day in each zone
 - c. All waste is placed curbside no earlier than the evening prior to collection
 - d. Solid Waste employees to work four (4) ten-hour days each week
2. Fully automated collection, including yard debris
 - a. Purchase 3,000 carts for yard debris with second cart available for purchase; 2 cart limit
 - b. Require all yard debris material to fit in cart(s)
 - c. Provide fee for service for bulk yard collection
3. Other collection system modifications
 - a. Old Town
 - i. Require all residences to have carts for each service
 - ii. Reduce the locations that have back door service
 - iii. Convert back door service to line of sight placement on the day of collection for those without back alleys
 - b. Condominiums
 - i. Require corrals where groups of carts would be stored for depositing trash and recycling. Space corrals evenly throughout complex.
 - ii. Village provides corrals
 - iii. Provide household and recycling carts at no charge to the condominium associations

These recommended changes will allow for maximized efficiency, enhanced community appearance, and greater employee safety and job satisfaction.



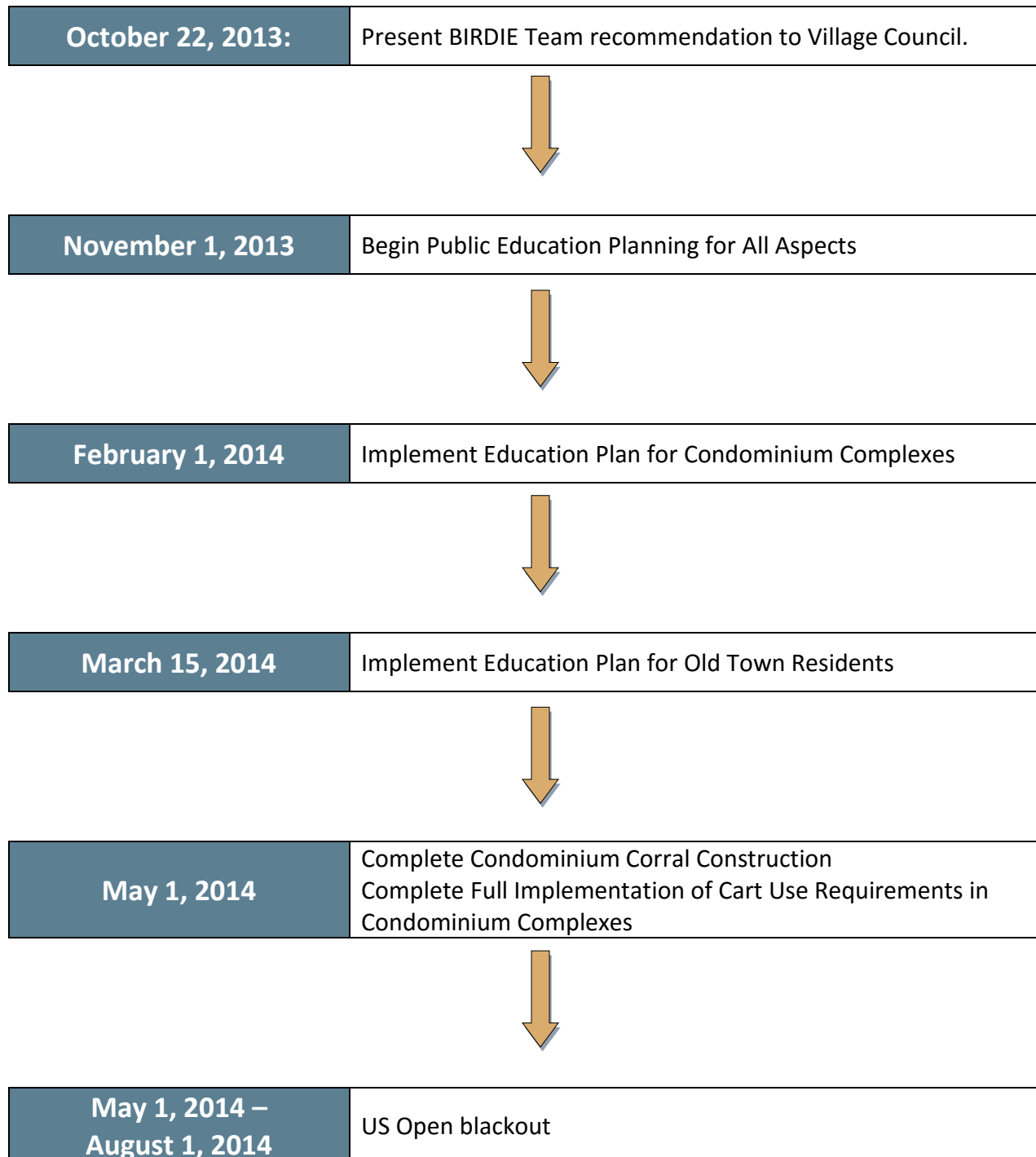
The proposed solution will provide the following advantages:

Advantages of Recommended Solution

Perspective	Advantage
Community Appearance	Waste is curbside only 1 day per week in each neighborhood instead of 3 or more
	Yard debris may only be placed at curb evening prior to collection day
	Village gains 6,656 additional work hours for streets and right of way maintenance per year
Customer Convenience	Easy for citizens to remember their collection day and alternate holiday pickup day
	No bagging – easier for residents
Cost to Tax Payers	Reduction in yard debris tonnage will save money when the county begins charging in 2015
	Redirects \$204,000 to Streets & Grounds maintenance tasks
Process Efficiency	Eliminates manual pickup truck method of yard debris collection
	All yard debris collected using automated method
	All yard debris is compacted as it is collected
	All yard debris is taken directly to the landfill
	Limits amount of yard debris per house per collection day
	Spikes in yard debris volume are spread over 4 days
	Less vehicles used, meaning less vehicle maintenance and gasoline costs
Employee Safety & Job Satisfaction	Employees have a day each week for personal business or medical appointments (reduced absenteeism)
	Automation reduces employee injuries and worker's compensation claims
	S&G employees will earn 8 hours of holiday pay for each holiday
	Employees will save travel costs to and from work



Implementation Plan





BIRDIE Recommendation: Yard Debris Collection



June 15, 2014	Complete Full Implementation of Trash and Recycle Cart Use Requirements in Old Town
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September 1, 2014	Implement Public Education for Yard Debris Cart Use Village-wide
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December 1, 2014	Begin Yard Debris Cart Distribution Throughout Village
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January 2, 2015	Full Implementation of Same Day Collection System
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