



City of Gastonia Recycling Program Update

Utilities Committee Meeting
August 26, 2020

Gastonia's Recycling History

- July 1989: Placed two unmanned bulk containers with compartments at Dixie Village and Long Avenue/Church Street.
- Early 1990s: Assigned a Litter officer to clean City and monitor sites.
- 1998: Contracted to collect 18-gallon bins at curbside. Citizens voluntarily paid \$2.50/household per month to participate.
- February 2002: County Farmer's Market Recycling Center opened.
- January 2012: Contracted with Republic Services to collect 96-gallon bins at curbside. All households received carts to participate in the recycling program.
- July 2018: Focused education on contamination of recycling stream.
- July 2019: Reduced curbside recycling to the "Fab 4".
- January 2020: Mailed "Fab 4" recycling postcard to all residents.
- Future: Republic Services contract expires June 30, 2021.

Recycling History (Cont.)

1998



Single-Stream

VS

Multi-Stream



2019

PLASTIC  No pumps Empty and rinse	ALUMINUM  Empty and rinse
NEWSPAPER  Must be dry	CARDBOARD  Must be flattened and dry



The Chinese Ban on U.S. Recyclables

- January 2018: China stopped allowing the import of recyclable goods from many countries, including the United States.
- Nations are struggling with excess amounts of recyclables with nowhere to send it.
- China has also banned many scrap materials and has not accepted others unless they meet an extremely strict contamination rate of 0.5%.
- The decision reflects China's desire to recycle more of its domestic waste.
- Previously, China had been the destination for about 40% of the United States' paper, plastics, and other recyclables.

Gastonia's Recycling Program Today

- Recycling participation by Gastonia residents is approximately 35%.
- City of Gastonia is billed for 23,727 recycling carts each month (per contract).
- In FY 2020, approximately 3,500 tons (average 292 tons/month) of materials were collected and placed in the City's recycling stream.
 - 60% (average) of the collected material is contaminated according to the Materials Recovery Facility (MRF) operator.



Future Challenges with Recycling

- Problems facing the industry are causing recycling companies to stop providing this service or significantly increase charges:
 - Rampant contamination.
 - Instability in the international recycling market.
 - Fewer lucrative options for reusing traditional recyclables.
- Gastonia is Not Alone:
 - **Shelby**: Decided to stop offering curbside recycling.
 - **Kings Mountain**: Suspended curbside recycling.
 - **Wrightsville Beach**: Was on track to launch a curbside recycling program this year, but those plans are now on hold.
 - **Bessemer City**: Discontinued curbside recycling.
 - **China Grove**: Discontinued curbside recycling after 2019 following a potential \$106,000 cost increase.
 - **Nags Head**: Suspended curbside recycling.
 - **Trinity**: Suspended curbside recycling.

The Problem: Residual Contamination

Contamination occurs when improper materials are placed in the system, or when the correct materials are contaminated from spillage.



Gastonia's average contamination rate is 60% according to the Materials Recovery Facility (MRF) operator.



Curbside Costs Since Inception

Fiscal Year (FY)	*11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	**20/21	***21/22
# Households (HH)	21,900	21,812	21,895	22,082	22,243	23,000	22,900	23,100	23,400	23,727	24,000
Projected Cost	\$407,340	\$811,406	\$822,376	\$842,649	\$848,792	\$676,200	\$687,000	\$704,088	\$994,032	\$1,051,579	\$1,097,280
Per HH/Month	\$3.10	\$3.10	\$3.13	\$3.18	\$3.18	\$2.45	\$2.50	\$2.54	\$3.54	\$3.66	\$3.81
Actual Cost	\$570,879	\$813,273	\$825,615	\$841,494	\$862,797	\$691,975	\$689,457	\$709,414	\$993,055		
Difference	\$(163,539)	\$(1,866)	\$(3,238)	\$1,155	\$(14,004)	\$(15,775)	\$(2,457)	\$(5,326)	\$977		

* FY 11/12 only for half the FY

** FY 20/21 with 3.5% CPI Increase

*** FY 21/22 contract ends June 30, 2021; reflects projected cost if current contract continued unchanged

Current Cost of Service

Per Household Per Month

Actual Cost of Service for FY 20

	Expenditures	Revenues	Balance
Garbage Collection	\$ 9.70	\$ 8.50	\$ 1.20
Yard Waste Collection	\$ 3.51	\$ 0.54	\$ 2.97
Leaf Collection	\$ 0.82	\$ 0.00	\$ 0.82
Recycling Collection	\$ 3.70	\$ 0.00	\$ 3.70
Administration	\$ 1.76	\$ 0.04	\$ 1.72
HR Retiree Cost	\$ 0.25	\$ 0.00	\$ 0.25
Total Cost Per Month	\$19.74	\$ 9.08	\$10.66

- Based upon 23,791 households as of 6/30/2020
- FY 21 Recycling Contract rate is \$3.66 per household per month

In FY 18, City Council approved a “50/50” strategy for Solid Waste – 50% of the expenditures are funded from the General Fund, and the other 50% from the Solid Waste Enterprise Fund revenue stream.

The General Fund transfer to Solid Waste for FY 20 = \$3,008,264 for a total Solid Waste budget of \$6,018,765.

Other Cities' Recycling Contracts

- **Gastonia's** current rate: \$3.66/household/month.
- **Town of Hildebran:** Renewed contract using (2) 18 gallon bins and charge residents \$8.00/household/month.
- **Boiling Springs:** No negotiating; were told their rate would increase from \$4.91 to \$5.06/household/month.
- **Town of Cary:** A 3.2% CPI increase, and excess contamination fee increase from \$150/ton to \$154.80/ton.
- **City of Charlotte's** current rate: \$2.74/household/month; in the last year of their contract and expect increases.
- **City of Salisbury:** Renegotiated contract at a new rate of \$4.43/household/month.
- **Town of Zebulon:** Renewed contract from \$3.46 to \$4.18/household/month.

To continue recycling in Gastonia:

- Negotiate a new contract (increased per cart fee).
- Most likely have a contamination clause put back in.
- Expect 3%-4% annual CPI increase.
- Most likely be charged a landfill dump fee.
- Most likely be charged an Administrative fee (trip fee).

Gastonia's Recycling Option Moving Forward:

A New & Improved City and County Solid Waste Approach

- **FISCAL YEAR 21:**

○ End our recycling contract 6 months early (December 31, 2020)	
○ Cost of recycling contract (6 months):	\$555,789
○ Cost to purchase recycling carts:	\$241,000
○ Re-purpose recycling carts as garbage carts	
○ FY 21 increased operational costs:	\$ 20,000
○ FY 21 increased landfill costs:	<u>\$ 50,000</u>
	TOTAL: \$866,789

FY 21 One-time Capital Costs:

○ Improve Farmer's Market Drop-off Recycling Center	\$121,000
○ Construction of New Drop-off Recycling Center at Duke St.	<u>\$374,000</u>
	TOTAL: \$495,000

FY 21 TOTAL EXPENSES: \$1,361,789

FY 21 Total Recycling Budget: \$1,111,577

○ Additional Expense: \$250,212

- **FISCAL YEAR 22:**

○ Potential second phase of improvements at Duke St. Recycling Center	\$ TBD
○ FY 22 increased operational costs:	\$ 40,000
○ FY 22 increased landfill costs:	\$ 100,000



SOLID WASTE & RECYCLING CENTERS

LINCOLN COUNTY

CLEVELAND COUNTY



RECYCLING & WASTE CENTER
IDENTIFIED BY NUMBER

CENTERS	LOCATION	PHONE
1. Crockett Creek	1120 CP (Crockett Road), Gastonia	(704) 866-0794
2. Harbin	2101 Philadelphia Church Rd., Dallas	(704) 921-2543
3. New Hope	200 Lake Wylie Rd., Belmont	(704) 828-2222
4. Riverbend	148 Mountain Island Rd., Mt. Holly	(704) 827-8327
5. Tryon	Hwy. 274, Bessemer City	(704) 426-4225
Hours:	7:30 AM - 5:00 PM (Monday - Saturday), 1:00 PM - 5:00 PM (Sunday)	
6. Yard Waste Facility	3100 Philadelphia Church Rd., Dallas	(704) 921-4843
Hours:	7:00 AM - 4:00 PM (Monday - Friday), 8:00 AM - 4:00 PM (Saturday)	
7. Farmer's Market	419 E. Long Avenue	(704) 863-8411
Hours:	7:30 AM - 1:00 PM (Monday - Saturday), 1:00 PM - 1:30 PM (Sunday)	
8. Household Appliances	128 Leisure Ln., Dallas	(704) 921-7729
Call the Solid Waste and Recycling Division for current schedule.		
FEE SCHEDULE		
1 - 10 Bags	\$1.00	
11 or more bags	\$4.00	
Other Fees		
Tires (all sizes) - Car	No Charge	Steel Load - Pick-Up Truck \$4.00
Appliances	No Charge	Large Load - Pick-Up Truck \$8.00
(Do not receive Island Composters)		Trailer Load - Pick-Up Truck \$16.00
		Motorcycle / Boat Spring \$2.00
(Bag = Average Size Orange Bag = 33 Gallons)		
Credits		
12" Stack of Newspapers or less (1) bag of Recyclables	\$1.00	
Credit on Ragged garbage only		
Bag - Shipping (tag or longer)		
GASTON COUNTY LANDFILL		
Location:	Philadelphia Church Rd., Dallas	
Hours:	Mon. - Fri. 7:00 AM - 4:00 PM, Sat. 8:00 AM - 12:00 PM	
Charge:	\$25.00 per ton - Municipal Solid Waste	
Note:	Cash, check, VISA or Mastercard ONLY. No outside are accepted for payment at the landfill. Call (704) 921-0267 for more questions or visit our website www.gastonnc.com/landfill	
INDUSTRY NUMBERS		
County Landfill:	(704) 921-0267	
County Recycling:	(704) 866-3022	
Solid Waste Enforcement:	(704) 866-3100	

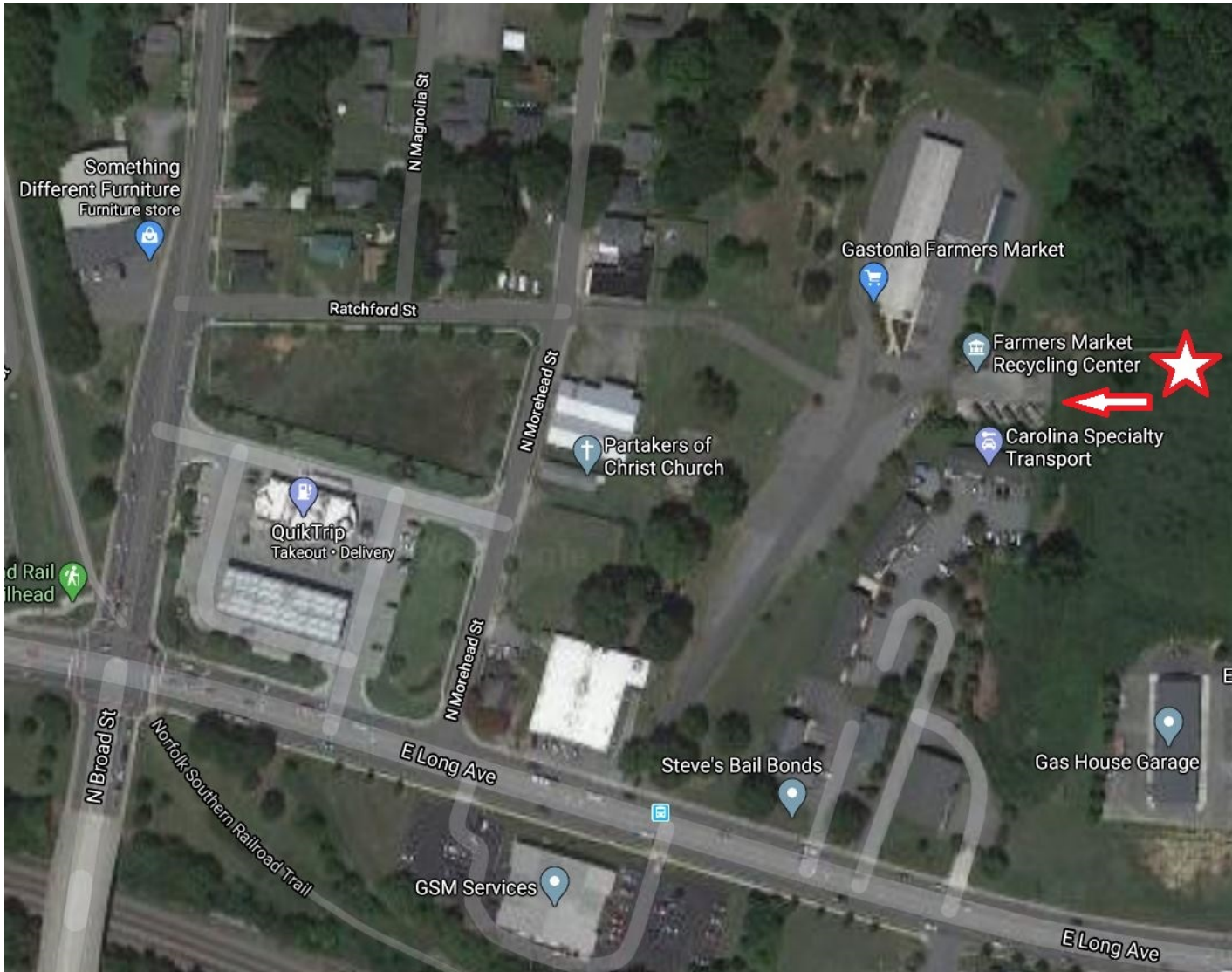
NORTH CAROLINA
SOUTH CAROLINA

YORK COUNTY
SOUTH CAROLINA

MECKLENBURG COUNTY



Farmer's Market Drop-off Recycling Center



DROP-OFF RECYCLING IS FREE AT THE GASTONIA FARMERS MARKET

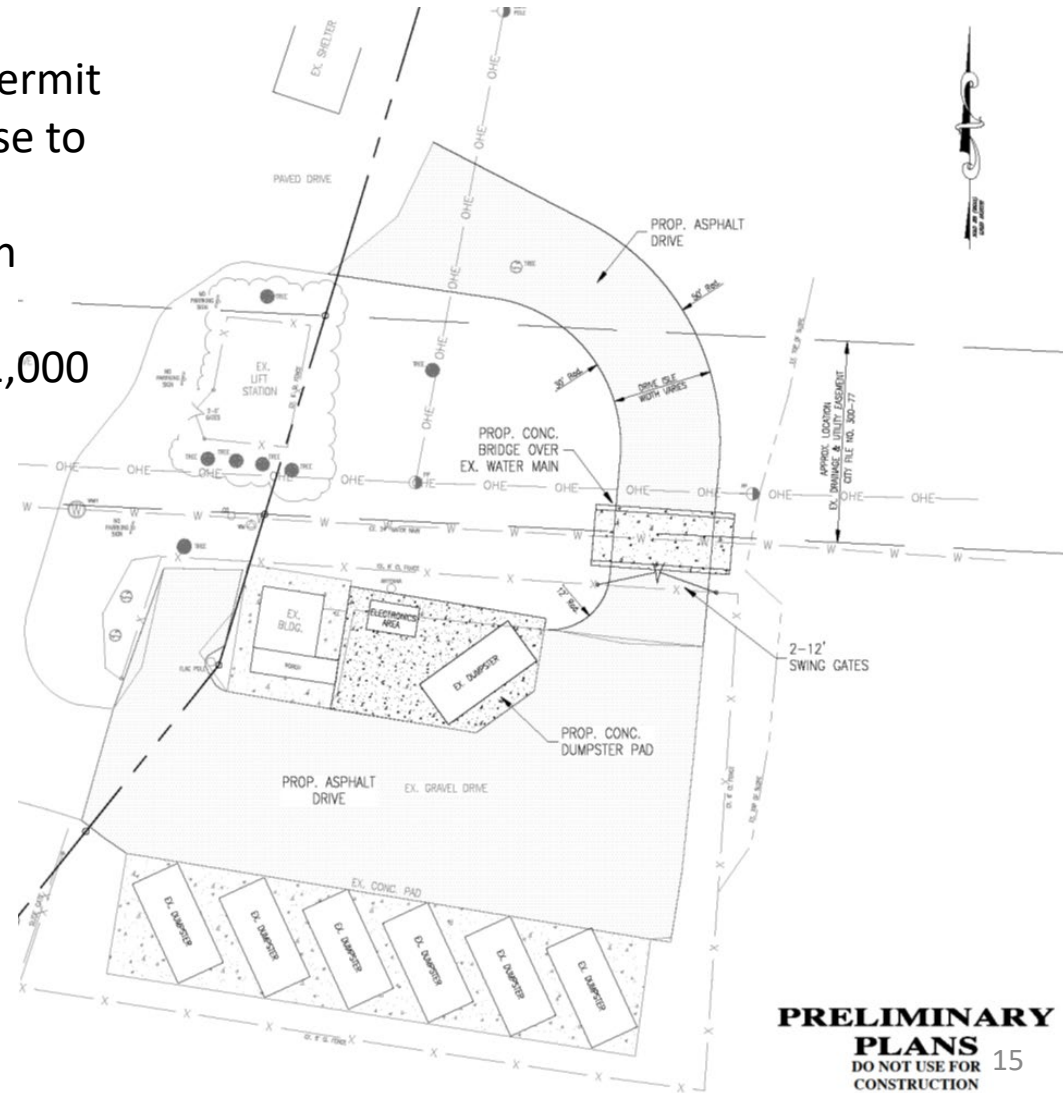
Fees apply to electronics. Tires & appliances are not accepted at this location.



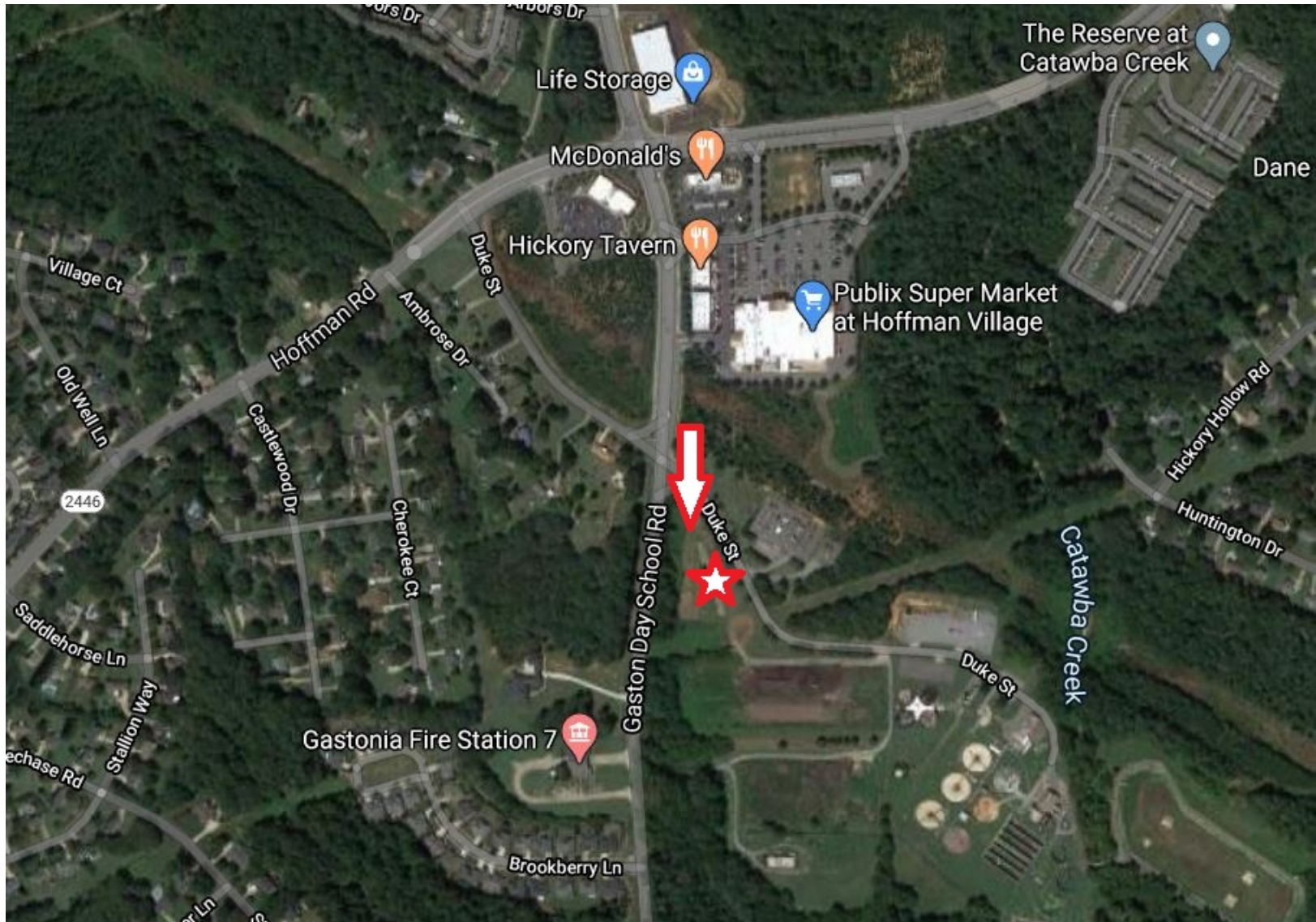
Location: 410 E. Long Avenue – Gastonia, NC 28054
Monday – Saturday 7:30 am to 5:30 pm (closed Sundays)

Farmer's Market Drop-off Recycling Center Improvements

- Construct driveway extension to permit drive-through capability in response to anticipated increase in patronage
- Continue to be operated by Gaston County
- Estimated construction cost: \$121,000

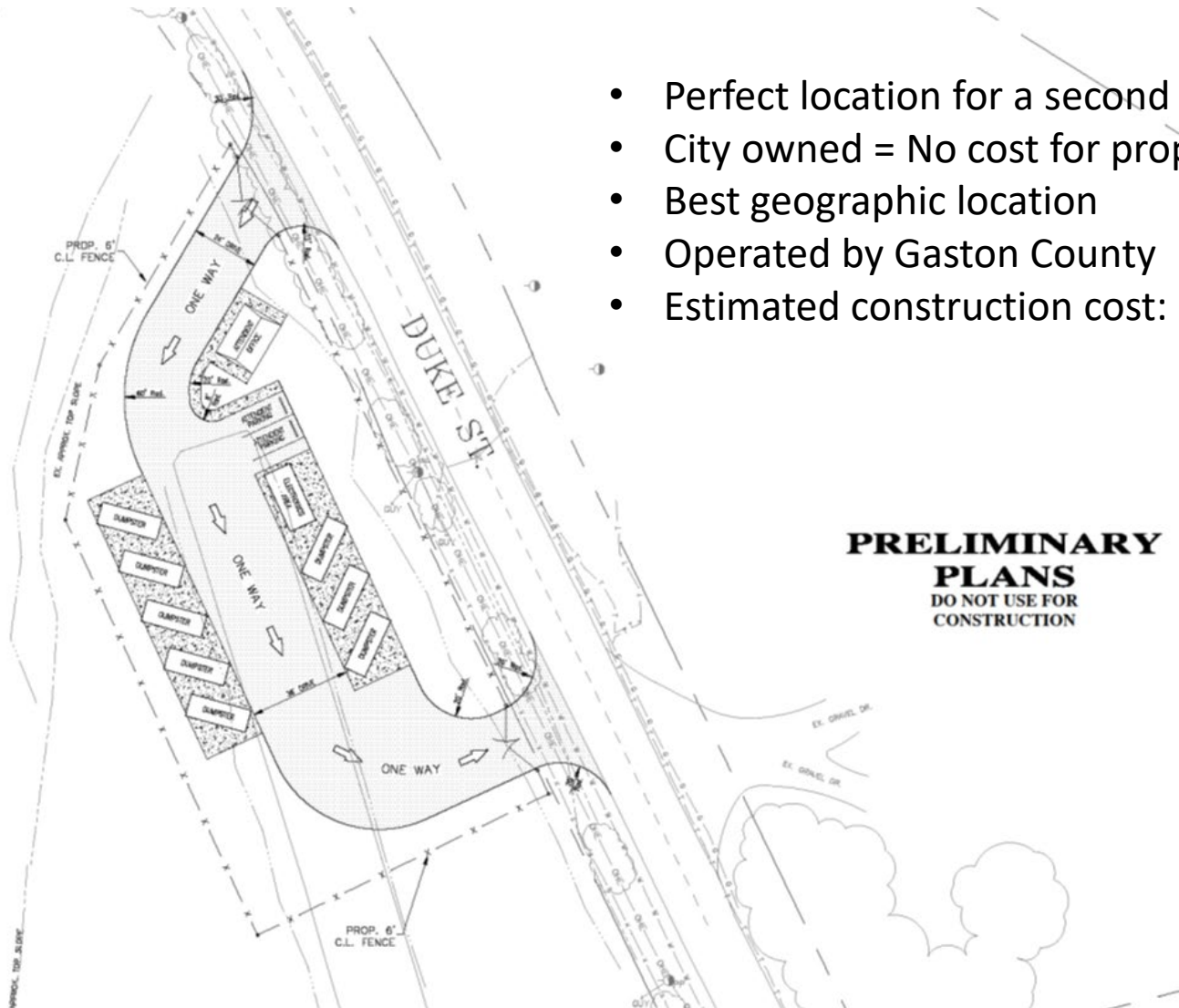


Proposed Duke Street Drop-off Recycling Center

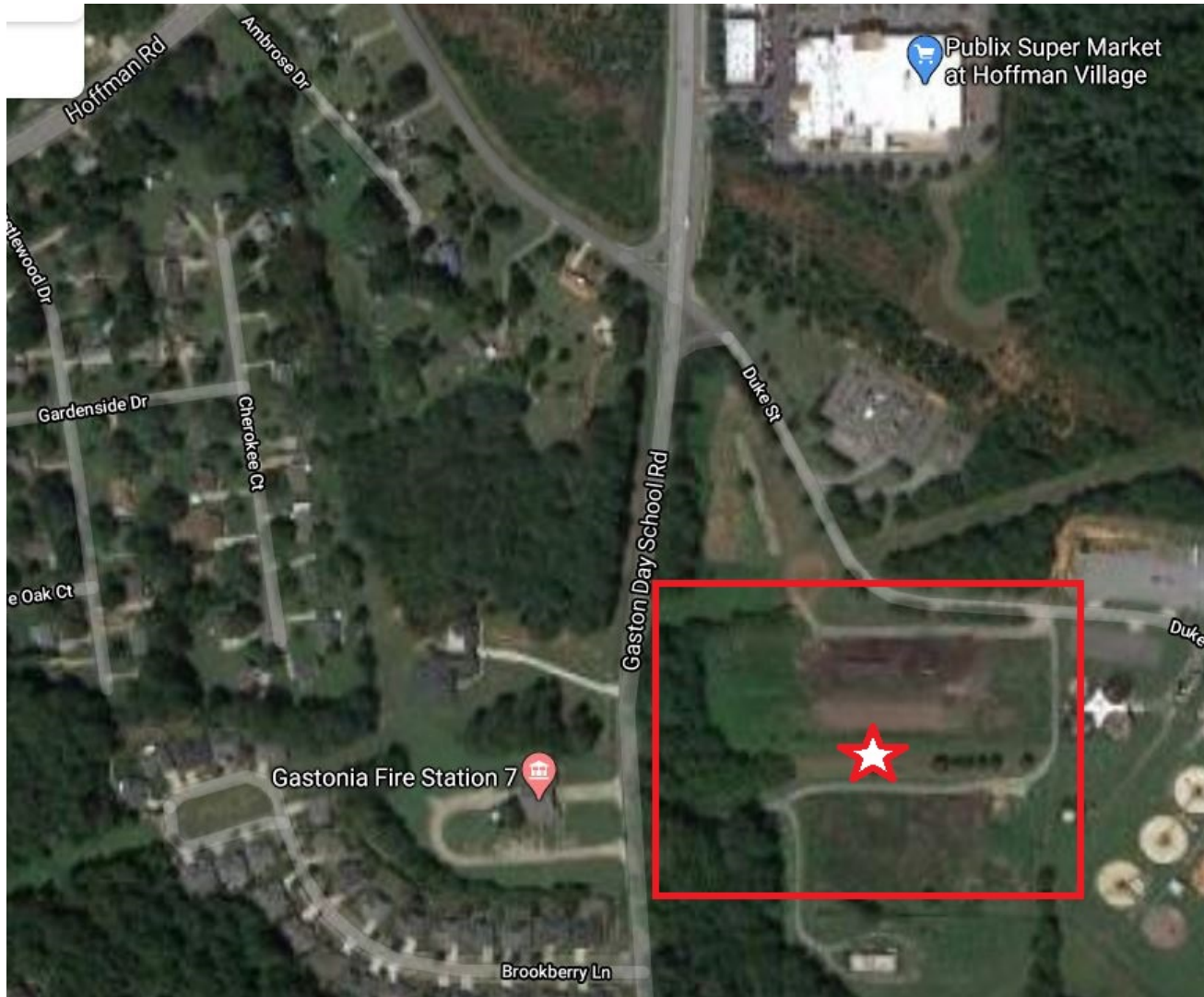


Proposed Duke Street Drop-off Recycling Center

- Perfect location for a second drop-off site
- City owned = No cost for property
- Best geographic location
- Operated by Gaston County
- Estimated construction cost: \$374,000



Proposed Duke Street Resource Recovery & Reuse Facility (Future Option)



Proposed Duke Street Resource Recovery & Reuse Facility (Future Option)

- Construction of multi-use facility for sales:
 - Black Gold
 - Firewood
 - Mulch
- Estimated cost: \$ TBD



How do we plan to notify our residents of these changes?



A Marketing Plan

- Partner with Keep Gastonia Beautiful (KGB)
- Social Media
- Direct Mail
- WasteWise App
- Telephone Hotline
- Partner with Gaston County
- Blackboard
- Newspaper Articles
- Utility Mailers
- Government Access Channel
- FAQs on the City of Gastonia website

Too much contamination!

Our contract is going to expire June 30, 2021. However, through partnerships with Keep Gastonia Beautiful and Gaston County, we will continue to promote recycling.

Staff recommendation:

- Discontinue curbside recycling contract 6 months early (December 31)
 - Mutually beneficial to the City of Gastonia and Republic Services due to high levels of contamination.
- Use the initial cost savings from discontinuing the recycling contract to:
 - Purchase recycling carts.
 - Make Capital improvements to the Farmer's Market Recycling Center.
 - Construct the New Duke Street Recycling Center.
 - Fund the increased Solid Waste operational expenses.
 - Fund the increased landfill costs.
 - Reduce multiple cart fee for household garbage.

Staff recommendation: (Cont.)

- Customers with an additional garbage cart: 1,167
- Estimate 5% of households will request an additional garbage cart: 1,186

Staff is recommending to decrease the additional garbage cart fee by \$1.00.

Annual financial impact: \$28,236 (loss)

Recommendation of Schedule:

- Direct staff to negotiate with Republic Services and Gaston County.
- September 15th – Possible consideration of agreements.
- October 6th – Next opportunity for Council to consider proposed agreements.
- October 26 – November 20 – Collect recycling carts.
- December/January – Begin construction of capital improvements with a completion date of July 1, 2021.

Questions?

