



MEMORANDUM

PUBLIC WORKS

To: City Council
Through: Ben Williamson, City Manager
From: Corey Lawson, Public Works Director
CC: Jawaria Tareen, Deputy City Manager
Kevin McCoy, Police Chief – Managing Director
Date: August 11, 2026
Subject: Mulching Feasibility Of Alternative Options

REQUESTOR:

Deputy Mayor Pro Tem Roger Neal

BACKGROUND:

A mulching program enables the City to recycle brush, tree limbs, and other vegetative debris into a beneficial resource that can be reused throughout the community. Rather than sending organic material to a landfill, the program reduces disposal costs, supports sustainable waste management practices, improves soil health, conserves water, and enhances the City's parks and landscaped areas.

The City currently utilizes The Organic Recycler (TOR) for the disposal and mulching of brush collected through residential services and City operations. The City previously contracted with Living Earth but transitioned to TOR after determining that TOR's disposal rates were approximately 30% lower. Under the current program, annual disposal costs total approximately \$65,000. TOR's facility is located 4.4 miles from the City's operations yard (8.8 miles round trip), with an estimated travel time of 20 minutes per load.

On average, 550 trips are taken to TOR's facility, diverting approximately 16,500 cubic yards of brush. Based on an average fleet fuel efficiency of 3.2 miles per gallon and an estimated operating cost of \$2.30 per mile (including fuel, maintenance, and other vehicle expenses), each round trip costs approximately \$20.24. Annual transportation costs are estimated at \$11,132, resulting in a total annual program cost of approximately \$76,000. The following analysis evaluates the current program alongside three alternatives: 1) establishing an in-house mulching operation at a City facility, 2) developing a mulching operation at the Camelot Landfill (as previously studied in 2021), and 3) disposing of brush through landfilling.

At the request of Deputy Mayor Pro Tem Roger Neal, staff evaluated neighboring entities for mulching processes and practices. The City of Mesquite operates a municipal composting and mulching facility funded through commercial tipping fees. The facility processes approximately

250,000 cubic yards of brush annually and utilizes a private grinding contract costing about \$475,000 per year. It also generates approximately \$75,000 in annual revenue through the sale of compost and mulch. Texas Pure Products is a regional composting program operated through an interlocal agreement among five member cities. The enterprise model is supported by brush collection from participating cities, tipping fees, and revenue from the sale of mulch and compost products. While the program requires significant upfront investment in land, equipment, and staffing, the multi-city partnership helps distribute costs and improve operational efficiency.

Also at the request of Deputy Mayor Pro Tem Roger Neal, staff provided additional opportunities for waste diversion, including a potential pilot program. One option is to negotiate with Republic Services for amendments to the landfill contract that would prohibit loads of clean brush from entering the landfill. This change would reduce the amount of landfill space that is filled by a recyclable material. This change would impact other landfill customers, including neighboring cities and contractors, requiring them to take loads of clean brush to a mulching facility instead of the landfill. There may be contractual issues to prevent this change from occurring, but staff can attempt negotiations if direction is received.

Another option is a pilot program that would offer separate collection of leaves, grass clippings, and green waste in order to divert compostable materials from the landfill. Staff would evaluate if this service should be contracted or if it is financially viable to increase internal capacity. This pilot not only addresses waste diversion but also alleviates residents' complaints about the irony of throwing leaves into a plastic trash bag.

DISCUSSION:

Three alternatives to the City's current brush disposal program were evaluated to determine whether they could provide operational or financial advantages.

Option A - Establish Mulching Operations in Farmers Branch: Establishing a City-operated mulching facility would require the acquisition and preparation of approximately 2.5 to 3 acres of industrially zoned property at an estimated cost of \$1 million to \$3 million, including site preparation, fencing, and permitting. If the City elected to perform grinding operations in-house, capital equipment costs would range from approximately \$630,000 to \$1.35 million for a grinder and front-end loader. In total, one-time capital costs for this option would range from \$1.63 million to \$4.35 million; the variation in range is largely due to land costs.

In addition to the capital costs, annual costs include: personnel costs of approximately \$113,675 for two full-time employees and annual operating expenses estimated between \$80,000 and \$130,000. Total annual operating costs would be between \$193,675 and \$243,675.

Total implementation costs for the first year (one-time capital costs plus annual operating costs) are estimated to range from approximately \$1.82 million to \$4.59 million.

As an alternative within this option, the City could contract with a private vendor to perform quarterly grinding operations at an estimated annual cost of \$100,000 instead of purchasing the grinding equipment, saving between \$450,000 and \$1 million in capital costs. However, this could result in large amounts of brush accumulating on the site between grinds.

Regardless of whether the City purchases the grinder or contracts the services, this option would require an industrially zoned site due to anticipated dust and noise impacts and would provide only storage and grinding capabilities. Additional investment would be required to produce and sell marketable, value-added mulch products, such as dyed mulch.

Option B - Establish Mulching Operations at Camelot Landfill: A feasibility analysis completed in 2021 determined that a mulching operation at Camelot Landfill was not practical. While the area previously identified for mulching is now planned for soil storage to support future landfill cell development, this analysis assumes the site remains available. One-time capital costs range from \$450,000 to \$550,000 for site construction.

Transportation costs would increase significantly due to the 27.2-mile round trip between Farmers Branch and Camelot Landfill, resulting in an estimated annual transportation cost of approximately \$34,408 and an average round-trip travel time of 50 minutes. In addition, a partnership with a commercial mulching operator would likely require the City to guarantee approximately \$35,000 in monthly revenue, or \$420,000 annually. Total annual operating costs would be \$454,408.

Total implementation costs for the first year (one-time capital costs plus annual operating costs) range from approximately \$904,408 to \$1,004,408.

Additional considerations include the need for Planning and Zoning Commission and City Council approvals from the City of Lewisville, potential opposition from nearby residents and competing businesses, and increased employee travel time.

Option C – Dispose of Brush at the Camelot Landfill: Transporting brush directly to the Camelot Landfill would eliminate third-party disposal fees, with annual transportation costs estimated at approximately \$34,408. However, this option presents several operational disadvantages. Brush occupies substantially more landfill volume than compacted municipal solid waste, reducing available airspace and potentially shortening the landfill's operational lifespan. Diverting landfill capacity to brush disposal could also reduce future landfill revenue opportunities. Additionally, the longer hauling distance would increase employee travel time, and disposing of recyclable brush material in a landfill may raise sustainability concerns and create negative public perception regarding the City's environmental stewardship.

Program	One-Time Cost	Annual Cost
Current Program: Contract with The Organic Recycler	None	\$76,000
Option A: Mulching in Farmers Branch	\$1.63 million - \$4.35 million	\$193,675 - \$243,675
Option B: Mulching at Camelot Landfill	\$450,000 - \$550,000	\$454,408
Option C: Brush Disposal at Landfill	None	\$34,408

SUSTAINABILITY CONSIDERATIONS:

Tonnage diverted from the landfill is the primary sustainability benefit. The more brush or organic waste that is diverted, the better. Mulching of brush creates a new, effective product and is a great example of the circular economy, whereas brush sent to the landfill will anaerobically decompose and create greenhouse gas emissions. The other sustainability consideration is the hauling distance to the mulching facility. The closer, the better, as it will require less fuel for transport. Reducing fuel consumption improves local air quality and reduces greenhouse gas emissions.