REQUEST FOR PROPOSAL

RFP # 19-28

MRF Operations and Recyclables Processing

City of Ann Arbor
Public Services Area

Due Date: September 17, 2019 at 2:00 p.m. (Local Time)

Issued By:

City of Ann Arbor
Procurement Unit
301 E. Huron Street
Ann Arbor, MI 48104
TABLE OF CONTENTS

SECTION I: GENERAL INFORMATION .........................................................3
SECTION II: SCOPE OF SERVICES ............................................................10
SECTION III: MINIMUM INFORMATION REQUIRED ..................................18
SECTION IV: ATTACHMENTS .................................................................23
APPENDIX A: SAMPLE SERVICES AGREEMENT .....................................37
APPENDIX B: MRF EQUIPMENT ASSESSMENT REPORTS .......................50
APPENDIX C: FIGURE 1, MRF BUILDING FLOOR PLAN .........................269
SECTION I - GENERAL INFORMATION

A. OBJECTIVE

The City of Ann Arbor is seeking the services of a firm (private company, public company, non-profit organization, or government agency) or team of firms to provide the labor, equipment and materials necessary to sort, process and market the City’s recyclable materials that are collected by the City’s crews or collection contractor(s) and currently delivered to the City’s Material Recovery Facility (MRF). Firms may propose to sort and process recyclables at the MRF, to use the MRF as a transfer facility to transload recyclables to another MRF for sorting and processing, a sequential combination of the foregoing, or an alternative approach to performing these services for the City. The City will consider hosting the processing of third-party recyclable materials as further described in Section II.

The City is seeking these services for an initial term of five years commencing July 1, 2020, but will also consider a longer term of up to ten years. If different forms of operations are proposed, the duration of each will be part of, but will total, five or possibly ten years. The Public Services Area Administrator or his /her designee will oversee the performance and quality of work of this contractor.

B. QUESTIONS AND CLARIFICATIONS / DESIGNATED CITY CONTACTS

All questions regarding this Request for Proposal (RFP) shall be submitted via e-mail. Questions will be accepted and answered in accordance with the terms and conditions of this RFP.

All questions shall be submitted on or before August 30, 2019 at 10:00 a.m., and should be addressed as follows:

Scope of Work/Proposal Content questions shall be e-mailed to Cresson Slotten, Public Services Area - cslotten@a2gov.org

RFP Process and Compliance questions shall be e-mailed to Colin Spencer, Buyer - CSpencer@a2gov.org

Should any prospective offeror be in doubt as to the true meaning of any portion of this RFP, or should the prospective offeror find any ambiguity, inconsistency, or omission therein, the prospective offeror shall make a written request for an official interpretation or correction by the due date for questions above.

All interpretations, corrections, or additions to this RFP will be made only as an official addendum that will be posted to a2gov.org and MITN.info and it shall be the prospective offeror’s responsibility to ensure they have received all addenda before submitting a proposal. Any addendum issued by the City shall become part of the RFP, and must be incorporated in the proposal where applicable.
C. PRE-PROPOSAL MEETING

A pre-proposal meeting will be held:

WHEN: August 27, 2019 at 1:30 p.m.
WHERE: City of Ann Arbor MRF, 4150 Platt Road, Ann Arbor, Michigan 48107

The meeting is not mandatory; however, it is highly recommended that interested offerors attend the meeting. The purpose of this meeting is to discuss the project with prospective offerors and to answer any questions concerning RFP# 19-28. Any questions and answers furnished in the pre-proposal meeting will not be official until verified in writing through an addendum.

D. PROPOSAL FORMAT

To be considered, each firm must submit a response to this RFP using the format provided in Section III. No other distribution of proposals is to be made by the prospective offeror. An official authorized to bind the offeror to its provisions must sign the proposal in ink. Each proposal must remain valid for at least ninety days from the due date of this RFP.

Proposals should be prepared simply and economically providing a straightforward, concise description of the offeror’s ability to meet the requirements of the RFP. No erasures are permitted. Mistakes may be crossed out and corrected and must be initialed in ink by the person signing the proposal.

E. SELECTION CRITERIA

Responses to this RFP will be evaluated using a point system as shown in Section III. A selection committee comprised of staff from the City will complete the evaluation.

The fee proposals will not be reviewed at the initial evaluation. After initial evaluation, the City will determine top proposals, and open only those fee proposals. The City will then determine which, if any, firms will be interviewed. During the interviews, the selected firms will be given the opportunity to discuss their proposal, qualifications, past experience, and their fee proposal in more detail. The City further reserves the right to interview the key personnel assigned by the selected offeror to this project. If the City chooses to interview any respondents, the interviews will be tentatively held the week of September 30, 2019. Offeror must be available on these dates.

All proposals submitted may be subject to clarifications and further negotiation. All agreements resulting from negotiations that differ from what is represented within the RFP or in the proposal response shall be documented and included as part of the final contract.
F. SEALED PROPOSAL SUBMISSION

All proposals are due and must be delivered to the City on or before, Tuesday, September 17, 2019 at 2:00 p.m. (local time). Proposals submitted late or via oral, telephonic, telegraphic, electronic mail or facsimile will not be considered or accepted.

Each respondent must submit in a sealed envelope
- one (1) original proposal
- three (3) additional proposal copies
- one (1) digital copy of the proposal on a USB/flash drive as one file in PDF format

Each respondent must submit in a single separate sealed envelope marked Fee Proposal
- two (2) copies of the fee proposal

The fee proposal and all costs must be separate from the rest of the proposal.

Proposals submitted must be clearly marked: “RFP No.19-28 – MRF Operations and Recyclables Processing” and list the offeror’s name and address.

Proposals must be addressed and delivered to:
City of Ann Arbor
c/o Customer Service
301 East Huron Street
Ann Arbor, MI 48107

All proposals received on or before the due date will be publicly opened and recorded on the due date. No immediate decisions will be rendered.

Hand delivered proposals must be date/time stamped by the Customer Service Department at the address above in order to be considered. Delivery hours are 8:00 a.m. to 5:00 p.m. Monday through Friday, excluding Holidays.

The City will not be liable to any prospective offeror for any unforeseen circumstances, delivery, or postal delays. Postmarking on the due date will not substitute for receipt of the proposal. Offerors are responsible for submission of their proposal. Additional time will not be granted to a single prospective offeror. However, additional time may be granted to all prospective offerors at the discretion of the City.
A proposal will be disqualified if the following required forms are not included with the proposal:

- Attachment C - City of Ann Arbor Non-Discrimination Declaration of Compliance
- Attachment D - City of Ann Arbor Living Wage Declaration of Compliance
- Attachment E - Vendor Conflict of Interest Disclosure Form of the RFP Document

Proposals that fail to provide these forms listed above upon proposal opening will be deemed non-responsive and will not be considered for award.

Please provide the forms outlined above (Attachments C, D and E) within your narrative proposal, not within the separately sealed Fee Proposal envelope.

All proposed fees, cost or compensation for the services requested herein should be provided in the separately sealed Fee Proposal envelope only.

G. DISCLOSURES

Under the Freedom of Information Act (Public Act 442), the City is obligated to permit review of its files, if requested by others. All information in a proposal is subject to disclosure under this provision. This act also provides for a complete disclosure of contracts and attachments thereto.

H. TYPE OF CONTRACT

A sample of the City Services Agreement is included as Appendix A. Those who wish to submit a proposal to the City solely for operation of the City’s MRF as a transfer facility to transload recyclables to another MRF for sorting and processing would be contracted by the City under the terms of this sample document are required to review this sample agreement carefully. The City will not entertain changes to its Services Agreement. For any other operation that might be proposed, the terms of the contract agreement will be structured by the City based on the offeror’s proposal. The requirements of the RFP and the offeror’s proposal, to the extent agreed to and/or modified, will be incorporated into the contract.

The City reserves the right to accept the total proposal, to reject any or all proposals in whole or in part, and to waive any informality or technical defects if, in the City’s sole judgment, the best interests of the City will be so served.

I. NONDISCRIMINATION

All offerors proposing to do business with the City shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the Section
9:158 of the Ann Arbor City Code. Breach of the obligation not to discriminate as outlined in Attachment C shall be a material breach of the contract. Contractors are required to post a copy of Ann Arbor’s Non-Discrimination Ordinance attached at all work locations where its employees provide services under a contract with the City.

J. WAGE REQUIREMENTS

The Attachments provided herein outline the requirements for payment of prevailing wages and/or a “living wage” to employees providing service to the City under this contract. The successful offeror must comply with all applicable requirements and provide documentary proof of compliance when requested.

K. CONFLICT OF INTEREST DISCLOSURE

The City of Ann Arbor Purchasing Policy requires that the offeror complete a Conflict of Interest Disclosure form. A contract may not be awarded to the selected offeror unless and until the Procurement Unit and the City Administrator have reviewed the Disclosure form and determined that no conflict exists under applicable federal, state, or local law or administrative regulation. Not every relationship or situation disclosed on the Disclosure Form may be a disqualifying conflict. Depending on applicable law and regulations, some contracts may awarded on the recommendation of the City Administrator after full disclosure, where such action is allowed by law, if demonstrated competitive pricing exists and/or it is determined the award is in the best interest of the City. A copy of the Conflict of Interest Disclosure Form is attached.

L. COST LIABILITY

The City of Ann Arbor assumes no responsibility or liability for costs incurred by the offeror prior to the execution of a Services Agreement. The liability of the City is limited to the terms and conditions outlined in the Agreement. By submitting a proposal, offeror agrees to bear all costs incurred or related to the preparation, submission, and selection process for the proposal.

M. DEBARMENT

Submission of a proposal in response to this RFP is certification that the Respondent is not currently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal departments or agency. Submission is also agreement that the City will be notified of any changes in this status.

N. PROPOSAL PROTEST

All proposal protests must be in writing and filed with the Purchasing Manager within five (5) business days of the award action. The offeror must clearly state the reasons
for the protest. If an offeror contacts a City Service Area/Unit and indicates a desire to protest an award, the Service Area/Unit shall refer the offeror to the Purchasing Manager. The Purchasing Manager will provide the offeror with the appropriate instructions for filing the protest. The protest shall be reviewed by the City Administrator or designee, whose decision shall be final.

Any inquiries or requests regarding this procurement should be only submitted in writing to the Designated City Contacts provided herein. Attempts by the offeror to initiate contact with anyone other than the Designated City Contacts provided herein that the offeror believes can influence the procurement decision, e.g., Elected Officials, City Administrator, Selection Committee Members, Appointed Committee Members, etc., may lead to immediate elimination from further consideration.

O. SCHEDULE

The proposals submitted should define an appropriate schedule in accordance with the requirements of the Proposed Work Plan in Section III.

The following is the schedule for this RFP process.

<table>
<thead>
<tr>
<th>Activity/Event</th>
<th>Anticipated Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Proposal Meeting</td>
<td>August 27, 2019 at 1:30 p.m.</td>
</tr>
<tr>
<td>Written Question Deadline</td>
<td>August 30, 2019 at 10:00 a.m.</td>
</tr>
<tr>
<td>Addenda Published (if needed)</td>
<td>Week of September 2, 2019</td>
</tr>
<tr>
<td>Proposal Due Date</td>
<td>Sept. 17, 2019 at 2:00 p.m. (Local Time)</td>
</tr>
<tr>
<td>Tentative Interviews (if needed)</td>
<td>Week of September 30, 2019</td>
</tr>
<tr>
<td>Selection/Negotiations</td>
<td>October 7-11, 2019</td>
</tr>
<tr>
<td>Expected City Council Authorizations</td>
<td>October 21, 2019</td>
</tr>
<tr>
<td>Commencement of Services</td>
<td>July 1, 2020</td>
</tr>
</tbody>
</table>

The above schedule is for information purposes only and is subject to change at the City’s discretion.

P. IRS FORM W-9

The selected offeror will be required to provide the City of Ann Arbor an IRS form W-9.

Q. RESERVATION OF RIGHTS

1. The City reserves the right in its sole and absolute discretion to accept or reject any or all proposals, or alternative proposals, in whole or in part, with or without cause.
2. The City reserves the right to waive, or not waive, informalities or irregularities in any proposal if determined by the City to be in its best interest.
3. The City reserves the right to request additional information from any or all offerors.
4. The City reserves the right to reject any proposal that it determines to be unresponsive and deficient in any of the information requested within RFP.
5. The City reserves the right to determine whether the scope of the project will be entirely as described in the RFP, a portion of the scope, or a revised scope be implemented.
6. The City reserves the right to select one or more offerors to perform services.
7. The City reserves the right to retain all proposals submitted and to use any ideas in a proposal regardless of whether that proposal is selected. Submission of a proposal indicates acceptance by the firm of the conditions contained in this RFP, unless clearly and specifically noted in the proposal submitted.
8. The City reserves the right to disqualify proposals that fail to respond to any requirements outlined in the RFP, or failure to enclose copies of the required documents outlined within RFP.

R. ENVIRONMENTAL COMMITMENT

The City of Ann Arbor recognizes its responsibility to minimize negative impacts on human health and the environment while supporting a vibrant community and economy. The City further recognizes that the products and services the City buys have inherent environmental and economic impacts and that the City should make procurement decisions that embody, promote, and encourage the City’s commitment to the environment.

The City encourages potential vendors to bring forward emerging and progressive products and services that are best suited to the City’s environmental principles.

S. SAFETY COMMITMENT

The City of Ann Arbor supports and continues to grow and foster a culture of safety for its employees and community members. The City further recognizes that the products and services the City procures have inherent potential safety hazards and impacts, and that the City should make procurement decisions that embody, promote, and encourage the City’s commitment to safety.

Offerors are to describe and present examples of their safety plans, procedures and protocols that exemplify their perspective and approach on safety matters, and how that approach will be applied to meet the City’s safety principals.
SECTION II - SCOPE OF SERVICES

1. Background

   a. Overview

   The City of Ann Arbor owns a Materials Recovery Facility (MRF) located at 4150 Platt Road. The MRF is located north of the City’s solid waste Transfer Station (TS) as shown on Figure 1.

   ![AERIAL VIEW OF MRF](image)

   The City’s scale and scale operations are currently located at the MRF, but the City is undertaking a capital improvement project to replace and relocate the scale to the Platt Road entrance to the W. R. Wheeler Center. This construction is anticipated to begin late summer 2019 and be substantially complete by the end of 2019. Operation of the relocated scale will be performed by City employees and is not included in the scope of services for this RFP.

   The MRF is currently receiving residential and commercial recyclables from City of Ann Arbor properties as described below. However, a newly formed authority, the Washtenaw Regional Resource Management Authority (WRRMA) may become a potential source of material at some point during the term of this contract.

   b. Summary of MRF Operations

   The City’s MRF commenced operations in 1995 and was originally designed as a dual-stream facility. The MRF was converted to a single-stream operation in 2010. Since inception, the City has contracted operations of the MRF to an
outside vendor.

The City’s MRF processed single-stream recyclables until July, 2016. At that time, the processing equipment was taken off-line because of safety concerns due the condition of the equipment. The equipment was inspected on two separate occasions after it was taken offline, which noted deficiencies in the equipment and the difficulty/inability to maintain or repair it due to its layout within the building. These inspection reports are included in Appendix B. The City has made the determination that the existing equipment, with the exception of the baler and its feed conveyor, will no longer be put into use due to these safety concerns.

The facility is currently operating as a transfer facility with single-stream materials being loose loaded into open-top trailers for processing at an off-site MRF in Cincinnati, Ohio. Some manual sorting and baling of OCC (old corrugated cardboard) using the City’s baler is performed on a limited amount of commercial OCC, which is then transported to a local recycler for additional processing and marketing. The material that is baled is pushed onto a horizontal conveyor that was the horizontal conveyor for the processing line, and has been modified to a shortened (25 feet) conveyor with a new belt, which then feeds the material onto the vertical conveyor that loads the baler.

The existing MRF facility is approximately 37,700 square feet (SF) in size, with approximately 11,000 SF of open tip-floor area as illustrated on Figure 1, below.

Figure 1: MRF Building Floor Plan
A larger version of this drawing is included in Appendix C.

If an offeror proposes to remove and replace, or modify the existing MRF facility details regarding the proposed facility are to be included in their proposal.

The MRF currently operates in alignment with the City’s collection operations. The MRF currently operates Monday through Friday (7:00 a.m. – 4:30 p.m.) and on Saturdays in weeks that include a major holiday (New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas) to accommodate catch-up recycling collections performed as a result of the holiday. However, it is anticipated that regular Saturday and Sunday half-day collections will be undertaken in the City’s downtown area during the term of this contract. Costs for MRF operations on holiday Saturdays as described are to be included in the offerors base proposals; additional pricing for adding regular weekend operations to accommodate regular Saturday and Sunday half-day collections in the downtown are to be included on the required Bid Forms.

The MRF currently receives recyclables from City properties, both residential and commercial. Commercial recyclables are primarily collected by City crews (commercial recycling dumpsters and carts in the downtown), although the City’s commercial franchise hauler (Waste Management of Michigan) also collects some commercial recyclables (compactor boxes). Single-stream recyclables outside of the downtown contained in carts or 300-gallon totes are collected under contract by Recycle Ann Arbor; these are primarily residential single-stream materials but also include some commercial materials.

Historical operating tonnages for City recyclables are provided below:

<p>| CITY OF ANN ARBOR - HISTORICAL RECYCLING TONNAGES (CALENDAR YEAR 2013-2018) |
|---|---|---|---|---|---|---|
| Sector | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Residential | 9,668 | 9,747 | 9,659 | 10,763 | 10,700 | 10,493 |
| Commercial | 4,584 | 4,977 | 5,055 | 4,762 | 4,134 | 4,417 |
| Total | 14,252 | 14,724 | 14,714 | 15,525 | 14,834 | 14,910 |</p>
<table>
<thead>
<tr>
<th>Month</th>
<th>Single-Stream (Residential/Commercial)</th>
<th>Commercial OCC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul-17</td>
<td>871</td>
<td>102</td>
<td>974</td>
</tr>
<tr>
<td>Aug-17</td>
<td>1,266</td>
<td>74</td>
<td>1,340</td>
</tr>
<tr>
<td>Sep-17</td>
<td>989</td>
<td>66</td>
<td>1,055</td>
</tr>
<tr>
<td>Oct-17</td>
<td>1,295</td>
<td>-</td>
<td>1,295</td>
</tr>
<tr>
<td>Nov-17</td>
<td>1,075</td>
<td>216</td>
<td>1,291</td>
</tr>
<tr>
<td>Dec-17</td>
<td>839</td>
<td>292</td>
<td>1,131</td>
</tr>
<tr>
<td>Jan-18</td>
<td>1,088</td>
<td>214</td>
<td>1,302</td>
</tr>
<tr>
<td>Feb-18</td>
<td>824</td>
<td>187</td>
<td>1,011</td>
</tr>
<tr>
<td>Mar-18</td>
<td>1,068</td>
<td>83</td>
<td>1,151</td>
</tr>
<tr>
<td>Apr-18</td>
<td>1,088</td>
<td>67</td>
<td>1,155</td>
</tr>
<tr>
<td>May-18</td>
<td>1,177</td>
<td>23</td>
<td>1,201</td>
</tr>
<tr>
<td>Jun-18</td>
<td>962</td>
<td>18</td>
<td>980</td>
</tr>
<tr>
<td><strong>FY18 TOTALS</strong></td>
<td><strong>12,542</strong></td>
<td><strong>1,343</strong></td>
<td><strong>13,885</strong></td>
</tr>
<tr>
<td>Jul-18</td>
<td>1,082</td>
<td>40</td>
<td>1,122</td>
</tr>
<tr>
<td>Aug-18</td>
<td>1,276</td>
<td>83</td>
<td>1,360</td>
</tr>
<tr>
<td>Sep-18</td>
<td>1,153</td>
<td>42</td>
<td>1,194</td>
</tr>
<tr>
<td>Oct-18</td>
<td>1,274</td>
<td>-</td>
<td>1,274</td>
</tr>
<tr>
<td>Nov-18</td>
<td>1,248</td>
<td>61</td>
<td>1,309</td>
</tr>
<tr>
<td>Dec-18</td>
<td>1,143</td>
<td>35</td>
<td>1,178</td>
</tr>
<tr>
<td>Jan-19</td>
<td>923</td>
<td>39</td>
<td>961</td>
</tr>
<tr>
<td>Feb-19</td>
<td>1,248</td>
<td>36</td>
<td>1,284</td>
</tr>
<tr>
<td>Mar-19</td>
<td>1,030</td>
<td>34</td>
<td>1,064</td>
</tr>
<tr>
<td>Apr-19</td>
<td>1,233</td>
<td>34</td>
<td>1,267</td>
</tr>
<tr>
<td>May-19</td>
<td>1,305</td>
<td>41</td>
<td>1,347</td>
</tr>
<tr>
<td>Jun-19</td>
<td>1,161</td>
<td>20</td>
<td>1,182</td>
</tr>
<tr>
<td><strong>FY19 TOTALS</strong></td>
<td><strong>14,076</strong></td>
<td><strong>467</strong></td>
<td><strong>14,543</strong></td>
</tr>
</tbody>
</table>

The City has a long-term zero waste goal and is in the process of finalizing a Solid Waste Resources Management Plan (SWRMP) which is expected to outlines steps which would further progress towards that goal. Thus, some increase in the City's recycling tonnages should be expected over the term of this contract.

The composition of the City’s single-stream recyclable materials has been determined through periodic Material Composition Audits performed by the City’s recent contracted MRF operators, Recycle Ann Arbor and Waste Management of Michigan. The compiled results of these audits are provided below (note that these audits are for single-stream materials and do not include the commercial OCC listed above):
### MATERIAL AUDIT RESULTS - CITY OF ANN ARBOR RECYCLABLES

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardboard # 11</td>
<td>19.57%</td>
<td>14.66%</td>
<td>20.90%</td>
<td>17.85%</td>
<td>21.38%</td>
<td>20.38%</td>
</tr>
<tr>
<td>Mixed Paper*</td>
<td>48.62%</td>
<td>32.99%</td>
<td>35.08%</td>
<td>36.39%</td>
<td>32.98%</td>
<td>35.56%</td>
</tr>
<tr>
<td>Sorted Residential (News)**</td>
<td>17.96%</td>
<td>14.56%</td>
<td>11.35%</td>
<td>12.75%</td>
<td>13.76%</td>
<td></td>
</tr>
<tr>
<td>Steel Cans</td>
<td>1.30%</td>
<td>1.37%</td>
<td>1.29%</td>
<td>1.90%</td>
<td>1.57%</td>
<td>1.61%</td>
</tr>
<tr>
<td>Aluminum Cans</td>
<td>0.25%</td>
<td>0.25%</td>
<td>0.20%</td>
<td>0.26%</td>
<td>0.24%</td>
<td>0.26%</td>
</tr>
<tr>
<td>HDPE (Combo)</td>
<td>1.20%</td>
<td>1.25%</td>
<td>0.97%</td>
<td>1.38%</td>
<td>1.05%</td>
<td>1.04%</td>
</tr>
<tr>
<td>PET</td>
<td>2.48%</td>
<td>3.13%</td>
<td>1.84%</td>
<td>2.48%</td>
<td>1.87%</td>
<td>2.47%</td>
</tr>
<tr>
<td>#1 - #7 Plastic Mixed</td>
<td>2.38%</td>
<td>1.82%</td>
<td>0.95%</td>
<td>1.29%</td>
<td>1.20%</td>
<td>1.17%</td>
</tr>
<tr>
<td>Aseptic / Tetra*</td>
<td>0.07%</td>
<td>0.10%</td>
<td></td>
<td></td>
<td>0.06%</td>
<td>0.03%</td>
</tr>
<tr>
<td>Misc. Scrap Metal</td>
<td></td>
<td>1.54%</td>
<td>1.27%</td>
<td>0.49%</td>
<td>1.36%</td>
<td>0.67%</td>
</tr>
<tr>
<td>Mixed Glass (3-Mix)</td>
<td>13.06%</td>
<td>15.12%</td>
<td>12.21%</td>
<td>15.86%</td>
<td>13.27%</td>
<td>13.34%</td>
</tr>
<tr>
<td>Residuals</td>
<td>11.06%</td>
<td>9.81%</td>
<td>10.73%</td>
<td>10.74%</td>
<td>12.26%</td>
<td>9.91%</td>
</tr>
</tbody>
</table>

* Aseptic/Tetra included in Mixed Paper for Nov2017 and Feb2018
** Newspaper included in Mixed Paper by Waste Management Audit in October, 2016

The City will commit to deliver all City-controlled recyclables (i.e., recyclable materials collected by City crews or the City’s collection contractors), but will not guarantee a specified tonnage of material. The City may allow the selected contractor to receive third-party recyclables at the MRF, provided that the tonnage received does not exceed the operating capacity of the MRF as all material is to be delivered and maintained within the interior of the facility. If proposers intend to accept and process third-party material, the Bid Form in Attachment A is to be completed indicating the host fee/processing credit and revenue share for this material that the City will receive from the selected contractor.

2. **Objective**

The City of Ann Arbor is seeking proposals from qualified vendors to perform the following services (and as described further in Section II. 3.):

1. To receive recyclable materials delivered to the MRF by the City or its collection contractor(s) and sorting/processing of those materials and return of those materials to end markets. These services, and the resulting contract, may be transferred to the Washtenaw Regional Resource Management Authority (WRRMA) if desired by both the City of Ann Arbor and WRRMA. As WRRMA is a newly forming authority, the City does not have any data of the materials that may be provided by its member communities in the future.

2. The City will consider proposals to: 1) use the City’s MRF to transload recyclables to an offsite MRF for sorting and processing; and/or, 2) equip,
modify as needed and operate the MRF, or another facility as a local processing facility.

3. The City will consider allowing outside third-party material to be brought to the MRF based on the host-fee/processing credit and revenue share that the City would receive from the selected contractor.

3. **Requirements**

A. The selected contractor is to provide all necessary labor, equipment, fuel and materials to perform the services to necessary to sort, process and market the City’s recyclable materials that are collected by the City’s crews or collection contractor(s). This may be accomplished by operating the City's MRF as a transload facility and/or as the primary processing facility. Other alternative approaches can be proposed for consideration by the City. The MRF facility will be provided to the selected contractor on an “as-is” basis; facility and equipment upgrades are the responsibility of the contractor and are to be included in the contractor’s fee proposal (with ownership transferred to the City at the end of the initial contract term). The selected contractor will be responsible for payment of utility services and janitorial services for the facility. Any repairs to the facility will be the responsibility of the contractor. Repair and maintenance of the site inside of the site fencing, including winter snow clearing, pavement, lawn areas, etc., will be the responsibility of the contractor. Site cleanliness is the responsibility of the contractor.

B. The contractor shall obtain and maintain any necessary permits or licenses from the State of Michigan for operating the MRF. The MRF site has a Stormwater Pollution Prevention Plan (SWPPP) on file with the State of Michigan Department of Environment, Great Lakes and Energy (EGLE). Proposals are to include provisions for the contractor to update the plan and registering it with EGLE, and providing the required staff training.

C. The selected contractor, at its sole choosing, may use the City’s baler and its current feed conveyors in its operation. If it so chooses, the regular preventative maintenance (PM), repairs and/or replacement of broken or worn parts will be the responsibility of the contractor. Also, the contractor shall schedule and pay for an annual full inspection of the baler and conveyors, and will provide the City with a copy of the inspection report. If the selected contractor includes a proposal for equipping and modifying the MRF to operate it as a processing facility, the proposal should include provisions for the contractor to purchase the baler from the City. Maintenance of any new processing equipment proposed by the contractor will be the responsibility of the contractor.

D. The contractor shall perform at least semi-annually (every six months) “dry” material composition audits of the City’s recyclables to establish the basis for monthly revenue share crediting. The cost of these audits is to be included in the
base proposal pricing with no additional or separate cost to the City. These audits shall be observed by City staff.

E. The contractor shall provide, maintain and update as necessary an operating plan, health and safety plan, and building/equipment maintenance plan, all of which will be available for review by the City upon request.

F. If proposers choose to include a proposal for using the City’s MRF to transload recyclables to an offsite processing facility, the proposal shall include, at a minimum, the following:
   a. The name and location of the offsite MRF, and a discussion of the contractor’s relationship with the offsite MRF (i.e., contractor-owned facility or, if a third-party facility, contractor’s access to the offsite MRF).
   b. A description of the processing capabilities of the offsite MRF (e.g., capacity, acceptable materials, etc).
   c. A description of the contractor’s proposed transload operation at the City’s MRF location.

G. If a proposer chooses to include a proposal for equipping and modifying the MRF as needed to operate the MRF as a processing facility, the proposal shall include, at a minimum, the following:
   a. The schedule timeline for equipping and modifying the MRF shall be included.
   b. Interim operations/handling for the City’s recyclable materials while the MFR is being modified.
   c. The salvage value of any of the existing equipment that is proposed to be removed must be provided to the City as a credit against facility upgrade costs.
   d. If any building modifications that expand the building footprint or modify the site outside of the building and within the fenced area are necessary during the term of any proposed agreement, the contractor will be responsible for all required approvals and are responsible for complying with all applicable laws and ordinances for those modifications to the MRF facility.
   e. Information and details are to be provided on the equipment to be provided and installed in the MRF, including manufacturer and technology to be utilized. If changes to the existing process line and push wall are proposed, a drawing should be provided. Details should also be provided on what existing equipment is to be removed and what, if any, will remain. Any existing equipment that will not be utilized must be removed and disposed of properly.
   f. Anticipated staffing levels are to be detailed in the proposal. Also, if any material will be transported to another intermediary processor before shipping to end markets, the intermediate processor(s) are to be identified,
including location and background information on the contractor’s relationship with the processor.

4. **Firm’s Proposal**

In keeping with the objective, requirements, and the contractor’s tasks as previously indicated in this Request for Proposal, contractors submitting proposals shall outline in detail the manner in which the contractor shall work with the City to fulfill the City’s needs.

The outline at a minimum shall address:

- A. Staffing and personnel.
- B. Communication and coordination.
- C. Compatibility with city’s standards, goals, and objectives.
- D. Working relationship between contractor and City staff.
- E. Information regarding the contractor’s/firm’s experience in performing these services which will assist the City to determine the contractor’s capability of performing the work.
SECTION III - MINIMUM INFORMATION REQUIRED

PROPOSAL FORMAT

Offerors should organize Proposals into the following Sections:

A. Professional Qualifications
B. Past Involvement with Similar Projects
C. Proposed Work Plan
D. Fee Proposal (include completed Bid Form in a separate sealed envelope clearly marked “Fee Proposal”)
E. Authorized Negotiator
F. Attachments

The following describes the elements that should be included in each of the proposal sections and the weighted point system that will be used for evaluation of the proposals.

A. Proposer's Qualifications – 20 points

1. State the full name and address of your organization and, if applicable, the branch office or other subsidiary element that will perform, or assist in performing, the work hereunder. Indicate whether it operates as an individual, partnership, corporation, not-for-profit or unit of government. If as a corporation, include whether it is licensed to operate in the State of Michigan.

2. State history of the firm, in terms of length of existence, types of services provided, etc. Identify the technical details that make the firm uniquely qualified for this work.

3. Provide information on the key management personnel that will be responsible for overseeing the implementation, administration and oversight of the services provided to the City.

4. Include the above information for any subcontractors or professionals included as part of the proposer's team to implement any part of the proposal.

5. Provide an overview of the safety and training programs that the offeror has in place, and that will be implemented if awarded a contract.

B. Past involvement with Similar Projects – 15 points

The written proposal must include a list of specific experience relating to the proposal. A complete list of contractor-owned facilities or facilities operated under contract must be provided. Three trade references shall be provided including the firm/agency name, address, telephone number, project title, and contact person.
C. Proposed Work Plan – 35 points

Provide a narrative description of how the offeror intends to provide the services requested in this RFP. This narrative description should include the following:

1. Operation and maintenance of the City’s Material Recovery Facility (MRF) to receive recyclable materials delivered to the MRF by the City or its collection contractor(s), with transload to an offsite MRF for processing:
   a. Brief narrative description on how the MRF will be operated (e.g., on-site direction of incoming collection vehicles, rolling stock equipment to be used, loading procedures, daily cleaning procedures, etc.)
   b. Proposed staffing of the MRF (number and type of personnel).
   c. Identification of primary processing site(s), including name of facility, address, hours of operation, holiday closures, and materials to be transported from the City of Ann Arbor MRF.
   d. Identification of any backup processing facilities the offeror can provide, including information in item c. above.
   e. Description of how the MRF work will be managed and scheduled, including communication and coordination with the City.

2. Outside third-party material to be brought to the MRF:
   a. Brief narrative description of whether and how the offeror will solicit/locate/arrange for outside third-party recyclable materials.
   b. The amount of third-party tonnage anticipated to be brought to the Ann Arbor MRF.
   c. Any additional staffing of the MRF (number and type of personnel) for managing the additional tonnage at the facility.

3. Proposals to equip and modify the MRF as needed and operate the MRF as a processing facility:
   a. Brief narrative description on how the MRF will be equipped and modified to operate as a processing facility, including existing equipment to be removed and new equipment to be installed, and any building modification necessary for the new equipment. A drawing showing any proposed modifications to the building and the layout of the equipment to be used, identifying both existing and new equipment that will be included, also must be provided.
   b. Interim operations/handling for the City’s recyclable materials while the MFR is being modified for use.
   c. Schedule and duration for the MRF modification and reequipping.
d. Brief narrative description on how the MRF will be operated after the equipping and modifications (e.g., on-site direction of incoming collection vehicles, rolling stock equipment to be used, processing procedures, regular/preventative maintenance and cleaning procedures, etc.)

e. Proposed staffing of the MRF (number and type of personnel) for processing.

f. Identification of any secondary processing site(s) or key fixed end markets, including name of facility, address, hours of operation, holiday closures, and materials to be transported from the City of Ann Arbor MRF.

g. Description of how the MRF work will be managed and scheduled, including communication and coordination with the City.

h. Identification of any backup processing facilities the offeror can provide, including information in item c. above, in the event a shutdown occurs at the MRF following its operating as a processing facility.

Offerors shall be evaluated on the clarity, thoroughness, and content of their responses to the above items.

D. Fee Proposal - 30 points

Fee schedules shall be submitted in a separate, sealed, envelope as part of the proposal, using the forms provided in Attachment A.

E. Authorized Negotiator

Include the name, phone number, and e-mail address of persons(s) in your organization authorized to negotiate the agreement with the City

F. Attachments

Legal Status of Offeror, Conflict of Interest Form, Living Wage Compliance Form, and the Non-Discrimination Form must be returned with the proposal. These elements should be included as attachments to the proposal submission.

PROPOSAL EVALUATION

1. The selection committee will evaluate each proposal by the above-described criteria and point system (A through C) to select a short-list of firms for further consideration. The City reserves the right to reject any proposal that it determines to be unresponsive and deficient in any of the information requested for evaluation. A proposal with all the requested information does not guarantee the proposing firm to be a candidate for
an interview. The committee may contact references to verify material submitted by the offerors.

2. The committee then will schedule interviews with the selected firms if necessary. The selected firms will be given the opportunity to discuss in more detail their qualifications, past experience, proposed work plan and fee proposal.

3. The interview must include the project team members expected to complete a majority of work on the project, but no more than six members total. The interview shall consist of a presentation of up to thirty minutes (or the length provided by the committee) by the offeror, including the person who will be the project manager on this contract, followed by approximately thirty minutes of questions and answers. Audiovisual aids may be used during the oral interviews. The committee may record the oral interviews.

4. The firms interviewed will then be re-evaluated by the above criteria (A through D), and adjustments to scoring will be made as appropriate. After evaluation of the proposals, further negotiation with the selected firm may be pursued leading to the award of a contract by City Council, if suitable proposals are received.

The City reserves the right to waive the interview process and evaluate the offerors based on their proposals and fee schedules alone and open fee schedules before or prior to interviews.

The City will determine whether the final scope of the project to be negotiated will be entirely as described in this RFP, a portion of the scope, or a revised scope.

Work to be done under this contract is generally described through the detailed specifications and must be completed fully in accordance with the contract documents.

Any proposal that does not conform fully to these instructions may be rejected.

**PREPARATION OF PROPOSALS**

Proposals should have no plastic bindings but will not be rejected as non-responsive for being bound. Staples or binder clips are acceptable. Proposals should be printed double sided on recycled paper. Proposals should not be more than 15 sheets (30 sides) for the base proposal and may include up to 10 additional sheets (20 sides) for the workplan on the optional proposal for equipping and modifying the MRF as needed and operate the MRF as a processing facility, not including required attachments and resumes.

Each person signing the proposal certifies that they are a person in the offeror’s firm/organization responsible for the decisions regarding the fees being offered in the Proposal and has not and will not participate in any action contrary to the terms of this provision.
ADDENDA

If it becomes necessary to revise any part of the RFP, notice of the addendum will be posted to Michigan Inter-governmental Trade Network (MITN) www.mitn.info and/or the City of Ann Arbor web site www.A2gov.org for all parties to download.

Each offeror must acknowledge in its proposal all addenda it has received. The failure of an offeror to receive or acknowledge receipt of any addenda shall not relieve the offeror of the responsibility for complying with the terms thereof. The City will not be bound by oral responses to inquiries or written responses other than official written addenda.
Attachment A – Fee Proposal Forms
Attachment B - Legal Status of Offeror
Attachment C – Non-Discrimination Ordinance Declaration of Compliance Form
Attachment D – Living Wage Declaration of Compliance Form
Attachment E – Vendor Conflict of Interest Disclosure Form
Attachment F – Non-Discrimination Ordinance Poster
Attachment G – Living Wage Ordinance Poster
ATTACHMENT A: COST PROPOSAL FORMS

RFP # 19-26 MRF OPERATIONS AND RECYCLABLES PROCESSING
FOR THE CITY OF ANN ARBOR

1: OFFEROR NAME:

The undersigned has examined the complete Request for Proposal and its requirements contained in the solicitation and is submitting the following Cost Proposal Forms in full compliance with those requirements.

Signature: ____________________________________________

Name / Title: __________________________________________

Date: ________________________________________________

2. PROPOSAL OPTIONS

Option 1: Receive recyclable materials at City of Ann Arbor MRF, transload materials to offsite MRF for processing and subsequent marketing to end markets. (For Option 1, respond to Item 3 and Item 4 below.)

Option 2: Equip and modify the City of Ann Arbor MRF to receive, process and market all recyclable materials at the City’s MRF. Interim processing at an offsite MRF must be provided until such time as the City’s MRF is operating. (For Option 2, respond to Item 3 and Item 4 for those years that interim processing will be provided, and respond to Item 5 for those years that processing will be conducted at the City’s MRF).

Alternative Proposal: If a proposer wishes to submit a proposal for an alternative arrangement to sort, process and market the City of Ann Arbor’s recyclable materials a separate detailed fee proposal for this alternative shall be submitted.

3: MRF INFORMATION - OFFSITE PROCESSING

Facility Name: __________________________________________

Address: _______________________________________________

Hours of Operation:

Monday-Friday ___________ Saturday ___________ Sunday ___________

Holiday Closures: __________________________________________

(specify all holidays MRF is closed)
ATTACHMENT A: COST PROPOSAL FORMS

4: PROPOSED RATE SCHEDULES (Transload Operations)

4.a Base Service Fee (fee paid by City to Offeror on City tons)
Below rate schedule applies to tonnage (residential and commercial recyclables) delivered by the City of Ann Arbor or its designated contracted haulers. Offeror will set rates for any 3rd party tonnage delivered to facility. In no instance will City be liable to pay any service fee on 3rd party tonnage.

<table>
<thead>
<tr>
<th>Contract Year</th>
<th>Year Ending</th>
<th>City MRF Operation/Transload ($/ton)</th>
<th>Transport ($/ton)</th>
<th>Offsite MRF Processing ($/ton)</th>
<th>Total ($/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6/30/2021</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>6/30/2022</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>6/30/2023</td>
<td></td>
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<tr>
<td>4</td>
<td>6/30/2024</td>
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<td>7</td>
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<td>8</td>
<td>6/30/2028</td>
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<td>9</td>
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<tr>
<td>10</td>
<td>6/30/2030</td>
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</tr>
</tbody>
</table>

4.b 3rd Party Transload Credit
A 3rd Party Transload Credit will be deducted from charges due by the City to the Offeror for all 3rd Party tons sourced by Offeror and received at the City’s MRF for transload. This credit is to offset depreciation on the City’s MRF from 3rd party tons.

Specify 3rd Party Recyclables Credit:                      /ton
ATTACHMENT A: COST PROPOSAL FORMS

4.c Material Revenue Share Credit

Material Revenue Share Credit will be deducted from charges due by the City to the Offeror for all City tons. In table below, specify source of price data, the current index price, and the revenue per ton of single-stream materials delivered by City. Pricing is for proposal evaluation; it is recognized that index pricing and revenue per single-stream ton will vary from month to month, and allocation percentages may change based on periodic material audits.

<table>
<thead>
<tr>
<th>Material</th>
<th>Allocation</th>
<th>Index Price Source (specify publication or actual)</th>
<th>Current Index Price ($/ton)</th>
<th>Revenue ($/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCC</td>
<td>20.38%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed Paper</td>
<td>35.36%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News</td>
<td>13.76%</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Steel Cans</td>
<td>1.61%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UBC</td>
<td>0.26%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE-Natural</td>
<td>0.52%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE-Colored</td>
<td>0.52%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET</td>
<td>2.47%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mix Plastic (1-7)</td>
<td>1.17%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk Metal</td>
<td>0.67%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aseptic Cartons</td>
<td>0.03%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glass (3-Mix)</td>
<td>13.34%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residuals</td>
<td>9.91%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ACR</td>
<td>100.00%</td>
<td></td>
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</tr>
</tbody>
</table>

City Revenue Share (on City tonnage):

For ACR <= Offsite MRF Processing Fee (from Table 4.a) = 100%

For ACR > Offsite MRF Processing Fee (from Table 4.a) = (specify %)

City Revenue Share (on 3rd Party tonnage):

For ACR > Offsite MRF Processing Fee (from Table 4.a) = (specify %)

or,

Flat Fee (to be escalated at same rate as Offsite MRF Processing Fee) = (specify $/ton)

In no event shall Average Commodity Revenue (ACR) be a negative number.
ATTACHMENT A: COST PROPOSAL FORMS

4.d Saturday and Sunday Operations

Below rate schedule is daily rate to receive recyclables on Saturdays (7:00 a.m. - 4:30 p.m.) and Sundays (7:00 a.m. - 12:30) as requested by City. Daily rate would be in lieu of per ton City MRF Operation/Transload service fee in Schedule 4 a. Per ton Transport service fee and Offsite MRF Processing service fee would still apply in addition to daily rate. Estimated quantity of City recyclables on weekends is 6-7 tons per weekend.

<table>
<thead>
<tr>
<th>Contract Year</th>
<th>Year Ending</th>
<th>Daily Rate - Saturdays (Full Day)</th>
<th>Daily Rate - Sundays (Half Day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>10</td>
<td>6/30/2030</td>
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</tbody>
</table>
ATTACHMENT A: COST PROPOSAL FORMS

5: PROPOSED RATE SCHEDULES (Equip and Modify City’s MRF)

5.a Capital Costs (to equip and modify for processing at City’s MRF)

(specify total $)

5.b Base Service Fee (fee paid by City to Offeror on City tons)

Below rate schedule applies to tonnage (residential and commercial recyclables) delivered by the City of Ann Arbor or its designated contracted haulers. Show pricing beginning the first year that processing would commence at the City’s MRF. Offeror will set rates for any 3rd party tonnage delivered to facility. In no instance will City be liable to pay any service fee on 3rd party tonnage.

<table>
<thead>
<tr>
<th>Contract Year</th>
<th>Year Ending</th>
<th>City MRF: Capital Cost ($/month)</th>
<th>City MRF: O&amp;M Cost ($/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6/30/2021</td>
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<td>10</td>
<td>6/30/2030</td>
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</tr>
</tbody>
</table>

5.c 3rd Party Processing Credit

A 3rd Party Processing Credit will be deducted from charges due by the City to the Offeror for all 3rd Party tons sourced by Offeror and received at the City’s MRF for processing. This credit is to offset depreciation and incremental capital costs on the City’s MRF from 3rd party tons.

Specify 3rd Party Recyclables Credit: $___________/ton
ATTACHMENT A: COST PROPOSAL FORMS

5.d Material Revenue Share Credit

Material Revenue Share Credit will be deducted from charges due by the City to the Offeror for all City tons. In table below, specify source of price data, the current index price, and the revenue per ton of single-stream materials delivered by City. Pricing is for proposal evaluation; it is recognized that index pricing and revenue per single-stream ton will vary from month to month, and allocation percentages may change based on periodic material audits.

**For Option 2, contractors may utilize City’s transfer station for disposal of residuals at a rate of $25.76/ton effective 07/01/2020, transfer/disposal fee to be paid by contractor.**

<table>
<thead>
<tr>
<th>Material</th>
<th>Allocation</th>
<th>Index Price Source (specify publication or actual)</th>
<th>Current Index Price ($/ton)</th>
<th>Revenue ($/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCC</td>
<td>20.38%</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Mixed Paper</td>
<td>35.36%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News</td>
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</tr>
<tr>
<td>Steel Cans</td>
<td>1.61%</td>
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<tr>
<td>UBC</td>
<td>0.28%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE-Natural</td>
<td>0.52%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDPE-Colored</td>
<td>0.52%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PET</td>
<td>2.47%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mix Plastic (1-7)</td>
<td>1.17%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk Metal</td>
<td>0.67%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aseptic Cartons</td>
<td>0.03%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glass (3-Mix)</td>
<td>13.34%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residuals</td>
<td>9.91%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACR</td>
<td>100.00%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

City Revenue Share (on City tonnage):

For ACR <= Total Processing Fee (from Table 5.a) = 100%

For ACR > Total Processing Fee (from Table 5.a) = (specify %)

City Revenue Share (on 3rd Party tonnage):

For ACR > Total Processing Fee (from Table 5.a) = (specify %)

Or,

Flat Fee (to be escalated at same rate as Total Processing Fee) = (specify $/ton)

In no event shall Average Commodity Revenue (ACR) be a negative number.
## ATTACHMENT A: COST PROPOSAL FORMS

### 5.e Saturday and Sunday Operations

Below rate schedule is daily rate to receive recyclables on Saturdays (7:00 a.m. - 4:30 p.m.) and Sundays (7:00 a.m. - 12:30) as requested by City. Daily rate would be in lieu of per ton O&M Cost service fee from Schedule 5.b. Estimated quantity of City recyclables on weekends is 6-7 tons per weekend.

<table>
<thead>
<tr>
<th>Contract Year</th>
<th>Year Ending</th>
<th>Daily Rate - Saturdays (Full Day)</th>
<th>Daily Rate - Sundays (Half Day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6/30/2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>6/30/2022</td>
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<td></td>
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<tr>
<td>3</td>
<td>6/30/2023</td>
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<tr>
<td>4</td>
<td>6/30/2024</td>
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<tr>
<td>5</td>
<td>6/30/2025</td>
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<tr>
<td>6</td>
<td>6/30/2026</td>
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<tr>
<td>7</td>
<td>6/30/2027</td>
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<tr>
<td>8</td>
<td>6/30/2028</td>
<td></td>
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</tr>
<tr>
<td>9</td>
<td>6/30/2029</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>6/30/2030</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ATTACHMENT B
LEGAL STATUS OF OFFEROR

(The Respondent shall fill out the provision and strike out the remaining ones.)

The Respondent is:

- A corporation organized and doing business under the laws of the state of ____________, for whom _____________________ bearing the office title of ____________, whose signature is affixed to this proposal, is authorized to execute contracts on behalf of respondent.*

*If not incorporated in Michigan, please attach the corporation’s Certificate of Authority

- A limited liability company doing business under the laws of the State of ____________, whom _____________________ bearing the title of ____________, whose signature is affixed to this proposal, is authorized to execute contract on behalf of the LLC.

- A partnership organized under the laws of the State of ____________ and filed with the County of ____________, whose members are (attach list including street and mailing address for each.)

- An individual, whose signature with address, is affixed to this RFP.

- A unit of government.

Respondent has examined the basic requirements of this RFP and its scope of services, including all Addendum (if applicable) and hereby agrees to offer the services as specified in the RFP.

_________________________________________ Date: ____________

Signature

(Print) Name _______________________________ Title ____________________________

Firm: ______________________________________________________________________

Address: ___________________________________________________________________

Contact Phone ____________________ Fax _____________________

Email ___________________________
ATTACHMENT C
CITY OF ANN ARBOR DECLARATION OF COMPLIANCE

Non-Discrimination Ordinance

The “non discrimination by city contractors” provision of the City of Ann Arbor Non-Discrimination Ordinance (Ann Arbor City Code Chapter 112, Section 9:158) requires all contractors proposing to do business with the City to treat employees in a manner which provides equal employment opportunity and does not discriminate against any of their employees, any City employee working with them, or any applicant for employment on the basis of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight. It also requires that the contractors include a similar provision in all subcontracts that they execute for City work or programs.

In addition the City Non-Discrimination Ordinance requires that all contractors proposing to do business with the City of Ann Arbor must satisfy the contract compliance administrative policy adopted by the City Administrator. A copy of that policy may be obtained from the Purchasing Manager.

The Contractor agrees:

(a) To comply with the terms of the City of Ann Arbor’s Non-Discrimination Ordinance and contract compliance administrative policy.

(b) To post the City of Ann Arbor’s Non-Discrimination Ordinance Notice in every work place or other location in which employees or other persons are contracted to provide services under a contract with the City.

(c) To provide documentation within the specified time frame in connection with any workforce verification, compliance review or complaint investigation.

(d) To permit access to employees and work sites to City representatives for the purposes of monitoring compliance, or investigating complaints of non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the Ann Arbor Non-Discrimination Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Non-Discrimination Ordinance, obligates the Contractor to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract.

________________________________________________________
Company Name

________________________________________________________
Signature of Authorized Representative                                 Date

________________________________________________________
Print Name and Title

________________________________________________________
Address, City, State, Zip

________________________________________________________
Phone/Email address

Questions about the Notice or the City Administrative Policy, Please contact:
Procurement Office of the City of Ann Arbor
(734) 794-6500

Revised 3/31/15 Rev. 0

NDO-2
ATTACHMENT D
CITY OF ANN ARBOR
LIVING WAGE ORDINANCE DECLARATION OF COMPLIANCE

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that an employer who is (a) a contractor providing services to or for the City for a value greater than $10,000 for any twelve-month contract term, or (b) a recipient of federal, state, or local grant funding administered by the City for a value greater than $10,000, or (c) a recipient of financial assistance awarded by the City for a value greater than $10,000, shall pay its employees a prescribed minimum level of compensation (i.e., Living Wage) for the time those employees perform work on the contract or in connection with the grant or financial assistance. The Living Wage must be paid to these employees for the length of the contract/program.

Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from compliance with the Living Wage Ordinance. If this exemption applies to your company/non-profit agency please check here [ ] No. of employees

The Contractor or Grantee agrees:

(a) To pay each of its employees whose wage level is not required to comply with federal, state or local prevailing wage law, for work covered or funded by a contract with or grant from the City, no less than the Living Wage. The current Living Wage is defined as $13.61/hour for those employers that provide employee health care (as defined in the Ordinance at Section 1:815 Sec. 1 (a)), or no less than $15.18/hour for those employers that do not provide health care. The Contractor or Grantor understands that the Living Wage is adjusted and established annually on April 30 in accordance with the Ordinance and covered employers shall be required to pay the adjusted amount thereafter to be in compliance with Section 1:815(3).

Check the applicable box below which applies to your workforce

[ ] Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage without health benefits

[ ] Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage with health benefits

(b) To post a notice approved by the City regarding the applicability of the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.

(c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.

(d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.

(e) To take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee covered by the Living Wage Ordinance or any person contracted for employment and covered by the Living Wage Ordinance in order to pay the living wage required by the Living Wage Ordinance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services or agrees to accept financial assistance in accordance with the terms of the Living Wage Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Living Wage Ordinance, obligates the Employer/Grantee to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract or grant of financial assistance.

___________________________________________________ ________________________________________________
Company Name      Street Address

___________________________________________________ ________________________________________________
Signature of Authorized Representative                              Date City, State, Zip

___________________________________________________ ________________________________________________
Print Name and Title     Phone/Email address

City of Ann Arbor Procurement Office, 734/794-6500, procurement@a2gov.org  Rev. 3/5/19
ATTACHMENT E

VENDOR CONFLICT OF INTEREST DISCLOSURE FORM

All vendors interested in conducting business with the City of Ann Arbor must complete and return the Vendor Conflict of Interest Disclosure Form in order to be eligible to be awarded a contract. Please note that all vendors are subject to comply with the City of Ann Arbor’s conflict of interest policies as stated within the certification section below.

If a vendor has a relationship with a City of Ann Arbor official or employee, an immediate family member of a City of Ann Arbor official or employee, the vendor shall disclose the information required below.

1. No City official or employee or City employee’s immediate family member has an ownership interest in vendor’s company or is deriving personal financial gain from this contract.
2. No retired or separated City official or employee who has been retired or separated from the City for less than one (1) year has an ownership interest in vendor’s Company.
3. No City employee is contemporaneously employed or prospectively to be employed with the vendor.
4. Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any City employee or elected official to obtain or maintain a contract.
5. Please note any exceptions below:

<table>
<thead>
<tr>
<th>Conflict of Interest Disclosure*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of City of Ann Arbor employees, elected officials or immediate family members with whom there may be a potential conflict of interest.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

*Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest and they are detected by the City, vendor will be exempt from doing business with the City.

I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor by my signature below:

<table>
<thead>
<tr>
<th>Vendor Name</th>
<th>Vendor Phone Number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Signature of Vendor Authorized Representative</th>
<th>Date</th>
<th>Printed Name of Vendor Authorized Representative</th>
</tr>
</thead>
</table>

Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500, procurement@a2gov.org
ATTACHMENT F
CITY OF ANN ARBOR NON-DISCRIMINATION ORDINANCE

Relevant provisions of Chapter 112, Nondiscrimination, of the Ann Arbor City Code are included below. You can review the entire ordinance at www.a2gov.org/humanrights.

Intent: It is the intent of the city that no individual be denied equal protection of the laws; nor shall any individual be denied the enjoyment of his or her civil or political rights or be discriminated against because of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight.

Discriminatory Employment Practices: No person shall discriminate in the hire, employment, compensation, work classifications, conditions or terms, promotion or demotion, or termination of employment of any individual. No person shall discriminate in limiting membership, conditions of membership or termination of membership in any labor union or apprenticeship program.

Discriminatory Effects: No person shall adopt, enforce or employ any policy or requirement which has the effect of creating unequal opportunities according to actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight for an individual to obtain housing, employment or public accommodation, except for a bona fide business necessity. Such a necessity does not arise due to a mere inconvenience or because of suspected objection to such a person by neighbors, customers or other persons.

Nondiscrimination by City Contractors: All contractors proposing to do business with the City of Ann Arbor shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All city contractors shall ensure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate inequality based upon any classification protected by this chapter. All contractors shall agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of any applicable protected classification. All contractors shall be required to post a copy of Ann Arbor's Non-Discrimination Ordinance at all work locations where its employees provide services under a contract with the city.

Complaint Procedure: If any individual believes there has been a violation of this chapter, he/she may file a complaint with the City's Human Rights Commission. The complaint must be filed within 180 calendar days from the date of the individual's knowledge of the allegedly discriminatory action or 180 calendar days from the date when the individual should have known of the allegedly discriminatory action. A complaint that is not filed within this timeframe cannot be considered by the Human Rights Commission. To file a complaint, first complete the complaint form, which is available at www.a2gov.org/humanrights. Then submit it to the Human Rights Commission by e-mail (hrc@a2gov.org), by mail (Ann Arbor Human Rights Commission, PO Box 8647, Ann Arbor, MI 48107), or in person (City Clerk’s Office). For further information, please call the commission at 734-794-6141 or e-mail the commission at hrc@a2gov.org.

Private Actions For Damages or Injunctive Relief: To the extent allowed by law, an individual who is the victim of discriminatory action in violation of this chapter may bring a civil action for appropriate injunctive relief or damages or both against the person(s) who acted in violation of this chapter.

THIS IS AN OFFICIAL GOVERNMENT NOTICE AND MUST BE DISPLAYED WHERE EMPLOYEES CAN READILY SEE IT.
**CITY OF ANN ARBOR LIVING WAGE ORDINANCE**

**RATE EFFECTIVE APRIL 30, 2019 - ENDING APRIL 29, 2020**

$13.61 per hour  
If the employer provides health care benefits*

$15.18 per hour  
If the employer does NOT provide health care benefits*

Employers providing services to or for the City of Ann Arbor or recipients of grants or financial assistance from the City of Ann Arbor for a value of more than $10,000 in a twelve-month period of time must pay those employees performing work on a City of Ann Arbor contract or grant, the above living wage.

**ENFORCEMENT**

The City of Ann Arbor may recover back wages either administratively or through court action for the employees that have been underpaid in violation of the law. Persons denied payment of the living wage have the right to bring a civil action for damages in addition to any action taken by the City.

Violation of this Ordinance is punishable by fines of not more than $500/violation plus costs, with each day being considered a separate violation. Additionally, the City of Ann Arbor has the right to modify, terminate, cancel or suspend a contract in the event of a violation of the Ordinance.

* Health Care benefits include those paid for by the employer or making an employer contribution toward the purchase of health care. The employee contribution must not exceed $.50 an hour for an average work week; and the employer cost or contribution must equal no less than $1/hr for the average work week.

The Law Requires Employers to Display This Poster Where Employees Can Readily See It.

For Additional Information or to File a Complaint contact Colin Spencer at 734/794-6500 or cspencer@a2gov.org

Revised 2/1/2019
APPENDIX A: SAMPLE GENERAL SERVICES AGREEMENT

GENERAL SERVICES AGREEMENT BETWEEN

______________________________________

AND THE CITY OF ANN ARBOR

FOR _________________________________

The City of Ann Arbor, a Michigan municipal corporation, having its offices at 301 E. Huron St. Ann Arbor, Michigan 48104 ("City"), and ___________________________________________, acting personally or through any assistants authorized by the Administrator/Manager of the Administering Service Area/Unit.

with its address at ___________________________________________________, agree as follows:

The Contractor agrees to provide services to the City under the following terms and conditions:

I. DEFINITIONS

Administering Service Area/Unit means ________________________________.

Contract Administrator means ____________________________, acting personally or through any assistants authorized by the Administrator/Manager of the Administering Service Area/Unit.

Deliverables means all Plans, Specifications, Reports, Recommendations, and other materials developed for and delivered to City by Contractor under this Agreement.

Project means ___________________________________________________.

II. DURATION

Contractor shall commence performance on _______________, 20___ ("Commencement Date"). This Agreement shall remain in effect until satisfactory completion of the Services specified below unless terminated as provided for in Article XII. The terms and conditions of this Agreement shall apply to the earlier of the Effective Date or Commencement Date.

III. SERVICES

A. The Contractor agrees to provide ________________________________

("Services") and to furnish all materials, equipment and labor necessary and to abide by all the duties and responsibilities applicable to it for the Project in accordance with the requirements and provisions of the following documents, including all written modifications incorporated into any of the documents, which are incorporated as part of this Agreement:
The contract documents are complementary and what is called for by any one shall be binding. The intention of the documents is to include all labor and materials, equipment and transportation necessary for the proper execution of the Project. Materials or work described in words that so applied have a well-known technical or trade meaning have the meaning of those recognized standards.

In case of a conflict among the contract documents listed above in any requirement(s), the requirement(s) of the document listed first shall prevail over any conflicting requirement(s) of a document listed later.

The City retains the right to make changes to the quantities of service within the general scope of the Agreement at any time by a written order. If the changes add to or deduct from the extent of the services, the contract sum shall be adjusted accordingly. All such changes shall be executed under the conditions of the original Agreement.

B. Quality of Services under this Agreement shall be of the level of quality performed by persons regularly rendering this type of service. Determination of acceptable quality shall be made solely by the Contract Administrator.

C. The Contractor shall perform its Services for the Project in compliance with all statutory, regulatory and contractual requirements now or hereafter in effect as may be applicable to the rights and obligations set forth in the Agreement.

D. The Contractor may rely upon the accuracy of reports and surveys provided to it by the City (if any) except when defects should have been apparent to a reasonably competent professional or when it has actual notice of any defects in the reports and surveys.

IV. INDEPENDENT CONTRACTOR

The Parties agree that at all times and for all purposes under the terms of this Agreement each Party’s relationship to any other Party shall be that of an independent contractor. Each Party will be solely responsible for the acts of its own employees, agents, and servants. No liability, right, or benefit arising out of any employer/employee relationship, either express or implied, shall arise or accrue to any Party as a result of this Agreement.

Contractor does not have any authority to execute any contract or agreement on behalf of the City, and is not granted any authority to assume or create any obligation or liability on the City’s behalf, or to bind the City in any way.
V. COMPENSATION OF CONTRACTOR

A. The Contractor shall be paid on the basis of the bid price restated in Exhibit B. The total fee to be paid the Contractor for the Services shall not exceed ____________________ ($______). Payment shall be made monthly, unless another payment term is specified in Exhibit B, following receipt of invoices submitted by the Contractor, and approved by the Contract Administrator.

B. The Contractor will be compensated for Services performed in addition to the Services described in Article III, only when the scope of and compensation for those additional Services have received prior written approval of the Contract Administrator.

C. The Contractor shall keep complete records of work performed (e.g. tasks performed/hours allocated) so that the City may verify invoices submitted by the Contractor. Such records shall be made available to the City upon request and submitted in summary form with each invoice.

VI. INSURANCE/INDEMNIFICATION

A. The Contractor shall procure and maintain from the Effective Date or Commencement Date of this Agreement (whichever is earlier) through the conclusion of this Agreement, such insurance policies, including those set forth in Exhibit C, as will protect itself and the City from all claims for bodily injuries, death, or property damage which may arise under this contract; whether the act(s) or omission(s) giving rise to the claim were made by the Contractor, any subcontractor, or anyone employed by them directly or indirectly. Prior to commencement of work under this Agreement, Contractor shall provide to the City documentation satisfactory to the City, through City-approved means (currently myCOI), demonstrating it has obtained the policies and endorsements required by Exhibit C. Contractor shall add registration@mycoitracking.com to its safe sender’s list so that it will receive necessary communication from myCOI. When requested, Contractor shall provide the same documentation for its subcontractor(s) (if any).

B. Any insurance provider of Contractor shall be authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company’s Key Rating Guide of “A-” Overall and a minimum Financial Size Category of “V”. Insurance policies and certificates issued by non-admitted insurance companies are not acceptable unless approved in writing by the City.

C. To the fullest extent permitted by law, Contractor shall indemnify, defend and hold the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses, including attorney’s fees, resulting or alleged to result, from any acts or omissions by Contractor or its employees and agents occurring in the performance of or breach in this Agreement, except to the extent that any suit, claim, judgment or expense are finally judicially determined to have resulted from the City’s negligence or willful misconduct or its failure to comply with any of its material obligations set forth in this Agreement.
VII. PERFORMANCE BOND

A Performance Bond will be required from the successful bidder as follows:

A Performance Bond to the City of Ann Arbor for 50% of the bid amount accepted for the first year of the Contract. The City and Contractor agree that the amount of the bond is $_____________, based on a Base Service Fee of $_____/ton.

The Performance Bond shall be executed on a form supplied by the City in a manner and by a Surety Company duly authorized to issue performance bonds in Michigan and satisfactory to the City Attorney.

VIII. WAGE REQUIREMENTS

Under this Contract, the Contractor shall conform to Chapter 14 of Title I of the Code of the City of Ann Arbor as amended; which in part states "...that all craftsmen, mechanics and laborers employed directly on the site in connection with said improvements, including said employees of subcontractors, shall receive the prevailing wage for the corresponding classes of craftsmen, mechanics and laborers, as determined by statistics for the Ann Arbor area compiled by the United States Department of Labor. At the request of the City, any contractor or subcontractor shall provide satisfactory proof of compliance with the contract provisions required by the Section."

Where the Contract and the Ann Arbor City Ordinance are silent as to definitions of terms required in determining contract compliance with regard to prevailing wages, the definitions provided in the Davis-Bacon Act as amended (40 U.S.C. 278-a to 276-a-7) for the terms shall be used.

If the Contractor is a “covered employer” as defined in Chapter 23 of the Ann Arbor City Code, the Contractor agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code. The Contractor agrees to pay those employees providing Services to the City under this Agreement a “living wage,” as defined in Section 1:815 of the Ann Arbor City Code, as adjusted in accordance with Section 1:815(3); to post a notice approved by the City of the applicability of Chapter 23 in every location in which regular or contract employees providing services under this Agreement are working; to maintain records of compliance; if requested by the City, to provide documentation to verify compliance; to take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee or person contracted for employment in order to pay the living wage required by Section 1:815; and otherwise to comply with the requirements of Chapter 23.

Contractor agrees that all subcontracts entered into by the Contractor shall contain similar wage provision covering subcontractor’s employees who perform work on this contract.

IX. NON-DISCRIMINATION

The Contractor agrees to comply, and to require its subcontractor(s) to comply, with the nondiscrimination provisions of MCL 37.2209. The Contractor further agrees to comply with the provisions of Section 9:158 of Chapter 112 of Title IX of the Ann Arbor City Code, and to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity.
X. REPRESENTATIONS AND WARRANTIES BY THE CONTRACTOR

A. The Contractor warrants that the quality of its Services under this Agreement shall conform to the level of quality performed by persons regularly rendering this type of service.

B. The Contractor warrants that it has all the skills, experience and licenses (if applicable) necessary to perform the Services it is to provide pursuant to this Agreement.

C. The Contractor warrants that it has available, or will engage, at its own expense, sufficient trained employees to provide the Services it is to provide pursuant to this Agreement.

D. The Contractor certifies that it has no personal or financial interest in the Project other than the fee it is to receive under this Agreement. The Contractor further certifies that it shall not acquire any such interest, direct or indirect, which would conflict in any manner with the performance of the Services it is to provide pursuant to this Agreement. Further Contractor agrees and certifies that it does not and will not employ or engage any person with a personal or financial interest in this Agreement.

E. The Contractor certifies that it is not, and shall not become overdue or in default to the City for any contract, debt, or any other obligation to the City including real and personal property taxes. Further Contractor agrees that the City shall have the right to set off any such debt against compensation awarded for Services under this Agreement.

F. The Contractor warrants that its bid was made in good faith, it arrived at the costs of its bid independently, without consultation, communication or agreement, for the purpose of restricting completion as to any matter relating to such fees with any competitor for these Services; and no attempt has been made or shall be made by the Contractor to induce any other perform or firm to submit or not to submit a bid for the purpose of restricting competition.

XI. OBLIGATIONS OF THE CITY

A. The City agrees to give the Contractor access to the Project area and other City-owned properties as required to perform the necessary Services under this Agreement.

B. The City shall notify the Contractor of any defects in the Services of which the Contract Administrator has actual notice.
XII. ASSIGNMENT

A. The Contractor shall not subcontract or assign any portion of any right or obligation under this Agreement without prior written consent from the City. Notwithstanding any consent by the City to any assignment, Contractor shall at all times remain bound to all warranties, certifications, indemnifications, promises and performances, however described, as are required of it under the Agreement unless specifically released from the requirement, in writing, by the City.

B. The Contractor shall retain the right to pledge payment(s) due and payable under this Agreement to third parties.

XIII. TERMINATION OF AGREEMENT

A. If either party is in breach of this Agreement for a period of fifteen (15) days following receipt of notice from the non-breaching party with respect to a breach, the non-breaching party may pursue any remedies available to it against the breaching party under applicable law, including but not limited to, the right to terminate this Agreement without further notice. The waiver of any breach by any party to this Agreement shall not waive any subsequent breach by any party.

B. The City may terminate this Agreement, on at least thirty (30) days advance notice, for any reason, including convenience, without incurring any penalty, expense or liability to Contractor, except the obligation to pay for Services actually performed under the Agreement before the termination date.

C. Contractor acknowledges that, if this Agreement extends for several fiscal years, continuation of this Agreement is subject to appropriation of funds for this Project. If funds to enable the City to effect continued payment under this Agreement are not appropriated or otherwise made available, the City shall have the right to terminate this Agreement without penalty at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of termination to Contractor. The Contract Administrator shall give Contractor written notice of such non-appropriation within thirty (30) days after it receives notice of such non-appropriation.

D. The provisions of Articles VI and IX shall survive the expiration or earlier termination of this Agreement for any reason. The expiration or termination of this Agreement, for any reason, shall not release either party from any obligation or liability to the other party, including any payment obligation that has already accrued and Contractor’s obligation to deliver all Deliverables due as of the date of termination of the Agreement.

XIV. REMEDIES

A. This Agreement does not, and is not intended to, impair, divest, delegate or contravene any constitutional, statutory and/or other legal right, privilege, power, obligation, duty or immunity of the Parties.
B. All rights and remedies provided in this Agreement are cumulative and not exclusive, and the exercise by either party of any right or remedy does not preclude the exercise of any other rights or remedies that may now or subsequently be available at law, in equity, by statute, in any agreement between the parties or otherwise.

C. Absent a written waiver, no act, failure, or delay by a Party to pursue or enforce any rights or remedies under this Agreement shall constitute a waiver of those rights with regard to any existing or subsequent breach of this Agreement. No waiver of any term, condition, or provision of this Agreement, whether by conduct or otherwise, in one or more instances, shall be deemed or construed as a continuing waiver of any term, condition, or provision of this Agreement. No waiver by either Party shall subsequently effect its right to require strict performance of this Agreement.

XV. NOTICE

All notices and submissions required under this Agreement shall be delivered to the respective party in the manner described herein to the address stated in this Agreement or such other address as either party may designate by prior written notice to the other. Notices given under this Agreement shall be in writing and shall be personally delivered, sent by next day express delivery service, certified mail, or first class U.S. mail postage prepaid, and addressed to the person listed below. Notice will be deemed given on the date when one of the following first occur: (1) the date of actual receipt; (2) the next business day when notice is sent next day express delivery service or personal delivery; or (3) three days after mailing first class or certified U.S. mail.

If Notice is sent to the CONTRACTOR, it shall be addressed and sent to:

If Notice is sent to the CITY, it shall be addressed and sent to:

City of Ann Arbor

(insert name of Administering Service Area Administrator)

301 E. Huron St.
Ann Arbor, Michigan 48104

With a copy to: The City of Ann Arbor
ATTN: Office of the City Attorney
301 East Huron Street, 3rd Floor
Ann Arbor, Michigan 48104
XVI. CHOICE OF LAW AND FORUM

This Agreement will be governed and controlled in all respects by the laws of the State of Michigan, including interpretation, enforceability, validity and construction, excepting the principles of conflicts of law. The parties submit to the jurisdiction and venue of the Circuit Court for Washtenaw County, State of Michigan, or, if original jurisdiction can be established, the United States District Court for the Eastern District of Michigan, Southern Division, with respect to any action arising, directly or indirectly, out of this Agreement or the performance or breach of this Agreement. The parties stipulate that the venues referenced in this Agreement are convenient and waive any claim of non-convenience.

XVII. OWNERSHIP OF DOCUMENTS

Upon completion or termination of this Agreement, all documents (i.e., Deliverables) prepared by or obtained by the Contractor as provided under the terms of this Agreement shall be delivered to and become the property of the City. Original basic survey notes, sketches, charts, drawings, partially completed drawings, computations, quantities and other data shall remain in the possession of the Contractor as instruments of service unless specifically incorporated in a deliverable, but shall be made available, upon request, to the City without restriction or limitation on their use.

XVIII. SEVERABILITY OF PROVISIONS

Whenever possible, each provision of this Agreement will be interpreted in a manner as to be effective and valid under applicable law. However, if any provision of this Agreement or the application of any provision to any party or circumstance will be prohibited by or invalid under applicable law, that provision will be ineffective to the extent of the prohibition or invalidity without invalidating the remainder of the provisions of this Agreement or the application of the provision to other parties and circumstances.

XIX. EXTENT OF AGREEMENT

This Agreement, together with any affixed exhibits, schedules or other documentation, constitutes the entire understanding between the City and the Contractor with respect to the subject matter of the Agreement and it supersedes, unless otherwise incorporated by reference herein, all prior representations, negotiations, agreements or understandings whether written or oral. Neither party has relied on any prior representations, of any kind or nature, in entering into this Agreement. No terms or conditions of either party’s invoice, purchase order or other administrative document shall modify the terms and conditions of this Agreement, regardless of the other party’s failure to object to such form. This Agreement shall be binding on and shall inure to the benefit of the parties to this Agreement and their permitted successors and permitted assigns and nothing in this Agreement, express or implied, is intended to or shall confer on any other person or entity any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of this Agreement. This Agreement may only be altered, amended or modified by written amendment signed by the Contractor and the City. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement.
XX. ELECTRONIC TRANSACTION

The parties agree that signatures on this Agreement may be delivered electronically in lieu of an original signature and agree to treat electronic signatures as original signatures that bind them to this Agreement.

XXI. EFFECTIVE DATE

This Agreement will become effective when all parties have signed it. The Effective Date of this Agreement will be the date this Agreement is signed by the last party to sign it.

FOR CONTRACTOR

By ____________________________

Its ____________________________

FOR THE CITY OF ANN ARBOR

By ____________________________

Christopher Taylor, Mayor

By ____________________________

Jacqueline Beaudry, City Clerk

Approved as to substance

_________________________________

Service Area Administrator

By ____________________________

Howard S. Lazarus, City Administrator

Approved as to form and content

By ____________________________

Stephen K. Postema, City Attorney
EXHIBIT A
SCOPE OF SERVICES

(Insert/Attach Scope of Work & Deliverables Schedule)
EXHIBIT B
COMPENSATION

General

Contractor shall be paid for those Services performed pursuant to this Agreement inclusive of all reimbursable expenses (if applicable), in accordance with the terms and conditions herein. The Compensation Schedule below/attached states nature and amount of compensation the Contractor may charge the City:

(insert/Attach Negotiated Fee Arrangement)
EXHIBIT C
INSURANCE REQUIREMENTS

From the earlier of the Effective Date or the Commencement Date of this Agreement, and continuing without interruption during the term of this Agreement, Contractor shall provide certificates of insurance to the City on behalf of itself, and when requested any subcontractor(s). The certificates of insurance and required endorsements shall meet the following minimum requirements.

A. The Contractor shall have insurance that meets the following minimum requirements:

1. Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:

   Bodily Injury by Accident - $500,000 each accident
   Bodily Injury by Disease - $500,000 each employee
   Bodily Injury by Disease - $500,000 each policy limit

2. Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 04 13 or current equivalent. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements which diminish the City's protections as an additional insured under the policy. Further, the following minimum limits of liability are required:

   $1,000,000 Each occurrence as respect Bodily Injury Liability or Property Damage Liability, or both combined
   $2,000,000 Per Project General Aggregate
   $1,000,000 Personal and Advertising Injury

3. Motor Vehicle Liability Insurance equivalent to, as a minimum, Insurance Services Office form CA 00 01 10 13 or current equivalent. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements that diminish the City’s protections as an additional insured under the policy. Further, the limits of liability shall be $1,000,000 for each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.

B. Insurance required under A.2 and A.3 above shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its insurer against the City for any insurance listed herein.
C. Insurance companies and policy forms are subject to approval of the City Attorney, which approval shall not be unreasonably withheld. Documentation must provide and demonstrate an unconditional and unqualified 30-day written notice of cancellation in favor of the City of Ann Arbor. Further, the documentation must explicitly state the following: (a) the policy number(s); name of insurance company; name(s), email address(es), and address(es) of the agent or authorized representative; name and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions, which may be approved by the City in its sole discretion; (c) that the policy conforms to the requirements specified. Contractor shall furnish the City with satisfactory certificates of insurance and endorsements prior to commencement of any work. Upon request, the Contractor shall provide within 30 days, a copy of the policy(ies) and all required endorsements to the City. If any of the above coverages expire by their terms during the term of this contract, the Contractor shall deliver proof of renewal and/or new policies and endorsements to the Administering Service Area/Unit at least ten days prior to the expiration date.
CITY OF ANN ARBOR
MATERIAL RECOVERY FACILITY
4150 Platt Road
Ann Arbor Michigan, 48108

PROCESS SYSTEM
INSPECTION REPORT

FINAL

Prepared by:

February 12, 2017
Ann Arbor – Inspection Report

On Tuesday November 9, 2016, an inspection of the Ann Arbor Material Recovery Facility was conducted by Waste Management. The purpose of the inspection and this report is to identify deficiencies (safety and operational) that should be addressed to bring the recycling system operational again in a safe manner.

This report is limited to the system and adjacent areas only. No inspections of the building or site were conducted. The system was observed in a static condition and was not operational except for the baler and infeed conveyors. All other system components were observed as best possible and deficiencies noted here-in. No safety covers, pit plates, guarding or other like items were removed during the inspection. It’s worthy to note, that although some equipment was noted to have “no observable deficiencies”, that doesn’t mean that none exist. It’s likely that once the system is energized, additional deficiencies may be discovered such as faulty alarms, safety switches, lighting, E-stops, fans, blowers, vacuums, bent shafts, hoists, speed adjustments, cylinders...etc. Also, where leaking motors are noted, it is possible oil may be coming from the breather cap as the motor heats up. These motors should be more thoroughly inspected to determine the cause before failure occurs.

Given the observable state with bent supports, improperly mounted motors, noticeably faulty safety switches, broken electrical lines, damaged belts and lack of sufficient guarding it was deemed unsafe (and would have been irresponsible) to energize the system for a full operational assessment.

This report is divided into three (3) parts:

Part A  Summary of conditions and recommendations.
This section seeks to identify the minimum amount of work that should be undertaken to bring the system safely back on-line. It is not meant to be all inclusive and as noted, additional safety concerns may be realized once the system is energized.

Part-B  Recommendations for improving the system (upgrading or adding equipment)
This section is designed to point out where deficiencies lie in the general design and use of old technologies. It is meant to give insight into what improvements would enhance system performance and overall sorting efficiencies.

Part-C  Deficiencies by component (including surrounding areas)
This section identifies by component, observable deficiencies that should be part of daily maintenance and housekeeping and to a greater extent those that render the system unsafe to energize until corrections are made.

Photos are crossed referenced back to Part A by item number (Ref A1, A2...)
Part – A Summary of Conditions and Recommendations

In general the system is in fair condition due mainly to neglect. Poor housekeeping and lack of preventative maintenance are to blame for most of what was observed. The following steps should be taken to bring the system back on-line safely. Upon start-up, additional conditions may arise that will require attention such as bent shafts, faulty switches, belt tracking issues...

A1. Remove dust from all equipment, especially fan motor guards.
A2. Replace all worn and missing discs in all screens and return rollers.
A3. Remove material buildup and windings from all shafts (Drive, Take-up and Return), chutes and transitions.
A4. Repair/Replace and fill all oil boxes and hydraulic tanks. Drain old, add new. Fix and repair broken or missing lines.
A5. Repair/Replace all belting with torn edges, broken lacing, or with loose, missing or heavily worn cleats or other wearable parts. Check all conveyors for proper tracking.
A6. Repair all worn-thru areas of hoppers, sideboards and containment walls. Remove any temporary wood or other materials and properly close all transitions for containment of materials.
A7. Repair/Replace and secure any bent, step, post, railing, support or other structural or safety concern.
A8. Properly cover all exposed moving parts to be safety compliant.
A9. Repair/Replace all worn chains, links, sprockets and missing pins, bolts or other fasteners.
A10. Lubricate all bearings
A11. Secure all loose decking to remove trip hazards
A12. Ensure all Sort Stations have E-Stops and no sharp edges on chutes and sideboards
A13. Fix lighting where necessary
A14. Repair/Replace all faulty/missing limit and other safety switches, and broken electrical lines
A15. Properly mount equipment and remove temporary chains and supports
A16. Repair/Replace Concrete Tip Hall Wall near OCC Bunker Conveyor
Part – B Recommendations for improving the system
(upgrading or adding equipment)

1. Replace the Infeed with a Drum Feeder and eliminate the Metering Drum. This will help more evenly distribute the material and allow the loader operator more time to work the Tip Floor. It will also eliminate “black belt” making the system more efficient and consistent in throughput. This should yield more effective sorters and individual machine components.

2. Replace M-2 with two conveyors. One Chain Conveyor to bring material up to Presort and one Variable Speed Slider Bed to be Presort. This will help reduce the Burden Depth of material to Presort and allow sorters to be more productive. Burden depth using a chain conveyor due to its limited speed does not allow sorters to see more than 50% of the material. There is also the safety factor of sorting from a Slider Bed vs. Chain Conveyor where side-wings and other hinged parts can easily grab clothing.

3. Replace Cage winches with proper ½ ton Chain-falls and wire back to Control Panel. This will provide a safe means of discharging materials from the cages. It appears the previous operator was hanging workers from suspended cables attached to overhead structures which is unacceptable and violates OSHA and other safety standards.

4. Replace Eddy Current with 5 FT wide Steinert and relocate to better position. Newer technology and relocation will remove more non-ferrous metal further upstream thus reducing the burden depth and composition of remaining materials to be sorted such as plastics. The existing Eddy Current appears to be home-made and undersized. With Aluminum being the most valuable commodity, payback on a newer, bigger, more efficient Eddy Current can be very fast.

5. Replace/Reposition Sort Conveyors to be horizontal (not inclined). Providing more ergonomic sort stations increases productivity and reduces worker fatigue. The more effective and safer a sorter can be, the more effective and safer the entire process can be.

6. Reduce conveyor angles to 35 degrees (max.) wherever possible. 30 degrees preferable. This will reduce roll-back of materials and thus increase overall system throughput and performance. Conveyors over 30 degrees deliver material to the next piece of equipment (or sorter) in clumps reducing sorter and system efficiency.

7. Replace ADS with more reliable technology such as Ballistic Separator & Optical Sorter. Newer technology will provide better separation of materials thus improving overall system performance (especially for downstream equipment). The ADS technology is only capable of removing single-layer paper. The equipment supplier has utilized 3 ADS units which combined are still very inefficient. Anything stacked or 3 dimensional will ultimately make its way to the container line and then residue. A properly sized Ballistic Separator in conjunction with an Optical Sorter firing on 3D paper can be up to 99% efficient in material separation.
8. Add Bale-turn to prevent bales from hitting wall. This safety issue is commonly overlooked until it’s too late. When the baler was replaced, the ejection chamber location was also changed. In the current arrangement the baler could eject bales directly into the wall causing damage to the building structure and/or the baler itself.

9. Improve Maintenance Access to all parts of the system. Ease of access will improve preventative maintenance measures and help avoid catastrophic failure of system components. Regular and proper cleaning of all machines during breaks and between shifts is paramount to keeping the system running at peak capacity and efficiency.

The way the system is currently laid out, it is nearly impossible to safely reach many of the main system components. Not having access does impact long term capabilities of maintaining equipment. Recommendation to improve maintenance access include:

a.) Construction of additional maintenance platforms for components that can accommodate the space but have no access.

b.) Construction of maintenance doors with windows for less accessible components.

c.) Relocation of some components such as the Eddy Current & Magnet. Maintenance Access would be designed-in similar to (a) & (b) above.

d.) Replacement of outdated components with newer technology. Maintenance Access would again be design-in.
Part – C Deficiencies by Component

POS M-1 Infeed Conveyor

- Steel Belt Separating
- Guarding under head pulley missing
- Loose electrical wire on motor
- Wrappings on head pulley shaft

Ref A5

Ref A3, A9

Ref A1, A3, A8, A14
POS M-2 Incline/Presort Conveyor

- Guarding missing, open exposed chain accessible
- Missing link pin and worn roller wheels on chain
- Bent support, not lagged to floor
- Heavily worn sideboards at Metering Drum and below
- Belly pan under head pulley bulging apart from material buildup
- Bent cleats
- Tail Guard not secured
POS M-2 Surrounding Area

- Loose conduit hanging from wall
- Improper lighting support over Q.C. station
- Electrical Line crimped
- Chute(s) stuffed with material
- Floor deck lifting in areas
- Bottom step to presort bent

Ref A14, A13, A14
Ref A14
Ref A3
Ref A7
POS M-3 Metering Drum

- Loose hydraulic lines and leaking hydraulic power pack
- Worn drum and cleats
- Wrappings on drum shafts
POS M-4A Transfer Conveyor

- Loose and missing cleats
- Wrappings on head pulley
- Worn and missing Return Rollers

Ref A2, A3, A5

Ref A1, A3, A10
**POS M-4B Transfer Conveyor**

- Bent head pulley and wrapping on shaft
- Belt heavily worn and damaged lacing
- Return Rollers missing

Ref A3, A7, A10
Ref A2, A5
Ref A2
POS M-5 Trash Transfer Conveyor

- Wrapping on head pulley
- Gearbox possibly leaking
- Belt not tracked and cutting sideboard

Ref A3, A5, A6, A10

Ref A3. A5, A6
POS M-6 Large Plastic Transfer Conveyor

- Lacing torn & ripping
- Tracking off

Ref A5
POS M-7 OCC Screen

- Bearing bolt missing
- Gearbox leaking
- Oil reservoir missing/broken
- Motor fan cover missing screw
- Motor seal-tight damaged
- Teeth on Discs heavily worn
- Transfer plate at Infeed worn thru
- Additional Fall Protection needed on right side ladder (overlooking Tip Area)
POS M-7 OCC Screen (cont.)

Ref A2, A3

Ref A4, A8

Ref A6

Ref A8
POS M-8 OCC Transfer Conveyor

- Belt Cleats missing and loose
- Threshold to Pos M-9A trip hazard
POS M-9A OCC Q.C. Conveyor

- Missing Belly Guard
- Open electrical box (no cover)
- Motor drive guard damaged
- Missing/Loose Sideboards
- Damaged Sort Chutes
- Deck lifting at Sort Station
POS M-9B OCC Transfer Conveyor

- Bent/Leaning support
- Bolted connection incomplete
- Missing/Worn Return Rollers
- Add Right-side Transition Plate to Contain Material
POS M-10A OCC Storage Conveyor

- Missing E-stop
- Missing Tail Guard

Ref A14

Ref A8
POS M-11 Screen Thrus Transfer Conveyor

- Belly Guards missing
- Self-cleaning Tail Pulley packed with material
- Windings on tail shaft
- Return Rollers worn
- Feed chute packed with material and worn
- Upturn Return Roller missing from radius
POS M-12 Mixed Transfer Conveyor

- Return Rollers missing
- Damaged Sorting Chutes with sharp edges
- E-Stop Pull Cord missing eye-loops along conveyor

Ref A6, A11, A12

Ref A11
POS M-13 Scalping Screen Presort Conveyor & Surrounding Area

- No guarding to belt underside
- Open electrical box (no cover)
- Motor drive guard damaged
- Distorted chutes with sharp edges

Ref A6, A8, A12
POS M-14 Scalping Screen

- Leaking Drive Motor
- Bent Handrail adjacent
- Heavily worn discs

Ref A1, A4, A7

Ref A2
POS M-15 Scalping Screen – Post Sort

- No observable deficiencies
POS M-16A OCC Transfer Conveyor

- Tail Bearing Guard missing

Ref A8
POS M-16B Trash Transfer Conveyor
- Drive leaks

POS M-16C Trash Transfer Conveyor
- Open Electrical Box
- Return Roller buildup

Ref A10, A14

Ref A2, A3
POS M-17 ONP Screen

- Worn Sprocket
- Hydraulic Power Pack Leaking

Ref A9

Ref A4
POS M-18 Fiber Transfer Conveyor

- Belt edge torn
- Wrapping on Return Roller
- Tail Bearing Guard missing
- Missing Belly Pan at Tail
- Bearings worn
- Tail Shaft worn

Ref A5  Ref A2, A3

Ref A8, A10
POS M-19 (not used)

POS M-20 Fiber Sort Conveyor

- Belt torn along edge
- Wrappings on Head Pulley
- Missing Belly Guard

Ref A5

Ref A3

Ref A8
POS M-21 CP Screen Feed Conveyor

- Torn belt edge
- Missing cleats and return rollers
- Motor leaking
- Missing Dust Cover on oiler

Ref A2, A5
Ref A4
Ref A8, A14
POS M-22 CP Screen – Mid Fiber Cut

- Blower Motor heavily covered in Dust
- Open electrical & Oiler
- Coupling missing shock absorber & not guarded

Ref A1, A4

Ref A5, A8
POS M-23 Mid Fiber transfer Conveyor

- Tail Bearing Guard missing
- Missing Tail Belly Pan
- Bearings worn
- Questionable OSHA compliant guarding

Ref A8, A10

Ref A8
POS M-24 Fiber Sort Conveyor
- No observable deficiencies

POS M-25 (not used)

POS M-26 Containers Transfer Conveyor
- Missing proper Belly Protection
- Floor Deck on Tip Hall side bouncy

POS M-27 Containers Transfer Conveyor
- No observable deficiencies

POS M-28 Fiber Transfer Conveyor
- No observable deficiencies
POS M-29 Glass Breaker

- Motor Drive Leaking
- Missing/Inoperative Disconnect Switches
- Empty Oil Reservoir
POS M-30 ADS Feed Conveyor

- Worn Cleats
- Missing/Damaged Return Rollers
- Missing Belly Guards

Ref A5, A8

Ref A2, A3, A8
POS M-31A & M-31B Air Drum Separator

- No observable Deficiencies
POS M-32 Fiber Transfer Conveyor

- Drive leaking
- Worn Return Rollers
- Broken electrical conduit
POS M-33 Fiber Transfer Conveyor

- Missing Tail Guard
- Loose/Worn/Patched Belting
POS M-34 ADS Feed Conveyor

- Worn Return Rollers

Ref A2, A3

POS M-35 Air Drum Separator

- Drive leaking oil

POS M-36 Fiber Transfer Conveyor

- Drive leaks
- Lacing Torn
POS M-37 Fiber Transfer Conveyor

- Chain Binder used as motor support

Ref A15
POS M-38 Trash Bunker Conveyor
- Inaccessible, not inspected

POS M-39 Small OCC Bunker Conveyor
- Inaccessible, not inspected

POS M-40 OMP Bunker Conveyor
- Inaccessible, not inspected

POS M-41 Office Paper Bunker Conveyor
- Inaccessible, not inspected

POS M-42 ONP Bunker Conveyor
- Inaccessible, not inspected

POS M-43 ONP Bunker Conveyor
- Inaccessible, not inspected

POS M-44 B&C Transfer Conveyor
- Missing Tail Guard
- Wear on Tail Pulley sides due to poor tracking
- Missing Return Rollers
- Loose Seal-tight at motor
POS M-45 B&C Transfer Conveyor

- Questionable guarding material
- Buildup on Return Rollers
POS M-46A B&C Transfer Conveyor

- Offset Take-up, Belt not tracking
POS M-46B B&C Transfer Conveyor

- Belly Pan Spacing to be closed
- Worn Return Rollers and belting

Ref A6, A8

Ref A2, A3
POS M-47 Non-FE Transfer Conveyor

- Drive leaking
- Insufficient Belly Guard

POS M-48 Magnet

- No observable deficiencies
POS M-49 FE Transfer Conveyor

- Drive Leaks
- Missing Return Roller

Ref A2, A4
POS M-50A Accelerator Conveyor

- Missing Tail Guard
- Missing Belly Guard

Ref A6, A8
POS M-50B Optical Sorter

- No observable deficiencies
POS M-51 PET Q.C. Conveyor

- Insufficient Belly Guarding

POS M-52 PET Silo Blower

- No observable deficiencies
POS M-53 Pass Fraction Transfer Conveyor

- Heavily worn Return Roller
- Insufficient Guarding where conveyor comes thru platform

Ref A2, A3

Ref A8
POS M-54 Container Sort Conveyor

- Missing Belly Guard
- Missing Return Roller, others ground flat
- Torn Belting at lace and shredded edge

Ref A3, A8

Ref A5
POS M-55 Eddy Current

- Missing one (1) Drive Belt
- Missing Bearing Cover

Ref A5, A8, A10

Ref A3, A8, A10
POS M-56 Alum Q.C. Conveyor

- Missing Belly Guard
- Drive leaks

Ref A4, A8
POS M-57 Alum Silo Blower

- No observable deficiencies
POS M-58 Pass Fraction Q.C. Conveyor

- Belt torn at lace
- Missing Return Rollers
- Missing Belly Guard
- No E-Stop at Sort Station

Ref A2

Ref A8, A12
POS M-59 Trash Transfer Conveyor

- Return Roller Buildup
- Heavy Belt Wear

Ref A2, A3, A5
POS M-60 (not used)

POS M-61 Glass Transfer Conveyor

- Missing Tail Guard over bearing
- Missing Return Rollers
- Drive leaking

Ref A2, A4, A8
POS M-62 Glass Transfer Conveyor

- Tail Pulley wearing thru take-up
- Belt heavily worn
- Missing Tail Guard
- Belt Return Roller Jammed & Bypassed
- Wood used to hold up belting
- Broken electrical conduit

Ref A8, A10

Ref A8

Ref A8

Ref A2, A8

Ref A6

Ref A14
POS M-63A Glass Transfer Conveyor

- Tail Pulley worn thru Take-up
- Wood used as Return Guide
- Missing Belly guards
- Drive Leaks oil

Ref A6, A

Ref A6
POS M-63B Glass Transfer Conveyor

- Torn Belting
- Missing Tail Guard
- Missing Idler guards
POS M-64 Glass Cleanup System

- No observable deficiencies
POS M-64A Glass Cyclone Blower

- No observable deficiencies
POS M-64B Rotary Valve

- No observable deficiencies

POS M-64C Glass Transfer Conveyor

- Missing Tail Guard
- Heavily worn Return Rollers
- Drive Leaks

Ref A2, A8

Ref A2, A3, A8
POS M-65A Glass Transfer Conveyor

- Missing Return Roller(s)
- Damaged Belt due to drag on chute
- Belt tracking right
- Tail Pulley heavily worn
- Drive leaks oil

Ref A2, A3, A5

Ref A5
POS M-65B Glass Transfer Conveyor

- Heavy wear on belt
- Belt tracking right

Ref A5
POS M-65C Glass Transfer Conveyor

- Drive leaking
- Belting too loose

POS M-66 (not used)

POS M-67 Glass Transfer Conveyor

- Buildup on Return Rollers

Ref A3
POS M-68, 69 & 70 (not used)

POS M-71 Silo & Bunker Upload Conveyor

- Sideboards worn thru at Head Pulley (both sides)

Ref A6
POS M-72 Baler Feed Conveyor

- Automatic Oiler empty and disconnected
- Torn Sideboard on incline portion
- Some Chain Rollers not turning

Ref A4

Ref A6, A9
POS M-73 Baler

- No observable deficiencies

POS M-74A, B, C, D, E, F, G, H, J Silos

- Inaccessible, not inspected
POS M-75 Glass Transfer Conveyor (to bunker)

- Head Pulley supported by chain-fall

Ref A15
Dear Ms. Gomes

The following report is a maintenance and operations evaluation of the equipment installed at the City of Ann Arbor Materials Recovery Facility by CP Manufacturing. The information gathered for this report was collected by Craig Frisch, Senior Field Project Manager. This information was gathered over a two day period.

During the two day evaluation, we focused on the following key areas:

1. Maintenance of the mechanical equipment (Primary focus on the main equipment)

This report has been organized in the following manner:

A. Itemized breakdown of each individual piece of equipment
B. Corresponding list of the individual parts evaluated for each piece of equipment
C. Notes and recommendations for each piece of equipment

At the end of this report, we have included a brief summary of our findings and a few recommendations for areas that we feel are especially problematic. We would like to thank you for welcoming us into your facility and for all of the help and assistance offered to us during our visit. We hope that the information contained within this audit helps with the necessary improvements, resulting in improved equipment performance and material recovery. Please feel free to contact us at any time with any questions or concerns.

Sincerely,

Mariska Augustyn-Morales

Customer Service Representative, CP Manufacturing
<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-1</td>
<td>Lower Horizontal Conveyor Existing, Extended 15FT Roller Chain 9” Pitch, 3” Roller</td>
</tr>
<tr>
<td>M-2</td>
<td>Incline Conveyor, 9” Pitch, 3” Roller Chain – Existing, Extended at Tail 10FT</td>
</tr>
<tr>
<td>M-3</td>
<td>Metering Drum, LH Drive 9009011</td>
</tr>
<tr>
<td>M-4A</td>
<td>Steel Transfer Conveyor, Flat Slider C/W 220 Rubber Cleated Belt</td>
</tr>
<tr>
<td>M-5</td>
<td>Trash Transfer Conveyor, Flat Slider C/W 220 Rubber Cleated Belt</td>
</tr>
<tr>
<td>M-6</td>
<td>Large Plastic Transfer Conveyor, Flat slider C/W 220 Rubber Flat Belt</td>
</tr>
<tr>
<td>M-7</td>
<td>Existing OCC Screen, 2 Section RH Drives Position 9001275</td>
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<tr>
<td>M-8</td>
<td>Existing Large OCC Transfer Conveyor, Flat slider C/W 220 Rubber Flat Belt 27168-005-001-Existing</td>
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<tr>
<td>M-9A</td>
<td>Existing Large OCC Sort Conveyor, Existing Shorten 23FT</td>
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<tr>
<td>M-9B</td>
<td>Large OCC Transfer Conveyor, Flat Slider C/W 220 Rubber Cleated Belt</td>
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<tr>
<td>M-10A</td>
<td>OCC Bunker Conveyor, 9” Pitch, 3” Roller Chain Steel Belt, Reversing</td>
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<td>M-11</td>
<td>Existing Mixed (OCC Unders) Corrugated Side Wall Belt Transfer Conveyor</td>
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<td>M-12</td>
<td>Existing Mixed Transfer Conveyor, Flat Slider C/W 220 Rubber Flat Belt</td>
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<td>M-13</td>
<td>Scalping Screen Pre-Sort</td>
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<tr>
<td>M-14</td>
<td>Scalping Screen, 3 Section LH Drives Position 9025250</td>
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<tr>
<td>M-15</td>
<td>Scalping Screen Post-Sort/Transfer Conveyor, Flat Slider C/W 220 Rubber Cleated Belt, Tilted Tail – Push Button E-Stops, One Each Side</td>
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<tr>
<td>M-16A</td>
<td>Small OCC Transfer Conveyor, Flat Slider C/W 220 Rubber Flat Belt</td>
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<td>Trash Transfer Conveyor, Flat Slider C/W 220 Rubber Flat Belt</td>
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<td>M-16C</td>
<td>Trash Transfer Conveyor, Flat Slider C/W 220 Rubber Flat Belt</td>
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<tr>
<td>M-17</td>
<td>ONP Newscreen, Single Deck RH Drive 9022179</td>
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<tr>
<td>M-18</td>
<td>Large Fiber Transfer Conveyor, Flat Slider 220 Rubber Flat Belt (Newscreen Overs)</td>
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<td>M-20</td>
<td>Large Fiber Sort Conveyor, Flat Slider 220 Cleat Top Rubber Belt</td>
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<td>M-21</td>
<td>CPScreen Feed Conveyor, Flat Slider C/W 220 Rubber Cleated Belt</td>
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<td>CPScreen, Single Deck RH Drive</td>
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<td>M-23</td>
<td>Mid Fiber Transfer, Flat Slider 220 Rubber Flat Belt (CPScreen Overs)</td>
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<td>M-24</td>
<td>Existing Middle/Small Fiber Sort Conveyor</td>
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<td>M-26</td>
<td>Containers Transfer Conveyor, Slider Bed Rubber Belt</td>
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<td>M-27</td>
<td>Containers Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt</td>
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<td>M-28</td>
<td>Fiber Transfer Reversible Conveyor, Flat Slider CW 220 Rubber &quot;V&quot; Groove Cleat Top Belt</td>
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<tr>
<td>M-29</td>
<td>Glass Breaker, 3 Deck RH Drive Position</td>
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<tr>
<td>M-30</td>
<td>ADS Feed Conveyor, Flat Slider C/W 220 Rubber Staggered Cleated Belt</td>
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<td>M-32</td>
<td>Fiber Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt</td>
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<td>Fiber Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt</td>
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<td>M-34</td>
<td>ADS Feed Conveyor, Flat Slider C/W 220 Rubber Staggered Cleated Belt (CP Screen Unders)</td>
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<td>Fiber Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt</td>
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<td>Fiber Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt</td>
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<tr>
<td>M-38</td>
<td>Existing Trash Bunker Conveyor – By Others</td>
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<tr>
<td>M-39</td>
<td>Existing Small OCC Bunker Conveyor – By Others</td>
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<td>M-40</td>
<td>Existing OMP Bunker Conveyor – By Others</td>
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<td>M-41</td>
<td>Office Paper Bunker Conveyor - Existing</td>
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<td>Existing ONP Paper Bunker Conveyor</td>
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<td>ONP Paper Bunker Conveyor - Existing</td>
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<td>M-44</td>
<td>Containers Transfer Conveyor, Flat Roller 4 Ply 150, Corrugated Cleated Cross Rigid (From Double ADS)</td>
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<td>M-45</td>
<td>Containers Transfer Conveyor, Flat Slider 220 Rubber Flat Belt</td>
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<tr>
<td>M-46A</td>
<td>Containers Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt – 3” Cleats</td>
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<td>M-46B</td>
<td>Containers Transfer Conveyor, Flat slider 220 Rubber Cleated Belt, SS Head</td>
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<td>M-47</td>
<td>MSS Feed Accelerating Conveyor, Flat Slider 220 Rubber Belt</td>
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<tr>
<td>M-49</td>
<td>Steel Transfer Conveyor, Flat Slider 220 Rubber Flat Belt</td>
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<td>M-50A</td>
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<tr>
<td>M-50B</td>
<td>Air Rotary Screw Compressor - Kaeser</td>
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<td>M-51</td>
<td>PET QC Conveyor, Slider Bed Rubber Cleated Belt</td>
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<td>M-53</td>
<td>Pass Fraction Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt</td>
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<td>M-54</td>
<td>Containers Sort Conveyor, Flat slider 220 Rubber Belt</td>
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<td>M-56</td>
<td>Aluminum QC Conveyor, Slider Bed Rubber Belt</td>
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<tr>
<td>M-57</td>
<td>Aluminum Silo Blower</td>
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<td>M-58</td>
<td>Eddy Current Pass Fraction QC Conveyor, Slider Bed Rubber Belt LH Drive</td>
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<tr>
<td>M-59</td>
<td>Trash Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt</td>
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<tr>
<td>M-61</td>
<td>Glass Transfer Conveyor (GB Unders), Troughed Roller 2 Ply, Rubber 220 Belt</td>
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<tr>
<td>M-62</td>
<td>Glass Transfer Conveyor, Flat Roller 4 Ply 150, Corrugated Cleated Cross Rigid Belt</td>
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<tr>
<td>M-63A</td>
<td>Glass Transfer Conveyor, Flat Roller 4 Ply 150, Corrugated Cleated Cross Rigid Belt</td>
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<td>M-63B</td>
<td>Glass Transfer Conveyor, Troughed Roller 2 Ply, Rubber 220 Belt</td>
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<td>M-64</td>
<td>Glass Clean Up System, RH 9010150</td>
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<tr>
<td>M-65A</td>
<td>Glass Transfer Conveyor, Troughed Roller</td>
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<td>M-65B</td>
<td>Glass Transfer Conveyor, Troughed Roller</td>
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<tr>
<td>M-65C</td>
<td>Glass Transfer Conveyor, Troughed Roller</td>
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<tr>
<td>M-71</td>
<td>Existing Silos And Bunkers Upload Conveyor – Reversed And Extended 19’8”</td>
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<tr>
<td>M-72</td>
<td>Existing Baler Feed Conveyor – Relocated and Shortened</td>
</tr>
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## Description:
Lower Horizontal Conveyor Existing, Extended 15FT Roller Chain 9” Pitch, 3” Roller

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<tr>
<td>Head Shaft</td>
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<tr>
<td>Tail Shaft</td>
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<tr>
<td>Return Roller</td>
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<tr>
<td>Support Roller</td>
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<tr>
<td>Belt</td>
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</tr>
<tr>
<td>Gearmotor</td>
<td></td>
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</tbody>
</table>

Conveyor and all components need to be replaced.

Only salvageable part on conveyor is the support frame.

Picture shows damaged side wings on belt.
Picture shows wrapped shafts. Take up frame is bent.

Picture shows damaged belt.
Shaft is wrapped inside of belt.

Head sprocket and Motor sprocket needs to be replaced. When sprockets are replaced, it is advised to change chain.
<table>
<thead>
<tr>
<th>Item #</th>
<th>2</th>
<th>Motor #</th>
<th>M-2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Incline Conveyor, 9” Pitch, 3” Roller Chain – Existing, Extended at Tail 10FT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
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<tbody>
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<td>Head Shaft</td>
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<td>Tail Shaft</td>
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<td>Return Roller</td>
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<tr>
<td>Support Roller</td>
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<tr>
<td>Trough Roller</td>
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<tr>
<td>Lacing</td>
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<tr>
<td>Gearmotor</td>
<td>X</td>
<td></td>
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</tbody>
</table>

D hole bars are worn out, no cotter pin installed.
Take up is bent. Shaft is wrapped.

D hole bars are missing/broken.
Shaft is wrapped. Take up frame is bent.

Belt needs to be tensioned. Bearings need to be replaced.
<table>
<thead>
<tr>
<th>Item #</th>
<th>3</th>
<th>Motor #</th>
<th>M-3</th>
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</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Metering Drum, LH Drive 9009011</td>
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</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
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<tr>
<td>Cleats</td>
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<tr>
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</table>

Cleats need to be replaced.

Hydraulic Lines needs to be replaced and/or fixed.
# System Audit Document

## Item #
4A  

## Motor #
M-4A  

## Description:
Steel Transfer Conveyor, Flat Slider C/W 220 Rubber Cleated Belt

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
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<tbody>
<tr>
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<tr>
<td>Return Roller</td>
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<tr>
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<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Bearings need to be replaced.
Belt tracking is off.

Belt need to be replaced. Cleats are torn/missing.
Head shaft is wrapped. Pulley needs to be replaced on both head and tail.
<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
<th>Description</th>
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<tbody>
<tr>
<td>4B</td>
<td>M-4B</td>
<td>Steel Transfer Conveyor, Flat Slider C/W 220 Rubber Flat Belt</td>
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</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
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<td>Support Roller</td>
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<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Pulley is damaged and needs to be replaced. Belt tracking is pulling to the left.
Pulley is wrapped.

Lacing is damaged. Belt is torn.
Item #  | Motor #  | M-5  
---|---|---
**Description:** | Trash Transfer Conveyor, Flat Slider C/W 220 Rubber Cleated Belt

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
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<td>Gearmotor</td>
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</table>

Overall condition of conveyor looks to be in working condition. Belt still has wear life before replacement is needed. Tracking is good.
## Description:
Large Plastic Transfer Conveyor, Flat slider C/W 220 Rubber Flat Belt

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</tr>
<tr>
<td>Belt</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Gearmotor</td>
<td>✗</td>
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<td></td>
</tr>
</tbody>
</table>

Pulley needs to be replaced. Belt is not tracked properly. Lacing is damaged and caused belt to tear.
Wire wrapped around pulley and shaft.
**Item #** | **Motor #** | **Description:**
--- | --- | ---
7 | M-7 | Existing OCC Screen, 2 Section RH Drives Position 9001275

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
<th>N/A</th>
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</thead>
<tbody>
<tr>
<td>Bearings</td>
<td>✗</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Chains</td>
<td>□</td>
<td>✗</td>
<td>□</td>
</tr>
<tr>
<td>Sprockets</td>
<td>✗</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Discs</td>
<td>✗</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Motor/Gearbox</td>
<td>□</td>
<td>✗</td>
<td>□</td>
</tr>
<tr>
<td>Oilers</td>
<td>□</td>
<td>✗</td>
<td>□</td>
</tr>
</tbody>
</table>

Chains need to be replaced.

Gearbox is leaking, seal needs to be replaced.
Rotors need to be clocked at 90 degrees.

Shafts should be better aligned to normalize disk spacing.
<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>M-8</td>
<td>Existing Large OCC Transfer Conveyor, Flat slider C/W 220 Rubber Flat Belt 27168-005-001-Existing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Pulley</td>
<td></td>
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<td></td>
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<tr>
<td>Tail Pulley</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return Roller</td>
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<td></td>
<td></td>
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<tr>
<td>Support Roller</td>
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<td></td>
<td></td>
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<tr>
<td>Trough Roller</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Lacing</td>
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<td></td>
<td></td>
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<tr>
<td>Tracking</td>
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<td></td>
<td></td>
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<tr>
<td>Tensioning</td>
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<td></td>
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<tr>
<td>Guarding</td>
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<tr>
<td>Bearings</td>
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<tr>
<td>Belt</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Gearmotor</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Guarding needs to be replaced.
Belt and lacing is torn and needs to be replaced.

Return rollers are worn and needs to be replaced.
<table>
<thead>
<tr>
<th>Item #</th>
<th>9A</th>
<th>Motor #</th>
<th>M-9A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Existing Large OCC Sort Conveyor, Existing Shorten 23FT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Pulley</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Tail Pulley</td>
<td>☑️</td>
<td>☑️</td>
<td>☑️</td>
</tr>
<tr>
<td>Return Roller</td>
<td>☑️</td>
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<td>☑️</td>
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<tr>
<td>Support Roller</td>
<td>☑️</td>
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<tr>
<td>Trough Roller</td>
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<tr>
<td>Lacing</td>
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<td>Tracking</td>
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<tr>
<td>Tensioning</td>
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<td>Guarding</td>
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<tr>
<td>Bearings</td>
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<td>☑️</td>
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<tr>
<td>Belt</td>
<td>☑️</td>
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<td>☑️</td>
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<tr>
<td>Gearmotor</td>
<td>☑️</td>
<td></td>
<td>☑️</td>
</tr>
</tbody>
</table>

Belt is worn but serviceable.
Guarding needs to be replaced.

All return rollers need to be replaced. Pulleys and bearings need to be replaced due to being worn.
**Item #** | **Motor #** | **Description:**
--- | --- | ---
9B | M-9B | Large OCC Transfer Conveyor, Flat Slider C/W 220 Rubber Cleated Belt

<table>
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<tr>
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<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Pulley</td>
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<tr>
<td>Tail Pulley</td>
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</tr>
<tr>
<td>Return Roller</td>
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<tr>
<td>Support Roller</td>
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<tr>
<td>Trough Roller</td>
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<td>Tracking</td>
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<td>Guarding</td>
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<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Return Rollers show signs of wear and should be replaced. Head and Tail Pulley needs to be replaced. Overall condition of conveyor is fair, cleaning required for optimal work.
<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>10A</td>
<td>M-10A</td>
<td>OCC Bunker Conveyor, 9” Pitch, 3” Roller Chain Steel Belt, Reversing</td>
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</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
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</thead>
<tbody>
<tr>
<td>Head Pulley</td>
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<tr>
<td>Tail Pulley</td>
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<tr>
<td>Return Roller</td>
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<tr>
<td>Support Roller</td>
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<tr>
<td>Trough Roller</td>
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<tr>
<td>Lacing</td>
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<td>Belt</td>
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</tr>
<tr>
<td>Gearmotor</td>
<td>✘</td>
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</tbody>
</table>

Conveyor is in good condition. Cleaning required for optimal use.
**Item #** 11  
**Motor #** M-11  
**Description:** Existing Mixed (OCC Unders) Corrugated Side Wall Belt Transfer Conveyor

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Head Pulley</td>
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<tr>
<td>Tail Pulley</td>
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</tr>
<tr>
<td>Return Roller</td>
<td>❌</td>
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</tr>
<tr>
<td>Support Roller</td>
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<tr>
<td>Guarding</td>
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<tr>
<td>Bearings</td>
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<tr>
<td>Belt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gearmotor</td>
<td></td>
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</tr>
</tbody>
</table>

Above picture shows the condition of the belt tracking. It also indicates the condition of the pulley and the shaft being wrapped.

Return rollers are in good condition. Recommendation is to replace both pulleys, belt, gearmotor and bearings.
**Description:**
Existing Mixed Transfer Conveyor, Flat Slider C/W 220 Rubber Flat Belt

<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
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<tbody>
<tr>
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<td>Tail Pulley</td>
<td>☒</td>
<td>☐</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Return Roller</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Support Roller</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
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<tr>
<td></td>
<td></td>
<td>Trough Roller</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
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<tr>
<td></td>
<td></td>
<td>Lacing</td>
<td>☒</td>
<td>☐</td>
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<td>Tracking</td>
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<tr>
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<td></td>
<td>Tensioning</td>
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<td></td>
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<tr>
<td></td>
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<td>Bearings</td>
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<td></td>
<td>Belt</td>
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<tr>
<td></td>
<td></td>
<td>Gearmotor</td>
<td>☒</td>
<td>☐</td>
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</tr>
</tbody>
</table>

Picture shows belt tracking being off.
Guarding needs to be replaced.

Belt is worn but serviceable.
### Scalping Screen Pre-Sort

<table>
<thead>
<tr>
<th>Item #</th>
<th>13</th>
<th>Motor #</th>
<th>M-13</th>
</tr>
</thead>
</table>

**Description:**

<table>
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<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Pulley</td>
<td>✗</td>
<td>✗</td>
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</tr>
<tr>
<td>Tail Pulley</td>
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</tr>
<tr>
<td>Return Roller</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Support Roller</td>
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<td>✗</td>
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<tr>
<td>Trough Roller</td>
<td>✗</td>
<td>✗</td>
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</tr>
<tr>
<td>Lacing</td>
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<tr>
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<tr>
<td>Guarding</td>
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<tr>
<td>Bearings</td>
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<td>✗</td>
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<tr>
<td>Belt</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Gearmotor</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
</tbody>
</table>

Shadows are wrapped and needs to be cleaned.
Shaft is wrapped, belt tracking needs to be corrected.

Return rollers need to be cleaned.

Conveyor is serviceable in current condition. Recommendation is to clean all components for optimal use. Pulleys and bearings are worn and need to be replaced.
<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
<th>Description:</th>
<th>Good Condition</th>
<th>Needs Repair</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>M-14</td>
<td>Scalping Screen, 3 Section LH Drives Position 9025250</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

**Component** | **Good Condition** | **Needs Repair** | **N/A**
--- | --- | --- | ---
Bearings | ☐ | ☒ | ☐
Chains | ☐ | ☒ | ☐
Sprockets | ☐ | ☒ | ☐
Discs | ☐ | ☒ | ☐
Motor/Gearbox | ☐ | ☒ | ☐
Oilers | ☐ | ☒ | ☐

Shafts need wrapping removed and cleaned.

Chains are worn and needs to be replaced.
Gearboxes on all decks are leaking and needs to be replaced.
<table>
<thead>
<tr>
<th>Item #</th>
<th>15</th>
<th>Motor #</th>
<th>M-15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Scalping Screen Post-Sort/Transfer Conveyor, Flat Slider C/W 220 Rubber Cleated Belt, Tilted Tail – Push Button E-Stops, One Each Side</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Pulley</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tail Pulley</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Return Roller</td>
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<tr>
<td>Support Roller</td>
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<tr>
<td>Trough Roller</td>
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<tr>
<td>Lacing</td>
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<tr>
<td>Tracking</td>
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<tr>
<td>Tensioning</td>
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<td>Guarding</td>
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<td></td>
</tr>
<tr>
<td>Gearmotor</td>
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<td></td>
</tr>
</tbody>
</table>

Shafts need to be cleaned off.
Belt tracking needs to be corrected.

Return rollers are showing signs of wear, but are still serviceable.

Pulleys and bearings are worn and need to be replaced.
<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>16A</td>
<td>M-16A</td>
<td>Small OCC Transfer Conveyor, Flat Slider C/W 220 Rubber Flat Belt</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
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</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Tail Pulley</td>
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<tr>
<td>Return Roller</td>
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<tr>
<td>Support Roller</td>
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<td>Bearings</td>
<td></td>
<td>x</td>
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</tr>
<tr>
<td>Belt</td>
<td>x</td>
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</tr>
<tr>
<td>Gearmotor</td>
<td></td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

Gearmotor is leaking.
Bearings are worn and needs to be replaced.

Pulleys need to be replaced.

Belt is in serviceable condition.
<table>
<thead>
<tr>
<th>Item #</th>
<th>16B</th>
<th>Motor #</th>
<th>M-16B</th>
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<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Trash Transfer Conveyor, Flat Slider C/W 220 Rubber Flat Belt</td>
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</table>

<table>
<thead>
<tr>
<th>Component</th>
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<tr>
<td>Head Pulley</td>
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<tr>
<td>Return Roller</td>
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<tr>
<td>Support Roller</td>
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<td>✗</td>
</tr>
<tr>
<td>Trough Roller</td>
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</tr>
<tr>
<td>Lacing</td>
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<td>✗</td>
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<tr>
<td>Guarding</td>
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<tr>
<td>Belt</td>
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</tr>
<tr>
<td>Gearmotor</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Belt and lacing are torn and needs to be replaced.
Return rollers are worn and needs to be replaced.

Gearmotor is leaking.

Pulleys and bearings show signs of wear and needs to be repaired.
### System Audit Document

**Description:** Trash Transfer Conveyor, Flat Slider C/W 220 Rubber Flat Belt

<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
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<th>M-16C</th>
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<td>Return Roller</td>
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<td>Support Roller</td>
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<td>Trough Roller</td>
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<td>Belt</td>
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</tr>
<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Disconnect switch is missing.
Return rollers are worn and need to be replaced.

Gearmotor is leaking and needs to be replaced.

Pulleys and bearing are worn and need to be replaced.
**Item #** | 17  | **Motor #** | M-17  
---|---|---|---
**Description:** | ONP Newscreen, Single Deck RH Drive 9022179

<table>
<thead>
<tr>
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<td>Sprockets</td>
<td>☐</td>
<td>☒</td>
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<tr>
<td>Discs</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>Motor/Gearbox</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>Oilers</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

Chains are stretched/worn, full replacement needed. Sprockets are worn, replacement needed.
Hydraulics are leaking, replacement needed.

Discs are worn, full deck replacement needed.

Bearings are worn and need to be replaced.
**Item #** | **Motor #** | **Description:** Large Fiber Transfer Conveyor, Flat Slider 220 Rubber Flat Belt (Newscreen Overs)
---|---|---

<table>
<thead>
<tr>
<th>Component</th>
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<tr>
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<td>Return Roller</td>
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<td>Guarding</td>
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<tr>
<td>Bearings</td>
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<td>Belt</td>
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<tr>
<td>Gearmotor</td>
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</tr>
</tbody>
</table>

![Image of conveyor belt with highlighted area]
Belt is torn, laced improperly. Replacement recommended.

Return rollers are worn and need replacement.
Gearmotor is leaking, replacement needed.
<table>
<thead>
<tr>
<th>Item #</th>
<th>20</th>
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<th>M-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Large Fiber Sort Conveyor, Flat Slider 220 Cleat Top Rubber Belt</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Pulley</td>
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<td>Return Roller</td>
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<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Picture above shows wrapped shaft, cleaning required. Material is building up under belt, causing more damage.
Gearmotor is leaking. Replacement required.

Return rollers are worn and wrapped, replacement required.

Belt needs to be replaced and tracked properly. Both head and tail bearings need to be replaced.

Flow Guides need to be repaired.
<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>M-21</td>
<td>CP Screen Feed Conveyor, Flat Slider C/W 220 Rubber Cleated Belt</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
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</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Tail Pulley</td>
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<td>Bearings</td>
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<td>Belt</td>
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</tr>
<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Return rollers need to be replaced. Some return rollers are missing/omitted.
Belt is torn and needs to be replaced. Tensioning is lacking.

Gearmotor is leaking and needs to be replaced.

Additionally, both pulleys and bearings are worn and need to be replaced.
### System Audit

**Item #** 22  
**Motor #** M-22  
**Description:** CPScreen, Single Deck RH Drive

<table>
<thead>
<tr>
<th>Component</th>
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<tr>
<td>Sprockets</td>
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<tr>
<td>Discs</td>
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</tr>
<tr>
<td>Motor/Gearbox</td>
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<td>✗</td>
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</tr>
<tr>
<td>Oilers</td>
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</tr>
</tbody>
</table>

All bearings are worn and need to be replaced.

All discs are worn and need to be replaced.
Chains are stretched and sprockets are worn, replacement required.

Gearmotors are leaking, replacement required.
**Item #** | **Motor #** | **Description:**
--- | --- | ---
23 | M-23 | Mid Fiber Transfer, Flat Slider 220 Rubber Flat Belt (CPScreen Overs)

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
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</thead>
<tbody>
<tr>
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<tr>
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<td>Belt</td>
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</tr>
<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Return rollers are wrapped and worn, replacement required.
Bearing is worn, tracking of belt veers to the right, replacement required.

Motor is filled dust and surrounded by debris, replacement required.

Additionally, both pulleys and bearings associated are worn and need replacement. Belt is worn and should be replaced.
<table>
<thead>
<tr>
<th>Item #</th>
<th>24</th>
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<th>M-24</th>
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</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Existing Middle/Small Fiber Sort Conveyor</td>
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</table>

<table>
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<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Belt is tracking to the left and is worn, replacement required.
Return rollers are missing and wrapped where in place. Pictures also indicate the tracking to the left. Replacement required.
Bearings are blown and need to be replaced.

Belt is torn, debris is piled up under belt which is causing the tracking to be off and more strain on the belt.
<table>
<thead>
<tr>
<th>Item #</th>
<th>26</th>
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<th>M-26</th>
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</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Containers Transfer Conveyor, Slider Bed Rubber Belt</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
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<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Belt is worn, tracking is off, replacement required.
Bearing is worn, replacement required.

Guarding needs to be repaired/replaced.

Additionally, return rollers need to be replaced.
<table>
<thead>
<tr>
<th>Item #</th>
<th>27</th>
<th>Motor #</th>
<th>M-27</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Containers Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt</td>
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</table>

<table>
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</table>

Gearmotor is leaking, replacement required.
Belt tracking is pulling to the left, belt is worn and needs to be replaced.

Return rollers are worn and need to be replaced.

Bearings and pulleys are worn and need to be replaced.
**Item #** | 28 | **Motor #** | M-28
---|---|---|---
**Description:** | Fiber Transfer Reversible conveyor, Flat Slider CW 220 Rubber “V” Groove Cleat Top Belt

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Pulley</td>
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<tr>
<td>Tail Pulley</td>
<td>□</td>
<td>□</td>
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</tr>
<tr>
<td>Return Roller</td>
<td>□</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>Support Roller</td>
<td>□</td>
<td>□</td>
<td>☒</td>
</tr>
<tr>
<td>Trough Roller</td>
<td>□</td>
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<tr>
<td>Lacing</td>
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<td>Tracking</td>
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</tr>
<tr>
<td>Tensioning</td>
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<td>□</td>
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</tr>
<tr>
<td>Guarding</td>
<td>□</td>
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<td></td>
</tr>
<tr>
<td>Bearings</td>
<td>□</td>
<td>□</td>
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</tr>
<tr>
<td>Belt</td>
<td>□</td>
<td>□</td>
<td></td>
</tr>
<tr>
<td>Gearmotor</td>
<td>□</td>
<td>□</td>
<td></td>
</tr>
</tbody>
</table>

Bearings are worn, replacement required.

Additionally, with no pictures, belt is and lacing is torn, both pulleys are worn, return rollers are omitted and the gearmotor is leaking. Replacement of all components required.
Item # | 29  | Motor # | M-29  
--- | --- | --- | --- 
**Description:** Glass Breaker, 3 Deck RH Drive Position  

<table>
<thead>
<tr>
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<tr>
<td>Chains</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
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<tr>
<td>Sprockets</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
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<tr>
<td>Discs</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>Motor/Gearbox</td>
<td>☐</td>
<td>☒</td>
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</tr>
<tr>
<td>Oilers</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

All bearings are worn, replacement required.

Safety device has been removed.
The above pictures show the excessive grease/oil from bearings that are worn, chains are stretched and worn, sprockets are worn, replacement of all components required.
Safety device has been removed. Not OSHA standards, replacement required.

Gearmotor is leaking, replacement required.
<table>
<thead>
<tr>
<th>Item #</th>
<th>30</th>
<th>Motor #</th>
<th>M-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>ADS Feed Conveyor, Flat Slider C/W 220 Rubber Staggered Cleated Belt</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Head Pulley</td>
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<tr>
<td>Tail Pulley</td>
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<tr>
<td>Return Roller</td>
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<tr>
<td>Support Roller</td>
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<tr>
<td>Trough Roller</td>
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<tr>
<td>Lacing</td>
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<tr>
<td>Tracking</td>
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<tr>
<td>Tensioning</td>
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<tr>
<td>Guarding</td>
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<tr>
<td>Belt</td>
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<td></td>
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<tr>
<td>Gearmotor</td>
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</tr>
</tbody>
</table>

Belt is worn, cleats are barely visible, replacement required.
Gearmotor is leaking, replacement required.

Head pulley lagging is torn, bearing on head is blown, debris has built up, replace both pulleys and bearings.
Return rollers are worn and some are omitted. Replacement required.

Belt tracking and tensioning completely off to the right.
<table>
<thead>
<tr>
<th>Item #</th>
<th>31A</th>
<th>Motor #</th>
<th>M-31A</th>
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</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>ADS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Guards are omitted/missing.

Bearings are worn and need to be replaced.

Equipment needs a good cleaning to enhance functionality.
<table>
<thead>
<tr>
<th>Item #</th>
<th>31B</th>
<th>Motor #</th>
<th>M-31B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
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<td></td>
</tr>
</tbody>
</table>

Equipment needs much work to be fully functional. Bearings needs to be replaced, proper cleaning required, guards are also omitted/missing.
**Item #** | **Motor #** | **Description:** Fiber Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt
---|---|---
32 | M-32 | **Component**

<table>
<thead>
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<tr>
<td>Support Roller</td>
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<td>Trough Roller</td>
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<tr>
<td>Guarding</td>
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<tr>
<td>Bearings</td>
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</tr>
<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Above picture indicates a severely worn belt, pulley and bearing. Replace all components.
Tracking is to the right, belt is worn.

Gearmotor is leaking. It is held stable by zip ties. Replacement required.
Return rollers are worn, replacement required.
<table>
<thead>
<tr>
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<th>M-33</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Fiber Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
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<tbody>
<tr>
<td>Head Pulley</td>
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<td>Return Roller</td>
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<tr>
<td>Support Roller</td>
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<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Bearings are worn/broken, replacement required.
Picture shows a severely worn pulley and belt tracking veering off. Pulleys to be replaced.

Return rollers are worn and wrapped. Replacement required.
<table>
<thead>
<tr>
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<th>34</th>
<th>Motor #</th>
<th>M-34</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>ADS Feed Conveyor, Flat Slider C/W 220 Rubber Staggered Cleated Belt (CP Screen Unders)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
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<tbody>
<tr>
<td>Head Pulley</td>
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<tr>
<td>Return Roller</td>
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<tr>
<td>Support Roller</td>
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<td>Guarding</td>
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<td>Bearings</td>
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<tr>
<td>Belt</td>
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</tr>
<tr>
<td>Gearmotor</td>
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</tr>
</tbody>
</table>

Belt is torn and tracking is veering to the left. Replacement required.
Picture indicates a pulley worn, replacement required. Bearing is worn as well, replacement required.
Return rollers are worn, replacement required.

Lagging on pulley is worn, replacement required.

Gearmotor is leaking, replacement required.
| Item # | 35 | Motor # | M-35 | Description: | ADS |

Guards are omitted/missing, motor is leaking, replacement required.
<table>
<thead>
<tr>
<th>Item #</th>
<th>36</th>
<th>Motor #</th>
<th>M-36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description:</td>
<td>Fiber Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Component</th>
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<tbody>
<tr>
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<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Severely wrapped head shaft, belt tracking is off, gearmotor is leaking. Replace all components.
Belt is torn, lacing is ripped, replacement required.

Bearing is worn, guarding is omitted, replacement required.
**Description:** Fiber Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
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</tr>
<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Guarding has been removed and left open. Pulleys are exposed, shows signs of severe wear, replacement required.
Return rollers are worn and need to be replaced. Picture also indicates a torn and severely worn belt, replacement required.

Gearmotor is not secured safely and is leaking, replacement required.

Both pulleys and bearings to be replaced on conveyor. Lacing on belt is ripped, belt is torn. Replace all components.
<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
<th>Component</th>
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<tr>
<td></td>
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<td></td>
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<td>Garmotor</td>
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</tr>
</tbody>
</table>

Description: Existing Trash Bunker Conveyor – By Others
Bearings are blown, replacement required.

Power unit is filled with debris, replacement required.

Additionally, both head and tail pulleys need to be replaced. Belt is worn and replacement is required.
<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>M-39</td>
<td>Existing Small OCC Bunker Conveyor – By Others</td>
</tr>
</tbody>
</table>

<table>
<thead>
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<th>Component</th>
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<th>Needs Repair</th>
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<td>Head Pulley</td>
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<tr>
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<td>☐</td>
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<td>☐</td>
</tr>
</tbody>
</table>

Belt needs to be replaced, tensioning is off as well.
Both head and tail pulley and bearings are severely worn, replacement required.

Belt is torn/worn, replacement required.
Disconnect has been disabled.
## System Audit

**Description:** Existing OMP Bunker Conveyor – By Others

<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
<th>40</th>
<th>M-40</th>
</tr>
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<table>
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<tr>
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<tr>
<td>Support Roller</td>
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<tr>
<td>Guarding</td>
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<tr>
<td>Bearings</td>
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<tr>
<td>Belt</td>
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<td>✗</td>
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<tr>
<td>Gearmotor</td>
<td>✔</td>
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</tr>
</tbody>
</table>

Bearings need to be replaced.

Both head and tail pulleys, all bearings, gearmotor and belt need to be replaced. Conveyor needs to be cleaned to function optimally.
## Item Audit

<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
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<td>Belt</td>
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<tr>
<td>Garmotor</td>
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</tbody>
</table>

Bearings and gearmotor need to be replaced.
Cover has been removed from wiring. Unsafe exposure.

Belt is worn, cross slats are bent, replacement required.
**Description:** Existing ONP Paper Bunker Conveyor

<table>
<thead>
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<th>Item #</th>
<th>Motor #</th>
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</table>

Conveyor needs to be cleaned.

Additionally, both head and tail pulleys, bearings and gearmotor are worn and needs to be replaced.
<table>
<thead>
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<th>Item #</th>
<th>Motor #</th>
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<tbody>
<tr>
<td>43</td>
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<td>ONP Paper Bunker Conveyor - Existing</td>
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<table>
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<tr>
<th>Component</th>
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<tr>
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<td>Gearmotor</td>
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</tbody>
</table>

Guarding has been removed.

Conveyor needs to be cleaned for optimal use. All components are worn and needs to be replaced.
**Item #** | **Motor #** | **Description:** Containers Transfer Conveyor, Flat Roller 4 Ply 150, Corrugated Cleated Cross Rigid (From Double ADS)
---|---|---

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<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Gearmotor is leaking. Torque arm needs to be replaced as motor is held up by a tie down.
Belt is worn and objects are protruding through cleats, replacement required.

Belt tensioning is off, return rollers required to enhance optimal use.
Both head and pulleys and bearings are worn and need replacement.
**Item #** | **Motor #** | **Description:** Containers Transfer Conveyor, Flat Slider 220 Rubber Flat Belt
---|---|---

<table>
<thead>
<tr>
<th>Component</th>
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<tr>
<td>Gearmotor</td>
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</tr>
</tbody>
</table>

Return rollers are worn and need to be replaced.
Head and tail pulley needs to be replaced. Belt tracking is pulling to the right.
<table>
<thead>
<tr>
<th>Item #</th>
<th>46A</th>
<th>Motor #</th>
<th>M-46A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Containers Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt – 3” Cleats</td>
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</table>

<table>
<thead>
<tr>
<th>Component</th>
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<tr>
<td>Tail Pulley</td>
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<tr>
<td>Return Roller</td>
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<td>Support Roller</td>
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<td>Belt</td>
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<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Picture shows belt tracking to the right, lacing and belt torn. Pulleys and bearings need to be replaced.
Condition of bearing is worn/blown. Replacement required.
**Item #** | 46B | **Motor #** | M-46B
---|---|---|---
**Description:** | Containers Transfer Conveyor, Flat slider 220 Rubber Cleated Belt, SS Head

<table>
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<tr>
<td>Garmotor</td>
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</tr>
</tbody>
</table>

Plywood installed as belly pans, removal required.
Return rollers are worn/omitted in places. Replacement required.

Belt is worn and need to be replaced. Missing cleats.
### Description:
MSS Feed Accelerating Conveyor, Flat Slider 220 Rubber Belt

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
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<tr>
<td>Gearmotor</td>
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</tr>
</tbody>
</table>

Belt is worn, replacement required. Tracking is off. Pulleys are worn. Bearings are worn.

Replacement of pulleys and bearings recommended.
Return rollers are worn, replacement required.

Gearmotor is leaking, replacement required.
<table>
<thead>
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<th>Item #</th>
<th>Motor #</th>
<th>Description:</th>
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</thead>
<tbody>
<tr>
<td>49</td>
<td>M-49</td>
<td>Steel Transfer Conveyor, Flat Slider 220 Rubber Flat Belt</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
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<tr>
<td>Gearmotor</td>
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</tbody>
</table>

Picture shows severely worn pulleys and bearings.
All components on this conveyor need replacement. Both pulleys, bearings, belt, gearmotor, return rollers. Replacement of conveyor recommended.
<table>
<thead>
<tr>
<th>Item #</th>
<th>50A</th>
<th>Motor #</th>
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<tbody>
<tr>
<td><strong>Description:</strong></td>
<td>Aladdin Single Eject</td>
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</tbody>
</table>

V-Belts need to be replaced.

Bearings need to be replaced.

Unit needs to be cleaned, belt needs to be replaced.
<table>
<thead>
<tr>
<th>Item #</th>
<th>50B</th>
<th>Motor #</th>
<th>M-50B</th>
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<tr>
<td><strong>Description:</strong></td>
<td>Air Rotary Screw Compressor - Kaeser</td>
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</table>

Cleaning required.
### Description:
PET QC Conveyor, Slider Bed Rubber Cleated Belt

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
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</thead>
<tbody>
<tr>
<td>Head Pulley</td>
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<tr>
<td>Tail Pulley</td>
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</tr>
<tr>
<td>Return Roller</td>
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<td>Support Roller</td>
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<tr>
<td>Gearmotor</td>
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</tr>
</tbody>
</table>

Guarding has been removed. Replacement required.
Return rollers are wrapped and worn, replacement required.

Pulley shafts are wrapped, bearings are worn, replacement of all required.
Item # | 53 | Motor # | M-53
--- | --- | --- | ---
Description: Pass Fraction Transfer Conveyor, Flat Slider 220 Rubber Cleated Belt

<table>
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<td>Tensioning</td>
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<tr>
<td>Guarding</td>
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<td>Bearings</td>
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<tr>
<td>Gearmotor</td>
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Return rollers are wrapped, cleaning required.

Bearings need to be replaced, head and tail pulley are worn, replacement required.
<table>
<thead>
<tr>
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<th>54</th>
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<th>M-54</th>
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<tbody>
<tr>
<td>Description:</td>
<td>Containers Sort Conveyor, Flat slider 220 Rubber Belt</td>
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<tr>
<td>Return Roller</td>
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<tr>
<td>Support Roller</td>
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<tr>
<td>Gearmotor</td>
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<td></td>
</tr>
</tbody>
</table>

Belt is torn, lacing torn, replacement required.
Tensioning is off, belt is not supported by any rollers.

Return rollers are worn, replacement required.
Gearmotor is leaking, replacement required.

Replace all components on conveyor to be functional.
<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>56</td>
<td>M-56</td>
<td>Aluminum QC Conveyor, Slider Bed Rubber Belt</td>
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</table>

<table>
<thead>
<tr>
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<tbody>
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<tr>
<td>Return Roller</td>
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<tr>
<td>Support Roller</td>
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<tr>
<td>Trough Roller</td>
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<tr>
<td>Belt</td>
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<tr>
<td>Gearmotor</td>
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<td></td>
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</tbody>
</table>

Gearmotor is leaking, replacement required.
Bearings are worn, replacement required.

Pulleys are worn, replacement required. Return rollers are worn, replacement required. All other components on conveyor are in need of replacement.
<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
</tr>
</thead>
<tbody>
<tr>
<td>57</td>
<td>M-57</td>
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</tbody>
</table>

**Description:** Aluminum Silo Blower

Cleaning required.
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<tr>
<td>Return Roller</td>
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<tr>
<td>Support Roller</td>
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<td>Trough Roller</td>
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<td>Bearings</td>
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<tr>
<td>Gearmotor</td>
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</tr>
</tbody>
</table>

Belt is torn, replacement required.
Pulleys are wrapped, replacement required.

Return rollers omitted. Replacement required. All other components on conveyor are in need of replacement.
<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
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<th>N/A</th>
</tr>
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<tbody>
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<tr>
<td>Gearmotor</td>
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<td>X</td>
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</tbody>
</table>

Bearings are worn/blown, replacement required.
Recommendation is to clean debris as to not obstruct any components from functioning at optimal pace.

Belt is torn in multiple places, replacement required.
Return rollers are worn, replacement required.
**Item #** | 61  | **Motor #** | M-61  
**Description:** | Glass Transfer Conveyor (GB Unders), Troughed Roller 2 Ply, Rubber 220 Belt  

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
<th>N/A</th>
</tr>
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<tbody>
<tr>
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<tr>
<td>Belt</td>
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<td></td>
</tr>
<tr>
<td>Gearmotor</td>
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</tr>
</tbody>
</table>

Bearings are worn/blown, replacement required.
Tensioning is lacking, return rollers omitted. Replacement of rollers required.

Both pulleys on conveyor are showing signs of wear, replacement required. Gearmotor is in worn condition and should be replaced as well.
### Item Information

<table>
<thead>
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<th>Item #</th>
<th>Motor #</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>62</td>
<td>M-62</td>
<td>Glass Transfer Conveyor, Flat Roller 4 Ply 150, Corrugated Cleated Cross Rigid Belt</td>
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### Component Status

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<tr>
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</table>

Return rollers are omitted, wood used instead. Immediate replacement required.
Pulley is worn, bearing is worn, guarding is damaged, replacement of all required.
### Description:
Glass Transfer Conveyor, Float Roller 4 Ply 150, Corrugated Cleated Cross Rigid Belt

<table>
<thead>
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<th>Motor #</th>
<th>Item</th>
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<td>Gearmotor</td>
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</tbody>
</table>

Pulleys, bearings and guarding is damaged. Replacement of all components required.
Return rollers omitted, replacement required.
**Item #** | **Motor #** | **Description:**
--- | --- | ---
63B | M-63B | Glass Transfer Conveyor, Troughed Roller 2 Ply, Rubber 220 Belt

<table>
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<tr>
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</tbody>
</table>

![Image 1](image1.png)

![Image 2](image2.png)
Belt is torn, replacement required. All components on conveyor is worn or damaged. Both pulleys, all bearings, gearmotor and belt need to be replaced.
**Item #** | **64** | **Motor #** | **M-64**  
---|---|---|---  
**Description:** | Glass Clean Up System, RH 9010150  

<table>
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</tbody>
</table>

Gearmotor is leaking, replacement required.

Liners need to be replaced.
Conveyor pulley shaft is wrapped, bearing and pulley both need to be replaced. Belt is worn and replacement is required.

Return rollers are worn, replacement required.
Ducting is held together by wire. Clamp is omitted. Immediate replacement required.
### Item 

<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>65A</td>
<td>M-65A</td>
<td>Glass Transfer Conveyor, Troughed Roller</td>
</tr>
</tbody>
</table>

### Component | Good Condition | Needs Repair | N/A
--- | --- | --- | ---
Head Pulley | ✗ | ✗ | ✗
Tail Pulley | ✗ | ✗ | ✗
Return Roller | ✗ | ✗ | ✗
Support Roller | ✗ | ✗ | ✗
Trough Roller | ✗ | ✗ | ✗
Lacing | ✗ | ✗ | ✗
Tracking | ✗ | ✗ | ✗
Tensioning | ✗ | ✗ | ✗
Guarding | ✗ | ✗ | ✗
Bearings | ✗ | ✗ | ✗
Belt | ✗ | ✗ | ✗
Gearmotor | ✗ | ✗ | ✗

Return rollers omitted. Replacement required.
Belt tracking is pulling to the left, pulleys are both damaged beyond repair, replacement of belt, pulleys and bearings recommended.
Gearmotor is leaking, replacement required.
<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Pulley</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Tail Pulley</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Return Roller</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Support Roller</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trough Roller</td>
<td></td>
<td></td>
<td>✗</td>
</tr>
<tr>
<td>Lacing</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Tracking</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Tensioning</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Guarding</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Bearings</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Belt</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Gearmotor</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
</tbody>
</table>

Pulleys are damaged, replacement of pulleys and bearings recommended. Belt tracking is to the right.
Return rollers are worn, replacement required.

Belt is severely worn, replacement required.
<table>
<thead>
<tr>
<th>Item #</th>
<th>Motor #</th>
<th>Description:</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>65C</td>
<td>M-65C</td>
<td>Glass Transfer Conveyor, Troughed Roller</td>
<td>65C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Pulley</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Tail Pulley</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Return Roller</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Support Roller</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Trough Roller</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Lacing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tracking</td>
<td></td>
<td>X</td>
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<tr>
<td>Tensioning</td>
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<td>X</td>
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<tr>
<td>Guarding</td>
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<tr>
<td>Bearings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belt</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Gearmotor</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Gearmotor is leaking. Replacement required.
Belt is worn, replacement required.

Return rollers are damaged. Replacement required.
Pulleys and bearings are damaged, replacement required.
### Item # 71  
**Motor #** M-71  
**Description:** Existing Silos And Bunkers Upload Conveyor – Reversed And Extended 19’8”

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Pulley</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tail Pulley</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Return Roller</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Support Roller</td>
<td></td>
<td></td>
<td>✗</td>
</tr>
<tr>
<td>Trough Roller</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Lacing</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Tracking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tensioning</td>
<td></td>
<td>✗</td>
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</tr>
<tr>
<td>Guarding</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Bearings</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Belt</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Gearmotor</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
</tbody>
</table>

Belt is worn, immediate replacement required.
The trash pile up on this conveyor has made it impossible for the technician to do a proper inspection of all components. From the pictures it can be said that this conveyor is in a very worn state and cannot function properly without correction of most components.
**Item #** | **Motor #** | **Description:**
--- | --- | ---
72 | M-72 | Existing Baler Feed Conveyor – Relocated and Shortened

<table>
<thead>
<tr>
<th>Component</th>
<th>Good Condition</th>
<th>Needs Repair</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Pulley</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>Tail Pulley</td>
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<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>Return Roller</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>Support Roller</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>Trough Roller</td>
<td>☐</td>
<td>☒</td>
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<td>Lacing</td>
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<tr>
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<tr>
<td>Tensioning</td>
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<td>☐</td>
<td>☐</td>
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<td>Guarding</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>Bearings</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Belt</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Gearmotor</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Oiler is broken and use has been discontinued. Replacement required.
Amount of debris pile up has made it impossible for technician to properly inspect all aspects of the conveyor. It is said that the rails/tracks are worn, head shaft is bent and belt is in bad condition. Replacement of these components would optimize use of conveyor.
Summary

From a mechanical perspective, the equipment cannot perform as designed. Most items are in need of repair for the equipment to continue to function properly well into the future. Maintenance of equipment cannot be seen through a screenshot of this facility. Many items have been omitted or have been repaired by standards not safe for a working environment. The cost of parts and labor to repair this facility to its original state, or to the point of functionality, would be excessive. It is the recommendation that many of the installed equipment be overhauled to newer standards for optimal use and enhanced recovery of materials. Some notable observations as follows:

- Return rollers on most conveyors should be replaced to avoid belt damage, if belts were replaced
- 95% of the belts on equipment are worn beyond optimal function and are in need of repair
- Due to a lack of maintenance, most head and tail shafts have taken on tremendous wrapping, shafts are bent, pulley drums are damaged and replacement of all is required.
- Bearings are damaged which is causing many other components to take on excessive strain to function to the designed capability.
- Because the facility has not been in operation since July 2016, it is recommended that an electrical audit be conducted to determine the extent of damage and/or functionality
APPENDIX C: FIGURE 1, MRF BUILDING FLOOR PLAN (11”X7”)

269
NOTES

1. SITE LAYOUT DEVELOPED FROM TERRATEK DESIGN, INC. AND VANSTON/O'BRIEN, INC. FLOOR PLAN AND ELEVATIONS (NOT AS-BUILT DRAWINGS). CERTAIN SITE FEATURES MODIFIED BASED ON FIELD RECONNAISSANCE.

2. FOR CLARITY, NOT ALL SITE AND BUILDING FEATURES ARE SHOWN.