



# Blue Earth County Ponderosa Landfill

Property & Environmental Resources Department: Waste and Recycling Division

Mark Manderfeld, Deputy Director & Jason Steffen, Landfill Supervisor

# Presenters



Mark Manderfeld  
Deputy Director

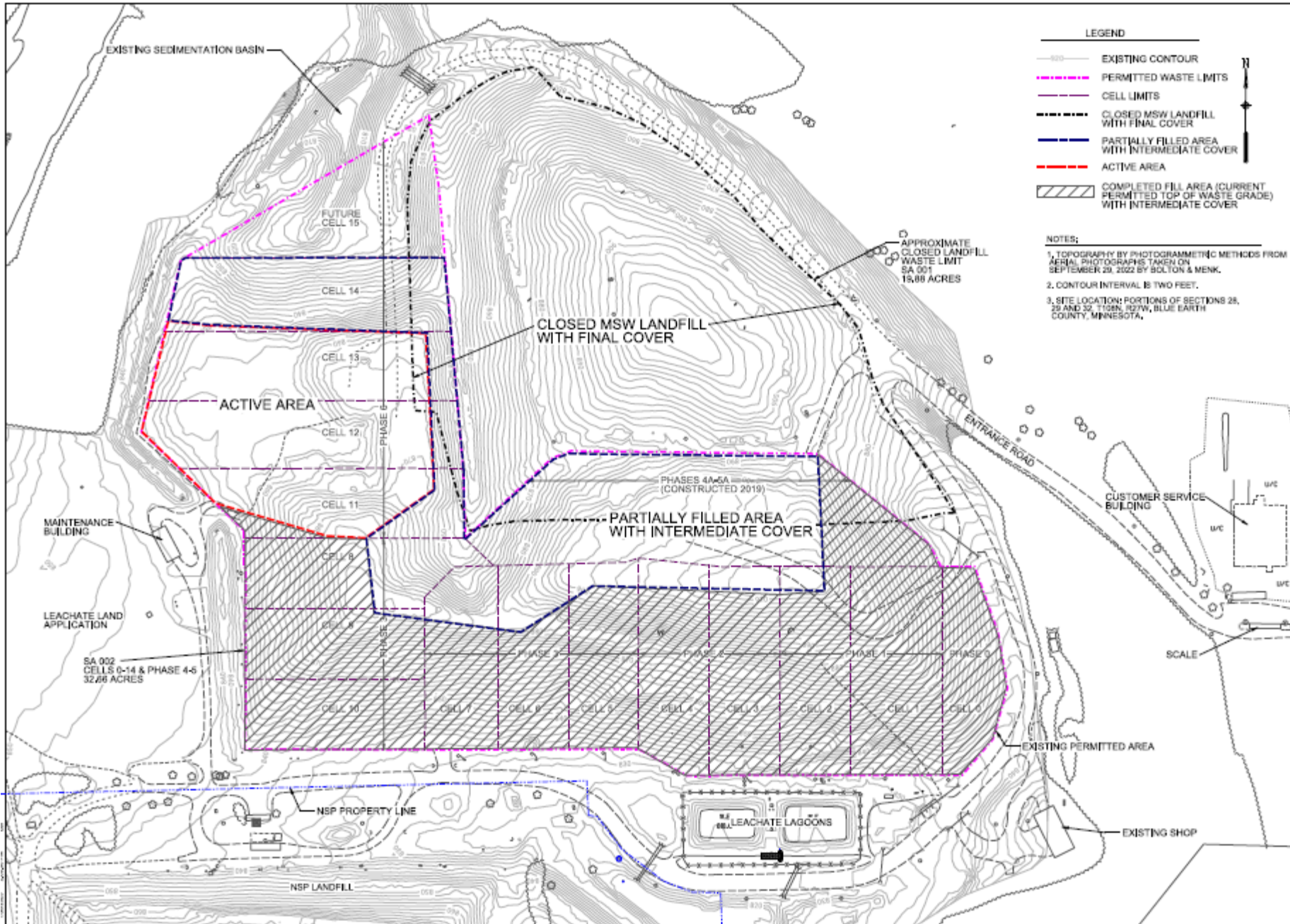


Jason Steffen  
Landfill Supervisor

# Rustling up Change



The transition from contract  
operated to county  
operated



**LEGEND**

- EXISTING CONTOUR
- PERMITTED WASTE LIMITS
- CELL LIMITS
- CLOSED MSW LANDFILL WITH FINAL COVER
- PARTIALLY FILLED AREA WITH INTERMEDIATE COVER
- ACTIVE AREA
- COMPLETED FILL AREA (CURRENT PERMITTED TOP OF WASTE GRADE WITH INTERMEDIATE COVER)

**NOTES:**

1. TOPOGRAPHY BY PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHS TAKEN ON SEPTEMBER 29, 2022 BY SOLTON & MENK.
2. CONTOUR INTERVAL IS TWO FEET.
3. SITE LOCATION: PORTIONS OF SECTIONS 28, 29 AND 32, T108N, R27W, BLUE EARTH COUNTY, MINNESOTA.

REVISIONS OF CONSTRUCTION  
 THIS DOCUMENT AND ANY OTHER DOCUMENTS FROM A SEPARATE PROJECT ARE NOT TO BE USED IN CONJUNCTION WITH THIS DOCUMENT UNLESS SPECIFICALLY NOTED OTHERWISE.  
 DATE: 01/11/2023  
 PROJECT: 289000

THE PONDOROSA SANITARY LANDFILL  
 PONDOROSA LANDFILL  
 BLUE EARTH COUNTY  
 MINNESOTA

NO.	DATE	DESCRIPTION
1	01/11/2023	ISSUED FOR PERMITTING

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1	01/11/2023	ISSUED FOR PERMITTING

EXISTING SITE CONDITIONS

HORIZONTAL SCALE  
 0 100 200  
 PROJECT # 289000  
 1

# History of the Ponderosa Landfill

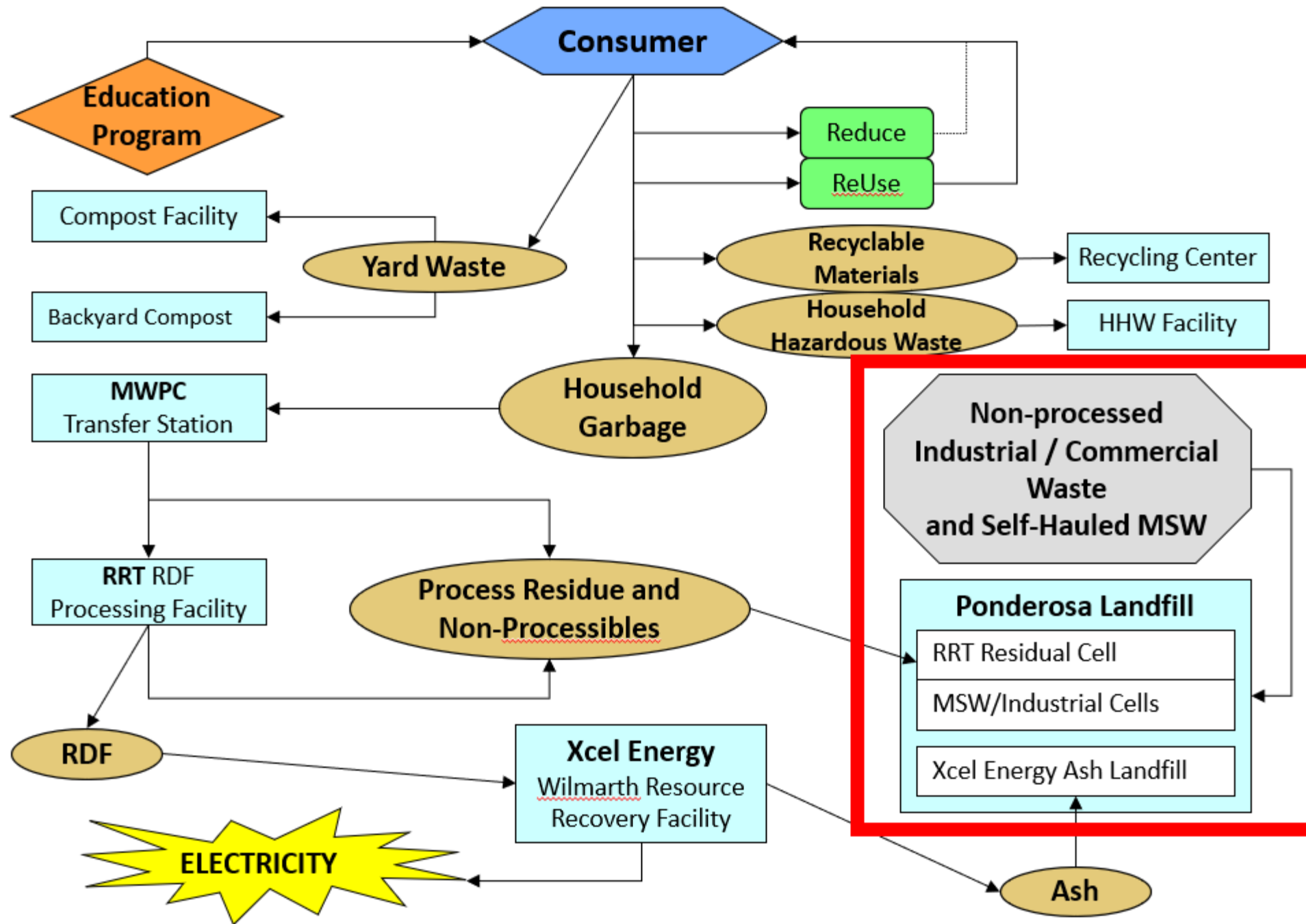
- ▶ 1972 - Ponderosa Landfill established
- ▶ 1996 - County purchases and contracts operations
- ▶ 2017 - County considers taking over landfill operations
- ▶ 2023 - County assumes operations



# County Board Decision Making

- ▶ Renew/Renegotiate existing contract
- ▶ Re-let contract for new vendors
- ▶ County completes operations and management





# Potential Disadvantage of Transition

- ▶ Loss of operational experience and a steep learning curve
- ▶ Required certifications for operators
- ▶ Initial startup costs (equipment and staffing)
- ▶ Emergency response
- ▶ Waste flow uncertainties (previous operator is a hauler)



# Department Recommendation

- ▶ Proceed with County operations and management
  - ▶ Cost effectiveness
  - ▶ Shared resources
  - ▶ Improved customer service
  - ▶ Long-term waste management

# County Board Support

- ▶ County Board approves operational takeover in Spring 2022
- ▶ Operations transition in April 2023
- ▶ Continued support to face upcoming challenges
  - ▶ Litter management
  - ▶ Leachate management
  - ▶ Increasing customer volume
  - ▶ PFAs

# Building the foundation for change



# Building the foundation for change



Hiring



Efficiency



Cost Analysis



Equipment

# Hiring

Supervisor

Senior Waste Specialist  
(On Staff)

Office Coordinator

Scale Operator

- 3 -  
Tech III Heavy  
Equipment  
Operators

Tech II Medium  
Equipment  
Operator

- 2 -  
Tech I Light  
Equipment  
Operators

- 2 -  
PT Techs

Increased Staffing From 5 FT Employees to 12 Total Employees

Efficiency

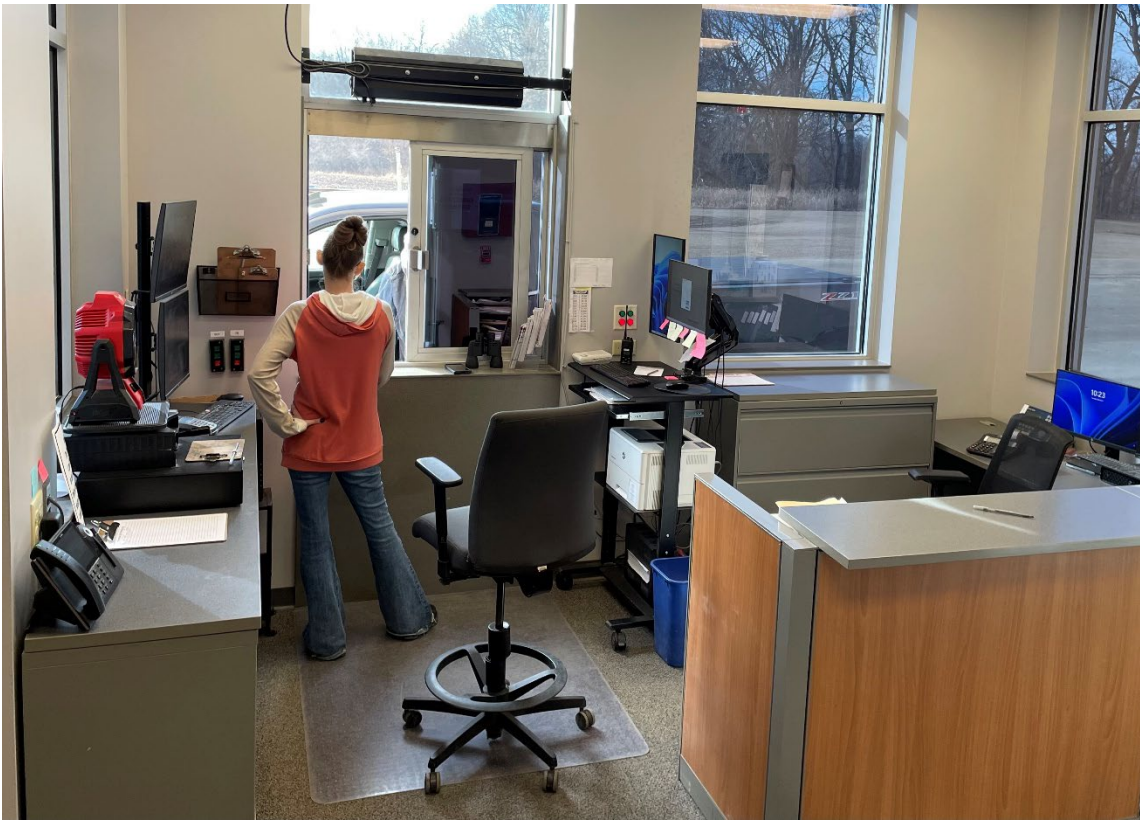
Scale House

Traffic Flow

Drop Areas

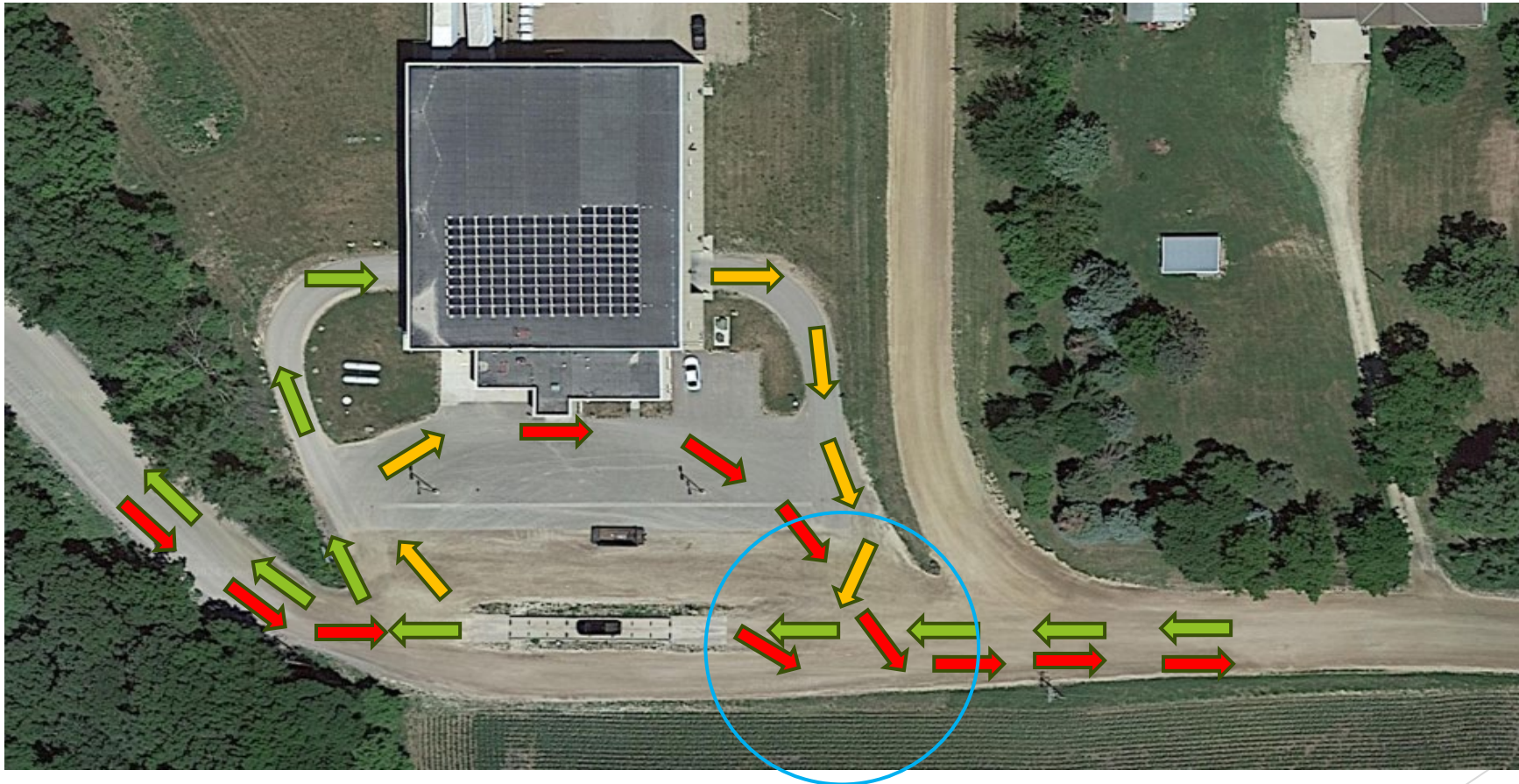
Material Processing

# Scale House



- ▶ Improved Scale Workstation
- ▶ Everything Within Arms Reach
- ▶ Eliminated 18 Ft. of Travel Per Transaction
- ▶ Quickly Customizable to Add a Second Employee

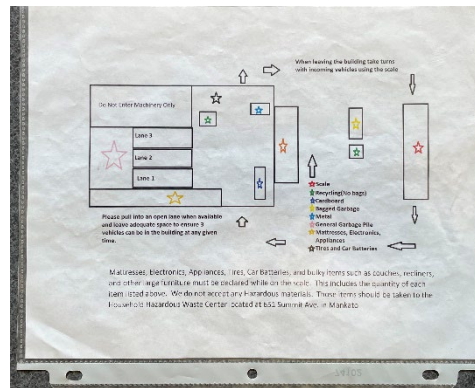
# Traffic Flow



4 Directions of Traffic Converge, Traffic Moving Back Against Itself



# Traffic Flow



- ▶ Saturdays could see traffic backed up a ¼ mile or more onto the highway
- ▶ All traffic utilizing one scale
- ▶ Tickets continually mixed up due to similar vehicle descriptions
- ▶ Created a numbering system
- ▶ Utilized an employee at our entrance to direct traffic & to answer customer questions
- ▶ Utilize tare weights for as many commercial vehicles as possible

# Resident Drop Area: Before & After

This was how our floor looked  
at the end of the day

No defined spaces

Customers and residents policed  
themselves

Waste spilling over blocking  
recycling area and bin area

Added a wall to define recycling  
and mixed waste areas



# Resident Drop Area

Added lines to create visible lanes

Lines spaced based on contractor dump trailer dimensions

Increased average number of vehicles dropping at the same time

Decreased transaction times



## Recycling Drop Area: Before & After

Acts as an additional lane for customers and residents dropping off only recyclable material

Allows consistent access to dock doors ensuring materials are loaded through out the day

Provides a convenient space to house the tools needed to load recycling



# Material Processing

- ▶ Dedicated areas to process recyclables
- ▶ Allows for processing during business hours without affecting customer or resident traffic
- ▶ Dedicated equipment for each process
- ▶ Protected from traffic flow for employee safety



# Material Processing- Workface Before

Entire cell was essentially the  
workface

ADC was not being utilized  
daily

Dirt cover was not being  
pulled back effectively

Dirt stockpiles going too  
quickly

Litter was blowing all over



# Material Processing- Workface After

Workface size managed appropriately to expected traffic

ADC being utilized daily

Dirt pulled back effectively

Dirt stockpiled near the workface for quick use

Sourced and stockpiled 6400 Yards of dirt



# Cost Analysis

Increasing our average load number by 12 units would increase our profit on mattress recycling \$12,000 per year

Hauling tires in a 40 YD container vs. a 20 YD container would save \$8000 per year in transportation cost

Removing rims from tires would save us \$17,000 in charges from the recycler while adding over \$2,600 in recycling income saving the county \$19,000 per year

Having a fuel trailer at the workface will save the county over \$10,000 per year in wages spent driving equipment to and from fuel tanks

Total savings to the county of \$49,000 per year

Comparing 8 months of county-operations budget to 8 months of contractor-operations costs:  
**Landfill costs are only \$1,100\* more per month to provide all this improved service**  
(\*and that includes one-time \$80,000 in operational start-up costs for tools, etc.)



# Equipment



Successes



# Successes

Customer  
Service

Customer  
Education

Waste  
Sorting

Waste  
Recovery

Re-Use

# Customer Service



EMPLOYEES ENGAGED  
WITH OUR CUSTOMERS  
AND RESIDENTS  
THROUGH OUT THE  
PROCESS



WE RECEIVE  
COMPLIMENTS FROM  
OUR CUSTOMERS AND  
RESIDENTS DAILY



ALL GOOGLE REVIEWS  
HAVE BEEN 5 STARS  
SINCE THE TRANSITION

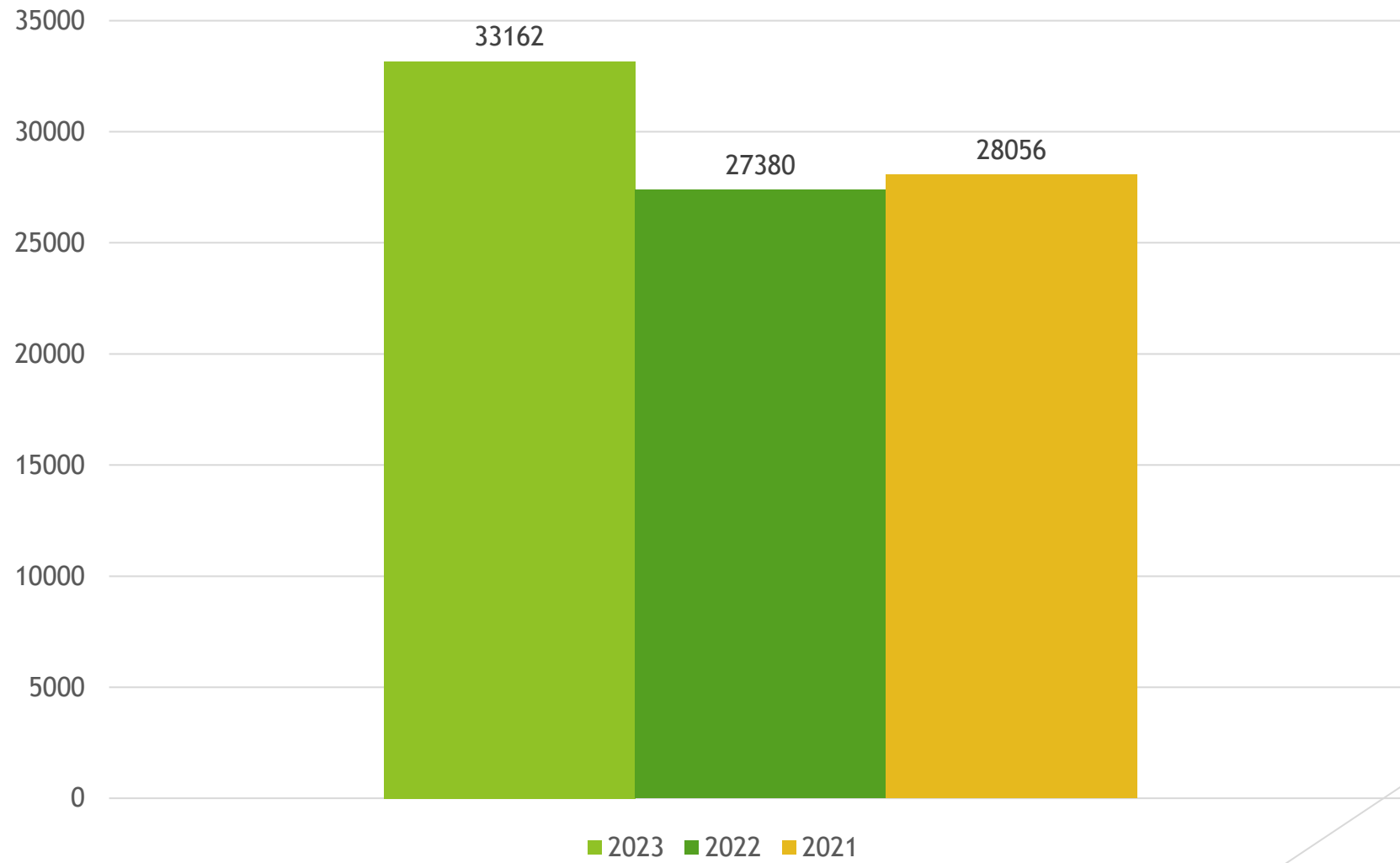


INCREASE IN CASH  
CUSTOMER TICKETS



ZERO EMPLOYEE  
TURNOVER

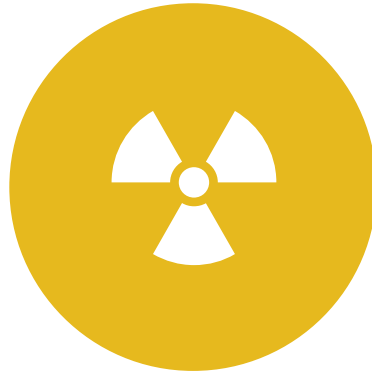
## Resident Traffic



# Customer Education



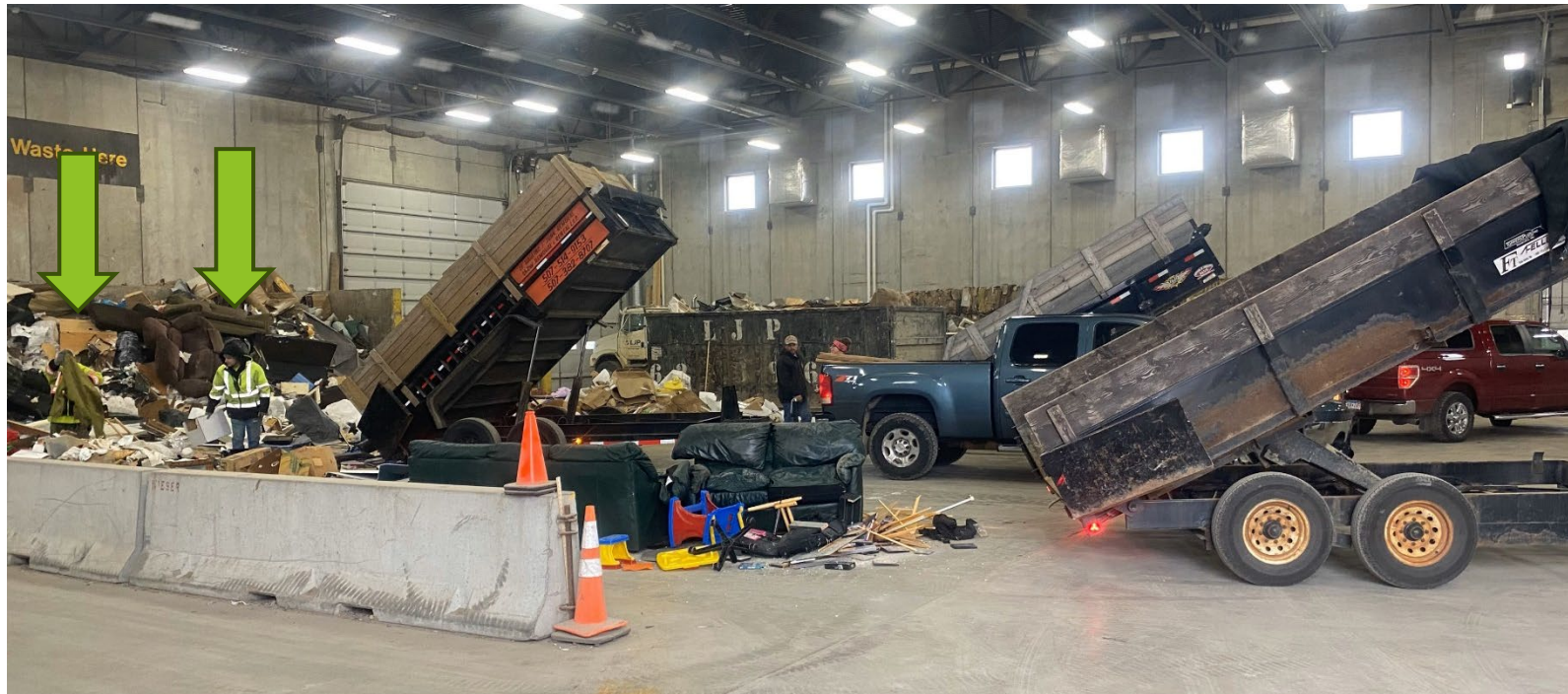
ENTIRE TEAM IS FOCUSED  
ON EDUCATING CUSTOMERS  
AND RESIDENTS



SEEING LESS HAZARDOUS  
WASTE ITEMS COMING IN

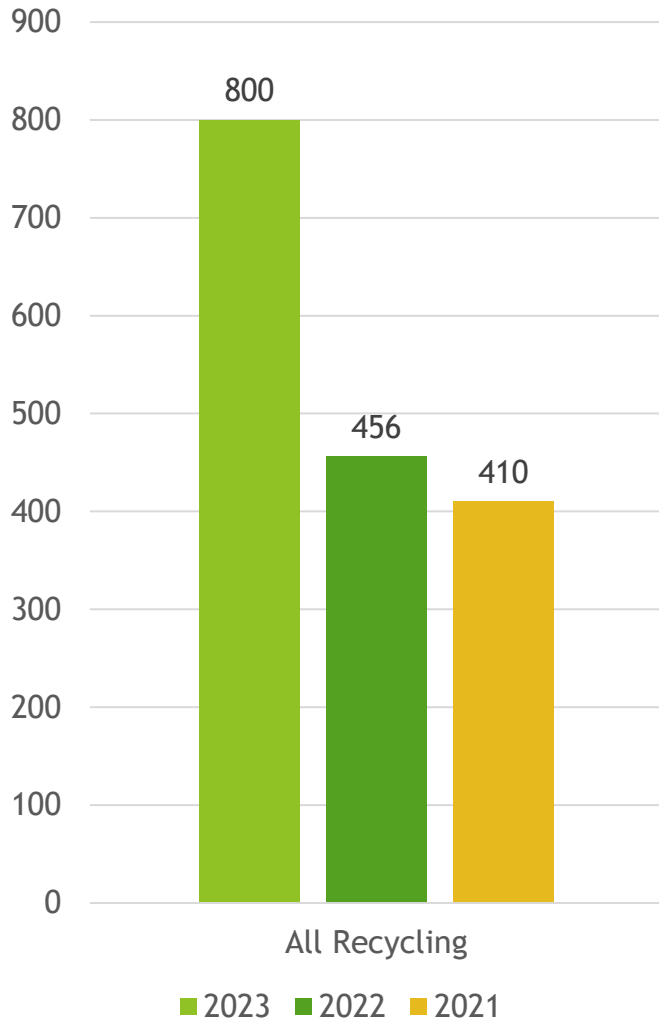


CONTRACTORS BRINGING  
LESS AND LESS  
RECYCLABLES

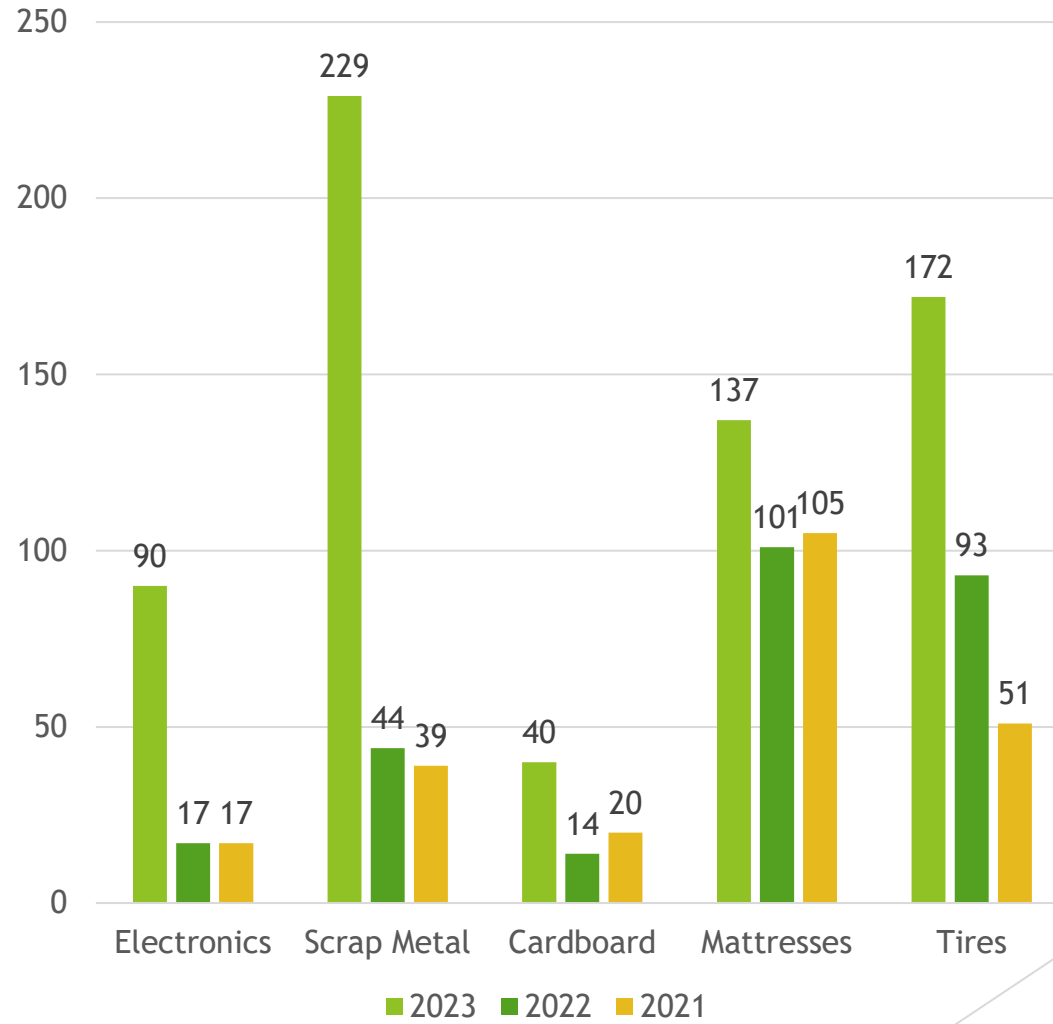


# Waste Sorting/Recovery

### All Recycling by Tons



### Recycling by Category by Tons








# Cardboard Recycling

# Re-Use

- ▶ Roughly 20 tons of items saved and re-used
- ▶ Sporting Equipment was the most re-used category
- ▶ Residents now make the trip just to shop our re-use area
- ▶ Residents placing more items in re-use area



• These Items are free for the asking.

• If you would like any of these items, please check with the attendant and they will assist you after you have scaled out.

**Materials Re-Use**

# Learnings



# Learnings



When implementing new scale software, allow for proper testing and implementation time



When attempting to optimize traffic flow, remember that fixing one pain point will create another



Litter pick up will consume more time than you can ever imagine



Do not underestimate how important customer service is... Even at a landfill



Have every repair vendor on speed dial



Do not be afraid to have an idea not work

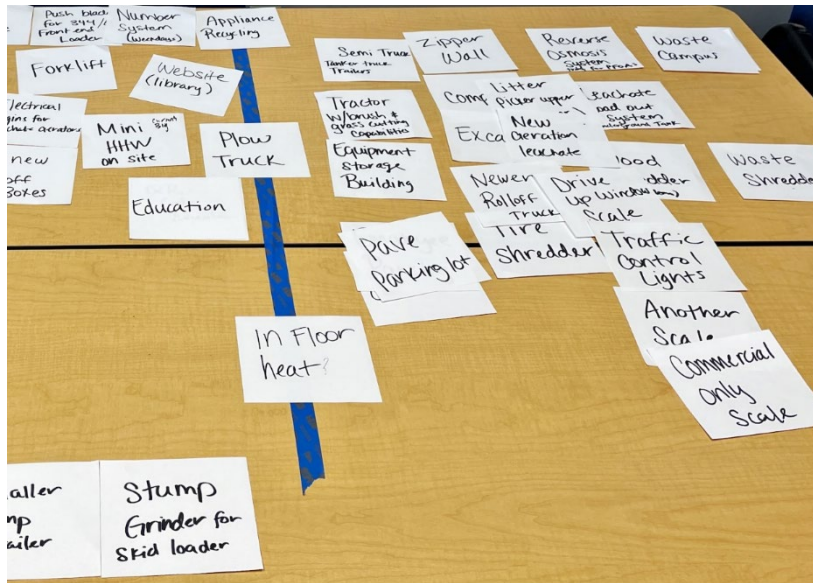


Your team is full of great ideas

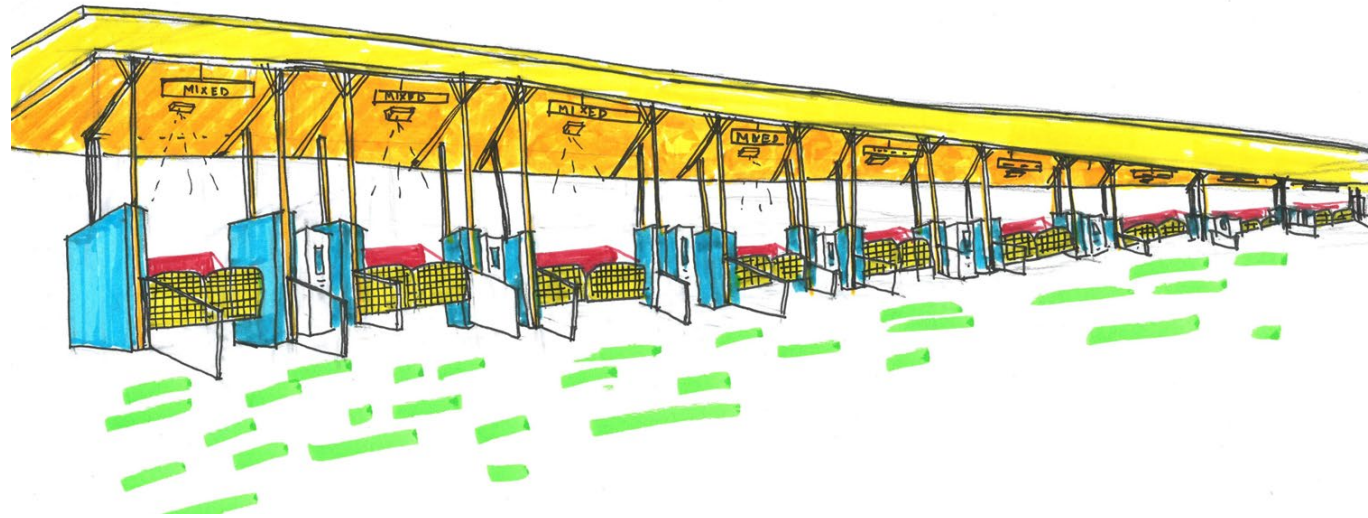
What does the  
future hold?



# Brainstorming



- ▶ Session held with Ponderosa employees
- ▶ Generated ideas that will drive efficiency, profit, and customer service
- ▶ Sorted by Impact & Effort
- ▶ County leadership working on a short-term plan to implement high impact low effort items
- ▶ Consultants working on a long-term plan for high impact high effort items



# Self Serve Concept



## Short Term Goals

- ▶ Collect over 1000 tons of recycling
- ▶ Collect and re-use over 40 tons of items
- ▶ Enlarge the re-use area
- ▶ Revamp the signing package at the Ponderosa
- ▶ Add an additional 600 LF of portable litter fence
- ▶ Streamline the Ponderosa website
- ▶ Improve our overall traffic flow



# Long Term Goals

Onsite leachate management system

Mechanical sorting to increase recyclable material recovery

All in one waste campus

Education center

Onsite energy generation i.e., solar or windfarm

Additional scales

Partnerships with non-profits i.e., Habitat for Humanity, Key City Bike

Shredder

Questions?

