DANE COUNTY SUSTAINABILITY CAMPUS

City-County Meeting

April 4, 2025

MEETING GOALS

- Provide an update on project status and progress
- Review tasks, roles, and schedule for the rest of 2025
- Introduce the scope and components of the upcoming Implementation Plan and Metric Reports

INTENDED MEETING OUTCOMES

Understanding the role of the Sustainability Campus in the circular economy

Consensus on direction and roles within the Metrics Report and Implementation Plan development and review phases to come

2022 CITY OF MADISON-DANE COUNTY **DEVELOPMENT AGREEMENT**

- Develop Master Plan for the Campus
- Issue RFIs for partners to divert 4 waste types or less if the waste steam equals 50% of total waste
- Create measurable metrics for the Campus

2023

Business Park Covenants established

2023

New Landfill permitting begins

2024

Staffing and Education Buildings/Supporting Landfill Building design begins

Campus Planning effort begins

2023

Purple Cow Organics partnership established

2024

2023

Campus Guiding Principles Established

County Department Engagement Plan

Public and Stakeholder Engagement Plan

2024

Waste Diversion Report

County Facility Needs Report

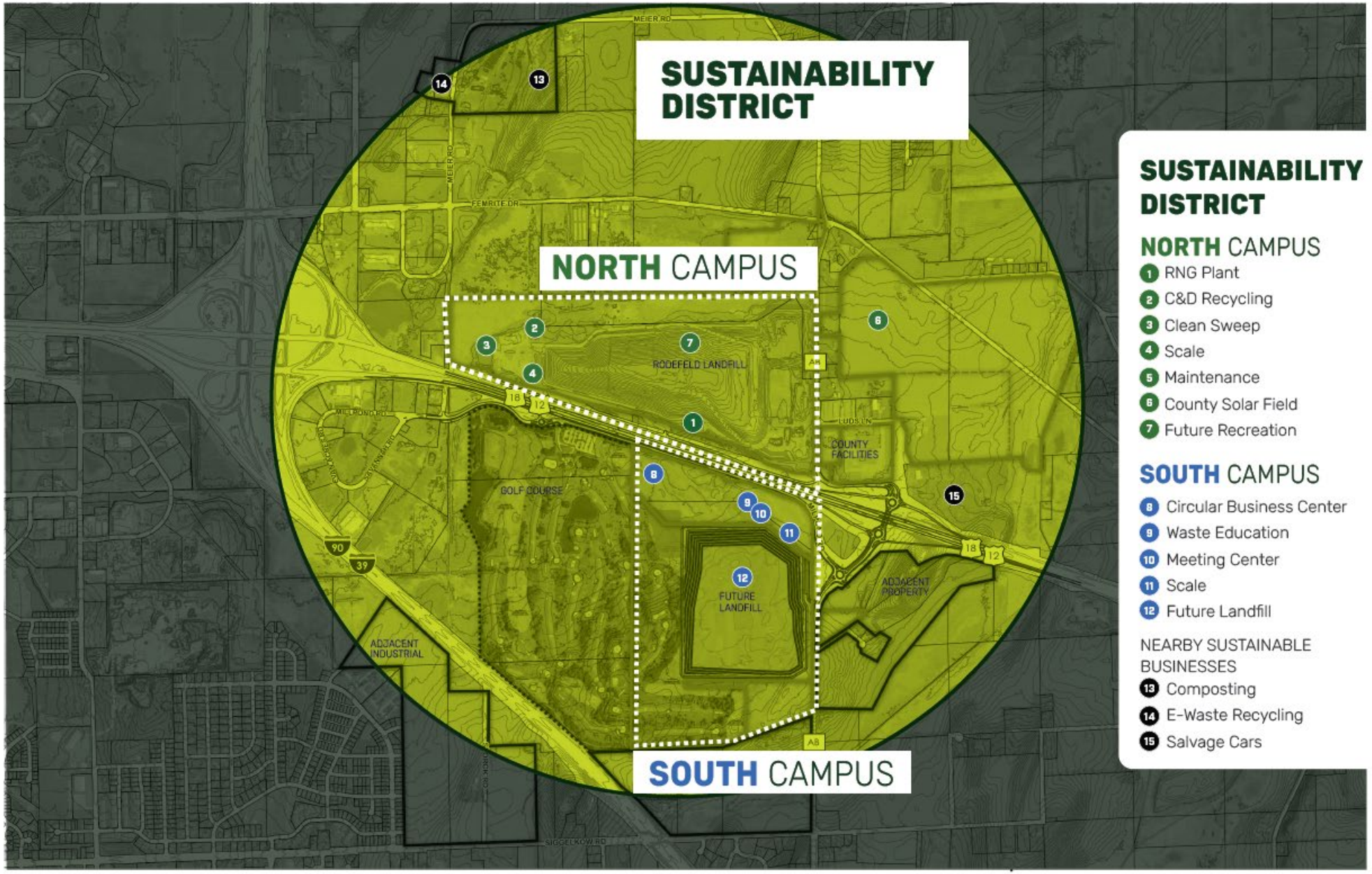
2024-2025

RFI Drafting

RFI Release

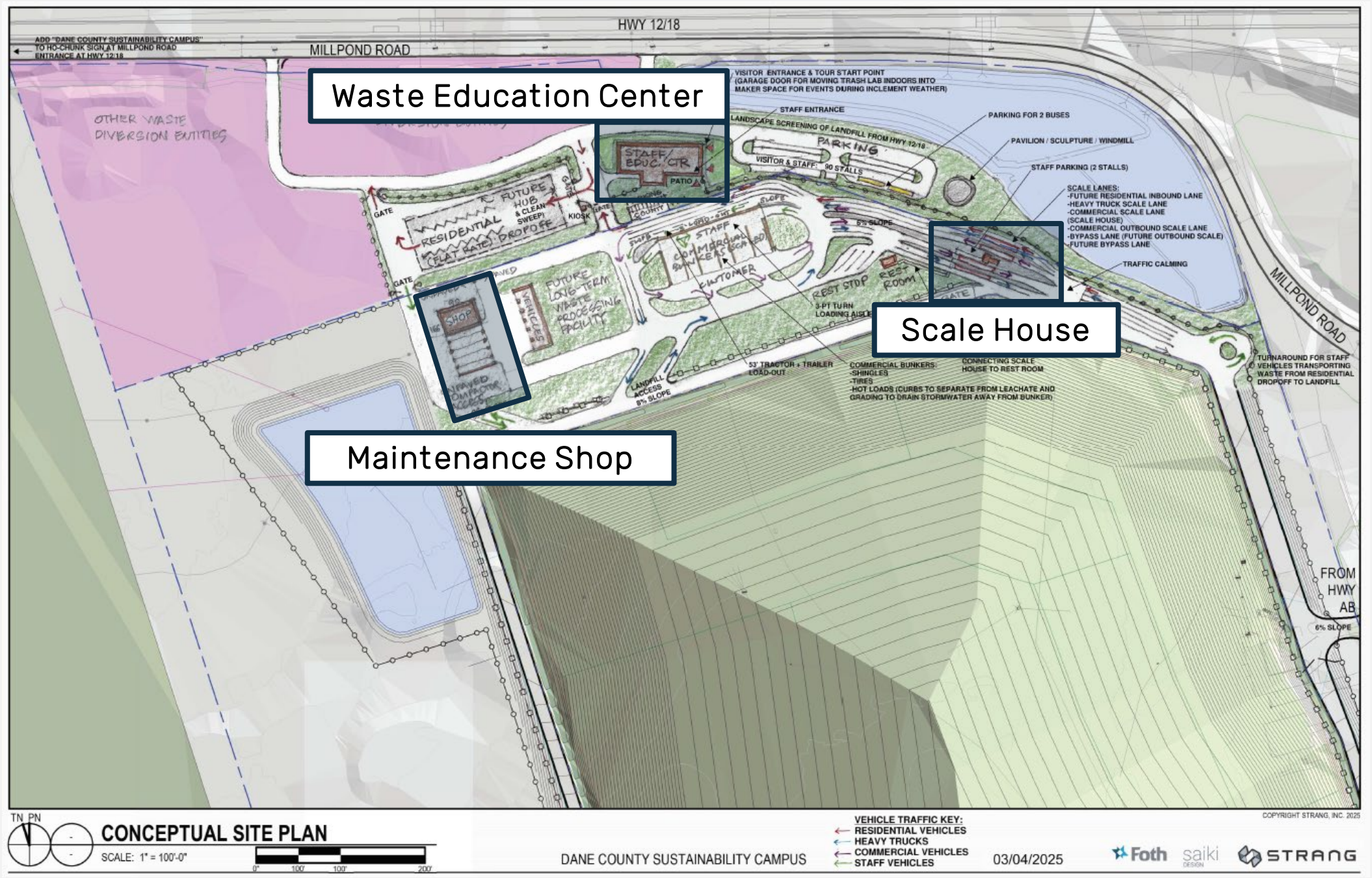

Feb
Mar
Apr
May
June
July
Aug
Sep
Oct
Nov
Dec
RFIs
Responses Due
Response Review and Interviews
Department Engagement Workshop / Determination Meeting
RFI Determination
RFI Summary and Recs
Metrics Report
Kickoff
Report Planning & Preparation
#1
Department Engagement Workshop
Incorporate RFI Metrics & Dept Engagement Workshop Feedback
Complete Draft to County
County/ City Review
#2
Final Metrics Report
Sustainability Campus Imp. Plan
Kickoff
Plan Outline & Process
Draft Plan – with Staff Input Meetings
#1
Complete Draft 1 Plan
County Review
#2
Complete Draft 2 Plan
Review
#3
Final Plan
A/E
Schematic / Design Development
Construction Documents
Bidding
Construction
City Review Meeting

DANE COUNTY DEPARTMENT OF **WASTE + RENEWABLES**

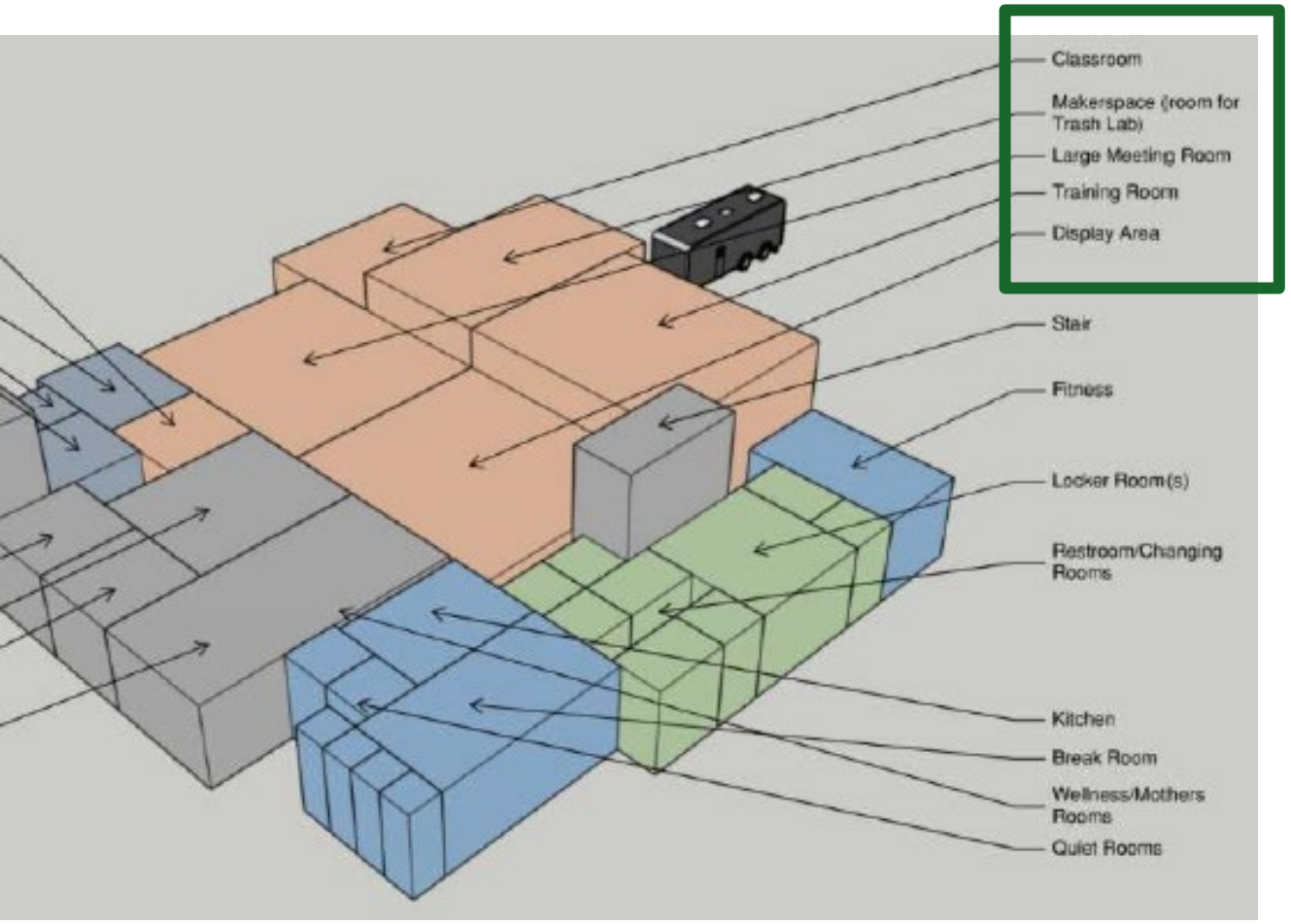


STAFFING AND EDUCATION BUILDING PLANNING

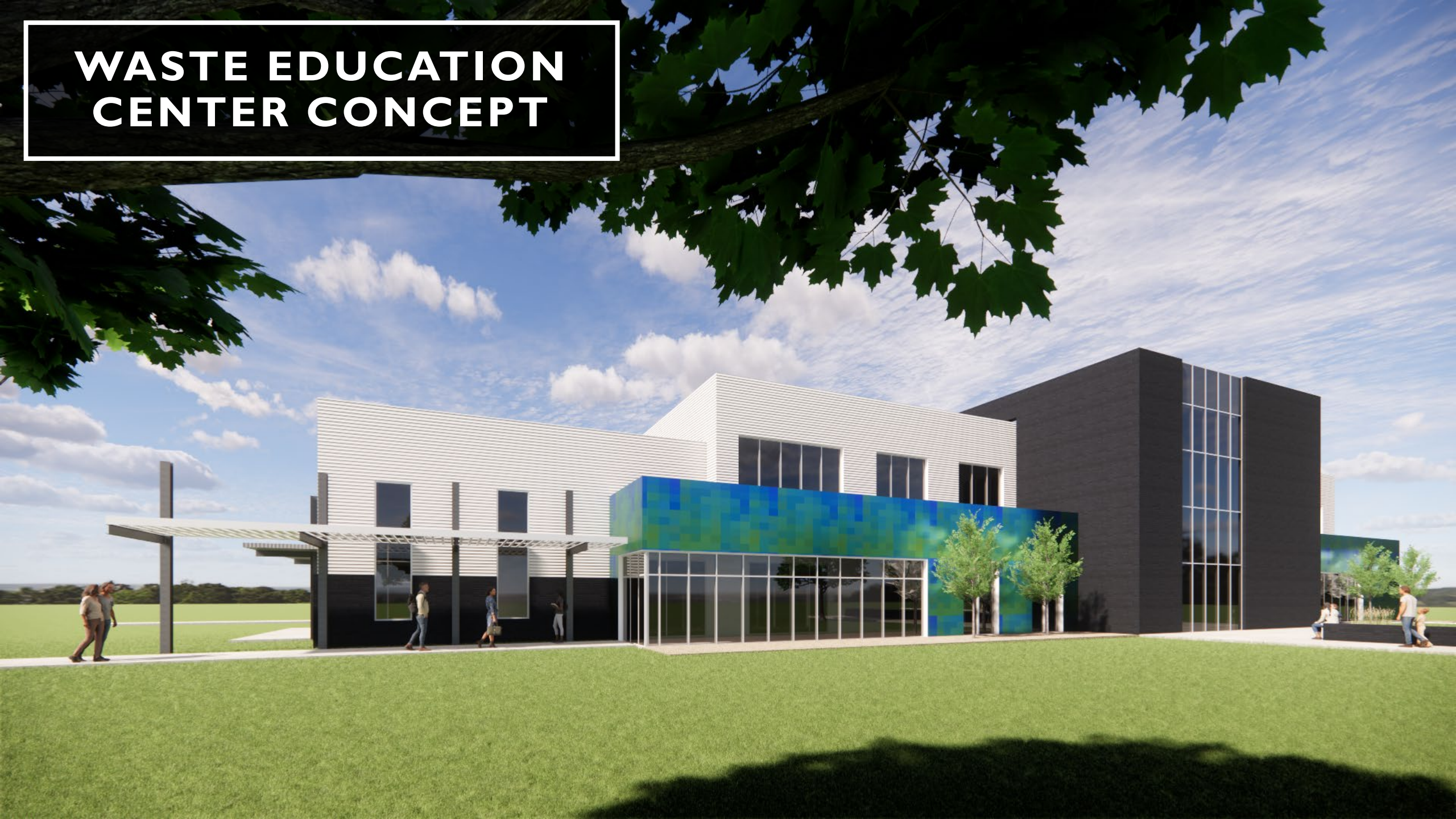
- Currently developing 25% design development drawings and reports
- Construction documents planned for late May
- Ongoing stormwater management planning
- Started discussions with City of Madison Planning on zoning
- McFarland Public Meeting occurred on March 19th


Waste Education Center
Scale House
Maintenance Shop
HWY 12/18
MILLPOND ROAD
ADD "DANE COUNTY SUSTAINABILITY CAMPUS" TO HO-CHUNK SIGN AT MILLPOND ROAD ENTRANCE AT HWY 12/18
OTHER WASTE DIVERSION ENTITIES
VISITOR ENTRANCE & TOUR START POINT (GARAGE DOOR FOR MOVING TRASH LAB INDOORS INTO MAKER SPACE FOR EVENTS DURING INCLEMENT WEATHER)
STAFF ENTRANCE
LANDSCAPE SCREENING OF LANDFILL FROM HWY 12/18
PARKING FOR 2 BUSES
PAVILION / SCULPTURE / WINDMILL
STAFF PARKING (2 STALLS)
PARKING
VISITOR & STAFF: 90 STALLS
STAFF EDUC. CTR
PATIO
SCALE LANES:
-FUTURE RESIDENTIAL INBOUND LANE
-HEAVY TRUCK SCALE LANE
-COMMERCIAL SCALE LANE
(SCALE HOUSE)
-COMMERCIAL OUTBOUND SCALE LANE
-BYPASS LANE (FUTURE OUTBOUND SCALE)
-FUTURE BYPASS LANE
TRAFFIC CALMING
FUTURE HUB & CLEAN SWEEP
RESIDENTIAL (FLAT RATE) DROPOFF
KIOSK
GATE
SLOPE
5% SLOPE
STAFF
COMMERCIAL (FLAT RATE) DROPOFF
CUSTOMER
REST STOP
REST ROOM
3-PT TURN LOADING AISLE
FUTURE LONG-TERM WASTE PROCESSING FACILITY
SHOP
VEHICLES
53' TRACTOR + TRAILER LOAD-OUT
COMMERCIAL BUNKERS:
-SHINGLES
-TIRES
-HOT LOADS (CURBS TO SEPARATE FROM LEACHATE AND GRADING TO DRAIN STORMWATER AWAY FROM BUNKER)
CONNECTING SCALE HOUSE TO REST ROOM
LANDFILL ACCESS 8% SLOPE
TURNAROUND FOR STAFF VEHICLES TRANSPORTING WASTE FROM RESIDENTIAL DROPOFF TO LANDFILL
FROM HWY AB
6% SLOPE
TN PN
CONCEPTUAL SITE PLAN
SCALE: 1" = 100'-0"
0' 100' 100' 200'
DANE COUNTY SUSTAINABILITY CAMPUS
VEHICLE TRAFFIC KEY:
RESIDENTIAL VEHICLES
HEAVY TRUCKS
COMMERCIAL VEHICLES
STAFF VEHICLES
03/04/2025
COPYRIGHT STRANG, INC. 2025
Foth
saiki DESIGN
STRANG

SUSTAINABILITY CAMPUS – COMMUNITY SPACE



WASTE EDUCATION CENTER CONCEPT



SUSTAINABILITY CAMPUS UPDATE – PRIORITIZING SITE PLANNING

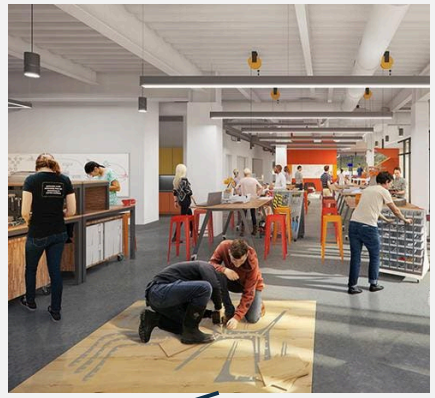
Large scale waste diversion

Mattress or other smaller recycling

Reuse retail or transfer location

Residential drop off area

Waste Education Center



upcycled art

REQUEST FOR INFORMATION

RFI 001

LARGE-SCALE WASTE DIVERSION, PROCESSING, AND RECYCLING

RFI 002

PROBLEM MATERIALS, BULKY WASTE, AND EMERGING MATERIALS

RFI 003

REUSE, RETAIL, AND UPCYCLING

RFI 004

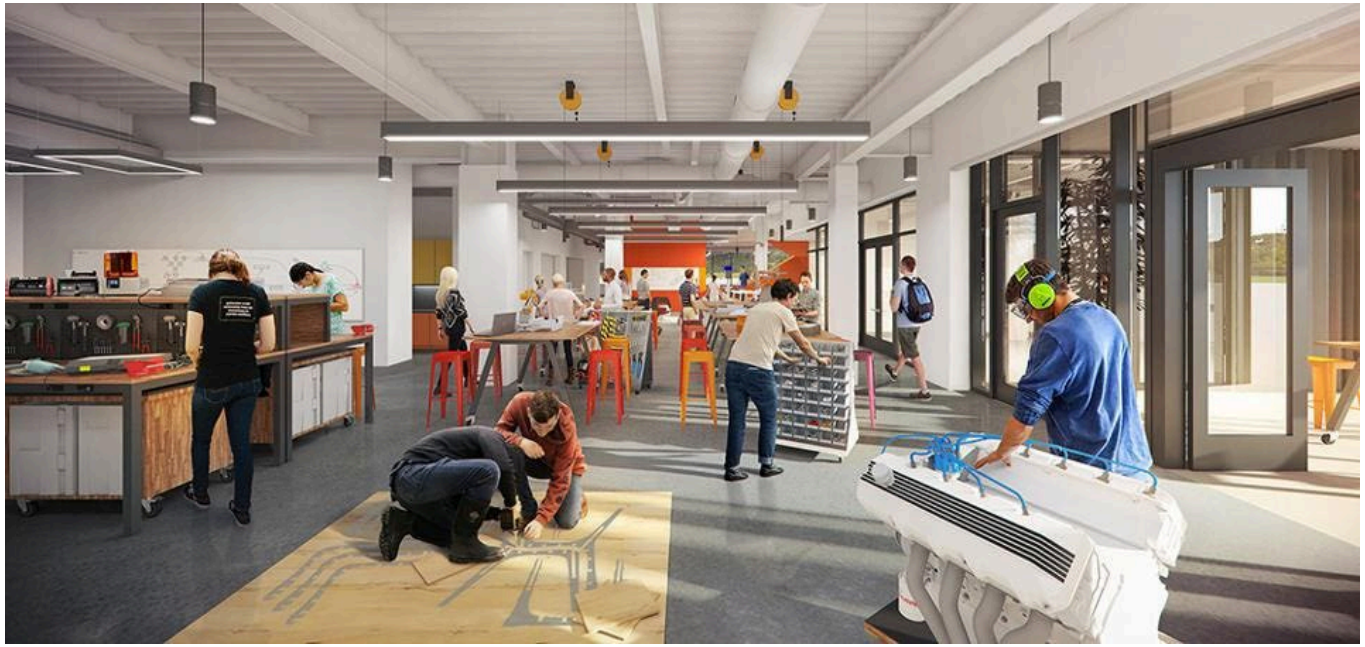
RESEARCH, EDUCATION, AND ART

RFI RESPONSES

Closed on March 21st

3,760 webpage views

42 total responses



RFI Category	Responses Submitted	Total Project Views	Included response types
Research, Education, and Art	10	913	Waste education and outreach programming, applied landfill research, community waste audits
Reuse, Retail, and Upcycling Services	3	704	Building material reuse ecosystem, tree and wood reuse
Problem Materials, Bulky Waste, and Emerging Materials	9	768	Mattress recycling, bicycle repair, AI-enabled lumber reprocessing
Large-Scale Waste Diversion, Processing, and Recycling Services	20	1375	Mixed waste processing, anaerobic digestion, chemical recycling
Total	42	3760	

Research, Education, and Art	Reuse, Retail, and Upcycling	Problem Materials, Bulky Waste, and Emerging Materials	Large-Scale Waste Diversion, Processing, and Recycling
Pilot-scale chemical plastic recycling	Building materials	Mattresses	Waste conversion/reduction
Waste audits	Green wood grinding	Bicycles	Mixed waste processing (biochar, AD, molecular recycling, composting)
Education/outreach – landscape, sustainability, supply chain recycling	Trees and wood reuse	Plastics	Hydrothermal carbonization
Maker spaces and learning hubs		Composting and food waste	Lumber
Applied landfill research		Building materials and lumber	Gasification and pyrolysis

INTERESTING RESPONSES

7 Rivers Recycling (Mattresses)

- Mattress/box spring recycling and reuse
- Existing partnership with La Crosse County

AMP and Juno (Mixed Waste Sorting)

- Sorting processes to recover valuable materials (plastic, metal, fiber, organics, etc.)
- Applied practice and experience in other communities

Urban Machine (Lumber)

- Sorting and recycling/reuse process for lumber products
- Example operation in California

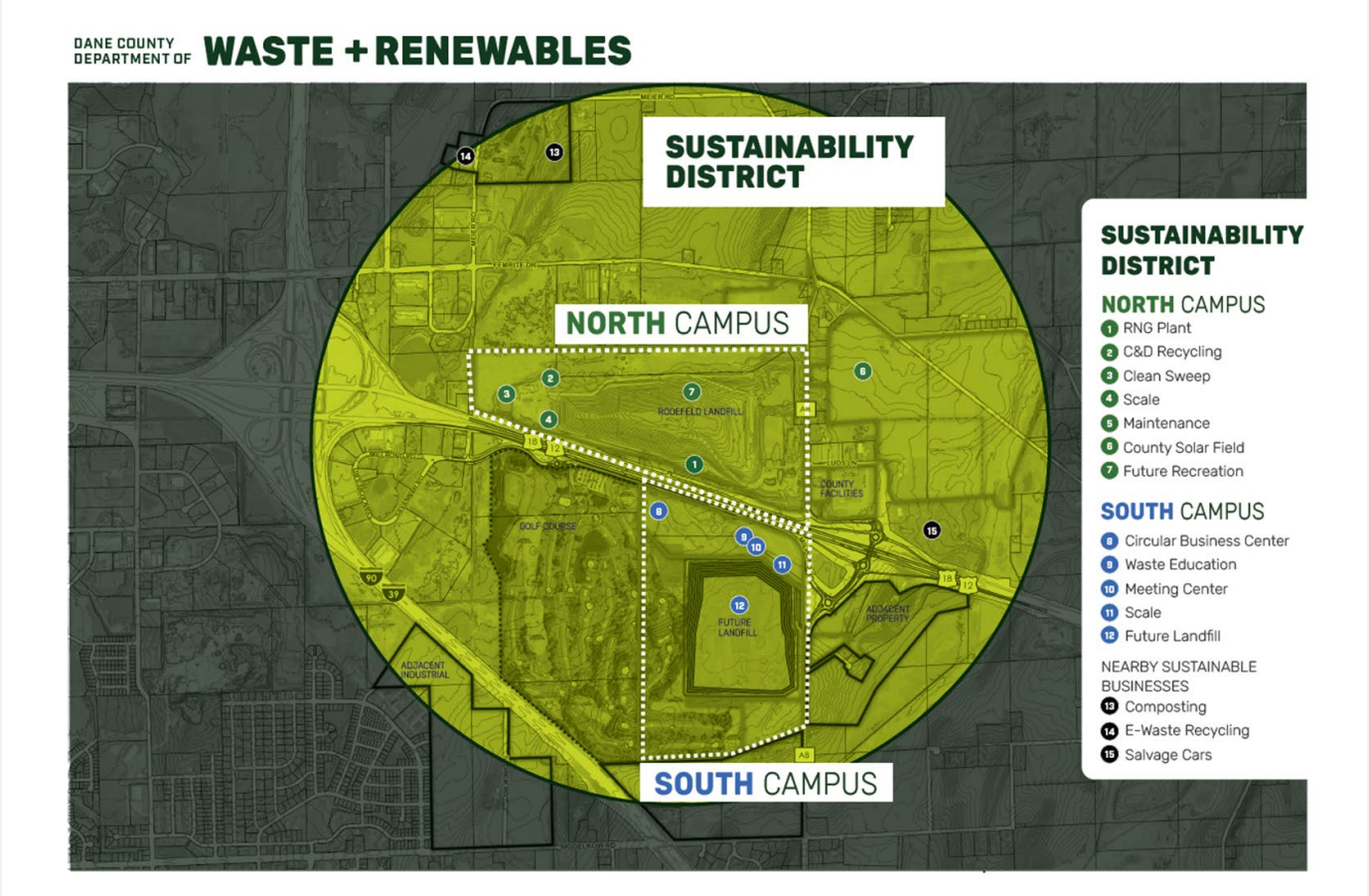
EVALUATION CRITERIA

Criteria	Explanation
Community Benefit	Will this RFI response category **create perceivable and welcome benefits to the public**? Benefits may come in the form of economic development, job creation, odor/pollution reduction, educational opportunities, publicly-available resources and/or materials, and beyond.
Environmental Benefit	Does this RFI response present **a viable solution to the environmental and/or operational challenges** as described in each RFI? Responses that divert significant quantities or difficult-to-manage waste materials, promote educational opportunities, reduce carbon emissions, and/or advance innovative material management practices will be scored highly.
Practicality and Feasibility	Is the RFI response reasonably **achievable**? Are there **existing examples** of the RFI response in other US or global locations? Does the response **correspond to the regional waste profile** and regional market demands/availability? Is this an opportunity that could **generate public awareness** and/or revenue for the County? Does the respondent demonstrate necessary **technical expertise, and future capacity** to successfully implement the proposal?
Circularity	Does the RFI response **fit the larger campus model** of promotion of circular economy, local and regional market development, and net positive impact for Dane County and the surrounding communities?

RFI NEXT STEPS

- Spring
  - Interviews
  - Department Workshop (discussion of interviews and recommendations)
- Summer
  - Determination, including RFI Summary and Recommendation document

CAMPUS IMPLEMENTATION PLAN AND METRICS REPORT



CAMPUS GUIDING PRINCIPLES

Community

- Function as an asset to the local community while providing a comprehensive service for safely and responsibly managing materials.
- Provide enriching educational programming to equip community members with tools and resources for moving towards and sustaining a circular economy.
- Prioritize safety and welfare of our staff and community members.

Circularity & Innovation

- Create a local circular economy, centered on waste and pollution reduction, keeping products and materials in use locally, and renewing & restoring natural systems.
- Reduce, reuse and recycle waste in new and innovative ways.
- Develop new ways to measure and assess our effectiveness and the quality of our programs and services on an ongoing basis.

Environment & Climate

- Protect the health of the local environment and enrich biodiversity.
- Build climate resiliency through sustainable design, maintenance and operation of the Campus.
- Invest in renewable energy and carbon neutrality.

Economic

- Create financially sustainable programs that support the Campus and its vision.
- Support and be a benefit to the local economy by forging public & private partnerships, and relationships with our neighbors that combine diverse strengths, skills and resources.
- Ensure staff and community members have access to training and job skills development to provide equitable access to a meaningful role in our vision for the future.

CIRCULAR ECONOMY DISCUSSION

Circular Economy:
a system that is based on the principles of designing out waste and pollution, keeping products and materials in use, and renewing and restoring natural systems

CIRCULAR ECONOMY DISCUSSION

What efforts are the highest priority as it relates to our region's circular economy?

What kinds of roles are best suited for the business community (large employers, institutions, etc.) to play in advancing the larger circular economy?

What are other communities already doing to advance the circular economy?

Are there circular economy models/examples you're tracking that may be well suited for replication within Dane County?

CIRCULAR ECONOMY DISCUSSION

What kinds of roles and achievable opportunities are best suited for the Sustainability Campus to play in advancing the larger circular economy?

In what ways could the Sustainability Campus build upon existing efforts?

Which roles and opportunities might be better suited to be achieved within the short-term vs. long-terms?

SUSTAINABILITY CAMPUS IMPLEMENTATION PLAN

SUSTAINABILITY CAMPUS IMPLEMENTATION PLAN

What this plan is…	• Development framework, phasing, implementation approach
What this plan is not…	• Zero waste, waste management, circular economy, etc.

City-County Collaboration Opportunities

TODAY

City Kickoff Meeting

OCTOBER

City Review Meeting

AUGUST

City Review Meeting

PLAN GOALS

- Development framework for the Campus
- Incorporate previous and current planning efforts
- Focus on vision, land use, development, infrastructure, and implementation
  - Concept renderings
  - Graphical summaries
- Outline process for future tenants and partners at Campus
- Summarize the impacts and opportunities to best achieve the plan

EXAMPLES

KENT COUNTY, MI

Reimagine Trash

- Vision
- Priority Materials and Diversion Goals
  - Organics, C&D, Bulky Materials
- Resource Innovation Park
- Indicators and Targets (implementation steps)
- Had to reevaluate after core tenant went bankrupt

1. Waste to Energy ash monofill
2. South Kent Landfill
3. Approximately 200 acres set aside for future landfill

COLUMBUS, OH REGION

Green Economy Business Park

- Economic Impact Study
- Gas-to-Energy Facility
- 360-acre Greenfield Site Adjacent to Landfill

CALIFORNIA

- Resource Recovery Parks (model for local government)
  - **Enables:** reducing waste, recovery of valuable materials, buy reused or recycled materials, matching wastes with resources
  - **Potential Businesses:** reuse, recycling, organics, C&D, technology/research, showrooms
  - **Potential Amenities:** open space, demonstration, artists, classrooms, education displays, incubator
  - **Public/Private Roles:** land and buildings, policies, cooperative agreements, management

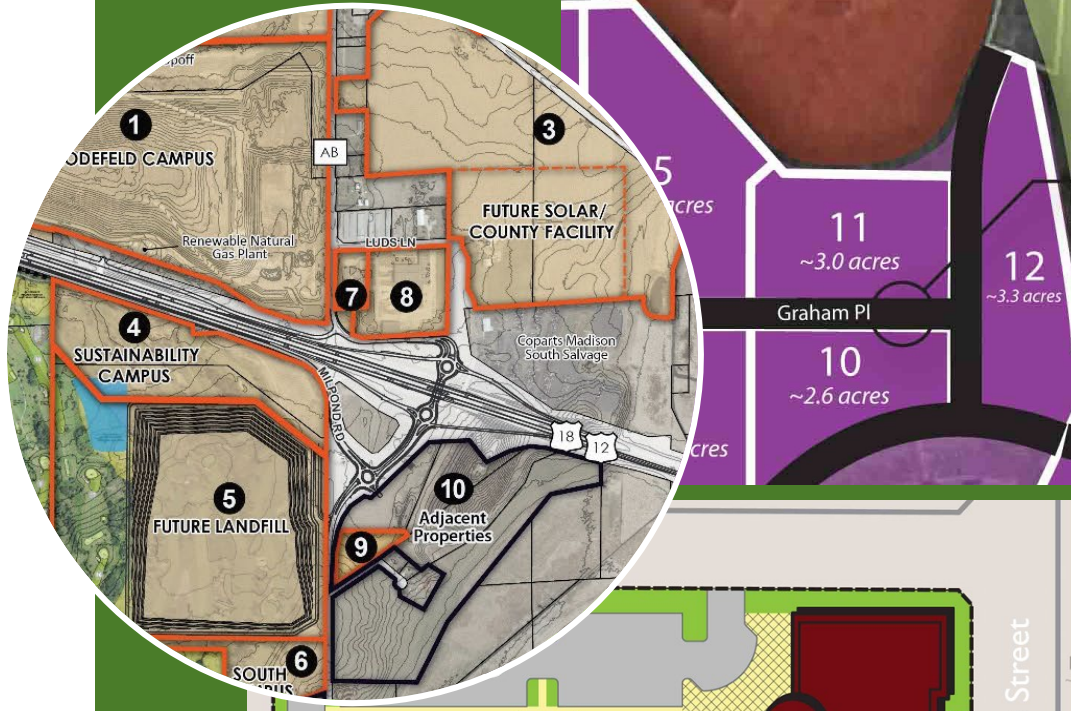
Case Studies

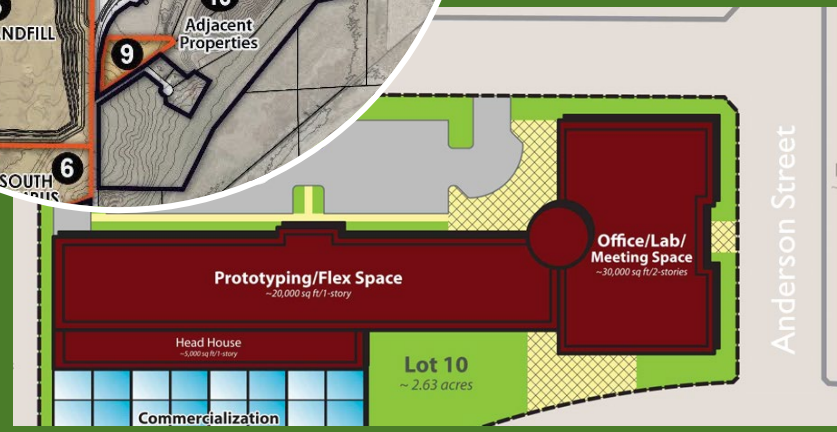
- Monterey Regional Waste Management District
- Urban Ore (Berkely)
- San Leandro
- Cabazon
- Eco-Industrial Parks

IMPLEMENTATION PLAN

Plan Components

- Overview of what's been done so far
- Establish vision, considerations, phasing, and Campus development plan
- Connect intended impacts and opportunities to Campus implementation efforts
  - Ex. circular economy, energy, transportation, GHG reduction, equity, local economy, sustainability
- Potential funding sources and policies for implementation
- Graphics and renderings illustrating the campus and its future





PLAN OUTLINE

- **Section 1: Introduction**
  - Overview
  - Purpose
- **Section 2: Background Information**
  - Acknowledgements
  - Glossary of Terms
  - Need for Campus
- **Section 3: Vision, Development, and Land Use**
  - Campus Vision and Guiding Principles
  - Measures of Success
  - Business Park Components
  - Planning and Management Considerations
  - Land Development and Zoning Considerations
- **Section 4: Project Impacts and Opportunities**
  - Advancing the Circular Economy
  - Materials Diverted and Rescued Landfill Space
  - Green House Gas Emissions Reduced
  - Energy Generated
  - Alternative Transportation
  - Leaders in Sustainability
  - Equity and Inclusion
  - Local Economy
- **Section 5: Potential Funding Sources**
  - Grants and Incentives
- **Section 6: Other Considerations**
  - Policies and Ordinances to Support Campus Operations
- **Appendix**

IMPLEMENTATION PLAN

Collaboration Opportunities

- Review and refinement of the plan at it is developed
- Circular economy connections
- City's development requirements and process
- Potential other locational opportunities for waste diversion entities
- Grant and local policy connections

METRICS REPORT

SUSTAINABILITY CAMPUS METRICS REPORT

SUSTAINABILITY CAMPUS AND LANDFILL DEVELOPMENT AGREEMENT LANGUAGE

"Based on the results of the consultant's report and the responses to the RFIs, RFQs or RFPs, the City and County agree to work in good faith to create measurable metrics for the Sustainable Business Park by December 31, 2025 to serve as a condition precedent to the sale of additional lands for future landfill purposes."

Metrics Report Timeline

TODAY
- City Kickoff Meeting

JUNE
- Department Workshop

SEPTEMBER
- 75% City Review Meeting

OCTOBER
- Final Metrics Report

AFTER REPORT IS FINALIZED
- Development Agreement Addendum

DEFINING METRICS

HOW WE DEFINE METRICS

- Defined as: "a standard of measurement" or "a system for measuring something"
- The things we want to measure and how we plan to measure them

SCOPE

- Beyond Sustainable Business Park
- W+R operations

METRICS REPORT GOALS

- Assist in fulfilling Dane County's contractual obligation to the City of Madison.
- Identify metrics that can be used to gauge success of the project.
- Discuss establishment of baseline values to compare future metrics against.
- Identify measurement methods and tracking tools that could be implemented by the County.

METRICS TO GAUGE SUSTAINABILITY CAMPUS SUCCESS

- Measurable
- Meaningful
- Long Lasting
- High-level
- Consistent with the Guiding Principles
- Independent of specific technologies or business park tenants
- Related to the wider Department Operations, not just the business park

EXAMPLE

CITY OF DUBUQUE, IA

Metrics:

- Pounds of trash and recycling generated per household per week.
- Total tonnage of curbside collection
- Stakeholder Involvement and Community Engagement
- Number of food scrap collection customers
- Yard waste tonnage collected
- Material composition percentages (i.e. plastic is 16.6% of total waste)

Goals:

- Increase waste diversion rate (% of total waste diverted) for single-family through six-plex households by one percent annually
- Decrease yearly waste disposal rate by one percent per customer (tons of trash/total tons of curbside collection)
- Using the EPA's Waste Reduction Model (WARM) to estimate GHG emission change from diversion vs. putting everything into the landfill.

Figure 10: FY22 Waste Diversion Rate

Fiscal Year	Total Curbside Waste Generation (tons)	Total Trash (tons)	Total Recycling (tons)	Total Organics (tons)	Total TVs (tons)	Total Appliances (tons)	Total Tires (tons)	Total Diverted (tons)	Diversion Rate
FY22	17,230.46	13,289.70	2,831.70	1,042.60	44.87	20.78	0.81	3,940.76	22.87%

METRICS REPORT COMPONENTS

- Introduction
  - Project Background
  - City Agreements
  - Guiding Principles
  - RFIs
  - Circular Economy and the Campus Role
- Existing Waste Streams
  - 2020-2021 Waste Sort
  - Other Waste Streams
- Metrics
  - Rooted in Guiding Principles
  - Connected to sustainable operations as a whole
- Conclusions and Recommendations

INFORMATION INCLUDED FOR EACH METRIC

Metric:

Metric Description:

Importance/why it is included in this report:

Baseline Value:

Measurement Methodology and Tracking:

Guiding Principles:

Community	Circularity + Innovation	Environment + Climate	Economic
▪	▪	▪	▪

EXAMPLE METRICS THAT COULD BE INCLUDED

CAMPUS GUIDING PRINCIPLES

Community

- Function as an asset to the local community while providing a comprehensive service for safely and responsibly managing materials.
- Provide enriching educational programming to equip community members with tools and resources for moving towards and sustaining a circular economy.
- Prioritize safety and welfare of our staff and community members.

Circularity & Innovation

- Create a local circular economy, centered on waste and pollution reduction, keeping products and materials in use locally, and renewing & restoring natural systems.
- Reduce, reuse and recycle waste in new and innovative ways.
- Develop new ways to measure and assess our effectiveness and the quality of our programs and services on an ongoing basis.

Environment & Climate

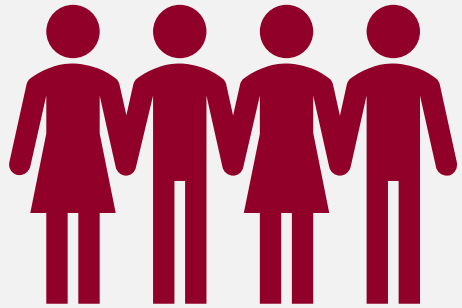
- Protect the health of the local environment and enrich biodiversity.
- Build climate resiliency through sustainable design, maintenance and operation of the Campus.
- Invest in renewable energy and carbon neutrality.

Economic

- Create financially sustainable programs that support the Campus and its vision.
- Support and be a benefit to the local economy by forging public & private partnerships, and relationships with our neighbors that combine diverse strengths, skills and resources.
- Ensure staff and community members have access to training and job skills development to provide equitable access to a meaningful role in our vision for the future.

COMMUNITY METRICS

- Communal Spaces
  - Public use of community spaces at the business park.
- Education and Outreach
  - Number of workshops/clinics held
  - Number of tours given
  - Number of community members engaged
  - Educational resources provided
  - Number of events/engagements



CIRCULARITY AND INNOVATION METRICS

- Number of items accepted at residential drop off
- Items recycled through Clean Sweep
- Number of material streams diverted
- Percent of waste diverted
- Food waste collected
- Tonnages/number of items diverted for reuse
- Hours of research conducted on-site
- Number of outside organization partnerships

ENVIRONMENT AND CLIMATE METRICS

- Number of odor complaints
- CO2e emissions
- Amount of renewable energy used
- Amount of renewable energy produced
- Acres of open space/prairie

ECONOMICS METRICS

- Number of unique diversion entity(s) within business park
- Dollars collected by County from circular business park tenant(s)
- Capital invested in new diversion entities
- Number of jobs/employees at the Campus
- Employee training costs

MEETING ACTION ITEMS