WASTE CONNECTIONS

Connect with the Future

Waste Connections Sustainability Campus

July 2023

The Roadmap

The Urban Landfill

…and its Integration into the Community

What is Champ?

Think Big, Act Small.


Spanish Village
Graham Packaging
Riverport
Champ Landfill – North Pit
Fred Weber, Inc. North Stone Quarry
Hollywood Casino Amphitheatre
Champ Landfill – South Pit
Champ, MO
Pattonville Fire District
Breckenridge Concrete Plant
Pattonville High School
Grace Church
Maryland Heights Renewable Energy
North Stone Stockyard
Unused Greenhouses
North Stone Asphalt Plant
Rose Acres
Rose Acres
Rose Acres Grade School

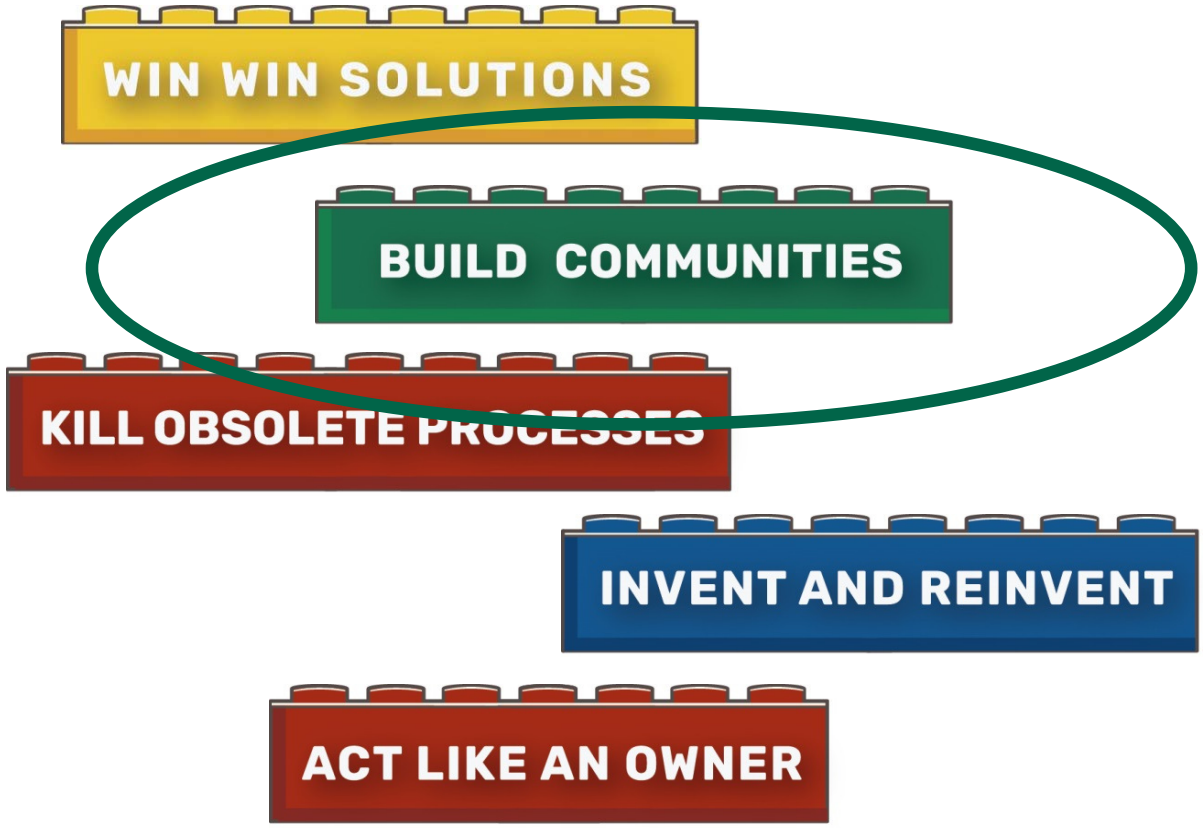
Operating Values

Think Big, Act Small.

- Safety
- Integrity
- Customer Service
- Be a Great Place to Work
- **Be THE Premier** Landfill **in** Missouri

Road to Premier

Think Big, Act Small.



Think Big, Act Small.

The Original Vision

City of Maryland Heights

Think Big, Act Small.

COMMUNITY FOR THE FUTURE

GROW MARYLAND HEIGHTS FOUNDATION

Think Big, Act Small.

WELCOME TO
GROW MARYLAND HEIGHTS FOUNDATION

- How we can grow our community
  - Corporate Involvement
  - Community Involvement
  - Grant Opportunities

COMMUNITY FOR THE FUTURE
GROW MARYLAND HEIGHTS FOUNDATION

Think Big, Act Small.

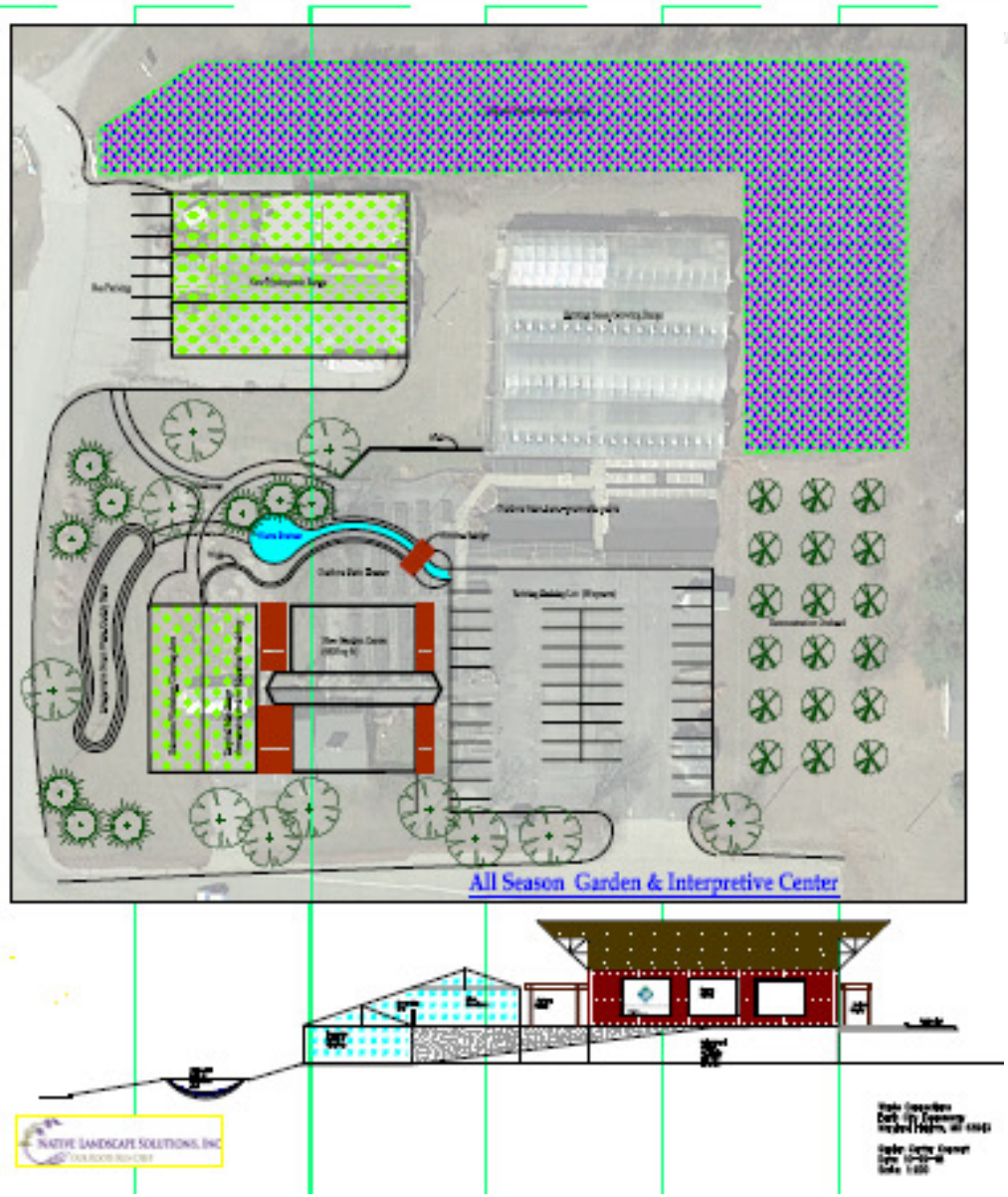
HOW IT STARTED

- Early 90's - Fred Weber was testing Methane gas as a way to heat greenhouses and offered the Jaeger family a place to live and an opportunity to use their greenhouses located near the landfill and quarry in MH
- Heating with methane gas was successful and saved the Jaeger family **12k-15k** per year in operational costs!!!
- Jaeger Greenhouses continued their success until they closed their doors in 2017

ASK & YOU SHALL RECEIVE

- The City of Maryland Heights was Awarded $850,000 to support our proposed Greenhouse, Garden, and Sustainability Center Project

Think Big,
Act Small.



Think Big, Act Small.

PARTNERSHIPS

- Champ Landfill/Waste Connections Agreement
  - Invested in Renewable Energy Project on Old Jaeger Site
  - Sustainability Campus moved to site adjacent to Pattonville High School

- Pattonville High School Life Sciences Program to benefit
  - Full use and operation of 1 HighYield greenhouse

- Community Involvement to assist in the development of programs

PATTONVILLE SCHOOL DISTRICT
A Great Place To Live, Learn, and Grow

City of MARYLAND HEIGHTS

WASTE CONNECTIONS
Connect with the Future

COMMUNITY FOR THE FUTURE
GROW MARYLAND HEIGHTS FOUNDATION

Think Big, Act Small.

GREENHOUSES

Ceres Greenhouses are Energy-efficient greenhouses, built with sustainability in mind.

- Minimal operation costs
  - Waste Connections to supply Methane to heat the greenhouses
  - Solar Energy Used for Control Systems

Think Big, Act Small.

- 2 – HighYield 30’ x 81’
- Climate Control Systems
- Creating optimal & abundant year-round growing environment

Think Big, Act Small.

PATTONVILLE HIGHSCHOOL

- Life Science Program
- Full control of 1 - 30’X81’ HighYield Greenhouse
- Classroom in Headhouse
- Aquaponics System
- Continue to provide healthy food to those in need

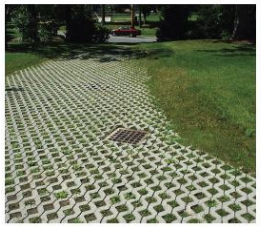
Think Big, Act Small.

DESIGN INSPIRATION






SUSTAINABLE DESIGN OPTIONS STRATEGIES

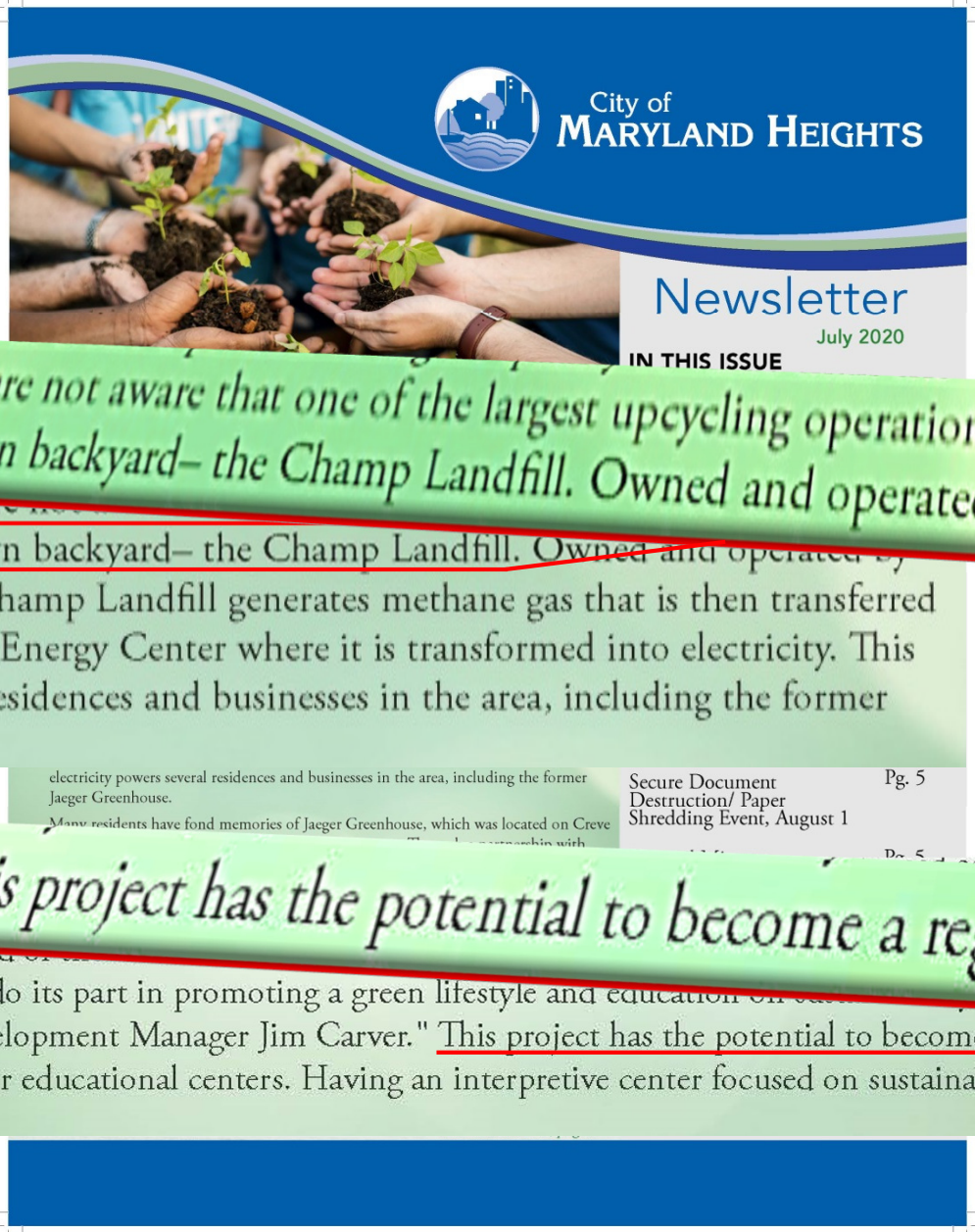




- Educational Trail Systems
- Community Gardens
- Rain Gardens
- Pollinator Gardens
- Public Access to MH Greenhouse
- So Much More

The Grant

Think Big, Act Small.



City of MARYLAND HEIGHTS

Newsletter

July 2020

IN THIS ISSUE

original. Many residents are not aware that one of the largest upcycling operations is occurring right in their own backyard– the Champ Landfill. Owned and operated by Waste Connections, the Champ Landfill generates methane gas that is then transferred to the Ameren Renewable Energy Center where it is transformed into electricity. This electricity powers several residences and businesses in the area, including the former Jaeger Greenhouse.

electricity powers several residences and businesses in the area, including the former Jaeger Greenhouse.

Many residents have fond memories of Jaeger Greenhouse, which was located on Creve

Secure Document Destruction/ Paper Shredding Event, August 1 Pg. 5

provide educational oppo

protection and sustainal

Fund which is a componen

the property, the City hopes to do its part in promoting a green lifestyle and education

education," says Economic Development Manager Jim Carver." This project has the potential to become a regional destination. Several cities operate nature, historical or educational centers. Having an interpretive center focused on sustainability and renewable resources is truly a unique opportunity."

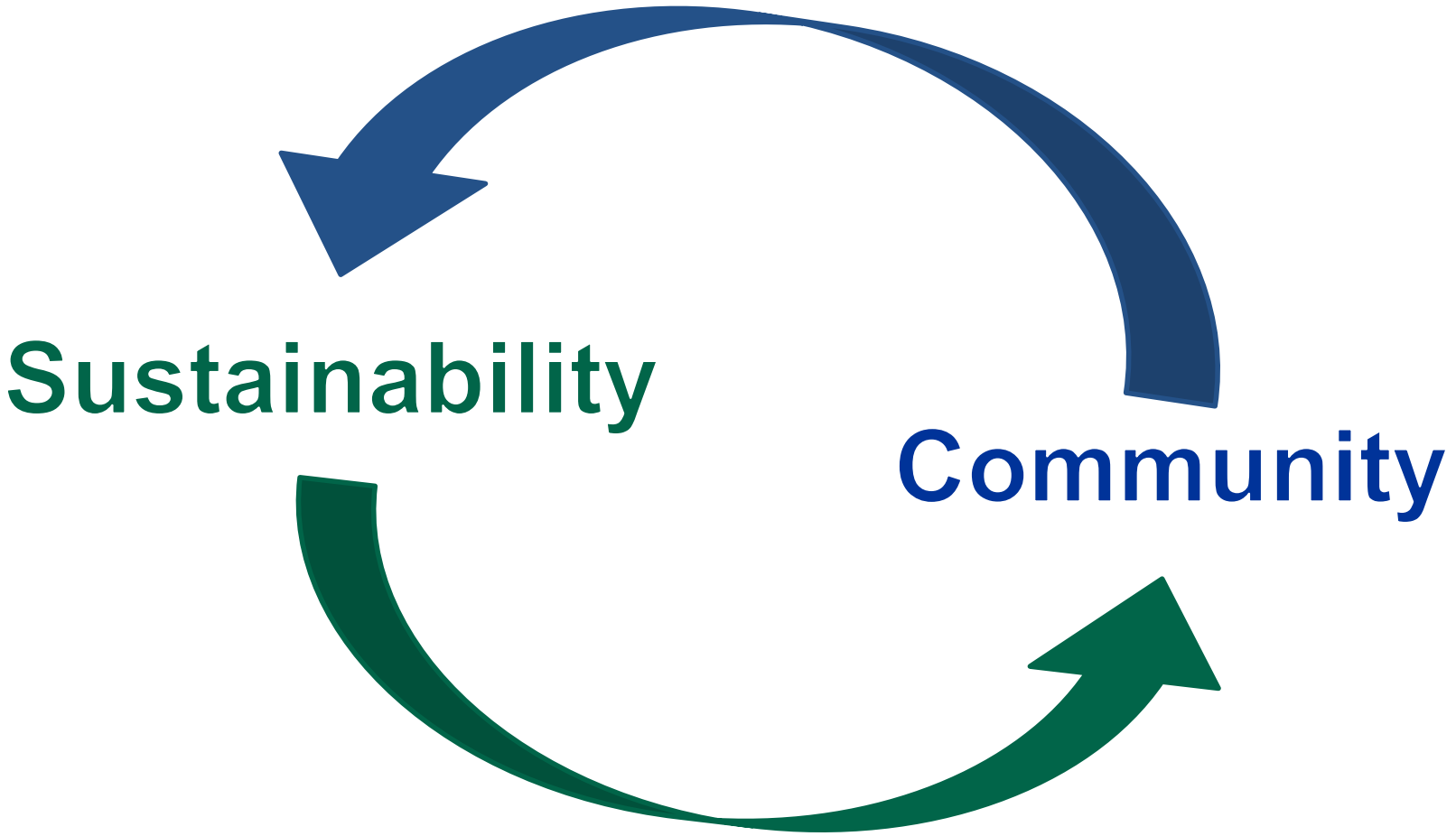
" This project has the potential to become a regional destination.

Think Big, Act Small.

The Vision 2.0

Waste Connections with City of Maryland Heights

Think Big, Act Small.



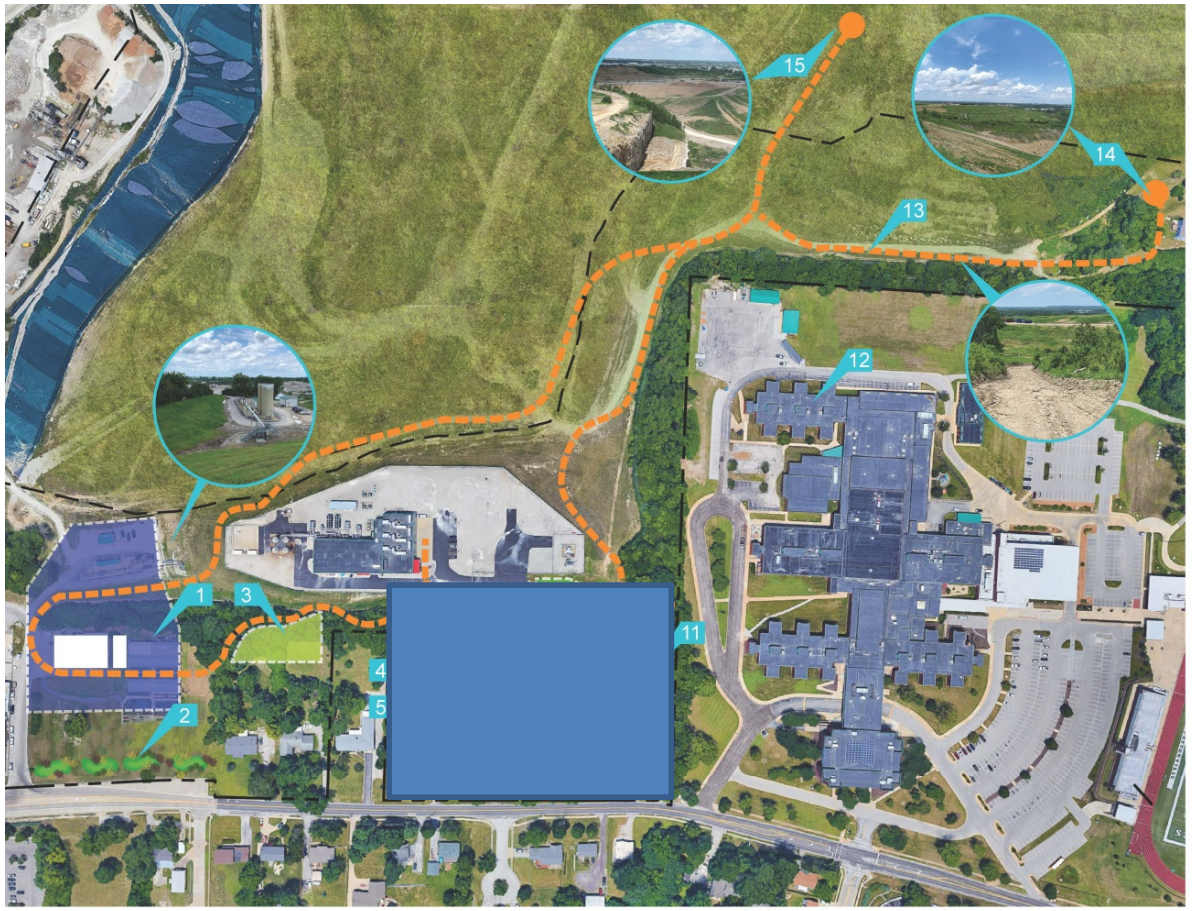
Sustainability – Three Pillars

Think Big, Act Small.

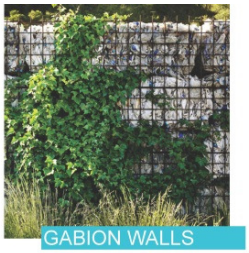
High Strenght MSW Leachate Treatment to Near Drinking Water Quality? Yes and Sustainable! Brown and Caldwall, 2016 GWMS

Phase 2 – Public/Private Partnership

Think Big, Act Small.



1 FUTURE RENEWABLE ENERGY PROJECT
2 LANDSCAPE BERMS
3 FUTURE SUSTAINABILITY DEVELOPMENT
4 EXISTING PAVILION
5 RELOCATED GREENHOUSE RANGE
6 RETAIL/SALES AREA
7 RELOCATED GREENHOUSES
8 OFFICE COMPLEX
9 FUTURE PAVILION/OUTDOOR CLASSROOM
10 PARKING
11 HILLSIDE PRAIRIE RESTORATION
12 ADJACENT HIGH SCHOOL
13 TRAILS
14 PERMANENT OVERLOOK
15 OVERLOOK
16 BIORETENTION AREA

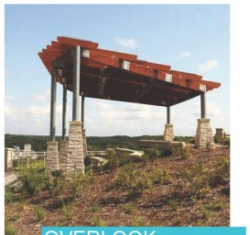

GABION WALLS


DETAILED EDGE


EDUCATION


WAYFINDING


HILLSIDE PRAIRIE


OVERLOOK


TRAIL SECTION

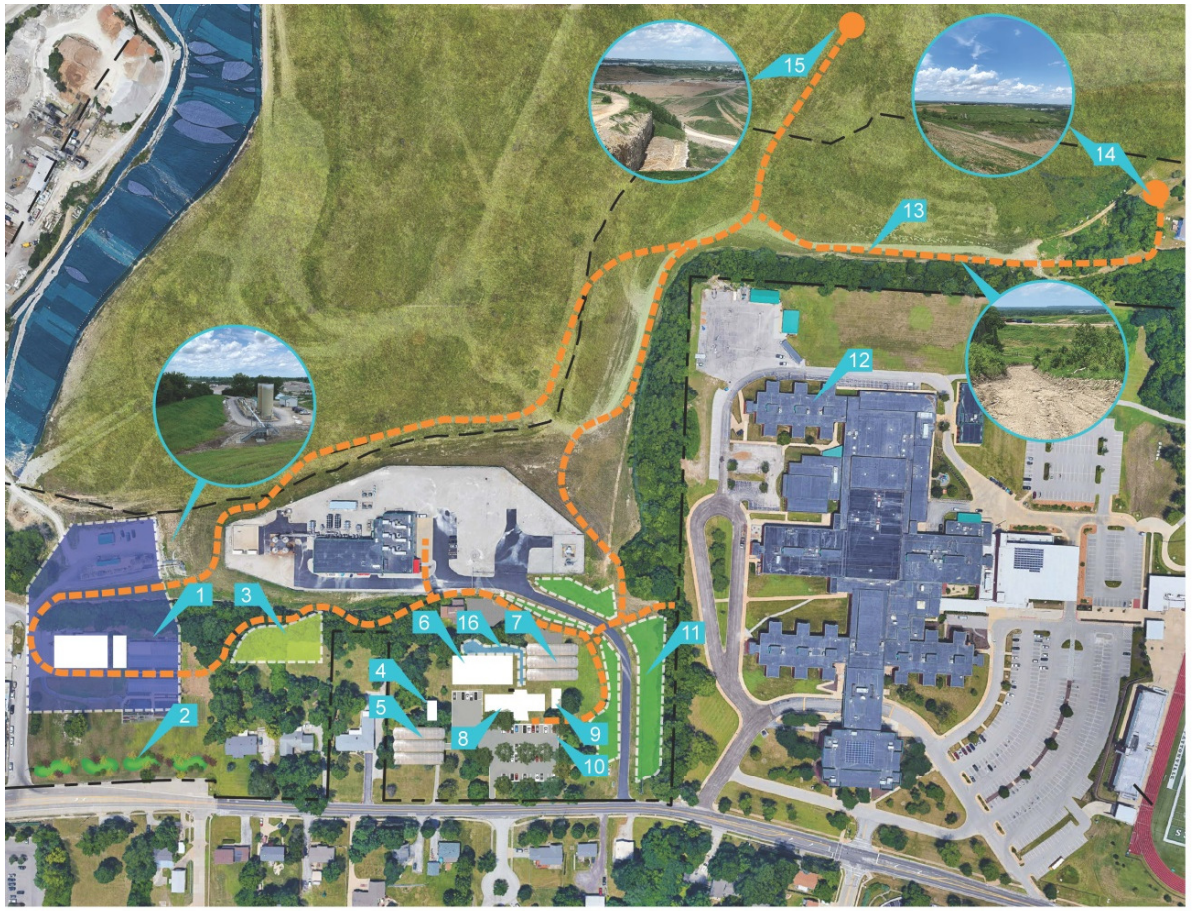
Champ Landfill

SUSTAINABILITY CAMPUS PLAN

CHAMP LANDFILL
A Waste Connections Company
Weaver Consultants Group
guernsey

Phase 2 – Public/Private Partnership

Think Big, Act Small.



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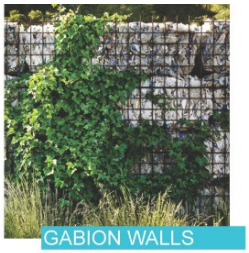
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DETAILED EDGE


EDUCATION


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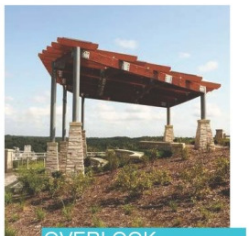
OVERLOOK


TRAIL SECTION

Champ Landfill

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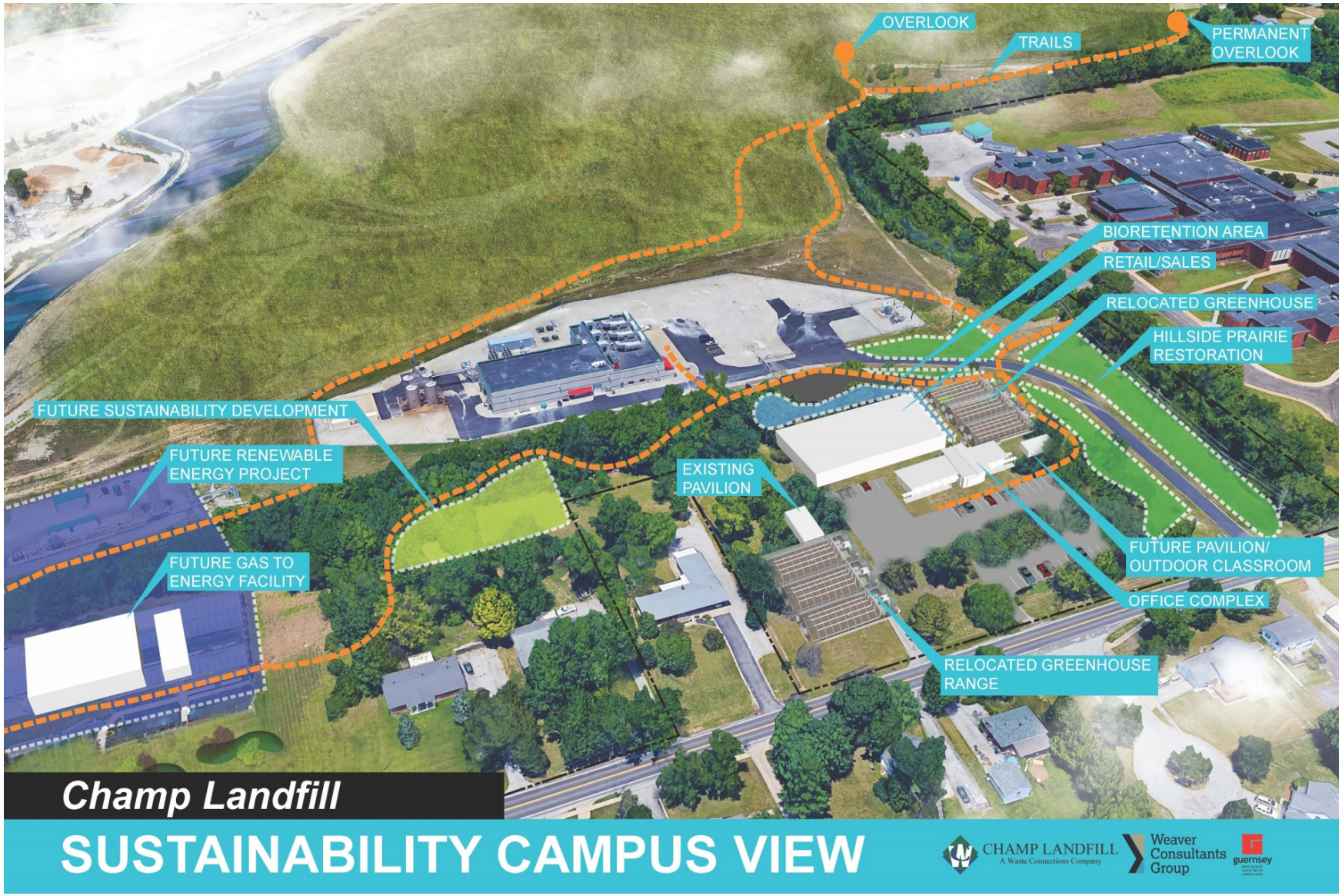
Phase 2 – Public/Private Partnership

Think Big, Act Small.



Phase 2 – Public/Private Partnership

Think Big, Act Small.

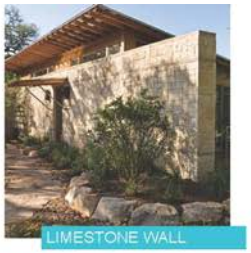
Champ Landfill

VISION

"Environmental, organizational and financial sustainability initiatives have been key components of Waste Connections' success since they were founded in 1997. They remain committed to growing and expanding these efforts as the industry and technology continue to evolve."

Guernsey supports your vision of environmental stewardship through sustainable measures. Our team's inspiration merges with your evolutionary nature to provide a design using recyclable materials that reinforces your commitment to the environment.


SOLAR SHADING


LIMESTONE WALL


RECYCLED CAPS


RECYCLED GLASS


OPEN COLLABORATION


NATURAL LIGHTING


CONVECTIVE COOLING

ENERGY DASHBOARD

SUSTAINABILITY CAMPUS OFFICE

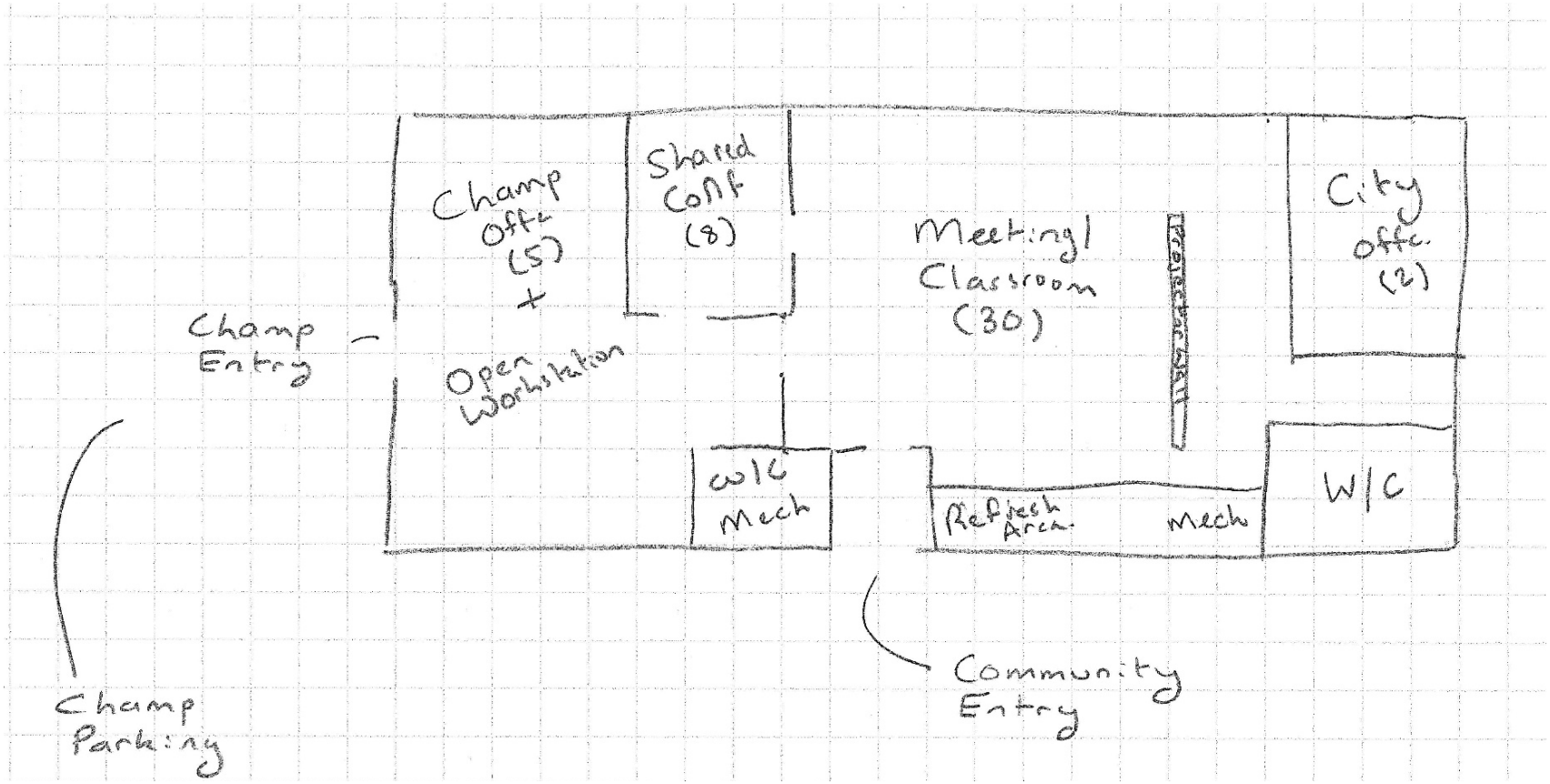
CHAMP LANDFILL
A Waste Connections Company

Weaver Consultants Group

guernsey

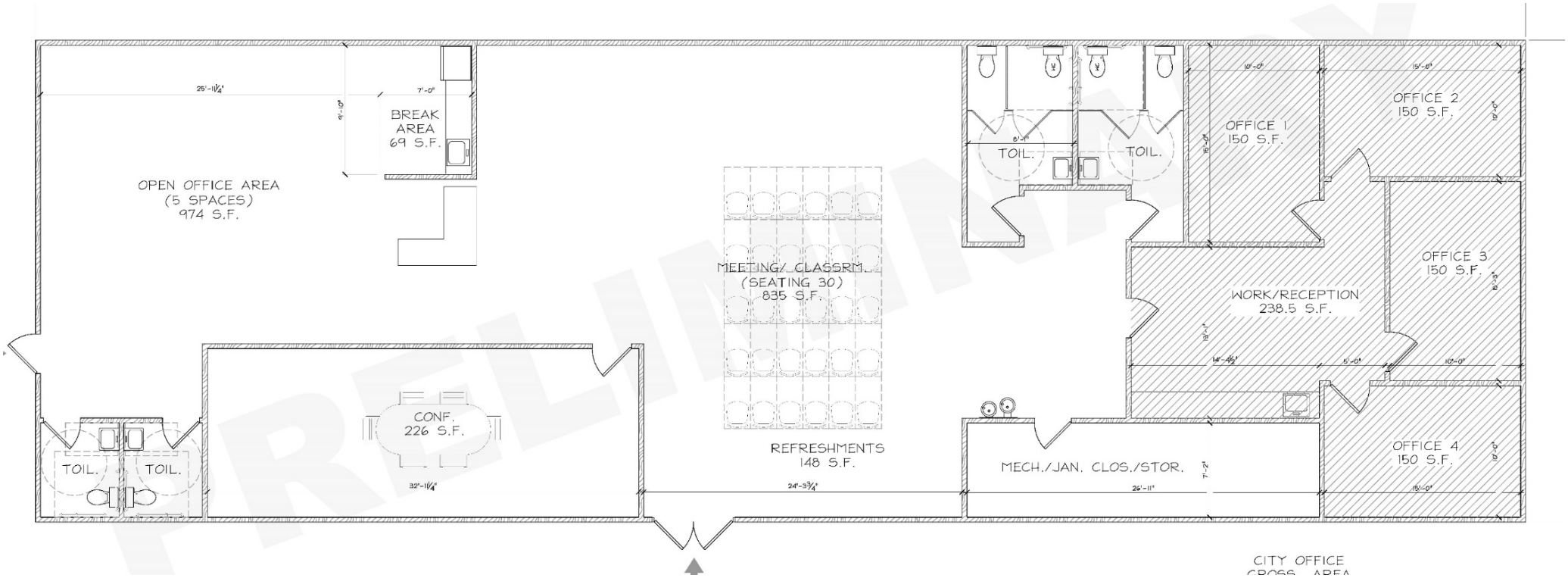
Original Concepts

Think Big, Act Small.



Original Concepts

Think Big, Act Small.



Think Big, Act Small.

The Vision 3.0

Waste Connections Sustainability Campus

Phase 2

Think Big, Act Small.

JUST MOMS STL
west lake landfill

City of MARYLAND HEIGHTS

INTERNATIONAL UNION OF OPERATING ENGINEERS
ORGANIZED DEC. 7, 1896
513
LABOR OMINA VINCIT

PATTONVILLE HIGH SCHOOL
PRIDE • HONOR • SPIRIT

VESTAL CORPORATION

Champ Sustainability

Think Big, Act Small.

Sustainability Campus

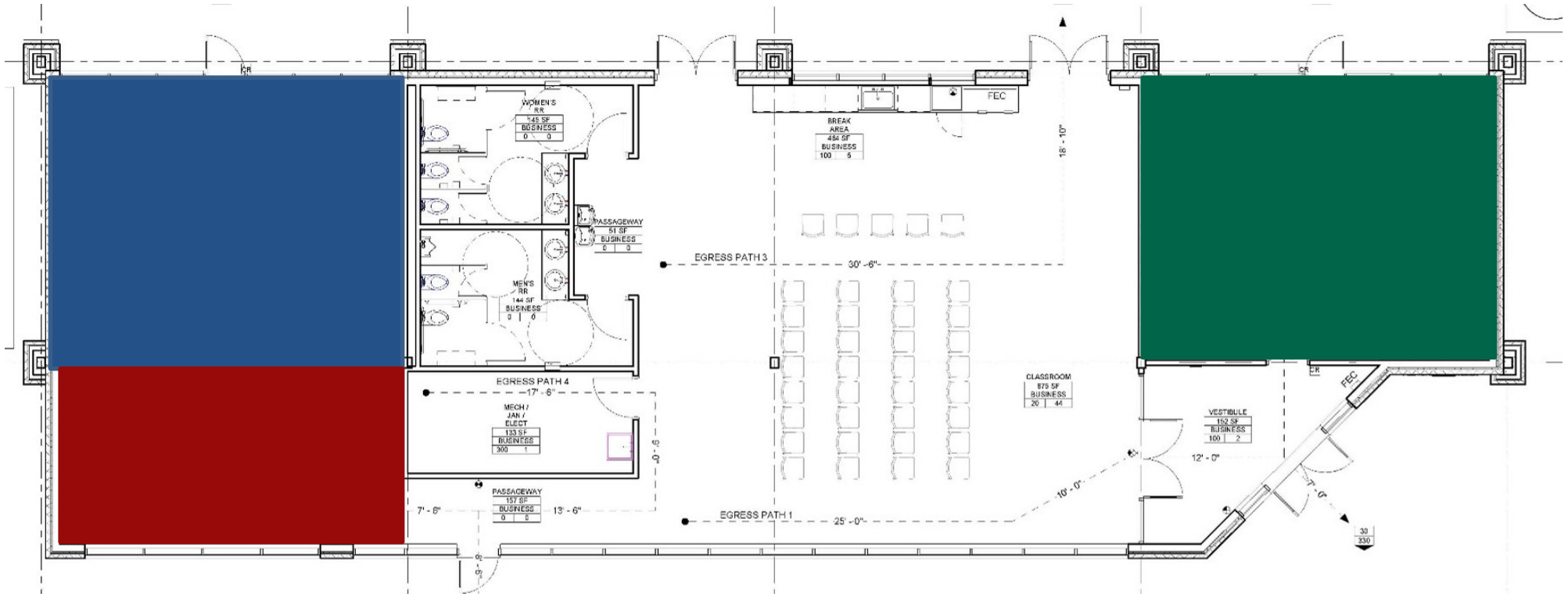
Interpretive Center

Think Big, Act Small.

- Champ/Maryland Heights Offices
- Shared Conference Room
- Interactive Exhibits
- Classroom

Final Concepts

Think Big, Act Small.



Alas

Think Big,
Act Small.

Welcome…

Think Big, Act Small.

...to...

Think Big, Act Small.

Inside!

Think Big, Act Small.

Inside!

Think Big, Act Small.

Greenhouses

Think Big, Act Small.

- Pattonville HS Classroom – Hydroponics
- National Plant-Based Research Company

Greenhouses

Think Big, Act Small.

Local Habitats

Think Big, Act Small.

Carver Barn

Think Big, Act Small.

We got bees!

Think Big, Act Small.

We got bees!

Think Big, Act Small.

We got bees!

Think Big,
Act Small.

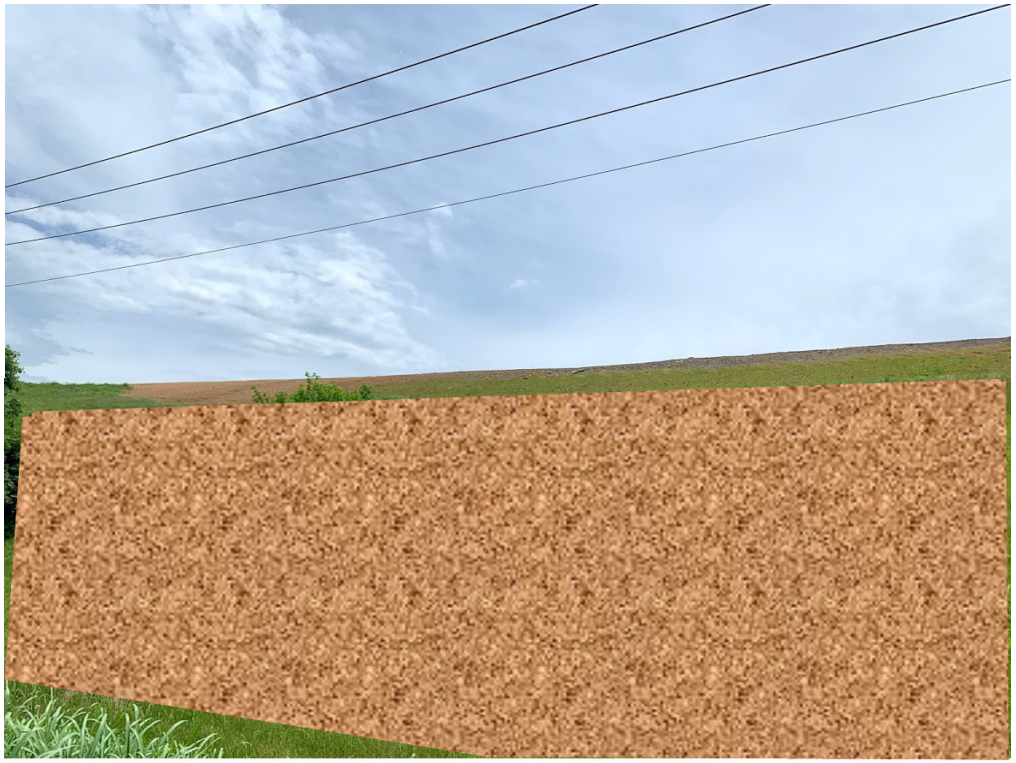
Native Planting

Think Big, Act Small.

- As part of landfill buffer areas
- Around campus
- Bioretention areas
- As intermediate cover

Maryland Heights Native Prairie

Think Big, Act Small.



Reimaging Vegetation

Think Big, Act Small.

Reimaging Vegetation

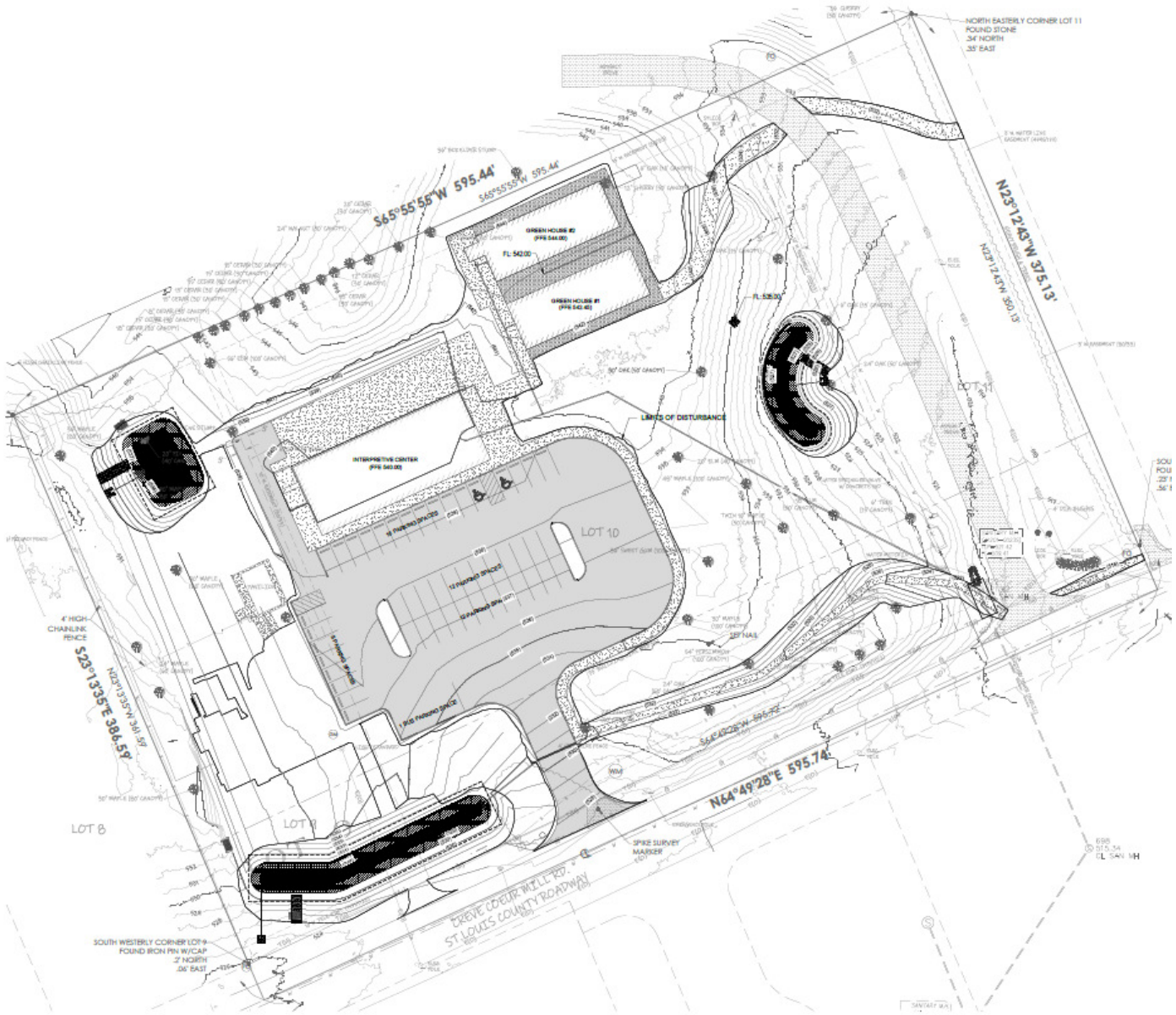
Think Big, Act Small.

Reimaging Vegetation

Think Big, Act Small.

Bioretention with Natives

Think Big, Act Small.



Trail System

Think Big, Act Small.

- Guided by LF personnel or Pattonville HS-trained students
- Two overlooks into Landfill and Quarry

Educational Trail System

Think Big, Act Small.

Educational Trail System

Think Big, Act Small.

Educational Trail System

Think Big, Act Small

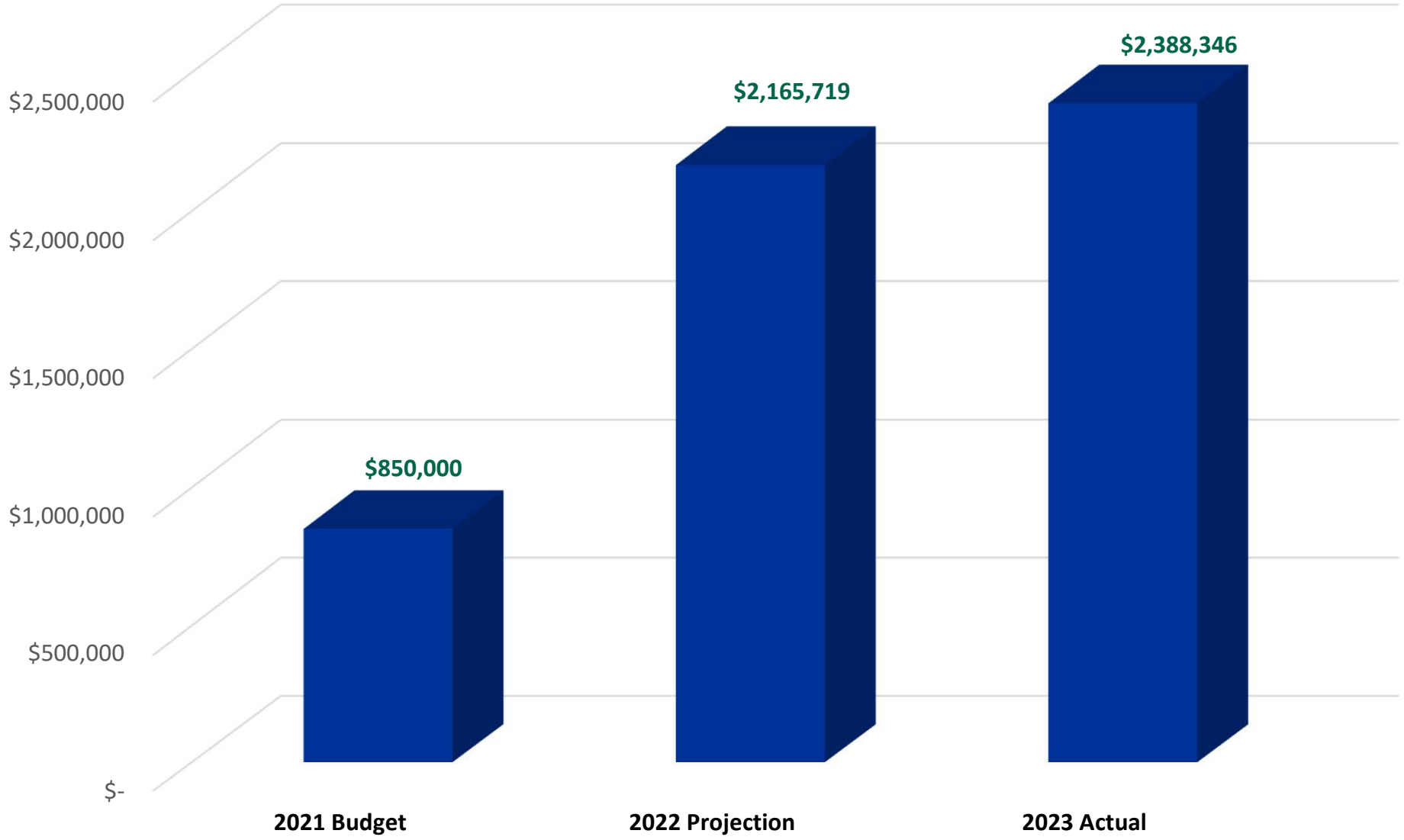
Think Big, Act Small.

Construction

The Public-Private Partnership

Just a Tad Off

Think Big, Act Small.



Before the Campus…

Think Big, Act Small.

…after Ben.

Think Big, Act Small.

Bring on the Greenhouses

Think Big, Act Small.

Bring on the Greenhouses

Think Big, Act Small.

And Now for the Interpretive Center

Think Big, Act Small.

And Now for the Interpretive Center

Think Big, Act Small.

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Think Big, Act Small.

Bioretention with Natives

Think Big, Act Small.

Bioretention with Natives

Think Big, Act Small.

Bioretention with Natives

Think Big, Act Small.

Starting to Come Together

Think Big, Act Small.

Starting to Come Together

Think Big, Act Small.

SCHEDULE SLIDE

Think Big, Act Small.

Expectation

Submittals
June 2022

Construction
August 2022

Completion
March 2023

Reality

Submittals
June 2023

Construction
October 2022

Completion
July 2023

Starting to Come Together

Think Big, Act Small.

Starting to Come Together

Think Big, Act Small.

Starting to Come Together

Think Big, Act Small.

From...

Think Big, Act Small.

...to.

Think Big, Act Small.

Inside

Think Big, Act Small.

Inside

Think Big, Act Small.

Inside

Think Big, Act Small.

...to.

Think Big, Act Small.

Think Big, Act Small.

The Legacy

Next Phases and Beyond

Phase 2

Think Big, Act Small.

CULTIVATING YOUNG LEADERS

COMMUNITY COOPERATIVE

HOST ENVIRONMENTAL SERVICE PROJECTS

Think Big, Act Small.

Takeaways

Takeaways

Think Big, Act Small.

- Landfills have the obligations to be good neighbors…
  - and the opportunity to become part of the community.
- Landfills are a utility, community need, and a form of recycling/green energy
- Opportunities for public/private partnerships exists, as do the benefits
- Sustainable projects should be celebrated by all


Sustainability
Community
WASTE CONNECTIONS
Connect with the Future®