



Cecil County
Department of Public Works

Cecil County Central Landfill

Landfill Disposal Cell 2



Presented By:

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Project Manager

Cecil County DPW – Engineering & Construction

**CEAM 2025 Fall
Conference**





Project Purpose

- **Central Landfill is projected to reach permitted capacity in February 2026**
 - **Cell 2 was constructed to increase the existing landfill capacity and provide additional landfill life to meet the solid waste management needs of the citizens of Cecil County**
 - **The project is the first landfill disposal cell to be constructed in a planned long term phased expansion of Central Landfill**
 - **The project helps facilitate the future expansion of the landfill and maximize the long term capacity of the landfill**
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Project Description

- **Relocation of existing leachate sewer lines within the proposed footprint of Cell 2**
- **Modifications to existing landfill gas and leachate collection and conveyance piping to accommodate the landfill cell construction**
- **Approximately 100,000 CY of earthwork**
- **Installation of composite landfill liner system including 24" clay subbase, geosynthetic clay liner, 60 mil HDPE geomembrane, 32 oz. cushion geotextile, and an 18-inch aggregate drainage layer**
- **Installation of new HDPE landfill gas and leachate collection and conveyance piping to serve Cell 2**
- **Installation of access roads and a working platform to provide access to Cell 2 and facilitate waste placement activities**



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Central Landfill – January 2024





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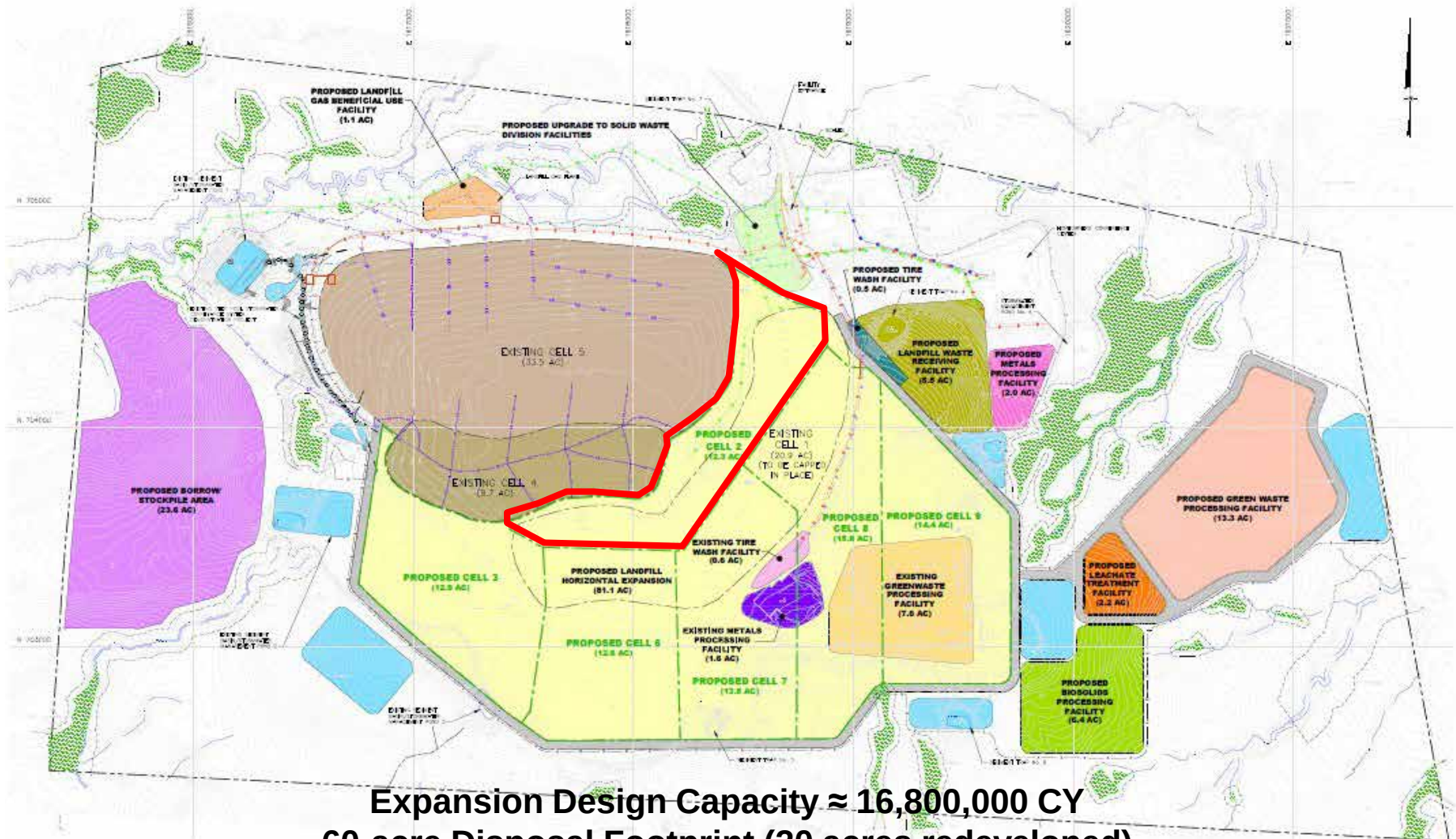
Central Landfill – January 2025





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Central Landfill Master Plan



Expansion Design Capacity $\approx$ 16,800,000 CY
60-acre Disposal Footprint (20 acres redeveloped)



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Cell 2 Earthwork





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Cell 2 Composite Liner System Installation





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New Cell 2 Liner Tie-in to Existing Cell 4/5





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Completed Cell 2 Liner Installation





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Leachate Drainage Layer Stone Placement





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Completed Leachate Drainage Layer





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Completed Leachate Drainage Layer





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Cell 2 – Completed Construction





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Cell 2 – In Operation





Project Facts

Cell 2 provides an additional 1.65 million CY of landfill capacity.

Cell 2 adds an additional 8-10 years of landfill disposal life to the existing landfill.

Cell 2 will fill in the valley between existing landfill Cell 1 and landfill Cell 4/5.

Cell 2 also caps half of existing landfill Cell 1 providing further environmental protection.

The project was completed in 9 months, approximately one month ahead of schedule.

The project utilized onsite borrow material providing several hundred thousand dollars in cost savings to the project.

Cell 2 was put into service approximately one year before running out of airspace at Central Landfill



Project Facts (Continued)

The construction of Cell 2 facilitates future expansion of the landfill allowing the County to maximize the capacity of the existing site and serve the County for 50+ years.

The project is a cost-effective and innovative solution because it caps an existing landfill cell while constructing a new landfill disposal cell and doubling the overall capacity of the landfill.

The project was completed under budget conserving funding for future landfill projects and improvements.

The project was fully paid for by the Solid Waste Enterprise Fund and did not include any funding from the County's General Fund (i.e., tax dollars).



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Project Data

Project Timeline:

Work started May 2024

Leachate & LFG piping – June thru October 2024

Earthwork – June thru October 2024

Liner Installation – October thru December 2024

Substantial Completion was achieved on January 21, 2025

Project Cost:

Total Project Cost - \$6.6 million

Engineering Design Cost - \$400,000

Construction Cost - \$5.57 million

Construction Management/Inspection Cost - \$350,000

Construction Quality Assurance Cost - \$275,000



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Acknowledgments

- **Design Engineer – Barton & Loguidice**



Jenny Padgett – Project Manager
Cory McDowell – Senior Engineer



- **Contractor – Kinsley Construction**



Chris Bailey – Project Manager
Ty Miller – Site Superintendent



- **Geosynthetic Liner Installer – Hallaton**



Kennedy Garber – Vice President of Construction



- **Construction Management/Inspection – Barton & Loguidice**



Jenny Padgett – Construction Manager
Becca Hartman – Construction Inspector

- **Construction Quality Assurance – BAI Group**



Pat Wozinski – Certifying Engineer
Justin Rajan – CQA Manager



- **Cecil County DPW Staff**



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QUESTIONS?

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