GUDE LANDFILL REMEDIATION UPDATE

COMMUNITY MEETING - APRIL 8, 2021

WELCOME!

- Attendees should stay muted and keep video off during the presentation.
- If you have a question, please type it in the chat and it will be addressed following the presentation.
- The presentation will be recorded and posted to the Gude Landfill Remediation Web page.





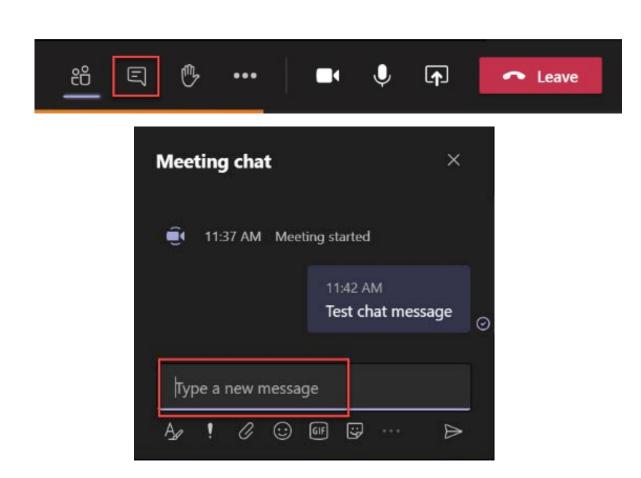




MEETING EXPECTATIONS

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CLICK TO OPEN THE CHAT











INTRODUCTIONS

- Montgomery County Department of Environmental Protection (DEP)
 - Jamie Foster, Project Manager DEP Recycling and Resource Management Division (RRMD)
- EA Engineering, Science, and Technology, Inc. (EA)
 - Mark Gutberlet, P.E., BCEE Project Manager
- Floura Teeter Landscape Architects (FTLA)
 - Megan Maffeo, PLA, LEED AP Project Manager









PRESENTATION OUTLINE

- Community Engagement
- Landfill Background
- Proposed Corrective Measure
- Landfill Remediation
- Passive Land Use
- Next Steps
- County Contacts and Information









COMMUNITY ENGAGEMENT & COMMUNICATION

- GLCC/DEP Meetings 58 meetings since June 2009
- Community Meetings September 2009, September 2012, April 2016, October 2016, April 2021
- Derwood Station HOA Newsletters since 2009
- DEP Remediation Web page since June 2009
 http://www.montgomerycountymd.gov/sws/facilities/gude/
- DEP Letters and Fact Sheets









LANDFILL BACKGROUND

- Landfill Operated: 1964 to 1982.
- Maryland Department of the Environment (MDE) directed DEP to initiate comprehensive site investigations to characterize groundwater quality in 2008.
- The County and MDE entered into a consent order in May 2013 to formalize requirements for the landfill assessment and remediation.



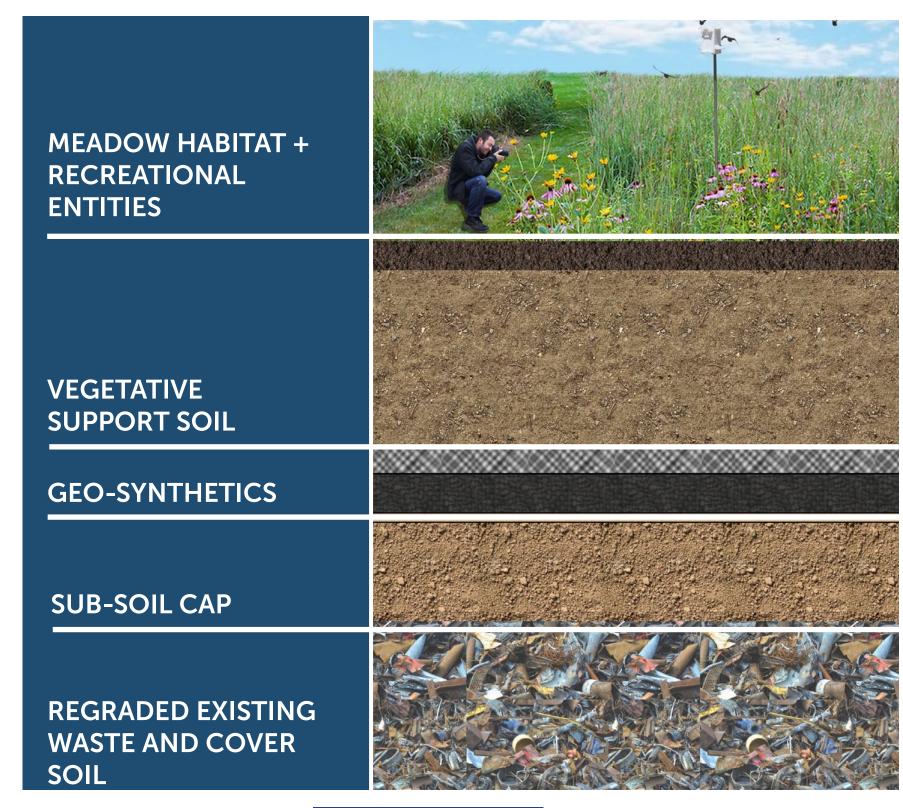






LANDFILL CAPPING & ADDITIONAL LANDFILL GAS COLLECTION

- Installation of a geomembrane cap over the flatter, grassed area of the landfill to reduce infiltration of rainwater and the potential for groundwater contamination and leachate seeps.
- Installation of additional landfill gas extraction wells to reduce landfill gas migration.

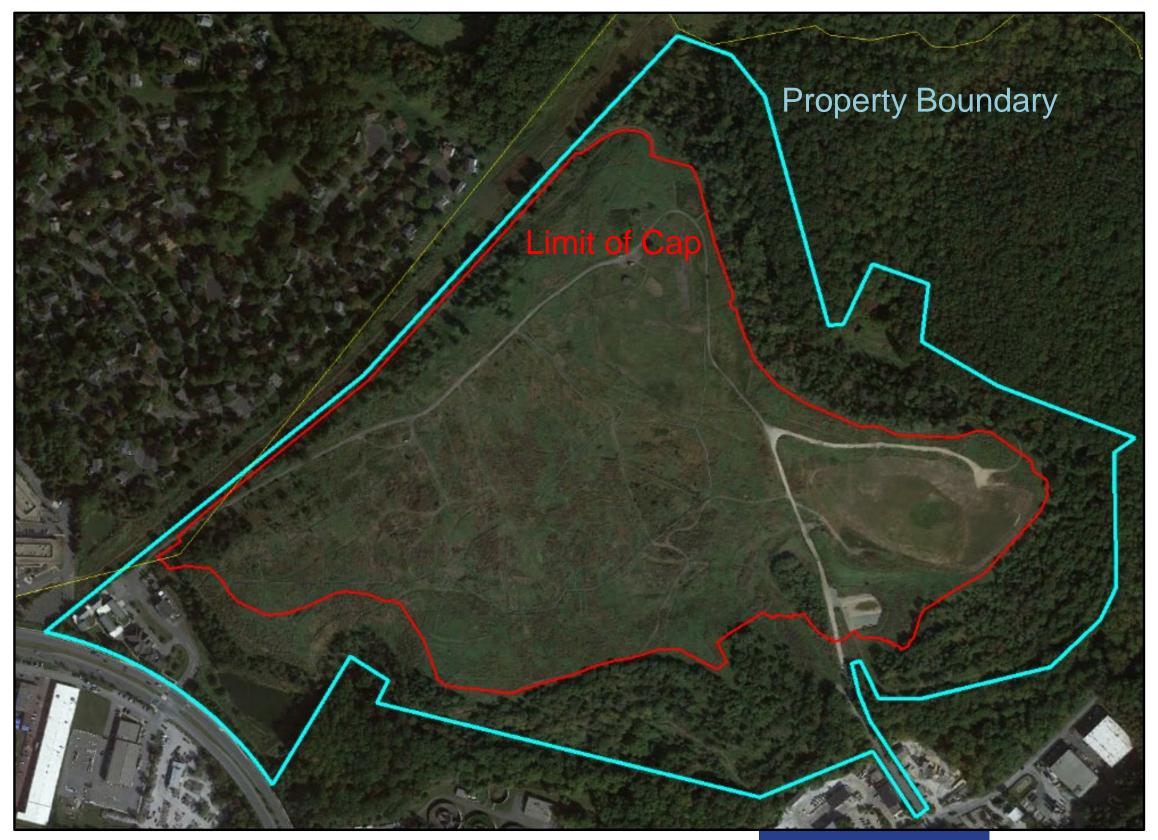








LANDFILL CAPPING & ADDITIONAL LANDFILL GAS COLLECTION







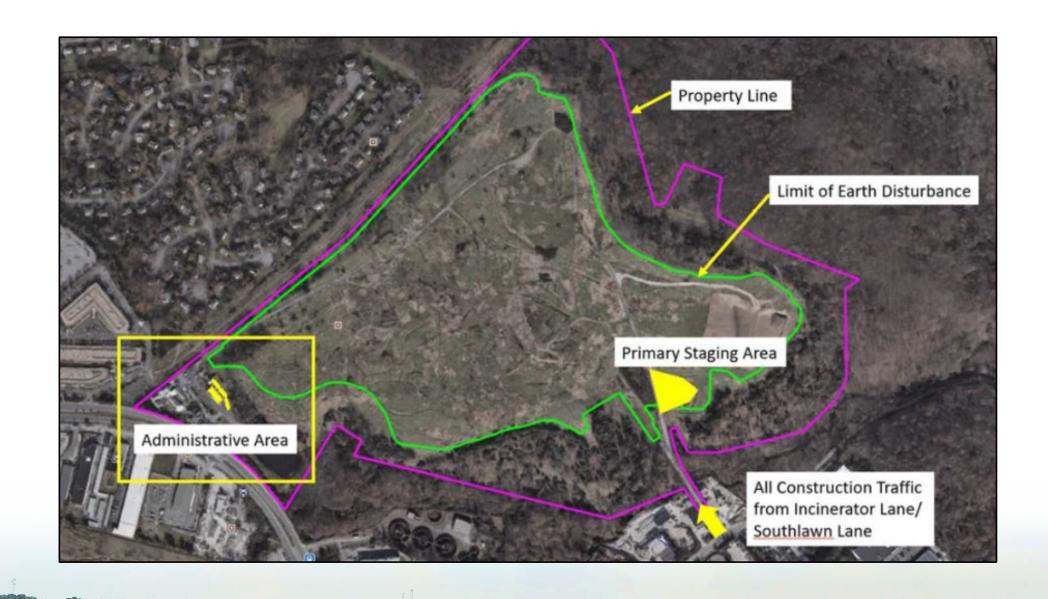


ENVIRONMENTAL EFFECTS - TRAFFIC

LONG-TERM EFFECTS	No noticeable change in traffic after construction.
CONSTRUCTION-PHASE EFFECTS	Traffic in and out of the site will increase during construction.

CONSTRUCTION-PHASE MITIGATION STRATEGIES

 Heavy construction traffic will be routed to Southlawn Lane site entrance away from residential areas.









ENVIRONMENTAL EFFECTS - DUST

LONG-TERM EFFECTS	No noticeable change in dust generation after construction.
CONSTRUCTION-PHASE EFFECTS	Dusts will be generated by construction activities.

- Heavy construction traffic will be routed to Southlawn Lane site entrance away from residential areas.
- Stabilized construction entrances will be installed to minimize dust/dirt tracking at Southlawn Lane and East Gude Drive site entrances.
- On-site speed limit will be set.
- · Access roads will be watered.
- Dump trucks will be covered.









ENVIRONMENTAL EFFECTS - NOISE

LONG-TERM EFFECTS	No noticeable change in noise levels after construction.
CONSTRUCTION-PHASE EFFECTS	Noise will be generated by construction activities.

- Vegetative buffer will reduce noise.
- Work will be limited to weekday, daylight hours.
- Equipment will have mufflers.
- Montgomery County Noise
 Control Law will be followed.
- Noise Suppression Plan will be developed.









ENVIRONMENTAL EFFECTS - ODORS

LONG-TERM EFFECTS	Odor levels may be lower after construction due to closure cap and improved landfill gas collection
CONSTRUCTION-PHASE EFFECTS	Odors will be released during waste excavation.

- Area of exposed waste will be limited and covered at the end of each day.
- Odor control measures such as foam over the waste or misting to eliminate odor will be employed if needed.









ENVIRONMENTAL EFFECTS - SITE ACCESS, SAFETY, & SECURITY

LONG-TERM EFFECTS	Site access will be improved by new public entrances and walking paths after construction.
CONSTRUCTION-PHASE EFFECTS	Site access will be restricted during construction for safety
	reasons.

- Site-Specific Health and Safety Plan will be developed to protect construction workers.
- Construction fencing and clear signage will be implemented to limit access to the site.
- Closed-circuit television surveillance system will be installed and monitored by the County.

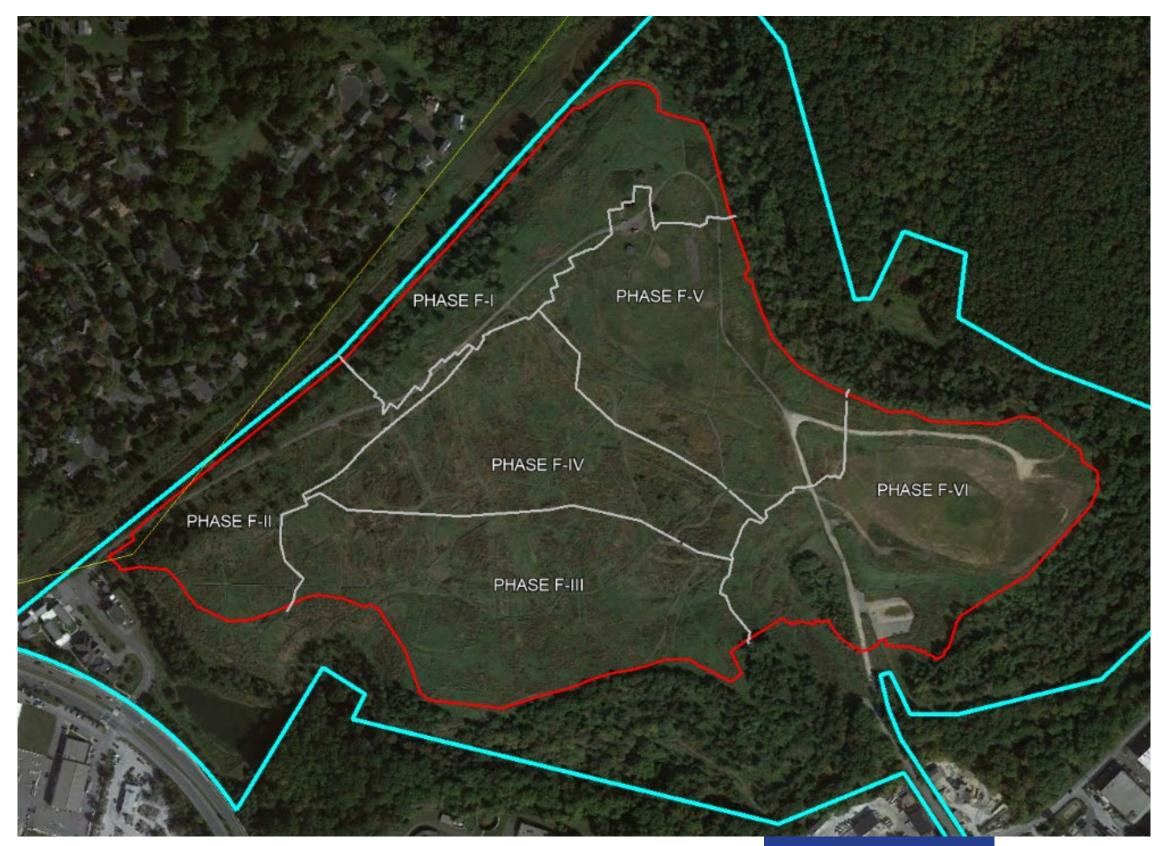








COMPLETE PHASE F-I AND F-II FIRST

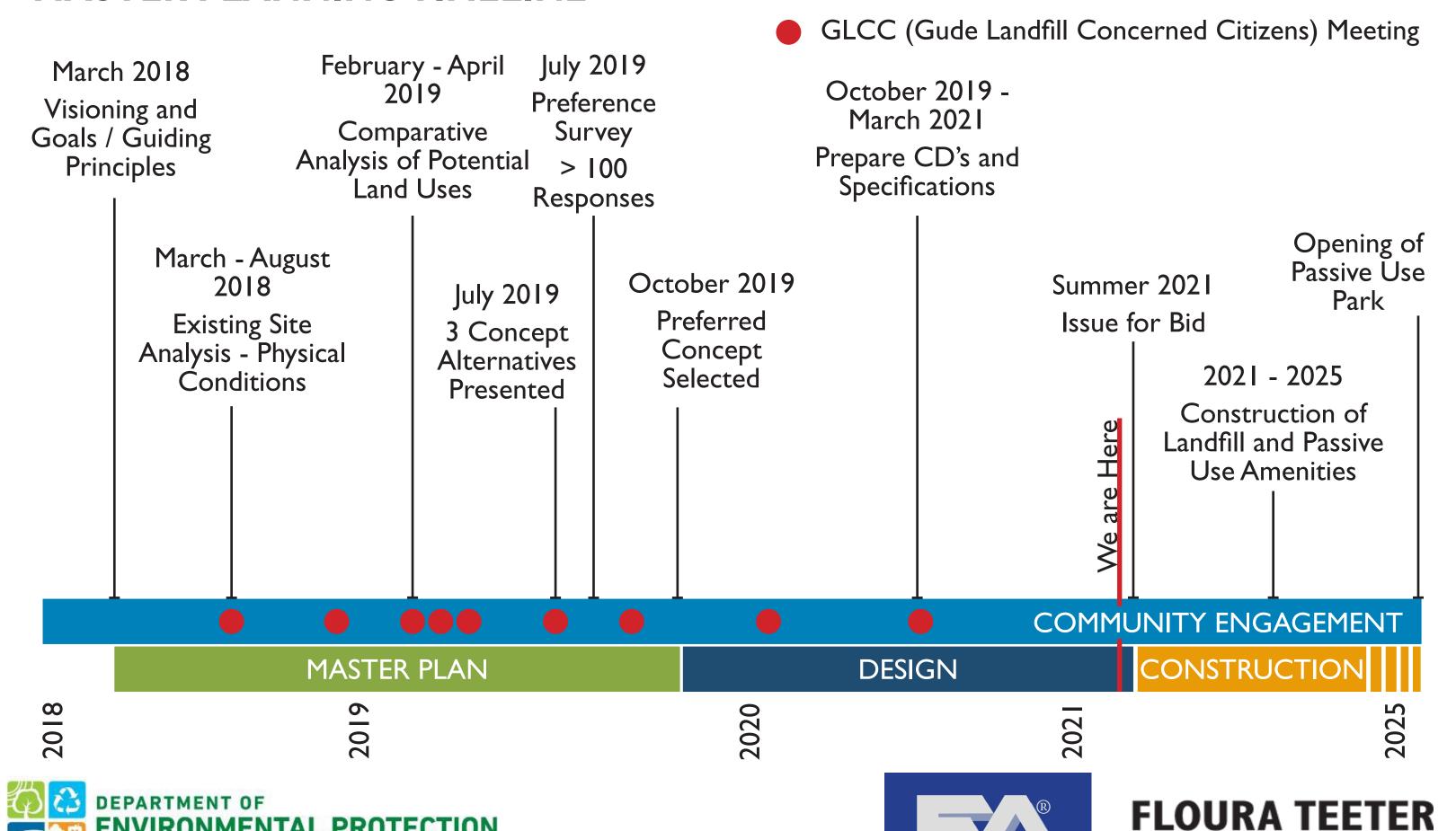








MASTER PLANNING TIMELINE



landscape architects

VISION AND GOALS

VISION:

Create a park-like environment with destination trails and limited amenities to allow access to the restored landscape of the landfill.

GOALS

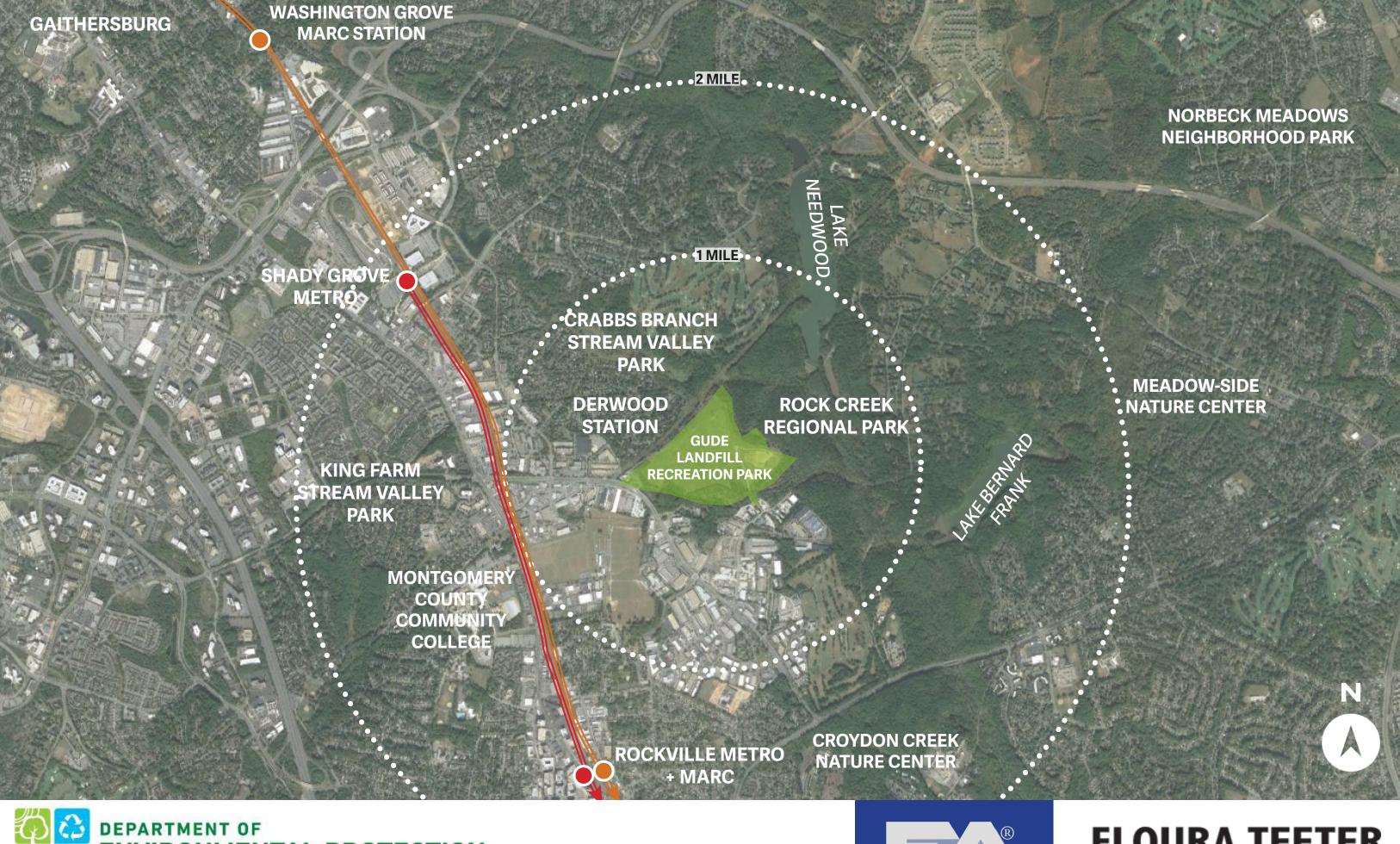
- Maintain integrity of the landfill and allow for continued monitoring during post closure period.
- Accommodate uses to support function of Montgomery County Recycling and Resource Management Division.
- Include recreation uses compatible with the landfill.
- Explore the feasibility for connections to adjacent parks/paths.
- Establish a naturalistic meadow environment and encourage the interaction of native bird species with the new flora.
- Include signage or art to celebrate the new ecology.
- Create an environment that is safe for users.
- Maintain or enhance drainage swales and other features required for landfill reclamation.















FLOURA TEETER
landscape architects

POTENTIAL LAND USE ACTIVITIES

COMPARATIVE ANALYSIS EVALUATION CRITERIA

- Impact to Landfill Remediation
- Level of Maintenance
- Magnitude of Cost
- Noise Level Concerns
- Adjacency Concerns / Separation Requirements

HIGH SUITABILITY	MEDIUM SUITABILITY				
Natural Meadow Vegetation & Habitat	Solar Array				
Walking - Trail System	Dog Play - Off Leash				
Dog Walking - On Leash	Disc Golf				
Birdwatching	Children's Playground				
Kite Flying					
Art /Sculpture					
Children's Nature Play					







DESTINATIONS



ACCESS POINT



DOG PLAY



HIGH POINT OVERLOOK



DISC GOLF



CHILDREN'S PLAY



ART INSTALLATION

TRAILS



DERWOOD TRAIL
BIRDWATCHER'S WAY
POLLINATOR LOOP
VISTA TRAIL
RAPTOR WAY

RAPTOR WAY

SHORTCUT TRAIL

SERVICE ROAD (NO ACCESS)

REGIONAL NETWORK









RECREATION TRAIL NETWORK

GRAVEL PUBLIC ACCESS



• Multi-functional, serves both recreation access and landfill gas extraction well access.

GRASS PUBLIC ACCESS



• Serves recreation access.

DESTINATION - HIGH POINT LOOKOUT



- Highest elevation on-site
- View of Rockville Skyline
- I/2 mile from Entry #I
- Less than I/4 mile from Entry #2
- Maintained Lawn /Short Meadow
- Potential Uses:
 Kite-flying
 Seating /Rest in Nature
 Birdwatching
 Walking

PLAN



KITE-FLYING



SEATING / REST IN NATURE



BIRDWATCHING



DESTINATION - CHILDREN'S NATURE PLAY

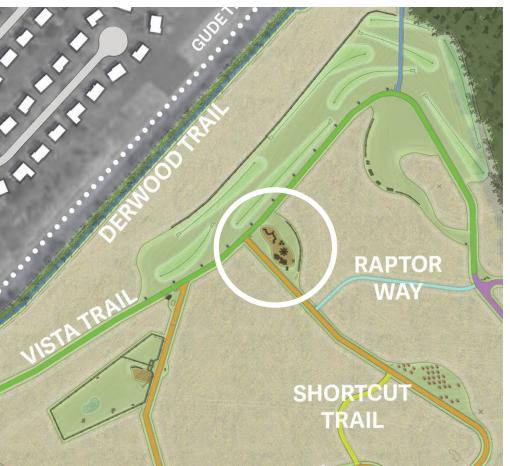


PLAN





- Designated Area
- Maintained Lawn / Mulched Area
- Easy to Access /High visibility
- Nature Inspired Play Elements
- Encourages Exploration
- Children Curate their Own Play Experience









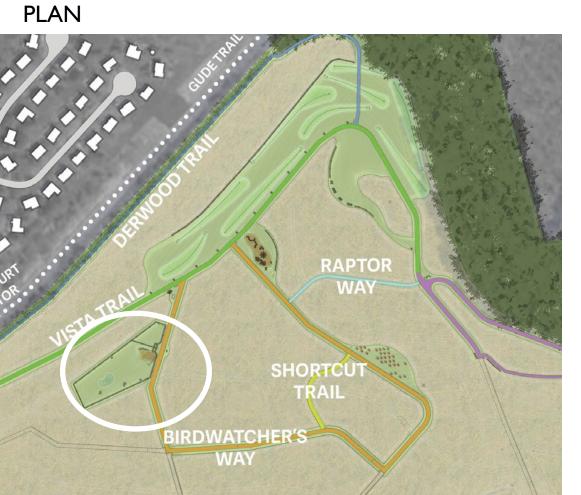
CHILDREN'S NATURE PLAY - VISUALIZATION



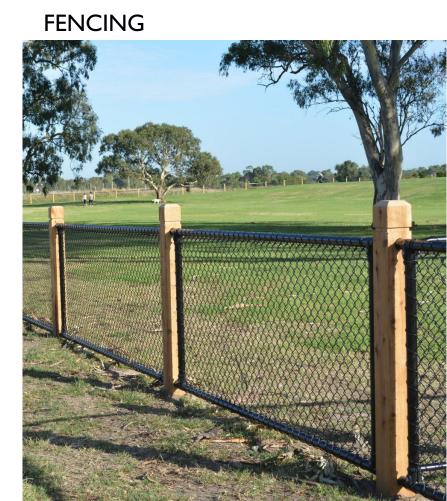
DESTINATION - DOG PLAY OFF LEASH



- Designated Area
- Fenced /Enclosed Space
- Maintained Lawn /Short Meadow
- Supervised /Off Leash Play
- Double Gated Entrance
- Separate Areas for Large and Small Dogs







DESTINATION - DISC GOLF



- Designated Area
- 9-hole Course
- Maintained Lawn /Short Meadow







HABITAT CREATION and ENVIRONMENTAL AWARENESS



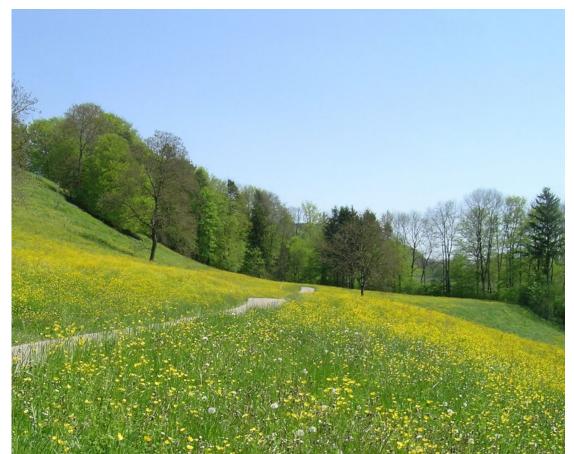


- Open Field
- Native Meadow Planting
- Avian Habitat /Bird Nesting Boxes
- Educational Signage

EDUCATIONAL SIGNAGE



NATIVE MEADOW



AVIAN HABITAT



WAYSTATIONS and ENVIRONMENTAL EDUCATION





Waystation #I - Evolution of the Landfill

Waystation #2 - Weather Station

Waystation #3 - Pollinator Habitat

Waystation #4 - Avian Habitat

Elements included at waystations:

- Trail marker and directional signage
- Wayfinding map
- Educational signage
- Seating

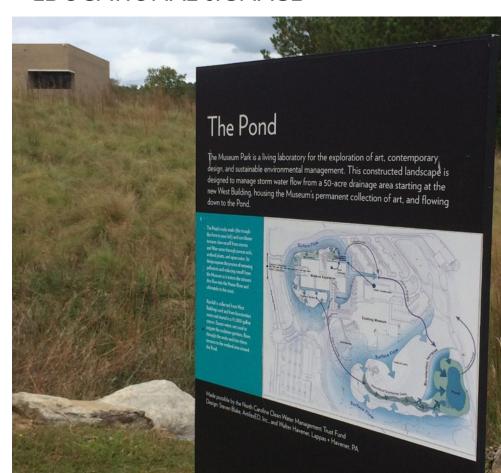
ENVIRONMENTAL ART



SEATING



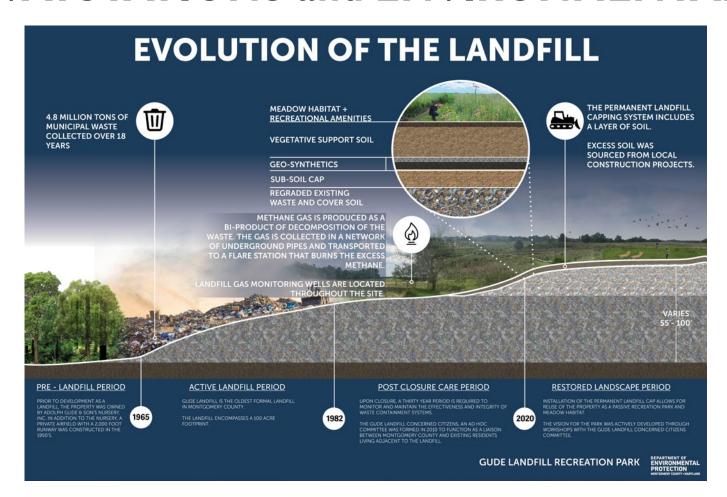
EDUCATIONAL SIGNAGE

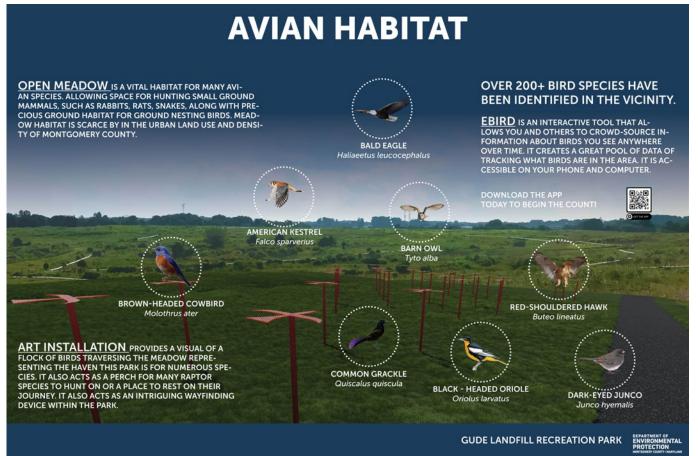


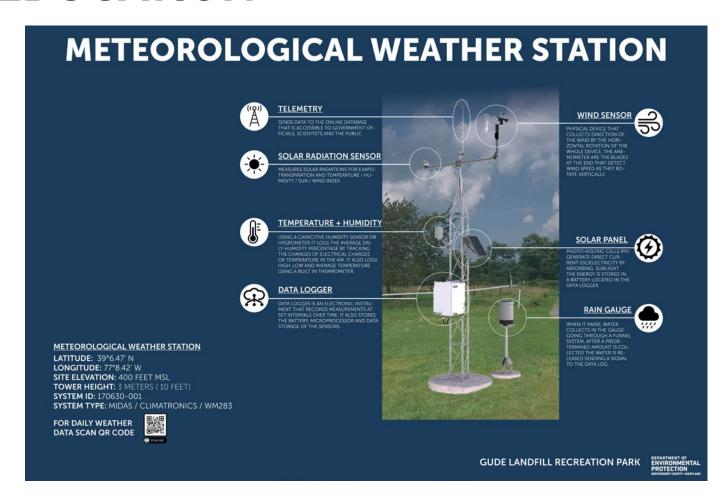
RECREATION TRAIL AND WAYSTATION - VISUALIZATION

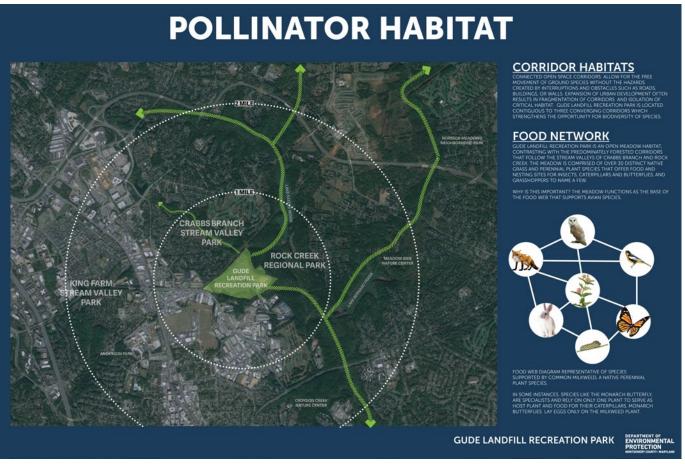


WAYSTATIONS and ENVIRONMENTAL EDUCATION









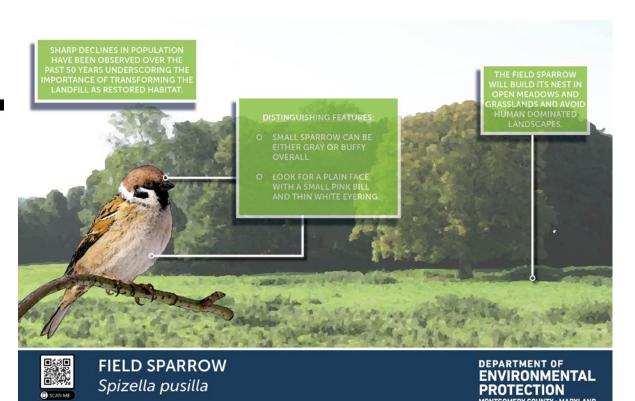
ENVIRONMENTAL ART - VISUALIZATION



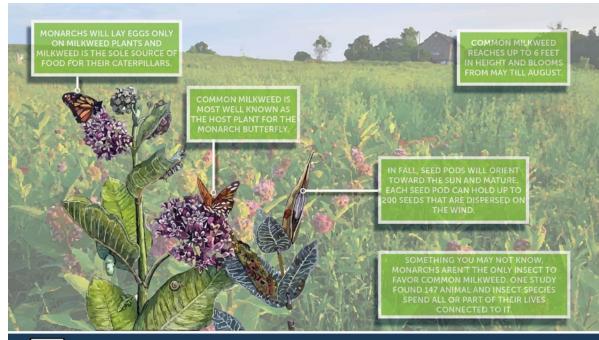
ENVIRONMENTAL EDUCATION

6 AVIAN SPECIES

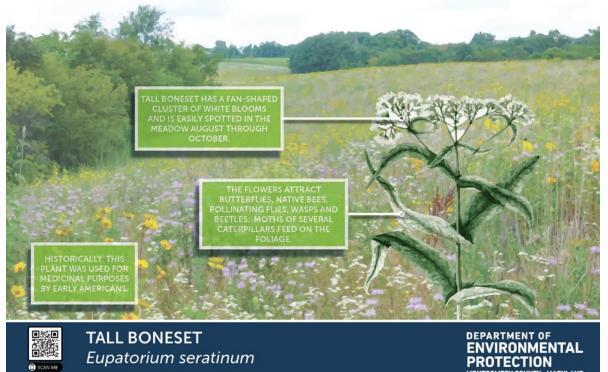




6 FLORA SPECIES







Eupatorium seratinum

SIGNAGE TYPOLOGY 10 foot 9 foot 8 foot 7 foot **GUDE LANDFILL** 6 foot 5 foot 4 foot 3 foot 2 foot I foot

DISC GOLFTEE POST EDUCATION POST

DIRECTIONAL SIGN POST

INFORMATION SIGN (SMALL)

INFORMATION SIGN (LARGE) EDUCATION SIGN

TRAIL MARKER

DESTINATIONS



ACCESS POINT



DOG PLAY



HIGH POINT OVERLOOK



DISC GOLF

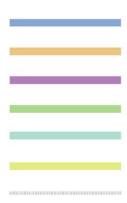


CHILDREN'S PLAY



ART INSTALLATION

TRAILS



DERWOOD TRAIL BIRDWATCHER'S WAY POLLINATOR LOOP VISTA TRAIL RAPTOR WAY SHORTCUT TRAIL SERVICE ROAD (NO ACCESS)



ANTICIPATED IMPLEMENTATION SCHEDULE

	2020	2021	2022	2023	2024	2025	2025	2025
Project Phase	Q1 Q2 Q3 Q4							
Landfill Cap Design and Permitting								
Procurement Activities for Construction								
Landfill Cap Construction								
Landfill Cap Maintenance*								

^{*}Maintenance of the cap will continue in perpetuity

NO SHADING: NO SITE ACTIVITY

ORANGE SHADING: CONSTRUCTION

GREEN SHADING: CONSTRUCTION COMPLETE





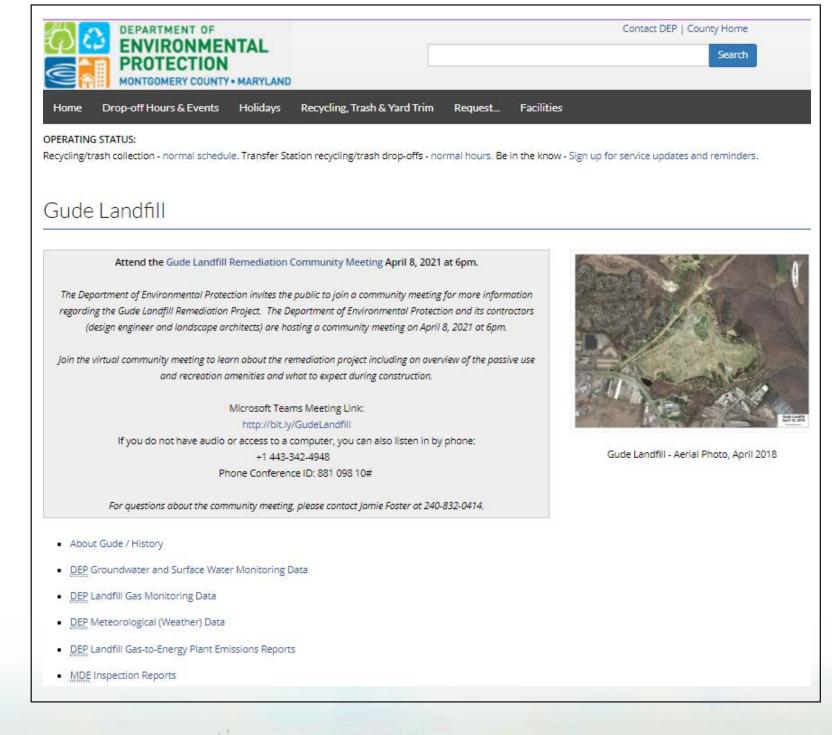






ONGOING COMMUNITY ENGAGEMENT

- GLCC/DEP Meetings
- DEP will continue to present documents to the community at principal milestones
- DEP will continue to post documents to the remediation web page









COUNTY CONTACTS & INFORMATION

- Jamie Foster County Project Manager
 - Senior Engineer, RRMD
 - 240-777-6574; Jamie.Foster@montgomerycountymd.gov
- Gude Landfill Remediation Web page
 - http://www.montgomerycountymd.gov/sws/facilities/gude/
- For any concerns or questions during construction:
 - 240-777-0311









