RATIONALE FOR MODIFICATION AND REISSUANCE
Greenway Environmental Services, LLC
Green Meadow Sustainable Solutions Landfill
Solid Waste Permit No. SW0320040549
Jefferson County, Mississippi

I. FACILITY INFORMATION

Facility Name:	Green Meadow Sustainable Solutions Landfill
Facility Owner:	Greenway Environmental Services, LLC
Facility Address:	4451 Highway 61 North Fayette, MS 39069
Permit No.:	SW0320040549
SIC Code:	4953
Permit Writer:	Charity Rockingham
Waste Division:	Solid Waste Permitting Branch

II. NATURE OF BUSINESS AND CURRENT CONDITIONS

The Green Meadow Sustainable Solutions Landfill owned by Greenway Environmental Services, LLC is currently permitted to operate a municipal solid waste management disposal facility at the referenced location. The Green Meadow Landfill (Solid Waste Management Permit No. SW0320040549) was originally permitted in June 1995 by Southern Landfill Management, Inc. as the Jefferson County Sanitary Landfill for the disposal of nonhazardous solid wastes from municipal, commercial, and industrial sources. The Jefferson County Sanitary Landfill was originally provided with the solid waste permit number SW03201A0083. The permit was transferred on August 9, 2011, to Riverbend Environmental Services, LLC and was issued the current solid waste permit number, SW0320040549. Riverbend operated the site as the Riverbend Landfill until it filed for bankruptcy. On July 31, 2021, the solid waste permit was transferred to its current owner, Greenway Environmental Services, LLC.

III. PROPOSED PERMITTING ACTION

Greenway Environmental Services, LLC has submitted an application for the modification and renewal of the solid waste permit for the Green Meadow Sustainable Solutions Landfill. The proposed modification would relocate portions of the undeveloped, permitted disposal area within the approximately 386.01-acre property. More specifically, the landfill is being redesigned to remove approximately 49 approved, but unused, disposal acres from the western and northwestern portions of the previously permitted footprint and add approximately 48 new disposal acres to the east and southeastern side of the existing landfill. The total permitted disposal area would be reduced from approximately 162 acres to approximately 160.4 acres. Approximately 40.04 acres of the disposal area have been constructed and approximately 120.33 acres remain undeveloped. The proposed action would also include revised final elevations, including maximum final elevations of 472

feet above mean sea level for the northern area and 360 feet above mean sea level for the southern area, and would authorize a solidification basin for the management of certain nonhazardous liquid or wet wastes prior to disposal. The solid waste permit would be renewed for a 10-year period.

IV. LOCATION INFORMATION AND ACCESS ROUTES

The Green Meadow Sustainable Solutions Landfill is located at 4451 Highway 61 North, Fayette, Mississippi, 39069. The landfill is north and west of and adjacent to U.S. Highway 61 South in Jefferson County, Mississippi approximately 6.6 miles southwest of Fayette, Mississippi. The total property, owned by Greenway Environmental Services LLC, consists of 386.01 acres located in parts of Sections 29, 30, 44, 46, and 69, Township 8N, Range 1 East in Jefferson County, Mississippi. Access to the facility is limited to the main gate along U.S. Highway 61South. The approximate GPS coordinates for the main entrance are 31.6532° N, 91.1435° W.

V. LOCAL SOLID WASTE PLANNING AND ZONING INFORMATION

The Jefferson County Solid Waste Management Plan (Plan) was adopted on August 18, 2014, and recognizes up to 162 acres for the permitted disposal of solid waste for the landfill. The Mississippi Commission on Environmental Quality (Commission) issued Administrative Order 6572 15 approving the plan on September 22, 2015.

The Jefferson County Board of Supervisors provided a letter dated August 4, 2025, confirming that the facility is in compliance with local zoning, land use and other laws, regulations, and ordinances, as well as being in compliance with the County's approved Solid Waste Management Plan.

VI. APPROVED SERVICE AREA AND WASTE ACCEPTANCE

The 2014 Jefferson County Solid Waste Management Plan, as approved by the Jefferson County Board of Supervisors, includes a service area for the landfill which includes Jefferson County as well as the continental United States of America. The applicant estimates an average incoming waste volume of the facility to be approximately X tons per day during a typical X-day work week.

VII. SITING CRITERIA

Rule 1.3.L.1 of the Mississippi Nonhazardous Solid Waste Management Regulations (Regulations) requires that landfills be located where adequate naturally occurring geological materials present of low permeability to act as a buffer between the base of the landfill liner and the top of the uppermost aquifer. Such materials shall generally consist of clays, silty clays, clayey silts, or other soils which have an average hydraulic conductivity of 1×10^{-6} cm/sec or less. The thickness, or depth, of these materials shall extend to at least five feet immediately beneath the base of the landfill liner. The proposed

redesign and relocation of certain disposal areas and site topography require that fill materials be placed in order to meet design grades. Greenway petitioned the Commission on Environmental Quality on June 6, 2025 and received a variance to this siting criteria, which allows them to construct geologic buffer where needed to meet desired design grades or in areas where natural materials do not meet specifications. All areas of the landfill will have a natural or constructed landfill buffer that will meet or exceed the buffer conditions required by Regulations.

Rule 1.3.T.1.d of the Regulations requires that, for landfills, the setback distance from the property line to the disposal area shall be at least 500 feet, except where adequate on-site screening, whether natural or artificial, will restrict the offsite view of the landfill, in which case the setback shall be no less than 250 feet. As allowed by the regulation, the applicant has requested this reduction in property line setback distance on the northern, southern and eastern boundaries be approved under the assertion that there is suitable onsite natural visual screening present and/or will be constructed to support the proposed reduction. The proposed setback distances from the property lines to the disposal areas are as follows: North – 250 feet; South - 250 feet; East - 250 feet, and West - >500 feet.

Rule 1.3.X (Noise Factors) of the Regulations requires that, to attenuate for noise, no new landfill or new outdoor processing facility shall be located closer than 1500 feet of a single family dwelling unit, and no new rubbish site, new indoor processing facility, or lateral expansions of any such facilities shall be located closer than 500 feet of a single family dwelling unit unless: (1) the owner of such dwelling provides written consent to a smaller distance; or (2) the applicant can demonstrate that the facility will be located, configured, designed, constructed, and operated such that the noise level at the neighboring dwelling, caused by the normal waste management operations of the facility, but not by vehicular movement into or out of the facility, will not exceed an eight-hour time weighted average (TWA) of 65 decibels between the hours of 7 a.m. and 7 p.m., and an eight-hour TWA of 55 decibels between 7 p.m. and 7 a.m.. The landfill disposal area boundary will be located within approximately 580 feet of an occupied single-family dwelling unit therefore a noise study was conducted to determine if anticipated noise levels will be in compliance with the Regulations. The noise study concluded that no 8-hour time-weighted average (TWA) period would exceed the regulatory threshold established in the Regulations.

No other variances to the Mississippi Nonhazardous Solid Waste Management Regulations are proposed for the new disposal areas. The applicant has demonstrated compliance with all other applicable siting criteria including setbacks and siting requirements relative to surface waters, wetlands, endangered species, historical properties, and other locational requirements.

VIII. SITE GEOLOGICAL AND HYDROGEOLOGICAL INFORMATION

The shallow subsurface of the site, from approximately 200 feet beneath to the surface, is comprised of sediments in ascending chronological order including the undifferentiated Miocene Series, Pleistocene Series, and more recent geologic deposits. The older

undifferentiated Miocene sediments include beds of clay with minor discontinuous sand lenses. A more continuous sand body within the undifferentiated Miocene sediments is located at depth with the overlying clay-underlying sand contact being encountered at depths ranging from approximately 290 to 208 feet msl. This sand body is designated as the Point-of Compliance aquifer for groundwater monitoring at the site. Loess of the Pleistocene Series was deposited above the undifferentiated Miocene sediments with this contact being considered a geologic disconformity due to the erosional contact at that boundary. Loess is located above the undifferentiated Miocene sediments and was deposited as a result of aeolian forces transporting glacially derived sediments south. The thickness of the loess has been documented to be between 5 and 28 feet thick at the site. Concurrently and since, the site has been subject to atmospheric conditions and has significantly eroded depositing site -derived sediments in erosional features at the site. The geologic investigation revealed that a continuous in-situ natural geologic buffer as required by regulations is not present across the proposed disposal area. Additional geologic buffer will be constructed as disposal cells are constructed.

Numerous geologic investigations and site characterizations have been completed at the site during the initial permitting of the site as well as during re-permitting of the site. To date, 56 soil borings, 21 hand augers, five cone penetrometer tomography survey transects, and five groundwater monitor wells have been completed, providing significant geologic data for both environmental as well as engineering support, substantiating portions of the permit application.

Geotechnical engineering data derived from soil samples collected during the subsurface investigations have provided information necessary for design and construction of future disposal cells at the site. Numerous Atterberg limits, including liquid and plastic limits, moisture content, and soil permeabilities have been completed to support these design and construction activities. The hydraulic conductivity (soil permeability) of the confining clay unit has been measured and reported to range between 1.22×10^{-6} centimeters per second (cm/sec) to 1.6×10^{-9} cm/sec.

Minor seasonal perched groundwater has been detected at shallow depths in a couple of soil borings. This groundwater may seep out of the subsurface in occasion providing surface water runoff. Construction quality assurance and quality control (CQA/QC) measures address the mitigation of this potential problem.

Groundwater within the Point-of-Compliance aquifer has been detected as previously mentioned in a sand body within the undifferentiated Miocene sediments at elevations ranging from approximately 192 feet to 171 feet msl. Apparent groundwater flows from northeast to southwest beneath the site. The hydraulic gradient for the Point-of Compliance aquifer at the site will vary but was calculated to be approximately 3.7×10^{-3} (unit less).

Currently, five groundwater monitoring wells are installed at the site in the Point-of Compliance aquifer and are being monitored, sampled, and reported on a semi-annual basis. Groundwater collected from monitor wells, as well as trip and field blanks, are

analyzed for Appendix I Constituents, including volatile organic compounds and select metals. As the proposed modified disposal footprint is developed, additional groundwater monitor wells will be installed overtime and will be included into the groundwater monitoring network.

IX. CONSTRUCTED COMPOSITE LINER SYSTEM:

The design for the liner system at the Landfill, including the proposed modified permit disposal area, is in accordance with the Mississippi Nonhazardous Solid Waste Management Regulations for municipal solid waste landfills. The composite liner system will be constructed above five feet of natural buffer exhibiting a permeability of 1 x 10^{-6}cm/sec or less and/or three feet of constructed buffer exhibiting a permeability of 1 x 10^{-7}cm/sec or less. The liner system will consist of 24 inches of compacted clay that must be constructed to the federal and state permeability standard ($k \leq 1 \times 10^{-7}$ cm/sec). The permeability of a soil layer is the rate at which liquids move through the soil. A 60 mil HDPE geomembrane liner will be placed over the constructed clay liner material, followed by 18" of a granular collection media and associated leachate piping and appurtenances.

The draft permit requires that a quality assurance construction report developed by a third-party engineer be provided to MDEQ demonstrating that the liner system has been constructed in accordance with the approved design plans prior to waste acceptance. MDEQ will also monitor the liner construction activity.

X. FACILITY HOURS OF OPERATION AND SITE SECURITY

The application indicates that the standard operating hours for the landfill for receiving waste will be Monday through Friday, 6:30 AM to 4:30 PM, and on Saturday from 6:00 AM to 12:00 PM, as necessary. Situations requiring the landfill to operate beyond normal hours include but are not limited to the following: an influx of waste received due to natural disasters and emergency circumstances, short duration surges or increases in waste volumes which cannot be accommodated during normal operating hours, and delays in the receipt of wastes receiving due to the inclement weather and on-site complications. The site operator and/or attendants will be there anytime the gated entrance is unlocked.

XV. WASTE ACCEPTANCE

The proposed landfill permit would allow the landfill to continue to accept and dispose of various nonhazardous solid wastes from residential, commercial, industrial, institutional and other approved sources from within the approved service area. The applicant estimates that the current disposal rate averages approximately 600 tons per day. The disposal rate is anticipated to reach up to 1,500 tons per day with continued market expansion over time.

XI. WASTE COVER SCHEDULE

By regulation the permittee is required to cover all waste in the working face of the disposal

area with a minimum of six inches of earthen cover at the end of every working day. The permittee has proposed using an alternate daily cover in lieu of an earthen cover at times. The alternate daily cover proposed includes the use of a tarp to cover the waste at the working face and/or a spray-on cover system which includes the use of a blend of clay binders, reinforcing fibers, and polymers that, when mixed with water hardens, producing a stucco type material. When using ADC, the site must receive six inches of earthen cover at least once per week.

XII. FINAL COVER SYSTEM

A final cover system must be constructed in accordance with State and Federal Regulations and the approved closure plan. An updated closure plan describing the final cover system must be submitted and approved by MDEQ prior to beginning final closure activities.

The final cover system will be developed with no more than 25% side slopes (with storm water benches) and a top cap with minimum of 4% slopes. Design drawings submitted with the permit application indicate a final height of 351 feet above mean sea level (msl) for the Phase 1 area and a final height of 472 feet msl for the Phase II area. The proposed final heights are supported by a slope stability study that provides calculated Factor of Safeties ranging from 1.510 to 1.899 when a 4H:1V slope is maintained.

Two closure plans, referred to as Final Cover Option A and Final Cover Option B in the permit application, have been proposed in the permit application, with both options meeting or exceeding the intent of regulatory closure system requirements. An alternate closure system may be considered by the Department subsequent to this permit.

XIII. MONITORING SYSTEMS

Groundwater Monitoring

The landfill permit requires that a groundwater monitoring system be installed and monitored. The current monitoring system includes groundwater monitoring wells, groundwater sampling protocols, and a data quality assurance plan. Currently, a system of five groundwater monitoring wells (MW-1, MW-2, MW-3, MW-4, and MW-5) have been installed, and background data has been collected and provided to MDEQ prior to wastes being received at the landfill. One of these groundwater monitoring wells, MW-4, will be plugged and abandoned due to the proposed location of an additional sedimentation basin being constructed in that area. This monitoring well (MW-4) will be replaced by MW-4R. Six groundwater monitoring wells, MW-6 through MW-11, will be constructed adjacent to the proposed future expansion area as the development of the landfill progresses. Groundwater from these wells will be sampled, analyzed, and the analytical results reported semiannually to MDEQ. Additionally, a statistical program will be used to determine if a statistically significant increase of any of the analytical constituents occurs over time.

Methane Monitoring

The landfill permit requires that a methane monitoring system be installed to monitor for any potential migration of methane gas from the site. The permit application identifies two (2) existing methane monitoring wells. Additional methane monitoring wells will be installed in phases as landfill development progresses, with proposed locations shown on Drawing 19 of the design drawings. Methane monitoring will be conducted on a quarterly basis.

XVI. FINANCIAL ASSURANCE

Prior to waste acceptance, Greenway Environmental Services, LLC, is required to establish adequate financial assurance for the estimated closure and post-closure costs of the landfill as required by the draft permit and Rule 1.4.F of the Mississippi Nonhazardous Solid Waste Management Regulations. The financial assurance must be based on third party cost estimates for the closure and post closure care of the landfill and must be approved by MDEQ. The approved financial assurance mechanism must be maintained and updated annually for the life of the facility and through the 30-year post-closure period.

XVII. DISCLOSURE STATEMENT

In accordance with State Law, the applicant has filed an updated disclosure statement describing the company's structure, key officers and members, other affiliated businesses and any civil or criminal violations. The MDEQ Legal Division reviewed the updated 2025 disclosure statement and determined it to be complete on January 21, 2026.

XVIII. FACILITY CONTACT INFORMATION

Mr. Jesse Stallone, CEO/Operations Manager
4451 Highway 61
Fayette, MS 39069
Facility Phone Number: 601-215-4704

XIX. OPERATOR CERTIFICATION

Green Meadow Sustainable Solutions Landfill is required to employ a person to manage site operations who possesses a Certificate of Competency as a Commercial Solid Waste Landfill Operator in accordance with Rule 1.4.B.(20) of the Mississippi Nonhazardous Solid Waste Management Regulations. In order to obtain a certificate of competency as a landfill operator, a person must demonstrate a level of proficiency and must meet minimum state requirements for experience, education, and training. The company must maintain a properly certified and trained person to manage operations throughout the life of the landfill. Currently, Mr. Jesse Stallone, Certification Number LF-02-95-003, is the certified operator for the disposal facility.

XX. OTHER ENVIRONMENTAL ISSUES

The currently active permits for the landfill include National Pollutant Discharge Elimination System (NPDES) Permit No. MSS061514 for storm water management and discharge; Air Permit to Construct and Title V Air Operating Permit No. 1320-00019 for air emissions controls from the landfill; and Water Quality Certification WQC2006004 for impacts to wetlands and the rerouting of streams on the landfill property. The NPDES storm water permit is being reissued concurrently with the proposed landfill expansion and future development of the disposal area. Title V Air Permit No. 1320-00019 is being renewed concurrently with the proposed landfill expansion and continued landfill operations. The pretreatment permit is also being reissued concurrently and would authorize a proposed maximum process wastewater flowrate of 0.072 million gallons per day (MGD), increased from the current permitted maximum of 0.024 MGD.

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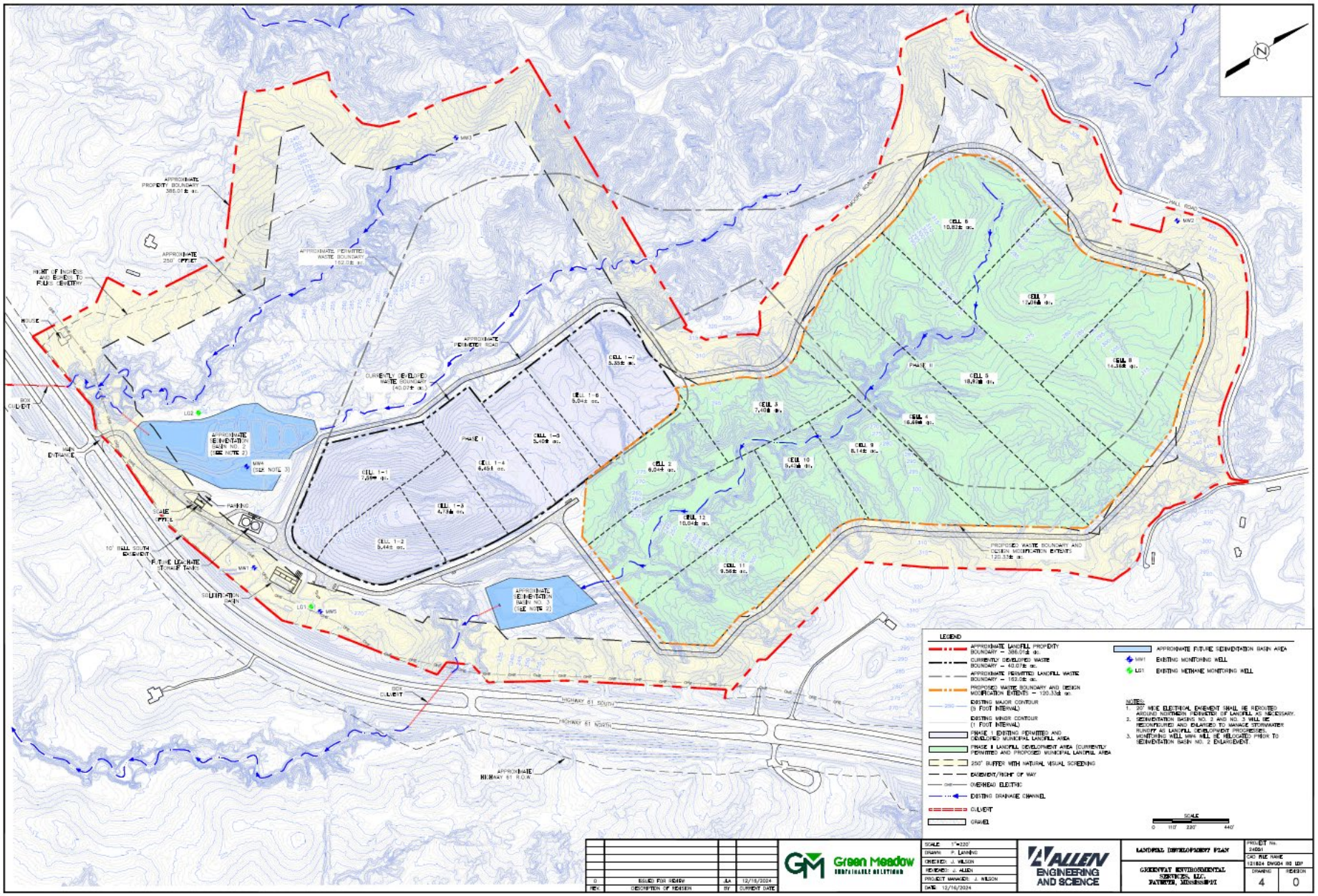

APPROXIMATE PROPERTY BOUNDARY 386.01± ac.
APPROXIMATE 250' OFFSET
RIGHT OF INGRESS AND EGRESS TO FOLKS CEMETERY
HOUSE
BOX CULVERT
MAIN ENTRANCE
APPROXIMATE PERMITTED WASTE BOUNDARY 162.0± ac.
APPROXIMATE PERIMETER ROAD
CURRENTLY DEVELOPED WASTE BOUNDARY (40.07± ac.)
APPROXIMATE SEDIMENTATION BASIN NO. 2 (SEE NOTE 2)
MW4 (SEE NOTE 3)
LG2
PARKING
SCALE OFFICE
10' BELL SOUTH EASEMENT
FUTURE LEACHATE STORAGE TANKS
MW1
SOLIDIFICATION BASIN
LG1
MW5
BOX CULVERT
APPROXIMATE SEDIMENTATION BASIN NO. 3 (SEE NOTE 2)
HIGHWAY 61 SOUTH
HIGHWAY 61 NORTH
APPROXIMATE HIGHWAY 61 R.O.W.
MW3
MW2
HALL ROAD
MOORE ROAD
PHASE I
PHASE II
CELL 1-1 7.69± ac.
CELL 1-2 5.44± ac.
CELL 1-3 4.73± ac.
CELL 1-4 6.45± ac.
CELL 1-5 5.40± ac.
CELL 1-6 5.04± ac.
CELL 1-7 5.33± ac.
CELL 2 6.04± ac.
CELL 3 7.40± ac.
CELL 4 16.69± ac.
CELL 5 18.92± ac.
CELL 6 10.82± ac.
CELL 7 17.06± ac.
CELL 8 14.36± ac.
CELL 9 8.14± ac.
CELL 10 5.42± ac.
CELL 11 9.56± ac.
CELL 12 10.04± ac.
PROPOSED WASTE BOUNDARY AND DESIGN MODIFICATION EXTENTS 120.33± ac.
LEGEND
APPROXIMATE LANDFILL PROPERTY BOUNDARY – 386.01± ac.
CURRENTLY DEVELOPED WASTE BOUNDARY – 40.07± ac.
APPROXIMATE PERMITTED LANDFILL WASTE BOUNDARY – 162.0± ac.
PROPOSED WASTE BOUNDARY AND DESIGN MODIFICATION EXTENTS – 120.33± ac.
EXISTING MAJOR CONTOUR (5 FOOT INTERVAL)
EXISTING MINOR CONTOUR (1 FOOT INTERVAL)
PHASE I EXISTING PERMITTED AND DEVELOPED MUNICIPAL LANDFILL AREA
PHASE II LANDFILL DEVELOPMENT AREA (CURRENTLY PERMITTED AND PROPOSED MUNICIPAL LANDFILL AREA
250' BUFFER WITH NATURAL VISUAL SCREENING
EASEMENT/RIGHT OF WAY
OVERHEAD ELECTRIC
EXISTING DRAINAGE CHANNEL
CULVERT
GRAVEL
APPROXIMATE FUTURE SEDIMENTATION BASIN AREA
MW1 EXISTING MONITORING WELL
LG1 EXISTING METHANE MONITORING WELL
NOTES:
1. 20' WIDE ELECTRICAL EASEMENT SHALL BE REROUTED AROUND NORTHERN PERIMETER OF LANDFILL AS NECESSARY.
2. SEDIMENTATION BASINS NO. 2 AND NO. 3 WILL BE RECONFIGURED AND ENLARGED TO MANAGE STORMWATER RUNOFF AS LANDFILL DEVELOPMENT PROGRESSES.
3. MONITORING WELL MW4 WILL BE RELOCATED PRIOR TO SEDIMENTATION BASIN NO. 2 ENLARGEMENT.
SCALE
0 110' 220' 440'
0 ISSUED FOR REVIEW JLA 12/16/2024
REV. DESCRIPTION OF REVISION BY CURRENT DATE
Green Meadow
SUSTAINABLE SOLUTIONS
SCALE: 1"=220'
DRAWN: P. LANNING
CHECKED: J. WILSON
REVIEWED: J. ALLEN
PROJECT MANAGER: J. WILSON
DATE: 12/16/2024
ALLEN ENGINEERING AND SCIENCE
LANDFILL DEVELOPMENT PLAN
GREENWAY ENVIRONMENTAL SERVICES, LLC.
FAYETTE, MISSISSIPPI
PROJECT No. 24051
CAD FILE NAME 121824 DWG04 R0 LDP
DRAWING 4
REVISION 0