2025 PARTIAL CLOSURE CONSTRUCTION MATLOCK BEND LANDFILL FOR REPUBLIC SERVICES, INC.



OWNER/OPERATOR

REPUBLIC SERVICES, INC. CONTACT: HOLLY VAN KIRK (ENV. MANAGER) 750 E JEFFERSON PIKE MURFREESBORO, TN 37130 (615) 956-9277

SITE ADDRESS

21712 HIGHWAY 72 NORTH LOUDON, TN 37774 (865) 458-2651

ISSUED FOR BID

2025-02-07	ISSUED FOR BID	ALL
DATE	DESCRIPTION	SHEETS

REVISION HISTORY



PROJECT SITE LOCATION SCALE: 1" = 1 MILE



HODGES, HARBIN, NEWBERRY & TRIBBLE, INC.

3920 ARKWRIGHT ROAD, SUITE 101 MACON, GEORGIA 31210 (478) 743-7175 © Republic Services, Inc. (2025)

EXISTING 10' CONTOUR	
EXISTING TREELINE	
EXISTING ROAD	
PROPERTY LINE	
PROPERTY BUFFER	
EXISTING CELL BOUNDARY	
EXISTING GROUND WATER MONITORING POINT	GWA-6
BENCHMARK	🔘 ВМ 1
EXISTING STORM DIVERSION BERM	
EXISTING STORM DOWNDRAIN	
EXISTING STORM DRAINAGE PIPE	
EXISTING LEACHATE CLEANOUT	\bigcirc
PROPOSED LIMITS OF CLOSURE	
PROPOSED TEMPORARY EDGE OF LINER	
PROPOSED 2' CONTOUR	
PROPOSED 10' CONTOUR	
PROPOSED STORM PERIMETER CHANNEL	
PROPOSED FINAL COVER TACK-ON BENCH	→
PROPOSED STORM LET-DOWN CHANNEL	
PROPOSED STORMWATER PIPE	
PROPOSED OUTFALL STRUCTURE	
PROPOSED GAS EXTRACTION WELL	🔶 EW-54

INDEX TO DRAWINGS

<u>SHEET NO</u> .	DESCRIPTION
-	TITLE SHEET
1	OVERALL EXISTING CONDITIONS
2	EXISTING CONDITIONS
3	TOP OF FINAL COVER GRADING PLAN
4	LANDFILL GAS SYSTEM PLAN
5	FINAL DRAINAGE PLAN
6	EROSION CONTROL PLAN
7-10	CONSTRUCTION DETAILS
11-12	SEDIMENT BASIN 2 IMPROVEMENTS
13	INITIAL BORROW AREA BASIN

SHEET NOTES:

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- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD LOCATING AND UNCOVERING EDGE OF EXISTING BOTTOM LINER FOR ALL PROPOSED TIE-IN LOCATIONS. ANY DISCREPANCIES FOUND WHILE UNCOVERING THE EXISTING LINER SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY.
- 2. CONTRACTOR SHALL USE EXTREME CARE TO ENSURE THERE IS NO DAMAGE TO EXISTING BASE LINER, LEACHATE COLLECTION SYSTEM, GROUNDWATER WELLS, METHANE PROBES, AND STORMWATER STRUCTURES DURING CONSTRUCTION.
- DESIGN MODIFICATIONS TO THE LANDFILL GAS SYSTEM WITHIN THE CLOSURE AREA TO BE PROVIDED BY OTHERS.
- . CONTRACTOR IS RESPONSIBLE FOR CONTINUOUSLY PROTECTING WORK FROM STORMWATER IMPACTS, INCLUDING MAINTENANCE OF EXISTING CONTROLS AND INSTALLATION OF NEW CONTROL MEASURES. ALL PROPOSED IMPROVEMENTS SHOWN ON THESE DRAWINGS SHALL BE CONSIDERED THE MINIMUM REQUIRED.

APPROXIMATE LOCATION-OF EXISTING LEACHATE CLEANOUT (TYP.)

Ling"

EDGE OF EXISTING BOTTOM LINER-LOCATION IS APPROXIMATE AND TO BE FIELD LOCATED BY THE CONTRACTOR

> ACCESS ROAD FROM EXISTING SCALEHOUSE

PROPERTY LINE (TYP.)





GENERAL NOTES:

- 1. EXISTING TOPOGRAPHICAL INFORMATION INSIDE THE PROPERTY LINE TAKEN FROM AN AERIAL SURVEY PROVIDED BY FIRMATEK, DATED 12-13-2024. EXISTING TOPOGRAPHICAL INFORMATION OUTSIDE THE PROPERTY LINE TAKEN FROM AN AERIAL SURVEY PROVIDED BY FIRMATEK, DATED 10-23-2024.
- EXISTING 24" STORMWATER PIPE SIZE AND LOCATION PROVIDED BY REPUBLIC SERVICES IN A FILE ENTITLED "LOUDONCOUNTYLF-11-5-24.csv".
- EXISTING 36" STORMWATER PIPE SIZE AND LOCATION TAKEN FROM THE APPROVED PERMIT PLANS IN A DRAWING ENTITLED "317474-SW03-P230-P-STORMWATER MANAGEMENT" BY CEC, INC.
- THE EDGE OF EXISTING BOTTOM LINER SHOWN ON THESE PLANS IS APPROXIMATE AND SHALL BE FIELD LOCATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE SURVEY INFORMATION ON THE BOTTOM LINER ANCHOR TRENCH TO THE ENGINEER FOR REVIEW PRIOR TO CLOSURE GRADING ACTIVITIES. THE ANCHOR TRENCH SHALL BE LOCATED AT MAXIMUM 100' INTERVALS.
- THE DESIGN / ENGINEERING WORK SHOWN ON THIS SHEET IS EXCLUSIVELY BASED ON THE TOPOGRAPHY, EXISTING CONDITIONS, OR DESIGNS BY OTHERS AS REFERENCED. SHOULD ANY OF THE EXISTING CONDITIONS OR TOPOGRAPHY BE FOUND TO BE DIFFERENT OR CHANGED, THE DESIGN ENGINEER THAT PREPARED THIS PLAN SHOULD BE CONTACTED PRIOR TO CONSTRUCTING / IMPLEMENTING THIS DESIGN, AND TO DETERMINE IF DESIGN REVISIONS ARE REQUIRED.
- 6. THE ENGINEER THAT PREPARED THIS DRAWING HAS ASSUMED THAT THE CONSTRUCTION WILL BE PERFORMED IN ACCORDANCE WITH THE ENGINEERING INTENT AND COMPLETE CONSTRUCTION SPECIFICATIONS WILL BE PREPARED TO ACCOMPANY THE DRAWINGS. THE ENGINEER EXPECTS THAT HE WILL BE INVOLVED WITH, PROVIDED AN OPPORTUNITY TO REVIEW, AND INSPECT PRODUCTS AND CONSTRUCTION OF THE IMPROVEMENTS SHOWN ON THIS PLAN SHEET IN ORDER TO CONFIRM THAT THE CONSTRUCTION OF THE IMPROVEMENTS ARE INSTALLED IN ACCORDANCE WITH DESIGN CONCEPTS. SHOULD THE DESIGN ENGINEER NOT BE INVOLVED WITH CONSTRUCTION, HE WILL NOT BE LIABLE FOR CHANGES IN CONDITIONS OR FIELD CONDITIONS THAT MAY AFFECT THE DESIGN.

SHEET NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD LOCATING AND UNCOVERING EDGE OF EXISTING BOTTOM LINER FOR ALL PROPOSED TIE-IN LOCATIONS. ANY DISCREPANCIES FOUND WHILE UNCOVERING THE EXISTING LINER SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY.
- CONTRACTOR SHALL USE EXTREME CARE TO ENSURE THERE IS NO DAMAGE TO EXISTING BASE LINER, LEACHATE COLLECTION SYSTEM, GROUNDWATER WELLS, METHANE PROBES, AND STORMWATER STRUCTURES DURING CONSTRUCTION.
- DESIGN MODIFICATIONS TO THE LANDFILL GAS SYSTEM WITHIN THE CLOSURE AREA TO BE PROVIDED BY OTHERS.
- CONTRACTOR IS RESPONSIBLE FOR CONTINUOUSLY PROTECTING WORK FROM STORMWATER IMPACTS, INCLUDING MAINTENANCE OF EXISTING CONTROLS AND INSTALLATION OF NEW CONTROL MEASURES. ALL PROPOSED IMPROVEMENTS SHOWN ON THESE DRAWINGS SHALL BE CONSIDERED THE MINIMUM REQUIRED.

BM NO.	NORTHING	EASTING	ELEV.
6	497448.00	2471943.27	997.46
21	497772.83	2471868.18	997.79

*CONTRACTOR TO CONFIRM SURVEY CONTROL AND PROVIDE TEMPORARY CONTROL AS NEEDED.

ISSUED FOR BID GRAPHIC SCALE IN FEET EXISTING CONDITIONS 2025 PARTIAL CLOSURE CONSTRUCTION MATLOCK BEND LANDFILL FOR **REPUBLIC SERVICES, INC.** LOUDON COUNTY, TENNESSEE 3920 ARKWRIGHT RD. - ENVIRONMENTAL CONSULTANTS -SUITE 101

6703-1217-01 1" = 80'

FEBRUARY 2025

HODGES, HARBIN, NEWBERRY & TRIBBLE, INC. MACON, GEORGIA 31210 MB-2025 CLOSURE_BASE.DWG EDIT 02-07-2025 2 OF 13 SHEET



















PERFORATED GAS COLLECTION PIPE

SCALE: NOT TO SCALE

GAS MONITORING NOTES:

- 1. THE GAS SYSTEM DESIGN ON THIS PLAN SHEET HAS BEEN TAKEN FROM THE APPROVED MATLOCK BEND LANDFILL PART II - EXPANSION PLANS BY CEC. INC.
- 2. TRENCHES TO BE SPACED NOT MORE THAN 200 FT. ON CENTERS AND WILL GENERALLY BE ORIENTED PERPENDICULAR TO THE CONTOURS
- 3. GAS COLLECTION PIPING WILL BE CONNECTED TO THE PASSIVE GAS VENTS AT REGULAR INTERVALS.
- 4. THE LOCATION OF THE PASSIVE GAS VENTS MAY VARY TO COORDINATE WITH THE TRENCH TIE-INS. SUCH VARIATION WILL NOT RESULT IN INCREASED SPACING NOR COVERAGE AREA THAN WHAT IS SHOWN.
- 5. THE GAS VENTING SYSTEM INDICATED IN THIS PERMIT DRAWING PACKAGE IS FOR A PASSIVE GAS SYSTEM WHICH MEETS THE CURRENT REGULATORY REQUIREMENTS FOR THIS FACILITY.
- 6. AN ACTIVE GAS SYSTEM MAY BE DESIGNED AND INSTALLED AT THIS FACILITY IN THE FUTURE. WHETHER VOLUNTARILY OR REQUIRED BY REGULATIONS.
- 7. OWNER'S GAS CONSULTANT SHALL CONFIRM GAS SYSTEM IS SUFFICIENT TO PREVENT CAP UPLIFT PRIOR TO CONSTRUCTION.

ISSUED FOR BID



MATLOCK BEND LANDFILL

FOR REPUBLIC SERVICES, INC. LOUDON COUNTY, TENNESSEE



SHEET

6703-1217-01

AS SHOWN

FEBRUARY 2025

3920 ARKWRIGHT RD. SUITE 101 HODGES, HARBIN, NEWBERRY & TRIBBLE, INC. MACON, GEORGIA 31210 MB-2025 CLOSURE_DT.DWG EDIT 02-07-2025 10 OF 13



(478) 743-7175

PROJ. NO.

SCALE

DATE

3



SEDIMENT BASIN 2

SCALE: 1" = 5'

EROSION CONTROL DEVICES

FLEXAMAT ^(R) LINING						
EGEN	ID					
BILIZA GETAT	tion Ion					
BILIZATION ECB EXCELSIOR MATTING SETATION ECB SLOPE STABILIZATION				G DN		
NO.	<u>RIP-</u>	RAP SIZE	LENGTH	<u>W1</u>	<u>W2</u>	
D1	CI	LASS B	19'	9'	22'	

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO, OR CONCURRENT WITH, LAND

EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLANS DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL

THE EROSION CONTROL MEASURES SHOWN ON THIS SHEET ARE CONSIDERED THE MINIMUM MEASURES THAT WILL BE USED. SHOULD ADDITIONAL EROSION CONTROL MEASURES BE REQUIRED BY THE ENGINEER OR LOCAL REGULATORY AGENCY, THEY WILL BE INSTALLED IN ACCORDANCE WITH THE TENNESSEE EROSION & SEDIMENT CONTROL

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

STRIPPING OF VEGETATION, CLEARING, GRADING, AND OTHER LAND DISTURBING ACTIVITIES SHALL BE CONDUCTED TO MINIMIZE EROSION.

NO NON-STORMWATER DISCHARGES WILL BE ALLOWED DURING THIS

7. SOIL IS NOT TO BE STOCKPILED WITHIN 25 FEET OF THE EDGE OF ANY

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STORMWATER MANAGEMENT THROUGHOUT THE DURATION OF THE PROJECT.

-OUTLET PROTECTION HARD ARMORING CLASS "B" RIPRAP

-8 OSY NON-WOVEN

GEOTEXTILE UNDERLAY

SERVICES

GENERAL NOTES:

EXISTING TOPOGRAPHICAL INFORMATION TAKEN FROM AN AERIAL SURVEY PROVIDED BY FIRMATEK, DATED 08-28-2024.

- THE DESIGN / ENGINEERING WORK SHOWN ON THIS SHEET IS EXCLUSIVELY BASED ON THE TOPOGRAPHY, EXISTING CONDITIONS, OR DESIGNS BY OTHERS AS REFERENCED. SHOULD ANY OF THE EXISTING CONDITIONS OR TOPOGRAPHY BE FOUND TO BE DIFFERENT OR CHANGED, THE DESIGN ENGINEER THAT PREPARED THIS PLAN SHOULD BE CONTACTED PRIOR TO CONSTRUCTING / IMPLEMENTING THIS DESIGN, AND TO DETERMINE IF DESIGN REVISIONS ARE REQUIRED.
- THE ENGINEER THAT PREPARED THIS DRAWING HAS ASSUMED THAT THE CONSTRUCTION WILL BE PERFORMED IN ACCORDANCE WITH THE ENGINEERING INTENT AND COMPLETE CONSTRUCTION SPECIFICATIONS WILL BE PREPARED TO ACCOMPANY THE DRAWINGS. THE ENGINEER EXPECTS THAT HE WILL BE INVOLVED WITH, PROVIDED AN OPPORTUNITY TO REVIEW, AND INSPECT PRODUCTS AND CONSTRUCTION OF THE IMPROVEMENTS SHOWN ON THIS PLAN SHEET IN ORDER TO CONFIRM THAT THE CONSTRUCTION OF THE IMPROVEMENTS ARE INSTALLED IN ACCORDANCE WITH DESIGN CONCEPTS. SHOULD THE DESIGN ENGINEER NOT BE INVOLVED WITH CONSTRUCTION, HE WILL NOT BE LIABLE FOR CHANGES IN CONDITIONS OR FIELD CONDITIONS THAT MAY AFFECT THE DESIGN.

SHEET NOTES

- CONTRACTOR IS RESPONSIBLE FOR CONTINUOUSLY PROTECTING WORK FROM STORMWATER IMPACTS, INCLUDING MAINTENANCE OF EXISTING CONTROLS AND INSTALLATION OF NEW CONTROL MEASURES. ALL PROPOSED IMPROVEMENTS SHOWN ON THESE DRAWINGS SHALL BE CONSIDERED THE MINIMUM REQUIRED.
- THE DESIGN OF THIS BASIN IS INTENDED TO MEET THE REQUIREMENTS FOR BASINS IN THE TENNESSEE DIVISION OF SOLID WASTE MANAGEMENT REGULATIONS, RULE 0400-11-01-04(2)(i).
- THE INTERIOR AND EXTERIOR SIDE SLOPE SURFACE AREA OF PROPOSED BASIN SHALL BE SEEDED , FERTILIZED AND COVERED WITH EROSION-CONTROL MATTING.
- 4. CLEAN-OUT ELEVATION IN BASIN IS TO BE ESTABLISHED AT 847.0 FT. WITHIN BASIN AND 851.0 FT. IN FOREBAY.
- CLEAR PROPOSED POND LOCATION OF ALL TOPSOIL, VEGETATION INCLUDING TREES AND STUMPS. FILL ALL STUMP HOLES AND CREVICES WITH LOW-PERMEABILITY SOILS.
- SCARIFY POND BASE SOILS TO A DEPTH OF 8-10 INCHES WITH A DISK, ROTO-TILLER OR OTHER SIMILAR EQUIPMENT. REMOVE ALL ROCKS AND TREE ROOTS.
- COMPACT THE SOIL SUB-GRADE MAKING 4-6 PASSES WITH A SHEEPSFOOT ROLLER OVER THE SCARIFIED LAYER, ADDING MOISTURE AS NEEDED TO MAXIMIZE COMPACTION.

ISSUED FOR BID

SEDIMENT BASIN 2 IMPROVEMENTS

2025 PARTIAL CLOSURE CONSTRUCTION

MATLOCK BEND LANDFILL

REPUBLIC SERVICES, INC. LOUDON COUNTY, TENNESSEE



-ENVIRONMENTAL CONSULTANTS-HODGES, HARBIN, NEWBERRY & TRIBBLE, INC. 6703-1217-01 AS SHOWN

FEBRUARY 2025

SHEET

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(478) 743-7175
PROJ. NO.
SCALE
DATE

REPUBLIC





SCALE: NOT TO SCALE

ROL DEVICES					
SED SINGLE ROW TYPE-EC-STR-3C NCE WITH BACKING					
ON N ON ECB EXCELSIOR MATTING N ECB SLOPE STABILIZATION					
RIP-RAP SIZE	<u>LENGTH</u>	<u>W1</u>	<u>W2</u>		
CLASS B	19'	9'	22'		
ED IN PLACE.					

GENERAL NOTES:

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- 2. THE INTERIOR AND EXTERIOR SIDE SLOPE SURFACE AREA OF PROPOSED BASIN SHALL BE SEEDED , FERTILIZED AND COVERED WITH EROSION-CONTROL MATTING.

PROJ. NO.

SCALE

DATE

ISSUED FOR BID GRAPHIC SCALE IN FEET INITIAL BORROW AREA BASIN 2025 PARTIAL CLOSURE CONSTRUCTION MATLOCK BEND LANDFILL FOR REPUBLIC SERVICES, INC. LOUDON COUNTY, TENNESSEE 3920 ARKWRIGHT RD. - ENVIRONMENTAL CONSULTANTS -SUITE 101 HODGES, HARBIN, NEWBERRY & TRIBBLE, INC. (478) 743-7175 MACON, GEORGIA 31210

MB-2025 CLOSURE_BASIN.DWG EDIT 02-07-2025

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SHEET

6703-1217-01

1" = 50'

FEBRUARY 2025