

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



GENERAL PERMIT for SEWER EXTENSION CONSTRUCTION

The Missouri Department of Natural Resources hereby issues a permit to:

Construction Permit ID: MOGSE0345
Title of Project: Outer Road S of Hwy 60
Owner: Sikeston Board of Municipal Utilities
Address: PO Box 370
Sikeston, MO 63801

The project will also include general site work appropriate to the scope and purpose of the project and will include all the necessary appurtenances to make a complete and usable collection system. The construction of this project will be in the vicinity of the county below and discharge to Receiving Permit ID below:

County: Mississippi Receiving Permit ID: MO0088536

for the construction of (described construction project):

Outer Road South of Highway 60 - Construction of 3,203 lf of 10-inch PVC gravity sewer with 10 manholes, 122 lf of 8-inch force main and 1 duplex lift station with each pump capable of operating at 440 gpm to serve 1,677 PE and a design average flow of 52,800 gpd. It will connect to an existing 14-inch force main that flows to the South Wastewater Treatment Plant.

Project is in the vicinity of Southwest Overpass Outer Road in Sikeston, New Madrid County and discharges to an existing system to be treated at Sikeston South WWTF, MO-00088536. Jeff Winders, BMU Operations Manager, signed the application dated March 3, 2022.

Construction of such proposed facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, RSMo, and regulation promulgated thereunder, or this permit may be revoked by the Department of Natural Resources (Department). As the Department does not examine structural features of design or the efficiency of mechanical equipment, the issuance of this permit does not include approval of these features.

This permit applies only to the construction of water pollution control components; it does not apply to other environmentally regulated areas.

March 23, 2022

Issue Date

A handwritten signature in black ink that reads "Chris Wieberg".

Chris Wieberg, Director
Water Protection Program

March 22, 2024

Expiration Date

APPLICABILITY

1. This permit authorizes the construction of gravity sewer extensions, force mains, and lift stations. Non-earthen flow equalization storage basins at lift stations and inline storage, which flows back into the lift station or collection system, are also included.
2. A site specific sewer extension construction permit may be required by the Department due to compliance and enforcement actions.
3. Projects located within an Approved Sewer Program as noted in the operating permit of the receiving wastewater treatment facility are not required to obtain a construction permit from the Department of Natural Resources (Department).
4. This permit does not apply to:
 - A. Earthen storage basins;
 - B. Exempt projects unless requested by the applicant or required by enforcement.

PREREQUISITES:

1. The General Sewer Extension Construction Permit application, appropriate fee, and documentation in accordance with 10 CSR 20-6.010(5)(G).
2. The plans and specifications each signed and sealed by a professional engineer registered in the State of Missouri in accordance with 10 CSR 20-8 and 10 CSR 20-6.010.
3. The Design Certification form or Engineering Report or Summary of Design signed and sealed by a professional engineer registered in the State of Missouri certifying the design of the system was prepared in accordance with 10 CSR 20-6 and 10 CSR 20-8.
4. A statement from the continuing authority, as defined in 10 CSR 20-6.010, accepting the wastewater for treatment and indicating the permitted treatment facility has the available capacity.
5. A statement from the continuing authority, as defined in 10 CSR 20-6.010, accepting the responsibility for operation and maintenance of these facilities.

PERMIT CONDITIONS:

1. This permit authorizes the activities and scope of work detailed in the plans and specifications submitted with the request.
2. The construction must be in accordance with the final plans and specifications approved by the Department.
3. State and Federal Law does not permit bypassing of raw wastewater; therefore steps must be taken to ensure that raw wastewater does not discharge during construction. If a sanitary sewer overflow or bypass occurs, report the appropriate information to the Department's regional office per 10 CSR 20-7.015(9)(E)2., or through the Online Bypass/SSO Reporting system found at <https://dnr.mo.gov/eservices.htm> under Water Protection.

PERMIT CONDITIONS: (continued)

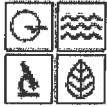
4. Protection of drinking water supplies must meet the requirements of 10 CSR 23-3.010 .
 - A. There shall be no physical connections between a public or private potable water supply system and a sewer, or appurtenance thereto, which would permit the passage of any wastewater or polluted water into the potable supply.
 - B. Sewers shall be laid at least fifty feet (50') in a horizontal direction from any existing or proposed public water supply well or other water supply sources or structures.
5. Manholes shall be located with the top access at or above grade level.
6. In addition to the requirements for a construction permit, see 10 CSR 20-6.200 for land disturbance requirements to obtain a Missouri State Operating Permit to discharge stormwater. The permit requires Best Management Practices sufficient to control runoff and sedimentation to protect waters of the state. Land disturbance permits will only be obtained by means of the Department's ePermitting system available online at www.dnr.mo.gov/env/wpp/epermit/help.htm.

See www.dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm for more information.

7. A United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) issued by the Department or permit waiver may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied. If construction activity will disturb any land below the ordinary high water mark of Jurisdictional Waters of the U.S. then a 404/401 will be required. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the Department's Water Protection Program at 573-751-1300 for more information.

See www.dnr.mo.gov/env/wpp/401/ for more information.

8. If this project eliminates a wastewater treatment facility under the jurisdiction of the Department, then a full closure plan shall be submitted with a Facility Closure Request Form, Form – MO 780-2512 to the Department's appropriate regional office for review and approval. In accordance with 10 CSR 20-6.010(12), the closure plan must meet the requirements outlined in Standard Conditions Part III, of the Missouri State Operating Permit. Closure shall not commence until the submitted closure plan is approved by the Department.
9. If this project is part of a project to resolve an enforcement action or is receiving funding from the Department, submit a statement of work complete following the completion of construction



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM
**APPLICATION FOR CONSTRUCTION PERMIT –
 SEWER EXTENSION**

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED \$300.00	CHECK NO. 79444
DATE RECEIVED 3-3-22	

NOTE ► PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM

1.0 APPLICATION INFORMATION (Note – If any of the questions in this section are answered NO, this application may be considered incomplete and returned.)

- 1.1 Is this a Federal/State funded project? YES N/A Funding Agency: _____ Project #: _____
- 1.2 Has the Department of Natural Resources approved the proposed project's engineering report*?
 YES Date of Approval: _____ NO N/A
- 1.3 Is a copy of the appropriate plans* and specifications* included with this application? YES NO
- 1.4 Is a summary of design* included with this application? YES NO
- 1.5 Is the appropriate fee or JetPay confirmation included with this application? YES NO
 See Section 7.0

* Must be affixed with a Missouri registered professional engineer's seal, signature and date.

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT

Lift station and gravity mains along the proposed Outer Road south of Highway 60

ADDRESS	CITY	STATE	ZIP CODE	COUNTY
P. O. Box 270	Sikeston	MO	63801	New Madrid

2.2 Legal Description: ¼, ¼, ¼, Sec. 31, T 25N, R 14E

2.3 Project Components (check all that apply):

- Gravity sewers Pumping stations Force mains Alternative sewer system Other (Describe below.)

2.4 PROJECT DESCRIPTION

Project includes a new submersible duplex pumping station with a rated capacity of 440 gpm, 122 feet of 8-inch forcemain to connect to an existing 14-inch forcemain that flows to the South Wastewater Treatment Plant and 3,203 feet of 10-inch gravity main with 10 manholes.

All improvements are to serve an area of future residential development.

2.5 DESIGN INFORMATION

- A. Population or number of lots to be served by this extension: potential 559 lots
- B. Estimated flow to be contributed by this extension: Design Average Flow: 52800 gpd Design Peak Hourly Flow: 25440 gph
- C. Industrial Wastes: Type: none Flow: 0 gpd
- D. Receiving Sewer: Size: 14 inches Capacity: 2000 gpm

3.0 PROJECT OWNER

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
Sikeston Board of Municipal Utilities	573-475-3329	jwinders@sbmu.net

ADDRESS	CITY	STATE	ZIP CODE
P. O. Box 370	Sikeston	MO	63801

4.0 CONTINUING AUTHORITY: A continuing authority is a company, business, entity or person(s) that will be operating the facility and/or ensuring compliance with the permit requirements. A continuing authority is not, however, an entity or individual that is contractually hired by the permittee to sample or operate and maintain the system for a defined time period, such as a certified operator or analytical laboratory. To access the regulatory requirement regarding continuing authority, 10 CSR 20-6.010(2), please visit <https://s1.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-6.pdf>. A continuing authority's name must be listed exactly as it appears on the Missouri Secretary of State's (SoS's) webpage: <https://bsd.sos.mo.gov/BusinessEntity/BESearch.aspx?SearchType=0>, unless the continuing authority is an individual(s), government, or otherwise not required to register with the SoS.

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
Sikeston Board of Municipal Utilities	573-475-3329	jwinders@sbmu.net

ADDRESS	CITY	STATE	ZIP CODE
P. O. Box 370	Sikeston	MO	63801

4.1 A letter from the continuing authority or the Continuing Authority and Receiving Wastewater Treatment Facility Acceptance form, if different than the owner, is included with this application. YES NO N/A

5.0 ENGINEER			
ENGINEER NAME / COMPANY NAME John Chittenden/Waters Engineering		TELEPHONE NUMBER WITH AREA CODE 573-471-5680	E-MAIL ADDRESS jchittenden@waterseng.com
ADDRESS P. O. Box 567	CITY Sikeston	STATE MO	ZIP CODE 63801
6.0 RECEIVING WASTEWATER TREATMENT FACILITY			
NAME Sikeston South Wastewater Treatment Plant		TELEPHONE NUMBER WITH AREA CODE 573-475-3329	E-MAIL ADDRESS jwinders@sbm.net
MISSOURI STATE OPERATING PERMIT # MO-0088536		REMAINING CAPACITY (GPD) 1,500,000 gpd	
6.1 Has the receiving treatment facility agreed to accept the additional wastewater flow? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
6.2 A letter from the receiving wastewater treatment facility, if different than the continuing authority, is included with this application. <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A			
7.0 Application Fee			
<input checked="" type="checkbox"/> Check Number		<input type="checkbox"/> JetPay Confirmation Number	
8.0 PROJECT OWNER: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.			
PROJECT OWNER SIGNATURE 			
PRINTED NAME Jeff Winders		DATE 10-28-2019 3/1/22	
TITLE OR COPORATE POSITION BMU Operations Manager		TELEPHONE NUMBER WITH AREA CODE 573-475-3329	E-MAIL ADDRESS jwinders@sbm.net
Mail completed copy to:		MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM P.O. BOX 176 JEFFERSON CITY, MO 65102-0176	

SEWER EXTENSION DESIGN CERTIFICATION

Answer all questions yes, no, or N/A. Answer N/A only if the question is clearly not applicable to the design of the proposed sewer extension **OR** if a deviation was previously allowed by the Department in the approval of Standard specifications or Standard Detail Sheets.

9.0 SEWER EXTENSION CHECKLIST					
	REGULATION		YES	NO	N/A
1.	8.110(9)(B)	Is there a detailed plan showing tributary area, boundaries, pertinent elevations, topography, existing and proposed facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	8.110(3)(A)(B)	Is the design flow based on actual flow data for an existing system? Is the design flow based on the design peak hourly flow for a new collection system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	8.120(2)	Does the sewer receive only sewage and not combined sewage?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	8.120(3)(C)	Are the joints sealed to prevent infiltration or exfiltration > 100 gal/inch of pipe dia/mile/day for receiving WWTF with a design flow > 22,500 gpd, and >200 gal/inch of pipe dia/mile/day for any section between manholes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	8.120(4)(A)	Are manholes located at all changes in grade, size or alignment, at all intersections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	8.120(3) (A)1	Is all sewer pipe constructed with a slope to obtain mean velocities of not less than 2 feet per second?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.	8.120(3)(A)2	Is the pipe covered with at least 36" of soil or sufficiently insulated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	8.120(3)(A)	Is the pipe installation, embedment, and backfill designed to prevent damage to the pipe and its joints?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	8.120(3)(B)	Is pipe being tested to ensure it does not exceed a deflection of 5% of the inside diameter?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	8.120(4)(C)	Are manholes at least 48 inches in diameter with a clear opening of 22 inches on sewer line larger than 8"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	8.120(4)(C)	Where cleanouts are used at the end of a lateral instead of a manhole, they are a minimum diameter of 8 inches or larger and equal to the diameter for pipes < 8"?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12.	8.120(4)(E)	Are the manholes watertight, constructed, installed in accordance with the manufacturer's recommendations and procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	8.120(4)(F)	Do the specifications include a requirement for inspection and testing for manholes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	8.120(5)(B)	Are sewers and manholes located at least 50 feet horizontally from any existing or proposed water supply well, sources, structures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	8.120(5)(A)	Is the sewer free from physical connections to a potable water supply system and no water pipes come in contact with a sewer manhole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.0 PRESSURE SEWERS, GRINDER PUMP, STEP AND STEG SEWER CHECKLIST					
	REGULATION		YES	NO	N/A
16	8.125(5)(A)	Does the cleaning velocity of ≥ 2 ft/s happen more than once per day when the minimum diameter sewer main pipe is at least 1.5"?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17	8.125(5)B	Are appirtenances compatible with the piping system?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	8.125(5)(C)	Is the minimum diameter service line pipe at least 1.25"?			<input checked="" type="checkbox"/>
19	8.125(5)(D)1A	Are no multiple equivalent dwelling units (EDUs) or commercial facilities served by simplex grinder pump stations?			<input checked="" type="checkbox"/>
20	8.125(5)(D)1B	Are multiple unit pump stations owned, operated, maintained by an approved continuing authority.			<input checked="" type="checkbox"/>
21	8.125(5)(D)3	Is there at least 70 gallons of storage in the grinder pump unit ?			<input checked="" type="checkbox"/>
22.	8.125(5)(D)4	is shutoff valve accessible from the ground? Is there a check valve? Is there an anti-siphon valve where siphoning could occur ?			<input checked="" type="checkbox"/>
23	8.125(5)(D)7 8.130(3)(B)2	Are units serviceable and replaceable under wet conditions without electrical hazard to repair personnel and electrical equipment suitable for hazardous locations (National Electrical Code, Class I, Group D, Division 1 location).			<input checked="" type="checkbox"/>

24	8.125(6)(D) 8.180(2)	Does at least 1 septic tank (1,000 gallons or more) provide to each EDU?			✓
25	8.125(6)(F)	Are duplex pumps provided for the design flow of 1,500 gallons or more STEP sewer?			✓
26	8.125(7)(A) 8.125(7)(C)	Is the minimum diameter sewer main pipe and service line of STEG sewer at least 4"?			✓
27	8.125(5)(D)8 8.125(8)	Are provisions in place to avoid interruption of service due to mechanical or power failure by providing standby power, storage capacity or interconnection with another disposal system?			✓

11.0 PUMP STATION CHECKLIST

	REGULATION		YES	NO	N/A
28.	8.130(2)(A) 8.140(2)(B)	Is the pump station designed to withstand the 100-year flood?			✓
29.	8.130(3)(A)	Is the dry well completely separate from the wet well and is a suitable and safe means of access provided to each?			✓
30.	8.130(3)(B)	If the design flow is 1,500 gpd or more, are there at least 2 pumps or pneumatic ejectors?			✓
31	8.130(3)(D)	Are valves outside wet well unless integral to a pump or its housing?			✓
32.	8.130(3)(F) 8.140 (8)(J)	Is interconnection between wet and dry well ventilation system?			✓
33	8.130(3)(G)	Does all potable water at station comply with 8.140 (7) D?			✓
34	8.130(6)	Is an alarm system provided an uninterrupted power?			✓
35.	8.130(7) (A)	is there 2 hrs retention of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs retention of the peak hourly flow for a design flow < 100,000 gpd?			✓
36	8.130(7)(B)	Is there independent utility substations?			✓
37	8.130(8)(A)	Is the force main velocity of ≥ 2 ft/s maintained?			✓
38.	8.130	Instructions and Equipment. Sewage pumping stations and their operators should have a complete set of operational instructions, including emergency procedures, maintenance schedules, special tools and spare parts as may be necessary.			✓

12.0 SUCTION LIFT PUMP AND SUBMERSIBLE PUMP STATION CHECKLIST

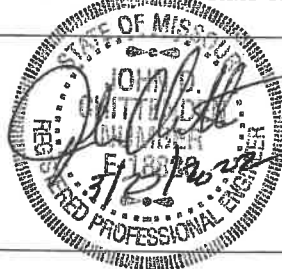
	REGULATION		YES	NO	N/A
39.	8.130(4)	Are the suction lift pumps of the self priming or vacuum priming type?			✓
40.	8.130(4)(A)	The combined total of dynamic suction lift at the "pump off" elevation and required net positive suction head at design operating conditions shall not exceed twenty-two feet (22').			✓
41	8.130(4)(B)	Is there dual vacuum pumps capable of removing air from the suction lift pump.			✓
42	8.130(5)(A)	Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the wet well?			✓

12.0 CERTIFICATION STATEMENT

I hereby certify that the design plans and specifications for this project, to the best of my knowledge, conform to the requirements listed above. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

I hereby certify that this plan, specification, and/or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Missouri.

Missouri Professional Engineer's Seal:



Name: JOHN CHITTENDEN
Street Address: P.O. BOX 567
City: SIKESPORT State: MO Zip Code: 63801

Phone Number: 573-471-5680 Email: jchittenden@waterseng.com



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM
**APPLICATION FOR CONSTRUCTION PERMIT –
 SEWER EXTENSION**

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED \$ 300.00	CHECK NO. 79444
DATE RECEIVED 3-3-22	SB

NOTE ► PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM

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2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT

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3.0 PROJECT OWNER

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
Sikeston Board of Municipal Utilities	573-475-3329	jwinders@sbfmu.net
ADDRESS	CITY	STATE

WARNING: DO NOT CASH UNLESS LOGO APPEARS IN BACKGROUND OF CHECK

BOARD OF MUNICIPAL UTILITIES
 ACCOUNTS PAYABLE CLEARING ACCOUNT
 P.O. BOX 370
 SIKESTON, MO 63801

MONTGOMERY BANK
 SIKESTON, MO 63801
 80-1776/815

Check Date: 03/01/2022
 Check #: 79444

AMOUNT
\$300.00

PAY THREE HUNDRED DOLLARS AND 00 CENTS*****

STATE OF MISSOURI
 MO DEPT OF NATURAL RESOURCES
 TO THE WATER PROTECTION PROGRAM
 ORDER PO BOX 176
 OF JEFFERSON CITY, MO 65102

[Handwritten Signature]

 MP

WARNING: DO NOT CASH UNLESS "ORIGINAL DOCUMENT" APPEARS ON BACK OF CHECK