# 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: Title of Project: Owner: Address:	MOGC00759 Salem Estates Plat 1 Salem Estates LLC 651 Taylor Circle Liberty, MO 64068-1294
	general site work appropriate to the scope and purpose of the project and will include all the necessary plete and usable collection system. The construction of this project will be in the vicinity of the county ving Permit ID below:
County: Clay	Receiving Permit ID: MO0091031
for the construction of (descri	bed construction project):
gravity sewer lines with ap	ruction of approximately 591 lf of 8-inch PVC SDR-35 and 771 lf of 12-inch PVC SDR-35 proximately 10 manholes to serve 22 single-family residences with a design PE of 81 PE of 8,140 gpd. The receiving sewer is 12 inches with a capacity greater than 1,090 gpm.
system to be treated at MA	Salem Road and Salem Drive in Lawson, Clay County and discharges to an existing WC Lawson WWTF, MO-0091031. Matt Jaspering, Project Engineer with Missouri provided an acceptance letter dated June 19, 2024.
RSMo, and regulation promu As the Department does not e permit does not include appro-	d facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, lgated thereunder, or this permit may be revoked by the Department of Natural Resources (Department) examine structural features of design or the efficiency of mechanical equipment, the issuance of this eval of these features.  The construction of water pollution control components; it does not apply to other environmentally
August 16, 2024 Issue Date	John Holee, Director Water Protection Program

August 15, 2026 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. The Missouri Department of Natural Resources may require a site-specific sewer extension construction permit due to compliance and enforcement actions in accordance with 10 CSR 20-6.010(13)(C).
- 3. This permit does not apply to:
  - A. Earthen storage basins;
  - B. Exempt projects in accordance with 10 CSR 20-6.010(1)(B), 10 CSR 20-6.010(5)(B), and RSMo 644.051 unless requested by the applicant or required by enforcement.

### **PREREQUISITES:**

- 1. The Sewer Extension Construction Permit application, appropriate fee, and documentation in accordance with 10 CSR 20-6.010(5)(G).
- 2. Submit the Sewer Extension Construction Permit application at least sixty (60) days in advance of the start of construction in accordance with 10 CSR 20-6.010(5)(F).
- 3. Submit an electronic copy of the construction permit application and documents to <a href="mailto:DNR.WPPEngineerSection@dnr.mo.gov">DNR.WPPEngineerSection@dnr.mo.gov</a> in accordance with 10 CSR 20-6.010(5)(G)3.
- 4. The plans and specifications, each signed, sealed, and dated by a professional engineer registered in the State of Missouri in accordance with 10 CSR 20-8 and 10 CSR 20-6.010.
- 5. The Design Certification form, Engineering Report, or Summary of Design, signed, sealed, and dated by a professional engineer registered in the State of Missouri, certifying the design of the system is in accordance with 10 CSR 20-6 and 10 CSR 20-8.
- 6. 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.
- 7. A statement from the continuing authority, as defined in 10 CSR 20-6.010, accepting responsibility for the 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 received by the Department. Revisions that affect capacity, flow, or system layout must be approved by the Department prior to construction.

#### **PERMIT CONDITIONS: (continued)**

- 3. If construction will incorporate minor changes from previously submitted plans and specifications (i.e., changes that do not affect the capacity, flow, or system layout), submit an electronic copy of the as-built plans and specifications in accordance with 10 CSR 20-8.110(11).
- 4. State and Federal Law does not permit bypassing of raw wastewater; therefore, the applicant must take steps 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) or through the Online Bypass/SSO Reporting service on the Missouri Gateway for Environmental Management (MoGEM) portal found at <a href="https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem">https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem</a>.

See <a href="https://dnr.mo.gov/document-search/missouri-gateway-environmental-management-mogem-frequently-asked-questions-pub2988/pub2988">https://dnr.mo.gov/document-search/missouri-gateway-environmental-management-mogem-frequently-asked-questions-pub2988/pub2988</a> for more information.

- 5. Protection of drinking water supplies must meet the requirements of 10 CSR 20-8.120(5).
  - A. There shall be no physical connections between a public or private potable water supply system and a sewer or appurtenance that would permit the passage of any wastewater or polluted water into the potable supply.
  - B. Lay sewers at least 50 feet (50') in a horizontal direction from any existing or proposed public water supply well or other water supply sources or structures.
- 6. Position manholes so that the top access is at or above grade level.
- 7. 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. Applicants shall obtain land disturbance permits through the Department's ePermitting system, available online at <a href="https://dnr.mo.gov/data-e-services/water/electronic-permitting-ep

See <a href="https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/stormwater/construction-land-disturbance">https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/stormwater/construction-land-disturbance</a> for more information.

8. Entities applying for funding under 10 CSR 20-4, "Grants and Loans" will need to comply with those requirements in addition to the requirements of 10 CSR 20-8.

### **PERMIT CONDITIONS: (continued)**

9. The Department may require a United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) or a permit waiver for the activities described in this permit. If construction activity will disturb any land below the ordinary high water mark of Jurisdictional Waters of the U.S., then a 404/401 is required. Fulfillment of these requirements is necessary before the permit is considered valid. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the Department's Operating Permits Section at 573-522-4502 for more information.

See <a href="https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/section-401-water-quality">https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/section-401-water-quality</a> for more information.

- 10. If this project eliminates a wastewater treatment facility under the jurisdiction of the Department, then the applicant shall submit a full closure plan 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 Department approves the submitted closure plan.
- 11. If this project is part of a project to resolve an enforcement action or is receiving funding from the Department, submit a <u>statement of work complete</u> following the completion of construction.
- 12. Applicants may submit, prior to the expiration date of this permit, a written request that additional time is needed in accordance with 10 CSR 20-6.010(5)(H)3.

### Recevied: 7/2/24

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# MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM

## APPLICATION FOR CONSTRUCTION PERMIT – SEWER EXTENSION

FOR DEPARTMENT USE ONLY								
APP NO.	CP NO.							
FEE RECEIVED	CHECK NO.							
DATE RECEIVED								

		the accompanyi						January 1	
1.0 A cons	APPLICATION INF idered incomplete	ORMATION (Not and returned.)	e — If any of the	e questions	in this sectio	n are ans	wered NO, this ap	plication may	/ be
1.1 ls	s this a Federal/St	ate funded project	? TYES	☑ N/A	Funding Age	тсу:		Project #:	
1.2 1	Has the Departme	nt of Natural Reso		d the propo	sed project's	engineer NO	ing report*?	<b>☑</b> N	/A
1.3 1	s a copy of the ap	propriate plans* a	nd specification	ns* include	d with this ap	plication?	☑ YES ☐ NO	)	
	• •	ng standard speci			_				_
j	-	esign* included wi	• •		_				
	s the appropriate See Section 7.0	fee or JetPay cont	irmation includ	ed with this	application?	☑ YES	□NO		
		a Missouri register	ed professiona		s seal, signat	ure and d	ate.	71 b. 13s . 25	a no montherapolitica.
r	ROJECT INFORI	NATION 3	With a second	a de	- 10-m			7 10 13 17 17 17 17 17 17 17 17 17 17 17 17 17	<u> </u>
l		Lawson, Missouri	i (Clay County)						
ADDRE		· · · · · · · · · · · · · · · · · · ·	CITY			STATE	ZIP CODE	COUNTY	
Salen	n Dr & Salem Rd		Lawson			МО	64062	Clay	
2.2 L	egal Description:	1/4,	1/4,	1/4, Sec.	.1 ,	T 53	, R 30		
		ts (check all that a			☐ Alternat	luo souron	auston D Otho	or (Doscribo	holow \
	✓ Gravity sewers □ Gravity sewers	☐ Pumping st	ations   Fo	rce mains	☐ Alternat	ive sewer	system 🗀 Othe	er (Describe	below.)
exten sanita	sion, 10 concrete	manholes, abando	on 144 linear fe	et of 8in P	VC sanitary s	ewer mai	2in PVC gravity sa n, abandon 611 lin home residential s	ear feet of 1	2in VCP
A. P	•	per of lots to be se	•			140 gpd	I Design Peak H	ourly Flow: 1	1357 gph
C. Ir	ndustrial Wastes:	Type: N/A	Flor	v: 0 g	pd				
	leceiving Sewer:		hes Cap	acity: >109	•				
E, D	oes this project (c	heck all that apply							
☑ Connect to an existing treatment plant ☐ Resolve enforcement issue ☐ Eliminate or consolidate an existing treatment plant									
F. Estimated number of onsite systems being removed: N/A									
G: Estimated costs associated with piping: \$ Estimated costs associated with lift station(s): \$ N/A									
≥3:0}F	ROJECTOWNE	R- 4	i. Ala		*.	.4 🛝	to the second second	5± 1	- 《海影》
NAME	n Estates LLC			TELEPHONE 816.213.6	NUMBER WITH AR	EA CODE	EMAIL ADDRESS	dcpa@yahoo	o.com
ADDRE			CITY			STATE	ZIP CODE		
651 T	aylor Circle		Liberty			МО	64068-1294		
I	TER NUMBER (SECRETAL 4417593	RY OF STATE) or REGISTE	RED AGENT			•	•		
1 1	7717000								

MO 780-1632 (10-22)

4.0 CONTINUING AUTHORITY: A continuing for ensuring compliance with the permit required continuing authority should be a relatively perwitten to sample or operate analytical laboratory. To access the regulator water Commission Chapter A continuing a (SoS's) webpage: Missouri Secretary of State required to register with the SoS.	rements a commanent e vity. A continut maintary requirements authority's	nd provide intity responding auth in the systement regardinate must	continuous s sible for the ority is not, l m for a defii ng continuir be listed ex	stable oversige ongoing open owever, an end time period authority, and active as it appressions.	int of the permitted facility or activity. The ration, maintenance and modernization, entity or individual that is contractually od, such as a certifled operator or 0 CSR 20-6.010(2), please visit Clean bears on the Missouri Secretary of State's
NAME	12 A	TELEBUONE 1	NUMBER WITH A	DEA CODE	EMAIL ADDRESS
Missouri-American Water Company )MAWC)		(314) 548-		NEA GODE	timothy.ganz@amwater.com
ADDRESS	CITY	<u> </u>		STATE	ZIP CODE
901 Hog Hollow Rd	Chesterfic	eld		МО	63129
CHARTER NUMBER (SECRETARY OF STATE) 00001468					
4.1 Has appropriate continuing authority accepting A letter from the continuing authority accepting different than the original owner of the construction Treatment Facility Acceptance" Form 780-25	ng respons ruction), or 84. 🗹 Y	sibility for co a properly ES □ N	ntinued mai executed "C O	ntenance of t ontinuing Aut	hority and Receiving Wastewater
NOT THE PROPERTY OF THE PROPER		AND SOLIONE	NUMBER WITH A	THE THE PROPERTY PRODUCTS OF THE PARTY AND THE	EMAIL ADDRESS
ENGINEER NAME / COMPANY NAME Kimley-Horn & Associates, Inc.		(816) 652-		REA CODE	matt.kist@kimley-horn.com
ADDRESS 805 Pennsylvania Avenue, Suite 150	CITY Kansas C	1		STATE MO	ZIP CODE 64105
-6.0 RECEIVING WASTEWATER TREATME	<u>.                                    </u>		7 n 4 m 1	'	
NAME		TELEPHONE I	NUMBER WITH A	V-19-19-19-19-19-19-19-19-19-19-19-19-19-	EMAIL ADDRESS
MAWC-Lawson WWTF MISSOURI STATE OPERATING PERMIT #	***	(314) 548-	0189		timothy.ganz@amwater.com  REMAINING CAPACITY (GPD)
MO-0091031		Clay			27,870
6.1 If different from the owner, has a letter be accept the expanded flow or has a properly of MO 780-2584 form been provided? YE 6.2 A letter from the receiving wastewater tree YES NO N/A  6.3 If the receiving treatment plant or continuous c	executed CS NC eatment face	Continuing A  D	ent than the	I Receiving We continuing a Public Service	/astewater Treatment Facility Acceptance uthority, is included with this application.  Commission (PSC) for sewer activities, a
Certificate of Convenience and Necessity ha OPTIONAL QUESTIONS REGARDING MIL			res – Date	Julie 19, 20	
Have you or an immediate family member ev	N. * Endough, 1 of Tallingson in	SACHERIN KRIPE N			
U.S. Armed Forces?				res .	□ No
If yes, would you like information about milita in Missouri?	ıry-related	services		/es	□ No
7.0 Application Fee	Ye i i i i i i i i i i i i i i i i i i i			;	
☑ Check Number 1540		<del>-</del>	☐ JetPay	Confirmation	Number
8.0 PROJECT OWNER: I certify under pena supervision in accordance with a system des submitted. Based on my inquiry of the persoi gathering the information, the information sul aware there are significant penalties for subriviolations.  PROJECT OWNER SIGNATURE	igned to a n or persor bmitted is,	ssure qualif as who man to the best	ied personn age the sys of my know	el properly ga tem, or those edge and bel	ther and evaluate the information persons directly responsible for lef, true, accurate and complete 4 am of fine and imprisonment for knowing
Those of the second sec					
DATN TED NAME					DATE
Tim Sherwood		TELEBRONE	NUMBER WITH A	DEA CODE	June 19, 2024  EMAIL ADDRESS
Member Manager		(816) 213-0		IREA CODE	timwsherwoodcpa@yahoo.com
Mail completed copy to:		<u>, , , , , , , , , , , , , , , , , , , </u>		Cubmit as	
MISSOURI DEPARTMENT OF NATURA WATER PROTECTION PROC	RCES	Submit completed electronic copy to:  Missouri Department of Natural Resources at DNR.WPPEngineerSection@dnr.mo.gov			
JEFFERSON CITY, MO 65102	2-0176				

MO 780-1632 (10-22)

. 12	EWER EXTENSION		Wal.	
SE <u>W</u> applic	ER EXTENSION Disable to the design	ESIGN CERTIFICATION: Answer all questions yes or N/A. Answer N/A only if the question is of the proposed sewer extension.	clearly r	iot 🎐
	REGULATION		YES	N/A
1.	8.110(3)(A)	Is the design flow based on actual flow data for an existing system?	V	
2.	8.110(3)(B)	Are average design flows, peak hourly flows and I&I contributions for new systems calculated?	V	
3.	8.110(9)(B)	Is there a detailed plan showing tributary area, boundaries, pertinent elevations, topography, existing and proposed facilities?		
4.	8.120(2)	Does the sewer exclude water from roofs, streets, groundwater from foundation drains and combined wastewater?	v	
5.	8.120(3)(A)	Is the pipe installation, embedment and backfill designed to prevent damage to the pipe and its joints?	v	
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?	D	
7.	8.120(3)(A)2	Is the pipe covered with at least 36" of soil or sufficiently insulated to prevent freezing?		
8.	8.120(3)(B)	Is deflection testing specified to ensure no pipe exceeds a deflection of 5% of the inside diameter?	Ø	
9.	8.120(4)(A)	Are manholes located at the end of each line, at all changes in grade, size or alignment and at all intersections?	V	
10.	8.120(4)(C)	Are manholes at least 42 inches in diameter with a clear opening of 22 inches on sewer line larger than 8"?		
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"?		V
12.	8.120(4)(E)	Are the manholes watertight, constructed and installed in accordance with the manufacturer's recommendations and procedures?		
13.	8.120(4)(F)	Do the specifications include a requirement for inspection and testing for manholes?	<b>V</b>	
14.	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?	V	
15.	8.120(5)(B)	Are sewers and manholes located at least 50 feet horizontally from any existing or proposed water supply well, sources, structures?	V	
10:0	PRESSURE/SEWE	RS, GRINDER PUMP, STEP AND STEG SEWER CHECKLIST	- eE	
	REGULATION		YES	N/A
16.	8.125(5)(A)1.	Does the cleaning velocity of ≥ 2 ft/s happen more than once per day?		V
17.	8.125(5)(A)2.	Is the diameter of the pressure sewer main pipe at least 1.5"?		V
18.	8.125(5)(B)	Are appurtenances compatible with the piping system?		V
19.	8.125(5)(B)2.	Are isolation valves located: upstream of major pipe intersections; both sides of stream, bridge and RR crossings; at terminal end of system?		V
20.	8.125(5)(C)	Do service line pipes have a minimum diameter of 1.25"?		V
21.	8.125(5)(D)1.A	Do simplex grinder pump stations service only a single equivalent dwelling unit (EDU)? i.e. 1 residence – 1 grinder pumpt.		V
22.	8.125(5)(D)1.B	Are multiple unit pump stations owned, operated and maintained by an approved continuing authority?		V
23.	8.125(5)(D)3.	Is there at least 70 gallons of storage in the grinder pump unit?		V
24.	8.125(5)(D)4.	Do grinder pump stations have shutoff valves, check valves and anti-siphon valves (where siphoning could occur) that are accessible from the ground surface?		V
25.	8.125(5)(D)7., 8.130(3)(B)2.	Are units serviceable and replaceable under wet conditions without electrical hazard and is electrical equipment suitable for hazardous locations (National Electrical Code, Class I, Group D, Division 1 location)?		V
26.	8.125(5)(D)8., 8.125(2)(F)6.	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?		~
27.	8.125(6)(D)	In a STEP system is at least one septic tank (1,000 gallons or more) provided for each EDU with 20% of tank volume dedicatied to freeboard and ventillation?		V
	8.125(6)(F)	Are duplex pumps provided for the design flow of 1,500 gallons or greater?		l V

1100	UMP STATION'C	HECKLIST 点温度	E LIF	3.53 3 m.		1. 2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	M 一种图4	, 45eF		in.
11.01	REGULATION	Sal Control							YES	N/A
29.	8.125(7)(C)	Is the minimum di					TEG sewer at	least 4"?		V
30.	8.130(2)(A) 8.140(2)(B)	Is the pump statio	1.00							V
31,	8.130(3)(A)	access provided to	s the dry well completely separate from the wet well and is a suitable and safe means of access provided to each?							V
32.	8.130(3)(B)	provided?	f the design flow is 1,500 gpd or more, are there at least 2 pumps or pneumatic ejectors provided?							V
33	8.130(3)(D)	Are valves located	d outside we	t well unles	ss Integra	I to a pump o	r its housing?			V
34.	8.130(3)(F) 8.140(8)(J)		Do wet and dry wells have separate ventilation systems?  Does all potable water brought to pump stations comply with 8.140(7)(D)?							
35.	8.130(3)(G)	Does all potable v	vater brough	t to pump	stations o	comply with 8.	.140(7)(D)?			V
36.	8.130(6)	ls an alarm syster								V
37.	8.130(7)(A)	Is there 2 hours re retention of the pe	ak hourly fle	ow for a de	sian flow	< 100,000 gp	od?			V
38.	8.130(7)(B)	Are there independent and operating the	dent utility s	substations	provided	for emergen	cy power capa	able of starting		V
39.	8.130(8)(A)	Is the force main	velocity of ≥	2 ft/s main	tained?					V
40.	8.130	Are there complet emergency proce- necessary?	e operation dures, main	instruction tenance sc	s for the hedules,	oumpting state special tools	ions provided and spare par	that include ts that may be		V
12.0 5	UCTION LIFT: PU	MP AND SUBMER	SIBLE PUN	P-STATIO	N CHEC	KLIST 🐗	Many 4 4	4.1000000000000000000000000000000000000	7 . '	
	REGULATION								YES	N/A
41.	8.130(4)	Are the suction lift								V
42.	8.130(4)(A)	Is the combined to positive suction he	otal of dynar ead at desig	nic suction in operating	lift at the g conditio	"pump off" el ns less than o	levation and re or equal to 22	equired net feet?		V
43.	8.130(4)(B)	Are there dual vac	cuum pumps	s capable o	of removir	ng air from the	suction lift po	ump?		V
44.	8.130(5)(A)	Are submersible p	oumps readi pipe in the	ly removab wet well?	le and re					V
13.0 8	EWER EXTENSION	ON CHECKLIST ( ered "N/A" provide a	CERTIFICA	TION STA	TEMENT			AGAST		
The	se plans have been	ed to the plans for S previously reviewe	d and appro	ved by Mis	sheets 1 1 souri Am	hrough 36) will erican Water.	OF MISSO ATTHEW D. KIST 7/1/2021	pared and dated	10/02/20	023.
Name	: Matthew Kis	t, PE (Kimley-Horn a	& Associates	s, Inc.)			2013019062 ONALUX			
Addre	ss: 805 Pennsylv	ania Avenue, Suite	150							
City:	Kansas	City	State:	Missouri			ZIP Code:	64105		
Telep	none Number with	Area Code:	816-652-013	18	Email:	Matt.Kist@k	Cimley-Horn.co	om		
O 780-16	32 (10-22)	AND THE PARTY OF T								