STATE OF MISSOURI DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



GENERAL PERMIT for SEWER EXTENSION CONSTRUCTION

The Missouri Department of N	latural Resources hereby issues a permit to:
Construction Permit ID: Title of Project: Owner: Address:	MOGSE0543 120th Terr Sanitary Sewer Improvements City of Grandview 1200 Main St GRANDVIEW, MO 64030
	eneral site work appropriate to the scope and purpose of the project and will include all the necessary elete and usable collection system. The construction of this project will be in the vicinity of the county ing Permit ID below:
County:	Receiving Permit ID:
for the construction of (describ	ped construction project):
gravity sewer lines with app also serve a design average MGD) of unknown commer	mprovements-Construction of approximately 1,614 lf of 8-inch to 21-inch PVC SDR-20 roximately 8 manholes (2 new, 6 reconstructed). This project is a realignment but will flow of an additional 26,040 gallons per day (or a maximum of approximately 1.01 cial and mixed development. 20th Terrace and Bennington Ave in Grandview, Jackson County, and discharges to
	ated at the LBVSD, Atherton WWTF, MO0101087. Doug Wesselschmidt, Public Grandview, signed application. David Lilly, P.E., District Engineer with LBVSD, or dated February 13, 2023.
RSMo, and regulation promula As the Department does not ex- permit does not include approve	facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, gated thereunder, or this permit may be revoked by the Department of Natural Resources (Department) tamine structural features of design or the efficiency of mechanical equipment, the issuance of this val of these features. construction of water pollution control components; it does not apply to other environmentally
April 14, 2023 Issue Date	John Hoke Director Water Protection Program
January 02, 2025 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 <u>www.dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm</u> 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	CHECK NO.			
DATE RECEIVED				

			DATE RECEIVED		
NOTE ► Please Read the accompanying in	nstructions before completing t	his form			
1.0 APPLICATION INFORMATION (Note – I considered incomplete and returned.)	f any of the questions in this section	on are answe	ered NO, this applica	ition may be	
1.1 Is this a Federal/State funded project?	☐ YES 🔽 N/A Funding Age	ncy:	Proj	iect#:	
1.2 Has the Department of Natural Resource TYES Date of Appro		engineering NO	report*?	□ N/A	
1.3 Is a copy of the appropriate plans* and s	pecifications* included with this ap	plication?	✓ YES □ NO		
If the project is using standard specificati	ons, name of community: Kansas Ci	ty Metropolitan Ch	apter of the American Public V	Vorks Association	
1.4 Is a summary of design* included with the	is application? 🛭 YES 🗌 NO)			
1.5 Is the appropriate fee or JetPay confirma See Section 7.0	tion included with this application?	YES	□NO		
* Must be affixed with a Missouri registered p	rofessional engineer's seal, signat	ure and date).		
2.0 PROJECT INFORMATION 2.1 NAME OF PROJECT					
120th Terr Sanitary Sewer Improvements					
ADDRESS	CITY	STATE MO	ZIP CODE 64030	COUNTY Jackson	
6503 E 120th Terr 2.2 Legal Description: 1/4, 1/4, 1/4	Grandview 4, SW 1/4, Sec. 12 ,	T 47N ,	R 33W	Jackson	
2.2 Legal Description.	4, 500 74, 666. 12 ,	. 4/11			
2.3 Project Components (check all that apply ☑ Gravity sewers ☐ Pumping station		tive sewer sy	rstem	escribe below.)	
2.4 PROJECT DESCRIPTION upsizing and re-routing of approximately 1,61	5 LE of 9" 21" gravity sower with 9	manholes			
upsizing and re-routing of approximately 1,61	5 LF 01 6 -21 gravity sewer with 6	mannoles.			
2.5 DESIGN INFORMATION					
A. Population or number of lots to be served	TOWARD AND MACHINES WITHOUT THE PER			v Flour	
B. Estimated flow to be contributed by this ex		223000 gpa	Design Peak Hourl	y Flow: gph	
C. Industrial Wastes: Type: N/A	Flow: gpd				
D. Receiving Sewer: Size: 21 inches	Capacity: 9690000 gpm				
E. Does this project (check all that apply):	_				
☑ Connect to an existing treatment plant □	Resolve enforcement issue	Eliminate or	consolidate an exis	ting treatment plant	
F. Estimated number of onsite systems being removed: 0					
G: Estimated costs associated with piping: \$ 600,000 Estimated costs associated with lift station(s): \$					
3.0 PROJECT OWNER	TELEPHONE NUMBER WITH A	DEA CODE	EMAIL ADDRESS		
NAME City of Grandview	816-316-4857	NEW CODE	DWesselschmidt@	grandview.org	
ADDRESS 1200 Main Street	CITY Grandview	MO STATE	ZIP CODE 64030		
CHARTER NUMBER (SECRETARY OF STATE) or REGISTERED		,			
,					

4.0 CONTINUING AUTHORITY: A continuir for ensuring compliance with the permit required Continuing authority should be a relatively provided by the permitted facility or activated by the permittee to sample or operate analytical laboratory. To access the regulated Water Commission Chapter 6. A continuing (SoS's) webpage: Missouri Secretary of State required to register with the SoS.	uirements a ermanent of ivity. A containt and maintaint ory requirer authority's	and provide entity responding attinuing auth ain the systement regard name mus	continuous sonsible for the hority is not, lem for a definiting continuing to be listed ex	stable overs e ongoing o however, and ned time per ag authority actly as it a	sight of the permitted facility or activity. The peration, maintenance and modernization, n entity or individual that is contractually eriod, such as a certified operator or , 10 CSR 20-6.010(2), please visit Clean appears on the Missouri Secretary of State's	
NAME			NUMBER WITH A	REA CODE	EMAIL ADDRESS	
City of Grandview ADDRESS	T CITY	816-316-4	4857	STATE	DWesselschmidt@grandview.org	
1200 Main Street	Grandvie	ew		MO	64030	
4.1 Has appropriate continuing authority acc A letter from the continuing authority accept different than the original owner of the const Treatment Facility Acceptance" Form 780-25 5.0 ENGINEER	ng respons	sibility for cor r a properly	ontinued mai executed "C	ntenance o	f the sewer (if the continuing authority is uthority and Receiving Wastewater	
ENGINEER NAME / COMPANY NAME		TELEPHONE	NUMBER WITH A	REA CODE	EMAIL ADDRESS	
Jennifer Waters-Trekk Design Group ADDRESS	CITY	816-874-4	1674	STATE	jwaters@trekkdesigngroup.com	
1411 E 104th St	Kansas			MO	64131	
6.0 RECEIVING WASTEWATER TREATME	NT FACIL			(#2)		
Little Blue Valley Sewer District		TELEPHONE NUMBER WITH AREA CODE 816-796-7660 ext 2214			EMAIL ADDRESS odell@lbvsd.org	
MISSOURI STATE OPERATING PERMIT # MO0101087		COUNTY Jackson			REMAINING CAPACITY (GPD) 22,000,000	
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	executed (S	Continuing A Collity, if differity is regular	Authority and rent than the	Receiving continuing ublic Service	Wastewater Treatment Facility Acceptance authority, is included with this application.	
Certificate of Convenience and Necessity ha OPTIONAL QUESTIONS REGARDING MIL	Name and Address of the Owner, where the Owner, while the		Yes – Date		□ No ☑ N/A	
Have you or an immediate family member ev						
U.S. Armed Forces?		□ Y	es	□ No		
If yes, would you like information about military-related se in Missouri?		services	□Y	es	□ No	
7.0 Application Fee						
Check Number					on Number 20041823	
8.0 PROJECT OWNER: I certify under penal supervision in accordance with a system des submitted. Based on my inquiry of the persor gathering the information, the information submitted aware there are significant penalties for submit violations. PROJECT OWNER SIGNATURE	igned to as n or persor omitted is,	ssure qualif ns who man to the best	fied personne lage the system of my knowle	el properly g em, or thos edge and be	gather and evaluate the information e persons directly responsible for elief, true, accurate and complete. I am	
PRINTED NAME				100	DATE 4.5.00	
Doug Wesselschmidt					4-5-23	
TITLE OR CORPORATE POSITION Public Works Director		TELEPHONE NUMBER WITH AREA CODE 816-316-4857		REA CODE	DWesselschmidt@grandview.org	
Mail completed copy to:		310 310 41				
MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM PO BOX 176 JEFFERSON CITY, MO 65102-0176			Submit completed electronic copy to: Missouri Department of Natural Resources at DNR.WPPEngineerSection@dnr.mo.gov			

MO 780-1632 (10-22)

9.0 S	EWER EXTENSION	ON CHECKLIST		
SEW!	ER EXTENSION Deable to the design	DESIGN CERTIFICATION: Answer all questions yes or N/A. Answer N/A only if the question is of the proposed sewer extension.	clearly	not
	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?	V	
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?		
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?	V	
7.	8.120(3)(A)2	Is the pipe covered with at least 36" of soil or sufficiently insulated to prevent freezing?	V	
8.	8.120(3)(B)	Is deflection testing specified to ensure no pipe exceeds a deflection of 5% of the inside diameter?	V	
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"?	V	
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?	V	
13.	8.120(4)(F)	Do the specifications include a requirement for inspection and testing for manholes?	V	П
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 F		ERS, GRINDER PUMP, STEP AND STEG SEWER CHECKLIST		
	REGULATION		YES	N/A
16.	8.125(5)(A)1.	Does the cleaning velocity of ≥ 2 ft/s happen more than once per day?		
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"?		\checkmark
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)?		√
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?		V
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
28.	8.125(6)(F)	Are duplex pumps provided for the design flow of 1,500 gallons or greater?		\checkmark

33 8.130(3)(D) Are valves located outside wet well unless integral to a pump or its housing? 34. 8.130(3)(F) 8.140(8)(J) 35. 8.130(3)(G) Does all potable water brought to pump stations comply with 8.140(7)(D)? 36. 8.130(6) Is an alarm system provided with uninterrupted power? 37. 8.130(7)(A) Is there 2 hours 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? 38. 8.130(7)(B) Are there independent utility substations provided for emergency power capable of starting and operating the pump station at its rated capacity? 39. 8.130(8)(A) Is the force main velocity of ≥ 2 ft/s maintained? 40. 8.130 Are there complete operation instructions for the pumpting stations provided that include	11.0 PUMP STATION CHECKLIST								
1. 1. 1. 1. 1. 1. 1. 1.		REGULATION					YES	N/A	
8.140(2)(B) 31. 8.130(3)(A) 32. 8.130(3)(B) 33. 8.130(3)(B) 34. 8.130(3)(B) 34. 8.130(3)(B) 35. 8.130(3)(B) 36. 130(3)(B) 37. 4 a valves located outside wet well unless integral to a pump or its housing? 38. 8.130(3)(B) 39. 8.130(3)(B) 30. A re valves located outside wet well unless integral to a pump or its housing? 39. 8.130(3)(B) 30. 8.130(3)(B) 31. 8.130(3)(B) 32. 8.130(3)(B) 33. 8.130(3)(B) 34. 8.130(3)(B) 35. 8.130(3)(G) 36. 8.130(G) 37. 8.130(7)(A) 38. 8.130(7)(A) 39. 8.130(7)(A) 39. 8.130(7)(A) 30. 8.130(7)(A) 30. 8.130(7)(B) 31. 8.130(7)(B) 32. 8.130(7)(B) 33. 8.130(7)(B) 34. 8.130(7)(B) 35. 8.130(7)(B) 36. 8.130(7)(B) 37. 8.130(7)(B) 38. 8.130(7)(B) 39. 8.130(8)(A) 39. 8.130(8)(A) 30. 8.130(7)(B) 30. 8.130(7)(B) 30. 8.130(7)(B) 30. 8.130(7)(B) 30. 8.130(7)(B) 30. 8.130(8)(A) 30	29.	8.125(7)(C)	Is the minimum diameter sewer main pipe and service line of STEG sewer at least 4"?				\checkmark		
access provided to each? Comparison of the design flow is 1,500 gpd or more, are there at least 2 pumps or pneumatic ejectors provided? Comparison of the design flow is 1,500 gpd or more, are there at least 2 pumps or pneumatic ejectors provided? Singlo(3)(0)	30.		Is the pump station	n designed to withstan	nd the 100-year flood?			V	
provided? Available State State	31.	8.130(3)(A)			the wet well and is a s	uitable and safe means of		V	
34. 8.130(3)(F) 35. 8.130(3)(G) 36. 8.140(B)(J) 36. 8.130(G) 37. 8.130(G) 38. 8.130(G) 38. 8.130(G) 38. 8.130(G) 39. 8.130(G) 39. 8.130(G) 30. 8.130(G) 30. 8.130(G) 30. 8.130(G) 30. 8.130(G) 31. 8.130(G) 32. 8.130(G) 33. 8.130(G) 34. 8.130(G) 35. 8.130(G) 36. 8.130(G) 36. 8.130(G) 37. 8.130(G) 38. 8.130(G) 39. 8.130(G)(G) 39. 8.130(G)(G) 30. Are there a hours retention of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs Vertication of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs Vertication of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs Vertication of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs Vertication of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs Vertication of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs Vertication of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs Vertication of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs Vertication of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs Vertication of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs Vertication of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs Vertication of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs Vertication of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs Vertication of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs Vertication or 100,000 gpd or 100,0	32.	8.130(3)(B)	provided?					V	
8.140(8)(J) 36. 8.130(3)(G) 37. 8.130(7)(A) 38. 8.130(7)(A) 39. 8.130(7)(A) 39. 8.130(7)(B) 39. 8.130(7)(B) 39. 8.130(8) 39. 8.130(8) 39. 8.130(8) 39. 8.130(8) 39. 8.130(8) 39. 8.130(8) 39. 8.130(8) 39. 8.130(8)(A) 39. 8.130(8)(A) 39. 8.130(8)(A) 39. 8.130(8)(A) 39. 8.130(8)(A) 30. Are there independent utility substations provided for emergency power capable of starting and operating the pump station at its rated capacity? 40. 8.130 40. Are there complete operation instructions for the pumpting stations provided that include emergency procedures, maintenance schedules, special tools and spare parts that may be necessary? 12.0 SUCTION LIFT PUMP AND SUBMERSIBLE PUMP STATION CHECKLIST 42. 8.130(4) 43. 8.130(4) 44. 8.130(4) 45. 18 the combined total of dynamic suction lift the "pump off elevation and required net positive suction head at design operating conditions less than or equal to 22 feet? 43. 8.130(4)(B) 46. Are there dual vacuum pumps capable of removing air from the suction lift pump? 44. 8.130(5)(A) 47. Are there dual vacuum pumps capable of removing air from the suction lift pump? 44. 8.130(5)(A) 48. Are there dual vacuum pumps capable of removing air from the suction lift pump? 49. 8.130(5)(A) 49. Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the wet well? 10. 10. 10. 10. 10. 10. 10. 10. 10. 10.	33	8.130(3)(D)	Are valves located	d outside wet well unle	ss integral to a pump o	or its housing?		\checkmark	
State: Modern State: State: State: Modern State: Mod	34.		Do wet and dry w	ells have separate ven	tilation systems?			V	
36. 8.130(6) Is an alarm system provided with uninterrupted power?	35.		Does all potable v	vater brought to pump	stations comply with 8	.140(7)(D)?		√	
8.130(7)(A) Is there 2 hours retention of the peak hourly flow for a design flow > 100,000 gpd?	36.	8.130(6)	Is an alarm syster	n provided with uninter	rrupted power?			V	
8. 8.130(7)(8) Are there independent utility substations provided for emergency power capable of starting and operating the pump station at its rated capacity? 9. 8.130(8)(A) Is the force main velocity of ≥ 2 ft/s maintained? 40. 8.130 Are there complete operation instructions for the pumpting stations provided that include emergency procedures, maintainance schedules, special tools and spare parts that may be necessary? 12.0 SUCTION LIFT PUMP AND SUBMERSIBLE PUMP STATION CHECKLIST REGULATION Are the suction lift pumps of the self priming or vacuum priming type? 41. 8.130(4)(A) Is the combined total of dynamic suction lift at the "pump off" elevation and required net positive suction head at design operating conditions less than or equal to 22 feet? 43. 8.130(4)(B) Are there dual vacuum pumps capable of removing air from the suction lift pump? 44. 8.130(5)(A) Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the wet well? 13.0 SEWER EXTENSION CHECKLIST — CERTIFICATION STATEMENT For any questions answered "N/A" provide an explanation. Also provide any useful general comments regarding design for review engineer. 11. There are no cleanouts included in this project. 1228. There are no pressure systems included in this project. 4144: There are no pump station included in this project. Missouri Professional Engineer's seal, signature and date: Missouri Professional Engineer's seal, signature and date: Address: 1411 E 104th St City: Kansas City State: MO ZIP Code: 64131	37.	8.130(7)(A)						V	
39 8.130(8)(A) Is the force main velocity of ≥ 2 ft/s maintained?	38.	8.130(7)(B)	Are there indepen	dent utility substations	provided for emergen			V	
Are there complete operation instructions for the pumpting stations provided that include energency procedures, maintenance schedules, special tools and spare parts that may be necessary? 12.0 SUCTION LIFT PUMP AND SUBMERSIBLE PUMP STATION CHECKLIST REGULATION 41. 8.130(4) Are the suction lift pumps of the self priming or vacuum priming type? 42. 8.130(4)(A) Is the combined total of dynamic suction lift at the "pump off" elevation and required net positive suction head at design operating conditions less than or equal to 22 feet? 43. 8.130(4)(B) Are there dual vacuum pumps capable of removing air from the suction lift pump? 44. 8.130(5)(A) Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the welt well? 13.0 SEWER EXTENSION CHECKLIST - CERTIFICATION STATEMENT For any questions answered "N/A" provide an explanation. Also provide any useful general comments regarding design for review engineer. 11: There are no cleanouts included in this project. 15-28: There are no pressure systems included in this project. 41-44: There are no pump station included in this project. 41-44: There are no pump station included in this project. 43. 8.130(4)(4)(4) Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the well well? 44. 8.130(5)(A) Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the well well? 45.130(5)(A) Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the well well? 46. 8.130(5)(A) Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the well well? 47. 8.130(4)(A) Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the well well? 48. 8.130(4)(B) Are there dual vacuum pumps readily removable and replaceable without personnel entering,	39.	8.130(8)(A)						V	
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INSTRUCTIONS FOR COMPLETING APPLICATION FOR CONSTRUCTION PERMIT – SEWER EXTENSION

All blanks must be filled in when the application is submitted to the Missouri Department of Natural Resources. This includes the **required signature**. The fee for a sewer extension construction permit is \$300.

In accordance with Missouri State law RSMo 644.051.3.(2), sewer extension projects installing up to a total of 1,000 linear feet of gravity sewer or force main with less than two pump stations are exempt from obtaining a construction permit. Since these projects are exempt, a construction permit will not be issued for this activity and completion of this form is not required.

Note: Use the form Application for Construction Permit – Wastewater Treatment Facility Application for Construction Permit – Sewer Extension MO 780-1632, if any wastewater treatment component(s) are to be constructed.

A land disturbance permit is required if construction will result in the disturbance of one or more acres of land. A land disturbance permit (MO-RA00000) is available through the department's ePermitting system at <u>ePermitting Splash Page</u>. A permit fee in accordance with 10 CSR 20-6.011(2)(E) is required.

After receiving a complete application, the department enters the application information into the Missouri Clean Water Information System. You may search for the status of a construction permit online at MocWIS Application Search.

- 1.1 Check appropriate box. If the project is funded with federal or state monies, supply the funding agency name and project number.
- 1.2 Check appropriate box and provide the date of department approval.

 The department has developed a fact sheet to aid in the development of an approvable engineering report, Engineering Report Guidance for Collection Systems, Fact Sheet--PUB2415. This document is available online at Engineering Report Guidance for Collection Systems With a Design Flow of 22,500 Gpd or Greater. Engineering report exemptions are listed in 10 CSR 20-6.010(4)(B). Per 10 CSR 20-8.110(2), engineering reports must be approved by the department prior to the submittal of plans and specifications and a construction permit application.
- 1.3 Check appropriate box. Provide a copy of the appropriate plans and specifications for department review when applying for a construction permit per 10 CSR 20-8.110 and 10 CSR 20-6.010. A Missouri registered professional engineering seal, signature and date is required on each sheet of the plans and the cover of the technical specifications. An electronic copy of the construction permit application and the information listed below in Portable Document Format (PDF) searchable format or department approved equivalent per 10 CSR 20-6.010(5)(G), along with one paper copy for projects not seeking department funding or two paper copies for projects seeking department funding under 10 CSR 20-4. If the project is relying on approved standard specifications from a particular municipality, provide the name of the community. The communities with department-approved standard specifications is available online at <u>Wastewater Construction Permits and Engineering Regulations</u>
- 1.4 Check appropriate box. A summary of design shall accompany the plans and specifications when applying for a construction permit per 10 CSR 20-8.110. The department has developed a fact sheet to aid in the development of an acceptable summary of design, Summary of Design Guidance, Fact Sheet--PUB2417. This document is available online at Summary of Design Guidance for Wastewater Treatment Facilities PUB2417.
- 1.5 Check the appropriate box. Include fee with application per 10 CSR 20-6.011(2) and <u>Wastewater Treatment Facility Permit Fees -- PUB2564</u>.
- Note: The department returns incomplete construction permit applications and related engineering documents and the application forfeits the fees. See 10 CSR 20-6.011(5)(A). The applicant forfeits the fees when the applicant withdraws construction applications. See 10 CSR 20-6.011(5)(B).2.1. Provide the project name and location by street name or address.
- 2.1. Provide the project name and location by street name or address.
- 2.2 Provide the project legal description. The department's mapping system is available online at MAPIT ARCGIS.
- 2.3 Check all of the applicable boxes. The department considers anything other than a gravity sewer system to be an alternative sewer system. Examples of these systems are grinder pump pressure sewers, septic tank effluent pump, or STEP, sewers, septic tank effluent gravity, or STEG, sewers or small diameter gravity sewers.
- 2.4 Briefly describe the project by providing the following information:
 - A. Total number of manholes.
 - B. Size of sewers and the total linear feet of each size.
 - C. Number of lift stations and design average flow and peak hourly flow capacities of each lift station.
 - D. Size and length of force mains.
 - E. Alternative sewer size and length, plus the number of components (e.g. septic tanks, grinder pumps, etc.)
- 2.5 Provide the project design information and when required in the units specified:
 - A. Provide the population or number of lots to be served by the proposed sewer extension.
 - B. Provide the estimated design flow information in accordance with 10 CSR 20-8.110(4)(C)4.A.
 - Design average flow The design average flow is the average of the daily volumes to be received for a
 continuous 12 month period expressed as a volume per unit time. However, the design average flow for
 facilities having critical seasonal high hydraulic loading periods (e.g., recreational areas, campuses and
 industrial facilities) shall be based on the daily average flow during the seasonal period.
 - **Design peak hourly flow** The design peak hourly flow is the largest volume of flow to be received during a one hour period expressed as a volume per unit time.
 - C. Provide the type and flow in gallons per day of industrial wastes received by the propose sewer extension.

- D. Provide the receiving sewer size in inches and capacity in gallons per minute.
- E. Check all of the applicable boxes.
- F. Provide an estimate of the number of onsite systems decommissioned as a result of the project.
- G: Provide estimated cost (design, materials, land, and labor) for installation of piping and pump station(s).
- 3.0 Project Owner Provide the legal name, mailing address, phone number and email address of the owner of the regulated activity or discharge. The owner identified in this section and subsequently reflected on the certificate page of the operating permit should be the owner of the regulated activity/discharge being applied for and is not necessarily the owner of the real property on which the activity or discharge is occurring. Also provide Charter Number of Project Owner from Secretary of State or name of Registered agent to comply with 10 CSR 20-6.010(2)(E) which states: "Private corporations which are not incorporated under the laws of Missouri shall be represented by a registered agent in the state of Missouri before a construction permit or an operating permit will be issued by the department."
- Continuing Authority A continuing authority is a company, business, entity, or person(s) that will be legally responsible for ensuring compliance with the permit requirements and provide continuous stable oversight of the permitted facility or activity. The Continuing authority should be a relatively permanent entity responsible for the ongoing operation, maintenance and modernization, when needed, of the permitted facility or activity. 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 view the regulatory requirement regarding continuing authority, 10 CSR 20-6.010(2), please visit Department of Natural Resources Division 20-Clean Water Commission Chapter 6-Permits. A continuing authority's name must be listed exactly as it appears on the Missouri Secretary of State's (SoS's) webpage: Missouri Secretary of State Business Entity Search, unless the continuing authority is an individual(s), government entity, or otherwise not required to register with the SoS. Provide charter number listed on SoS's webpage, if applicable. If the Continuing Authority is the same as the Project Owner, write "Same as above".
- 4.1 Check appropriate box. Include a letter signed by the continuing authority (if not the same as the project owner) stating they will "accept, operate, and maintain" the sewer extension. The continuing authority may complete the "Continuing Authority and Receiving Wastewater Treatment Facility Acceptance" form in lieu of a letter. Download the department's form Continuing Authority Receiving Wastewater Treatment Facility Acceptance-Mo 780-2584. If the continuing authority will not accept and agree to operate and maintain the sewer extension, this application will be considered incomplete.
- 5.0 Complete Engineer contact information.
- 6.0 Complete Receiving Wastewater Treatment Facility information. Include the Missouri State Operating Permit number and the available remaining capacity in gallons per day, or gpd.
- 6.1 Check appropriate box. The receiving wastewater treatment facility must be notified and agree to the proposed sewer extension and additional flow, prior to submitting a construction permit to the department.

 If the receiving wastewater treatment facility will not accept the wastewater, this application will be considered incomplete.
- 6.2 Check appropriate box. Include a letter from the receiving wastewater treatment facility (if not same as the continuing authority) acknowledging and accepting the additional flow from the proposed sewer extension.
- 6.3 Check appropriate box. The Certificate of Convenience and Necessity (CCN) is granted by the Public Service Commission to for-profit companies to provide sewer services. 10 CSR 20-6.010(2)(B)3 requires the CCN be granted prior to applying for a permit from the department.
- 7.0 Check the appropriate box and include check or confirmation number. Applicants can pay fees online by credit card or eCheck through a system called JetPay. See <u>Water Permit Fees</u>. Clicking on the JetPay link you can make a one-time payment by selecting the "Water Protection Program" as the Payment Category and WP 04 Construction Permits as the Payment Type. The system then asks for Wastewater Permit Number (which is "construction") and Facility/Project name (which is the name of this project given in question 2.0). The fee for sewer extension review is \$300.
 - Per Section 37.001, RSMo, a transaction fee will be included. The transaction fee is paid to the third party vendor JetPay, not the Department of Natural Resources.
 - Be sure to select the correct fee type and corresponding URL to ensure your payment is applied appropriately. If you
 are unsure what type of fee to pay, contact the Water Protection Program's Budget, Fees and Grants Management
 Unit by phone at 573-522-1485 for assistance.
 - Upon successful completion of your payment, JetPay provides a payment confirmation. Submit this form with a copy of the payment confirmation if requesting a new permit or a permit modification.
 - If you are unable to make your payment online, but want to pay with credit card, you may email your name, phone
 number, and invoice number, if applicable, to <u>WPPFEES@dnr.mo.gov</u>. The Budget, Fees and Grants Management
 Unit will contact you to assist with the credit card payment. Please do not include your credit card information in
 the email.
 - Applicants can find fee rates for various activities in 10 CSR 20-6.011 and <u>Wastewater Treatment Facility Permit Fees-- PUB2564</u>.
- 8.0 The owner of the construction project must sign the application per 10 CSR 20-6.010(5)(G).

 Mail the completed form, related construction documents and applicable fee (or JetPay receipt) to the department. Also provide the application, plans and specifications in PDF searchable format via external media drive or email if size allows. Email information to DNR.WPPEngineerSection@dnr.mo.gov.

9.0-13.0 Sewer Extension Checklist

This portion of the application is optional, but completing it is recommended because it can speed review. If designed properly, the engineer preparing the application should be able to answer "Yes" or "Not Applicable" (N/A) for each of the items. If an answer of "N/A" is necessary, section 13.0 provides a place to provide any explanation or useful comments. Section 13.0 also requires those completing the Sewer Extension Checklist (9.0 – 13.0) to properly sign, seal and date the checklist. If there are any questions concerning this form, contact the Department of Natural Resources, Water Protection Program at 800-361-4827 or 573-751-1300, or visit <u>Wastewater Construction Permits and Engineering.</u>