

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

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

City of Liberty
101 East Kansas Street
Liberty, MO 64068

for the construction of (described facilities):

See attached.

Permit Conditions:

See attached.

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.

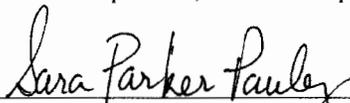
As the department does not examine structural features of design or the efficiency of mechanical equipment, the issuance of this permit does not include approval of these features.

A representative of the department may inspect the work covered by this permit during construction. Issuance of a permit to operate by the department will be contingent on the work substantially adhering to the approved plans and specifications.

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

September 15, 2015
Effective Date

September 14, 2017
Expiration Date


Sara Parker Pauley, Director, Department of Natural Resources


Director, Water Protection Program

CONSTRUCTION PERMIT

CONVEYANCE SYSTEM:

This project consists of the installation and construction of wastewater conveyance system improvements:

- West Interceptor Sewer – approximately 1,500 lf of new 36-inch gravity sewer
- 11 MGD West Pump Station and approximately 1,110 lf of new 18-inch forcemain
- Nine MGD East Pump Station and approximately 15,900 lf of new forcemain

The project will also include general site work appropriate to the scope and purpose of the project.

These wastewater facilities will be in the vicinity of Lindeman Road and Birmingham Road in the city of Liberty, MO, Clay County, and will discharge to the new Liberty Wastewater Treatment Facility (currently under construction), Missouri State Operating Permit No. MO-0137111.

PERMIT CONDITIONS:

This project is being constructed as a “Design-Build project. The permittee is authorized to construct subject to the following conditions:

1. All construction shall be in accordance with the Water Pollution Control components of the plans submitted by Crawford Murphy & Tilly, Inc. on July 14, 2015 and signed and sealed by Mr. Timothy M. Schneller, P.E. on March 20, 2015 and approved by the department on September 15, 2015.
2. The department must be contacted in writing prior to making any changes to the approved plans that would directly or indirectly have an impact on the capacity, flow, system layout, or reliability of the proposed wastewater treatment facilities or any design parameter that is addressed by 10 CSR 20-8, in accordance with 10 CSR 20-8.110(8).
3. As per 10 CSR 20-4.040, all changes in contract price or time within the approved scope of work must be by change order in accordance with Section 20 of this rule.
4. This construction permit does not authorize discharge.
5. 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 Kansas City Regional Office per 10 CSR 20-7.015(9)(E)2.

6. Protection of drinking water supplies shall be in accordance with 10 CSR 20-8.120(10).
“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. No water pipe shall pass through or come in contact with any part of a sewer manhole.”
 - A. Sewers in relation to water works structures shall meet the requirements of 10 CSR 23-3.010 with respect to minimum distances from public water supply wells or other water supply sources and structures.
 - B. Sewer mains shall be laid at least ten feet horizontally from any existing or proposed water main. The distances shall be measured edge-to-edge. In cases where it is not practical to maintain a ten foot separation, the department may allow a deviation on a case-by-case basis, if supported by data from the design engineer. Such a deviation may allow installation of the sewer closer to a water main, provided that the water main is in a separate trench or on an undisturbed earth shelf located on either side of the sewer and at an elevation so the bottom of the water main is at least 18 inches above the top of the sewer. If it is impossible to obtain proper horizontal and vertical separation as described above for sewers, the sewer must be constructed of slip-on or mechanical joint pipe or continuously encased and be pressure tested to 150 pounds per square inch to assure water tightness.
 - C. Manholes should be located at least ten feet horizontally from any existing or proposed water main.
 - D. Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade. When it is impossible to obtain proper vertical separation as stipulated above, one of the following methods must be specified:
 - 1) The sewer shall be designed and constructed equal to the water pipe and shall be pressure tested to assure water tightness prior to backfilling; or
 - 2) Either the water main or sewer line may be continuously encased or enclosed in a watertight carrier pipe which extends ten feet on both sides of the crossing, measured perpendicular to the water main. The carrier pipe shall be of materials approved by the department for use in water main construction.

7. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of one acre or more 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 may 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.

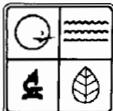
8. A United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) issued by the department or permit waiver may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied. If construction activity 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.

9. Upon completion of construction:
 - A. The city of Liberty will become the continuing authority for operation, maintenance, and modernization of these facilities;
 - B. Submit the enclosed form Statement of Work Completed to the department in accordance with 10 CSR 20-6.010(5)(D); and
 - C. Submit an electronic copy of the as-builts.

RECEIVED

1100137111 CPSE01040
AP 20985 C14622



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

MAR 26 2015

APPLICATION FOR CONSTRUCTION PERMIT -
SEWER EXTENSION

WATER PROTECTION PROGRAM

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
SEE RECEIVED	CHECK NO.
\$2300.00	31240
DATE RECEIVED	
3/26/15	SB

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: SRF Project #: 702-1
- 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 included with this application? (See instructions for appropriate fee.) YES NO

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

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT

Liberty Wastewater Conveyance System

ADDRESS	CITY	STATE	ZIP CODE	COUNTY
Lindenman Rd. & Birmingham Rd.	Liberty	MO	64068	Clay

2.2 Legal Description: ¼, SW ¼, SW ¼, Sec. 30, T 51N, R 31W

2.3 Project Components (check all that apply):

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

2.4 PROJECT DESCRIPTION

Construction of wastewater conveyance system improvements to convey wastewater generated by the City of Liberty to a new wastewater treatment plant. Major components include: a new "East" pump station; a new "West" pump station; approximately 16,000 lineal feet of 20-inch diameter "East" forcemain; approximately 1,300 lineal feet of 36-inch diameter "West" gravity interceptor sewer; approximately 1,000 lineal feet of 18-inch diameter "West" forcemain; and new metering and diversion structures to separate Liberty flows from Kansas City flows on the West system.

2.5 DESIGN INFORMATION

- A. Population or number of lots to be served by this extension: 30,000 current, 50,000 design
- B. Estimated flow to be contributed by this extension: Design Average Flow: 5.0M gpd Design Peak Hourly Flow: 800k gph
- C. Industrial Wastes: Type: Flow: gpd
- D. Receiving Sewer: Size: inches Capacity: gpm

3.0 PROJECT OWNER

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS	
City of Liberty	(816) 439-4549	bhess@ci.liberty.mo.us	
ADDRESS	CITY	STATE	ZIP CODE
101 E. Kansas Street	Liberty	MO	64068

4.0 CONTINUING AUTHORITY: Permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the wastewater collection system.

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS	
City of Liberty	(816) 439-4549	bhess@ci.liberty.mo.us	
ADDRESS	CITY	STATE	ZIP CODE
101 E. Kansas Street	Liberty	MO	64068

4.1 A letter from the continuing authority, if different than the owner, is included with this application. YES NO N/A

5.0 ENGINEER

ENGINEER NAME / COMPANY NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS	
Tim Schneller / GBA Architects & Engineers	(913) 492-0400	tschneller@gbateam.com	
ADDRESS	CITY	STATE	ZIP CODE
9801 Renner Boulevard	Lenexa	KS	66219

6.0 RECEIVING WASTEWATER TREATMENT FACILITY		
NAME Liberty Wastewater Treatment Plant	TELEPHONE NUMBER WITH AREA CODE (816) 439-4549	E-MAIL ADDRESS bhess@ci.liberty.mo.us
MISSOURI STATE OPERATING PERMIT # MO-0137111	REMAINING CAPACITY (GPD) 5.0M	
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 PROJECT OWNER: I hereby certify that I am familiar with the information contained in this application and to the best of my knowledge and belief such information is true, complete, and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders, and decisions, subject to any legitimate appeal available to applicant under Missouri Clean Water Law.		
PROJECT OWNER SIGNATURE 		
PRINTED NAME Brian Hess, P.E.	DATE 3/23/15	
TITLE OR COPORATE POSITION Director of Utilities	TELEPHONE NUMBER WITH AREA CODE (816) 439-4549	E-MAIL ADDRESS bhess@ci.liberty.mo.us
Mail completed copy to:	MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM P.O. BOX 176 JEFFERSON CITY, MO 65102-0176	