

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

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

<p>City of Jefferson 320 East McCarty Street Jefferson City, MO 65101</p>

for the construction of (described facilities):

<p>See attached.</p>

Permit Conditions:

<p>See attached.</p>

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).

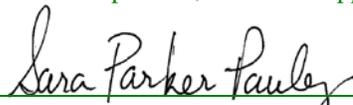
As the department does not examine structural features of design or the efficiency of mechanical equipment, the issuance of this permit does not include approval of these features.

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.

April 7, 2015
Effective Date

April 6, 2017
Expiration Date


Sara Parker Pauley, Director, Department of Natural Resources


John Madras, Director, Water Protection Program

CONSTRUCTION PERMIT

COLLECTION SYSTEM:

This project consists of two gravity sewer lengths and a force main to replace existing sewer lines. No new flow is introduced to the wastewater treatment facility with this construction permit.

For the Lafayette interceptor, the project consists of construction and installation of approximately 3930 linear feet of 24 to 36-inch polyvinyl chloride (PVC) Pipe Stiffness (PS)-46 gravity sewer, 33 linear feet of 8-inch PVC Standard Dimension Ratio (SDR)-35 gravity sewer with 20 manholes, and 1500 linear feet of 14-inch PVC Type C-905 force mains with air release valves.

For the Stadium interceptor, the project consists of construction and installation of approximately 2720 linear feet of 21 to 24-inch PVC PS-46 gravity sewer, 450 linear feet of 24-inch Ductile Iron Class 52 gravity sewer, and 2130 linear feet of 8 to 15-inch PVC SDR-35 gravity sewer with 36 manholes.

The project includes certain laterals, connections, stubs, and all necessary appurtenances to make a complete and usable wastewater collection system. The project will also include general site work appropriate to the scope and purpose of the project.

These activities will be in the vicinity of Stadium Boulevard, Lafayette Street, and Rose Valley Drive in the City of Jefferson, Cole County and discharge to an existing sewer system to be treated at the Jefferson City Water Reclamation Facility, Callaway County, Missouri State Operating Permit No. MO-0094846.

PERMIT CONDITIONS:

1. All construction shall be in accordance with the plans and specifications submitted by Bartlett & West, Inc. as follows:
 - City of Jefferson Standard Sanitary Sewer Specifications dated April, 2004 with additional specifications received on March 19, 2015.
 - Plans received on March 19, 2015 and signed and sealed by Mr. Matthew Vander Tuig, P.E. as follows: sheets 1 through 59 dated March 13, 2015.
2. The department must be contacted in writing prior to making any changes to the approved plans and specifications 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. 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 Northeast Regional Office per 10 CSR 20-7.015(9)(E)2.
4. This construction permit is invalid for projects required to comply with the requirements contained in 10 CSR 20-4, "Grants and Loans".
5. 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 10 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 10 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 shall be located with the top access at or above grade level.
 - D. Manholes should be located at least 10 feet horizontally from any existing or proposed water main.
 - E. 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 10 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.
6. 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.
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. In accordance with 10 CSR 20-6.010(6)(B), submit the enclosed form Application for Letter of Authorization – Sewer Extension to the department following completion of construction. Submit an electronic copy of the as-built drawings with this form if the project was not constructed in accordance with previously submitted plans and specifications.
9. Upon completion of construction, the City of Jefferson will become the continuing authority for operation, maintenance, and modernization of these facilities.



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

**APPLICATION FOR CONSTRUCTION PERMIT
SEWER EXTENSION**

RECEIVED

C15E01037
AP 1000 0 21400.0

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

WATER PROTECTION PROGRAM

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 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

Basins 5 & 6 Upgrades - (Phase 2)

ADDRESS	CITY	STATE	ZIP CODE	COUNTY
Lafayette Street to Jefferson&Hough Park	Jefferson City	MO	65101	Cole

2.2 Legal Description: $\frac{1}{4}$, $\frac{1}{4}$, $\frac{1}{4}$, Sec. 18, T 44N, R 11W

2.3 Project Components (check all that apply):

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

2.4 PROJECT DESCRIPTION

Phase 2: Install approximately 10,500 lineal feet of 6-inch to 36-inch gravity sanitary sewer including manholes, appurtenances, and approximately 1,500 lineal feet of 14-inch force main to provide wet weather capacity to the existing sanitary sewer system in Basin 5 & 6.

2.5 DESIGN INFORMATION

- A. Population or number of lots to be served by this extension: see report attached.
- B. Estimated flow to be contributed by this extension: Design Average Flow: 1.1M gpd Design Peak Hourly Flow: 0.9M gph
- C. Industrial Wastes: Type: N/A Flow: gpd
- D. Receiving Sewer: Size: 24 inches Capacity: 2900 gpm

3.0 PROJECT OWNER

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS	
City of Jefferson	(573) 634-6410	eseaman@jeffcitymo.org	
ADDRESS	CITY	STATE	ZIP CODE
320 E. McCarty	Jefferson City	MO	65101

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	
same as above			
ADDRESS	CITY	STATE	ZIP CODE

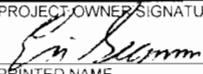
4.1 A letter from the continuing authority, if different than the owner, is included with this application. YES NO N/A

5.0 ENGINEER

ENGINEER NAME / COMPANY NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS	
Bob Gilbert, P.E./Bartlett & West, Inc.	(573) 634-3181	bob.gilbert@bartwest.com	
ADDRESS	CITY	STATE	ZIP CODE
1719 Southridge - Suite 100	Jefferson City	MO	65109

6.0 RECEIVING WASTEWATER TREATMENT FACILITY

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
Jefferson City Regional Reclamation Facility	(573) 634-6444	eseaman@jeffcitymo.org

MISSOURI STATE OPERATING PERMIT # MO-0094846		REMAINING CAPACITY (GPD) 5M
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 Eric Seaman, P.E.		DATE 13 FEB 15
TITLE OR COPORATE POSITION Wastewater Division Director	TELEPHONE NUMBER WITH AREA CODE (573) 634-6410	E-MAIL ADDRESS eseaman@jeffcitymo.org
Mail completed copy to: MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM P.O. BOX 176 JEFFERSON CITY, MO 65102-0176		