

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

www.dnr.mo.gov

December 4, 2015

The Honorable Ed Hottle, Mayor
City of Bonne Terre
118 N. Allen Street
Bonne Terre, MO 63628

RE: DW291343-01 City of Bonne Terre, MO – Water Supply Improvements Project, Phase II, Bonne Terre Northwest Wastewater Treatment Facility, MO-0100706, Construction Permit No. CPSE01058

Dear Mayor Hottle:

The Department of Natural Resources' Water Protection Program has reviewed and approved the plans and specifications related to the sewer extensions submitted by Horner and Shifrin, Inc. for the city of Bonne Terre, MO. Please find enclosed Construction Permit No. CPSE01058 and one set of approved plans and specifications. You must maintain these with your official project file for a minimum of four years following completion of the project. Please note that this approval and enclosed construction permit only apply to sewer extensions. Separate approval and/or permit(s) will be issued for water supply improvements and distribution.

This permit will terminate 12 months from the date of issuance. In accordance with 10 CSR 20-6.010(4)(G), the department may grant an extension only one time. If you believe that an extension is necessary, you must submit a request and a justification in writing for the extension at least 30 days prior to the permit expiration date.

Nothing in this permit removes any obligations to comply with county or other local ordinances or restrictions.

If you were adversely affected by this decision, you may appeal to have the matter heard by the Administrative Hearing Commission. To appeal, you must file a petition with the Administrative Hearing Commission within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the Administrative Hearing Commission.



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The Honorable Ed Hottle, Mayor
December 4, 2015
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If you have any questions concerning this matter, please contact me at (573) 751-1402 or Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102-0176.

Thank you for your efforts to help ensure clean water in Missouri.

Sincerely,

WATER PROTECTION PROGRAM



Shawn Muenks, P.E., SRF Engineering Unit Chief
Financial Assistance Center

SM/cs

Enclosures

c: Mr. Jim McCleish, P.E., Horner and Shifrin, Inc.
Southeast Regional Office
Mr. Kurtis Cooper, Water Protection Program, Compliance and Enforcement
Ms. Darleen Groner, Water Protection Program, Financial Assistance Center

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 Bonne Terre 118 N. Allen Street Bonne Terre, MO 63628

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.

December 4, 2015
Effective Date

December 3, 2016
Expiration Date

Sara Parker Pauley, Director, Department of Natural Resources

Director, Water Protection Program

CONSTRUCTION PERMIT

COLLECTION SYSTEM:

This project consists of new gravity sewer lines to carry backwash water from hydrous manganese oxide treatment systems at two well sites (Well Site 1 and Well Site 3). The project will include installation and construction of approximately 3,700 linear feet (lf) of eight-inch polyvinyl chloride (PVC) gravity sewer lines with approximately 26 manholes and all the necessary appurtenances to connect the two new well treatment systems to existing sewer lines. The sewer connections will be designed with hydraulic capacities of 600 and 780 gallons per minute, respectively. The project will also include general site work appropriate to the scope and purpose of the project.

These collection systems will consist of two separate sewer lines. Proposed sewer from Well Site 1 will run south along gravel access road, then turn west on Mansion Hill Drive and then southwest to existing sewer on Cottage Road. Proposed sewer from Well Site 3 will run southeast along Park Drive, then south and parallel to existing sewer line until ending at a point on existing sewer line near the southeast corner of City Park in the city of Bonne Terre, MO, St. Francois County. The existing sewers discharge to the Bonne Terre Northwest Wastewater Treatment Facility, Missouri State Operating Permit No. MO-0100706.

PERMIT CONDITIONS:

The permittee is authorized to construct subject to the following conditions:

1. All construction shall be in accordance with the plans and specifications submitted by Horner and Shifrin, Inc. on October 14, 2015 and signed and sealed by Mr. James E. McCleish, P.E. on August 10, 2015 and approved by the department on December 4, 2015.
2. Regulation 10 CSR 20-4.040(19)(B)1 requires that projects be publicly advertised, allowing sufficient time for bids to be prepared and submitted. Projects should be advertised at least 30 days prior to bid opening.
3. 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).

4. 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.
5. This construction permit does not authorize discharge.
6. 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 Southeast Regional Office per 10 CSR 20-7.015(9)(E)2.
7. 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.
8. 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.

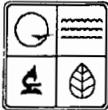
9. A United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) issued by the department or permit waiver may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied. If construction activity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

10. Upon completion of construction:
- A. The city of Bonne Terre 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.

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#C15160

AP 21870
CPSE01058



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
APPLICATION FOR CONSTRUCTION PERMIT # 08 2015
SEWER EXTENSION

Water Protection Program

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
\$\$\$ RECEIVED \$300.00	CHECK NO. 84896
DATE RECEIVED 7/8/15	

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 #:
- 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

Water Supply Improvements Project - Phase II

ADDRESS	CITY	STATE	ZIP CODE	COUNTY
Mansion Hill Drive & Park Drive	Bonne Terre	MO	63628	St. Francois

2.2 Legal Description: ¼, ¼, ¼, Sec. , T 37N , R 4E

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 consists of two separate sewer lines required for operation of well's HMO treatment systems.

Well Site 1 sewer will consist of approximately 2,300 feet of 8" PVC pipe with 16 manholes.

Well Site 3 sewer will consist of approximately 1,400 feet of 8" PVC pipe with 10 manholes.

Flow contribution to each sewer line is from backwash of treatment systems.
Flow contributions are as follows: 200 gpm for 12 minutes and peak of 665 gpm for 3 minutes.

2.5 DESIGN INFORMATION

- A. Population or number of lots to be served by this extension: See above for flow contributions
- B. Estimated flow to be contributed by this extension: Design Average Flow: gpd Design Peak Hourly Flow: gph
- C. Industrial Wastes: Type: NA Flow: gpd
- D. Receiving Sewer: Size: 8" inches Capacity: 1,100 gpm

3.0 PROJECT OWNER

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS	
City of Bonne Terre	(573) 358-2254		
ADDRESS	CITY	STATE	ZIP CODE
118 N. Allen Street	Bonne Terre	MO	63628

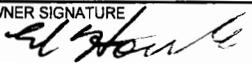
4.0 CONTINUING AUTHORITY: Permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the wastewater collection system.

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	
Jim McCleish / Horner & Shifrin	(314) 531-4321	jmcclleish@hornershifrin.com	
ADDRESS	CITY	STATE	ZIP CODE
401 S. 18th Street, Suite 400	St. Louis	MO	63103

6.0 RECEIVING WASTEWATER TREATMENT FACILITY		
NAME Bonne Terre Northwest Wastewater Treatment Facility	TELEPHONE NUMBER WITH AREA CODE (573) 880-1706	E-MAIL ADDRESS
MISSOURI STATE OPERATING PERMIT # MO-0100706	REMAINING CAPACITY (GPD) 210,000	
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 Ed Hottle	DATE 09/01/2015	
TITLE OR CORPORATE POSITION Mayor	TELEPHONE NUMBER WITH AREA CODE (573) 358-0369	E-MAIL ADDRESS ed.hottle@gmail.com
Mail completed copy to: MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM P.O. BOX 176 JEFFERSON CITY, MO 65102-0176		