STATE OF MISSOURI
Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director
DEPARTMENT OF NATURAL RESOURCES
www.dnr.mo.gov

May 12, 2014

Mr. E. Ray Jones
7289 County Lane 114
Carthage, MO 64836

RE: AP17906 Glen Cove Subdivision Sewer Extension – Carthage Wastewater Treatment Facility, MO-0039136, Construction Permit No. CPSE00885

Dear Mr. Jones:

The Missouri Department of Natural Resources' Water Protection Program has reviewed and approved the plans and specifications submitted by Anderson Engineering, Inc. Please find enclosed Construction Permit No. CPSE00885.

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 (1) 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.

Recycled Paper

If you have any questions concerning this matter, please contact Mr. Mark Bockstruck, of the Water Protection Program, at 573-526-5631 or Missouri Department of Natural Resources, 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

Byron F. Shaw, Jr.

Byron F. Shaw, Jr., P.E.
SRF Engineering Unit Chief

BFS:mbc

Enclosures

c: Mr. Jason Eckhart, P.E., Anderson Engineering, Inc.
Carthage Water and Electric Plant
Southwest Regional Office
Mr. Mark Bockstruck, 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:

Mr. E. Ray Jones
7289 County Lane 114
Carthage, MO 64836

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 (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.

May 12, 2014
Effective Date

Sara Parker Pauley
Sara Parker Pauley, Director, Department of Natural Resources

May 11, 2015
Expiration Date

John Madras
Director, Water Protection Program

CONSTRUCTION PERMIT

COLLECTION SYSTEM:

This project consists of the installation and construction of approximately 2,080 linear feet (lf) of eight-inch (8") polyvinyl chloride (PVC) Standard Dimension Ratio (SDR)-35 gravity sewer lines with approximately ten (10) manholes and all the necessary appurtenances to make a complete and usable wastewater collection system to serve 38 lots and an estimated design average flow of 7,200 gallons per day. 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 Shelia Ann Drive in the Glen Cove Subdivision in the city of Carthage, MO, Jasper County, and will discharge to an existing sewer system to be treated at the Carthage Wastewater Treatment Facility, Missouri State Operating Permit No. MO-0039136.

PERMIT CONDITIONS:

1. All construction shall be in accordance with the plans and specifications submitted by Anderson Engineering, Inc. as follows:
   - Specifications received on March 4, 2014 and signed and sealed by Mr. John Jason Eckhart, P.E. on February 10, 2014.
   - Plans received on March 4, 2014 and signed and sealed by Mr. John Jason Eckhart, P.E. as follows: sheets S1-S2 dated February 10, 2014.
   - And approved by the Department on May 12, 2014.

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 Southwest 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 ten feet (10') 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 (10') 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 (10') 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 (1) 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 (10') 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 (1) 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 builts with this form.

9. Upon completion of construction, the city of Carthage will become the continuing authority for operation, maintenance, and modernization of these facilities.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
P.O. BOX 176 JEFFERSON CITY MO 65102-0176
(SEE MAP FOR APPROPRIATE REGIONAL OFFICE)

MAR 4 2014

APPLICATION FOR CONSTRUCTION PERMIT - SEWER EXTENSION

FOR DEPARTMENT USE ONLY	
PERMIT NO. MO –	
FEE RECEIVED 3-4-14	DATE RECEIVED 300.00 CK# 1634

DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS.
NOTE: A CONSTRUCTION PERMIT FEE MUST ACCOMPANY THIS APPLICATION. (PLEASE FILL IN ALL BLANKS)

1.1 NAME OF PROJECT: Glen Cove Subdivision
SRF, SG, EPA GRANT NUMBER (IF APPLICABLE):

1.2 LOCATION OF PROJECT: Carthage
COUNTY: Jasper

2.1 OWNER'S NAME: E. Ray Jones
TELEPHONE NUMBER: (417) 388-0792
EMAIL ADDRESS: rayjones@ecarthage.com
ADDRESS: 7289 County Lane 114
CITY: Carthage
STATE: MO
ZIP CODE: 64836

2.2 CONTINUING AUTHORITY NAME: Carthage Water and Electric Plant
ADDRESS: 627 W Centennial Ave
CITY: Carthage
STATE: MO
ZIP CODE: 64836

3.1 BRIEF DESCRIPTION: Construct approximately 2080 l.f. of 8" diameter gravity sewer including (10) 4' diameter manholes.

All construction will be in accordance with the City of Carthage Standard Specifications for Sewer Main Construction as approved by MDNR September 18, 2009 and adopted by the Cathage City Council as Ordinance No. 09-56, October 27, 2009

ENGINEER: Jason Eckhart
TELEPHONE NUMBER: (417) 358-9551
EMAIL ADDRESS: jason@aeincmo.com

3.2 DESIGN INFORMATION

A. POPULATION OR NUMBER OF LOTS TO BE SERVED BY THIS EXTENSION: 38 Lots

B. ESTIMATED FLOW TO BE CONTRIBUTED BY THIS EXTENSION: 7,200 GPD

C. INDUSTRIAL WASTES: TYPE N/A FLOW N/A

D. RECEIVING SEWER: SIZE 18" CAPACITY 2300 GPM

3.3 RECEIVING TREATMENT FACILITY NAME: Carthage Wastewater Treatment Plant
TELEPHONE NUMBER: (417) 237-7300
EMAIL ADDRESS:
PERMIT NUMBER: MO-0039136
REMAINING CAPACITY: 2.8 MGD

4.1 HAS THE CONTINUING AUTHORITY THAT OPERATES THE TREATMENT FACILITY AND OR COLLECTION SYSTEM APPROVED OR AGREED TO ACCEPT THE ADDITIONAL SEWAGE FLOW?
☒ YES ☐ NO

4.2 I CERTIFY THAT I AM FAMILIAR WITH THE INFORMATION CONTAINED IN THE APPLICATION, AND THAT TO THE BEST OFMY 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 THE MISSOURI CLEAN WATER LAW, OF THE MISSOURI CLEAN WATER COMMISSION.

APPLICANT'S SIGNATURE (SEE INSTRUCTIONS): E. Ray Jones
TELEPHONE NUMBER: (417) 388-0792
EMAIL ADDRESS: rayjones@ecarthage.com
DATE:
NAME PRINTED: E. Ray Jones
TITLE OR CORPORATE POSITION: Owner

MO 780-1632 (6-04)