STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

GENERAL PERMIT for SEWER EXTENSION CONSTRUCTION

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

Construction Permit ID:	MOGC00050
Title of Project:	Independence Valley
Owner:	ELS Properties
Address:	217 Wittenborn Dr. Union, MO 63084

The project will also include general site work appropriate to the scope and purpose of the project and will include all the necessary appurtenances to make a complete and usable collection system. The construction of this project will be in the vicinity of the county below and discharge to Receiving Permit ID below:

County: Franklin Receiving Permit ID: MO0025283

for the construction of (described construction project):

Construction of approximately 1,800 lf of 8-inch PVC SDR-35 gravity sewer lines with approximately 9 manholes and 2 lampholes to serve a residential development with a 222 PE and a design average flow of 22,200 gpd.

The project is in the vicinity of the intersection of Independence Drive and North Union Avenue in Union, MO in Franklin County and discharges to an existing system to be treated at Union West WWTF, MO-0025283. Jonathan Zimmermann, the City Engineer with the City of Union, provided an acceptance letter dated September 2, 2015.

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

October 15, 2015
Issue Date

Sara Parker Pauley, Director
Department of Natural Resources

October 14, 2017
Expiration Date

John Madras
Director, Water Protection Program

APPLICABILITY

1. This permit authorizes the construction of gravity sewer extensions, force mains, and lift stations. Storage basins, considered part of the collection system, are also included. Earthen basins are not included under this General Sewer Extension Construction permit.

2. A Sewer Extension Construction Permit may be required by the department due to compliance and enforcement actions.

3. This permit does not apply to:
   A. Earthen storage basins;
   B. Projects located within an Approved Sewer Program. These include the City of Blue Springs, City of Columbia, City of Kansas City, City of Jefferson City, City of Joplin, City of Lebanon, City of Springfield, City of St. Peters, Duckett Creek Sewer District, and Metropolitan St. Louis Sewer District;
   C. Projects funded by the Department of Natural Resources;
   D. Projects that substantially deviate from the Design Guides in 10 CSR 20-8; and
   E. Exempt projects unless requested by the applicant or required by enforcement.

PREREQUISITES:

1. The General Sewer Extension Construction Permit application, appropriate fee, and a schedule for construction with the date on which construction will begin and anticipated completion date.

2. The engineering report, as required, plans and specifications each signed and sealed by a professional engineer registered in the State of Missouri. A Summary of Design is an acceptable substitute for the engineering report required by this permit prerequisite.

3. The Design Certification form signed and sealed by a professional engineer registered in the State of Missouri certifying the design of the system was done in accordance with 10 CSR 20-6 and 10 CSR 20-8.

4. A statement from the continuing authority was received accepting the wastewater for treatment.

5. A statement from the continuing authority was received accepting the responsibility for operation, maintenance, and modernization of these facilities

PERMIT CONDITIONS:

1. Contact the department's appropriate regional office 48 hours prior to starting construction. Contact information can be found at http://dnr.mo.gov/regions/regions.htm.

2. This permit authorizes the activities and scope of work detailed in the plans and specifications submitted with the request.

3. The construction must be in accordance with the design certification stating the plans and specifications comply with 10 CSR 20-6 and 10 CSR 20-8.

PERMIT CONDITIONS: (continued)

4. 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.

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 shall be located with the top access at or above grade level.

   D. Manholes should be located at least ten feet (10') 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 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.

PERMIT CONDITIONS: (continued)

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 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 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. If this project eliminates a wastewater treatment facility, then a full closure plan shall be submitted to the department's appropriate regional office for review and approval of any permitted wastewater treatment system being replaced. In accordance with 10 CSR 20-6.010(12), the closure plan must meet the requirements outlined in Standard Conditions Part III, Section I, of the Missouri State Operating Permit. Closure shall not commence until the submitted closure plan is approved by the department. Form J – Request for Termination of a State Operating Permit, shall be submitted to the department's appropriate Regional Office for termination of any existing Missouri State Operating Permit, once closure is completed in accordance with the approved closure plan.

9. Submit a Statement of Work Completed Form to the department following completion of construction. Submit an electronic copy of the as built plans if the project was not constructed in accordance with previously submitted plans and specifications.

MOGC00075
MO-0130046
APP 1900 C15145

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

APPLICATION FOR CONSTRUCTION PERMIT SEWER EXTENSION

RECEIVED
SEP 17 2015
Water Protection Program

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED $300.00	CHECK NO. 1137
DATE RECEIVED 9/17/15 SB	

NOTE ► PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM

1.0 APPLICATION INFORMATION

1.1 Is this a Federal/State funded project? ☐ YES ☑ NO 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
Independence Valley

ADDRESS	CITY	STATE	ZIP CODE	COUNTY
Independence Drive	Union	MO	63084	Franklin

2.2 Legal Description: ¼, NE ¼, SE ¼, Sec. 22 , T 43N , R 1W

2.3 Project Components (check all that apply):
☑ Gravity sewers ☐ Pumping stations ☐ Force mains ☐ Alternative sewer system

2.4 PROJECT DESCRIPTION
Installation of approximately 1,790 feet of 8 inch Sch 35 PVC gravity sewer pipe, 9 manholes and 2 lampholes to serve a residential development.

2.5 DESIGN INFORMATION
A. Population or number of lots to be served by this extension: 222 persons

B. Estimated flow to be contributed by this extension: Design Average Flow: 22,200 gpd Design Peak Hourly Flow: 3,821 gph

C. Industrial Wastes: Type: N/A Flow: N/A gpd

D. Receiving Sewer: Size: 8 inches Capacity: 313 gpm

3.0 PROJECT OWNER

NAME	TELEPHONE NUMBER WITH AREA CODE	EMAIL ADDRESS
Independence Valley, LLC.	(636) 583-7797	

ADDRESS	CITY	STATE	ZIP CODE
217 Wittenborn Drive	Union	MO	63084

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	EMAIL ADDRESS
City of Union	(636) 583-1805	

ADDRESS	CITY	STATE	ZIP CODE
500 East Locust Street	Union	MO	63084

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

4.2 Will the user charge rate increase as a result of the proposed sewer extension? ☐ YES ■ NO

5.0 CONSULTANT

ENGINEER NAME / COMPANY NAME	TELEPHONE NUMBER WITH AREA CODE	EMAIL ADDRESS
Wunderlich Surveying & Engineering, Inc.	(636) 583-8400	ron@wseteam.com

ADDRESS	CITY	STATE	ZIP CODE
512 East Main Street	Union	MO	63084

6.0 RECEIVING WASTEWATER TREATMENT FACILITY		
NAME Union West WWTF	TELEPHONE NUMBER WITH AREA CODE (636) 583-1805	EMAIL ADDRESS
MISSOURI STATE OPERATING PERMIT # MO- 0135046	REMAINING CAPACITY (GPD) 298,200 gpd	

6.1 Has the receiving treatment facility agreed to accept the additional wastewater flow? ☑ YES ☐ NO

6.2 A letter from the receiving wastewater treatment facility, if different than the continuing authority, is included with this application.
☑ YES ☐ NO

7.0 PROJECT OWNER: I hearby 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 Schmelz		DATE 09-15-2015
TITLE OR COPORATE POSITION Member, Independence Valley, LLC.	TELEPHONE NUMBER WITH AREA CODE (636) 583-7797	E-MAIL ADDRESS

Mail completed copy to: MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
P.O. BOX 176
JEFFERSON CITY, MO 65102-0176

City of Union

500 East Locust Street

Union, Missouri 63084
PHONE: 636-583-3600
FAX: 636-583-4091

September 2, 2015

RECEIVED
SEP 17 2015
Water Protection Program

Mr. Ron DeClue, PE
c/o Wunderlich Engineering and Surveying, Inc.
512 East Main Street
Union, Missouri 63084

RE: Independence Valley PUD- Independence Valley LLC

Mr. DeClue,

I have reviewed and approved the proposed sanitary sewer line extension submitted by your firm. The City of Union sanitary sewer system will provide the required capacity to treat and convey the sanitary sewage produced by the proposed development. Our existing treatment facility is currently operating at 1,150,000 gallons per day. Our permitted flow is 1,500,000 gallons per day. The proposed development will produce approximately 22,200 gallons per day based upon 74 attached senior dwellings with 3.0 pe per unit and 100 gallons per day per pe. We currently have 51,800 gallons per day attributed to existing lots that have not been built upon. The remaining available treatment is therefore 298,200 gallons per day. The City of Union will own operate and maintain the sewer line once completed if constructed in accordance with the approved plans.

If you have any questions or comments, please feel free to contact me at (636) 583-1805 or email me at engdept@unionmissouri.org

Sincerely,

CITY OF UNION

Jonathan Zimmermann
City Engineer