MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Mike Kehoe
Governor

Kurt U. Schaefer
Director

October 30, 2025

The Honorable Lynn Gross
Mayor
City of Clarksburg
110 West State Street
Clarksburg, MO 65025

RE: C295863-01 City of Clarksburg, Missouri'
Clarksburg Wastewater Improvements, Clarksburg Wastewater Treatment Facility,
MO-0109797, Construction Permit No. CP0002535, Moniteau County

Dear Mayor Gross:

The Missouri Department of Natural Resources' Financial Assistance Center has reviewed and approved the plans and specifications submitted by Bartlett & West, Inc. for the City of Clarksburg. Please find enclosed Construction Permit No. CP0002535. You must maintain one set of these plans and specifications with your official project file for a minimum of 4 years following completion of the project.

This permit will terminate 24 months from the date of issuance. In accordance with 10 CSR 20-6.010(5)(J), the department may grant an extension. 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.

This construction permit does not supersede any requirements of the operating permit or enforcement actions. 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 be entitled to an appeal before the Administrative Hearing Commission (AHC) pursuant to Section 621.250, RSMo. To appeal, you must file a petition with the AHC 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 AHC. Contact information for the AHC is: Administrative Hearing Commission, United States Post Office Building, Third Floor, 131 West High Street, P.O. Box 1557, Jefferson City, MO 65102, Phone: 573-751-2422, Fax: 573-751-5018, and Website: ahc.mo.gov/.

Please direct any technical questions regarding the construction permit, or plans and specifications to Tazrin Chowdhury, Review Engineer, at 573-526-1940 or tazrin.chowdhury@dnr.mo.gov. Please direct funding questions to Shane Graupman, Project Manager, at 573-522-4894 or shane.graupman@dnr.mo.gov. You may also submit questions or comments in writing to the Department of Natural Resources, Financial Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176 or fac@dnr.mo.gov. Thank you.

Sincerely,

FINANCIAL ASSISTANCE CENTER

Ginny Bretzke

Ginny Bretzke, P.E.
Clean Water Engineering Unit Chief

GB:tcc

Enclosures

c: Kyle Landwehr, P.E., Bartlett & West, Inc.
Matthew Vander Tuig, P.E., Bartlett & West, Inc.
Central Field Office
Tazrin Chowdhury, Department of Natural Resources, Financial Assistance Center
Shane Graupman, Department of Natural Resources, 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 Clarksburg
Clarksburg WWTF
0.35 miles southwest of Willow Street and Hwy H intersection
Clarksburg, MO 65025

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.

October 30, 2025
Effective Date

October 29, 2027
Expiration Date

Heather Peters, Director, Water Protection Program

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

The City of Clarksburg needs wastewater system upgrades to address future effluent limitations. The proposed project will include treatment improvements with Triplepoint MBBR, two lift stations rehabilitations, and manhole rehabilitation to those manholes in need of immediate attention.

The Clarksburg WWTP is located 0.35 miles southwest of Willow Street and Hwy H intersection, Clarksburg, Missouri, in Moniteau County. The current facility has a design average flow of 41,000 gallons per day and serves a design population equivalent of 410.

II. COST ANALYSIS FOR COMPLIANCE

Pursuant to Section 644.145, RSMo, when issuing permits under this chapter that incorporate a new requirement for discharges from publicly owned combined or separate sanitary or storm sewer systems or publicly owned treatment works, or when enforcing provisions of this chapter or the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., pertaining to any portion of a publicly owned combined or separate sanitary or storm sewer system or [publicly owned] treatment works, the Department of Natural Resources shall make a "finding of affordability" on the costs to be incurred and the impact of any rate changes on ratepayers upon which to base such permits and decisions, to the extent allowable under this chapter and the Federal Water Pollution Control Act. This process is completed through a cost analysis for compliance. Permits that do not include new requirements may be deemed affordable.

The department is required to make a "finding of affordability" on the new environmental requirement(s) within the permit; however, due to no costs associated with the new requirement(s), the department has determined the permit to be affordable based on the eight requirements listed in §644.145.4 RSMo.

III. CONSTRUCTION PERMIT CONDITIONS

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

1. This construction permit does not authorize discharge.

2. All construction shall be in accordance with the plans and specifications prepared by Bartlett & West, Inc. The final versions of the plans and specifications were submitted on June 25, 2025. The project plan was signed and sealed on June 19, 2025, by the following engineers:
    - Matthew Vander Tuig, P.E.
    - Kyle J. Landwehr, P.E.
    - Michael J. Neufeld, P.E.
    - Jennifer L. McVey, P.E., and
    - Chad D. Yost, P.E.

The specifications was signed and sealed by Matthew Vander Tuig, P.E. on June 19, 2025. The plans and specifications were approved by the department on October 30, 2025.

3. Regulation 10 CSR 20-4.040(18)(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.

4. 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(11).

5. 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 19 of this rule.

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 electronic Sanitary Sewer Overflow/Bypass Reporting system at https://dnr.mo.gov/mogem/ or Central Field Office at (573) 522-3322 per 10 CSR 20-7.015(9)(G).

7. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of 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 will only be obtained by means of the department's ePermitting system available online at https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem. See https://dnr.mo.gov/data-e-services/water/electronic-permitting-epermitting, for more information.

8. A United States Army Corps of Engineers (USACE) Section 404 Department of Army permit (§404) along with the department's Section 401 Water Quality Certification or waiver (§401) 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 likely be required. Since the USACE makes determinations on what is jurisdictional, you must contact the USACE to determine permitting requirements. See https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/section-401-water-quality, for more information you may contact the department's Water Protection Program at 573-522-4502 or wpsc401cert@dnr.mo.gov.

9. All construction must adhere to applicable 10 CSR 20-8 (Chapter 8) requirements.

10. Upon completion of construction:

    A. The City of Clarksburg will become the continuing authority for operation and maintenance of these facilities;

    B. Submit an electronic copy of the as-builts if the project was not constructed in accordance with previously submitted plans and specifications; and

    C. Submit the enclosed form Statement of Work Completed to the department in accordance with 10 CSR 20-6.010(5)(N) and request the operating permit modification be issued. When the facility applies for their next operating permit renewal, they will be expected to include an updated facility description on their application.

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

   The City of Clarksburg needs wastewater system upgrades to address future effluent limitations. The proposed project will include treatment improvements with Triplepoint MBBR, two lift stations rehabilitations, and manhole rehabilitation to those manholes in need of immediate attention.

2. FACILITY DESCRIPTION

   Clarksburg's wastewater treatment plant was placed into operation in 1991 and is currently operating under Missouri State Operating Permit No. MO-0109797. The wastewater collection system serving Clarksburg consists of PVC gravity sewers with precast concrete manholes, three lift stations, and force mains. This collection system is subject to inflow, infiltration, and rainfall induced infiltration of surface water from abandoned service lines and leaking manholes. The existing wastewater treatment system is not in compliance with ammonia as nitrogen and *E. coli* effluent limits. The recommended treatment system improvement will help to meet the final effluent limits.

   The Clarksburg WWTP is located 0.35 miles southwest of Willow Street and Hwy H intersection, Clarksburg, Missouri, in Moniteau County. The current facility has a design average flow of 41,000 gallons per day and serves a design population equivalent of 410 people.

3. COMPLIANCE PARAMETERS

   The proposed project is required to meet final effluent limits as established in Missouri State Operating Permit No. MO-0109797 effective August 1, 2025. The following limits will be applicable after the completion of construction to the facility:

Parameter	Units	Monthly average limit
Biochemical Oxygen Demand$_5$	mg/L	45
Total Suspended Solids	mg/L	45
Ammonia as N (Jan 1 – Mar 31)	mg/L	3.1
Ammonia as N (Apr 1 – Jun 30)	mg/L	1.8
Ammonia as N (Jul 1 – Sep 30)	mg/L	1.5
Ammonia as N (Oct 1 – Dec 31)	mg/L	2.8
pH	SU	6.5-9.0
E. coli	#/100mL	206

4. REVIEW OF MAJOR TREATMENT DESIGN CRITERIA

Existing Components: Three-cell lagoon/sludge retained in lagoon.

- Lagoon Cell #1: non-aerated, operating depth of 5 ft and surface area at maximum operating level of 2.22 acres.
- Lagoon Cell #2: aerated, operating depth of 5 ft and surface area at maximum operating level of 0.7 acres.
- Lagoon Cell #3: non-aerated, operating depth of 8 ft and surface area at maximum operating level of 0.36 acres.

Proposed Improvements:

- Updated Facility Description: Manual bar screen/Two-cell lagoon/aerated cell #2/air lift intermediate pump/MBBR nitrification reactor/Polishing lagoon cell/UV disinfection/sludge retained in lagoon.
- Headworks Improvements (upstream of Cell 1) – Includes manual bar screen, associated manholes and yard piping, and dumpster pad. The bar screen has a width of 1.67 ft, depth of 4.6 ft, and bar spacing is one and a half inch. The screen will be positioned at an angle of 45 degrees from the horizontal to allow for manual raking of the screen.
- Flow Control Structure (between Cell 1 and Cell 2) – Includes the precast structure, water tight flexible gaskets, and access hatch.
- Lagoon Cell 2 Aeration – Includes Single Ares aerator, associated structures, valve manifolds, and air piping.
- Triplepoint Water Technologies, LLC, NitrOx^{TM} – The lagoon-treated effluent will be pumped to the NitrOx^{TM} system. The NitrOx^{TM} system is capable of treating average daily flow of 20,100 gpd and maximum monthly average daily flow of 41,000 gpd. The system is composed of two tanks with each approximately 8.5 ft x 8.5 ft x 13.5 ft with a sidewater depth of 9 ft. Total volume of the two tanks is 9,728 gallons. The average flow hydraulic retention time is 5.7 hours and the peak flow hydraulic retention time is 2.3 hours. A floating insulating cover shall be installed in each tank. An immersion tank heater will be installed to maintain a minimum wastewater temperature of 5°C. Each tank shall be filled with high surface area media. Aeration by means of tri-lobe or bi-lobe positive displacement blowers each

capable of supplying 77 scfm with 5 HP motors. The effluent from the NitrOx^{TM} basins will flow by gravity to the clarifier for polishing prior to disinfection and discharge.

- UV Disinfection (following Cell 3) – Disinfection is the process of removal, deactivation, or killing of pathogenic microorganisms. Includes two units, low pressure high intensity Enaqua UV disinfection system capable of treating a peak flow of 172,800 gpd while delivering a minimum UV intensity of 30 mJ/cm^2 with an expected ultraviolet transmissivity of 65percent or greater. The enclosed UV system consists of 8 lamps per reactor. The disinfected effluent will flow by gravity through flow measurement equipment and to Outfall No. 001.
- Flow Meter Manhole (following UV disinfection) – Installation of an electro-magnetic flow measurement device will aid in wastewater service. A 2" Mag Meter ModMAG M2000 flow meter shall measure the flow from the UV disinfection to the outfall. Associated piping and fittings will be provided to keep the mag meter at full pipe capacity.
- Lift Station Rehabilitations – Includes complete replacement of all appurtenances within the wet well for the School and Route H lift stations. Replacements include but are not limited to valve vault and appurtenances, submersible pumps, electrical/control panel, site work, all couplings, anchor bolts, piping, valves, accessories and appurtenances specified, indicated on the drawings, or otherwise required for a complete properly operating installation acceptable to the owner. The School Lift Station includes a duplex submersible grinder pump system with each 3.5 HP capable of operating 65 gpm at 53.45 feet of TDH. The Route H Lift Station includes a duplex submersible grinder pump system with each 10.7 HP capable of operating 200 gpm at 50.35 feet of TDH.
- Manhole Rehabilitations – The replacements include but are not limited to adding grade adjustment rings, resetting manhole frames, installing new manhole frames and seals, chemical grout injection to seal leaks, CIPM manhole liners, repairing disrupted pavement and final site restoration.

5. OPERATING PERMIT

   Missouri State Operating Permit No. MO-0109797 will require a modification to reflect the construction activitie, which was successfully public noticed from April 25, 2025, to May 27, 2025, with no comments received. Submit the Statement of Work Completed to the department in accordance with 10 CSR 20-6.010(5)(N).

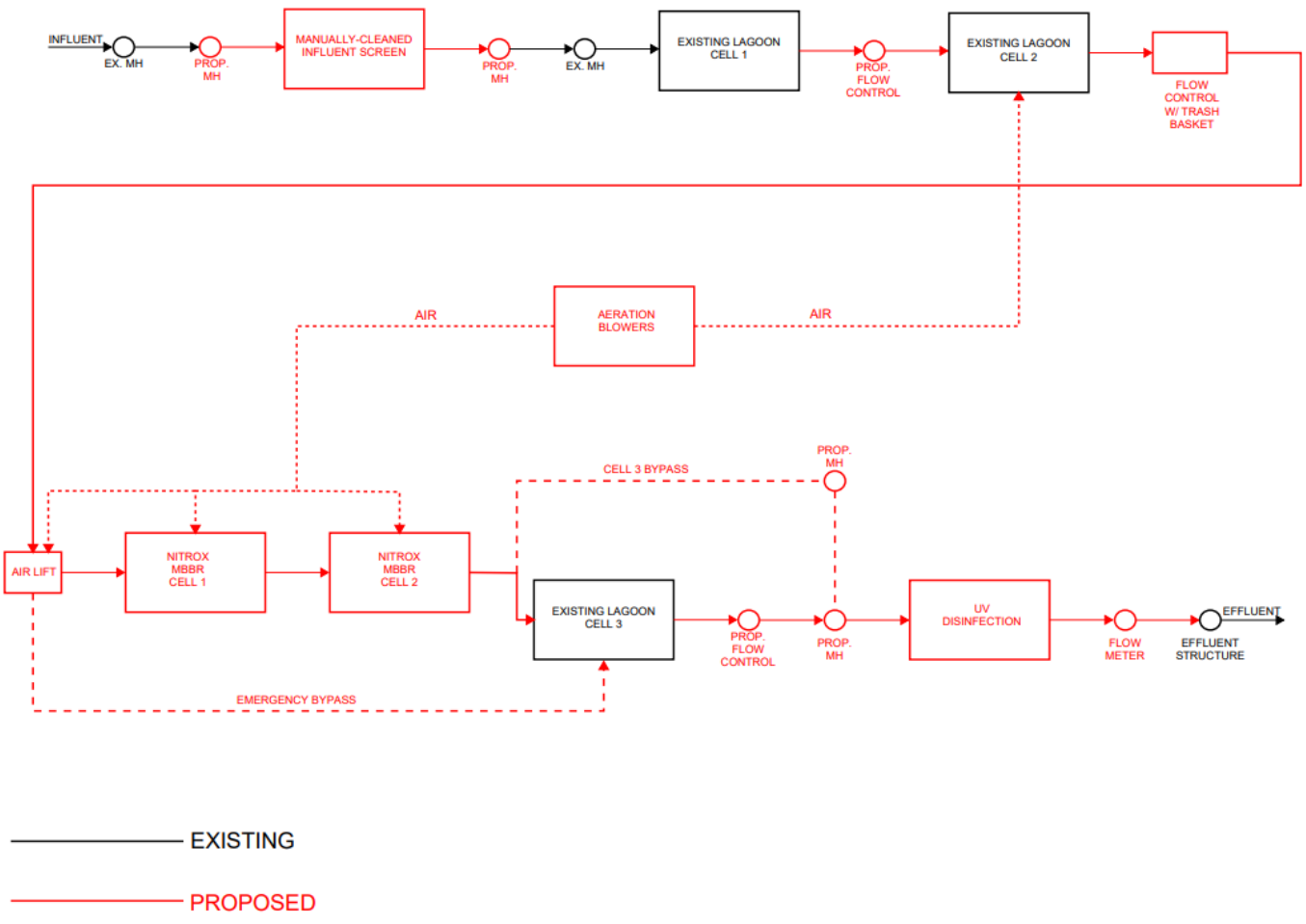
Tazrin Chowdhury
Financial Assistance Center
tazrin.chowdhury@dnr.mo.gov

APPENDICES

Appendix A – Process Flow Diagram
Appendix B – Project Map

APPENDIX A – PROCESS FLOW DIAGRAM

CLARKSBURG, MISSOURI PROCESS FLOW DIAGRAM



APPENDIX B – FACILITY MAP


W Elm St
Institute St
Missouri Pacific Railroad
W State St
Academy St
Clarksburg
Methodist Church
MO0109797
Parker St
Hooper St
Clarksburg C-II School
S Locust St
Washington St
MO0109797


MO0109797
MO0109797

AP46840

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

APPLICATION FOR CONSTRUCTION PERMIT – WASTEWATER TREATMENT FACILITY

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

APPLICATION OVERVIEW

The Application for Construction Permit – Wastewater Treatment Facility form has been developed in a modular format and consists of Part A and B. **All applicants must complete Part A.** Part B should be completed for applicants who currently land-apply wastewater or propose land application for wastewater treatment. **Please read the accompanying instructions before completing this form. Submittal of an incomplete application may result in the application being returned.**

PART A – BASIC INFORMATION

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: CWSRF Project #: C295863-01

1.2 Has the Missouri Department of Natural Resources approved the proposed project's antidegradation review?
☐ YES Date of Approval: _____ ☑ N/A

1.3 Has the department approved the proposed project's facility plan*?
☑ YES Date of Approval: 2-14-22 ☐ NO (If No, complete No. 1.4.)

1.4 [Complete only if answered No on No. 1.3.] Is a copy of the facility plan* for wastewater treatment facilities included with this application?
☐ YES ☐ NO ☐ Exempt because _____

1.5 Is a copy of the appropriate plans* and specifications* included with this application?
☑ YES Denote which form is submitted: ☐ Hard copy ☑ Electronic copy (See instructions.) ☐ NO

1.6 Is a summary of design* included with this application? ☑ YES ☐ NO

1.7 Has the appropriate operating permit application (A, B, or B2) been submitted to the department?
☐ YES Date of submittal: _____
☑ Enclosed is the appropriate operating permit application and fee submittal. Denote which form: ☐ A ☑ B ☐ B2
☐ N/A: However, In the event the department believes that my operating permit requires revision to permit limitation such as changing equivalent to secondary limits to secondary limits or adding total residual chlorine limits, please share a draft copy prior to public notice? ☐ YES ☐ NO

1.8 Is the facility currently under enforcement with the department or the Environmental Protection Agency? ☐ YES ☑ NO

1.9 Is the appropriate fee or JetPay confirmation included with this application? ☑ YES ☐ NO
See Section 7.0

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

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT
Clarksburg Wastewater System Improvements

2.2 ESTIMATED PROJECT CONSTRUCTION COST
$

2.3 PROJECT DESCRIPTION
Rehabilitation of the existing wastewater collection system and rehab of three (3) pump stations. Repair of the existing wastewater lagoon berms and installing flow control structures. Adding Triplepoint Nitrox Ammonia removal and UV for disinfection

2.4 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION
The third cell of the lagoon will be used as a polishing cell and for solids handling

2.5 DESIGN INFORMATION
A. Current population: 254 ; Design population: 410
B. Actual Flow: 20,100 gpd; Design Average Flow: 41,000 gpd;
Actual Peak Daily Flow: 102,500 gpd; Design Maximum Daily Flow: 102,500 gpd; Design Wet Weather Event: 10 year

2.6 ADDITIONAL INFORMATION
A. Is a topographic map attached? ☑ YES ☐ NO
B. Is a process flow diagram attached? ☐ YES ☑ NO see plans

3.0 WASTEWATER TREATMENT FACILITY

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
Clarksburg Wastewater Treatment Facility	573-787-3729	k.wirts@cityofcalifornia.net

ADDRESS (PHYSICAL)	CITY	STATE	ZIP CODE	COUNTY
112 E. State St.	Clarksburg	MO	65025	Moniteau

Wastewater Treatment Facility: Mo- 0109797 (Outfall 1 Of 1)

3.1 Legal Description: ____ ¼, NE ¼, SE ¼, Sec. 16, T 45N, R 16W
(Use additional pages if construction of more than one outfall is proposed.)

3.2 UTM Coordinates Easting (X): 528225 Northing (Y): 4278734
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

3.3 Name of receiving streams: tributary of Long Branch

4.0 PROJECT OWNER

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
City of Clarksburg	573-796-4694	lyngros55@gmail.com

ADDRESS	CITY	STATE	ZIP CODE
110 W. State St. PO Box 134	Clarksburg	MO	65025-1017

5.0 CONTINUING AUTHORITY: A continuing authority is a company, business, entity or person(s) that will be operating the facility and/or ensuring compliance with the permit requirements.

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
Kyle Wirts	573-690-7579	k.wirts@cityofcalifornia.net

ADDRESS	CITY	STATE	ZIP CODE
112 E. State St.	Clarksburg	MO	65025

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

5.2 COMPLETE THE FOLLOWING IF THE CONTINUING AUTHORITY IS A MISSOURI PUBLIC SERVICE COMMISSION REGULATED ENTITY.

A. Is a copy of the certificate of convenience and necessity included with this application? ☐ YES ☐ NO

5.3 COMPLETE THE FOLLOWING IF THE CONTINUING AUTHORITY IS A PROPERTY OWNERS ASSOCIATION.

A. Is a copy of the as-filed restrictions and covenants included with this application? ☐ YES ☐ NO

B. Is a copy of the as-filed warranty deed, quitclaim deed or other legal instrument which transfers ownership of the land for the wastewater treatment facility to the association included with this application? ☐ YES ☐ NO

C. Is a copy of the as-filed legal instrument (typically the plat) that provides the association with valid easements for all sewers included with this application? ☐ YES ☐ NO

D. Is a copy of the Missouri Secretary of State's nonprofit corporation certificate included with this application? ☐ YES ☐ NO

6.0 ENGINEER

ENGINEER NAME / COMPANY NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
Kyle Landwehr/Bartlett & West, Inc.	573-659-6727	kyle.landwehr@bartwest.com

ADDRESS	CITY	STATE	ZIP CODE
601 Monroe Street, Suite 201	Jefferson City	MO	65101

7.0 APPLICATION FEE

☐ CHECK NUMBER ☑ JETPAY CONFIRMATION NUMBER

8.0 PROJECT OWNER: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

PROJECT OWNER SIGNATURE: Lynn Gross

PRINTED NAME	DATE
Lynn Gross	12/30/2024

TITLE OR CORPORATE POSITION	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
Mayor	573-796-4694	lyngors55@gmail.com

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

END OF PART A.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHETHER PART B NEEDS TO BE COMPLETE.

PART B – LAND APPLICATION ONLY
(Submit only if the proposed construction project includes land application of wastewater.)

8.0 FACILITY INFORMATION

8.1 Type of wastewater to be irrigated: ☐ Domestic ☐ State/National Park ☐ Seasonal business
☐ Municipal ☐ Municipal with a pretreatment program or significant industrial users
☐ Other (explain) _____

8.2 Months when the business or enterprise will operate or generate wastewater:
☐ 12 months per year ☐ Part of the year (list months): _____

8.3 This system is designed for:
☐ No-discharge.
☐ Partial irrigation when feasible and discharge rest of time.
☐ Irrigation during recreational season, April – October, and discharge during November – March.
☐ Other (explain) _____.

9.0 STORAGE BASINS

9.1 Number of storage basins: _____ (Use additional pages if greater than three basins.)

9.2 Type of basins: ☐ Steel ☐ Concrete ☐ Fiberglass ☐ Earthen ☐ Earthen with membrane liner

9.3 Storage basin dimensions at inside top of berm (feet). Report freeboard as feet from top of berm to emergency spillway or overflow pipe.
Basin #1: Length _____ Width _____ Depth _____ Freeboard _____ Depth _____ Safety _____ % Slope _____
Basin #2: Length _____ Width _____ Depth _____ Freeboard _____ Depth _____ Safety _____ % Slope _____
Basin #3: Length _____ Width _____ Depth _____ Freeboard _____ Depth _____ Safety _____ % Slope _____

9.4 Storage Basin operating levels (report as feet below emergency overflow level).
Basin #1: Maximum operating water level _____ ft Minimum operating water level _____ ft
Basin #2: Maximum operating water level _____ ft Minimum operating water level _____ ft
Basin #3: Maximum operating water level _____ ft Minimum operating water level _____ ft

9.5 Design depth of sludge in storage basins.
Basin #1: _____ ft Basin #2: _____ ft Basin #3: _____ ft

9.6 Existing sludge depth, if the basins are currently in operation.
Basin #1: _____ ft Basin #2: _____ ft Basin #3: _____ ft

9.7 Total design sludge storage: _____ dry tons and _____ cubic feet

10.0 LAND APPLICATION SYSTEM

10.1 Number of irrigation sites _____ Total Acres _____ Maximum % field slopes _____
Location: _____ ¼, _____ ¼, _____ ¼, _____ Sec. _____ T _____ R _____ County _____ Acres
Location: _____ ¼, _____ ¼, _____ ¼, _____ Sec. _____ T _____ R _____ County _____ Acres
Location: _____ ¼, _____ ¼, _____ ¼, _____ Sec. _____ T _____ R _____ County _____ Acres
(Use additional pages if greater than three irrigation sites.)

10.2 Type of vegetation: ☐ Grass hay ☐ Pasture ☐ Timber ☐ Row crops
☐ Other (describe) _____

10.3 Wastewater flow (dry weather) gallons per day: Average annual _____ Seasonal _____ Off-season _____

10.4 Land application rate (design flow including 1-in-10 year storm water flows):
Design: _____ inches/year _____ inches/hour _____ inches/day _____ inches/week
Actual: _____ inches/year _____ inches/hour _____ inches/day _____ inches/week

10.5 Total irrigation per year (gallons): Design: _____ gal Actual: _____ gal

10.6 Actual months used for irrigation (check all that apply):
☐ Jan ☐ Feb ☐ Mar ☐ Apr ☐ May ☐ Jun ☐ Jul ☐ Aug ☐ Sep ☐ Oct ☐ Nov ☐ Dec

10.7 Land application rate is based on:
☐ Hydraulic Loading ☐ Other (describe) _____
☐ Nutrient Management Plan (N&P) If N&P is selected, is the plan included? ☐ YES ☐ NO