



Building Community.

Project Name: **King Street & Shircliff Way**
Water Main Replacement
 Permit No. (Water): **2019-2005-WI8069**
 Date Issued: **07/02/2019** Date Expires: **07/02/2021**
 Approved By: **William E. Pound**
 JEA Permitted Utilities: **Approx 1,457LF of 8"/10" WM**

Permit for Construction of an Extension to a JEA Drinking Water Distribution System and/or JEA Wastewater Collection/Transmission System

INSTRUCTIONS: This form shall be completed and submitted (in duplicate) to JEA along with engineering plans, and design data (signed and sealed).

Check all that apply:

(Note: This permit is for JEA or future JEA owned and operated facilities. No permit fee required.)

- ☒ New Permit Submittal: (Availability No. 2019-2005)
☐ Permit Modification Submittal: (Associated JEA Permit No.: _____ Date of Issue: _____)
☒ This project involves an extension to a JEA Water Distribution System
☐ This project involves additions to JEA Wastewater Collection/Transmission System

**GENERAL
CONDITIONS
ATTACHED**

I. NAME, DESCRIPTION, AND LOCATION OF PROJECT:

Project Name: **King Street and Shircliff Way water main replacement**

Project Description: **Installation of approximately 750 linear feet 8" Ductile Iron water main on King Street and 707 linear feet of 8"/10" ductile iron water main on Barrs Street and Shircliff Way. Water main installation will be by open cut methods.**

• Project Location (See attached plans):

County*: **Duval**

Vicinity: **St. Vincent Hospital**

(*Project must be located within Duval County to be eligible for self-permitting*)

II. STATEMENT BY PERMITTEE:

I, the undersigned owner or authorized representative of JEA am fully aware that the statements made in this application are true, correct and complete to the best of my knowledge and belief. I, the undersigned am fully aware that it is my responsibility to operate and maintain this facility in such a manner as to function as it was designed. I agree to retain a professional engineer to observe that construction of the project is in accordance with all applicable JEA standards and approved engineering plans. **I am fully aware that we must obtain a letter of clearance from JEA before we place this project into service.** Also, I am fully aware that, if we sell or legally transfer ownership of this project before obtaining a letter of clearance from JEA, we must submit to JEA a letter of request to transfer this permit within 30 days after such sale or legal transfer of ownership. Upon JEA permit approval, I understand that the terms, general and specific conditions, requirements, limitations, and restrictions set forth herein and as defined within the approved permit, and within the latest version of the JEA Water & Sewer Standards Manual are "Permit Conditions" and as such are binding upon the permittee and are enforceable pursuant to the authority of JEA and/or the Florida Department of Environmental Protection (FDEP). I understand that JEA and FDEP may review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the Permittee, its agents, or representatives. Any unauthorized deviation from the approved drawings, JEA specifications and standards, or conditions of the approved permit may constitute grounds for revocation and enforcement action by JEA and/or FDEP.

Elizabeth DiMeo
 Signature and Date

7/1/19

Elizabeth DiMeo, P.E. JEA Manager W/WW Systems

Name and Title (please type or print)

Company Name: **JEA**

Address: **2434 N Pearl Street**

City: **Jacksonville**

State: **Florida** Zip: **32206**

Office Phone No.: **(904) 665-8139** Fax. No.: **(904) 665-7455**

Email Address: **dimeea@jea.com**

III. STATEMENT BY PROFESSIONAL ENGINEER IN RESPONSIBLE CHARGE OF DESIGNING THE PROJECT:

I, the undersigned professional engineer registered in Florida, certify that I am in responsible charge of the preparation and production of engineering documents for this project; that I have expertise in the design of water distribution systems and/or wastewater collection/transmission systems; and that, to the best of my knowledge and belief, the engineering design and construction plans for this project complies, where applicable, with Chapter 62-555, F.A.C., Chapter 62-604, F.A.C., and the latest versions of the JEA Developer Installed Systems Manual, JEA Water & Sewer Standards, Details & Materials Manual, JEA Backflow Prevention Program, and other applicable JEA standards. I certify that, to the best of my knowledge, the location and size of existing water mains, reclaimed water lines, force mains, sanitary sewers, storm sewers, and other utilities, as well as the location and size of the proposed utilities, are shown on the plans. Also, I certify that all water mains, gravity sewer mains, and force mains associated with this application are 12-inch in size or less and are located wholly within Duval County. The design includes procedures for keeping existing utilities in service or minimizing outages. To the best of my knowledge, this project does not include installation of any new utilities in areas of ground water or soils for which there is documentation of the presence of petroleum products or other hazardous materials at concentrations exceeding groundwater standards.

Kenneth A. Fraser
 Signature and Date and Seal

7/1/2019
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 No. 57452

Kenneth A. Fraser PE# 57452

Name and License Number (please type or print)

Company Name: **Jones Edmunds & Associates, Inc.**

Address: **8657 Baypine Road, Building 5, Suite 300**

City: **Jacksonville**

State: **Florida** Zip: **32211**

Office Phone No.: **(904) 744-5401** Fax. No.: **(904) 755-6267**

Email Address: **kfraser@jonesedmunds.com**

WATER DESIGN AND CONSTRUCTION REQUIREMENTS CHECKLIST

**(TO BE COMPLETED BY THE PROFESSIONAL DESIGN ENGINEER
WHEN APPLYING FOR A JEA WATER PERMIT)**

Project Name: King Street and Shircliff Way Water Main Replacement Permittee: JEA

If this project is being designed to comply with the following requirements, initial before the requirements. If any of the following requirements do not apply to this project, mark "NA."

General

- NA (1) Signed and sealed water hydraulic calculations supporting fire flow requirements including fire hydrant flow test results and a letter or review and approval from the Fire Marshall's office.
- KAF (2) Note referencing compliance with JEA Water and Sewer Standards Manual and JEA DIS Manual.
- KAF (3) All pipe construction and testing conform to the appropriate AWWA standards.
- KAF (4) Pressure and leakage testing specified in accordance with AWWA C600 and C605 or other applicable standards.
- KAF (5) Proper water demand information is provided below (Equivalent Dwelling Unit = 350 gals per day).
- KAF (6) Design Plans signed and sealed by a professional engineer registered in Florida indicating:
- a. Benchmark (Permanent benchmark required or a temporary benchmark referenced to a permanent benchmark)
 - b. Plan views of entire project to include location and pipe size of new water mains; gravity sewers and force mains; trench details; manhole details; joint details and material specifications
 - c. Location of existing water mains/reclaimed water lines/force mains/ gravity sewers/storm sewers and water wells
 - d. Restrained joints are specified and general details shown
- KAF (7) Minimum water main and sewer collection/transmission system or reclaimed water main separations are maintained per F.A.C. 62-555 as measured from the pipes outside edges:
- a. Horizontal Separation of at least 6 feet and preferably 10 feet maintained. Horizontal separation between water main and gravity type sewers may be reduced to three (3) feet where the water main is laid at least six (6) inches above the top of the sewer.
 - b. Vertical separation of at least six (6) inches and preferably twelve (12) inches maintained at crossings between water main and gravity or vacuum-type sanitary sewer or storm sewer. Vertical separation of at least twelve (12) inches maintained at crossings between water main and pressure type sanitary sewer, wastewater or stormwater force main, or pipeline conveying reclaimed water.
 - c. At crossings, pipe joints are as far apart as possible and equidistant from the point of crossing. Water main is on top. A full length of pipe is to be centered at the crossing.

Water Main Requirements

- KAF (8) Water mains are arranged to form a grid of looped distribution.
- KAF (9) The use of dead end mains is minimized.
- KAF (10) Minimum cover for water mains less than 24 inches in diameter is 30 inches in unpaved areas and 36 inches in paved areas with a maximum of 60 inches in arterial or collector roadways where construction is anticipated. Minimum cover for water mains 24 inches in diameter or greater is 36 inches (paved and unpaved areas) with a maximum of 84 inches.
- KAF (11) Minimum size for water main providing fire protection and serving fire hydrants in residential is shown to be 6 inches in diameter.
- KAF (12) Minimum size for water mains in non-residential areas is 8 inches in diameter when in a closely interconnected grid and 12 inches in diameter if not closely interconnected.
- KAF (13) No record of historical organic or gasoline contamination within 1500 feet of the area of proposed PVC pipe installation.
- KAF (14) No water pipe passes through or comes in contact with any part of a sewer manhole.
- KAF (15) Proper water main disinfection is in accordance with AWWA C651 and JEA Standards.



Building Community.

WATER DESIGN AND CONSTRUCTION
REQUIREMENTS CHECKLIST
(TO BE COMPLETED BY THE PROFESSIONAL DESIGN ENGINEER
WHEN APPLYING FOR A JEA WATER PERMIT)

Project Name: King Street and Shircliff Way Water Main Replacement

Permittee: JEA

Service Requirements

- NA (16) Water services are 1-inch for single family residences or double 1 ½ inch long side services for adjacent lots .
- NA (17) No more than five (5) domestic service connections are shown on a 2-inch water main.
- NA (18) Gang water services (5 or more services in one area) are shown in accordance with detail W-1 of the JEA Water and Sewer Standards Manual.
- NA (19) The maximum length of a water services does not exceed 100 feet.

Meter Requirements

- NA (20) Multi-family or commercial developments serving multiple tenants where the project is under single ownership is metered by one of the following options:
- a. Master metered with private on-site utilities
 - b. Individual JEA meters with a master backflow prevention device and private on-site utilities
 - c. Individual JEA meters with JEA on-site utilities in appropriate easements.

Valve Requirements

- NA (21) Valves are shown on all water main branches in two directions on a tee and in three directions on a cross.
- NA (22) Valves are provided on water mains at a maximum of 500 foot intervals within high density residential, commercial or industrial developments and at a maximum of 800 foot intervals within residential areas.
- NA (23) On transmission mains with a limited number of service connections, valves are located at a maximum of 2500 foot intervals and at distribution branches where allowed by JEA.
- NA (24) No 2-inch water valves. A minimum 4-inch gate valve with a 4-inch by 2-inch reducer is shown where connecting a 2-inch main.

Fire Hydrant Requirements

- NA (25) Fire hydrants are on the same side of the road as the water main, at property corners just inside the right-of-way, and a minimum of 3 feet from the edge of pavement or back of curb.
- NA (26) Fire hydrants are located not more than 600 feet apart in single family residential areas and not more than 500 feet apart in commercial, industrial or multi-family residential areas.
- NA (27) Fire hydrants within commercial, industrial or multi-family residential areas shall be served with a minimum 8-inch water main.

Backflow Prevention Requirements

- NA (28) Adequate backflow prevention devices are provided at all proposed lift station, irrigation lines, commercial facilities, etc.
- NA (29) Backflow prevention devices are located on private property within 10 feet of the meter, but outside of applicable meter easements.

Explanation for requirements marked "NA" above (including justification, documentation, assurances, and/or alternative as required by rule for exceptions to requirements listed above:

- (1) Replacement water main size to match existing.
- (16)- (19) No new services.
- (20) No new meters.
- (21) Valve have only been added at new pipe connections.
- (23)- (24) Valves have only been added at new pipe connections.
- (25)- (27) No new fire hydrants.
- (28)- (29) No new backflows.

**WATER DESIGN AND CONSTRUCTION
REQUIREMENTS CHECKLIST**
(TO BE COMPLETED BY THE PROFESSIONAL DESIGN ENGINEER
WHEN APPLYING FOR A JEA WATER PERMIT)

Project Name: King Street and Shircliff Way Water Main Replacement

Permittee: JEA

IV. ENGINEER CERTIFICATION

I completed the Water Design and Construction Requirements Checklist of this permit application, and the information provided in the Water Checklist and on the attached plans is true and accurate to the best of my knowledge and belief.

Kenneth A. Fraser



Kenneth A. Fraser PE# 57452

Signature and Date and Seal

Company Name: Jones Edmunds & Associates

Address: 8757 Baypine Road, Building 5, Suite 300

City: Jacksonville

State: Florida

Office Phone No.: (904) 744-5401

Fax No.: (904) 744-6267

Name and License Number (please type or print)

Email Address: kfraser@jonesedmunds.com

V. WATER DESIGN DATA

1. Does this project include any new flows? **NO – Replacement of existing water mains only.**
If "YES", please answer Questions 2, 3 and 4.

2. Design/Projected Annual Average and Maximum Day Water Demands for Proposed Altered/New Distribution Facilities (i.e., water mains) Under this Project:

A = Type of Service Connection	B = Number of Service Connections	C = Average Daily Water Demand Per Service Connection	D = Total Average Daily Water Demand (Columns B x C for Residential Service Connections)	E = Total Maximum Day Water Demand
Single-Family Home				
Mobile Home				
Apartment				
Commercial, Institutional, Or Industrial Facility*				
Total				

*Description of Commercial, Institutional, and Industrial Facilities and Explanation of Method Used to Estimate Average Day Water Demand for These Facilities:

3. Design/Projected Maximum Hour Water Demand for Proposed Altered/New Distribution Facilities Under this Project and Basis of Design/Projection:
4. Will the proposed altered/new distribution facilities under this project be part of a community water system or a public water system that has a service area also served by a reclaimed water system? **Choose One**
If "YES", document that the system has a routine cross-connection control plan, including a written plan, in accordance with Rule 62-555, F.A.C.:



Building Community

General Conditions for "Permit for Construction of an Extension to a JEA Drinking Water Distribution System and/or JEA Wastewater Collection/Transmission System"

GENERAL CONDITIONS:

The following are general conditions associated with JEA approved "Permit for Construction of an Extension to a JEA Drinking Water Distribution System and/or JEA Wastewater Collection/Transmission System", as issued by JEA. To improve communication, it is requested that all correspondence, relating to this project, indicate the project name and JEA permit number.

1. The terms, conditions, requirements, limitations and restrictions set forth herein and in the JEA permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that JEA and the Florida Department of Environmental Protection (the Department) will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants, or representatives.
2. **Certification as to construction of the project in accordance with the approved plans by the Florida Registered Professional Engineer together with record drawings, and supporting documentation shall be provided and a letter of clearance obtained from JEA before placing the facilities into service.**
3. It is required that all new and relocated water and sewer mains conform to the latest JEA Design Standards, JEA Water & Sewer Standards, Details & Materials Manual, and other applicable JEA Standards.
4. If the project involves the connection of any new or existing industrial or commercial facilities to the JEA sanitary sewer system and if requested by JEA, the permittee shall provide a listing of the applicable company names and addresses.
5. The time duration of the initial permit will be 2-years. JEA will grant the approval of up to 3 one year (permit) time extensions upon the written request of the permittee. This will result in a 5-year maximum construction time period. During this 5-year time period, the JEA standards effective at the time of the initial permit issuance date will prevail. After a 5-year time period, the permit will expire. If the field construction has not been initiated, then all requests for a permit extension will be denied and a new permit application will have to be submitted to JEA for review and approval. The re-submittal of a permit application must then meet the current JEA standards effective at the time of the new permit approval.

6. A permit modification is required for all substantial deviations from the original approved plans, additions to the approved work or other deviations as outlined in the current Department (FDEP) and JEA rules and/or standards. If the permit modification involves an increase in the water and/or sewer demand greater than 10% of the initial permitted quantity, the additional water and/or sewer utilities and associated components must meet the current JEA standards effective at the time of the permit modification approval. If the permit modification involves a 10% or less increase in the water and/or sewer demand, then the additional water and/or sewer components may be constructed in accordance with the JEA standards effective at the time of the original permit approval.
7. The JEA permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of the permit may constitute grounds for revocation and enforcement action by JEA or the Department.
8. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of the JEA permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement federal, state, or local laws or regulations. The JEA permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
9. The JEA permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
10. The JEA permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from JEA or the Department.
11. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of the permit and Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by JEA and/or Department rules.
12. The permittee, by accepting the JEA permit, specifically agrees to allow authorized JEA and/or Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - a. Have access to and copy any records that must be kept under conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with the permit, JEA rules or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

13. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in the permit, the permittee shall immediately provide JEA and the Department with the following information:
 - a. A description of and cause of noncompliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by JEA and/or the Department for penalties or for revocation of the permit.
14. In accepting the JEA permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to JEA and the Department may be used by JEA and/or the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S.
15. The permittee agrees to comply with changes in JEA and/or the Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes, JEA, or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
16. The JEA permit is transferable only upon JEA approval in accordance with Rule 62-4.120 and 62-730.300 F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by JEA.
17. The JEA permit or a copy thereof shall be kept at the work site of the permitted activity.
18. The JEA permit also constitutes:
 - a. Determination of Best Available Control Technology (BACT)
 - b. Determination of Prevention of Significant Deterioration (PSD)
 - c. Certification of compliance with state Water Quality Standards (Section 401, PL 92-500)
 - d. Compliance with New Source Performance Standards

19. The permittee shall comply with the following:
- a. Upon request, the permittee shall furnish all records and plans required under JEA and/or Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by JEA or the Department.
 - b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by the permit, and records of all data used to complete the application for the permit. The time period of retention of materials shall be at least three years from the date of the sample, measurement, report, or application unless otherwise specified by JEA or Department rule.
 - c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the dates analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used;
 - the results of such analyses.
20. When requested by JEA or the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to JEA or the Department, such facts or information shall be corrected promptly.
21. Permit approval will be given with the understanding that upon the installation of such work its operations shall be placed under the care of a licensed contractor, whose qualifications are approved by the Department and the operations shall be carried out according to best accepted practice and in accordance with the requirements of the rules and regulations of JEA and/or the Department.
22. JEA shall be notified forty-eight (48) hours (min.) in advance of commencement of construction. Construction shall be performed during regular JEA working hours except in those cases where conditions may require special consideration. Prior to notification of commencement of construction, the contractor (JEA will notify all parties in only special cases) shall schedule a pre-construction conference. Mandatory attendance is required by all parties involved in the utility portion of the project including the owner, engineer of record, contractor, sub-contractor and JEA inspector.
23. Upon completion of the utility construction, the contractor shall submit As-Built drawings, a certificate of completion of construction and asset breakdown to JEA (where applicable). The as-built drawings shall be in accordance with all JEA rules and regulations.