

## **Procedure 2**

### **Review and Approval of Water/Sewer System Extensions**

#### **PART 1: Purpose**

This procedure outlines the steps required to request ECUA's approval of a proposed extension to ECUA's existing water/sewer systems. See Procedure 1 – Engineering Manual User's Guide, Section 8.16 for definition and examples of System Extensions. ECUA's review and approval process is independent of other agencies. ECUA reserves the right to approve or deny proposed extensions based on the positive or negative impacts to ECUA's existing water/sewer systems and customer base.

#### **PART 2: Ownership Responsibility**

- 2.1 *General* – Extensions to ECUA's water and sewer systems must be constructed in accordance with the approved plans. Prior to plan approval, ownership and maintenance responsibility of the completed facilities will be determined and outlined in Exhibit "C" of the Utility Service Agreement as executed by the developer and ECUA. ECUA typically accepts responsibility for all water and sewer extensions built within public rights-of-way and/or utility easements approved by ECUA.
- 2.2 *Water and Sewer System Extensions* – ECUA will accept all water and sewer system extensions within public rights-of-way and in easements dedicated for the use of public utilities such as in the case of newly platted subdivisions. Private water/sewer systems are not allowed in residential subdivisions. ECUA will accept water and sewer system extensions within easements on private property when those water and sewer system extensions are intended to either serve other properties or are required for ECUA system operational needs.

ECUA will not accept water or sewer system extensions intended to solely provide service to a single parcel or commercial entity, except for those portions entirely within the public right-of-way. Typically, ECUA does not accept water/sewer systems related to apartment complexes, strip shopping centers, malls, condominiums, office parks, industrial sites, etc. Metering of water service to those types of facilities shall be in accordance with current ECUA policies.

- 2.3 *Lift Stations* – ECUA will accept for ownership new lift stations constructed in accordance with the requirements of ECUA's Engineering Manual which provide service to multiple parcels such as in new subdivisions. ECUA will not approve the proposed construction of a new lift station to serve a new subdivision where the developer indicates his intention is for the station to remain privately owned. In the case of a lift station intended to serve traditional platted single-family residential subdivisions, the lift station must be designed and constructed in accordance with ECUA approved plans. Ownership of the completed lift station must be transferred to ECUA upon completion.

Lift stations intended to serve a single commercial entity will not be accepted for ownership by ECUA unless the lift station also will serve other parcels of land such that it is of benefit to the surrounding community. Examples of single commercial entities include: apartment complexes, strip shopping centers, malls, condominiums, office parks, industrial sites, etc.

- 2.4 *Determination* – ECUA solely reserves the right to determine the extent or limits of proposed ownership as a condition of plan approval for all water and sewer extensions. Those determinations will be outlined with the Utility Service Agreement, Exhibit “C”.

### **PART 3: System Extension Submittal and Review Process**

- 3.1 *Step 1: Preliminary Engineering Report (PER) (mandatory)* – Applicant’s Engineer of Record (EOR) shall prepare PER in pdf format (less than 10 MB) on 8.5” x 11” pages and email to the Engineering Department at [ecuaeng.contact@ecua.fl.gov](mailto:ecuaeng.contact@ecua.fl.gov). The EOR may use their discretion on formatting the PER, however it shall contain the following items at a minimum:
- 3.1.1 Completed top half of ECUA’s *System Extensions – Project Information Form* located in the ECUA Engineering Manual, Division 5 Forms.
  - 3.1.2 Vicinity map depicting location of project, to include limits of associated master development and/or other developments in close proximity to the project. The map shall also depict the project’s physical property address.
  - 3.1.3 Narrative of requested extensions (i.e. water, irrigation, fire line, sewer).
  - 3.1.4 Average daily flow (ADF) for water and/or sewer system.
  - 3.1.5 Peak flows for potable water need, fire flow need, and peak hourly flow (PHF) for sewer system.
  - 3.1.6 Preliminary estimate of main line sizes, lift station pump flows, and meter sizes as applicable.
  - 3.1.7 Need for Applicant to provide and construct either a private lift station or an ECUA lift station (designed and built to ECUA standards and to be owned, operated, and maintained by ECUA)
  - 3.1.8 For projects with proposed ECUA lift stations, proximity to available electrical power in area (3 phase 240V or 3 phase 480V)
  - 3.1.9 Need for easements to be dedicated to ECUA and/or need for ECUA parcels
  - 3.1.10 Unique topographic features (i.e. contours, wetlands, high water tables, etc.) that may impact design, construction, maintenance, and ECUA access.
  - 3.1.11 Potential application of existing ECUA programs, etc.:
    - 3.1.11.1 Septic tank abatement program
    - 3.1.11.2 Fire hydrant cost-sharing program
    - 3.1.11.3 Low-pressure sewer consideration
  - 3.1.12 (Optional) Other pertinent information as EOR deems necessary. Examples include conceptual layout of proposed subdivisions, preliminary site plan showing possible connections to ECUA, set of conceptual construction plans, etc. Any construction plans

provided at this stage are deemed preliminary and will require revisions based on ECUA review.

- 3.2 *Step 2: ECUA Project Establishment and Initial Review* – Upon receiving a complete PER, ECUA will assign an ECUA system extension project number, assign an ECUA reviewer, and forward the PER to various ECUA operational departments for preliminary review. Upon collection of ECUA internal comments, ECUA reviewer will schedule Pre-application Meeting with Applicant's EOR. This step typically takes 2-3 weeks to complete.
- 3.3 *Step 3: Pre-Application Meeting (mandatory)* – The pre-application meeting allows ECUA and Applicant to coordinate the following:
  - 3.3.1 Meeting scheduling - Meetings are to be held at ECUA Engineering offices. ECUA reviewer may choose to hold pre-meeting with ECUA operations staff immediately prior to meeting with EOR. For projects with minimal complexity, ECUA reviewer may opt to perform meeting via tele-conference.
  - 3.3.2 Meeting scope – This meeting allows for the mutually beneficial exchange of information related to ECUA's existing infrastructure and the project's water/sewer needs. Should the project be of such magnitude that it requires improvements to ECUA's infrastructure, then Applicant shall be responsible for those costs. This meeting also allows the opportunity to discuss property issues, ECUA policies and programs, compatibility with future capital projects, etc.
  - 3.3.3 Oversizing – Should the ECUA feel it is in its best interest, then ECUA may require the Applicant to oversize portions of the project design (i.e. ECUA pays for incremental cost difference between a project requiring a 6" water main and ECUA requested 8" water main). The ECUA review engineer can brief the Applicant regarding the oversizing policies and procedures. See Engineering Manual, Procedure 6 – Oversizing.
  - 3.3.4 Meeting results – The meeting results shall be captured by the ECUA reviewer on the bottom half of the *System Extensions - Project Information Form*, as well as incorporated into the project design and associated documents.
- 3.4 *Step 4: ECUA Reviewer Recommendation for Formal Submittal (mandatory)* – Once the pre-application meeting is completed to the satisfaction of the ECUA reviewer, the reviewer will sign the *System Extensions – Project Information Form* and give copy to Applicant's EOR, thus clearing the project for formal submittal to ECUA. The Applicant's EOR shall then incorporate the information and results from the preliminary submittal meeting into the formal submittal per Step 5 below.
- 3.5 *Step 5: Formal Submittal Contents*– Applicant's EOR shall prepare formal submittal package as follows and submit to the ECUA Engineering Department:
  - 3.5.1 Cover letter with table of contents listing the submitted items.
  - 3.5.2 ECUA signed *System Extensions – Project Information Form*.
  - 3.5.3 \$500 review fee, in the form of a check made payable to the ECUA.
  - 3.5.4 One signed and sealed copy of the *Notice of Intent to Construct an Extension to ECUA's Water/Sewer Systems*. See Engineering Manual, Division 5 – Forms.

- 3.5.5 One draft, unsigned copy of the *Utility Service Agreement* with completed Exhibits A, B, C, and D attached. See ECUA Engineering Manual, Division 5 – Forms. Once form has been properly completed based on project specifics, then ECUA reviewer will request two signed originals.
- 3.5.6 Construction Plans: Depending on the complexity of the project, the ECUA reviewer may request 3 check sets, size 22" x 34" or 24" x 36", of construction plans that are not signed and sealed at this stage in the process. Once the ECUA reviewer is satisfied that comments and requested revisions (generated in step 6) have been sufficiently incorporated into the plans, the ECUA reviewer will require six sets of construction plans, size 22" x 34" or 24" x 36", signed and sealed by a Professional Engineer registered in the State of Florida. The upper right hand corner of each title sheet shall include the *ECUA Engineering Manual Reference Note*. See ECUA Engineering Manual, Division 5 – Forms, on ECUA website for note.
- 3.5.7 One copy of the plan review checklist (Future).
- 3.5.8 Two sets of lift station calculations, if applicable, signed and sealed by EOR, along with two copies of the following:
  - 3.5.8.1 For privately owned lift stations – include completed *ECUA Review of Privately Owned Lift Stations*. See ECUA Engineering Manual, Division 5 – Forms, for document. See instructions on top of page one for simplex vs duplex pump requirements.
  - 3.5.8.2 For ECUA owned lift stations – include completed *Lift Station Design Worksheet* and *Lift Station Pump Selection Worksheet*. See ECUA Engineering Manual, Division 5 – Forms, for worksheets.
- 3.5.9 Submit the following, if applicable, regarding property requirements:
  - 3.5.9.1 For subdivision projects – include preliminary plat showing all existing and proposed public ROW, private road ROW, easements, and all easements and parcels for ECUA facilities, etc.
  - 3.5.9.2 For other projects – include plans showing all existing and proposed public ROW, private road ROW, easements, and all easements and parcels for ECUA facilities, etc. The EOR is responsible for creating legal descriptions and sketches for all proposed easements and parcels, and shall coordinate with ECUA ROW Agent for proper documents to be used in the acquisition process.
- 3.5.10 Cost estimate information, if applicable, for oversizing requests.
- 3.6 *Step 6: ECUA Review and Approval of Formal Submittal* – The Formal Submittal review process will generally follow the steps outlined below:
  - 3.6.1 Submittal will be logged in by ECUA Reviewer and reviewed for completeness. If complete, package will be routed to the appropriate ECUA departments for their formal reviews.
  - 3.6.2 The ECUA Reviewer will begin review of plans and associated documents for compliance with ECUA and/or FDEP requirements, as appropriate.

- 3.6.3 Comments from ECUA departments will be collected and reviewed.
- 3.6.4 Additional meetings, requests for additional information, and/or changes to the design may be required. ECUA reserves the right to make changes and/or modify requirements during formal review process that were or were not addressed in the pre-application meeting.
- 3.6.5 Once submittals are deemed complete, accurate, and suitable to ECUA, then ECUA reviewer shall have executed the *Notice of Intent* (permit) and the two *Utility Service Agreements* and shall stamp all six sets of plans either “Approved” or “Approved with Comments”.
- 3.6.6 ECUA Engineering Department will contact EOR and quote the ECUA inspection fees required. Applicant or EOR shall deliver check for inspection fees to Engineering Department, at which time System Extension Plan Approval letter/package will be available for pickup.
- 3.6.7 Documents shall be distributed by ECUA as follows:

	<b>Plan Approval Letter</b>	<b>Stamped Approved Plans</b>	<b>NOI</b> (original to ECUA binder)	<b>USA</b> (original to ECUA Board)
ECUA reviewer/file	1 copy	1 set	1 copy	1 copy
ECUA inspector	1 copy	1 set	1 copy	-
ECUA operations	1 copy	2 sets	-	-
Owner/Applicant	1 original <sup>(i)</sup>	1 set <sup>(i)(ii)</sup>	-	1 original <sup>(i)</sup>
EOR	1 copy <sup>(i)</sup>	1 set <sup>(i)</sup>	1 copy <sup>(i)</sup>	-

- (i) Included with Plan Approval letter/package sent to EOR
- (ii) Owner shall insure its Contractor has a set of the stamped approved plans on the project site for use in construction

- 3.6.8 Review time: 60 days of ECUA review time with clock starting on the date of a complete formal submittal package. Clock stops for periods of time when ECUA is awaiting information, re-submittals, forms, etc. from the EOR and/or Applicant. Time extensions may be required depending on the project’s complexity.
- 3.6.9 Nothing is stated or implied whereas an Applicant can receive ECUA approval by any means other than ECUA issuing a Plan Approval letter.
- 3.6.10 Expiration of System Extension Plan Approval Letter: Extensions shall be completed by Applicant and accepted by ECUA (per date of ECUA Final Acceptance letter) within three years of the date of the system extension Plan Approval letter, otherwise the extension Plan Approval will expire and Applicant will be required to resubmit, to include meeting current fees, ECUA standards, and other applicable codes at time of re-submittal.

3.7 *Step 7: Pre-Construction Coordination* – The following pre-construction activities shall take place based on project scope:

- 3.7.1 Material Submittals Review and Approval – For complex projects (i.e. subdivisions) as determined by ECUA reviewer, the EOR or the Applicant’s Contractor shall provide ECUA with material submittals and shall order and utilize materials based on ECUA approved submittals. For less complex projects (i.e. private grinder station connection to ECUA force main) as determined by ECUA reviewer, material submittals will not be required.
  - 3.7.2 Pre-Construction Meeting - For complex projects (i.e. subdivisions) as determined by ECUA reviewer, the EOR or the Applicant’s Contractor shall schedule a pre-construction meeting with ECUA at least two weeks prior to commencing construction. For less complex projects (i.e. private grinder station connection to ECUA force main) as determined by ECUA reviewer, pre-construction meetings will not be required.
- 3.8 *Step 8: Construction* – Once the Applicant receives the system extension Plan Approval letter, has paid all applicable fees (impact, etc.), and has complied with the pre-construction coordination as mentioned above, then the construction phase of the project may proceed. Other permits may be required from other agencies. The approval of ECUA’s Engineering Department does not constitute approval from other regulatory agencies. Additional construction-related items are as follows:
- 3.8.1 The Applicant’s Contractor shall provide notice to ECUA’s Inspector at least three full business days prior to beginning water or wastewater utility construction or connection activities.
  - 3.8.2 Applicant shall give its Contractor a set of the ECUA stamped approved plans prior to commencing construction. The Contractor shall have, on the job site, one set of the ECUA “Approved” or “Approved with Comments” stamp-approved plans. A current set of As-Built plans shall also be kept on the job site. Contractor shall have printed version of ECUA Engineering Manual on site, or shall have access to manual via ECUA website while on site.
  - 3.8.3 The ECUA Inspector will only inspect construction that is shown on the ECUA stamped approved plans. Work installed that does not conform to the ECUA stamped approved plans and/or the ECUA Engineering Manual will be rejected and will be assessed re-inspection fees.
  - 3.8.4 Minor changes (i.e. service locations, valve locations, etc.) to the stamped approved plans may be made by the ECUA inspector. Major changes (i.e. additions or deletions of mains, changes in pumps, etc.) to the stamped approved plans must be requested by the Contractor, reviewed by the EOR, and then submitted to the ECUA reviewer by the EOR. The ECUA reviewer must provide approval, prior to construction of major changes.
  - 3.8.5 All questions and comments regarding the construction plans shall be directed to the Applicant’s EOR and shall be approved by ECUA reviewer.
  - 3.8.6 Changes to the ECUA stamped approved plans may be required if various codes and standards (i.e. National Fire Protection Agency – NFPA, or National Electric Code – NEC) or other safety related needs dictate. Associated costs to change construction means, methods, equipment, etc. shall be borne by the Applicant and not ECUA.
- 3.9 *Step 9: Final Inspection/Walk-Thru* – Upon completion of construction and successful testing, the EOR shall notify the ECUA reviewer stating the project was completed according to the ECUA stamped approved plans, and request a final inspection/walk-thru. ECUA will schedule the final

inspection/walk-thru. Attendees shall include at a minimum the EOR, Contractor's project manager, and ECUA inspector. Optional attendees will include the ECUA reviewer, ECUA regional supervisor, and other ECUA operations staff.

3.10 *Step 10: Closeout Paperwork Requirements* – The following items shall be submitted to the ECUA Inspector only after successful completion of the final inspection/walk-thru:

3.10.1 *Certification of Completion of Construction for an Extension to ECUA's Drinking Water Distribution System and/or Certificate of Completion of Construction for an Extension to ECUA's Wastewater Collection/Transmission System* (see ECUA Engineering Manual for forms). This certification also requires the submission of these additional documents:

- 3.10.1.1 (Water mains only) One copy of bacteriological test results. Certificate of Completion of Construction shall be received by ECUA no later than 60 days from date of samples. Include map of sampling points.
- 3.10.1.2 Letter from ECUA inspector stating all punch-list deficiencies have been corrected.
- 3.10.1.3 Record Drawings per ECUA specification section 4000.
- 3.10.1.4 *Certification of Developer* form with an itemized statement of improvement values or cost, one for water and one for sewer. See ECUA Engineering Manual, Division 5 – Forms, on ECUA website for *SD-3, Certification of Developer* form.
- 3.10.1.5 Recorded plat, if available (subdivision projects). Copies of all recorded easements pertinent to ECUA facilities (all projects).
- 3.10.1.6 One copy of all pressure tests for force mains and water mains.
- 3.10.1.7 One copy of all video inspection and air testing of gravity sewer collection systems, to include manhole vacuum test results.

3.10.2 (ECUA lift stations only) Operation and Maintenance manuals per ECUA Engineering Manual.

3.11 *Step 11: Final Acceptance by ECUA* – Upon successful completion of all closeout paperwork, the ECUA Engineering Department will issue a Certification of Final Acceptance Notice to the Applicant. Failure to obtain the Certification of Final Acceptance Notice from ECUA may result in the removal of water meter and termination of water service per the Utility Service Agreement.

3.12 *Step 12: Post-Construction Coordination* – The following post-construction activities shall take place:

- 3.12.1 Warranty – All projects and all work that is accepted by ECUA for ownership and maintenance shall be covered by a two year warranty per the Utility Service Agreement.
- 3.12.2 Final recorded plat – For subdivision projects, the EOR shall submit to the ECUA reviewer the final recorded subdivision plat within 10 days of its recording, if not already submitted.