# JEA AS-BUILT OR RECORD DRAWING SUBMITTAL TRANSMITTAL

JEA.

Water/Wastewater/Reclaimed Water/Chilled Water pipelines and Pump Stations

To:				
From:				
Phone:		E-mail:		
Company Name:				
Company Address				
Date of Submittal:				
Signature of Submitter Verifying Compliance:				
Project Name:				
Project Type: (Check all that app <b>l</b> y) <sup>-</sup>	New Development	Treatment Plant	JEA Installed	JEA Contractor
Project Purpose	Main Extension	Main Replacement	Main Relocation	Plant Project
JEA Availability Number:			JEA Capital Project Number:	
JEA Project Manager:			JEA PM e-mail:	
Engineering Firm:				
Engineering Contact:				
Engineers Phone:				
Engineers E-mail:				
Contracting Co.:				
Contractor Contact:				
Contractor Phone:				
Contractor E-Mail:				
Surveying Co.:				
Surveyor Contact: Surveyors Phone:				
Surveyors E-mail:				
JEA O&M representative:				
Attached:	Water As-Builts - D	aper Conv & Electronic	Water Data Tables Electro	
Audoneu - - -	Wastewater As-Buil Reclaimed Water A Chilled Water As-Bu As-Built Submittal C	ts - Paper Copy & Elect s-Builts - Paper Copy & uilts - Paper Copy & Ele	ronic, Wastewater Data T Electronic, Reclaimed Da ctronic, Water Data Table gineer, Contractor or Surve	ables Electronic ta Tables Electronic s Electronic

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Revised: January 1, 2019	Revised By: KGL	Approved By: CFS
	AS-BUILT DRAWINGS – SECTION 501	

## JEA AS-BUILT OR RECORD DRAWING SUBMITTAL REQUIREMENTS CHECK LIST

Per JEA Water and Wastewater Standards Manual Section 501

Initial next to each requirement verifying compliance

### **GENERAL REQUIREMENTS**

- Separate As-Builts or record drawings for water, wastewater, reclaimed water and chilled water
- \_\_\_\_\_On each page of as-built, certification filled out, signed, sealed and dated by surveyor/mapper
- On each page of as-built, certification filled out, signed and dated by contractor
- On each page of record drawing, certification filled out, signed and dated by JEA project manager
- Old lines not built as per design deleted and redrawn as constructed
- Notes and elevations not struck through, but changed
- "AS-BUILT" or "RECORD DRAWING" labeled in 1" letters on each page
- Sheets are 24" x 36" in size
- Includes all changes by Addendum or Change Order or SWA (Supplemental Work Allowance)
  - As-Built Includes datum & reference to state plane coordinates (Florida East Zone NAD 83, NAVD 88)
- Vicinity map on cover page
- Street names on all streets
- North Arrow on each page
- Graphic Scale on each page
- \_\_\_\_\_Availability number and/or JEA Capital Project number on each page
- JEA easements labeled as such, including RE number and Official Records Book and Page (OR #).
- \_\_\_\_\_ Title page includes JEA Availability Number and/or JEA Oracle Project Numbers
- Date of utility installation completion on each page
- Ownership transition point between JEA and Private system clearly designated on the as-built drawing.
- Master Plan showing phasing for the entire development
- Match lines shown for continuation to other sheets
- Private utilities installed as part of this project shown

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## POTABLE WATER SYSTEMS

### WATER MAINS

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Elevations on the main and finished grade shown at:

- Points of connection to the existing system
- Points of crossing over or under wastewater mains or storm drains
- At maximum of 100 ft. intervals
- Where less than 30 inches or greater than 48 inches of cover is provided
- Main stub outs

Each water main section between fittings/valves is shown with pipe size, pipe material and pipe pressure class called out with a leader line pointing to the applicable main (exceptions noted for extended pipe run)

- Pipe size and type indicated on service lateral piping
- Beginning and end points of horizontal directional drills located by professional surveyor
- HDD (Horizontal directional drill) bore log included showing:
  - Bore in plan and profile view
  - Bore log on 24" x 36" sheets
  - Certified by HDD contractor
  - Horizontal and vertical location data at 25 ft. intervals (max)

### WATER FITTINGS

Each fitting shows a call out designating fitting number, fitting type (45, tee, etc.) and size with leader pointing to the installed fitting.

Table included with data for each fitting:

- Fitting Number
- Subtype = Fitting Type (see data table file for subtypes)
- Facility Owner (JEA or PRIVATE)
- Fitting Size Primary (Inches)
- Fitting Size Secondary (Inches)
- Fitting Type
- Manufacturer
- Fitting Material (DIMJ, PVC or HDPE)
- Lining Material
- Fitting Top Elevation (feet)
- Final Grade Elevation (feet)
- Fitting Depth (feet)
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude

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**AS-BUILT DRAWINGS – SECTION 501** 

### WATER VALVES

JEA.

Each valve shows a call out designating valve number, valve type, and valve size with leader pointing to the installed valve.

Table included with data for each valve:

- Valve Number (WV, WWV, RV, CV)
- Valve Subtype = Valve, ARV, Backflow, Hydrant
- (See data table file for subtypes)
- Valve Type
- Facility Owner (JEA or PRIVATE)
- Valve Size
- Valve Open Direction (left/right)
- Valve number of turns required to open the valve
- Valve Depth to Operating Nut
- Final Grade Elevation (feet)
- Valve Depth to Nut (feet)
- Valve Manufacturer
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude
- RFID/Barcode Number (future)

### WATER HYDRANTS

Each hydrant shows a call out designating hydrant number with leader pointing to the installed hydrant.

Table included with data for each hydrant:

- Hydrant Number (WH, RH)
- Hydrant Subtype = Hydrant
- Facility Owner (JEA or PRIVATE)
- Hydrant Manufacture Date (year)
- Hydrant Manufacturer
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude
- RFID/Barcode Number (future)

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#### WATER METER BOXES

JEA.

Each meter box shows a call out designating meter box number with leader pointing to the installed box.

Location of meter boxes indicated and referenced to property lines (not necessary for 2 inch or less residential meters located as per standards).

Table included with data for each water meter box:

- Meter Box Number
- Service Type (Water or Reclaimed Water)
- Meter Subtype = Minor Meter (<2"), Major Meter
- Facility Owner (JEA or PRIVATE)
- Meter box manufacturer
- Meter Box Material
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude

#### WATER LOCATE WIRE BOXES

Each locate wire box shows a call out designating locate wire box number with leader pointing to the installed box

Table included with data for each locate wire box:

- Locate Wire Box Number (WLW-,)
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude

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### WASTEWATER SYSTEMS

### **GRAVITY MAINS**

Elevations on the main and finished grade shown at:

- Points of connection to the existing system
- Points of crossing over or under water mains
- Lateral (service) end points
- Main stub outs

Vertical separation called out at crossings with water mains

Plan and profile drawings provided showing pipe and manholes

Each gravity wastewater main section between manholes is shown with pipe size, pipe material, pipe pressure class and slope called out with a leader line pointing to the applicable main.

Pipe type and size and finished grade elevations on service lateral piping shown.

\_\_\_\_\_The location of the service point for each lateral located from the side property line or by station and offset.

Table included with data for each gravity main:

- Sewer Pipe Run Number
- Sewer Pipe Subtype = Collection, Trunk
- Facility Owner (JEA or PRIVATE)
- Pipe Size (Inches)
- Pipe Class (SDR26, etc)
- Pipe Material (PVC, etc.)
- Pipe Manufacturer
- Pipe Length (feet)
- Downstream Pipe Invert Elevation (feet)
- Downstream Grade Elevation at Invert (feet)
- Upstream Pipe Invert Elevation (feet)
- Upstream Grade Elevation at Invert (feet)
- Slope (ft/ft)

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### **GRAVITY FITTINGS**

JEA

Each fitting shows a call out designating fitting number, fitting type (45, tee, etc.) and size with leader pointing to the installed fitting.
 Table included with data for each fitting:

 Fitting Number

- Subtype = Fitting Type (see data table file for subtypes)
- Facility Owner (JEA or PRIVATE)
- Fitting Size Primary (Inches)
- Fitting Size Reducer (Inches)
- Manufacturer
- Fitting Material (DI, PVC or HDPE)
- Lining Material
- Fitting Top Elevation (feet)
- Final Grade Elevation (feet)
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude

### **MANHOLES & CLEANOUTS**

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Elevations of inverts and north rim of top of manhole covers shown for all manholes at the manhole

- Manholes and cleanouts labeled with number at manhole/cleanout
- Table with the following data for each manhole:
  - Manhole Number
    - Manhole Subtype = Collection, Force main, Low Pressure, Trunk (See data file for subtypes)
  - Facility Owner (JEA or PRIVATE)
  - Manhole Type (A through J)
  - Manhole Drop Type (Inside or Outside)
  - Manufacturer/Supplier
  - Manhole Size (feet)
  - Manhole Material
  - Manhole Lining Material
  - Manhole Lining Manufacturer
  - Rim Elevation (feet)
  - Invert Elevations (feet) with Directions
  - State Plane Northing, X Coord
  - State Plane Easting, Y Coord
  - Latitude
  - Longitude
  - Exterior Joint Tape Type & Manufacturer
  - RFID/Barcode Number (future)

#### WASTEWATER SERVICE POINTS

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Each service point (sewer lateral end point) shows a call out designating service point number with leader pointing to the service point.

Table included with data for each wastewater service point:

- Wastewater Service Point Number
- Wastewater Service Point Subtype = Customer point, Major Meter (See data table file for subtypes)
- Finished Grade Elevation (feet)
- Top of Pipe Elevation (feet)
- Depth of Cover (feet)
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude

### WASTEWATER FORCE MAINS

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Elevations on the main and finished grade shown at:

- Points of connection to the existing system
- Points of crossing over or under water mains
- At maximum of 100 ft. intervals
- Where less than 30 inches or greater than 48 inches of cover is provided.
- Main stub-outs

Each force main section between fittings/valves is shown with pipe size, pipe material and pipe pressure class called out with a leader line pointing to the applicable main (exceptions noted for extended pipe run)

Beginning and end points of HDD (horizontal directional drills) located by professional surveyor

HDD bore log included showing:

- Bore in plan and profile view
- Bore log on 24" x 36" sheets
- Certified by HDD contractor
- Horizontal and vertical location data continuous or at no more than 25 ft. intervals

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### FORCE MAIN FITTINGS

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\_Each fitting shows a call out designating fitting number, fitting type (45, tee, etc.) and size with leader pointing to the installed fitting.

Table included with data for each fitting:

- Fitting Number
- Subtype = Fitting Type (see data table file for subtypes)
- Facility Owner (JEA or PRIVATE)
- Fitting Size Primary (Inches)
- Fitting Size Reducer (Inches)
- Manufacturer
- Fitting Material (DI, PVC or HDPE)
- Lining Material
- Fitting Top Elevation (feet)
- Final Grade Elevation (feet)
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude

#### WASTEWATER VALVES

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Each valve shows a call out designating valve number, valve type, and valve size with leader pointing to the installed valve.

Table included with data for each valve:

- Valve Number (WV, WWV, RV, CV)
- Valve Subtype = Valve, ARV, Backflow, Hydrant
  - (See data table file for subtypes)
- Valve Type
- Facility Owner (JEA or PRIVATE)
- Valve Size
- Valve Open Direction (left/right)
- Valve number of turns required to open the valve
- Valve Depth to Operating Nut
- Final Grade Elevation (feet)
- Valve Depth to Nut (feet)
- Valve Manufacturer
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude
- RFID/Barcode Number (future)

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### WASTEWATER LOCATE WIRE BOXES

JEA.

Each locate wire box shows a call out designating locate wire box number with leader pointing to the installed box

Table included with data for each locate wire box:

- Locate Wire Box Number (WLW-,)
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude

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## WASTEWATER PUMPING STATIONS

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P	ump Station sheet is digital (not scanned and marked up) and legible when zoomed in.
	II As-Built changes are marked with AB and clouded. Corrected in AUTOCAD file, not crossed out with ne new numbers.
	Il pump station data/information is included on first sheet and the station layout with measurements, levations and GPS coordinates on second sheet.
A	Il utilities within the pump station site are located relative to property lines.
E	levations (*and GPS coordinates) indicated at:
	<ul> <li>Invert(s)</li> <li>Wet well Top (rim elevation) *</li> <li>Wet well bottom</li> <li>Concrete slab station corners</li> <li>Underground piping, valves* and fittings*</li> </ul>
N	leasurements of panels & equipment relative to the concrete edges of station at:
	<ul> <li>Control Panel Rack</li> <li>Power Distribution Rack</li> <li>Demarcation Box(s)</li> <li>Flow Meter Panel</li> </ul>
A	bove and below ground piping
V	/et Well shown and dimensioned from property lines
0	enerator/Pony pump shown and information filled out
C	riveway shown and dimensioned from property lines
A	Il materials, sizes of lines and fittings associated with pump station are indicated on drawings.
	Il buried electrical conduit labeled and located, including electrical service from utility transformer to tation meter and to control panel.
P	ump information has been checked for completeness and accuracy
N	ICC Panel chart is filled out.
S	chedule of elevation chart is filled out entirely.
S	tation physical address is indicated in Pump Station Information box.
P	rivately owned pump stations will provide pump model info for modeling purposes.

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### **RECLAIMED WATER SYSTEMS**

### **RECLAIMED WATER MAINS**

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Elevations on the main and finished grade shown at:

- Points of connection to the existing system
- Points of crossing over or under wastewater mains or storm drains
- At maximum of 100 ft. intervals
- Where less than 30 inches or greater than 48 inches of cover is provided
- Main stub-outs

Each reclaimed water main section between fittings/valves is shown with pipe size, pipe material and pipe pressure class called out with a leader line pointing to the applicable main (exceptions noted for extended pipe run)

Pipe size and type indicated on service lateral piping

Location of meter boxes indicated and referenced to property lines (not necessary for 2 inch or less residential meters located as per standards).

Beginning and end points of horizontal directional drills located by professional surveyor

HDD (Horizontal directional drill) bore log included showing:

- Bore in plan and profile view
- Bore log on 24" x 36" sheets
- Certified by HDD contractor
- Horizontal and vertical location data at 25 ft. intervals (max)

### **RECLAIMED WATER FITTINGS**

Each fitting shows a call out designating fitting number, fitting type (45, tee, etc.) and size with leader pointing to the installed fitting.

Table included with data for each fitting:

- Fitting Number
- Subtype = Fitting Type (see data table file for subtypes)
- Facility Owner (JEA or PRIVATE)
- Fitting Size Primary (Inches)
- Fitting Size Reducer (Inches)
- Manufacturer
- Fitting Material (DI, PVC or HDPE)
- Lining Material
- Fitting Top Elevation (feet)
- Final Grade Elevation (feet)
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude

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### **RECLAIMED WATER VALVES**

JEA.

Each valve shows a call out designating valve number, valve type, and valve size with leader pointing to the installed valve.

Table included with data for each valve:

- Valve Number (WV, WWV, RV)
- Valve Subtype = Valve, ARV, Backflow, Hydrant (See data table file for subtypes)
- Valve Type
- Facility Owner (JEA or PRIVATE)
- Valve Size
- Valve Open Direction (left/right)
- Valve number of turns required to open the valve
- Operating Nut Elevation (feet)
- Final Grade Elevation (feet)
- Depth to Op Nut (feet)
- Current Status (Open/Closed)
- Valve Manufacturer
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude
- RFID/Barcode Number (future)

### **RECLAIMED WATER HYDRANTS**

Each hydrant shows a call out designating hydrant number with leader pointing to the installed hydrant.

Table included with data for each hydrant:

- Hydrant Number (WH, RH)
- Hydrant Subtype = Hydrant
- Facility Owner (JEA or PRIVATE)
- Hydrant Manufacture Date (year)
- Hydrant Manufacturer
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude
- RFID/Barcode Number (future)

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### **RECLAIMED WATER METER BOXES**

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Each meter box shows a call out designating meter box number with leader pointing to the installed box.

Table included with data for each meter box:

- Meter Box Number
- Service Type (Water or Reclaimed Water)
- Meter Subtype = Minor Meter (<2"), Major Meter
- Facility Owner (JEA or PRIVATE)
- Meter box manufacturer
- Meter Box Material
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude

### **RECLAIMED WATER LOCATE WIRE BOXES**

Each locate wire box shows a call out designating locate wire box number with leader pointing to the installed box

Table included with data for each locate wire box:

- Locate Wire Box Number (WLW-,)
- State Plane Northing, X Coord
- State Plane Easting, Y Coord
- Latitude
- Longitude

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