

## **ART LIGHT SPACE, LLC**

### **The Ft Lauderdale Water Tower Proposal**

The "TOWER LIGHTS PROJECT" will transform the very visible but rundown water tower in downtown Ft Lauderdale into an iconic and symbolic piece of interactive public art. The redesign of this utilitarian structure into a piece of socially engaged artwork encourages a sense of ownership for the city and showcases Fort Lauderdale as art and tech-savvy, entertaining, fun and cultured. The tower design will be a visual and iconic landmark both day and night. The design colors are inspired by prismatic hues to provide a colorful and exciting experience by day from every direction. The water tower "comes to life" after dark with an animated light sequencing that pulses with the beat of the city to a catalog of music (streaming online) to a pre-programmed color array. The community will have the ability to "paint the tower with light" using a computer or a web enabled device and view the result in person or on a live camera feed.

#### **Design Phase**

Art, Light Space (ALS) shall present the Water Tower Project at the kickoff meeting. ALS shall create painting and lighting specifications. We shall attend the progress meetings providing status and forecast. ALS shall assemble preliminary drawings for review for quality and submit 60% complete design package to City for review, responding to City review comments. ALS shall review 90% complete design package for quality. We shall submit 90% design package to the City for review and attend progress meeting to provide status and forecast, responding to City review and comments. ALS shall then submit completed 90% design package to the City.

ART DESIGN / SPECIFICATIONS - ALS (Art Light Space)

#### **GRAPHICS DESIGN**

Art Project – ALS shall provide a design schematic of the tower art-scape with correlated (pantone shades) for the painting template. Consultation in the Design Phase may include coordinating with the engineering design consultant and the City, providing progress reports and attending meetings.

#### **LIGHTING AND FIXTURE DESIGN - ALS**

Lighting Plot – ALS shall provide a design layout for lighting array and placement (fixture placement site plan). The design layout shall be inclusive of light coverage and intensity for each fixture in the design array. It shall include simulation of project operation and a "fly-by" recreation. It shall include all lighting specifications specifically designed for this project with lensing optimization for particular tower requirements. The lighting will be specified with optimum intensity (lumens), coverage, and protocol with wireless controls using RDM (Remote Device Management).

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Rigging Design – ALS shall include all hardware, components, engineering, and structural design for lighting mounting and placement to code specifications. ALS shall design the following: 1) the mounting for the light fixtures to the tank exterior; 2) mounting supports for the lights; 3) electrical conduit and wire to power the lighting; 4) control conduit and wire for automated control of the lights; 5) exterior coatings; 6) weights and wind load calculations (per ASCE Standard 7-10, signed and sealed by a Professional Engineer registered in the State of Florida) for the light fixtures and light supports; supports for conduits for tank lighting power and control conduits.

Lighting Specifications provided for Bid Package.

### **HARDWARE - Specifications**

Network Lighting Controller – ALS shall select the controller to interact with third party custom software and communicate using wireless DMX protocol interfaced with lighting array RDM.

Server – ALS shall select a server to provide intermediary between onsite controller and user devices. Second server to provide system back-up for system operations.

Internet Connection - Will be provided by City.

VIDEO SYSTEM – Specifications. ALS shall provide a design schematic and specification for the water tower video feed.

### **ENGINEERING DRAWINGS**

Deliverables: 60% and 90% packages of all drawings, specifications, designs, components, and sealed engineering plans for lighting system in project. ALS shall provide design drawings and specifications signed and sealed by Professional Engineer registered in the State of Florida.

### **PERMITTING**

ALS shall fill out City Department of Sustainable Development (Building) application. We will submit completed 90% design package to the City DSD with the permit application, responding to City DSD permit review comments. ALS shall review 90% design package for quality and respond. We shall attend progress meeting and provide status and forecast. ALS shall submit 100% package to DSD to satisfy permit requirements.

Deliverables: ALS shall provide 100% design drawings and specifications signed and sealed by Professional Engineer registered in the State of Florida.

### **BIDDING**

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ALS shall attend pre bid conference and prepare responses to bidder questions. ALS shall review bids and review City prepared Commission Agenda item.

### **CONSTRUCTION**

ALS shall attend pre-construction meeting. We shall review and approve submittals (shop drawings) for paint and lighting. We shall attend progress meeting and provide status and forecast. ALS shall conduct ground level construction inspections and attend Construction Meeting, provide status and forecast. As needed, but generally at least twice per week during construction activities related to the decorative painting and lighting installation. ALS shall assist City review of contractor Application for Payment. We shall program the lighting system. ALS shall review coating inspector reports and provide opinion on adequacy of painting and identify needs for correction. ALS shall test the lighting system and inspect the system for substantial completion and prepare a list of items to repair or complete punch list. This will include a change order review and progress meeting. ALS shall conduct a punch list inspection and assist with City review of contractor Application for Payment providing a Certification that the project is complete.

### **SOFTWARE DESIGN AND INTERFACES**

Software System – ALS shall design and build a web based application to be specified that is compatible with common browser platforms (TBD) with protocols to coordinate music selection and sequencing with tower lighting array. This is inclusive of music cue design and user notification of play status. Interface will connect all Application Programming Interface (API) programs to system equipment. At final project completion, ALS shall give the City non-exclusive rights to the API/programming source code and/or a contract for either delivery to the City' IT department with a white paper, or support contract so the City's IT department can assume upgrades. Upgrades will have to be pushed every 12-18 months to keep the web app compatible with the current system configurations of user computers and devices. User notification will be via SMS text messaging or similar method.

As part of the final project completion requirements, ALS shall conduct one half day training session for up to four City IT department representatives. The training shall include system start up and shut down procedures, system operation and basic to moderate level troubleshooting. Extended maintenance after final completion of the project will be conducted under a new, separate contract with ALS. ALS shall provide a user manual for the system.

ALS shall upload the program into the control system and verify the system functionality. ALS shall assist the contractor to test the system design and simulation. Additionally ALS shall provide guidance to the contractor for the system initialization and startup.

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LIGHTING SYSTEM INSTALLATION, TESTING, AND INITIALIZATION ALS shall include support for upgrades to API software during the project warranty period as necessary. In line with generally accepted practice in the industry, API software upgrades shall be free after the initial purchase of the software package for the one year warranty period.

Warranty Period – ALS shall provide troubleshooting and general assistance services to the City during the one year warranty period. When notified of an issue, ALS shall begin repairs within one business day. Any expenses borne by ALS in the repair or replacement of defective or failed equipment, software or programming shall be borne entirely by ALS. City requested upgrades or changes to the system not related to system deficiencies shall be conducted via separate contract.

ALS shall periodically inspect layout of lighting site plan to insure that it complies with the drawings and specifications.

### **EXCEPTIONS**

ALS shall present an extended maintenance agreement under a separate contract.  
(TBD)

Web hosting to be provided under separate agreement if desired.

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**The Ft Lauderdale Water Tower Budget**

DESIGN PHASE – 2 Months

Art Design / Specification \$60,055.00

Outside Contractors:

Engineered Drawings / Specs \$10,000.00

Lighting Plot \$ 5,000.00

Fixture Placement Sight Plan \$ 5,000.00

\$ 80,055.00

PERMITTING PHASE – 2 Months

\$ 9,275.00

BIDDING – 3 Months

\$ 4,790.00

CONSTRUCTION PHASE – 2 – 3 Months

\$107,680.00

**TOTAL FEES**

**\$201,800.00**