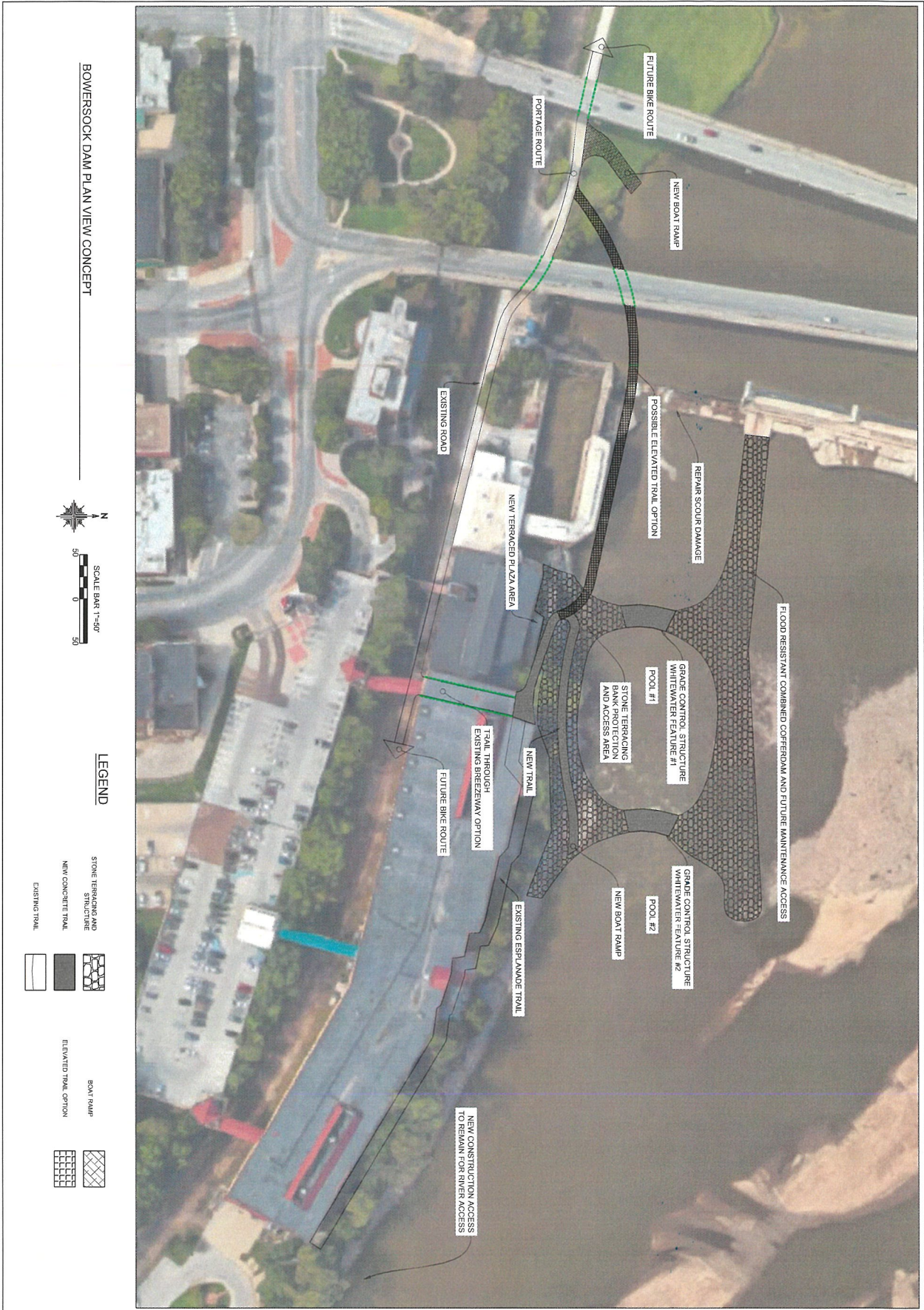


# DRAFT CONCEPT SKETCH



LOWERSOCK DAM PLAN VIEW CONCEPT



### LEGEND



NO.	DATE	REVISIONS

**KANSAS RIVER DAM CONCEPT**  
 KANSAS RIVER                      LAWRENCE, KS  
**PRELIMINARY - NOT FOR CONSTRUCTION**  
 SHT 1

PROJECT OWNER:  
 LAWRENCE, KS  
 BOWERSOCK DAM  
 KANSAS RIVER  
 DAM REPAIR

DRAFT

RECREATION ENGINEERING  
 AND PLANNING  
 485 ARAPAHOE AVE.  
 BOULDER | CO | 80302  
 WWW.BOATERPARKS.COM



## Team Member Background

We have assembled a strong team of technical experts and specialists in river engineering, hydrology, hydraulic design, permitting, hydraulic modeling, and fish passage and habitat to assist with all phases of this project. In addition to the firm's primary officers described above resumes for additional key staff assigned to the proposed project are provided in the Appendix.

## Scope of Work

### **1. Project Startup and Basemapping**

REP will review hydrology statistics, topography, prior reports and studies, soil borings and other available information. REP will create a basemap with topography, public utilities, property lines, streets and geo-rectified, high-resolution aerial photo background in an AutoCAD file format. REP will also review digital floodplain hydraulic models, work map and review and summarize relevant literature and data. A site and bathymetric survey may be required.

### **2. Preliminary Design**

Preliminary Design - 60% design drawings. Includes plan profile, cross sections, details civil design of all proposed structures, structural design of all proposed structures, water control, cost and quantity estimate, and project timeline for permitting and construction.

### **3. Permit Preparation and Submittals to Regulatory Agencies**

REP will prepare permit applications for submittal and review by regulatory agencies (USACE, KDHE and Division of Water Resources). This assumes a Nationwide Section 404 permit will be authorized for this project.

### **4. Meetings**

Attend meetings as requested by City staff with local organizations, city review boards or local agencies. Anticipate four on-site meetings with USACE, City, KDHE, and others, plus numerous phone and conference call meetings for progress updates and review.

### **5. One-Dimensional Hydraulic Modeling**

Acquire existing HEC-RAS model of record, create and insert proposed conditions into the model, analyze at various discharges, compile and report on findings.

### **6. Final design and construction documents.**

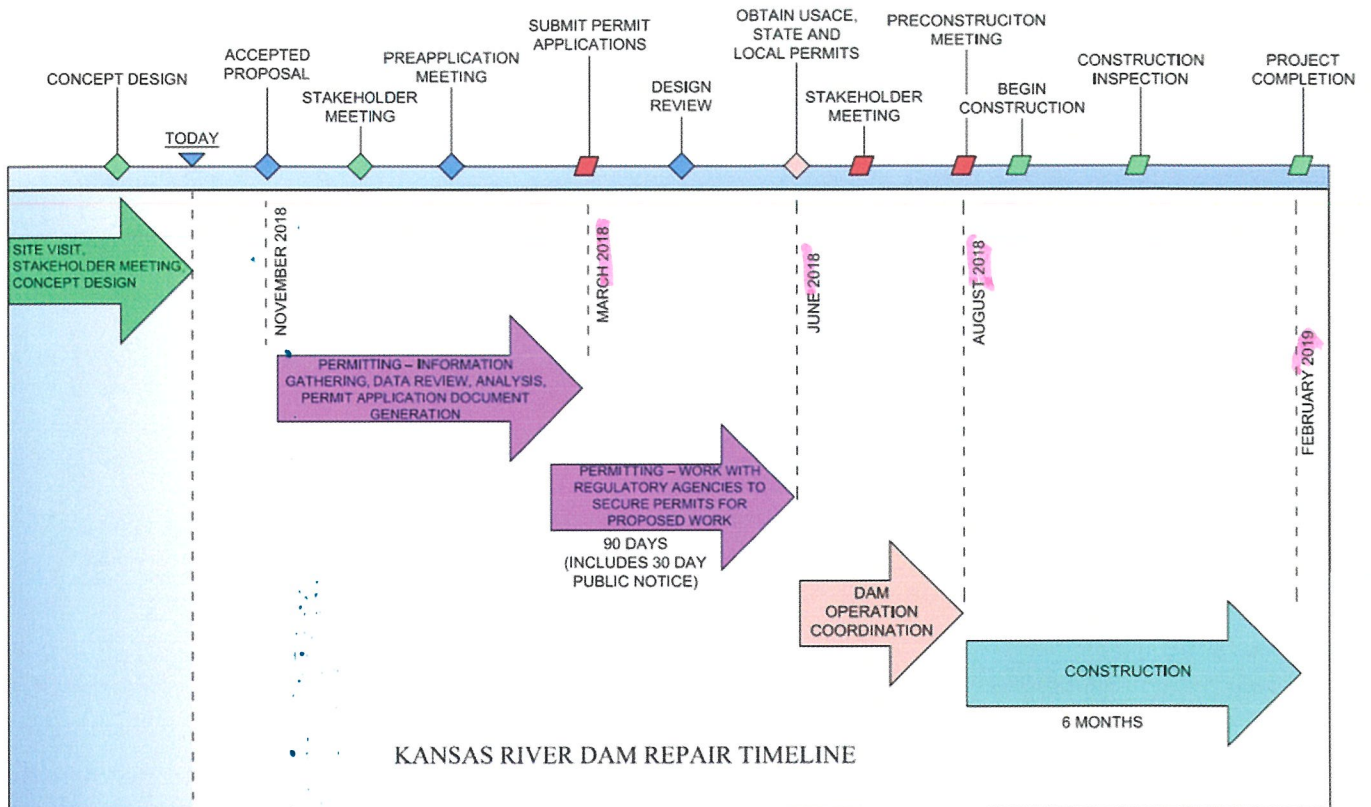
Includes final design of all project elements included within the 60% design. Includes refined quantity estimate and project specifications.

### **7. Construction Phase Services**

Attend preconstruction meeting. Answering contractor questions. Inspecting work quality and conformance with design intent and specifications. Aid with measurement and payment. Review shop drawings and submittals.

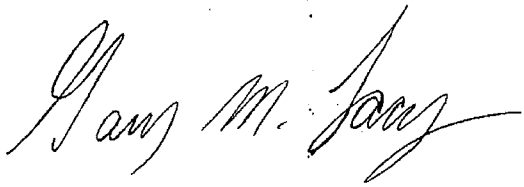
## Project Schedule

The project team offers the following proposed schedule for completion of deliverables as required by the Scope of Services, however, we can accommodate any schedule requested by the City.



If selected the project team will provide performance and statutory bonds as well as appropriate insurance.

Authorized Principal:

A handwritten signature in black ink, appearing to read "Gary M. Lacy". The signature is written in a cursive style with a long horizontal flourish extending to the right.

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Gary Lacy  
Recreation Engineering & Planning Inc.

## Contact Information



REP

485 Arapahoe Ave.

Boulder, CO 80302

(303) 545-5883

Gary Lacy

(303) 808-4522

[gary@boaterparks.com](mailto:gary@boaterparks.com)

## Appendix: Letters of Recommendation, Resumes, and Additional Project Information