

Design PWO Amendment 2 & Construction Management Contract Approval

C00284 – LTP Disinfection and Diversion
Project

BPU Contract Review Subcommittee

October 20, 2020

Mark Kasraie, PE

Supervising Engineer



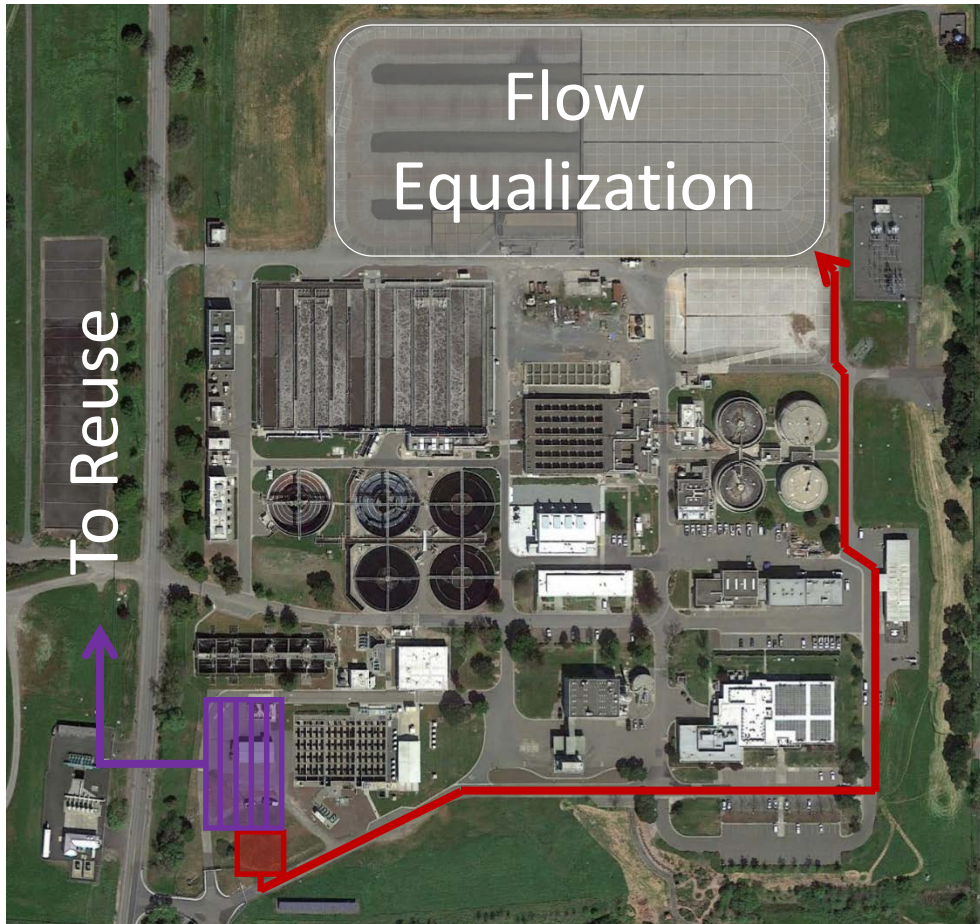
OUR FUTURE IN EVERY DRÖP

Presentation Outline

- Project status update
- PWO Amendment No. 2 for engineering services during construction
- PSA for construction management and inspection
- Recommendation for Subcommittee support



Project Purpose and Description



- The existing UV system at LTP has been de-rated to 48.5 MGD by the Division of Drinking Water and is also beyond its useful service life (at 22 years old)
- Project will replace existing **UV system** with a new 70 MGD system and will install an **onsite diversion system and 42" pipeline**

Project Status Update

We are preparing for design completion and are approaching construction – seeking contracts for engineering services during construction and construction management

- **August 2019** – Approval of design contract amendment 1
 - Finalizing 90% design
- **August 2020** – Approval of MOU and PSA with Calgon Carbon for UV equipment
 - Finalizing UV equipment design submittal

Carollo Project Work Order

- **Original PWO** – Carollo selected after competitive solicitation due to unparalleled expertise in UV system design (\$2.8M)
- **PWO Amendment No. 1** – provided additional budget to address project delays and scope changes (\$1.6M)
- **PWO Amendment No. 2** – planned amendment for design engineering services during construction (\$2.1M)

PWO Amendment No. 2

Scope

- Design engineering services during construction
- Review and respond to contractor submittals and RFIs
- Change orders and design clarifications
- Record drawings, start-up, and O&M Manuals
- Project Closeout



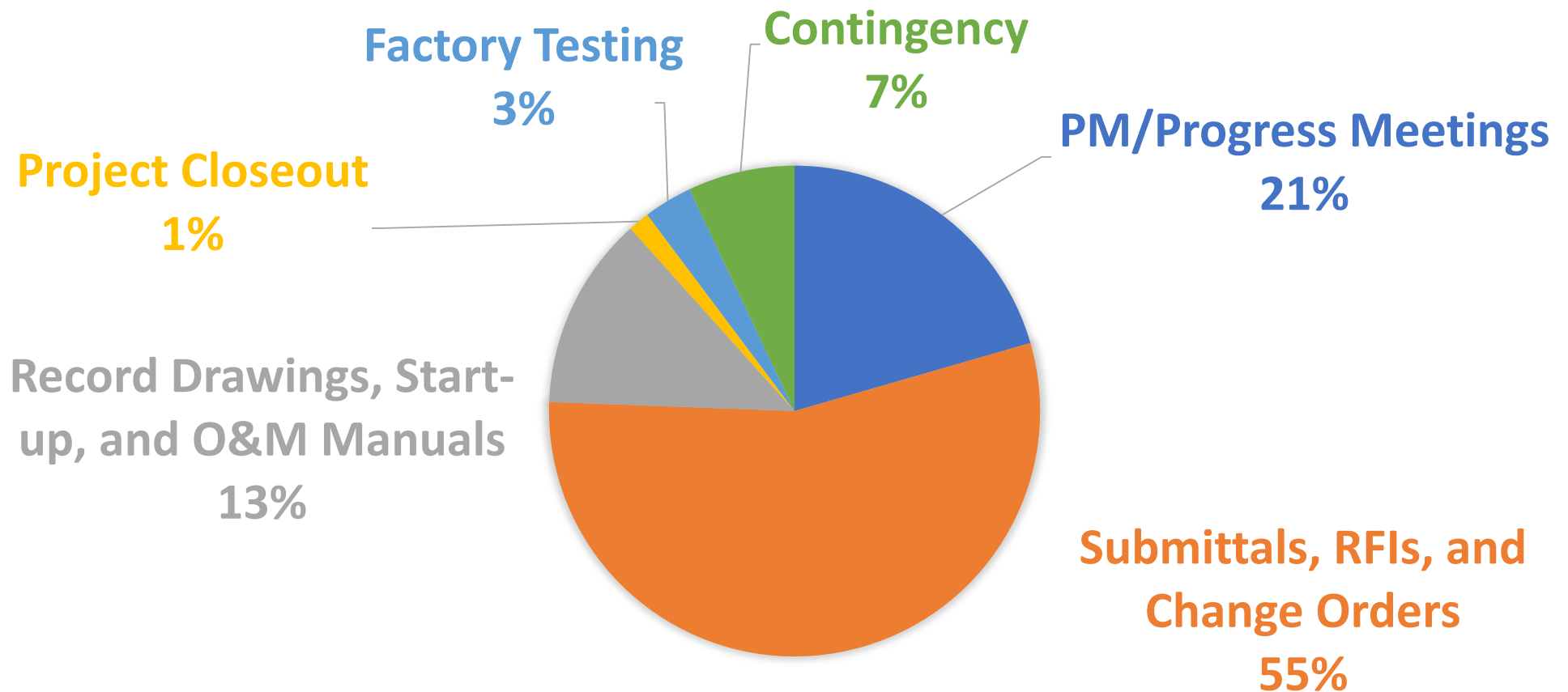
PWO Amendment No. 2

Fee

PWO Amendment No. 2 Tasks	Task Description	Fee (\$)
Tasks 1-2	PM/Progress Meetings	437,447
Tasks 3-5	Submittals, RFIs, and Change Orders	1,173,414
Tasks 6-8	Record Drawings, Start-up, and O&M Manuals	272,040
Task 9	Project Closeout	30,014
Task 10	Factory Testing	68,218
Task 11	Contingency	150,000
<u>Total PWO Amendment No.2 Fee:</u>		<u>2.1M</u>

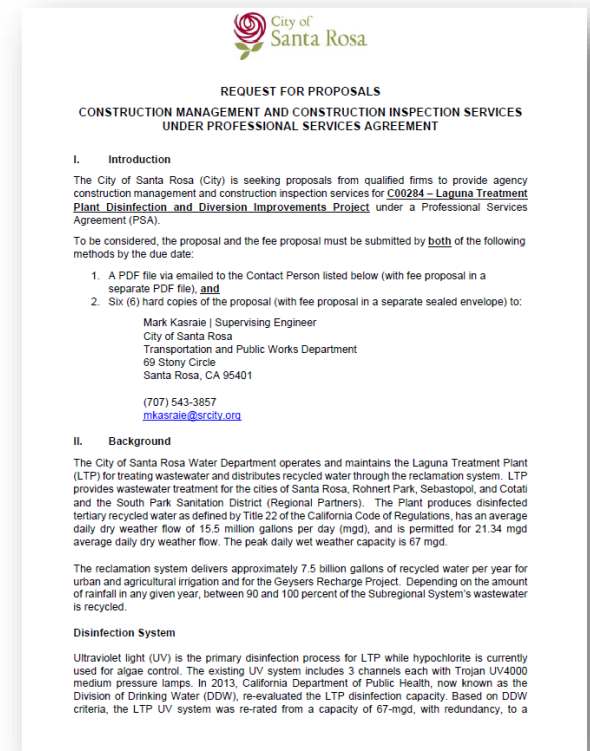
PWO Amendment No. 2

Fee



CM & Inspection RFP Process and Criteria

- RFP Released August 17 for construction management and inspection services
- Key selection criteria:
 - Responsiveness to RFP
 - Qualifications of Project Team
 - Work plan and scope of services
 - Experience with UV installations
 - Demonstrated Technical Abilities
 - References



CM & Inspection Proposal Selection

▪ Review Panel:

- (1) Deputy Director
- (1) Superintendent
- (2) Supervising Engineers
- (1) Civil Engineering Technician III

▪ Three (3) proposals received

- Two (2) short-listed & Interviewed

▪ Psomas selected:

- Strongest qualifications and experience
- Greatest time commitment to project
- Best references

▪ Contract Fee

- Not to exceed fee of \$4,471,746
- Consistent with City staff estimate

CM & Inspection Proposal Selection

- **Psomas' Proposal Demonstrated:**
 - Core team had seven (7) relevant wastewater treatment plant projects with UV components ranging in cost from \$15M to \$110M and flows as high as 30 MGD
 - Strongest time-commitment to Santa Rosa UV Project:
 - Project Manager - 60 Hours per month
 - Construction Manager – 144 hours per month
 - Resident Engineer and Inspector – Full-time
 - Excellent references...

CM & Inspection Proposal Selection

- **Psomas – Successful history with many municipalities:**

*I would highly recommend them
For CM & inspection work*

Works well with operations staff

*When things go wrong, PSOMAS works quickly
to produce a cost-effective solution*

*A particular strength of looking ahead
and working closely with everyone to prepare*

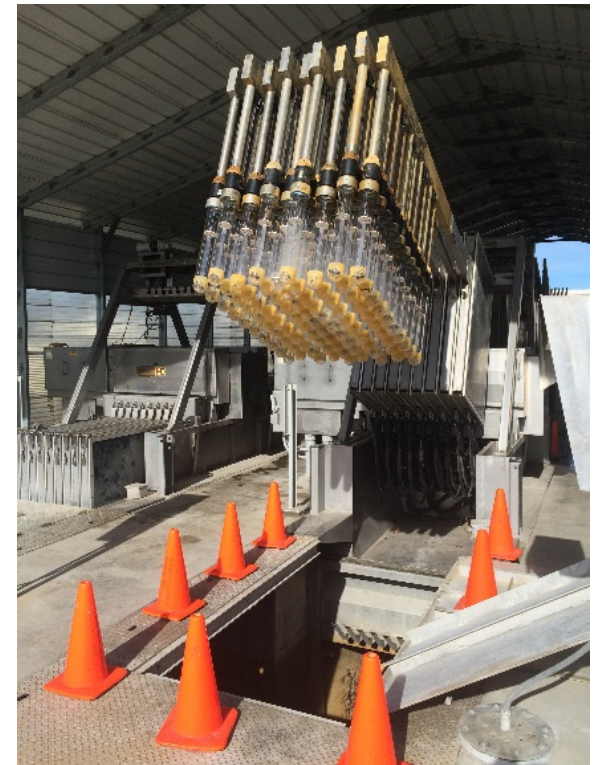
*All our CM firms have done well,
But not as well as PSOMAS*

Estimated Consultant Delivery Costs

Consultant Services Task	Fee	% of Total Construction	City Budget % of Total Construction
Design Services	\$4.4M	9.3%	13%
Engineering Services During Construction	\$2.1M	4.5%	5%
CM & Inspection	\$4.5M	9.6%	12%
Total	\$11M	23.4%	30%

Estimated Total Project Costs

UV Disinfection	\$35M
Non-compliant Diversion	\$12M
Total Construction Cost	\$47M
Project Delivery Costs ⁽¹⁾	\$16.5M
Estimated Total Project Cost	\$63.5M



(1) Project Delivery Cost represents 35% of Total Construction Cost, and Includes: Design, ESDC, CM/Inspection, Fees, In-House Labor, Overhead, and Overall Contingency

Impacts and Schedule

- **Fiscal Impact**

- Approval of these contracts has no impact on the budget. Funds have already been appropriated.

- **Environmental Impact**

- Pursuant to CEQA, an addendum to the Incremental Recycled Water Program EIR has been prepared.

- **Schedule**

- Should BPU approve these contracts, we estimate complete design Spring 2021.
- Construction estimated to begin Summer 2021 and last 30 – 36 months

Next Steps

- Late November – 90% Design workshop
- November 19 – BPU Consideration
 - Project Environmental (CEQA),
 - Design PWO Amendment No. 2
 - Construction Management & Inspection
- Future Board Meeting – Sole-source approval of specific equipment at LTP
- Summer 2021 – Award Construction Contract

Recommendation

It is recommended by the Transportation and Public Works Department and the Water Department, that the Contract Review Subcommittee support:

1. Design PWO Amendment No. 2, engineering services during construction for the Laguna Treatment Plant Disinfection Improvements Project in the amount not to exceed \$2,131,132.
2. A Professional Services Agreement with Psomas, for construction management and inspection in the amount not to exceed \$4,471,746.

Thank You

