

A closer look at

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# Water Tank Maintenance Programs

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A different approach to protecting and  
prolonging the life of your capital assets



# Water Tank Maintenance 101

Replacement Construction Cost:

**\$1.50 to \$3.00** per gallon of storage



500,000 gallon  
elevated tank



3,000,000 gallon  
ground reservoir



8,300,000 gallon  
ground reservoir

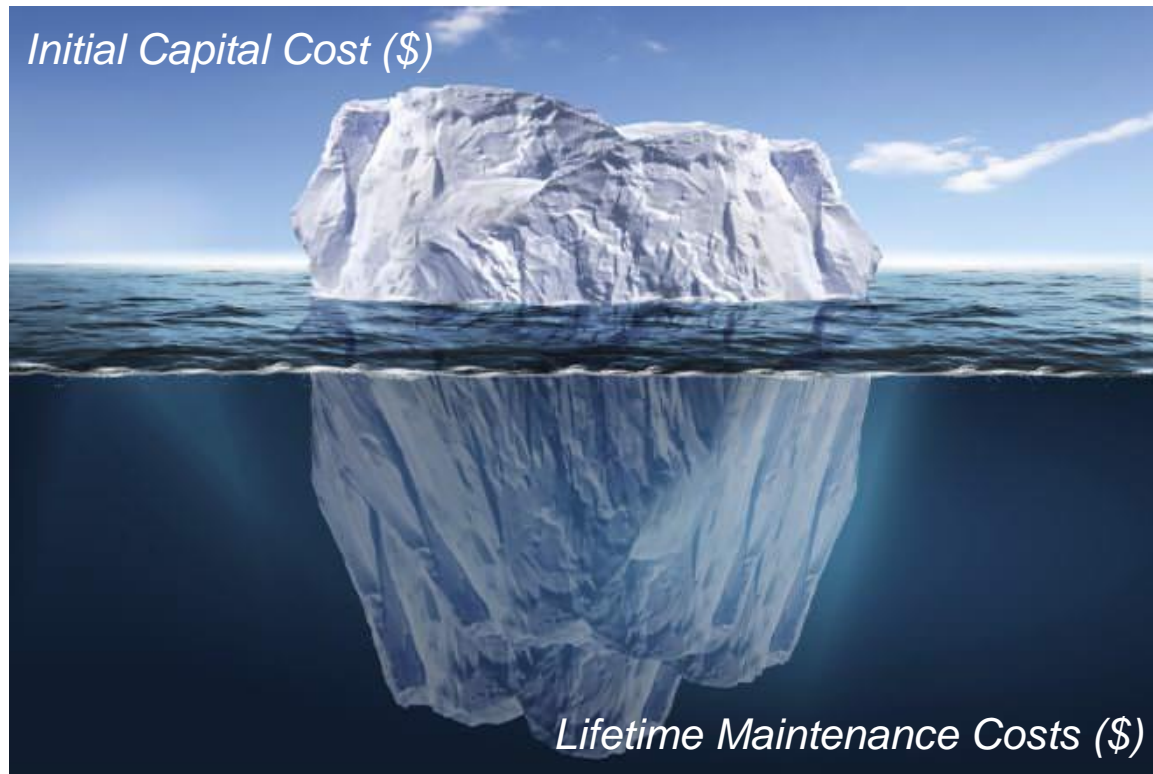


5,000,000 gallon  
ground reservoir

Nearly **17,000,000** gallons of storage in the City of Brighton's potable water storage system.

Over **\$30M** in water storage assets

# Water Tank Maintenance 101



Total life-cycle maintenance costs are usually **one to two** times the capital cost of a water tank asset.

# Water Tank Maintenance 101

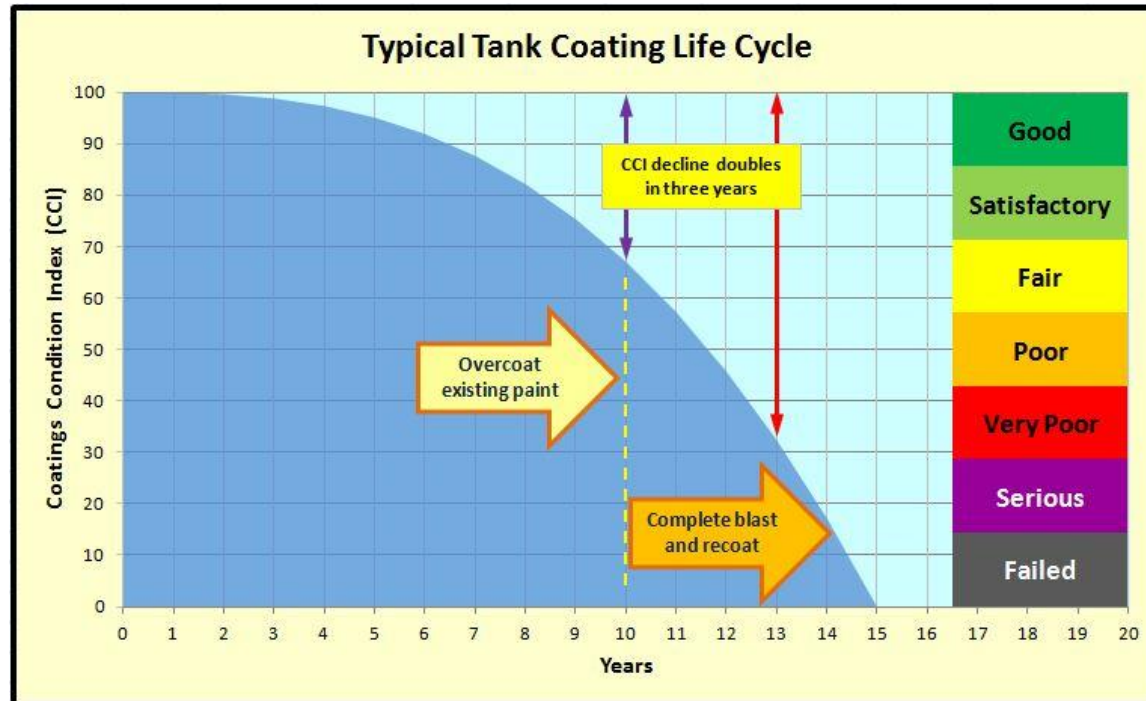
Typical design service life of 75+ years.

Given a practical maintenance schedule, the functional life can be extended indefinitely.



# Water Tank Maintenance 101

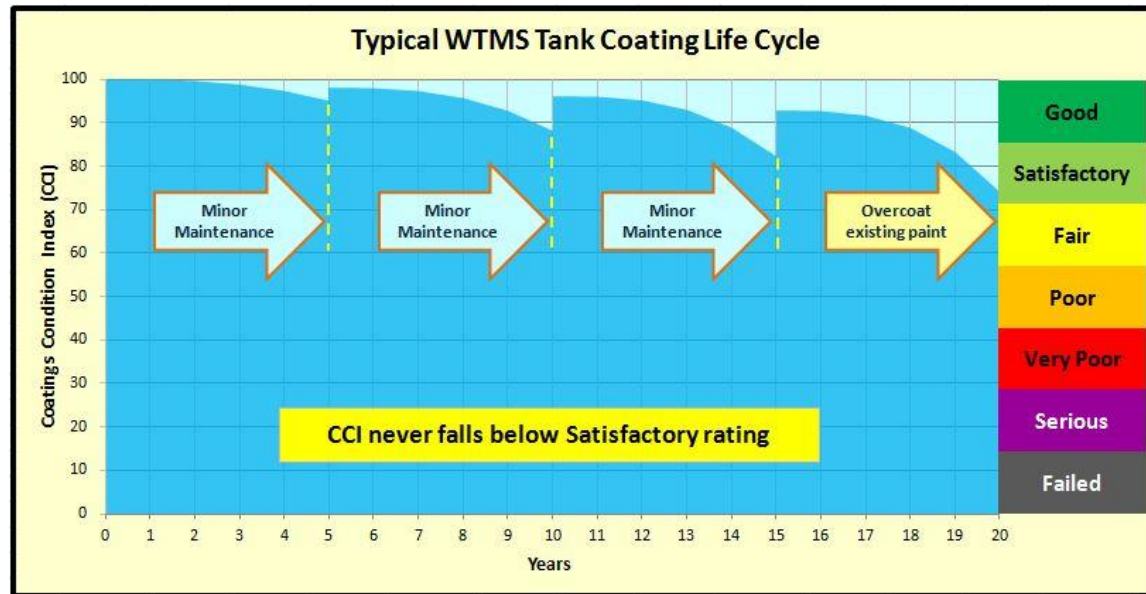
“Paint it and forget it...”



Desired coating life: 15-20 years

# Water Tank Maintenance 101

Pro-active maintenance approach



Ongoing maintenance extends the duration between major rehabilitations projects.

# Water Tank Maintenance 101

The Typical Approach  
*(design-bid-build)*

A Different Approach  
*(maintenance contract)*

# How do the two methods compare?

## The Typical Approach (*design-bid-build*)

## A Different Approach (*maintenance contract*)

Preliminary tank inspection	\$	✓	Included
Inspection report	\$	✓	Included
Identification of project scope	\$	✓	Included
Construction plans/work orders	\$	✓	Included
Project specifications	\$	✓	Included
Project cost identification	\$	✓	Locked, not an estimate



# How do the two methods compare?

## The Typical Approach (*design-bid-build*)

## A Different Approach (*maintenance contract*)

Bidding assistance		 Not necessary
Final project cost		 Total cost locked from onset
Project contractor		 Pre-determined
Contractor experience		 References available
Contractor safety record		 Ability to research record
Tank inspection and oversight		 Included

# How do the two methods compare?

## The Typical Approach (*design-bid-build*)

## A Different Approach (*maintenance contract*)

Warranty on workmanship	1-2 years	✓	Up to 10 years
Final invoice	Due at completion	✓	Spread costs over contract
Routine tank maintenance	\$	✓	Included
Annual inspections	\$	✓	Included
Cleaning and touch-up	\$	✓	Included

# What's right for Brighton?

- Compliance with CDPHE sanitary survey
- Quarterly inspection protocol
- NACE/CWI-certified inspection staff
- Significant rehabilitation needs on existing storage facilities
- Budgeted repair costs on 8.3 MG tank exceed \$3.0M alone
- Spread out the rehabilitation costs for all three tanks
- Provision of a one-stop-shop for all potable tank needs

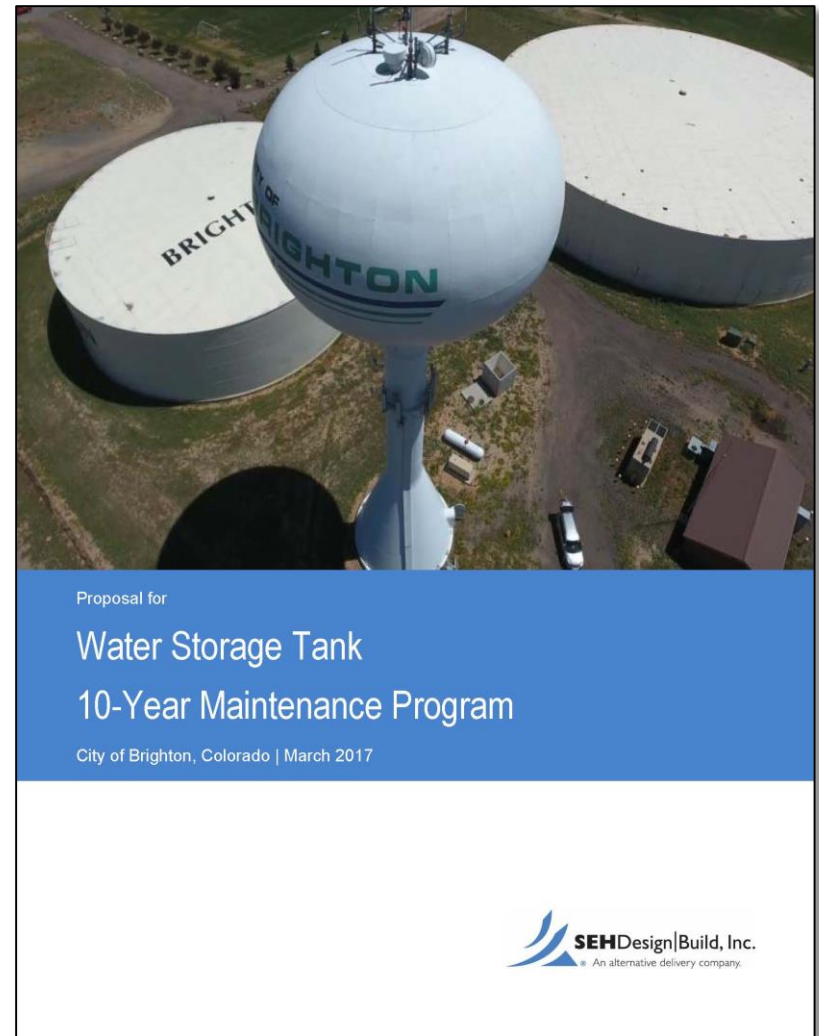


**COLORADO**  
Department of Public  
Health & Environment



# Tank Maintenance Proposal

- Up-to-date and compliant with CDPHE, AWWA and OSHA requirements
- Proactive protection of your water storage facilities
- Extend functional life and push out capital replacement costs
- Comprehensive 10-year maintenance and warranty
- Flexible payment terms
- All at a competitive price



# Other Questions



Jason P. Sprague  
SEH Design|Build  
jsprague@sehinc.com  
612.217.4420

Thank you!