



Vistoso Trails Nature Preserve

Presentation to Town Council
April 16, 2025

Kimley»»Horn

Agenda

- Summary of Feedback
- Existing Conditions Assessment
- Pond Concept Plan Review
- Preliminary Costs
- Next Steps



Summary of Feedback:

- Some felt that the pond would best meet community expectations for this area.
- Others had concerns about the feasibility and costs associated with a pond.
- Several mentioned a desire for a water feature instead of a pond.
- Several felt the focus of this area should be on water conservation rather than reintroducing a water feature.
- All felt that preservation of views was important. Consider parking location accordingly.



Summary of Feedback:

- Several asked for a better understanding of the maintenance & costs involved in fully restoring the pond. It was also suggested to consider refilling the existing pond.
- Several agreed that a small area of turf would be nice.
- Several were concerned about the liability and safety risks potentially associated with having a pond. Edge safety should be a consideration.



Existing Conditions:

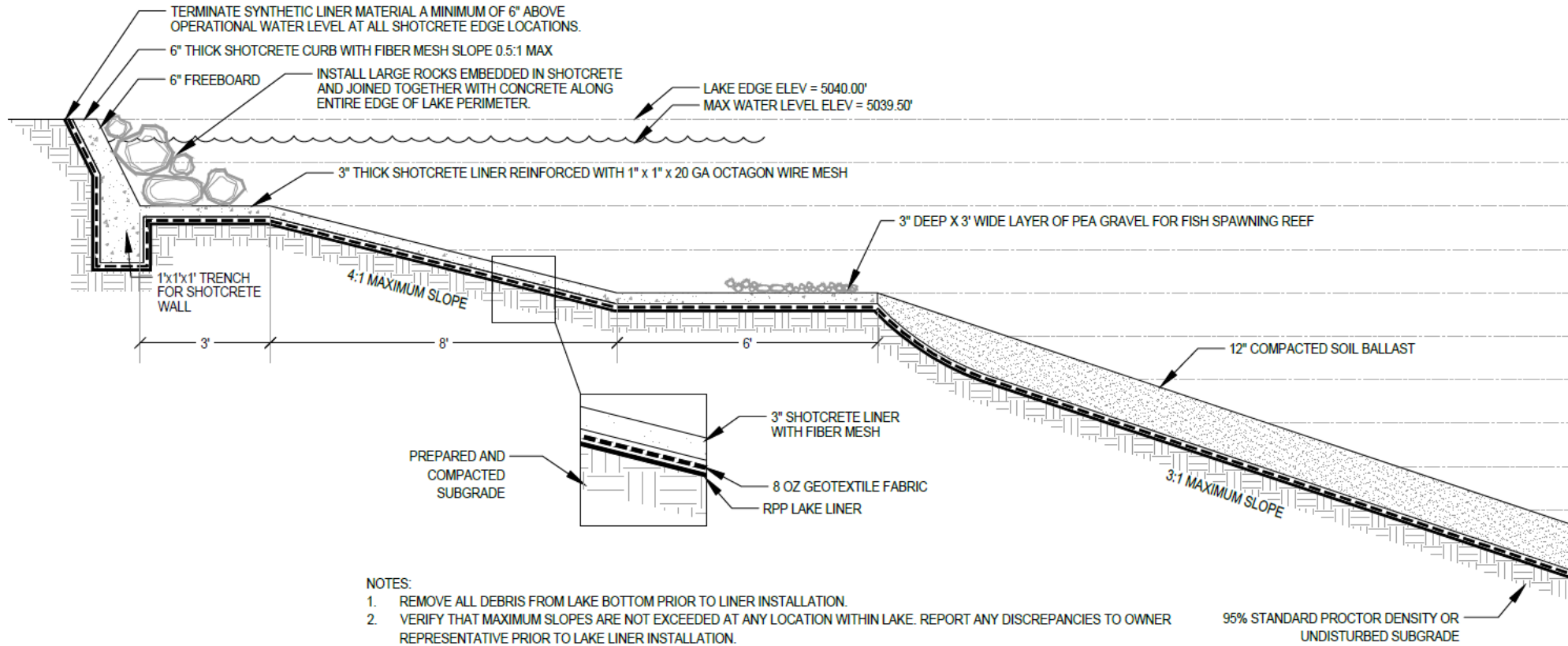
- Existing equipment is in a significant state of disrepair and would need to be replaced.
- Shotcrete at edge of pond appears to be intact and may be able to remain in place.
- Evidence of existing synthetic pond lining present. Liner is old, brittle, and has been significantly compromised due to age and exposure to the elements.



Existing Conditions:

- Existing synthetic liner should be abandoned in place and a new pond lining system should be used.
- Testing should be done on existing recirculation system to see if it could be reused.
- Safety shelf should be installed for public safety.

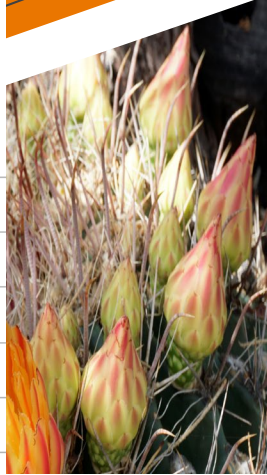




1

TYPICAL LAKE EDGE DETAIL

N.T.S.



1 Acre Pond Concept Plan



LEGEND

- | | | |
|--|--|---|
| A Existing Concrete Path | D Desert Landscape Planted Area | G Proposed Concrete Path |
| B 16'x16' Ramada | E 1 Acre Pond | H Parking Lot with 27 Spaces
Including 2 ADA Spaces |
| C Proposed Decomposed Granite
Walking Path | F Enhanced Landscape Entry
Feature | I Bench |

PLAN
NOT TO
SCALE



2.5 Acre Pond Concept Plan



LEGEND

- | | | | |
|--|--|-------------------------|---------------------------------|
| A Parking Lot with 27 Spaces Including 2 ADA Spaces | D Desert Landscape Planted Area | G 16'x16' Ramada | J Existing Concrete Path |
| B Enhanced Landscape Entry Feature | E Proposed Concrete Path | H 2.5 Acre Pond | |
| C Proposed Decomposed Granite Walking Path | F 0.5 Acre Turf | I Bench | |

PLAN
NOT TO
SCALE



Preliminary Cost Assessment: 1 Acre Pond

- Install: \$3,695,050
- Yearly O&M: \$27,000
- Yearly Water: \$36,000

Total Year 1: \$3,758,058

Vistoso Preserve: 1 Acre Concept

Order of Magnitude O&M Costs

Revised: 4/9/2025

Revised: 4/9/2025			1 Acre		
Category		Unit	Qty	O&M Unit	O&M
	POND MAINTENANCE	AC	1	\$6,000	\$6,000
	GENERAL PARK MAINTENANCE	AC	7	\$3,000	\$21,000
	YEARLY WATER	LS	1	\$36,000	\$36,000
GRAND TOTALS			\$63,000		
			1 Acre		

Assumptions:

Pond maintenance includes chemicals, removing growth, pump repairs, etc.

General park maintenance includes tree trimming, fertilizer, seed, irrigation repairs, and weed abatement.

Vistoso Preserve: 1 Acre Concept

Order of Magnitude Costs

	Category	Unit	Unit Cost	Qty	Sub Total
	BBQ Grill	EA	\$675	5	\$3,375
	Benches	EA	\$1,200	8	\$9,600
	Bike Racks	EA	\$600	1	\$600
	Drinking Fountain	EA	\$6,000	1	\$6,000
	Irrigation (Landscape Drip)	AC	\$20,000	5	\$100,000
	Picnic Tables	EA	\$2,000	10	\$20,000
	Ramada (Small)	EA	\$35,000	5	\$175,000
	Trail (Stabilized DG)	SF	\$4	14,952	\$59,808
	Trash (Receptacle)	EA	\$1,000	10	\$10,000
	Park Amenity Totals				\$384,383
Earthwork	Clearing & Grubbing	SF	\$0.50	348,480	\$174,240
	Place Fill Material	CY	\$20	24,000	\$480,000
	Rough Grading	SF	\$0.50	348,480	\$174,240
	Construction Surveying & Materials Testing	AC	\$1,500	8	\$12,000
	Earthwork Totals				\$840,480
	Dust Control & SWPPP	AC	\$1,500	8	\$12,000
	General Landscape	SF	\$2	226,588	\$453,176
	Parking Lot Improvements	SY	\$65	1,160	\$75,400
	Sidewalk Concrete (4-inch thick)	SF	\$15	2,870	\$43,050
	Lake Resurfacing/Liner/12-inch Cover Fill	SF	\$5	41,593	\$207,965
	Lake Edge Treatment	LF	\$300	835	\$250,500
	Shotcrete	SF	\$8	1,750	\$14,000
	Lake & Irrigation Mechanical Equipment & Enclosure	LS	\$150,000	1	\$150,000
	Infrastructure Totals				\$1,206,091
	Design/ Construction Documents	LS	10%		\$243,095
	Construction Management with Internal Costs	LS	10%		\$243,095
	Mobilization/ Demobilization	LS	10%		\$243,095
	Construction Overhead / Profit	LS	10%		\$243,095
	Insurance	LS	1%		\$24,310
	Bond	LS	1%		\$24,310
	Construction Contingency	LS	10%		\$243,095
GRAND TOTAL					\$3,695,050

Assumptions:

This Order of Magnitude Cost Estimate cost has been derived from conceptual master plan graphics. Due to the preliminary nature of the design, assumptions on line items and unit quantities have been made. Additional line items and adjustments to the unit quantities are likely as the design progresses. Unit costs have been derived from projects of similar type and size. Those on the consultant team are not cost estimators and the unit costs are only impressions of the current market cost. This cost estimate does not account for potential impacts from tariffs or inflation. If a detailed cost estimate is needed, it is suggested that the Town hire an objective, third party professional cost estimator for exact current market conditions. Construction cost percentages are approximations based upon projects of similar size.



Preliminary Cost Assessment: 2.5 Acre Pond

- Install: \$3,705,907
- Yearly O&M: \$45,000
- Yearly Water: \$90,000

Total Year 1: \$3,840,907

Vistoso Preserve: 2.5 Acre Concept

Order of Magnitude O&M Costs

Revised: 4/9/2025

		2.5 Acre		
Category	Unit	Qty	O&M Unit	O&M
POND MAINTENANCE	AC	2.5	\$6,000	\$15,000
TURF MAINTENANCE	AC	0.5	\$30,000	\$15,000
GENERAL PARK MAINTENANCE	AC	5.0	\$3,000	\$15,000
YEARLY WATER	LS	1.0	\$90,000	\$90,000
GRAND TOTALS			\$135,000	
			2.5 Acre	

Assumptions:

Pond maintenance includes chemicals, removing growth, pump repairs, etc. Turf maintenance includes staff for 15 hrs./week @ \$20 per hour (mowing, fertilizing, clean up, overseeding, irrigation adjustments, etc. General park maintenance includes tree trimming, fertilizer, seed, irrigation repairs, and weed abatement.

Vistoso Preserve: 2.5 Acre Concept

Order of Magnitude Costs

	Category	Unit	Unit Cost	Qty	Sub Total
	BBQ Grill	EA	\$675	5	\$3,375
	Benches	EA	\$1,200	8	\$9,600
	Bike Racks	EA	\$600	1	\$600
	Drinking Fountain	EA	\$6,000	1	\$6,000
	Irrigation (Landscape Drip)	AC	\$20,000	3	\$60,000
	Irrigation (Landscape Turf)	AC	\$30,000	1	\$21,000
	Picnic Tables	EA	\$2,000	10	\$20,000
	Ramada (Small)	EA	\$35,000	5	\$175,000
	Trail (Stabilized DG)	SF	\$4	14,577	\$58,308
	Trash (Receptacle)	EA	\$1,000	10	\$10,000
	Park Amenity Totals				\$363,883
Earthwork	Clearing & Grubbing	SF	\$0.50	348,480	\$174,240
	Rough Grading	SF	\$0.50	348,480	\$174,240
	Construction Surveying & Materials Testing	AC	\$1,500	8	\$12,000
	Earthwork Totals				\$360,480
	Dust Control & SWPPP	AC	\$1,500	8	\$12,000
	General Landscape	SF	\$2	132,877	\$265,754
	Turf (Sod)	SF	\$2	29,930	\$59,860
	Parking Lot Improvements	SY	\$65	1,080	\$70,200
	Sidewalk Concrete (4-inch thick)	SF	\$15	4,700	\$70,500
	Lake Resurfacing/Liner/12-inch Cover Fill	SF	\$5	101,584	\$507,920
	Lake Edge Treatment	LF	\$300	1,425	\$427,500
	Lake & Irrigation Mechanical Equipment & Enclosure	LS	\$300,000	1	\$300,000
	Infrastructure Totals				\$1,713,734
	Design/ Construction Documents	LS	10%		\$243,810
	Construction Management with Internal Costs	LS	10%		\$243,810
	Mobilization/ Demobilization	LS	10%		\$243,810
	Construction Overhead / Profit	LS	10%		\$243,810
	Insurance	LS	1%		\$24,381
	Bond	LS	1%		\$24,381
	Construction Contingency	LS	10%		\$243,810
	GRAND TOTAL				\$3,705,907

Assumptions:

This Order of Magnitude Cost Estimate cost has been derived from conceptual master plan graphics. Due to the preliminary nature of the design, assumptions on line items and unit quantities have been made. Additional line items and adjustments to the unit quantities are likely as the design progresses. Unit costs have been derived from projects of similar type and size. Those on the consultant team are not cost estimators and the unit costs are only impressions of the current market cost. This cost estimate does not account for potential impacts from tariffs or inflation. If a detailed cost estimate is needed, it is suggested that the Town hire an objective, third party professional cost estimator for exact current market conditions. Construction cost percentages are approximations based upon projects of similar size.



Water Allocation:

- Town receives its effluent entitlement by utilizing City of Tucson Water's infrastructure.
- If Town exceeds its entitlement, the Town must compensate the City.
 - Pay 93% of the 'firm' cost for CAP M&I water
 - Transfer long-term storage credits to the City
- The Town currently utilizes all of its effluent entitlement.
 - In 2024 the Town purchased an additional 112-acre feet of effluent. The Town paid the effluent cost plus an additional \$251/acre foot.
- As the City moves forward with Advanced Water Purification, it is possible the Town will lose the option to purchase additional effluent from the City.
- This does not include future rate increases.



Next Steps:

- Council direction on option for Desert Garden Site
 - 1 acre pond
 - 2.5 acre pond
 - Desert Garden
 - Other
- Resume design on selected option
 - Pond Concepts will need to move to 30% design phase. Timeframe of approximately 3-4 months.
 - 30% Design: August 2025
 - 60% Design: November 2025
 - 90% Design: January 2025
 - Final Plans: February 2026





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