



RSTC Project Analysis

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October 20, 2022

## Original RSTC tennis project scoped to copy lessons learned from University of West Florida tennis court history

- Asphalt tennis courts installed 25+ years ago (1997)
- Asphalt tennis courts installed in stages / different years
- After 10 years, asphalt courts developed cracks and required extra maintenance
- In 2007, UWF specified 12 new post tension concrete courts for replacement (2 courts remained the original asphalt)

# UWF Tennis Courts 2022

- The 12 post tension courts have no cracks after 15 years
- The 2 asphalt courts are still generating cracks
- Asphalt courts are only used as a last resort for practice or play

## UWF Maintenance Costs for Tennis Courts

- No annual maintenance costs \$0
- 5 year reoccurring maintenance costs per court \$5K
- UWF very satisfied with the post tension tennis courts
- UWF not satisfied with asphalt courts

## Foundation is Key for Asphalt Tennis Courts

- Derrick Racine believes reason asphalt courts are not in worse shape is crushed rock / seashell foundation
- RSTC project will be awarded to lowest bidder / if foundation is not specified other foundation fill can be used



UWF Asphalt court #4  
October 2022





UWF Asphalt  
court #8  
October 2022





UWF post  
tension court #3  
October 2022





UWF post  
tension court #3  
October 2022

UWF post  
tension court #2  
October 2022





UWF post  
tension court #2  
October 2022

UWF post  
tension court #3  
October 2022







UWF post  
tension court #1  
October 2022



# UWF Tennis Courts 2022 Update

Musco LED lighting project,  
September 2022

14 tennis courts, \$450K

Contractor: Bill Smith  
Electric (Pensacola)

The RSTC project specified  
the same type of lighting

UWF very satisfied with  
lighting project, all phases

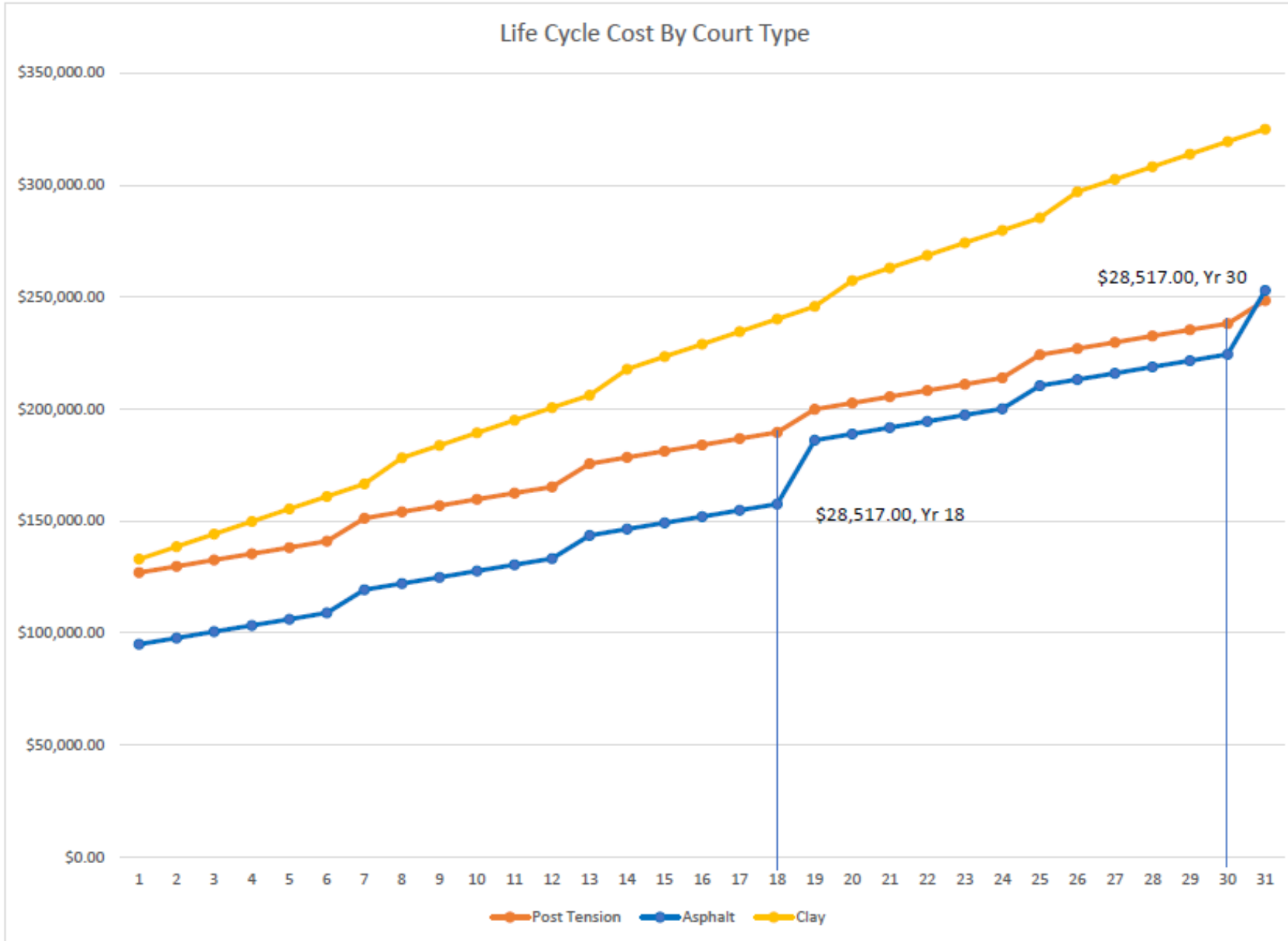
All UWF information in this  
presentation gathered from  
Derrick Racine, UWF head  
men's and women's tennis  
coach



# RSTC Project Summary

- Bids received for 12 post tension tennis courts
  - Tennis courts, water lines, lights, concrete walkways, concrete pads, etc.
  - Lowest bid was \$4M+
- Budget was \$2.2M for project installed costs
  - \$1.3M from the county
  - \$1.3M from the city
  - \$400K has already been spent on design / architects / engineers / surveyors - Mott MacDonald
- City decided to rebid project using asphalt courts
  - Currently in progress
  - City hoping bids will come under \$2.2M

# Recent City Council Presentation Slide



Data presented from 20 different data sources (not disclosed)

Data does not reflect UWF maintenance history

Graph data shows \$24.3K (5) year maintenance costs for each post tension court / This is in stark contrast to UWF's \$5K per court

Extensive refurbishment of the asphalt court shown in year 18 for \$28.5K (\$342K / 12 courts) and \$28.5K in year 30 (another \$342K / 12 courts)

LOST funds were cited for future maintenance expenses / this needs to be vetted

Tennis Court Comparative Analysis

Court Type	Post Tension	Asphalt	Clay
Construction Cost Per Court	\$127,000.00	\$95,000.00	\$133,000.00
Total Cost for 18 Courts	\$2,286,000.00	\$1,710,000.00	\$2,394,000.00
Ave Resurfacing Cycle in yrs	5.6	5.6	7
Basic Resurfacing	\$7,500.00	\$7,500.00	\$6,000.00
15yr Major Resurfacing	\$0.00	\$462,920.04	\$0.00
Maintenance Costs Per Year	\$2,800.00	\$2,800.00	\$5,600.00

Data for previous graph

30 yr Analysis	LCC	Initial Cost	Major Repair	Residual	OM&R	Resurfacing
Post Tension	\$248,500.00	\$127,000.00	\$0.00	0	\$84,000	\$37,500.00
Asphalt	\$252,934.00	\$95,000.00	\$51,434.00	0	\$84,000	\$22,500.00
Clay	\$325,000.00	\$133,000.00	\$0.00	0	\$168,000	\$24,000.00

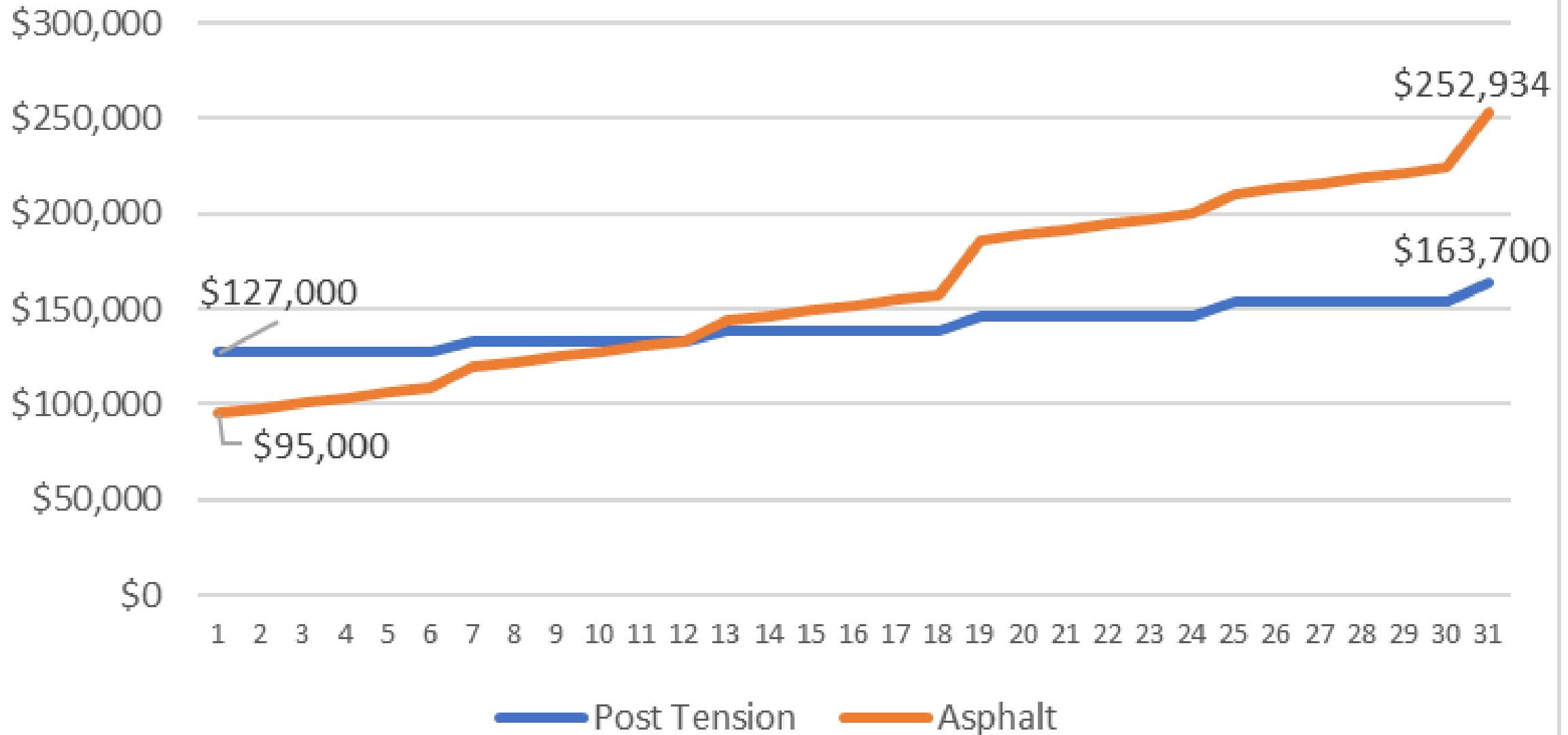
Costs per year			Cumulative Costs per year				
Years	Post Tension	Asphalt	Clay	Years	Post Tension	Asphalt	Clay
0	\$127,000.00	\$95,000.00	\$133,000.00	0	\$127,000.00	\$95,000.00	\$133,000.00
1	\$2,800.00	\$2,800.00	\$5,600.00	1	\$129,800.00	\$97,800.00	\$138,600.00
2	\$2,800.00	\$2,800.00	\$5,600.00	2	\$132,600.00	\$100,600.00	\$144,200.00
3	\$2,800.00	\$2,800.00	\$5,600.00	3	\$135,400.00	\$103,400.00	\$149,800.00
4	\$2,800.00	\$2,800.00	\$5,600.00	4	\$138,200.00	\$106,200.00	\$155,400.00
5	\$2,800.00	\$2,800.00	\$5,600.00	5	\$141,000.00	\$109,000.00	\$161,000.00
6	\$10,300.00	\$10,300.00	\$5,600.00	6	\$151,300.00	\$119,300.00	\$166,600.00
7	\$2,800.00	\$2,800.00	\$11,600.00	7	\$154,100.00	\$122,100.00	\$178,200.00
8	\$2,800.00	\$2,800.00	\$5,600.00	8	\$156,900.00	\$124,900.00	\$183,800.00
9	\$2,800.00	\$2,800.00	\$5,600.00	9	\$159,700.00	\$127,700.00	\$189,400.00
10	\$2,800.00	\$2,800.00	\$5,600.00	10	\$162,500.00	\$130,500.00	\$195,000.00
11	\$2,800.00	\$2,800.00	\$5,600.00	11	\$165,300.00	\$133,300.00	\$200,600.00
12	\$10,300.00	\$10,300.00	\$5,600.00	12	\$175,600.00	\$143,600.00	\$206,200.00
13	\$2,800.00	\$2,800.00	\$11,600.00	13	\$178,400.00	\$146,400.00	\$217,800.00
14	\$2,800.00	\$2,800.00	\$5,600.00	14	\$181,200.00	\$149,200.00	\$223,400.00
15	\$2,800.00	\$2,800.00	\$5,600.00	15	\$184,000.00	\$152,000.00	\$229,000.00
16	\$2,800.00	\$2,800.00	\$5,600.00	16	\$186,800.00	\$154,800.00	\$234,600.00
17	\$2,800.00	\$2,800.00	\$5,600.00	17	\$189,600.00	\$157,600.00	\$240,200.00
18	\$10,300.00	\$28,517.00	\$5,600.00	18	\$199,900.00	\$186,117.00	\$245,800.00
19	\$2,800.00	\$2,800.00	\$11,600.00	19	\$202,700.00	\$188,917.00	\$257,400.00
20	\$2,800.00	\$2,800.00	\$5,600.00	20	\$205,500.00	\$191,717.00	\$263,000.00
21	\$2,800.00	\$2,800.00	\$5,600.00	21	\$208,300.00	\$194,517.00	\$268,600.00
22	\$2,800.00	\$2,800.00	\$5,600.00	22	\$211,100.00	\$197,317.00	\$274,200.00
23	\$2,800.00	\$2,800.00	\$5,600.00	23	\$213,900.00	\$200,117.00	\$279,800.00
24	\$10,300.00	\$10,300.00	\$5,600.00	24	\$224,200.00	\$210,417.00	\$285,400.00
25	\$2,800.00	\$2,800.00	\$11,600.00	25	\$227,000.00	\$213,217.00	\$297,000.00
26	\$2,800.00	\$2,800.00	\$5,600.00	26	\$229,800.00	\$216,017.00	\$302,600.00
27	\$2,800.00	\$2,800.00	\$5,600.00	27	\$232,600.00	\$218,817.00	\$308,200.00
28	\$2,800.00	\$2,800.00	\$5,600.00	28	\$235,400.00	\$221,617.00	\$313,800.00
29	\$2,800.00	\$2,800.00	\$5,600.00	29	\$238,200.00	\$224,417.00	\$319,400.00
30	\$10,300.00	\$28,517.00	\$5,600.00	30	\$248,500.00	\$252,934.00	\$325,000.00
	\$248,500.00	\$252,934.00	\$325,000.00				

Asphalt resurfacing year extended to 18 due to average temps and timing of acrylic resurfacing.

Asphalt resurfacing assumed to provide approximately 10 additional years of usage per instance.

# Life Cycle Cost for Post Tension and Asphalt

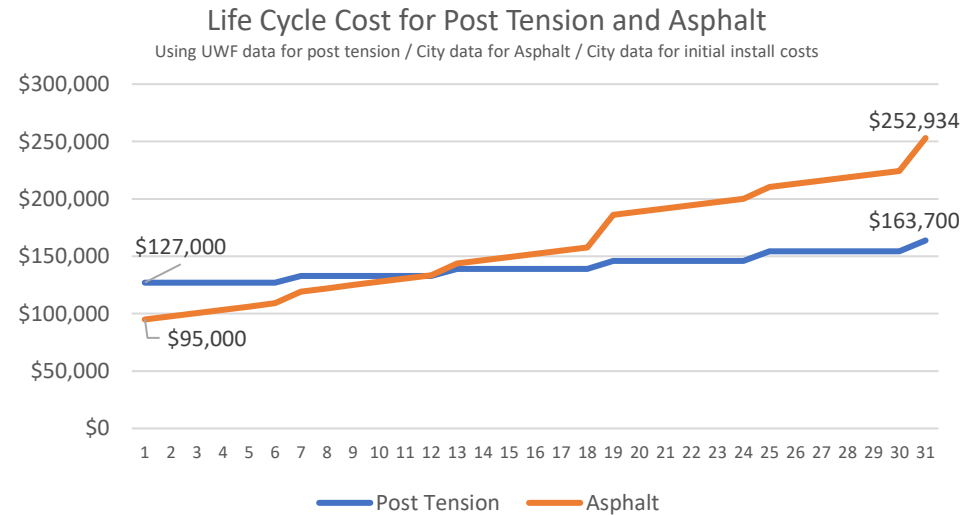
Using UWF data for post tension / City data for Asphalt / City data for initial install costs



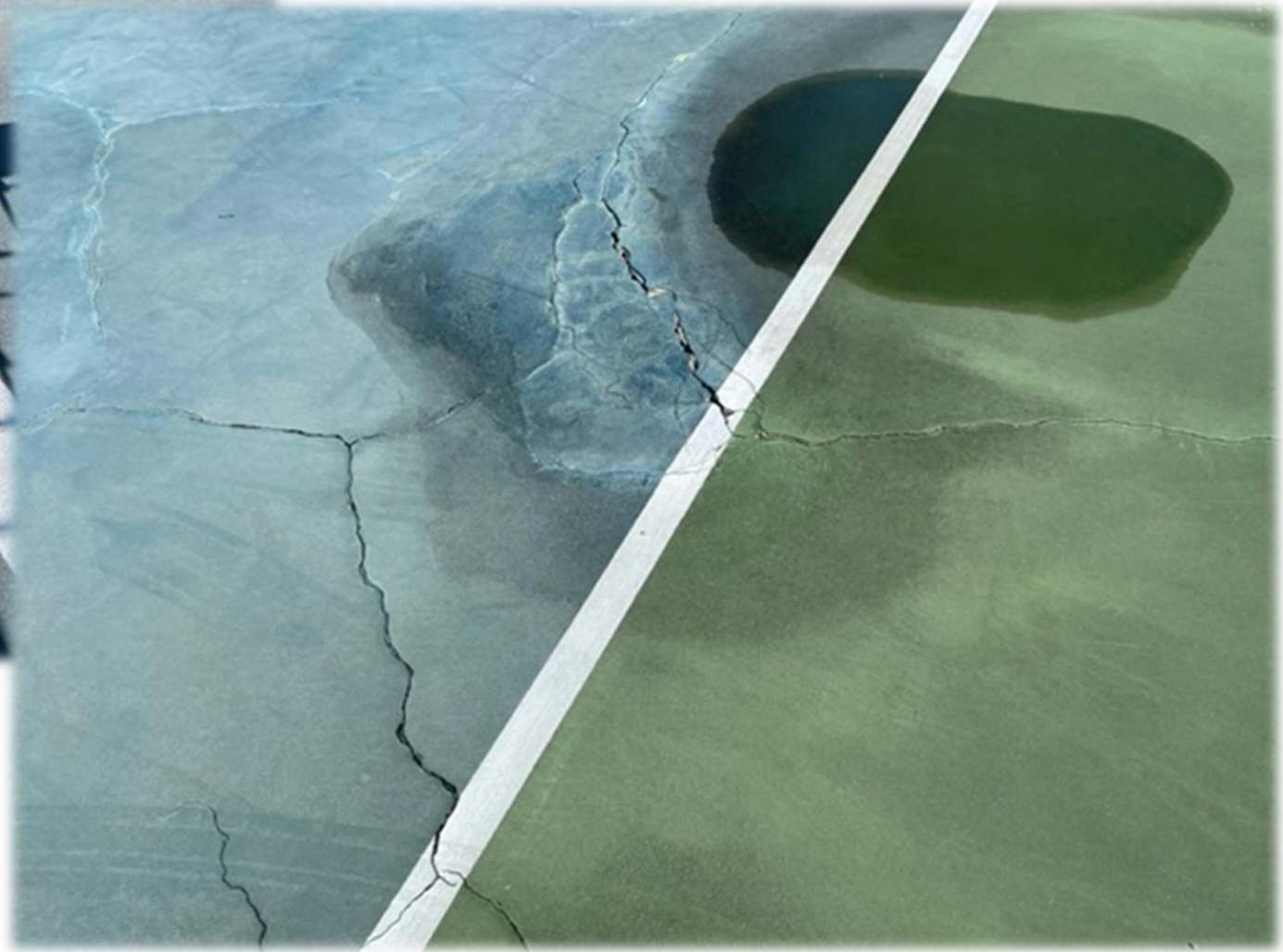
# Data for previous graph

## UWF data has 3% inflation built in with maintenance costs

Year	Post Tension	Asphalt	Year	Post Tension	Asphalt
0	\$127,000	\$95,000	0	\$127,000	\$95,000
1		\$2,800	1	\$127,000	\$97,800
2		\$2,800	2	\$127,000	\$100,600
3		\$2,800	3	\$127,000	\$103,400
4		\$2,800	4	\$127,000	\$106,200
5		\$2,800	5	\$127,000	\$109,000
6	\$5,800	\$10,300	6	\$132,800	\$119,300
7		\$2,800	7	\$132,800	\$122,100
8		\$2,800	8	\$132,800	\$124,900
9		\$2,800	9	\$132,800	\$127,700
10		\$2,800	10	\$132,800	\$130,500
11		\$2,800	11	\$132,800	\$133,300
12	\$6,100	\$10,300	12	\$138,900	\$143,600
13		\$2,800	13	\$138,900	\$146,400
14		\$2,800	14	\$138,900	\$149,200
15		\$2,800	15	\$138,900	\$152,000
16		\$2,800	16	\$138,900	\$154,800
17		\$2,800	17	\$138,900	\$157,600
18	\$7,100	\$28,517	18	\$146,000	\$186,117
19		\$2,800	19	\$146,000	\$188,917
20		\$2,800	20	\$146,000	\$191,717
21		\$2,800	21	\$146,000	\$194,517
22		\$2,800	22	\$146,000	\$197,317
23		\$2,800	23	\$146,000	\$200,117
24	\$8,200	\$10,300	24	\$154,200	\$210,417
25		\$2,800	25	\$154,200	\$213,217
26		\$2,800	26	\$154,200	\$216,017
27		\$2,800	27	\$154,200	\$218,817
28		\$2,800	28	\$154,200	\$221,617
29		\$2,800	29	\$154,200	\$224,417
30	\$9,500	\$28,517	30	\$163,700	\$252,934
	\$163,700	\$252,934			



RSTC asphalt court  
November 2022



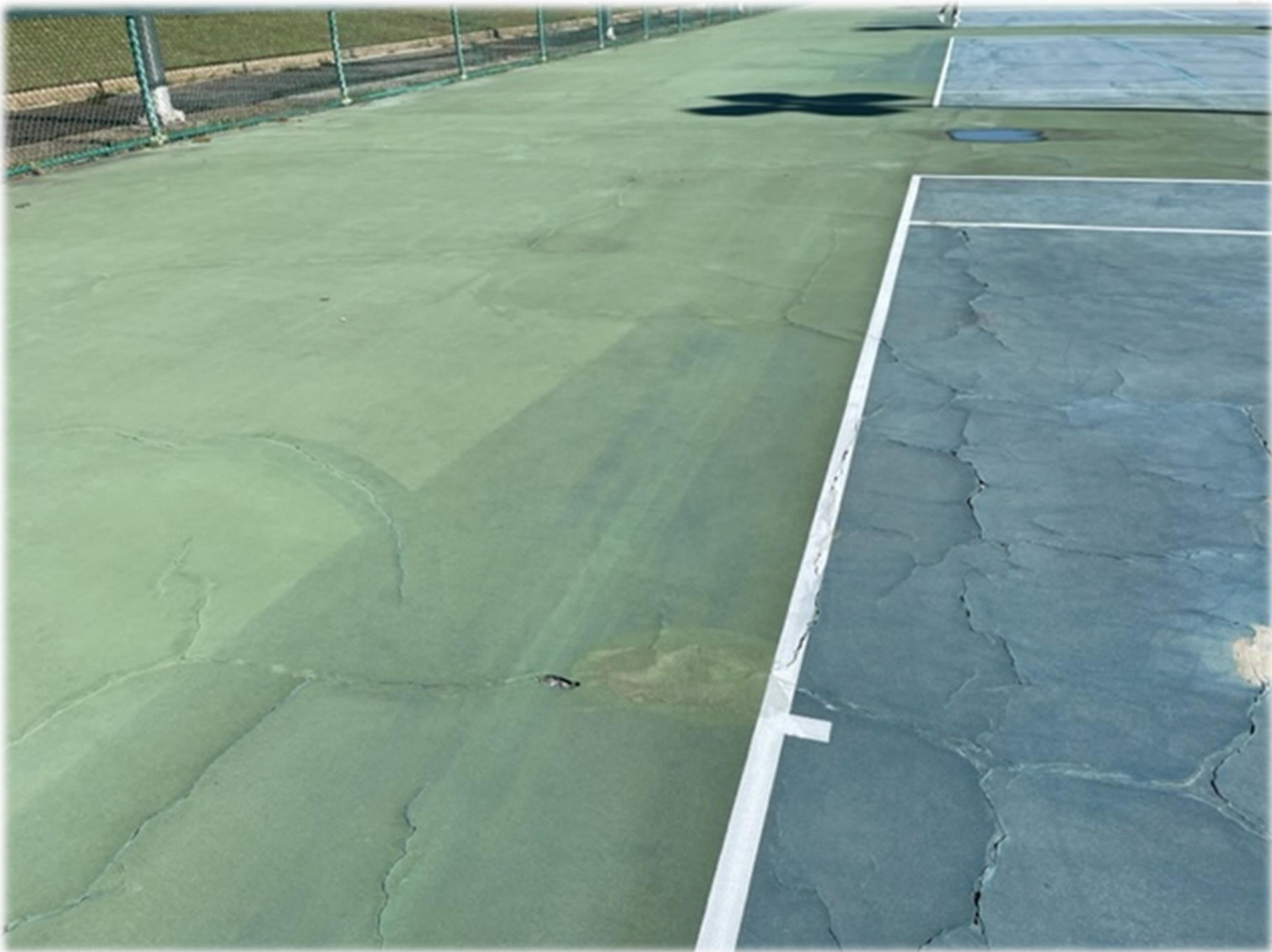


RSTC asphalt court  
November 2022





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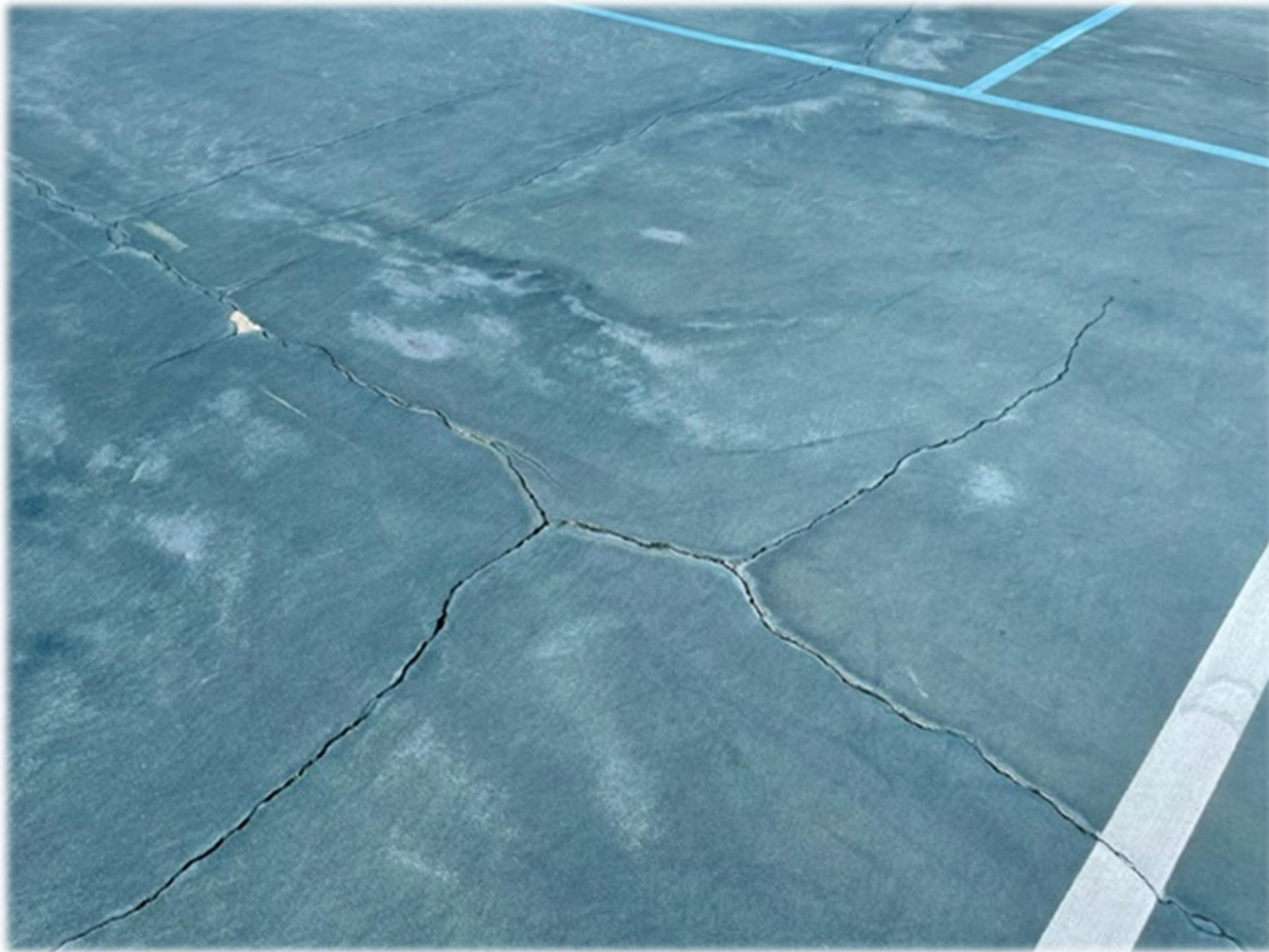
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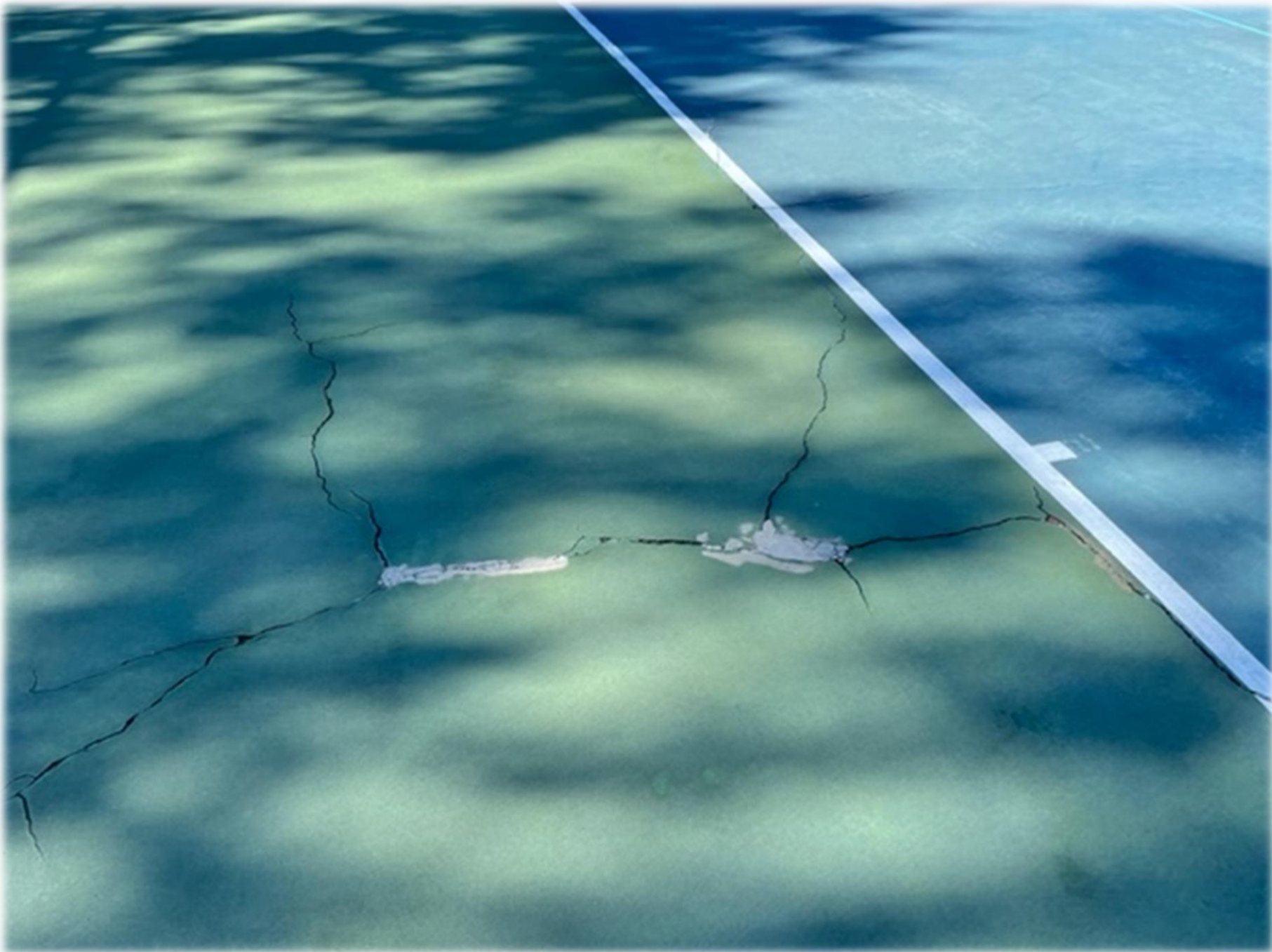


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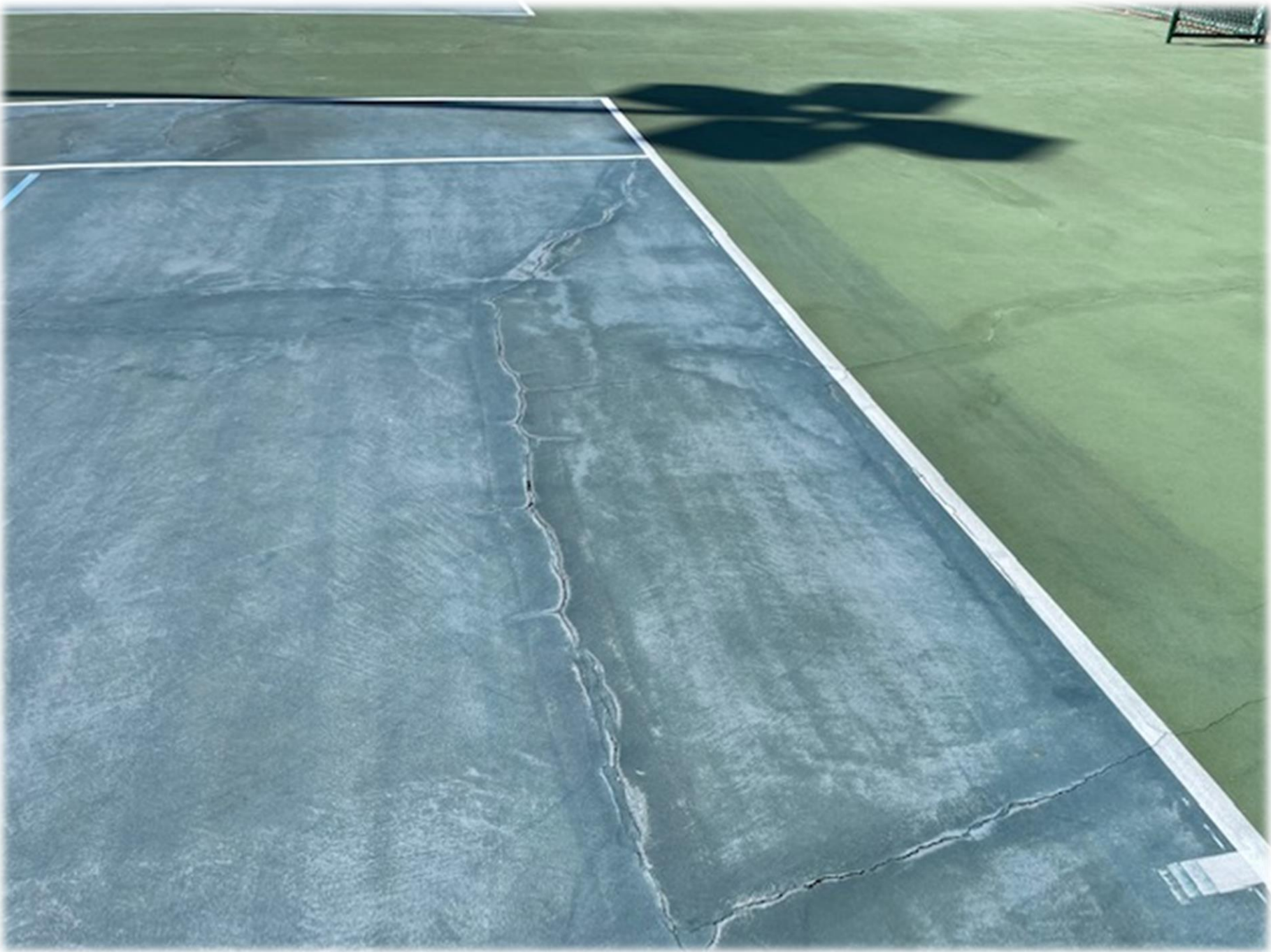
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# Hayne Haigler Final Thoughts

- **Post tension tennis courts**
  - Longest lasting design but higher initial cost
  - City short on funds for initial project implementation
- **Asphalt tennis courts**
  - Lowest initial cost but more lifetime maintenance
  - Refurbishment in 15-18 years (\$342K) and in 30 years (\$342K)
  - Presentation to council was LOST funds would provide future maintenance costs for courts (LOST funding need confirmation / vetting)
- **RSTC Project Design**
  - \$400K already spent / too much in my opinion
- **UWF Tennis Courts Example**
  - Installed quality post tension tennis courts with realized low maintenance costs
  - 2 asphalt tennis courts at UWF offer a side-by-side comparison with post tension
  - UWF very satisfied with post tension tennis courts / not satisfied with asphalt courts
  - Time will tell if the City is making the right choices for RSTC
- **Asphalt tennis courts versus no RSTC project**
  - New asphalt courts would be an improvement at RSTC
  - Would need future maintenance funds to maintain / source of maintenance funds needs to be vetted (can LOST funds really be used / how to secure for RSTC)