

Salt Lake County Parks & Recreation Murray Fields Synthetic Turf Proposal

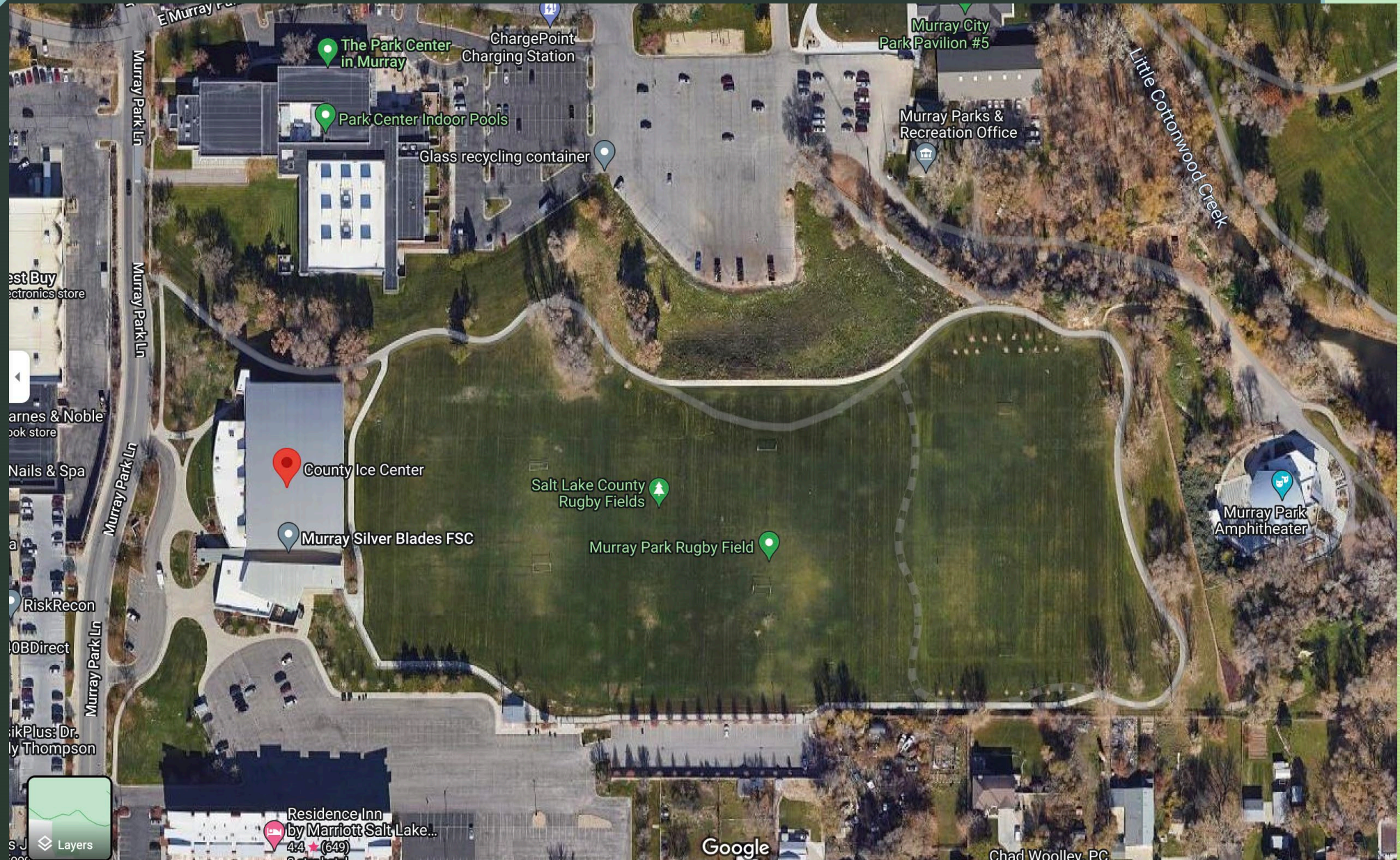
Martin Jensen - Director

June 14, 2022

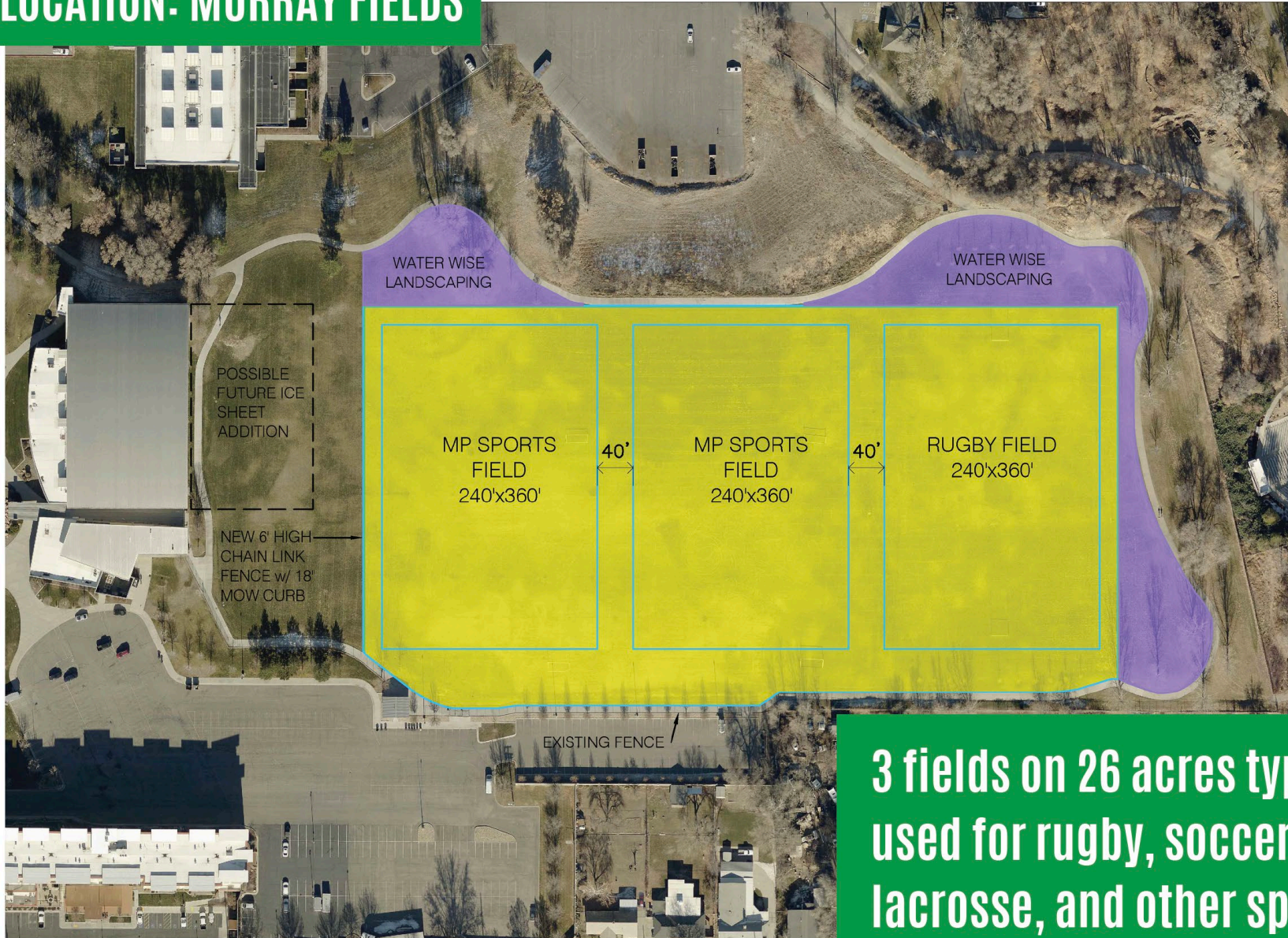


Murray Fields – Adjacent SL County Ice Center

5201 Murray Park Ln, Murray, UT 84107



PILOT LOCATION: MURRAY FIELDS



3 fields on 26 acres typically used for rugby, soccer, lacrosse, and other sports

Sports & Active Play

- Improves self-esteem and health
- Combats childhood obesity
- Builds community pride
- Stimulates volunteer efforts
- Creates a culture of respect and tolerance
- Reduces anti-social, criminal, and substance abuse behavior



Need For Better Fields

- Continued urbanization of SL County
- Inclusion of boys and girls
- Multiple sports, soccer, lacrosse, rugby, baseball, softball, field hockey, marching bands, cheer, events
- School Districts closing access due to liability and revenue-generating opportunities
- Lack of water on fields creates unsafe fields for youth and adults



Natural Grass Limitations

- 20 hours per week of use
- Inclement weather conditions (too much rain, or not enough water)
- Maintenance consumes school/cities funds
- 500,000 to 2,000,000 gallons of water per year per field
- Sub-par fields due to limitations
- Water restrictions with drought



Synthetic Turf Solutions

- All-weather solution. 24/7/365
- Unlocks greater play and event opportunities
- Fraction of cost per playing hour
- 10-year lifetime -
Replacements are ~50% of the original cost
- Consistent safety and performance



Positive Environmental Impact

- Saves 2,000,000 gallons per field.
 - 6,000,000 gallons annually
- Eliminates air pollutants from mowing
- Reduces fertilizer runoff in waterways leading to algae blooms
- Reduces harmful use and exposure of pesticides and weed killers
- Helps players with allergies



Revenue Generating

- Rent field for additional income not currently realized
- Huge demand for high-quality fields - UYSA Letter, Utah Rugby, Competitive Sports
- Maintenance savings can be utilized in other SLCO locations



"The DEBATE" Natural Grass vs Synthetic Turf

- *American Journal of Sport Medicine* conducted a study from 2013-2016 over 4 seasons of Major League Soccer in the United States*
- Turf vs Natural grass injuries
- 2174 injuries in the 4 seasons
- 1.54 injuries per game on artificial turf
- 1.49 injuries per game on natural grass

"Artificial turf was found to be noninferior to natural grass for overall foot injury and forefoot injury. No statistically significant differences were found in knee injuries between the 2 surfaces."

Conclusion: The overall rate of injury on artificial turf was noninferior to that on natural grass.

*Calloway SP, Hardin DM, Crawford MD, et al. Injury Surveillance in Major League Soccer: A 4-Year Comparison of Injury on Natural Grass Versus Artificial Turf Field. *Am J Sports Med.* 2019;47(10):2279-2286. doi:10.1177/0363546519860522

Player Safety

- Improved technology
- Lower ambient temp – sand-based fill, no longer crumb rubber
- Question of injury levels
- Numerous actual examples of successful facilities

Study	Turf bad	Turf not bad	Explanation
Ekstrand 2006 (Br J Sports Med)	X	X	More ankle sprains on turf, all other types same on turf vs grass
Fuller 2007 (Br J Sports Med)		X	Women in the study actually had fewer injuries on turf, but not significant
Steffen 2007 (Br J Sports Med)	X	X	More severe injuries and ankle sprains on turf, all other types same on turf vs grass
Haruhito 2010 (Clin J Sport Med)		X	No differences between turf and grass
Bjorneboe 2010 (Br J Sports Med)		X	No differences between turf and grass
Ekstrand 2011 (Scan J Sports Med)	X	X	Fewer quad strains for men in the study on turf, more ankle sprains on turf, all other types same on turf vs grass
Soligard 2012 (Scan J Med Sci Sports)		X	Fewer ankle injuries on turf, more back/shoulder injuries on turf, all other types same on turf vs grass
Meyers 2013 (Am J Sports Med)		X	Significantly fewer injuries and fewer “substantial” injuries on turf, all other types same on turf vs grass
Lanzetti 2017 (Scan J Med Sci Sports)		X	No differences between turf and grass
Fujitaka 2017 (Ortho J Sports Med)		X	Injuries went up before they added rubber chips, then down after they did
Williams 2011 (J Sports Med)*		X	No differences between turf and grass except maybe ankle sprains

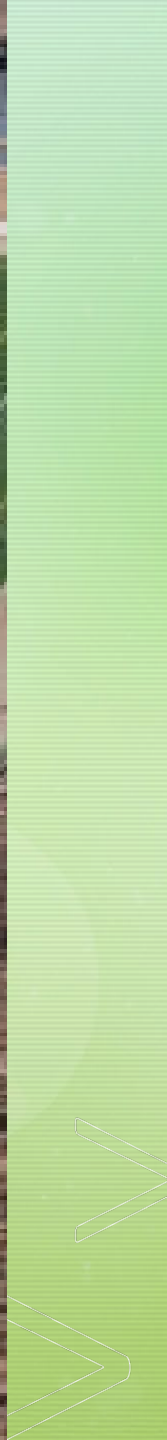
Spence Eccles Ogden Community Sports Complex

1950 Monroe Blvd, Ogden



Mesquite Sports and Events Complex

1635 World Champion Way, Mesquite, NV



Woodinville Community Complex

13103 NE 175th St, Woodinville, WA 98072



Matt Knoop Memorial Park - Park City, Utah





ARPA Eligible Project

5.8 Water
Conservation

6.1 Expanded
Government
Services

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Description	Quantity	Unit	Unit Cost	Cost
Clearing and Grubbing	315,000	SF	0.20	63,000
Grading	315,000	SF	0.25	78,750
Artificial Turf, 240'x360' (includes sub-surface)	315,000	SF	9.70	3,055,500
Landscaping Repair (sod and irrigation)	10,130	SF	2.25	22,793
Fencing	2,406	LF	25.00	60,150
Netting Behind Goals	6	LF	280.00	1,680
Concrete Slab	15,984	SF	8.00	127,872
Field Lighting	1	LS	225,000	225,000
Convert Existing Lawn to Water Wise Landscaping	80,392	SF	8.00	641,136
Contractor P&O, Mobilization, Bonds, etc. (15% of construction costs)				641,682
Construction Subtotal				\$4,919,563
Project Contingency at 10% of Construction Subtotal				419,956
Soft Costs at 15% of Construction Subtotal + Contingency (Design consultants, surveys, testing, permitting, printing, etc.)				811,728
Total Estimated 2022 Projected Cost				\$6,223,247



MORE INFO:
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 APRIL 27, 2022



PARKS & RECREATION