DAVENPORT RANCH FIRE/EMS STATION JAL

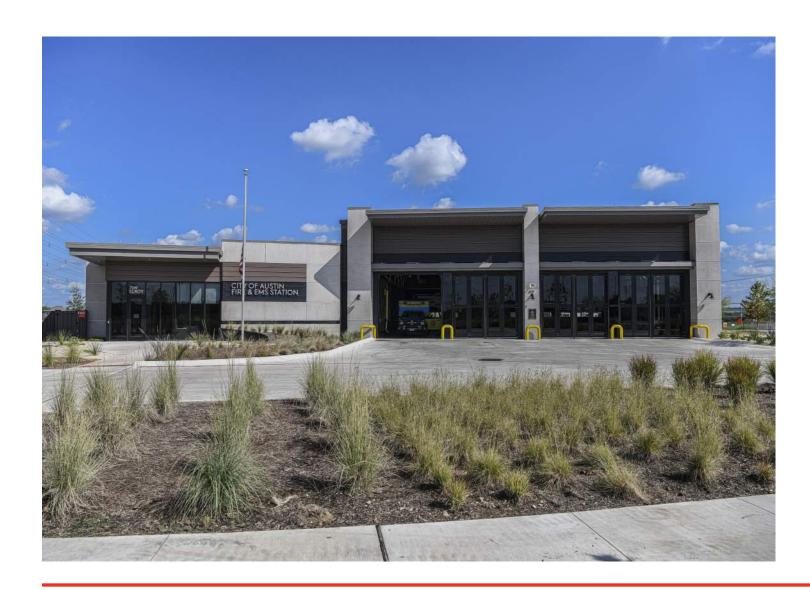


DESIGN COMMISSION | OCTOBER 25, 2021

PREVIOUS COA FIRE/EMS STATIONS

DEL VALLE FIRE/EMS STATION

- 12,700 square feet
- Single story structure
- -4 pull-through apparatus bays
- -Completed July 2020



TRAVIS COUNTRY FIRE/EMS STATION

- 15,000 square feet
- 2 story structure due to site size
- 4 back-in apparatus bays
- -Completed July 2021







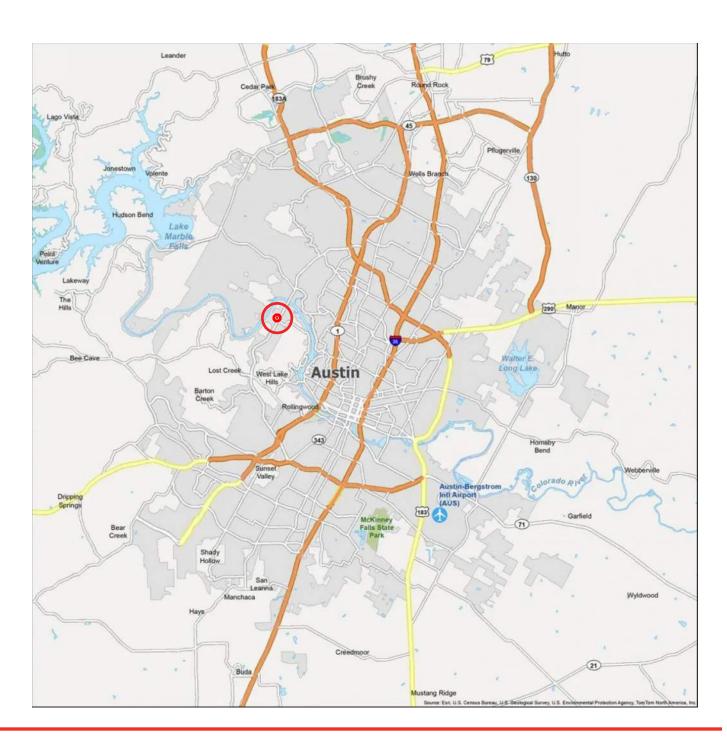
DAVENPORT RANCH FIRE/EMS STATION

GOAL:

PROVIDE EMERGENCY RESPONSE SERVICES TO DAVENPORT RANCH AREA

PROJECT ELEMENTS:

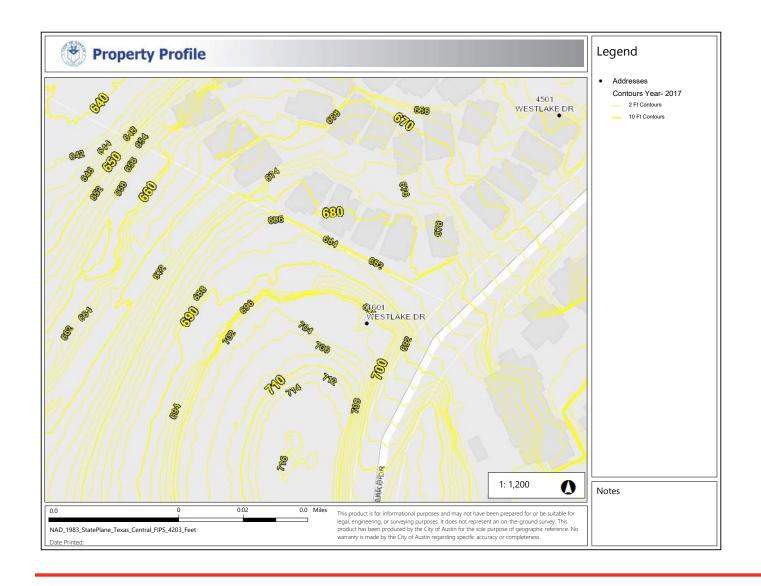
- 13,500 square feet; 4 apparatus bays
- 24 staff parking
- 2 visitor parking
- Compact design due to site limitation
- Water treatment pond
- Site retaining wall
- Staff exterior space (accessible from Day Room)
- Day Room, Kitchen, Gym, gear storage rooms, 14 sleep rooms

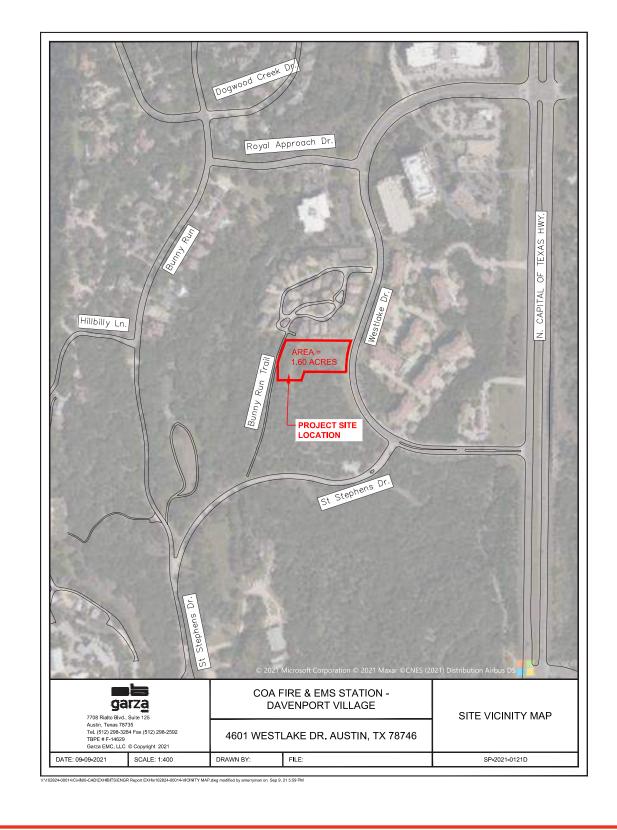


DAVENPORT RANCH FIRE/EMS STATION

SITE & CONTEXT:

- -On St. Stephen's property
- -No public transport within 1/4 mile
- -Located in the ETJ
- -Site has steep, rocky terrain















































ARCHITECTURAL CONTEXT

ST. STEPHEN'S EXISTING ARCHITECTURE:

- -Natural Stone
- -Metal low-slope roofing
- -Large architectural overhangs
- -Large glazing units





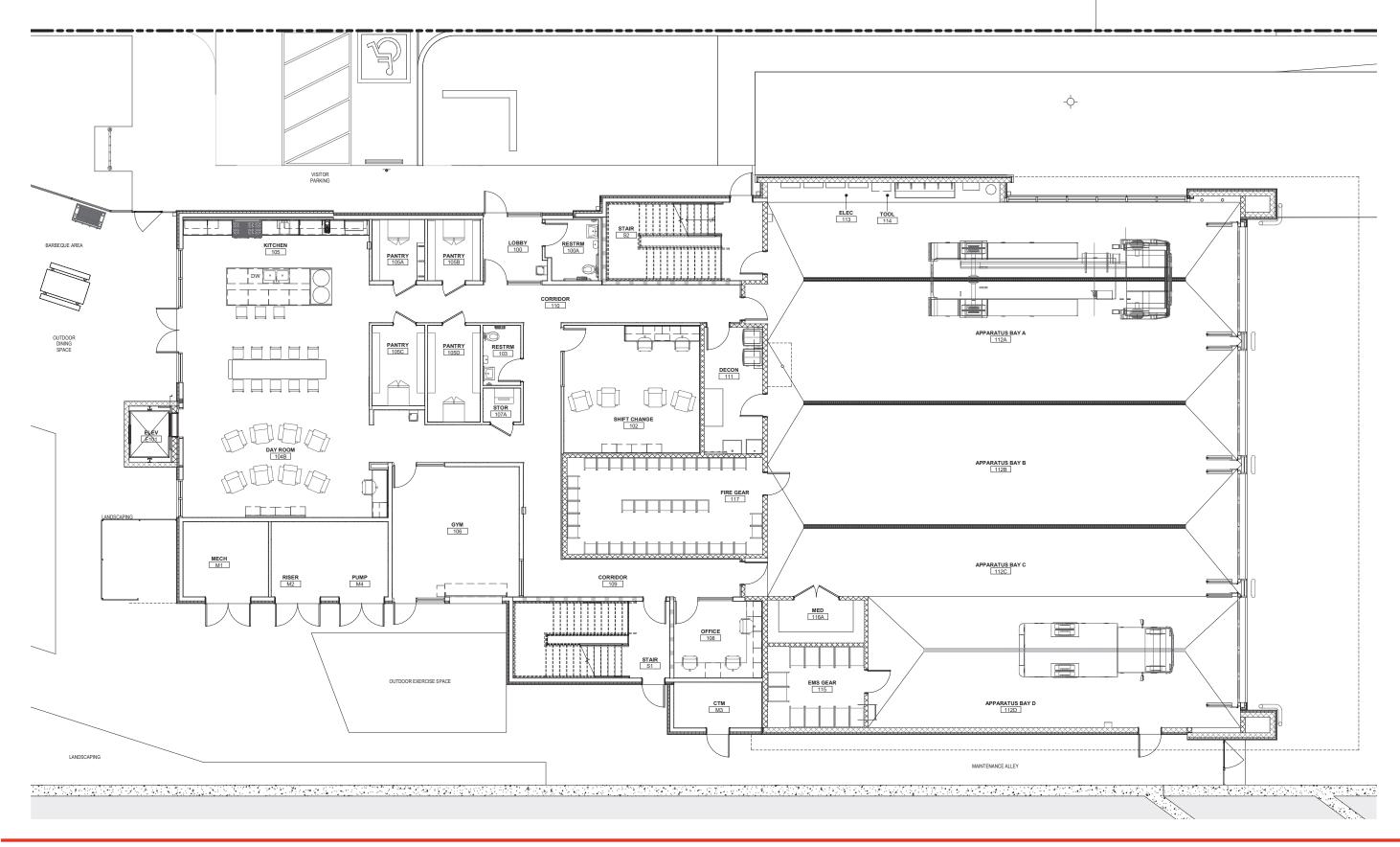


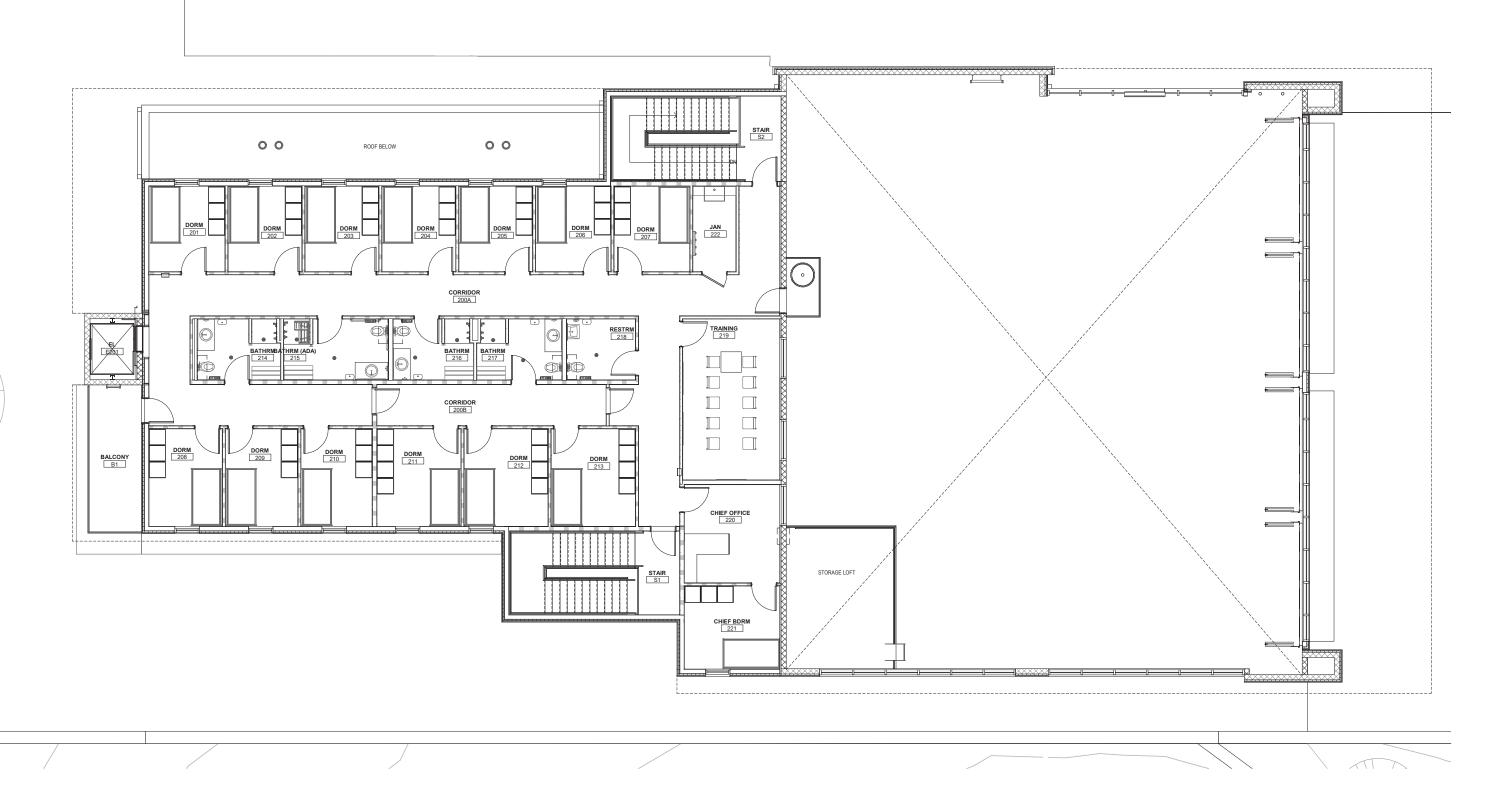


















































SUSTAINABILITY OVERVIEW

Certification Goal:

LEED 4.0 Silver

Location and Transportation: site location challenging for credits. 10 of 16 credits are NO.

Sustainable Sites: concrete pavement key for Heat Island reduction.

Water Efficiency: water use reduction & additional metering

Energy and Atmosphere: enhanced commissioning, photovoltaic panels, and increased energy performance through envelope design

Materials and Resources: building product disclosures and waste management

Indoor Environmental Quality: low-emitting materials & indoor air quality management

Innovation: IPM, Green Housekeeping, education outreach, Pilot

Regional Priority: Additional points for using photovoltaic panels



LEED v4 for BD+C: New Construction and Major Renovation

Building-Level Water Metering

0	GBC	,		Proje	ct Checklist		Dat	e: (0.80	2.20	J21
	?		N	Credit	Integrative Process	1					
T	0	0	10	Locat	tion and Transportation	16	4	2	2	5	Materials and Resources
				Credit	LEED for Neighborhood Development Location	16	Υ				Prereq Storage and Collection of Recyclables
T				Credit	Sensitive Land Protection	1	Υ				Prereq Construction and Demolition Waste Management Planning
T			1	Credit	High Priority Site - project does not qualify	2		1	2	2	Credit Building Life-Cycle Impact Reduction
T			3	Credit	Surrounding Density and Diverse Uses	5	1			1	Credit Building Product Disclosure Optimization - Environmental F
T				Condit	Access to Quality Transit	-	1			1	Credit Building Product Disclosure and Ontimization - Sourcing of

					O		၂ ၁	3	illuoc	r Environmental Quality	10
3	2	0	Sustainable Sites 10		Υ				Prereq	Minimum Indoor Air Quality Performance	Required
			Prereq Construction Activity Pollution Prevention Requir	ed	Υ				Prereq	Environmental Tobacco Smoke Control	Required
			Credit Site Assessment 1		1	1			Credit	Enhanced Indoor Air Quality Strategies	2
2			Credit Site Development - Protect or Restore Habitat 2		2	1			Credit	Low-Emitting Materials	3
			Credit Open Space 1		1				Credit	Construction Indoor Air Quality Management Plan	1
1	2		Credit Rainwater Management 3				1	1	Credit	Indoor Air Quality Assessment - flushout or testing	2
			Credit Heat Island Reduction 2		1				Credit	Thermal Comfort - controllability	1
			Credit Light Pollution Reduction - BUG		1		1		Credit	Interior Lighting - 90% individual occupant spaces - 3 levels	2
			-					3	Credit	Daylight	3
0	0	7	Water Efficiency 11				1		Credit	Quality Views	1
			Prereq Outdoor Water Use Reduction Requi	ed				1	Credit	Acoustic Performance	1
]			Prereq Indoor Water Use Reduction Requi	ed							
	2	2 1 2	2 1 2	Prereq Construction Activity Pollution Prevention Requir	Prereq Construction Activity Pollution Prevention Required Credit Site Assessment 1 Credit Site Development - Protect or Restore Habitat 2 Credit Open Space 1 1 2 Credit Rainwater Management 3 Credit Heat Island Reduction 2 Credit Light Pollution Reduction - BUG 1 0 0 7 Water Efficiency 11 Prereq Outdoor Water Use Reduction Required	3 2 0 Sustainable Sites 10 Y Prereq Construction Activity Pollution Prevention Required Y Credit Site Assessment 1 1 1 2 2 2 2 2 2 2 2 2 2 2 1	3 2 0 Sustainable Sites 10 Y Prereq Construction Activity Pollution Prevention Required Credit Site Assessment 1 <td>3 2 0 Sustainable Sites 10 Y Prereq Construction Activity Pollution Prevention Required Credit Site Assessment 1<td> 3 2 0 Sustainable Sites</td><td> Note</td><td> 3 2 0 Sustainable Sites 10 Y Prereq Construction Activity Pollution Prevention Required Y Prereq Environmental Tobacco Smoke Control Environmental Tobacco Smo</td></td>	3 2 0 Sustainable Sites 10 Y Prereq Construction Activity Pollution Prevention Required Credit Site Assessment 1 <td> 3 2 0 Sustainable Sites</td> <td> Note</td> <td> 3 2 0 Sustainable Sites 10 Y Prereq Construction Activity Pollution Prevention Required Y Prereq Environmental Tobacco Smoke Control Environmental Tobacco Smo</td>	3 2 0 Sustainable Sites	Note	3 2 0 Sustainable Sites 10 Y Prereq Construction Activity Pollution Prevention Required Y Prereq Environmental Tobacco Smoke Control Environmental Tobacco Smo

5 1 0 0 Innovation

Project Name: Davenport Ranch Fire EMS Station

2		4	Credit	Indoor Water Use Reduction	6	1				Credit LEED Accredited Professional
		2	Credit	Cooling Tower Water Use	2					
1			Credit	Water Metering	1	2	0	1	3	Regional Priority
			_			1			1	Credit Regional Priority: Renewable Energy Production
23	0 1	9	Energ	gy and Atmosphere	33				1	Credit Regional Priority: Outdoor Water Use Reduction
Υ			Prereq	Fundamental Commissioning and Verification	Required			1	1	Credit Regional Priority:⊹Rainwater Management
Υ			Prereq	Minimum Energy Performance	Required	1				Credit Regional Priority: Optimize Energy Performance
Υ			Prereq	Building-Level Energy Metering	Required					
Υ			Prereq	Fundamental Refrigerant Management	Required	56	8	9	39	TOTALS Possible Points
5		1	Credit	Enhanced Commissioning - before end of DD, measurement	6					Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110
13		5	Credit	Optimize Energy Performance	18					
1			Credit	Advanced Energy Metering - systems >10% whole building + data	1					



