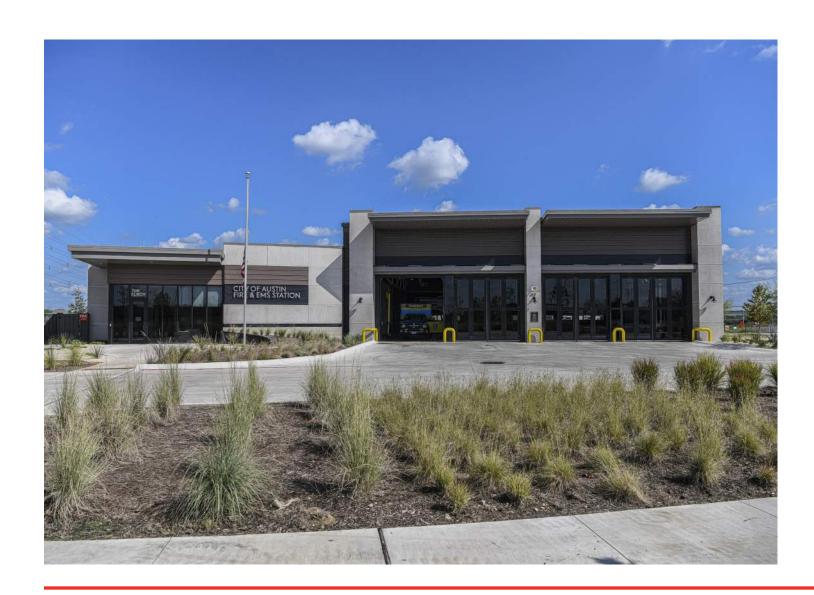
DAVENPORT RANCH FIRE/EMS STATION JAL

DESIGN COMMISSION | NOVERMBER 15, 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







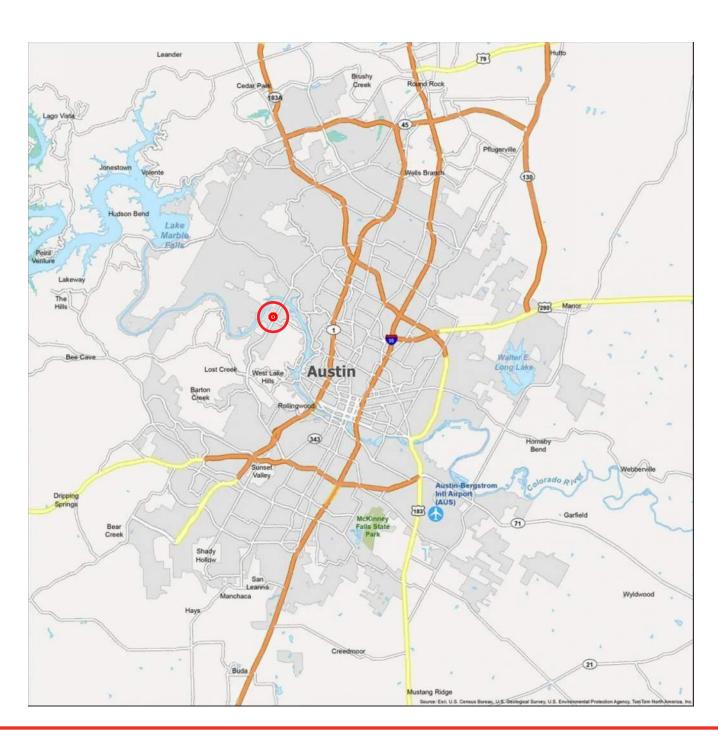
DAVENPORT RANCH FIRE/EMS STATION

GOAL:

PROVIDE EMERGENCY RESPONSE SERVICES TO DAVENPORT RANCH AREA

PROJECT ELEMENTS:

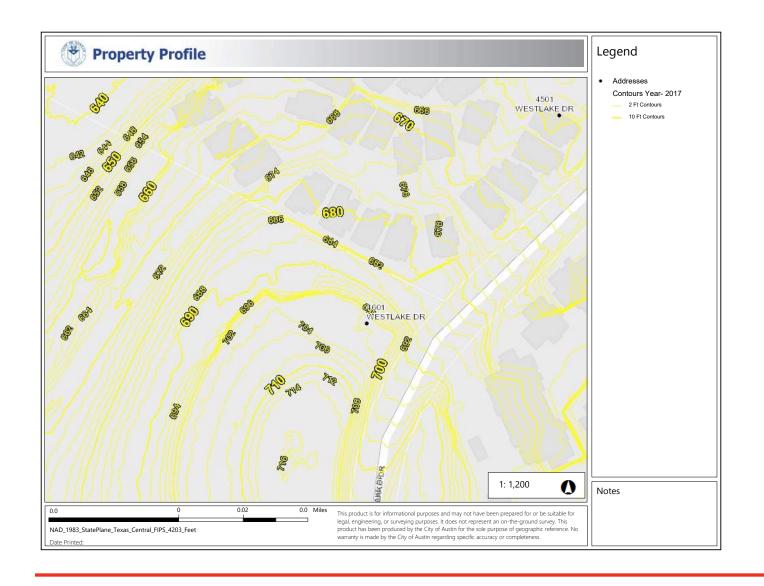
- 13,500 square feet; 4 apparatus bays
- 24 staff parking
- 2 visitor parking
- Compact design due to site limitation
- Water treatment pond
- Site retaining wall
- Staff exterior space (accessible from Day Room)
- Day Room, Kitchen, Gym, gear storage rooms, 14 sleep rooms

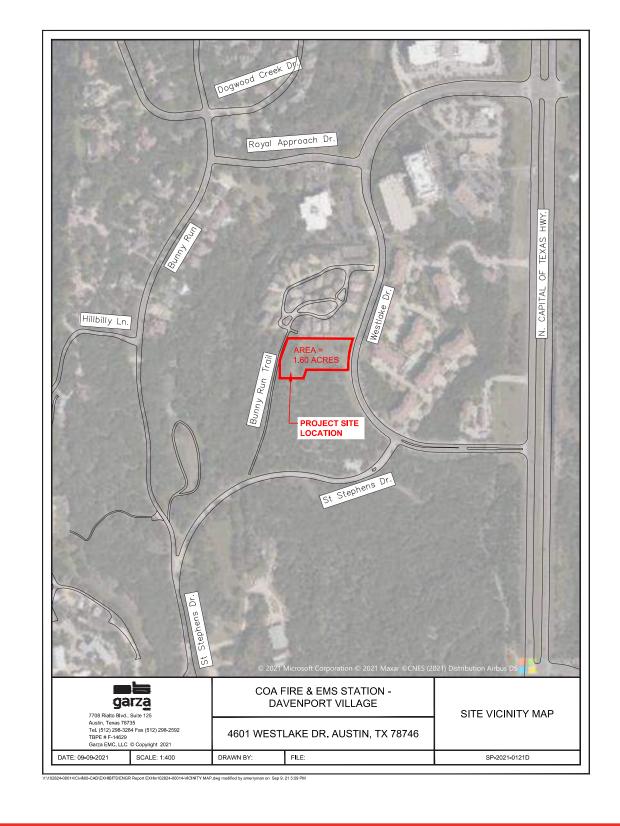


DAVENPORT RANCH FIRE/EMS STATION

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







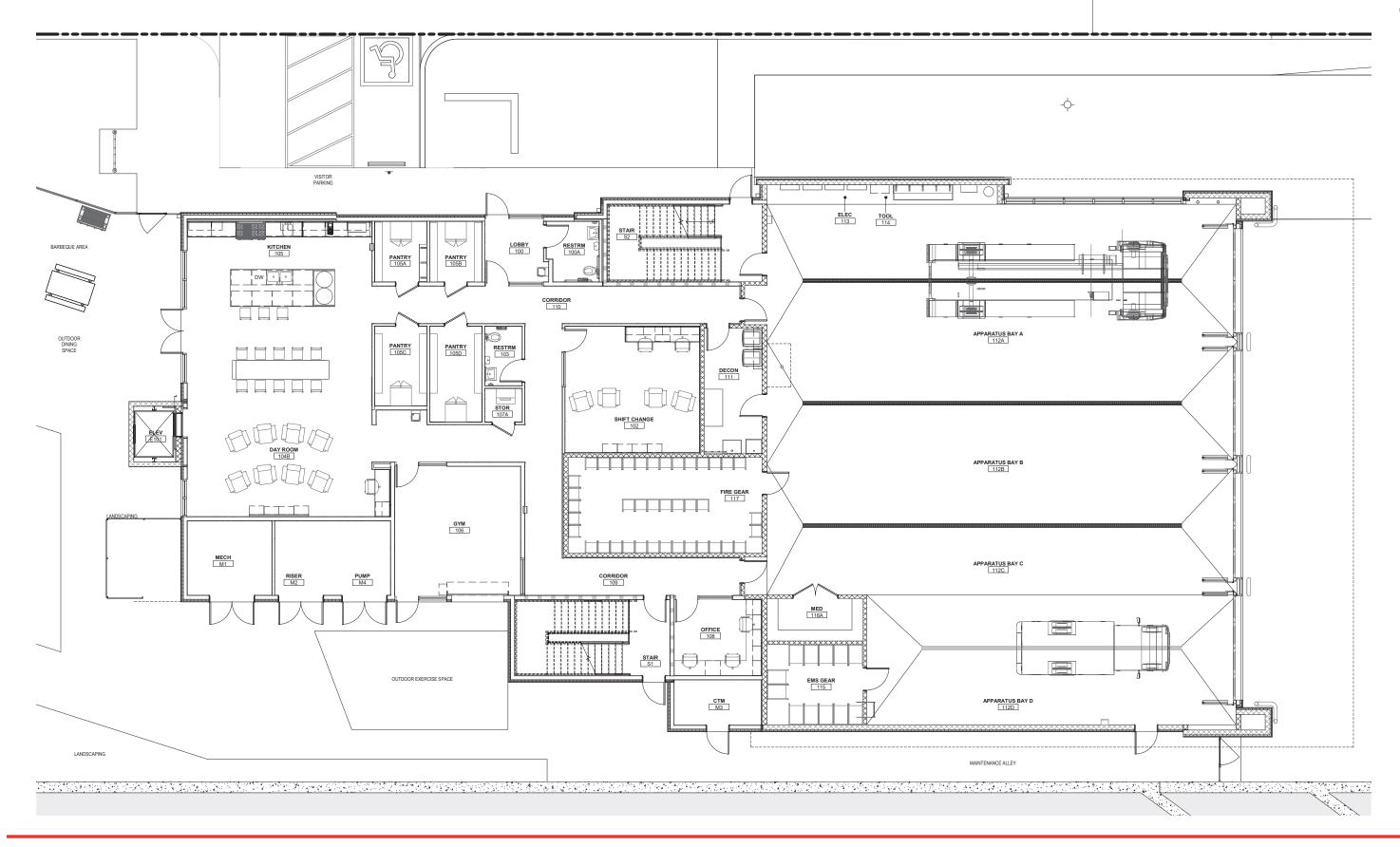


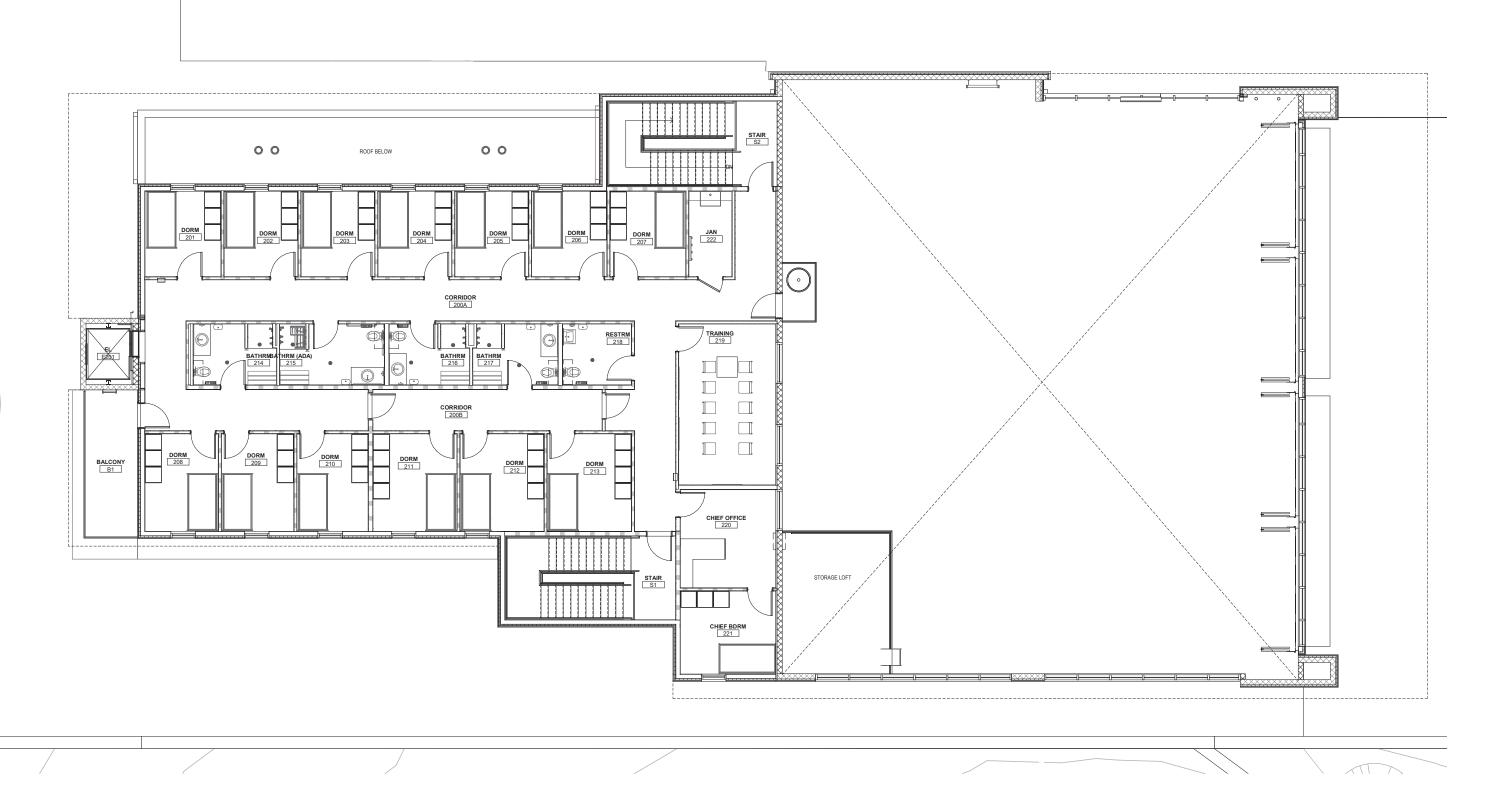


















































Required

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

Enhanced Refrigerant Management

SGBC		Proje	ect Checklist		Date	a. C	0.02	۷.۷	JZ I	
?	N	1								
		Credit	Integrative Process	1						
0	0 10	0 Loca	tion and Transportation	16	1	2	2	5	Mater	ials and Resources
-	1	Credit	LEED for Neighborhood Development Location	16	4				Prerea	Storage and Collection of Re
		Credit	LEED for Neighborhood Development Location	10	T				Prereq	Storage and Collection of Ne

 U	•	U	ו ו	LUCA	non and Transportation	10	, ~ .	~	4	"	Water	iais and Nesources
				Credit	LEED for Neighborhood Development Location	16	Υ				Prereq	Storage and Collection of Recyclables
1				Credit	Sensitive Land Protection	1	Y				Prereq	Construction and Demolition Waste Management Planning
1			1	Credit	High Priority Site - project does not qualify	2		1	2	2	Credit	Building Life-Cycle Impact Reduction
2			3	Credit	Surrounding Density and Diverse Uses	5	1			1	Credit	Building Product Disclosure Optimization - Environmental Product Declarations
			5	Credit	Access to Quality Transit	5	1			1	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials
1				Credit	Bicycle Facilities	1	1			1	Credit	Building Product Disclosure and Optimization - Material Ingredients
			1	Credit	Reduced Parking Footprint - zoning requirements? 40% reduction required	1	1	1			Credit	Construction and Demolition Waste Management
1				Credit	Green Vehicles - v4.1 allow 6% infrastructure	1						
				-			6	2	3	5	Indoo	r Environmental Quality

5	3	2	0	Susta	ninable Sites	10	Υ				Prereq	Minimum Indoor Air Quality Performance	Required
Y				Prereq	Construction Activity Pollution Prevention	Required	Υ	1			Prereq	Environmental Tobacco Smoke Control	Required
1		П		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
1		П		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
2		П		Credit	Heat Island Reduction	2	1				Credit	Thermal Comfort - controllability	1
1				Credit	Light Pollution Reduction - BUG	1	1		1		Credit	Interior Lighting - 90% individual occupant spaces - 3 levels	2
				•						3	Credit	Daylight	3
4	0	0	7	Wate	r Efficiency	11			1		Credit	Quality Views	1
Y				Prereq	Outdoor Water Use Reduction	Required				1	Credit	Acoustic Performance	1
Y				Prereq	Indoor Water Use Reduction	Required							

Project Name: Davenport Ranch Fire EMS Station

Data: 09 02 2021

Υ	Prereq	Building-Level Water Metering	Required	5	1	0	0	Innovation	6
1	1 Credit	Outdoor Water Use Reduction	2	4	1			Credit Innovation - LED Lighting, Innovation, Pilot, Educational, EP, Composting	5
2	4 Credit	Indoor Water Use Reduction	6	1				Credit LEED Accredited Professional	1
	2 Credit	Cooling Tower Water Use	2						
1	Credit	Water Metering	1	2	0	1	3	Regional Priority	4
				1			1	Credit Regional Priority: Renewable Energy Production	1
23	0 1 9 Energ	gy and Atmosphere	33				1	Credit Regional Priority: Outdoor Water Use Reduction	1
Υ	Prereq	Fundamental Commissioning and Verification	Required			1	1	Credit Regional Priority: Rainwater Management	1
Y	Prereq	Minimum Energy Performance	Required	1				Credit Regional Priority: Optimize Energy Performance	1
V	Preren	Building-Level Energy Metering	Required						

	_	· ·	gy a					-	· · · · · · · · · · · · · · · · · · ·
١	1	Prereq	Fundamental Commissioning and Verification	Required			1	1	Credit Regional Priority: Rainwater Management
)	1	Prereq	Minimum Energy Performance	Required	1				Credit Regional Priority: Optimize Energy Performance
)	1	Prereq	Building-Level Energy Metering	Required					<u>-</u>
)	1	Prereq	Fundamental Refrigerant Management	Required	56	8	9	39	TOTALS
5	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
1	3	5 Credit	Optimize Energy Performance	18					
1	1	Credit	Advanced Energy Metering - systems >10% whole building + data	1					
		2 Credit	Demand Response	2					
3	3	Credit	Renewable Energy Production - programming requirement	3					

points. Platinum: 80 to 110

