SALIDA FIRE DEPARTMENT

DESIGN WORKSESSION 6/30/2022



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Neenan's Collaborative Design Process (CDP) is a day-long interactive process to develop alignment among the Owner, the building users, Neenan, design consultants, and subcontractors on building design, scope, schedule, and budget. During the CDP the project team seeks input and feedback in order to validate needs and programmatic requirements. After the CDP, Neenan will engage the building users in smaller work sessions and recurring owner meetings to review progress.

In the CDP work session held on June 30, 2022, the team reviewed the Conditions of Satisfaction. These had been compiled prior to the work session. All participants were invited to discuss and add to the list.

The team was then asked to evaluate a series of images of fire stations. There were two sheets of exterior photographs and two sheets of interior photographs. The group made notes on the photos. Afterward the participants discussed which ideas, materials, layouts, forms they liked and why.

The group then broke into three groups to discuss in more depth a variety of topics. A site plan, a one-story floor plan concept, and a two-story floor plan concept were developed from the smaller design sessions over the afternoon.





The process of collecting Conditions of Satisfaction (COS) is to define the criteria by which the success of the project can be measured. The intent of this exercise is to define this criteria in terms of the building users, City of Salida, and community perspective. This document is meant to be dynamic and to be evaluated during the course of the project.

Overall Project Goals

- Meets current and future needs of the fire department with a 75-year life
- Space that enhances the health and well-being of its firefighters
 - o Space to rest & recharge
 - o Decontamination zones
- Functions with current and future fire apparatus and allows for expansion
 - o Enhancement of employee retention and recruitment
 - o Gender specific considerations
- On-site training for situational preparedness
- Efficient with space
 - o Improve function through flow
- Architecture more modern with respect to history
 - o Potential to invest in neglected area of city
- Effective use of taxpayer funds
- Thinking like a young person
 - o Future thinking

Assumptions

- City of Salida will perform regular fleet maintenance on apparatus
 - o No truck lifts required

<u>Site</u>

- Ability to grow: add bay, not living space
- Live fire training facility (would need ½ acre)
- Parking for 10 cars with solar (+accessible)
- Large aprons for turning and backing
- Siting for winter conditions
- Fiber optics access
- Hose Tower
- Equipment outbuilding
- Outdoor staff space
- Hose area
- Future reserve dorm (for 6)
 - o CMC involvement
- Illuminated flagpole
- Hydrant
 - o Suitable location for training
- EV charging
- Bike path on east side
 - o Local road
- Coordinate with CDOT street scape project
- Accommodate access on both sides
 - o At school
 - o At development adjacent
- Stormwater off site considerations
- Entrance to town
 - o Digital marquee sign
- Smokey the Bear station
- Options for simple space- park
 - o Schools plans





Apparatus Bays

- Drive through bays
 - o Single load first out engine for calls
 - o Single load ladder truck
 - o Double load the rest
 - o Space to back in
 - o Squad, engine, ladder trucks
- Bay depths
 - o Ladder truck 42'
 - o Could be 50' in future
- Clear height to open cab 16-20'
- Accordion/Bi-fold doors for first out (4' bay space)
- Heated aprons
- Decontamination space with good flow
 - o Health concerns
 - Hot, warm, cold
- Boot wash
- Dedicated wash bay
 - o Use for parking if needed
- Floor drains
 - o At compressor
 - Raise to drain
 - Housekeeping pads
 - o Sand and oil separator
- Drop down air and power
 - o Grid
 - o Shore line cords
 - o Each apparatus
- Outdoor hose bibbs
- Plymo-vent system (have currently, breaks often; look at other options)
 - o Automatic whole bay system scrubs air
 - o Future EV, whole bay option
- Flammable liquids cabinet- vented
- Area to clean equipment
 - o Shop sink

- o Countertop workspace
- o Clean
- o 220 outlet
- 2.5" water line to fill trucks inside
- Keep public safe from hot zone
- Keep bays as clear as possible

Equipment Outbuilding

- Storage for non-essential equipment
 - Save bay space and expense
 - Boat & trailer
 - Hazmat trailer
 - Brush truck
 - Training props

Adjacent to Bays

- Equipment storage
 - o Bunker most used 90%
 - o Wildland
 - o Swiftwater
 - o Changing solution for privacy
 - Partition
 - Curtain
 - o Bench in middle
 - o Larger
- Gear drying space
 - o Vented to outside
 - o Plan for larger extractor
- EMS storage
- Charging station
- Workspace
- Storage
- Chimney brush access
 - o Not in bays (carcinogens)
 - o Public program
 - o In outbuilding?
 - o Outside closet?





Training

- 3 story training/hose tower with water
 - o Hose rack
 - o Height to throw ladders
 - o Durable exterior
 - o Confined space
 - o Vertical ventilation
 - o Place for props & tools?
 - Or in outbuilding?
- Integrate training throughout bays
 - o Training mezzanine
- Training room
 - o Classroom style for 40 50 seats
 - o Multi-use for monthly board meetings
 - o Tech
 - Smart boards
 - Projector
 - Screens
- Separate board room
 - o Used for interviews, etc.

Workout

- Away from sleeping quarters
- Space for shift to workout (4)
- Bathroom with shower
- Garage door for outdoor conditioning
- Sound system tied into alarm
- Built in digital clock/timer
- Concrete floor with horse mats

Living area

- Separation from work area
- Sleeping Options
 - o Sleeping rooms focused on good rest
 - o (3) Murphy beds per sleeping room
 - o Individual small sleeping rooms (14)
 - Nightstand
 - Uniform storage/Foot locker
 - Larger than current
 - Bookshelf
- Room for reserves
- Bathrooms
 - o Individual bathrooms (4)
 - o With showers
 - o Separation within bathrooms
 - o Storage for toiletries
 - o Hanging for clothes
- Properly sized water heater
- Laundry
- 5 computer stations
 - o Horseshoe
 - o Personal & training
 - o Close to training
- Sauna
- No carpet
- Larger shared space
 - o 5 or 6 recliners
 - o 70-80" TV
- Security
 - o Keep public from living quarters
- Zoned climate control
- No sensored fixtures in bathroom

CONDITIONS OF SATISFACTION



Kitchen

- Large enough to accommodate two shifts
- Commercial appliances
 - o 3 refrigerators
- Commercial cabinets and surfaces
- Vent stove
- Plumbed coffee maker
- Filtered water
- Lots of counter space
 - o Island
 - o Additional seating
 - o Storage
 - Common pots & pans
- Seating for 10
- Shift pantries
 - o Individual cabinet space

Outside Space

- Area for physical conditioning
 - o Astroturf?
- Private outdoor space
 - o Adjacent to kitchen
 - o Grill, plumbed gas
 - o Water
 - o Table (8-10)
 - Training option
 - o Shade
- Roof access?
 - o Separation of space
 - o Deck if on second floor
- Grass area
 - o Shift dog?
- Shade
 - o Patio heater

Museum

- Visible from outside
- Display historic artifacts
 - o 1911 truck to new facility to bring history with them
 - o Sentimental value for fire history not downtown location
 - o Books
 - o Trophies, photos
 - o Hose wheel
 - o Fire pole

Office

- Safe entry
- Card reader door security
- Panic button
- Security cameras
- Reception
 - o Flow
 - o Middle of area
 - o Access to everyone
- Public alert
 - o After hours
 - o From outside
- Security/separation between reception/lobby and offices
- Bathrooms
 - o Public restroom
 - o Gender neutral/family
- IT room
 - o Lock up
- No carpet
- Separate offices
 - o Chief
 - o Assistant Chief
 - o Captain
 - File for each shift (3)
- Wall space
 - o Calendar for inspections





Elevations/Exterior

- Sloped roofs
- Durable finishes
 - o Hoses
 - o Ladders

Systems

- Natural Gas backup generator
- Bay ventilation
 - o Plymo vs. automatic whole bay system
- Ventilation throughout
 - o Bays
 - o Kitchen
 - o Extractor
 - o Workout
 - o Lockers
 - o Bathroom
- Zoned living space
- House alarm/Notification system
 - o Integrated station communication
 - o Station tones
 - o Night lights
 - o Running GPS
- Electric for sauna
- 2.5" water to fill trucks
- Hydrant on site
 - o Hose testing
 - o Fill trucks
- Intercom paging
 - o Whole building
- Motion sensor lighting
- Rotojet hose washer
- Tolin Mechanical
 - o Contracted HVAC for City
 - o Sign off on systems
- Security system
 - o Compatible with City
- Water department has a portable generator
 - o Wire to utilize as backup

Sustainability

- Rotojet hose washer saves a lot of water
 - o Specs
 - o Vs GPM
- Water reuse in wash bay
- Recycling
 - o Composting
 - o Reuse of things we produce
 - Use compost in Parks
- Net Zero and no greenhouse gas emissions
 - o Goals not certification
- Electrification
 - o Tesla power walls
 - o Battery packs
 - o On site generation opportunities
 - Geothermal
 - Solar
- Xeric plants
 - o Public facing
 - o Not in recreation area
- Tree City
 - o Preserve & improve tree canopy
 - o Planning
 - Tree board
- Build to 2021 energy code
- Heating & cooling
 - o Efficient alternative systems
 - Heat pumps
 - Geothermal for snow melt
- Indoor air quality
 - o Office & residential separately
 - o Building flush
- Bike storage
 - o Rack
- Dark sky compliance new land use code





Prior to the work session The Neenan Company met with Salida Fire to prepare a line-by-line inventory of all the needed spaces and rooms. This document, known as the Space List, served as the basis for the creation of the Preliminary Conceptual Plans.

This space list follows best practice recommendations for similar stations as well as regulatory requirements such as ADA and building codes.

Salida Fire Department					Space List
Space List Completion Date: 0 Plan Completion Date: n					
TOTALS			22,126	-	
	Current Staffing	Proposed Staffing	Space List	Plan xx.xx.xxxx	Remarks
Building Support					
Administration	5.00	5.00	3,290	-	
Living Quarters	12.00	18.00	5,180	-	
Support Services	-	-	1,105	-	
Apparatus					
Apparatus and Maintenance	-	-	11,907	-	
Sub Total			21,482	-	

Gross Factor

3%





Salida Fire Department Administration

3,290 Total Square Footage for **Space List**- Total Square Footage for **Plan xx.xx.xxxx**

15% Percent of Total Building

Description	Staf	ffing		Space Lis	t		Plan xx.xx.	xxxx	Remarks
	current	proposed	qty.	area	total sf	qty.	area	total sf	
Public									
Entrance			1.00	150	150	-	-	-	doorbell for after hours, display boards, panic button
Reception	1.00	1.00	1.00	60	60	-	-	-	controlled access, hrs M-R 7-5
Public Toilet			1.00	70	70	-	-	-	unisex, baby changing station?
									truck, hose wheel, pole, nozzles, photos, 20' fire pole, antique
Museum			1.00	500	500	-	-	-	ladders, badge board
Administration Offices						1		1	
Fire Chief's Office	1.00	1.00	1.00	150	150		-	-	
Fire Captain's Office			-	120	-	-	-	-	
Assistant Chief's Office	1.00	1.00	1.00	120	120	-	-	-	
Station Captain's Office			-	120	-		-	-	
Shared Office	1.00	1.00	1.00	120	120	-	-	-	shift captain
Fire Prevention Office			-	120	-	-	-	-	
Fire Inspector's Office	1.00	1.00	1.00	120	120	-	-	-	plan table, big wall mounted monitor
Shift Supervisor's Office			-	120	-	-	-	-	
Dispatch Office			-	120	-	-	-	-	County does dispatching, building-wide paging tied to radio
			-	-	-	-	-	-	
Conference									
Storage			1.00	100	100	-	-	-	AV, CPR Annies, manuals, can be casework
									also used as Board room, training, main floor, projector and
									screen, whiteboards, not for public use, 40-50 seats, flexible
Conference/Training			1.00	750	750	-	-	-	table arrangements
Board Room			-	-	-	-		-	
Support									
Storage			1.00	30	30	-	-	-	
Inspection Files			1.00	30	30	-	-	-	4 file cabinets (not in an office), bookshelves for binders
Copy/Print/Mail			1.00	60	60	-	-	-	
Staff Toilets			1.00	60	60	-	-	-	unisex, verify with Code
Nutrition			1.00	30	30	-	-	-	microwave, coffee, sink, small fridge
Subtotal					2,350			-	
Walls and Structure			10%		235	10%		-	
Circulation			30%		705	30%		-	
Total	5.00	5.00			3,290			-	

Notes:

Access to bays solar panels for covered parking fire hydrant on site



SPACE LIST



Salida Fire Department Living Quarters

5,180 Total Square Footage for **Space List**- Total Square Footage for **Plan xx.xx.xxxx**

23% Percent of Total Building

Description	Sta	ffing		Space Lis	t	F	Plan xx.xx.	xxxx	Remarks
Description		proposed	qty.	area	total sf	qty.	area	total sf	Remarks
Living									
Television/Day Room			1.00	400	400	-	-	-	5 recliners
Study			1.00	200	200	-	-	-	shared space, individual workstations for 5
Fitness			1.00	500	500	-	-	-	bikes, stair stepper, free weights, rower, treadmills
Staff RR/Shower			1.00	80	80	-	-	-	in fitness room
Dining				·					
Kitchen			1.00	250	250		_		3 retrigerators (1 per shift), gas stove/oven, commercial grade, microwave, garbage disposal, dishwasher, coffee maker, ice maker optional, TV, white board, instant hot water, filtered water, island
			1.00	250	250	-		-	water, island
Vending Dining			1.00	250	250	-	-	-	10 person table, will bring existing
			1.00	60	60	-	_	-	1 2 3
Dry Storage			1.00	60		_	-	-	3 pantries (1 per shift) off kitchen/dining, grill, pizza oven, garage door
Sleeping patio			1.00	-	-	-	-	-	Off Kitchen/dining, grill, pizza oven, garage door
Bedrooms Staff Lockers	12.00	18.00	14.00	100	1,400	-	-	-	progressive lighting (tie into dispatch?), ceiling fans, operable windows, twin bed, wardrobe, nightstand in bedroom
Guest Room			-	120	-	-	-	-	twin bed, wardrobe, nightstand
Support									
Restroom/Shower			4.00	100	400	-	-	-	
Laundry			1.00	60	60	-	-	-	laundry sink, can also be used as janitorial 12 career staff, 6 extra, full height, 18" wide, for toiletries and
Staff Lockers			20.00	5	100	-	-	-	towel
Subtotal					3,700			-	
Circulation			30%		1,110	30%		-	
Walls and Structure			10%		370	10%		-	
Total	12.00	18.00			5,180			-	

Notes:

sauna



SPACE LIST



Salida Fire Department Support Services

1,105 Total Square Footage for **Space List**- Total Square Footage for **Plan xx.xx.xxxx**

5% Percent of Total Building

Description	Staffing		Space Li	c+		Plan xx.xx.	vvvv	Remarks
Description	current proposed	I qty.	area	total sf	qty.	area	total sf	Remarks
Information Technology								
Office		-	100	-	-	-	-	
Server		1.00	60	60	-	-	-	server is at Touber Building, cloud
Work Stations		-	60	-	-	-	-	
		-	-	-				
Shipping and Receiving								
Receiving		-	100	-	-	-	-	
General Storage		-	150	-	-	-	-	
		-	-	-	-	-	-	
Building Support								
Maintenance		1.00	200	200	-	-	-	
Janitorial		1.00	40	40	-	-	-	vacuum, shelving
								air compressor for tools, store for refilling tanks has to draw
Compressor Room		1.00	60	60	-	-	-	fresh air
Main Electrical Room		1.00	250	250	-	-	-	expandable or ready for electric apparatus
Main Emergency Electrical Room		-	150	-	-	-	-	
Main Mechanical Room		1.00	150	150	-	-	-	
Fire Riser Room		1.00	60	60	-	-	-	
Main Telephone Distribution		1.00	30	30	-	-	-	normal, fax, emergency, intercom
Generator		1.00	-	-	-	-	-	back up everything, natural gas (could be diesel if larger), Tesla power wall?
Subtotal				850				
Circulation		20%		170	20%			
Walls and Structure		10%		85	10%			
Total		10%		1,105	10/0			
illai	-			1,105			-	

Notes:

exterior security cameras, badge access





Salida Fire Department Apparatus and Maintenance

11,907 Total Square Footage for **Space List**- Total Square Footage for **Plan xx.xx.xxxx**

54% Percent of Total Building

Description	Staf	•		Space Li			Plan xx.xx.		Remarks
	current	proposed	qty.	area	total sf	qty.	area	total sf	
Apparatus									
									20'+ height (to open hood on ladder truck), 14' tall doors,
Truck Bays			6.00	1,000	6,000	-	-	-	windows in two sections of each overhead door
Wash Bay			1.00	1,000	1,000	-	-	-	
			-	-	-	-	-	-	
Maintenance									
Vehicle Maintenance Office			-	120	-	-	-	-	
Vehicle Maintenance Storage			1.00	120	120	-	-	-	work bench, side of bay (not room)
									on wall in truck bay, needs space around (see compressor
SCBA Maintenance			-	120	-	-	-	-	room), breathing air (not O2)
Exterior Maintenance			1.00	120	120	-	-	-	lawn mower, shovels, snow blower
upport									
Hose Storage and Drying			1.00	300	300	-	-	-	tower, openings, durable exterior finish
Fire Extinguisher Repair/Storage			-	120	-	-	-	-	
Protective Clothing Lockers			20.00	15	300	-	-	-	for turnout gear, bench in middle, 2 sets of bunker gear
									another wall for gear hooks (wild land) and changing area,
Protective Clothing Storage			20.00	10	200				swift water gear in a bag on shelves
Protective Clothing Laundry			1.00	120	120	-	-	-	
General Storage			1.00	150	150	-	-	-	air pack cylinder storage, extra nozzles, hoses
									hot area to get out of gear, warm to wash hands, cold; after
Disinfecting Facilities			1.00	80	80	-	-	-	fire wipes; part of Laundry
Janitor			1.00	35	35	-	-	-	mop sink
Bootwash			1.00	10	10				before entry to Living area
Restroom			1.00	70	70	-	-	-	
Subtotal					8,505			-	
Circulation			30%		2,552	30%		-	
Walls and Structure			10%		851	10%		-	
Total	-	-			11,907			-	

Notes:

decontam on scene, not shower think about gear changing space gender separation exhaust for trucks (not per truck), whole system, have Plymo system but breaks

separate building for maintenance, small vehicles, trailers, work bench



NEENAN ARCHISTRUCTION

















Like wrap around corner (2 faces to building)



Like earth tones, but not muted gray (Salida is more vibrant), like windows above bays



Like scale of building, sloped roofs



Like "country look", ranch style



Like windows in bays (they work in there a lot), orientation of building (street frontage vs. corner)



Like wood and brick, solar not visible with flat roof, timeless style



Public facing, inviting, know where entrance is, clean lines, timeless, long-lasting, set tone for future development in area



Like gentle slope of roof, respectful of neighborhood; brick to compliment building to south, historical/ Salida feel, metal roof looks high quality



Like bay clerestory, approachable, break up roof lines

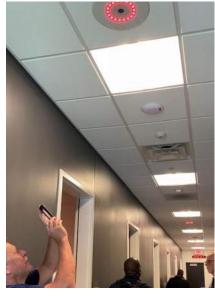


Tower is too tall



Too modern





Intercom throughout, light progression



Too much water in space for this



Training tower for repelling, can spray water all over, grate flooring (capture for landscaping?), hang hoses to dry, confined space training, Denver Prop technique



Light-hearted, fun, different



Clean, open, everything well lit, something to engage kids



Clean and efficient, ADA accessibility, potential for conference room to be open to public, garage door to outside





Like open, communal space; kitchen is hub of station; access to outside; tiered seating arrangement



Murphy bed idea is cool, like bench connected to wardrobe for radios/light/etc, no workstation in sleeping room



"Train with a Fire Fighter" work out to make money?, like windows, open layout, ability to pull equipment out to build a circuit (like CrossFit), 3-4 people working out together





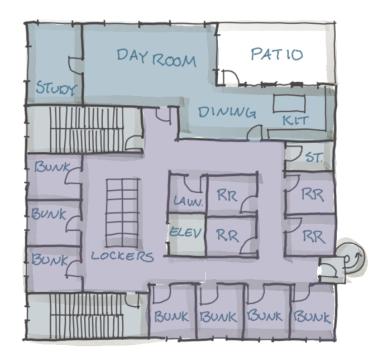




CONCEPTUAL 1 STORY FLOOR PLAN









SECOND FLOOR

FIRST FLOOR