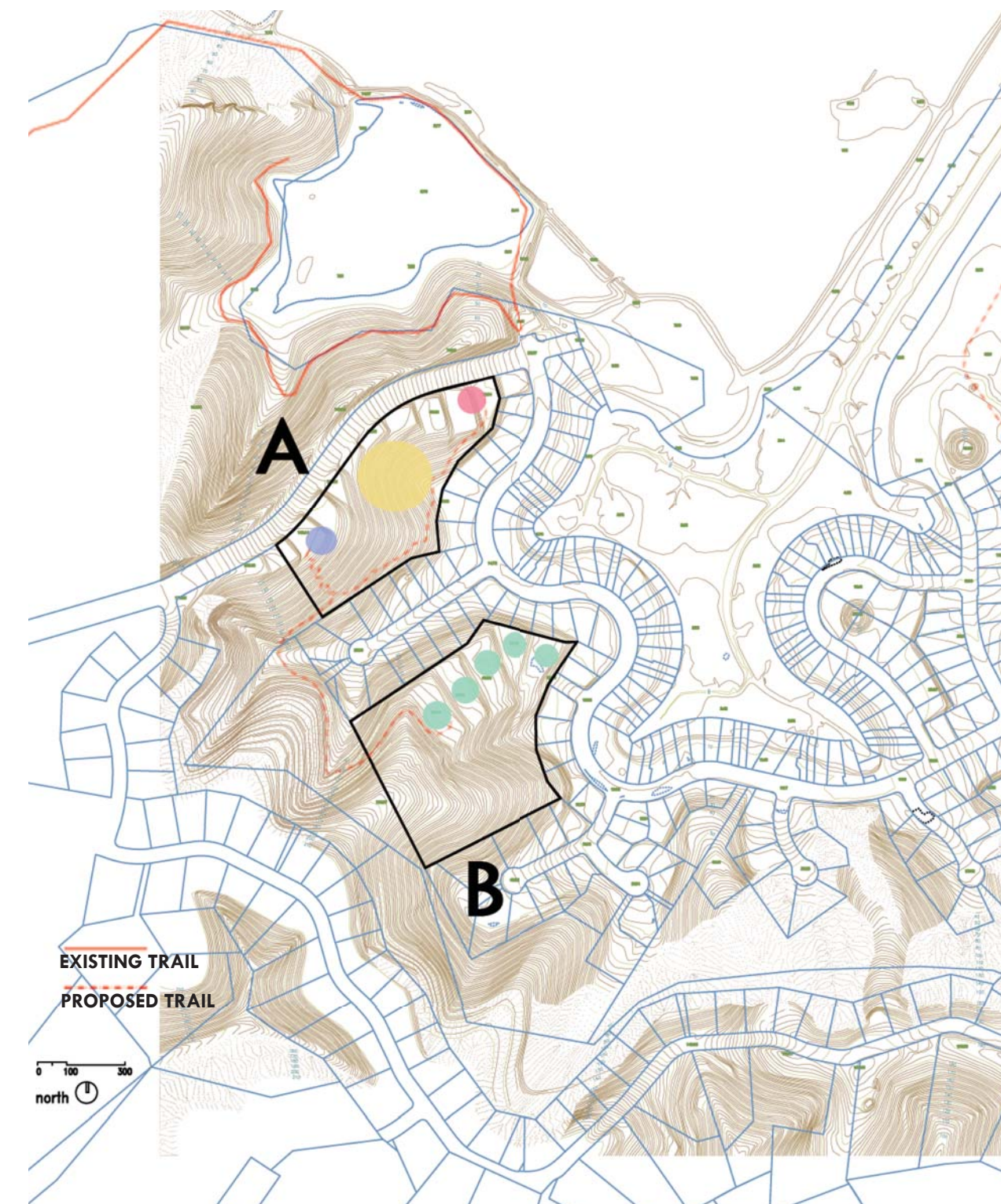


# 172 PRODUCTIVE LANDSCAPES

## TOP CALIFORNIA SENIOR HOUSING DESIGN COMPETITION

### COMMUNITY PLAN

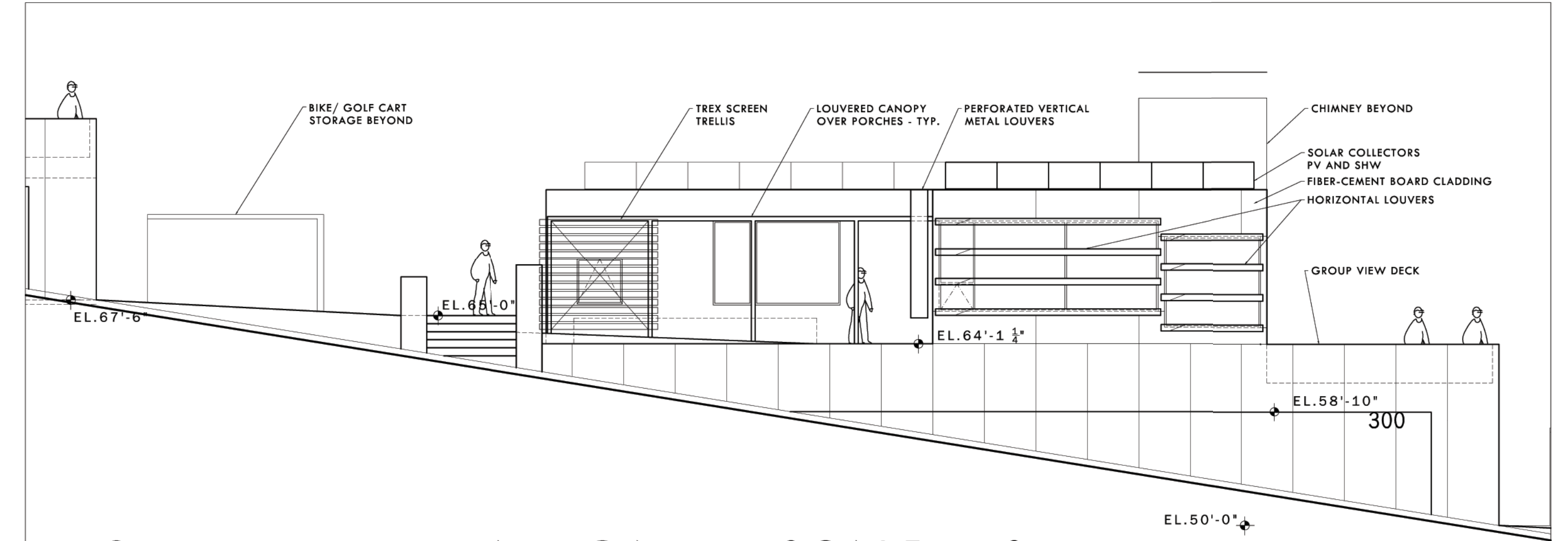
- A. Four Areas of development include:
- Residential terrace housing on five existing site platforms located along an extended Misty Court on Parcel B. Community Gardens collocated with residential use.
  - A Vineyard Hospitality | Visitor's Center located along Bahia Drive at the top of Parcel A including two units of Live-Work housing with agricultural support spaces for vineyard production below. Mixed Use.
  - A Vineyard covering approximately six acres of Parcel A. Agriculture support spaces located below Visitor's Center.
  - A locally serving 'Corner Store' located at the bottom of Bahia Drive including two units of Live-Work housing. (see unit summaries)
- B. Residential Use and Competition Goals
1. New residences at Misty Court are embedded at center of existing residential neighborhood knitting new residences to Bahia neighborhood.
  2. Courtyard development of these homes and development of generous public spaces allows for hosting of special events and community exchange.
  3. Integration of food production, senior housing and gardening as a financial, therapeutic and social endeavor adds jobs, value and meaning to the lives of seniors.
  4. Resource efficiency includes maximum use of rainwater, graywater and solar collection in effort to create a ZEB; zero energy building.
  5. On-site electrical production supports alternatives to fossil fuels via bicycles, electric mopeds and an electric golf-cart ride/share program.
- C. Corner Store | Live-Work and Competition Goals
1. Corner Store provides ready market for Misty Court food production as well as immediate convenience to all. Community is provided with jobs, locally grown food source and another point of community integration.
  2. Corner Store location serves a gateway function to residential neighborhoods as well as a possible trail node from MAS trails to the North and future trails across vineyard and beyond.
  3. Location reinforces maximization of pedestrian and auto alternatives within neighborhood.
  4. Live | Work component creates 'Mom and Pop' model for seniors. Residential lease would be combined with an operating agreement of the commercial use.
- D. Mixed Use: Visitor's Center, Live | Work and Viticulture
1. A Landmark mixed-use building is locate at the high point of the site at the edge of a newly created vineyard; a clear and public presence that furthers goals of SALT and NFH.
  2. The siting captures best possible view planes to water and marks point of arrival to the river basin as an overlook structure.
  2. Creation of a destination along arterial street re-connects City of Novato to Bahia at most public point of both parcels.
  3. Overlook site at the highpoint is an inherently activating place providing opportunities for special events, public education, hospitality, and vineyard tours; metaphorically, a 'community living room' that represents the public face and unique qualities of the whole development.
  4. Live | Work component creates job opportunities for seniors. Residential lease would be combined with an operating agreement of the commercial use.
  5. Relatively minor development along Bahia Drive maintains public view planes and creates a memorable vineyard setting that will strengthen SALT and NFH 'brand'.
- E. Planning and Entitlements
1. It is consistent with the competition goals to enhance pedestrian activity via consideration of linkages of trails between the two parcels as well as through the vineyard itself, with a trail 'node' created at the Corner Store intersection with the MAS system trails. The Entitlement process would review collective access agreements as required.



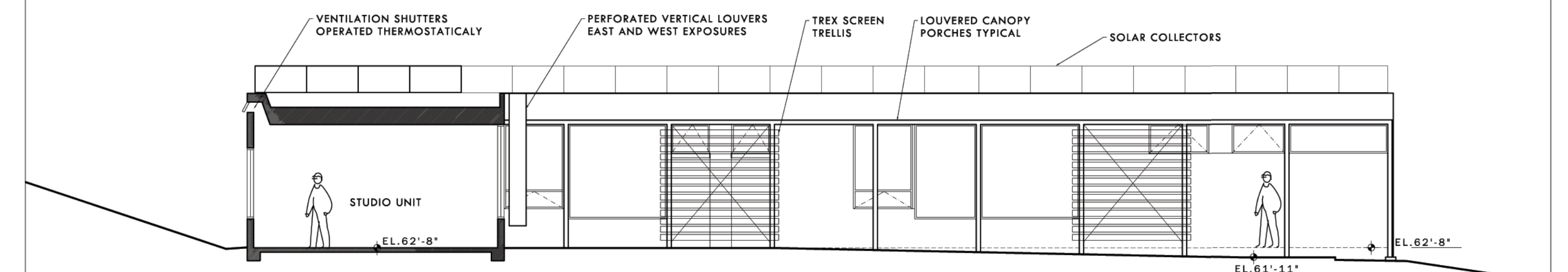
COMMUNITY PLAN

### FLOOR PLANS, ELEVATIONS AND SECTIONS

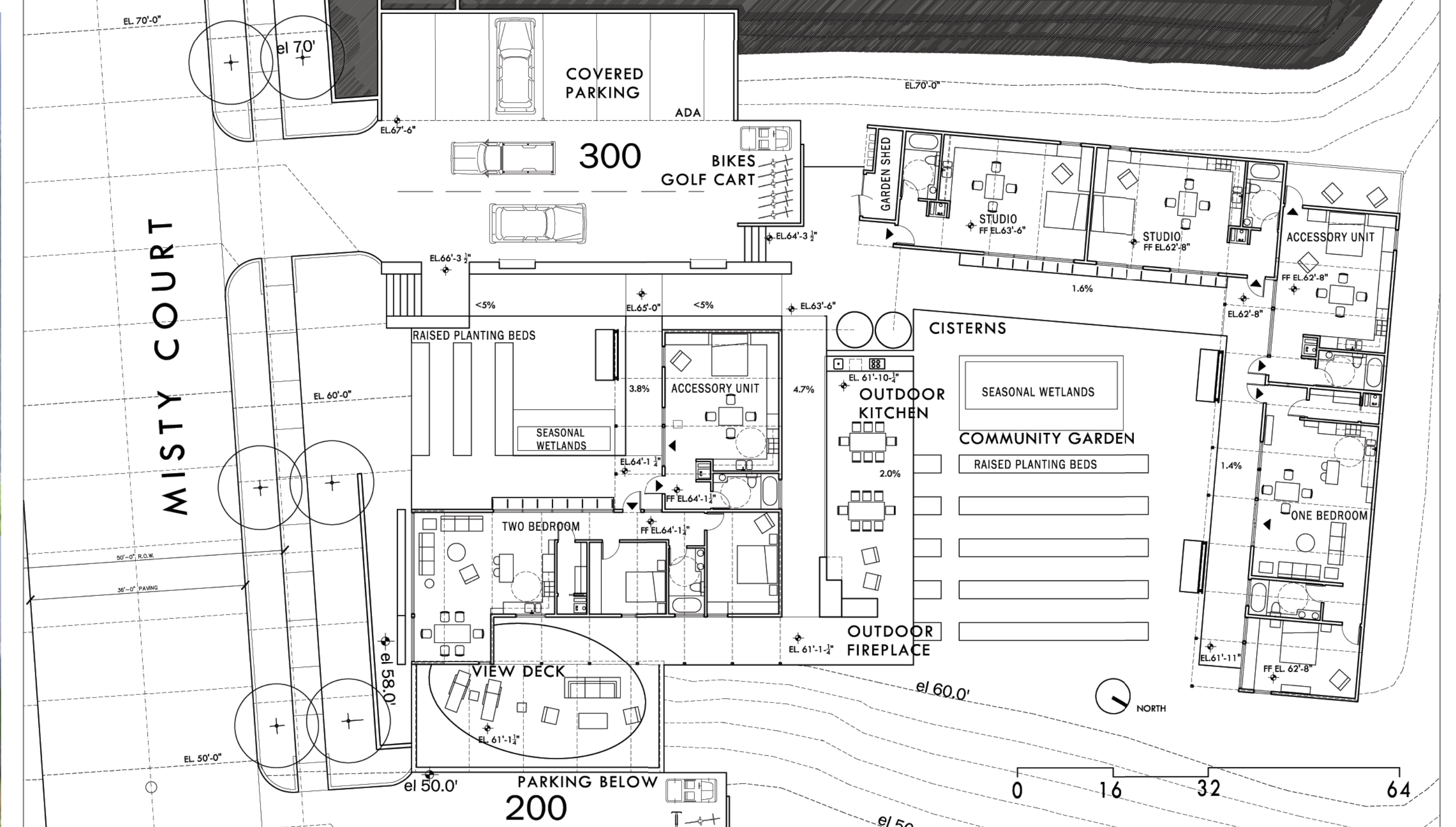
- A. Senior Program
1. The smaller courtyard consists of a two bedroom and an attached Accessory unit. Privacy is maintained under the assumption that the caregiver is serving the occupants of the two bedroom. Internal passage between the two units is optional.
  2. The larger courtyard typically consists of a single accessory unit located between a One Bedroom and a Studio unit. The accessory unit then has the option of being internally linked to either one of those, enhancing the functionality of possible living arrangements. The southern most studio is a 'swing' unit, and is eliminated or present depending on the site geometry.
  3. Additionally, the gardens are intended to be therapeutic, healing and engaging to the senses. Habitat creation around the seasonal wetlands feature further those goals.
  4. All public and private areas are equally wheel chair accessible to other modes of locomotion.
- B. Sustainable Architecture and Construction
1. Resource efficiency includes maximum use of rainwater and graywater collection for non-potable irrigation. Above grade cisterns are for roof collected rainwater, while a below grade cistern is integrated to handle gray water processes at each terrace.
  2. On-site electrical production supports alternatives to fossil fuels via bicycles, electric mopeds and an electric golf-cart ride/share program.
  3. Unit construction is panelized. The units are designed to an eight and four foot module enabling simplified, cost effective construction as well as ease of re-purposing of the panels at a later time. Site walls are constructed of pre-cast concrete panels of a similar module. A Carbon neutral footprint could be considered when considering the construction as 'temporary'.
  4. IAQ is maintained via operable ventilation shutters at the ceiling, while operable hoppers, located close to the floor allow for fresh air.
  5. Construction details, sequence and practices will follow LEED standards.
- C. On-Site Energy Creation and Envelope Design
1. - see Parcel B narrative below. **ZEB and beyond.**



STREET ELEVATION SCALE 1:8



SOUTH ELEVATION SCALE 1:8



TYPICAL TERRACE PLAN SCALE 1:16



PERSPECTIVE FROM MISTY COURT



GARDEN COURTYARD



**PARCEL SITE PLAN B**

**A. Misty Court - Garden Court Terrace Residences**

24 units are divided between five existing terraces.

A typical terrace contains two interlocking garden courts; the smaller oriented to the SW while the larger is oriented to the SE. The two lowest terraces are organized around single, SE oriented courtyards.

Courtyards are designed as accessible, senior friendly gardens with raised planting beds and vertical trellis planting walls. Creation of habitat is desired.

Each of the five terraces contain a public view deck and an outdoor kitchen and fireplace, (wood pellet insert)

Single loaded street enables most efficient handling of automobile with the least amount of dedicated space to auto related paving and driveways.

**B. On-Site Energy Creation and Envelope Design**

Architecture and Landscape are elaborated together and integrated. The productive qualities of the site were simultaneously understood in agricultural and architectural terms. A 'field' of PV arrays organize the roof | sky horizon and are optimized for maximum efficiency and output.

Building Orientation allows all arrays to be within +/- 30 degrees of true South. No shading issues existing and there is the possibility of seasonal adjustment of the array angles to optimize performance.

A majority of the units have Southern exposure. All are designed as models of passive solar efficiency.

The 'skin loaded' energy profile of the residences is addressed via an exoskeleton of vertical louvers, horizontal louvers and deep south facing porches with ceiling screens. Each element is optimized to be porous to winter daylight, while resistant to high angle, summer heat gain. The PV arrays themselves contribute to resisting heat gain on the roof plane.

SHW panels may be integrated with the array as required, though the loads from this particular program are light.

The high initial cost of a 'full' PV option may be mitigated via tax credits, governmental subsidies or lease-back programs from third parties. The tax advantages may be leveraged to partner with third party viticulture experts and/or outsourcing of the vinting and bottling process.

As drawn, the PV area represents about 25-40% of the residential floor area, and depending on the panel specification, could, in theory, exceed electrical demand from the residential use. The single living level requirement of the program integrates well with such a solar harvesting strategy and is appropriate to a 'demonstration' model project that is developing other buildings with mixed uses under single ownership. Moreover, the siting and passive energy strategies employed in the envelope design, warrant speculation on the use of maximizing energy creation technology.

**Conceptual Cost Estimate**

Total square footages		
Residential	22,550 sf @ 200-300/sf =	\$4,510,000 - \$6,765,000
Other	6,200 sf @ 200-300/sf =	\$1,240,000 - \$1,860,000
Community gardens and outdoor kitchens	allowance \$30,000/ea	\$150,000
Misty Street extension	allowance \$100/lf x 443lf =	\$44,300
Vineyard +/- six acres	first year allowance @ \$9,000/acre (Soils prep, Irrigation, Trellis, plants)	\$54,000
Utility connections - Bahia Drive	allowance \$ 50 lf x 1,200 lf =	\$60,000
Subtotal		\$6,058,300 - \$8,933,300
professional services fees 9%		\$545,247 - \$803,997
Contingency @ 15% of subtotal		\$908,745 - \$1,339,995

**Total Project Cost \$7,512,292 - \$11,077,292**



ARIAL VIEW OF TWO TERRACES



**PARCEL SITE PLANS**

SCALE 1:50



**A**



**PARCEL SITE PLAN A**

**A. Corner Store | Live-Work**

Live | Work component creates 'Mom and Pop' model for active seniors. Residential lease would be combined with an operating agreement for the store. A Single bedroom unit type includes an attached Accessory Unit for a future or current caregiver.

**B. Mixed Use: Visitor's Center, Live | Work and Viticulture**

A landmark mixed-use building is locate at the high point of the site at the edge of a newly created vineyard; a clear and public presence that furthers goals of SALT and NFH.

A majority of the landscaped terraces could be 'restored' with 'cut' material from the Misty Drive road excavation, eliminating unnecessary terraces and reverting the site to a more 'natural' state.

The building is conceived as a split section, with housing and the visitor's Center on the upper level, with a tuck-under barn for tractors, tractor implements, and scales below. Auto entrance for the upper use is 'uphill' from agricultural vehicular access at a lower terrace.

Live | Work component creates job opportunities for seniors. Residential lease would be combined with an operating agreement of the commercial use. A Single bedroom unit type includes an attached Accessory Unit for future or current caregiver at the level of the Visitor's Center. An elevator from the barn level is anticipated in the split level section.

It is assumed that vinting and bottling of wine would be outsourced by others. SALT should consider partnering with those able to provide the service and label the wine as there own brand - appellation TBD - with distribution and sales from the Visitor's Center.

Stage Two of the design competition will address the above architecture and site issues in greater detail. To be continued...

**UNIT SUMMARY**

	Misty Court - Parcel B	Bahia Rd - Parcel A
	(4) 2 bedroom units (5) 1 bedroom units (7) Studio units (8) AU's 24 units	(2) 1 bedroom units (2) AU's 4 units
<b>Parking</b>	Auto: 24 regular 2 guest spaces 19 covered spaces, 13 min. 5 ADA spaces Bikes 24 regular Electric 5 - one each terrace Carts	4 residential regular + public parking associated w / Corner Store + Vineyard Visitor Center and Hospitality
<b>Residential Totals</b>	(4) 2 bedroom units (7) 1 bedroom units (7) Studio units (10) AU's <b>28 units</b>	4 x 1,250 gsf = 5,000 gsf 7 x 1,000 gsf = 7,000 gsf 7 x .650 gsf = 4,550 gsf 10 x .610 gsf = 6,100 gsf <b>total residential SF = 22,550 SF</b>
<b>Additional Buildings and Structures</b>	1. (5) Five Gardening Sheds @ 100 sf/ea 500 sf 2. (5) Bike and Golfcart ports @ 190 sf/ea 950 sf 3. (5) Outdoor Kitchens 4. Visitor's Center Large Room, Shop, Exhibits 2,000 sf (2-3) Offices, WC's, and Kitchen 500 sf Circulation 10% 250 sf Total 2,750 sf 5. Tractor Barn and Viticulture support 1,000 sf 6. Corner Store 1,000 sf	<b>Total Additional Program 6,200 SF</b>