

L BROWN RANCH

Focus Team: Natural & Built Sustainability

Date and Location: Tuesday, February 8, 2022 – Community Center

Estimated Attendance: 25

Guiding Questions:

- What are the most critical sustainability elements that should guide the planning of Brown Ranch?
- What unique opportunities exist at Brown Ranch that could help this project be a national model for sustainability?
- Which sustainability measures have a cost impact, either negative or positive?
- What role does Sustainability play in:
 - Health Equity?
 - Sustainability?
 - Project Economics?
 - Infrastructure?

Public Input:

Equity

- Concern about maintaining affordability in perpetuity. Consider bringing in manufactured home facility to region?
- Every family deserves a place to live. Dignity and pride should be shared. Equity is important. All housing developed at Brown Ranch should be high quality.
- How do we build Brown Ranch so community is sustained? Reduce transience.
- Support housing mobility!! Provide diversity of housing products and diversity of housing products.
- Demand: housing is an issue all the way up the AMI scale.

Resiliency

- Resilience
 - Fire resilience: defensible space, xeriscaping, fire resistance construction.
 - question about whether we want lawns or decorative plants. We can reduce risk of wildland fire by eliminating decorative plants.
 - Research best practices re fire resilience –how do we build houses and engineer utility to prevent houses from catching each other on fire.
 - Resilience hub.



BROWN RANCH

- Maintain existing environment as much as possible and build houses that are compatible with it (this is not an environment that should have trees bc it is a natural shrubland) – interplay with urban design
- Community garden/greenhouse ... build resilience with less reliance on outside sources.

Energy

- Community solar array.
- Consider geothermal heating/cooling (ground source heat pumps?).

Transportation

- Transportation: reduce vehicle miles traveled; reduce single occupancy vehicles. (consultant comments)
- Connected, efficient trails (multi-modal)
- What public transit options are on the table?
 - Gondolas?
 - Electric autonomous shuttles?
 - Brown Ranch transportation hub.
- Consultants introduced the concept of car sharing.
- Build planned services to reduce vehicle miles travelled – overlap w/non-residential demand
- How do we prioritize and incentivize e-bikes?
- Less emphasis on parking lots, driveways, etc.

Design

- Building performance is critical: Home must be affordable for the lifetime of the building, not just during construction.
- Identify “meaningful open space” (provides ecosystem services and is contiguous).
- Snow storage: consider piling snow in Slate Creek.
- Consider strategies to reduce Heat Island Effect: tree planting & landscaping, reflective roofs, minimize pavement.
- Consider how we minimize parking (pavement) especially in commercial spaces. Consider underground parking? Don’t use asphalt?
- Parking under houses!
- Avoid sprawl.
- Consider minimizing # of single family homes (maximize density)
- Design for multimodal transportation & walkability.
- Opportunity to re-envision housing for the future. Need to question traditional values re: housing (lawns, big SF homes, etc.)
- Design for passive solar energy.
- Consider principles of beauty. Design that is pleasing and cultivate a sense of peace.



Water

- Concerns about runoff. Consider using pavers and cobblestone on roads to prevent run-off (green infrastructure).
- Water conservation. – 30% water loss from evaporation on landscaping.
- Opportunity for rainwater harvesting?
 - Legal in CO but only for outdoor purposes.
- Grey water conservation (new comment).

Other:

- Look at examples: Lowry (collaborative, communal open space); RMI solar arrays used as shade shelters
- No matter how well it's done, the construction of this community is not going to offset its impact on the environment.

Decisions: N/A

Next Steps and Action Items:

Task 1: Create a high-level Vision & Principles Statement for Natural & Built Sustainability to guide Brown Ranch, that supports the overall Brown Ranch Vision & Principles.

Task 2: Outline specific recommendations to YVHA for the approach to Natural & Built Sustainability to inform an integrated Brown Ranch Program to be created by March 31st. Identify specific recommendations that should inform the conceptual planning, and items that should be studied in future design phases. Identify key metrics to measure success.

YVHA FOLLOW-UP FOR WEEKLY REPORT

Resources needed from technical consultants for next meeting

Necessary Cross-Collaboration w/other Focus Teams:

- Infrastructure – explore viability of geothermal energy & solar array
- Demand – Commercial and civic services at Brown Ranch will minimize vehicle trips
- Urban Design – Connect w/Sustainability Team for ideas on snow storage, trails, and meaningful open space. Design high-density, walkable neighborhoods that foster community connection. Design for multimodal transportation with as little use of pavement as possible.
- Economics – Evaluate the “lifetime cost” of development vs. one-time cost to build.
- Stakeholders/Policy – Explore the barriers to implementing graywater system.