



MHTN
ARCHITECTS

FINDING COMMON GROUND

CONSENSUS BUILDING IN GRAND COUNTY

PRESENTORS



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Planner & Architect



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+

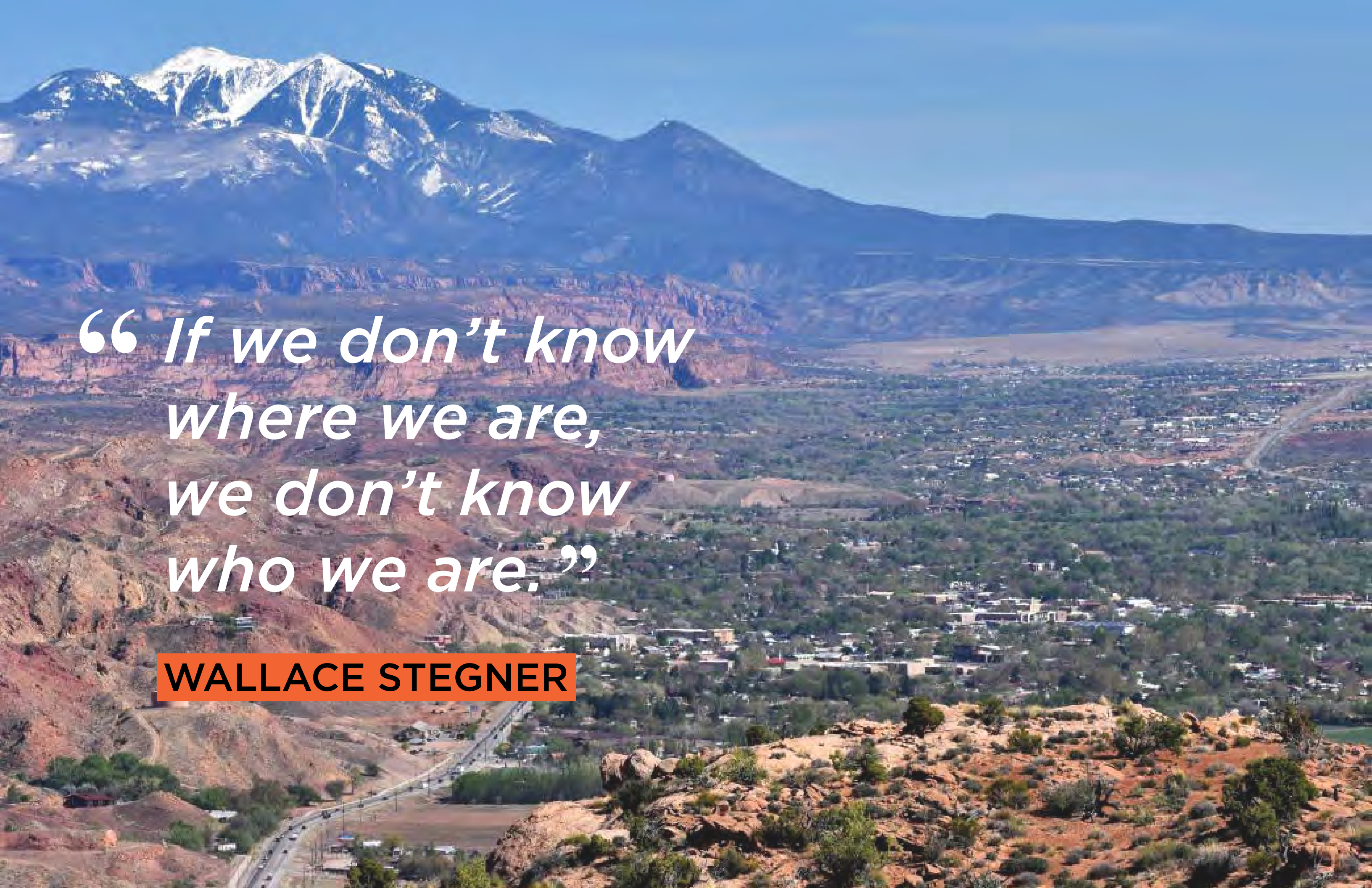
PANELISTS



LIANNA ETCHBERGER
USU MOAB
Director



KARLA VANDERZANDEN
CANYONLANDS FIELD INSTITUTE
Founder



*“ If we don’t know
where we are,
we don’t know
who we are.”*

WALLACE STEGNER



NORTH

NORTH AB

MOOSE JAW

GRAND JUNCTION



CANYONLANDS FIELD INSTITUTE

MOAB VALLEY MULTICULTURAL CENTER

BEACON AFTERSCHOOL PROGRAM

SOUTHERN UTAH WILDERNESS ALLIANCE

MOAB BEE INSPIRED GARDEN INITIATIVE

MOAB FOLK FESTIVAL

GRAND AREA MENTORING

WABISABI

YOUTH GARDEN PROJECT

MOAB FREE HEALTH CLINIC

SEEKHAVEN FAMILY CRISIS AND RESOURCE CENTER

YOUTH ROCK CAMP

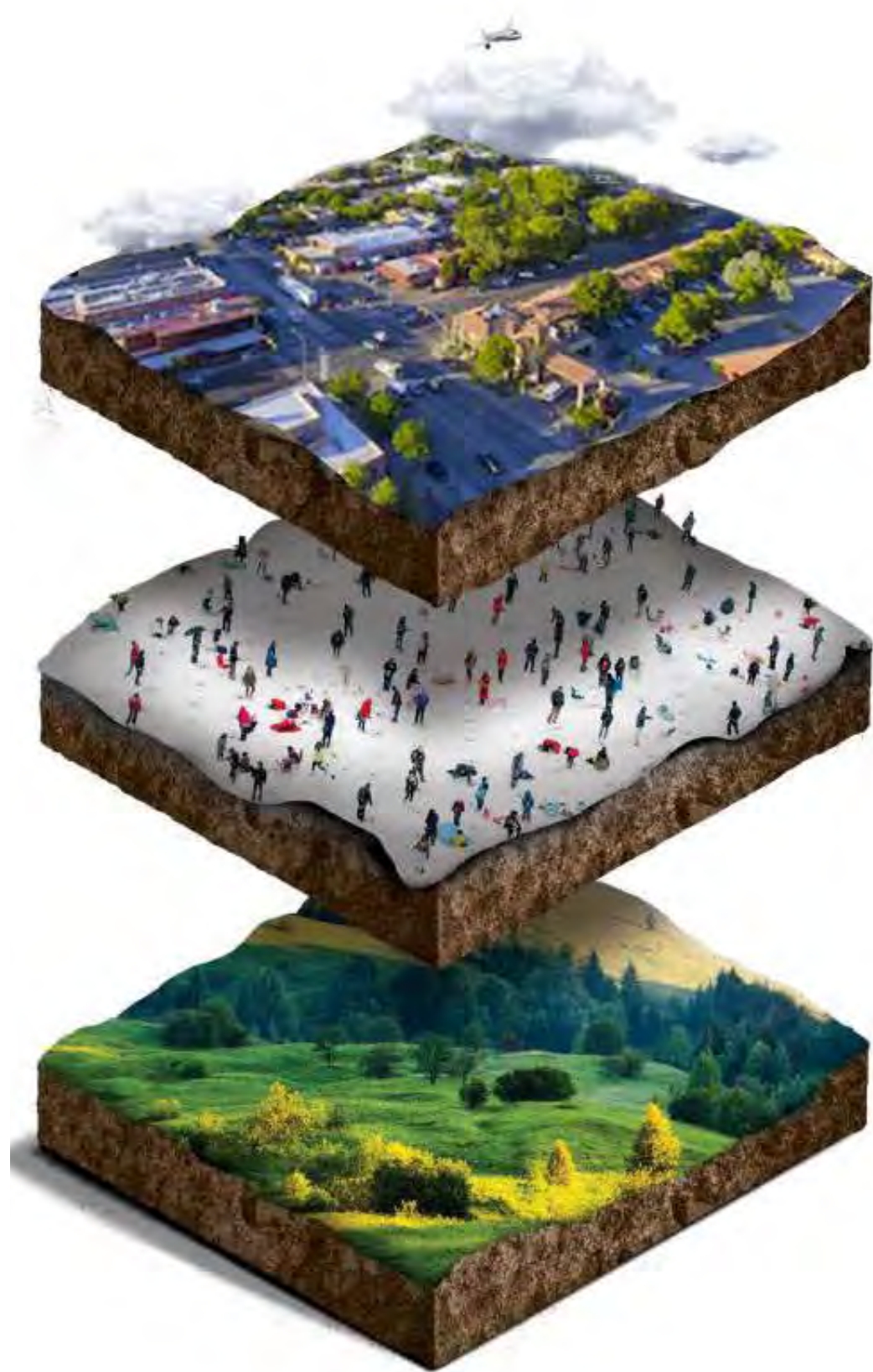
COMMUNITY REBUILDS

NON-PROFIT ORGANIZATIONS

CANYONLANDS COMMUNITY RECYCLING

RURAL UTAH CHILD DEVELOPMENT HEAD START

ABOUT 75



BUILDING



PEOPLE

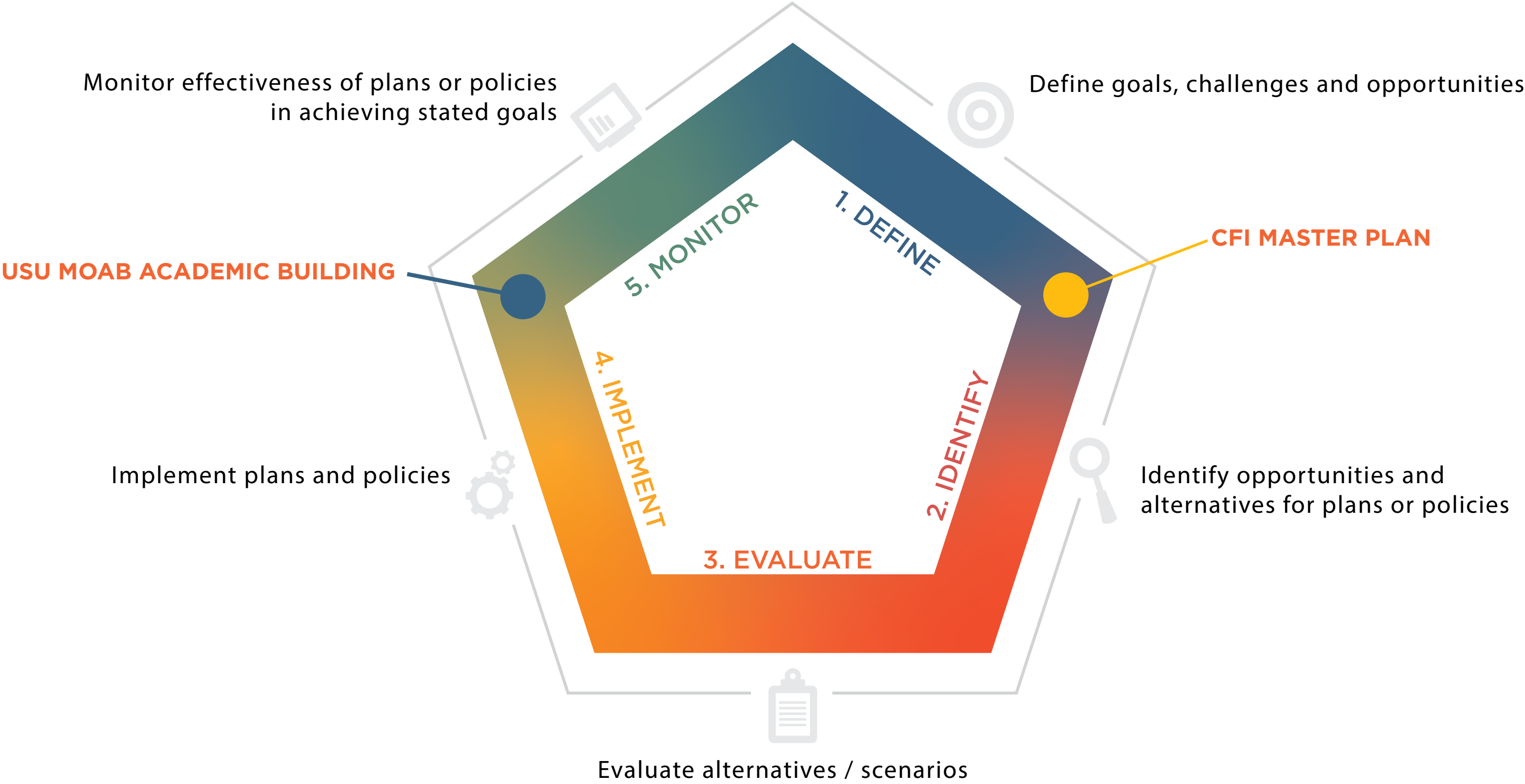


LAND



MASTER PLAN

WHAT IS THE PROCESS FOR CREATING THE MASTER PLAN?

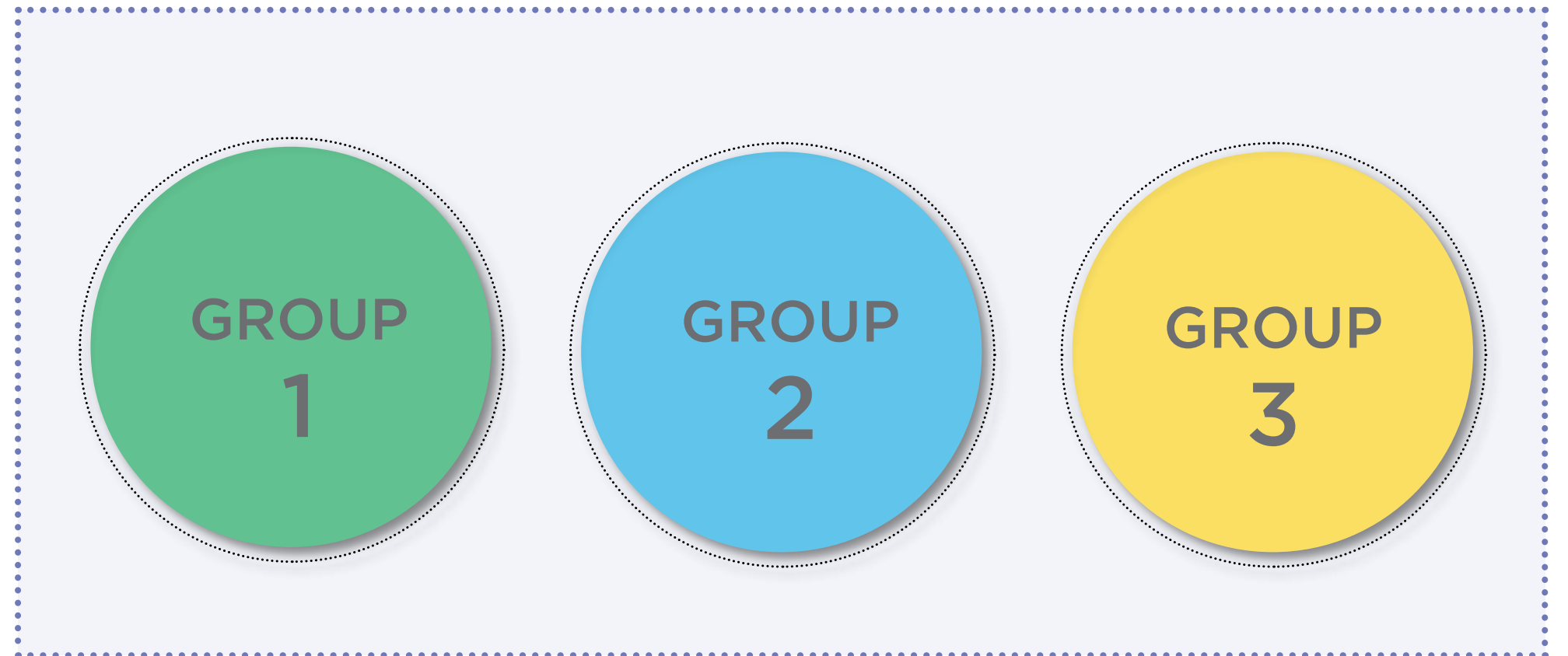




HOW TO BUILD CONSENSUS?

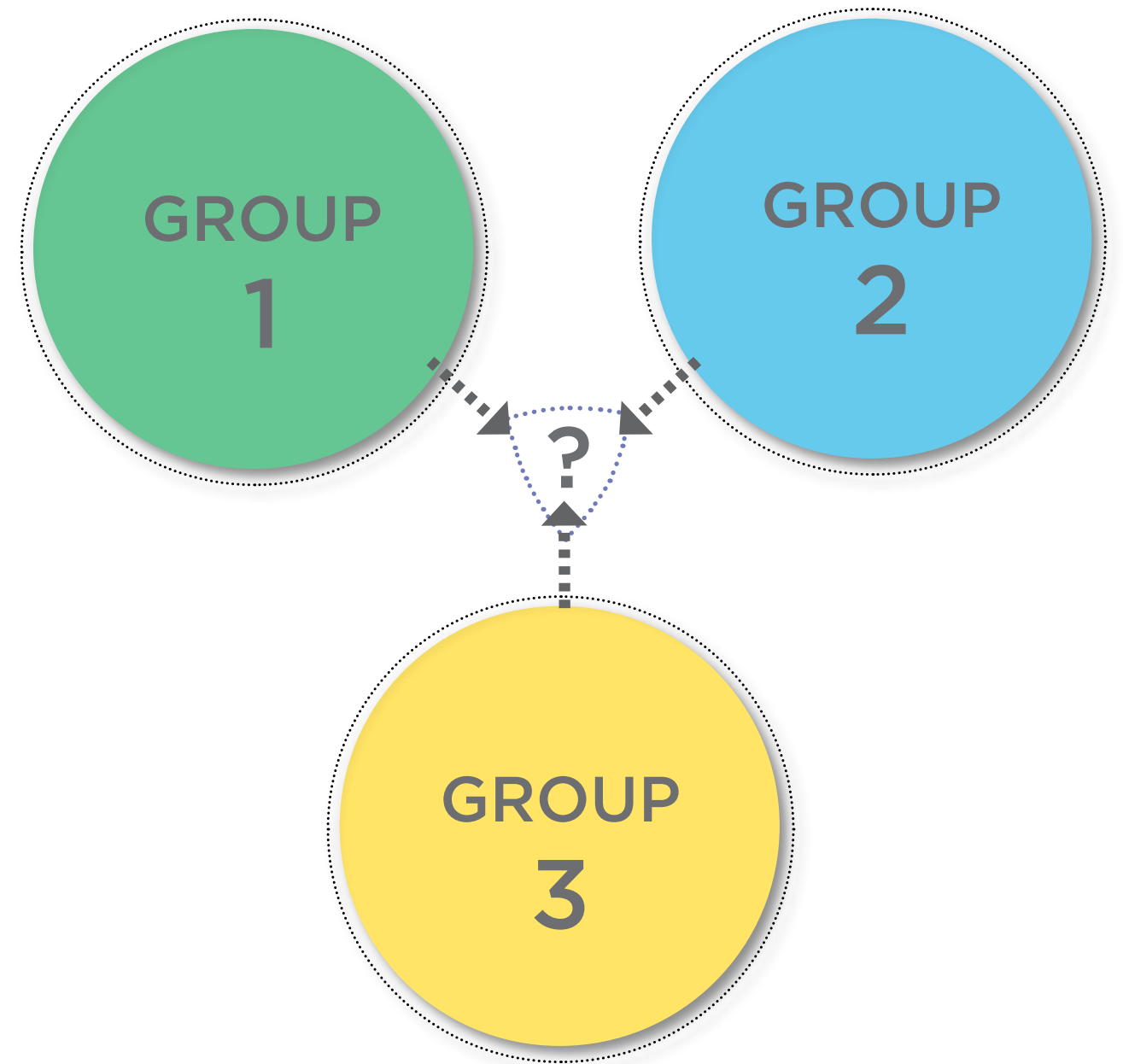
HOW TO BUILD CONSENSUS?

1 *COMMUNICATE PROJECT
PARAMETERS*



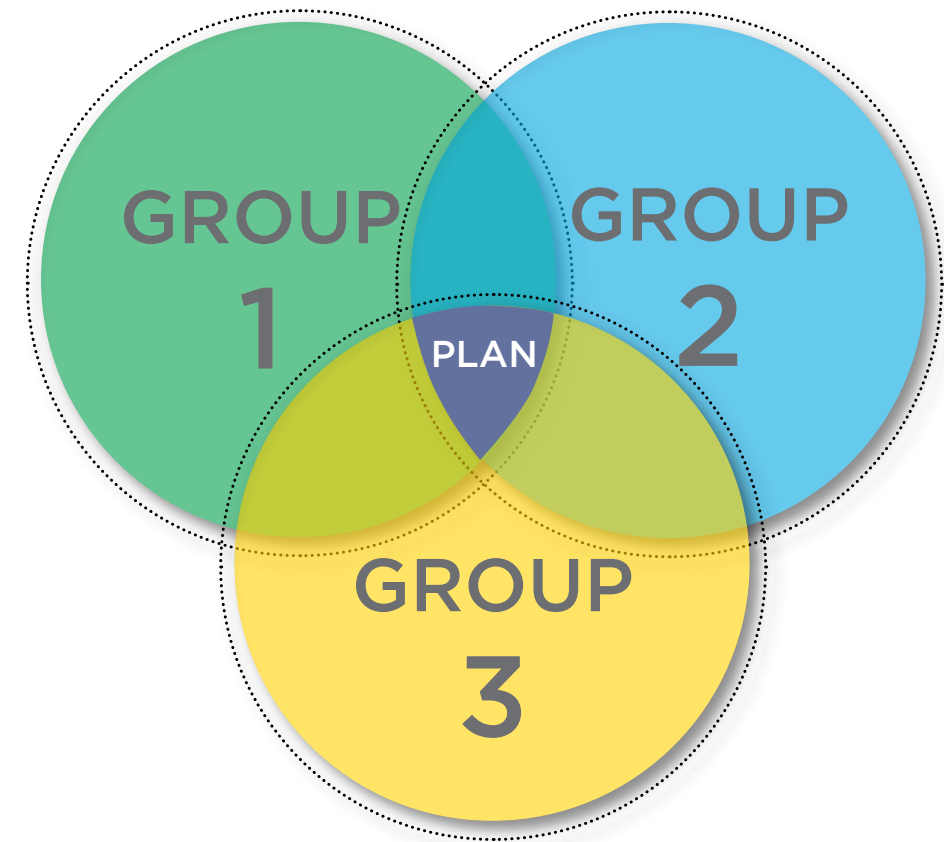
HOW TO BUILD CONSENSUS?

2 *SEEK TO UNDERSTAND DIFFERENT PERSPECTIVES*

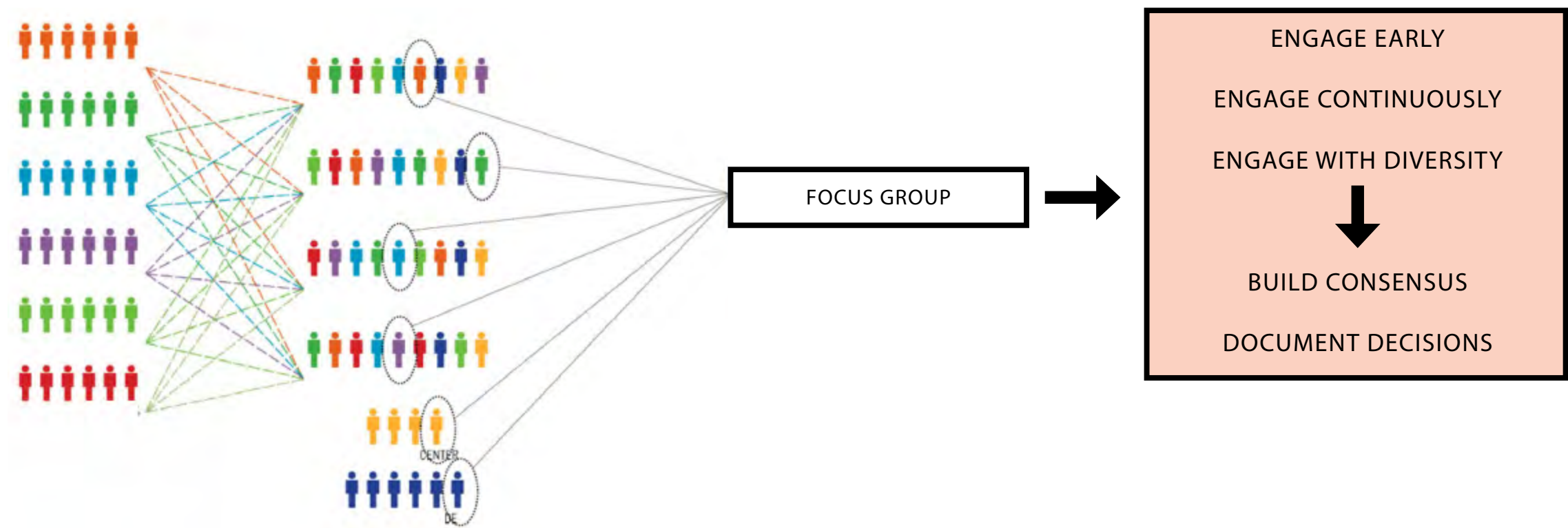


HOW TO BUILD CONSENSUS?

3 *FACILITATE DISCOVERY OF COMMONALITIES*

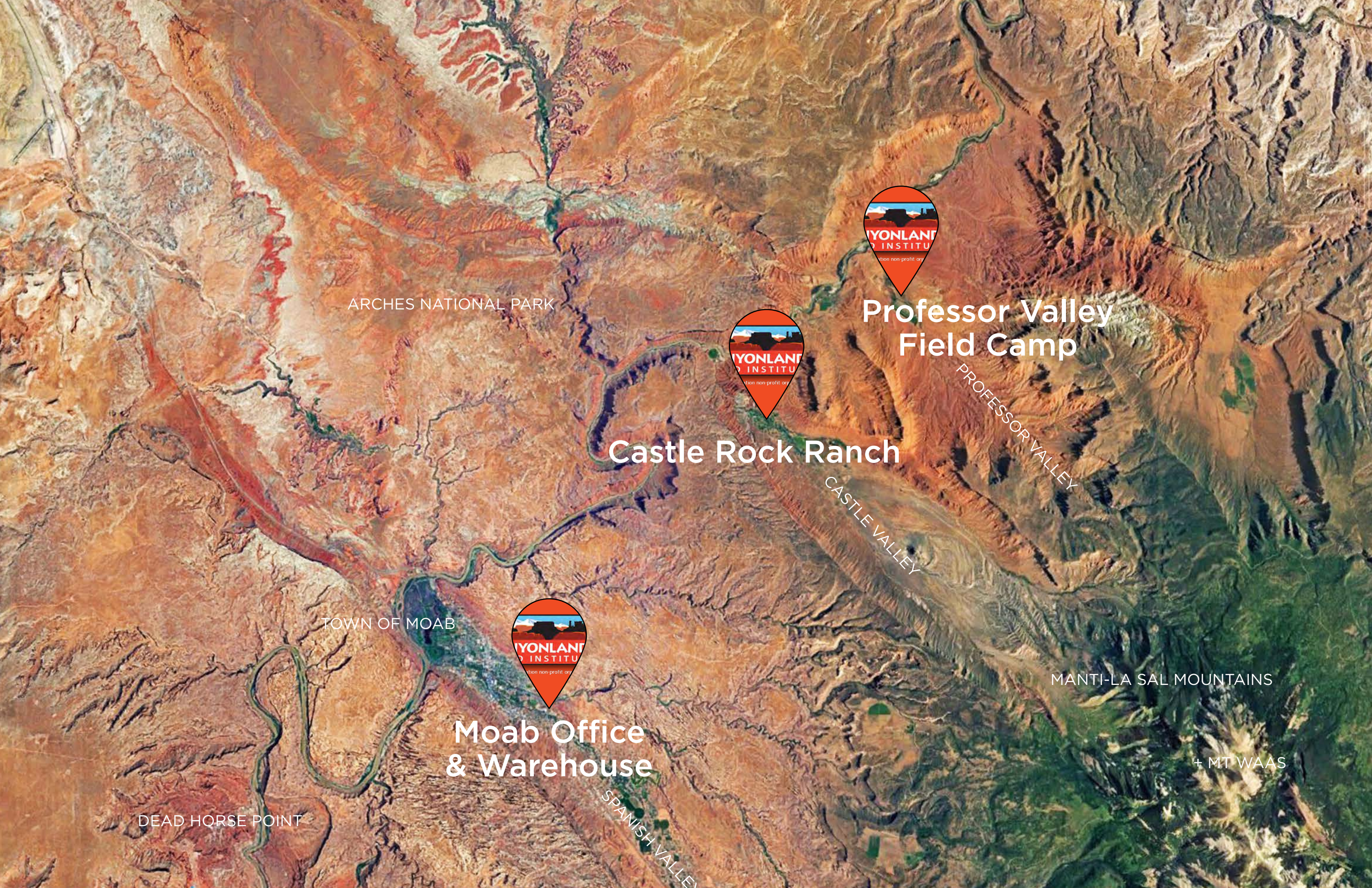


INTEGRATED DESIGN





CANYONLANDS FIELD INSTITUTE



ARCHES NATIONAL PARK



Professor Valley
Field Camp



Castle Rock Ranch

PROFESSOR VALLEY

CASTLE VALLEY

TOWN OF MOAB



Moab Office
& Warehouse

MANTI-LA SAL MOUNTAINS

+ MT WAAS

DEAD HORSE POINT

SPANISH VALLEY





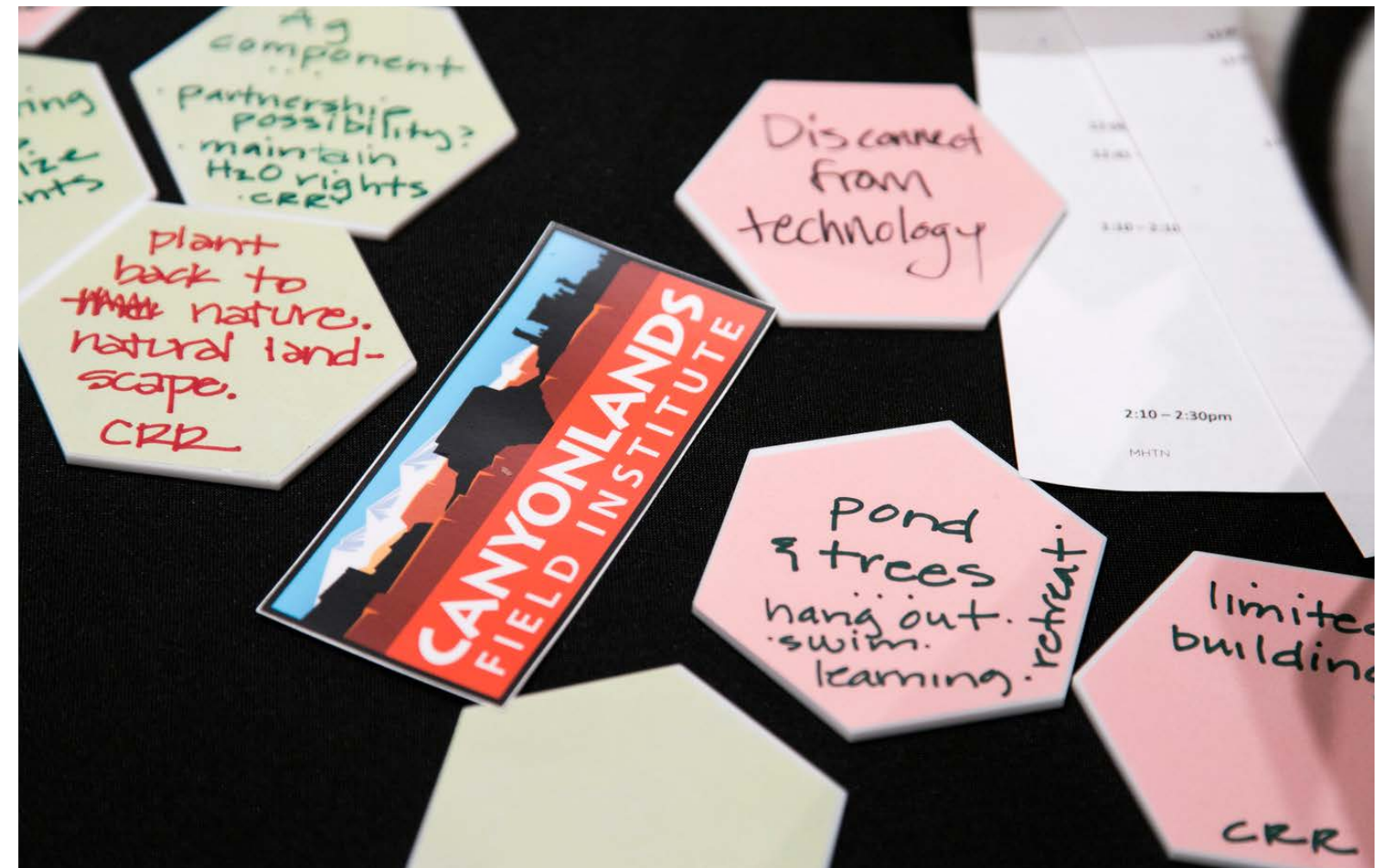
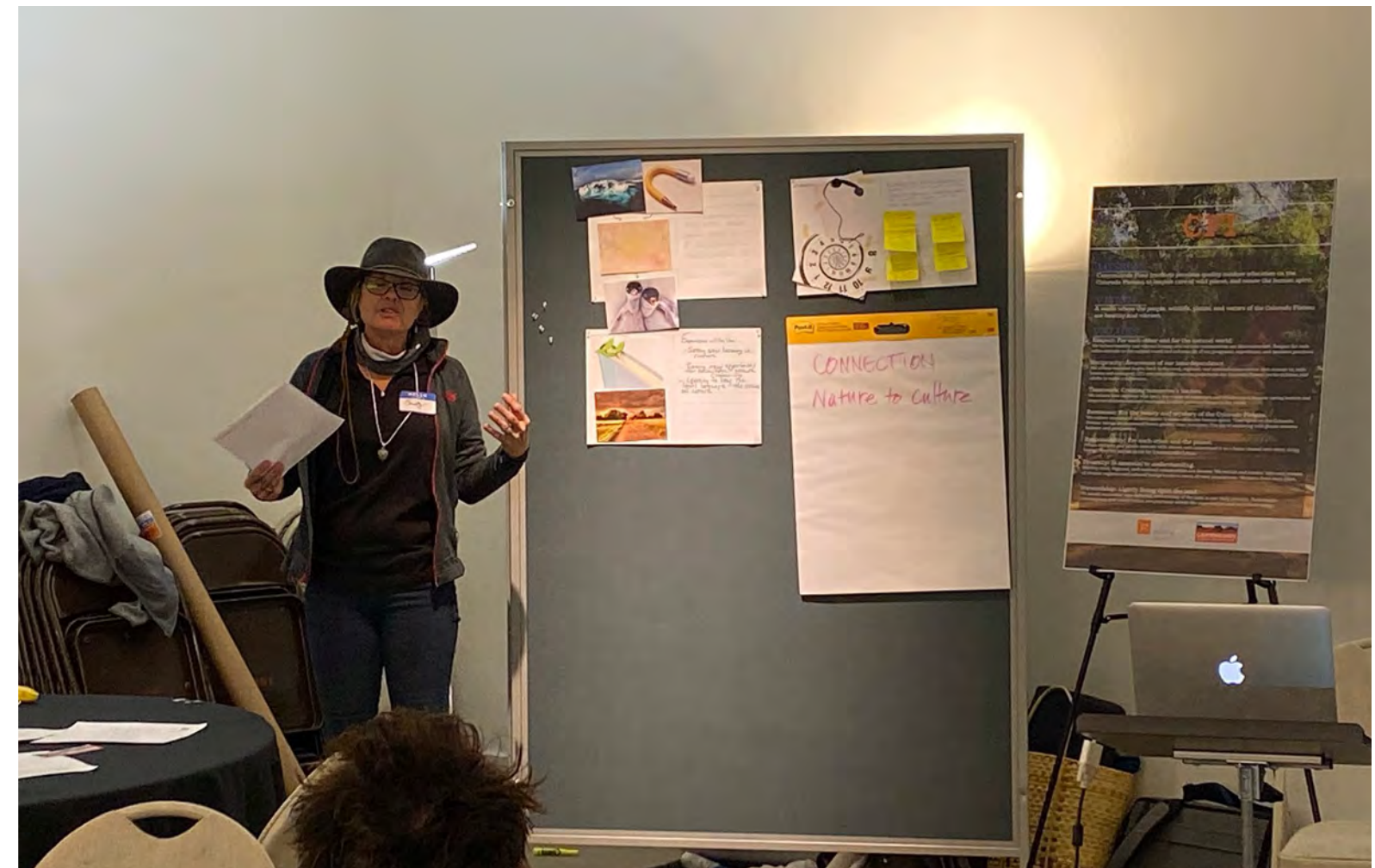
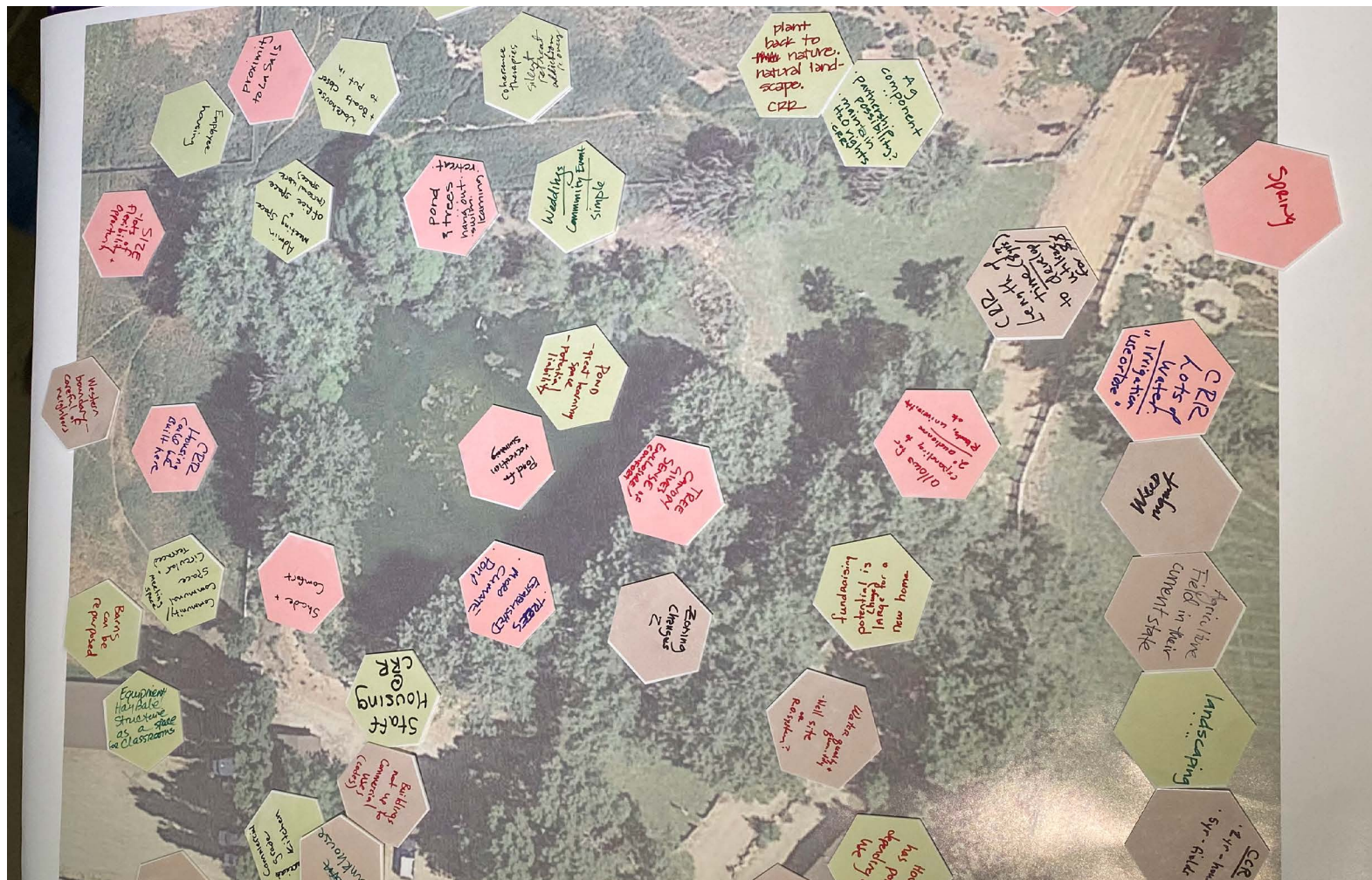


PROFESSOR VALLEY FIELD CAMP

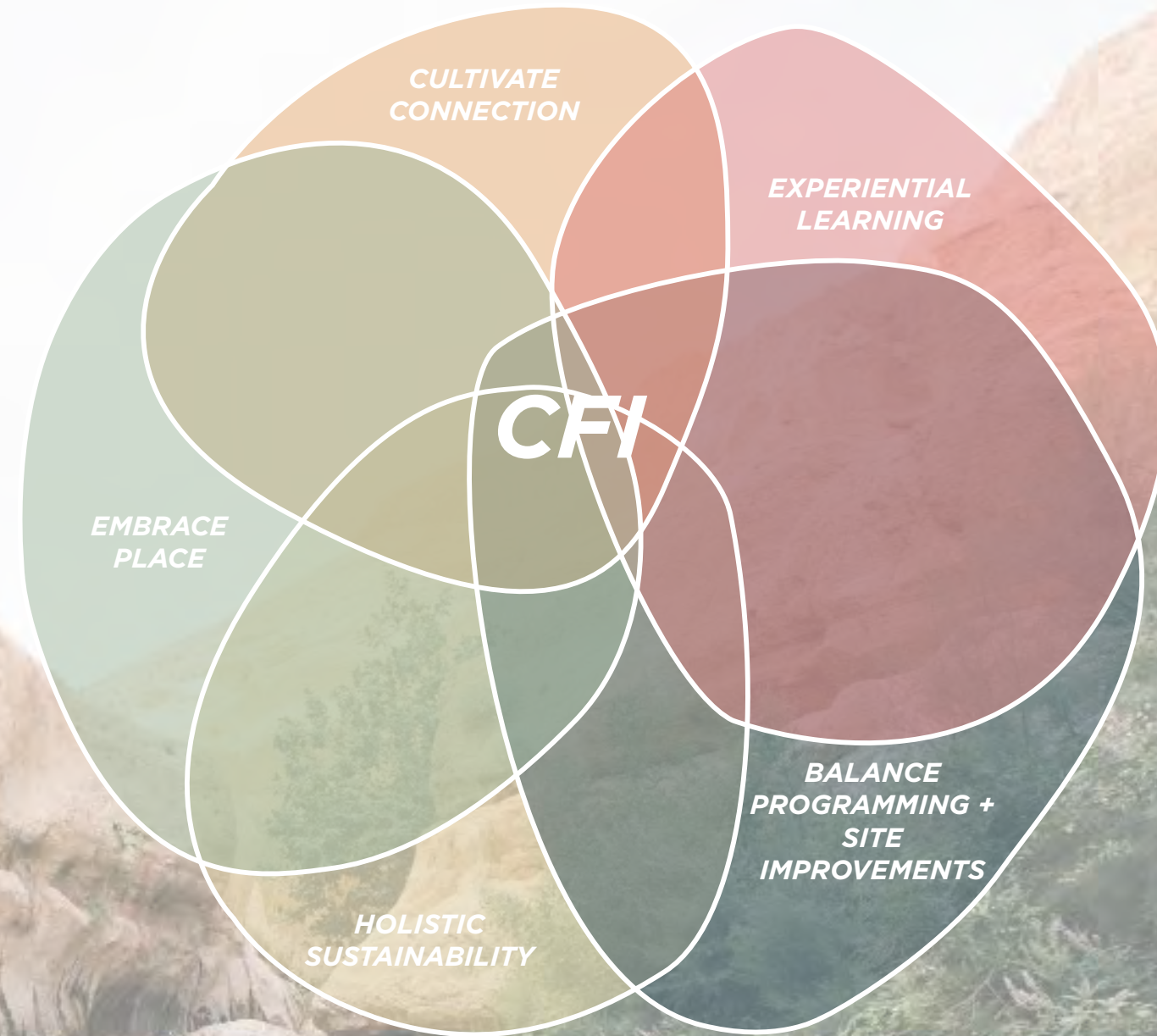


CASTLE ROCK RANCH

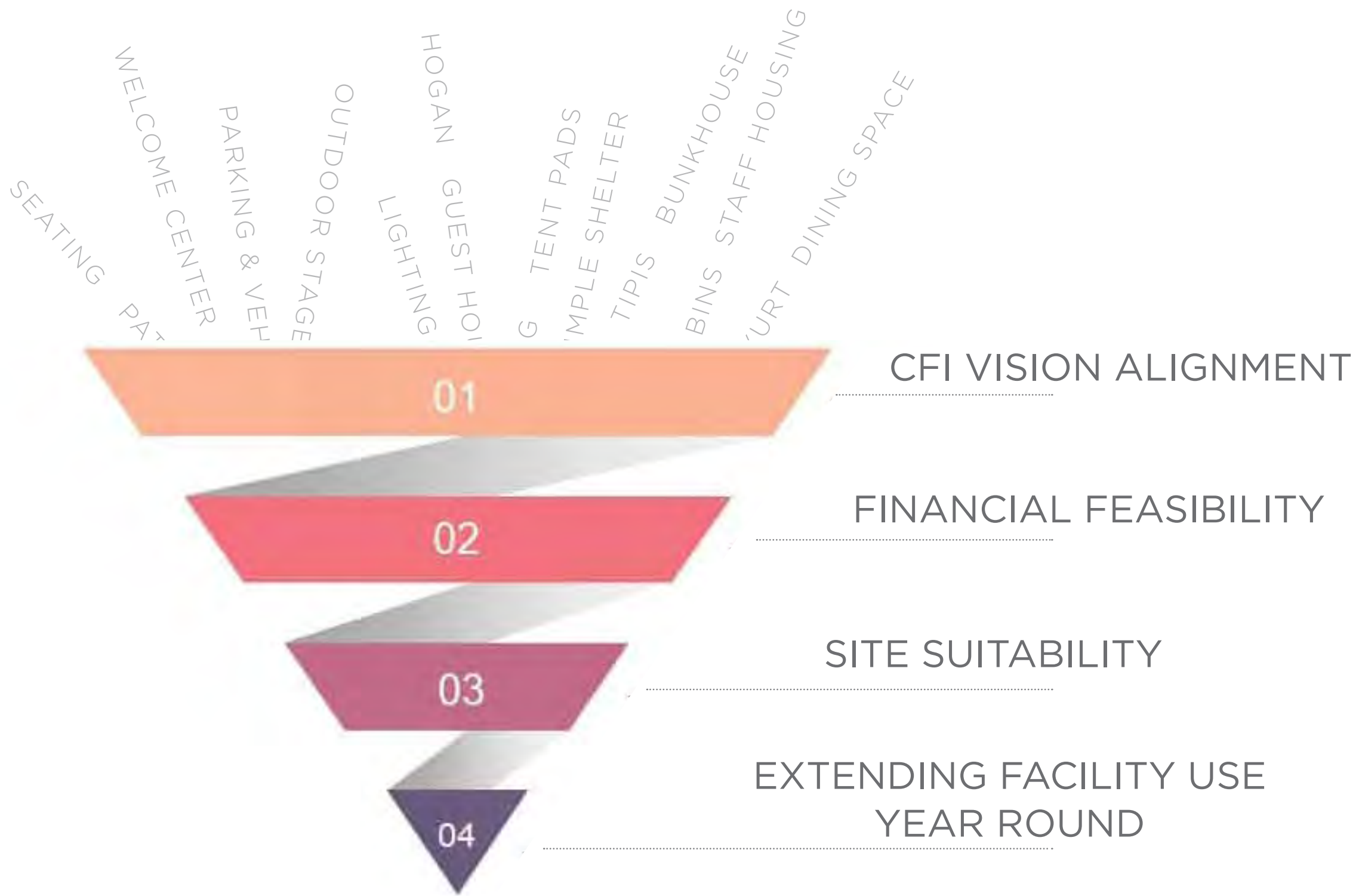




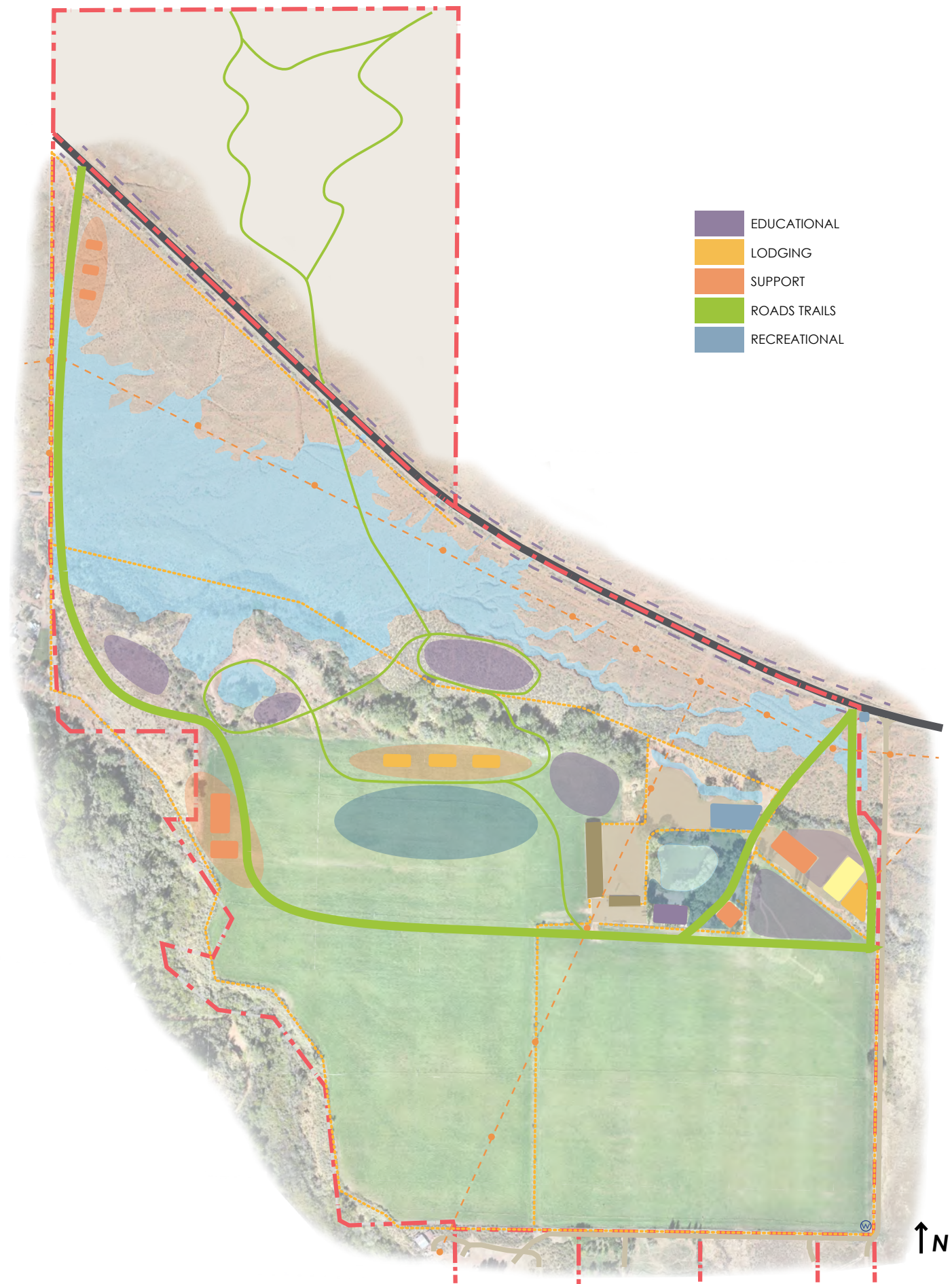
Touchstones



IDEAS FOR PROGRAMS & IMPROVEMENTS

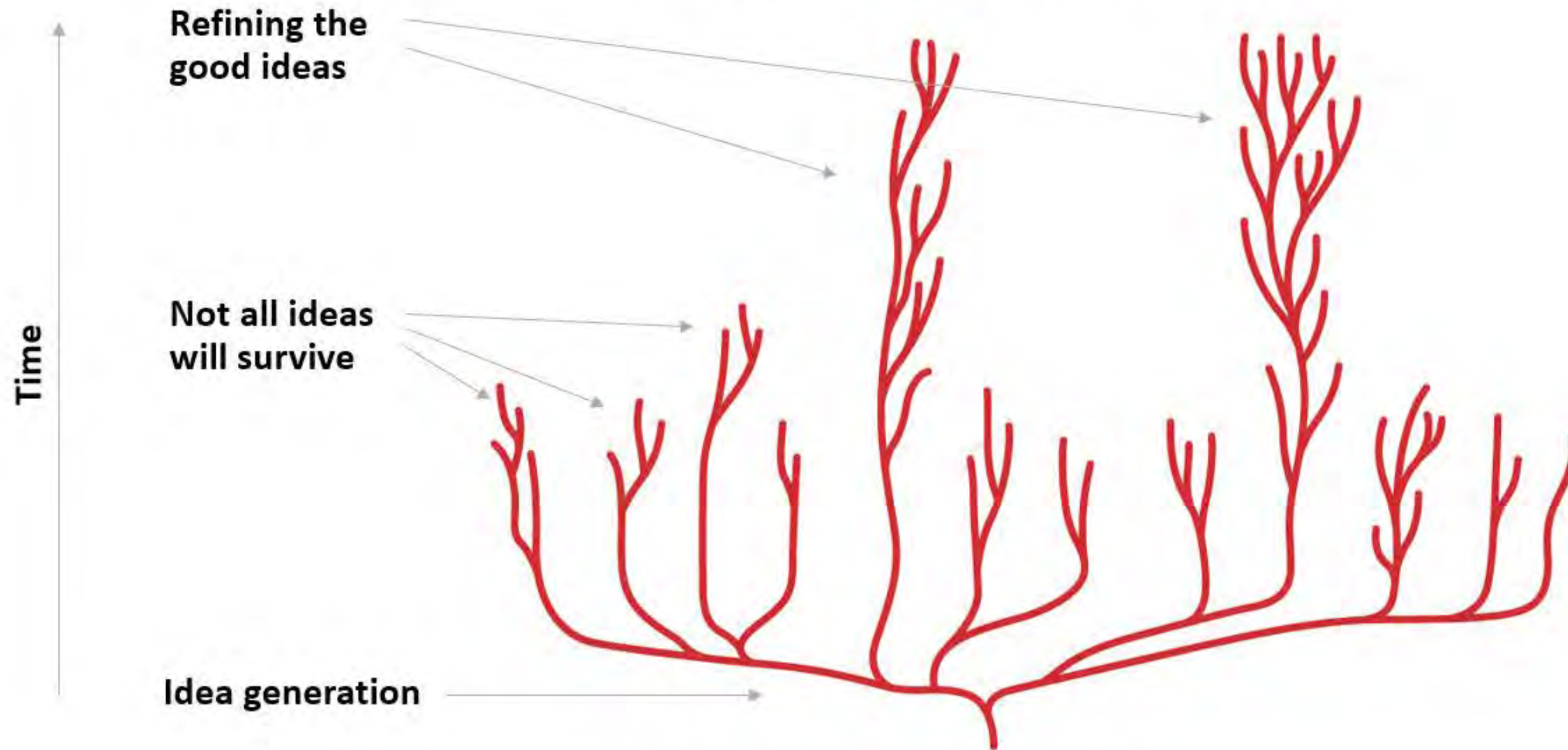


CFI MASTER PLAN



CASTLE ROCK RANCH

Where We're Going



Where We Are Now

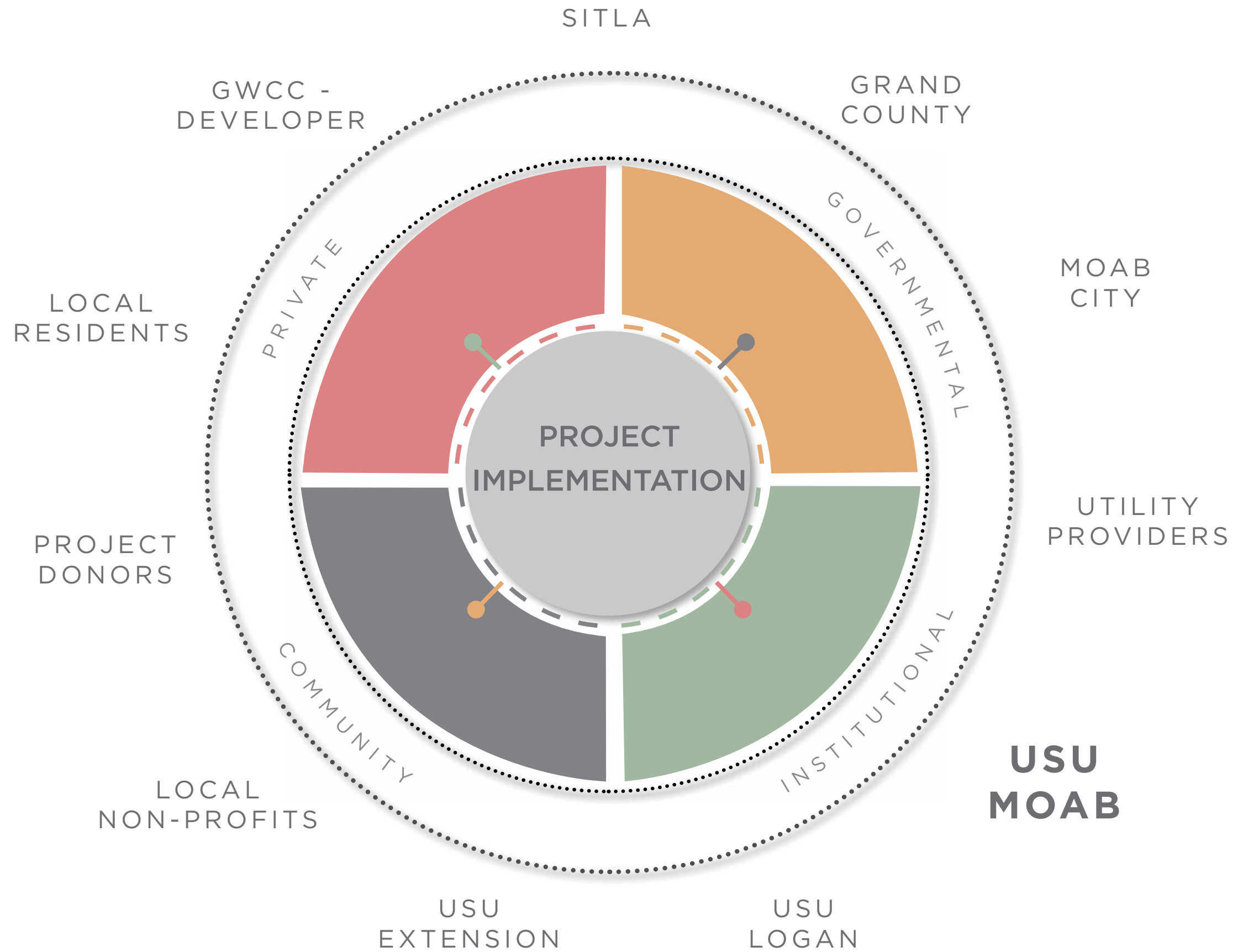


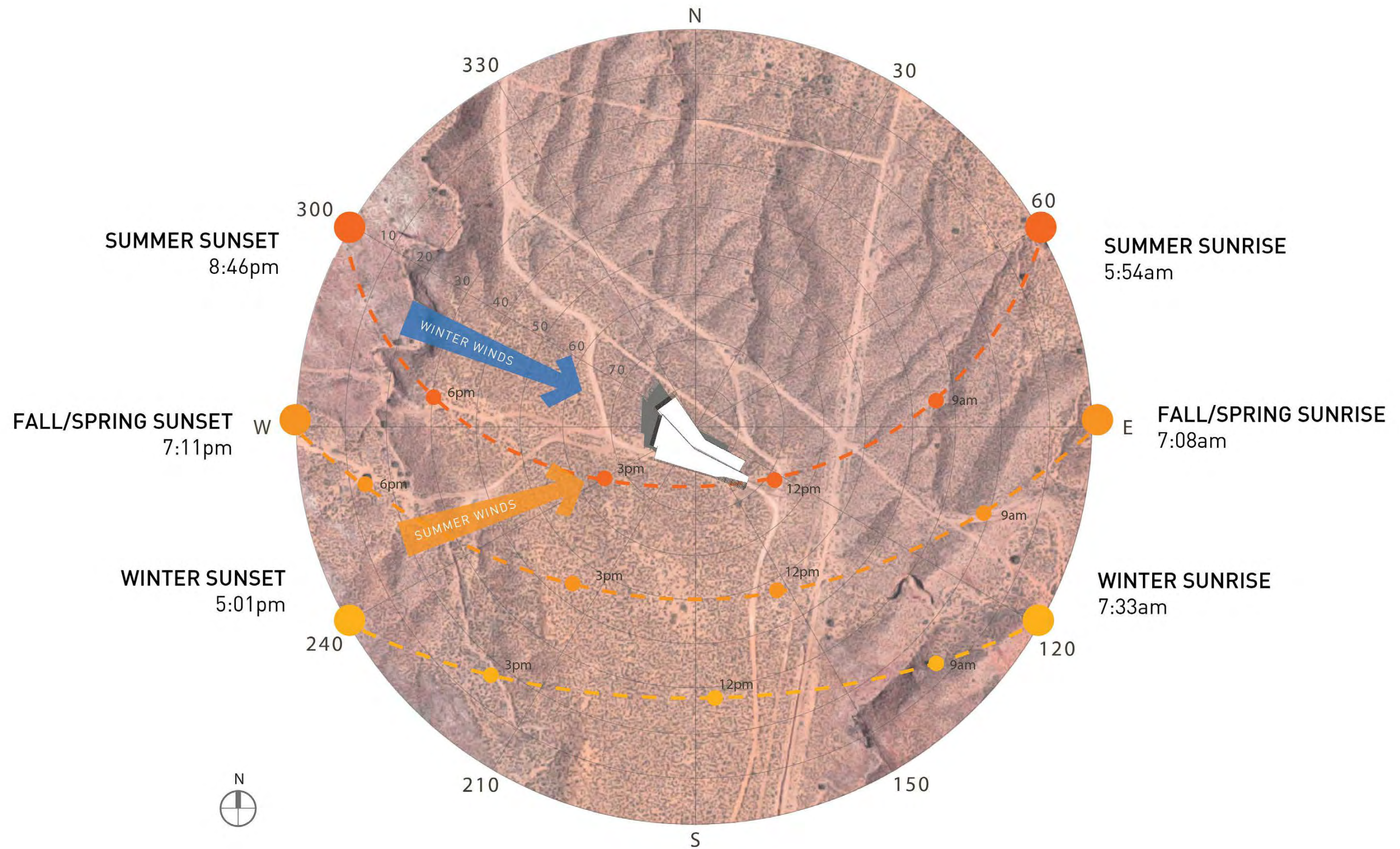
HWY 191

SITE



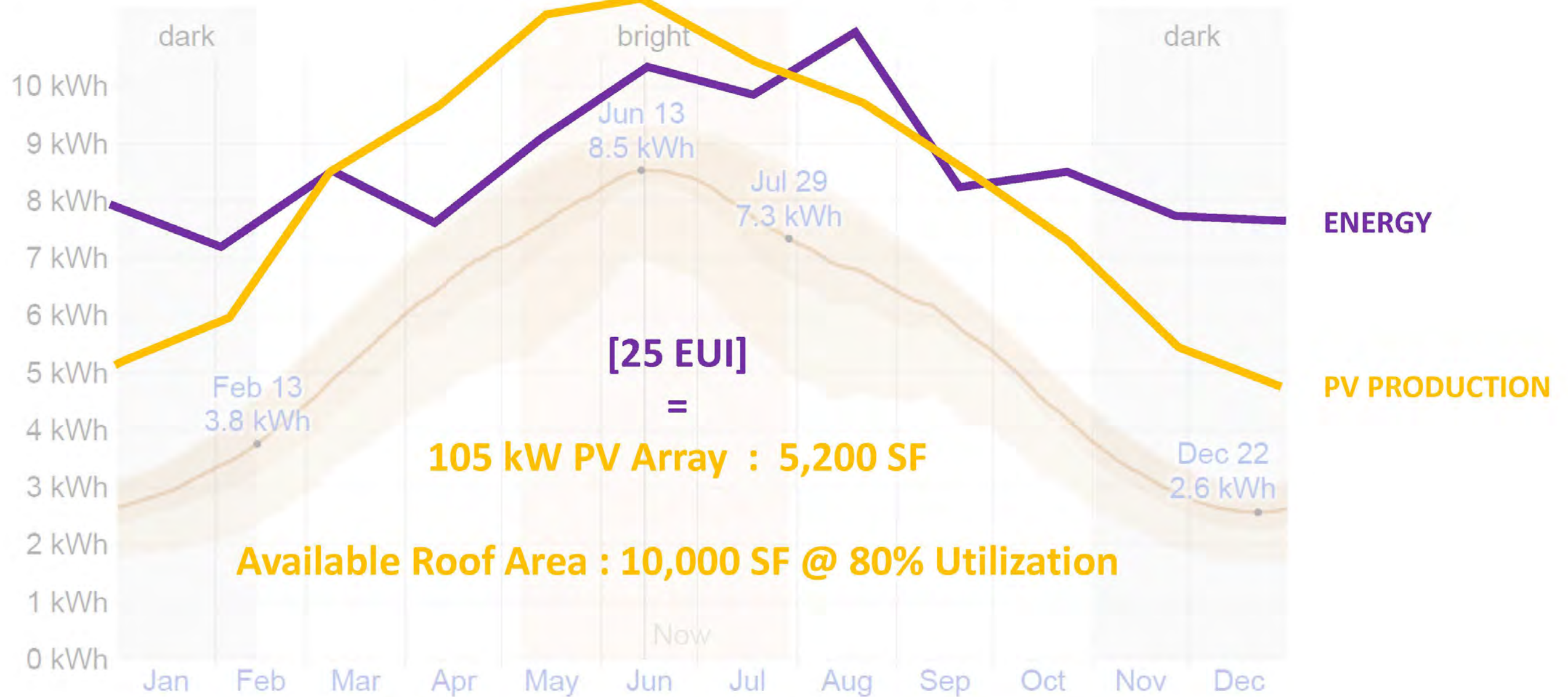




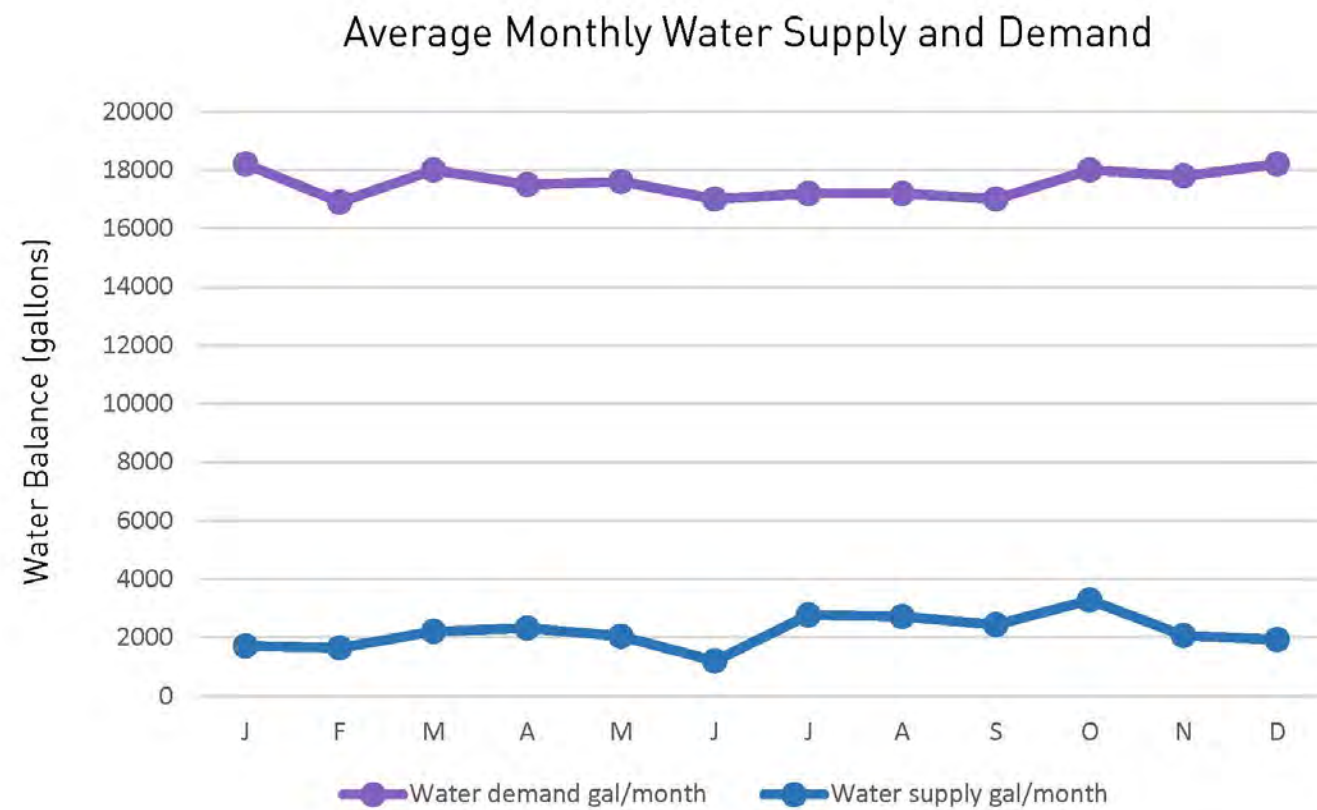
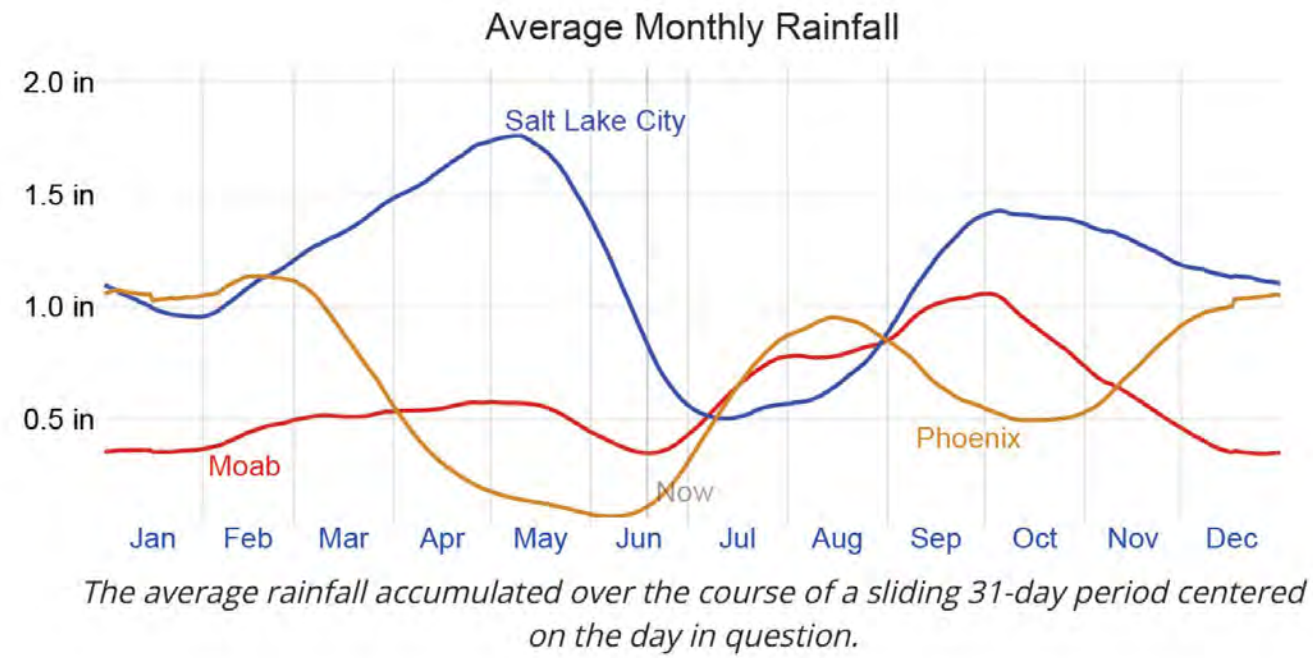


2019

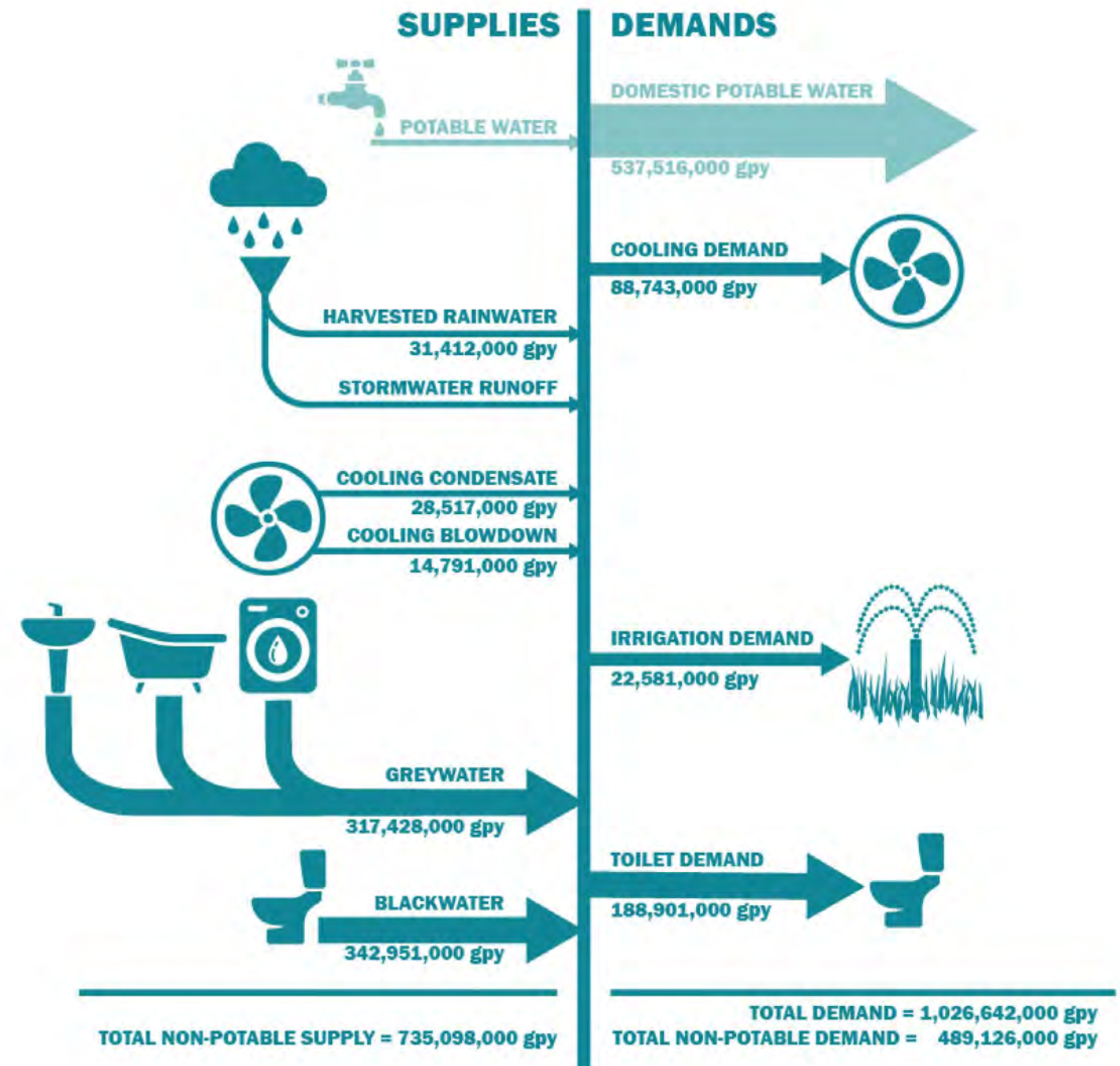
Average Weather in Moab, Utah, United States, Year Round - Weather Spark



The average daily shortwave solar energy reaching the ground per square meter (orange line), with 25th to 75th and 10th to 90th percentile bands.



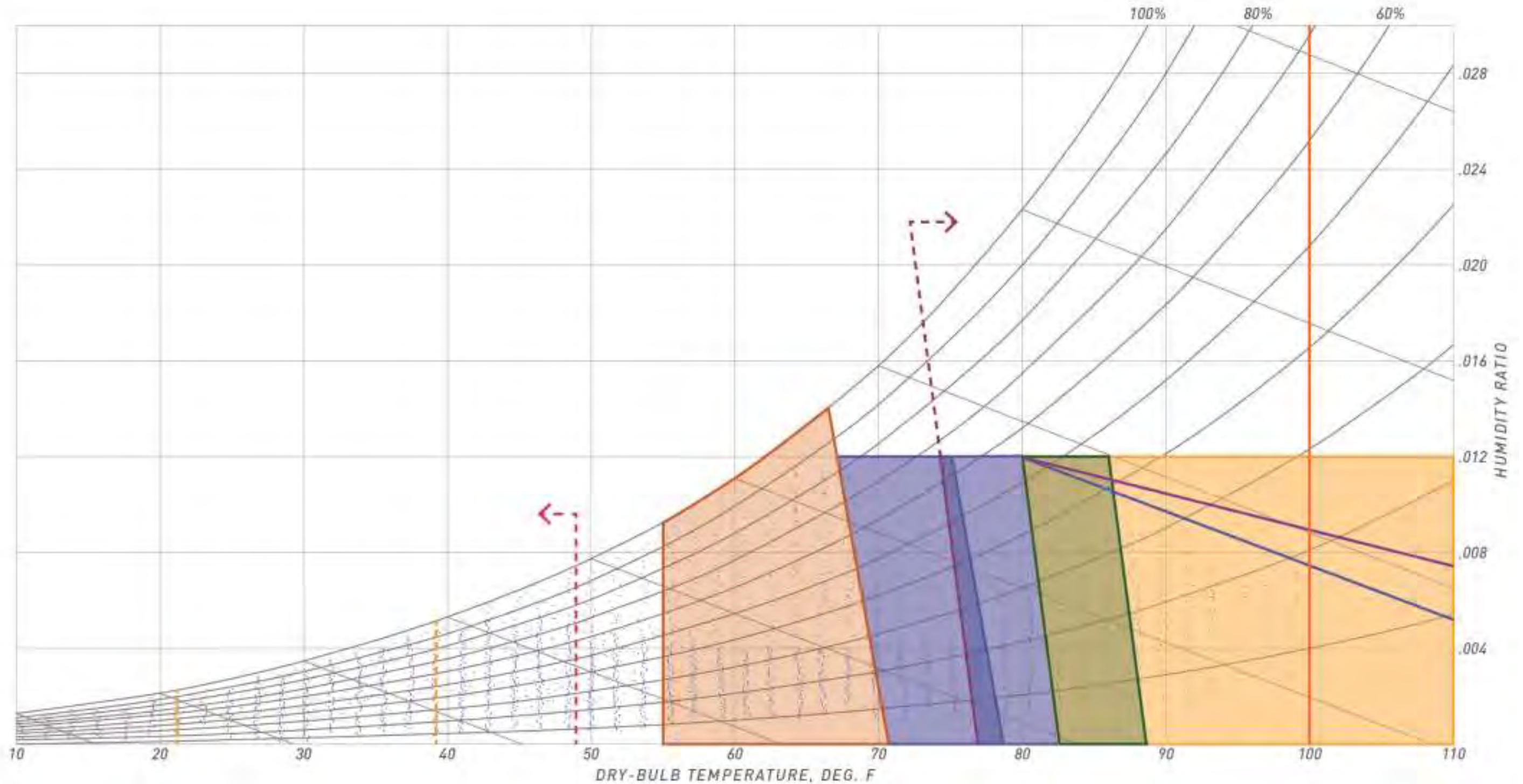
WATER BALANCE

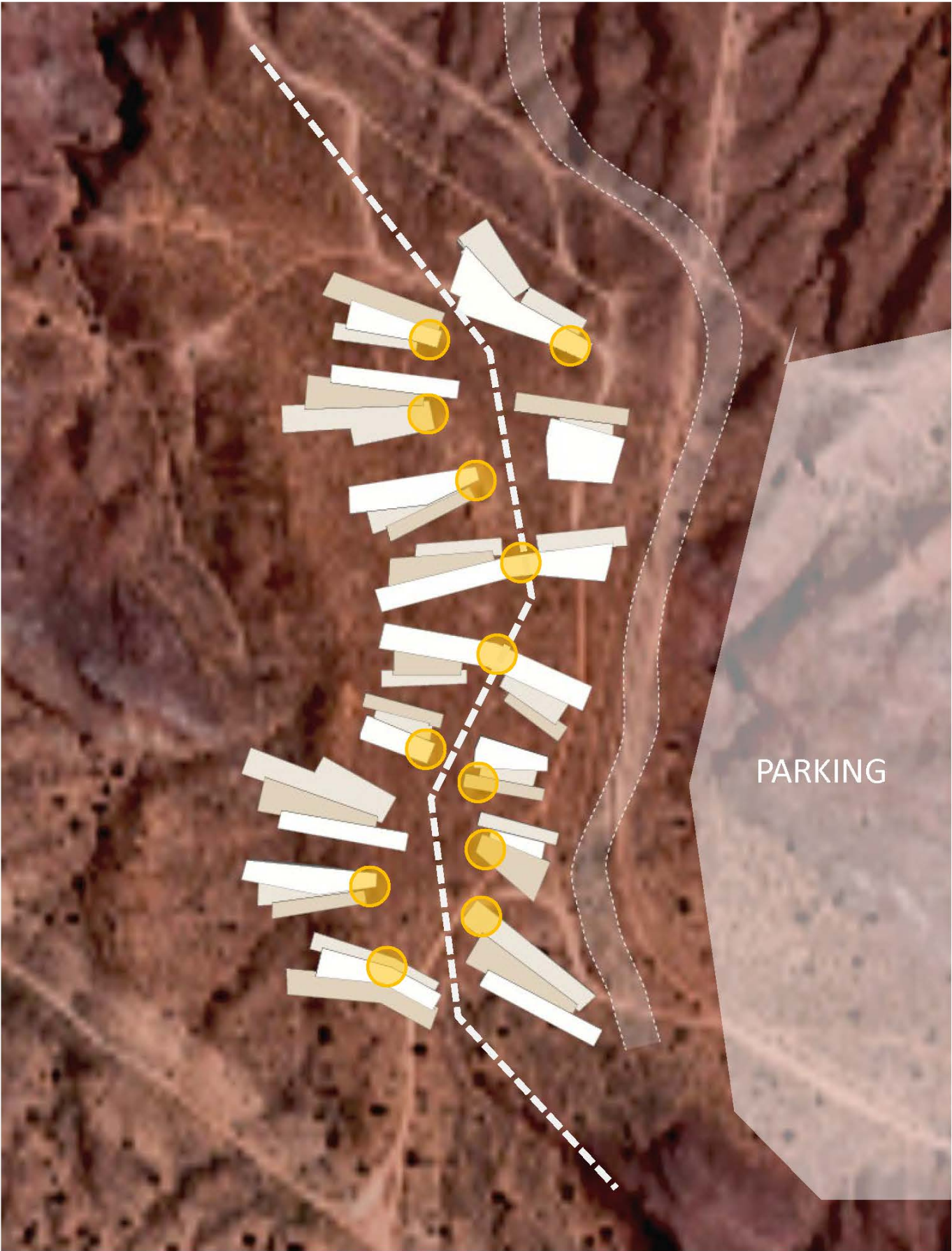


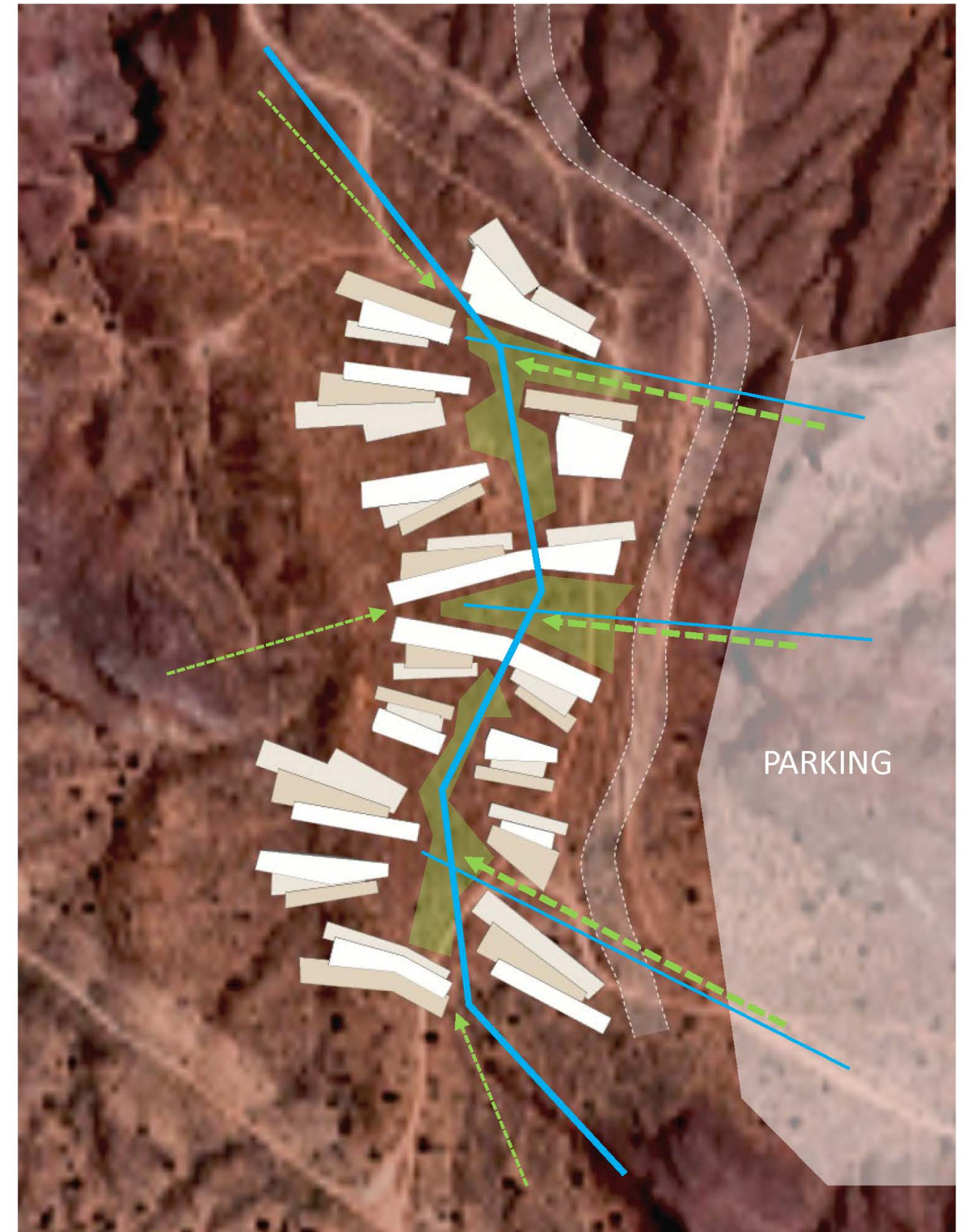
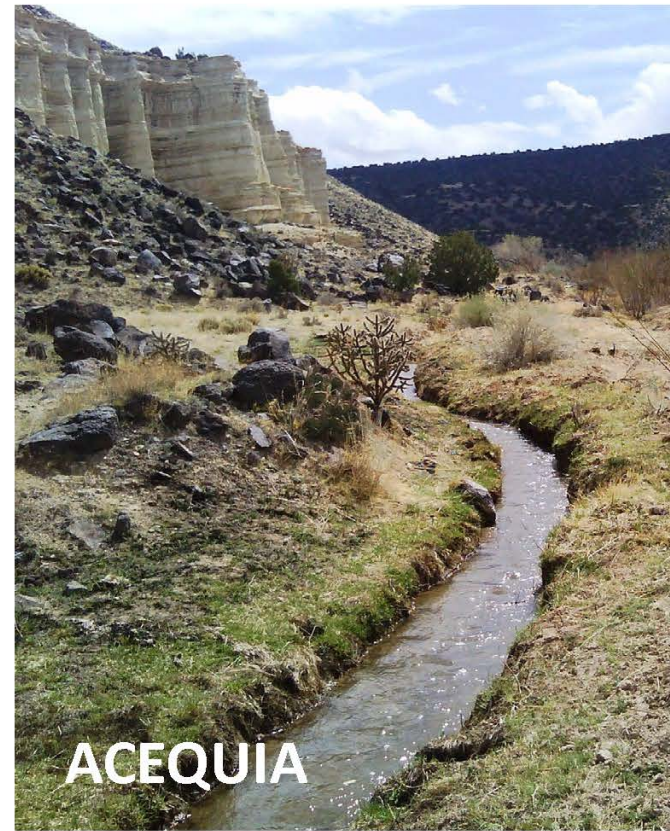
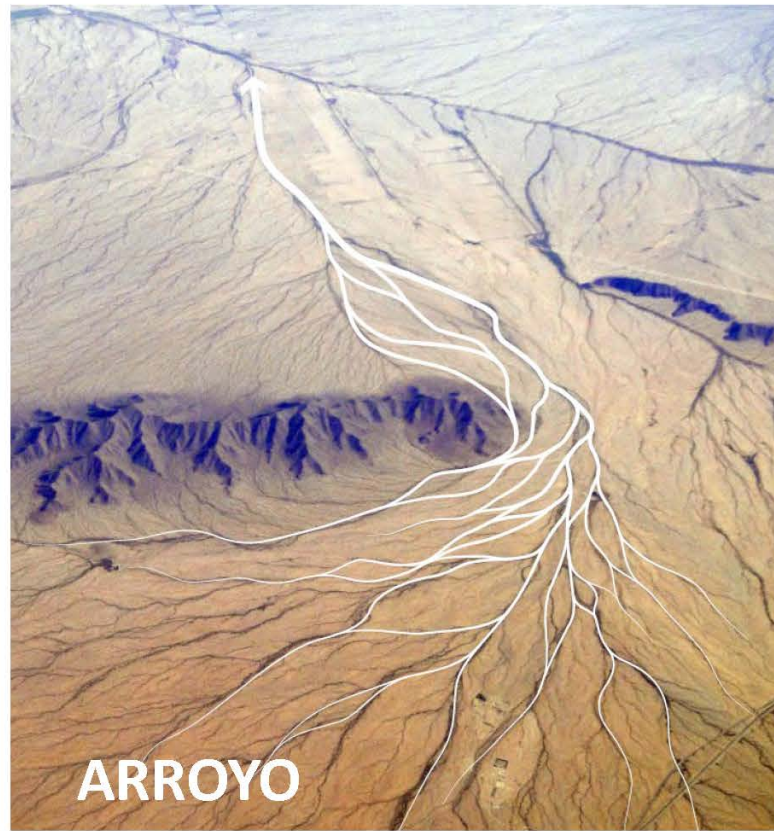
UTAH STATE UNIVERSITY MOAB

PSYCHROMETRIC CHART

- Comfort Range
- High Thermal Mass
- Internal Heat Gain
- Natural Ventilation Cooling
- Passive Solar Direct Gain
- Sun Shading of Windows
- Wind Protection of Outdoor Spaces
- Direct Evaporative Cooling
- Two-Stage Evaporative Cooling
- Wind Protection of Outdoor Spaces

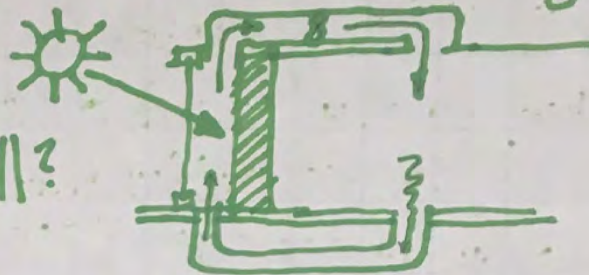








PASSIVE STRATEGIES

1. Solar Hot Water? — Displaces P.V. (Not good)
Education Display High Maint. Back-up needed? In fl
2. Retain Heat @ Windows at night — thermal coverings
3. Passive Pre-Heating — Trombe Wall?

4. Reduce Air Movement — Heat & Cool Radiantly
Smaller ducts — make-up air
5. Operable Windows vs. HVAC? Interlock shut off
*Additional loads? Residual loads when windows close.
Use in areas w/ greater temp comfort range
Cheap make-up air.
6. Solar over Parking
Help maximize P.V.
7. Occupant Participation
Clothing choices ("Shorts & sweater room")
Training for bldg. users



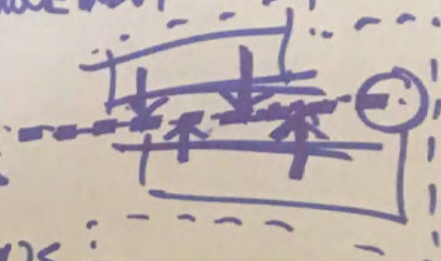
STUDY ABOVE GRADE
VS. BELOW GRADE

- MAINTENANCE + QUALITY CONCERNS - VS. BELOW
- 2,500 PARLORS LIMITATION - EASE OF EXCEPTIONS

- LIMIT COLLECTION TO THAT OF IMPELVIOUS COVER
- STUDY & LIMITATION OF ABOVE GRADE RETENTION PONDS -

- Intellect of Topography + Water Movement

- PERMACULTURE: 360ms + 10 PRINCIPLES



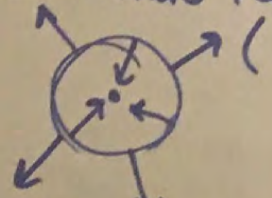
- MIMICKS THE WAY NATURE FUNCTIONS :-

- Assigning appropriate vegetation to areas of absorption -

- ### ▮ ADDRESS INTENSITY

- Low TECH - NO MOTORS & NO SENSORS

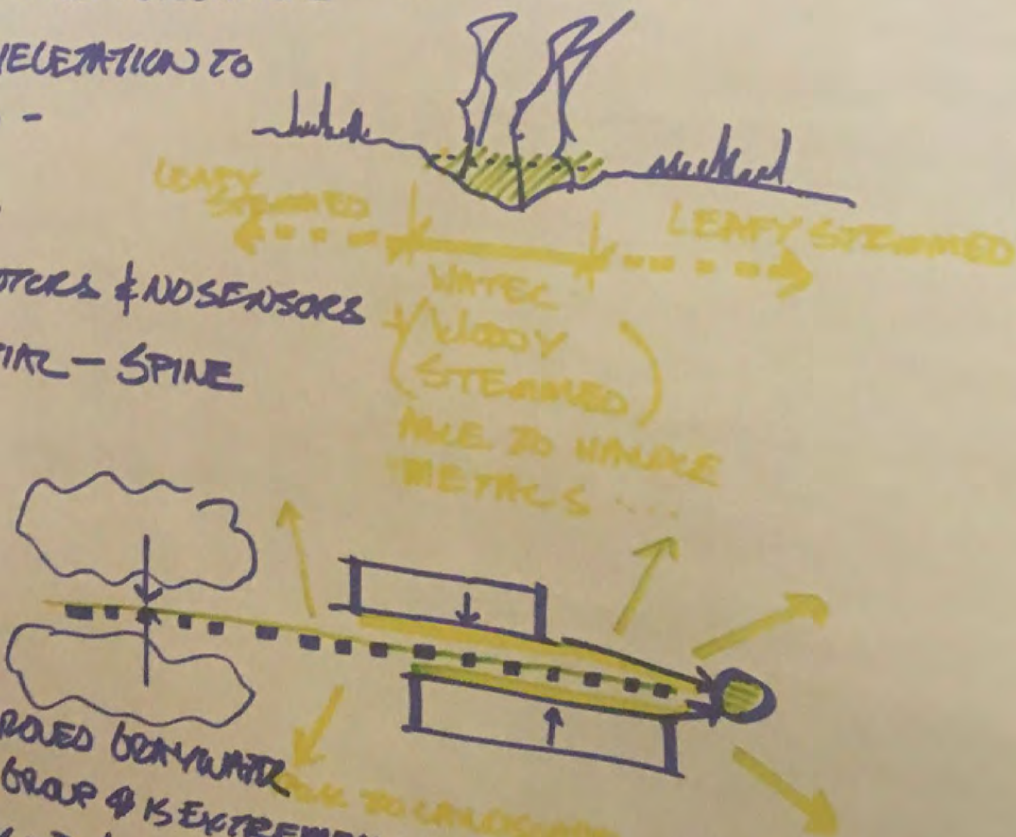
- EDUCATION POTENTIAL - SPINE

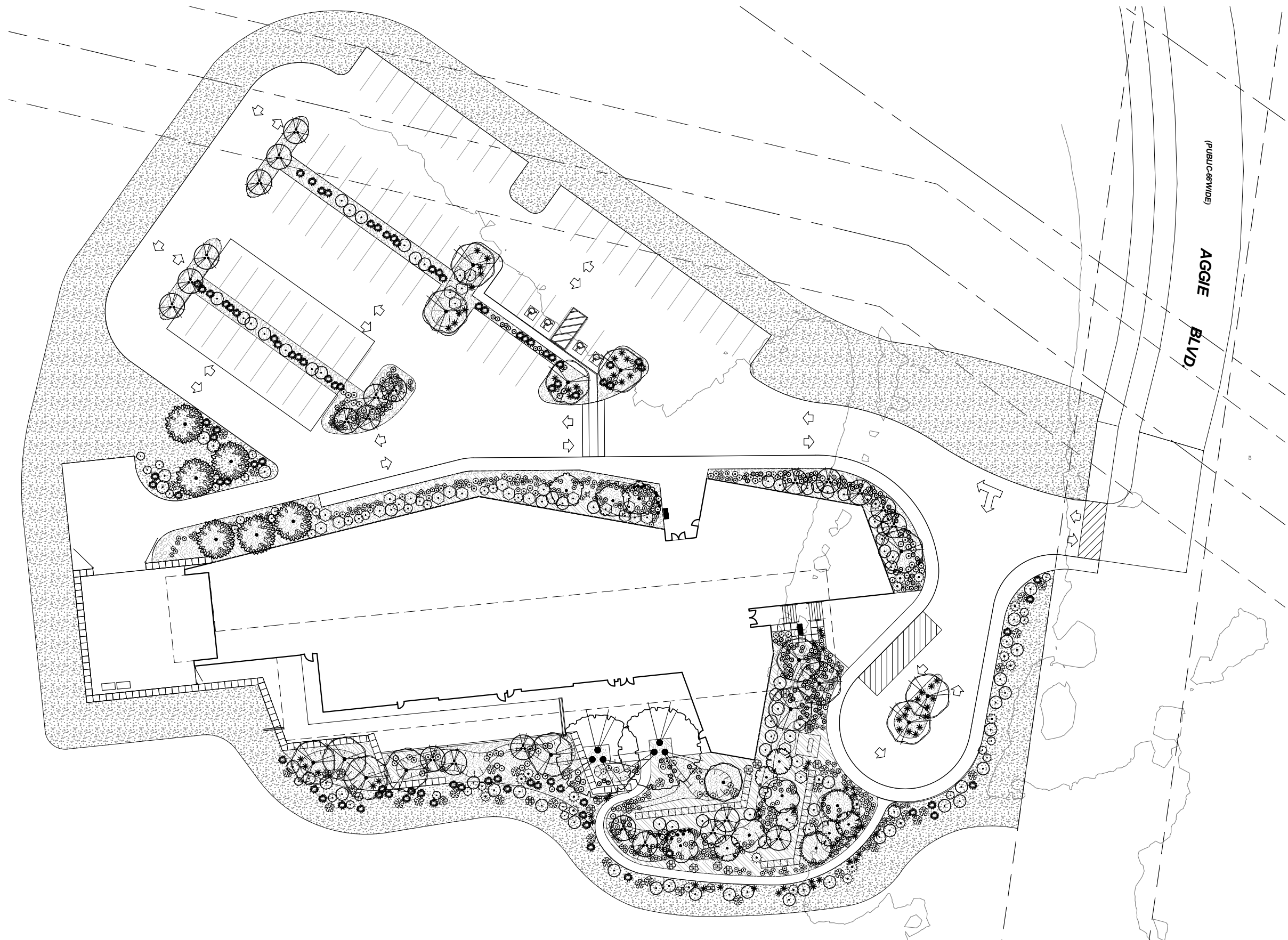


- INTERMEDIATE DEFECTIVE
+ EXTERMINATE DEFECTIVE

- APPROX CROSSING - APPROVED BEYOND WATER STRATEGIES → LOCAL BRANCH
- SHOOTING

- Shower + Bath + Linnen = 15 min

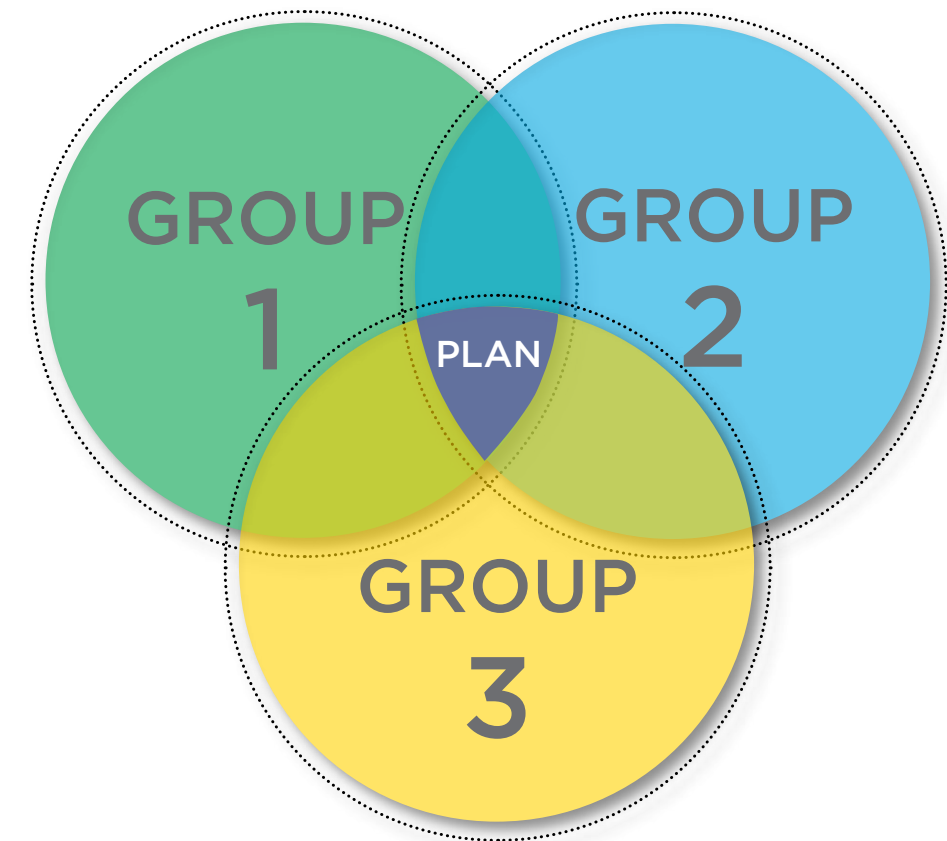






HOW TO BUILD CONSENSUS?

- 1 *COMMUNICATE PROJECT PARAMETERS*
- 2 *SEEK TO UNDERSTAND DIFFERENT PERSPECTIVES*
- 3 *FACILITATE DISCOVERY OF COMMONALITIES*
- 4 *REPEAT*





Q & A



MHTN
ARCHITECTS



UtahStateUniversity
MOAB

THANK YOU!