HOOD RIVER
COMMUNITY HOUSING
SITE ANALYSIS
EXISTING SITE CONDITIONS

COMBINED CONDITIONS

PROPERTY LINE
PONDING
STREAM/ CULVERT
ROCK OUTCROP
DEBRIS FILL
STEEP TOPOGAPHY
CONIFEROUS TREE
DECIDUOUS TREE
EXISTING SITE CONDITIONS
EXISTING SITE CONDITIONS
STEEP TOPOGRAPHY
EXISTING SITE CONDITIONS
ROCK OUTCROPS
EXISTING SITE CONDITIONS
DECIDUOUS TREES

- Healthy Tree
- Fair/Poor Tree
- Dead Tree
- Oak Tree
- Maple Tree
- Locust Tree
- Ash Tree
- Cottonwood
- Other Species
EXISTING SITE CONDITIONS
CONIFEROUS TREES

- Healthy Tree
- Fair/Poor Tree
- Dead Tree
- Pine Tree
- Fir Tree
EXISTING SITE CONDITIONS

PONDING
CONTEXT
EXISTING SITE CONTEXT
WIND PATTERNS
CONNECTIONS
EXISTING SITE CONNECTIONS
UTILITIES

- SEWER
- GAS
- WATER
- STORM
- ELECTRICAL
EXISTING SITE CONNECTIONS
PAVED ROADS
EXISTING SITE CONNECTIONS
UNPAVED ROADS
CONCEPT
SITE DESIGN

GOALS:
• Integration of built & natural environment
• Stormwater control expressed through site design
• Preservation of natural features
• Accurate documentation & analysis of site features
• Connection to nature
• Solar access
• Trail design
• Reduce impervious area

DESIGN:
• Preserved areas at the perimeter & corners
• Trail along creek at SE corner & around west and north sides (2 trails)
• Access from south along existing dirt road
• Emergency access across north
• Community building near trail at NW corner
• Shared commons in the center & adjacent to community building
• Buildings clustered in middle around shared commons
• Variety of building sizes and heights

BUILDING DESIGN

GOALS:
• Reduce costs – initial building costs & maintenance costs
• Community oriented design, including smaller buildings
• Programmatic goals:
  - 60-80 units
  - Affordable for up to 80% AMI, mix of incomes
  - Multi-generational
  - Accessible
  - Community gathering on site
  - Community space with meeting area
  - Residential storage
  - Maintenance space
  - Leader in sustainability
  - Not focused on parking
  - Solar design
  - Long-term durability & maintenance
  - Sound mitigation on site & in buildings
  - Emphasize outdoor space – natural area, community area, and play area (can be combined)

• Look for double-duty elements when responding to site constraints
• Durable materials
• Multiple, smaller buildings
• Preference for 2-story buildings
• CCHC has only 1 building with internal circulation & none over 2 stories
• Sound control between units (avoid family units over smaller units)

DESIGN:
• 1 or 2 buildings with internal circulation
• 1 3-story building, all others 2-story
• 2-story townhome buildings
• Buildings clustered around a common area
• Community building in the center of common area

SUSTAINABLE DESIGN

GOALS (OVERALL GROUP DISCUSSION):
• Consider Net Zero
• Preserve & improve habitat (ie: preserve oaks & managing pine to avoid pine beetle)
• Contribute to 50% local renewable energy in Hood River
  - Energy efficient design
  - Solar PV
• Emergency shelter with solar microgrid capability for resiliency
• Electric vehicle charging
• Passive House (lite) for envelope & mechanical design
• Low utility bills & ease of use for residents
• Visible elements for sustainability, especially around community building
• Wind brings community concerns
• Advanced framing
• Stormwater control on site

GOALS (SUSTAINABILITY GROUP DISCUSSION):
• Overarching program goals of sustainable programs
  - Net Zero/ Passive House
• Reducing use of resources
• Passive techniques
• Natural resources – activities
• Small scale food production / educational opportunity
• Incentives
  - Low income weatherization
  - Solar Trade Allies
• Use of solar
• Resiliency
• Upgraded Envelope/Mechanical
• Strategic Infrastructure

DESIGN:
• Active Solar:
  - Solar hot water
  - PV on south face of sound wall
  - Solar ready construction
  - Solar funding (Blue Sky Grant, Community Solar, ETO, Solar Trade Allies, Meyer Memorial Trust)
  - EV charging station
• Resiliency
  - Microgrid ready
  - Battery storage
  - Resiliency plan
  - Backup power at Community Building
  - Food generation
• Strategic Infrastructure
  - Placement and number of buildings
  - Foundation system
• Upgrade Envelope/Mechanical
  - Ductless minisplits (heat & cooling)
  - HRV for fresh air
  - High efficiency equipment
  - Central systems
• Passive Strategies
  - Shading techniques
  - Ventilation strategies
  - (Passive air intake, Night flushing, Appliances: gas vs electric)
• Lighting
  - Daylighting
  - LED / Energy Star
  - Light fixtures in bedrooms with ceiling fan
• Wind
  - Summer vs winter
  - Opportunities to celebrate?
  - Ways to counteract?
INITIAL CONCEPTS

TOTAL UNITS: 61
PARKING RATIO: 1:1

TOTAL UNITS: 69
PARKING RATIO: 1:1

TOTAL UNITS: 62
PARKING RATIO: 1:1

TOTAL UNITS: 60
PARKING RATIO: 1:1

TOTAL UNITS: 61
PARKING RATIO: 1:1

TOTAL UNITS: 58
PARKING RATIO: 1:1
PRELIMINARY CONCEPTS

TOTAL UNITS: 60
PARKING RATIO: 1:1.5

TOTAL UNITS: 70
PARKING RATIO: 1:1.5

TOTAL UNITS: 80
PARKING RATIO: 1:1.5
SCHEME DESIGN CONSIDERATIONS:

PARKING:
1.5 SPACES PER UNIT PROVIDED
SURFACE PARKING
PAVERS AS AN OPTION FOR THE PARKING STALLS
- REDUCE IMPERVIOUS SURFACES (STORMWATER & VISUAL)

SITE ACCESS:
TWO WAY ACCESS FROM WASCO STREET, RIGHT TURN EXIT ONLY ONTO JAYMAR STREET

BUILDING TYPE:
ONE (3-STORY) DOUBLE LOADED CORRIDOR BUILDING & THREE (3-STORY) WALK-UP UNITS

BUILDING LOCATION:
BUILDING “A” ON THE WEST SIDE WHICH TUCKS INTO THE NATURAL TOPOGRAPHY AS WELL AS BLOCKS THE WIND FOR 10 MONTHS OF THE YEAR

BUILDINGS “B”, “C”, AND “D” ARE POSITIONED TO BENEFIT FROM SOLAR GAIN, WHILE BUILDING “A” WILL RECEIVE SOME BENEFITS FROM SOLAR GAIN

OUTDOOR AREAS:
CENTRALIZED COMMONS
- ADJACENT TO NATURAL ROCK OUTCROP
- PROVIDES ONE MAIN COMMON SPACE
- MULTIPLE OPPORTUNITIES FOR RAIN GARDENS

COMMUNITY BUILDING LOCATION:
ATTACHED TO BUILDING “A”
OPENS OUT TO THE NATURAL ROCK OUTCROPPING

OTHER SITE CONSIDERATIONS:
FENCE AT WEST PROPERTY LINE
SOUND MITIGATION AT HIGHWAY

TOTAL UNIT COUNT: 65 UNITS

CONCEPT UNIT MIXES:

DOUBLE LOADED CORRIDOR “A”: 40 UNITS
STUDIO: 5 [400-425 SF]
1-BEDROOM FLAT: 32 [600 SF]
2-BEDROOM FLAT: 3 [800 SF]

WALK-UP UNIT “B”: 6 UNITS
1-BEDROOM FLAT: 3 [600 SF]
2-BEDROOM TOWNHOME: 3 [850 SF]

WALK-UP UNIT “C”: 10 UNITS
2-BEDROOM FLAT: 3 [800 SF]
3-BEDROOM FLAT: 2 [1,050 SF]
2-BEDROOM TOWNHOME: 5 [850 SF]

WALK-UP UNIT “D”: 9 UNITS
3-BEDROOM FLAT: 3 [1,050 SF]
3-BEDROOM TOWNHOME: 6 [1,050 SF]

PRELIMINARY CONCEPT
65 UNITS
COMMUNITY GARDEN

MULTI-MODAL PATH

STORMWATER / RAIN GARDEN

COURTYARD SPACE

NATURAL PLAY AREAS

NATURAL PLAY AREAS
PRELIMINARY CONCEPT
LANDSCAPE PLAN

- PRESERVE NATURAL FEATURE
- RAIN GARDEN
- SHARED COMMONS
- TRAIL NETWORK
- MULTI-MODAL PRIMARY TRAIL
- SIDEWALK
- WASCO AVE.