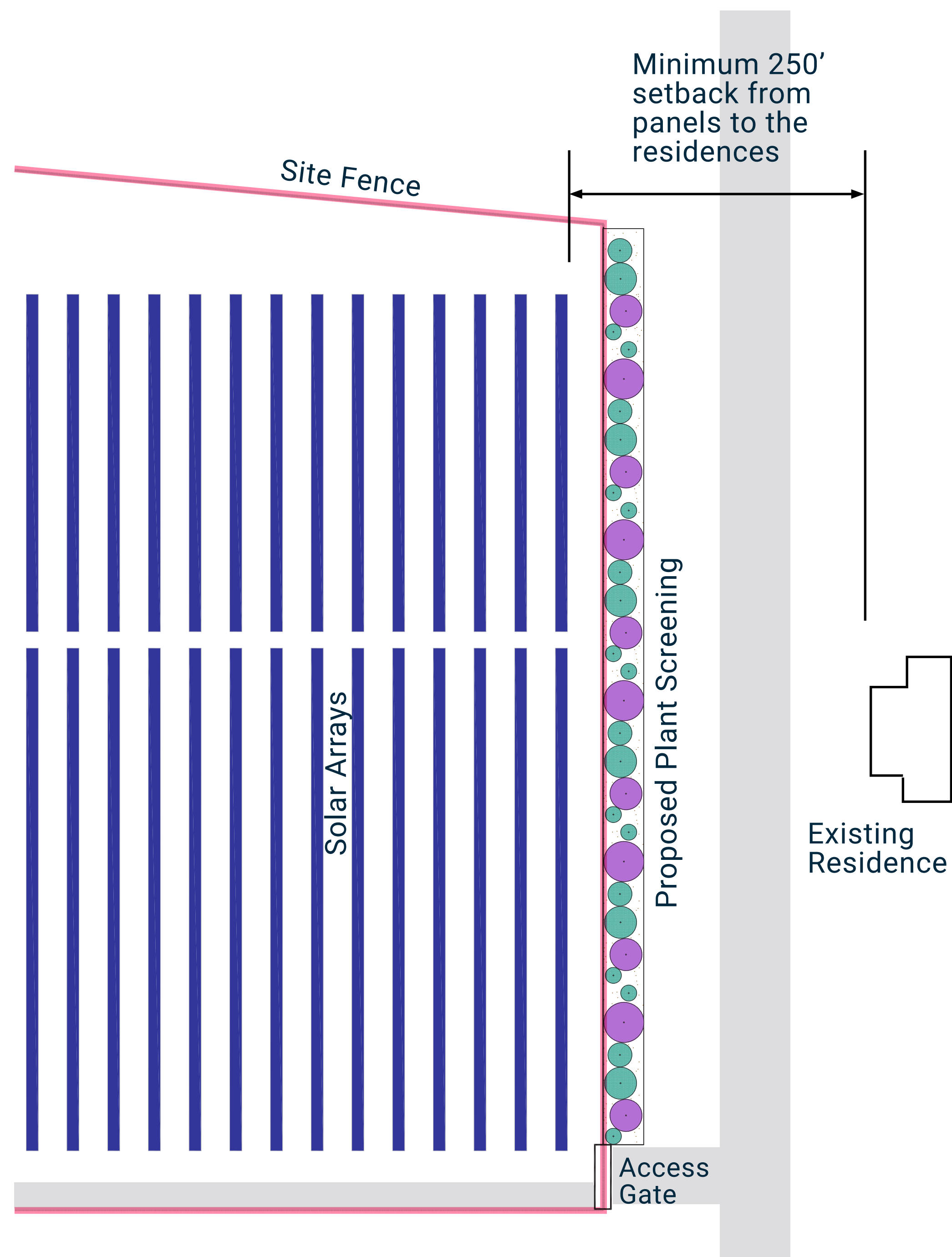
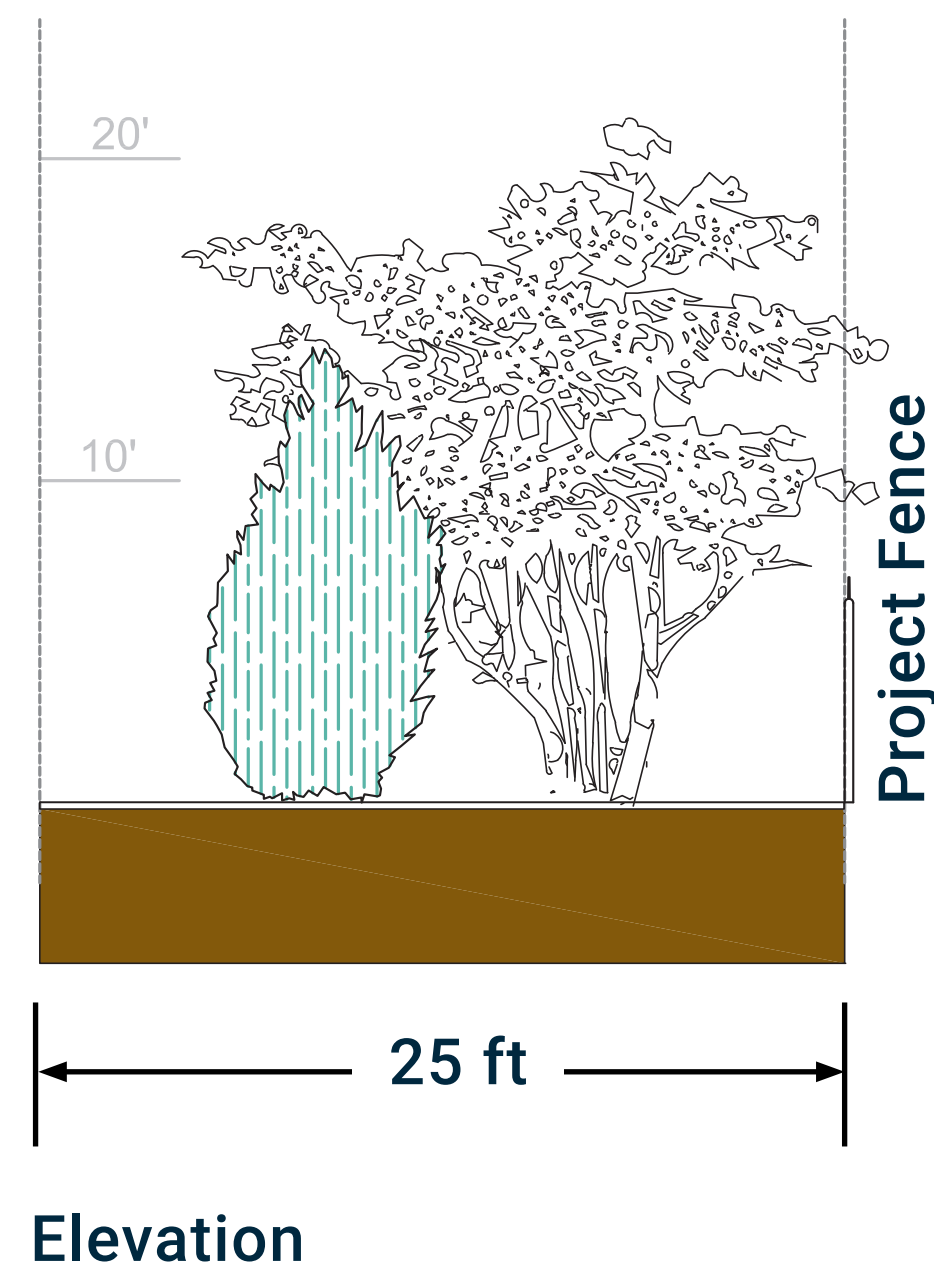
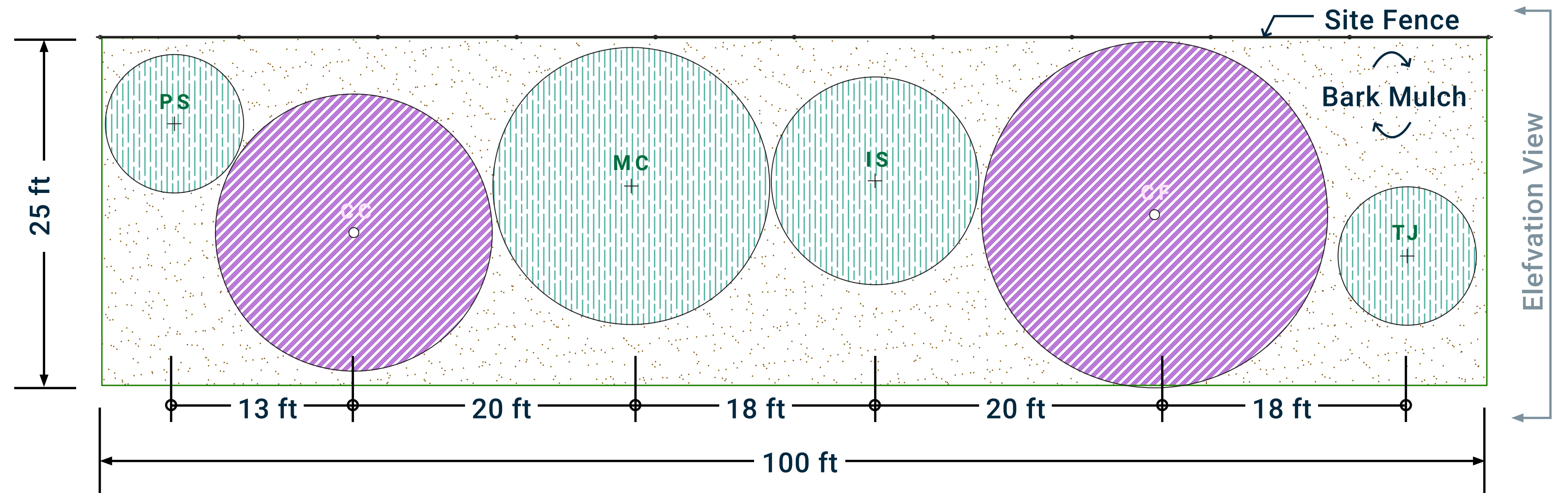


## TYPICAL PLANTING PLAN



## TYPICAL PLANTING DESIGN ARRANGEMENT



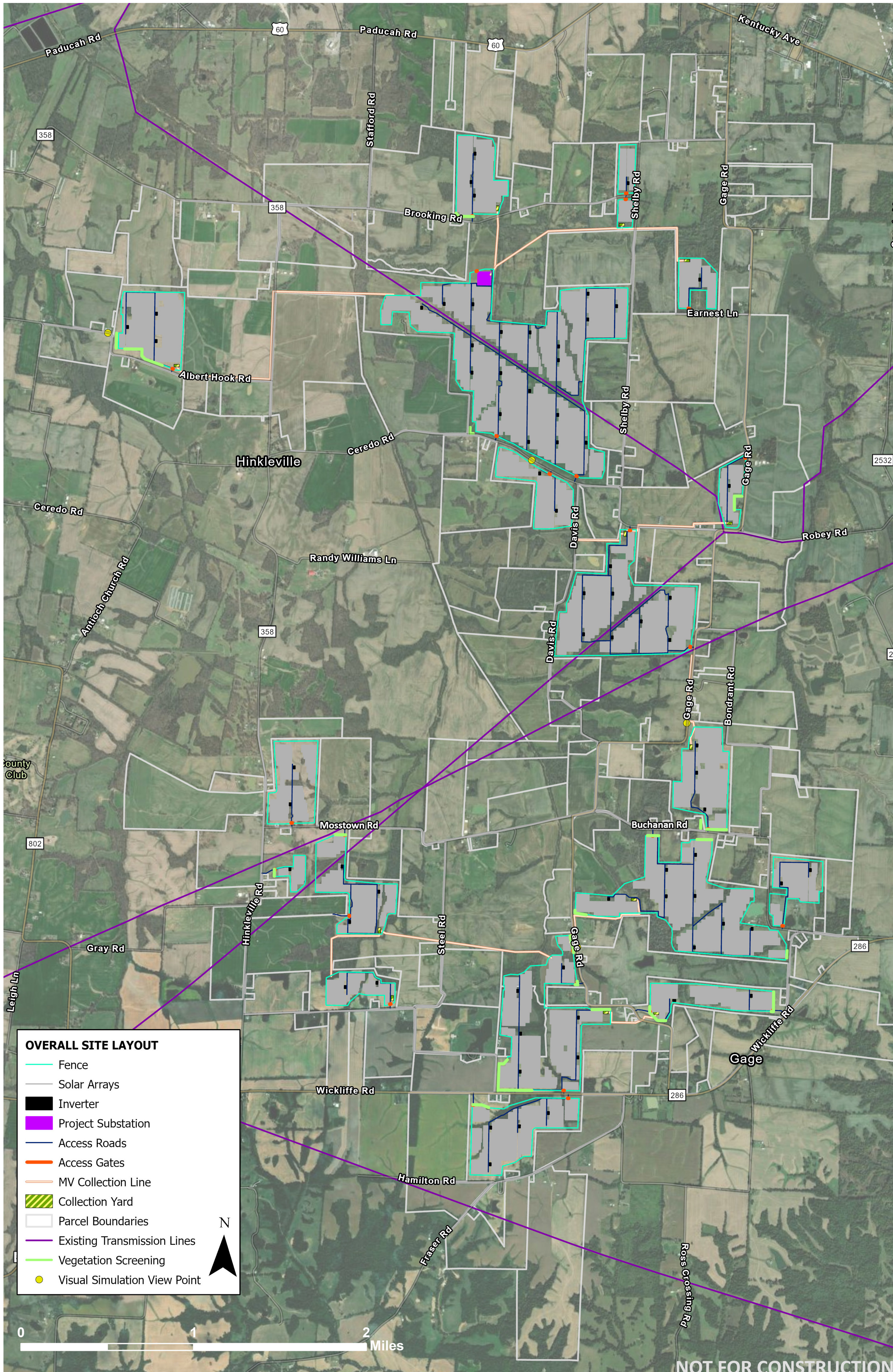
## EXAMPLE PLANTING LIST

	Common Name	Scientific Name	Type	Height	Spread
PS	Dwarf Eastern White Pine	<i>Pinus strobus</i> 'Nana'	Evergreen shrubs suitable for KY	15'	10'
MC	Wax Myrtle Tree	<i>Myrica cerifera</i>		15'	20'
IS	Nellie Stevens Holly	<i>Ilex</i> X 'Nellie R. Stevens'		15'	15'
TJ	Junior Giant Thuja Tree	<i>Thuja</i> x 'Junior Giant'		15'	10'
CC	Eastern Redbud	<i>Cercis canadensis</i>	Deciduous small Trees, native	20'	20'
CF	Flowering Dogwood	<i>Cornus florida</i>		20'	25'



# Preliminary Solar Infrastructure Layout

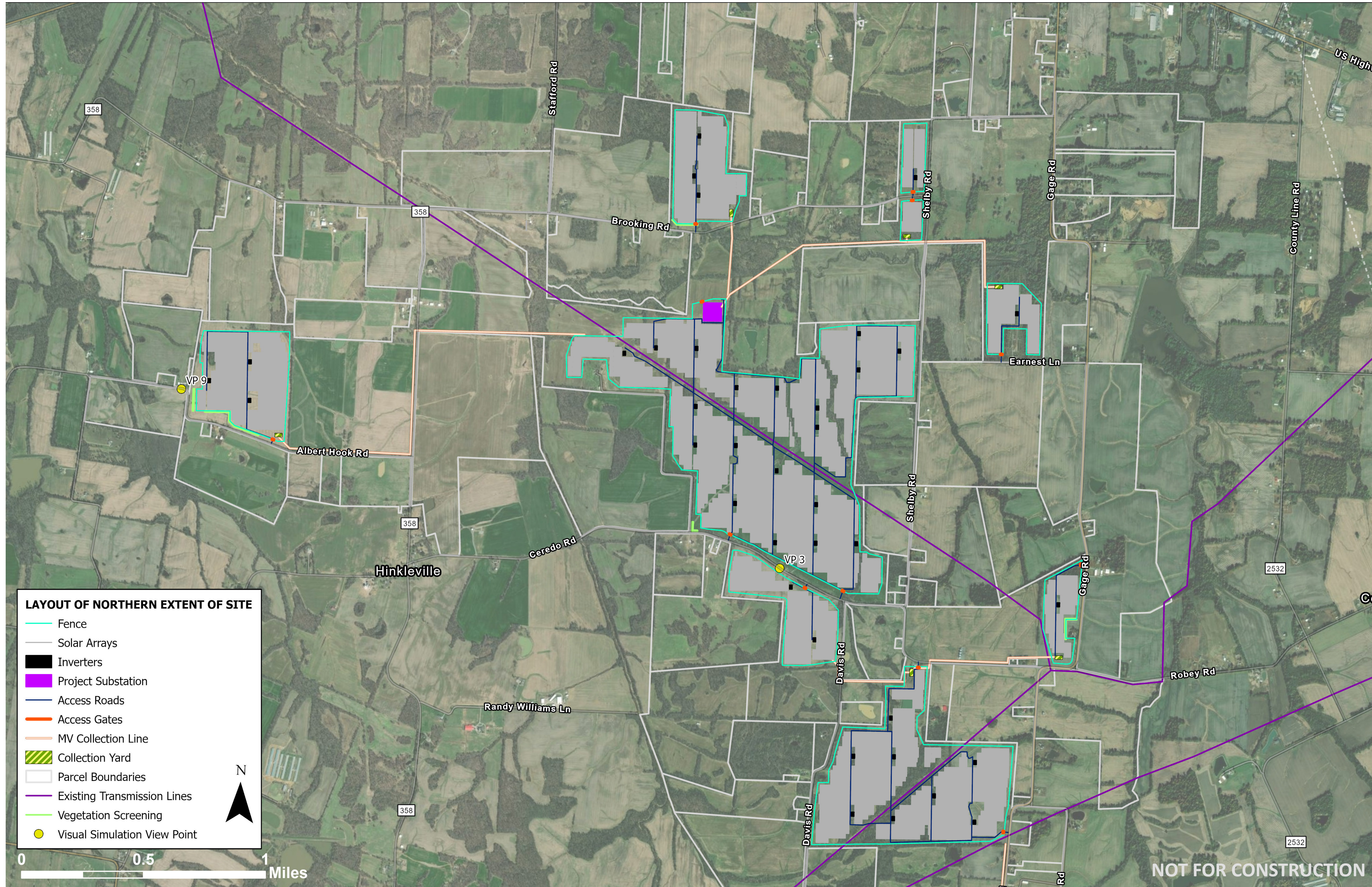
Preliminary layout subject to environmental considerations and additional design refinement.





# Detail 1: North Project Area

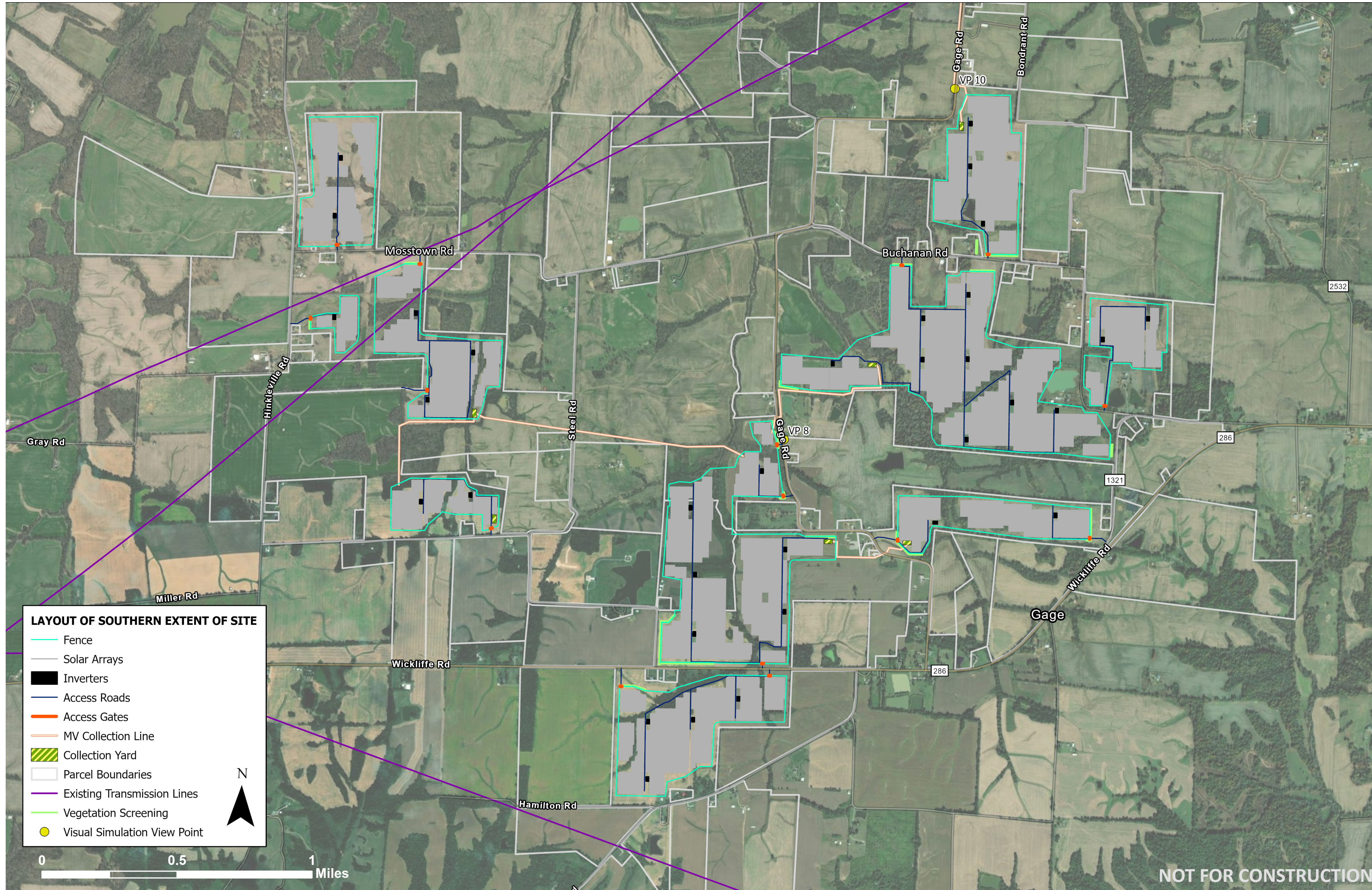
Preliminary layout subject to environmental considerations and additional design refinement.





# Detail 2: South Project Area

Preliminary layout subject to environmental considerations and additional design refinement.





# Project Benefits



## **\$7.4M in Revenue to Local Government**

An increase of \$6.9 Million compared to current land use



## **Up to 300 Construction Jobs**

BrightNight anticipates many of these jobs to be local



## **Additional Job Creation**

Large commercial and industrial job creators are attracted to areas of strong renewable power generation



## **Continued Agricultural Use**

BrightNight is working with local farmers to continue agricultural use on the same land used for solar power generation



## **Local Economic Uplift**

Project estimated to generate **\$23 Million** in local economic output during construction



## **Community Partnership**

BrightNight will be an active member of the community, supporting schools, emergency responders and other community needs



# Economics of BrightNight's Gage Solar Project

## BrightNight Equipped for Success

- Developing 21 GW of projects across the US
- Funded by 2 large financial institutions – Cordelio Power and Global Infrastructure Partners – which manage over \$600B
- Team members have developed over 100 clean energy projects and invested over \$20B in the past decade

## Will the Next Election Affect the Project?

Federal elections don't have much impact on the viability of clean energy projects. Both red states and blue states benefit from tax credits, so there is broad political support across the spectrum. Clean energy projects were being developed as actively during the Trump administration as during the Biden administration. The market is driving the renewable power transition much more than the government.

## Gage Solar Project Set Up for Success

- Executed 2 power purchase agreements with Kentucky Utilities – power contracted for 20 years
- Project qualifies for federal production tax credits – incentivized to produce energy
- Project qualifies for additional credit for proximity to retired coal plant (Joppa)

## Impacts to Local Community

- During construction:
  - \$310M investment in Ballard County
  - 300 jobs over 18-24 months
  - \$22.7M local economic output
  - \$475K in local & state tax revenue
- During operations:
  - \$1.3M annual economic output
  - \$7.2M revenue to Ballard County (vs. \$533K under current land use)



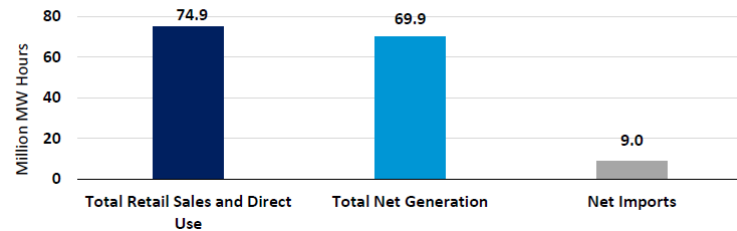
# Know the Facts

- **Who Gets the Power** | Customers of Kentucky Utilities, including 2,300 residential, commercial and industrial customers in Ballard County.
- **Decommissioning** | At the end of a project's life, the project will be removed, and the site will be restored. This is guaranteed through security BrightNight is required to provide during the project's 2<sup>nd</sup> year in operation.
- **Material Disposal** | The majority of the project's components – glass, silicon, aluminum, steel and copper – can be readily recycled. Most of the weight of a solar panel (about 75 percent) is composed of glass.
- **Solar Projects are Safe** | Solar projects have been operating safely for more than 50 years. They are emissions free. The equipment does not produce or transfer any materials or chemicals into the soil. Solar projects are the safest, cleanest form of electricity generation.
- **Glare** | BrightNight hired an outside consultant to evaluate project glare. Their analysis concluded that no glare is expected on any roadways, homes or businesses near the project.
- **Property Value** | BrightNight commissioned a study by a Kentucky State Certified General Appraiser to evaluate property value impacts near the project. This study determined that the project will not negatively impact property values, a finding supported by a large body of evidence as similar projects have been developed in many rural and urban communities nationwide.
- **Emergency Response** | BrightNight will coordinate closely with local first responders to establish an Emergency Response Plan. BrightNight employs and regularly consults with industry experts specializing in energy facility safety.
- **Road Conditions** | A traffic study has been commissioned to demonstrate traffic impacts during construction and operations. Typically, only a small traffic increase is experienced, even during construction. BrightNight will be responsible for maintaining roads and repairing any damaged caused by construction traffic.



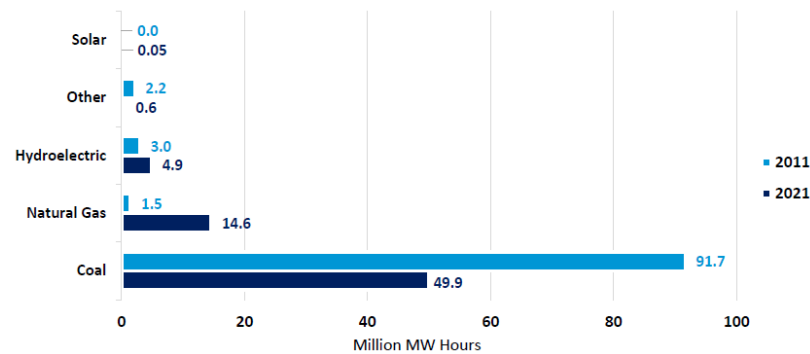
# Why Solar is Needed in West Kentucky

Figure 1: Demand and Supply of Electricity in Kentucky in 2021 (in millions of megawatt-hours)<sup>2</sup>



<sup>2</sup> Data Source: U.S. Energy Information Administration. In this chart, "Net Imports" does not directly equal the residual of "Total Net Generation" minus "Total Retail Sales and Direct Use" because of losses during transmission.

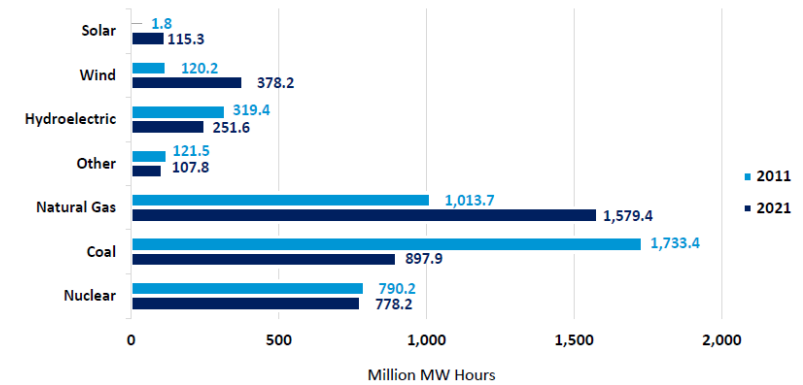
Figure 2: Electricity Generation in Kentucky by Energy Source in 2011 and 2021 (in millions of megawatt-hours)<sup>4,5</sup>



<sup>4</sup> Data Source: U.S. Energy Information Administration. "Other" includes other biomass, other, petroleum, and wood.

<sup>5</sup> Electricity production in Kentucky in 2011 totaled 98.4 million megawatt hours and in 2021 it totaled 69.9 million megawatt hours. The amount of electricity produced decreased by 29 percent during that time.

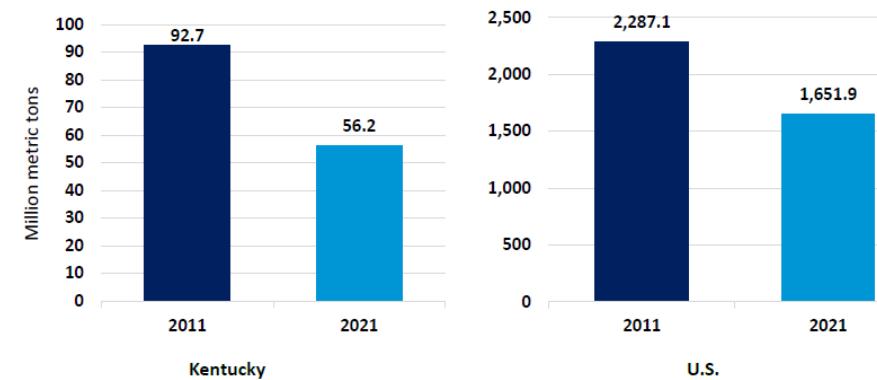
Figure 3: Electricity Generation in the United States by Energy Source in 2011 and 2021 (in millions of megawatt-hours)<sup>6,7</sup>



<sup>6</sup> Data Source: U.S. Energy Information Administration. "Other" includes battery, geothermal, other, other biomass, other gas, petroleum, pumped storage, and wood.

<sup>7</sup> Electricity production nationwide in 2011 and in 2021 totaled 4,100 million megawatt hours. The amount of electricity produced increased by 0.2 percent during that time.

Figure 4: Carbon Dioxide Emissions from Electricity Production (millions of metric tons)<sup>8</sup>



<sup>8</sup> Data Source: U.S. Energy Information Administration.



# Supporting Our Project Community

## Saint Mary Food Pantry



BrightNight has partnered with the Magney Legacy Ridge Farm and the Saint Mary Food Pantry to fund the weekly delivery of fresh produce. Located in La Center, the Saint Mary Food Pantry serves 500 families a month. BrightNight is proud to connect these two local partners to support our project community.



Victory Through Grace Ministry works to empower young women who have been victims of trafficking and other forms of abuse to recover and restore their lives. BrightNight is proud to support the incredible work of this local organization.



# ENVIRONMENTAL DILIGENCE OVERVIEW

Solar facilities are subject to extensive diligence and oversight from federal, state, and local agencies, requiring many studies and plans to create the best project possible for host communities.



## Diligence included in project planning:

- Wetland and waterbody delineation
- Protected species habitat assessment
- Phase I environmental site assessment
- Cultural resources review
- Traffic impact study
- Socioeconomic assessment
- Erosion and sediment control plan
- Property value assessment
- Noise evaluation
- Visual assessment
- Landscaping plans
- Glare study
- Federal Aviation Administration review
- Decommissioning plan



# KENTUCKY SITING BOARD PROCESS

BrightNight is working with a team of consultants to complete studies and prepare an application for a Construction Certificate (KRS 278.700-718).

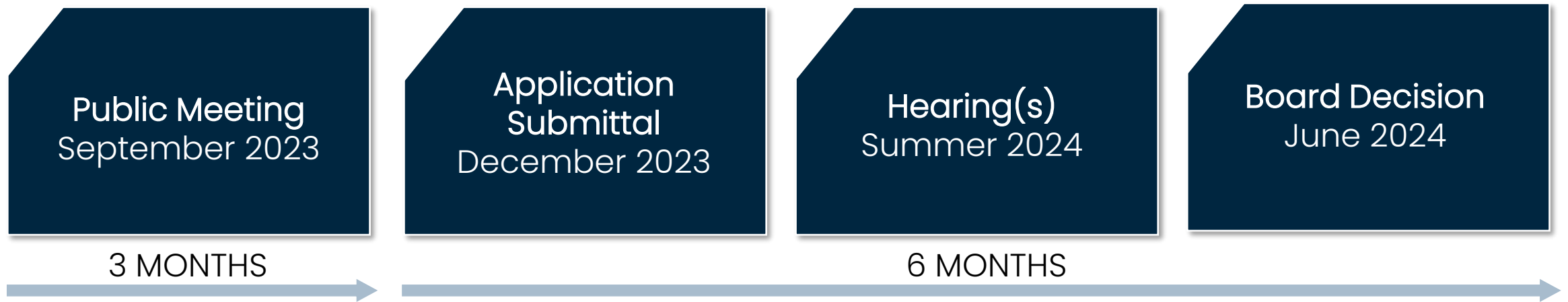
The Kentucky Siting Board (KSB), which will include two local representatives, will use their own consultants in review of the application.

The KSB process is designed to include public participation and local representation throughout.

An evidentiary hearing will be held prior to the KSB decision, which includes sworn expert testimony.

The KSB review focuses on three areas:

1. Impact to surrounding community;
2. Economic impacts; and
3. Impact onto the electric transmission grid.





# PHASES OF CONSTRUCTION

(Total expected duration: 13 – 16 months)

## Phase 1: Site Prep 7-9 months

### Key developments

- Site grading (reduced to the minimum needed)
- Install project access roads and internal circulation
- Tree clearing, grubbing as needed
- Soil erosion mitigation
- Equipment delivery
- Perimeter fencing

### What to expect

- Temporary traffic
- Use of machinery limited to daytime hours

## Phase 2: Electrical Installation 5-6 months

### Key developments

- Lay cabling in trenching
- Connect cabling

### What to expect

- Electric crews onsite for installation
- De-mobilization of large construction equipment

## Phase 3: Racking Installation 6-8 months

### Key developments

- Equipment delivery
- Rows of posts placed in the ground over the project area
- Install mechanism to move solar panels
- Begin installing electrical equipment

### What to expect

- Equipment delivery vehicles
- Some machine noise while posts are installed

## Phase 4: Panel Install 5-6 months

### Key developments

- Panels are installed on racking by construction crew

### What to expect

- Panel delivery trucks
- Project will begin to take shape
- Majority of construction noise complete from this phase forward

## Phase 5: Testing & Landscaping 4-5 months

### Key developments

- Inspections of installed equipment
- Power testing
- Site safety testing and training

### What to expect

- Inspection crews
- Plant begins operating



# Operations and Maintenance Approach

- Our people and communities drive BrightNight's O&M business.
- BrightNight has a strong value orientation towards Environmental, Health and Safety management. The safety of our employees, land and community is our top priority.
- The success of our business relies on working the with community. The majority of the Gage project team will come from the local community.



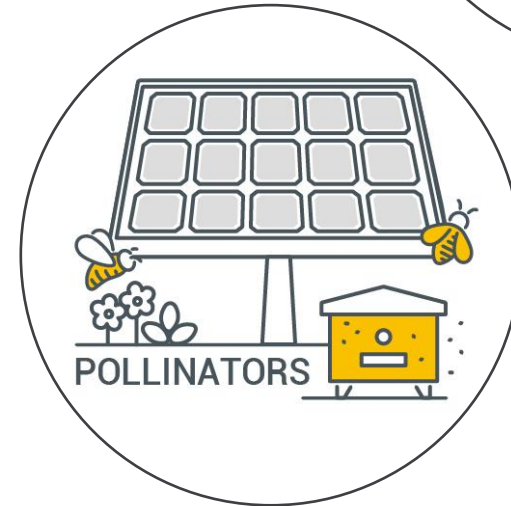


# What is Shared-Use?

Shared-use is the practice of keeping renewable energy project land in agricultural production, with the goal of increasing the productivity of land

## Benefits

- Land remains in **agricultural use** for life of the project
- Better **soil quality** on solar land compared to standard practices
- Lower **vegetation management** costs
- Potential increase of **panel efficiency**
- Potential **higher agricultural yields** on site and nearby land
- **Supports local farmers** and products
- **Lower exhaust emissions and quieter** than mowing





# Research-Proven Benefits of Solar Grazing

**Preliminary research from Oregon State University shows that solar grazing results in mutually beneficial outcomes for energy generation and agricultural output.**

**Their studies found that solar grazing practices:**

- Increased agricultural productivity of pastures by nearly 100%,
- Tripled water use efficiency,
- Improved panel performance up to 10% due to transpiration from plants,
- Accommodated an additional late summer graze rotation, and
- Allowed for the potential to host additional stock due to more vegetation and less stressed sheep.



Source: Nexus of Energy, Water, and Agriculture (NEWAg) Lab. <https://agsci-labs.oregonstate.edu/newagbee/>