

**Taelor Solar 1, LLC / Matt Mooney**

**L&R Rumsey Land, LLC**

**Magnum Feedyard, LLC**

**Special Use**

**\*Continued hearing from 8/14/2023**

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**PLANNING COMMISSION HEARING**

**September 11, 2023**

**7:00 p.m.**

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FILE SUMMARY



**MORGAN COUNTY  
PLANNING AND BUILDING DEPARTMENT**

**MORGAN COUNTY PLANNING COMMISSION  
FILE SUMMARY**

**August 30, 2023**

**Hearing date – September 11, 2023**

**Continued from August 14, 2023**

**APPLICANTS: Taelor Solar 1, LLC  
OWNERS: L&R Rumsey Land, LLC and Magnum Feedyard, LLC**

A Planning Commission hearing was held on August 14, 2023, where the Commissioners heard from Applicant's representative and the public. The public hearing was continued until September 11, 2023 in order for Taelor Solar 1, LLC to submit the following additional information:

1. A glare report
2. Reseeding vegetation component to the Erosion Control Plan
3. Aerial photographs of similar projects

Items 1 through 3 are included in the updated packet.

The following revised conditions for the Solar Collector Facility are recommended (new conditions noted in italics below). No revised conditions are recommended for BESS special use permit.

**Taelor Solar 1 Collector Facility:**

- a. Proof of lease between Taelor Solar 1, LLC and the property owners must be submitted to the Planning & Zoning Department prior to construction.
- b. All necessary land use, environmental, and construction permits, approvals and authorizations will be obtained prior to the start of and during construction as required and may include, but are not limited to, land use permits, right-of-way (ROW) permits, road use agreements, access permits, oversize/overweight permits, grading permits, and stormwater permits.
- c. All necessary plans, reports, permits, and certificates will be submitted prior to issuance of any building permit associated with the solar collector facility and may include, but are not limited to, interconnection/crossing agreements, final drainage & erosion control plan, signed and sealed geotechnical report, decommissioning plan, operations and maintenance plan, Liability Insurance Certificate, final locations for any laydown yard, a copy of the APEN issued by the Colorado Department of Public Health and Environment, Unanticipated Discovery plan, and glare analysis.

- d. Taelor Solar 1, LLC will comply with proposed decommissioning plan, any modifications/deviations from the proposed plan must be approved by the County. The County must be notified in writing when the Applicant commences decommissioning.
- e. Any building greater than 120 sq. ft. will require a building permit.
- f. The substation and solar collector facility shall be enclosed by a security fence and be secured at all times. Emergency services must have access at all times.
- g. Prior the commencement of construction, Taelor Solar 1, LLC will enter into *two* road use agreements for the use of any public road during construction. *One agreement will designate the haul route and maintenance obligations for the Morgan County portion of the larger Taelor Solar project. The second agreement will designate the haul route and maintenance of Morgan County roads to access the portion of the project located in Weld County. Both agreements shall include the following:*
  - i. *A designated haul route or routes, subject to approval by the Morgan County Road & Bridge Department. A map showing the designated haul route to be used during construction.*
  - ii. *A pre-construction baseline inventory of County roads on the designated haul route or routes to be used during construction to document their pre-construction condition, obtained by and paid for by the applicant.*
  - iii. *A mitigation plan to address traffic congestion, control, and potential impacts to County roads on the designated haul route. The mitigation plan shall also include any dust mitigation activities.*
  - iv. *A requirement that the applicant to return any County roads to their pre-construction baseline condition.*
  - v. *A requirement to post financial security in an amount not less than one hundred-fifteen percent (115%) of the estimated cost to complete all road restoration, in the form of an irrevocable letter of credit or cash escrow. Cost estimates shall be provided by a licensed Colorado engineer. Upon preliminary acceptance of the restored public road, the County shall release all but fifteen percent (15%) of total actual costs of restoration of the public roads, so long as Taelor Solar 1, LLC are not in default of any provision of the public improvements agreement. The County shall inspect the restored roads and Taelor Solar 1, LLC shall pay to the County the cost incurred by the County in conducting such inspections. These costs shall be due and payable upon demand of the County. Taelor Solar 1, LLC shall be responsible for correcting or properly completing the restoration.*
  - vi. *The residual fifteen percent (15%) retained by the County shall act as security for Taelor Solar 1, LLC's guarantee that the restoration remains free of defect during a two year warranty period. Taelor Solar 1, LLC may at any time during the preliminary acceptance or warranty period offer to provide a substitute or supplemental form of financial security to that security as originally posted with and/or retained by the County. The County may accept substitute or supplemental forms of security in its sole discretion.*
- h. Prior the commencement of construction, Taelor Solar 1, LLC must obtain all proper permissions from landowners to use private roads or develop access roads on any private

property. No private access roads, new or currently in use, shall become public rights of way unless approved and accepted by the Board of County Commissioners.

- i. The County will require written notice for all staging or laydown areas, or other temporary areas for construction or repair activities ("Temporary Areas") utilized after final construction is completed. Taelor Solar 1, LLC must provide a map showing the Temporary Area by size (acreage and perimeter), a list of materials and equipment to be stored on the Temporary Areas, activities within the area (e.g., grading, storage, etc.), the length of time the temporary construction or staging or laydown areas will be in use and must notify the County at least thirty (30) days prior to the use of the temporary area. It shall be a condition of all equipment and materials must be removed from the Temporary Areas and the area returned to a condition similar to its condition prior to construction. No permanent structures may remain in the Temporary Areas unless approved by the County pursuant to the applicable Morgan County Zoning Regulations.
- j. The project area shall be reclaimed and/or reseeded as soon as practicable but no later than six months after Taelor Solar 1, LLC has completed construction, unless the County Planning Administrator grants an extension for demonstrated good cause.
- k. Construction occurring within ¼ quarter mile of any residence shall not commence earlier than 7 a.m.
- l. Taelor Solar 1, LLC shall prevent the existence of any nuisances by way of its construction activities. All trash, litter, construction waste and any potentially hazardous materials shall be disposed of properly off-site. If the County determines that a nuisance exists and the nuisance is not abated or an abatement plan is not submitted to the satisfaction of the County, the County may, upon thirty (30) days' notice under this Agreement, draw upon the Performance Guarantee to pay the cost and expenses of abating the nuisance. The decision to draw on the Performance Guarantee shall be within the sole discretion of the County.
- m. Taelor Solar 1, LLC shall comply with all applicable law and regulations related to safety and emergency management during construction and on-going operations.
- n. Taelor Solar 1, LLC shall be responsible for the payment of all costs and fees incurred by the County associated with this Permit. The County shall invoice Taelor Solar 1, LLC for costs and fees and payment will be due by Taelor Solar 1, LLC within thirty (30) days of the date of the invoice. Failure to pay may result in enforcement actions by the County.

Nicole Hay,  
Morgan County Planning Administrator

HAUL ROUTE



Jenafer Santos <jsantos@co.morgan.co.us>

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## Taelor Solar and Battery SUP Apps

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Erica Goad <egoad@balancedrockpower.com>

Tue, Sep 5, 2023 at 10:31 AM

To: Jenafer Santos <jsantos@co.morgan.co.us>

Cc: Nicole Hay <nhay@co.morgan.co.us>, mmooney@balancedrockpower.com, Cheryl Brindisi <cbrindisi@co.morgan.co.us>, Planning Dept Permits Licensing <permits\_licensing@co.morgan.co.us>, Randy Schroeder <rschroeder@envalue.us>, Liam Norris <lnorris@balancedrockpower.com>

Good morning Jenafer and Cheryl,

Attached is the packet of the supplemental information requested by the Board for the Taelor Solar and Storage projects, including a revised haul route map, a glare report, a revegetation report, and aerial images of projects (these had been sent over previously). A couple of notes:

-We accept the Road and Bridge proposed haul route assuming our interpretation of their proposal matches the map

-The truck weights used for construction of the Taelor Solar project will have to comply with state and federal interstate requirements, and the maximum we anticipate is 40 tons (most loads will be much less - transporting the GSU is the heaviest load). If additional fortification is needed for bridges along the haul route, the Taelor Solar project will make the bridge improvements. The bridge improvement obligations will be addressed in the future Road Use Agreement.

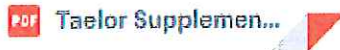
Thanks again and please let us know if you have any additional questions. See you next week!

Erica

One attachment • Scanned by Gmail



Taelor Solar + Storage Supplemental Information

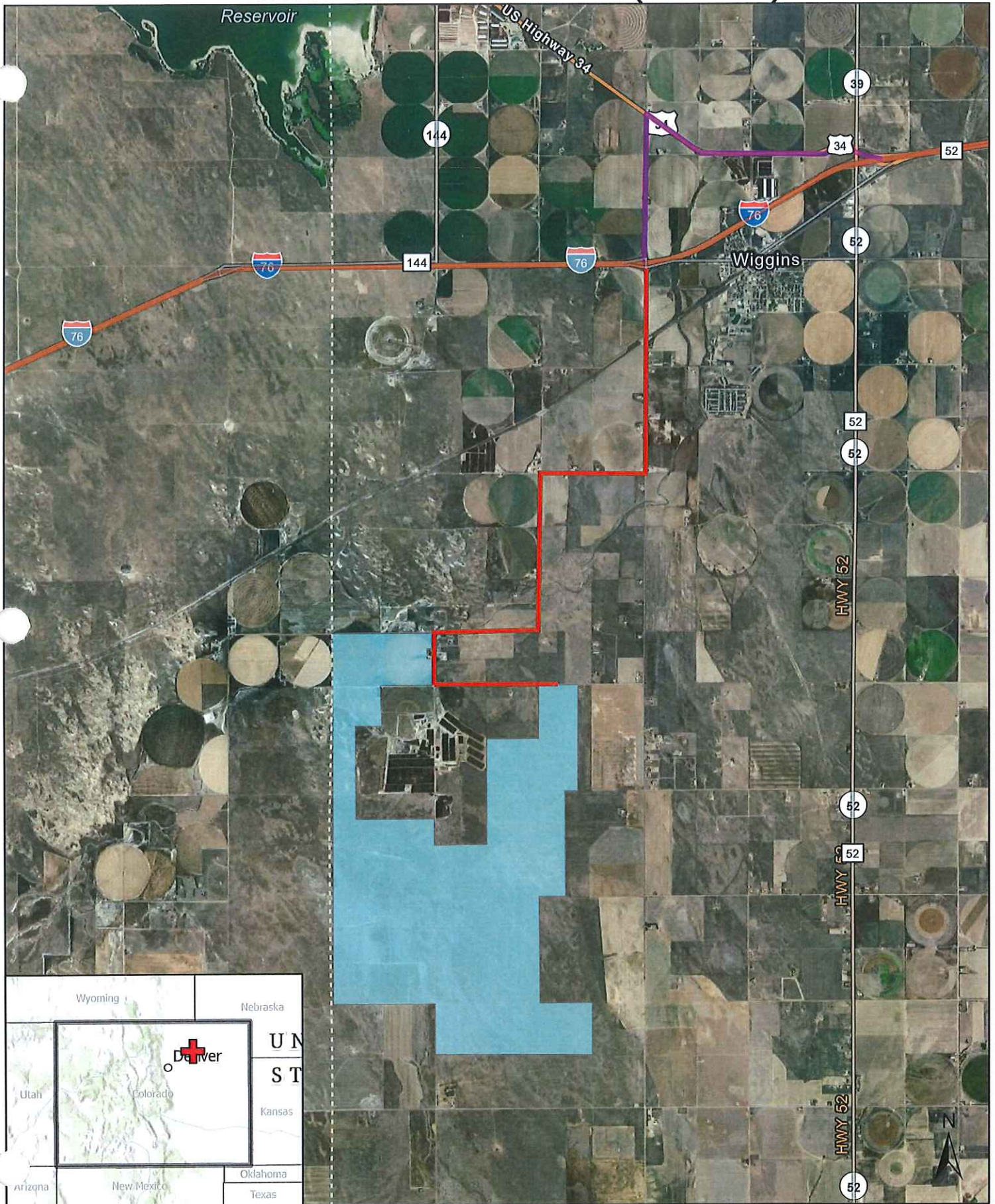






## **Taelor Solar + Storage Supplemental Information**

# Taylor Solar Haul Route (Revised)



BALANCED ROCK

- Westbound Entrance to Main Haul Route
- Main Haul Route
- Taylor Morgan County Permitting Boundary

0 0.5 1 2 Miles

1:100,000

9/5/2023

Prognosis World Terrain

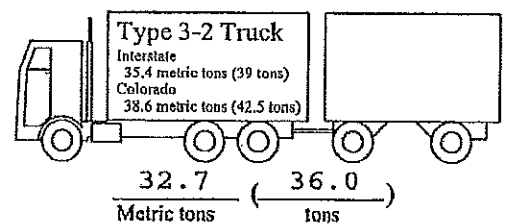
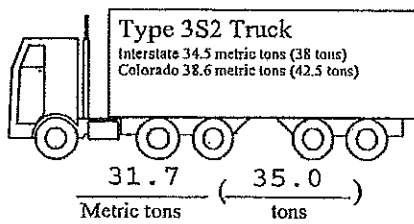
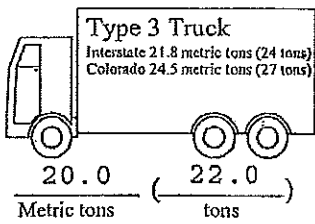
# Bridge on Road 2 North of MS

<b>COLORADO DEPARTMENT OF TRANSPORTATION LOAD FACTOR RATING SUMMARY</b>		Structure #	MG2-0.4-M.5
		State Highway #	CR 2
Rated using: Asphalt thickness: <u>102</u> mm ( <u>4</u> in.) <input checked="" type="checkbox"/> Colorado legal loads <input type="checkbox"/> Interstate legal loads		Batch I.D.	
		Structure Type	CI
		Parallel Structure #	

Structural Member	Interior Girder	Deck (Visual Rating)	
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	Metric Tons	(Tons)		
Inventory	15.4	( 17.0 )	32.7	( 36.0 )
Operating	25.7	( 28.3 )	36.3	( 40.0 )

Type 3 truck	20.8	( 22.9 )	( )	( )
Type 3S2 truck	32.5	( 35.9 )	( )	( )
Type 3-2 truck	33.0	( 36.4 )	( )	( )
Type SU4 truck (27T)	20.8	( 22.9 )	( )	( )
Type SU5 truck (31T)	22.6	( 24.9 )	( )	( )
Type SU6 truck (35T)	22.8	( 25.1 )	( )	( )
Type SU7 truck (39T)	23.8	( 26.3 )	( )	( )
NRL (40T)	23.4	( 25.8 )	( )	( )
Permit Truck Multi-Lane D.F.	( )	( )	( )	( )



Comments: (T = tons)

Posting Required

- EV2 = 24.9 T (Interior Girder)
- EV3 = 24.0 T (Interior Girder)
- Deck visually rated due to lack of plans and the deck shows no signs of failure
- Built 1973
- 79'-8" Str. Length (39'-4" - 39'-4"); 24'-0 1/2" O/O (23'-6" R/R)
- 4" Asphalt on 5" CIP Concrete Deck
- (11) W16x40 @ 2'-4" o.c.

Rated By Stantec Consulting Services

Rated by: <i>Z. Banachowski, EIT</i>	Date: 2/28/17	Checked by: <i>James Fuller, PE</i>	Date: 3/30/17
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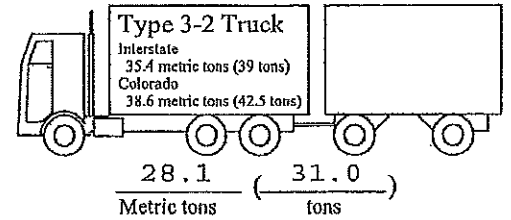
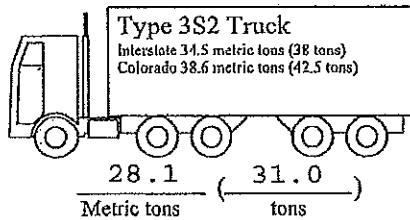
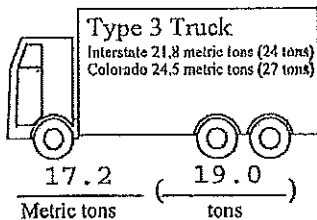
# Bridge on Road 5, South of Road 0

<b>COLORADO DEPARTMENT OF TRANSPORTATION LOAD FACTOR RATING SUMMARY</b>	Structure #	MG3-1.7-M
	State Highway #	CR 3
Rated using: Asphalt thickness: <u>152</u> mm ( <u>6</u> in.) <input checked="" type="checkbox"/> Colorado legal loads <input type="checkbox"/> Interstate legal loads	Batch I.D.	
	Structure Type	CI
	Parallel Structure #	

Structural Member	Interior Girder		
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	Metric Tons	(Tons)		
Inventory	13.4	( 14.8 )	( )	( )
Operating	22.4	( 24.6 )	( )	( )

Type 3 truck	18.0	( 19.9 )	( )	( )
Type 3S2 truck	28.1	( 31.0 )	( )	( )
Type 3-2 truck	28.7	( 31.7 )	( )	( )
Type SU4 truck (27T)	18.0	( 19.8 )	( )	( )
Type SU5 truck (31T)	19.6	( 21.6 )	( )	( )
Type SU6 truck (35T)	19.8	( 21.8 )	( )	( )
Type SU7 truck (39T)	20.7	( 22.8 )	( )	( )
NRL (40T)	20.3	( 22.4 )	( )	( )
Permit Truck Multi-Lane D.F.	( )	( )	( )	( )



Comments: (T = tons)			
<p>Posting Required</p> <ul style="list-style-type: none"> <li>- EV2 = 21.8 T (Int. Girder)</li> <li>- EV3 = 20.8 T (Int. Girder)</li> <li>- Built 1965</li> <li>- 39'-10" Str. Length (38'-9" CL Brg. - CL Brg.); 24'-4" O/O (23'-9" R/R)</li> <li>- (11) W16x40 spaced @ 2'-4" o.c.</li> <li>- 6" Asphalt on 6" CIP Concrete Deck</li> <li>- Deck Rating not required; reinforcing layout unknown and deck shows no signs of failure</li> </ul> <p>Rated By Stantec Consulting Services</p>			
Rated by: Z. Banachowski, EIT	Date: 2/27/17	Checked by: Peter LaRue, PE	Date: 3/1/17



Nicole Hay <nhay@co.morgan.co.us>

---

## Haul Routes

---

**Bruce Bass** <bbass@co.morgan.co.us>  
To: Nicole Hay <nhay@co.morgan.co.us>

Thu, Aug 31, 2023 at 3:52 PM

Nichole

John and I discussed the possible haul routes and we have no issue with the following recommended haul routes:

East bound traffic on I 76 exiting at the Wiggins (County Road 3 Exit), then south on Road 3 to Road O, the west on Road O to Road 2, then South on Road 2 to Road M.5, then West on Road M.5 to Road 1, then South on Road 1 to Road M, then Road M short distance to destination.

West bound traffic on I 76 exiting at the Hwy 34 exit towards Greeley, then west on Hwy 34 to Road 3, then south on Road 3 to Road O, the west on Road O to Road 2, then South on Road 2 to Road M.5, then West on Road M.5 to Road 1, then South on Road 1 to Road M, then Road M short distance to destination.

We will need to require them to be responsible for mitigating any nuisance conditions that arise from the use of the short section of Road M in these haul routes.

As far as using Road M from Road 1 to Road 3, Road & Bridge will not approve the use of this road as part of the haul route unless it is improved using asphalt pavement to CDOT specifications.


Also attached are the two load rating sheets for the two bridges you asked about.

Bridge on Road 2, North of Road M.5 is Load restricted to 22 ton and the bridge on Road 3 from south of Road O is restricted to 19 ton for type 3 trucks. See attached load sheets.

Thank You

*Bruce Bass*  
*Public Works Director*  
*Morgan County Government*  
*970-542-3560*

---

 **Bridge Load Ratings.pdf**  
1509K



Cheryl Brindisi &lt;cbrindisi@co.morgan.co.us&gt;

---

**Haul Routes**

1 message

**Nicole Hay** <nhay@co.morgan.co.us>

Thu, Aug 31, 2023 at 4:25 PM

To: Erica Goad &lt;egoad@balancedrockpower.com&gt;, "cc: Matthew Mooney" &lt;mmooney@balancedrockpower.com&gt;, Randy Schroeder &lt;rschroeder@envalue.us&gt;, Dana Diller &lt;ddiller@balancedrockpower.com&gt;

Cc: Cheryl Brindisi &lt;cbrindisi@co.morgan.co.us&gt;, Jenafer Santos &lt;jsantos@co.morgan.co.us&gt;

Good afternoon,

Attached is the response from Road and Bridge. I am also still needing truck weight information from you along with the rest of the requested information.



I will be out of the office until September 11, please reach out to Cheryl or Jenafer

Thanks

--

Nicole F. Hay  
Planning Administrator  
Planning/Zoning Department  
[231 Ensign St.](#)  
[Fort Morgan, CO 80701](#)  
970-542-3526

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**2 attachments** **Haul Routes 083123.pdf**  
109K **Bridge Load Ratings.pdf**  
1509K

GLARE REPORT



## TAELOP SOLAR PROJECT

MORGAN COUNTY, COLORADO

### SOLAR GLARE HAZARD ASSESSMENT

RWDI #2400311

September 5, 2023

#### SUBMITTED TO

**Matt Mooney**  
Balanced Rock Power, LLC  
310 E 100 S  
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#### SUBMITTED BY

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**Ryan Danks, B.A.Sc., P.Eng**  
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**Steve Smith, B.Sc., QSTI**  
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# 1 INTRODUCTION

RWDI AIR Inc. (RWDI) was retained by Balanced Rock Power, LLC to undertake a Solar Glare Hazard Assessment (SGHA) for the proposed Taelor Solar Project located in Morgan County, Colorado. The aim of this analysis was to predict the potential for glare from the Project on nearby dwellings, flight paths and vehicle routes. All work was completed by qualified technical staff, as detailed in Appendix A.

## 1.1 Objective and Regulatory Context

RWDI is not aware of specific requirements for glare from photovoltaics in Colorado. As such, we have based this assessment on standard industry best practices and RWDI's past experience in studying glare for hundreds of projects around the world. RWDI's assessment included:

- Predicting solar glare potential at dwellings, railways highways and other major roads within 5000 feet from the boundary of the project.
- Predicting solar glare potential at aerodromes, including the potential effect on runways, flightpaths, and air traffic control towers within 10 miles from the boundary of the project.
- Describing the time, location, duration, and intensity of solar glare predicted to be caused by the project.
- Describing the software or tools used in the assessment, the assumptions, and the input parameters utilized.
- Describing the qualification of the individual(s) performing the assessment.
- Producing a map (or maps) identifying the solar glare receptors, critical points along highways, major roadways and railways and aerodromes that were assessed.
- Producing a table that provides the expected intensity of solar glare (e.g., green, yellow, or red) and the expected duration of solar glare at each identified location.

# 2 PROJECT DESCRIPTION

The Project is a solar power plant that will have a grid capacity of 250 MW<sub>AC</sub> consisting of solar photovoltaic (PV) panels mounted on single-axis trackers covering approximately 5 square miles. Surrounding land use primarily consists of cultivated agricultural land and internal access roads. A map of the Project's layout, including the dwelling receptors and routes considered as part of this assessment, is included below in Figure 1.

## 3 METHODOLOGY

### 3.1 Overview

#### 3.1.1 Glare and Glint

Solar glare is defined as a continuous source of excessive brightness. This can be experienced by both stationary and moving observers. In common language, glint is a similar phenomenon but occurring over very brief timescales. In the interest of clarity, the word 'glare' will be used throughout this report.

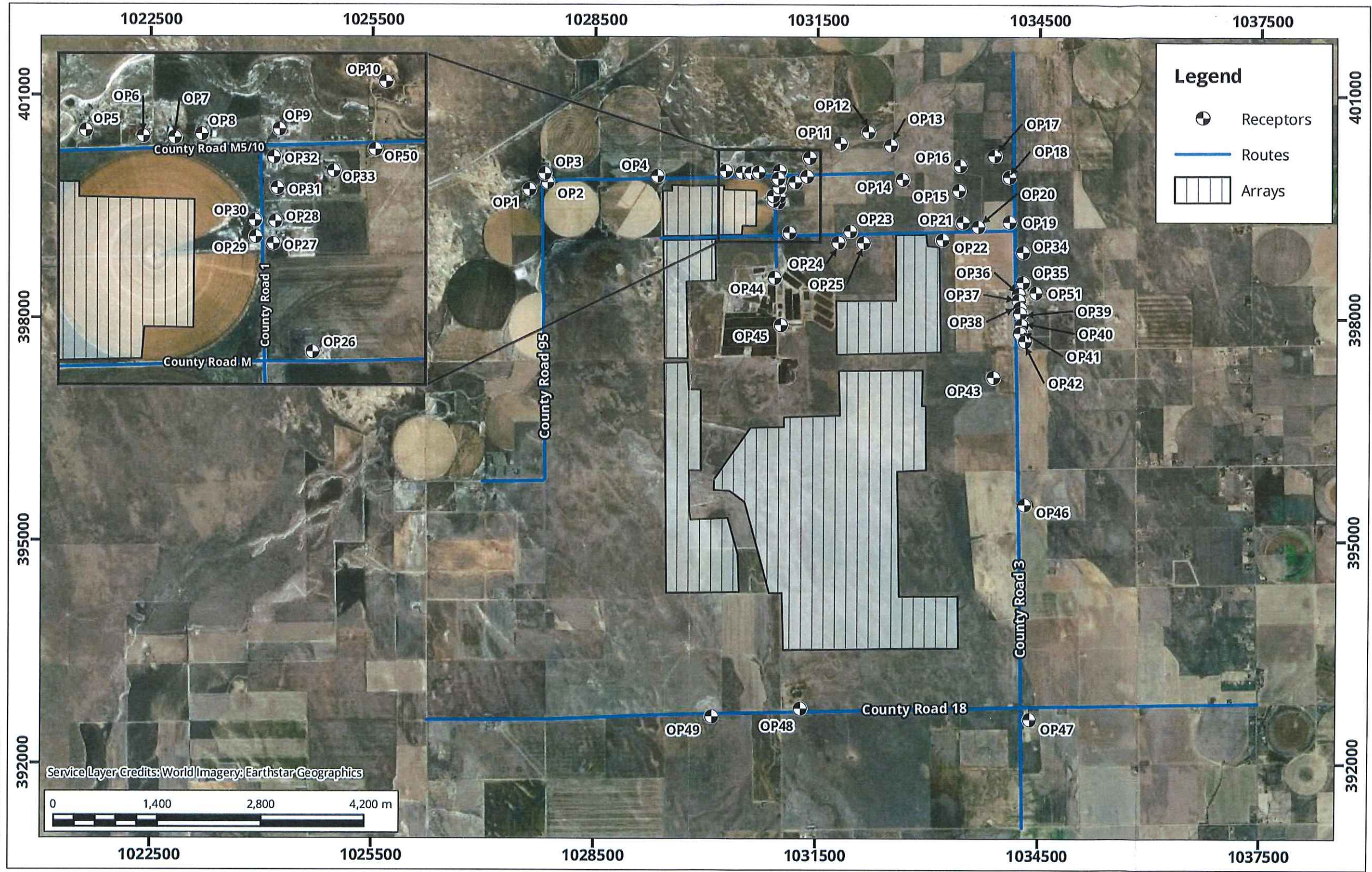
There are many ways that glare can be classified [1], however the most commonly used metric for solar glare hazard assessment is the one created by Ho et al. [2] which categorizes glare into one of the three ocular hazard colour codes:

**Green:** Glare with low potential to cause temporary afterimage (i.e. lingering image in a viewer's eye associated with a flash of light) to a viewer prior to a typical blink response time.

**Yellow:** Glare with potential to cause temporary afterimage to a viewer prior to a typical blink response time.

**Red:** Glare with potential to cause retinal damage to a viewer prior to a typical blink response time.

Below is a sample ocular hazard plot that illustrates where common sources of light approximately fall within this framework.



**Project Layout Showing Project Location, Routes, and Receptors**

Map Projection: NAD 1983 StatePlane Colorado North FIPS 0501  
 Taelor Solar Project - Morgan County, Colorado



True North  
 Drawn by: RCL Figure: 1  
 Approx. Scale: 1:72,000  
 Date Revised: Aug 30, 2023  
 Project #: 2400311



Map Document: C:\GIS\2400311\_ACM\Energy\2400311\_ACM\Energy.aprx

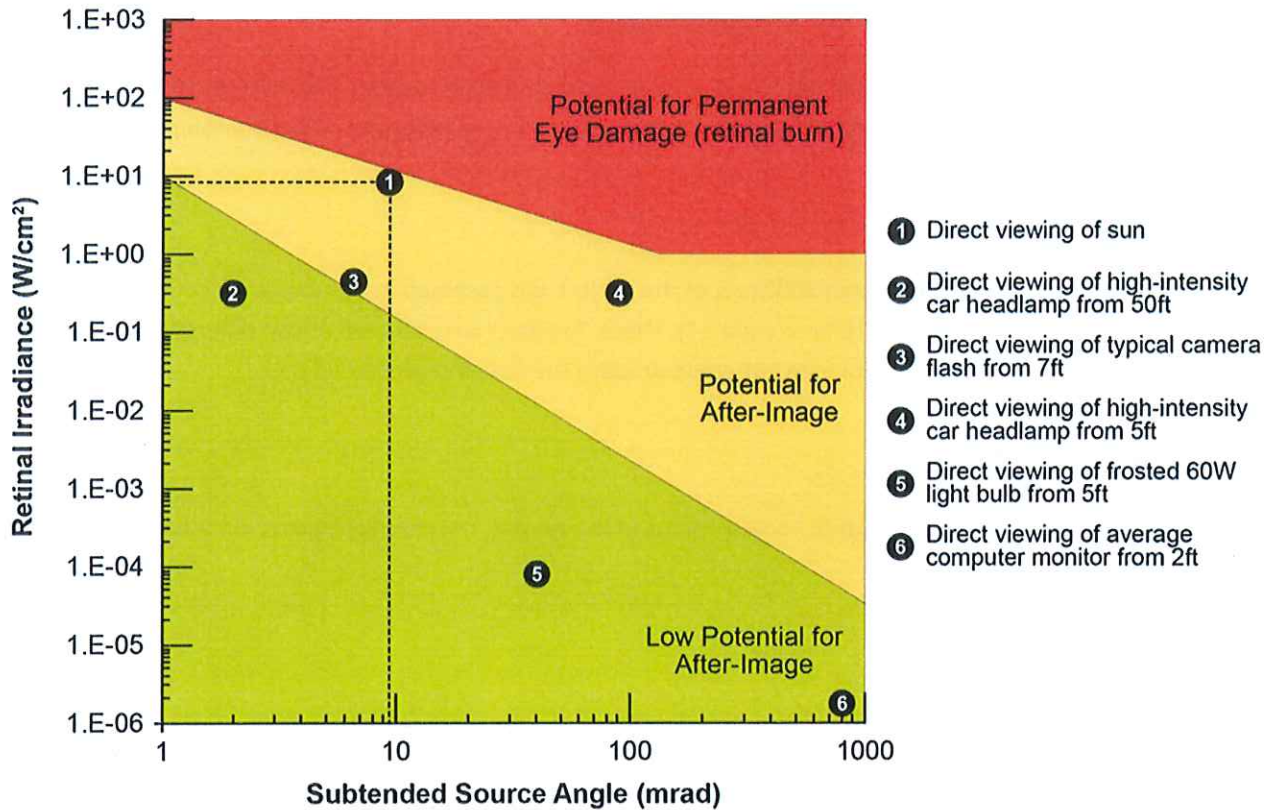


Figure 2: Ocular Hazard Plot

### 3.1.2 Reflectivity

The amount of visible light reflected from a solar panel depends on a variety of factors including the:

- latitude of the solar farm;
- time of year;
- solar intensity;
- presence of cloud, fog, dust or other attenuating factors in the atmosphere;
- angle of incidence at which direct sunlight strikes the panel; and
- overall reflectivity of the panel surface.

Solar panels are designed to maximize sunlight absorption and minimize reflection in order to ensure maximum electricity production. The majority of solar panels are treated with an anti-reflective coating (ARC) that further reduces the amount of sunlight that is reflected and was modelled as such in our analysis.



## **3.2 Identification of Receptors**

The locations investigated in this analysis were chosen based on RWDI's own best practices and experience in other jurisdictions to provide an appropriately conservative assessment of glare potential.

### **3.2.1 Dwellings**

All dwellings that exist within 5000 feet of the Project was assessed in this study. A total of 51 dwellings were found within that radius (refer to Figure 1). These dwellings were studied at two different heights (5ft and 15ft above grade) to account for views at approximately the first and second floors.

### **3.2.2 Aerodromes**

No airports were found within 10-mile radius of the project, thus no flight paths or air traffic control towers were assessed.

### **3.2.3 Routes**

Six nearby routes were assessed in this analysis: County Road M and County Road 1 (RR1 and RR3) located within the project site, County Road 18 (RR2), south of the Project; County Road 3 (RR4), east of the Project; County Road 95 (RR5), west of the Project and County Road M5/10 (RR6), north of the Project. These routes were assessed for glare at a height of 3.5 feet above grade.

A summary of the receptors identified for the Project are presented in Table 1 below.



**Table 1:** Project Route Receptors and Observation Points

Receptor ID	GlareGauge Receptor Type	Details
RR1	Route	County Road M
RR2	Route	County Road 18
RR3	Route	County Road 1
RR4	Route	County Road 3
RR5	Route	County Road 95
RR6	Route	County Road M5/10
OP1 – OP51*	Observation Point	Dwellings in the vicinity of the Project

\*Note that all dwellings were studied at two different heights (5ft and 15ft above grade) to account for views at approximately the first and second floors. For the exact location of these dwellings, please refer to Appendix B.

### 3.3 Modelling Software

Solar glare from the proposed Project has been estimated using Forge Solar’s GlareGauge assessment tool. Assumptions and limitations associated with GlareGauge are described within Section 3.3.2. All work was completed by technical staff experienced in the assessment of reflected visible light and solar energy, as detailed in Appendix A.





### 3.3.1 Modelling Inputs

**Table 2:** Model Inputs

Parameter	Value	Input Type
<b>Axis Tracking</b>	Single axis	Project Specific
<b>Backtracking Method</b>	Shade-slope	Project Specific
<b>Tracking Axis Orientation</b>	180 Degrees (South)	Project Specific
<b>Maximum Tracking Angle</b>	60 Degrees	Project Specific
<b>Resting Angle</b>	3 Degrees	Project Specific
<b>Ground Coverage Ratio (GCR)</b>	31.8 %	Project Specific
<b>Module Surface Material</b>	Smooth glass with ARC	Project Specific
<b>Rated Power</b>	250 MW <sub>AC</sub>	Project Specific
<b>Heights Above Ground</b>	Solar panels: 5 ft	Project Specific
	Route Receptors (RR): 3.5 ft	General
	Observation Points (OP): 5 ft and 15 ft	General
<b>View Angle for Routes</b>	50 Degrees	Default
<b>Analysis Time Interval</b>	1 minute	Default
<b>Pupil Diameter</b>	0.002 m	Default
<b>Eye Focal Length</b>	0.017 m	Default
<b>Sun Subtended Angle</b>	9.3 milliradians	Default

### 3.3.2 Model Assumptions and Limitations

Assumptions and limitations of the analysis are listed below:

- This analysis was based on information provided to RWDI up to August 18, 2023. Design changes may impact the predictions made below. Should alterations occur, the details should be communicated to RWDI so that their impact on the conclusions be investigated.
- The SGHA did not include detailed geometry of the PV panels such as gaps between the modules and as such actual glare results may be impacted.
- The SGHA assumes that the PV panel arrays are aligned with a plane defined by the heights and coordinates from Google Maps. Large, localized changes in topography cannot be directly accounted for using this method. However, based on available data such topographical changes were not noted at this site.
- The model does not account for potential screening from natural or artificial obstacles such as cloud cover, vegetation or other physical obstructions including the building envelope of any dwellings.
- The model presents results for 1-minute intervals, but vehicle drivers would travel through a particular section of road relatively quickly. As such, if glare was to occur, it would result in momentary glint rather than continuous glare being observed for a driver.
- Based on information provided to RWDI, the PV arrays consist of single axis tracking panels and the module surface material was a smooth glass with an anti-reflective coating (ARC).
- RWDI has assumed a modern backtracking approach designed to minimize panel shading and low solar elevations.
- This analysis covers the expected typical operating condition of the Project. It does not include an assessment of glare potential during maintenance or other activities that would impact panel orientation. It is assumed that such activities would not occur for prolonged periods and would not affect a large portion of the Project at any one time.
- All receptor locations were based on Google Earth imagery of the project location and were not field verified by RWDI.
- This analysis assumed reasonable and responsible behaviour on the part of people in the vicinity of the Project. A reasonable and responsible person would not purposely look towards a bright reflection, purposely prolong their exposure to reflected light or heat, or otherwise intentionally try to cause discomfort/harm to themselves or others and/or damage to property.



## 4 RESULTS AND ANALYSIS

### 4.1 Assessment

The results of the analysis (summarized in Table 3 below) predicted no potential for red glare, yellow or green glare at any of locations under the assumptions described above.

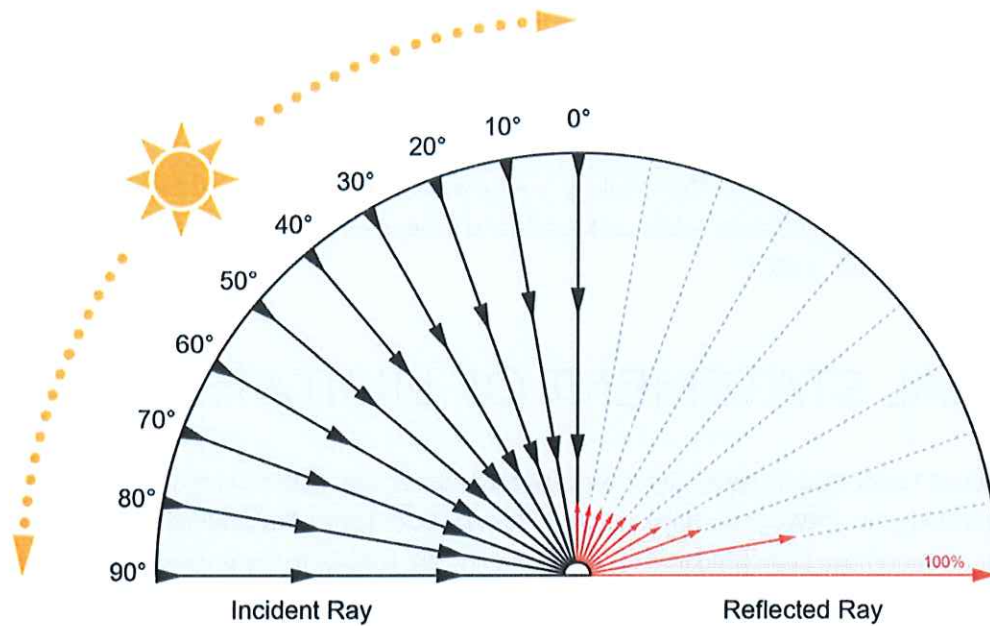
**Table 3:** Potential Glare Impacts for the Project

Receptor ID	GlareGauge Receptor Type	Green Glare (min/year)	Yellow Glare (min/year)	Red Glare (min/year)
RR1	Route	0	0	0
RR2	Route	0	0	0
RR3	Route	0	0	0
RR4	Route	0	0	0
RR5	Route	0	0	0
RR6	Route	0	0	0
OP1 – OP51	Observation Point	0	0	0

### 4.2 Effect of Resting Angle on Predictions

The “resting angle” of a PV tracking system defines the angle up from horizontal the panels will ‘rest’ at when the sun is low in the sky. Shallow rest angles are common in modern systems with backtracking as this minimizes inter-row shadowing on the PV panels during the first and last hours of the day.

Resting angle is also an important factor that contributes to glare potential within the GlareGauge software. This is because panels resting closer to horizontal have the potential to create glancing angle reflections when the sun is low in the sky. The reflectivity of any glass (including the exterior surface of a PV panel) is naturally increased when light strikes it in such a fashion (see Figure 3) and the low solar angle results in reflections directed more horizontally rather than vertically. Thereby, increasing the potential for glare that could affect people. As such, the analysis was also conducted for a zero-degree resting angle to understand the range of glare potential for the Project.



**Figure 3:** Schematic Illustrating Reflectivity vs. Incidence Angle

**Table 4:** Number of Receptors Receiving Glare at Different Resting Angles

Resting Angle (degrees)	GlareGauge Receptor Type	Green Glare	Yellow Glare	Red Glare
0	Routes	4	4	0
	Observation Points	43	13	0
3	Routes	0	0	0
	Observation Points	0	0	0

## 5 CONCLUSIONS

In conclusion, based on the GlareGauge analysis, the Taelor Solar Project was not predicted to create red, yellow or green glare at any of the studied receptor locations, at a resting angle of 3°. A re-analysis at a 0° resting angle indicated the potential for green and yellow glare across many of the receptors throughout the year. Therefore, resting angles below 3° would have an increased potential for glare in the absence of other mitigating factors not included here (e.g. vegetation or artificial screening).



## 6 REFERENCES

1. Danks, R., Good, J., and Sinclair, R., "Assessing reflected sunlight from building facades: A literature review and proposed criteria." *Building and Environment*, 103, 193-202, 2016.
2. Ho, C., Ghanbari, C. and Diver, R., "Methodology to Assess Potential Glint and Glare Hazards from Concentrating Solar Power Plants: Analytical Models and Experimental Validation," *Journal of Solar Energy Engineering*, vl. 133, no. 3, 2011.

## 7 GENERAL STATEMENT OF LIMITATIONS

This report entitled Taelor Solar Project – Solar Glare Hazard Assessment (dated September 5, 2023) was prepared by RWDI Air, Inc. ("RWDI") for Balanced Rock Power, LLC ("Client"). The findings and conclusions presented in this report have been prepared for the Client and are specific to the project described herein ("Project"). The conclusions and recommendations contained in this report are based on the information available to RWDI when this report was prepared.

Because the contents of this report may not reflect the final design of the Project or subsequent changes made after the date of this report, RWDI recommends that it be retained by Client during the final stages of the project to verify that the results and recommendations provided in this report have been correctly interpreted in the final design of the Project.

The conclusions and recommendations contained in this report have also been made for the specific purpose(s) set out herein. Should the Client or any other third party utilize the report and/or implement the conclusions and recommendations contained therein for any other purpose or project without the involvement of RWDI, the Client or such third party assumes any and all risk of any and all consequences arising from such use and RWDI accepts no responsibility for any liability, loss, or damage of any kind suffered by Client or any other third party arising therefrom.

Finally, it is imperative that the Client and/or any party relying on the conclusions and recommendations in this report carefully review the stated assumptions contained herein and to understand the different factors which may impact the conclusions and recommendations provided.

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# APPENDIX A

## PRACTITIONER BIOGRAPHIES



## **Ryan Danks, B.A.Sc., P.Eng. Technical Director/Associate**

Ryan Danks specializes in creating tools and methodologies to predict how the built environment will interact with climate. From preventing dangerous solar glare to tracking germs through air ducts and understanding wind flow around the next generation of extremely large telescopes, Ryan's ability to understand and simulate multifaceted physical processes yields answers to even the most sophisticated questions. His process may be complex, but the outcome is simple: comfortable, sustainable spaces in and around our clients' structures and facilities. In addition to the impressive results he delivers for clients, Ryan helps us stay at the leading edge of building science through his contributions to our building-science R&D practice. Among other things, Ryan is the lead developer of our Climate-Aware Design Toolkit, which includes the Eclipse solar modeling engine and the Oasis thermal comfort estimator.

Ryan has experience in urban glare analysis, thermal comfort, daylight availability/shadow analysis internationally and is a registered Professional Engineer in both Ontario and Alberta. He is also a member of the International Building Performance Simulation Association (IBPSA) Canadian Chapter, Canada Green Building Council, Façade Tectonics Institute and frequently presents at conferences on solar issues and glare in the built environment.

## **Vimaldoss Jesudhas, Ph.D. Technical Coordinator**

Vimal brings to his work a valuable combination of technical training and research experience. He is a strong communicator and a creative problem-solver, he excels at translating the findings of his analyses into clear, actionable reports. Vimal has a holistic perspective that enables him to collaborate effectively and deliver useful results and insights for colleagues and clients alike.

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APPENDIX B  
OBSERVATION POINT LOCATIONS





Receptor ID	Receptor Type	Latitude (°)	Longitude (°)
OP1	Observation Point	40.180728	-104.170727
OP2	Observation Point	40.181545	-104.167817
OP3	Observation Point	40.18263	-104.168238
OP4	Observation Point	40.182128	-104.150407
OP5	Observation Point	40.182576	-104.139452
OP6	Observation Point	40.182358	-104.136934
OP7	Observation Point	40.182297	-104.135547
OP8	Observation Point	40.182398	-104.134346
OP9	Observation Point	40.182522	-104.130945
OP10	Observation Point	40.184077	-104.126212
OP11	Observation Point	40.185727	-104.121242
OP12	Observation Point	40.187072	-104.116824
OP13	Observation Point	40.185427	-104.113295
OP14	Observation Point	40.181276	-104.111498
OP15	Observation Point	40.179818	-104.102564
OP16	Observation Point	40.182826	-104.102341
OP17	Observation Point	40.18395	-104.096819
OP18	Observation Point	40.181347	-104.094645
OP19	Observation Point	40.175875	-104.094725
OP20	Observation Point	40.175387	-104.099545
OP21	Observation Point	40.17594	-104.102048
OP22	Observation Point	40.173867	-104.105301
OP23	Observation Point	40.175051	-104.119937
OP24	Observation Point	40.173721	-104.121822
OP25	Observation Point	40.173622	-104.117892
OP26	Observation Point	40.175002	-104.129618
OP27	Observation Point	40.178673	-104.131294



Receptor ID	Receptor Type	Latitude (°)	Longitude (°)
OP28	Observation Point	40.179422	-104.131184
OP29	Observation Point	40.178905	-104.132066
OP30	Observation Point	40.179466	-104.132063
OP31	Observation Point	40.180546	-104.131074
OP32	Observation Point	40.181585	-104.131191
OP33	Observation Point	40.181101	-104.128563
OP34	Observation Point	40.172201	-104.092679
OP35	Observation Point	40.168568	-104.09274
OP36	Observation Point	40.167166	-104.093499
OP37	Observation Point	40.16641	-104.093477
OP38	Observation Point	40.165441	-104.093284
OP39	Observation Point	40.164801	-104.093239
OP40	Observation Point	40.163397	-104.093061
OP41	Observation Point	40.162417	-104.093278
OP42	Observation Point	40.161401	-104.092602
OP43	Observation Point	40.157075	-104.097551
OP44	Observation Point	40.169572	-104.13199
OP45	Observation Point	40.163811	-104.131146
OP46	Observation Point	40.141575	-104.092956
OP47	Observation Point	40.115493	-104.09255
OP48	Observation Point	40.117242	-104.128732
OP49	Observation Point	40.116447	-104.142834
OP50	Observation Point	40.181796	-104.126713
OP51	Observation Point	40.16729	-104.090733

REVETATION PLAN

# TAEOR SOLAR

## REVEGETATION PLAN

Morgan County, Colorado



*Prepared for*



**BALANCED ROCK**  
POWER

*Prepared by*

**KERTec** LLC

## 1.0 INTRODUCTION

Balanced Rock Power (BRP) is designing Taelor Solar (Project) in Morgan County, Colorado. BRP has engaged KerTec, LLC (KerTec) to prepare this site-specific Revegetation Plan (Plan) for implementation on the Project. This Plan has been initiated and will be amended as civil designs are completed and further site details are developed and made known. The purpose of this Plan is specifically designed to focus on soil preservation, land stewardship, and revegetation with regard to erosion control and the site's future vegetative-longevity. This Plan is to be implemented utilizing a dynamic approach—multiple reclamation services may be required during the course of construction to ensure stability and success of the land. This Plan will work to properly identify potential erosion potential and mitigation measures, vegetation limiting factors, as well as the proper formation of a sustainable and executable plan. This Plan has been developed based on approximately 10% engineering design with additional details to come and be incorporated herein.

### 1.1 THE PROJECT

The Project is slated to be under construction in 2025. The Project is located at Lat/Long 40.145, -104.127 in Morgan County, Colorado, northeast of Denver set to encompass approximately 4,410 acres. The Project aims to achieve 250 MWac power generation.

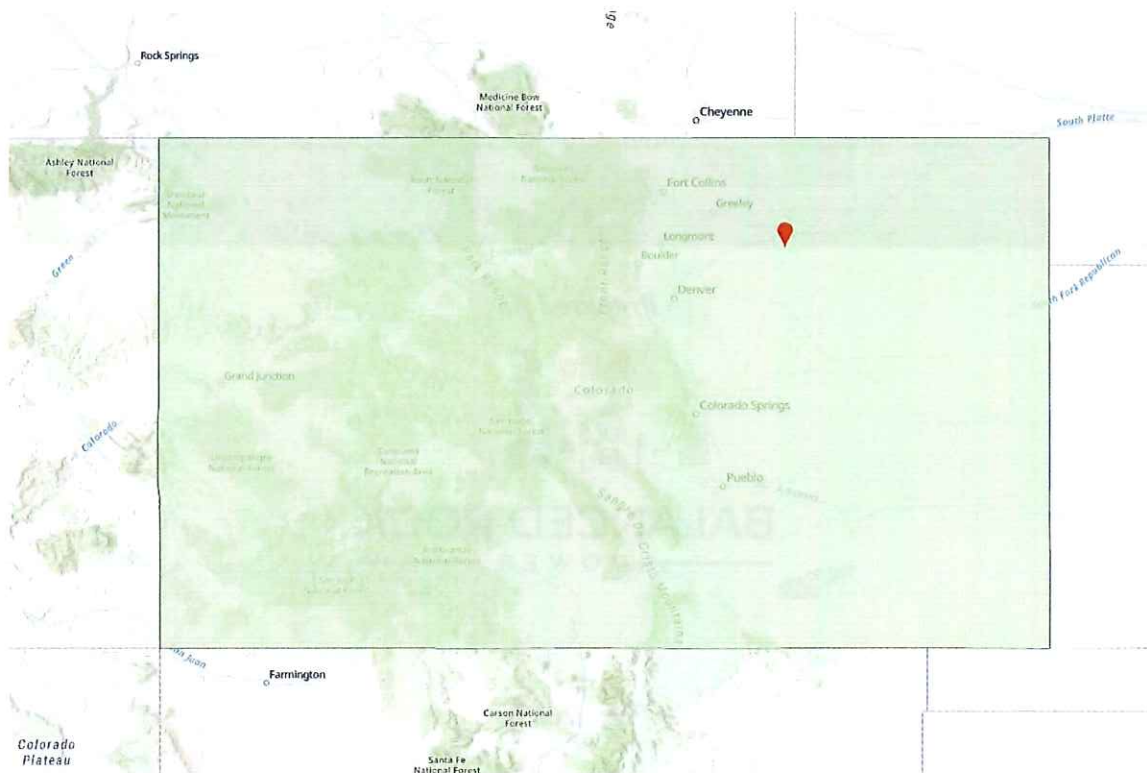


FIGURE 1. Proposed location of the Project, Morgan County, Colorado.

## 2.0 PLANNING

### 2.1 ENVIRONMENT

The state of Colorado is located within an arid region of the United States. Lower annual levels of precipitation are likely, especially on the Front Range. However, the Front Range is known to experience temperatures ranging from lows near 20°F to highs approaching 90°F. Average annual precipitation is around 20.1", with the greatest amounts typically received in the 2<sup>nd</sup> and 3<sup>rd</sup> quarters of the year (growing season). Average hours of sun exposure range from 209 hours in February to an excess of 323 hours in August<sup>1</sup>.

### 2.2 SOILS

The Project consists of a multitude of soil types but Morgan County is typically known to consist of very deep, well drained, slow or medium permeable loamy sand or sandy loam soils formed in eolian materials. These gently sloping uplands range from 0-6% slope<sup>2</sup>. Being an arid climate compounded by relatively low average rainfall and wind, the Project must anticipate and strive to prevent not only water erosion but also wind erosion of the topsoil.



FIGURE 2. USDA-NRCS Web Soil Survey

<sup>1</sup> <https://www.weatherwx.com/climate-averages/co/morgan+county.html>

<sup>2</sup> <https://soilseries.sc.egov.usda.gov/>

## 2.3 HISTORIC & CURRENT LAND USE

Based upon desktop review, the site is expected to have been historically used as open rangeland with recent transitions to farming and livestock production.

The expected condition of the range is a function of land management practices over time. In order to assess the expected condition of the range at the Project, one must know the range's potential condition as a function of vegetative production and ecological climax species composition. The range's potential condition is referred to as a "reference site". The reference site is based on the use of sound rangeland management practices. Examples of sound rangeland management practices include, but are not limited to: proper grazing management, brush control, and weed control. When sound rangeland management practices are not consistently implemented, the condition of the range declines and transitions into a state of invasive species encroachment and topsoil erosion. Therefore, the range's natural plant community composition and health is negatively affected. This translates into a reduction of animals (livestock, wildlife, and or pollinators) the land is able to ultimately feed and support.

## 2.4 NOXIOUS WEEDS

Noxious weed encroachment should be monitored, identified, and removed to prevent infestation and competition with desirable plant species. The Colorado Noxious Weed Act<sup>3</sup> directs each county within the state to adopt a Noxious Weed Management Plan. Per the Morgan County Noxious Weed and Pest Management Plan, noxious weeds should be managed using cultural, mechanical, biological and chemical methods. Preferred methods for managing noxious weeds include properly timed cultural and mechanical practices such as mowing, plowing and seeding, as well as grazing. Chemical methods including spot spraying or the use of selective herbicides can be used in conjunction with cultural and mechanical methods to reduce infestation sizes without negatively impacting all vegetation onsite. The Morgan County Noxious Weed List and Noxious Weed and Pest Management Plan can be found in Appendix A.

## 3.0 REVEGETATION MANAGEMENT

Revegetation planning and implementation is a technical, science-based discipline requiring academic credentials and extensive, on-the-job experience. The following revegetation plan should be developed and administered by the site's professional, qualified as such. In order to mitigate the risk of revegetation failure, this Plan will address:

- Topsoil Preservation
- Soil Stabilization
- Fertility
- Seedbed Conditions & Preparation
- Seeding
- Monitoring
- Weed Management

---

<sup>3</sup> Colorado Revised Statutes 35-5.5

### 3.1 TOPSOIL PRESERVATION

Topsoil preservation is of utmost importance where construction-based soil disturbance is anticipated to take place. In the event of grading, it is recommended that topsoil be properly separated from the subsoil to ensure optimum soil media for revegetation. Stockpiling of topsoil is recommended on the downhill side of cleared areas and should be stabilized using Best Management Practices (BMPs) including but not limited to: seeding and mulch. Areas stockpiled should be contained using vegetated berms, compost wattles, or silt fence structures to further prevent loss from the Project. Stockpiled topsoil should then be redistributed across its origin during final grading, as much as practicable, to ensure healthy soil for the purpose of revegetation.

### 3.2 SOIL STABILIZATION

BMPs are to be implemented and utilized as means to ensure stability of the project site, especially during construction. BMPs include but are not limited to: temporary and/or permanent seeding, straw mulch, hydromulch, erosion control blankets, wattles, silt fence, concrete fleximat, etc. Implementing different BMP techniques, according to what the landscape and climate dictates, will help ensure the site is able to successfully sustain stability.

#### PROPOSED LAND TREATMENT PER EVALUATED SLOPE - PHASE 1

SLOPE RANGE	EROSION CONTROL (OPTION A)*	EROSION CONTROL (OPTION B)	EROSION CONTROL (OPTION C)
0.00 – 2.50%	DRILL SEEDING	DRILL SEEDING (NO CHANGE FROM OPTION A)	DRILL SEEDING (NO CHANGE FROM OPTION A OR OPTION B)
2.50 – 12.5%	DRILL SEEDING + STRAW APPLICATION (4,000 lbs HAY PER ACRE)	DRILL SEEDING + STRAW APPLICATION (2,000 lbs HAY PER ACRE)	DRILL SEEDING
12.5 – 30.0%	DRILL SEEDING + KOTON HYDROMULCH (5,000 lbs MULCH PER ACRE)	DRILL SEEDING + STRAW APPLICATION (4,000 lbs HAY PER ACRE)	DRILL SEEDING + STRAW APPLICATION (2,000 lbs HAY PER ACRE)
30.0 % <	DRILL SEEDING + DOUBLE LAYER COCONUT EROSION CONTROL MATTING	DRILL SEEDING + KOTON HYDROMULCH (5,000 lbs MULCH PER ACRE)	DRILL SEEDING + STRAW APPLICATION (4,000 lbs HAY PER ACRE)

#### LAND TREATMENT NOTES:

KNOWN CONCENTRATED FLOW AREAS SHALL RECEIVE PYRAMAT™ 75 HIGH PERFORMANCE TURF REINFORCEMENT MATTING, REGARDLESS OF OPTION SELECTION

\*CONTRACTOR TO SELECT EROSION CONTROL OPTION. OPTION A IS PREFERRED AS IT OFFERS GREATER RISK MITIGATION REGARDING EROSION POTENTIAL COMPARED TO OPTIONS B & C. CONTRACTOR SHALL ENSURE THAT REGARDLESS OF OPTION SELECTED, CONTINUAL STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MONITORING IS TO BE ASSESSED AND APPROPRIATE FIELD ADJUSTMENTS IMPLEMENTED TO ENSURE CONTINUAL SWPPP COMPLIANCE.

**FIGURE 3. Proposed Land Treatment Per Evaluated Slope**

### 3.3 FERTILITY & COMPACTION

It is recommended that a preliminary sampling of one soil sample per 100 acres be collected and tested for compaction, macro/micronutrient availability, soil biology, and soil health to determine the benchmark soil health for the site. Understanding the compaction level and nutrient availability is essential for successful vegetation success. As construction progresses, additional samplings will be taken from cut/fill acres to determine if any additional nutrient or decompaction requirements are applicable.

### 3.4 SEEDBED CONDITIONS & PREPARATION

In order to prepare a suitable seed bed, the need for soil decompaction, grading, fertilizer, topsoil, and compost should be evaluated. Soil should be de-compacted to a minimum depth of 5". Remove all material larger than 3". Decompaction of the seedbed (top 5" of the soil surface) to <200 psi must be accomplished for the soil to express vegetation quantities capable of protecting the site from wind or water erosion. The decompaction process should yield soil aggregates <1" in



diameter. Aggregate material over 1” to be removed, hauled off, and properly disposed of prior to planting, as needed. Material, such as large areas of mulch or debris from vegetation clearing, can cause negative impacts to vegetation establishment by suppressing growth and therefore should be removed.

### 3.5 SEEDING

<b><u>Recommended Temporary Seeding</u></b>		
<b><u>Dormant Season - Spring</u></b> (Jan 1 - April 15)	<b><u>Growing Season</u></b> (April 15 - Aug 31)	<b><u>Dormant Season - Fall</u></b> (Sept 1 - December 31)
Spring Oats ( <i>Avena sativa</i> )	Proso Millet ( <i>Panicum miliaceum</i> )	Hard Red Winter Wheat ( <i>Triticum aestivum</i> )
Hard Red Winter Wheat ( <i>Triticum aestivum</i> )	Western Wheatgrass ( <i>Pascopyrum smithii</i> )	Annual Rye Grass ( <i>Lolium multiflorum</i> )
Triticale ( <i>X Triticosecale</i> )	Teff grass ( <i>Eragrostis tef</i> )	Hairy vetch ( <i>Vicia villosa</i> )
-----	Assorted Clovers	Assorted Clovers

FIGURE 4. Recommended Temporary Seeding Mixes & Timeframes

<b><u>Common Name</u></b>	<b><u>LBS/Acre</u></b>	<b><u>Total LBS</u></b>
White Dutch Clover	2.000	2.000
Annual Ryegrass	10.000	10.000
Crested Wheatgrass (Turf Type)	5.000	5.000
Kentucky Bluegrass (Bronze Tier)	20.000	20.000
Solar Array Brand Fine Fescue Mix	40.000	40.000
Blue Grama	1.250	1.250
Prarie Junegrass	0.250	0.250
Sand Dropseed	0.100	0.100
Sideoats Grama	1.400	1.400
<b>Total Seeding Rate (LB/Acre)</b>	<b>80.000</b>	<b>80.000</b>

FIGURE 5. Recommended Permanent Seeding Mix

Pre-construction and during construction, the site should be seeded and stabilized with a temporary cover crop (blend to be determined by applicable season) to allow for immediate stabilization. Planting a desirable temporary blend will reduce competition from undesirable species as well as prepare the soil for permanent seeding. Seeding should occur using a no-till drill. It is recommended that permanent seeding take place post-pile installation but pre-driveline and torque tube installation, co-planted with temporary cover species for quick germination. In areas with limited access, a broadcast seeding method may be utilized. Upon completion of construction, subsequent disturbed areas of the site should be touch-up seeded with a permanent blend consisting of native grasses and forbs.

After permanent seeding, bare ground areas not expressing vegetation in excess of 10 square feet should be identified and the following soil characteristics supervised by a Soil Scientist or Certified Crop Advisor:

- Soil compaction
- Soil fertility (via sampling and lab analysis)
- Sterilization herbicide contamination
- Soil structure
- pH (via sampling and lab analysis)
- Electroconductivity

A mitigation strategy should be developed by a qualified professional (examples in 3.6) to address needed soil amendments, seed selection for the respective area, stabilization protocol, and follow-up monitoring intervals.

Implementing a temporary cover crop on constructed areas will be critical in the Project's ability to mitigate encroachment of undesirable plant species "weeds", and to ultimately prevent erosion. The Project should require close watch for signs of erosion and the site should be diligent to take precautions to prevent erosion, whether through the combined use of temporary stabilization techniques and/or implementation of permanent stabilization techniques.

### 3.6 MONITORING

This site should be monitored by regularly scheduled site inspections for erosion issues, invasive/noxious species, vegetation growth, compliance with the Fire Mitigation Plan, and other general site conditions. Inspections should occur monthly during the growing season to monitor vegetation growth, species competition, and potential bare ground areas. During the dormant season, inspections should occur quarterly. The results of inspections can lead to the development of implementation of mechanical and chemical control, mitigation strategies or BMP installation plans.

Examples of qualified professional for site monitoring supervision:

- Professional Soil Scientist
  - Masters of Science in Agronomy or Plant and Soil Science
  - Active and current Certified Professional Agronomist
  - or BRP approved equal

### 3.7 WEED MANAGEMENT

Weed management will consist of the treatment of noxious weeds and potential woody species, as needed, and mowing of all other vegetation pre-construction, during construction and post-construction. Regular mechanical and chemical treatment of weedy species will reduce undesirable species populations and encourage proliferation of desirable species. See Section 2.4 for noxious weed control.

### 4.0 CONCLUSION

Through the various soil and vegetation management techniques outlined in this Plan, the Project will have the capability of being a successful land-stewarding solar facility in the BRP portfolio, for years to come. It should be expected that within the first three years of site management, plans, protocols, and costs may be more than subsequent years. By allocating proper resources on the front-end of the project, and maintaining site compliance with the Fire Mitigation Plan, BRP can gradually expect a reduced number of inputs over the life of the project.

**Morgan County Noxious Weed and Pest Management Plan and Noxious Weed List**

Common Name	Scientific Name
List A	
Camelthorn	<i>Alhagi pseudalhagi</i>
Common crupina	<i>Crupina vulgaris</i>
Giant salvinia	<i>Salvinia molesta</i>
Hydrilla	<i>Hydrilla verticillate</i>
Medusahead	<i>Taeniatherum caput-medusae</i>
Parrotfeather	<i>Myriophyllum aquaticum</i>
Squarrose knapweed	<i>Centaurea virgata</i>
African rue	<i>Peganum harmala</i>
Dyer's woad	<i>Isatis tinctoria</i>
Elongated mustard	<i>Brassica elongate</i>
Flowering rush	<i>Butomus umbellatus</i>
Meadow knapweed	<i>Centaurea x moncktonii</i>
Rush skeletonweed	<i>Chondrilla juncea</i>
Tansy ragwort	<i>Senecio jacobaea</i>
Yellow starthistle	<i>Centaurea solstitialis</i>
Cypress spurge	<i>Euphorbia cyparissias</i>
Giant reed	<i>Arundo donax</i>
Hairy willow-herb	<i>Epilobium hirsutum</i>
Knotweeds	<i>Japanese, Giant, and Bohemian</i>
Mediterranean sage	<i>Salvia aethiopsis</i>
Myrtle spurge	<i>Euphorbia myrsinites</i>
Orange hawkweed	<i>Hieracium aurantiacum</i>
Purple loosestrife	<i>Lythrum salicaria</i>
Yellow flag iris	<i>Iris pseudacorus</i>
List B	
Absinth wormwood	<i>Artemisia absinthium</i>
Black henbane	<i>Hyoscyamus niger</i>
Bouncingbet	<i>Saponaria officinalis</i>
Bull thistle	<i>Cirsium vulgare</i>
Canada thistle	<i>Cirsium arvense</i>
Chinese clematis	<i>Clematis orientalis</i>
Common tansy	<i>Tanacetum vulgare</i>
Common & Cutleaf teasel	<i>Dipsacus fullonum</i>
Dalmatian toadflax	<i>Linaria dalmatica &amp; genistifolia</i>
Dames rocket	<i>Hesperis matronalis</i>
Diffuse knapweed	<i>Centaurea diffusa</i>
Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
Hoary cress	<i>Lepidium draba</i>
Houndstongue	<i>Cynoglossum officinale</i>
Hybrid knapweed	<i>Centaurea x psammogena = C. stoebe x C. diffusa</i>

Hybrid toadflax	<i>Linaria vulgaris x L. dalmatica</i>
Jointed goatgrass	<i>Aegilops cylindrica</i>
Leafy spurge	<i>Euphorbia esula</i>
Mayweed chamomile	<i>Anthemis cotula</i>
Moth mullein	<i>Verbascum blattaria</i>
Musk thistle	<i>Carduus nutans</i>
Oxeye daisy	<i>Leucanthemum vulgare</i>
Perennial pepperweed	<i>Lepidium latifolium</i>
Plumeless thistle	<i>Carduus acanthoides</i>
Russian knapweed	<i>Acroptilon repens</i>
Russian olive	<i>Elaeagnus angustifolia</i>
Salt cedar	<i>Tamarix chinensis, T. parviflora, and T.</i>
Scentless chamomile	<i>Tripleurospermum inodorum</i>
Scotch thistle	<i>Onopordum acanthium</i>
Spotted knapweed	<i>Centaurea stoebe</i>
Sulfur cinquefoil	<i>Potentilla recta</i>
Wild caraway	<i>Carum carvi</i>
Yellow nutsedge	<i>Cyperus esculentus</i>
Yellow toadflax	<i>Linaria vulgaris</i>

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List C

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Bulbous bluegrass	<i>Poa bulbosa</i>
Chicory	<i>Cichorium intybus</i>
Common burdock	<i>Arctium minus</i>
Common mullein	<i>Verbascum Thapsus</i>
Common St. Johnswort	<i>Hypericum perforatum</i>
Downy brome	<i>Bromus tectorum</i>
Field bindweed	<i>Convolvulus arvensis</i>
Halogeton	<i>Halogeton glomeratus</i>
Johnsongrass	<i>Sorghum halepense</i>
Perennial sowthistle	<i>Sonchus arvensis</i>
Poison hemlock	<i>Conium maculatum</i>
Puncturevine	<i>Tribulus terrestris</i>
Quackgrass	<i>Elymus repens</i>
Redstem filaree	<i>Erodium cicutarium</i>
Siberian elm	<i>Ulmus pumila</i>
Tree of Heaven	<i>Ailanthus altissima</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Wild-proso millet	<i>Panicum miliaceum</i>

<https://morgancounty.colorado.gov/sites/morgancounty/files/Noxious-Weed-and-Pest-Mgmt-Plan.pdf>

CPW REPLY

Jenafer Santos <[jsantos@co.morgan.co.us](mailto:jsantos@co.morgan.co.us)>**FW: Taelor Solar Wildlife Study Plan**

1 message

**mmooney@balancedrockpower.com** <[mmooney@balancedrockpower.com](mailto:mmooney@balancedrockpower.com)>

Thu, Aug 24, 2023 at 12:02 PM

To: Nicole Hay <[nhay@co.morgan.co.us](mailto:nhay@co.morgan.co.us)>Cc: Jenafer Santos <[jsantos@co.morgan.co.us](mailto:jsantos@co.morgan.co.us)>, Cheryl Brindisi <[cbrindisi@co.morgan.co.us](mailto:cbrindisi@co.morgan.co.us)>, Planning Dept Permits Licensing <[permits\\_licensing@co.morgan.co.us](mailto:permits_licensing@co.morgan.co.us)>, Randy Schroeder <[rschroeder@envalue.us](mailto:rschroeder@envalue.us)>, Liam Norris <[lnorris@balancedrockpower.com](mailto:lnorris@balancedrockpower.com)>, Erica Goad <[egoad@balancedrockpower.com](mailto:egoad@balancedrockpower.com)>

Hi Nicole,

Per below it sounds like CPW is on board with the Project's draft wildlife study plan that corresponds with the draft plan submitted within our SUP application.

Kr,

Matt

**From:** Marette - DNR, Brandon <[brandon.marette@state.co.us](mailto:brandon.marette@state.co.us)>**Date:** Monday, August 21, 2023 3:18 PM**To:** Randy Schroeder <[rschroeder@envalue.us](mailto:rschroeder@envalue.us)>**Cc:** Matthew Mooney <[mmooney@balancedrockpower.com](mailto:mmooney@balancedrockpower.com)>; [egoad@balancedrockpower.com](mailto:egoad@balancedrockpower.com); Pat Golden <[pgolden@heritage-ec.com](mailto:pgolden@heritage-ec.com)>; Scott Albrecht <[salbrecht@heritage-ec.com](mailto:salbrecht@heritage-ec.com)>; [mike.sherman@state.co.us](mailto:mike.sherman@state.co.us); [chris.mettenbrink@state.co.us](mailto:chris.mettenbrink@state.co.us); Marty Stratman - DNR <[marty.stratman@state.co.us](mailto:marty.stratman@state.co.us)>; [todd.cozad@state.co.us](mailto:todd.cozad@state.co.us); [wendy.figueroa@state.co.us](mailto:wendy.figueroa@state.co.us)**Subject:** Re: Taelor Solar Wildlife Study Plan

Randy,

Thanks for this study plan. It looks good to me.

Regards,

**Brandon B. Marette, CWB<sup>®</sup>****Northeast Region Energy Liaison**

Direct (720) 880-0819

6060 Broadway, Denver, CO 80216

[brandon.marette@state.co.us](mailto:brandon.marette@state.co.us)

8/25/23, 12:30 PM

Co.morgan.co.us Mail - FW: Taelor Solar Wildlife Study Plan

[CPW's Energy Webpage](#)

[CPW's Wildlife Movements Webpage](#)



**THINK SAFETY FIRST!**



(\*upcoming dates out of the office for work: 8/23-24, 9/6-8, 9/12-13)

On Thu, Jul 20, 2023 at 1:15 PM Randy Schroeder <[rschroeder@envalue.us](mailto:rschroeder@envalue.us)> wrote:

Brandon,

As discussed, attached is a draft wildlife study plan for the Taelor Solar projects in Morgan and Weld Counties for review by the CPW team. We believe it addresses each of the items discussed on our calls with CPW.

Let us know if you have any questions / comments and whether you would like to have a follow-up call to discuss.

Thanks.

*Randy Schroeder*

**ENValue**

[rschroeder@envalue.us](mailto:rschroeder@envalue.us)

303-819-3313



AERIAL MAPS

# Long Draw Solar - 225MW, Borden County, TX



# Anson Solar Center

- 200MW AC Solar Project, Jones County, TX.
- Long-term energy buyers include Microsoft and Target.

## Legend


- 345 KV BUS
- ▭ Project Boundary



# Townsite Solar PV + BESS

232 MWac PV  
70 MW X 360MWh BESS  
Power Buyer: NV Energy

**Legend**

-  Boulder City

