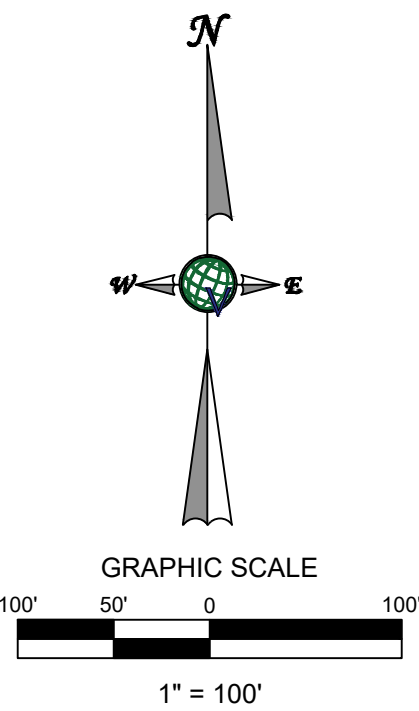
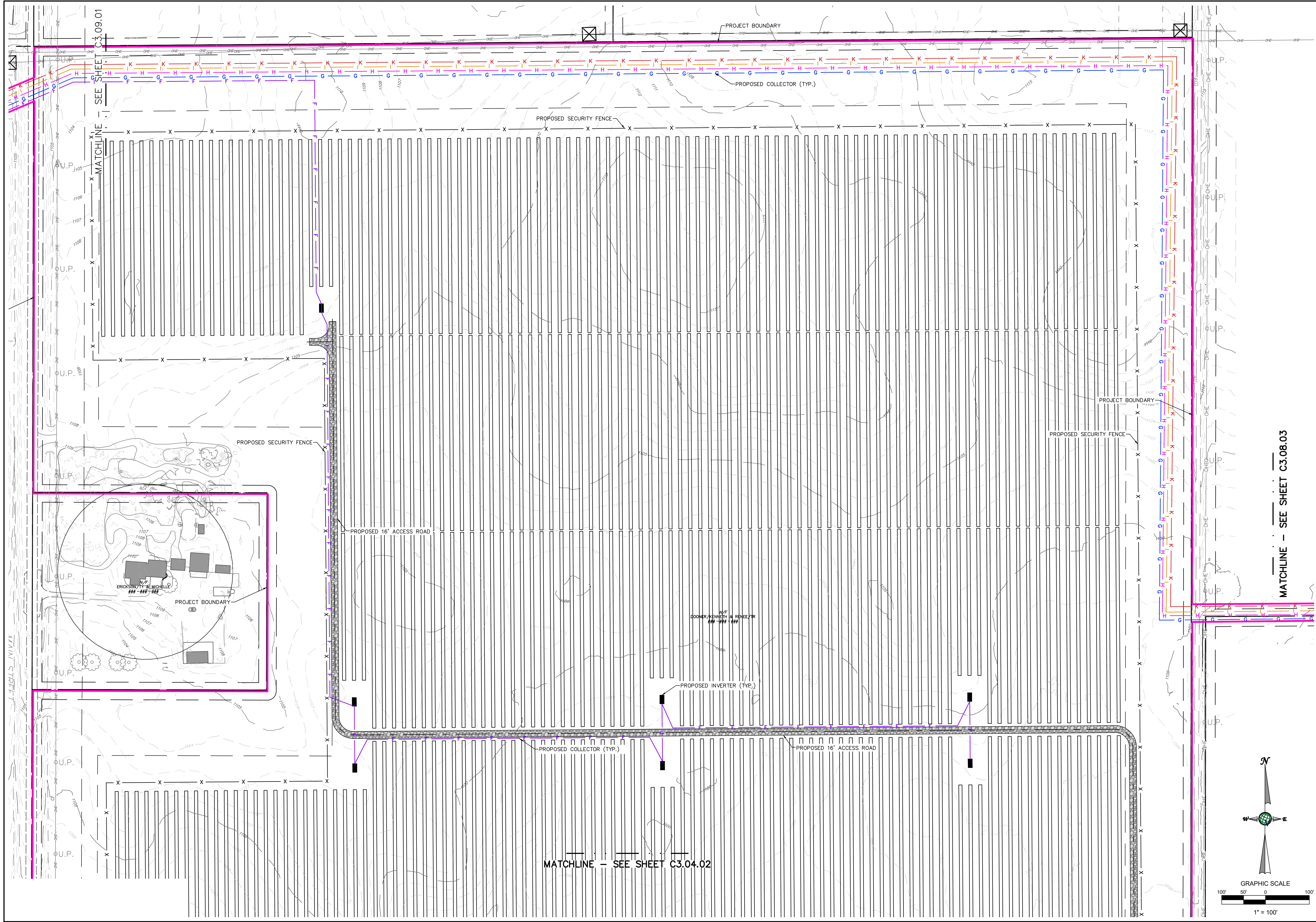
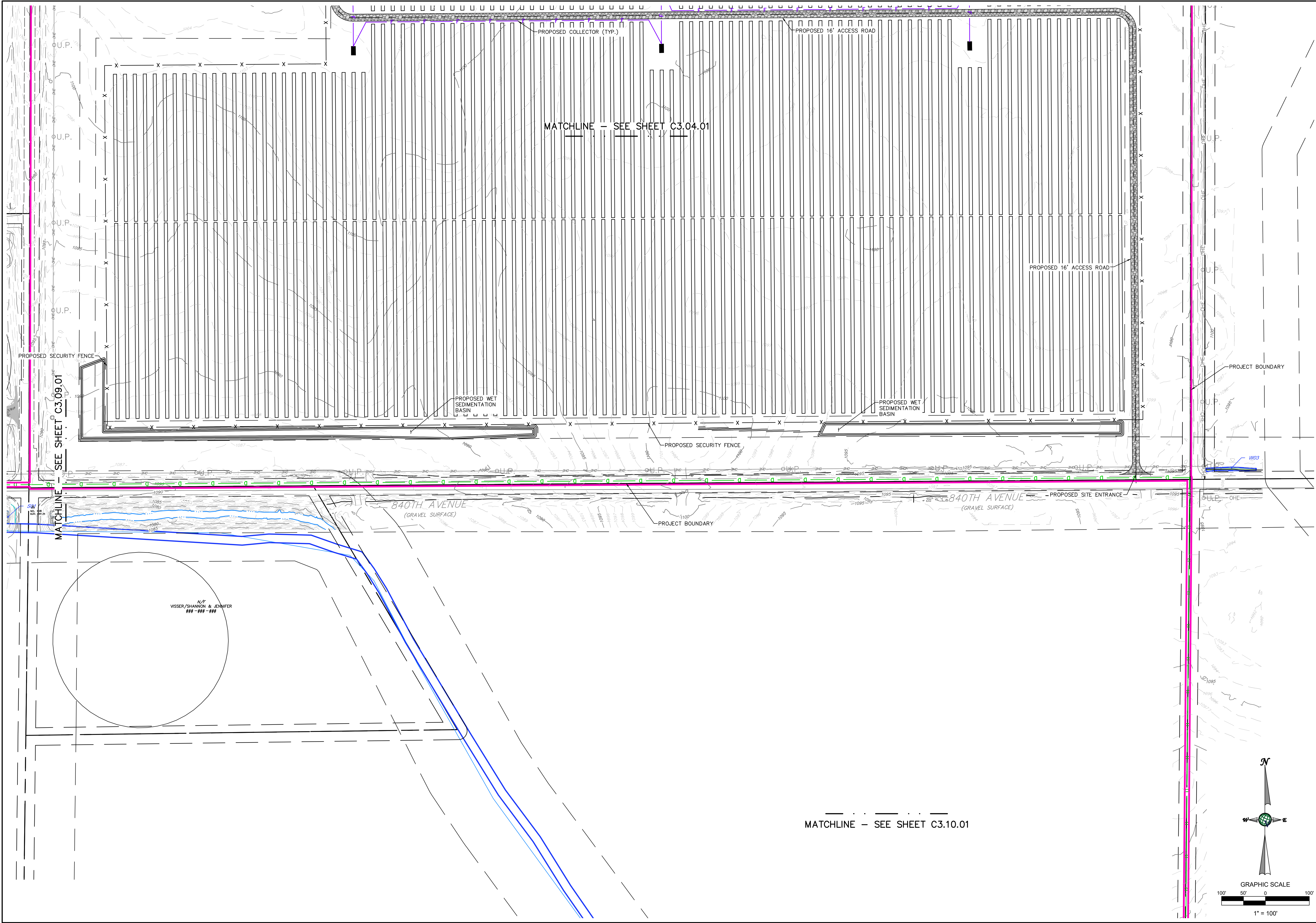




MATCHLINE - SEE SHEET C3.08.03

MATCHLINE - SEE SHEET C3.04.02

Project Name: GOPHER STATE SOLAR		Project Number: 00223023	
Drawing Description: SITE LAYOUT PLAN		Drawing Number: C3.04.01	
Property Owners: MULTIPLE SEE SHEET C0.01		Applicant: GOPHER STATE SOLAR, LLC	
Engineer: VERDANTERRA 601 TECHNOLOGY DRIVE, STE. 200 CANONSBURG, PA 15317 724.916.4541 WWW.VERDANTERRA.COM		Seal: DRAFT	
No.	Date	Revision	
1	08/16/24	ADD GAS LINE / REV PANEL LAYOUT	
Sheet Number: 22		of 36	



Seal

108/16/24

ADD GAS LINE / REV PANEL LAYOUT

1

08/16/24

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GOPHER STATE SOLAR, LLC

Property Owners:

MULTIPLE SEE SHEET C0.01

Project Name:

GOPHER STATE SOLAR

Project Number:

00223023

Scale:

AS NOTED

Drawn By:

DRK

Date:

JUNE 2024

Checked By:

CEA

Drawing Description:

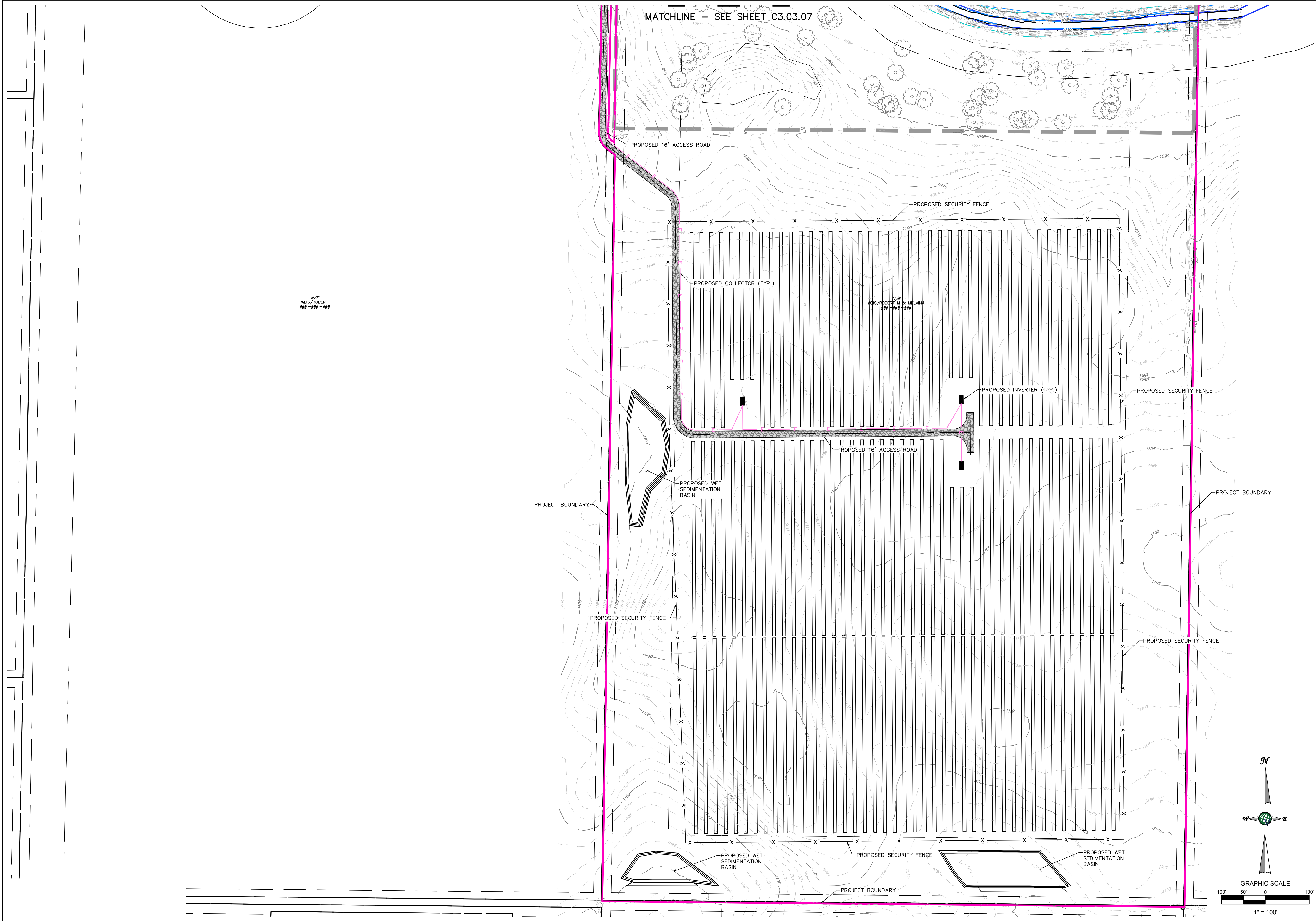
SITE LAYOUT PLAN

Drawing Number:

C3.04.02

Sheet Number:

23 of 36



Revision		ADD GAS LINE / REV PANEL LAYOUT	
No.	Date		
1	08/16/24		

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MULTIPLE SEE SHEET C0.01

Project Name:

GOPHER STATE SOLAR

Project Number:

00223023

Scale:	AS NOTED	Drawn By:	DRK
Date:	JUNE 2024	Checked By:	CEA

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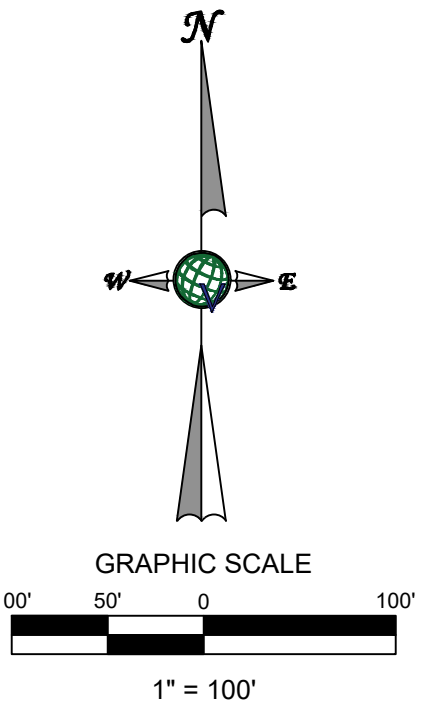
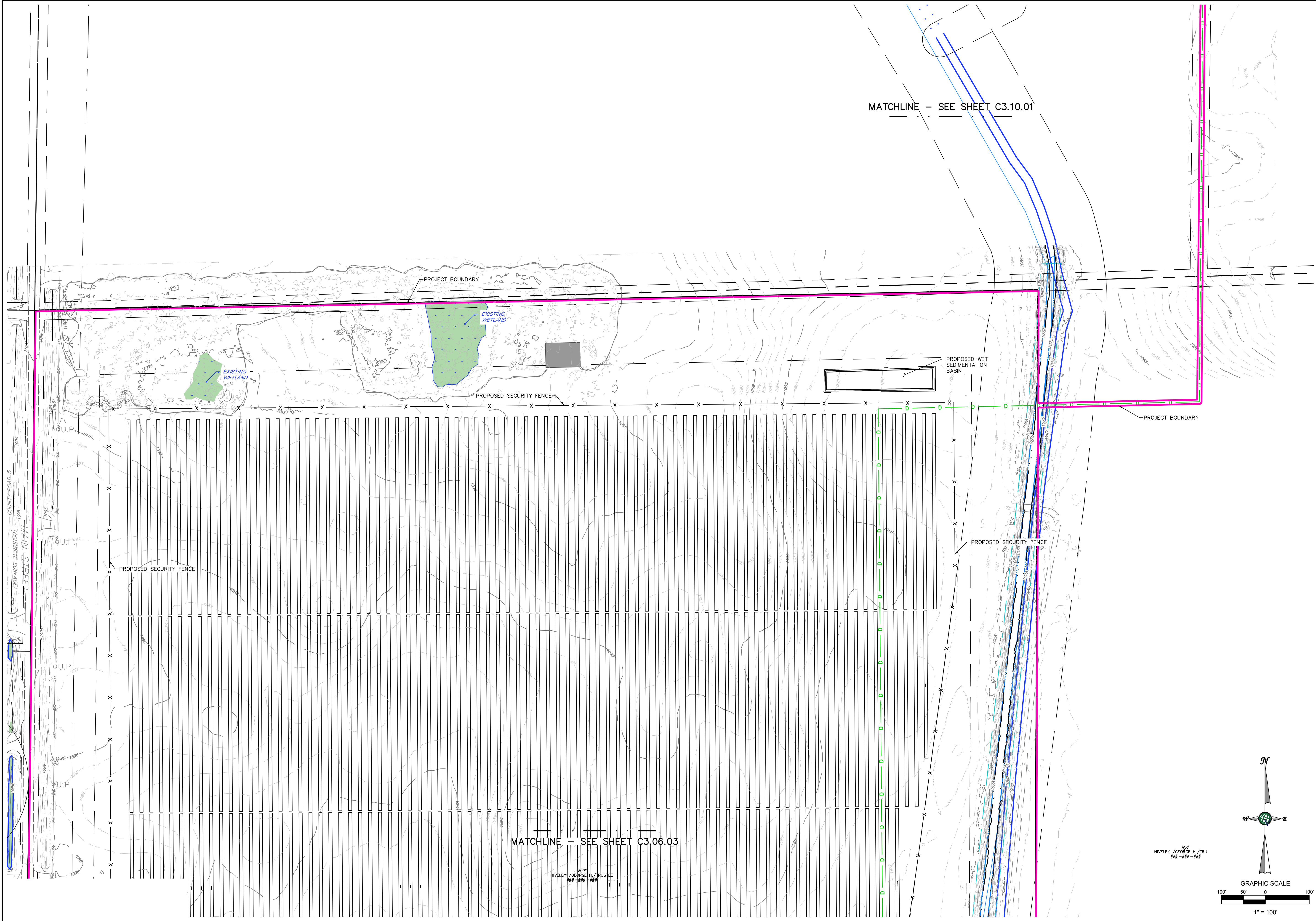
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Drawing Number:

C3.05.01

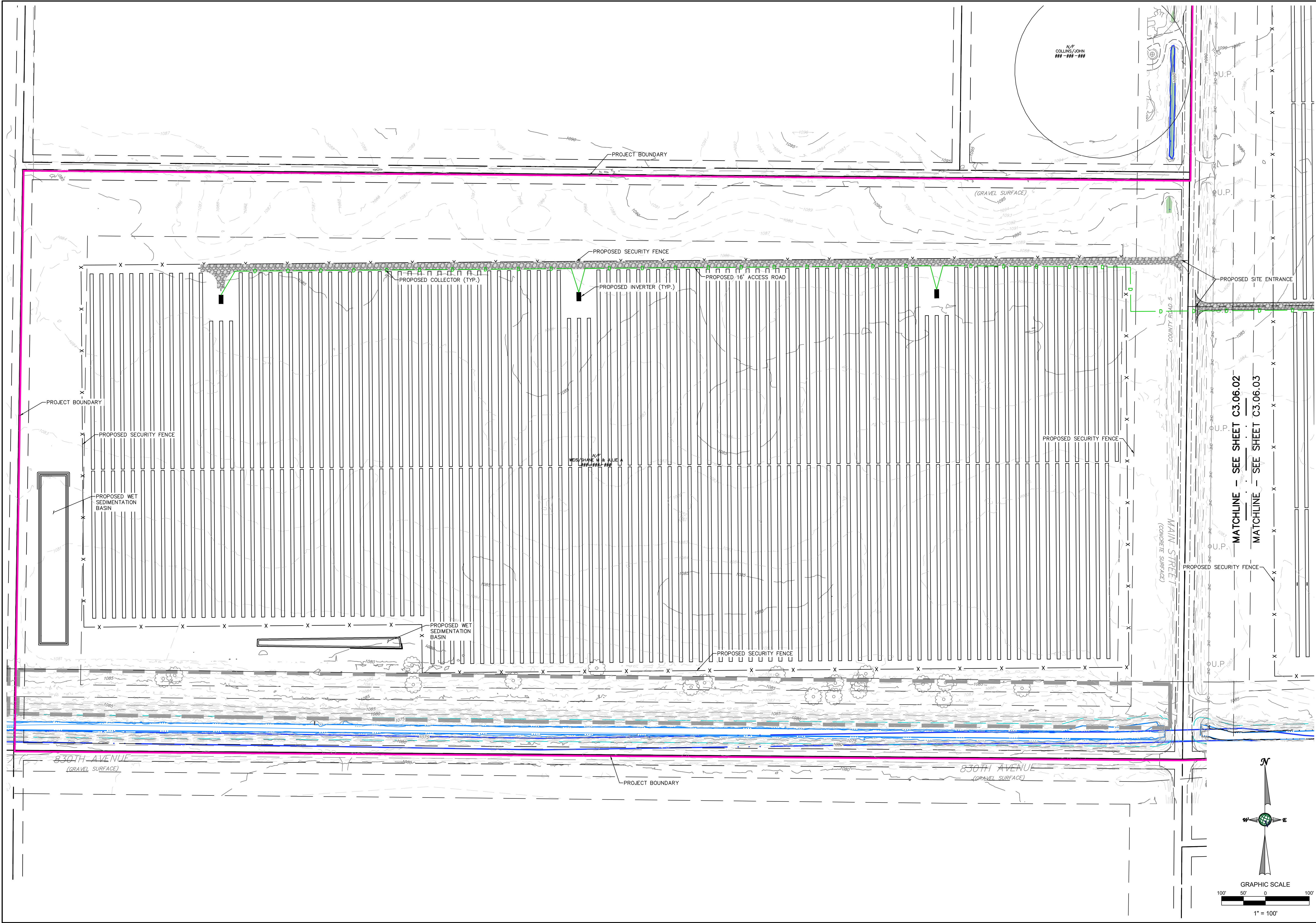
Sheet Number:

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Property Owners: MULTIPLE SEE SHEET C0.01		Applicant: GOPHER STATE SOLAR, LLC		Engineer: VERDANTERRA 601 TECHNOLOGY DRIVE, STE. 200 CANONSBURG, PA 15317 724.916.4541 WWW.VERDANTERRA.COM	
Project Name: GOPHER STATE SOLAR		Project Number: 00223023		Scale: AS NOTED	
Date: JUNE 2024		Drawn By: DRK		Checked By: CEA	
Drawing Description: SITE LAYOUT PLAN					
Drawing Number: C3.06.01					
Sheet Number: 25 of 36					
Seal		Date 1 08/16/24		Revision ADD GAS LINE / REV PANEL LAYOUT	

DRAFT



Revision	No.	Date	1	08/16/24	ADD GAS LINE / REV PANEL LAYOUT

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Property Owners:

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Project Name:

GOPHER STATE SOLAR

Project Number:

00223023

Scale:	AS NOTED	Drawn By:	DRK
Date:	JUNE 2024	Checked By:	CEA

Drawing Description:

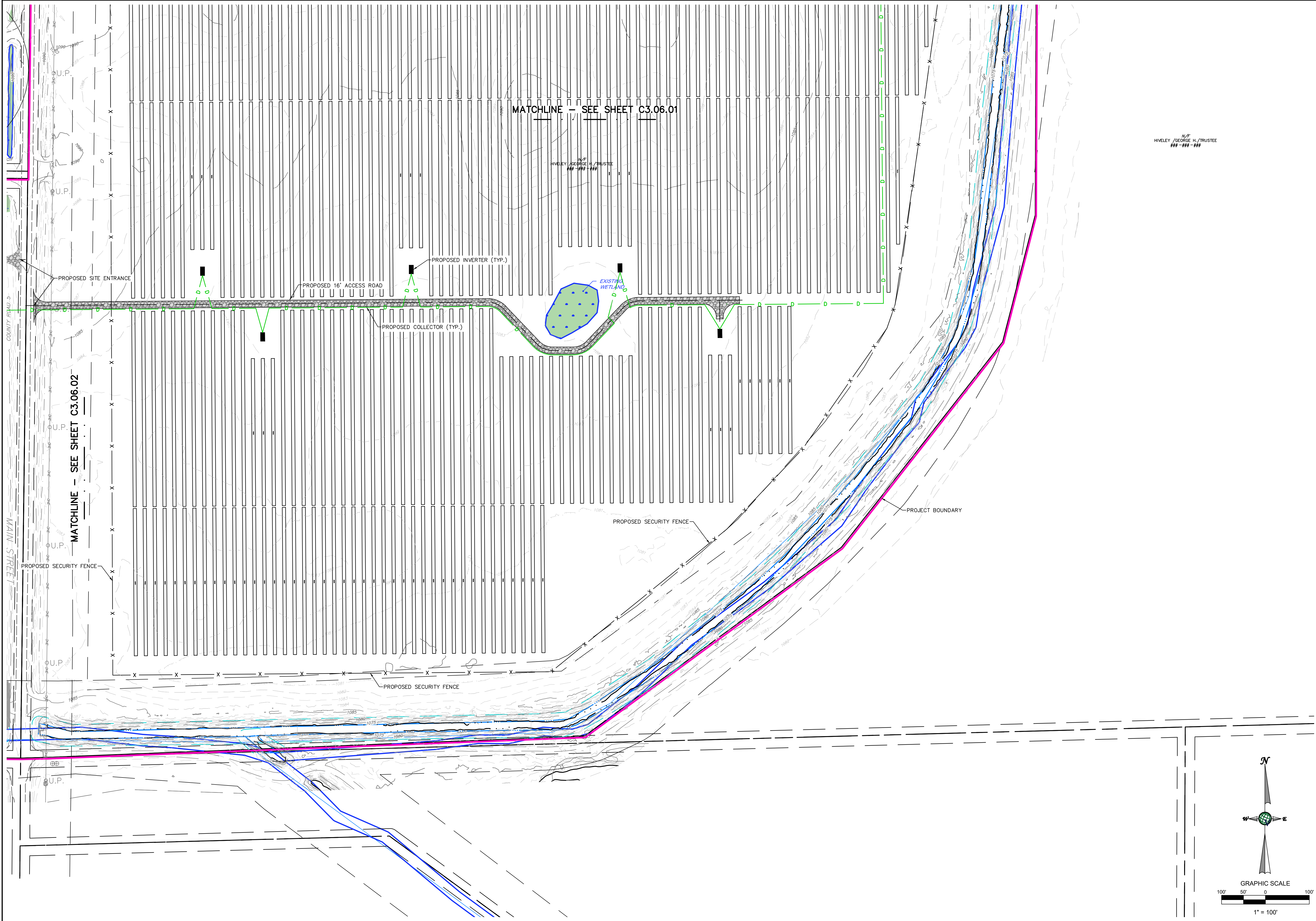
SITE LAYOUT PLAN

Drawing Number:

C3.06.02

Sheet Number:

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N/F
HIVELEY /GEORGE H./TRUSTEE
###-###-####

N/F
HIVELEY /GEORGE H./TRUSTEE
###-###-####

No.	Date	Revision
1	08/16/24	ADD GAS LINE / REV PANEL LAYOUT

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Property Owners:
MULTIPLE SEE SHEET C0.01

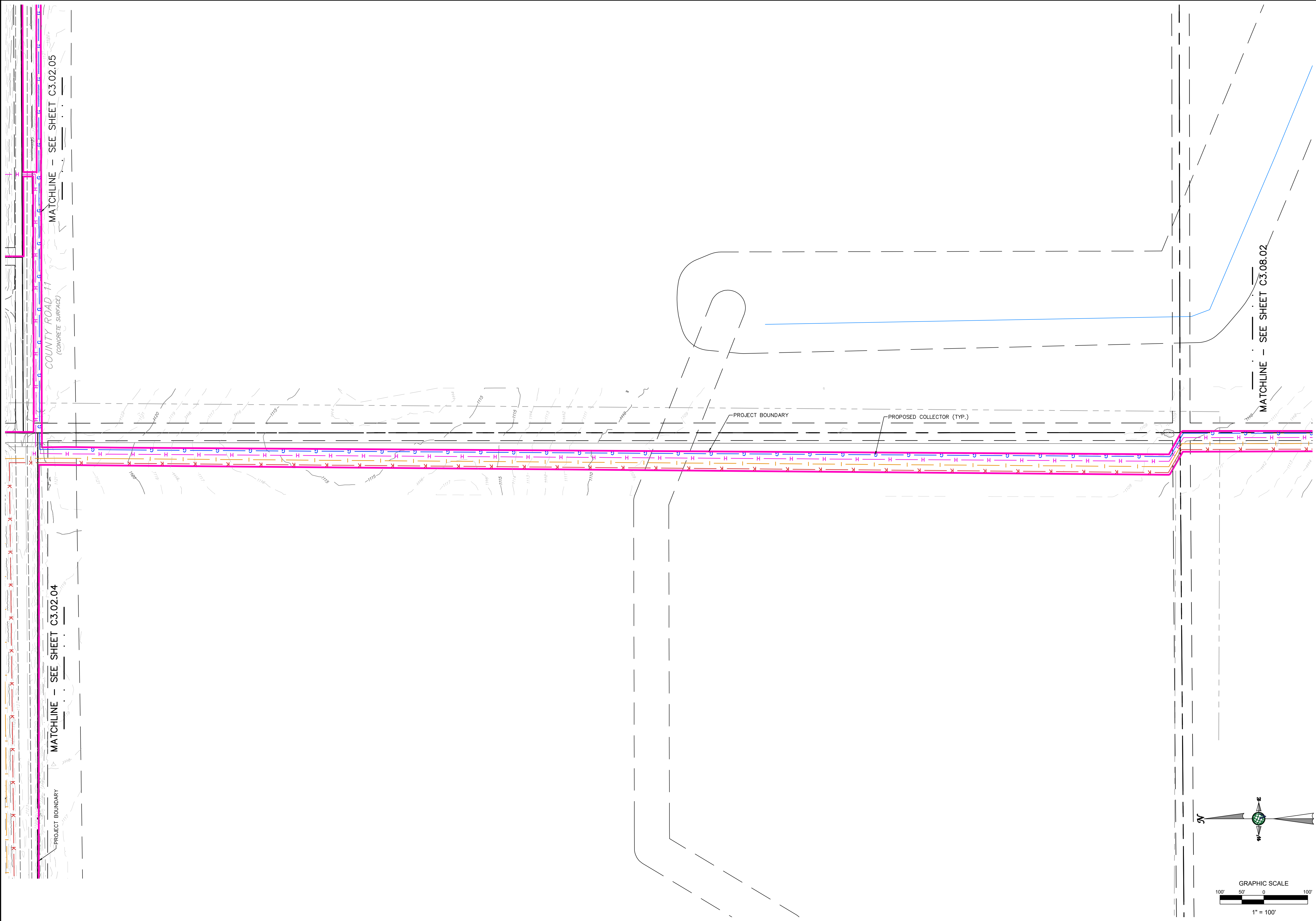
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GOPHER STATE SOLAR

Project Number:
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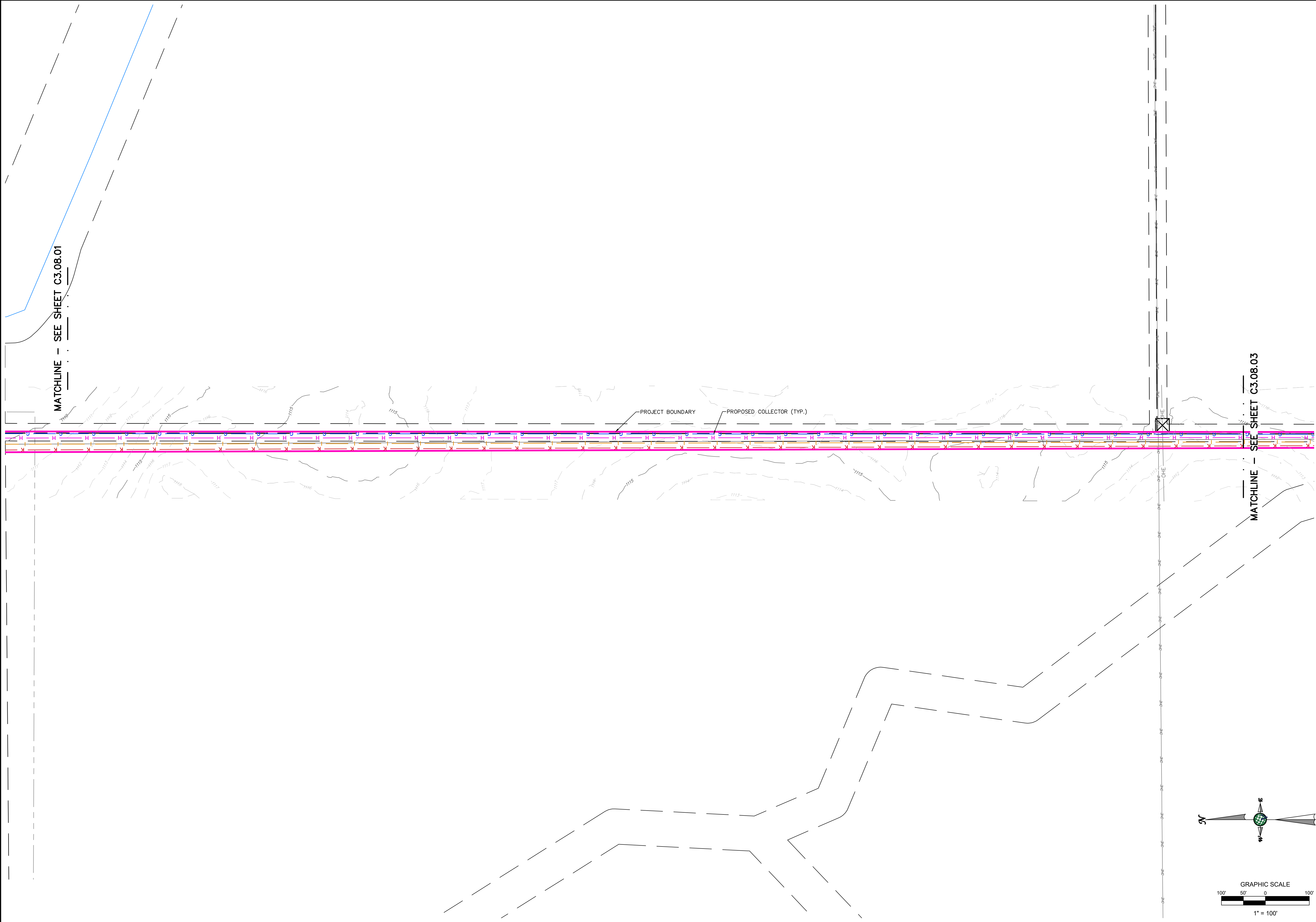
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Date: JUNE 2024	Checked By: CEA

Drawing Description:
SITE LAYOUT PLAN

Drawing Number:
C3.06.03
Sheet Number:
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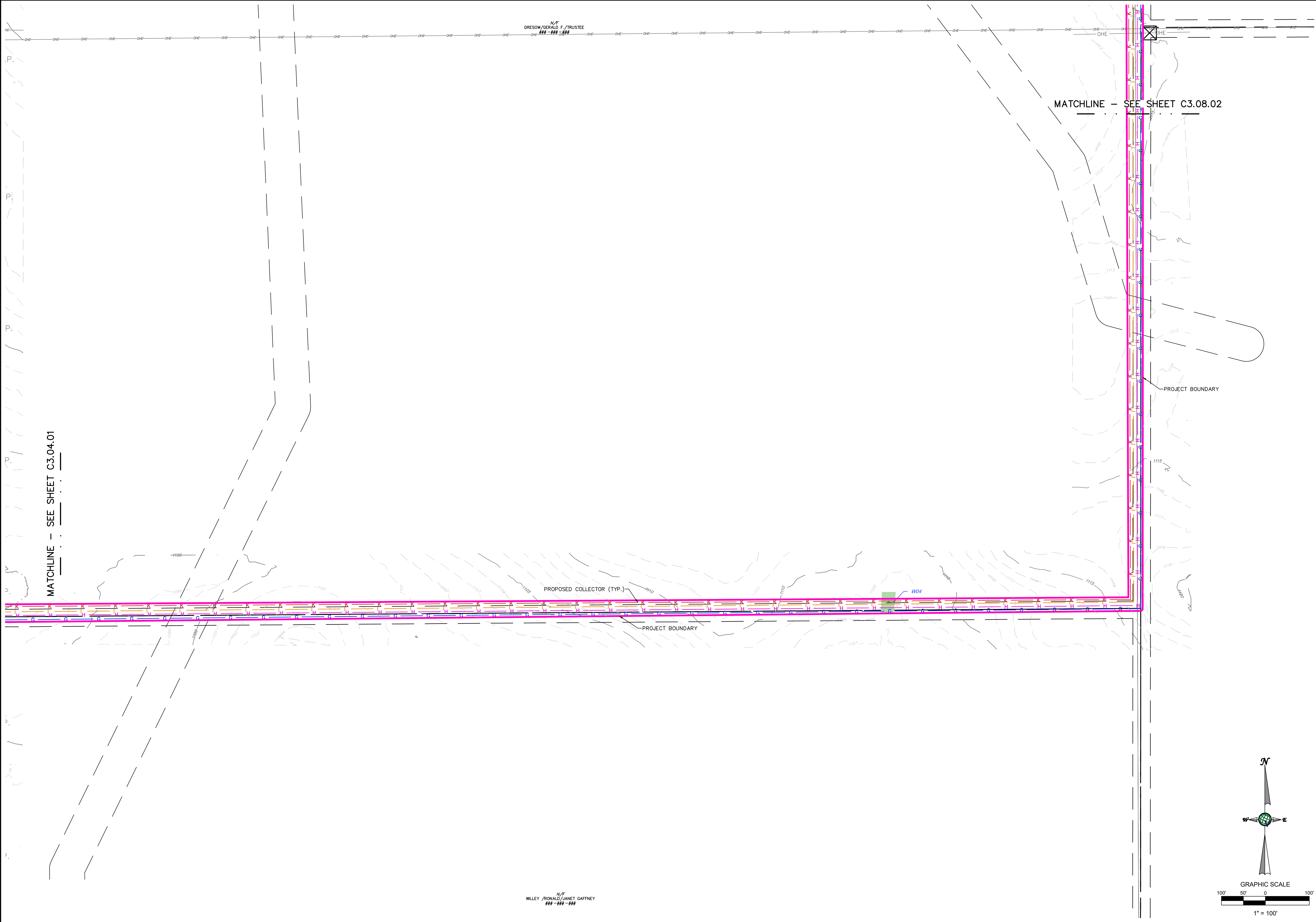
Property Owners:		Applicant:		Engineer:		Revision	
MULTIPLE SEE SHEET C0.01		GOPHER STATE SOLAR, LLC		VERDANTERRA 601 TECHNOLOGY DRIVE, STE. 200 CANONSBURG, PA 15317 724.916.4541 WWW.VERDANTERRA.COM		ADD GAS LINE / REV PANEL LAYOUT	
Project Name: GOPHER STATE SOLAR		Seal		Date 1 08/16/24		Revision	
Project Number: 00223023		Seal		Date		Revision	
Scale: AS NOTED		Seal		Date		Revision	
Date: JUNE 2024		Seal		Date		Revision	
Drawing Description: SITE LAYOUT PLAN		Seal		Date		Revision	
Drawing Number: C3.08.01		Seal		Date		Revision	
Sheet Number: 30 of 36		Seal		Date		Revision	



Property Owners:		Applicant:		Engineer:		Seal:		Revision	
Project Name: GOPHER STATE SOLAR		Project Name: GOPHER STATE SOLAR, LLC		Seal:		Seal:		ADD GAS LINE / REV PANEL LAYOUT	
Project Number: 00223023		Project Number: 00223023		Seal:		Seal:		ADD GAS LINE / REV PANEL LAYOUT	
Scale: AS NOTED		Scale: AS NOTED		Seal:		Seal:		ADD GAS LINE / REV PANEL LAYOUT	
Date: JUNE 2024		Date: JUNE 2024		Seal:		Seal:		ADD GAS LINE / REV PANEL LAYOUT	
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Drawing Number: C3.08.02		Drawing Number: C3.08.02		Seal:		Seal:		ADD GAS LINE / REV PANEL LAYOUT	
Sheet Number: 31 of 36		Sheet Number: 31 of 36		Seal:		Seal:		ADD GAS LINE / REV PANEL LAYOUT	

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DRAFT



N/F
WILLEY /RONALD/JANET GAFFNEY
###-###-###

N/F
DRESOW/GERALD F./TRUSTEE
###-###-###

Seal

DRAFT

Engineer

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Property Owners:

MULTIPLE SEE SHEET C0.01

Project Name:

GOPHER STATE SOLAR

Project Number:

00223023

Scale:

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Drawn By:

DRK

Date:

JUNE 2024

Checked By:

CEA

Drawing Description:

SITE LAYOUT PLAN

Drawing Number:

C3.08.03

Sheet Number:

32 of 36

Revision

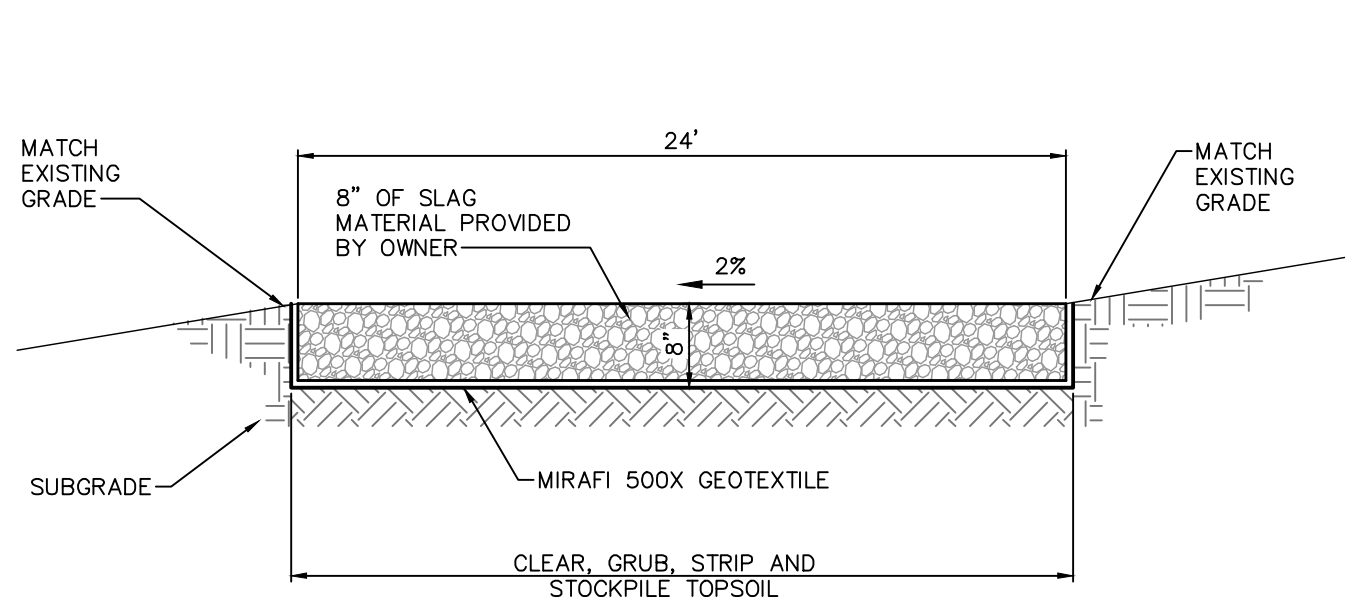
ADD GAS LINE / REV PANEL LAYOUT

Date

08/16/24

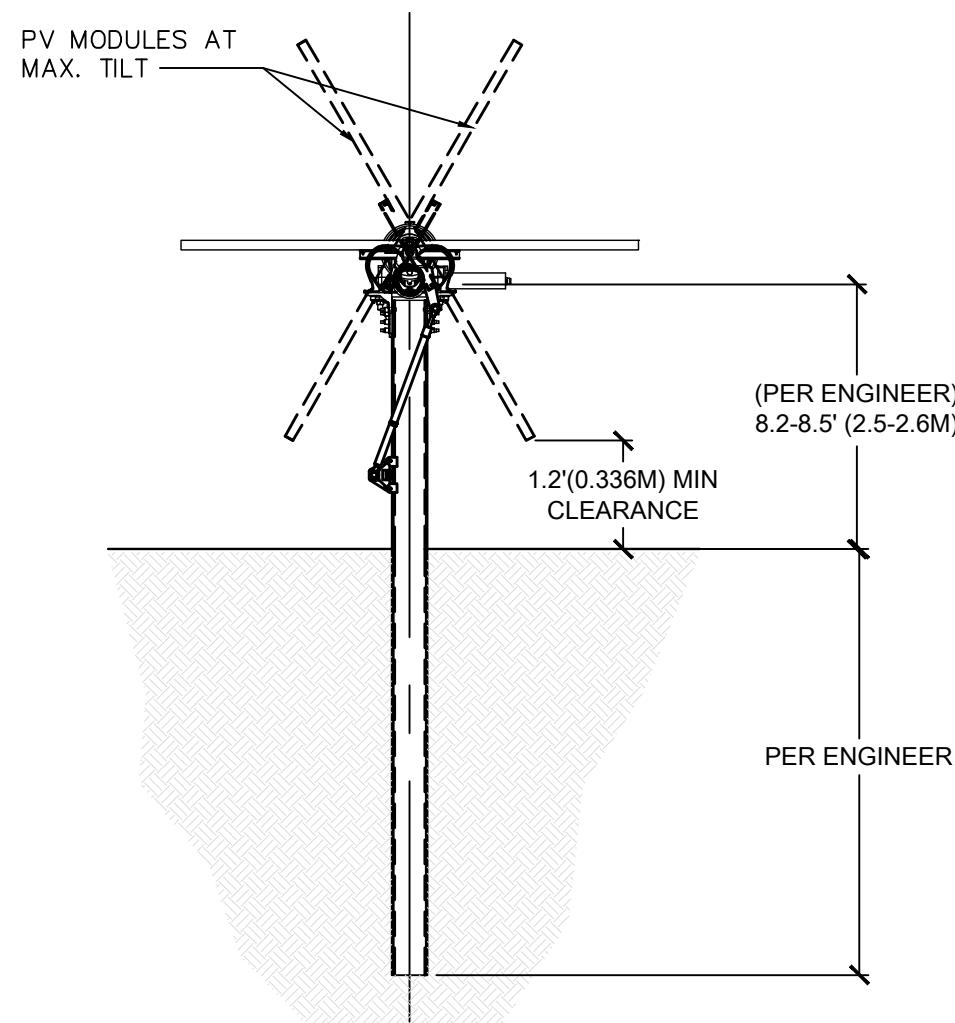
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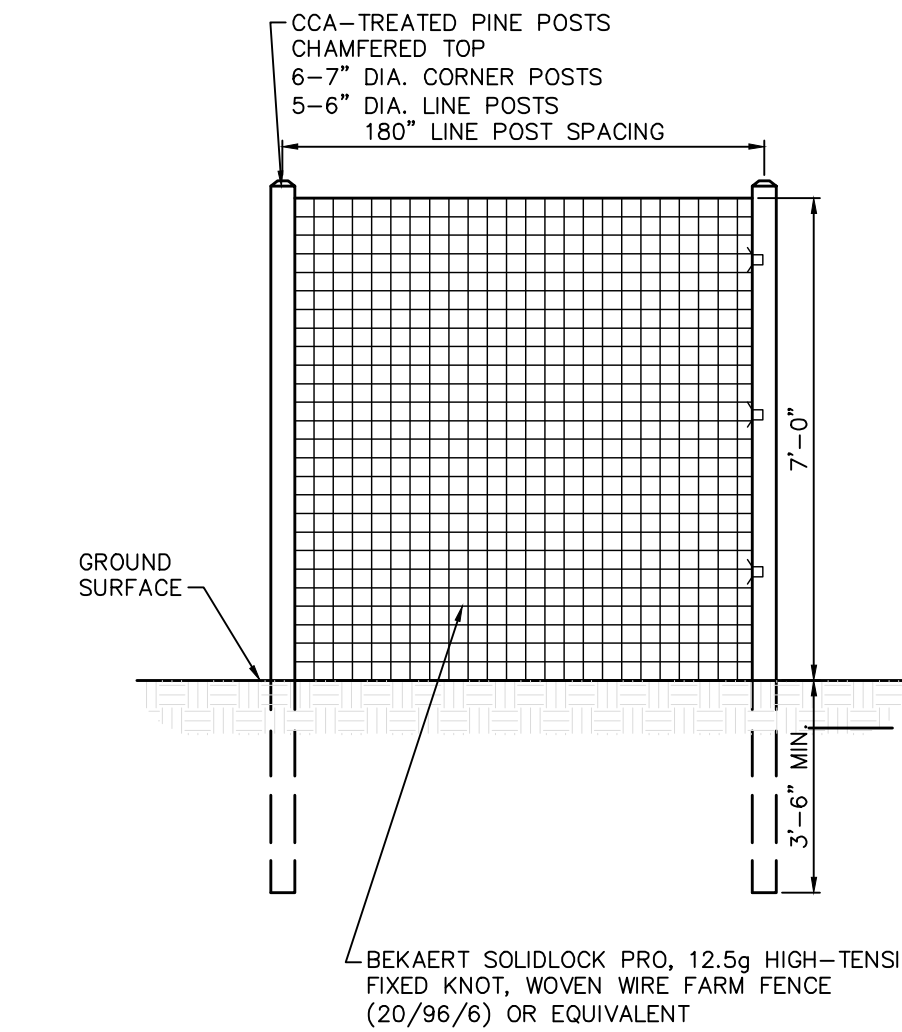


- CONSTRUCTION NOTES:
- ADHERE TO GENERAL GRADING NOTES ON PLAN SHEET C0.01.
 - SUBGRADE PREPARATION SHOULD INCLUDE STRIPPING VEGETATION, ROOTMAT, TOPSOIL, AND OTHER SOFT OR OTHERWISE UNSUITABLE MATERIALS FROM THE 5-FOOT EXPANDED LIMITS OF THE ACCESS DRIVE.
 - THE SUBGRADE SHOULD NOT BE EXPOSED TO THE ELEMENTS OR CONSTRUCTION TRAFFIC FOR A PROLONGED TIME PERIOD AS THE SUBGRADE MAY BECOME DISTURBED AND/OR SOFTENED. IF THE ACCESS DRIVE SECTION IS NOT PLANNED TO BE CONSTRUCTED WITHIN A FEW DAYS AFTER EXPOSING THE FINAL DESIGN SUBGRADE, CONSIDERATION SHOULD BE GIVEN TO LEAVING THE SUBGRADE APPROXIMATELY 1 FOOT ABOVE THE FINAL DESIGN SUBGRADE, WHERE FEASIBLE, TO HELP REDUCE SOFTENING OF THE DESIGN SUBGRADE SOIL. PRIOR TO FILL PLACEMENT OR OTHER CONSTRUCTION ON SUBGRADES, THE SUBGRADES SHOULD BE EVALUATED BY EGS. THOROUGHLY PROOFROLL THE EXPOSED SUBGRADE WITH CONSTRUCTION EQUIPMENT HAVING A MINIMUM AXLE LOAD OF 10 TONS (E.G., FULLY LOADED TANDEM-AXLE DUMP TRUCK FOR CLAYEY SOILS OR A LARGE VIBRATORY SMOOTH DRUM ROLLER FOR SANDY SOILS). TRAVERSE THE SUBGRADE WITH THE PROOFROLL EQUIPMENT IN TWO PERPENDICULAR (ORTHOGONAL) DIRECTIONS WITH OVERLAPPING PASSES OF THE VEHICLE.
 - UNSTABLE OR PUMPING SUBGRADE AREAS IDENTIFIED DURING THE PROOFROLL SHOULD BE REPAIRED PRIOR TO THE PLACEMENT OF SUBSEQUENT ENGINEERED FILL OR OTHER CONSTRUCTION MATERIALS. UNSTABLE SUBGRADE REPAIR METHODS, SUCH AS UNDERCUTTING, OR MOISTURE CONDITIONING AND RECOMPACTION, OR CHEMICAL STABILIZATION, ARE DEFINED IN THE GEOTECH REPORT AND SHOULD BE DISCUSSED WITH EGS TO DETERMINE THE APPROPRIATE PROCEDURES WITH REGARD TO THE EXISTING CONDITIONS CAUSING THE INSTABILITY. TEST PITS MAY BE EXCAVATED TO EXPLORE THE SHALLOW SUBSURFACE MATERIALS WITHIN THE AREA OF THE INSTABILITY TO HELP DETERMINE THE APPROPRIATE REMEDIAL ACTION TO STABILIZE THE SUBGRADE.
 - REFER TO SECTION 6.2.1 ENGINEERED FILL OF THE GEOTECH REPORT FOR ENGINEERED FILL AND COMPACTION PARAMETERS.
 - PROPERLY SLOPE THE SUBGRADE TO AVOID DIPS OR POCKETS WHERE WATER MAY BECOME TRAPPED.
 - IN AREAS WHERE THE SUBGRADE HAS BEEN UNDERCUT AND BACKFILLED WITH GRANULAR SOILS ARE RECOMMENDED TO BE GRADED TO DRAIN TOWARD A DRAIN TILE. THE DRAIN TILE SHOULD BE SLOPED A MINIMUM OF 1/2 TO 1 PERCENT TO DISCHARGE TO NEARBY DRAINAGE DITCHES OR OTHER APPROPRIATE DRAINAGE FACILITIES.
 - GEOTEXTILE SHALL BE MIRAFIT 500X OR APPROVED EQUAL.
 - COMPACT SLAG MATERIAL TO 95% OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557 (MODIFIED PROCTOR METHOD).
 - THE SLAG SECTION WILL REQUIRE REGULAR MAINTENANCE, WHICH COULD INCLUDE REGRADING THE SURFACE, SMOOTHING, CROWNING, AND FILLING RUTS / DEPRESSIONS THAT DEVELOP WITH TIME WITH ADDITIONAL AGGREGATE. THE NEED FOR MAINTENANCE WILL INCREASE WITH GREATER TRAFFIC AND INCLEMENT WEATHER.

TYPICAL ACCESS DRIVE
NOT TO SCALE



TRACKER WITH MODULES
NOT TO SCALE



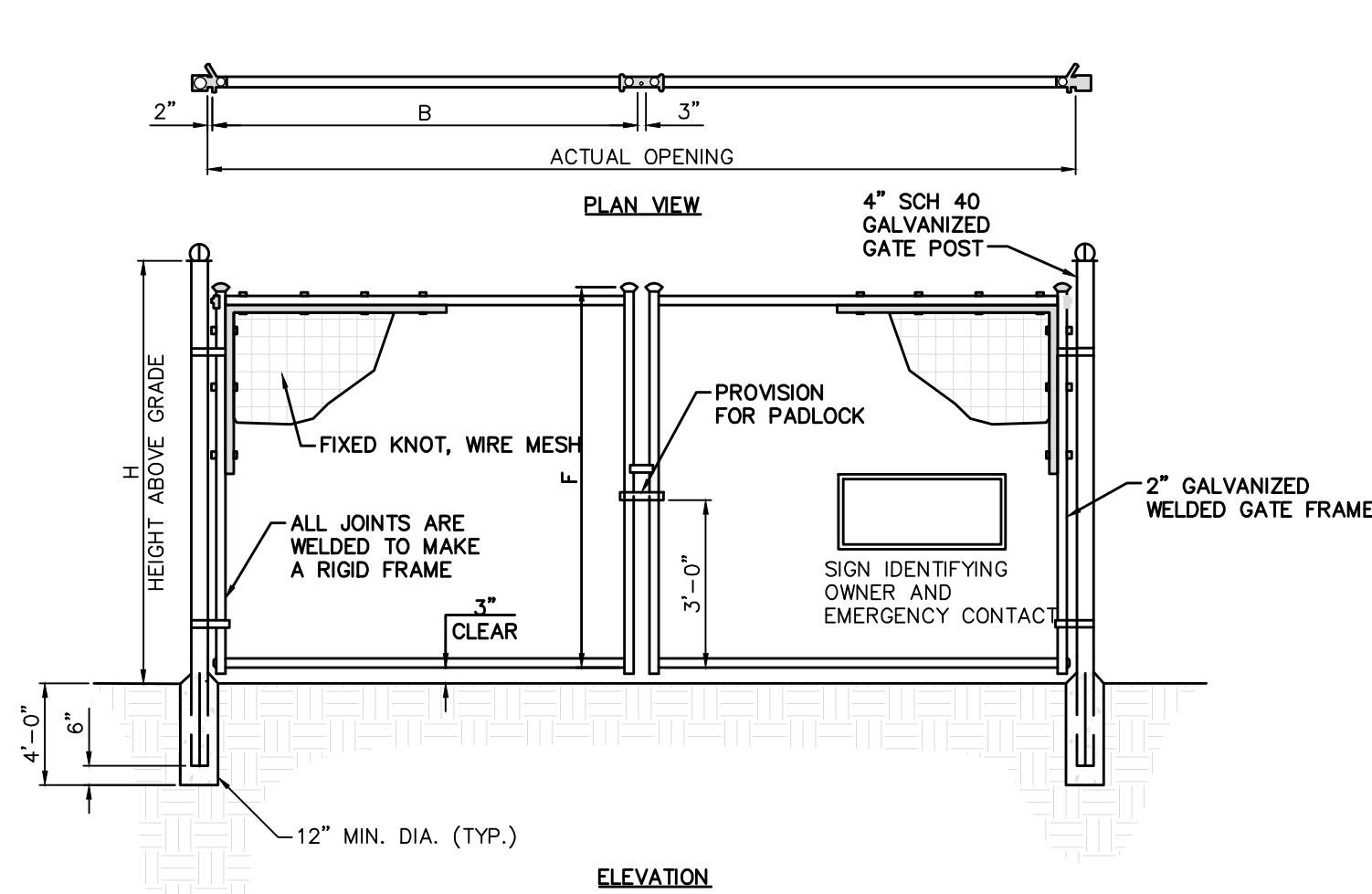
# WIRE	NOMENCLATURE	LENGTH	WEIGHT
23	23/120/6	330'	492
20	20/96/3	165'	308
20	20/96/6	330'	598
17	17/96/6	330'	326
17	17/75/6	330'	326
10	10/60/6	330'	210

# WIRE	NOMENCLATURE	LENGTH	WEIGHT
23	23/120/12	330'	543
20	20/96/12	330'	282
20	20/96/12	660'	564
17	17/96/12	330'	248
17	17/96/12	660'	496
17	17/75/12	330'	235
10	10/60/12	660'	224

WIRE	GAUGE	TENSILE STRENGTH	BREAKING LOAD	GALVANIZATION
Line Wires	12 1/2 ga.	Hi-Tensile 180K-212K	1347 lbs-1687 lbs	.85 oz-1.4 oz. per sq. ft.
Stay Wires	12 1/2 ga.	Med-Tensile 140K-170K*	1048 lbs-1273 lbs*	.85 oz-1.4 oz. per sq. ft.
Knot Wires	13 ga.	Low Tensile 57K-76K	311 lbs-456 lbs	.85 oz-1.4 oz. per sq. ft.

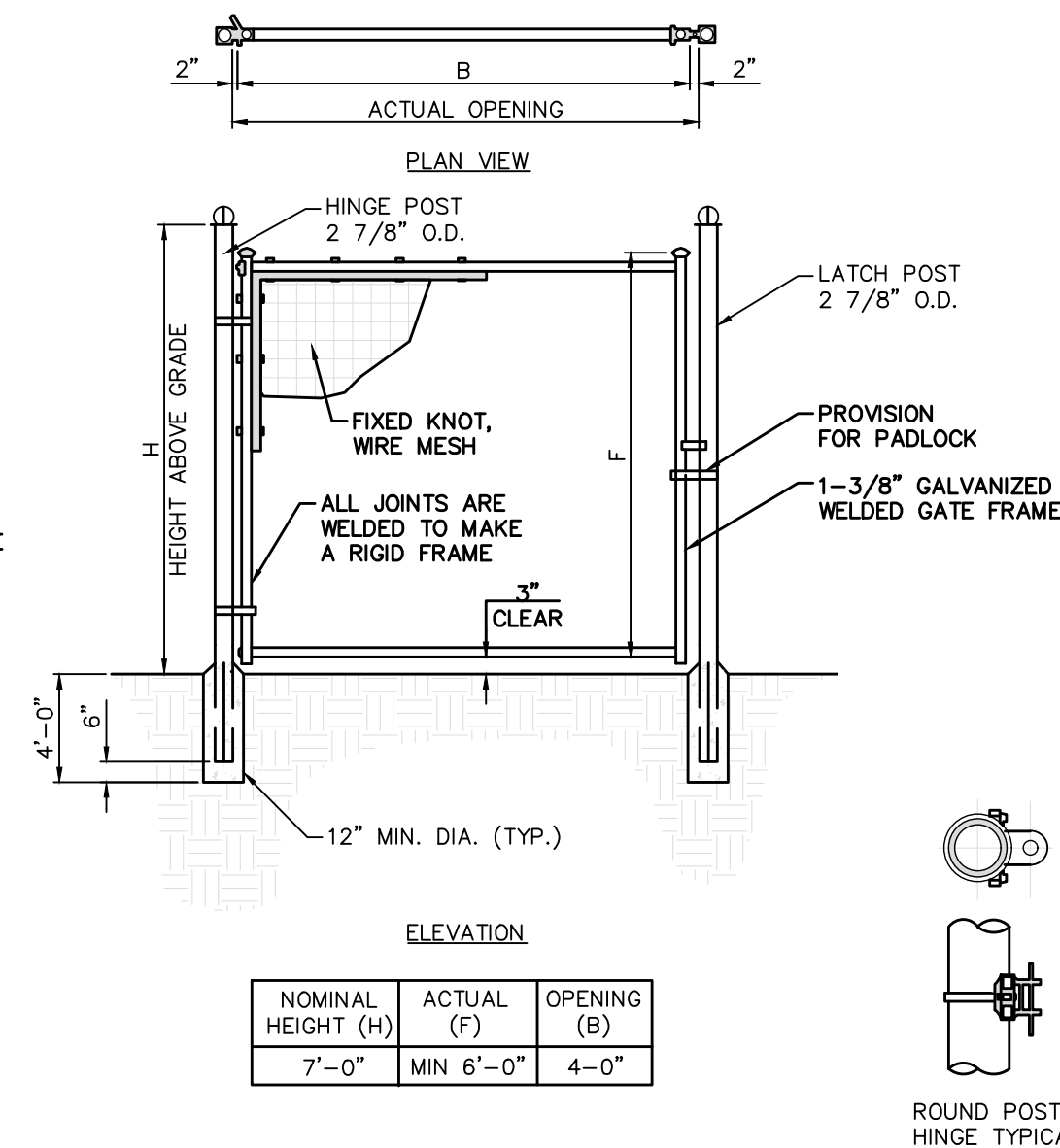
- NOTES:
- USE CONCRETE ENCASEMENT FOR ANGLE, CORNER, END, OR GATE POSTS ONLY. BACKFILL ALL LINE POSTS WITH NATIVE MATERIAL.

FIXED KNOT FARM FENCE
NOT TO SCALE



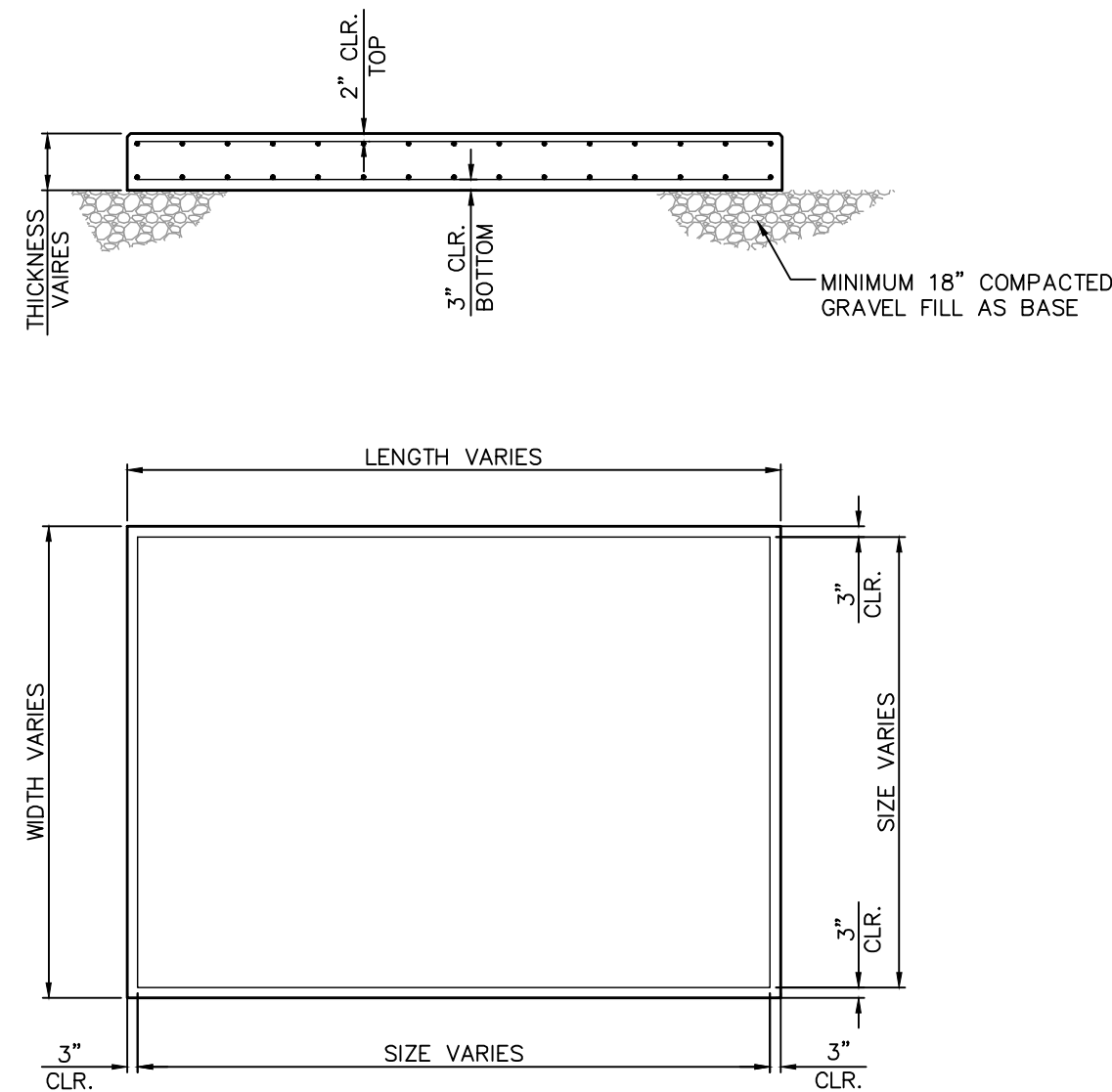
- NOTES
- ALL FENCING AND HARDWARE SHALL BE GALVANIZED.
 - CONCRETE ENCASEMENT AT END AND GATE POSTS ONLY
 - FIXED KNOT WIRE MESH TO BE BAKAERT SOLIDLOCK PRO (20/96/6), (17/96/6) OR EQUIVALENT

NOT TO SCALE



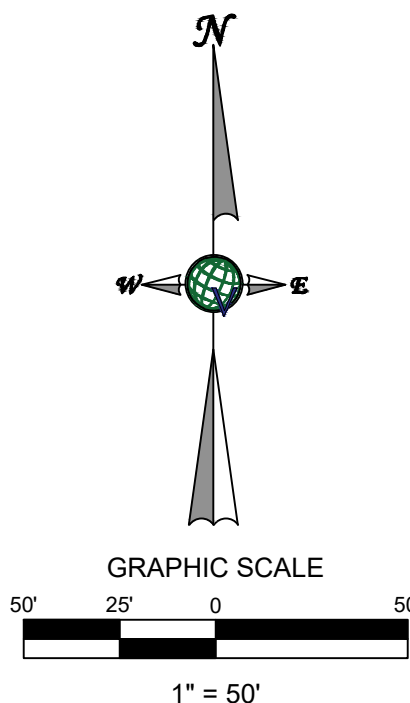
- NOTES
- ALL FENCING AND HARDWARE SHALL BE GALVANIZED.
 - CONCRETE ENCASEMENT AT END AND GATE POSTS ONLY
 - FIXED KNOT WIRE MESH TO BE BAKAERT SOLIDLOCK PRO (20/96/6), (17/96/6) OR EQUIVALENT

NOT TO SCALE



- NOTES:
- CONCRETE TO BE 4000 PSI @ 28 DAYS.
 - MAX. SLUMP: 4 INCHES (TO BE MEASURED PRIOR TO PUMPING AND ADDITION OF ADMIXTURES.)
 - REINFORCING SHALL BE ASTM A615 GR. 60 (60 KSI YIELD.)
 - USE 3/4" CHAMFER ON ALL EXPOSED EDGES, UNLESS NOTED OTHERWISE.
 - FOUNDATIONS TO BE BACKFILLED & COMPACTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
 - ESTIMATED CONCRETE QUALITY IS FOR OWNER'S ASSET MANAGEMENT PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR DETERMINING QUANTITIES FOR CONSTRUCTION & BID PURPOSES.
 - EQUIPMENT ANCHORAGE TO BE HILTI ADHESIVE ANCHOR, DESIGNED UPON RECEIPT OF CERTIFIED EQUIPMENT DRAWINGS.

TYPICAL EQUIPMENT PAD
NOT TO SCALE



Revision

ADD GAS LINE / REV PANEL LAYOUT

Date

1 08/16/24

No.

1

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Engineer

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Applicant

GOPHER STATE SOLAR, LLC

Property Owners:

MULTIPLE SEE SHEET C0.01

Project Name:

GOPHER STATE SOLAR

Project Number:

00223023

Scale:

AS NOTED

Drawn By:

DRK

Date:

JUNE 2024

Checked By:

CEA

Drawing Description:

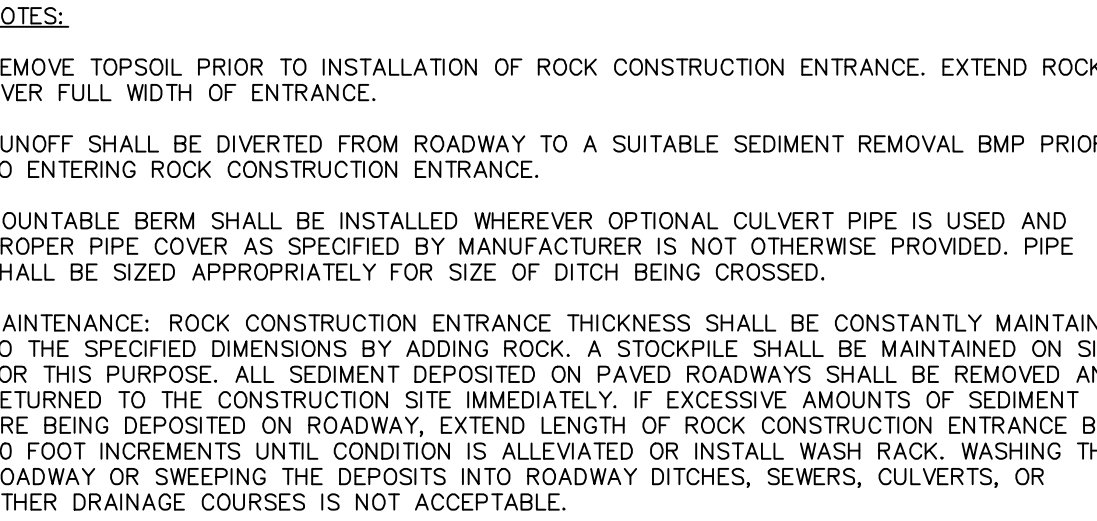
DETAILS

Drawing Number:

C5.00

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The diagram illustrates the construction of a fence section. The top part shows a plan view of two fence sections being joined, with labels for 'STAKE' and 'STAPLES'. The bottom part is a 'SECTION VIEW' showing the fence's profile. It includes a 'SUPPORT STAKE' on the left, a 'FABRIC FENCE' on the right, and a 'TOE ANCHOR TRENCH' at the base. Dimensions are provided for the fabric fence (18 IN. high, 8 FT. MIN. wide), the compacted backfill, and the toe anchor trench (6 IN. deep, 6 IN. wide). A note specifies that stakes are spaced at 8 FT. MAX. and that the fence can be made of 2 IN. x 2 IN. (±3/8 IN.) wood or equivalent steel (U or T) stakes. The ground is labeled 'UNDISTURBED GROUND' and 'FILL SLOPE'.

JOINING FENCE SECTIONS

8 FT. MIN.

SUPPORT STAKE

FABRIC FENCE

COMPACTED BACKFILL

UNDISTURBED GROUND

TOE ANCHOR TRENCH

18 IN.

6 IN.

6 IN.

18 IN. MIN.

* STAKES SPACED AT 8 FT. MAX.
USE 2 IN. X 2 IN. (±3/8 IN.) WOOD OR
EQUIVALENT STEEL (U OR T) STAKES

SECTION VIEW

FILL SLOPE

1. STEEL (W/ OR TH) SHALL BE 30 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (W/ OR TH) STAKES.
2. SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.
3. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND LEVEL.
4. ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET
5. FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

The drawing consists of two parts: an 'OUTLET CROSS SECTION' and an 'UP SLOPE FACE'.

OUTLET CROSS SECTION: This diagram shows a cross-section of a rock filter structure. The top surface is a sloped layer of rock, labeled 'R-3 ROCK', with a minimum thickness of '1 MIN.' indicated by a dimension line. Above the rock, there is an 'OPTIONAL 6" COMPOST LAYER FIRMLY ANCHORED' and an 'OPTIONAL 6" SUMP'. The rock layer is supported by a base of 'AASHTO #57 6" MIN.' material. The structure is shown on a sloped ground line.

UP SLOPE FACE: This diagram shows the side view of the rock filter structure. It features a sloped face of rock, labeled 'R-3 ROCK', with a minimum thickness of '1 MIN.' indicated by a dimension line. The rock is supported by a base of 'AASHTO #57 3' MIN.' material. The structure is shown on a sloped ground line. The top surface is a horizontal layer of rock, labeled 'WOOD POSTS', with a minimum thickness of '1"'. The side face is labeled 'STRAW BALES OR FILTER FABRIC'. The height of the rock filter is indicated as 'HEIGHT OF ROCK FILTER = 5/6 HEIGHT OF STRAW BALES OR FILTER FABRIC FENCE'. The rock layer is supported by a base of 'AASHTO #57 3' MIN.' material.

- NOTES:
1. A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.
 2. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

WET SEDIMENTATION BASIN

NOT TO SCALE

NOTES:

1. RIPRAP TO BE INSTALLED PER MNDOT SPECIFICATIONS.
2. CLASS II RIPRAP PER MNDOT SPECIFICATIONS
3. FILTER FABRIC TO BE MNDOT 3733 TYPE IV

NOTES:

1. RIPRAP TO BE INSTALLED PER MNDOT SPECIFICATIONS.
2. CLASS II RIPRAP PER MNDOT SPECIFICATIONS
3. FILTER FABRIC TO BE MNDOT 3733 TYPEIV

[illegible]

DRAFT

Engineer

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GOPHER STATE SOLAR, LLC

Multiple Owners: _____
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Project Name:
GOPHER STATE
SOLAR

Project Number:
00223023

Scale: AS NOTED	Drawn By: DRK
Date: JUNE 2024	Checked By: CEA

Drawing Description:

DETAILS

Drawing Number:
C5.01
Sheet Number:
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