APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): November 6, 2017

B. ST PAUL, MN DISTRICT OFFICE, FILE NAME, AND NUMBER: MVP-2017-01810-TJH

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Minnesota County/parish/borough: Chisago City: Sunrise Township

Center coordinates of site (lat/long in degree decimal format): Lat. 45.47251° **N**, Long. -92.89286° **W**.

Universal Transverse Mercator: 15

Name of nearest waterbody: Sunrise River

Name of watershed or Hydrologic Unit Code (HUC): 07030005

☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: October 25, 2017

☐ Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are no"*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs: N/A

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY): N/A

C. SIGNIFICANT NEXUS DETERMINATION: N/A

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY): N/A

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY): N/A

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers

☐ Other: (explain, if not covered above):

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Westwood Wetland Determination Report: Norelius Community Solar Garden (June 8, 2017)

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☒ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps:

☐ Corps navigable waters' study:

☐ U.S. Geological Survey Hydrologic Atlas:

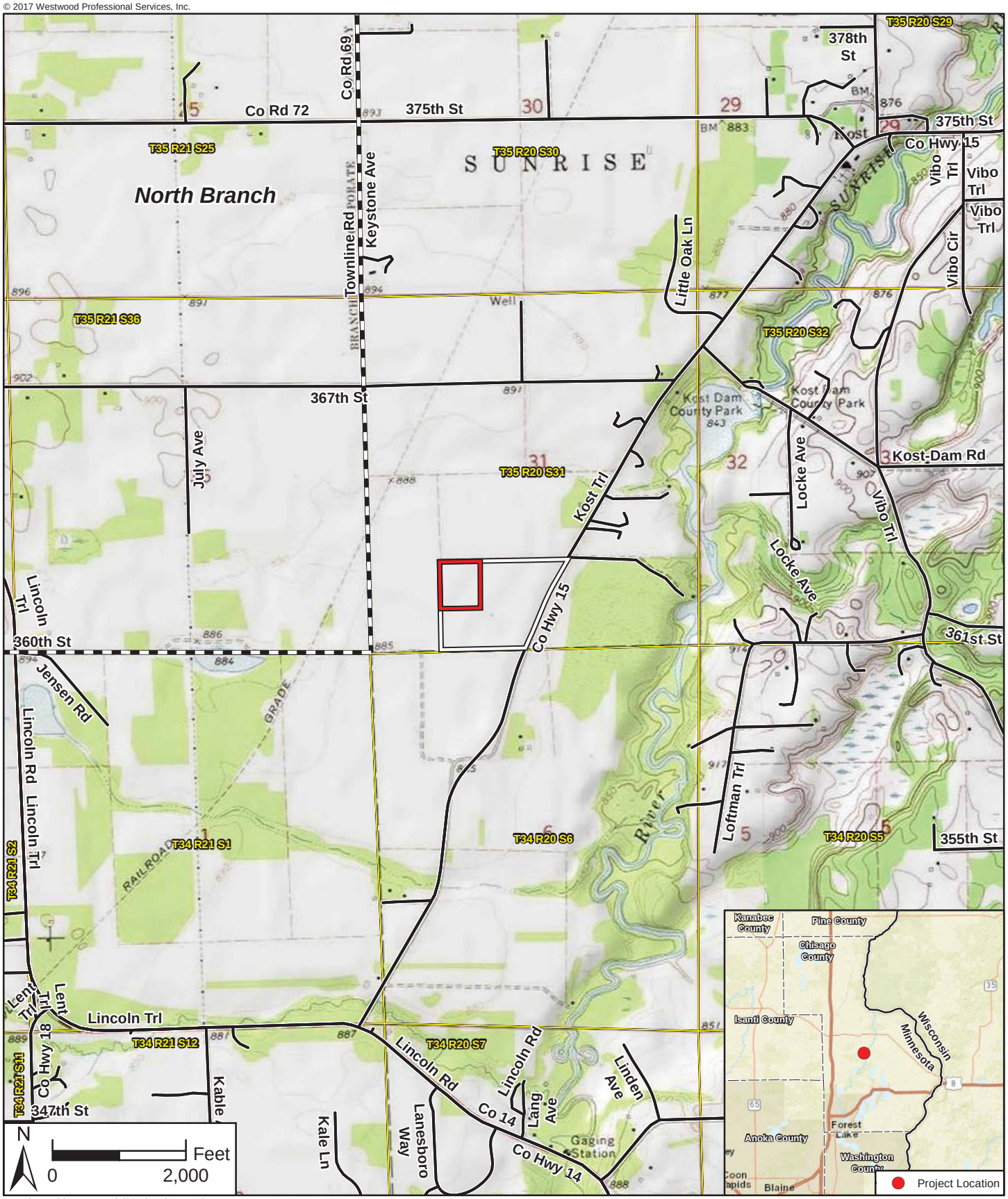
☐ USGS NHD data.

☐ USGS 8 and 12 digit HUC maps.

- ☒ U.S. Geological Survey map(s). Cite scale & quad name: 1:24K MN-STACY
- ☒ USDA Natural Resources Conservation Service Soil Survey. Citation: Chisago County Soil Survey
- ☒ National wetlands inventory map(s). Cite name: USFWS NWI & MnDNR NWI
- ☐ State/Local wetland inventory map(s):
- ☐ FEMA/FIRM maps:
- ☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date): Google Earth: 1991-2015
  or ☐ Other (Name & Date):
- ☐ Previous determination(s). File no. and date of response letter:
- ☐ Applicable/supporting case law:
- ☐ Applicable/supporting scientific literature:
- ☒ Other information (please specify): Chisago County LiDAR data

B. ADDITIONAL COMMENTS TO SUPPORT JD: The review area identified on the enclosed figures labeled MVP-2017-01810-TJH Pages 1-3 of 3 is upland and does not contain any wetlands or waters of the U.S. (WOUS). The USDA NCSS SSURGO and STATSGO digital soil maps show the project area mapped as Kost loamy find sand, which is described as excessively drained. The area has not met the three parameters required to be classified as a wetland, contains no aquatic resources and no WOUS.

© 2017 Westwood Professional Services, Inc.



Data Source(s): Westwood (2017); ESRI WMS USA Topo Basemap Imagery (Accessed 2017); Minnesota DNR - Minerals Division/Section of Wildlife (2015); Census Bureau (2016).

Legend

- Project Premises Boundary
- Project Parcel Boundary
- Road
- City/Civil Township Boundary
- County Boundary
- PLS Section Boundary

Norelius Community Solar Garden

Sunrise Township,
Chisago County, Minnesota

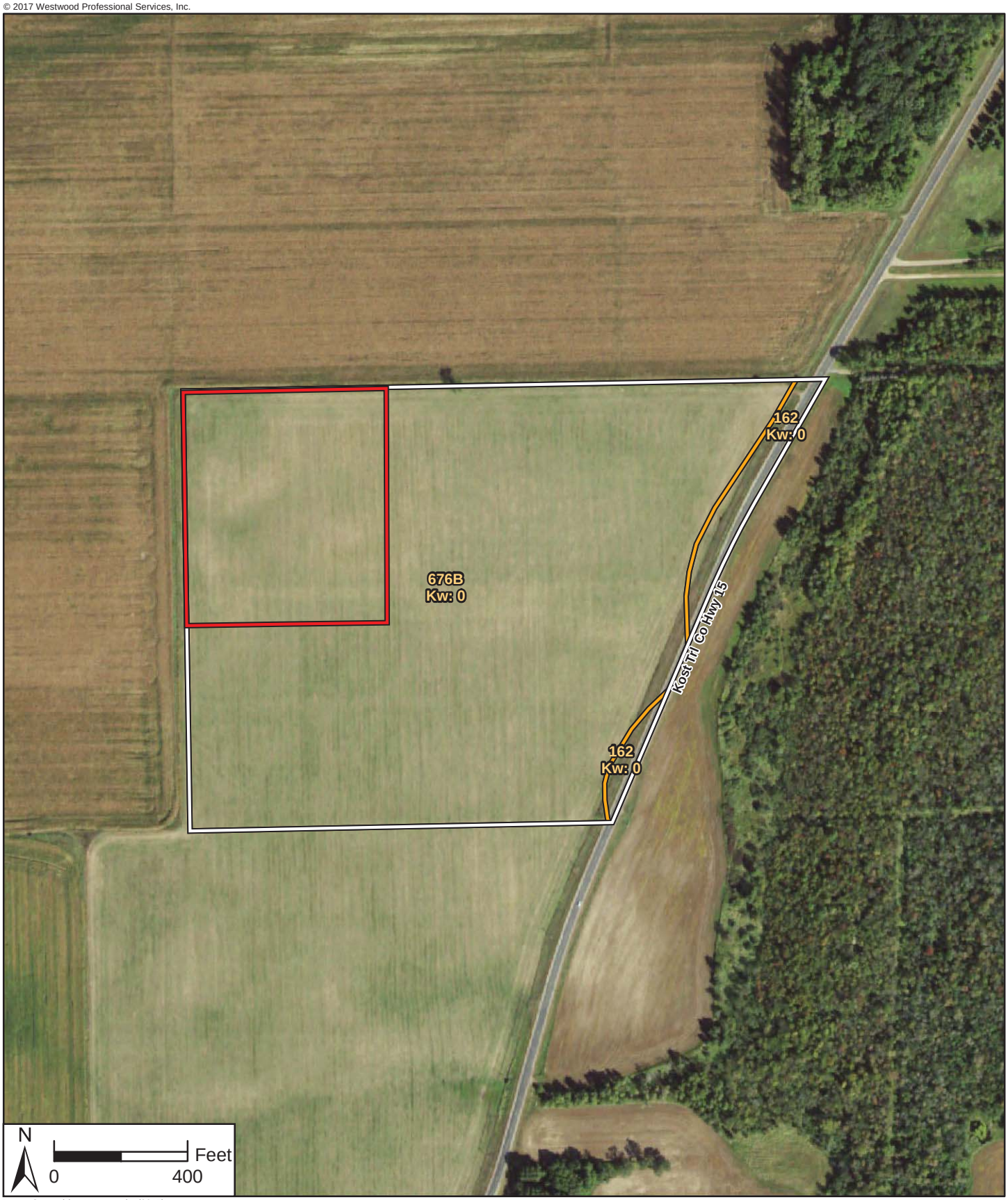
Project Location & USGS Topography

EXHIBIT 1

Westwood
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

Map Document: N:\0010810.00\GIS\CIA_Exhibits\SS_CIA_Ex1_SiteLocation_170130.mxd 2/14/2017 3:01:57 PM radevito

© 2017 Westwood Professional Services, Inc.



Data Source(s): Westwood (2017); Minnesota NAIP Imagery (Accessed 2017); Census Bureau (2016); U.S. Department of Agriculture, Natural Resources Conservation Service (2016).

Legend

- Project Premises Boundary
- Project Parcel Boundary
- Soil Unit Boundary
- All Hydric/Predominantly Hydric Soil

Unified Soil Classification System | USDA Map Unit Symbol | USDA Map Unit Name | Hydric Soils Classification

N/A | 162 | Lino loamy fine sand | 3% Hydric

N/A | 676B | Kost loamy fine sand, 1 to 6 percent slopes | 8% Hydric

Norelius Community Solar Garden

Sunrise Township,
Chisago County, Minnesota

Soils

EXHIBIT 3

Westwood
Toll Free (888) 937-5150 westwoodps.com
Westwood Professional Services, Inc.

Map Document: N:\0010810.00\GIS\CIA_Exhibits\USS_CIA_Ex6_Soils_170130.mxd 2/24/2017 12:31:31 PM RADevito

© 2017 Westwood Professional Services, Inc.

LEGEND

- SINGLE AXIS TRACKER
- POWER STATION – (1) 480V 2000A PANELBOARD, (1) MV TRANSFORMER, (1) DAS, (1) WEATHER STATION
- (E) XCEL ENERGY OVERHEAD POLES
- (N) UTILITY POLES (SEE E-100 FOR DETAILS)
- 15' WIDE SITE ACCESS ROAD
- 10' WIDE LANDSCAPE BUFFER
- U.G. MEDIUM VOLTAGE CABLE
- OVERHEAD MEDIUM VOLTAGE CABLE
- PROJECT SITE SECURITY FENCE
- PROPERTY LINE
- STRUCTURE SETBACK
- EXISTING WETLANDS (NWI)
- TOP OF PERMANENT BASIN

NOTE: NO WETLANDS IDENTIFIED IN FIELD DELINEATION.

SYSTEM SPECIFICATIONS

SYSTEM SIZE DC	1,425.60 kW
SYSTEM SIZE AC	1,000.00 kW
DC/AC RATIO	1.4256
MODULE RATING	330 W
TOTAL MODULE QTY	4320
TOTAL NO. TRACKER RACKS	60
NO. OF MODULES PER TRACKER RACK	72 (1x72L)
TILT ANGLE	0°
INTER-ROW SPACING	12.0'
PITCH	18.4'
GCR	34.8%
AREA OCCUPIED	8.6 Ac

GENERAL NOTES

1. INSTALLATION TO COMPLY WITH NEC 2014 ARTICLE 690 AND ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES OR REGULATIONS.
2. EQUIPMENT SHALL BE LABELED PER NEC 690 AND XCEL ENERGY REGULATIONS.
3. 15' ACCESS ROADS SHALL BE DESIGNED TO ACCOMMODATE ALL CONSTRUCTION, OPERATIONS, MAINTENANCE, AND UTILITY TRAFFIC THROUGHOUT THE SITE.
4. DIMENSIONS TO PROPERTY LINES AND EXISTING FEATURES ARE APPROXIMATE PENDING SURVEY.

Westwood

Phone (952) 937-5150
Fax (952) 937-5822
Toll Free (888) 937-5150
7699 Anagram Drive
Eden Prairie, MN 55344
westwoodps.com

Westwood Professional Services, Inc.

Designed: MDO
Checked: KMP
Drawn: MDO
Record Drawing by/date:

Revisions:

#	DATE	DESCRIPTION
1		

Prepared for:

US SOLAR

100 N 6th St #218c
Minneapolis, MN 55403

0' 150' 300' 450'

USS Norelius Solar LLC

Chisago County, Minnesota

36024 Kost Trail
North Branch, MN 55056

PV Site Plan

Not for Construction

Date: 05/25/17
Sheet: C.100

N:\0010810.20\dwg\Permit\0010810.20 Permit Site Plan.dwg