

EXISTING AGRICULTURAL DRAIN TILE INVESTIGATION PLAN

SUNTRUST SOLAR

Prepared for: SUNVEST SOLAR, LLC

Section no.23, Rutland Twp., Kane Co., IL

EXISTING SUBSURFACE AGRICULTURAL DRAIN TILE INVESTIGATION REPORT

SUNTRUST SOLAR

SUNVEST SOLAR, LLC

SUNTRUST SOLAR / SUNVEST SOLAR, LLC, FIELD FILE NO. 4-13-23, DATE: 8/20/25.
IN ACCORDANCE WITH LOCAL COUNTY AND A.L.M.A. EXISTING DRAIN TILE INVESTIGATION & LOCATION STANDARDS
COPYRIGHT © 2025, BY HUDDLESTON MCBRIDE LAND DRAINAGE COMPANY

DESCRIPTION CHART NO. 1A: INVESTIGATION SLIT TRENCH LOCATIONS

ID NO.	SZ.	TYPE / QUALITY	FLOW %	SILT %	DEPTH GRD/INCH	FIELD NOTES
A	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
B	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
C	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
D	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
E	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
F	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
G	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
H1	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
I	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
J	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
K	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
L1	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
M1	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
N	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
O1	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
P1	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
Q1	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
R	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
S	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
T	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
U1	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
V	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
W	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
X	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
Y	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
Z	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
2A	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	
2B	3"	CLAY / GOOD	20%	32"	NO DRAIN TILE LOCATED	



MAP LEGEND:

- EXIST. DRAIN TILE COVER MEASUREMENT, TOP OF TILE TO SURFACE
- EX. CLAY DRAIN TILE MAINLINE OR SYSTEM PART
- EX. CONCRETE DRAIN TILE MAINLINE OR SYSTEM PART
- EXIST. DRAIN TILE CONTINUES TO UPLAND WATERSHED
- EXISTING DRAIN TILE OUTLETS TO SURFACE
- EXIST. DRAIN TILE (1) INSPECTION STRUCTURE / (2) CATCH BASIN
- EXIST. DRAIN TILE (1) LOCATED END / (2) ASSUMED END
- EXISTING DRAIN TILE CONTINUES TO OFF-SITE OUTLET SYSTEM
- EXISTING DRAIN TILE FAILURE / FLOW SURCHARGE TO SURFACE
- EXISTING DRAIN TILE MAPPED BY SPECULATION AND ASSUMPTION
- EXISTING DRAIN TILE ABANDONED (NOT FUNCTIONAL)
- EXISTING DRAIN TILE "BLOWOUT" OR FAILURE
- HAND PROBE OR ELECTRONIC SCAN FOR DRAIN TILE LOCATION
- INVESTIGATION SLIT TRENCH FOR INVESTIGATION
- SURVEY DATA POINTS
- REPORT IDENTIFICATION NUMBER

REPORT LEGEND:

- ID NO. POINT OF EXCAVATION FOR SPECIFIC DRAIN TILE INVESTIGATION.
- SZ. (SIZE) DRAIN TILE INTERNAL DIAMETER IN INCHES.
- MATERIAL / QUALITY TYPE OF TILE MATERIALS, PIPE QUALITY - GOOD, FAIR & POOR.
- PERCENTAGE OF TILE DIAMETER OCCUPIED BY ACTIVE FLOW, RESTRICTED OR BACKED UP FLOW, SURCHARGED CONDITION
- SILT % PERCENTAGE OF TILE DIAMETER OCCUPIED BY RESTRICTIVE SILT.
- ABANDONED, FILLED WITH SILT BLOCKAGE, NO FLOW POTENTIAL
- DEPTH MEASUREMENT FROM EXISTING GROUND LEVEL TO PIPE INVERT.

(GENERAL NOTES)

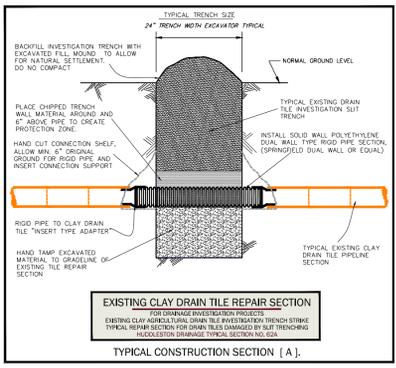
- MAINLINE TILE TRUNK LINE OR MUTUAL DRAIN, COLLECTOR OF SUB-SYSTEMS.
- SUB-MAIN TILE SECONDARY TRUNK LINE OR RANDOM SYSTEM COLLECTOR.
- LATERAL TILE FEEDER LINE, SERVICE TILE OR SYSTEM SPUR.
- "BLOWOUT" EXISTING SYSTEM PIPE FAILURE OR RESTRICTION.
- DRAIN TILE ENDS MAINLINE, SUB-MAIN OR LATERAL PLANNED TERMINATION.
- SLIT TRENCH INVESTIGATION TRENCH, TYPICAL 2'-0" WIDE X 6'-0" DEPTH.

- #### SPECIAL NOTES:
- All existing agricultural drain tiles located during this investigation survey have been identified on this plan and their status at 50' intervals, in some occasions certain existing local drain tile sections may be speculated and considered as an assumed route which shall be delineated on this plan.
 - Any existing drain tile not encountered during slit trenching or probe transect procedures will remain unknown.
 - All existing drain tiles damaged during the investigation process shall be repaired to their original state in accordance with National Resource Conservation Service standards for drain tile installation and repair. All existing drain tile not encountered during slit trenching procedure will remain unknown.
 - Huddleston McBride (2024 typical standard "A")
 - All existing drain tile location dimensions have been mapped in state plane coordinates by GPS survey systems and include sub meter accuracy, all locations pertinent to final design shall be verified by the project surveyor.
 - This drain tile investigation report is intended to identify existing drain tile mainline systems only with additional priority on drain tiles which may serve the adjacent property of others or with mutual drainage status.
 - This drain tile investigation report shall be filed with Huddleston McBride Drainage Co., and will be reproduced and dispersed only by permission of the contract principals.
 - Solar Field Development - It is our recommendation that all existing drain tile systems within the proposed solar farm development should be repaired by tile and/or construction which will assure the location and replacement of unknown drain tile systems that were not located by this Existing Drain Tile Investigation.

DESCRIPTION CHART NO. 1B: SURVEY DATA POINT LOCATIONS

DATA POINT	SZ.	TYPE / QUALITY	FLOW %	SILT %	DEPTH GRD/INCH	FIELD NOTES

NOTE: ALL EXISTING DRAIN TILE LOCATED DURING THIS INVESTIGATION REMAIN LOCAL, THEREFORE NO DATA (INGRESS / EGRESS) POINTS WHERE ESTABLISHED.



THESE SYMBOLS REPRESENT SURVEY DATA POINTS WHICH HAVE BEEN STAKED IN THE FIELD FOR THE SPECIFIC PURPOSE OF ELECTRONIC LOCATION AND ELEVATION DETERMINATION BY THE PROJECT SURVEYOR.
THESE DATA POINTS CONSIST OF A 2" X 2" GROUND HUB AND A 3/4" OD DRAIN TILE LOCATION STAKE WHICH INCLUDES DATA POINT IDENTIFICATION NUMBER, SEPARATION MEASUREMENT FROM HUB TO PIPE INVERT, AND PIPE SIZE.
ALL EXISTING DRAIN TILE ROUTES HAVE BEEN FIELD STAKED WITH EXISTING DRAIN TILE PIN FLAGS AT 50' INTERVALS AND DOUBLE FLAGS AT INTERSECTIONS.

CROP DAMAGE ESTIMATE REPORT

REGARDING EXISTING DRAIN TILE SURVEY DAMAGE

ALL EXISTING INVESTIGATION TRENCHES ARE ESTIMATED AT A WIDTH OF 30ft, WHICH INCLUDES TRENCH EXCAVATION AND BACKFILLING. ALL FIELD TRAVEL PATHWAYS FROM PUBLIC ACCESS OR NON-CROP AREA TO EACH INVESTIGATION TRENCH ARE ESTIMATED AT A WIDTH OF 8ft, WHICH INCLUDES ONE WAY TRAFFIC.

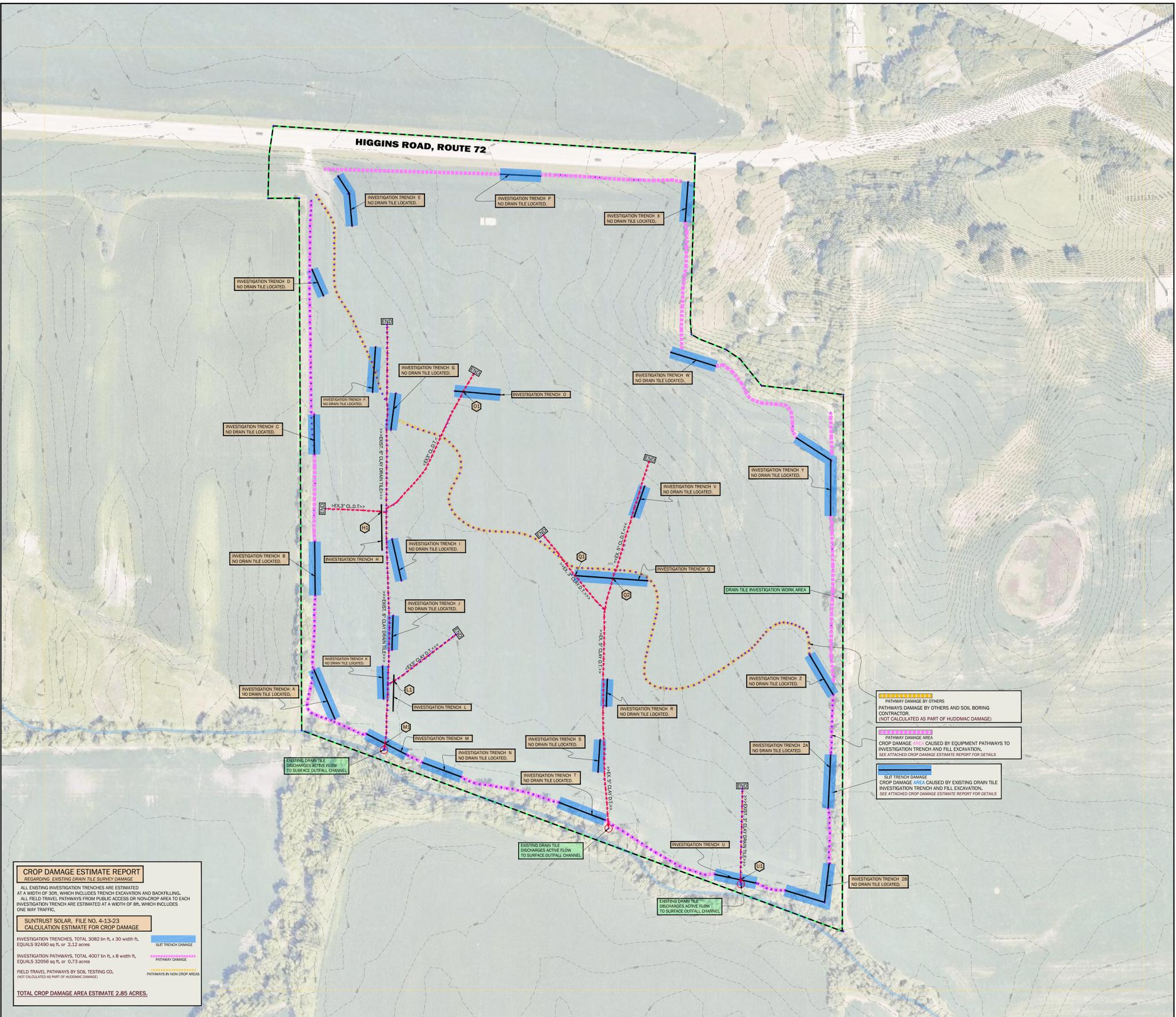
SUNTRUST SOLAR, FILE NO. 4-13-23
CALCULATION ESTIMATE FOR CROP DAMAGE

INVESTIGATION TRENCHES, TOTAL 3082 lin ft x 30 width ft, EQUALS 92490 sq ft or 2.12 acres

INVESTIGATION PATHWAYS, TOTAL 4007 lin ft x 8 width ft, EQUALS 32056 sq ft or 0.73 acres

FIELD TRAVEL PATHWAYS BY SOIL TESTING CO. (NOT CALCULATED AS PART OF HUDDMAC DAMAGE)

TOTAL CROP DAMAGE AREA ESTIMATE 2.85 ACRES.



PROJECT CLIENT: **SUNVEST SOLAR, LLC**
Bill French, Project Manager
330 W. State Street, Suite 1, Geneva, IL 60134

APPROVED BY AND DATE: RUDY P. DIXON, P.E., 8/20/25
ACKNOWLEDGMENTS: HUDDLESTON DRAINAGE MAP and ARCHIVE SYSTEMS
DRAWN BY AND DATE: TOM HUDDLESTON 8/20/25

PROJECT DATE: 8/20/25
FIELD FILE NO.: 4-13-23
DRAWING NO.: 4-13-23_X1

REVISIONS: DATE: BY: DESCRIPTION:
WEATHER CONDITIONS: SUNNY / COOL - 80o
DRAWING SCALE: 1" TO 150'
SHEET NO.: ONE OF ONE

PROFESSIONAL LAND DRAINAGE ENGINEER
RUDY P. DIXON, P.E. 062.065333
1976 Huddleston McBride 49th Anniversary 2025
ILLINOIS FARM BUREAU MEMBER
811 Know what's below. Call before you dig. 800.487.8899
NORTH
SUNTRUST SOLAR
HUDDLESTON MCBRIDE PROFESSIONAL LAND DRAINAGE SERVICES
Women-Owned Small Business (WOSB)
9504 FOWLER RD., ROCHELLE, ILLINOIS PHONE 615-562-8007
COORDINATE SYSTEM: ILLINOIS STATE PLANE EAST NAD 83