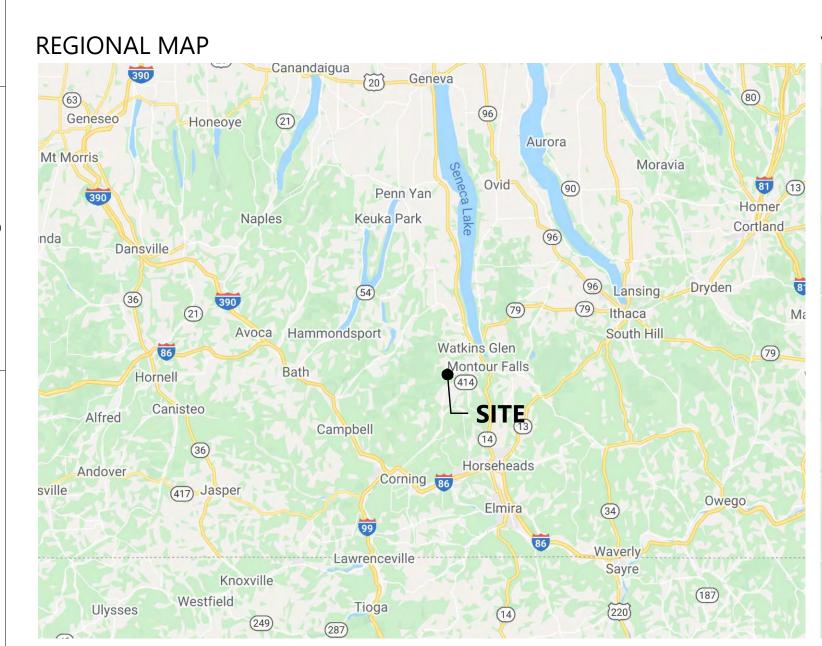
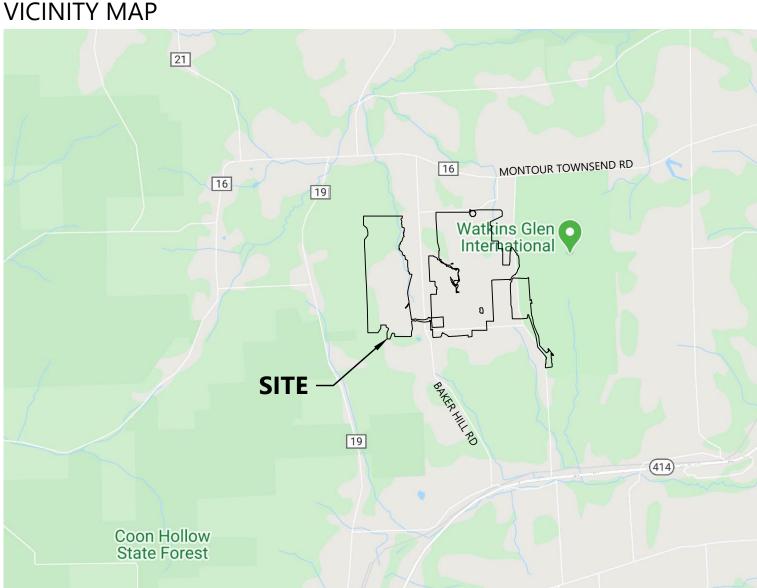
Watkins Glen Solar Energy Center

Town of Dix, Schuyler County

# Civil Construction Plans

**Issued for Permit** 





CONTACT INFORMATION			
CONSULTANT	COMPANY	NAME	PHONE NUMBER
PROJECT MANAGER	WESTWOOD	JACK HAYS	972-265-4871
ENGINEER OF RECORD	WESTWOOD	ALEX ALVARADO	214-228-8102
CLIENT	NEXTERA	JOE CARTAYA	561-604-4529
ENVIRONMENTAL CONSULTANT	TRC	SAMANTHA KRANES	315-362-2415

DATA SET INFORMATION			
BASE FILE	FILE NAME/NOTES	PROVIDER	
GRADING	0025414C-GRADE	WESTWOOD	
CIVIL IMPROVEMENTS	0025414C-SITE	WESTWOOD	
PV ARRAY	0025417E-EQUIP-TRACKER42 GCR	WESTWOOD	
ELECTRICAL LAYOUT	0025417E-EQUIP-TRACKER42 GCR	WESTWOOD	
BOUNDARY SURVEY	0025414V-MAPO	HUNT	
TOPOGRAPHY	0025414V-ECON	DUDEK	
AERIAL	0025414V-AERIAL	PUBLIC DATA	
WETLANDS	0025414V-MAPO	TRC	
SUBSTATION	0025417E-EQUIP-TRACKER42 GCR	TRC	

SHEET NUMBER	SHEET TITLE	
T.100	COVER	
T.101	GENERAL NOTES  CIVIL SITE PLAN INDEX	
C.100		
C.200	OVERALL SITE PLAN	
C.300	CIVIL SITE PLAN - 1	
C.301	CIVIL SITE PLAN - 2	
C.302	CIVIL SITE PLAN - 3	
C.303	CIVIL SITE PLAN - 4	
C.304	CIVIL SITE PLAN - 5	
C.305	CIVIL SITE PLAN - 6	
C.306	CIVIL SITE PLAN - 7	
C.307	CIVIL SITE PLAN - 8	
C.308	CIVIL SITE PLAN - 9	
C.400	TREE CLEARING PLAN - 1	
C.401	TREE CLEARING PLAN - 2	
C.402	TREE CLEARING PLAN - 3	
C.403	TREE CLEARING PLAN - 4	
C.404	TREE CLEARING PLAN - 5	
C.405	TREE CLEARING PLAN - 6	
C.406	TREE CLEARING PLAN - 7	
C.407	TREE CLEARING PLAN - 8	
C.408	TREE CLEARING PLAN - 9	
C.600	CONSTRUCTION DETAILS - 1	
C.601	CONSTRUCTION DETAILS - 2	
C.602	CONSTRUCTION DETAILS - 3	
C.603	CONSTRUCTION DETAILS - 4	
C.604	CONSTRUCTION DETAILS - 5	
C.605	NEW YORK EROSION CONTROL DETAILS - 1	
C.606	NEW YORK EROSION CONTROL DETAILS - 2	
C.607	NEW YORK EROSION CONTROL DETAILS - 3	
C.608	NEW YORK EROSION CONTROL DETAILS - 4	
C.609	CONSTRUCTION NOTES	
C.610	TREE CLEARING NOTES	
E.650	TRENCH DETAILS - 1	
E.651	TRENCH DETAILS - 2	
E.652	TRENCH DETAILS - 3	

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
L0.00	COVER SHEET
L1.00	OVERALL LANDSCAPE PLAN
L1.01	ENLARGED LANDSCAPE PLAN
L1.02	ENLARGED LANDSCAPE PLAN
L1.03	ENLARGED LANDSCAPE PLAN
L1.04	ENLARGED LANDSCAPE PLAN
L1.05	ENLARGED LANDSCAPE PLAN
L1.06	ENLARGED LANDSCAPE PLAN
L2.01	LANDSCAPE NOTES & DETAILS
L2.02	LANDSCAPE NOTES & DETAILS

## **Watkins Glen Solar Energy Center**

**NEXTera** 

700 Universe Blvd, Juno Beach, FL 33408

Town of Dix, Schuyler County

Cover

**PRELIMINARY** NOT FOR CONSTRUCTION

09/01/2020

T.100

l l		<b>~</b>	J		
ENERAL NOTES:	·				
LIDVEY MOTEC					
<u>URVEY NOTES:</u> . SURVEY INFORMATION PROVID	ED BY HIINT EAS DATED MADC	J 2020			F
PROPERTY BOUNDARY INFORMA					<u> </u>
. HORIZONTAL DATUM: NSRS 201		•			
VERTICAL DATUM: NSRS11.NY-0	•	11110 (2 20112, 03 1 00 1			
. WETLAND BOUNDARY INFORMA		D MARCH 2020.			
. EXISTING TREELINE IS APPROXIN					PERN
. SOILS INFORMATION FROM USI	OA-NRCS WEB SOIL SURVEY SCI	HUYLER COUNTY, NY DATE	ED SEPTEMBER 3, 2018.		TEM
. FLOOD ZONE CLASSIFICATION:					I CIVI
SITE LIES WITHIN AN AREA OF N	IINIMAL FLOODING (ZONE C); A	S SHOWN ON THE FOLLO	WING MAPS NUMBERED:		LIMIT
3607460005A - DATED OC	TORED 20 1002				-
3607460003A - DATED OC	•				
3007400010A - DATED OC	.10der 29, 1902				LOT (
WPPP NOTE:					
THE EROSION AND SEDIMENTA	TION CONTROL MEASURES FOF	THIS PROJECT SHALL BE I	N SUBSTANTIAL COMPLIA	ANCE	

PROJECT DETAILS				CULVE	RT SCHEDULE	
PROPERTY AREA (ACRES)	786	NAME	INLET	OUTLET	CULVERT SIZE	CULVERT LENGTH
FENCED AREA (ACRES)	352	DC-01	1639.5 (S)	1635.1 (N)	(3) - 36"	75'
FENCING LENGTH (LF)	38,357	DC-02	1647.0' (S)	1645.7' (N)	(2) - 18"	30'
PERMANENT ACCESS ROAD (LF)	16,964		<u> </u>	` ,	, ,	30
TEMPORARY ACCESS ROAD (LF)	550	DC-03	1661.2' (S)	1659.4' (N)	(1) - 18"	40'
LIMITS OF DISTURBANCE (ACRES)	391.55	DC-04	1706.0' (E)	1701.4' (W)	(2) - 24"	60'
TREE CLEARING (ACRES)	96	DC-05	1591.5' (W)	1589.9' (E)	(1) - 18"	65'
LOT COVERAGE PERCENTAGE (%)	37	DC-06	1591.4' (S)	1589.1' (N)	(1) - 18"	45'
ROAD AGGREGATE (CY)	5,189	DC-07	1641.6' (N)	1641.1' (N)	(1) - 42"	60'
LAYDOWN YARD AGGREGATE (CY)	7,492				] , ,	

		V	Ves	tw
Ή	SHEET	Phone Fax	(952) 937-5150 (952) 937-5822	12701 Whitew Minnetonka, N
	C.304	Toll Free Westwoo	(888) 937-5150 d Surveying and Eng	westwoodps.c gineering, P.C.
	C.304			
	C.304-C.305			
	C.305			
	C.307			
		I		

C.306

C.306

(952) 937-5822 Minnetonka, MN 55343 (888) 937-5150 westwoodps.com



700 Universe Blvd,

		Juno Beach, FL 33408
REV	ISIONS:	
#	DATE	COMMENT
Α	03/11/20	ISSUED FOR REVIEW
В	04/17/20	ISSUED FOR PERMIT
C	06/05/20	ISSUED FOR REVIEW
D	06/26/20	ISSUED FOR REVIEW

E 09/01/20 ISSUED FOR REVIEW

TREES AND OTHER VEGETATION MAY BE REDUCED TO CHIPS BY THE USE OF CHIPPING MACHINES OR STUMP GRINDER AND USED AS REQUIRED FOR EROSION CONTROL. ALL OTHER CHIPS AND WOOD WASTE RESULTING FROM REMOVAL

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL

WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THE PROJECT IN ACCORDANCE WITH

PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY (GP-0-20-001), OR GP IN

EFFECT AT COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

- OPERATIONS SHALL BE DISPOSED OF OFF-SITE AT A FACILITY AND IN A MANNER APPROVED BY THE OWNER. AREAS IDENTIFIED AS AVOIDANCE AREAS SHALL BE CLEARED OF TREES AND ONLY IF LOCATED WITHIN AN AREA DESIGNATED FOR TREE CLEARING ON THE TREE CLEARING PLANS. GROUND DISTURBANCE IS NOT PERMITTED. STUMPS SHALL BE CUT TO A MAXIMUM HEIGHT OF ONE (1) FOOT AND LEFT IN PLACE.
- AND FEDERAL REGULATIONS. TAKE NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING IMPROVEMENTS AND FACILITIES TO REMAIN IN PLACE. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND REPLACEMENT OF DAMAGED ITEMS AS A RESULT OF CONSTRUCTION

ALL DEMOLITION WASTE, DEBRIS AND RUBBISH SHALL BE PROPERLY REMOVED FROM THE SITE AS IT OCCURS. ALL

MATERIALS SHALL BE PROPERLY DISPOSED OF OFF-SITE IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE

WORK WILL BE CARRIED OUT NEAR AND UNDER ENERGIZED EQUIPMENT. EXTREME CAUTION IS REQUIRED AT ALL TIMES. THE CONTRACTOR SHALL STRICTLY FOLLOW ALL NEW YORK STATE ELECTRIC AND GAS SAFETY (NYSEG) REQUIREMENTS WHEN WORKING WITHIN THE POWER NYSEG CORP RIGHT-OF-WAY. FAILURE TO DO SO WILL RESULT IN TERMINATION.

UNLESS INDICATED OTHERWISE REFER TO THE LATEST EDITION OF THE STATE OF NEW YORK, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS FOR GENERAL REQUIREMENTS, PRODUCTS AND EXECUTION RELATED TO CONSTRUCTION OF BUT NOT LIMITED TO; CLEARING, GRUBBING, ROADS, UTILITY TRENCH EXCAVATION, BORROW, SUBGRADE, SUBBASE, GRANULAR FILL, AND AGGREGATE BASE.

#### PROJECT CONSTRUCTION SEQUENCING NOTES:

OF THE PROPOSED IMPROVEMENTS.

THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SEQUENCING OR CONSTRUCTION PHASING PLAN FOR OWNER APPROVAL THAT COMPLIES WITH PERMITTING REQUIREMENTS. THE PLAN SHALL SHOW THAT ACTIVE LAND DISTURBANCE ACTIVITIES WILL BE LIMITED TO LESS THAN FIVE (5) ACRES IN SIZE AND SHALL DISCUSS BUT IS NOT LIMITED TO THE FOLLOWING:

- THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS FOR TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE CONSTRUCTION DRAWINGS, IN THE SWPPP AND THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
- PRIOR TO THE START OF ONSITE EARTHWORK ACTIVITIES, THE CONTRACTOR SHALL ESTABLISH THE CONSTRUCTION WORKSPACE LIMITS AND IDENTIFY AND MARK SENSITIVE RESOURCES.
- THE CONTRACTOR SHALL INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs) IN ORDER TO PROTECT DOWN GRADIENT AREAS.
- AFTER PERMANENT EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED AND FUNCTIONING ON THE CURRENT CONSTRUCTION PHASE THE CONTRACTOR SHALL OBTAIN OWNER APPROVAL PRIOR TO BEGINNING EARTHWORK ON THE SUBSEQUENT CONSTRUCTION PHASE.

IF DISTURBING MORE THAN FIVE (5) ACRES, THE OWNER OR OPERATOR MUST OBTAIN PRIOR WRITTEN AUTHORIZATION FROM THE DEPARTMENT OF ENVIRONMENTAL CONTROL, OR IN AREAS UNDER THE JURISDICTION OF A REGULATED, TRADITIONAL LAND USE CONTROL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4), THE REGULATED, TRADITIONAL LAND USE CONTROL MS4 (PROVIDED THE MS4 IS NOT THE OWNER OR OPERATOR OF THE CONSTRUCTION ACTIVITY). AT A MINIMUM, THE OWNER OR OPERATOR MUST COMPLY WITH THE FOLLOWING REQUIREMENTS IN ORDER TO BE AUTHORIZED TO DISTURB GREATER THAN FIVE (5) ACRES OF SOIL AT ANY ONE

THE OWNER OR OPERATOR SHALL HAVE A QUALIFIED INSPECTOR CONDUCT AT LEAST TWO (2) SITE INSPECTIONS IN ACCORDANCE WITH PART IV.C. OF THIS PERMIT EVERY SEVEN (7) CALENDAR DAYS, FOR AS LONG AS GREATER THAN FIVE (5) ACRES OF SOIL REMAIN DISTURBED. THE TWO (2) INSPECTIONS SHALL BE SEPARATED BY A MINIMUM OF TWO (2) FULL CALENDAR DAYS. 2. IN AREAS WHERE SOIL DISTURBANCE ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED, THE APPLICATION OF SOIL STABILIZATION MEASURES MUST BE INITIATED BY THE END OF THE NEXT BUSINESS DAY AND COMPLETED WITHIN SEVEN (7) DAYS FROM THE DATE THE CURRENT SOIL DISTURBANCE ACTIVITY CEASED. THE SOIL STABILIZATION MEASURES SELECTED SHALL BE IN CONFORMANCE WITH THE TECHNICAL STANDARD, AND THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, DATED NOVEMBER 2016.

3. THE OWNER OR OPERATOR SHALL PREPARE A PHASING PLAN THAT DEFINES MAXIMUM DISTURBED AREA PER PHASE AND SHOWS REQUIRED CUTS AND FILLS.

4. THE OWNER OR OPERATOR SHALL INSTALL ANY ADDITIONAL SITE-SPECIFIC PRACTICES NEEDED TO PROTECT WATER QUALITY. 5. THE OWNER OR OPERATOR SHALL INCLUDE THE REQUIREMENTS ABOVE IN THE SWPPP

HORIZONTAL DIRECTIONAL DRILLING TABLE		
LOCATION	LENGTH	CIVIL PLAN SHEET REFERENCE
CROSSING OF GAS LINE AND STREAM (S-DL-6)	325 FEET	C.304
CROSSING OF WETLAND (W-JBB-7)	160 FEET	C.306
CROSSING OF WETLAND (W-JBB-7)	160 FEET	C.306

## **Watkins Glen Solar Energy Center**

Town of Dix, Schuyler County

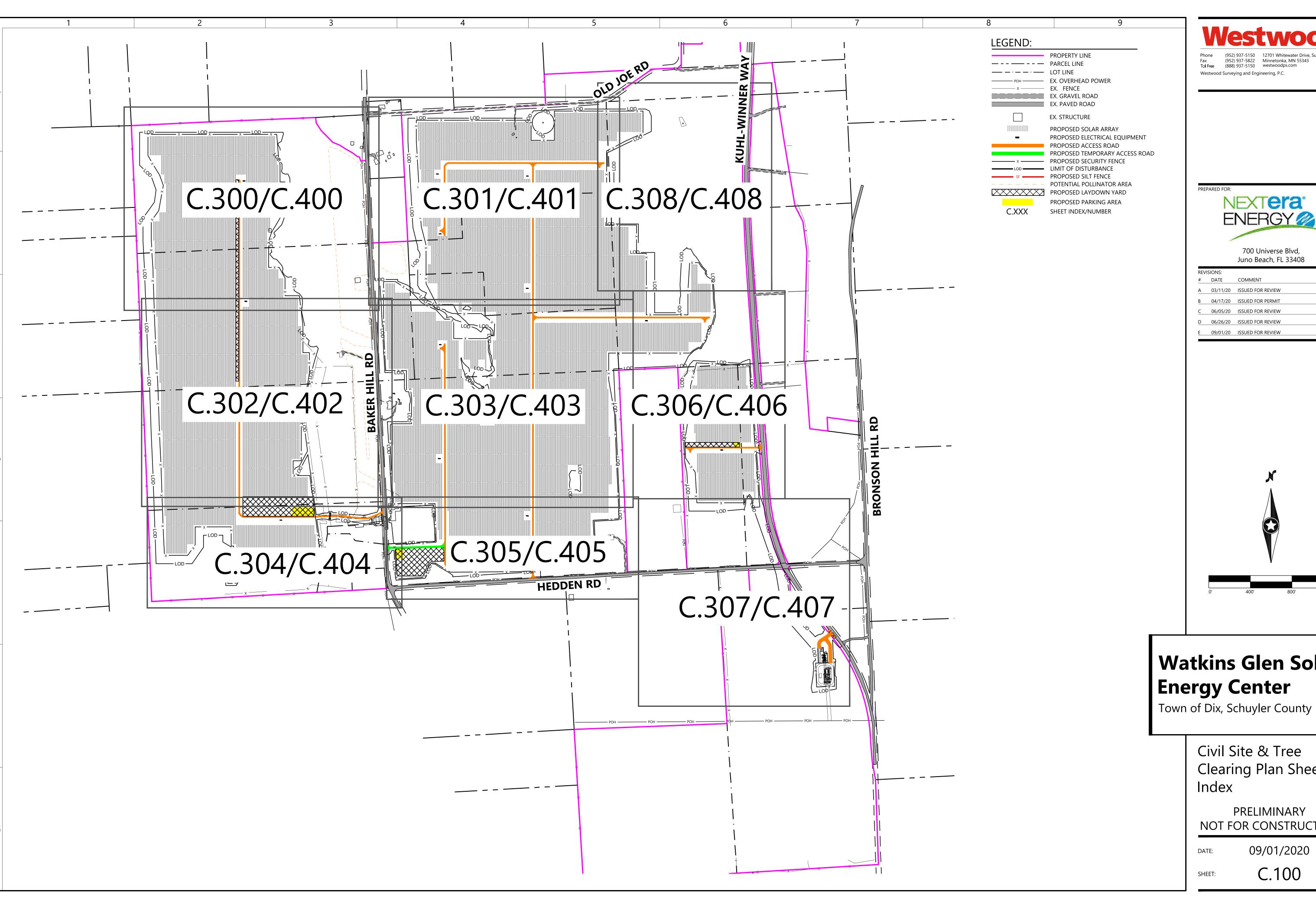
General Notes

**PRELIMINARY** NOT FOR CONSTRUCTION

SHEET:

09/01/2020

T.101



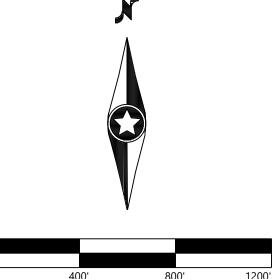
Westwood

(952) 937-5150 12701 Whitewater Drive, Suite #30 (952) 937-5822 Minnetonka, MN 55343 westwoodps.com



700 Universe Blvd, Juno Beach, FL 33408

REV	REVISIONS:				
#	DATE	COMMENT			
Α	03/11/20	ISSUED FOR REVIEW			
В	04/17/20	ISSUED FOR PERMIT			
С	06/05/20	ISSUED FOR REVIEW			
D	06/26/20	ISSUED FOR REVIEW			
E	09/01/20	ISSUED FOR REVIEW			

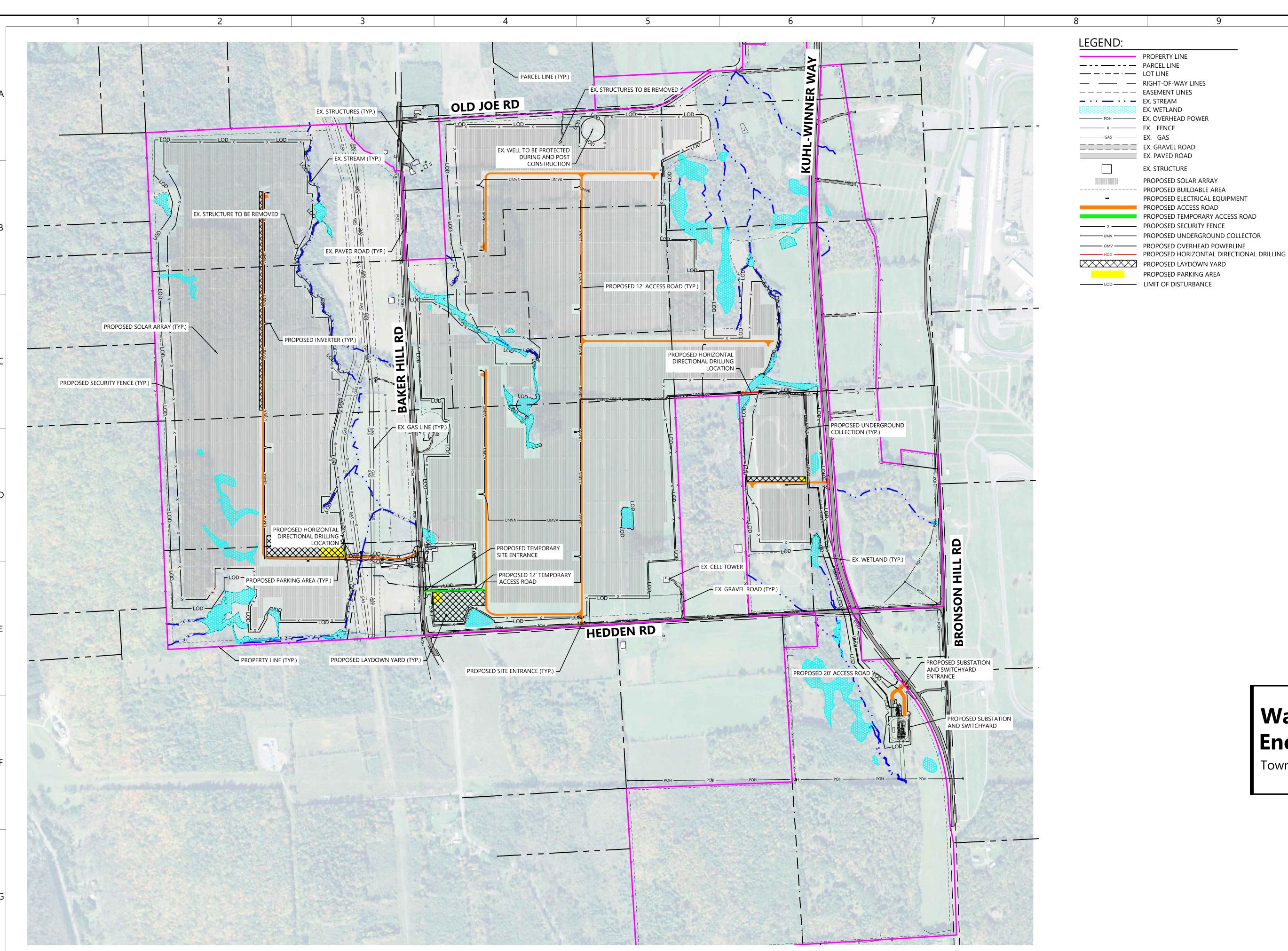


### **Watkins Glen Solar Energy Center**

Civil Site & Tree Clearing Plan Sheet

PRELIMINARY NOT FOR CONSTRUCTION

09/01/2020



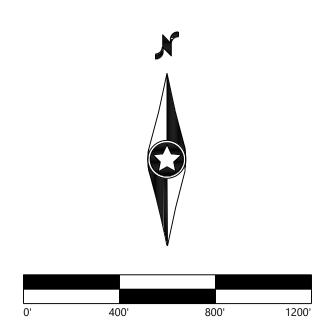


Phone (952) 937-5150 12701 Whitewater Drive, Suite #300 Fax (952) 937-5822 Minnetonka, MN 55343 westwoodps.com Westwood Surveying and Engineering, P.C.



700 Universe Blvd, Juno Beach, FL 33408

EVI	SIONS:		_
<del>!</del>	DATE	COMMENT	
	03/11/20	ISSUED FOR REVIEW	
	04/17/20	ISSUED FOR PERMIT	
:	06/05/20	ISSUED FOR REVIEW	
)	06/26/20	ISSUED FOR REVIEW	
	09/01/20	ISSUED FOR REVIEW	



### **Watkins Glen Solar Energy Center**

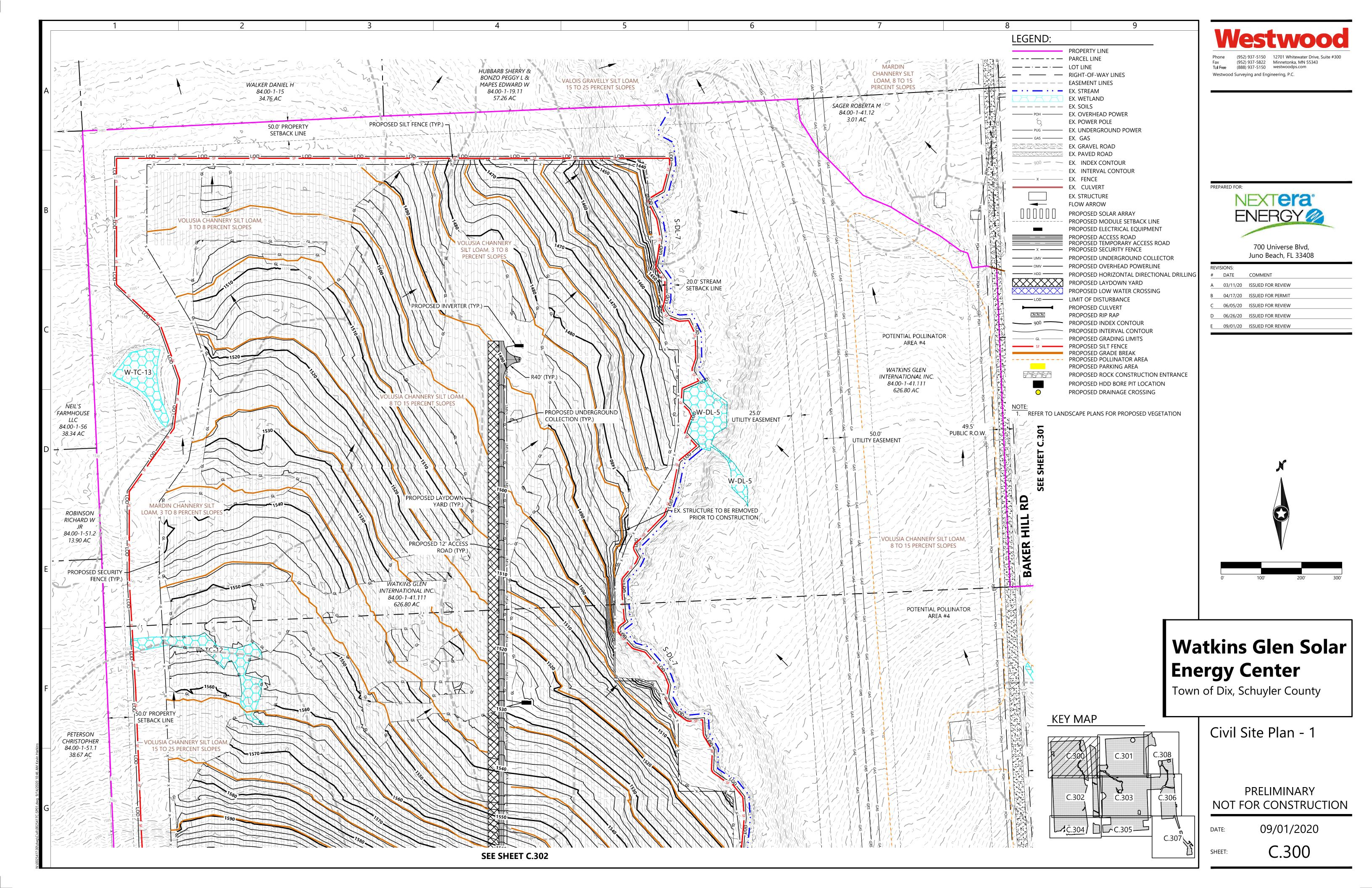
Town of Dix, Schuyler County

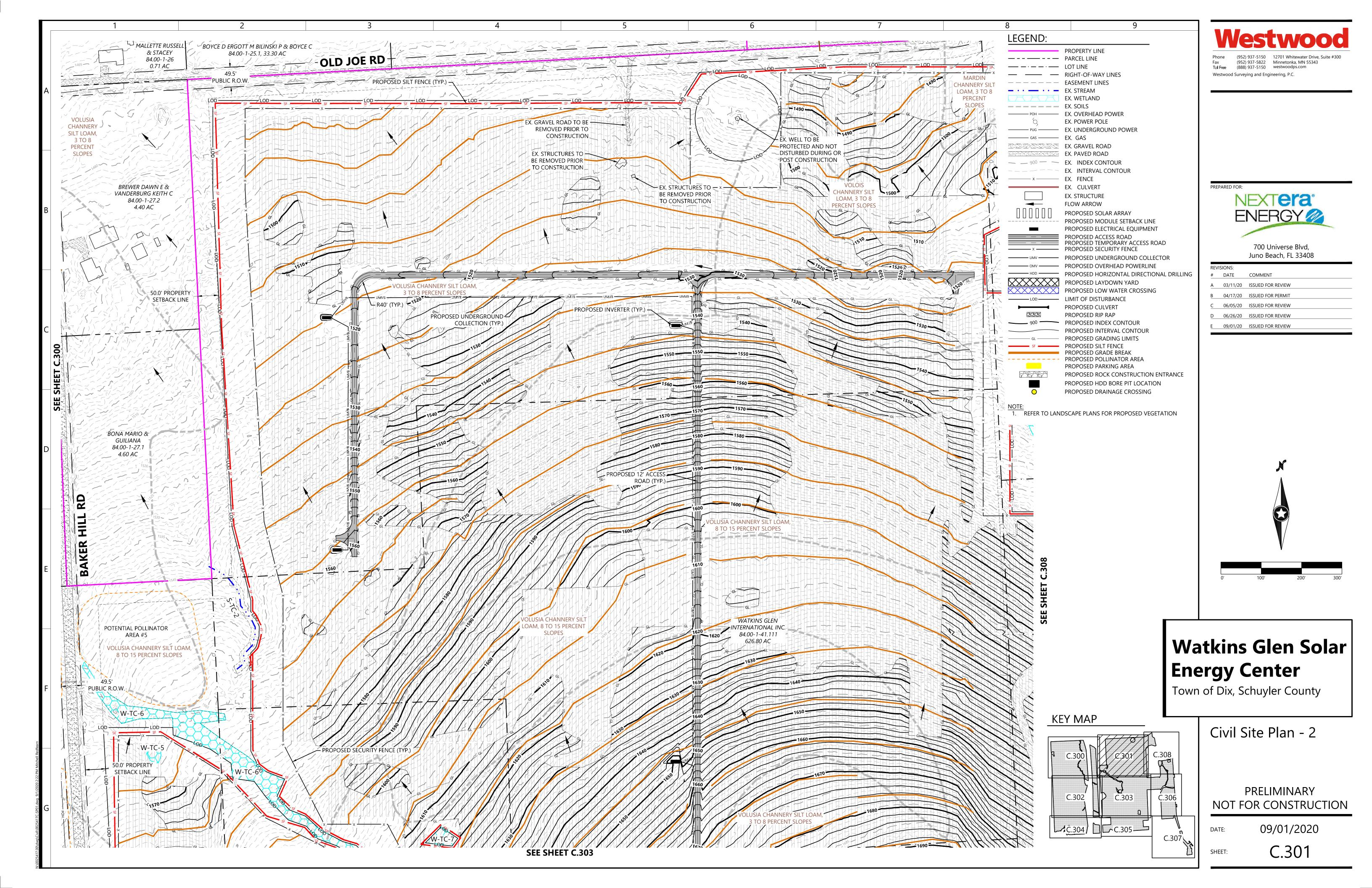
Overall Site Plan

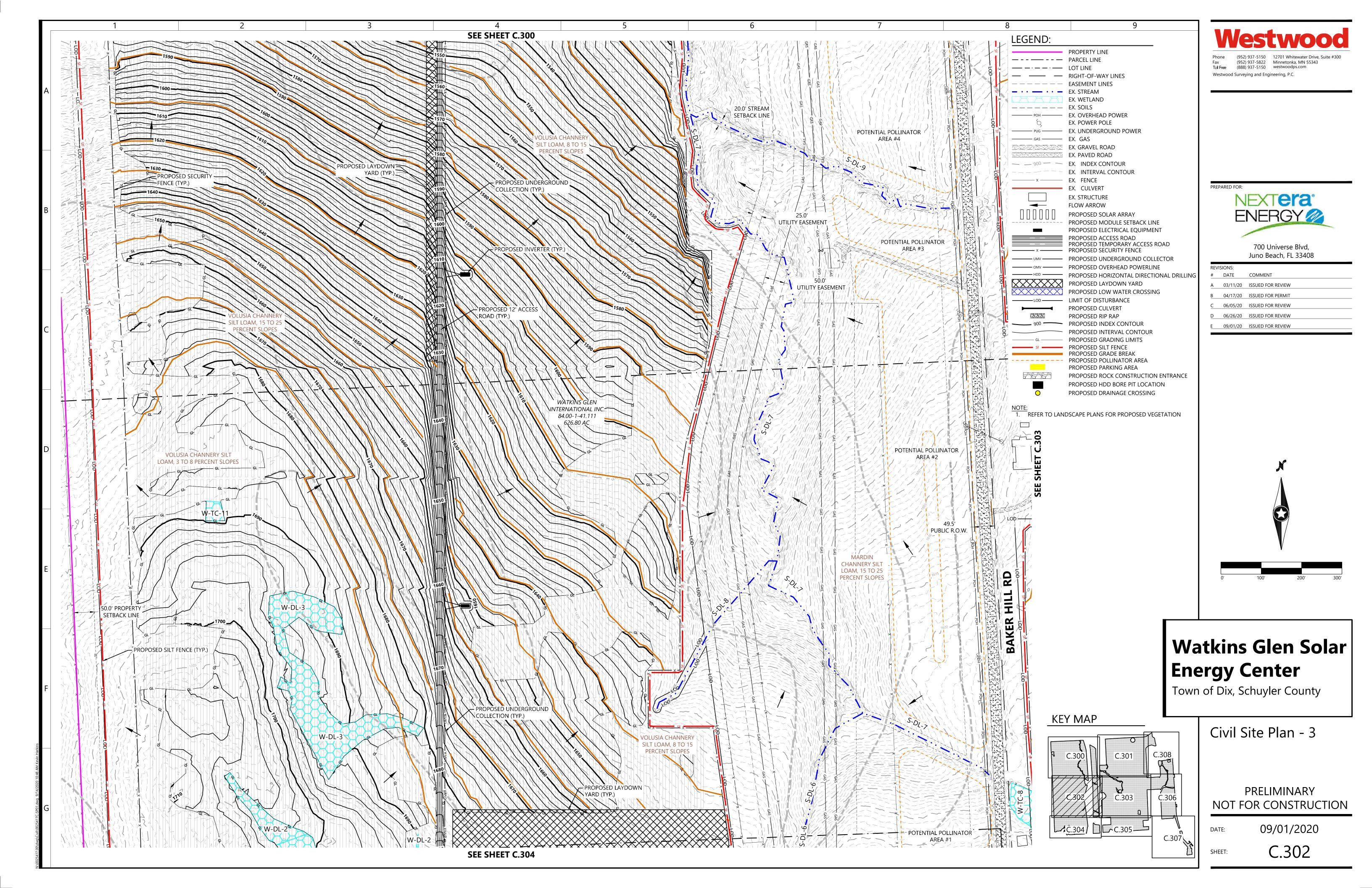
PRELIMINARY NOT FOR CONSTRUCTION

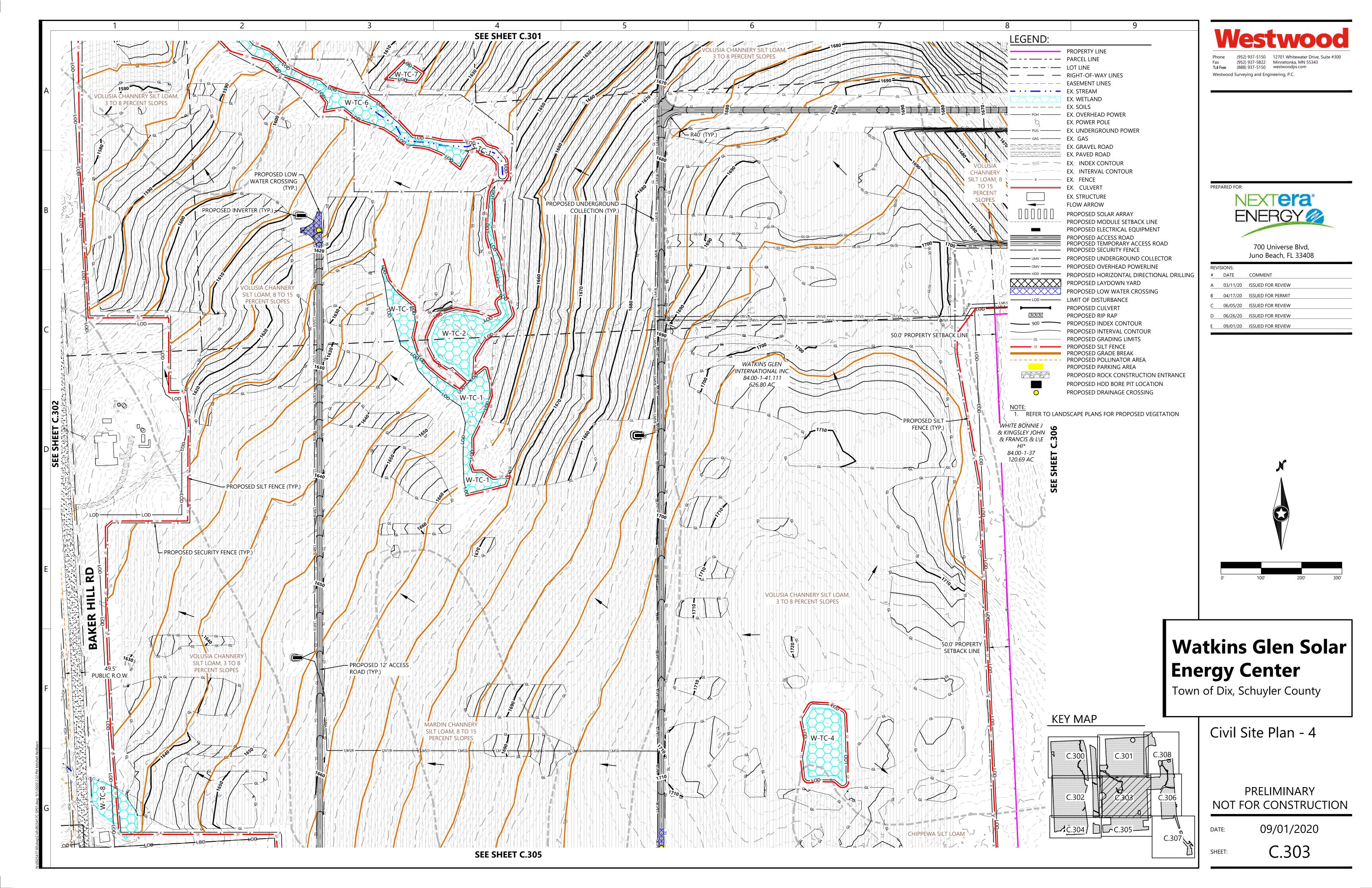
09/01/2020

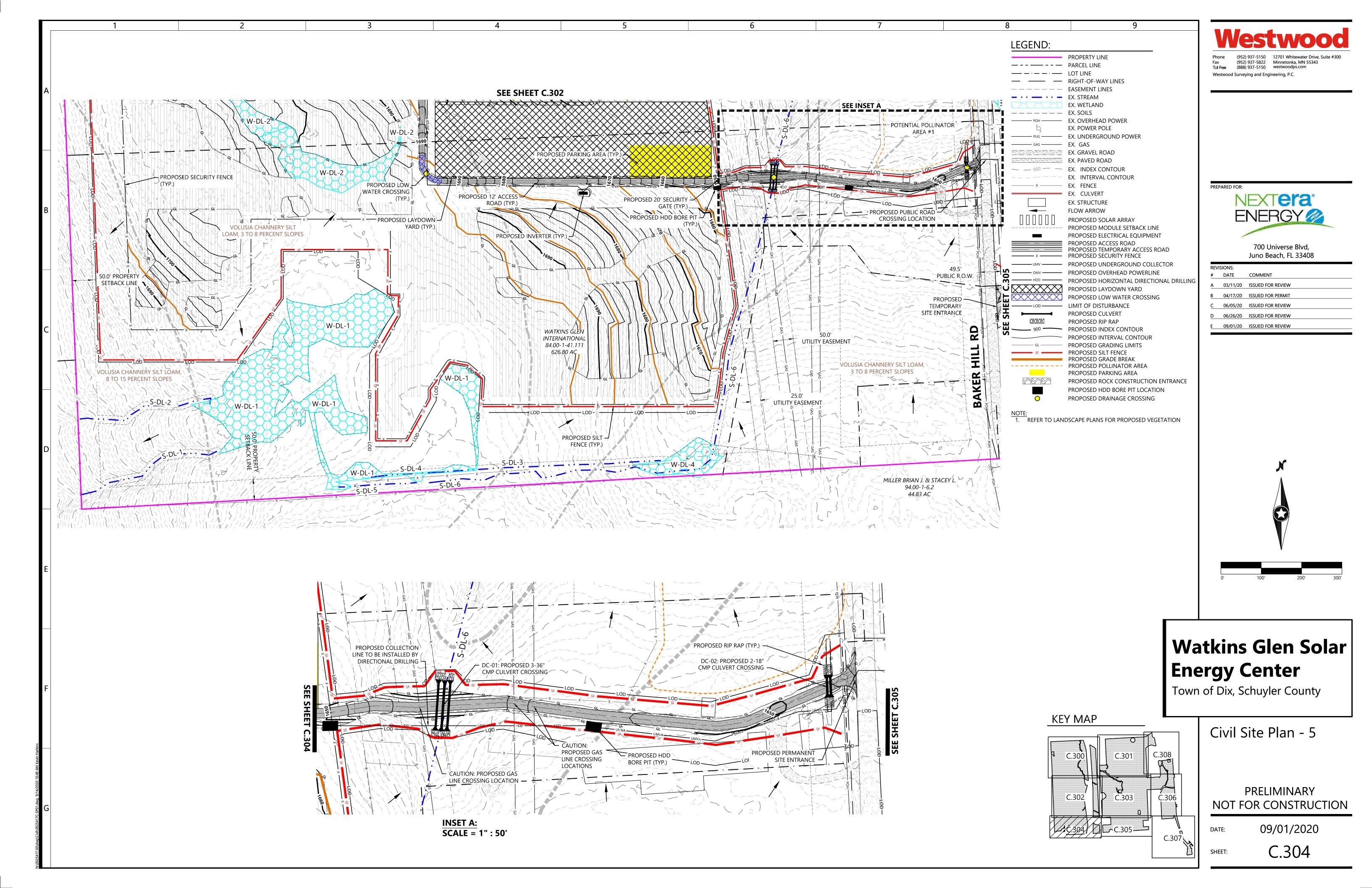
C.200 SHEET:

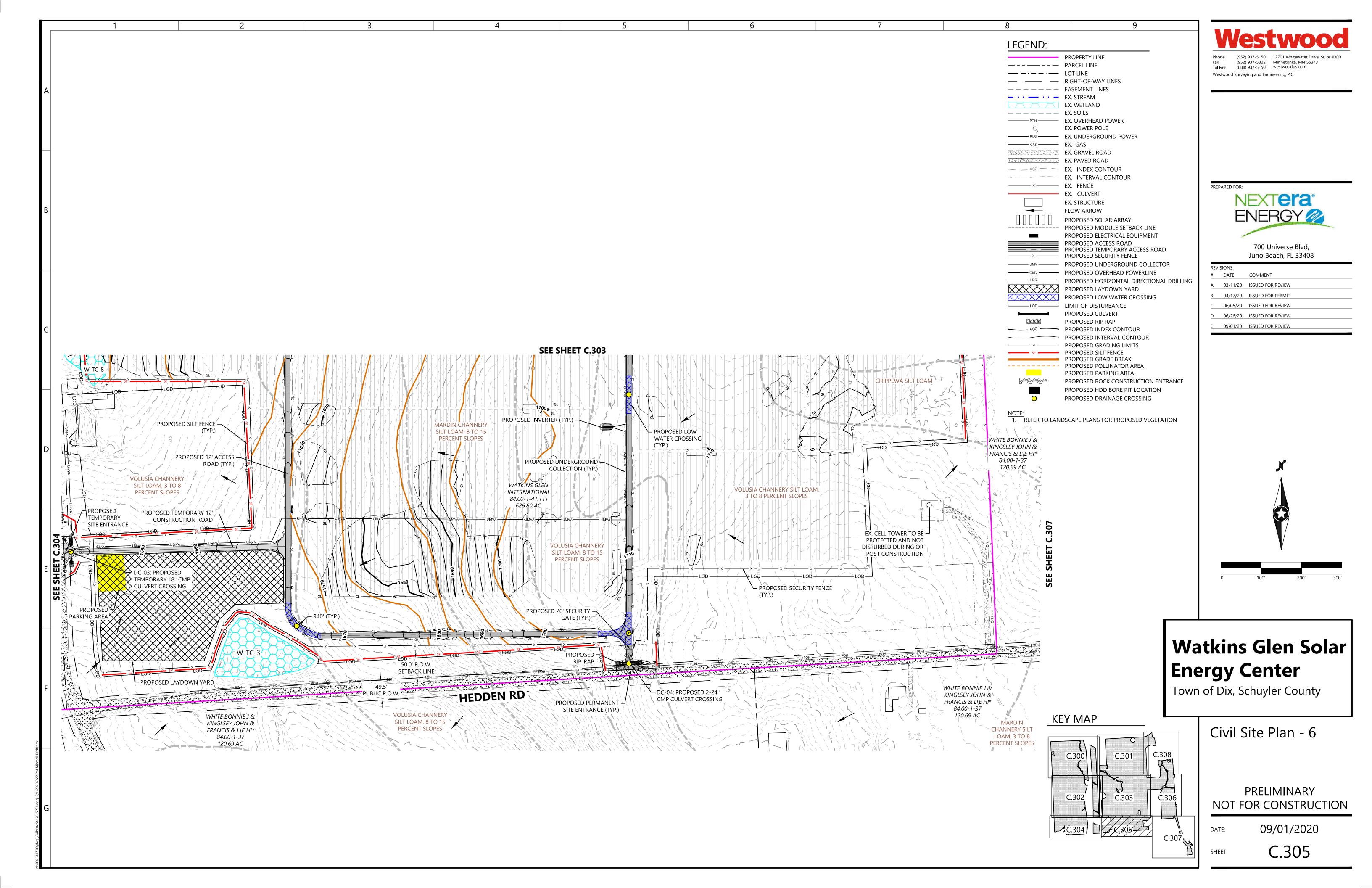


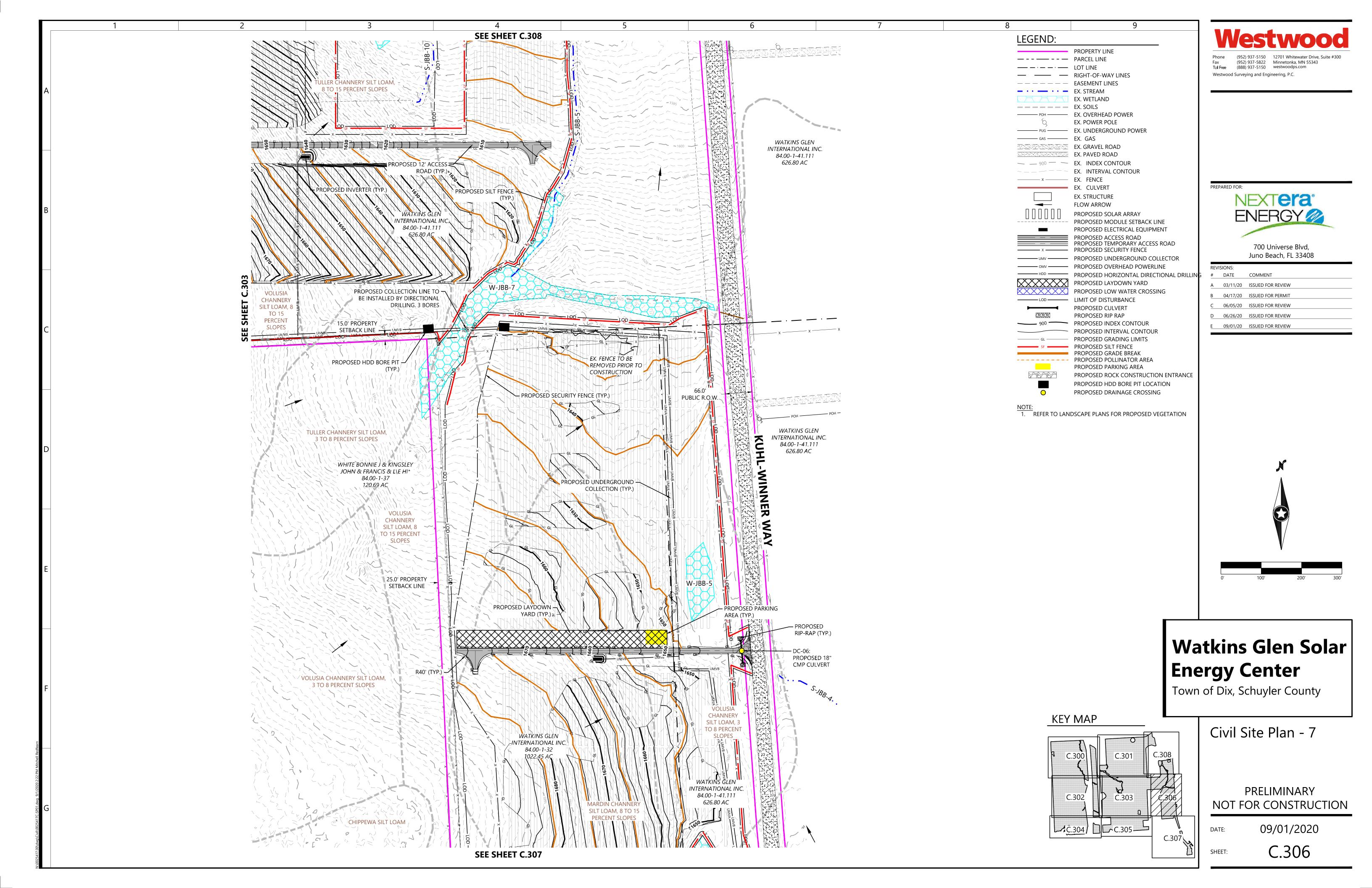


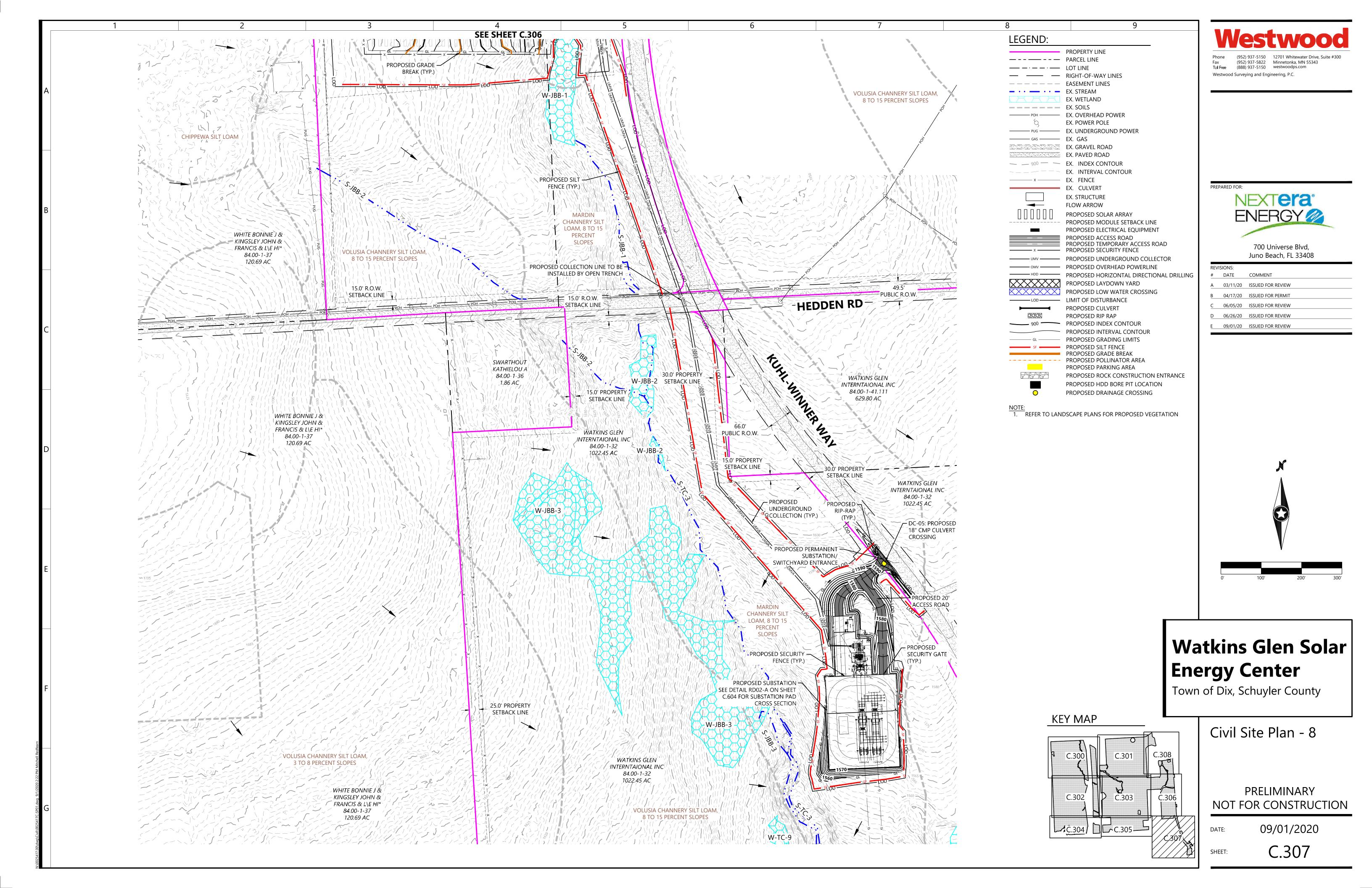


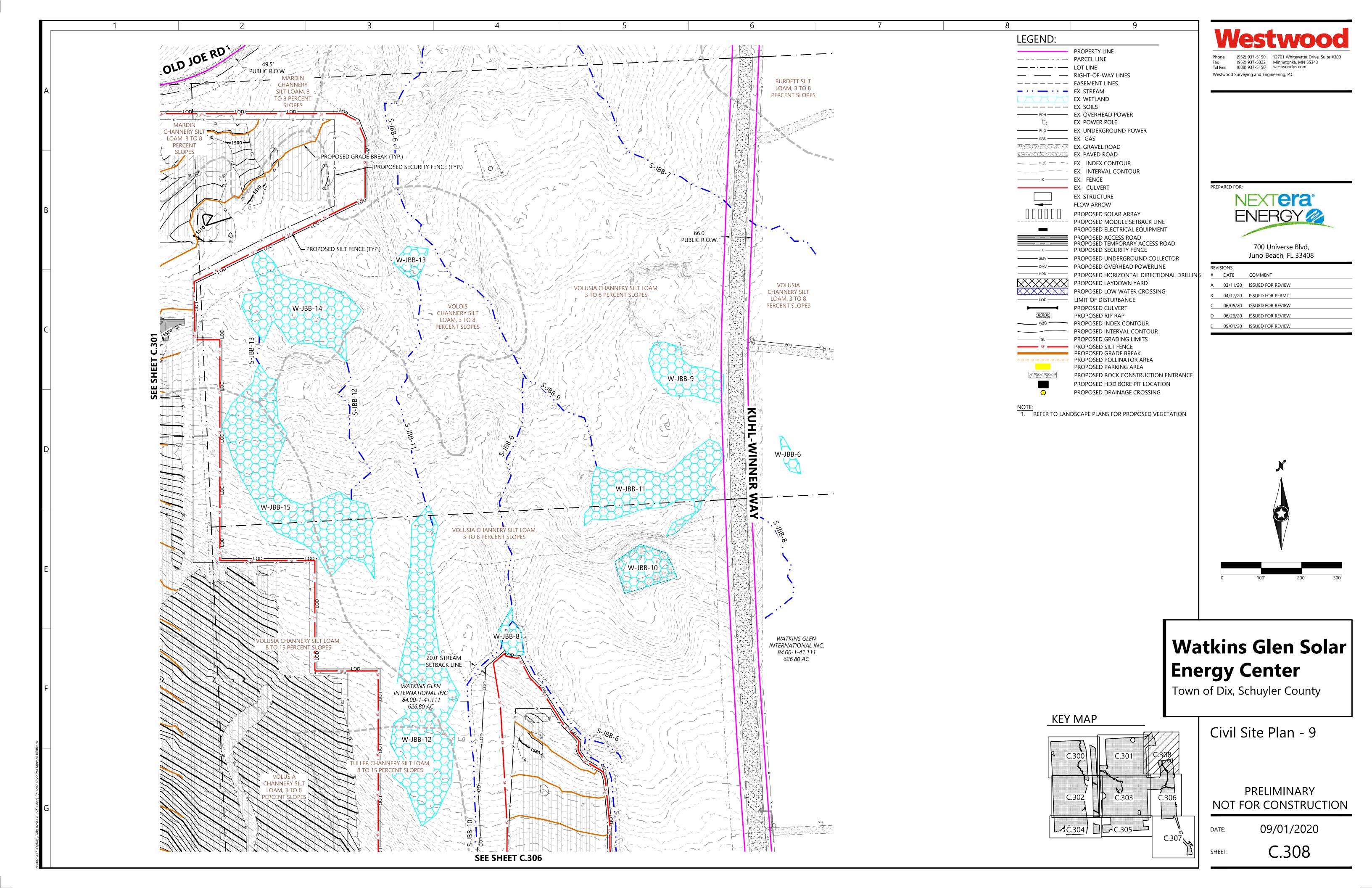


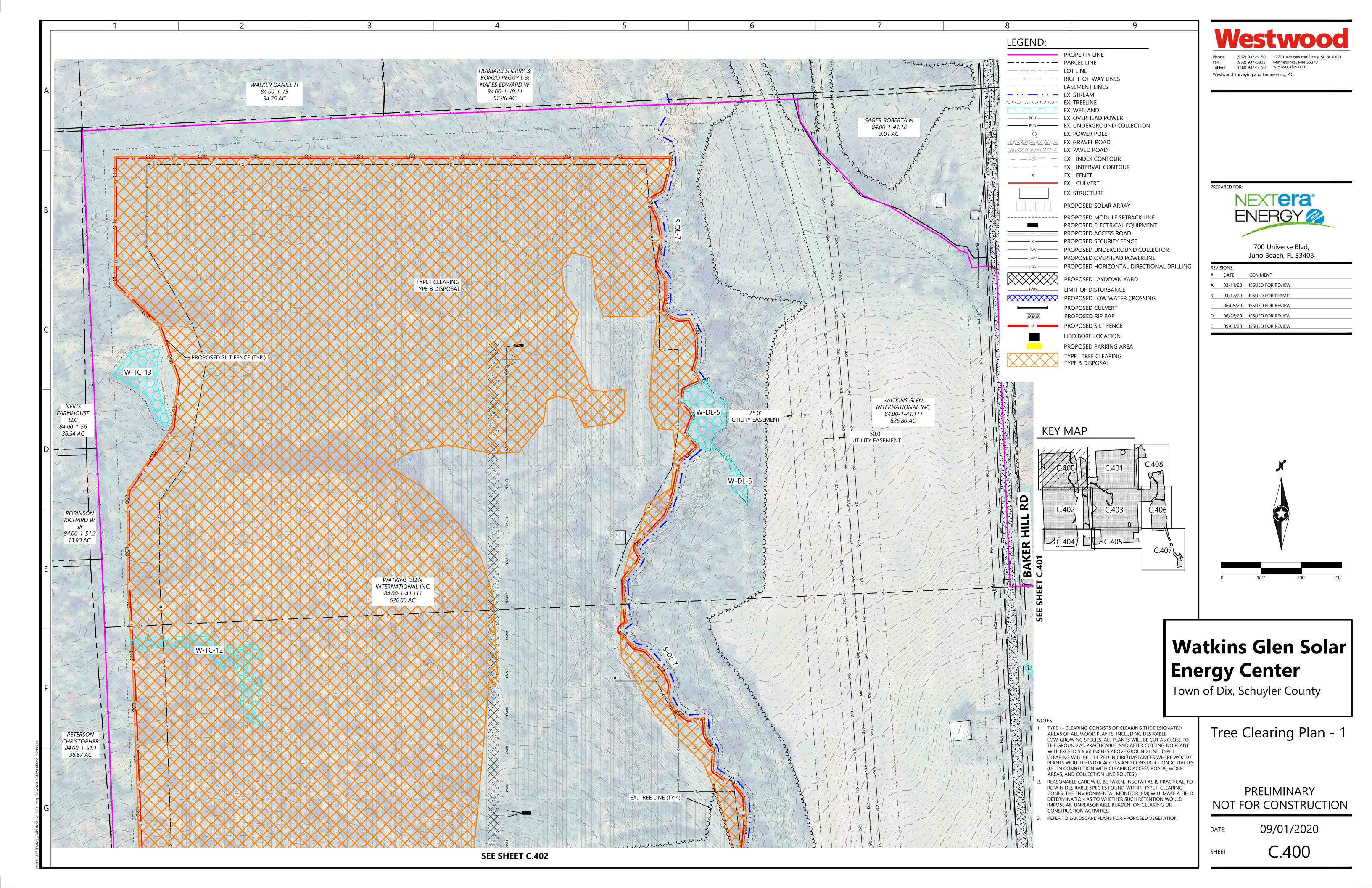


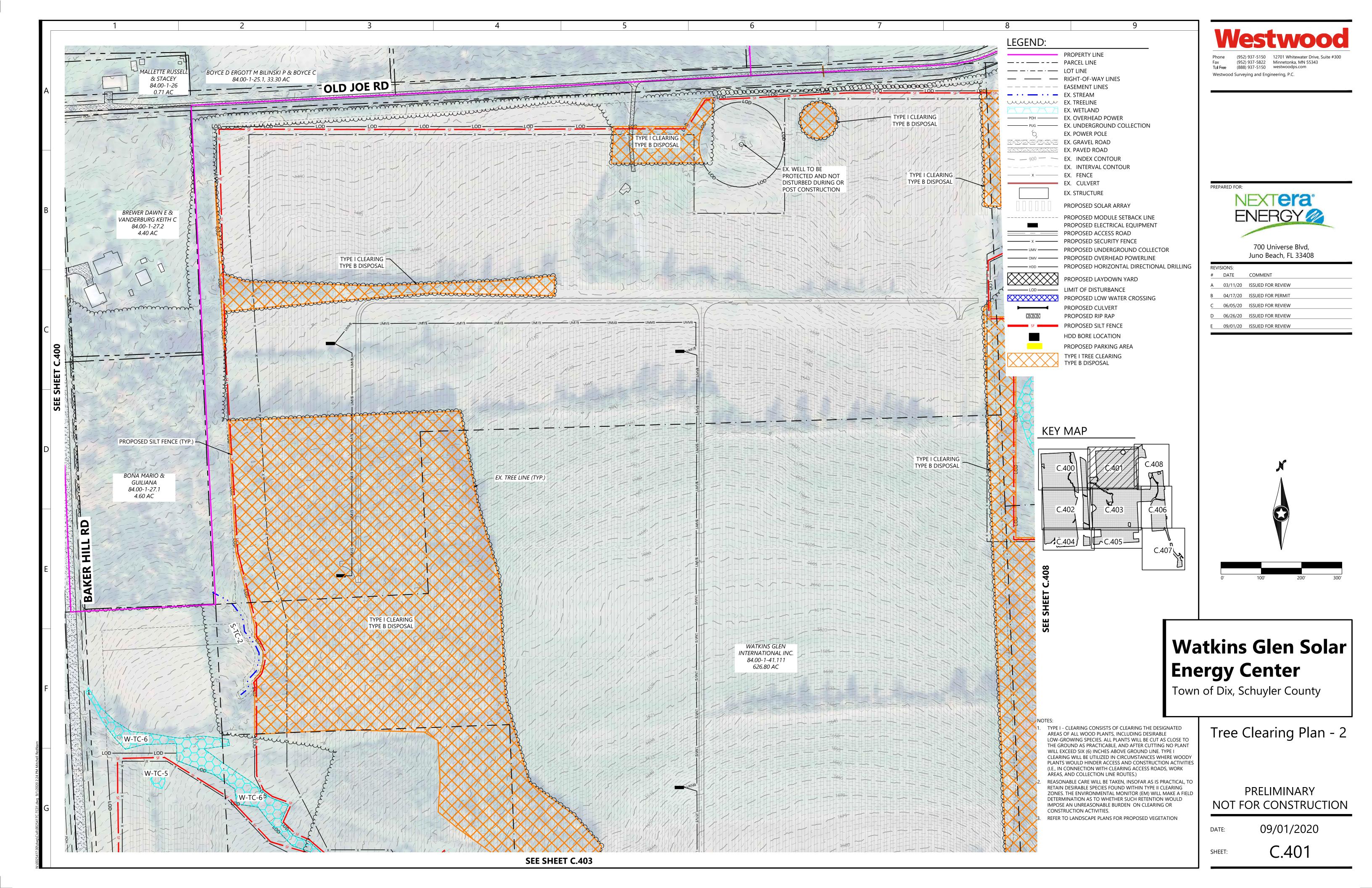


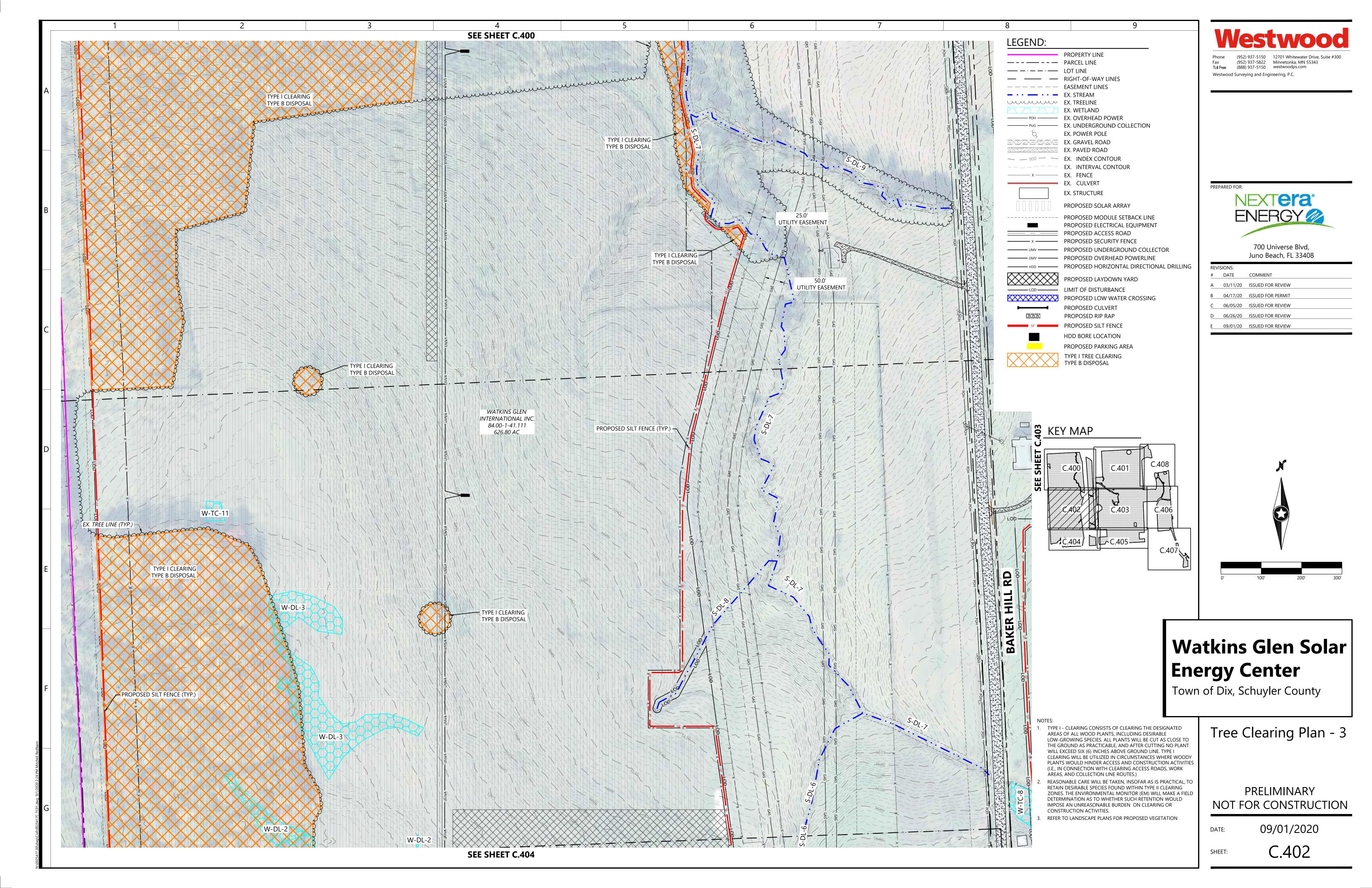


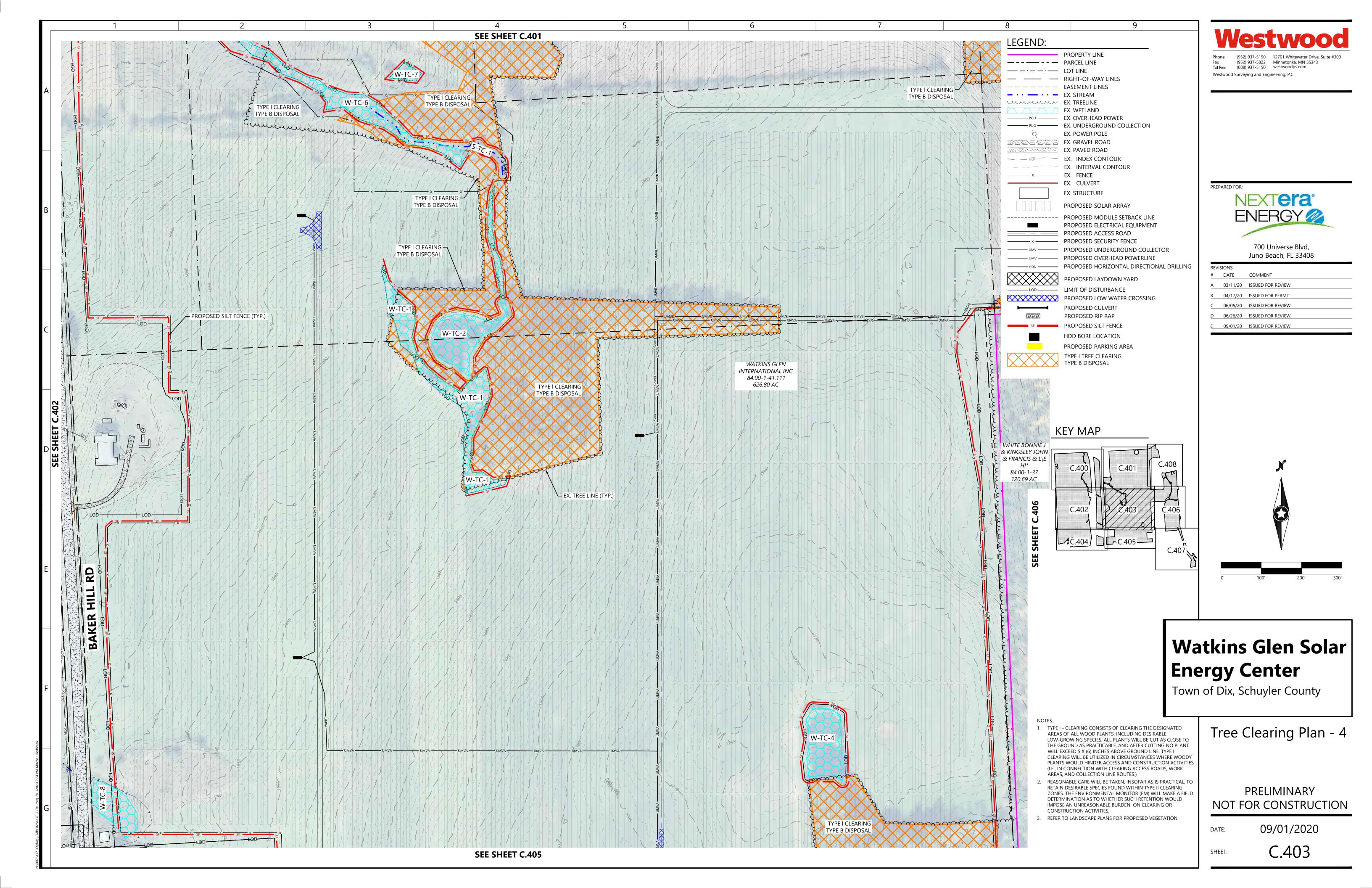


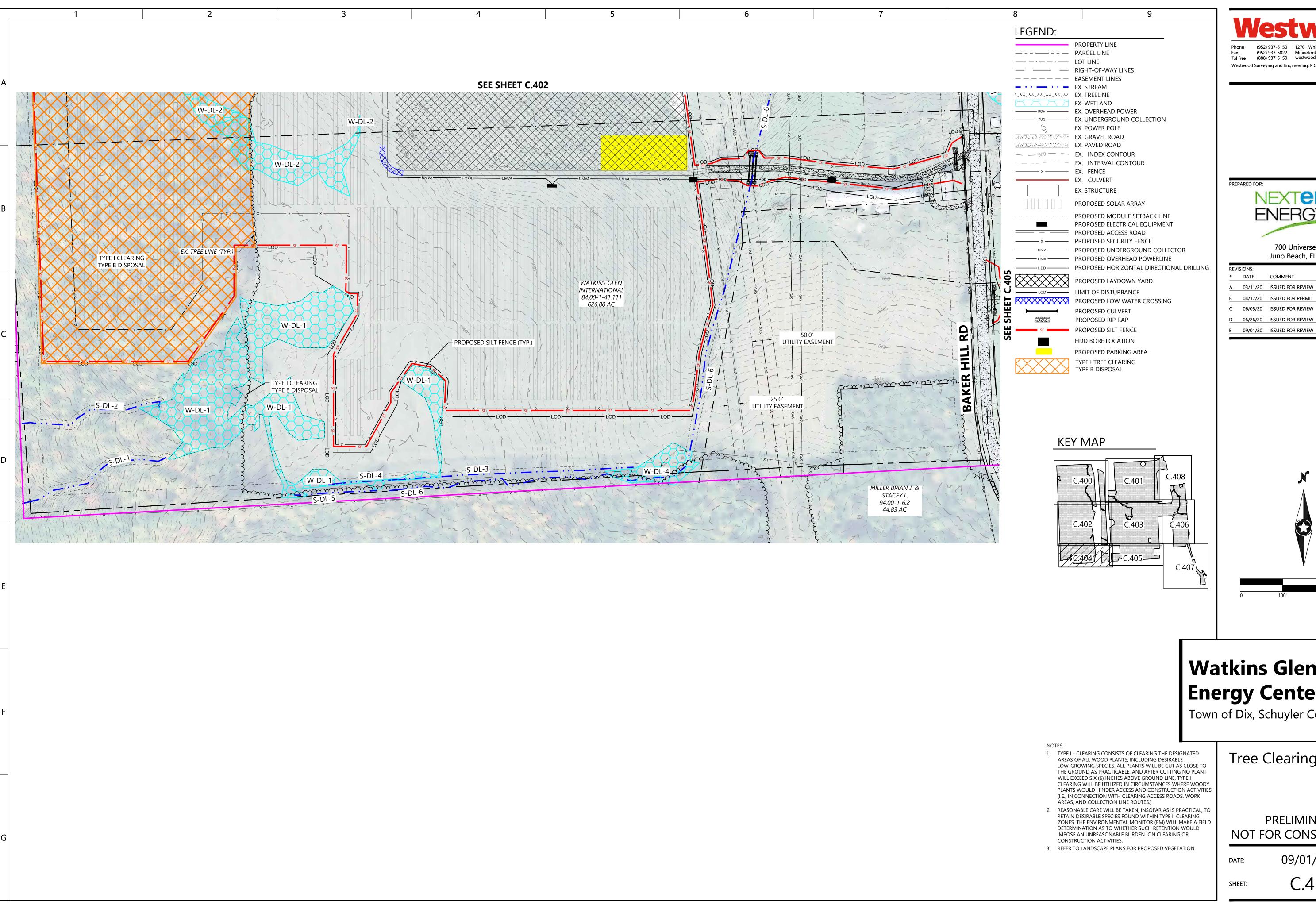












(952) 937-5150 12701 Whitewater Drive, Suite #300 (952) 937-5822 Minnetonka, MN 55343 westwoodps.com Westwood Surveying and Engineering, P.C.



700 Universe Blvd, Juno Beach, FL 33408

ISIONS:		
DATE	COMMENT	
03/11/20	ISSUED FOR REVIEW	
04/17/20	ISSUED FOR PERMIT	
06/05/20	ISSUED FOR REVIEW	
06/26/20	ISSUED FOR REVIEW	

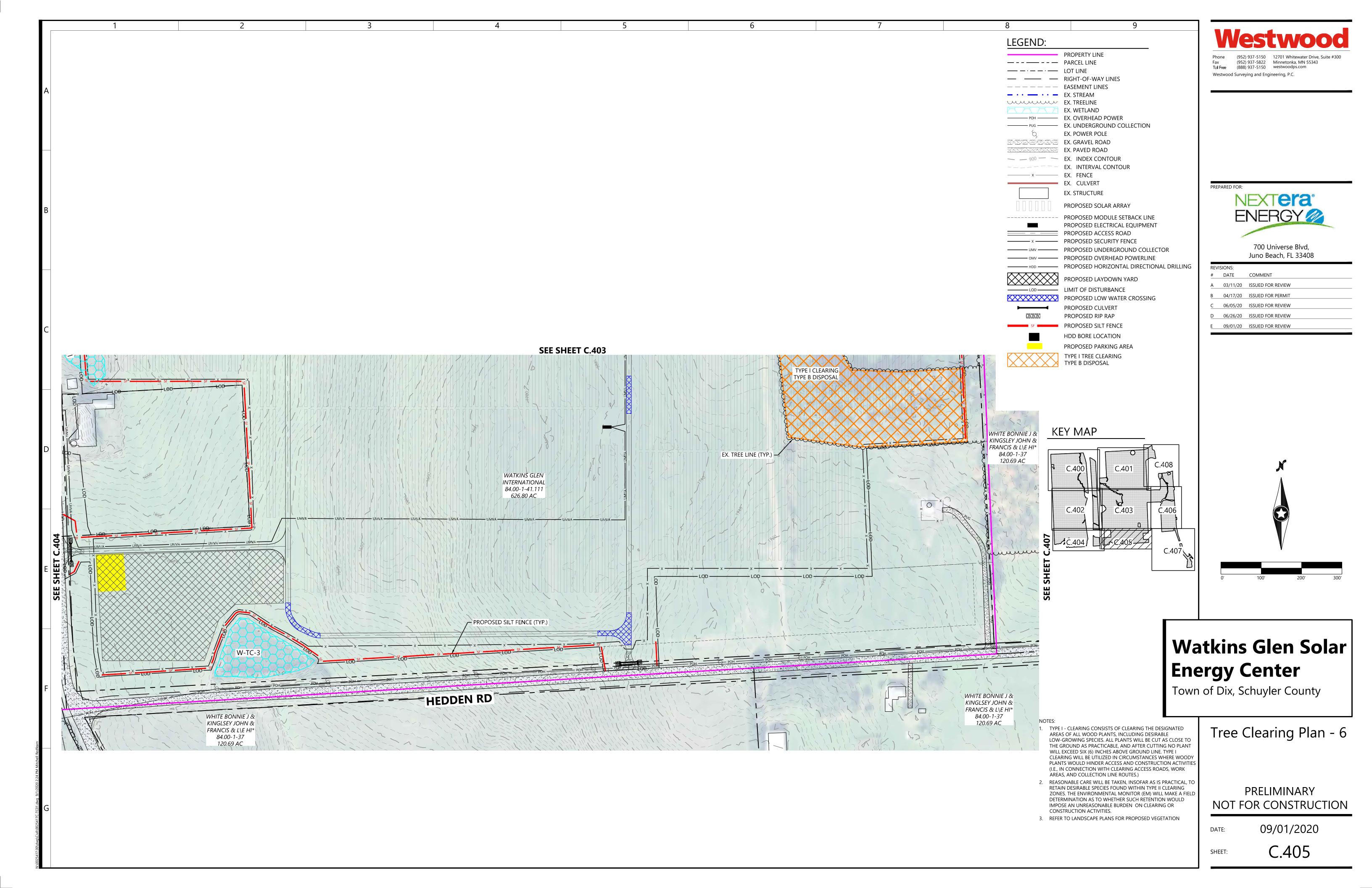


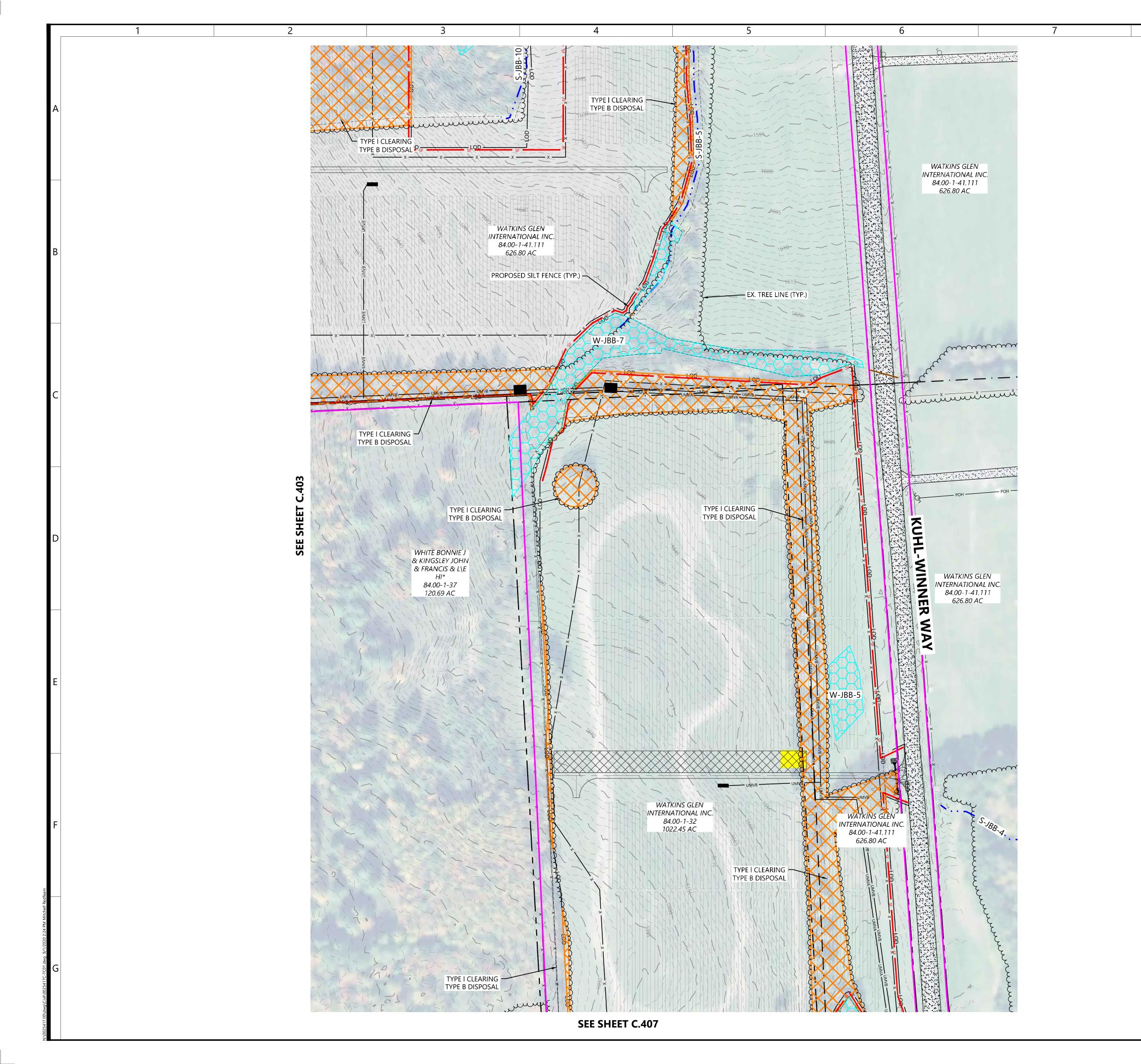
Town of Dix, Schuyler County

Tree Clearing Plan - 5

PRELIMINARY NOT FOR CONSTRUCTION

09/01/2020





LEGEND:

PROPERTY LINE — - - — PARCEL LINE

— — · — · — LOT LINE -- RIGHT-OF-WAY LINES ---- Easement lines **— · · — · · —** EX. STREAM

**EX. TREELINE** EX. WETLAND ——— POH ——— EX. OVERHEAD POWER

PUG — EX. UNDERGROUND COLLECTION EX. POWER POLE EX. GRAVEL ROAD EX. PAVED ROAD

— — 900 — — EX. INDEX CONTOUR ---- EX. INTERVAL CONTOUR ——— x ——— EX. FENCE EX. CULVERT

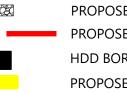
EX. STRUCTURE PROPOSED SOLAR ARRAY

----- PROPOSED MODULE SETBACK LINE

PROPOSED ELECTRICAL EQUIPMENT PROPOSED ACCESS ROAD PROPOSED SECURITY FENCE PROPOSED UNDERGROUND COLLECTOR

PROPOSED OVERHEAD POWERLINE PROPOSED HORIZONTAL DIRECTIONAL DRILLING PROPOSED LAYDOWN YARD

————— LIMIT OF DISTURBANCE PROPOSED LOW WATER CROSSING



PROPOSED RIP RAP PROPOSED SILT FENCE HDD BORE LOCATION PROPOSED PARKING AREA TYPE I TREE CLEARING TYPE B DISPOSAL

PROPOSED CULVERT



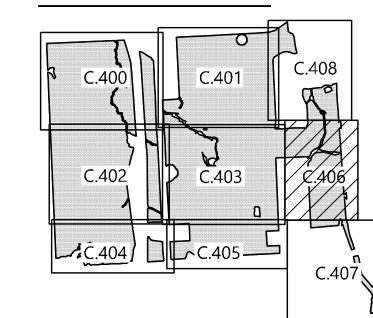
Phone (952) 937-5150 12701 Whitewater Drive, Suite #300 Fax (952) 937-5822 Minnetonka, MN 55343 westwoodps.com Westwood Surveying and Engineering, P.C.

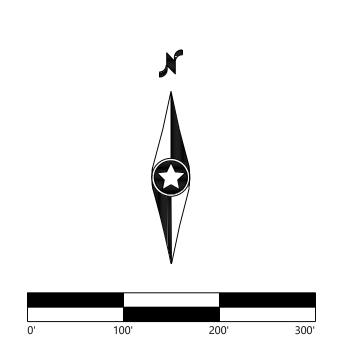
**NEXTera**° **ENERGY** 

> 700 Universe Blvd, Juno Beach, FL 33408

EVISIONS:				
:	DATE	COMMENT		
	03/11/20	ISSUED FOR REVIEW		
	04/17/20	ISSUED FOR PERMIT		
	06/05/20	ISSUED FOR REVIEW		
)	06/26/20	ISSUED FOR REVIEW		
	09/01/20	ISSUED FOR REVIEW		

KEY MAP





### **Watkins Glen Solar Energy Center**

Town of Dix, Schuyler County

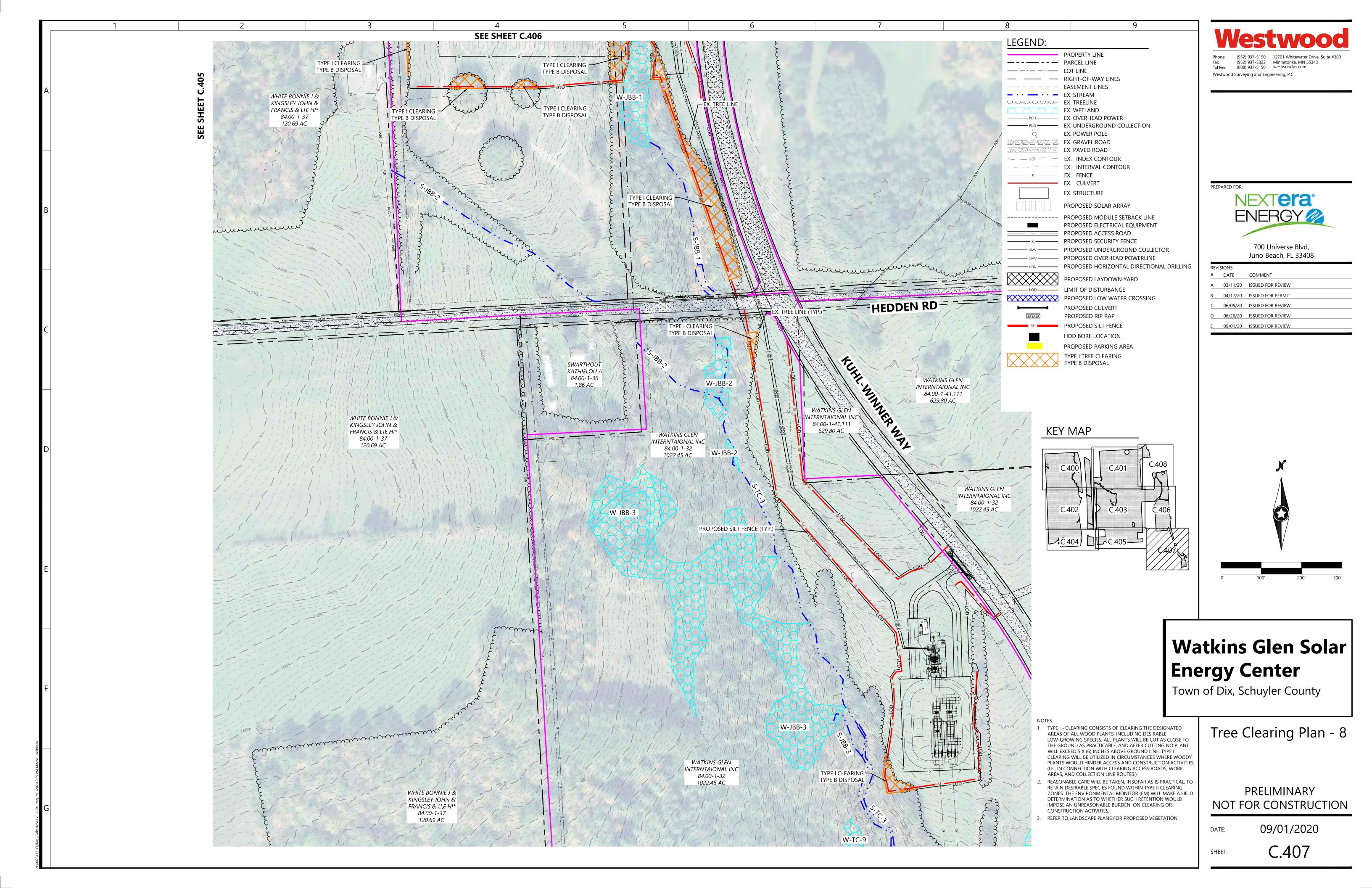
- 1. TYPE I CLEARING CONSISTS OF CLEARING THE DESIGNATED AREAS OF ALL WOOD PLANTS, INCLUDING DESIRABLE LOW-GROWING SPECIES. ALL PLANTS WILL BE CUT AS CLOSE TO THE GROUND AS PRACTICABLE, AND AFTER CUTTING NO PLANT WILL EXCEED SIX (6) INCHES ABOVE GROUND LINE. TYPE I CLEARING WILL BE UTILIZED IN CIRCUMSTANCES WHERE WOOD PLANTS WOULD HINDER ACCESS AND CONSTRUCTION ACTIVITIES (I.E., IN CONNECTION WITH CLEARING ACCESS ROADS, WORK AREAS, AND COLLECTION LINE ROUTES.)
- 2. REASONABLE CARE WILL BE TAKEN, INSOFAR AS IS PRACTICAL, TO RETAIN DESIRABLE SPECIES FOUND WITHIN TYPE II CLEARING ZONES. THE ENVIRONMENTAL MONITOR (EM) WILL MAKE A FIELD DETERMINATION AS TO WHETHER SUCH RETENTION WOULD IMPOSE AN UNREASONABLE BURDEN ON CLEARING OR CONSTRUCTION ACTIVITIES.
- 3. REFER TO LANDSCAPE PLANS FOR PROPOSED VEGETATION

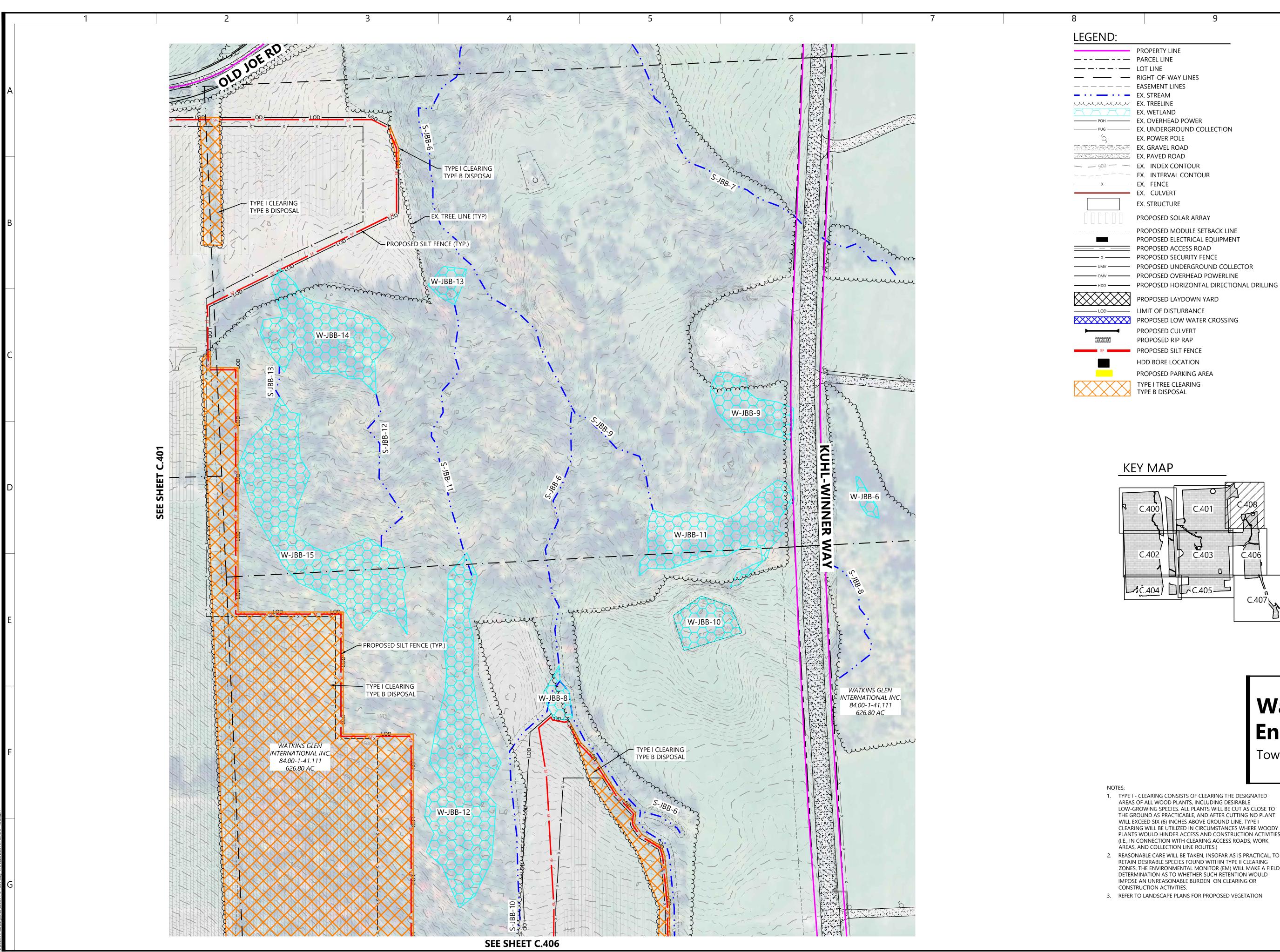
Tree Clearing Plan - 7

### PRELIMINARY NOT FOR CONSTRUCTION

09/01/2020 DATE:

C.406 SHEET:







Phone (952) 937-5150 12701 Whitewater Drive, Suite #300 Fax (952) 937-5822 Minnetonka, MN 55343 westwoodps.com Westwood Surveying and Engineering, P.C.

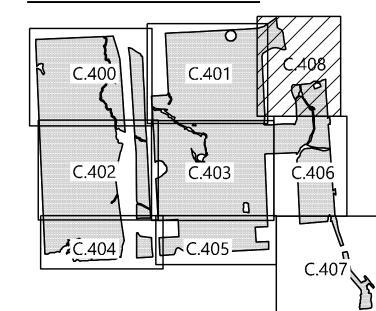


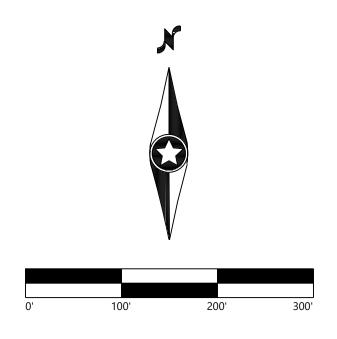
700 Universe Blvd, Juno Beach, FL 33408

VIS	SIONS:		
	DATE	COMMENT	
	03/11/20	ISSUED FOR REVIEW	
	04/17/20	ISSUED FOR PERMIT	
	06/05/20	ISSUED FOR REVIEW	
	06/26/20	ISSUED FOR REVIEW	

E 09/01/20 ISSUED FOR REVIEW

KEY MAP





## **Watkins Glen Solar Energy Center**

Town of Dix, Schuyler County

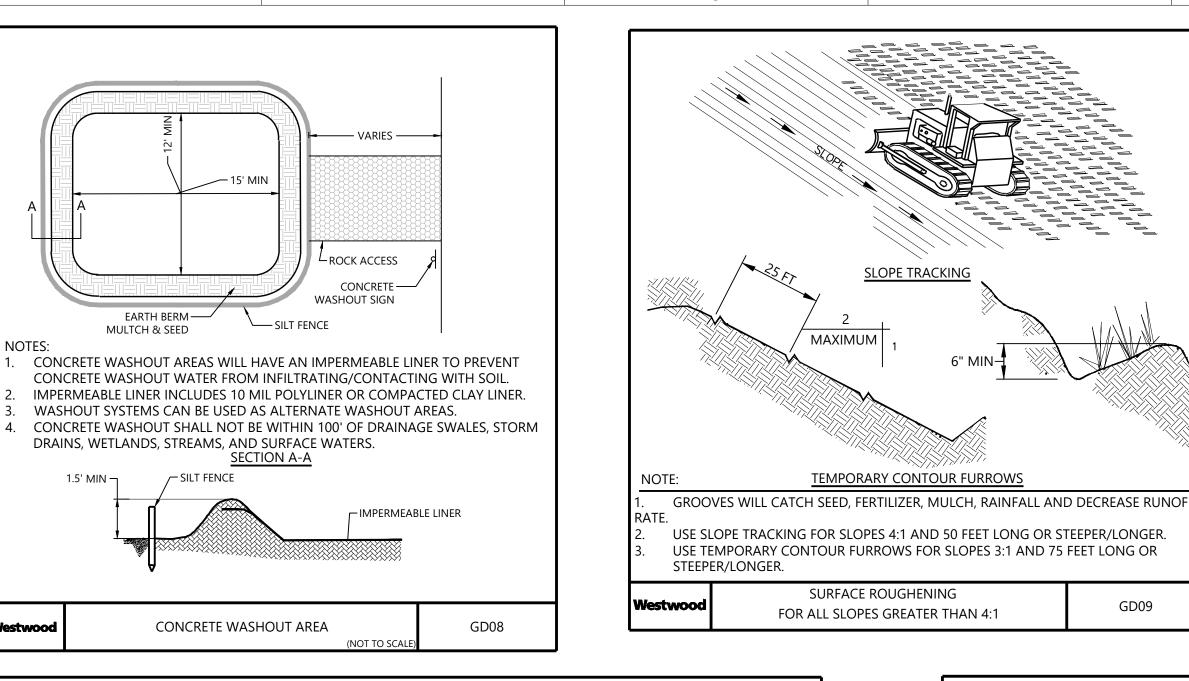
- 1. TYPE I CLEARING CONSISTS OF CLEARING THE DESIGNATED AREAS OF ALL WOOD PLANTS, INCLUDING DESIRABLE LOW-GROWING SPECIES. ALL PLANTS WILL BE CUT AS CLOSE TO THE GROUND AS PRACTICABLE, AND AFTER CUTTING NO PLANT WILL EXCEED SIX (6) INCHES ABOVE GROUND LINE. TYPE I CLEARING WILL BE UTILIZED IN CIRCUMSTANCES WHERE WOOD PLANTS WOULD HINDER ACCESS AND CONSTRUCTION ACTIVITIES (I.E., IN CONNECTION WITH CLEARING ACCESS ROADS, WORK AREAS, AND COLLECTION LINE ROUTES.)
- 2. REASONABLE CARE WILL BE TAKEN, INSOFAR AS IS PRACTICAL, TO RETAIN DESIRABLE SPECIES FOUND WITHIN TYPE II CLEARING ZONES. THE ENVIRONMENTAL MONITOR (EM) WILL MAKE A FIELD DETERMINATION AS TO WHETHER SUCH RETENTION WOULD IMPOSE AN UNREASONABLE BURDEN ON CLEARING OR CONSTRUCTION ACTIVITIES.
- 3. REFER TO LANDSCAPE PLANS FOR PROPOSED VEGETATION

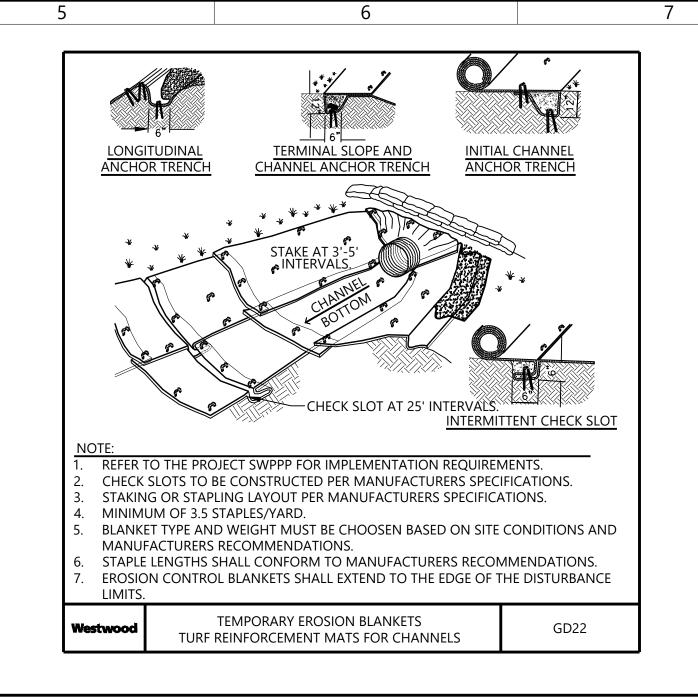
Tree Clearing Plan - 9

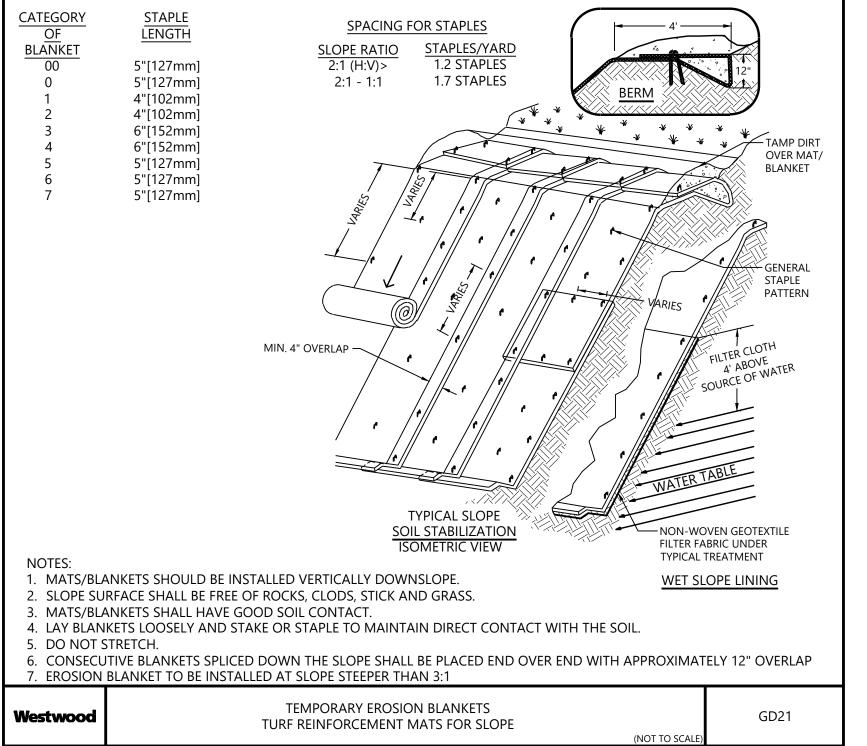
### PRELIMINARY NOT FOR CONSTRUCTION

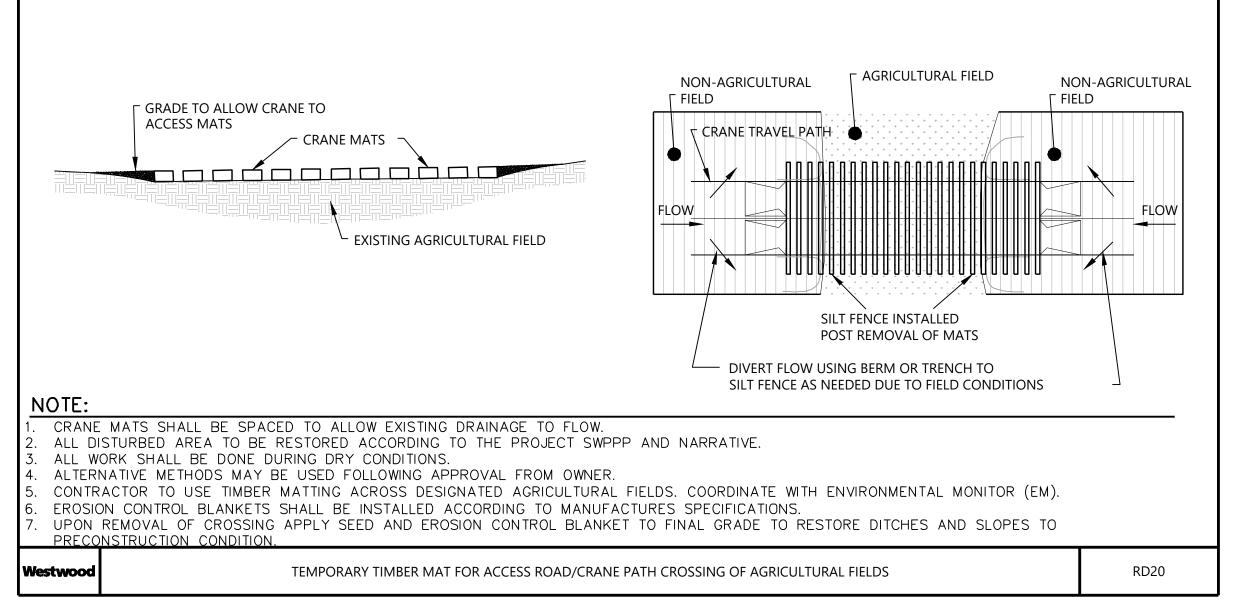
09/01/2020 DATE:

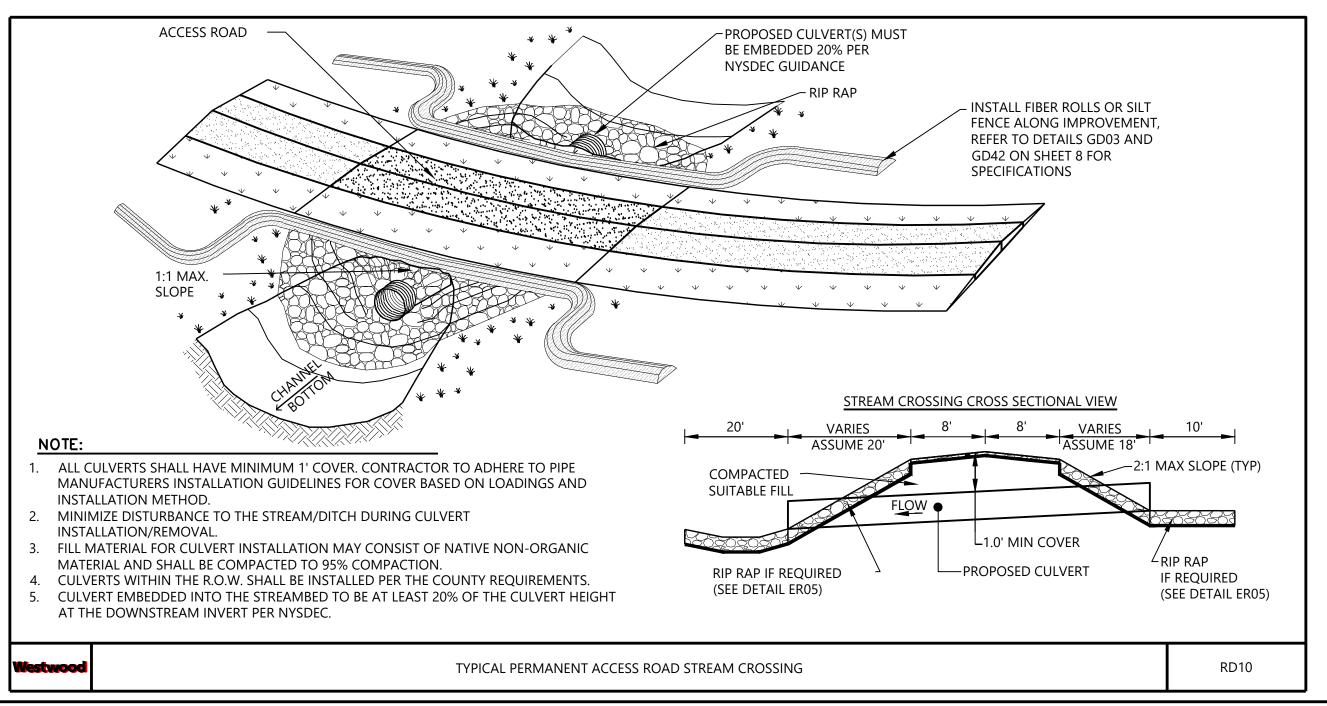
C.408 SHEET:











(952) 937-5822 Minnetonka, MN 55343 Toll Free (888) 937-5150 westwoodps.com Westwood Surveying and Engineering, P.C.



700 Universe Blvd, Juno Beach, FL 33408

**REVISIONS:** # DATE COMMENT A 03/11/20 ISSUED FOR REVIEW B 04/17/20 ISSUED FOR PERMIT C 06/05/20 ISSUED FOR REVIEW D 06/26/20 ISSUED FOR REVIEW E 09/01/20 ISSUED FOR REVIEW

## **Watkins Glen Solar Energy Center**

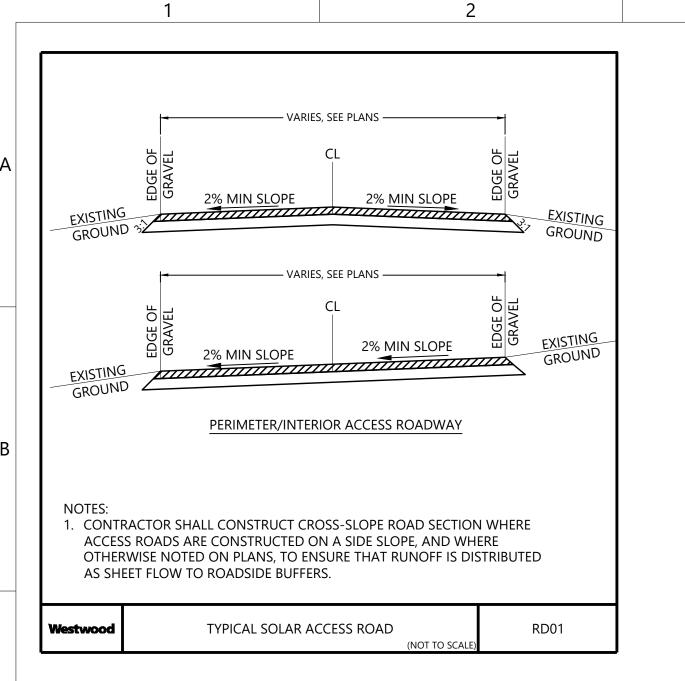
Town of Dix, Schuyler County

Construction Details -

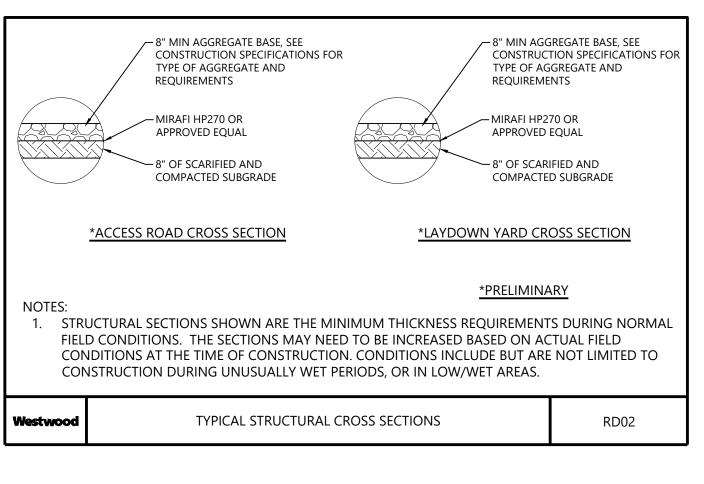
PRELIMINARY NOT FOR CONSTRUCTION

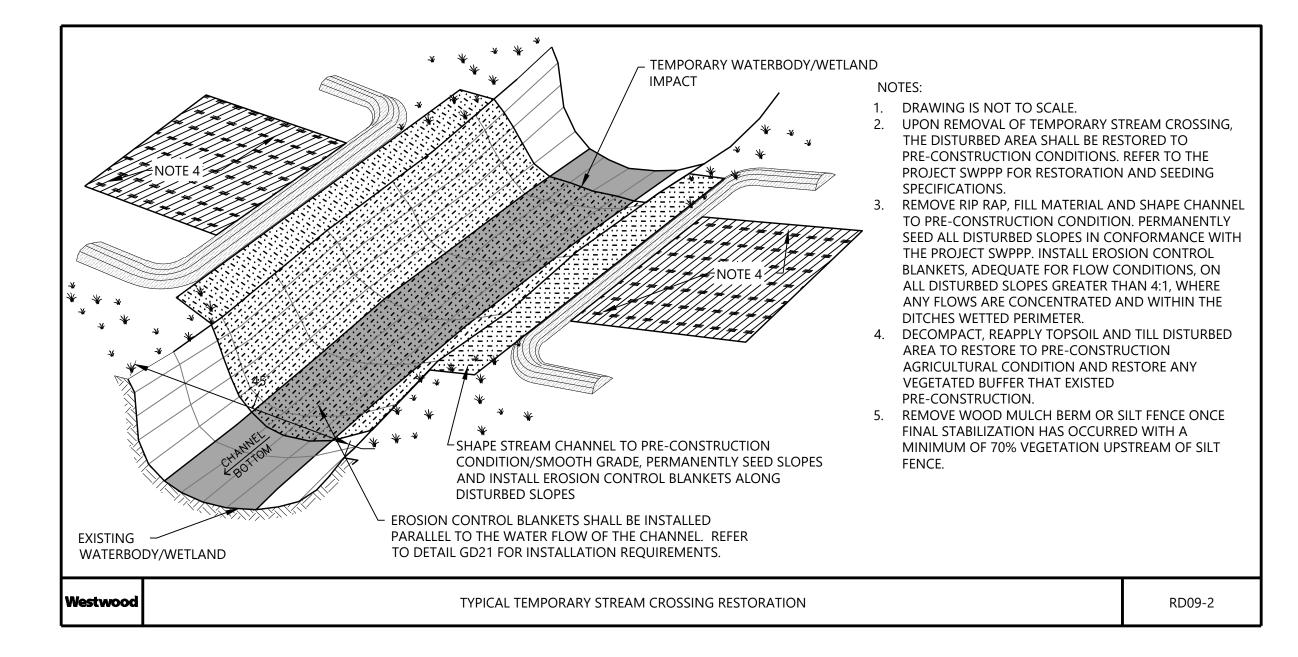
09/01/2020 DATE:

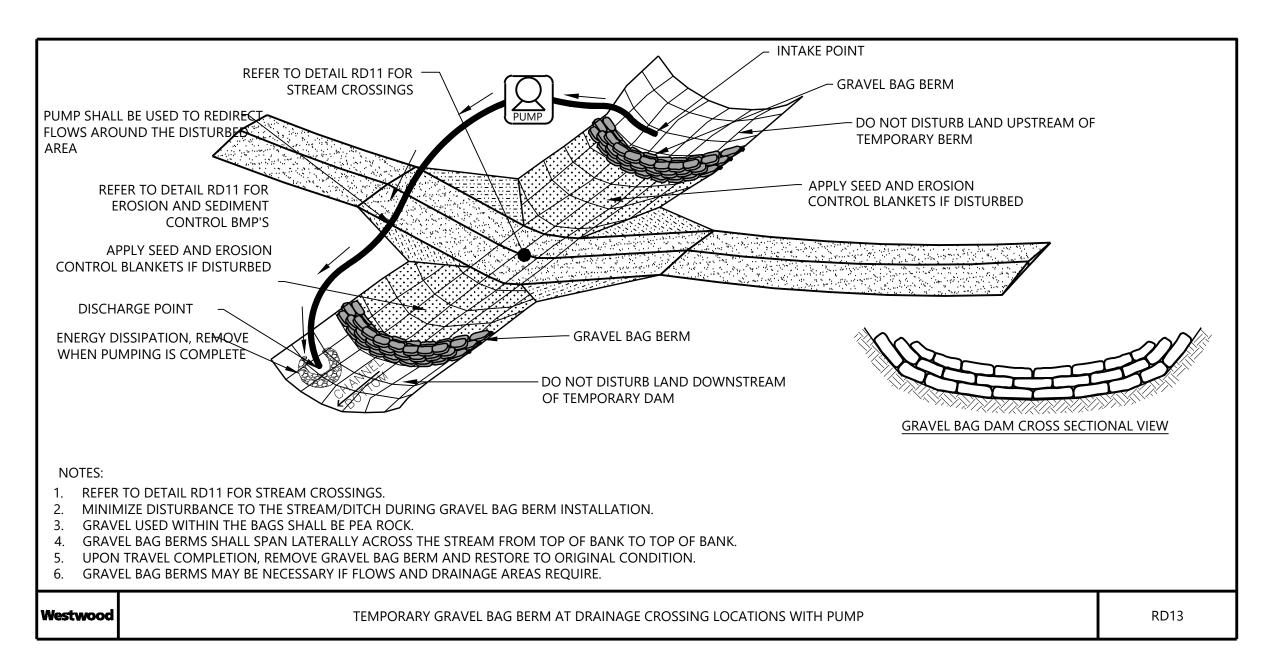
SHEET:

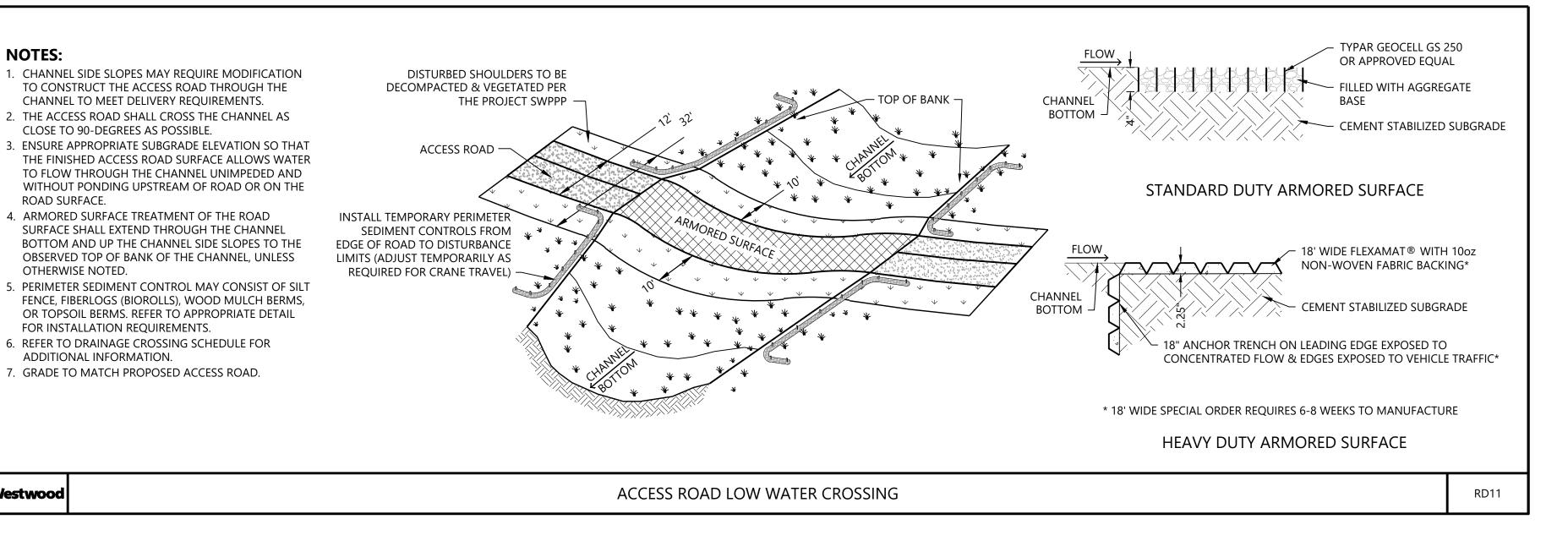


Westwood









# (952) 937-5822 Minnetonka, MN 55343

Toll Free (888) 937-5150 westwoodps.com Westwood Surveying and Engineering, P.C.



700 Universe Blvd, Juno Beach, FL 33408

**REVISIONS:** # DATE COMMENT A 03/11/20 ISSUED FOR REVIEW B 04/17/20 ISSUED FOR PERMIT C 06/05/20 ISSUED FOR REVIEW D 06/26/20 ISSUED FOR REVIEW

E 09/01/20 ISSUED FOR REVIEW

### **Watkins Glen Solar Energy Center**

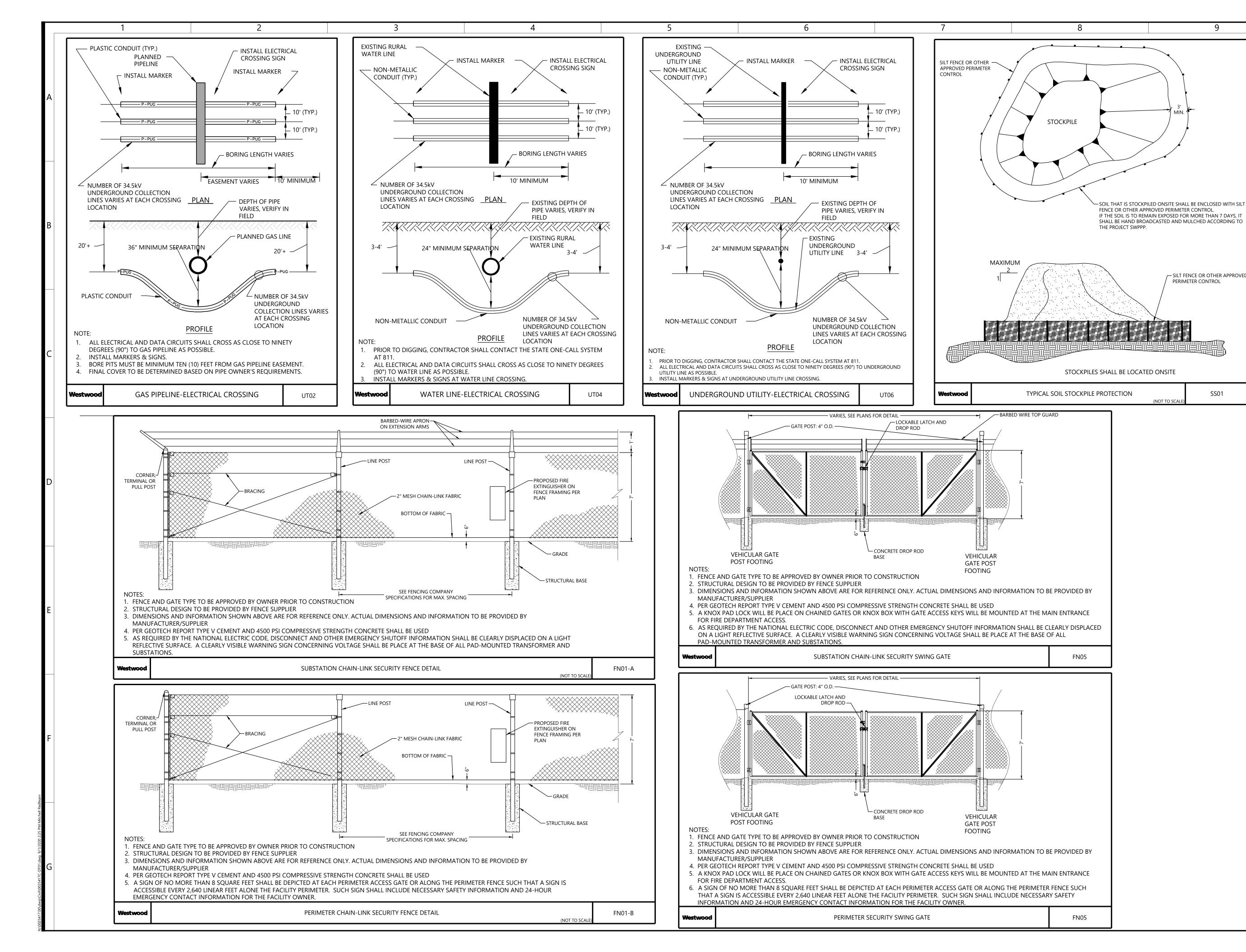
Town of Dix, Schuyler County

Construction Details -

**PRELIMINARY** NOT FOR CONSTRUCTION

09/01/2020 DATE:

SHEET:





(952) 937-5822 Minnetonka, MN 55343 (888) 937-5150 westwoodps.com Westwood Surveying and Engineering, P.C.

**NEXTERA**°

#### 700 Universe Blvd, Juno Beach, FL 33408

REVISIONS: # DATE COMMENT A 03/11/20 ISSUED FOR REVIEW 04/17/20 ISSUED FOR PERMIT 06/05/20 ISSUED FOR REVIEW 06/26/20 ISSUED FOR REVIEW

09/01/20 ISSUED FOR REVIEW

SS01

### **Watkins Glen Solar Energy Center**

Town of Dix, Schuyler County

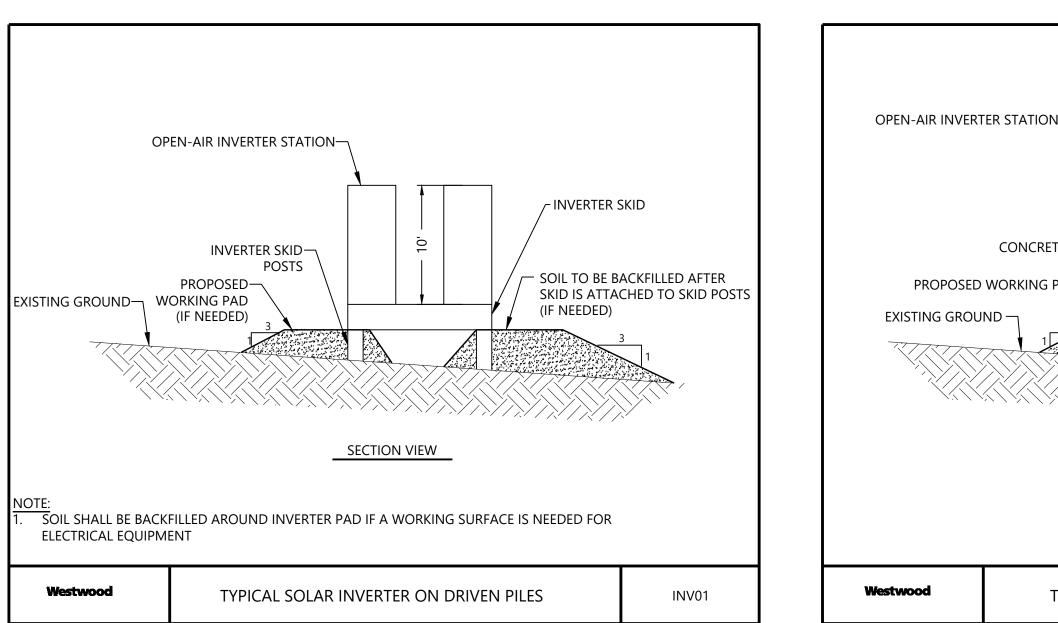
Construction Details -

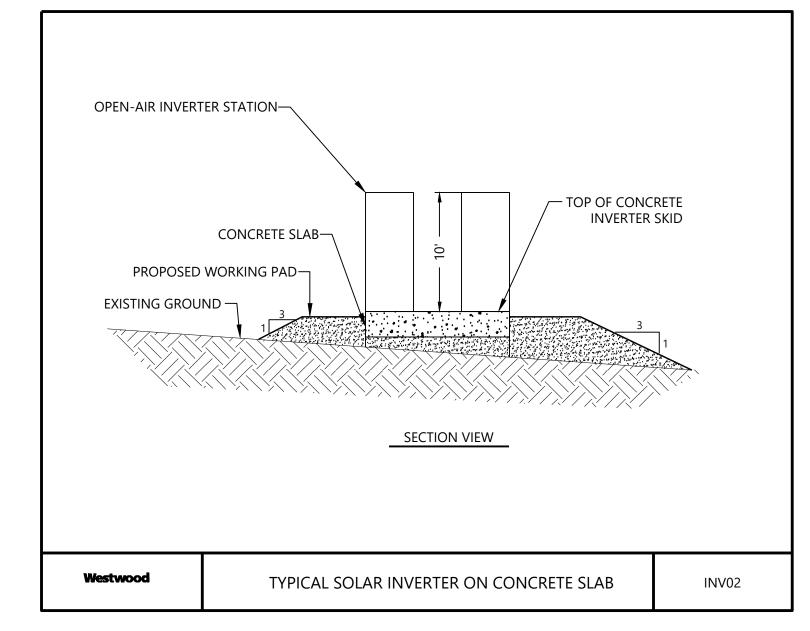
**PRELIMINARY** NOT FOR CONSTRUCTION

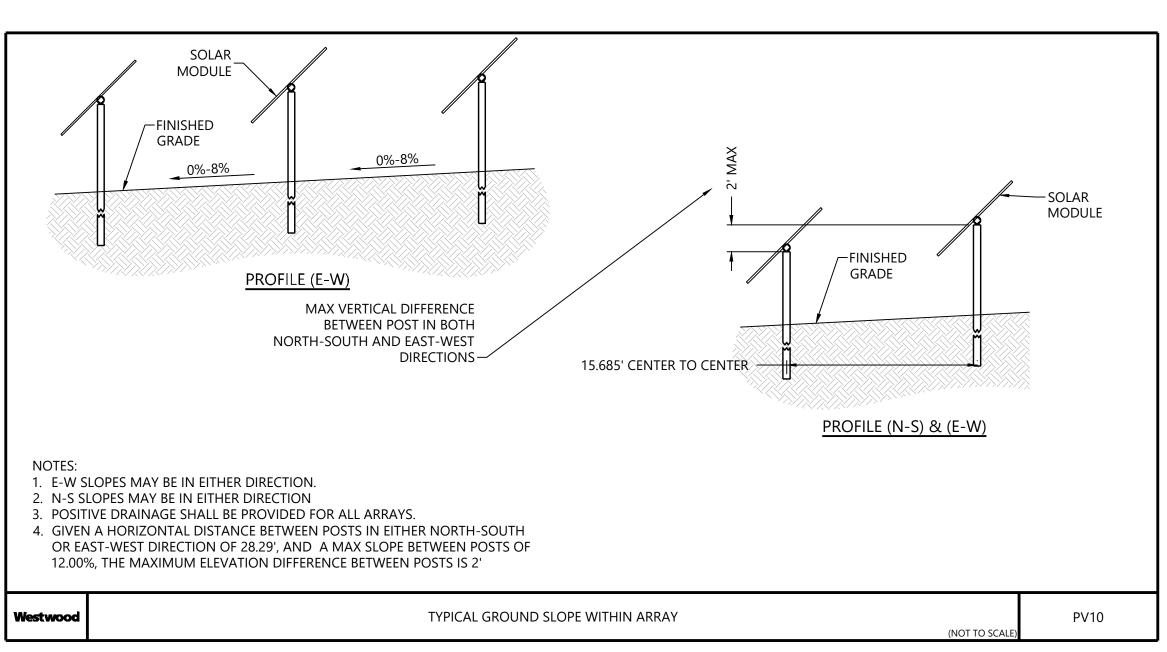
09/01/2020 DATE:

C.602

SHEET







Fax (952) 937-5822 Minnetonka, MN 55343 Toll Free (888) 937-5150 westwoodps.com Westwood Surveying and Engineering, P.C.



700 Universe Blvd, Juno Beach, FL 33408

**REVISIONS:** # DATE COMMENT A 03/11/20 ISSUED FOR REVIEW B 04/17/20 ISSUED FOR PERMIT C 06/05/20 ISSUED FOR REVIEW D 06/26/20 ISSUED FOR REVIEW

E 09/01/20 ISSUED FOR REVIEW

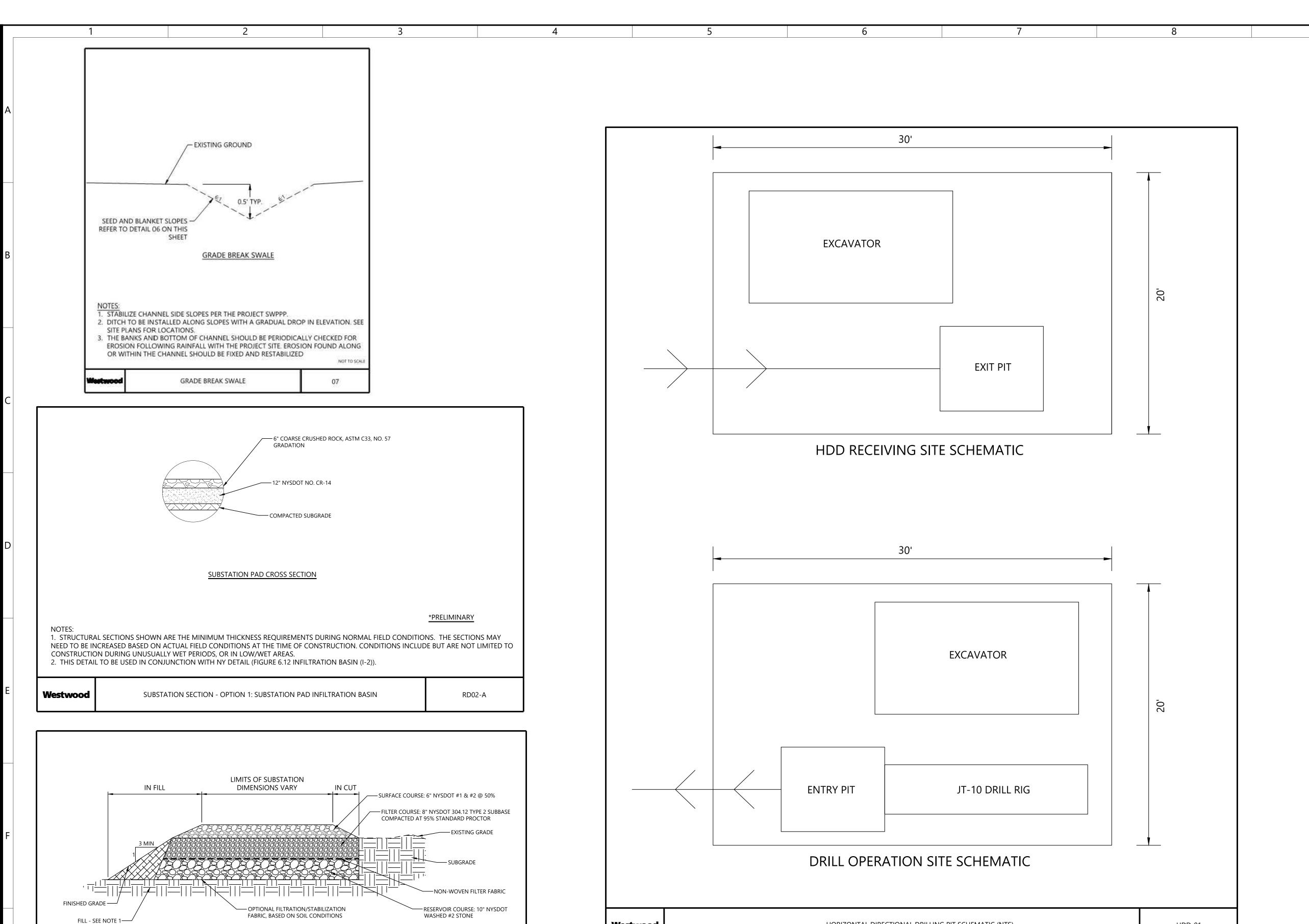
# **Watkins Glen Solar** Energy Center Town of Dix, Schuyler County

Construction Details -

PRELIMINARY NOT FOR CONSTRUCTION

09/01/2020

C.603 SHEET:



Westwood

HORIZONTAL DIRECTIONAL DRILLING PIT SCHEMATIC (NTS)

HDD-01

### (952) 937-5822 Minnetonka, MN 55343 Toll Free (888) 937-5150 westwoodps.com Westwood Surveying and Engineering, P.C.



700 Universe Blvd, Juno Beach, FL 33408

**REVISIONS:** # DATE COMMENT A 03/11/20 ISSUED FOR REVIEW B 04/17/20 ISSUED FOR PERMIT C 06/05/20 ISSUED FOR REVIEW D 06/26/20 ISSUED FOR REVIEW

E 09/01/20 ISSUED FOR REVIEW

## **Watkins Glen Solar Energy Center**

Town of Dix, Schuyler County

Construction Details -

PRELIMINARY NOT FOR CONSTRUCTION

09/01/2020 DATE:

C.604 SHEET:

SUBSTATION SECTION - OPTION 2: SUBSTATION PAD INFILTRATION BASIN

COMPACTED TO HAVE AN INFILTRATION RATE LESS THAN THE SUBSTATION SUBGRADE.

OR AS APPROVED BY THE NYS DEC REGIONAL OFFICE OR MS4 REPRESENTATIVE.

GREATER THAN OR EQUAL TO 0.5 INCHES PER HOUR.

1. ALL FILL USED FOR SIDE SLOPES SHALL BE ONSITE MATERIAL FROM AREA CUT TO CREATE THE SUBSTATION OR SHALL BE OFFSITE FILL

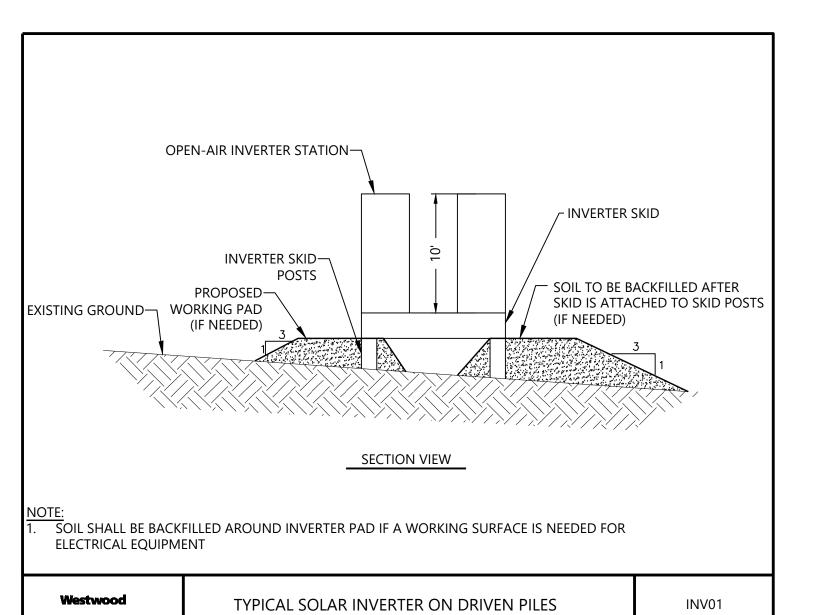
THIS SECTION SHALL BE APPLICABLE TO MEET THE STORMWATER MANAGEMENT REQUIREMENTS OF NEW DEVELOPMENT AND

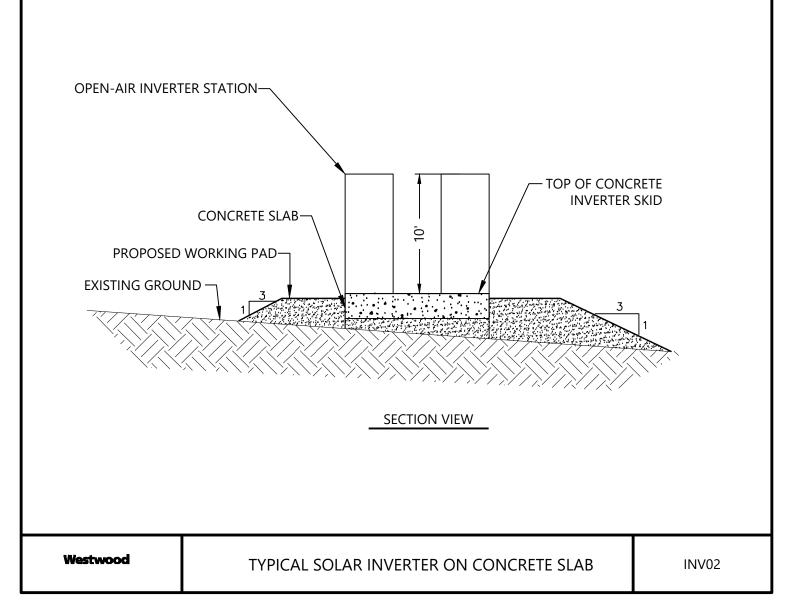
4. IF INFILTRATION BASIN PER NY DETAIL (FIGURE 6.12 INFILTRATION BASIN (I-2)) IS NOT USED, CONTRACTOR TO USE DETAIL RD02-B.

. INFILTRATION TESTING SHALL BE COMPLETED AS REQUIRED BY APPENDIX D OF THE 2010 NYS STORMWATER MANAGEMENT DESIGN MANUAL,

REDEVELOPMENT PROJECTS, PER THE 2010 NYS STORMWATER MANAGEMENT DESIGN MANUAL, FOR SITES WITH INFILTRATION RATES OF

RD02-B







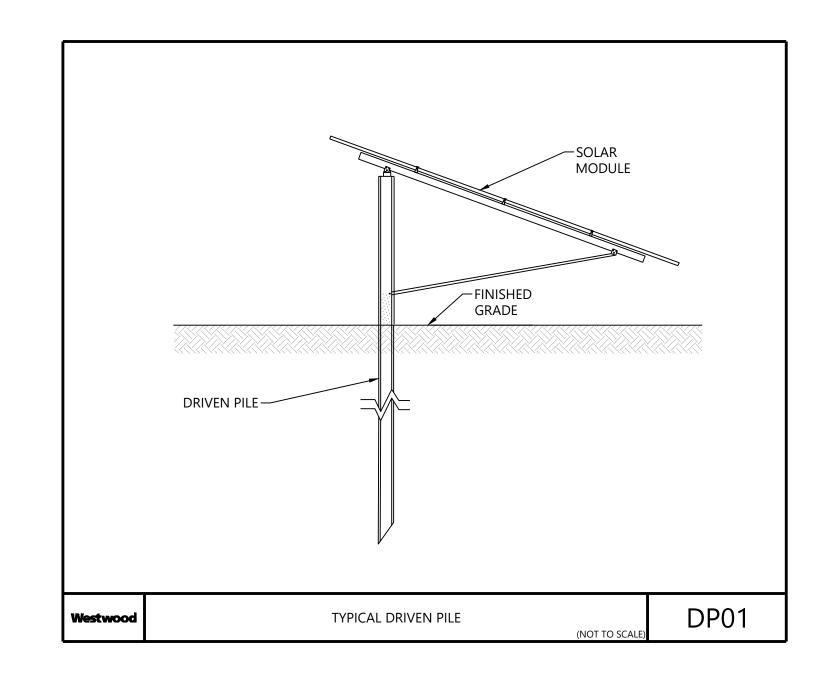
Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com Westwood Surveying and Engineering, P.C.

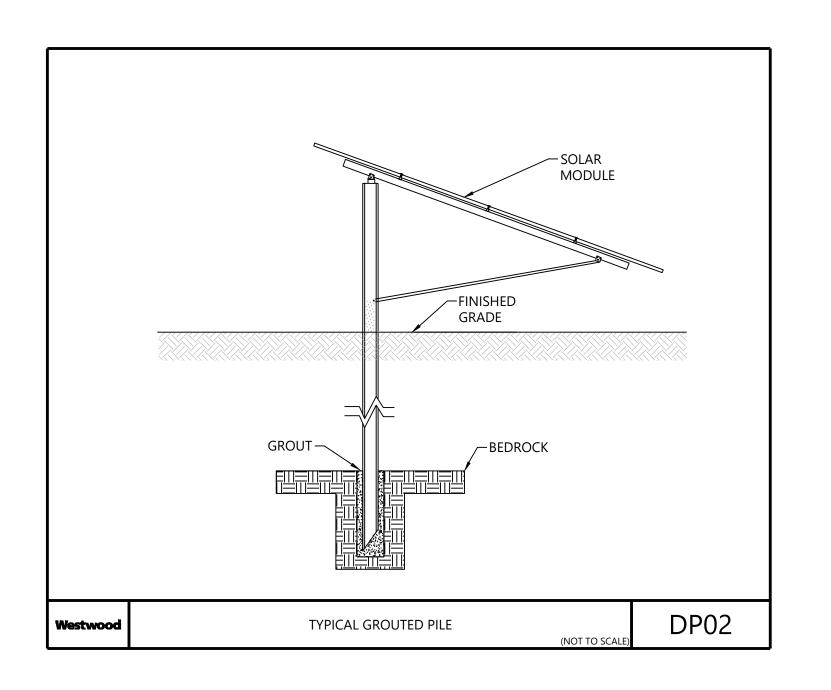


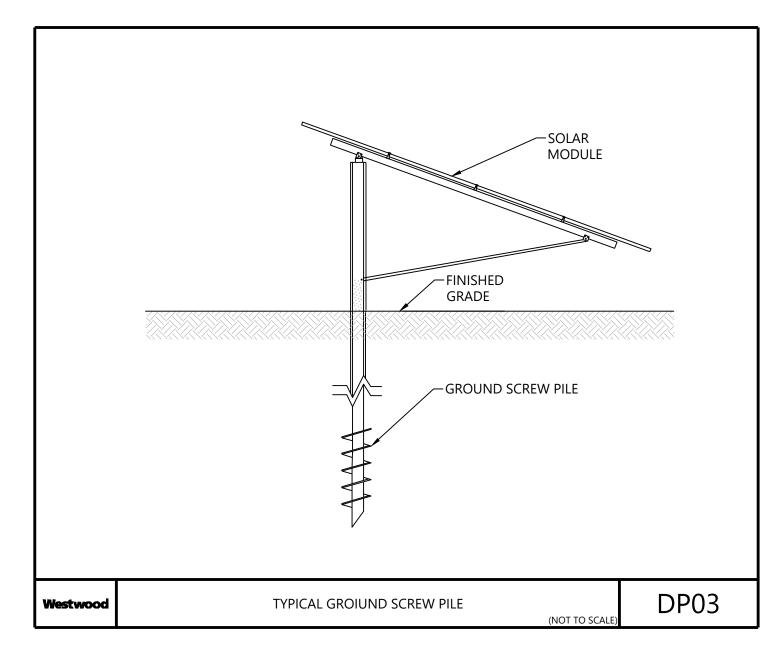
700 Universe Blvd, Juno Beach, FL 33408

REVI	SIONS:		
#	DATE	COMMENT	
Α	03/11/20	ISSUED FOR REVIEW	
В	04/17/20	ISSUED FOR PERMIT	
С	06/05/20	ISSUED FOR REVIEW	
D	06/26/20	ISSUED FOR REVIEW	

E 09/01/20 ISSUED FOR REVIEW





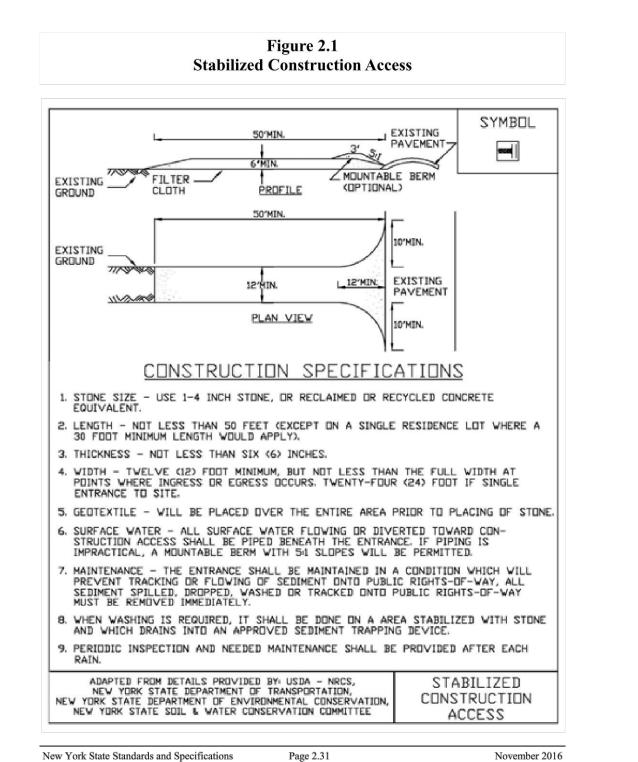


# **Watkins Glen Solar Energy Center**Town of Dix, Schuyler County

Construction Details -

PRELIMINARY NOT FOR CONSTRUCTION

09/01/2020



#### Figure 2.2 **Temporary Access Bridge**

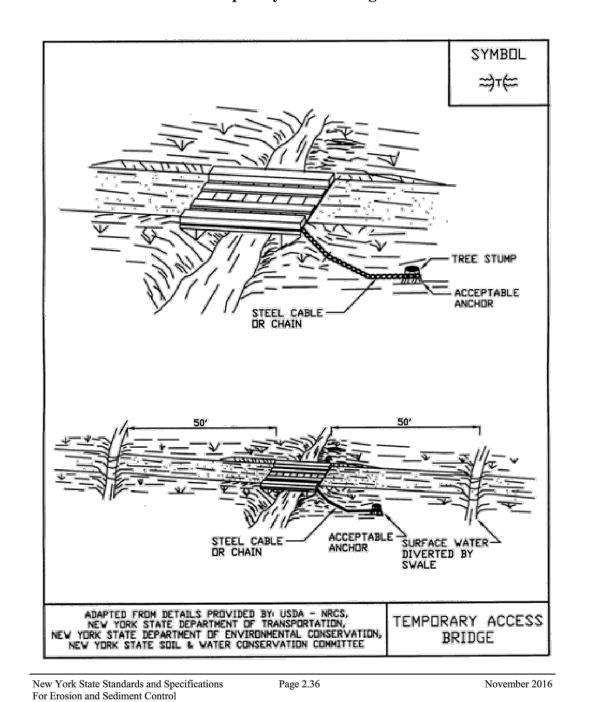
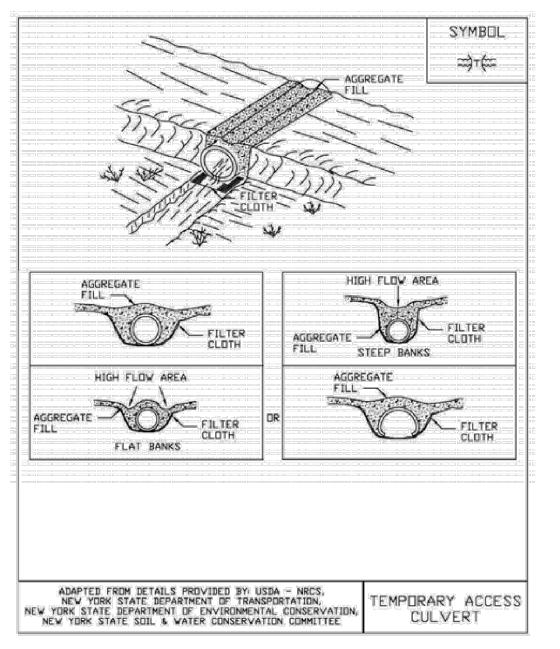


Figure 2.3 **Temporary Access Culvert** 



New York State Standards and Specifications For Erosion and Sediment Control

November 2016

**NEXTERA®** 

700 Universe Blvd, Juno Beach, FL 33408

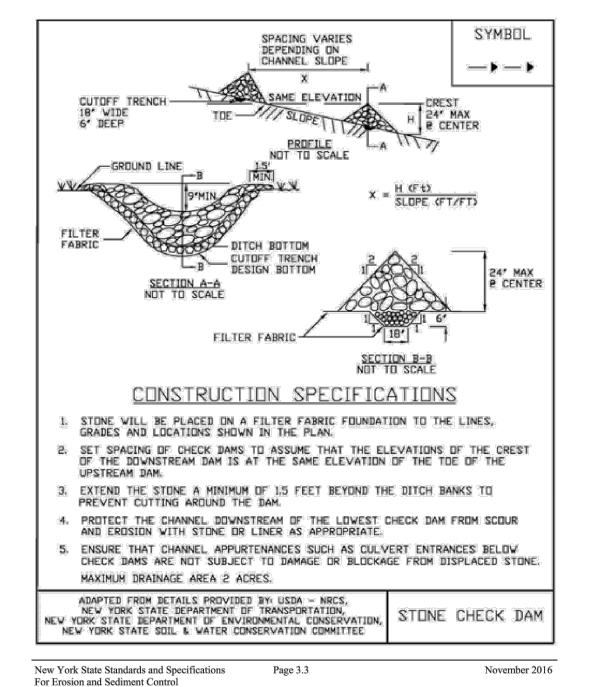
(952) 937-5822 Minnetonka, MN 55343

Toll Free (888) 937-5150 westwoodps.com Westwood Surveying and Engineering, P.C.

**REVISIONS:** # DATE COMMENT A 03/11/20 ISSUED FOR REVIEW B 04/17/20 ISSUED FOR PERMIT C 06/05/20 ISSUED FOR REVIEW D 06/26/20 ISSUED FOR REVIEW

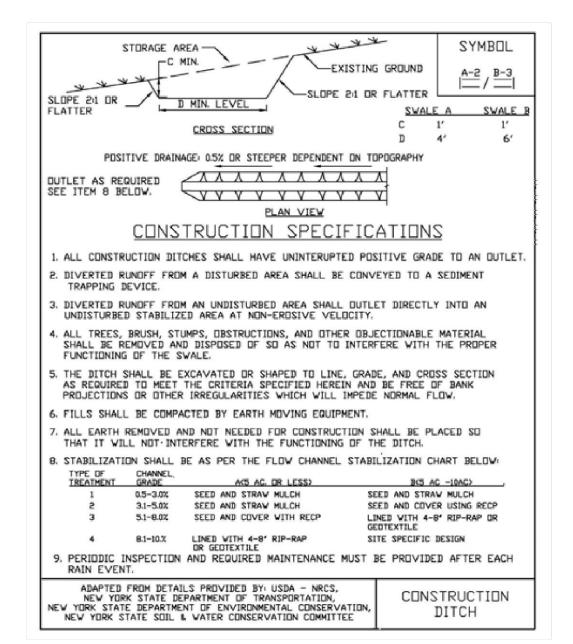
E 09/01/20 ISSUED FOR REVIEW

For Erosion and Sediment Control



November 2016 New York State Standards and Specifications For Erosion and Sediment Control

Figure 3.2



### **Watkins Glen Solar Energy Center**

New York Erosion Control Details - 1

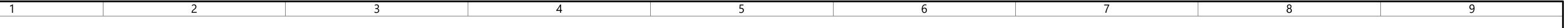
PRELIMINARY NOT FOR CONSTRUCTION

09/01/2020 DATE:

C.606

SHEET:

Town of Dix, Schuyler County





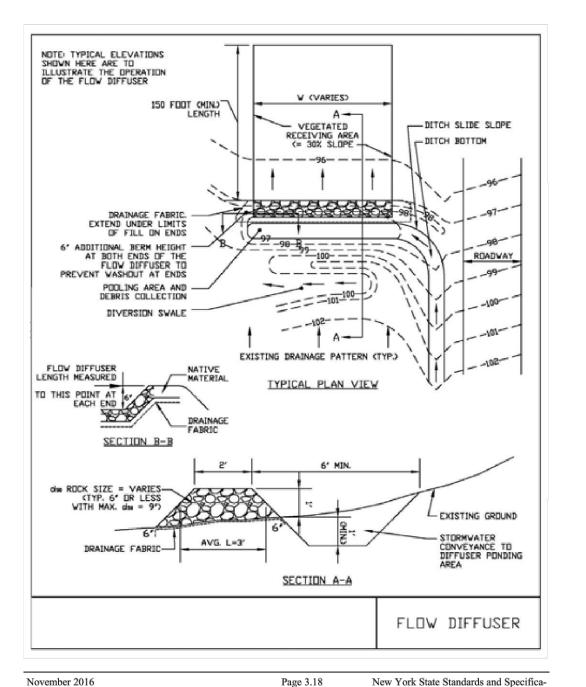
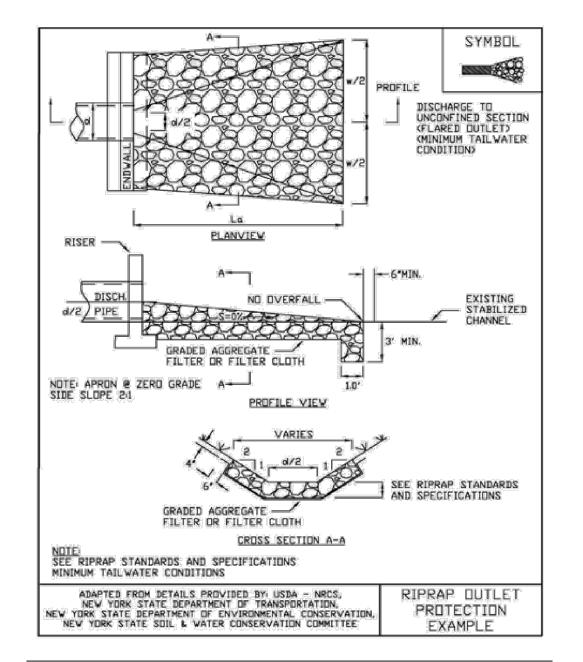
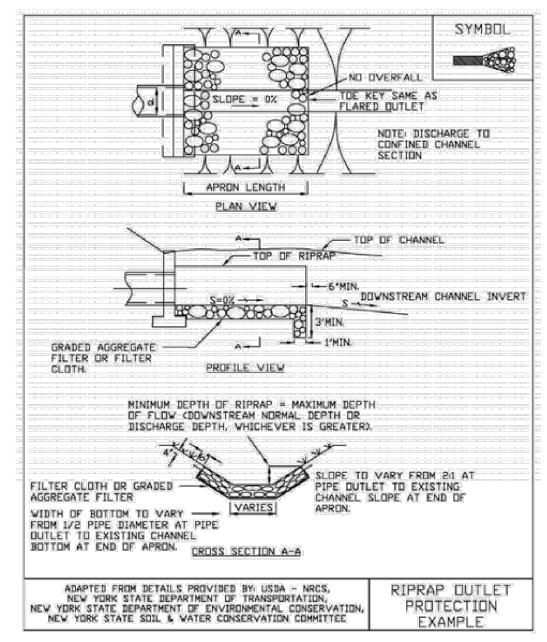


Figure 3.18 **Riprap Outlet Protection Detail (1)** 



New York State Standards and Specifications November 2016 For Erosion and Sediment Control

Figure 3.19 **Riprap Outlet Protection Detail (2)** 



New York State Standards and Specifications November 2016 For Erosion and Sediment Control

(952) 937-5822 Minnetonka, MN 55343 Toll Free (888) 937-5150 westwoodps.com Westwood Surveying and Engineering, P.C.

**NEXTERA®** 

700 Universe Blvd, Juno Beach, FL 33408

REV	ISIONS:		
#	DATE	COMMENT	
Α	03/11/20	ISSUED FOR REVIEW	
В	04/17/20	ISSUED FOR PERMIT	
С	06/05/20	ISSUED FOR REVIEW	
D	06/26/20	ISSUED FOR REVIEW	

E 09/01/20 ISSUED FOR REVIEW

#### Figure 3.20 **Riprap Outlet Protection Detail (3)**

For Erosion and Sediment Control

For Erosion and Sediment Control

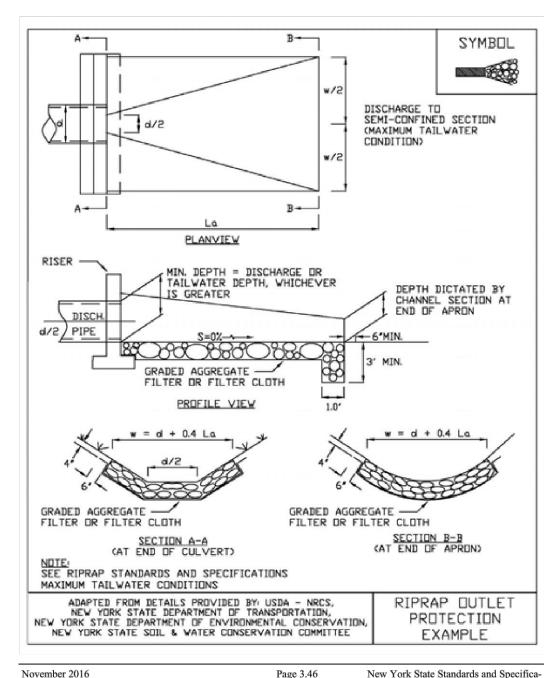
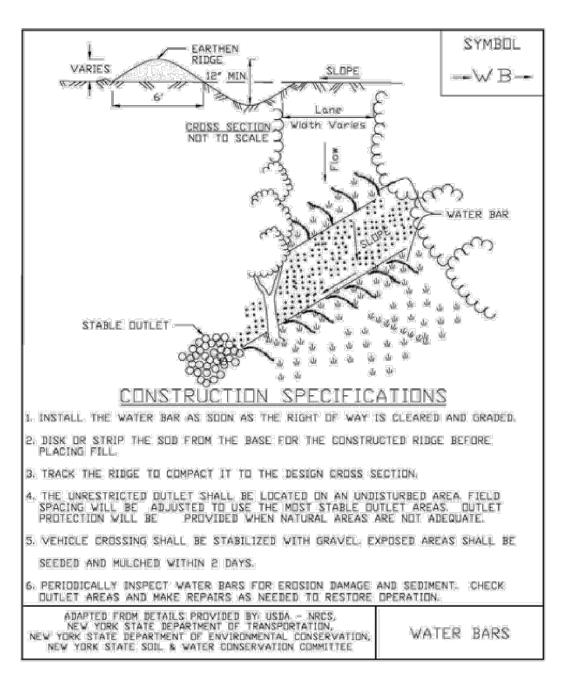


Figure 3.22 Water Bar Detail

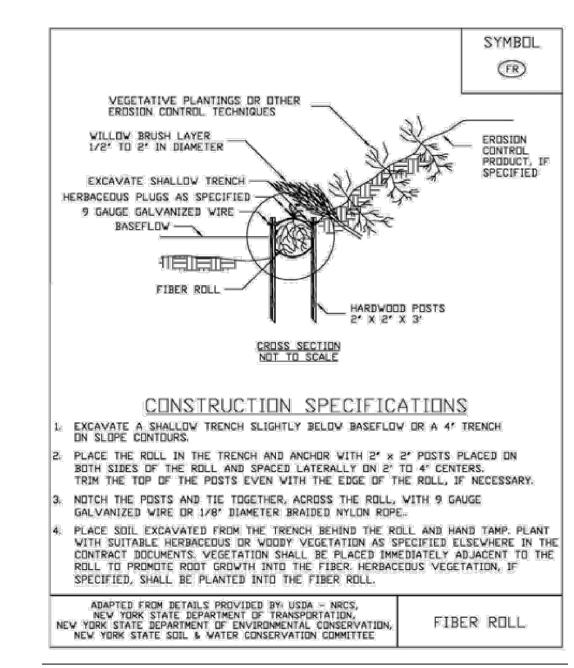


November 2016

New York State Standards and Specifications

For Erosion and Sediment Control

Figure 4.8 Fiber Roll



New York State Standards and Specifications For Erosion and Sediment Control

Page 4.23

November 2016

# **Watkins Glen Solar Energy Center**

Town of Dix, Schuyler County

New York Erosion Control Details - 2

**PRELIMINARY** NOT FOR CONSTRUCTION

09/01/2020 DATE:

C.607 SHEET:

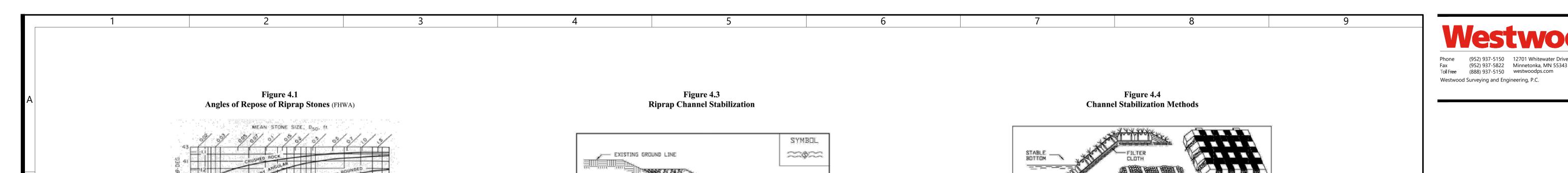
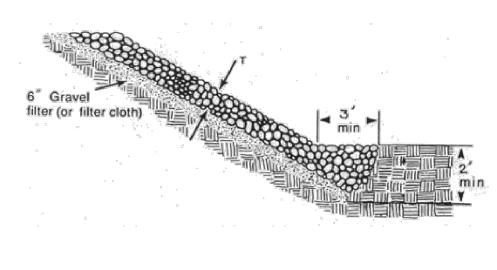


Figure 4.2 **Typical Riprap Slope Protection Detail** 

MEAN STONE SIZE, D50, mm



New York State Standards and Specifications For Erosion and Sediment Control

RIPRAP DESIGN TABLE REACH CLASS THICKNESS LAYER HEIGHT DIO DSC D85 DICC FILTER CONSTRUCTION SPECIFICATIONS I. SLOPE SHALL BE GRADED TO 20 OR FLATTER PRIOR TO PLACING FILTER, FILTER FABRIC, OR RIPRAP. RIPRAP SHALL BE PLACED TO MAINTAIN A UNIFORM GRADATION LARGER STONE SHALL BE PLACED AT THE TOE. 3 ENDS OF THE RIPRAP SHALL BE KEYED INTO A STABLE BANK WHEN TYING INTO OTHER STRUCTURES, LARGER RIPRAP CAN BE LAID IN STEPS OR STACKED AS NEEDED TO FIT. STONES LARGER THAN THOSE DESIGNED FOR FLOW SHALL BE USED FOR THIS PURPOSE. REMAINING DISTURBED AREAS SHALL BE GRADED AND PERMANENTLY SEEDED AND ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE RIPRAP CHANNEL

New York State Standards and Specifications November 2016 For Erosion and Sediment Control

STABILIZATION

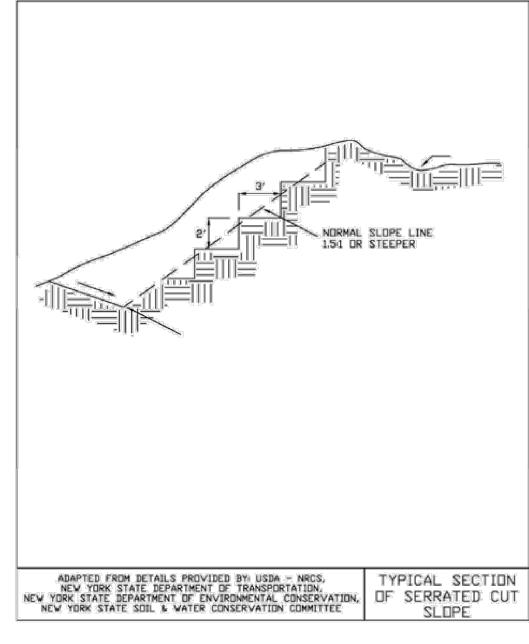
S BLOCKS WIDE GRID PAVERS PRE-CAST MODULAR UNITS Interlocking Blocks ADAPTED FROM DETAILS PROVIDED BY USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

November 2016 New York State Standards and Specifications

CHANNEL STABILIZATION

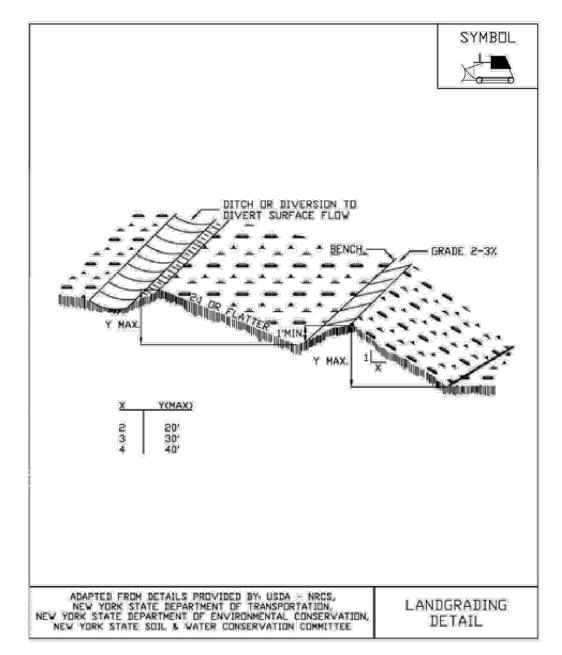
METHODS

### Figure 4.9 **Typical Section of Serrated Cut Slope**



November 2016 New York State Standards and Specifications For Erosion and Sediment Control

#### Figure 4.10 Landgrading



New York State Standards and Specifications November 2016 For Erosion and Sediment Control

#### Figure 4.11 **Landgrading - Construction Specifications**

#### CONSTRUCTION SPECIFICATIONS

- ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE PERMANENTLY STABILIZED.
- ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN
- 3. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.
- AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
- AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF FOUR INCHES PRIOR TO PLACEMENT OF TOPSOIL.
- 6. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS, FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED
- IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES. 7. ALL FILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- 8. EXCEPT FOR APPROVED LANDFILLS, FILL MATERIAL SHALL BE FREE OF FROZEN PARTICLES, BRUSH, RODTS, SOD, OR OTHER FOREIGN OR OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF
- SATISFACTORY FILLS. FROZEN MATERIALS OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED IN FILLS.
- 10. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- 11: ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.
- 12. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN
- OR OTHER APPROVED METHOD 13. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING
- 14. STOCKPILES, BORROW AREAS AND SPOIL AREAS SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATION.

ADAPTED FROM DETAILS PROVIDED BY USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

November 2016

New York State Standards and Specifications For Erosion and Sediment Control

LANDGRADING

SPECIFICATIONS

**NEXTERA**° 700 Universe Blvd, Juno Beach, FL 33408

**REVISIONS:** # DATE COMMENT A 03/11/20 ISSUED FOR REVIEW B 04/17/20 ISSUED FOR PERMIT C 06/05/20 ISSUED FOR REVIEW D 06/26/20 ISSUED FOR REVIEW

E 09/01/20 ISSUED FOR REVIEW

### **Watkins Glen Solar Energy Center**

Town of Dix, Schuyler County

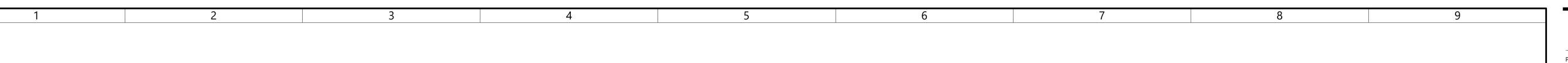
New York Erosion Control Details - 3

PRELIMINARY NOT FOR CONSTRUCTION

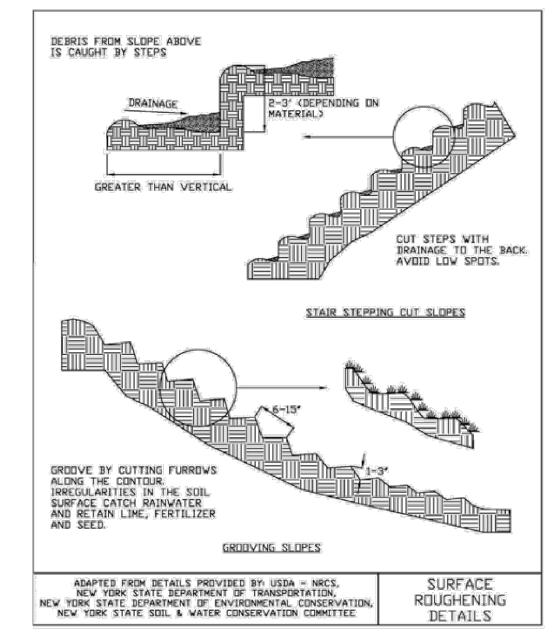
DATE:

09/01/2020

C.608 SHEET:

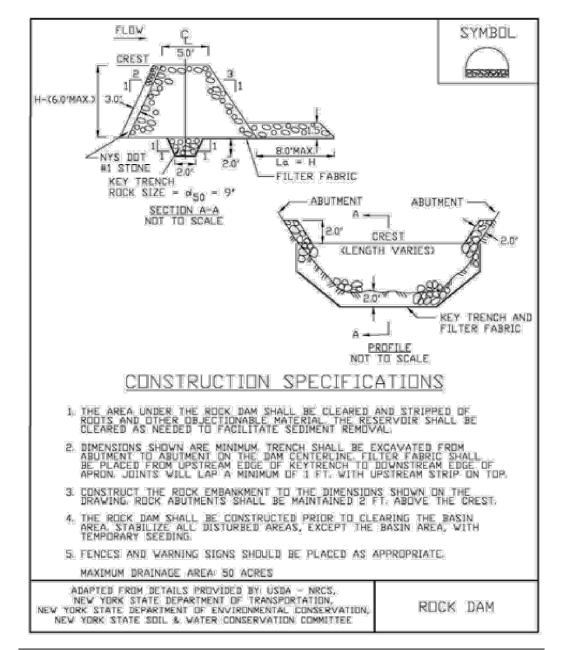


#### Figure 4.18 Surface Roughening



New York State Standards and Specifications November 2016 For Erosion and Sediment Control

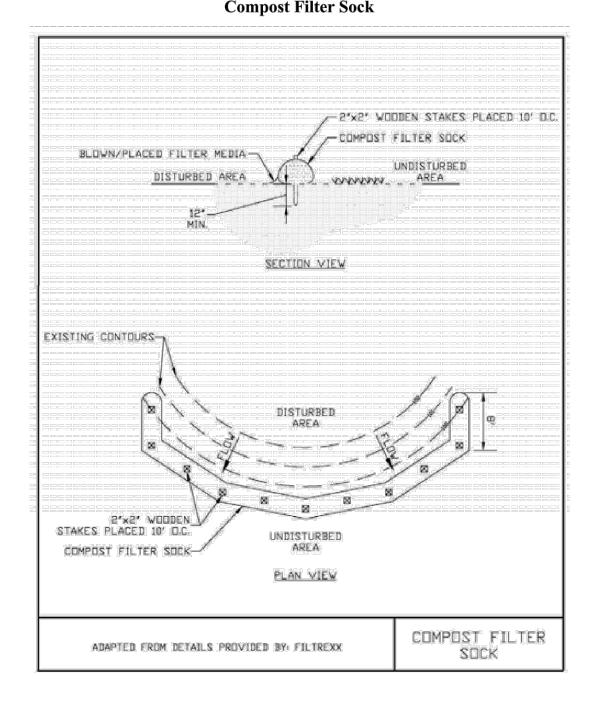
#### Figure 5.7 Rock Dam



November 2016

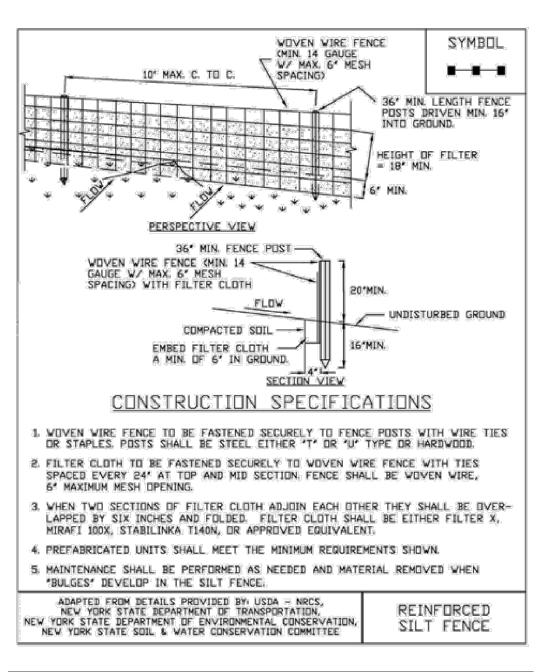
New York State Standards and Specifica-For Erosion and Sediment Control

### Figure 5.2



New York State Standards and Specifications November 2016 For Erosion and Sediment Control

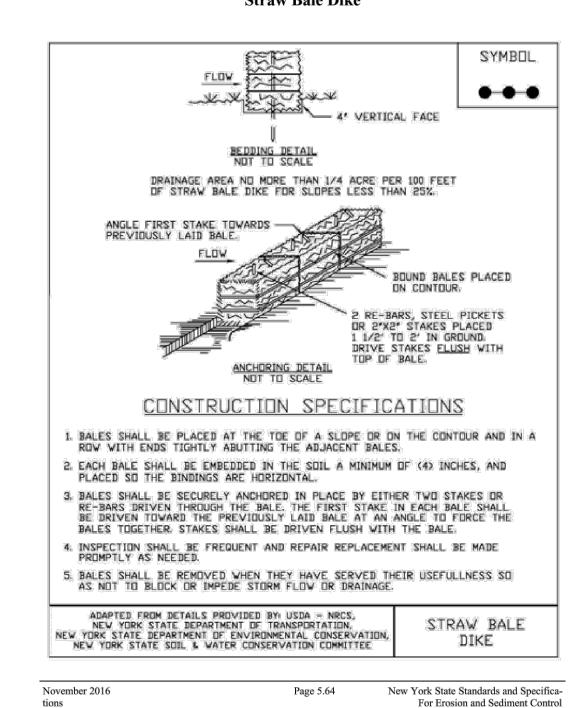
#### Figure 5.30 Reinforced Silt Fence



November 2016

New York State Standards and Specifica-For Erosion and Sediment Control

#### Figure 5.34 Straw Bale Dike



(952) 937-5822 Minnetonka, MN 55343 Toll Free (888) 937-5150 westwoodps.com Westwood Surveying and Engineering, P.C.

**NEXTERA®** 

700 Universe Blvd, Juno Beach, FL 33408

**REVISIONS:** # DATE COMMENT A 03/11/20 ISSUED FOR REVIEW B 04/17/20 ISSUED FOR PERMIT C 06/05/20 ISSUED FOR REVIEW D 06/26/20 ISSUED FOR REVIEW

E 09/01/20 ISSUED FOR REVIEW

## **Watkins Glen Solar Energy Center**

Town of Dix, Schuyler County

New York Erosion Control Details - 4

PRELIMINARY NOT FOR CONSTRUCTION

09/01/2020 DATE:

C.609

SHEET:

THIS PAGE INTENTION
THIS PAGE TREFT BLANK



Westwood Surveying and Engineering, P.C.

PREPARED FOR:



700 Universe Blvd, Juno Beach, FL 33408

REVISIONS:
# DATE COMMENT

A 03/11/20 ISSUED FOR REVIEW

B 04/17/20 ISSUED FOR PERMIT

C 06/05/20 ISSUED FOR REVIEW

D 06/26/20 ISSUED FOR REVIEW

E 09/01/20 ISSUED FOR REVIEW

## Watkins Glen Solar Energy Center

Town of Dix, Schuyler County

**Construction Notes** 

PRELIMINARY
NOT FOR CONSTRUCTION

DATE:

09/01/2020

THIS PAGE INTENTION
LEFT BLANK



Westwood Surveying and Engineering, P.C.

PREPARED FOR:



700 Universe Blvd, Juno Beach, FL 33408

REVISIONS:
# DATE COMMENT

A 03/11/20 ISSUED FOR REVIEW

B 04/17/20 ISSUED FOR PERMIT

C 06/05/20 ISSUED FOR REVIEW

D 06/26/20 ISSUED FOR REVIEW

E 09/01/20 ISSUED FOR REVIEW

## Watkins Glen Solar Energy Center

Town of Dix, Schuyler County

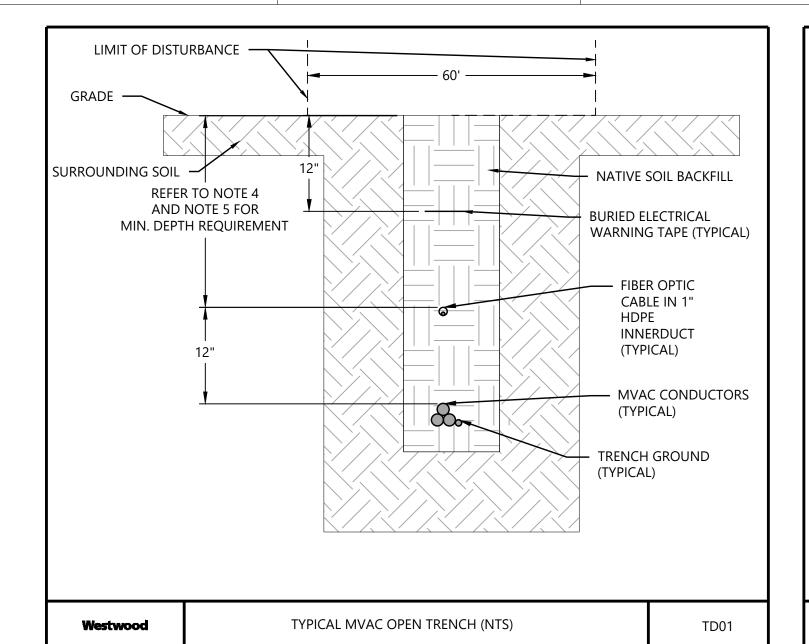
Tree Clearing Notes

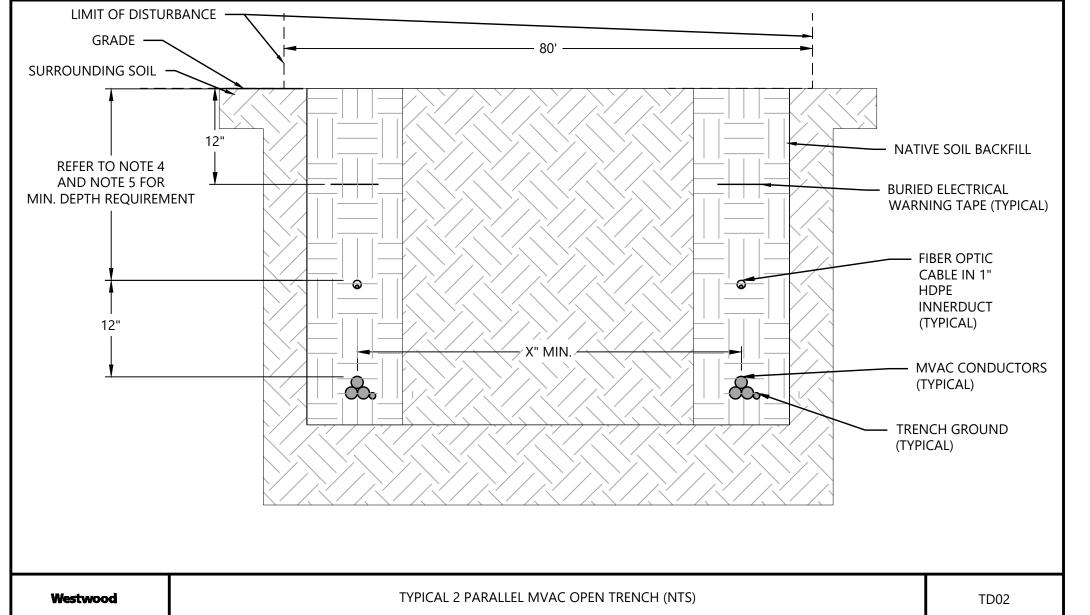
PRELIMINARY
NOT FOR CONSTRUCTION

DATE.

09/01/2020

неет: С.611





- 1. TRENCHES AND BACKFILL SHALL BE FREE OF ROCK, STUMPS, LARGE ROOTS OR ANY OTHER MATERIAL LARGER THAN 3/8" IN DIAMETER THAT CAN CAUSE DAMAGE TO CABLE JACKETS OR INSULATION.
- 2. TYPICAL MVAC TRENCHES SHALL BE MINIMUM 2.5' AWAY FROM PILES. TRENCHES THAT ARE WITHIN 2.5' OF PILES SHALL BE COMPACTED TO 95%.
- 3. BACKFILL LIFTS SHALL NOT EXCEED 12".
- 4. ALL BURIED UTILITIES LOCATED WITHIN THE GENERATION FACILITY'S SECURITY FENCE MUST HAVE A MINIMUM DEPTH OF 36" IF DIRECT BURIED AND MINIMUM DEPTH OF 18" IF BURIED IN A CONDUIT.
- 5. ALL BURIED UTILITIES LOCATED OUTSIDE OF THE GENERATION FACILITY SECURITY FENCE:
  (a) IN CROPLAND, HAYLAND, AND IMPROVED PASTURE BURIED ELECTRIC CONDUCTORS MUST HAVE A MINIMUM DEPTH OF 48" OF COVER, IN AREAS WHERE THE DEPTH OF SOIL BEDROCK IS LESS THAN 48", THE ELECTRIC CONDUCTORS MUST BE BURIED BELOW THE SURFACE OF THE BEDROCK IF FRIABLE/RIPPABLE, OR AS NEAR AS POSSIBLE TO THE SURFACE OF THE BEDROCK.
  (b) IN UNIMPROVED GRAZING AREAS OR ON LAND PERMANENTLY DEVOTED TO PASTURE THE MINIMUM DEPTH OF COVER MUST BE 36".
- (c) WHERE ELECTRICAL CONDUCTORS ARE BURIED DIRECTLY BELOW THE GENERATION FACILITY'S ACCESS ROAD OR IMMEDIATELY ADJACENT (AT ROAD EDGE) TO THE ACCESS ROAD, THE MINIMUM DEPTH OF COVER MUST BE 36" IF DIRECT BURIED AND 24" IF BURIED IN CONDUIT. CONDUCTORS MUST BE CLOSED ENOUGH TO THE ROAD EDGE AS TO BE NOT SUBJECT TO AGRICULTURAL CULTIVATION/SUB-SOILING.
- 6. WHEN OPEN-CUT TRENCHING IS PROPOSED, TOPSOIL STRIPPING IS REQUIRED FROM THE WORK AREA ADJACENT TO THE TRENCH (INCLUDING SEGREGATED STOCKPILE AREAS AND EQUIPMENT ACCESS). TRENCHER OR ROAD SAW LIKE EQUIPMENT ARE NOT ALLOWED FOR TRENCH EXCAVATION IN AGRICULTURAL AREAS, AS THE EQUIPMENT DOES NOT SEGREGATE TOPSOIL FROM SUBSOIL. HORIZONTAL DIRECTIONAL DRILLING (HDD) OR EQUIVALENT INSTALLATION THAT DOES NOT DISRUPT THE SOIL PROFILE, MAY LIMIT AGRICULTURAL GROUND DISTURBANCES. ANY HDD DRILLING FLUID INADVERTENTLY DISCHARGED MUST BE REMOVED FROM AGRICULTURAL AREAS. NARROW OPEN TRENCHES LESS THAN 25 FEET LONG INVOLVING A SINGLE DIRECTLY BURIED CONDUCTOR OR CONDUIT (AS REQUIRED) TO CONNECT SHORT ROWS WITHIN THE ARRAY, ARE EXEMPT FROM TOPSOIL SEGREGATION.
- 7. STRIPPED TOPSOIL SHOULD BE STOCKPILED FROM WORK AREAS (E.G. PARKING AREAS, ELECTRIC CONDUCTOR TRENCHES, ALONG ACCESS ROADS, EQUIPMENT PADS) AND KEPT SEPARATE FROM OTHER EXCAVATED MATERIAL (ROCK AND/OR SUB-SOIL) UNTIL THE COMPLETION OF THE FACILITY FOR FINAL RESTORATION. FOR PROPER TOPSOIL SEGREGATION, AT LEAST 25 FEET OF ADDITIONAL TEMPORARY WORKSPACE (ATWS) MAY BE NEEDEDALONG "OPEN-CUT" UNDERGROUND UTILITY TRENCHES. ALL TOPSOIL WILL BE STOCKPILED AS CLOSE AS IS REASONABLY PRACTICAL TO THE AREA WHERE STRIPPED/REMOVED AND SHALL BE USED FOR RESTORATION ON THAT PARTICULAR AREA. ANY TOPSOIL REMOVED FROM PERMANENTLY CONVERTED AGRICULTURAL AREAS (E.G. PERMANENT ROADS, ETC.) SHOULD BE TEMPORARILY STOCKPILED AND EVENTUALLY SPREAD EVENLY IN ADJACENT AGRICULTURAL AREAS WITHIN THE PROJECT LIMITS OF DISTURBANCE (LOD); HOWEVER NOT TO SIGNIFICANTLY ALTER THE HYDROLOGY OF THE AREA. CLEARLY DESIGNATE TOPSOIL STOCKPILE AREAS AND TOPSOIL DISPOSAL AREAS IN THE FIELD AND ON CONSTRUCTION DRAWINGS; CHANGES OR ADDITIONS TO THE DESIGNATED STOCKPILE AREAS MAY BE NEEDED BASED ON FIELD CONDITIONS IN CONSULTATION WITH THE EM. SUFFICIENT LOD (AS DESIGNATED ON THE SITE PLAN OR BY THE EM) AREA SHOULD BE ALLOTTED TO ALLOW ADEQUATE ACCESS TO THE STOCKPILE FOR TOPSOIL REPLACEMENT DURING RESTORATION.

(a) TOPSOIL STOCKPILES ON AGRICULTURAL AREAS LEFT IN PLACE PRIOR TO OCTOBER 31ST SHOULD BE SEEDED WITH AROOSTOOK WINTER RYE OR EQUIVALENT AT AN APPLICATION RATE OF THREE BUSHELS (168 LBS.) PER ACRE AND MULCHED WITH STRAW MULCH AT RATE OF TWO TO THREE BALES PER 1000 SQ. FT.

(b) TOPSOIL STOCKPILES LEFT IN PLACE BETWEEN OCTOBER 31ST AND MAY 31ST SHOULD BE MULCHED WITH STRAW AT A RATE OF TWO TO THREE BALES PER 1000 SQ. FT. TO PREVENT SOIL LOSS.

# Westwoo

Phone (952) 937-5150 12701 Whitewater Drive, Suite and Frax (952) 937-5822 Minnetonka, MN 55343 Westwood Surveying and Engineering, P.C.

PREPARED FOR:



700 Universe Blvd, Juno Beach, FL 33408

REV	REVISIONS:			
#	DATE	COMMENT		
Α	03/11/20	ISSUED FOR REVIEW		
В	04/17/20	ISSUED FOR PERMIT		
С	06/05/20	ISSUED FOR REVIEW		
D	06/26/20	ISSUED FOR REVIEW		
E	09/01/20	ISSUED FOR REVIEW		

## Watkins Glen Solar Energy Center

Town of Dix, Schuyler County

Trench Details - 1

PRELIMINARY
NOT FOR CONSTRUCTION

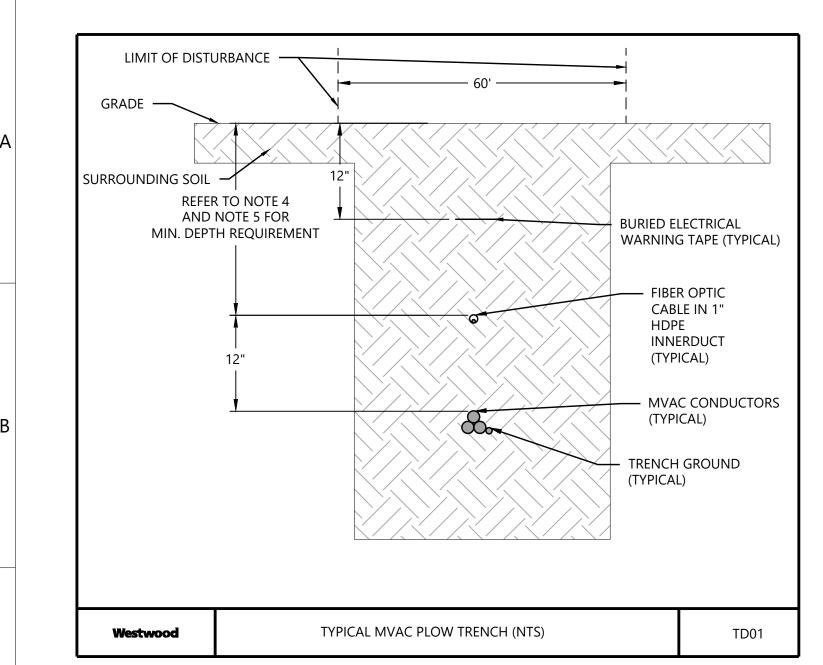
ATE:

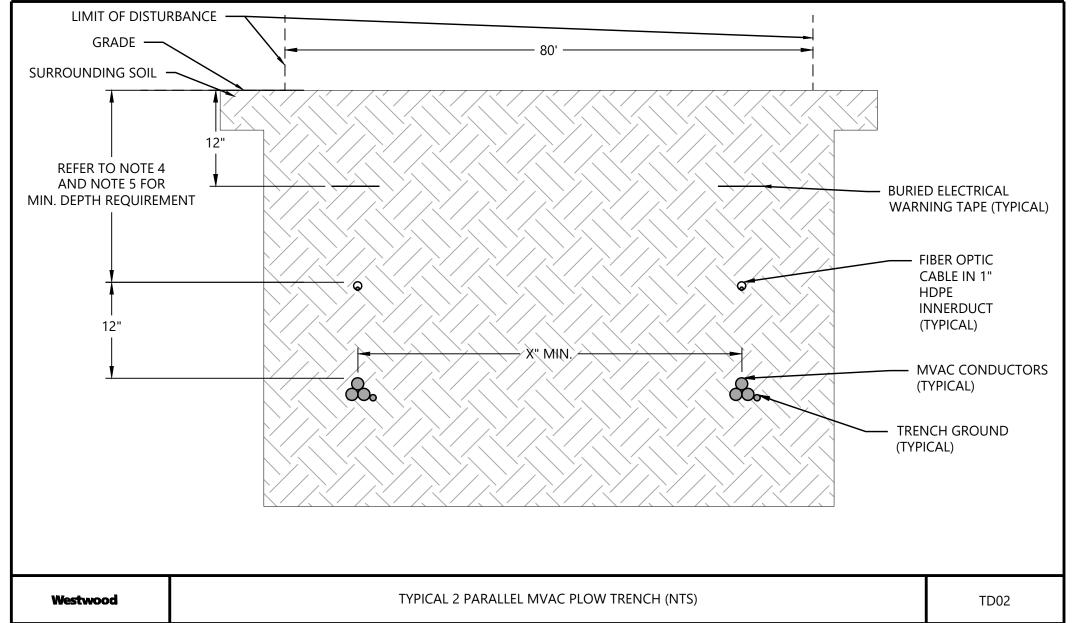
09/01/2020

E.650

V .. ( ) 0001150TDLK .l. .

5417 E.650 Trench Details.dwg 9/1/2020 2:26 P





- 1. TRENCHES AND BACKFILL SHALL BE FREE OF ROCK, STUMPS, LARGE ROOTS OR ANY OTHER MATERIAL LARGER THAN 3/8" IN DIAMETER THAT CAN CAUSE DAMAGE TO CABLE JACKETS OR INSULATION.
- 2. TYPICAL MVAC TRENCHES SHALL BE MINIMUM 2.5' AWAY FROM PILES. TRENCHES THAT ARE WITHIN 2.5' OF PILES SHALL BE COMPACTED TO 95%.
- 3. BACKFILL LIFTS SHALL NOT EXCEED 12".
- 4. ALL BURIED UTILITIES LOCATED WITHIN THE GENERATION FACILITY'S SECURITY FENCE MUST HAVE A MINIMUM DEPTH OF 36" IF DIRECT BURIED AND MINIMUM DEPTH OF 18" IF BURIED IN A CONDUIT.
- 5. ALL BURIED UTILITIES LOCATED OUTSIDE OF THE GENERATION FACILITY SECURITY FENCE:
  (a) IN CROPLAND, HAYLAND, AND IMPROVED PASTURE BURIED ELECTRIC CONDUCTORS MUST HAVE A MINIMUM DEPTH OF 48" OF COVER, IN AREAS WHERE THE DEPTH OF SOIL BEDROCK IS LESS THAN 48", THE ELECTRIC CONDUCTORS MUST BE BURIED BELOW THE SURFACE OF THE BEDROCK IF FRIABLE/RIPPABLE, OR AS NEAR AS POSSIBLE TO THE SURFACE OF THE BEDROCK.
  (b) IN UNIMPROVED GRAZING AREAS OR ON LAND PERMANENTLY DEVOTED TO PASTURE THE MINIMUM DEPTH OF COVER MUST BE 36".
- (c) WHERE ELECTRICAL CONDUCTORS ARE BURIED DIRECTLY BELOW THE GENERATION FACILITY'S ACCESS ROAD OR IMMEDIATELY ADJACENT (AT ROAD EDGE) TO THE ACCESS ROAD, THE MINIMUM DEPTH OF COVER MUST BE 36" IF DIRECT BURIED AND 24" IF BURIED IN CONDUIT. CONDUCTORS MUST BE CLOSED ENOUGH TO THE ROAD EDGE AS TO BE NOT SUBJECT TO AGRICULTURAL CULTIVATION/SUB-SOILING.
- 6. WHEN OPEN-CUT TRENCHING IS PROPOSED, TOPSOIL STRIPPING IS REQUIRED FROM THE WORK AREA ADJACENT TO THE TRENCH (INCLUDING SEGREGATED STOCKPILE AREAS AND EQUIPMENT ACCESS). TRENCHER OR ROAD SAW LIKE EQUIPMENT ARE NOT ALLOWED FOR TRENCH EXCAVATION IN AGRICULTURAL AREAS, AS THE EQUIPMENT DOES NOT SEGREGATE TOPSOIL FROM SUBSOIL. HORIZONTAL DIRECTIONAL DRILLING (HDD) OR EQUIVALENT INSTALLATION THAT DOES NOT DISRUPT THE SOIL PROFILE, MAY LIMIT AGRICULTURAL GROUND DISTURBANCES. ANY HDD DRILLING FLUID INADVERTENTLY DISCHARGED MUST BE REMOVED FROM AGRICULTURAL AREAS. NARROW OPEN TRENCHES LESS THAN 25 FEET LONG INVOLVING A SINGLE DIRECTLY BURIED CONDUCTOR OR CONDUIT (AS REQUIRED) TO CONNECT SHORT ROWS WITHIN THE ARRAY, ARE EXEMPT FROM TOPSOIL SEGREGATION.
- 7. STRIPPED TOPSOIL SHOULD BE STOCKPILED FROM WORK AREAS (E.G. PARKING AREAS, ELECTRIC CONDUCTOR TRENCHES, ALONG ACCESS ROADS, EQUIPMENT PADS) AND KEPT SEPARATE FROM OTHER EXCAVATED MATERIAL (ROCK AND/OR SUB-SOIL) UNTIL THE COMPLETION OF THE FACILITY FOR FINAL RESTORATION. FOR PROPER TOPSOIL SEGREGATION, AT LEAST 25 FEET OF ADDITIONAL TEMPORARY WORKSPACE (ATWS) MAY BE NEEDEDALONG "OPEN-CUT" UNDERGROUND UTILITY TRENCHES. ALL TOPSOIL WILL BE STOCKPILED AS CLOSE AS IS REASONABLY PRACTICAL TO THE AREA WHERE STRIPPED/REMOVED AND SHALL BE USED FOR RESTORATION ON THAT PARTICULAR AREA. ANY TOPSOIL REMOVED FROM PERMANENTLY CONVERTED AGRICULTURAL AREAS (E.G. PERMANENT ROADS, ETC.) SHOULD BE TEMPORARILY STOCKPILED AND EVENTUALLY SPREAD EVENLY IN ADJACENT AGRICULTURAL AREAS WITHIN THE PROJECT LIMITS OF DISTURBANCE (LOD); HOWEVER NOT TO SIGNIFICANTLY ALTER THE HYDROLOGY OF THE AREA. CLEARLY DESIGNATE TOPSOIL STOCKPILE AREAS AND TOPSOIL DISPOSAL AREAS IN THE FIELD AND ON CONSTRUCTION DRAWINGS; CHANGES OR ADDITIONS TO THE DESIGNATED STOCKPILE AREAS MAY BE NEEDED BASED ON FIELD CONDITIONS IN CONSULTATION WITH THE EM. SUFFICIENT LOD (AS DESIGNATED ON THE SITE PLAN OR BY THE EM) AREA SHOULD BE ALLOTTED TO ALLOW ADEQUATE ACCESS TO THE STOCKPILE FOR TOPSOIL REPLACEMENT DURING RESTORATION.

(a) TOPSOIL STOCKPILES ON AGRICULTURAL AREAS LEFT IN PLACE PRIOR TO OCTOBER 31ST SHOULD BE SEEDED WITH AROOSTOOK WINTER RYE OR EQUIVALENT AT AN APPLICATION RATE OF THREE BUSHELS (168 LBS.) PER ACRE AND MULCHED WITH STRAW MULCH AT RATE OF TWO TO THREE BALES PER 1000 SQ. FT.

(b) TOPSOIL STOCKPILES LEFT IN PLACE BETWEEN OCTOBER 31ST AND MAY 31ST SHOULD BE MULCHED WITH STRAW AT A RATE OF TWO TO THREE BALES PER 1000 SQ. FT. TO PREVENT SOIL LOSS.

# Westwoo

Phone (952) 937-5150 12701 Whitewater Drive, Suit Fax (952) 937-5822 Minnetonka, MN 55343 Toll Free (888) 937-5150 westwoodps.com
Westwood Surveying and Engineering, P.C.

PREPARED FOR:



700 Universe Blvd, Juno Beach, FL 33408

REVISIONS:				
#	DATE	COMMENT		
Α	03/11/20	ISSUED FOR REVIEW		
В	04/17/20	ISSUED FOR PERMIT		
С	06/05/20	ISSUED FOR REVIEW		
D	06/26/20	ISSUED FOR REVIEW		
E	09/01/20	ISSUED FOR REVIEW		

### Watkins Glen Solar Energy Center

Town of Dix, Schuyler County

Trench Details - 2

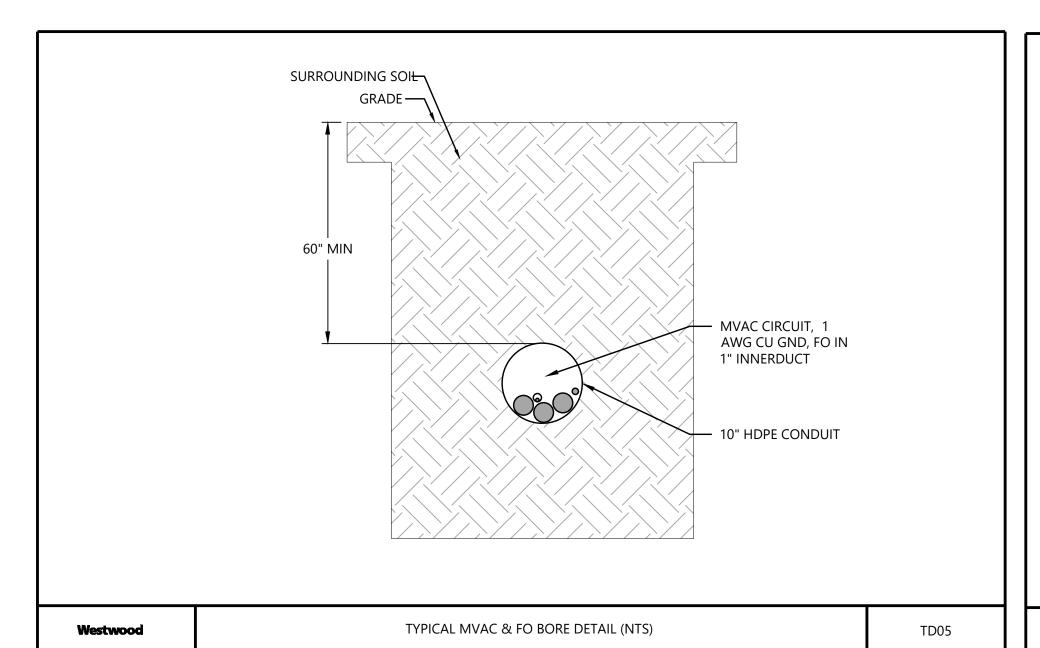
PRELIMINARY
NOT FOR CONSTRUCTION

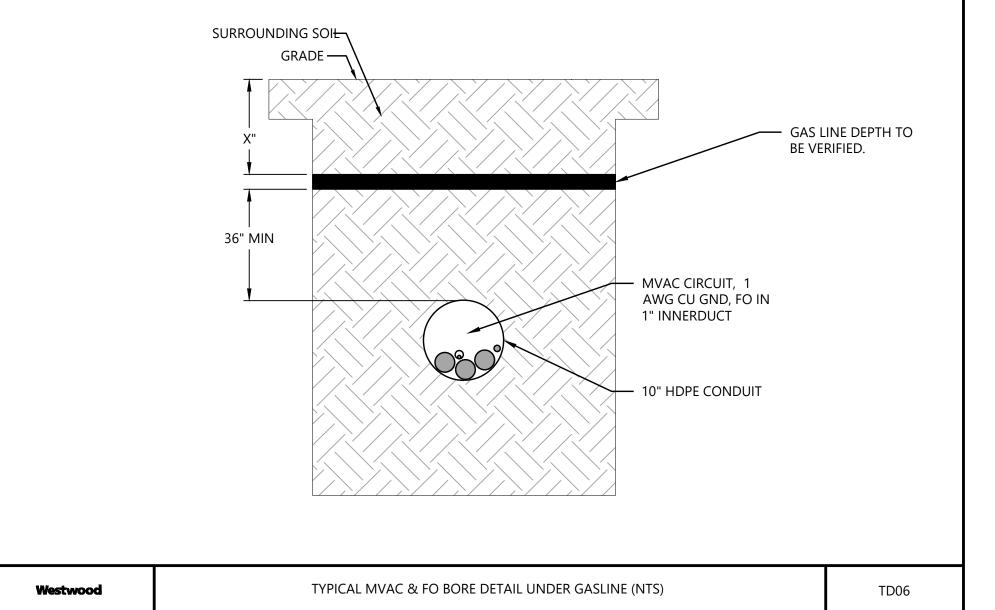
DATE:

09/01/2020

E.650

V -- ( ) 00211F0TPLK -l





- 1. VERIFY UTILITY LOCATIONS AND REQUIRED CLEARANCE. 2. VERIFY REQUIRED BORE DEPTH.
- 3. TRANSITION STATION, GRADE, AND RADIUS MAY BE ADJUSTED IN FIELD WITH OWNERS APPROVAL.
- 4. PRIOR TO THE START OF EXCAVATION, MARK-OUT THE PLANNED WORK AREA AND NOTIFY DIG-SAFE AND ANY NON-PARTICIPATING UTILITIES OF THE PLANNED WORK LOCATION.
- 5. ALL UTILITIES IN THE VICINITY OF EACH CROSSING SHALL BE PHYSICALLY LOCATED BY TEST PITTING, BELL HOLING, OR OTHER SUITABLE APPROVED MEANS. MECHANICAL EXCAVATION EQUIPMENT (BACKHOES AND SIMILAR POWER EQUIPMENT) SHALL NOT BE USED FOR TEST PITTING OR BELL HOLING. THE ACTUAL LOCATION AND ELEVATION OF THE EXISTING UTILITY SHALL BE RECORDED AND GEO-REFERENCED. GEO-REFERENCED POSITION/ELEVATION SHALL BE TO SUB-FOOT ACCURACY.



Fax (952) 937-5822 Minnetonka, MN 55343 Toll Free (888) 937-5150 westwoodps.com Westwood Surveying and Engineering, P.C.



700 Universe Blvd, Juno Beach, FL 33408

**REVISIONS:** # DATE COMMENT A 03/11/20 ISSUED FOR REVIEW B 04/17/20 ISSUED FOR PERMIT C 06/05/20 ISSUED FOR REVIEW D 06/26/20 ISSUED FOR REVIEW

E 09/01/20 ISSUED FOR REVIEW

## **Watkins Glen Solar Energy Center**

Town of Dix, Schuyler County

Trench Details - 3

PRELIMINARY NOT FOR CONSTRUCTION

09/01/2020

E.652