# Site Plans

Issued for Application

Date Issued December 19, 2022

Latest Issue March 1, 2023

# Collins Aerospace Solar

1 Hamilton Rd Windsor Locks, Connecticut

## **Applicant**

Earthlight Technologies 128 West Road Ellington, CT 06029

Map / Block / Lot: 016 / 001 / 002

## Owner

Hamilton Sunstrand Corporation 8 Farm Springs Road Tax Dept 8FS2 Farmington, CT 06032



March 1, 2023

March 1, 2023

**Sheet Index** 

C-5.1-5.2 Site Details

C-2.0

C-3.0

**Drawing Title** 

Legend and General Notes

Layout and Materials Plan

Grading, Drainage, and Utilities Plan Erosion and Sediment Control Plan

	Reference Drawings		
Latest Issue	No.	Drawing Title	Latest Issue
March 1, 2023 March 1, 2023 March 1, 2023	Sv-1 to S	Sv-5 Partial Property and Topographic Survey	September 19, 2022



Exist.	Prop.		Exist.	Prop.	
		PROPERTY LINE			CONCRETE
		PROJECT LIMIT LINE			HEAVY DUTY PAVEMENT
		RIGHT-OF-WAY/PROPERTY LINE			BUILDINGS
- — —		EASEMENT			RIPRAP
		BUILDING SETBACK	6AULV0AU		CONSTRUCTION EXIT
		PARKING SETBACK		<u> </u>	
10+00	10+00	BASELINE	27.35 TC×	27.35 TC×	TOP OF CURB ELEVATION
		CONSTRUCTION LAYOUT	26.85 BC×	26.85 BC×	BOTTOM OF CURB ELEVATION
		ZONING LINE	132.75 ×	132.75 ×	SPOT ELEVATION
		TOWN LINE	45.0 TW× 38.5 BW	45.0 TW × 38.5 BW	TOP & BOTTOM OF WALL ELEVATION
		TOWN LINE	_	<b>*</b>	BORING LOCATION
		LIMIT OF DISTURBANCE	E8		TEST PIT LOCATION
<u> </u>		WETLAND LINE WITH FLAG	<b>○</b> MW	→ MW	MONITORING WELL
		FLOODPLAIN			
		100-YEAR FLOOD LIMITS	——UD—— 12"D	——UD—— 12″D—►	UNDERDRAIN
			12 0		DRAIN
		GRAVEL ROAD	6"RD	6″RD→	ROOF DRAIN
<u>EOP</u>	EOP	EDGE OF PAVEMENT	12"S	12"S	SEWER
BB	BB	BITUMINOUS BERM	FM	FM	FORCE MAIN
BC	BC	BITUMINOUS CURB	OHW	OHW	OVERHEAD WIRE
CC	CC	CONCRETE CURB	6"W	6"W	WATER
	CG	CURB AND GUTTER	4"FP	4"FP	FIRE PROTECTION
CC	ECC	EXTRUDED CONCRETE CURB		2"DW	DOMESTIC WATER
CC	MCC	MONOLITHIC CONCRETE CURB	3"G	G	GAS
CC	PCC	PRECAST CONC. CURB	———E———	——Е——	ELECTRIC
SGE	SGE	SLOPED GRAN. EDGING	STM	STM	STEAM
VGC	VGC		T	——т——	TELEPHONE
		VERT. GRAN. CURB	———FA———	——FA——	FIRE ALARM
		LIMIT OF CURB TYPE	CATV	——CATV——	CABLE TV
		SAWCUT			
(1/1/1//			<b>    </b>	<b>=</b>	CATCH BASIN
	<u> </u>	BUILDING			DOUBLE CATCH BASIN
	<b>]</b> ⊲EN	BUILDING ENTRANCE	<b>==</b>	<b>=</b>	GUTTER INLET
	<b>]</b> LD	LOADING DOCK	<b>(D)</b>	•	DRAIN MANHOLE
	•	BOLLARD	=TD=	<del></del>	TRENCH DRAIN
D	D	DUMPSTER PAD	CO	[ CO	PLUG OR CAP
0	•	SIGN		€ •	CLEANOUT
<del></del>	<b>=</b>	DOUBLE SIGN		•	FLARED END SECTION
		CTEL CHARRAN			HEADWALL
	<u>I</u>	STEEL GUARDRAIL	<u> </u>	•	SEWER MANHOLE
		WOOD GUARDRAIL		CS	SEVER WIN WITCH
		DATU	— CS ●	CS •	CURB STOP & BOX
		PATH	₩V	₩V •	WATER VALVE & BOX
	<b></b>	TREE LINE	TSV	TSV	TAPPING SLEEVE, VALVE & BOX
×	<del>-xx</del>	WIRE FENCE	<b>♦</b> •	₩ HVD	SIAMESE CONNECTION
<b>─</b>	•	FENCE	HYD	HYD <b>⊚</b>	FIRE HYDRANT
	-	STOCKADE FENCE	WM ⊡	WM ⊡	WATER METER
000000		STONE WALL	PIV ●	PIV <b>●</b>	POST INDICATOR VALVE
		RETAINING WALL	<b>W</b>		WATER WELL
		STREAM / POND / WATER COURSE	GG	GG O	GAS GATE
	<del></del>	DETENTION BASIN	GM	<b>O</b> GM ⊡	GAS METER
0 0 0 0 0 0 0 0 0 0 0		HAY BALES			GNO IVIETER
-××-	—×——×—	SILT FENCE	© .	● <sup>EMH</sup>	ELECTRIC MANHOLE
<pre>&lt;::::::&gt; ·</pre>	· c::::::> ·	SILT SOCK / STRAW WATTLE	EM ⊡	EM ⊡	ELECTRIC METER
4	4	MINOR CONTOUR	_ \$	*	LIGHT POLE
			(Ī)	<b>●</b> <sup>™H</sup>	TELEPHONE MANHOLE
20	-20	MAJOR CONTOUR	_	<del>▼</del>	
10	10	PARKING COUNT	T	T	TRANSFORMER PAD
	C10	COMPACT PARKING STALLS	-0-	•	UTILITY POLE
DYL	DYL	DOUBLE YELLOW LINE	0-	•	GUY POLE
SL	SL	STOP LINE	Ţ	Ţ	GUY WIRE & ANCHOR
			HH ⊡	HH ⊡	HAND HOLE
		CROSSWALK	PB ⊡	PB ⊡	PULL BOX
<u>4                                    </u>	<u>A</u>	ACCESSIBLE CURB RAMP		L 19. ·	
		ACCESSIBLE PARKING	R faic	hline	

	A I I
	Abbreviations
General	
ABAN	ABANDON
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
BIT	BITUMINOUS
BS	BOTTOM OF SLOPE
BWLL	BROKEN WHITE LANE LINE
CONC	CONCRETE
DYCL	DOUBLE YELLOW CENTER LINE
EL	ELEVATION
ELEV	ELEVATION
EX	EXISTING
FDN	FOUNDATION
FFE	FIRST FLOOR ELEVATION
GRAN	GRANITE
GTD	GRADE TO DRAIN
LA	LANDSCAPE AREA
LOD	LIMIT OF DISTURBANCE
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PERF	PERFORATED
PROP	PROPOSED
REM	REMOVE
RET	RETAIN
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
SWEL	SOLID WHITE EDGE LINE
SWLL	SOLID WHITE LANE LINE
TS	TOP OF SLOPE
TYP	TYPICAL
Utility	
СВ	CATCH BASIN
СМР	CORRUGATED METAL PIPE
CO	CLEANOUT
DCB	DOUBLE CATCH BASIN
DMH	DRAIN MANHOLE
CIP	CAST IRON PIPE
COND	CONDUIT
DIP	DUCTILE IRON PIPE
FES	FLARED END SECTION
FM	FORCE MAIN
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
GI	GUTTER INLET
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
НН	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
INV	INVERT ELEVATION
	INVERT ELEVATION
	LIGHT POLE
	METAL END SECTION
	POST INDICATOR VALVE
	POST INDICATOR VALVE PAVED WATER WAY

REINFORCED CONCRETE PIPE

TAPPING SLEEVE, VALVE AND BOX

RIM ELEVATION

**SEWER MANHOLE** 

UNDERGROUND

UTILITY POLE

Notes

#### General

- 1. CONTRACTOR SHALL NOTIFY "CALL BEFORE YOU DIG" (811 OR 1-800-922-4455) AT LEAST 72 HOURS BEFORE EXCAVATING.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES
- 3. WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS.

SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.

- 4. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
- 5. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S
- 6. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
- CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
- 8. DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
- 9. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
- 10. THIS PROJECT DISTURBS MORE THAN ONE ACRE OF LAND AND WILL REQUIRE ADHERENCE TO AND REGISTRATION FOR THE CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS FROM
- 11. STAGING AND STOCKPILE AREAS SHALL NOT BE LOCATED WITHIN ANY WETLAND AND ABUTTING RESOURCE AREA AND SHALL BE LOCATED WITHIN THE LIMITS OF DISTURBANCE.

CONSTRUCTION ACTIVITIES, EFFECTIVE DECEMBER 31, 2020.

#### Utilities

- 1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR IT'S REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
- 2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
- 3. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND ARCHITECT.
- 4. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR POLE RELOCATION AND FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY THE UTILITIES COMPANY.
- 5. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND SHALL FURNISH EXCAVATION, INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED SITEWORK RELATED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. SITE CONTRACTOR SHALL FURNISH CONCRETE ENCASEMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.

#### Layout and Materials

- 1. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR.
- 2. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.
- 3. FINAL LAYOUT SUBJECT TO CONDITIONS ENCOUNTERED IN THE FIELD.

#### <u>Demolition</u>

- CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
- 2. THE DEMOLITION LIMITS DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK
- 3. UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.

- 1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
- 2. CONTRACTOR OR QUALIFIED INSPECTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS OR MORE FREQUENTLY AS NEEDED, (MINIMUM) OR AS REQUIRED PER THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL ADDRESS DEFICIENCIES AND MAINTENANCE ITEMS WITHIN TWENTY-FOUR HOURS OF INSPECTION. CONTRACTOR SHALL PROPERLY DISPOSE OF SEDIMENT SUCH THAT IT DOES NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
- 3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
- 4. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM AMOUNT OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
- 5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.
- 6. VEGETATIVE SLOPE STABILIZATION WILL BE IMPLEMENTED WITHIN 14 DAYS AFTER GRADING OR CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. VEGETATIVE SLOPE STABILIZATION WILL BE USED TO MINIMIZE EROSION ON SLOPES OF 3:1 OR STEEPER. ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER MAY BE ESTABLISHED BY HYDRO-SEEDING OR SODDING. A SUITABLE TOPSOIL, GOOD SEEDBED PREPARATION, AND ADEQUATE LIME, FERTILIZER AND WATER WILL BE PROVIDED FOR EFFECTIVE ESTABLISHMENT OF THESE VEGETATIVE STABILIZATION METHODS. MULCH WILL ALSO BE USED AFTER PERMANENT SEEDING TO PROTECT SOIL FROM THE IMPACT OF FALLING RAIN AND TO INCREASE THE CAPACITY OF THE SOIL TO ABSORB WATER.

#### **Existing Conditions Information**

- BASE PLAN: THE PROPERTY LINES SHOWN WERE DETERMINED BY PLANS AND DEEDS OF RECORD AND MONUMENTS FOUND IN A FIELD SURVEY CONDUCTED BY VHB ON SEPTEMBER 19, 2022.
- 2. TOPOGRAPHY: ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.

#### Document Us

- 1. THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.
- 2. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
- SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.



100 Great Meadow Road Suite 200 Wethersfield, CT 06109 860.807.4300

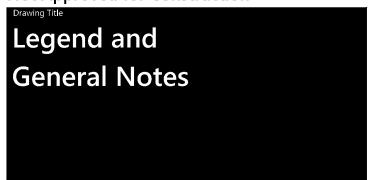
### **Collins Aerospace Solar**

1 Hamilton Rd Windsor Locks, Connecticut

1	Revised Fence Detail	3/1/2023	S
Design	DRB	Checked by SJI	<
Issued	l for	Date	

Not Approved for Construction

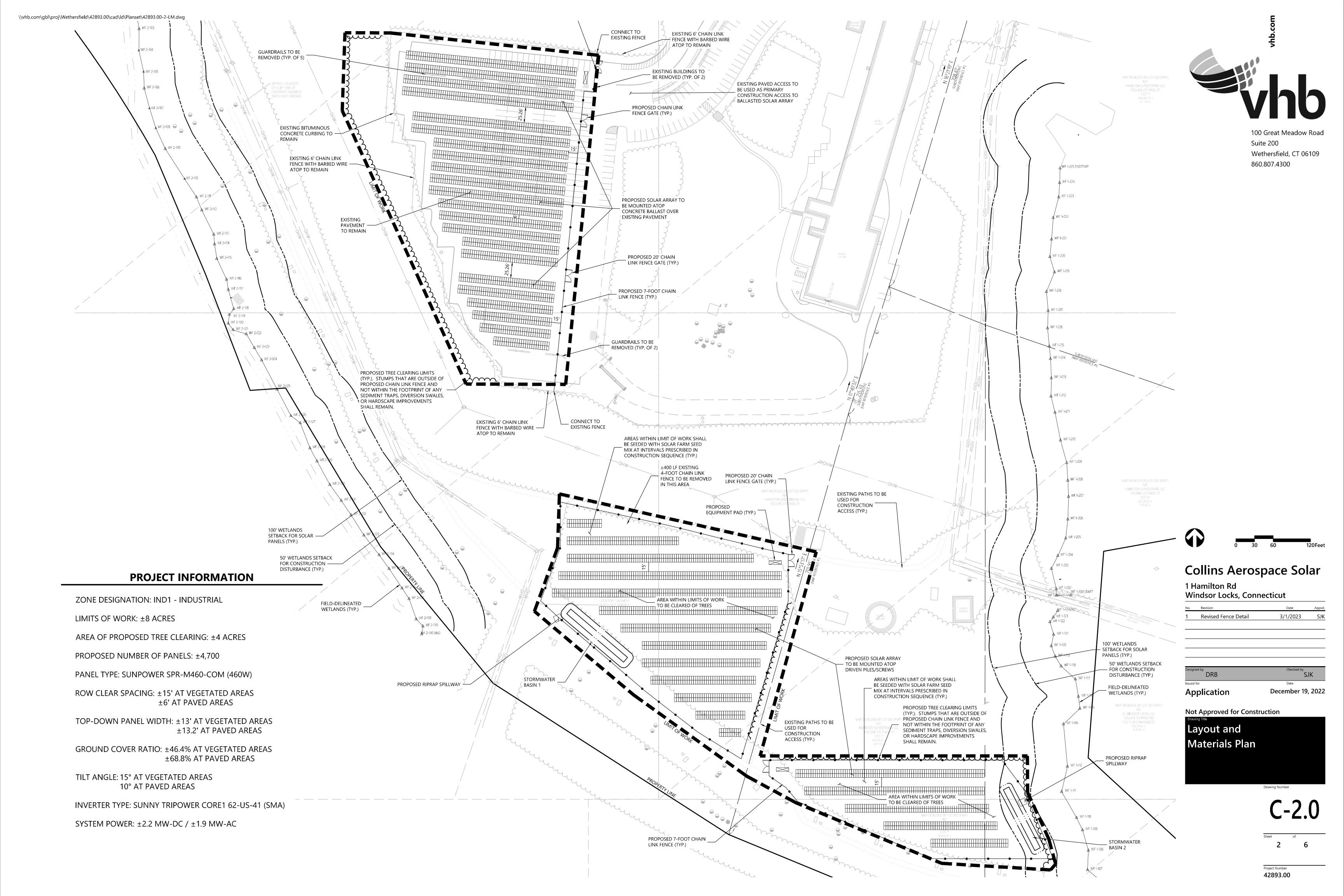
Application

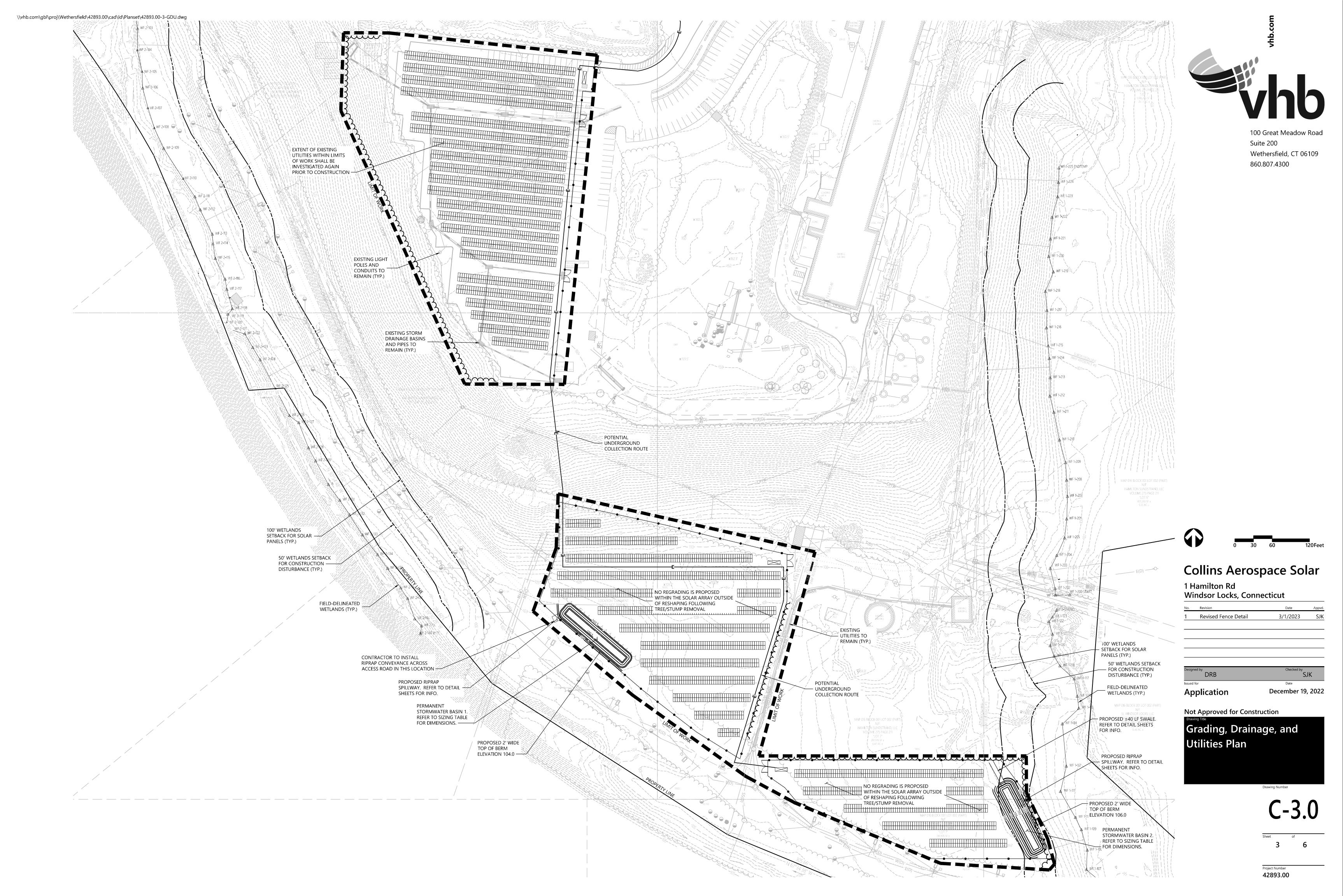


C-1.0

December 19, 2022







#### **CONSTRUCTION SEQUENCING**

- ALL CONSTRUCTION ACTIVITIES ARE EXPECTED TO BEGIN IN THE SPRING/SUMMER OF 2023 AND BE COMPLETED BY THE END OF 2023. THE GENERAL CONSTRUCTION NOTES ARE AS FOLLOWS: 1. THE SITE CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT ROADS/HIGHWAYS AND THEIR DRAINAGE SYSTEM, NEIGHBORING PROPERTIES, WETLANDS AND REGULATORY PROTECTED AREAS, WHETHER SUCH
- SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT. DESIGNATED ACCESS DRIVES MUST BE USED TO THE MAXIMUM EXTENTS POSSIBLE. IT IS REQUIRED THAT THE SITE CONTRACTOR PERFORM A DAILY INSPECTION OF ALL EROSION AND SEDIMENT CONTROL MEASURES EMPLOYED AT THE SITE.
- PERFORMING INSPECTIONS AND PREPARING REPORTS IN ACCORDANCE WITH SECTION 5(B)(4)(B) OF THE CONSTRUCTION GENERAL PERMIT. THESE INSPECTIONS SHALL TAKE PLACE WEEKLY, AT A MINIMUM, AND SHALL BE REQUIRED WITHIN 24 HOURS OF A RAINFALL EVENT EXCEEDING 0.5 INCHES. THE ENGINEER OF RECORD SHALL BE REQUIRED TO REVIEW AND COUNTER-SIGN THE PREPARED WEEKLY REPORTS. IT IS ALSO ANTICIPATED THAT REPRESENTATIVES FROM CTDEEP AND/OR THE STATE CONSERVATION DISTRICT MAY PERFORM PERIODIC INSPECTIONS.

2. A CTDEEP-APPROVED QUALIFIED INSPECTOR SHALL BE ASSIGNED TO BE RESPONSIBLE FOR

- ENGINEER OF RECORD WILL PERFORM MONTHLY PLAN IMPLEMENTATION INSPECTIONS UNTIL EROSION CONTROLS ARE IN PLACE, OR THE FIRST THREE MONTHS (WHICHEVER IS GREATER) AND WILL PREPARE REPORTS OF THE FINDINGS.
- 4. THROUGHOUT THE COURSE OF THE CONSTRUCTION PROJECT, ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE WARRANTED AT THE DISCRETION OF THE QUALIFIED INSPECTOR AND/OR DESIGN ENGINEER. THESE IMPROVEMENTS MUST BE IMPLEMENTED IN A TIMELY FASHION IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT. ADDITIONALLY, AREAS OF PROPOSED COMPACTED NATIVE SOIL ROADS SHALL BE CONVERTED TO STABLE GRAVEL ROADS IF/AS DETERMINED BY THE QUALIFIED INSPECTOR OR
- ENGINEER OF RECORD. PRIOR TO CONSTRUCTION, THE APPLICANT SHALL PROVIDE THE TOWN OF WINDSOR LOCKS
- WITH THE NAME OF CONTACT AND 24-HOUR CONTACT INFORMATION. 6. CONTRACTOR SHALL ADHERE TO 2002 CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL, AS AMENDED.
- 7. THE CONTRACTOR SHALL HOLD PRE-CONSTRUCTION MEETING(S). ATTENDEES SHALL INCLUDE, BUT NOT BE LIMITED TO, REPRESENTATIVES OF THE GENERAL CONTRACTOR, SITE CONTRACTOR, CTDEEP, TOWN OF WINDSOR LOCKS, ENGINEER OF RECORD, AND QUALIFIED SWPPP
- 8. THE CONTRACTOR SHALL CONTACT CALL-BEFORE-YOU-DIG (1-800-922-4455) PRIOR TO
- ENGAGING IN ANY EXCAVATION ACTIVITIES AT THE SITE. 9. THE CONTRACTOR SHALL NOTIFY THE TOWN OF WINDSOR LOCKS AGENT, ZONING
- ENFORCEMENT OFFICER, AND ENGINEERING DEPARTMENT, 48 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY. 10. NO CONSTRUCTION OF SITE IMPROVEMENTS MAY BEGIN UNTIL THE PROPER EROSION
- CONTROL MEASURES SERVING THE AREA TO BE DISTURBED ARE IN PLACE.
- 11. ANTICIPATED WORK HOURS WILL BE BETWEEN 7:00 AM AND 5:00 PM. 12. HIGH FLOTATION TIRE EQUIPMENT SHALL BE USED TO THE MAXIMUM EXTENTS PRACTICABLE IN LIEU OF TRACK CONSTRUCTION EQUIPMENT IN AN EFFORT TO AVOID COMPACTION OF THE

#### PRE-CONSTRUCTION SITE PROTECTION SEQUENCE (SPRING/SUMMER 2023)

- SURVEY AND MARK ALL WOODLAND CLEARING LIMITS.
- EXISTING ACCESS ROADS SHALL BE DESIGNATED AS EARLY AS FEASIBLE AND USED PRIMARILY FOR CONSTRUCTION TRAFFIC. 3. FIELD SURVEY AND MARK BOUNDARY BETWEEN CLEARING LIMITS AND GRUBBING LIMITS.
- 4. INSTALL EROSION AND SEDIMENT CONTROLS FOLLOWING THE CT GUIDELINES AND MANUFACTURER'S DIRECTIONS. DURING CONSTRUCTION, THE CONTRACTOR SHALL INSTALL MEASURES AS REQUIRED BY THE ENGINEER OF RECORD OR QUALIFIED INSPECTOR, TO PREVENT SEDIMENT-LADEN RUNOFF FROM REACHING WETLANDS OR DISCHARGING OFFSITE.
- CLEAR AND GRUB VEGETATION PER SITE PLANS. INSTALL STORMWATER BASINS AND SEDIMENT TRAPS AS EARLY AS FEASIBLE IN ACCORDANCE WITH THE APPROVED SITE-SPECIFIC SWPCP AND CT GUIDELINES. THE ENGINEER OF RECORD SHALL INSPECT FEATURES TO CONFIRM REQUIRED STORAGE CAPACITIES ARE PROVIDED AND THAT OUTLETS AND/OR SPILLWAYS ARE CONSTRUCTED CORRECTLY. DISCHARGE AREAS BELOW OUTFALLS MUST BE INSPECTED TO CONFIRM FLOW WILL BE OVER STABLE GROUND AND SHEET FLOW IS ENCOURAGED. IF DISTURBED SOILS ARE PRESENT, THE ENGINEER OF RECORD TO PROVIDE CORRECT MEASURES TO ADDRESS CONDITION.
- 6. SEED AND PROTECT DISTURBED SOILS AROUND SEDIMENT TRAPS AND BASINS WITHIN 72
- THE USE OF A TUB GRINDER IS RECOMMENDED FOR THE MULCHING OF FELLED TREES IF CHIPPED ON SITE. MULCH SHALL NOT BE CAST WIDESPREAD ACROSS SITE AS IT WILL INHIBIT VEGETATIVE GROWTH.
- 8. PERFORM EARTHWORK AND SHAPING ON THE SITE. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FROM AREAS PROPOSED FOR REGRADING. EXCESS SOIL WHICH IS NOT REUSED IN PROPOSED SITE GRADING AND SHAPING SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER, WHO SHALL DIRECT THE HANDLING OF THIS SOIL.
- 9. TOPSOIL SHALL BE REPLACED OVER REGRADED AREAS UPON COMPLETION OF MASS EARTHWORK ACTIVITIES AND AREAS WHICH WERE DISTURBED BY MASS EARTHWORK
- OPERATIONS SHALL BE RESEEDED WITHIN 72 HOURS OF COMPLETION. 10. THROUGHOUT CONSTRUCTION, THE CONTRACTOR SHALL ADDRESS ONGOING EROSION PROBLEMS USING TEMPORARY DIVERSIONS AND FILLING AND GRADING GULLIES.
- 11. UPON COMPLETION OF THIS CONSTRUCTION PHASE, ALL DISTURBED AREAS SHALL BE SEEDED WITH TACKIFIER AND ALLOWED TO GROW THROUGH A GROWING SEASON PRIOR TO INITIATION OF CONSTRUCTION SEQUENCE, TO THE SATISFACTION OF THE WEEKLY INSPECTOR, ENGINEER OF RECORD, AND/OR CONSERVATION DISTRICT.

#### CONSTRUCTION SEQUENCE (SUMMER/FALL 2023)

- INSTALL GROUND SCREWS OR CONCRETE BALLAST FOR SOLAR PANEL RACKING. THE INSTALLATION OF RACKING SHALL FOLLOW THE FOUNDATION INSTALLATION.
- RESEED AND REGRADE ALL AREAS DISTURBED BY CONSTRUCTION TRAFFIC WITHIN THE ARRAYS WHERE RACKS ARE INSTALLED AS EARLY AS POSSIBLE. RUTS AND RILLS SHALL BE SMOOTHED AND GRADED AS DISCOVERED.
- 4. INSTALL SOLAR PANEL MODULES IN THE RACKING. MUCH OF THIS WORK IS ANTICIPATED TO BE PERFORMED BY HAND AND LIGHT CONSTRUCTION EQUIPMENT WHICH WILL CAUSE MINIMAL DISTURBANCE COMPARED TO THE USE OF HEAVY EQUIPMENT. DESIGNATED ACCESS ROADS SHALL STILL BE USED TO THE MAXIMUM EXTENTS POSSIBLE.
- 5. UPON COMPLETION OF CONSTRUCTION, RE-SEED ALL DISTURBED AREAS WITHIN 72 HOURS AND PREVENT VEHICULAR TRAFFICKING OVER THESE AREAS. INSTALL FINAL LANDSCAPING.
- 6. AFTER SITE IS STABILIZED, AND AFTER INSPECTION BY DESIGN ENGINEER, OR OTHER OWNER'S REPRESENTATIVE, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS. ENTIRE SITE SHALL BE CHECKED FOR AND CLEANED OF SEDIMENT AS NEEDED.





100 Great Meadow Road Suite 200 Wethersfield, CT 06109 860.807.4300





1 Hamilton Rd Windsor Locks, Connecticut

Revised Fence Detail

DRB

3/1/2023

December 19, 2022

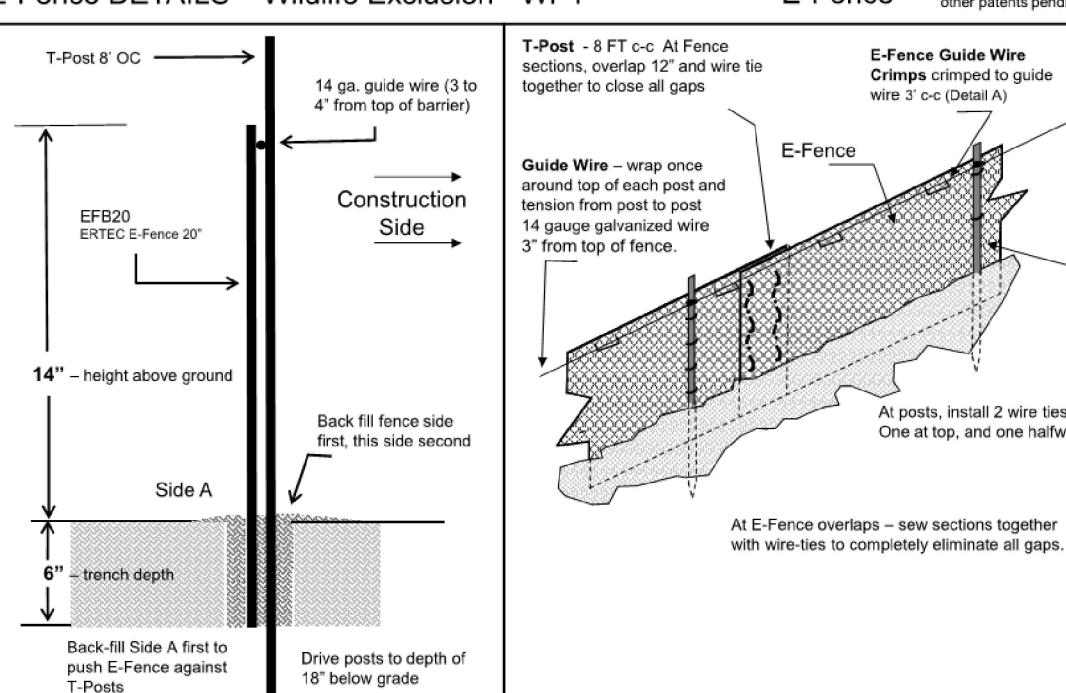
**Not Approved for Construction** 

**Erosion and Sediment Control Plan** 

42893.00

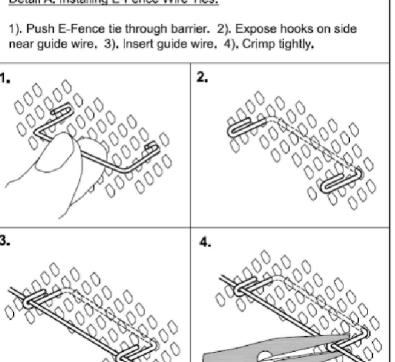
#### E-Fence DETAILS – Wildlife Exclusion - WPT

other patents pending)



E-Fence Guide Wire Crimps crimped to guide wire 3' c-c (Detail A) At posts, install 2 wire ties. One at top, and one halfway.

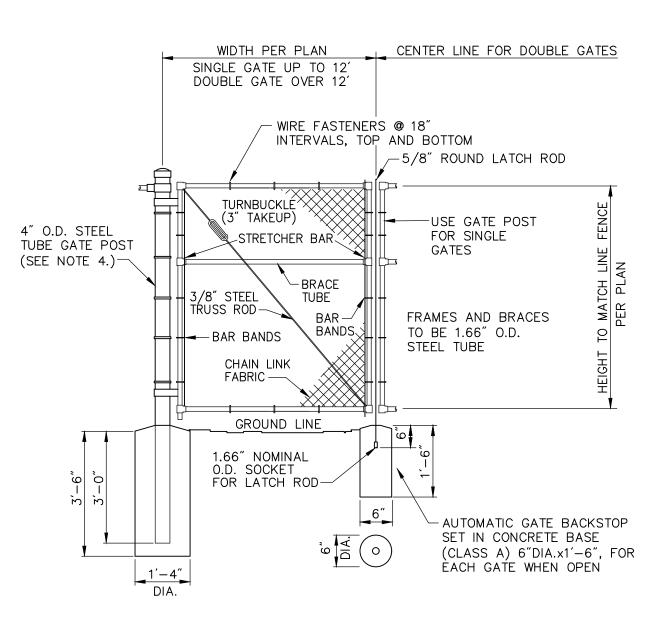
## E-Fence DETAILS – Guidewire Crimp Detall A: Installing E-Fence Wire Ties: 1). Push E-Fence tie through barrier. 2). Expose hooks on side near guide wire, 3), Insert guide wire, 4), Crimp tightly,



#### E-Fence™ DETAILS – Wildlife Exclusion

#### Installation Notes:

- Excavate a trench a minimum of 4" wide and a minimum of 5"
- T-posts shall be a minimum of 0.95 lbs/ft. T-posts shall be driven a minimum 18" deep into the ground 8' centers
- Insert barrier material into trench and attach to post in two places: 1) at 3" below top of fence and at 2) mid-height
- At 3 inches from top of fence (above wire tie), wrap 14 gauge galvanized wire once around each T-post and pull the guide wire from post to post, wrap, secure and pull wire tight between each
- At segment overlaps (roll length 100 or 150 LF), overlap segments a minimum of 12". Eliminate all gaps by tying sections together with tie wire in two vertical rows, as shown.
- Push E-Fence Guide Wire Crimps through the E-Fence and crimp the ties to the guide wire on the other side of the fence (two crimps per tie) at 3' intervals, as illustrated in Detail A of the installation guidelines. Crimp to the guide-wire securely.
- E-Fence must be installed in continuous lengths (100 or 150 feet rolls). Do not cut segments into shorter lengths unless necessary due to sudden changes in elevation.
- Backfill trench with trench spoils. Backfill from E-Fence side of posts first so that E-Fence is pushed up against T-posts. Back fill other side to complete backfill.



#### **Notes:**

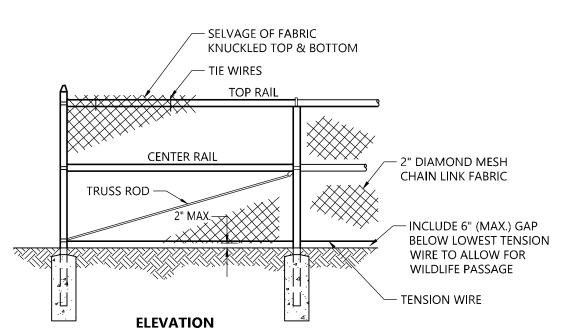
- 1. CHAIN LINK FABRIC FOR GATES TO BE THE SAME AS REQUIRED FOR FENCE.
- 2. GATE POST BASE-PORTLAND CEMENT CONCRETE (3000 PSI).
- 3. FENCE FABRIC, POSTS, FRAMEWORKS, AND HARDWARE SHALL BE GALVANIZED STEEL OR BLACK VINYL (AS INDICATED ON PLANS) PER SPECIFICATIONS.
- 4. GATE POSTS TO BE USED ON EACH SIDE OF SINGLE AND DOUBLE GATE OPENINGS.

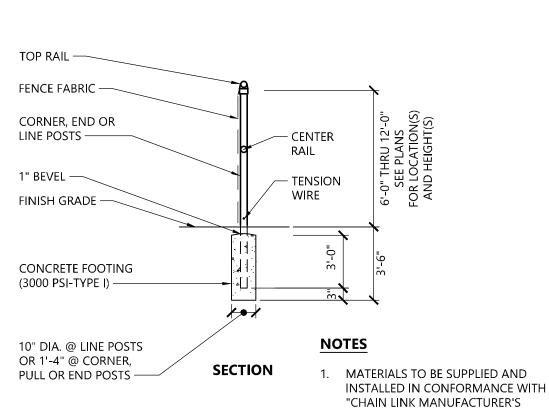
#### **Chain Link Fence Gate**

N.T.S. Source: VHB

#### **E-Fence Installation Details**

Source: Ertec Environmental Systems





7' Chain Link Fence 10/20 LD\_480 N.T.S. Source: VHB

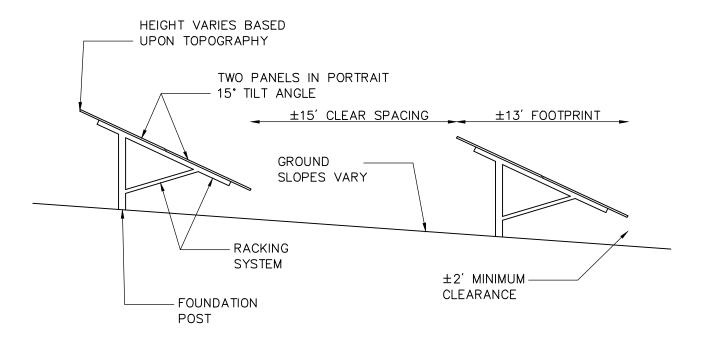
INSTITUTE" PRODUCT MANUAL.



PHOTOVOLTAIC INSTALLATION Site Location: 1 Hamilton Road, Windsor Locks, CT Owner: Collins Aerospace **IN CASE OF EMERGENCY CALL 911 ORANGE POLICE DEPARTMENT - (860) 627-1461** 

1. THE SITE FACILITY SIGN IS A DRAFT SHOWING THE MINIMUM AMOUNT OF INFORMATION THAT WILL BE PROVIDED. SIGN WILL BE 18" X 24". 2. ALL SIGNS WILL BE MOUNTED ONTO THE CHAIN LINK

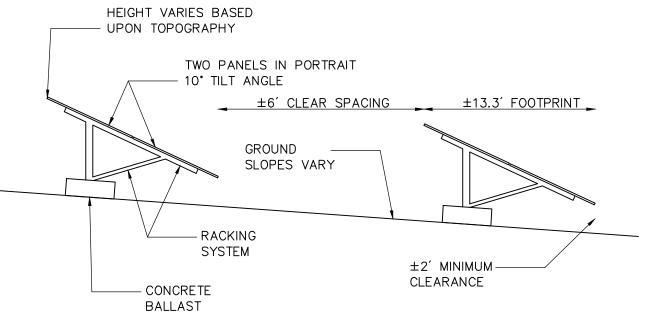
**Danger and Site Facility Signs** N.T.S. Source: VHB



FINAL DETERMINATION OF PANEL TYPE, RACKING SYSTEM, AND FOUNDATION POSTS TO BE DETERMINED PENDING BEST AVAILABLE TECHNOLOGY AT TIME OF CONSTRUCTION AND STRUCTURAL GROUND TESTING.

**Notes:** 

**Cross Section of Fixed-Tilt Panel Array in Vegetated Area** N.T.S. Source: VHB



1. FINAL DETERMINATION OF PANEL TYPE, RACKING SYSTEM, AND FOUNDATION POSTS TO BE DETERMINED PENDING BEST AVAILABLE TECHNOLOGY AT TIME OF CONSTRUCTION AND STRUCTURAL GROUND TESTING.

### **Cross Section of Fixed-Tilt Panel Array in Paved Area**

N.T.S. Source: VHB



100 Great Meadow Road

Wethersfield, CT 06109

Suite 200

860.807.4300

## **Collins Aerospace Solar**

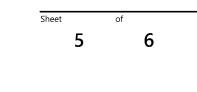
1 Hamilton Rd Windsor Locks, Connecticut

Revised Fence Detail 3/1/2023

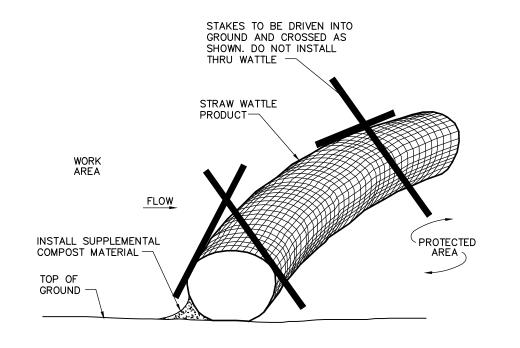
DRB December 19, 2022 **Application** 

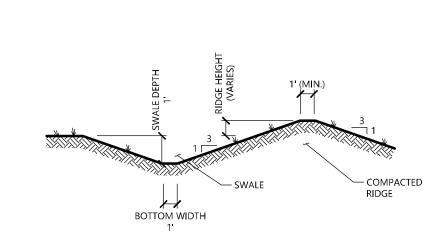
**Not Approved for Construction** 





42893.00





1. ALL SIDE SLOPES SHALL NOT EXCEED 3:1 2. THE INTENT IS TO USE THE MATERIAL EXCAVATED FROM THE SWALE TO CONSTRUCT THE RIDGE. 3. BOTTOM OF SWALE SHALL BE LINED WITH EROSION CONTROL BLANKET.

Source: VHB

**Diversion Swale** 

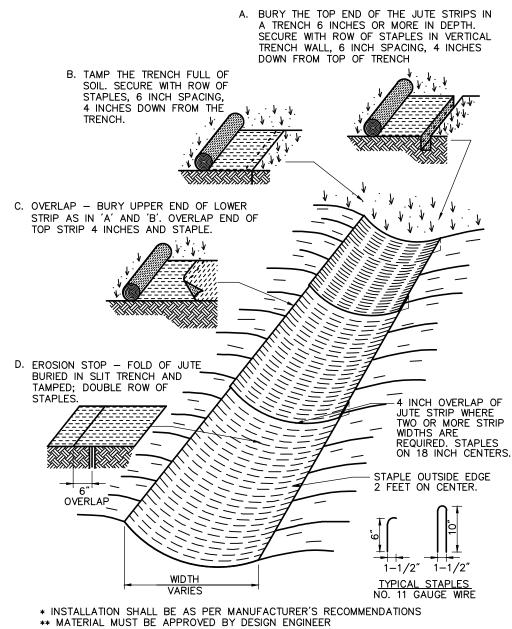
N.T.S.

LD\_658

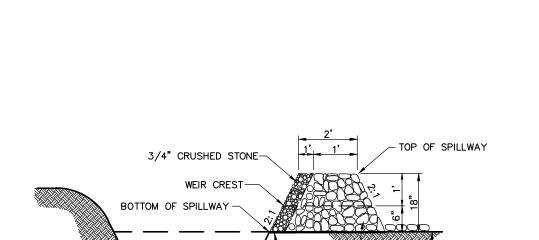
1½" X 1½" X 4' WOOD STAKE OR APPROVED EQUAL — SILT FENCE — WORK Area FLOW GROUND — 4" EMBEDMENT PLACE 4" OF FABRIC ALONG TRENCH AWAY FROM PROTECTED AREA BACKFILL AND COMPACT  $-\!\!\!-$ **WOOD STAKE** 

Silt Fence Barrier	1/16	
N.T.S.	Source: VHB	LD_650

JOINT DETAIL







**Trap Cross Section** 

GEOTEXTILE FABRIC

CONNDOT MODIFIED ORIGINAL GROUND ELEVATION

1. ALL VEGETATED SIDE SLOPES SHALL NOT EXCEED 3:1 2. SIDE SLOPES OF EMBANKMENT SHALL BE STABILIZED BY EROSION CONTROL BLANKETS OR AS DIRECTED BY THE ENGINEER.

3. TRAP SHALL BE DRAINED AND CLEANED OF SEDIMENT ONCE SEDIMENT IS > 1' ABOVE TRAP BOTTOM.

4. REFER TO "PERMANENT STORMWATER BASIN SIZING" TABLE FOR VARIABLE SIZING.

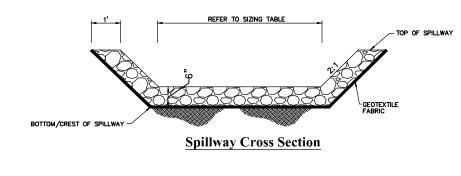
5. PERIMETER SILT FENCE SHALL BE REMOVED IMMEDIATELY DOWNSTREAM FROM SPILLWAY AND

REPLACED WITH E-FENCE.

Straw Wattle Installation

N.T.S.

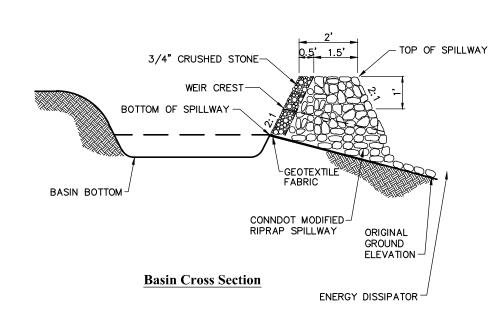
**Sediment Trap (TST)** 



- 1. ALL SIDE SLOPES SHALL NOT EXCEED 2:1 FOR SPILLWAY
- 2. STONE FOR SPILLWAY SHALL BE 8-12" RIPRAP 3. TOP OF EMBANKMENT SHALL BE 2' (MIN.) WIDTH AND 1' (MIN.) ABOVE TOP OF SPILLWAY. 4. SIDE SLOPES OF EMBANKMENT SHALL BE STABILIZED BY EROSION CONTROL BLANKETS OR AS DIRECTED BY THE ENGINEER.

5. REFER TO "PERMANENT STORMWATER BASIN SIZING" TABLE FOR VARIABLE SIZING. 6. PERIMETER SILT FENCE SHALL BE REMOVED IMMEDIATELY DOWNSTREAM FROM SPILLWAY AND

**Stormwater Basin Spillway** 

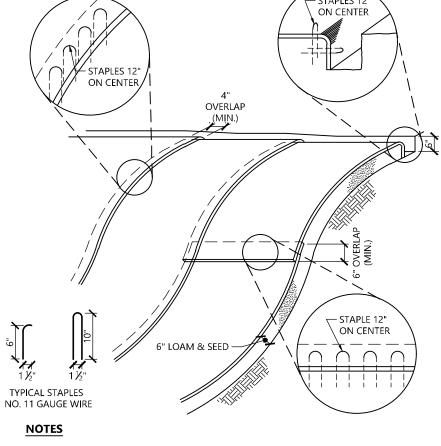


- 1. ALL VEGETATED SIDE SLOPES SHALL NOT EXCEED 3:1 2. TOP OF EMBANKMENT SHALL BE 2' (MIN.) WIDTH.
- 3. SIDE SLOPES OF EMBANKMENT SHALL BE STABILIZED EROSION CONTROL BLANKETS OR AS DIRECTED BY THE ENGINEER.

  4. REFER TO "PERMANENT STORMWATER BASIN SIZING" TABLE FOR VARIABLE SIZING.

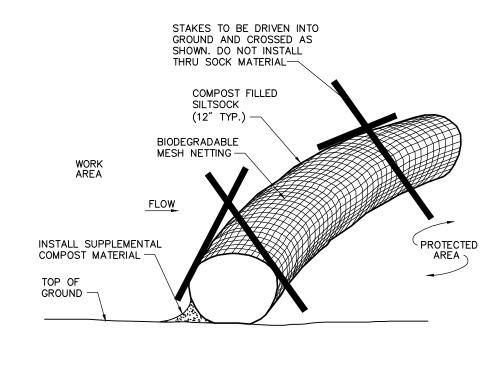
  5. PERIMETER SILT FENCE SHALL BE REMOVED IMMEDIATELY DOWNSTREAM FROM SPILLWAY AND REPLACED WITH E-FENCE.

**Permanent Stormwater Basin** 



- BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" DEEP TRENCH BACKFILL AND COMPACT TRENCH AFTER STAPLING.
- 2. ROLL THE BLANKET DOWN THE SWALE IN THE DIRECTION OF THE WATER FLOW. 3. THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROX. 4 INCH OVERLAP WHERE 2
- OR MORE STRIP WIDTHS ARE REQUIRED. 4. WHEN BLANKETS MUST BE SPLICED DOWN THE SWALE, PLACE UPPER BLANKET END
- OVER LOWER END WITH 6 INCH (MIN.) OVERLAP AND STAPLE BOTH TOGETHER.

5. METHOD OF INSTALLATION SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS. 6. EROSION CONTROL BLANKETS SHALL BE USED IN ALL AREAS WHERE SLOPES EXCEED 3:1. **Erosion Control Blanket Slope Installation** REV LD\_680



- APPROVED EQUAL. 2. SILTSOCKS SHALL OVERLAP A MINIMUM OF 12 INCHES.
- SILTSOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.

SILTSOCK SHALL BE 12" DIAMETER FILTREXX SILTSOXX, OR

- 4. COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.
- 5. IF NON BIODEGRADABLE NETTING IS USED THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFFSITE.

**Compost Filter Sock (CFS)** 

LD\_658

## **Collins Aerospace Solar**

100 Great Meadow Road

Wethersfield, CT 06109

Suite 200

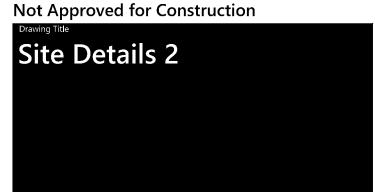
860.807.4300

1 Hamilton Rd Windsor Locks, Connecticut

No. Revision Revised Fence Detail 3/1/2023 SJK

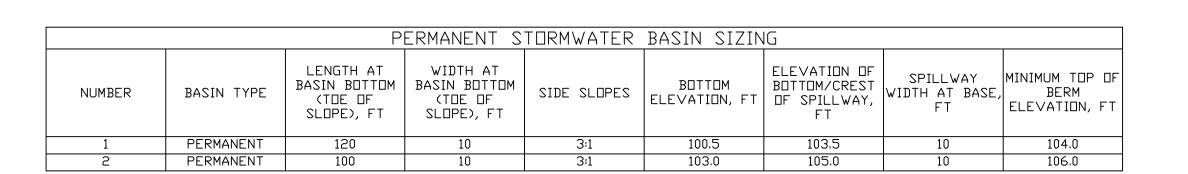
DRB

**Application** 



December 19, 2022

42893.00



Sizing Tables for Temporary & Permanent Stormwater Features

N.T.S. Source: VHB