Site Plans

Issued for Application

Date Issued December 2, 2019

Latest Issue December 2, 2019

Photovoltaic Installation

117 Oil Mill Road Waterford, Connecticut

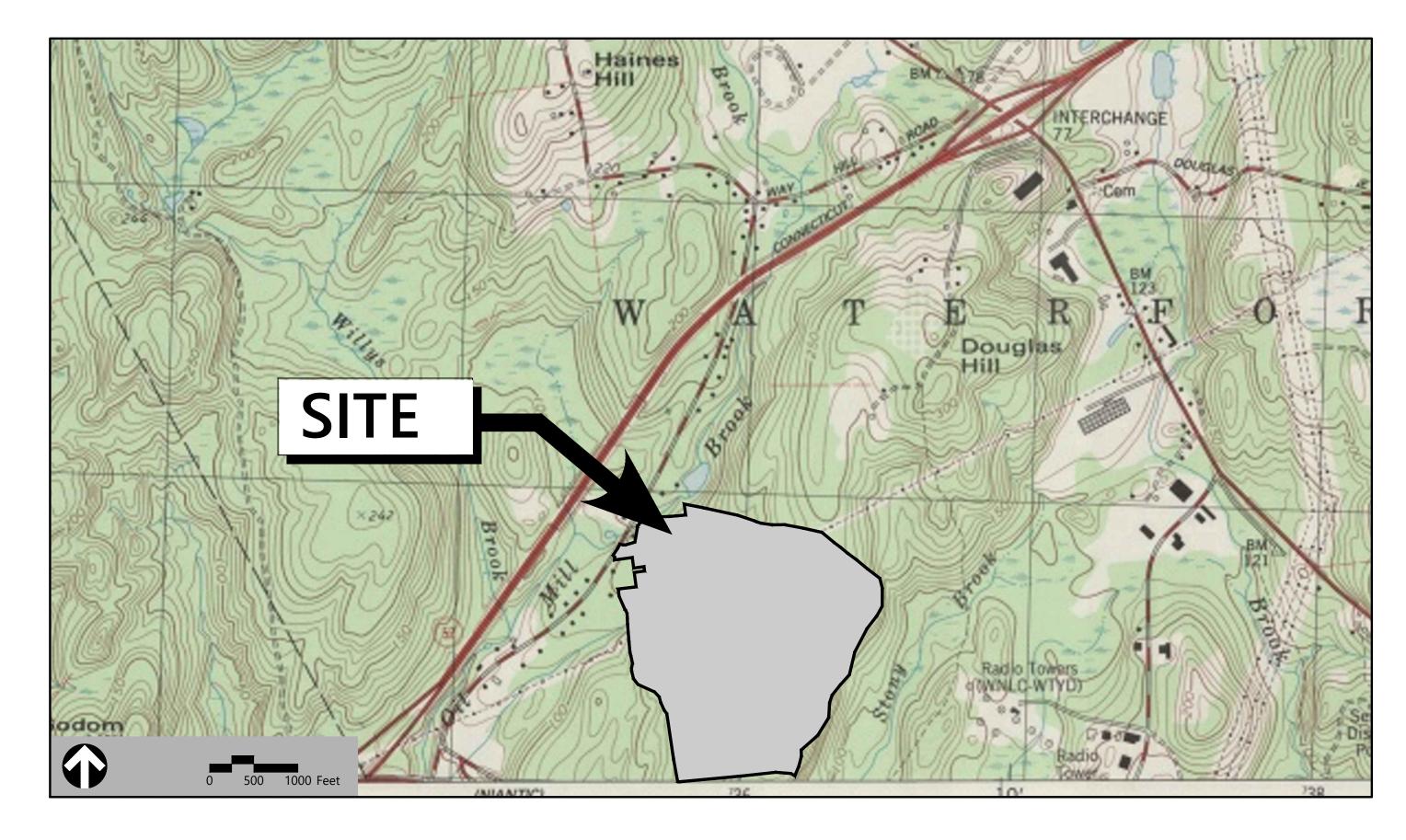
Applicant

GRE Gacrux, LLC 10 Main Street, Suite E Middletown, CT 06457

Map / Lot: 80 / 5497

Owner

Rosalie Irene Maguire & Todd Carl Willis 149 Watson Road Preston, CT 06365



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Site Details

December 2, 2019



Latest Issue

February 22, 2018

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		Leg	jena		
Exist.	Prop.		Exist.	Prop.	
		PROPERTY LINE	and the second of the second o	Company of the Compan	CONCRETE
		PROJECT LIMIT LINE	[4,5 m, 6 m, 1 m]	4.5 W. \$455.5	HEAVY DUTY PAVEMENT
		RIGHT-OF-WAY/PROPERTY LINE			BUILDINGS
		EASEMENT	KONJOKON		RIPRAP
			62Uñ082U		CONSTRUCTION EXIT
		BUILDING SETBACK		///// 	CONSTRUCTION EXIT
10+00	10+00	PARKING SETBACK BASELINE	27.35 TC×	27.35 TC×	TOP OF CURB ELEVATION
			26.85 BC×	26.85 BC×	BOTTOM OF CURB ELEVATION
		CONSTRUCTION LAYOUT	132.75 ×	132.75 ×	SPOT ELEVATION
		ZONING LINE	45.0 TW × 38.5 BW	45.0 TW 38.5 BW	TOP & BOTTOM OF WALL ELEVATION
		TOWN LINE	-	•	BORING LOCATION
		LIMIT OF DISTURBANCE	ě	Ě	TEST PIT LOCATION
<u>A</u>		WETLAND LINE WITH FLAG	→ MW	→ MW	MONITORING WELL
		FLOODPLAIN			
		100-YEAR FLOOD LIMITS	——UD ——	——UD——	UNDERDRAIN
		- TOO TENTITE OF ENTITE	12"D	12″D—►	DRAIN
		GRAVEL ROAD	6"RD	6″RD—►	ROOF DRAIN
EOP	EOP	EDGE OF PAVEMENT	12"S	12"S	SEWER
BB	BB	BITUMINOUS BERM	FM	<u>FM</u>	FORCE MAIN
BC	BC		OHW	——— OHW ———	OVERHEAD WIRE
CC	CC	BITUMINOUS CURB	6"W	6"W	WATER
	CG	CONCRETE CURB	4"FP	4"FP	FIRE PROTECTION
		CURB AND GUTTER		2"DW	DOMESTIC WATER
	<u>ECC</u>	EXTRUDED CONCRETE CURB	3"G	G	GAS
CC	MCC	MONOLITHIC CONCRETE CURB	——Е——	——Е——	ELECTRIC
CC	PCC PCC	PRECAST CONC. CURB	STM	STM	STEAM
SGE	SGE	SLOPED GRAN. EDGING	——т—	—т—	TELEPHONE
VGC	VGC	VERT. GRAN. CURB	—— FA——	——FA——	FIRE ALARM
		LIMIT OF CURB TYPE		——CATV——	CABLE TV
		SAWCUT	-		SAULE IV
					CATCH BASIN
(//////		BUILDING			DOUBLE CATCH BASIN
] ⊲EN	BUILDING ENTRANCE		===	GUTTER INLET
	_ J∢ LD	LOADING DOCK	D	•	DRAIN MANHOLE
•	•	BOLLARD	=TD=		TRENCH DRAIN
D	D	DUMPSTER PAD	I	Ľ	PLUG OR CAP
-0-	•	SIGN	CO	co •	CLEANOUT
	=	DOUBLE SIGN	>	>	FLARED END SECTION
			-	\checkmark	HEADWALL
тт		STEEL GUARDRAIL			
		WOOD GUARDRAIL	(\$)	•	SEWER MANHOLE
			CS ●	CS ●	CURB STOP & BOX
	====	PATH	WV	₩V •	WATER VALVE & BOX
$\bigvee \bigvee$		TREE LINE	TSV	TSV	TAPPING SLEEVE, VALVE & BOX
-×	-xx	WIRE FENCE	→	→	SIAMESE CONNECTION
-0	•	FENCE	HYD	HYD ©	FIRE HYDRANT
	-	STOCKADE FENCE	WM	WM	
.0000000		STONE WALL	PIV	PIV	WATER METER
		RETAINING WALL	(W)		POST INDICATOR VALVE
		STREAM / POND / WATER COURSE		<u></u>	WATER WELL
		DETENTION BASIN	GG O	GG O	GAS GATE
	• • • • • • • • • • • • •	HAY BALES	GM ∙	GM ⊡	GAS METER
—×——×—	_××_	SILT FENCE	Œ.	● EMH	ELECTRIC MANHOLE
· c:::::> ·	· c:::::> ·	SILT SOCK / STRAW WATTLE	EM	EM	
		S.E. SSON, CHANT WITHE	- \$	<u></u>	ELECTRIC METER
4	 4 	MINOR CONTOUR		▼ TMH	LIGHT POLE
— — 20 — —	20	MAJOR CONTOUR		• 114111	TELEPHONE MANHOLE
(10)	10	PARKING COUNT	T	T	TRANSFORMER PAD
	©10	COMPACT PARKING STALLS	-0-	•	UTILITY POLE
DYL	DYL				
		DOUBLE YELLOW LINE	0-	← 	GUY POLE
SL	SL	STOP LINE	HH _	HH	GUY WIRE & ANCHOR
		CROSSWALK	⊡ PB	⊡ PB	HAND HOLE
		ACCESSIBLE CURB RAMP		<u> </u>	PULL BOX
گ	گ	ACCESSIBLE PARKING	Matc	chline	MATCHLINE
Ė.	گ	VAN-ACCESSIBLE PARKING			v. Grienve

	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
CMP	CORRUGATED METAL PIPE
СО	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
l=	INVERT ELEVATION
LP	LIGHT POLE
MES	METAL END SECTION
PIV	POST INDICATOR VALVE
PWW	PAVED WATER WAY
PVC	POLYVINYLCHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R=	RIM ELEVATION
SMH	SEWER MANHOLE
TSV	TAPPING SLEEVE, VALVE AND BOX
LIC	LINDERCROLIND

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 SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
- 3. WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS.
- 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.
- 7. 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.
- 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 FIVE ACRES 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 CONSTRUCTION ACTIVITIES, EFFECTIVE OCTOBER 1, 2019.
- 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.

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. RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:
 - A. PAVEMENTS AND CONCRETE SURFACES: FLUSH
 - B. ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
 - C. LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
- 4. 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.
- 5. 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.
- 6. 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

- PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR.
- 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.

Demolition

- 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.

rosion Control

- 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 OF TIME BEFORE THEY ARE COVERED, SEEDED, OR OTHERWISE STABILIZED
- 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.

Document Use

- 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.
- 3. 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

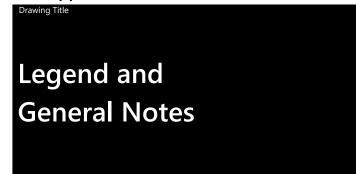
Photovoltaic Installation 117 Oil Mill Road

Waterford, Connecticut

No.	Revision	Date	App
Design	ed by	Checked by	

Application December 2, 2019

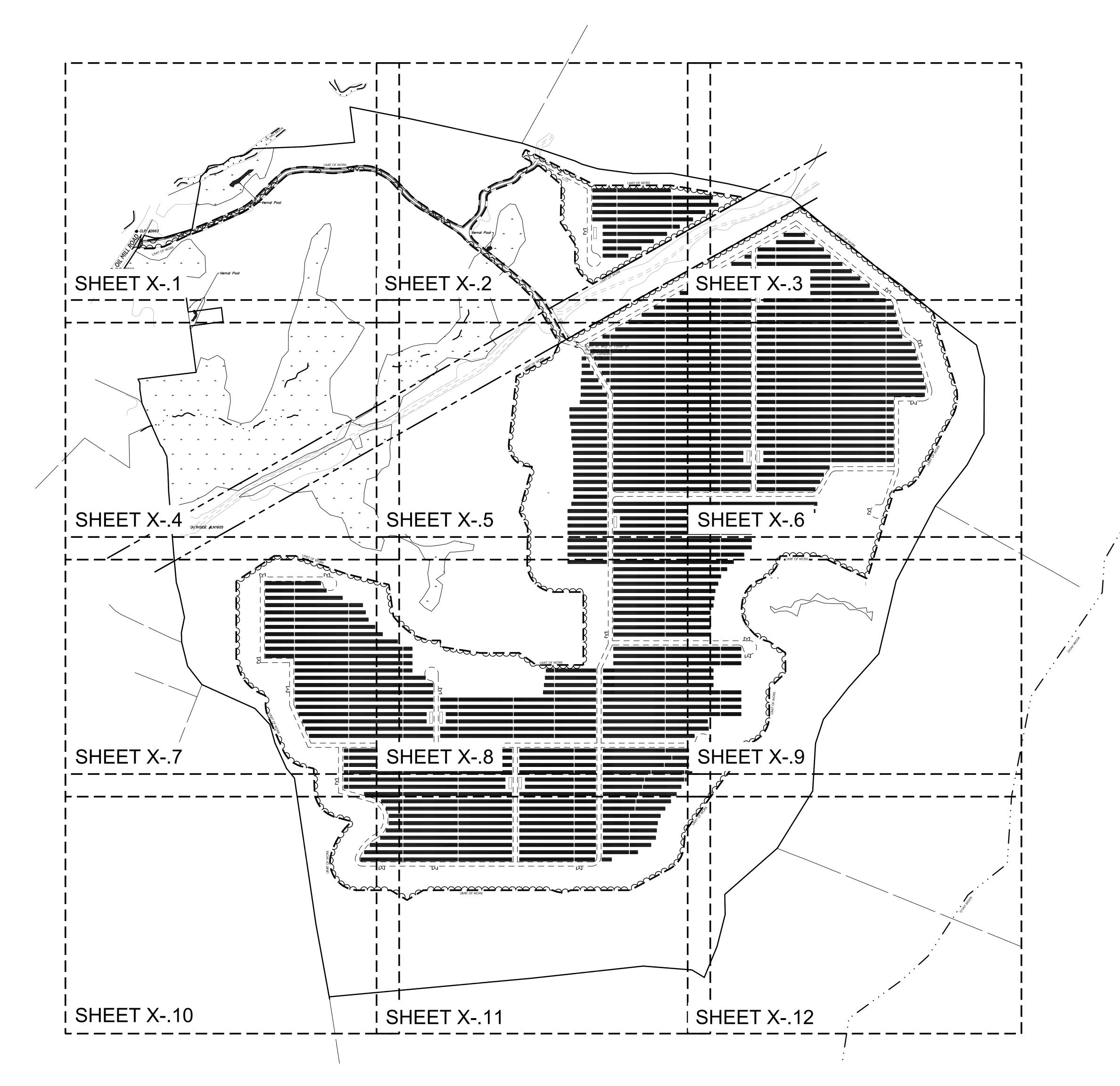
Not Approved for Construction



C-1

6heet of **43**

Project Number









Photovoltaic Installation

117 Oil Mill Road Waterford, Connecticut

Application December 2, 2019

Not Approved for Construction

Key Plan

PROJECT INFORMATION

PARCEL SIZE: ±152 ACRES

ZONE DESIGNATION: RU-120 RURAL RESIDENTIAL

LIMIT OF WORK: ±75 ACRES

AREA OF PROPOSED TREE CLEARING: ±75 ACRES (PRE-TIMBER HARVEST)

NON-DISTURBANCE BUFFER TO WETLANDS: > 100'

PROPOSED NUMBER OF PANELS: 45,976

PANEL TYPE: JINKO SOLAR EAGLE HC 72M G2 400W

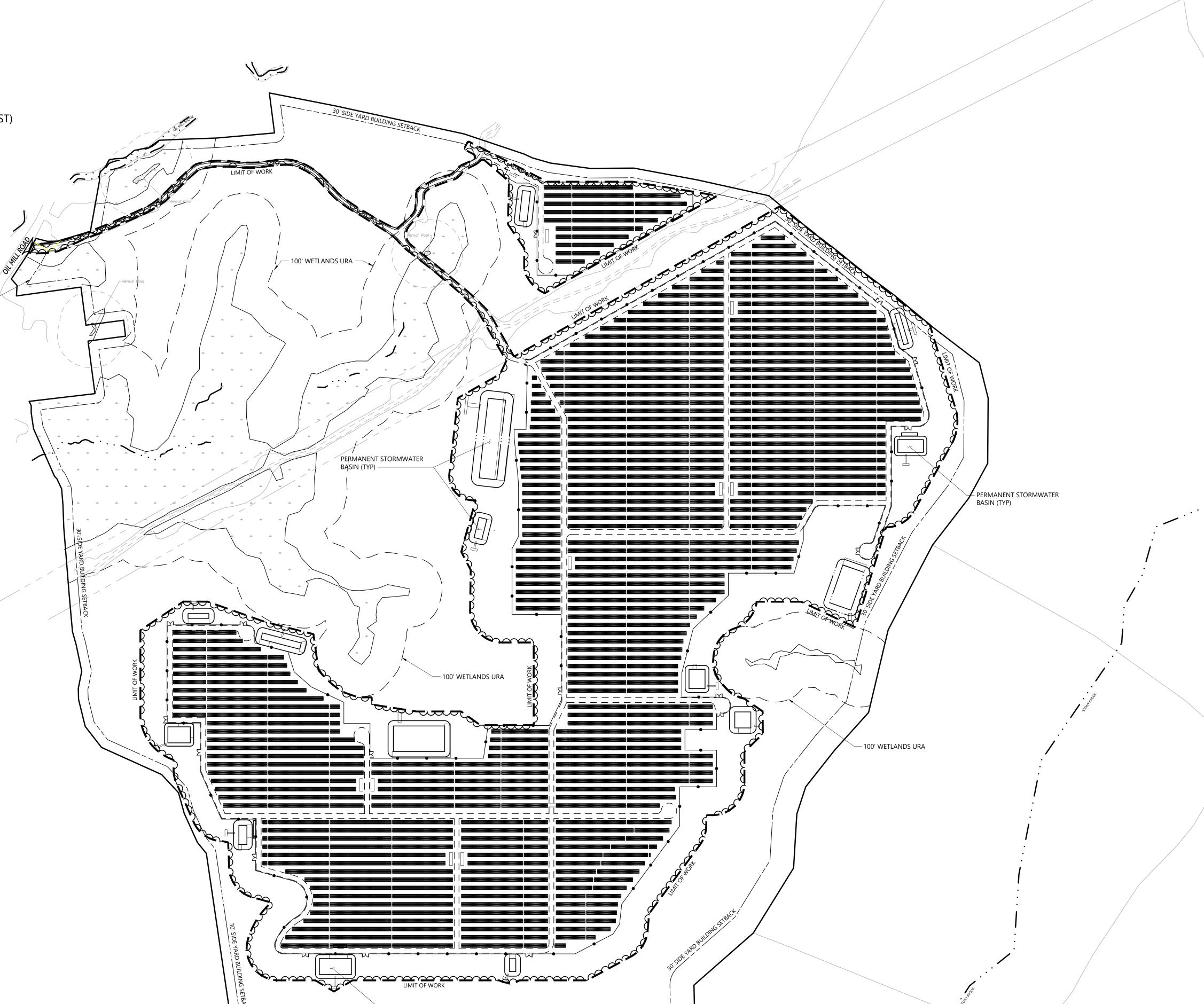
ROW SPACING: 14.5' CLEAR

TILT ANGLE: 25°

INVERTER TYPE: SOLECTRIA RENEWABLES XGI 1000-60/65

SYSTEM POWER: 18.39 MW-DC / ±15.33 MW-AC

50' FRONT YARD BUILDING SETBACK

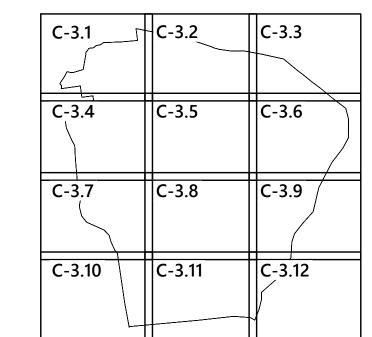


– PERMANENT STORMWATER BASIN (TYP)

30' SIDE YARD BUILDING SETBACK



100 Great Meadow Road Suite 200 Wethersfield, CT 06109 860.807.4300



Key

Not To Scale





Photovoltaic Installation
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Revision Date Appvd.

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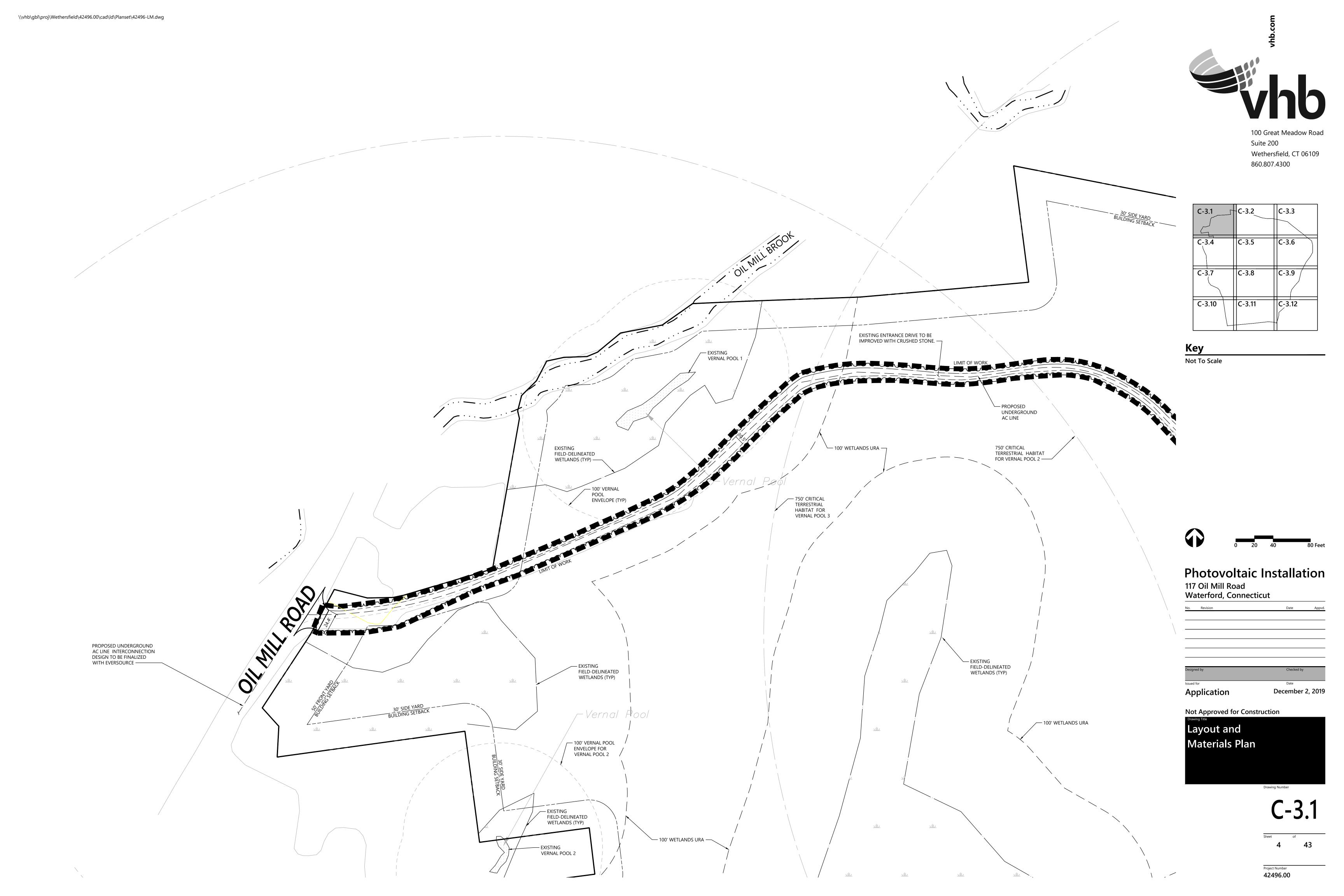
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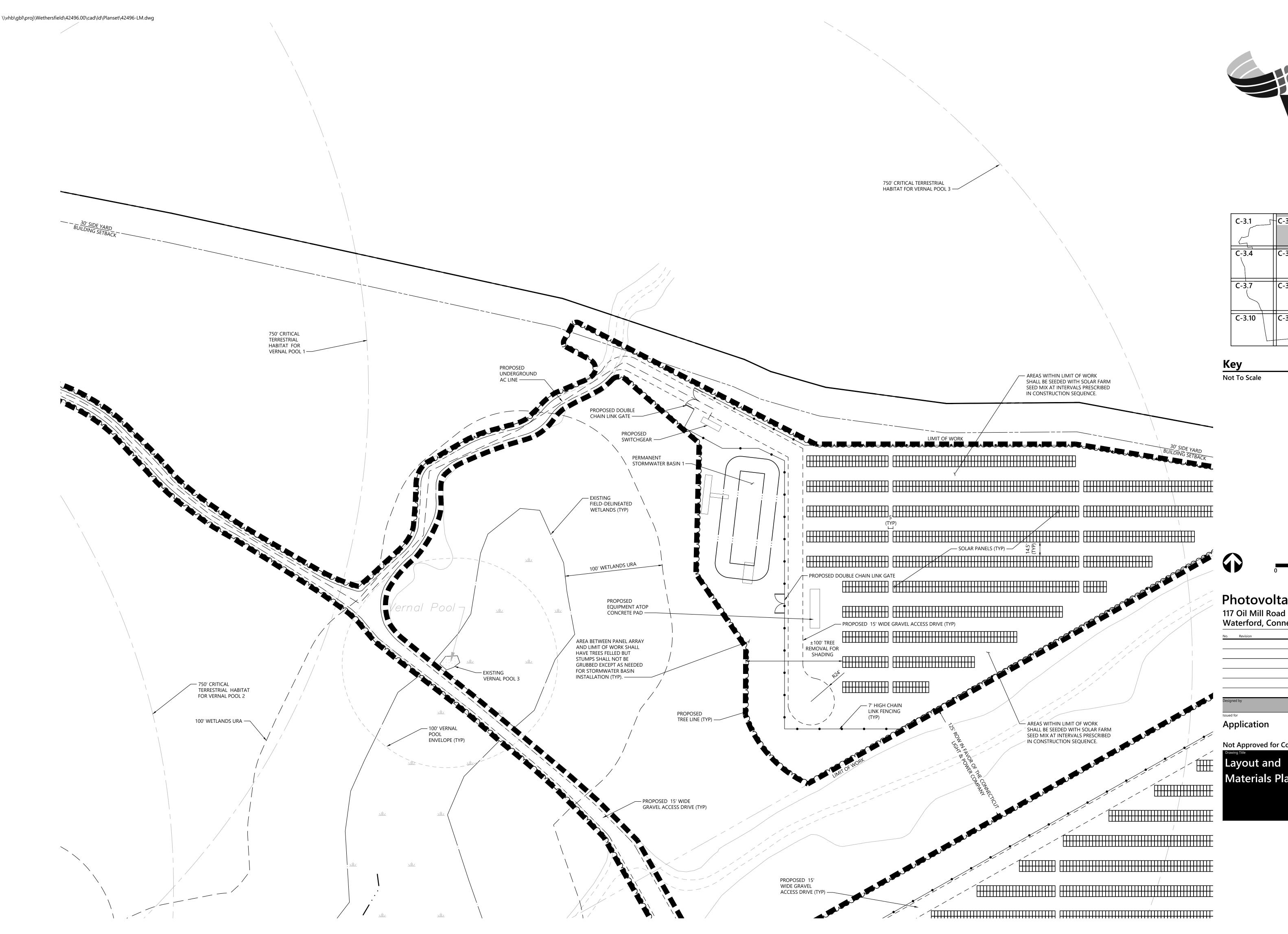
Layout and Materials Plan - Overall

Drawing N

C-3.0









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	C-3.1	C-3.2	C-3.3
	C-3.4	C-3.5	C-3.6
	C-3.7	C-3.8	C-3.9
	C-3.10	C-3.11	C-3.12

Photovoltaic Installation

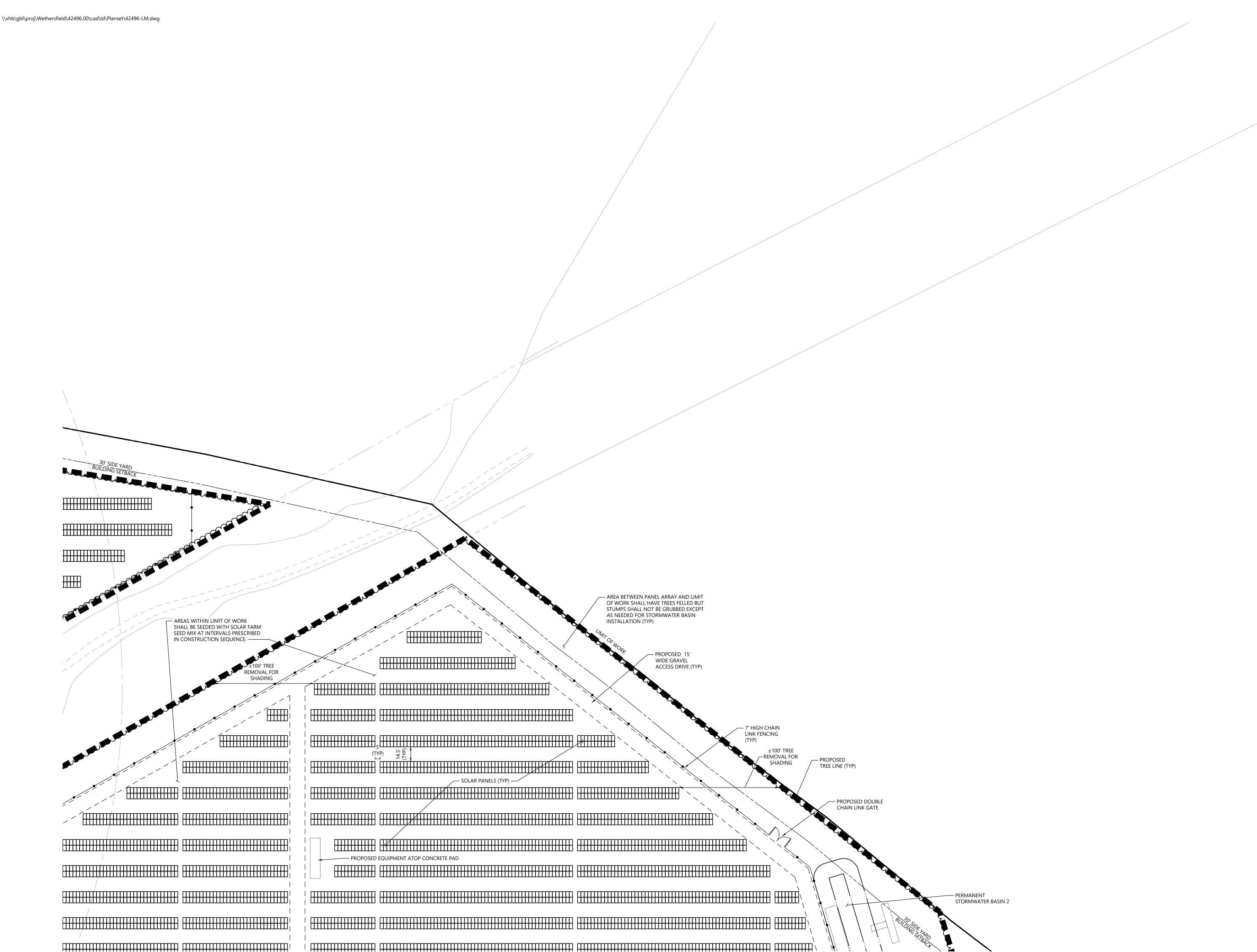
Waterford, Connecticut

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Layout and **Materials Plan**

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Suite 200

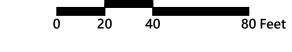
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Wethersfield, CT 06109

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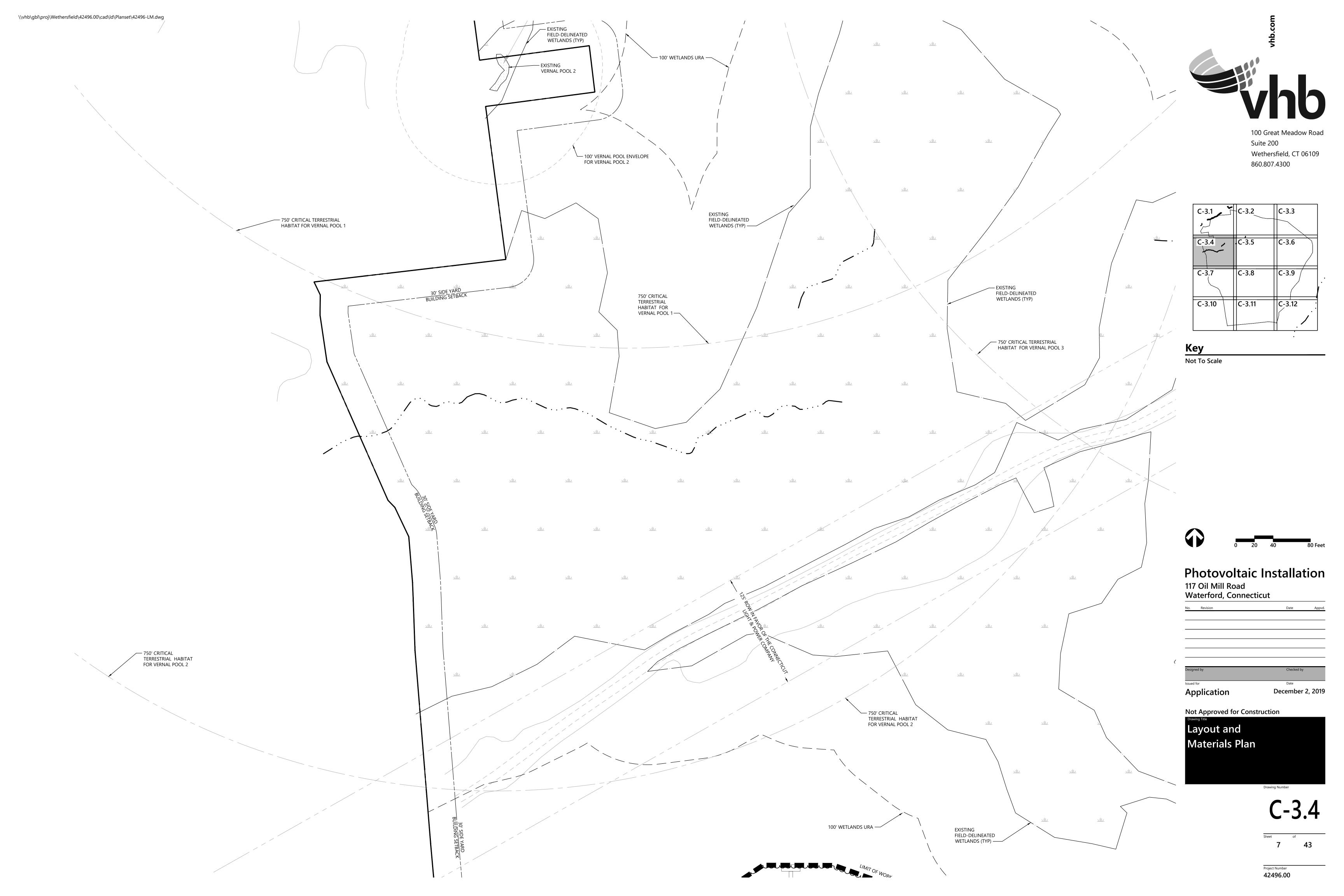
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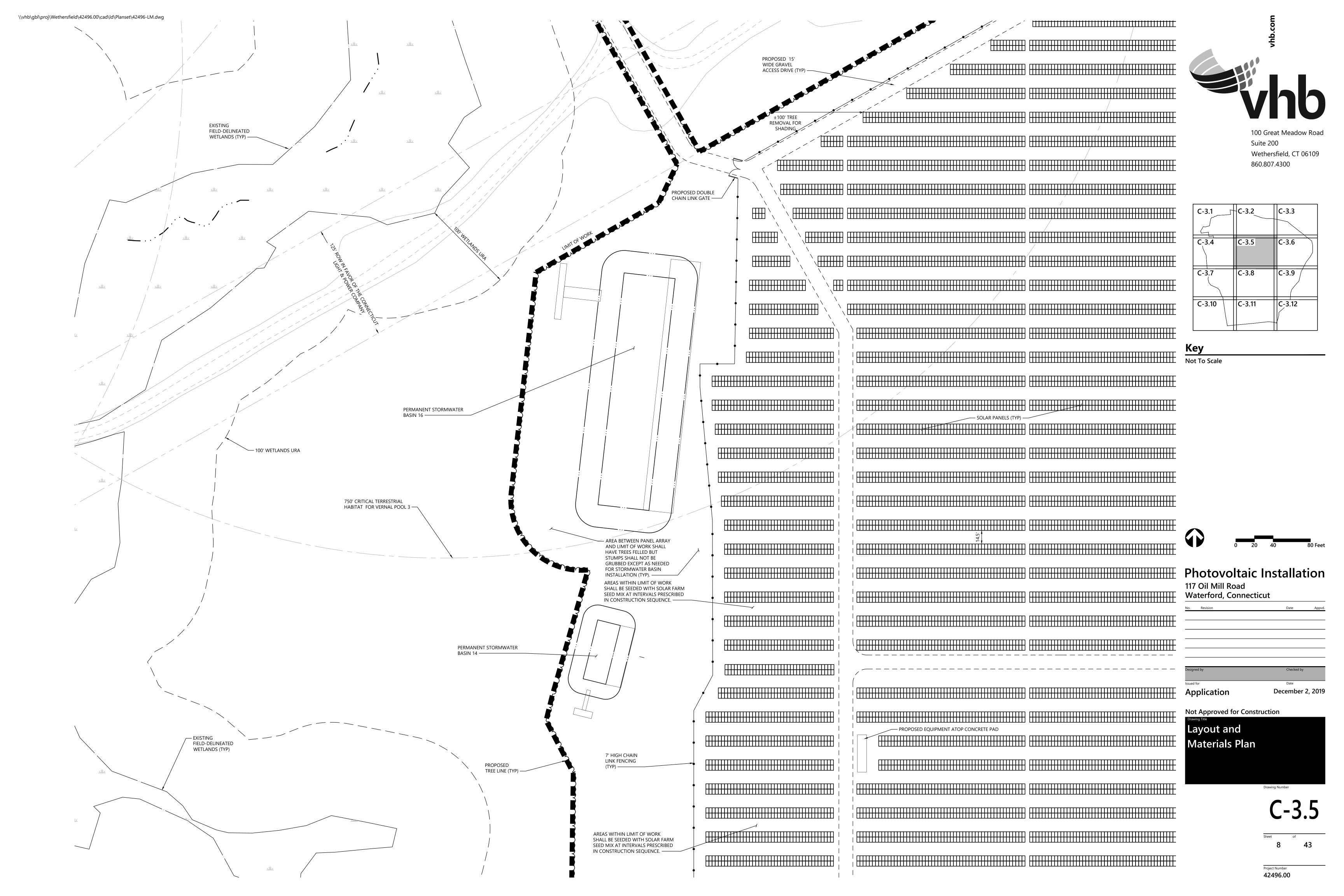
Layout and Materials Plan

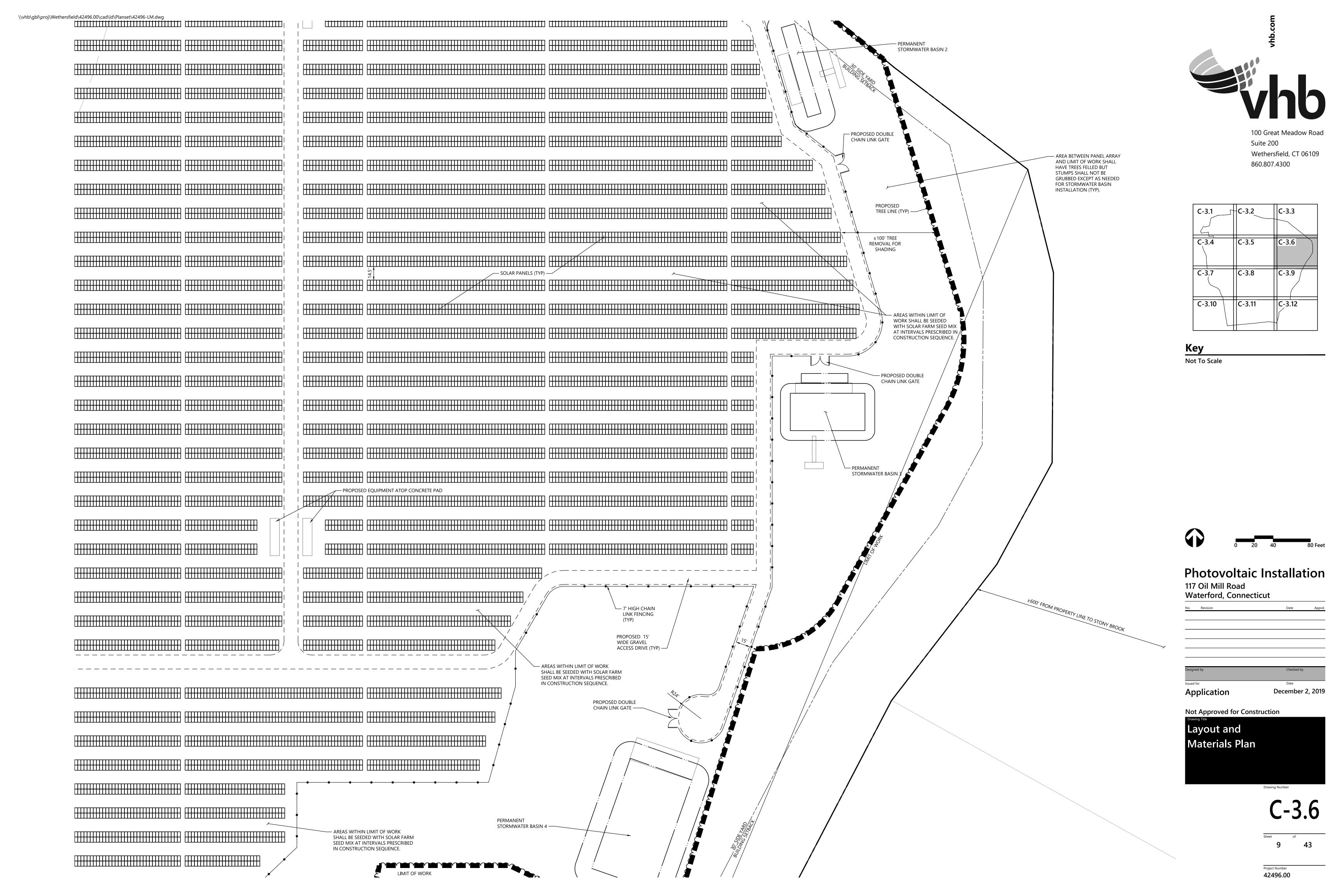
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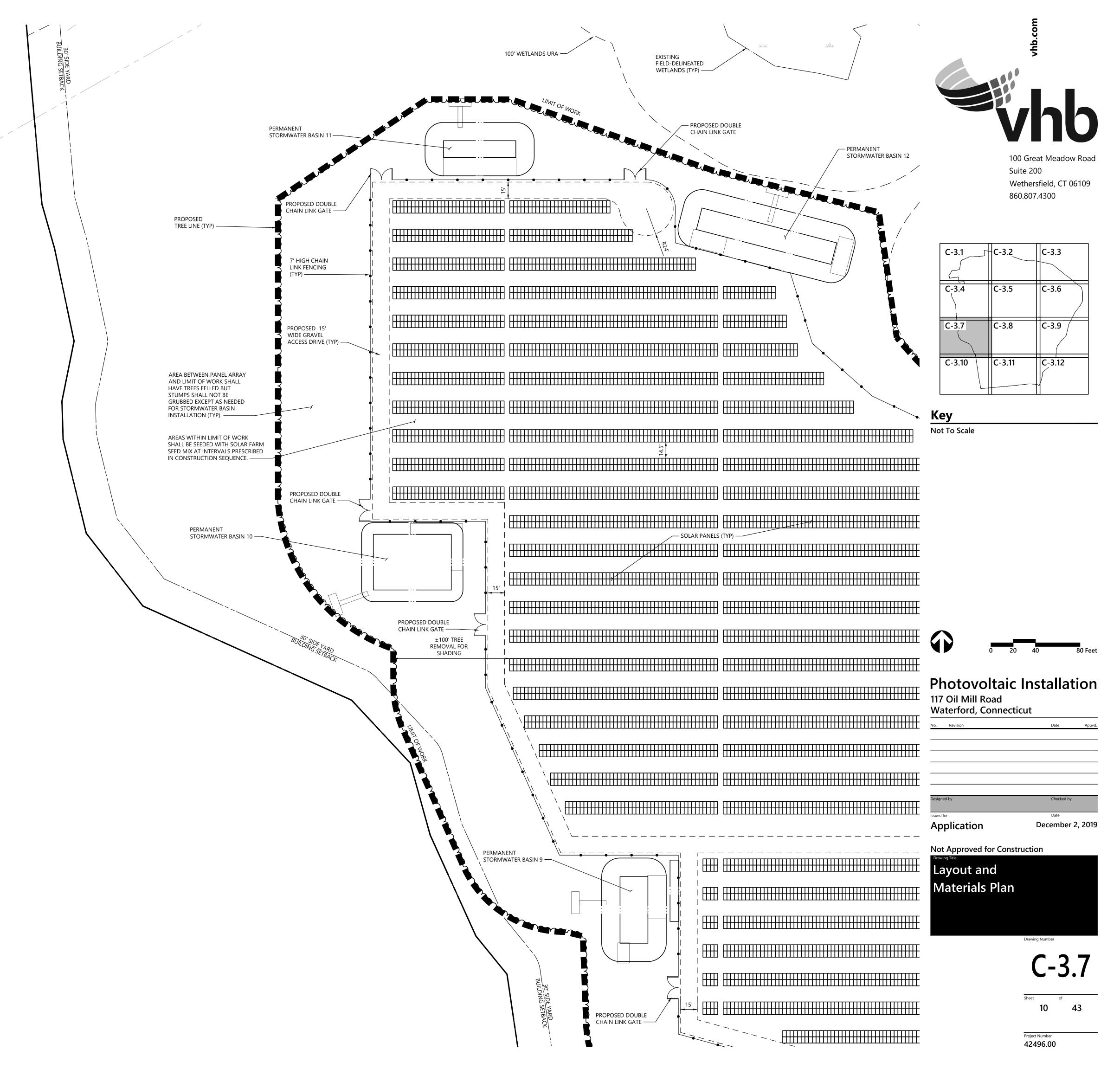
C-3.3

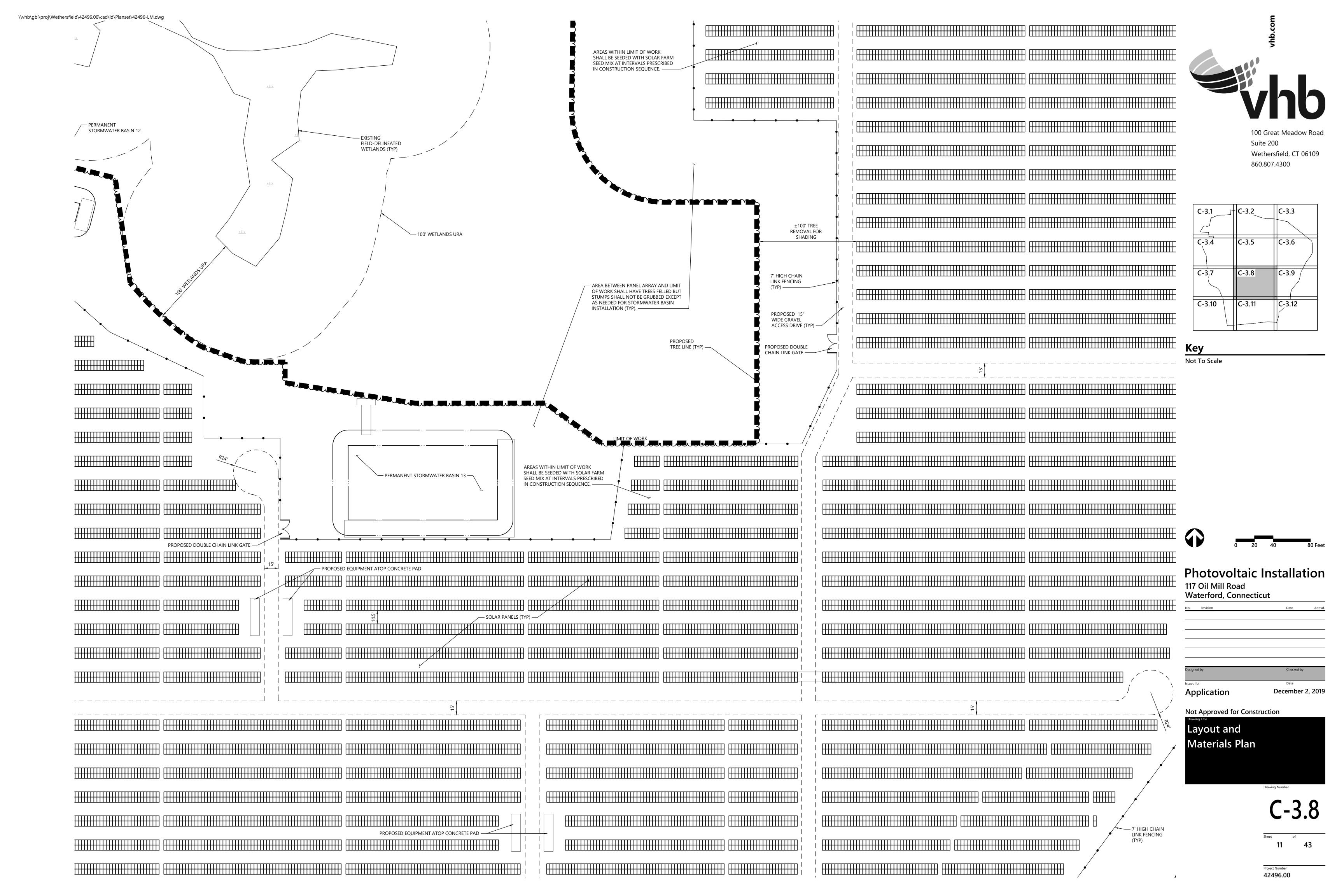
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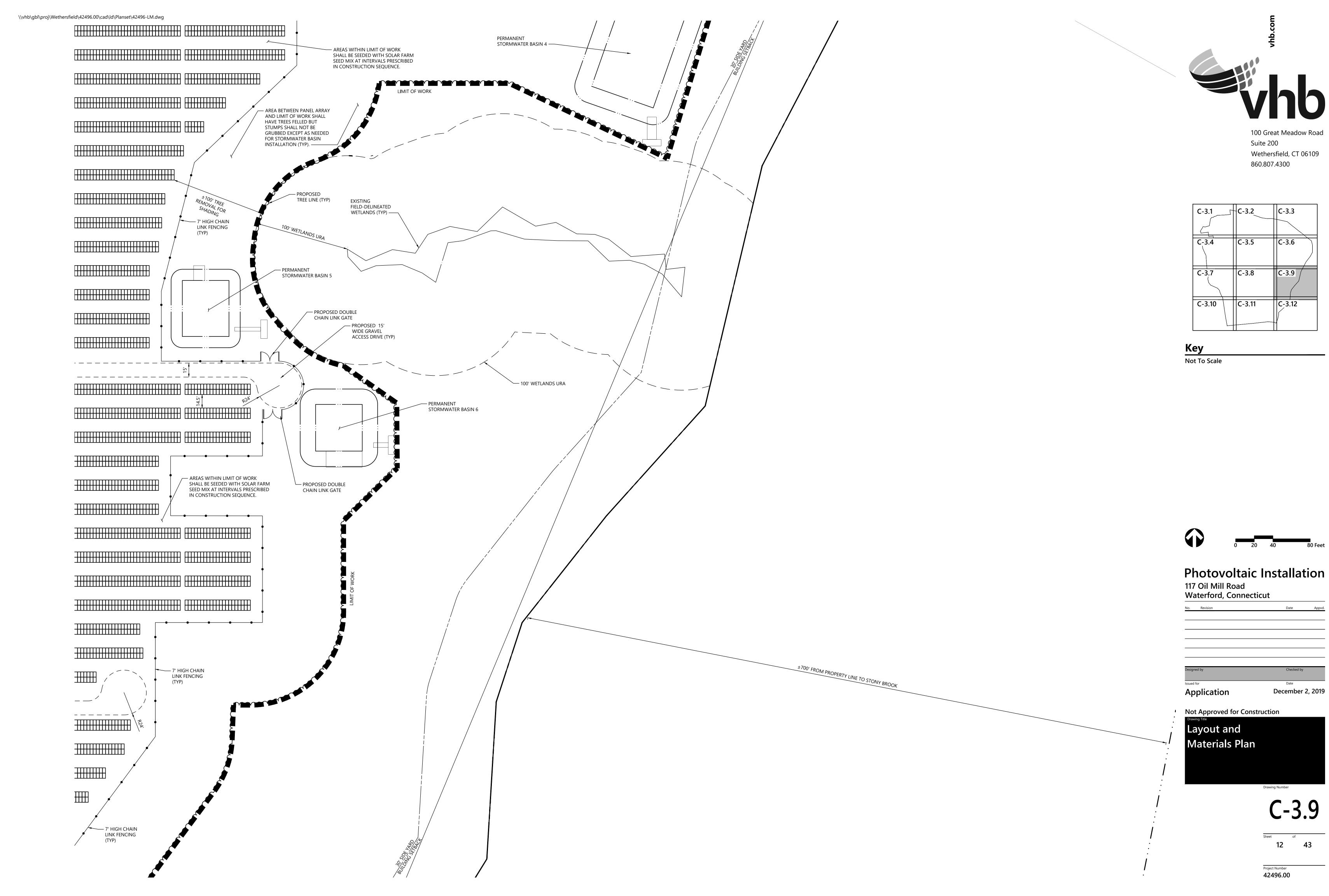




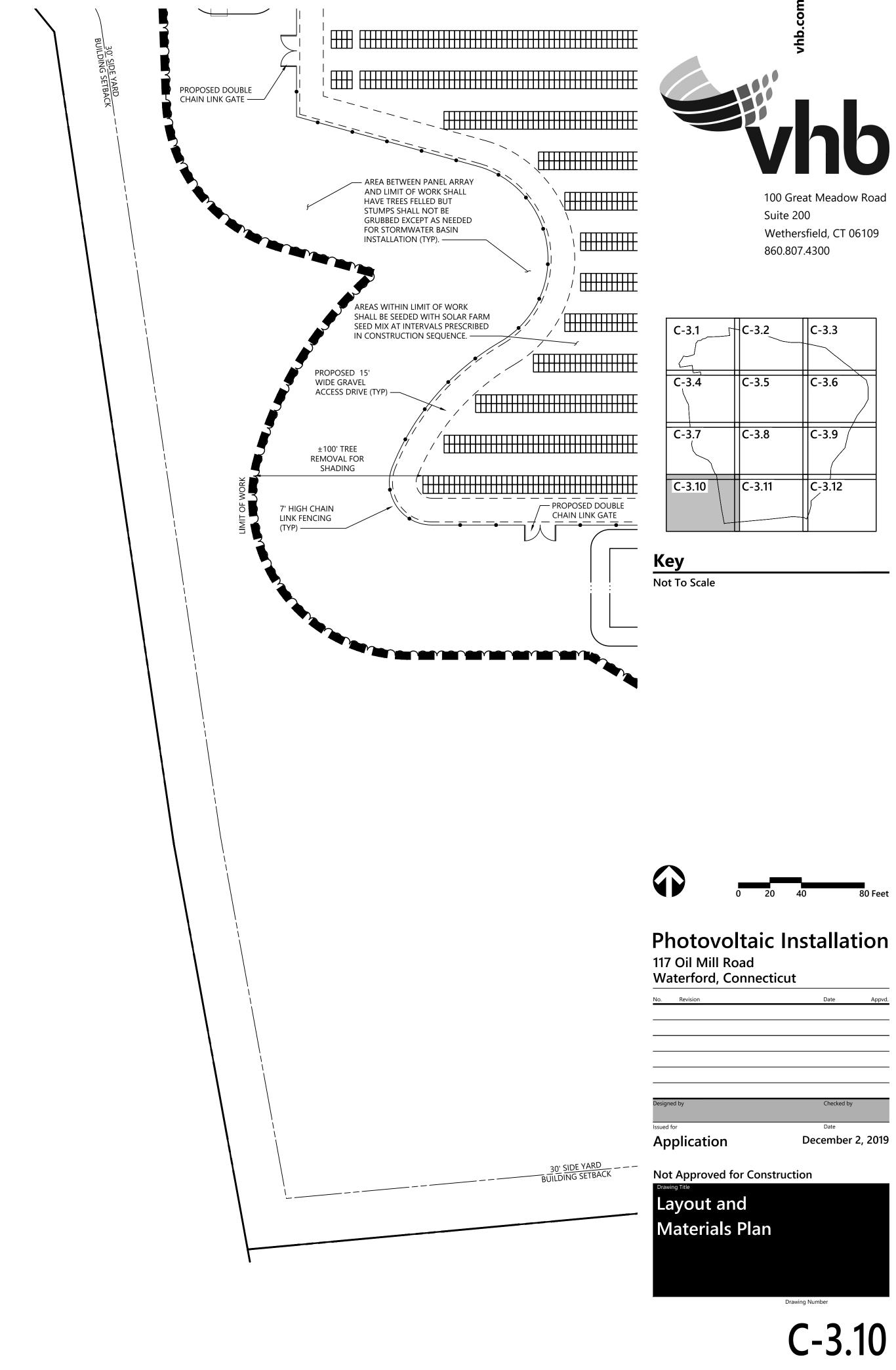


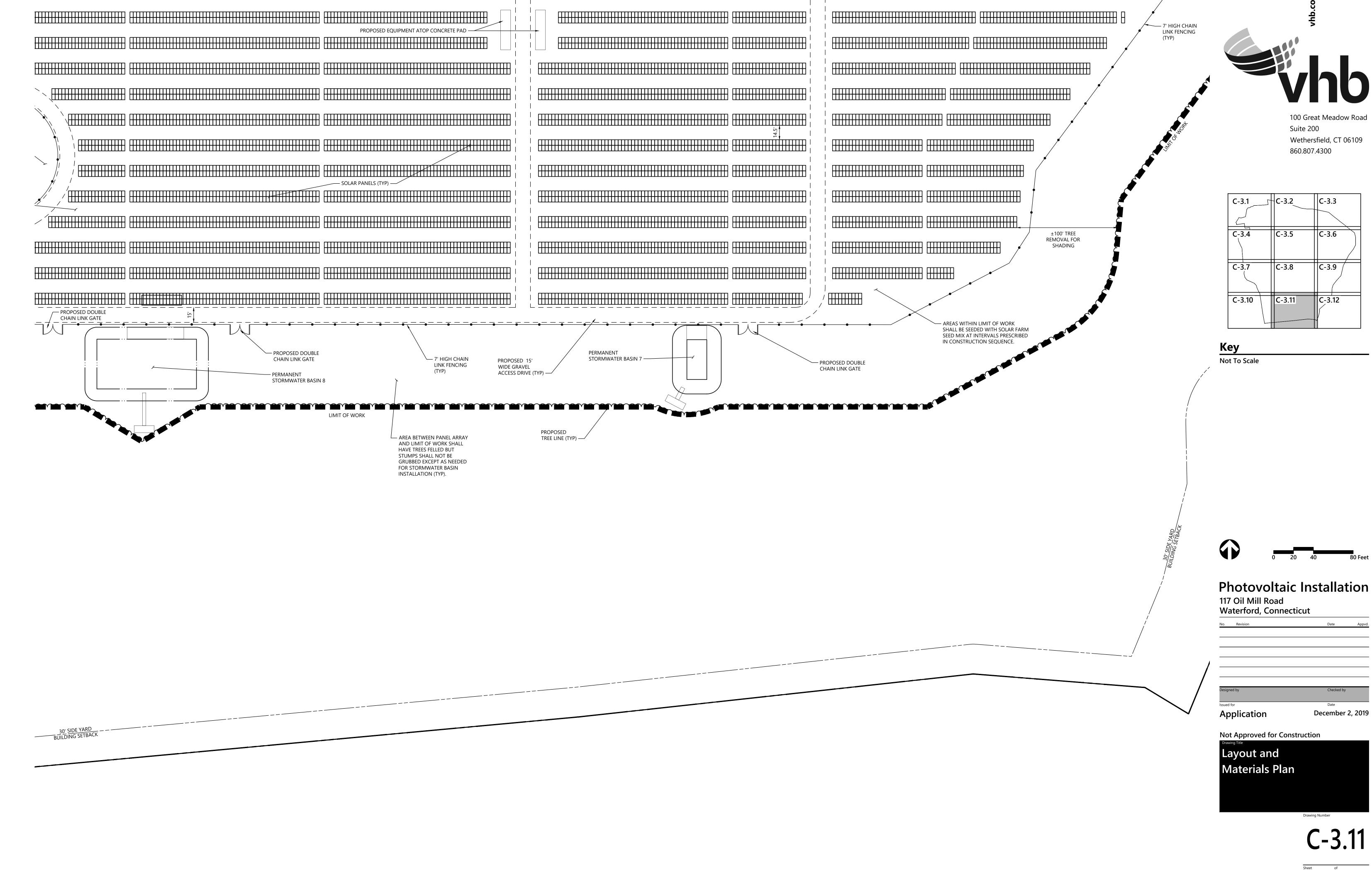






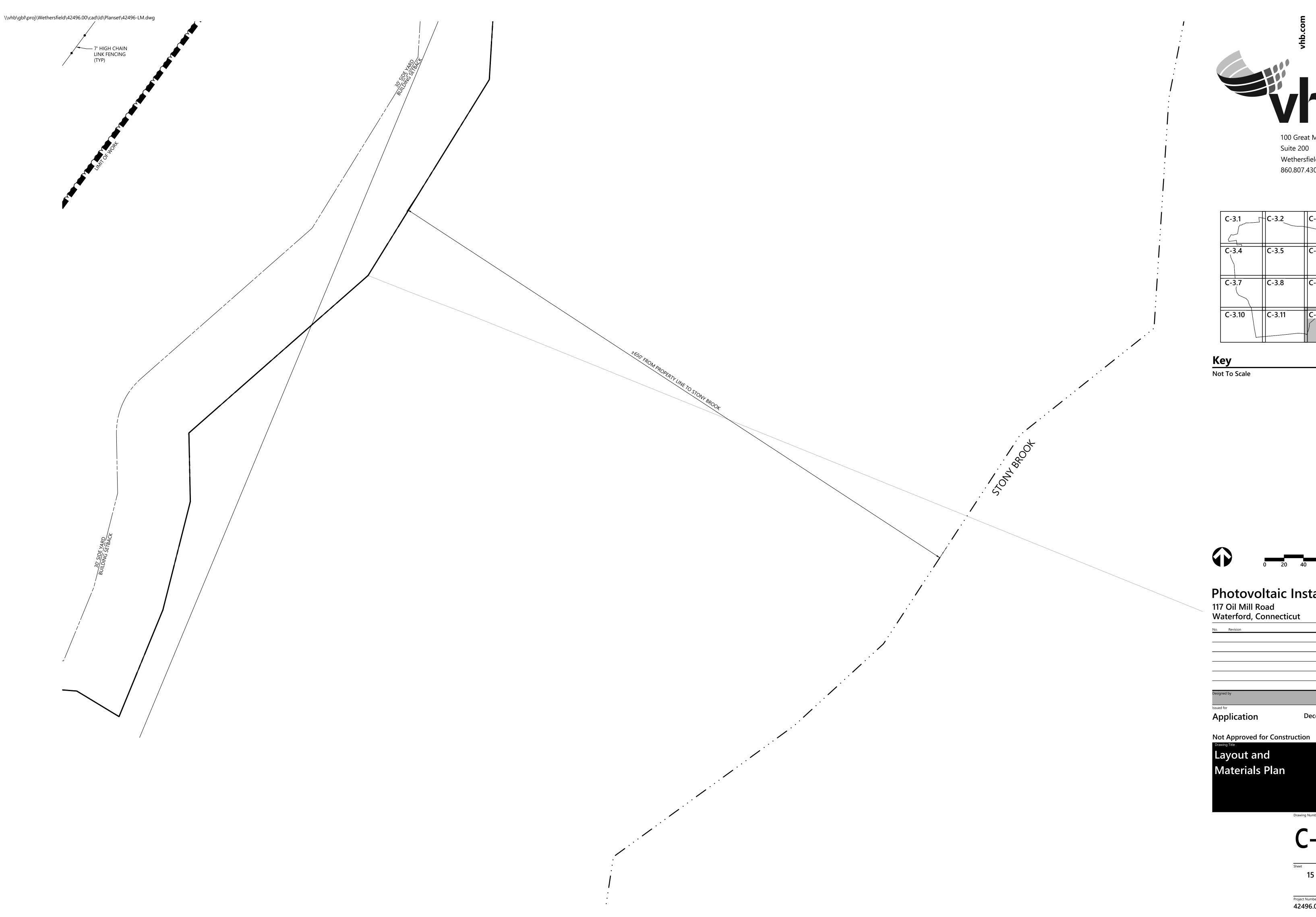
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C-3.1	C-3.2	C-3.3
C-3.4	C-3.5	C-3.6
		
C-3.7	C-3.8	C-3.9
C-3.10	C-3.11	C-3.12



Photovoltaic Installation

December 2, 2019





C-4.1	C-4.2	C-4.3
2		
C-4.4	C-4.5	C-4.6
C-4.7	C-4.8	C-4.9
C-4.10	C-4.11	C-4.12

Key Not To Scale



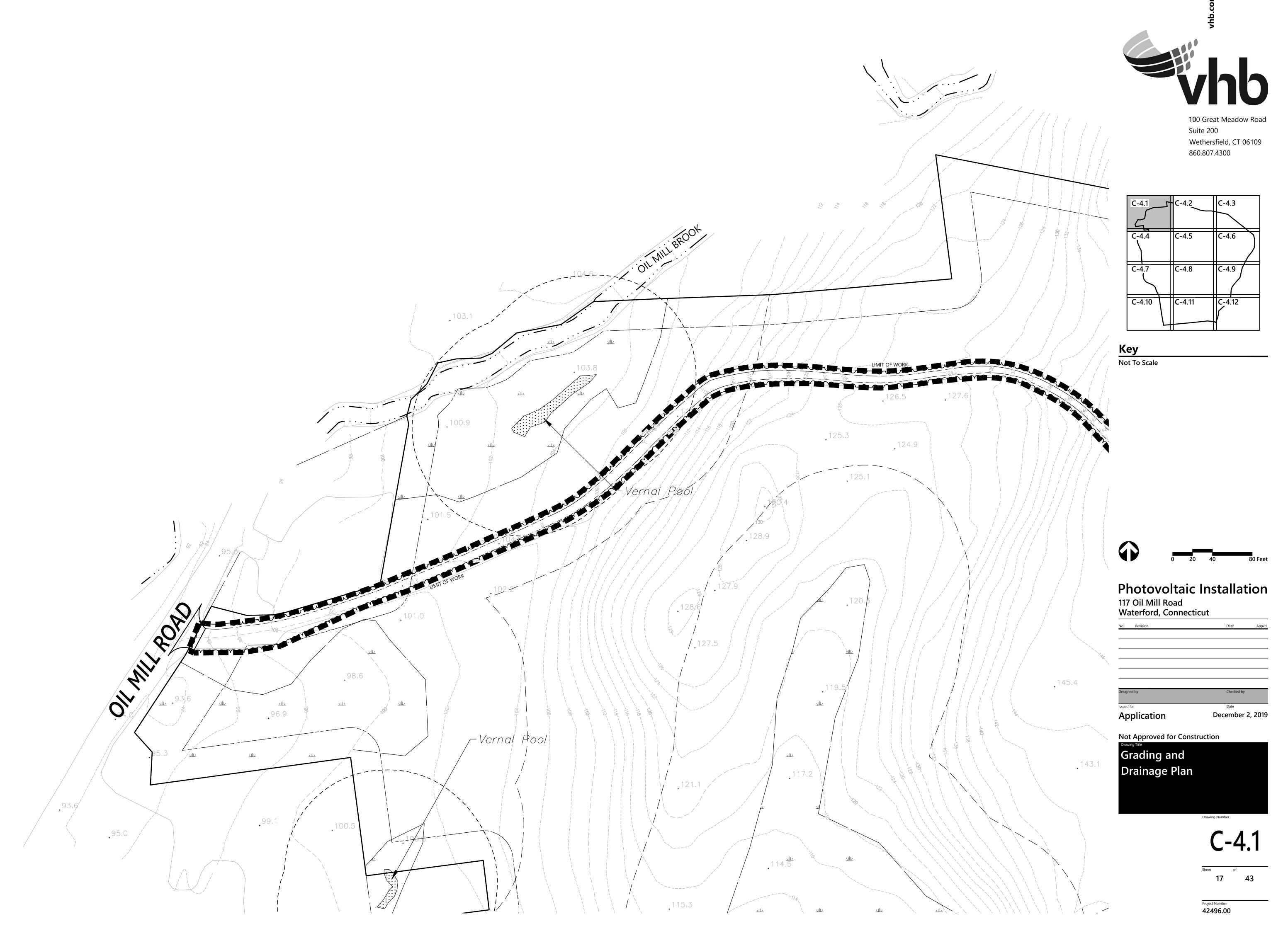
Photovoltaic Installation

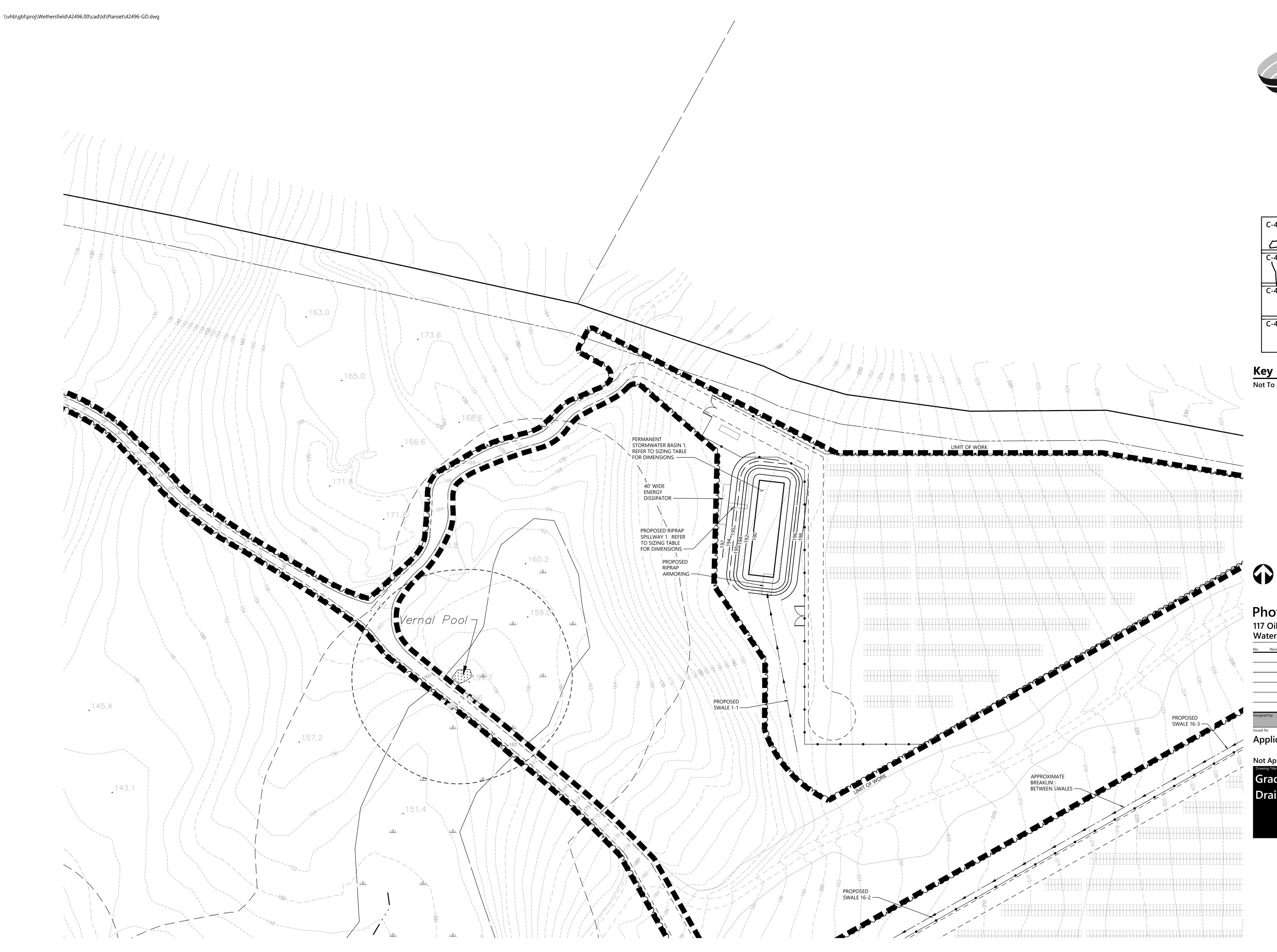
117 Oil Mill Road Waterford, Connecticut

Application December 2, 2019

Not Approved for Construction

Grading and Drainage Plan - Overall







C-4.1	C-4.2	C-4.3
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Photovoltaic Installation

117 Oil Mill Road Waterford, Connecticut

December 2, 2019 **Application**

Not Approved for Construction

Grading and Drainage Plan



Suite 200

860.807.4300

Wethersfield, CT 06109

C-4.1	C-4.2	C-4.3
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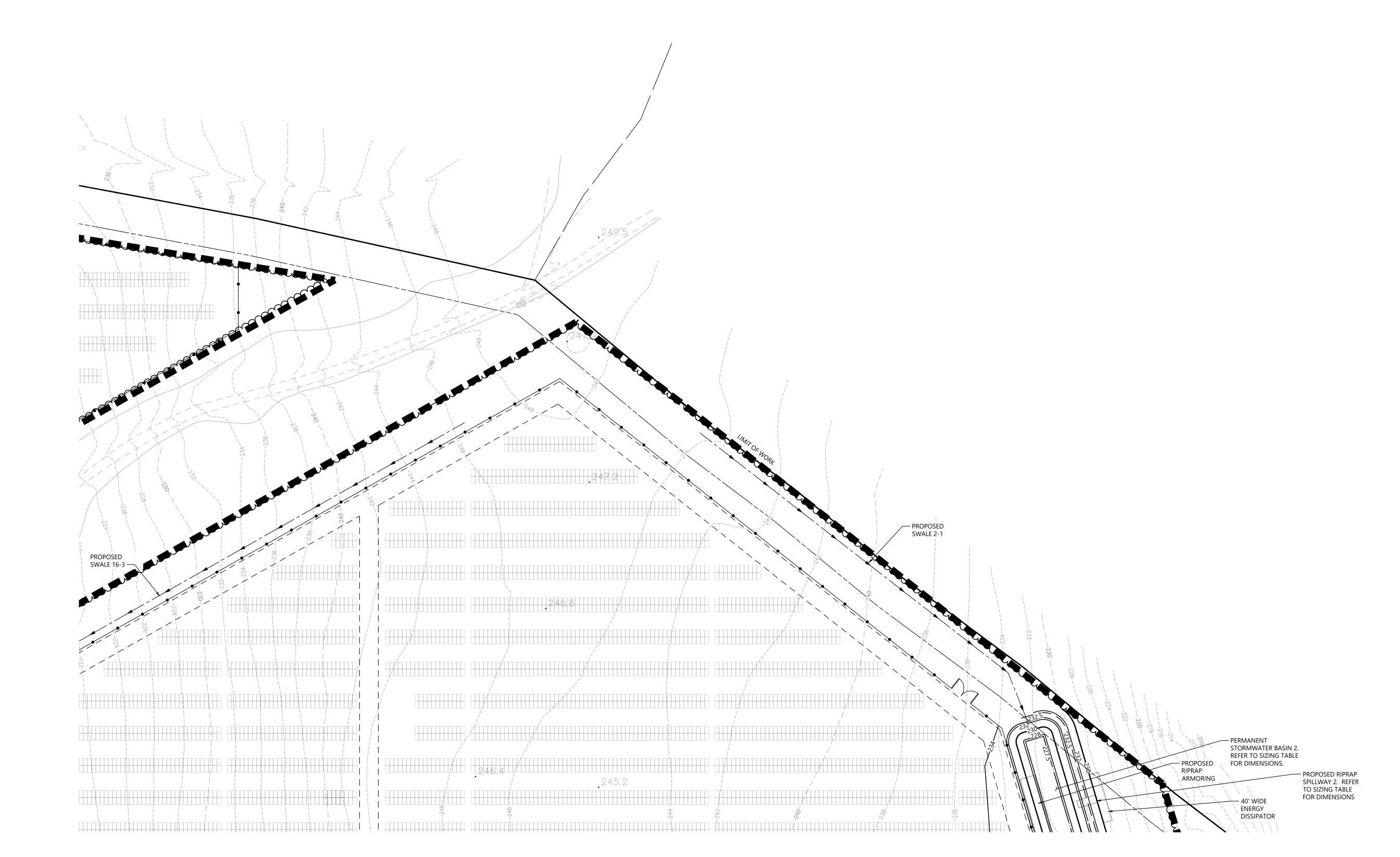
Photovoltaic Installation

117 Oil Mill Road Waterford, Connecticut

Application December 2, 2019

Not Approved for Construction

Grading and Drainage Plan







C-4.1	7	C-4.2	C-4.3
C-4.4		C-4.5	C-4.6
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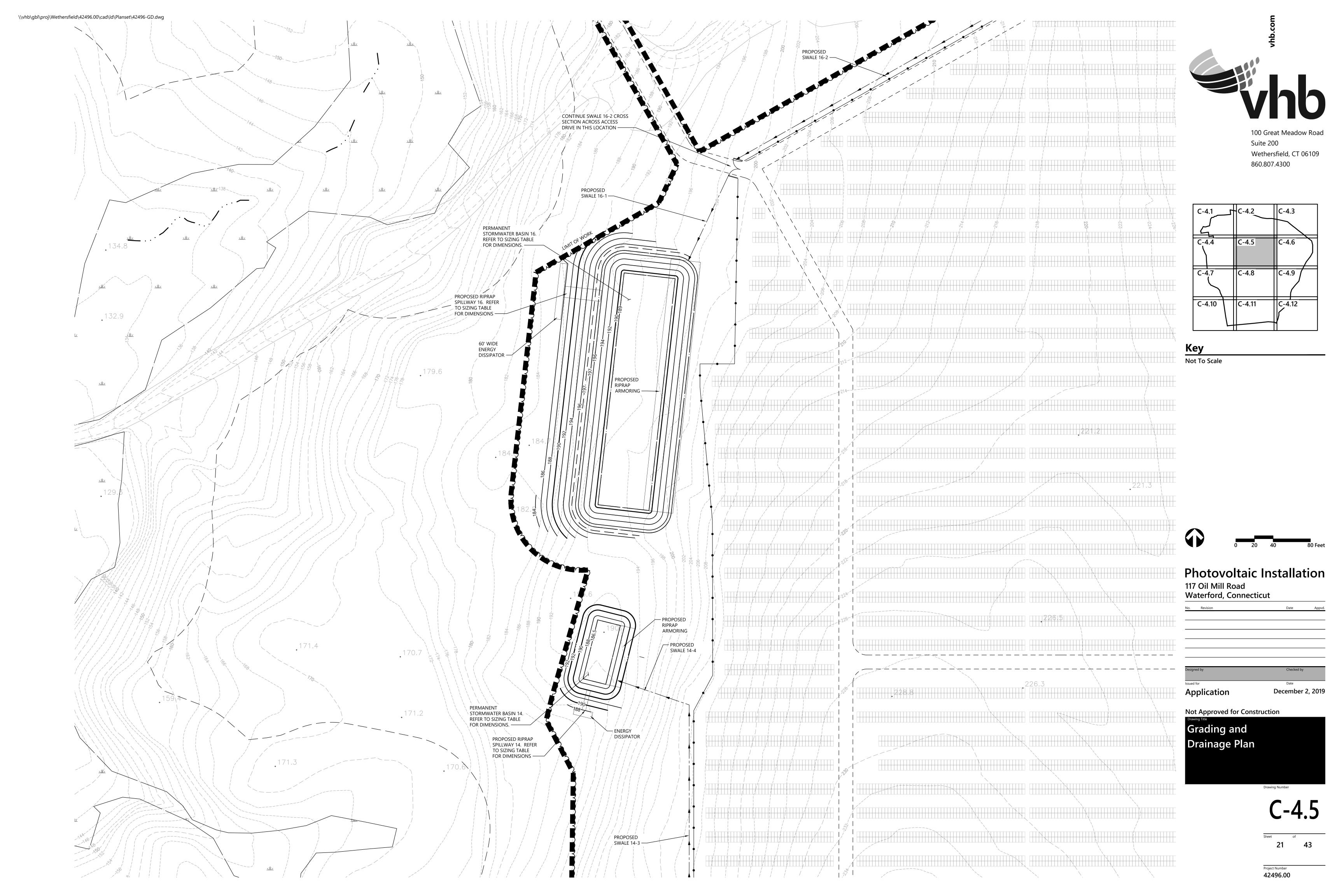


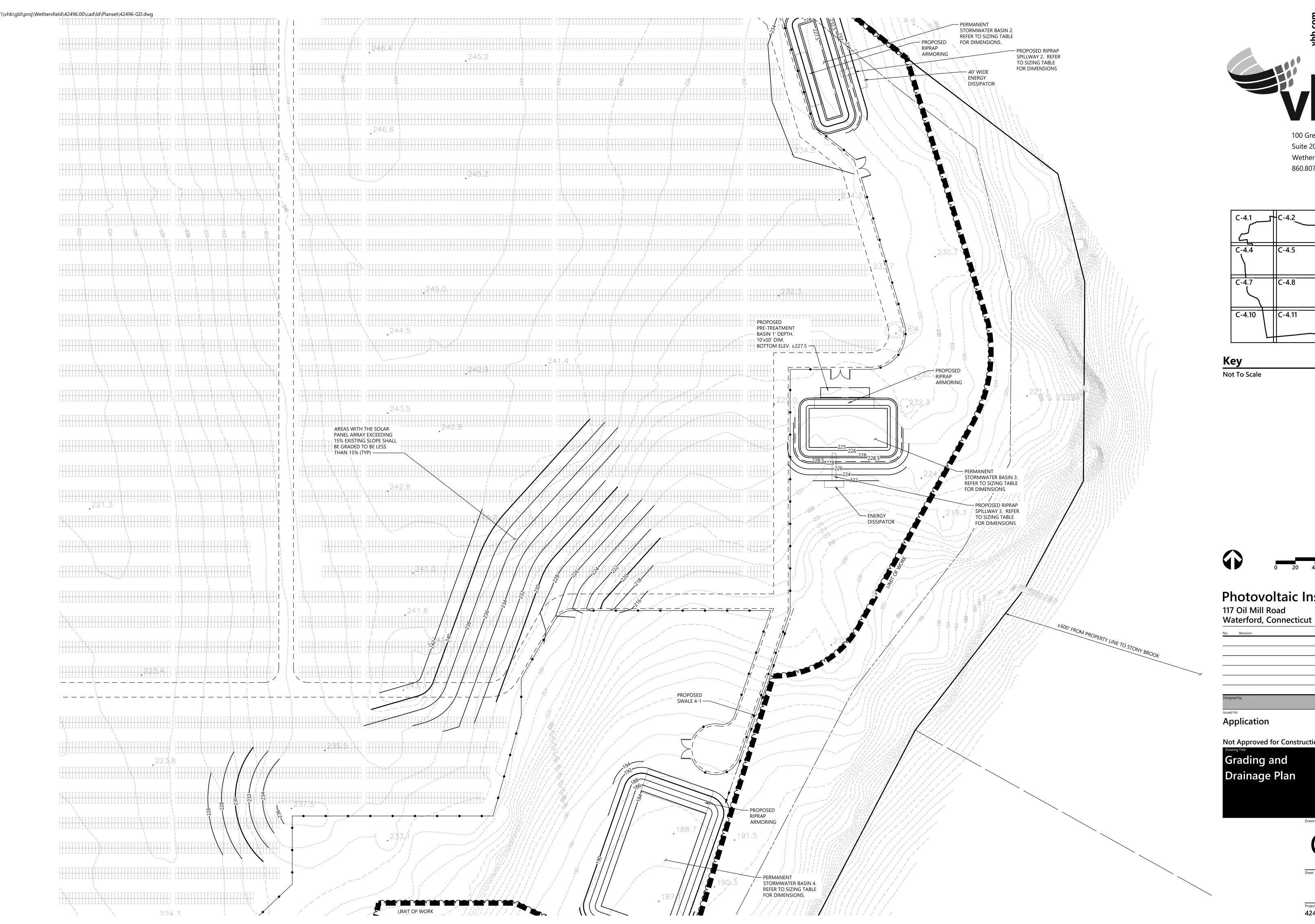
117 Oil Mill Road Waterford, Connecticut

December 2, 2019

Not Approved for Construction

Grading and Drainage Plan







Suite 200 Wethersfield, CT 06109 860.807.4300

C-4.1	C-4.2	C-4.3
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Photovoltaic Installation

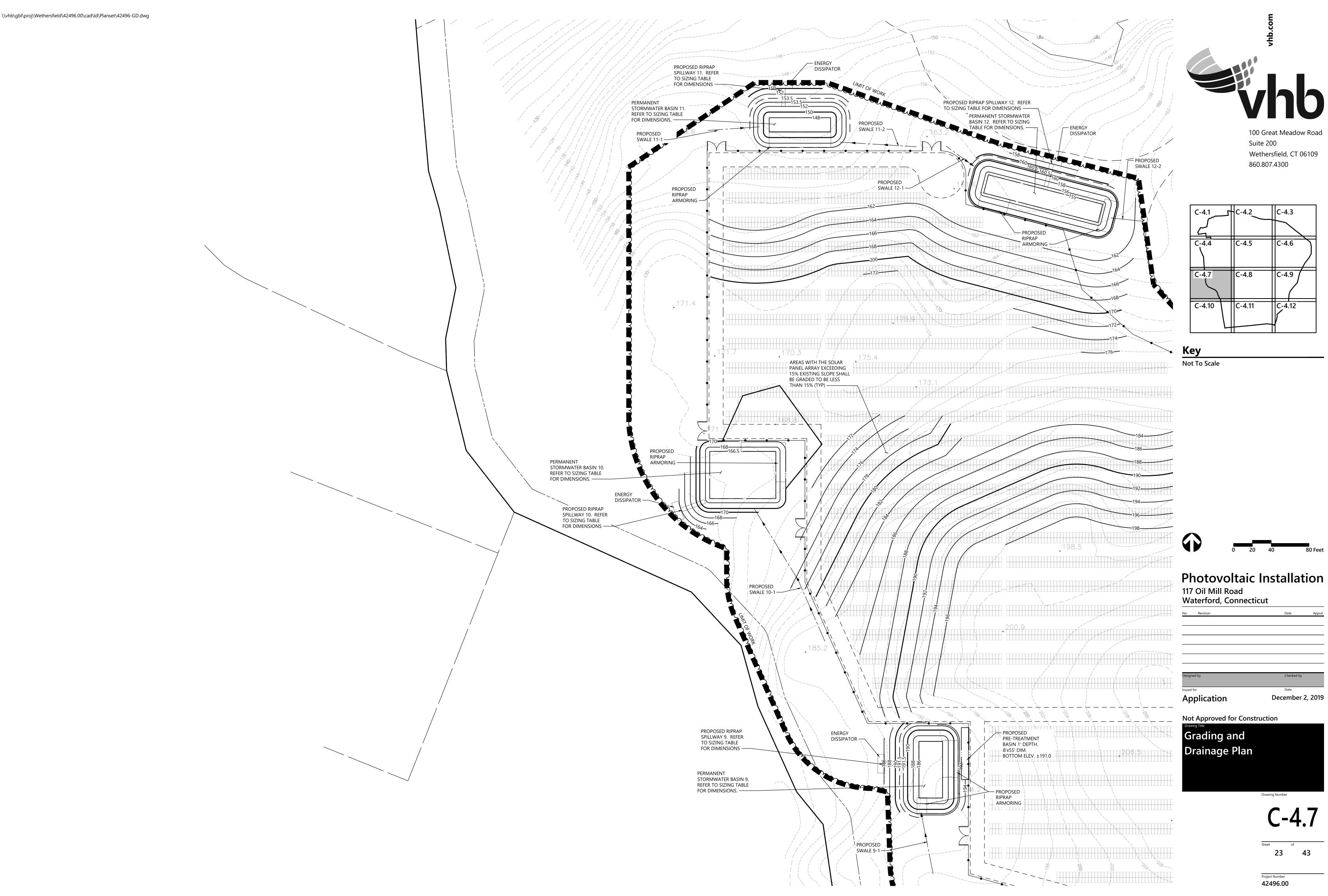
117 Oil Mill Road

Application

Not Approved for Construction

Grading and Drainage Plan

December 2, 2019



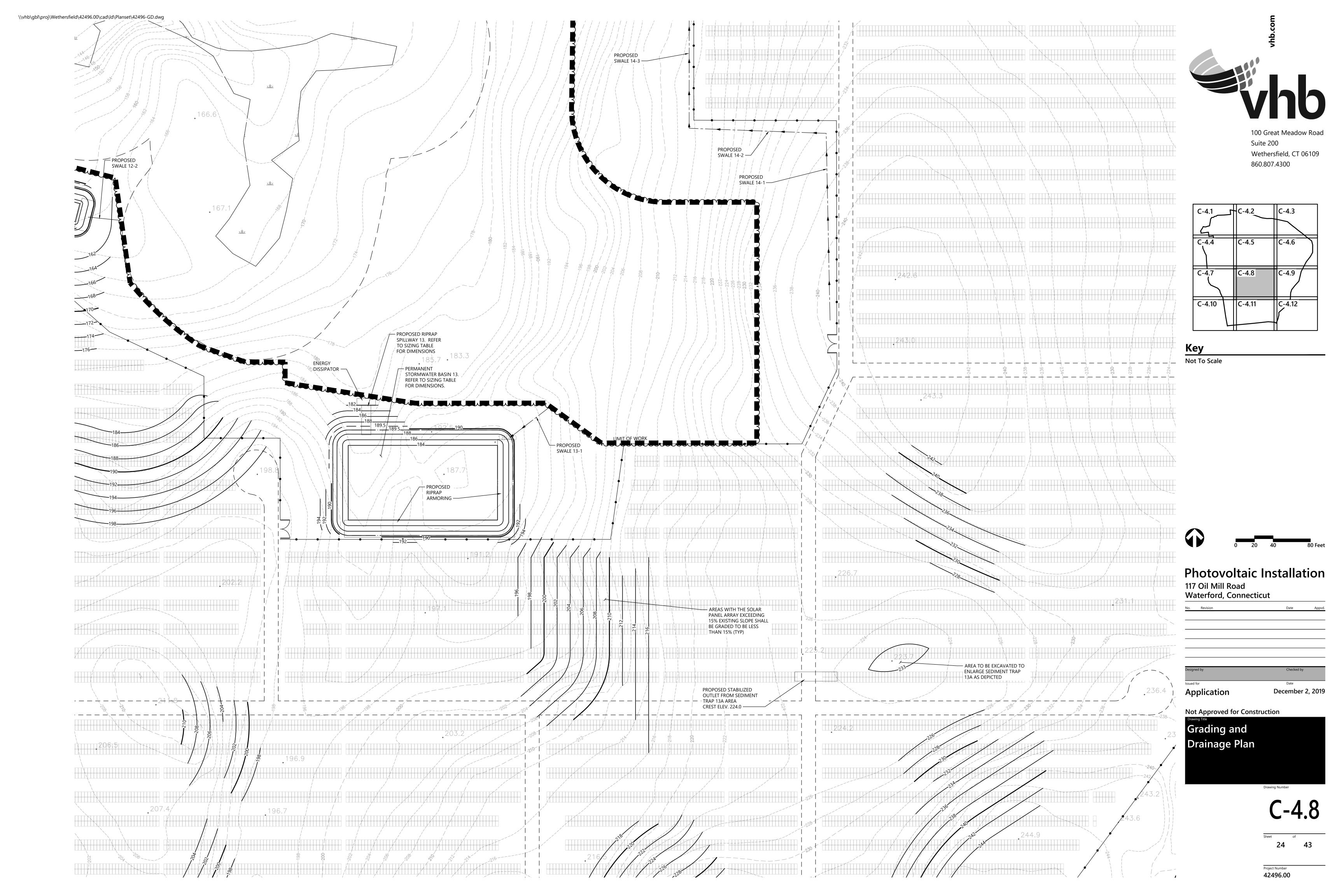


100 Great Meadow Road Suite 200 Wethersfield, CT 06109

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December 2, 2019

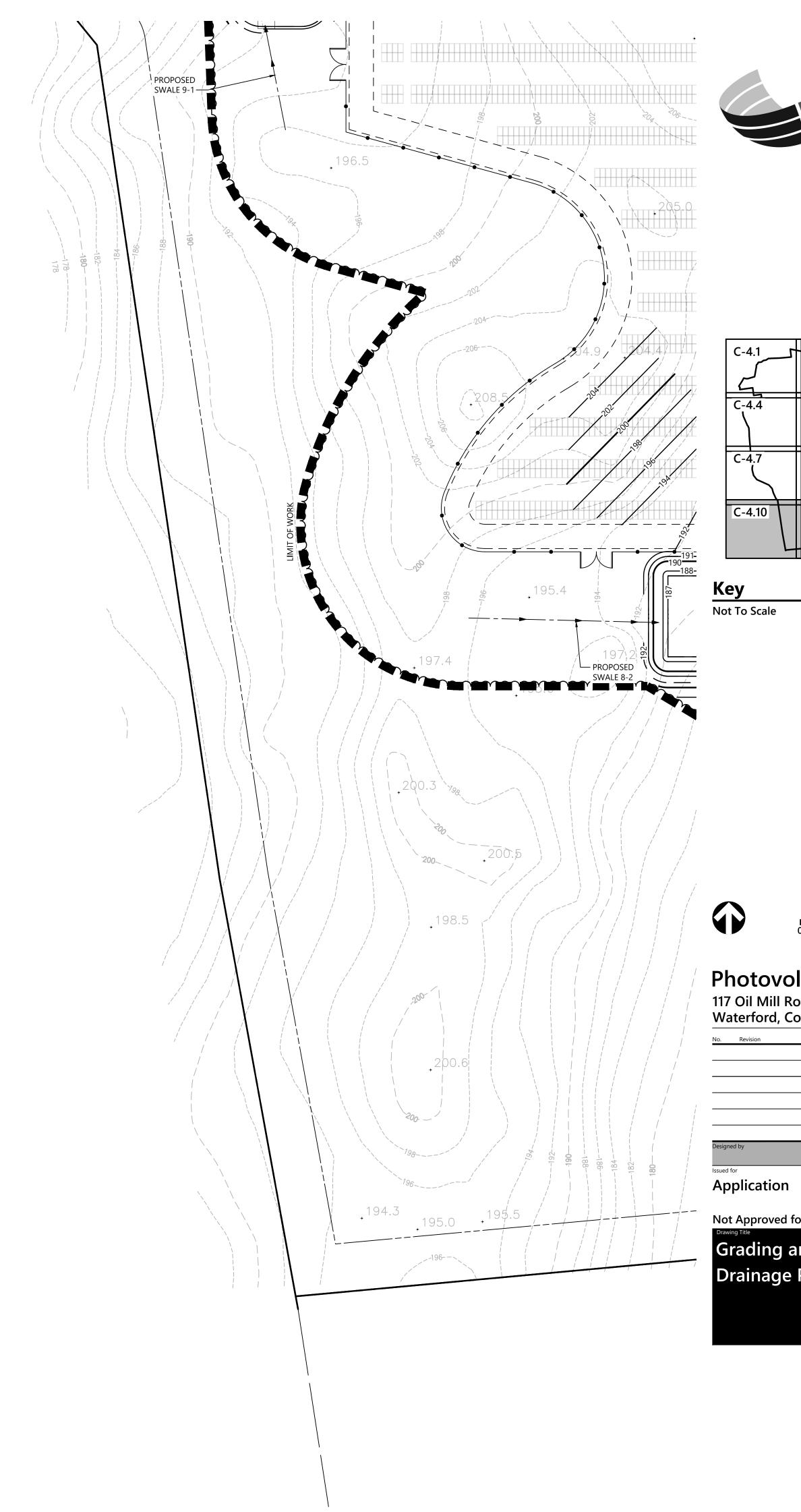
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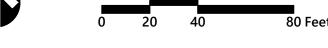




100 Great Meadow Road Suite 200 Wethersfield, CT 06109 860.807.4300

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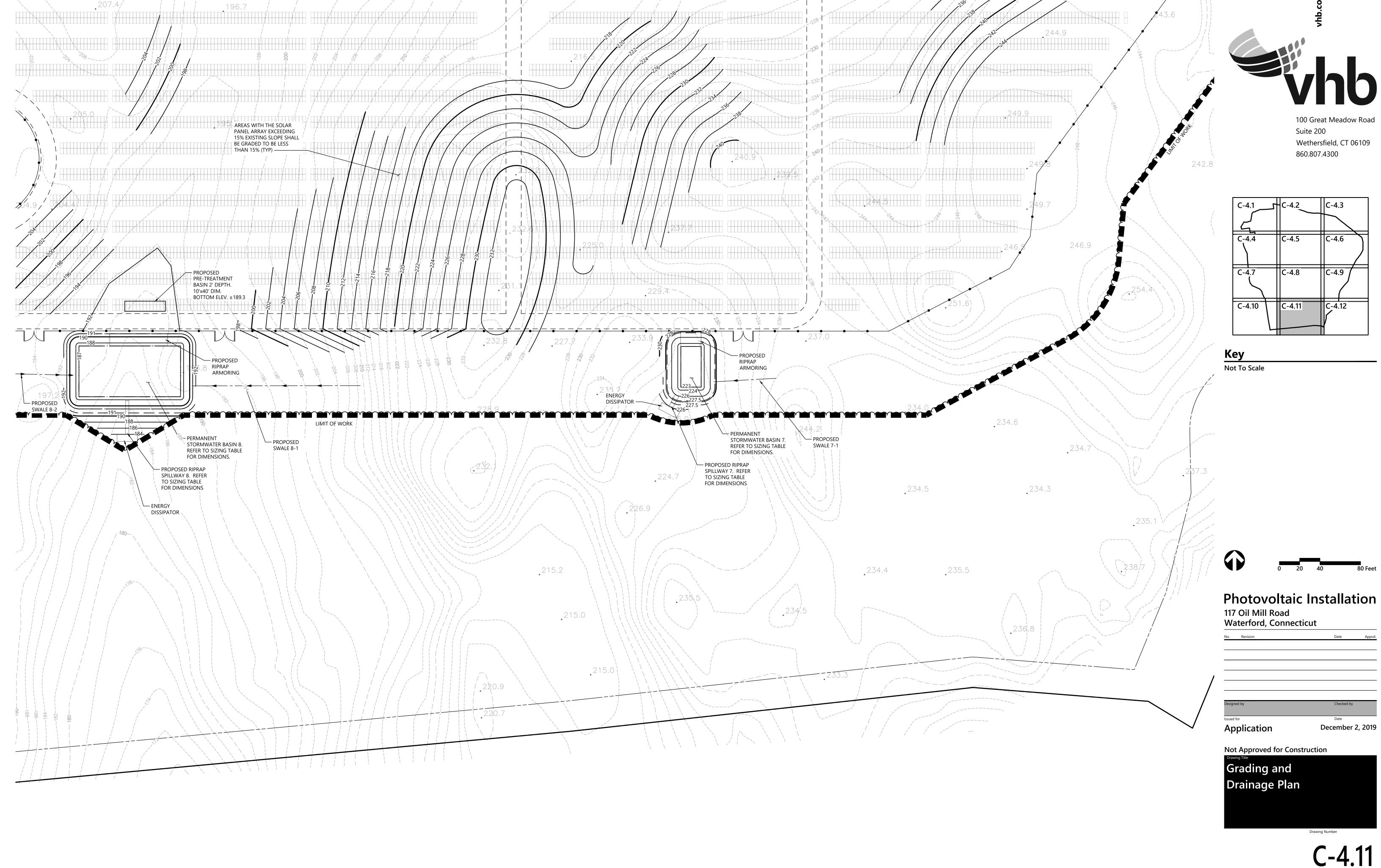
Photovoltaic Installation

117 Oil Mill Road Waterford, Connecticut

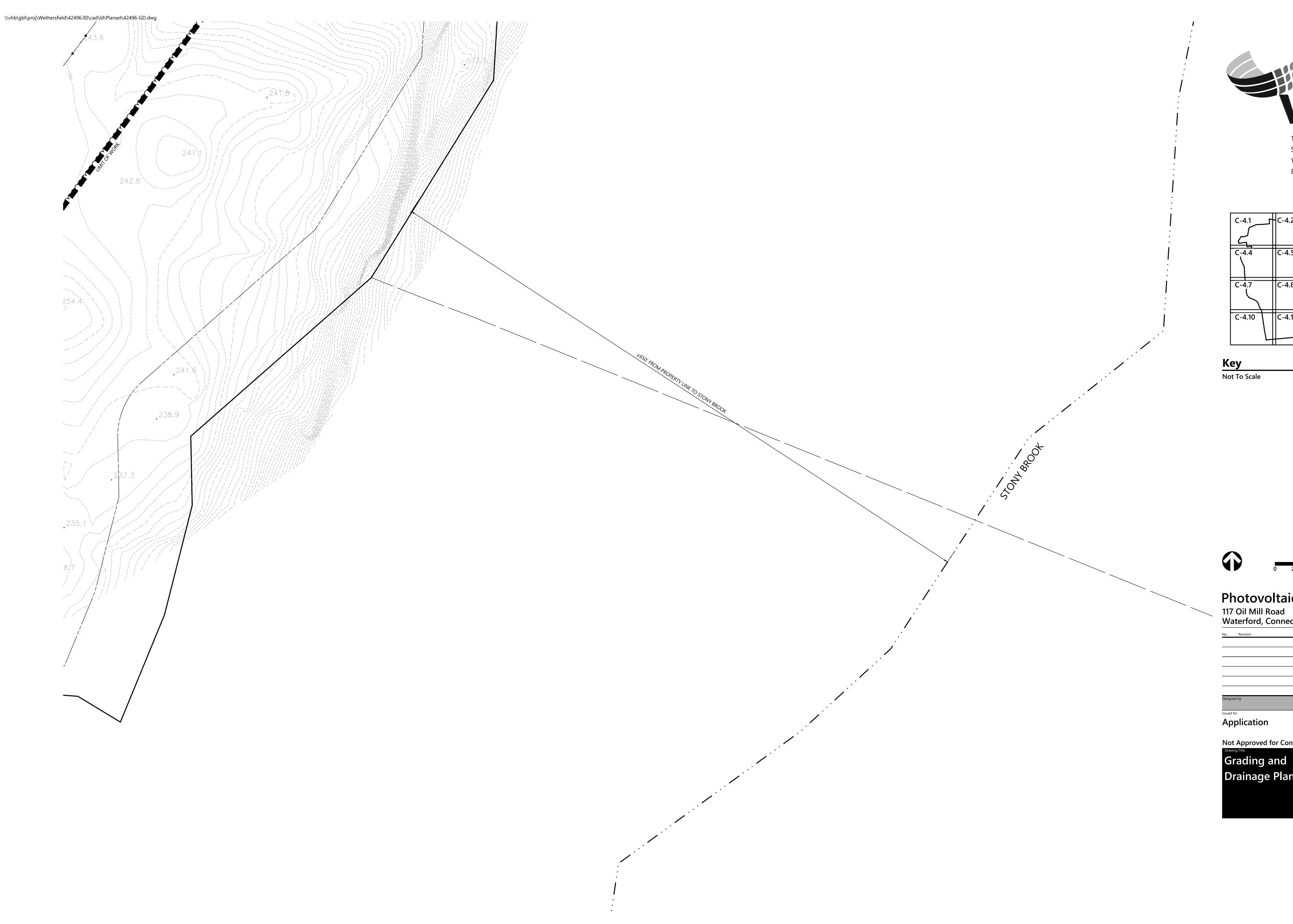
Date
December 2, 2019

Not Approved for Construction

Grading and **Drainage Plan**



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	C-4.7	C-4.8	C-4.9
	C-4.10	C-4.11	C-4.12

Photovoltaic Installation

117 Oil Mill Road Waterford, Connecticut

December 2, 2019

Not Approved for Construction

Drainage Plan

PERFORM PERIODIC INSPECTIONS.

CONSTRUCTION SEQUENCING

- ALL CONSTRUCTION ACTIVITIES ARE EXPECTED TO BEGIN IN THE SPRING/SUMMER OF 2020 AND COMPLETED BY THE END OF 2020. 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.
- 2. A QUALIFIED INSPECTOR SHALL BE ASSIGNED TO BE RESPONSIBLE FOR PERFORMING INSPECTIONS AND PREPARING REPORTS IN ACCORDANCE WITH SECTION 5(B)(4)(B) OF THE CONSTRUCTION GENERAL PERMIT. IT IS ALSO ANTICIPATED THAT REPRESENTATIVES FROM CTDEEP AND/OR THE STATE CONSERVATION DISTRICT WILL
- 3. ENGINEER OF RECORD SHALL PERFORM THREE (3) MONTHLY PLAN IMPLEMENTATION INSPECTIONS WITHIN THE FIRST 90 DAYS OF CONSTRUCTION ACTIVITY, AS REQUIRED

BY CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION.

- 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.

 5. PRIOR TO CONSTRUCTION, THE APPLICANT SHALL PROVIDE THE TOWN OF
- WATERFORD 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 FLAG THE LIMITS OF CLEARING NECESSARY TO FACILITATE
- THE PRE-CONSTRUCTION MEETING.

 8. 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 WATERFORD, ENGINEER OF RECORD, AND
- QUALIFIED SWPPP INSPECTOR.

 9. THE CONTRACTOR SHALL CONTACT CALL-BEFORE-YOU-DIG (1-800-922-4455) PRIOR
- TO ENGAGING IN ANY EXCAVATION ACTIVITIES AT THE SITE.

 10. THE CONTRACTOR SHALL NOTIFY THE TOWN OF WATERFORD AGENT, ZONING ENFORCEMENT OFFICER, AND ENGINEERING DEPARTMENT, 48 HOURS PRIOR TO
- COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY.

 11. NO CONSTRUCTION OF SITE IMPROVEMENTS MAY BEGIN UNTIL THE PROPER EROSION
- CONTROL MEASURES SERVING THE AREA TO BE DISTURBED ARE IN PLACE.

 12. ANTICIPATED WORK HOURS WILL BE BETWEEN 6:30 AM AND 5:00 PM.

PRE-CONSTRUCTION SITE PROTECTION SEQUENCE

- 1. INSTALL STABILIZED VEHICLE CONSTRUCTION EXIT AT THE EXISTING ROAD INTERSECTING WITH OIL MILL ROAD.
- 2. SURVEY AND MARK ALL WOODLAND CLEARING LIMITS.
- 3. MARK TREES TO BE FELLED WITHIN 10 FEET OF CLEARING LIMITS AND INSTALL TREE PROTECTION FOR TREES TO BE PRESERVED WITHIN 10 FEET OF CLEARING LIMITS.
- 4. FIELD SURVEY AND MARK BOUNDARY BETWEEN CLEARING LIMITS AND GRUBBING
- 5. THE USE OF A TUB GRINDER IS RECOMMENDED FOR THE MULCHING OF FELLED TREES.
 6. AS TREES ARE CLEARED AND GRUBBED, GRIND TOPS AND ROOT BALLS IN TUB GRINDER
- TO CREATE MATERIAL FOR WOOD CHIP MULCH BERM.

 7. ACCESS ROADS SHALL BE DESIGNATED AS EARLY AS FEASIBLE AND USED PRIMARILY
- FOR CONSTRUCTION TRAFFIC.

 8. AS MATERIAL IS PRODUCED, INSTALL MULCH BERM AT THE LIMIT OF DISTURBANCE GENERALLY IN AREAS OF CLEARED FOREST. MULCH BERM HAS NOMINAL DIMENSIONS OF 1.5 TO 2 FEET HIGH BY 4-FOOT WIDE.
- 9. IMMEDIATELY INSIDE THE PERIMETER MULCH BERM, INSTALL ENTRENCHED SILT FENCE FOLLOWING STANDARDS OF THE 2002 CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL. MULCH BERM AND PERIMETER SILT FENCE SHALL BE MAINTAINED IN PERPETUITY UNTIL COMPLETION OF CONSTRUCTION. NO WORK
- SHALL BE ALLOWED OUTSIDE OF THESE LIMITS.

 10. CONCURRENT WITH ITEMS 2 THROUGH 9 ABOVE, THE CONTRACTOR SHALL ADDRESS ONGOING EROSION PROBLEMS USING TEMPORARY DIVERSIONS AND FILLING AND GRADING GULLIES. TRACK GULLIES UP AND DOWN SLOPE AND HYDROSEED WITH A THERMALLY-TREATED WOOD BONDED FIBER MATRIX (BFM) MULCH WITH TACKIFIER. A STAPLED BIODEGRADABLE EROSION CONTROL BLANKET WITHOUT MONOFILAMENT
- MESH IS AN ACCEPTABLE ALTERNATIVE FOR HYDROSEED AND BFM.

 11. INSTALL TEMPORARY SEDIMENT TRAPS 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.

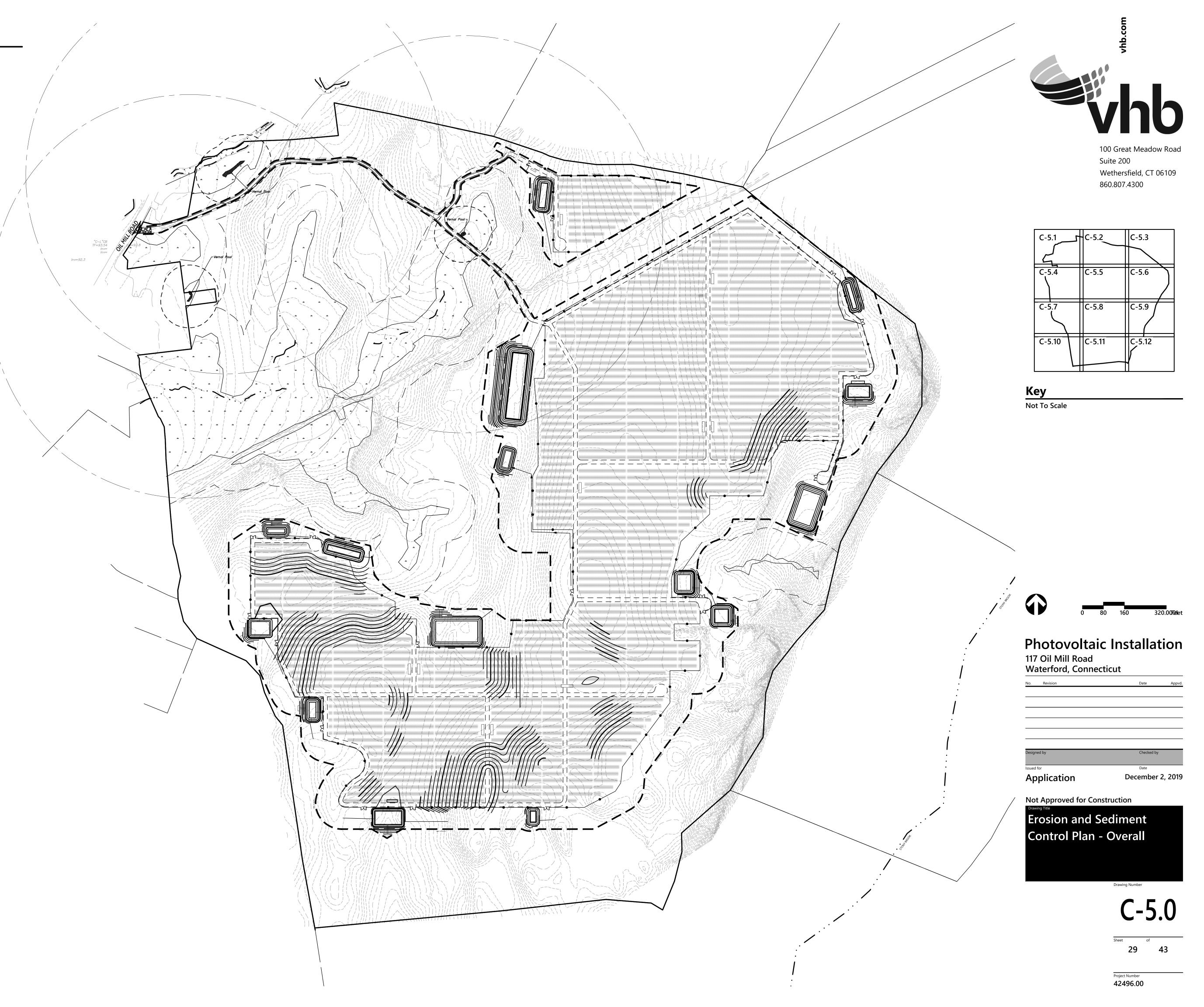
 12. SEED AND PROTECT DISTURBED SOILS AROUND SEDIMENT TRAPS AND BASINS WITHIN 10 DAYS OF COMPLETION. SECURE SEED WITH A THERMALLY-TREATED BFM APPLIED FOLLOWING MANUFACTURER'S SPECIFICATIONS FOR USE AT SPECIFIED APPLICATION RATES. AN ANIONIC POLYACRYLAMIDE PRODUCT MAY BE INCLUDED WITH THE TACKIFIER TO PROMOTE SOIL STABILITY. ALL OTHER AMENDMENTS SHOULD BE
- PRESCRIBED BASED ON THE RESULT OF SOIL TESTS.

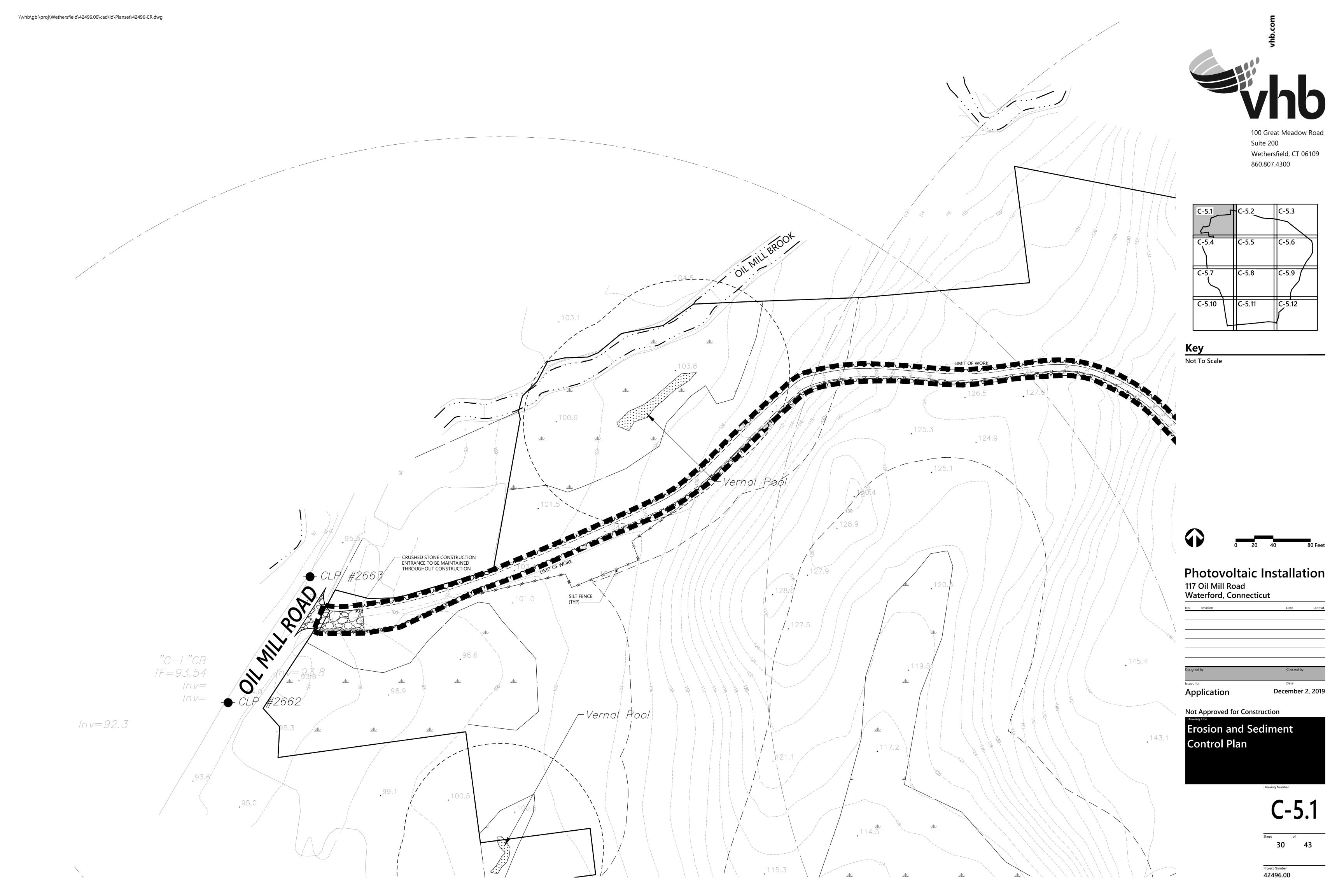
 13. INSTALL OTHER EROSION AND SEDIMENT CONTROLS FOLLOWING THE CT GUIDELINES AND MANUFACTURER'S DIRECTIONS. DURING CONSTRUCTION, THE CONTRACTOR SHALL INSTALL MEASURES AS REQUIRED BY THE ENGINEER OF RECORD OR QUALIFIED INSPECTOR, TO PREVENT SEDIMENT-LADEN RUNOFF FROM REACHING WETLANDS OR DISCHARGING OFFSITE.
- 14. ESTABLISH DESIGNATED VEHICULAR TRAFFIC ACCESS ROADS (GRAVEL, OR COMPACTED NATIVE SOIL, PER PLANS) THAT SHALL BE USED AS PRIMARY ACCESSES. EFFORTS MUST BE MADE TO MINIMIZE VEHICULAR TRAFFICKING ACROSS NON-DESIGNATED AREAS TO THE EXTENTS POSSIBLE.
- 15. SPREADED MULCH FROM PRE-EXISTING TIMBER HARVEST ON SITE SHALL BE CLEANED AND AREAS SEEDED PRIOR TO INITIATION OF CONSTRUCTION SEQUENCE.

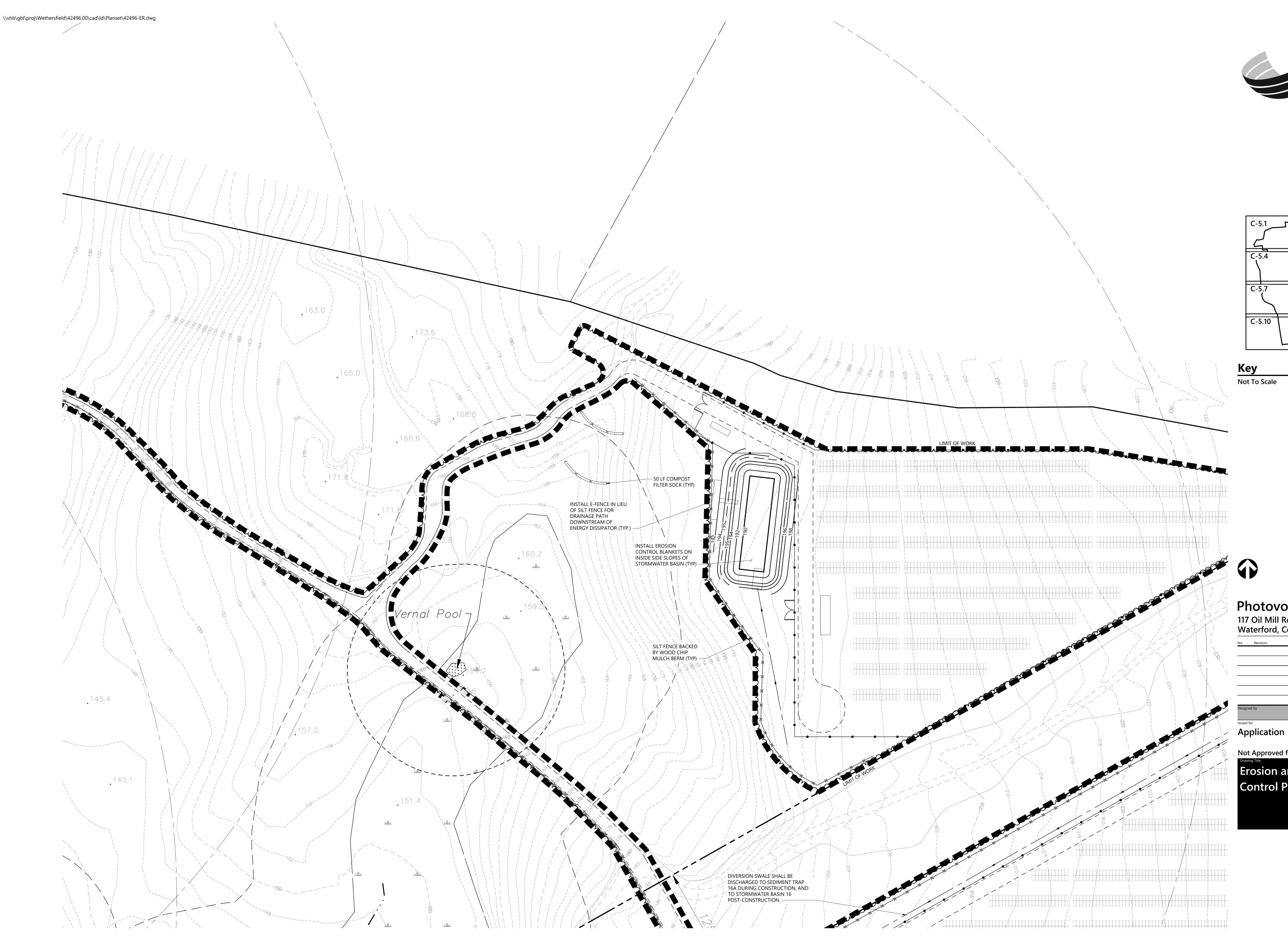
CONSTRUCTION SEQUENCE

- PERFORM MASS EARTHWORK ON THE SITE AND INSTALL PERIMETER FENCE TO SERVE AS CONSTRUCTION BARRIER. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FROM AREAS PROPOSED FOR REGRADING. REFER TO RESOURCE PROTECTION PLAN.
- TOPSOIL SHALL BE REPLACED TO 3" MINIMUM DEPTH OVER REGRADED AREAS UPON COMPLETION OF MASS EARTHWORK ACTIVITIES AND AREAS WHICH WERE DISTURBED BY MASS EARTHWORK OPERATIONS SHALL BE RESEEDED WITHIN 10 DAYS OF COMPLETION.
- 3. DRIVE PILES FOR SOLAR PANEL RACKING.
- 4. THE INSTALLATION OF RACKING SHALL FOLLOW THE PILE DRIVING BY ROUGHLY ONE WEEK STARTING FROM THE SAME POINT. IT IS ANTICIPATED THAT APPROXIMATELY 13 ACRES OF PILES WILL BE IN AHEAD OF RACKING ON AVERAGE.
- 5. 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.
- 6. 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.

 7. UPON COMPLETION OF CONSTRUCTION, RE-SEED ALL DISTURBED AREAS WITHIN 10 DAYS AND PREVENT VEHICULAR TRAFFICKING OVER THESE AREAS. INSTALL FINAL LANDSCAPING.
- 8. THE TEMPORARY SEDIMENT TRAPS/BASINS AND THEIR ASSOCIATED DIVERSION CHANNELS MAY BE REMOVED ONCE ALL TRIBUTARY AREAS UPSTREAM OF THEM HAVE BEEN COMPLETED AND STABILIZED WITH 80 PERCENT VEGETATED COVER, AT THE DIRECTION OF THE QUALIFIED INSPECTOR AND/OR DESIGN ENGINEER.
- 9. 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.









C-5.1	C-5.2	C-5.3
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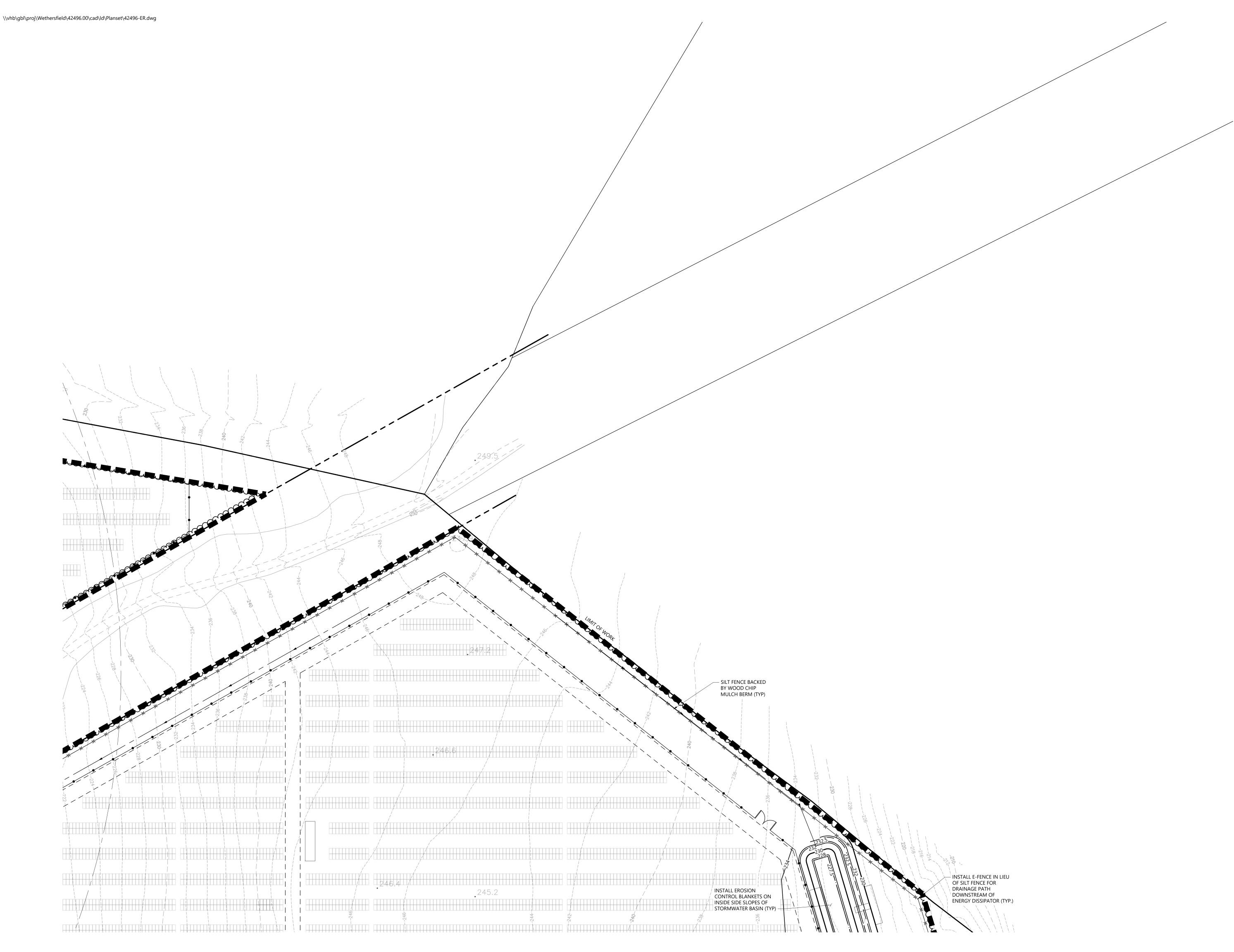
Photovoltaic Installation

117 Oil Mill Road Waterford, Connecticut

December 2, 2019

Not Approved for Construction

Erosion and Sediment Control Plan

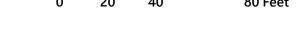




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Key

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Photovoltaic Installation

117 Oil Mill Road Waterford, Connecticut

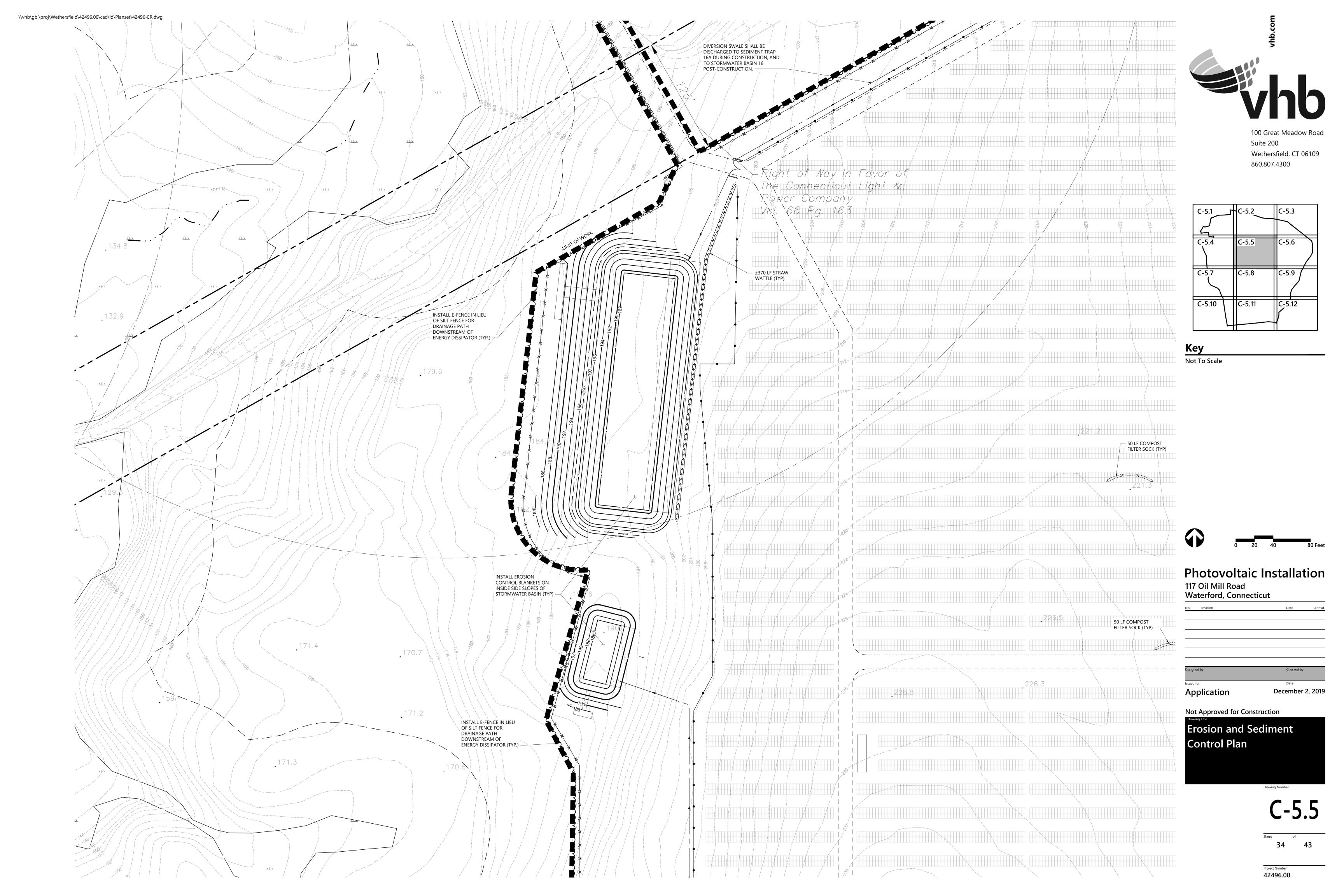
December 2, 2019 **Application**

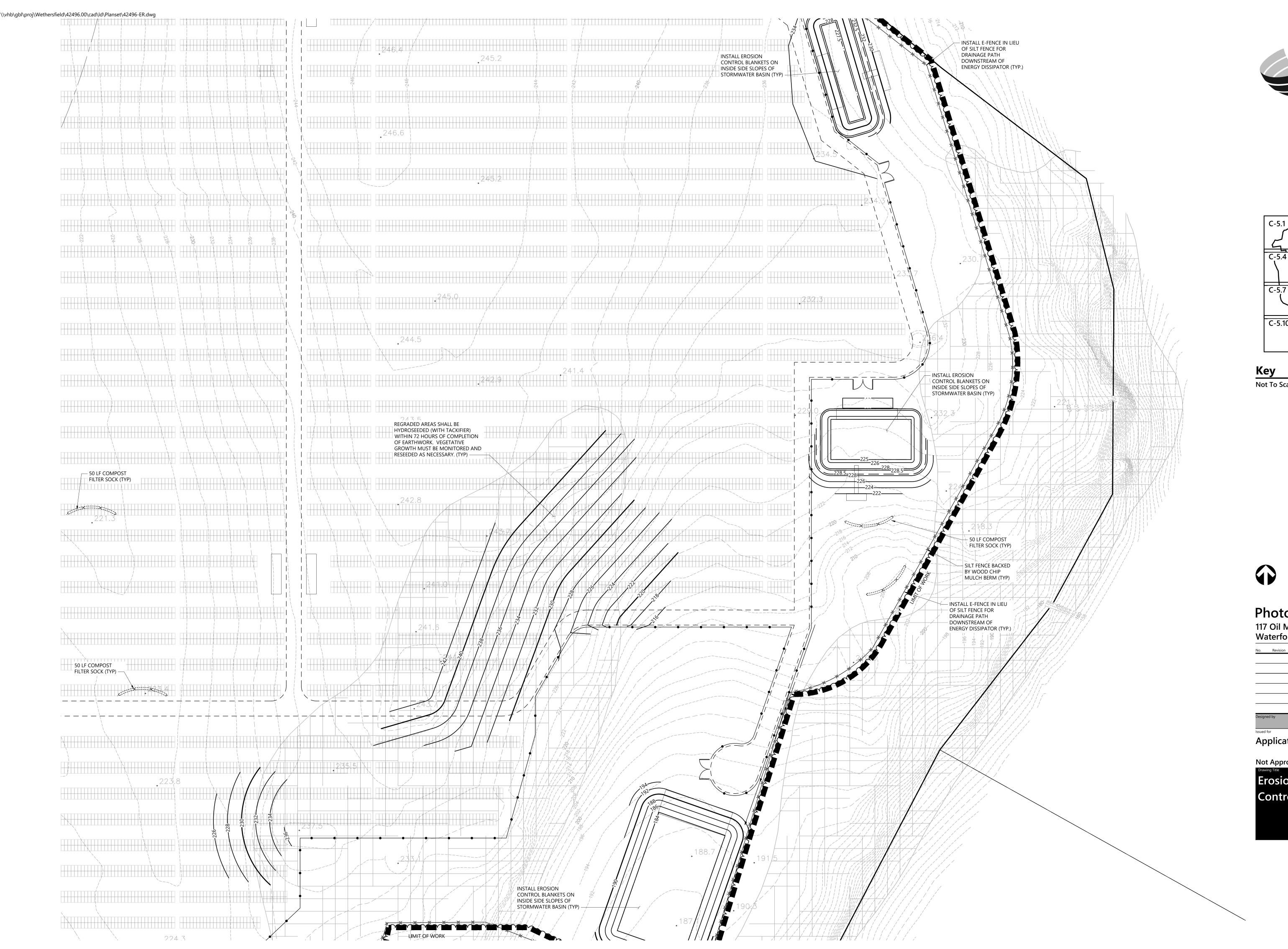
Not Approved for Construction

Erosion and Sediment

Control Plan









Suite 200 Wethersfield, CT 06109 860.807.4300

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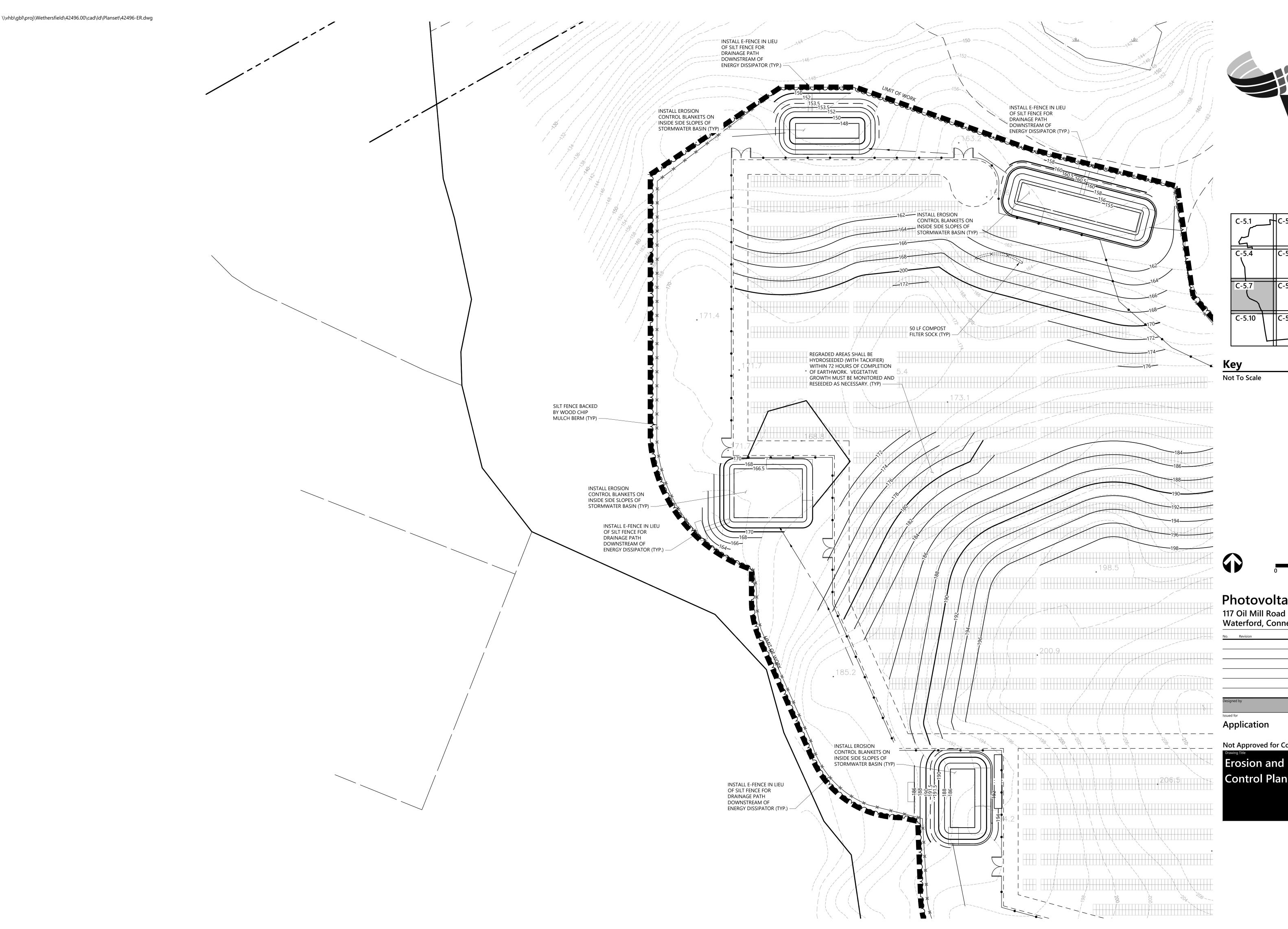
Photovoltaic Installation

117 Oil Mill Road Waterford, Connecticut

Application December 2, 2019

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Erosion and Sediment Control Plan





C-5.1	C-5.2	C-5.3
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Photovoltaic Installation

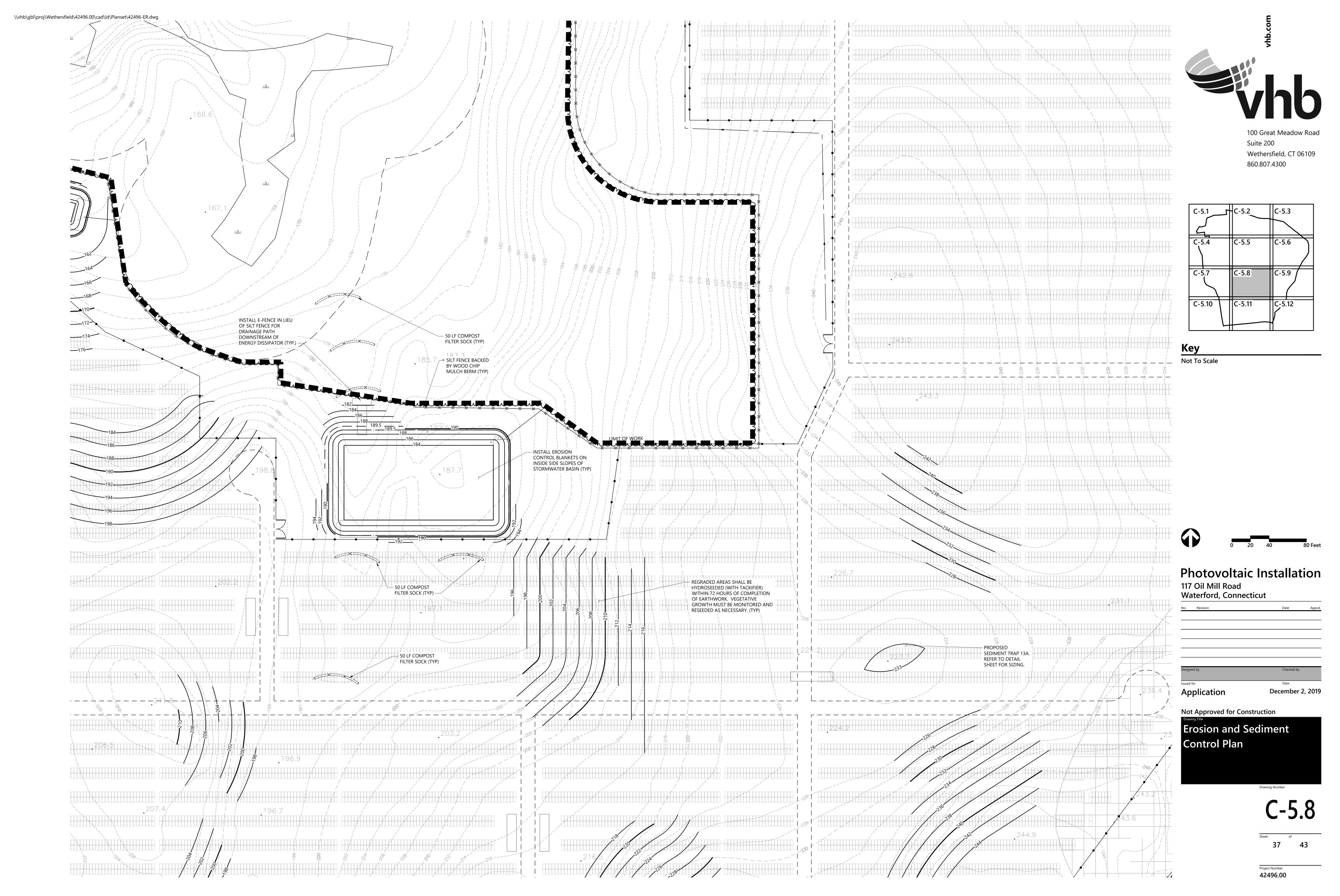
Waterford, Connecticut

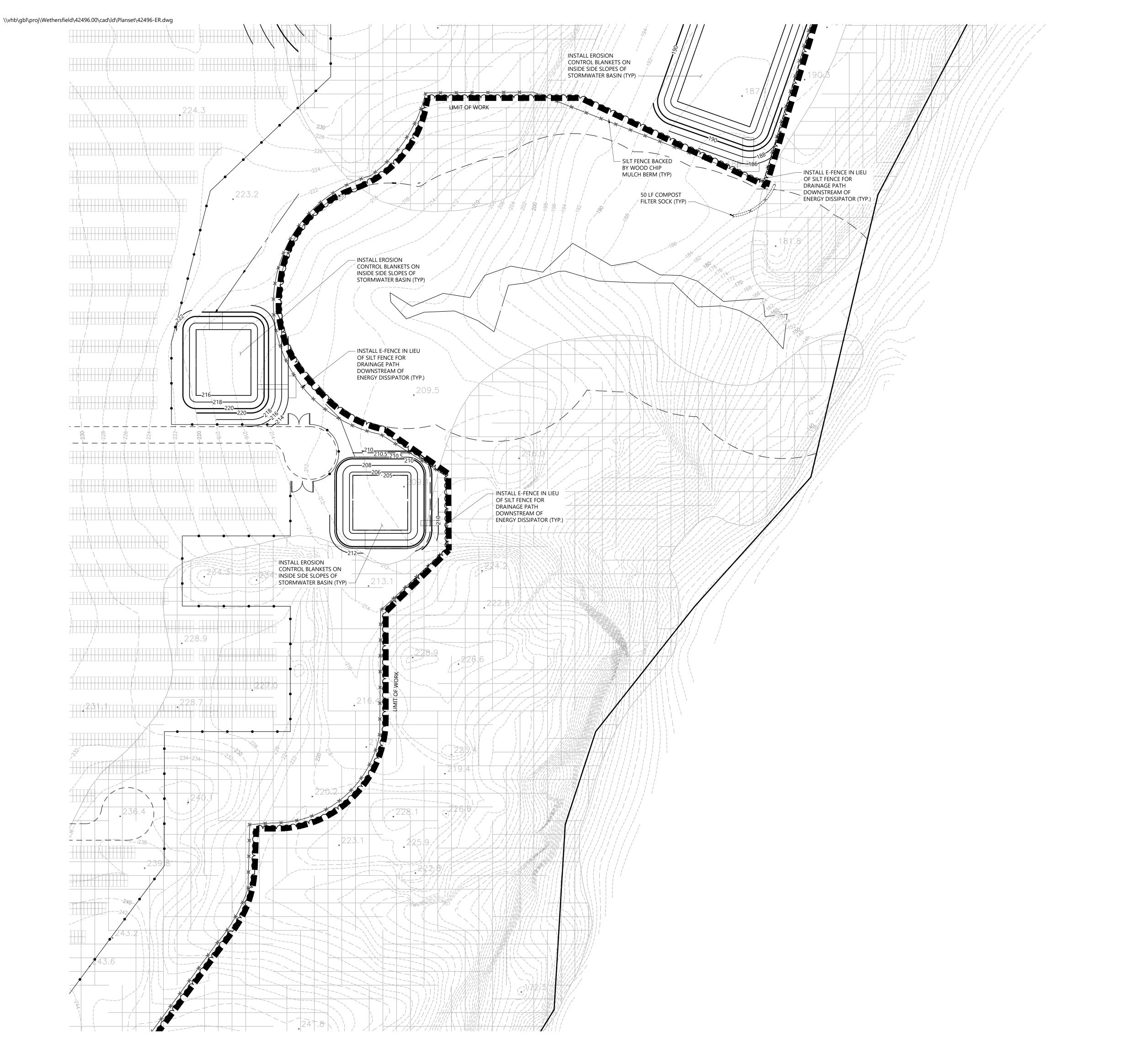
December 2, 2019 **Application**

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Erosion and Sediment Control Plan

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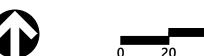




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Photovoltaic Installation

117 Oil Mill Road Waterford, Connecticut

Revision Date

Issued for Date

Application December 2, 2019

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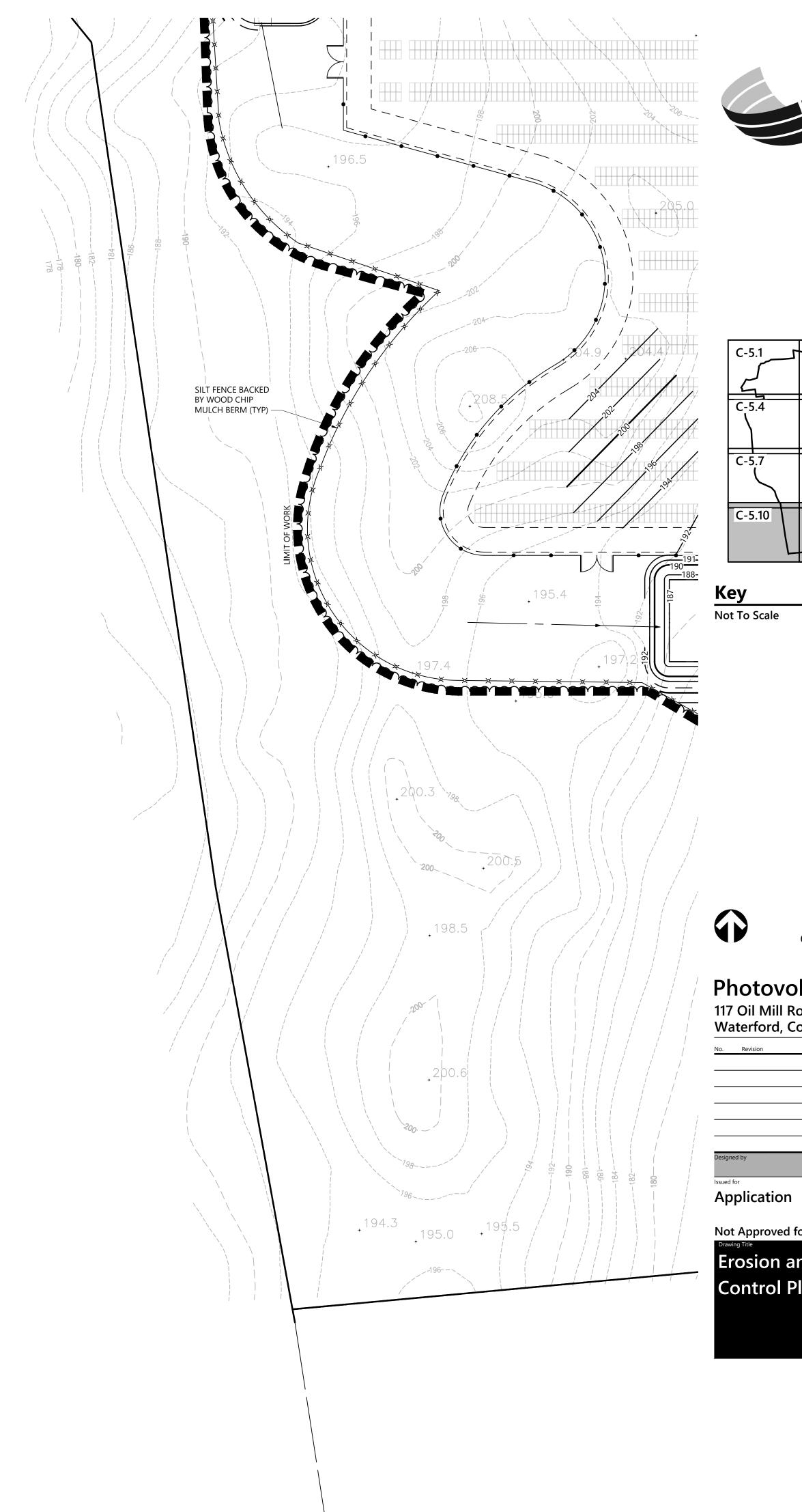
Erosion and Sediment Control Plan

Drawing

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100 Great Meadow Road Suite 200 Wethersfield, CT 06109 860.807.4300

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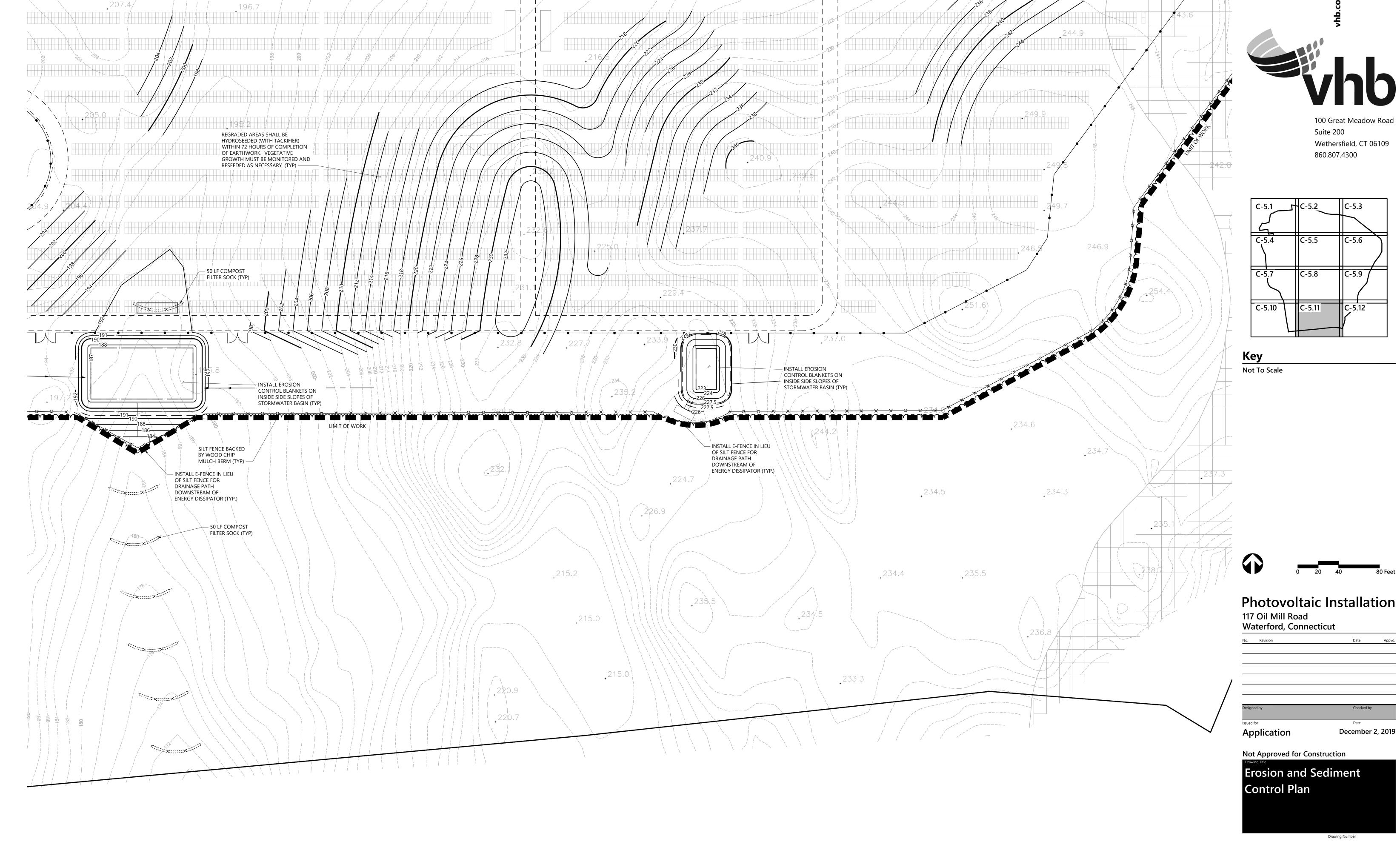
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117 Oil Mill Road Waterford, Connecticut

December 2, 2019

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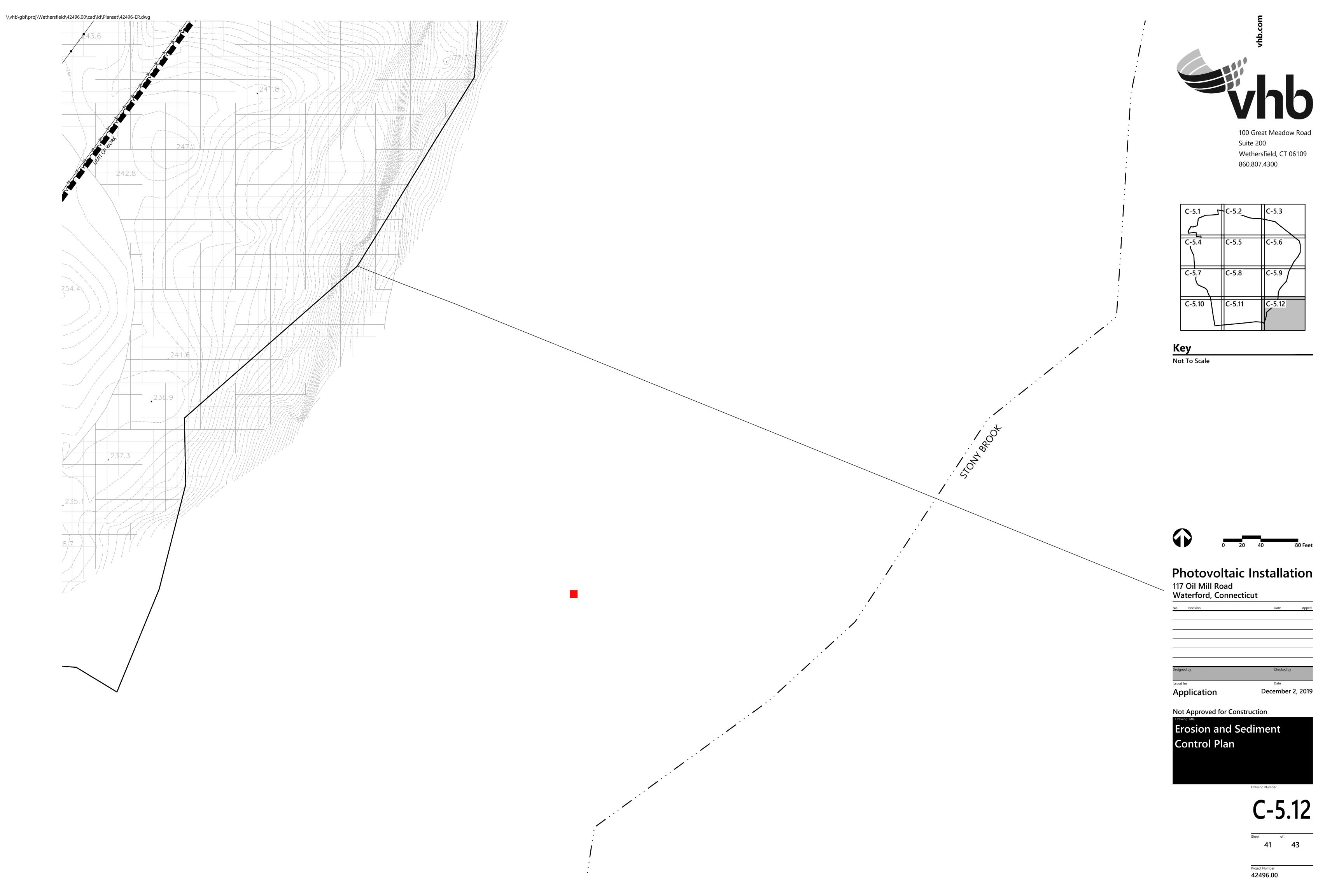
Erosion and Sediment Control Plan



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E-Fence DETAILS – Wildlife Exclusion - WPT

other patents pending)

T-Post - 8 FT c-c At Fence T-Post 8' OC E-Fence Guide Wire sections, overlap 12" and wire tie Crimps crimped to guide together to close all gaps 14 ga. guide wire (3 to 4" from top of barrier) E-Fence Guide Wire - wrap once around top of each post and Construction tension from post to post Side 14 gauge galvanized wire ERTEC E-Fence 20" 3" from top of fence. 14" - height above ground Back fill fence side first, this side second Side A At E-Fence overlaps – sew sections together with wire-ties to completely eliminate all gaps. 6" - trench depth Back-fill Side A first to Drive posts to depth of push E-Fence against 18" below grade T-Posts

wire 3' c-c (Detail A) 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. At posts, install 2 wire ties. One at top, and one halfway.

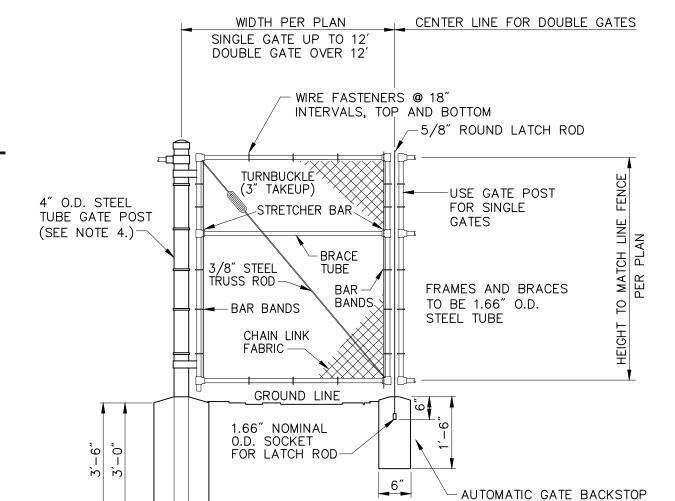
E-Fence DETAILS – Guidewire Crimp

Installation Notes:

Excavate a trench a minimum of 4" wide and a minimum of 5"

E-Fence™ DETAILS – Wildlife Exclusion

- 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:

SET IN CONCRETE BASE

EACH GATE WHEN OPEN

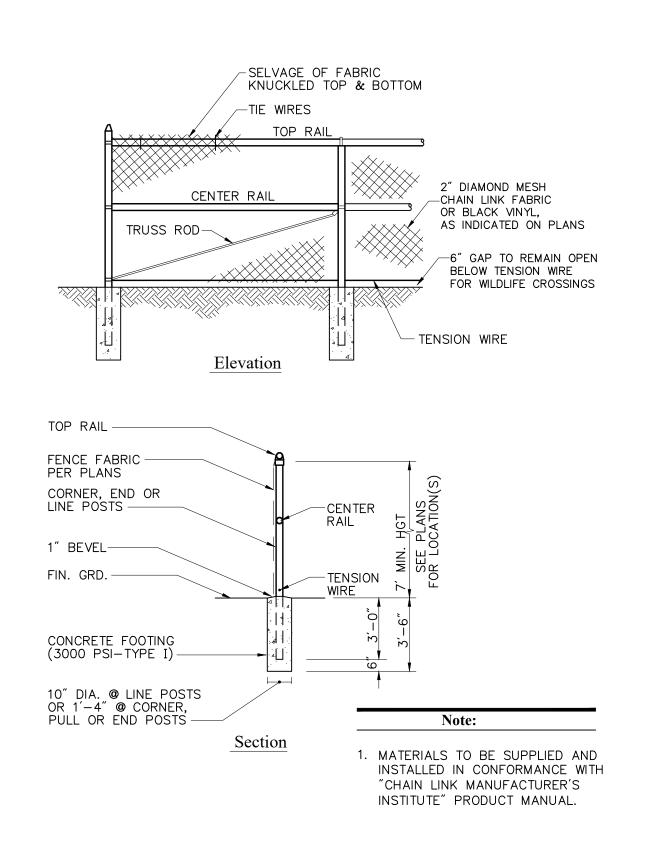
(CLASS A) 6"DIA. \times 1'-6", FOR

- 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	6/08	
N.T.S.	Source: VHB	LD_482

E-Fence Installation Details

N.T.S. Source: Ertec Environmental Systems



7' Chain Link Fence N.T.S. Source: VHB LD_480



PHOTOVOLTAIC INSTALLATION Site Location: 117 Oil Mill Road, Waterford, CT 06385 Owner: GRE Gacrux, LLC Attn: Jean-Paul LaMarche 363 Centennial Parkway, Suite 105 Louisville, CO 80027 **IN CASE OF EMERGENCY CALL 911** WATERFORD POLICE DEPARTMENT - (860) 442-9451

1/16

- 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

Photovoltaic Installation

100 Great Meadow Road

Wethersfield, CT 06109

Suite 200

860.807.4300

117 Oil Mill Road Waterford, Connecticut

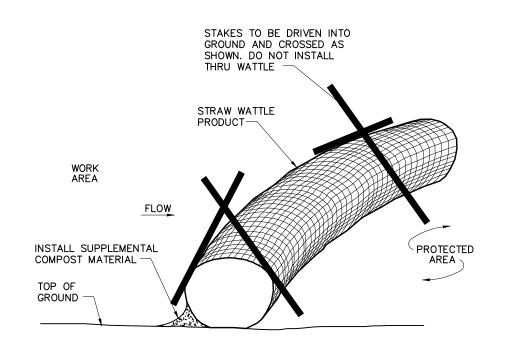
Application December 2, 2019

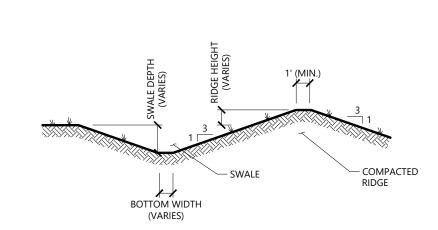
Not Approved for Construction





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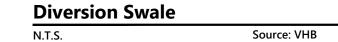


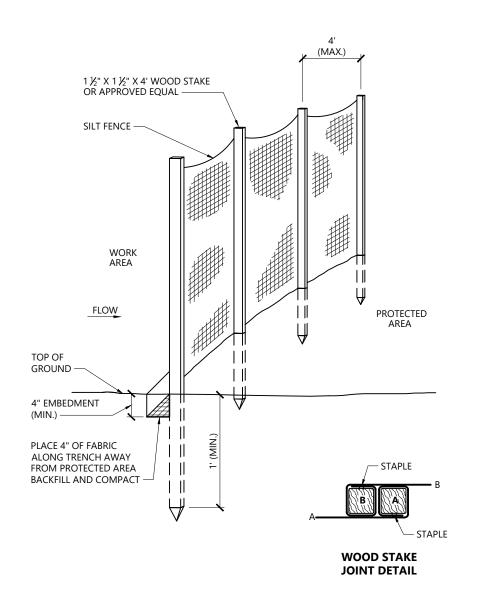
1. ALL SIDE SLOPES SHALL NOT EXCEED 3:1 2. REFER TO "DIVERSION SWALE SIZING" TABLE FOR SELECTION OF LINING MATERIAL TO BE INSTALLED OVER ENTIRE SWALE AREA.

3. REFER TO "DIVERSION SWALE SIZING" TABLE FOR VARIABLE SIZING.

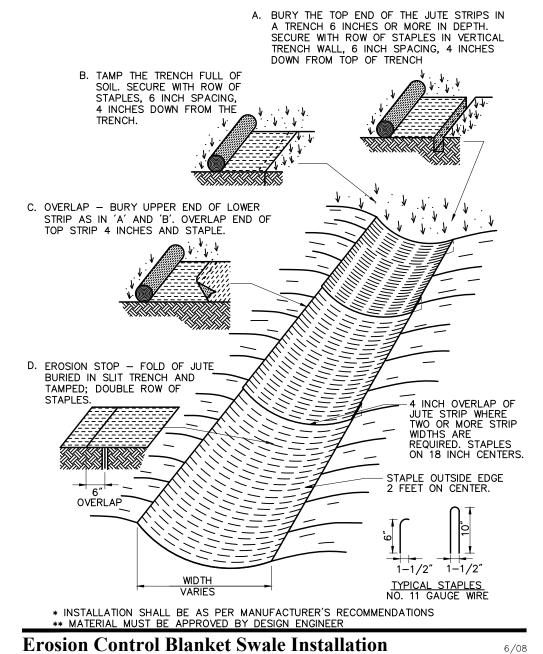
4.THE INTENT IS TO USE THE MATERIAL EXCAVATED FROM THE SWALE TO CONSTRUCT THE RIDGE.

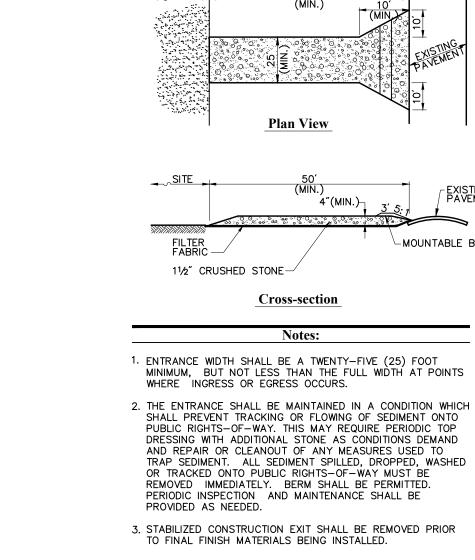
Straw Wattle Installation		8/12
N.T.S.	Source: VHB	LD_658





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





Stabilized Construction Exit

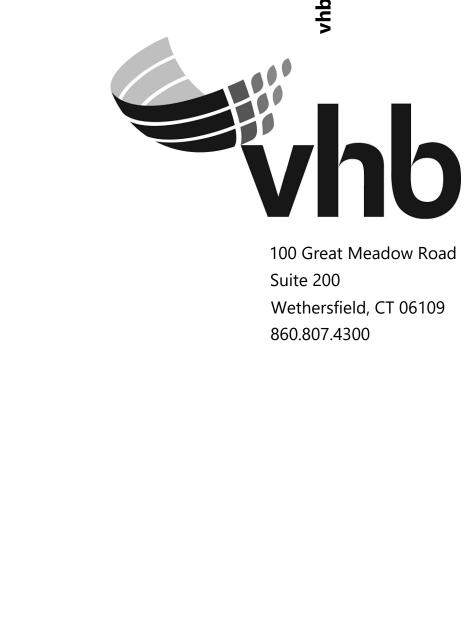
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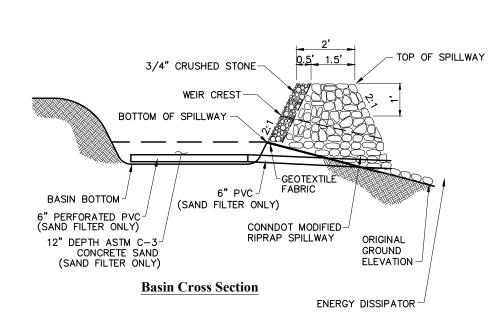
LD_681

-MOUNTABLE BERM

6/08

LD_682





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

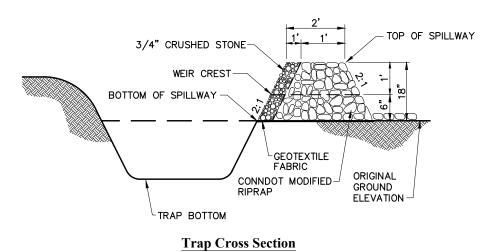
4. REFER TO "PERMANENT STORMWATER BASIN SIZING" TABLE FOR VARIABLE SIZING.

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

REPLACED WITH E-FENCE. 6. PERFORATED PVC AND CONCRETE SAND FOR SAND FILTERS SHALL BE INSTALLED ONLY UPON FULL STABILIZATION OF UPSTREAM AREAS. 6" PVC SHALL BE INSTALLED AND CAPPED AT TIME OF BASIN

Permanent Stormwater Basin

N.T.S.



NOTE: 1. ALL SIDE SLOPES SHALL NOT EXCEED 3:1 2. SIDE SLOPES OF EMBANKMENT SHALL BE STABILIZED BY TEMPORARY SEEDING OR EROSION CONTROL BLANKETS AS DIRECTED BY THE ENGINEER. 3. TRAP SHALL BE DRAINED AND CLEANED OF SEDIMENT ONCE SEDIMENT IS > 1' ABOVE TRAP BOTTOM.

Temporary Sediment Trap (TST)

BOTTOM/CREST OF SPILLWAY -**Spillway Cross Section**

BLANKETS 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.

1. ALL SIDE SLOPES SHALL NOT EXCEED 2:1
2. TOP OF EMBANKMENT SHALL BE 2' (MIN.) WIDTH AND 1' (MIN.) ABOVE TOP OF SPILLWAY. 3. SIDE SLOPES OF EMBANKMENT SHALL BE STABILIZED BY TEMPORARY SEEDING OR EROSION CONTROL 7' HIGH PERIMETER / CHAIN LINK FENCE SOLAR PANELS 15% (MAX.) LONGITUDINAL SLOPE — 12" DEPTH DOT NO. 3 STONE

CRUSHED STONE SHALL BE IN ACCORDANCE WITH THE CURRENT VERSION OF THE CONNECTICUT DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR ROADS,

NUMBER

BASIN TYPE

INFILTRATI□N

INFILTRATION

INFILTRATI□N

POND

POND POND

BRIDGES, AND INCIDENTAL CONSTRUCTION. ON-SITE ROCK MATERIAL SHALL BE CRUSHED AND USED IN THE CONSTRUCTION OF ACCESS ROAD TO THE MAXIMUM EXTENTS FEASIBLE.

Perimeter Ac	cess Cross Section	
NTC	0 1410	

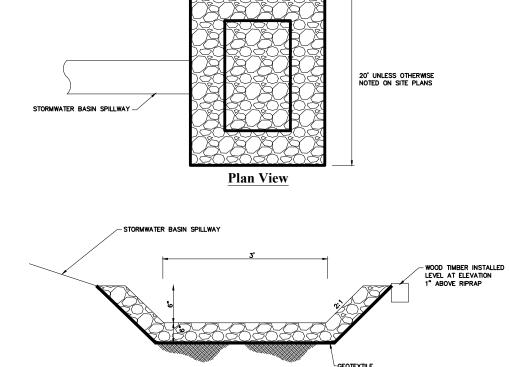
LENGTH AT

BASIN BOTTOM
(TOE OF
SLOPE), FT
SLOPE), FT

WIDTH AT

PERMANENT STORMWATER BASIN SIZING

ELEVATION OF BOTTOM BOTTOM/CREST SPILLWAY MIDTH AT BASE, FT



N.T.S.

Energy Dissipator	
N.T.S.	Source: VHB

Cross Section	GEOTEXTILE FABRIC
NOTE: 1. SHALL BE INSTALLED AT THE OUTLET FROM EACH STORMWATER	R BASIN SPILLWAY.
anan Diadaatan	

WORK AREA	COMPOST FILLED SILTSOCK (12" TYP.) BIODEGRADABLE MESH NETTING	
INSTALL SUPPLEM COMPOST MATERIA		PROTECTED AREA
TOP OF GROUND		

Source: VHB

STAKES TO BE DRIVEN INTO GROUND AND CROSSED AS SHOWN. DO NOT INSTALL THRU SOCK MATERIAL

Notes:				
1.	SILTSOCK SHALL BE 12" DIAMETER FILTREXX SILTSOXX, OR APPROVED EQUAL.			

- 2. SILTSOCKS SHALL OVERLAP A MINIMUM OF 12 INCHES. 3. SILTSOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE
- PERFORMED PROMPTLY AS NEEDED.
- 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)		8/12
N.T.S.	Source: VHB	LD_658

	DI\	/ERSION SW	ALE SIZ	ING		
NAME	APPROXIMATE TRIBUTARY AREA, AC	APROXIMATE LENGTH, FT	BOTTOM WIDTH, FT	SIDE SLOPES	SWALE DEPTH, FT	LINING MATERIAL
1-1	2.2	160	1	3:1	1.5	ECB
2-1	0.5	360	1	3:1	1	ECB
4-1	0.2	210	1	3:1	1	ECB
5-1	0.9	140	1	3:1	1.5	ECB
6-1	0.1	60	1	3:1	1	ECB
7-1	0.1	60	1	3:1	1	ECB
8-1	0.4	170	2	3:1	1	ECB
8-2	0.1	120	1	3:1	1	ECB
9-1	0.6	70	1	3:1	1	ECB
10-1	0.5	160	2	3:1	1	ECB
11-1	0.2	50	1	3:1	1	ECB
11-2	0.2	80	1	3:1	1	ECB
12-1	0.1	40	1	3:1	1	ECB
12-2	1.5	40	1	3:1	1.5	ECB
13-1	0.4	60	1	3:1	1	ECB
14-1	0.3	200	1	3:1	1	ECB
14-2	0.3	150	2	3:1	1.5	15" RIPRAP
14-3	1.5	220	2	3:1	1.5	ECB
14-4	1.5	80	5	3:1	1.5	15" RIPRAP
16-1	13.8	100	12	3:1	3	15" RIPRAP
16-2	4.1	400	6	3:1	2	15" RIPRAP
16-3	1.3	400	6	3:1	1	ECB

Photovoltaic Installation	
117 Oil Mill Road	

Waterford, Connecticut

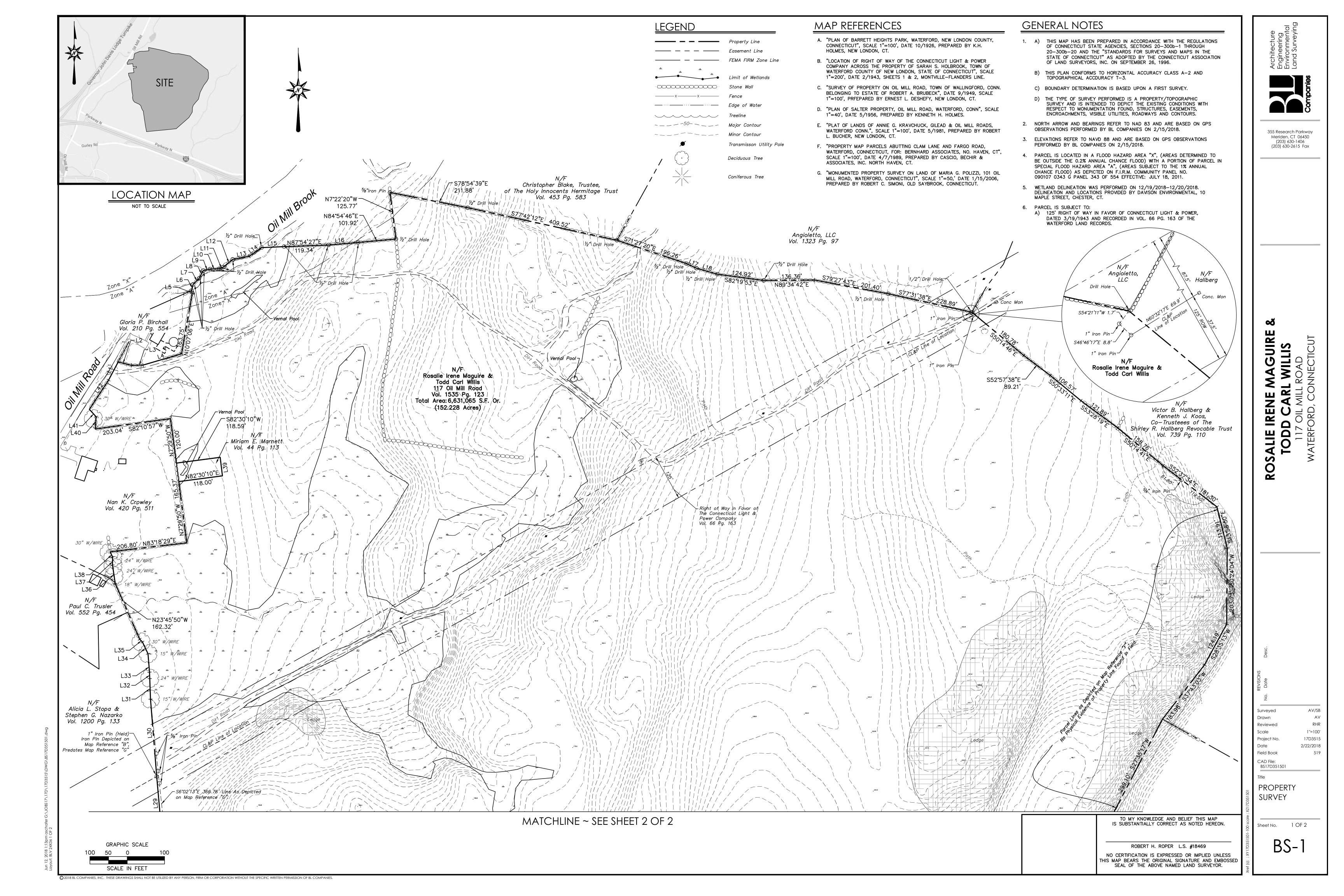
December 2, 2019 **Application**

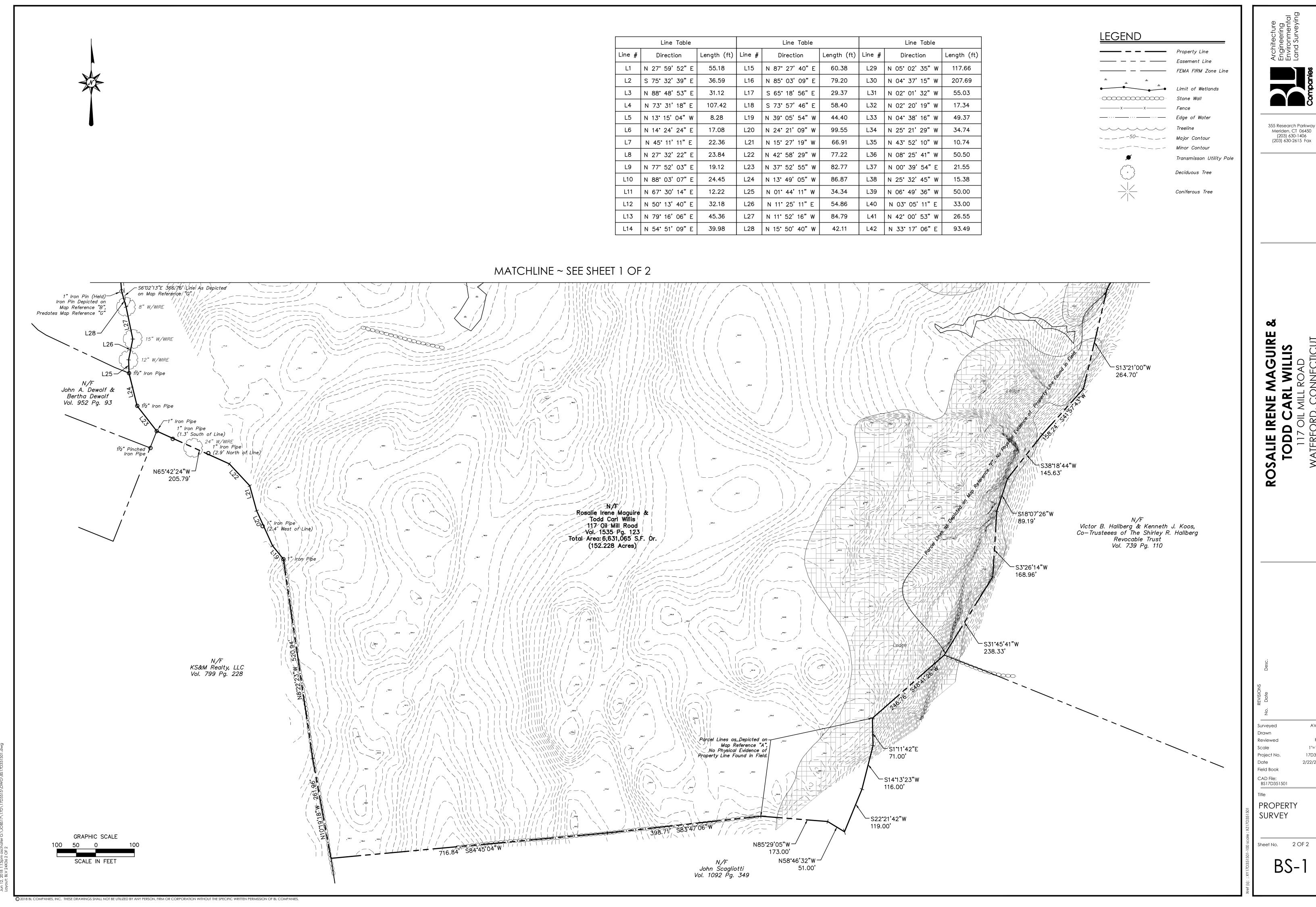


42496.00

Sizing Tables for Temporary & Permanent Stormwater Features

Stormwater Basin Spillway





Meriden, CT 06450 (203) 630-1406 (203) 630-2615 Fax

MAGUIRE RL WILLIS

S 80

AV/SB RHR 1''=100' 17D3515

2/22/2018

CAD File: BS17D351501

PROPERTY SURVEY

Sheet No. 2 OF 2

BS-1