

**STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL**

GRE GACRUX LLC petition for a declaratory ruling for the proposed construction, maintenance and operation of a 16.78-megawatt AC solar photovoltaic electric generating facility in Waterford, Connecticut. Reopening of this petition based on changed conditions.

Petition No. 1347A

July 28, 2020

**PETITION 1347A: GRE GACRUX LLC'S RESPONSES TO
THE SITING COUNCIL'S LATE-FILED EXHIBIT REQUESTS**

Petitioner GRE GACRUX LLC ("GRE" or "Petitioner") hereby submits the following responses to the Siting Council's requests for late-filed exhibits. Should the Council so desire, Petitioner's witness panel will swear to the information below and the exhibits referenced therein so that there may be a full cross examination on the information presented below.

a) Provide a Sign Posting Affidavit

An affidavit relating to the posting of signage at the site, executed by Steven J. Kochis, is submitted with this response as Attachment A.

b) Provide revised site plans that include, but are not limited to, a new access road alignment, stormwater basins with forebays, revisions to grading plan and stormwater basin alignment, removal of panels within 200 feet of wetland areas, and any other changes to the original site layout

A copy of a revised set of site plans, dated July 28, 2020, is enclosed herewith as Attachment B. The site plans have been revised as follows:

- The entrance road in the vicinity of Vernal Pool 3 and Stormwater Basin 1 has been revised such that daily construction activities shall not use the existing road crossing the wetlands. The revised layout can be found on Site Plan Sheet C-3.2.
- A permanent sediment forebay capable of storing at least 25% of the water quality volume for each basin has been added to the Site Plans upstream of each proposed basin. These basins are depicted on the C-4.X series of the Site Plans.
- Stormwater basin 5 has been revised in footprint to shift the bottom of the basin out of the approximate seasonal high groundwater depth. Information on this stormwater basin can be found on Site Plan sheets C-4.9 and C-6.2.

- A line 200 feet from the delineated onsite wetlands has been added to all the Site Plan sheets. All proposed panels that were previously depicted within this line have been removed from the plans.
- The intent to seed and stabilize areas within 72 hours of earthwork completion has been noted on the pertinent Site Plans. This information can be found on Site Plan sheets C-1, C-5.0, and the C-5.X series.
- The proposed fence in the vicinity of Stormwater Basin 4 has been adjusted as requested. This can be found on Site Plan sheet C-3.6.
- Details for Pretreatment Basins, Earthen Surface Sand Filter Basin, Wood Chip Mulch Berm, and Cross Section of Panel Array have been added to Site Plan sheet C-6.1.

c) Provide revised vernal pool pre and post Vernal Pool Envelope and Critical Terrestrial Habitat figures to exclude the logged areas as a pre and post-construction development condition. Refer to Petition 1347 Responses to Council interrogatories Set 1, Exhibit J for the previous vernal pool analysis conducted for the site

A Vernal Pool Disturbance exhibit has been created dated July 24, 2020. The pre- and post-development Vernal Pool Envelope and Critical Terrestrial Habitat figures have been updated to exclude the logged areas as existing or proposed disturbance. The exhibit is enclosed herewith as Attachment C.

d) Provide a monitoring protocol for the Eastern Ribbon Snake

The Eastern Ribbon Snake monitoring protocol has been created by VHB and is enclosed herewith as Attachment D.

e) Provide an inspection protocol and potential remedial actions for vernal pool species that may use the post-construction wet pond stormwater basins as decoy pools

The ongoing monitoring plan for decoy pool usage has been completed by VHB and is enclosed herewith as Attachment E. Additionally, the measures are also shown on Site Plan sheets C-3.2 and C-3.5 of Attachment B.

f) Revise Site Plan C-5.0 Notes to include inspections of E&S controls/basins (daily, weekly, and prior to and after a storm events)

The notes on Site Plan Sheet C-5.0 (included in Attachment B) have been revised to require the contractor to perform daily inspections of the erosion and sediment control features on the site. It has also been clarified in the notes that a CTDEEP-approved qualified inspector shall perform weekly inspections, at a minimum, and/or inspections within 24 hours of a 0.5-inch rainfall event.

g) Revise the stormwater basin callouts on Site Plans 4.0 series and 5.0 series to clearly indicate where erosion blankets and rip rap will be installed

The stormwater basin callouts on Site Plan Sheets C-4.X and C-5.X series (included in Attachment B) have been revised to depict where to install erosion control blankets within the basin and where to install riprap.

h) Revise Site Plan 6.2 to include Silt Fence barrier detail/notes for areas with exposed and shallow bedrock

The Silt Fence Barrier detail on Site Plan sheet C-6.2 (included in Attachment B) has been revised with a note outlining how the contractor shall handle obtrusions while placing the silt fence.

i) Indicate whether solar panels include selenium

The Petitioner has received documentation from our most common manufacturer and the manufacturer of the modules most likely to be used for the proposed project regarding what materials are included in the modules. The report is confidential, so cannot be provided at this time, but it does confirm that selenium is not a major material used in the modules and that it can only be detected in trace amounts of .05 mg/L (below the limit of 1 mg/L) and does not leach from the module.

If the project is approved, the Petitioner is willing to provide the Siting Council with any information it receives from its selected manufacturer regarding the selenium content of any panels that will be used in the project.

j) Provide the amount of anticipated site grading in acres and as a percentage of the construction area;

Based upon a review of the Site Plans revised through July 28, 2020, it is anticipated that the total site development will be approximately 75 acres. Of that 75 acres, it is anticipated that a footprint of approximately 6.4 acres will be disturbed to install the proposed stormwater basins, that approximately 8.9 acres will be disturbed to grade down slopes in excess of 15%, and approximately 0.9 acres will be disturbed to install the proposed swales. This total of 16.2 acres of grading represents approximately 21.6% of the total site development area of 75 acres.

k) Indicate whether Petitioner will adhere to the clearing restrictions behind Appendix H of the Petition.

The Petitioner presumes that the Council is referring to section 4.2 of Appendix H, which states that to promote habitat, “all clearing should occur between October 15th and March 1st, to prevent impacts to wildlife.” Assuming that Petitioner is correct in that assumption, assuming the Petition is approved in a time frame that would allow Petitioner to undertake its clearing between October 15th and March 1st, Petitioner will adhere to that clearing restriction. If that is not the case, Petitioner would first apply to the Siting Council, through the D&M Plan process, to provide an alternative method of site clearing that would be protective of the wildlife in the area and would abide by the Siting Council’s decision regarding such an alternate plan.

In addition to the foregoing responses the Council requested, Petitioner wishes to clarify the discussions surrounding the stormwater permitting process that took place at the 1:00 p.m. hearing on July 14, 2020. This discussion begins on page 40 of the Transcript, where Steven Kochis discussed comments from CT DEEP that Petitioner had received concerning its stormwater permit application. The comments from CT DEEP, and Petitioner's responses thereto, are included below for the Council's review. Petitioner anticipates filing these responses with CT DEEP on July 29, 2020.

CTDEEP COMMENTS

1) Determine how to avoid compaction of proposed infiltration basins during their use as temporary sediment traps.

The Site Plans have been revised to include new temporary sediment traps upstream of the proposed infiltration basins, which have been sized to handle their tributary watershed areas. These temporary sediment traps will remain permanently as oversized pretreatment basins for the infiltration basins. This information can be found on the Site Plan sheet C-4.X series.

2) The Petitioner shall make clear that they will allow a growing season following construction and stabilization of the basins prior to initiation of solar development.

Note 15 of the Pre-Construction Site Protection Sequence has been revised to state that the initiation of mass earthwork or solar development cannot take place until the disturbed areas from the erosion and sediment control sequence have been seeded and allowed to grow through a growing season. This note can be found on Site Plan sheet C-5.0.

3) The outfall point of the energy dissipators shall be converted from timber to concrete curb, and the long-term inspection plan shall be revised to include confirmation that these level spreader lips remain level over time.

The Energy Dissipator detail on Site Plan sheet C-6.2 has been revised to depict a concrete curb in lieu of a timber lip at the discharge point from the measure. The Long-term inspection plan depicted in the Stormwater Report has been revised to address inspection measures for the energy dissipator, and the Stormwater Report is also enclosed herewith.

4) Construction notes shall be clear that "mass excavation" refers only to those parts of the site where proposed grades are shown.

Note 1 of the Construction Sequence on Site Plan sheet C-5.0 has been revised to note that mass earthwork shall only mean regrading to meet the proposed grading depicted on the plans.

5) Include a detail for the sand filter.

A detail for Earthen Surface Sand Filter Basin has been added to Site Plan sheet C-6.1.

6) The site plans should be revised to include pretreatment basins for all proposed stormwater basins.

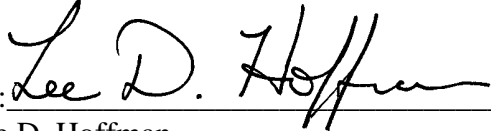
A detail for the Pretreatment Basins has been added to Site Plan sheet C-6.1 and a permanent sediment forebay capable of storing at least 25% of the water quality volume for each basin has been added to the Site Plans upstream of each proposed basin. These basins are depicted on the C-4.X series of the Site Plans.

7) A Letter of Credit in the value of \$15,000 per acre of disturbance shall be provided to the Department.

A Letter of Credit for \$1.125M will be secured and delivered to CTDEEP.

Respectfully submitted,

GRE GRACRUX LLC

By: 

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Amanda G. Gurren

agurren@pullcom.com

Pullman & Comley, LLC

90 State House Square

Hartford, CT 06103-3702

Ph. (860) 424-4315

Ph. (860) 424-4338

Fax (860) 424-4370

Its Attorneys

CERTIFICATION

I hereby certify that a copy of the foregoing document was delivered by e-mail on July 28, 2020 to the following service list:

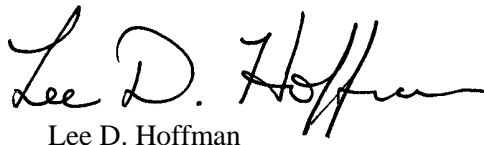
The Honorable Robert J. Brule
First Selectman
Waterford Town Hall
15 Rope Ferry Road
Waterford, CT 06385
rbrule@waterfordct.org
apiersall@waterfordct.org

Jean-Paul La Marche
Development Manager
Clean Focus Renewables, Inc.
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VP, Save the River-Save the Hills, Inc.
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Lee D. Hoffman

Attachment A

STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

**Petition 1347A - GRE GACRUX LLC
Petition for a Declaratory Ruling, Pursuant
to Connecticut General Statutes §4-176 and
§16-50k, for the Proposed Construction,
Maintenance and Operation of a 16.78 MW
AC Solar Photovoltaic Electric
Generating Facility Located at 117 Oil Mill
Road and Associated Electrical
Interconnection to Eversource Energy's
Existing Substation at 325 Waterford
Parkway North in Waterford, Connecticut.
Reopening of this Petition Based on
Changed Conditions Pursuant to Connecticut
General Statutes §4-181a(b).**

PETITION NO. 1347A

July 27, 2020

SIGN POSTING AFFIDAVIT

I, Steven J. Kochis, being duly sworn, deposes and states that:

1. I am over eighteen (18) years of age, and I understand the obligations of making a statement under oath.
2. I am a Senior Project Engineer for Vanasse Hangen Brustlin, Inc. ("VHB"), working primarily in the 100 Great Meadow Road, Suite #200, Wethersfield, Connecticut location.
3. I was responsible for the posting of the "Public Notice Sign" at the subject property (the "Project Site"; or the "Site"). In accordance with Connecticut Siting Council ("Council") regulations section 16-50j-21(a)(3), a sign was posted on June 9, 2020 (the "Original Public Notice Sign"). The Public Notice Sign measured four (4) feet by six (6) feet and was posted at the Site access driveway along Oil Mill Road in Waterford. A photograph of the Original Public Notice Sign is attached to this Affidavit as **Exhibit A**.

4. On June 26, 2020, I posted a revised Public Notice sign (the “Revised Public Notice Sign”) at the Project Site to reflect that the hearing for Petition No. 1347A had been rescheduled to July 14, 2020.

5. The Revised Public Notice Sign measures four (4) feet by six (6) feet and is at the Site access driveway along Oil Mill Road in Waterford. The text of the posted Revised Public Notice Sign is as set forth in the Council's regulations section 16-50j-21(a)(3). A photograph of the Revised Public Notice Sign posted at the Project Site is attached to this Affidavit as **Exhibit B**.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the undersigned has executed and delivered this Affidavit as of the date set forth above.

By: Steven J. Kochis
Steven J. Kochis, Senior Project Engineer
Vanasse Hangen Brustlin, Inc.
100 Great Meadow Road, Suite #200
Wethersfield, CT 06109

STATE OF CONNECTICUT)
) SS: HARTFORD
COUNTY OF HARTFORD)

On this 27th day of July, 2020, before me, the undersigned, Steven J. Kochis, personally appeared via Zoom, and he is known to me to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same as his free act for the purposes therein contained.

In witness whereof, I hereunto set my hand.

Lee D. Hoffman

Lee D. Hoffman
Commissioner of the Superior Court

EXHIBIT A

Original Public Notice Sign

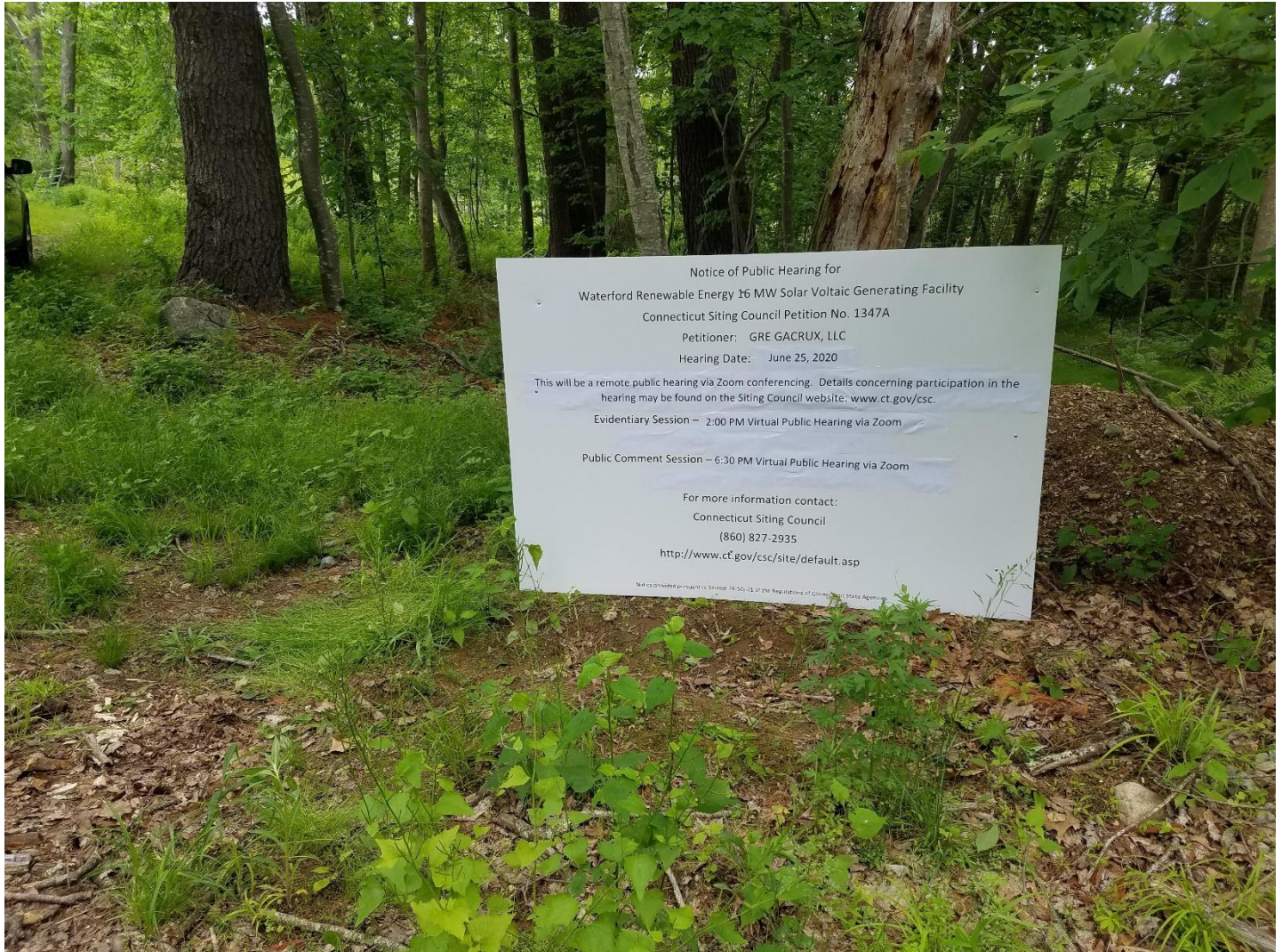


EXHIBIT B

Revised Public Notice Sign



Site Plans

Issued for	Application
Date Issued	December 2, 2019
Latest Issue	July 28, 2020

Photovoltaic Installation

117 Oil Mill Road
Waterford, Connecticut

Applicant

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

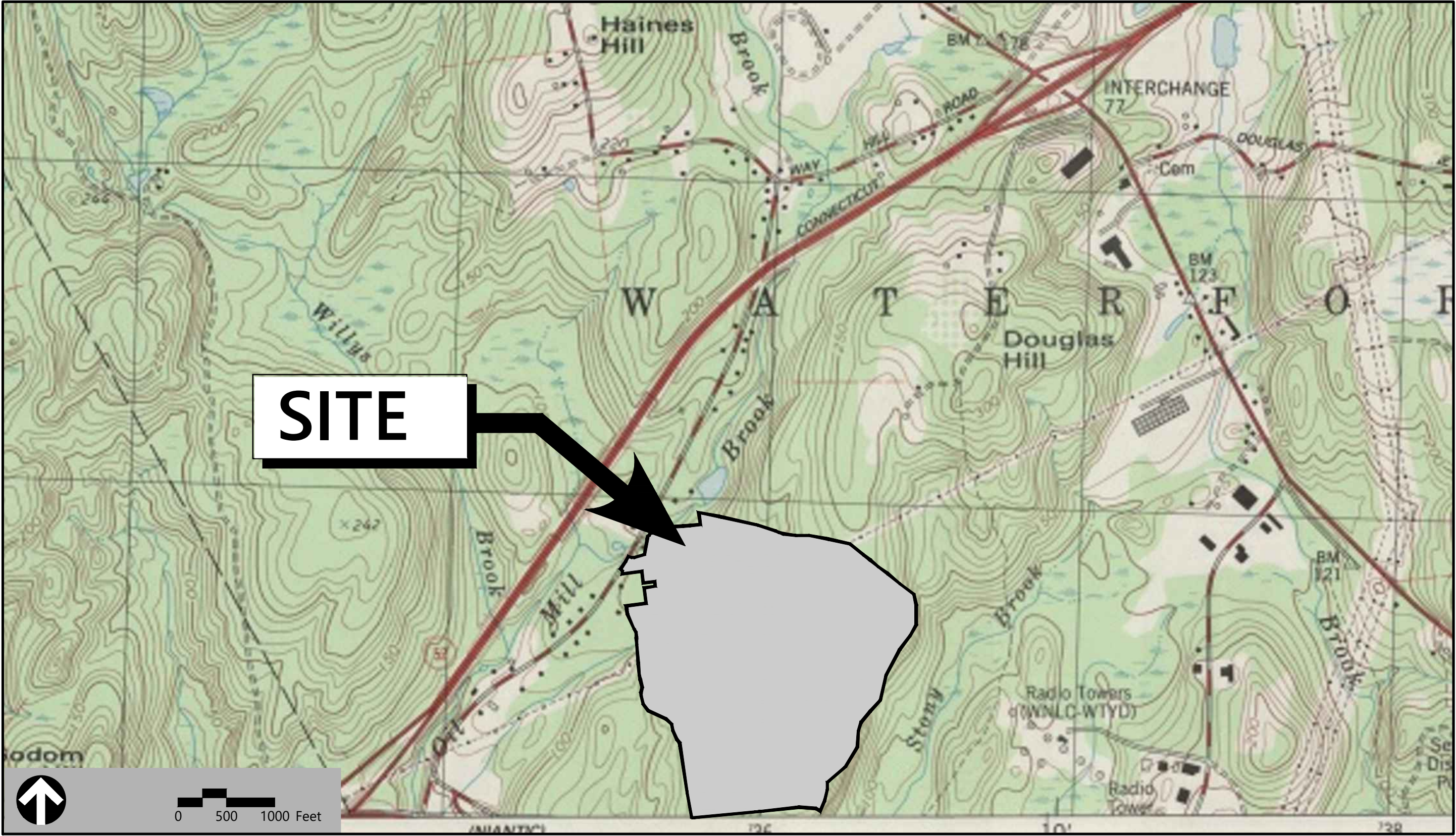
Map / Lot:

80 / 5497

Owner

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

Attachment B



Sheet Index			Reference Drawings		
No.	Drawing Title	Latest Issue	No.	Drawing Title	Latest Issue
C-1	Legend and General Notes	July 28, 2020	Sheets 1 & 2	Property Survey	February 22, 2018
C-2	Key Plan	July 28, 2020			
C-3.0	Layout and Materials Plan - Overall	July 28, 2020			
C-3.1-3.12	Layout and Materials Plan	July 28, 2020			
C-4.0	Grading and Drainage Plan - Overall	July 28, 2020			
C-4.1-4.12	Grading and Drainage Plan	July 28, 2020			
C-5.0	Erosion and Sediment Control Plan - Overall	July 28, 2020			
C-5.1-5.12	Erosion and Sediment Control Plan	July 28, 2020			
C-6.1-6.2	Site Details	July 28, 2020			





100 Great Meadow Road

Suite 200

Wethersfield, CT 06109

860.807.4300

Legend

Exist.	Prop.		Exist.	Prop.	
		PROPERTY LINE			CONCRETE
		PROJECT LIMIT LINE			HEAVY DUTY PAVEMENT
		RIGHT-OF-WAY/PROPERTY LINE			BUILDINGS
		EASEMENT			RIPRAP
		BUILDING SETBACK			CONSTRUCTION EXIT
		PARKING SETBACK			TOP OF CURB ELEVATION
		BASELINE			BOTTOM OF CURB ELEVATION
		CONSTRUCTION LAYOUT			SPOT ELEVATION
		ZONING LINE			TOP & BOTTOM OF WALL ELEVATION
		TOWN LINE			BORING LOCATION
		LIMIT OF DISTURBANCE			TEST PIT LOCATION
		WETLAND LINE WITH FLAG			MONITORING WELL
		FLOODPLAIN			UNDERDRAIN
		100-YEAR FLOOD LIMITS			DRAIN
		GRAVEL ROAD			ROOF DRAIN
		EDGE OF PAVEMENT			SEWER
		BITUMINOUS BERM			FORCE MAIN
		BITUMINOUS CURB			OVERHEAD WIRE
		CONCRETE CURB			WATER
		CURB AND GUTTER			FIRE PROTECTION
		EXTRUDED CONCRETE CURB			DOMESTIC WATER
		MONOLITHIC CONCRETE CURB			GAS
		PRECAST CONC. CURB			ELECTRIC
		SLOPED GRAN. EDGING			STEAM
		VERT. GRAN. CURB			TELEPHONE
		LIMIT OF CURB TYPE			FIRE ALARM
		SAWCUT			CABLE TV
		BUILDING			CATCH BASIN
		BUILDING ENTRANCE			DOUBLE CATCH BASIN
		LOADING DOCK			GUTTER INLET
		BOLLARD			DRAIN MANHOLE
		DUMPSTER PAD			TRENCH DRAIN
		SIGN			PLUG OR CAP
		DOUBLE SIGN			CLEANOUT
		STEEL GUARDRAIL			FLARED END SECTION
		WOOD GUARDRAIL			HEADWALL
		PATH			SEWER MANHOLE
		TREE LINE			CURB STOP & BOX
		WIRE FENCE			WATER VALVE & BOX
		FENCE			TAPPING SLEEVE, VALVE & BOX
		STOCKADE FENCE			SIAMESE CONNECTION
		STONE WALL			FIRE HYDRANT
		RETAINING WALL			WATER METER
		STREAM / POND / WATER COURSE			POST INDICATOR VALVE
		DETENTION BASIN			WATER WELL
		HAY BALES			GAS GATE
		SILT FENCE			GAS METER
		SILT SOCK / STRAW WATTLE			ELECTRIC MANHOLE
		MINOR CONTOUR			ELECTRIC METER
		MAJOR CONTOUR			LIGHT POLE
		PARKING COUNT			TELEPHONE MANHOLE
		COMPACT PARKING STALLS			TRANSFORMER PAD
		DOUBLE YELLOW LINE			UTILITY POLE
		STOP LINE			GUY POLE
		CROSSWALK			GUY WIRE & ANCHOR
		ACCESSIBLE CURB RAMP			HAND HOLE
		ACCESSIBLE PARKING			PULL BOX
		VAN-ACCESSIBLE PARKING			MATCHLINE

Abbreviations

General	
ABAN	ABANDON
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
BIT	BITUMINOUS
B5	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	
CB	CATCH BASIN
CMP	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
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
INV	INVERT ELEVATION
I=	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
UG	UNDERGROUND
UP	UTILITY POLE

Notes

General	
1. CONTRACTOR SHALL NOTIFY "CALL BEFORE YOU DIG" (811 OR 1-800-922-4455) AT LEAST 72 HOURS BEFORE EXCAVATING.	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 TO PREVENT EROSION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.	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.
3. WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS.	6. VEGETATIVE SLOPE STABILIZATION WILL BE IMPLEMENTED WITHIN 72 HOURS 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 SOODING, 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.
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 CUT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.	Document Use
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 EXPENSE.	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.
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.	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.
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.	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.
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 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 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	
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 INTERSECTIONS 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	
1. 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 MATERIALS AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOROVER, 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.	
Erosion Control	
1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE	

Photovoltaic Installation

117 Oil Mill Road
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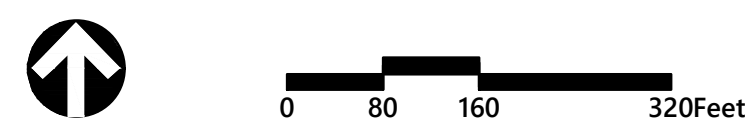
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Legend and General Notes



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Key Plan

Drawing Number

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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: 45,566

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

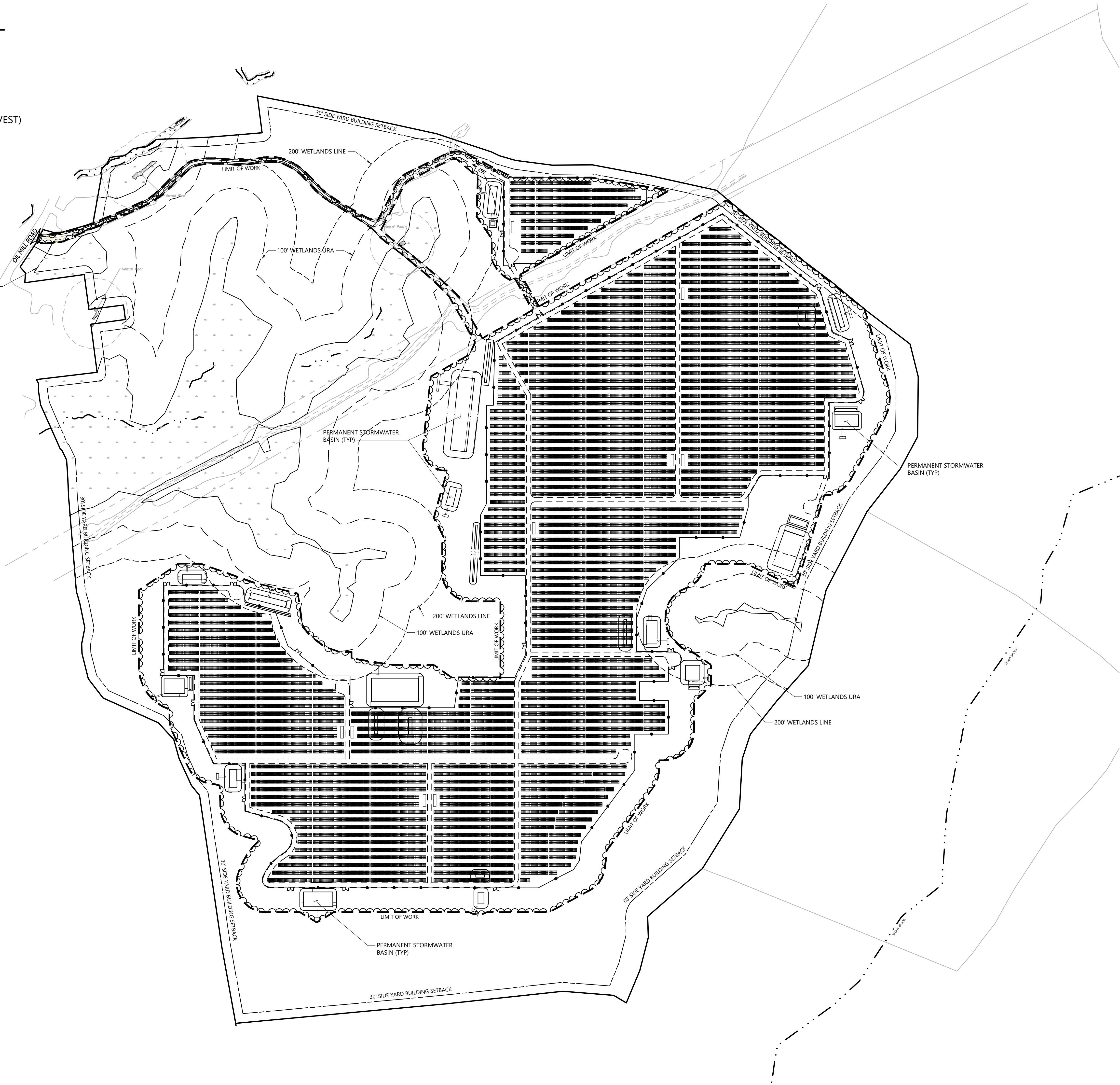
ROW SPACING: 14.5' CLEAR

TILT ANGLE: 25°

INVERTER TYPE: SOLECTRIA RENEWABLES XGI 1000-60/65

SYSTEM POWER: 18.23 MW-DC / ±15.33 MW-AC

50' FRONT YARD BUILDING SETBACK





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C-3.7	C-3.8	C-3.9
C-3.10	C-3.11	C-3.12

Key

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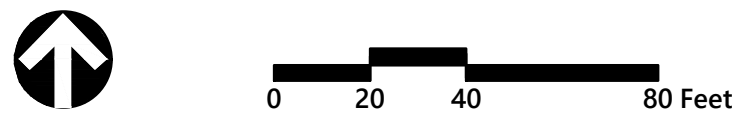
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Materials Plan

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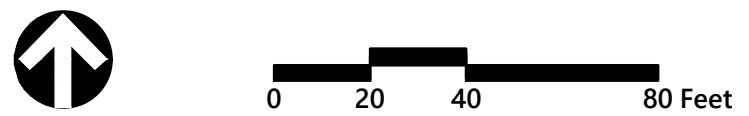
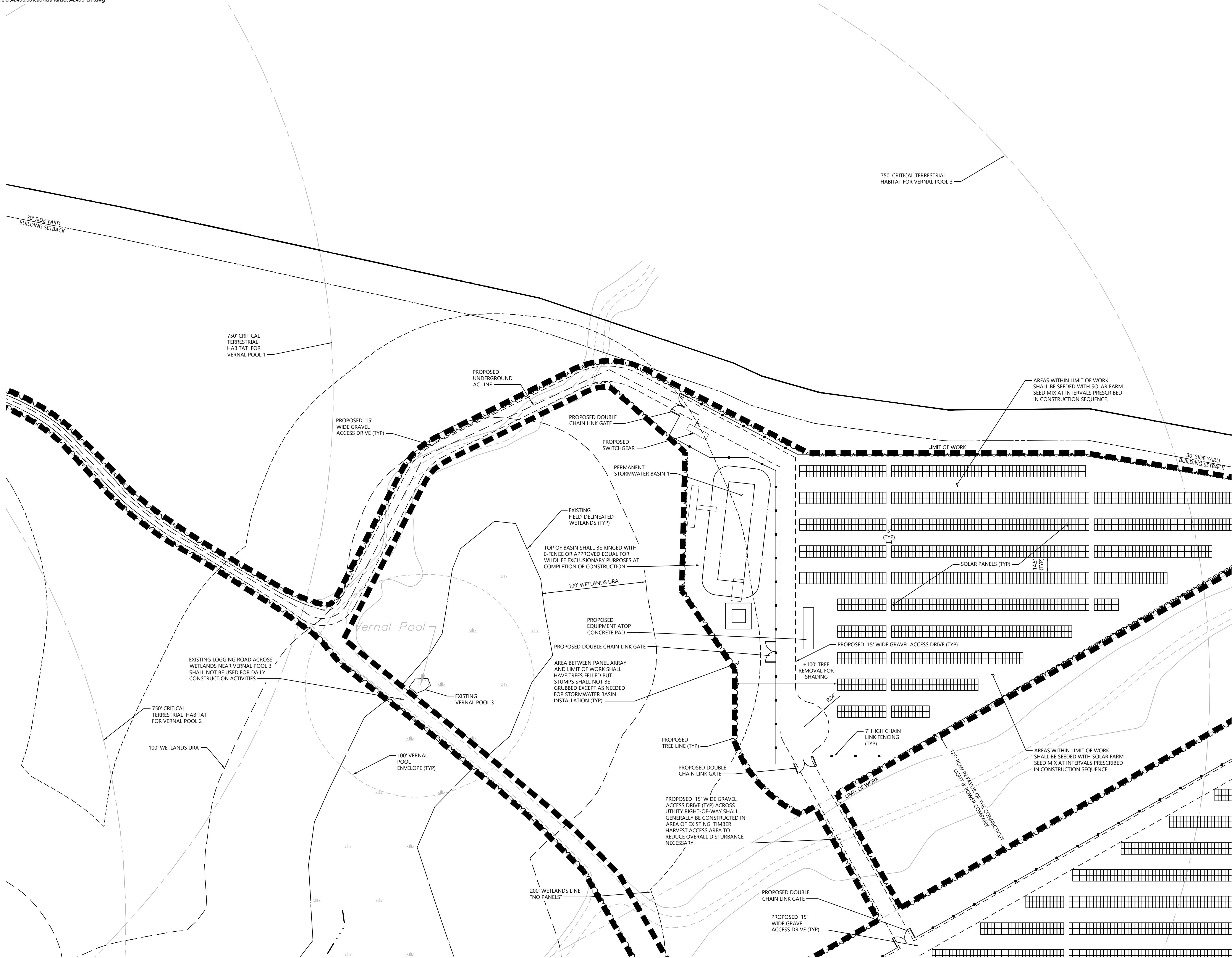
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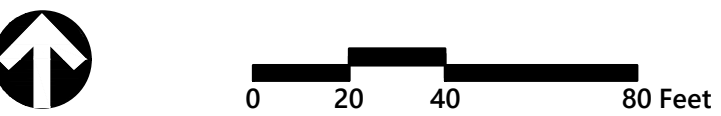
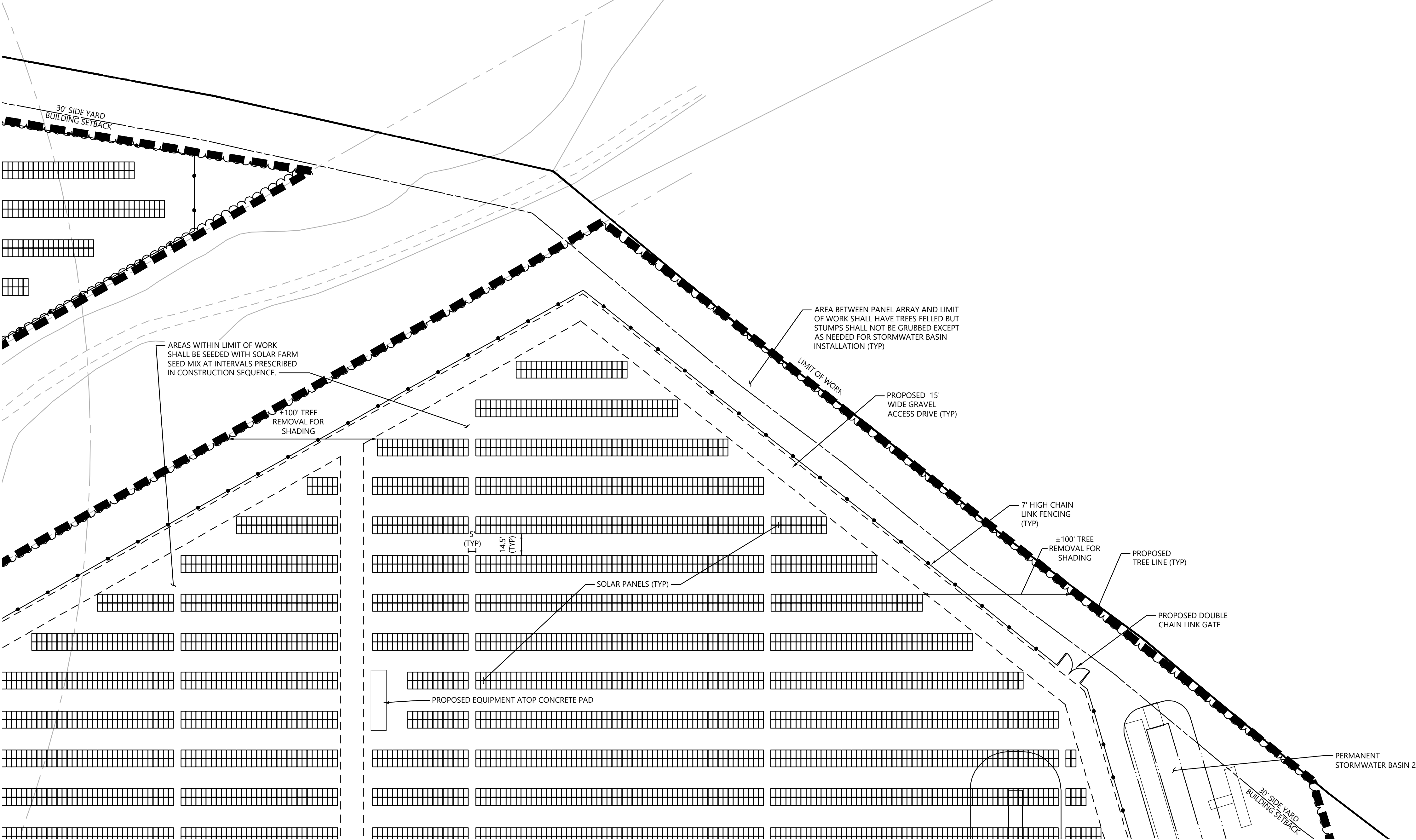
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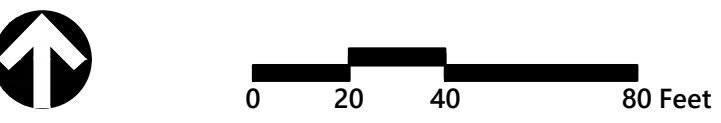
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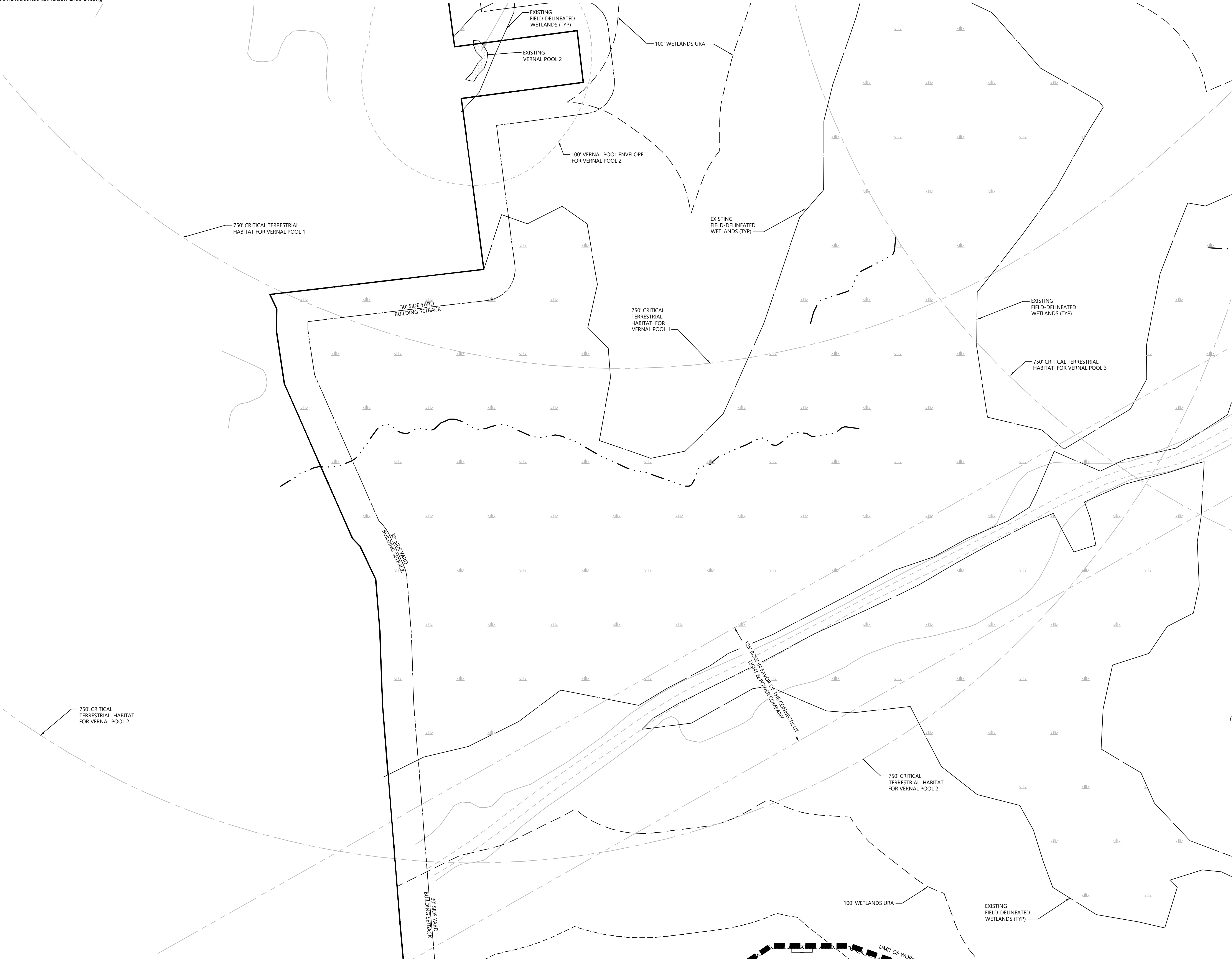
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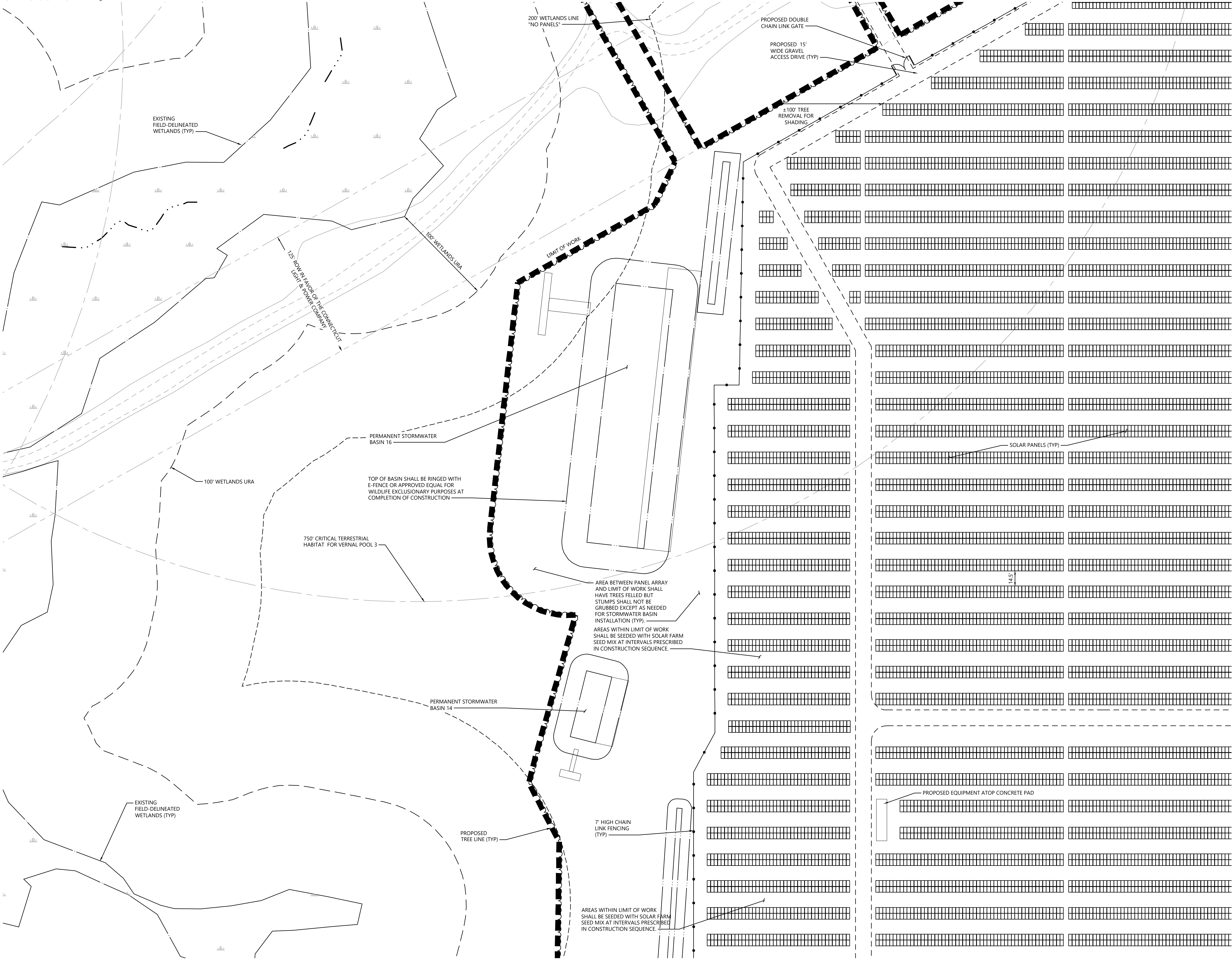
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0204080 Feet

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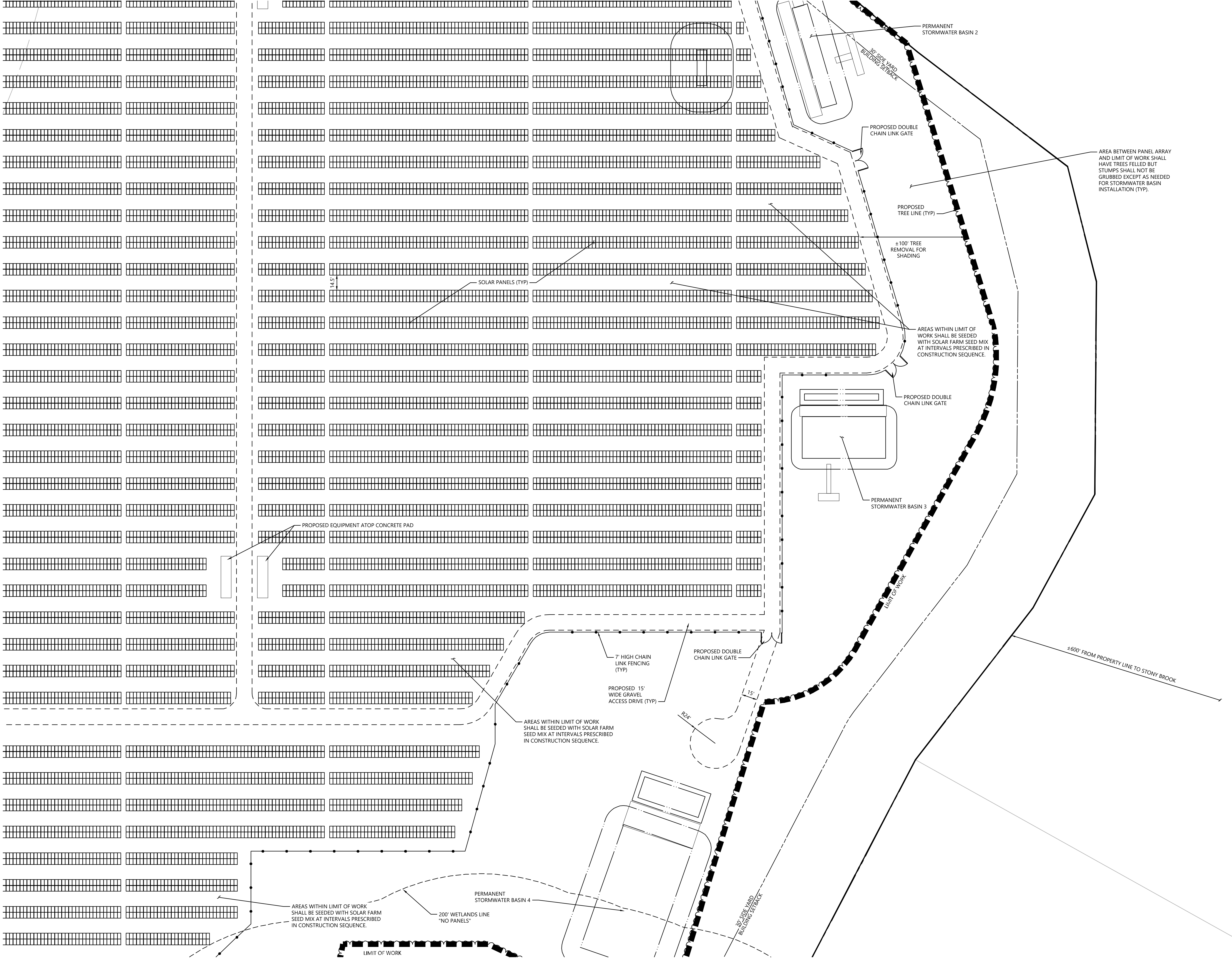
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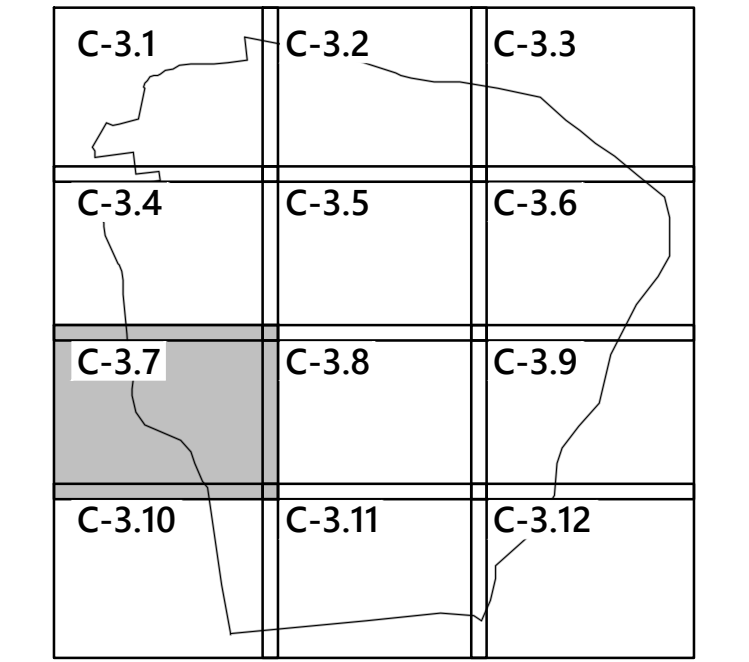
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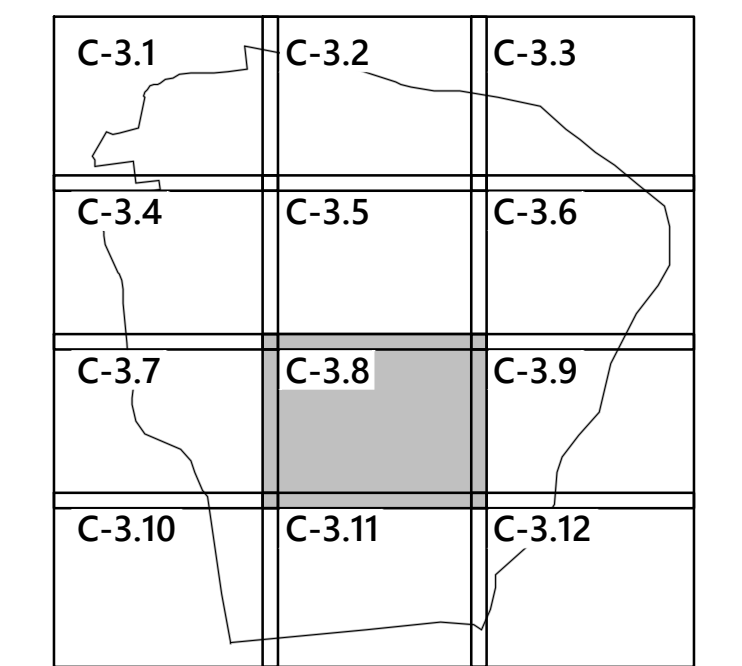
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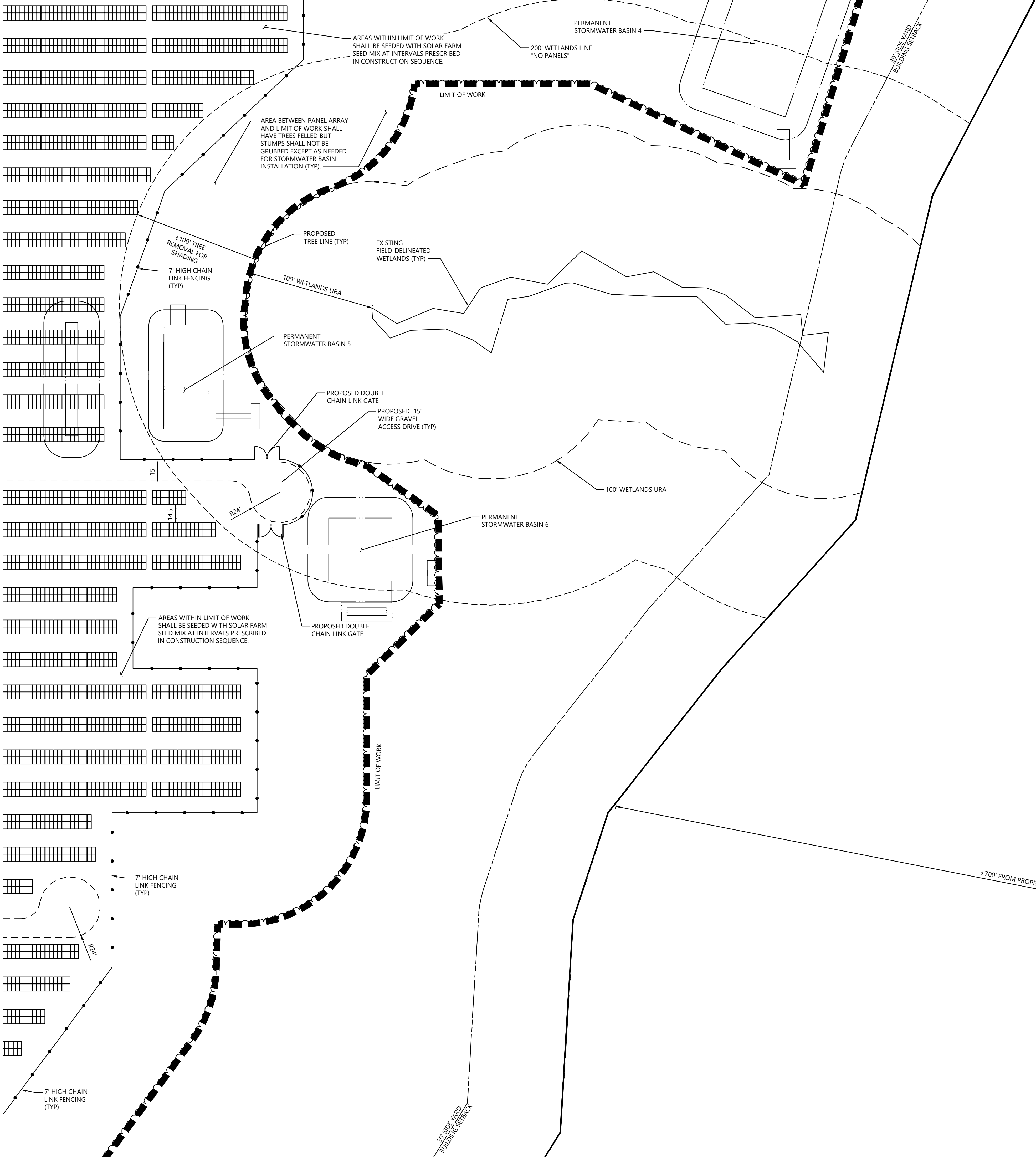
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80 Feet

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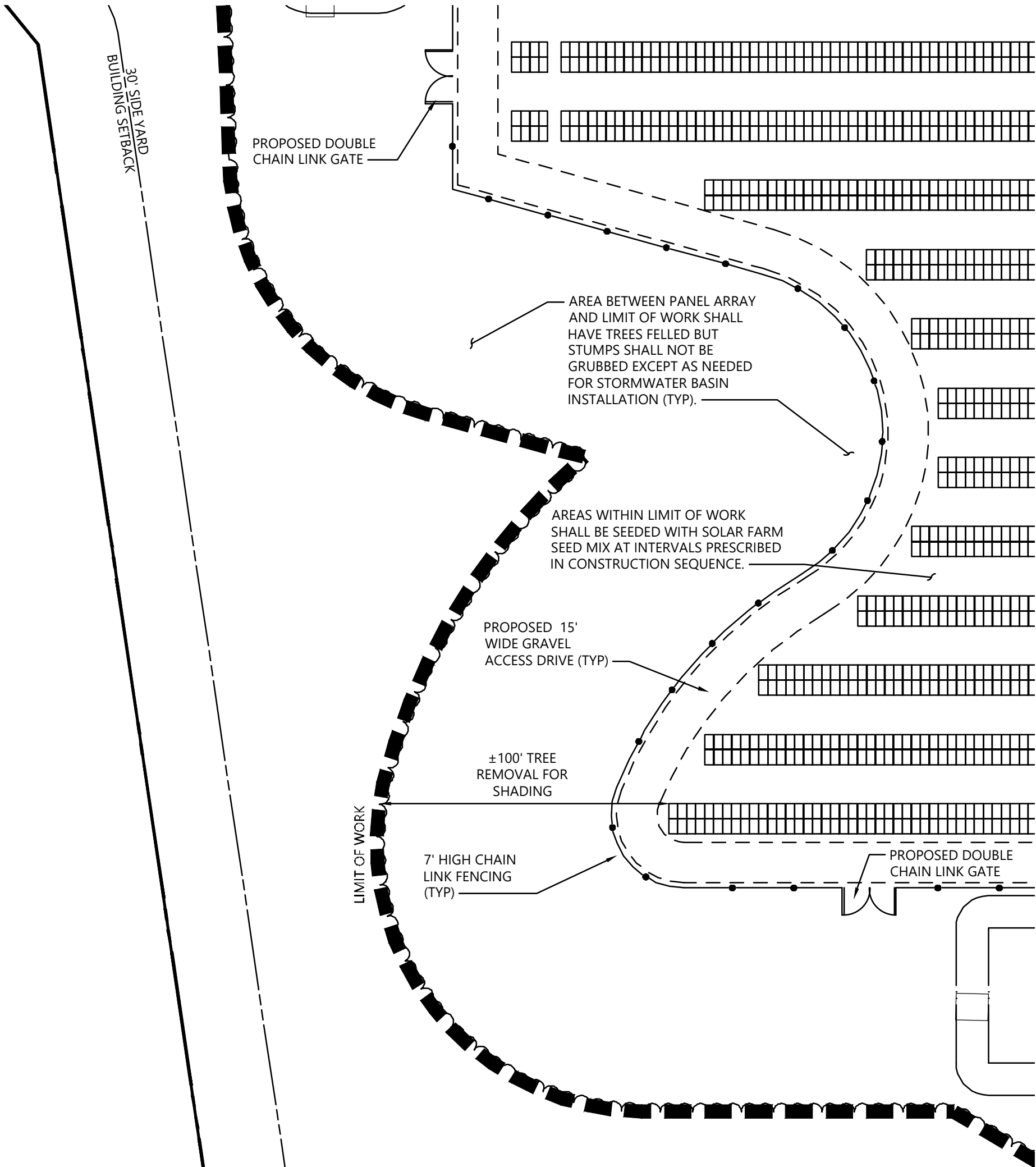
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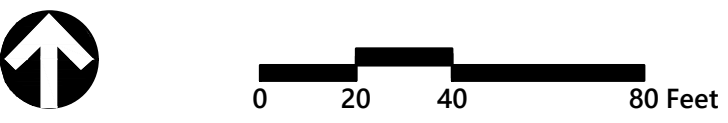


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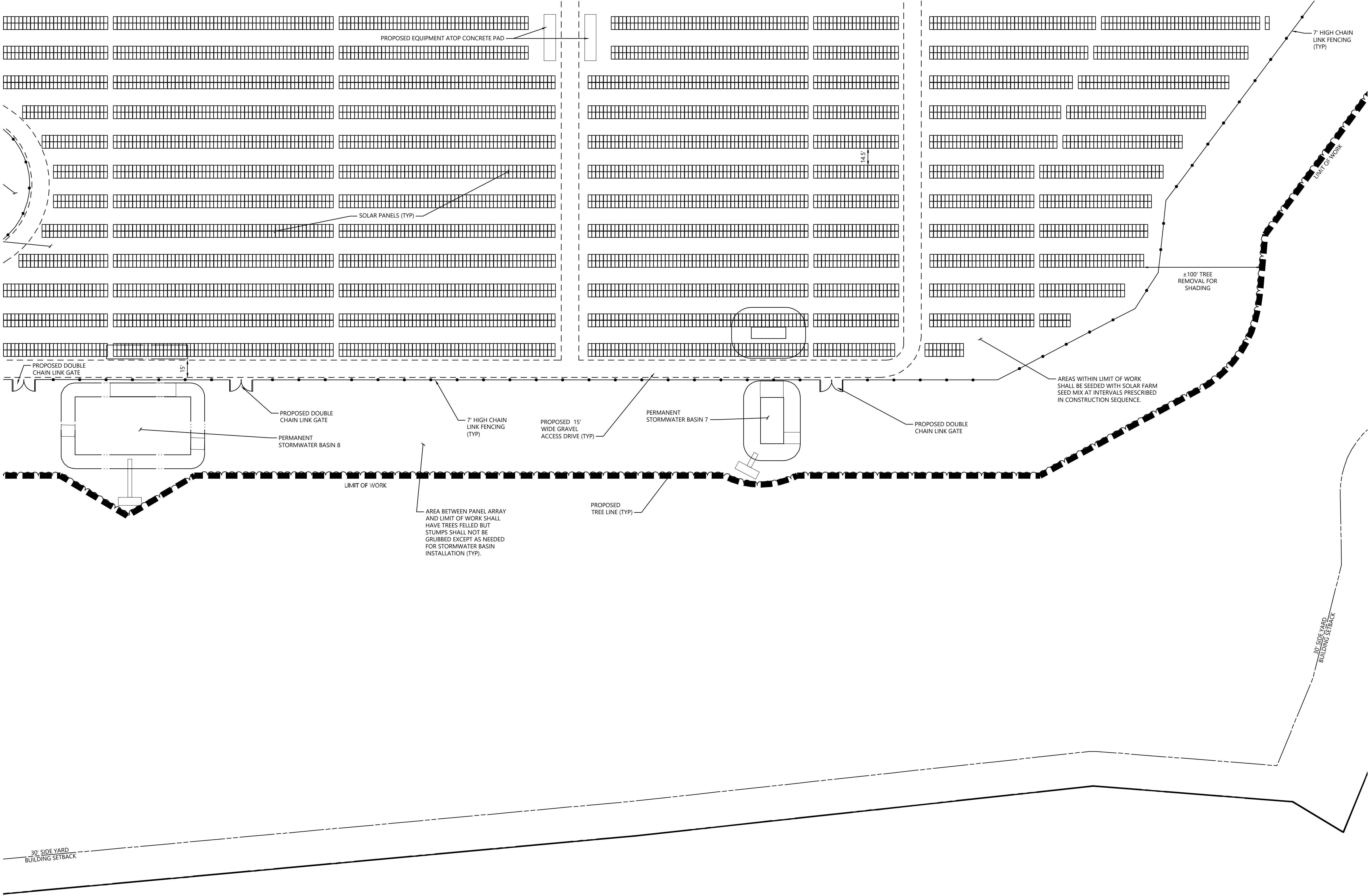
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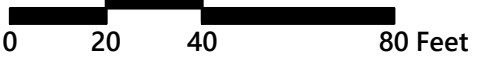



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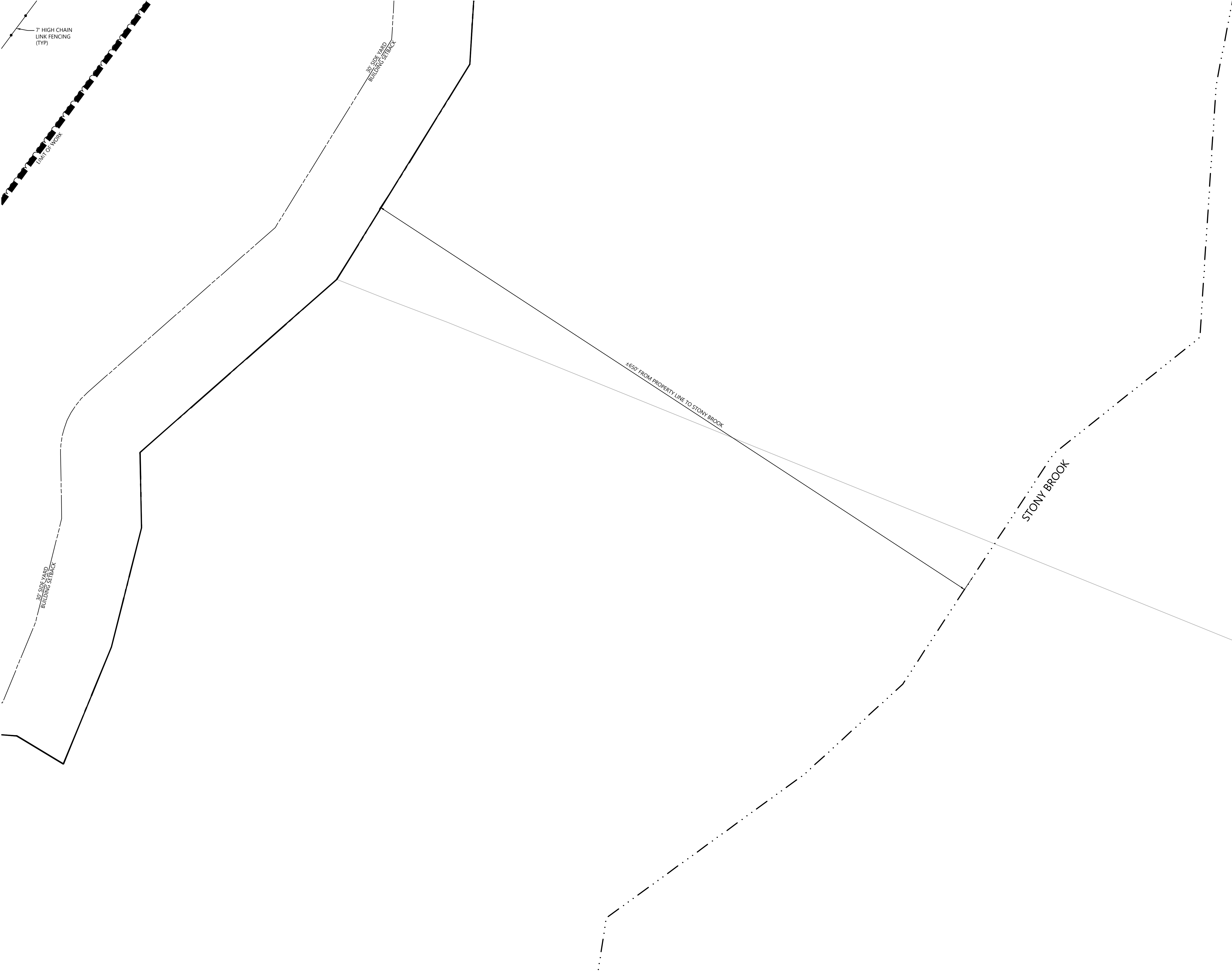
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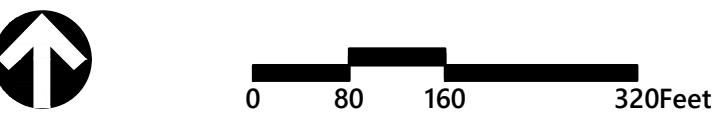
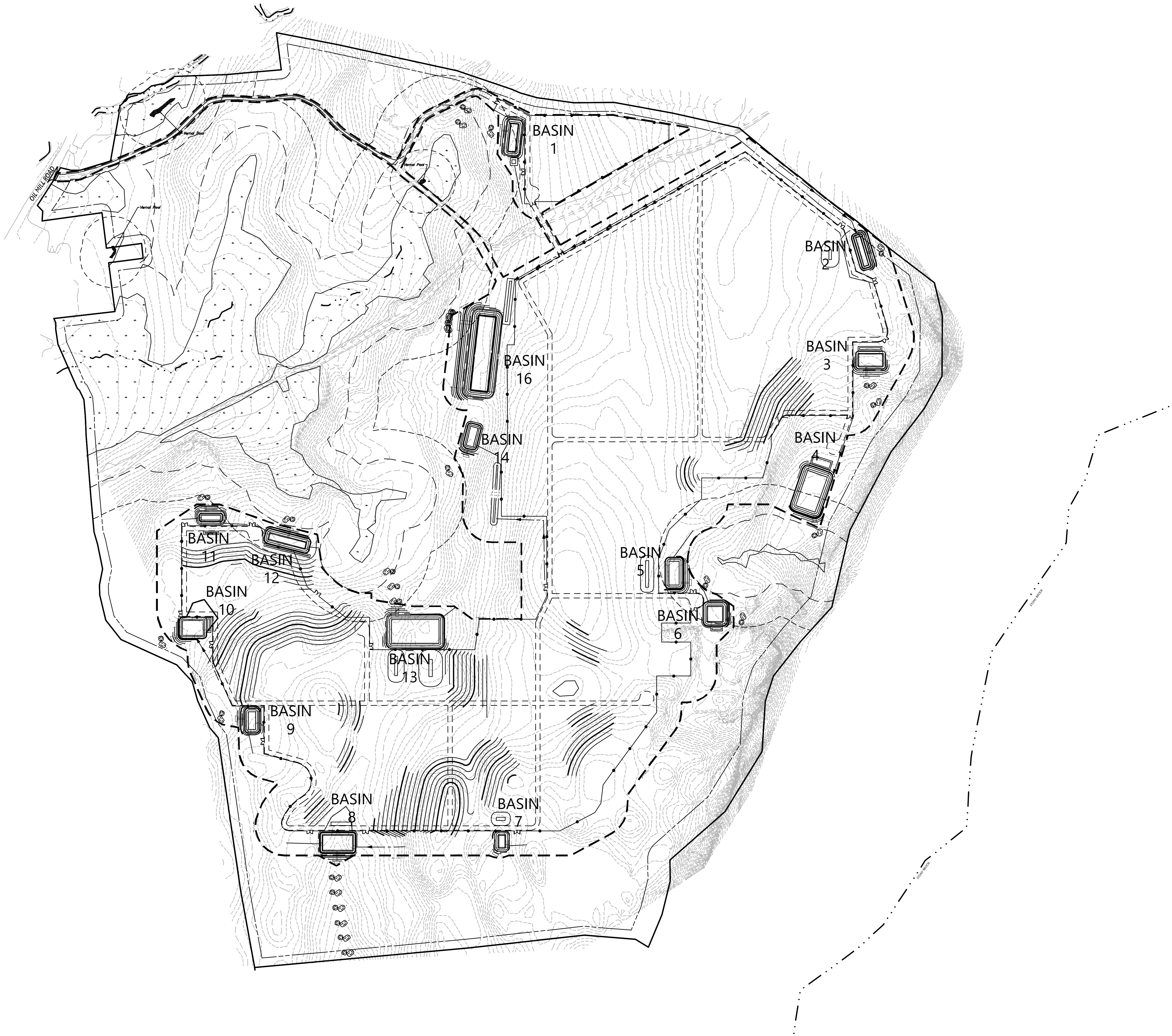
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**Grading and
Drainage Plan - Overall**

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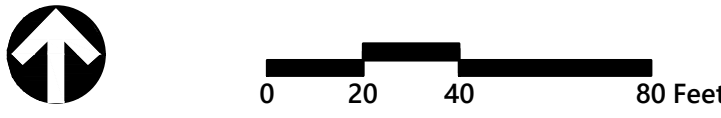
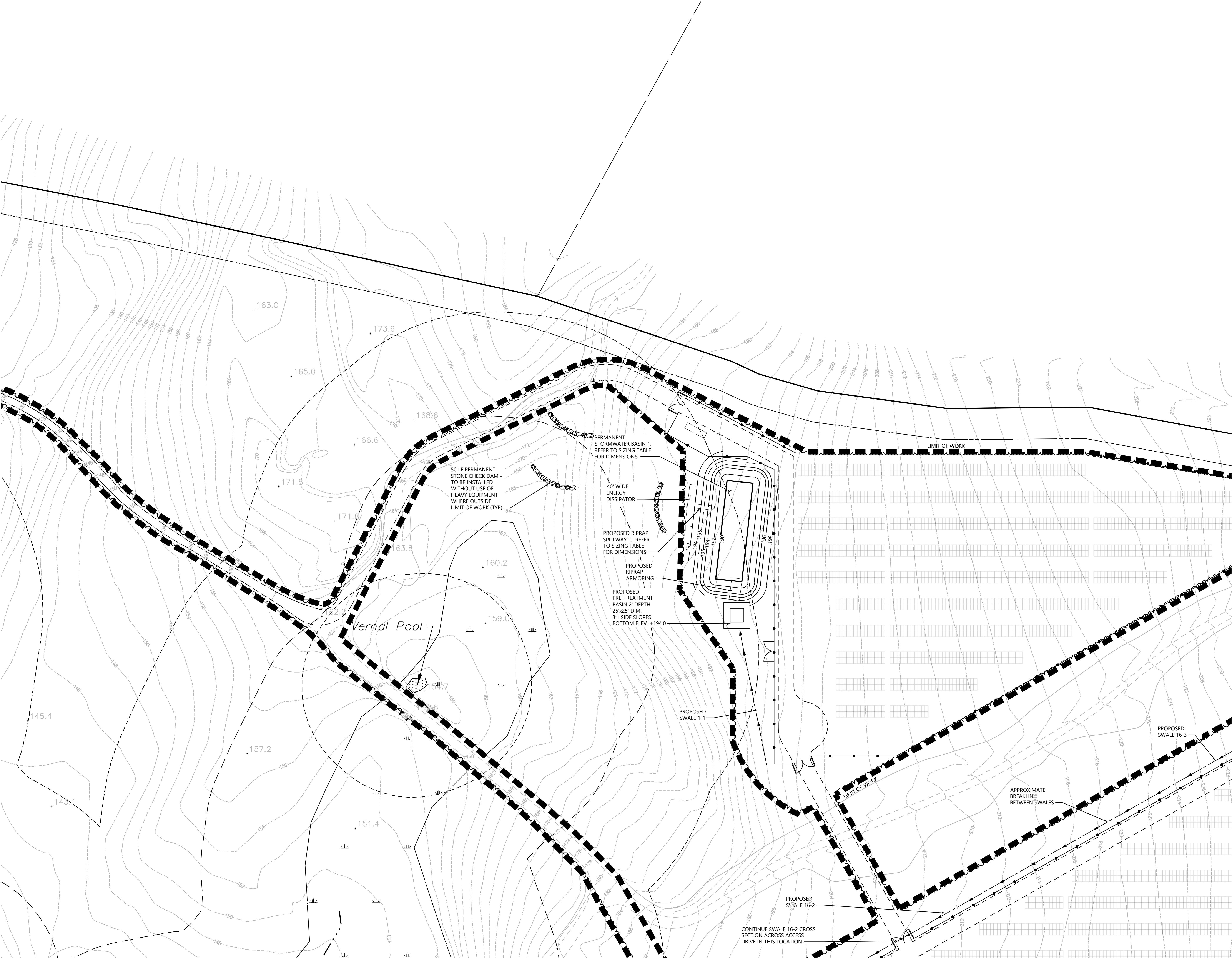
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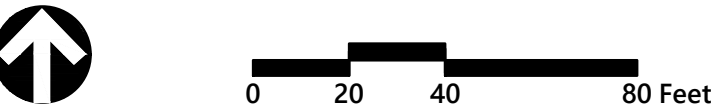
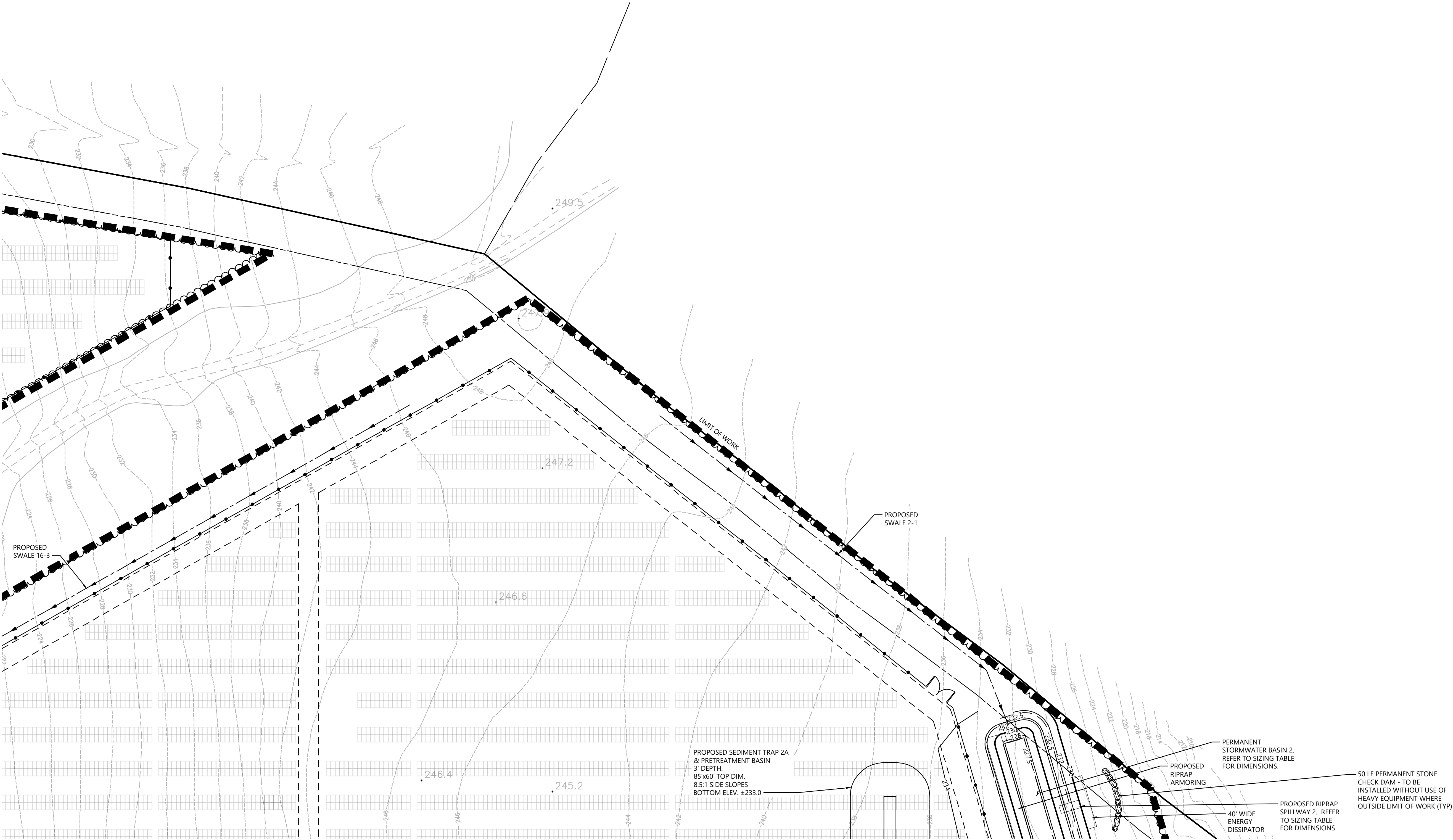
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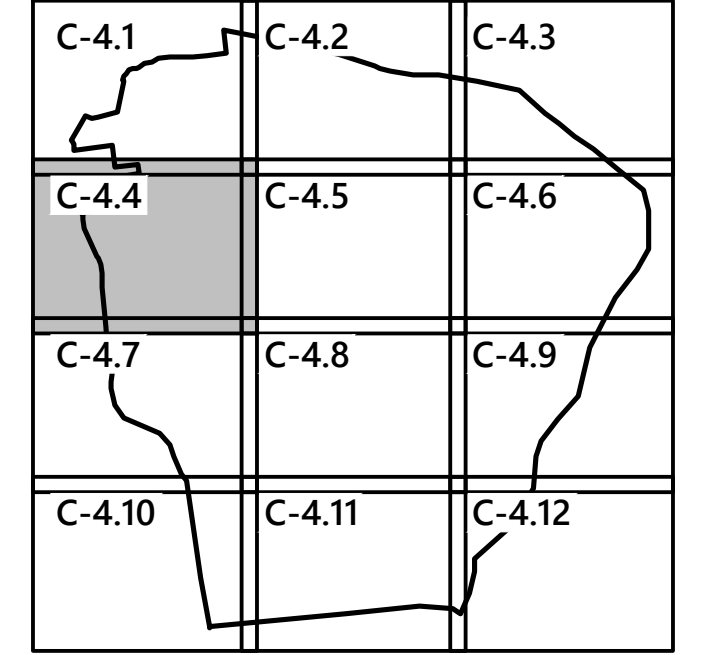
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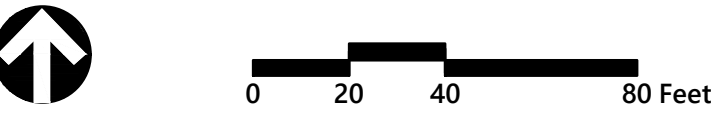
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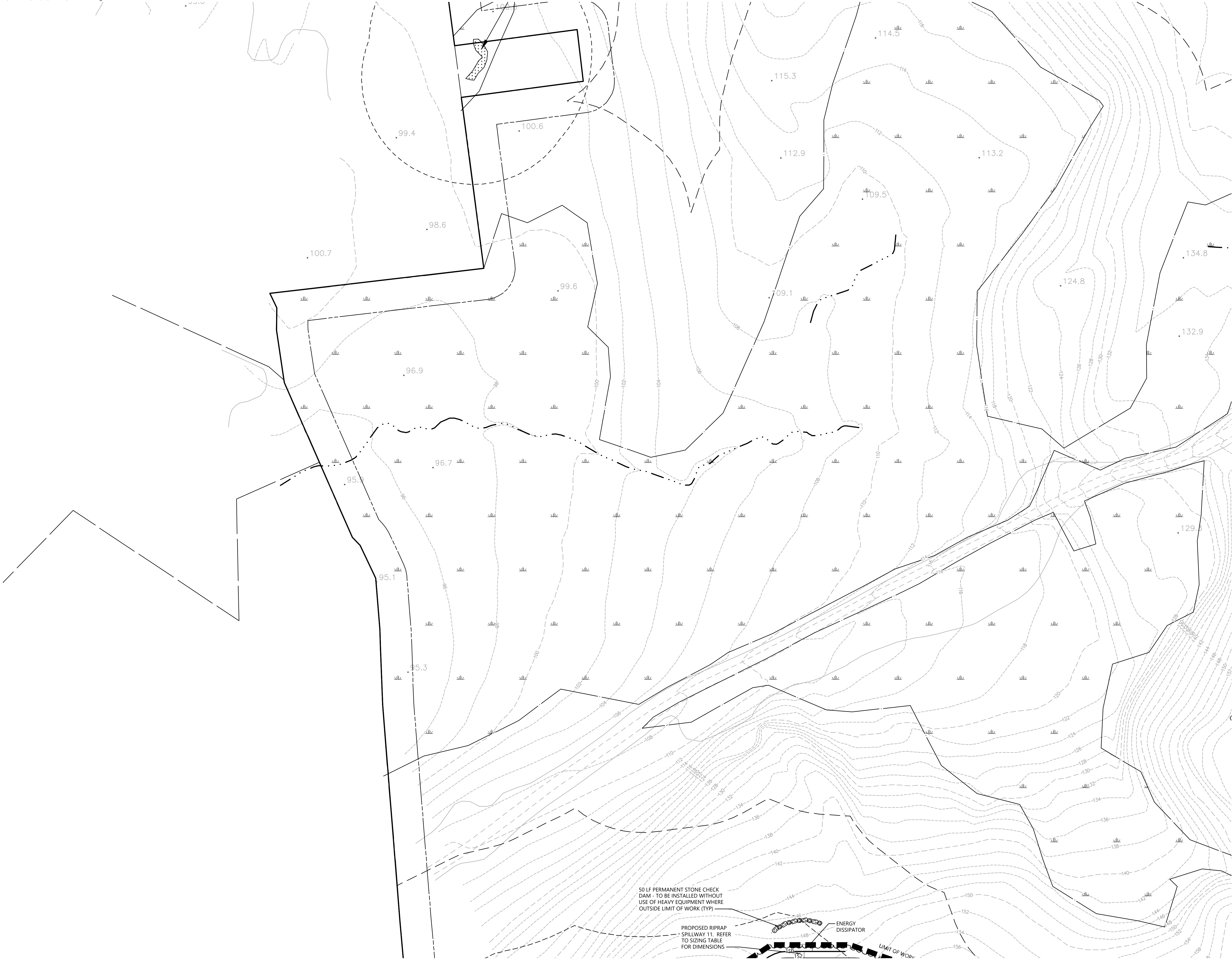
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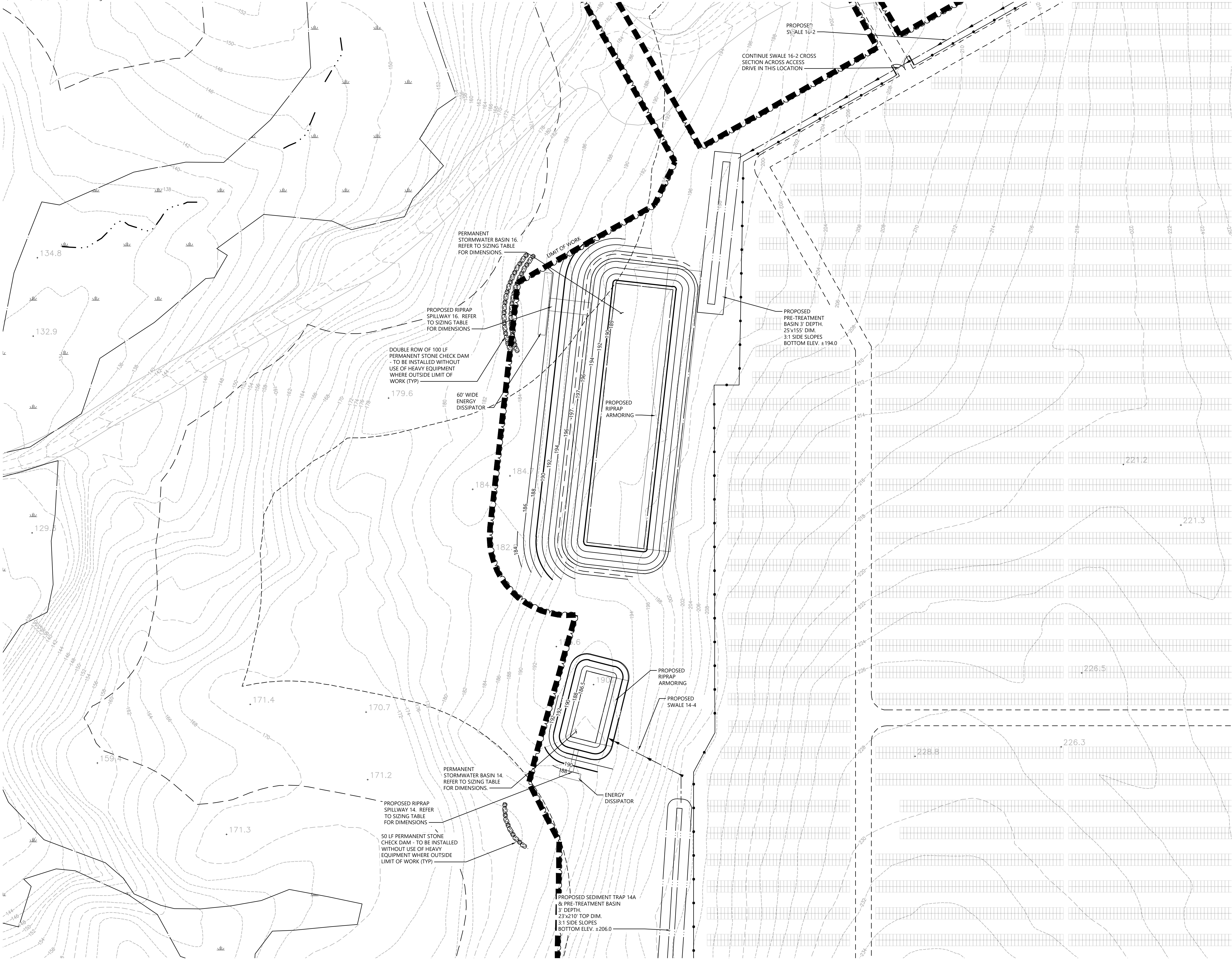
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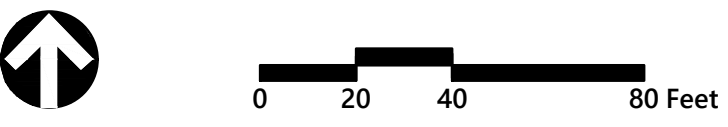




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1	CTDEEP Comments	3/12/2020	SJK
2	CSC & CTDEEP Comments	7/28/2020	SJK

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Drawing Title
**Grading and
Drainage Plan**

Drawing Number

C-4.5

Sheet

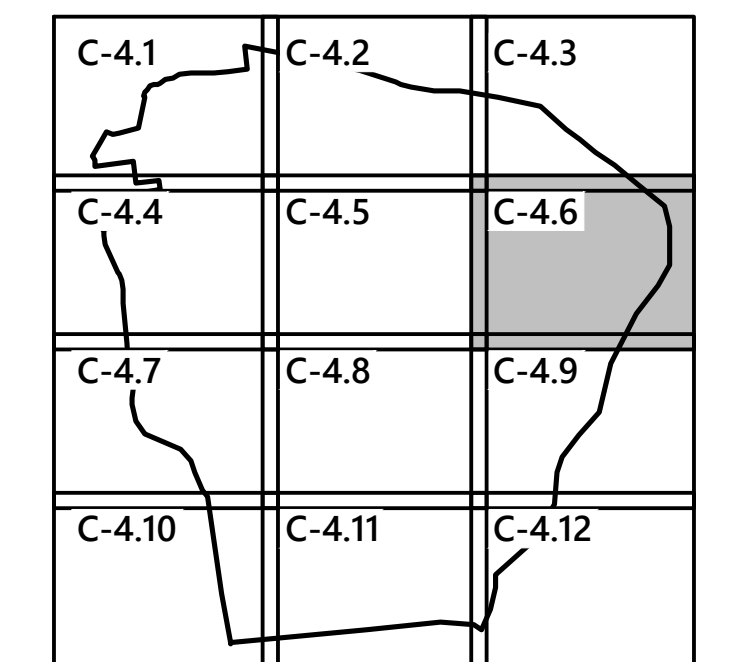
of

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43

Project Number

42496.00



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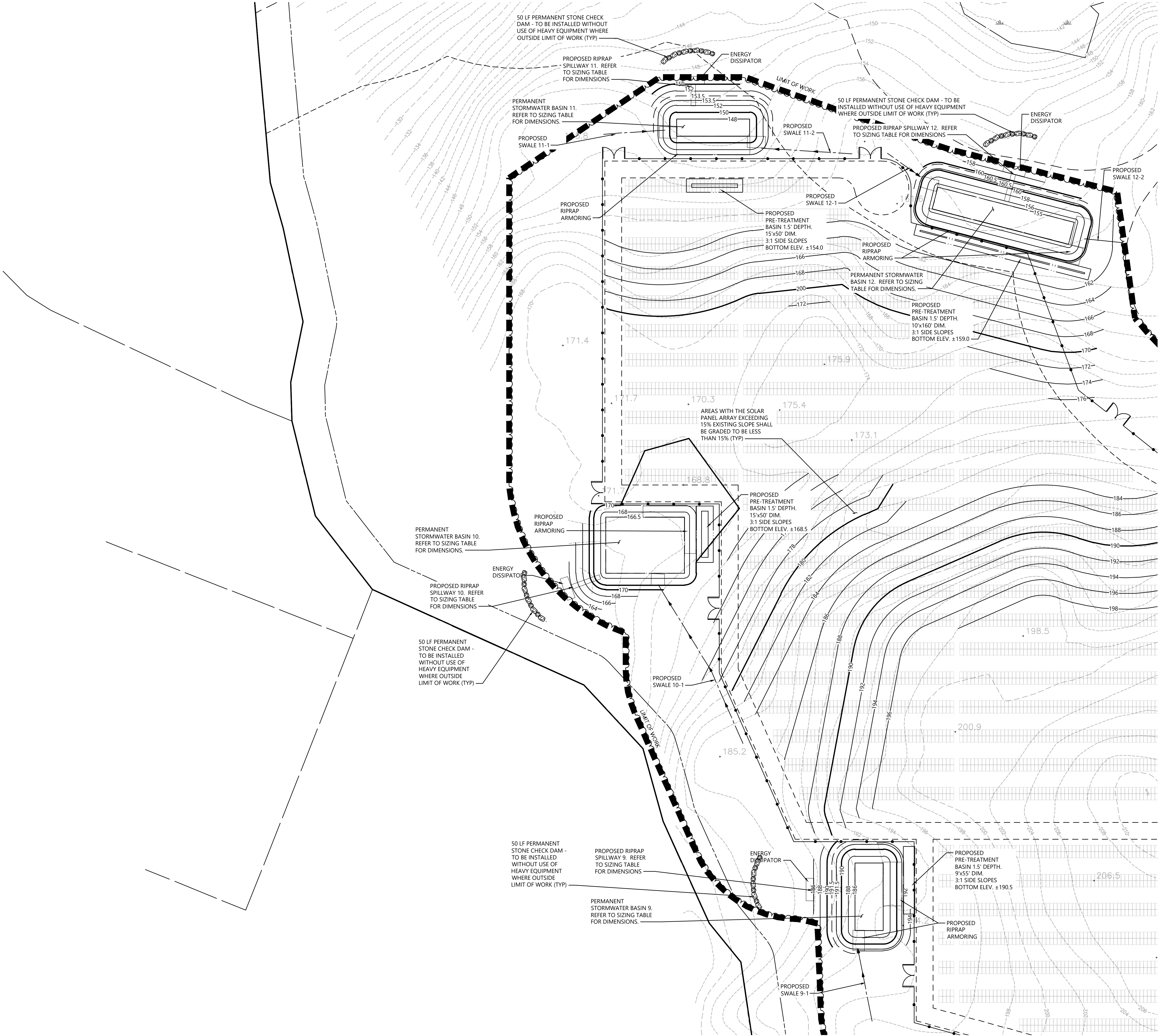
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Grading and Drainage Plan

C-4.6

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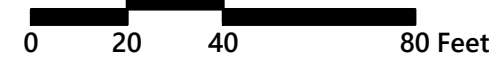


100 Great Meadow Road
Suite 200
Wethersfield, CT 06109
860.807.4300

C-4.1	C-4.2	C-4.3
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
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Photovoltaic Installation
117 Oil Mill Road
Waterford, Connecticut

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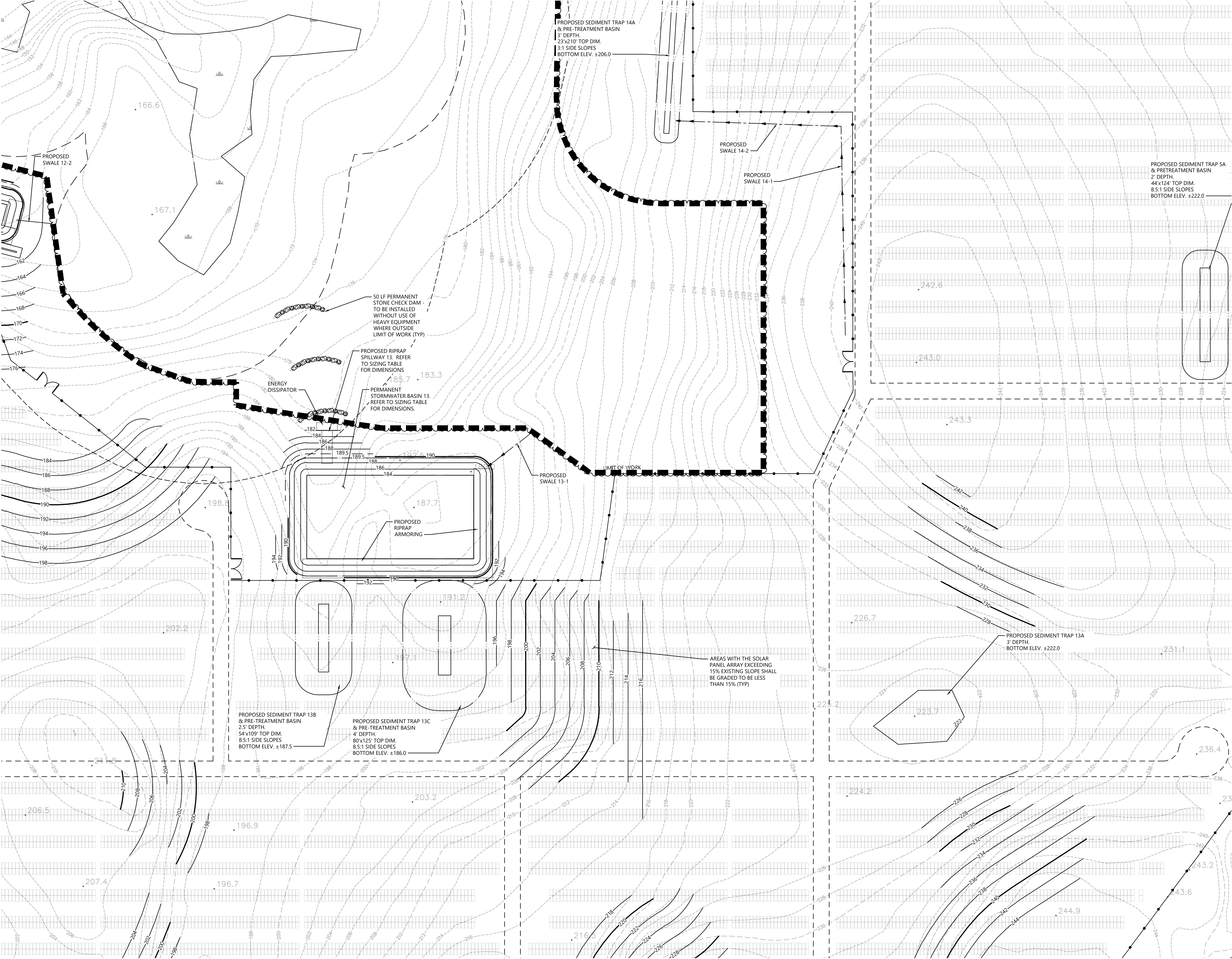
Grading and
Drainage Plan

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C-4.7

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43

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

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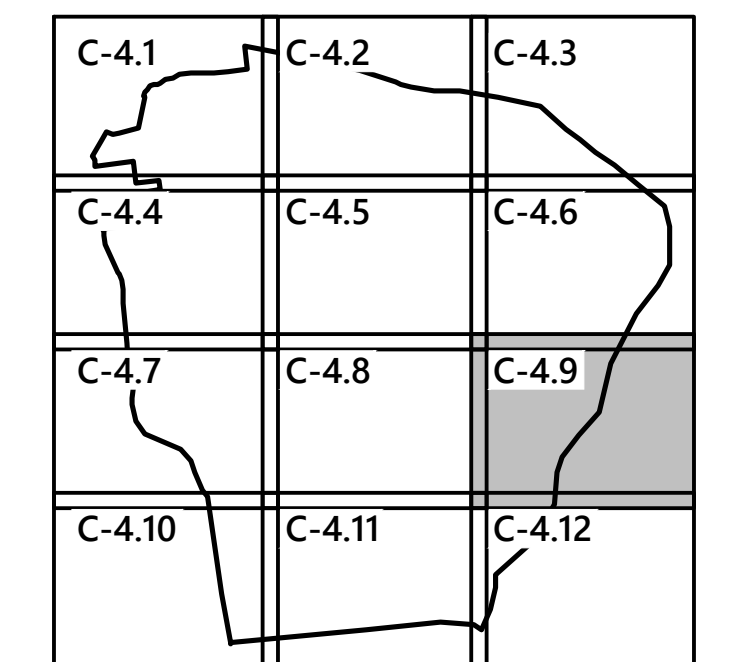
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C-4.8

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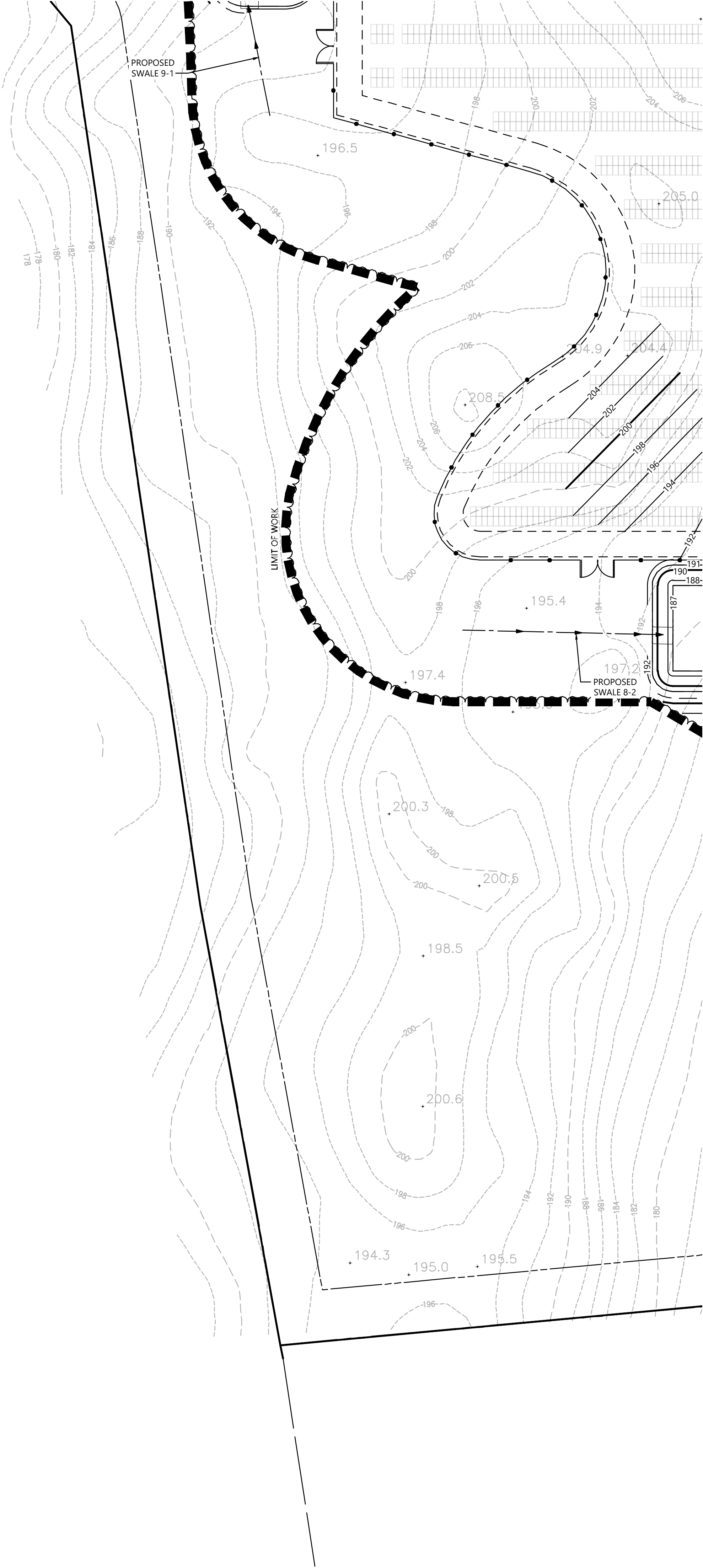
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C-4.9

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C-4.1	C-4.2	C-4.3
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

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20

40

80 Feet

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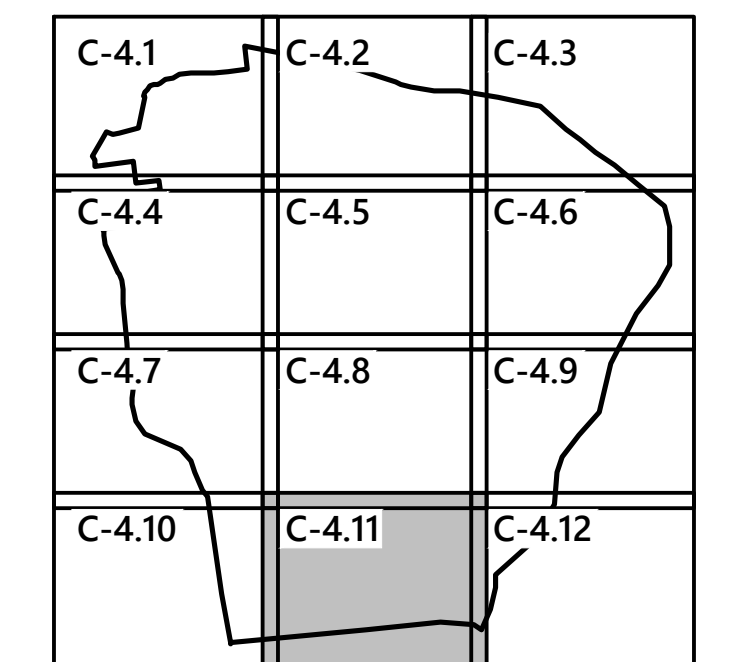
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C-4.10

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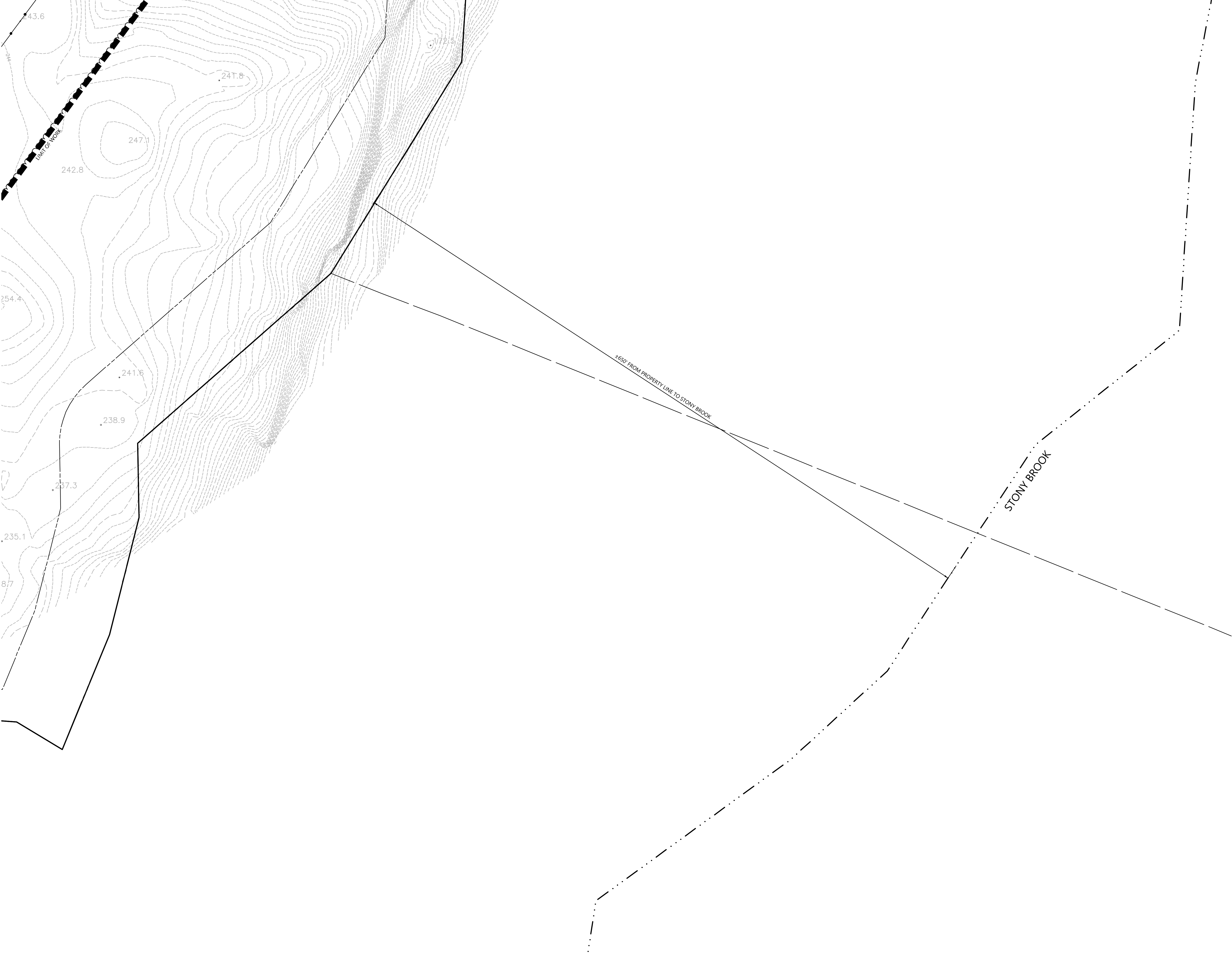
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C-4.1	C-4.2	C-4.3
C-4.4	C-4.5	C-4.6
C-4.7	C-4.8	C-4.9
C-4.10	C-4.11	C-4.12

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28 43

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CONSTRUCTION SEQUENCING

- ALL CONSTRUCTION ACTIVITIES ARE EXPECTED TO BEGIN IN THE SUMMER/FALL OF 2020 AND BE COMPLETED BY THE END OF 2021. 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.
 2. A CTDEEP-APPROVED 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. THESE INSPECTIONS SHALL TAKE PLACE WEEKLY, AT A MINIMUM, AND SHALL BE REQUIRED WITHIN 24 HOURS OF A RAINFALL EVENT EXCEEDING 0.5 INCHES. IT IS ALSO ANTICIPATED THAT REPRESENTATIVES FROM CTDEEP AND/OR THE STATE CONSERVATION DISTRICT WILL PERFORM PERIODIC INSPECTIONS.
 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 OR 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.
 13. 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 NATIVE SOILS.

PRE-CONSTRUCTION SITE PROTECTION SEQUENCE (2020)

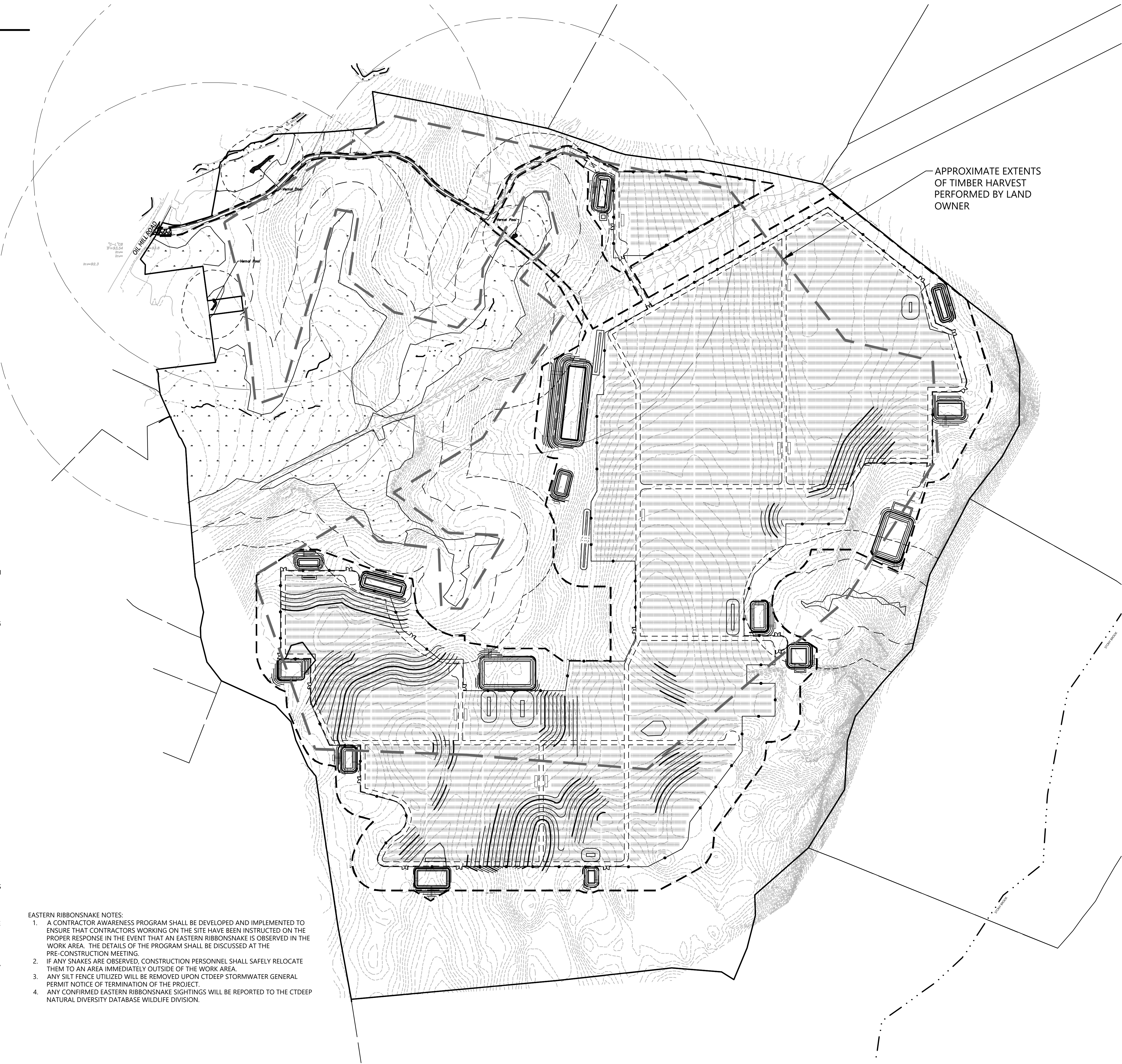
1. INSTALL STABILIZED VEHICLE CONSTRUCTION EXIT AT THE EXISTING ROAD INTERSECTING WITH OIL MILL ROAD.
2. SURVEY AND MARK ALL WOODLAND CLEARING LIMITS.
3. MARK TREES TO BE FELLED WITHIN 10 FEET OF CLEARING LIMITS AND INSTALL TREE PROTECTION FOR TREES TO BE PRESERVED WITHIN 10 FEET OF CLEARING LIMITS.
4. FIELD SURVEY AND MARK BOUNDARY BETWEEN CLEARING LIMITS AND GRUBBING LIMITS.
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 72 HOURS 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 ACCESS. EFFORTS MUST BE MADE TO MINIMIZE VEHICULAR TRAFFICKING ACROSS NON-DESIGNATED AREAS TO THE EXTENTS POSSIBLE.
15. AREAS DISTURBED DURING THIS SEQUENCE MUST BE HYDROSEED AND ALLOWED TO GROW THROUGH A GROWING SEASON (SPRING, OR FALL) PRIOR TO INITIATION OF CONSTRUCTION SEQUENCE.
16. SPREADED MULCH AND FELLED BRANCHES FROM PRE-EXISTING TIMBER HARVEST ON SITE SHALL BE CLEANED AND AREAS SEED. MATERIAL CLEANED IN THIS WAY MAY BE REPURPOSED FOR THE USE OF WOOD CHIP MULCH BERMS ALONG THE SITE PERIMETER OR REMOVED FROM THE SITE. THE USE OF HYDROSEED COMBINED WITH TACKIFIER AND POLYACRLAMIDE (PAM) IS RECOMMENDED FOR THIS RESEEDING. THE CLEANUP AREAS SHALL BE LEFT UNDISTURBED THROUGH A FULL GROWING SEASON BEFORE INITIATION OF THE CONSTRUCTION SEQUENCE CAN TAKE PLACE.

CONSTRUCTION SEQUENCE (2021)

1. PERFORM MASS EARTHWORK ON THE SITE AND INSTALL PERIMETER FENCE TO SERVE AS CONSTRUCTION BARRIER. MASS EARTHWORK SHALL ONLY MEAN REGRADING TO MEET THE PROPOSED GRADING DEPICTED ON THE PLANS. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FROM AREAS PROPOSED FOR REGRADING.
2. 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 RESEED WITHIN 72 HOURS OF COMPLETION.
3. AREAS DISTURBED BY MASS EARTHWORK SHALL BE RESEED WITH HYDROSEED, COMBINED WITH TACKIFIER AND PAM.
4. DRIVE PILES FOR SOLAR PANEL RACKING.
5. 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.
6. 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.
7. 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.
8. UPON COMPLETION OF CONSTRUCTION, RE-SEED ALL DISTURBED AREAS WITHIN 72 HOURS AND PREVENT VEHICULAR TRAFFICKING OVER THESE AREAS. INSTALL FINAL LANDSCAPING.
9. 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.
10. 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.

EASTERN RIBBONSNAKE NOTES:

1. A CONTRACTOR AWARENESS PROGRAM SHALL BE DEVELOPED AND IMPLEMENTED TO ENSURE THAT CONTRACTORS WORKING ON THE SITE HAVE BEEN INSTRUCTED ON THE PROPER RESPONSE IN THE EVENT THAT AN EASTERN RIBBONSNAKE IS OBSERVED IN THE WORK AREA. THE DETAILS OF THE PROGRAM SHALL BE DISCUSSED AT THE PRE-CONSTRUCTION MEETING.
2. IF ANY SNAKES ARE OBSERVED, CONSTRUCTION PERSONNEL SHALL SAFELY RELOCATE THEM TO AN AREA IMMEDIATELY OUTSIDE OF THE WORK AREA.
3. ANY SILT FENCE UTILIZED WILL BE REMOVED UPON CTDEEP STORMWATER GENERAL PERMIT NOTICE OF TERMINATION OF THE PROJECT.
4. ANY CONFIRMED EASTERN RIBBONSNAKE SIGHTINGS WILL BE REPORTED TO THE CTDEEP NATURAL DIVERSITY DATABASE WILDLIFE DIVISION.



APPROXIMATE EXTENTS
OF TIMBER HARVEST
PERFORMED BY LAND
OWNER

C-5.1	C-5.2	C-5.3
C-5.4	C-5.5	C-5.6
C-5.7	C-5.8	C-5.9
C-5.10	C-5.11	C-5.12

Key

Not To Scale



0 80 160 320Feet

Photovoltaic Installation

117 Oil Mill Road
Waterford, Connecticut

No.	Revision	Date	Appr'd.
1	CTDEEP Comments	3/12/2020	SJK
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Erosion and Sediment
Control Plan - Overall

Drawing Number

C-5.0

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Project Number
42496.00



100 Great Meadow Road
Suite 200
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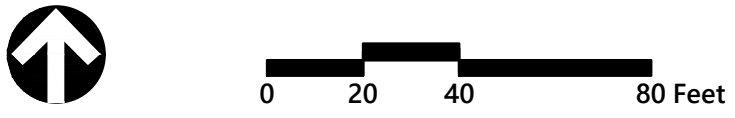
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C-5.1	C-5.2	C-5.3
C-5.4	C-5.5	C-5.6
C-5.7	C-5.8	C-5.9
C-5.10	C-5.11	C-5.12

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Photovoltaic Installation
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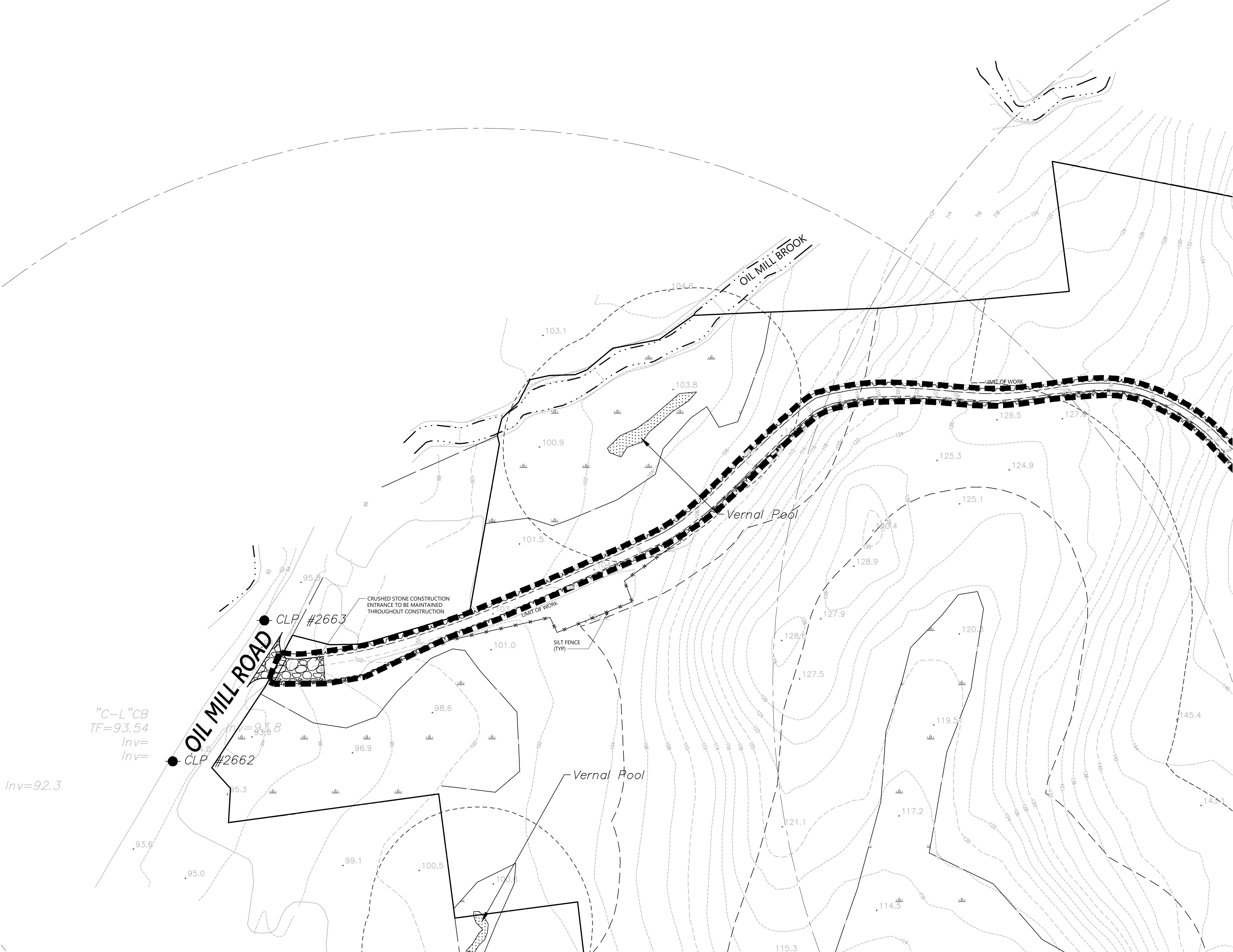
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Drawing Title
Erosion and Sediment
Control Plan

Drawing Number

C-5.1

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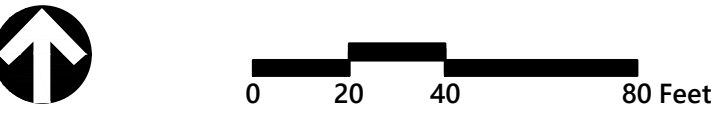
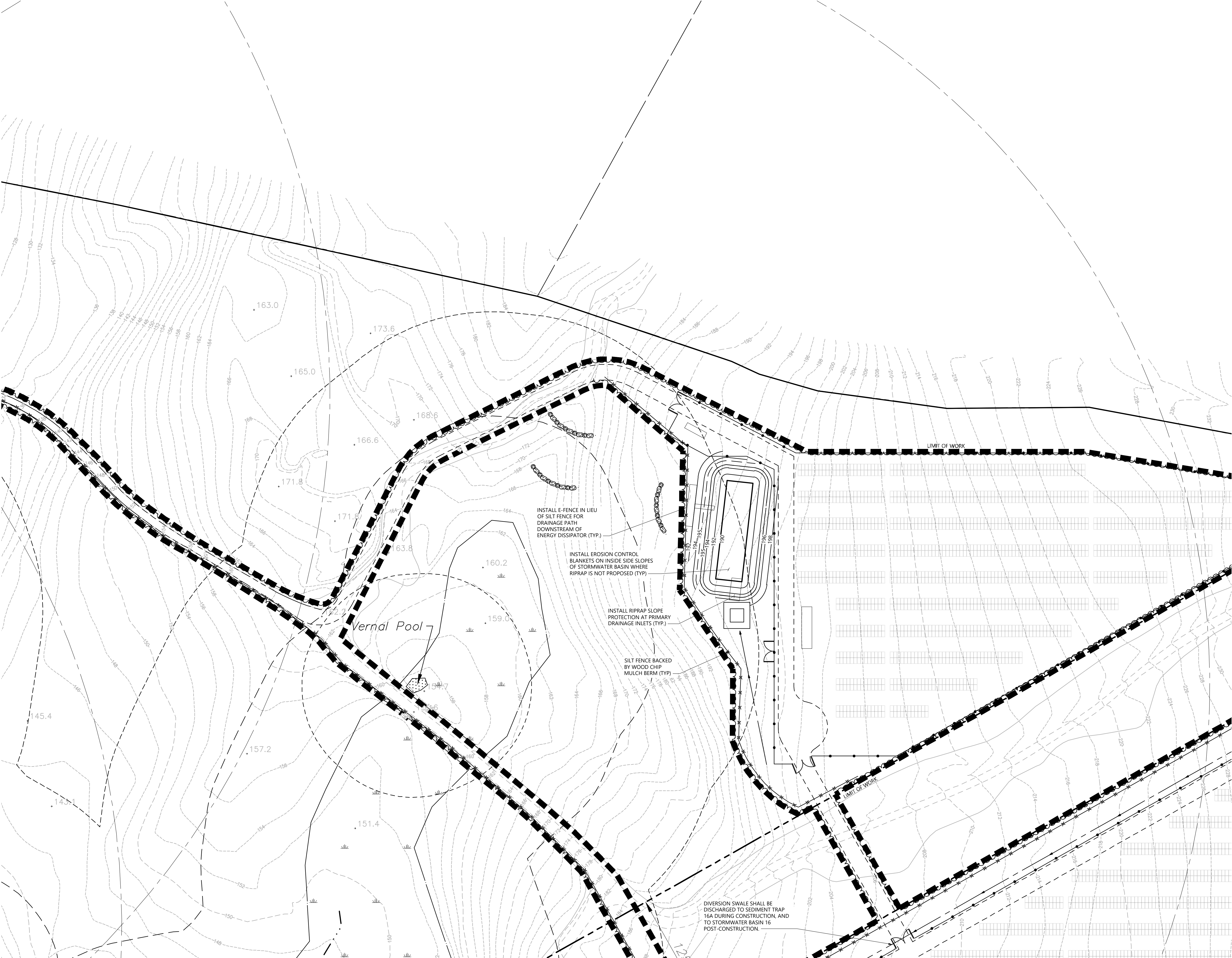
Project Number
42496.00



C-5.1	C-5.2	C-5.3
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C-5.7	C-5.8	C-5.9
C-5.10	C-5.11	C-5.12

Key

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Photovoltaic Installation

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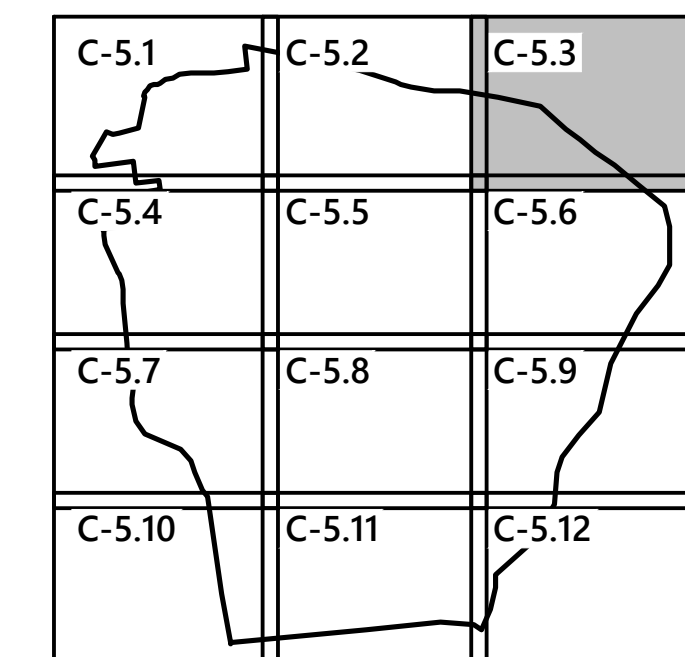
Erosion and Sediment Control Plan

Drawing Number

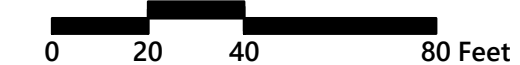
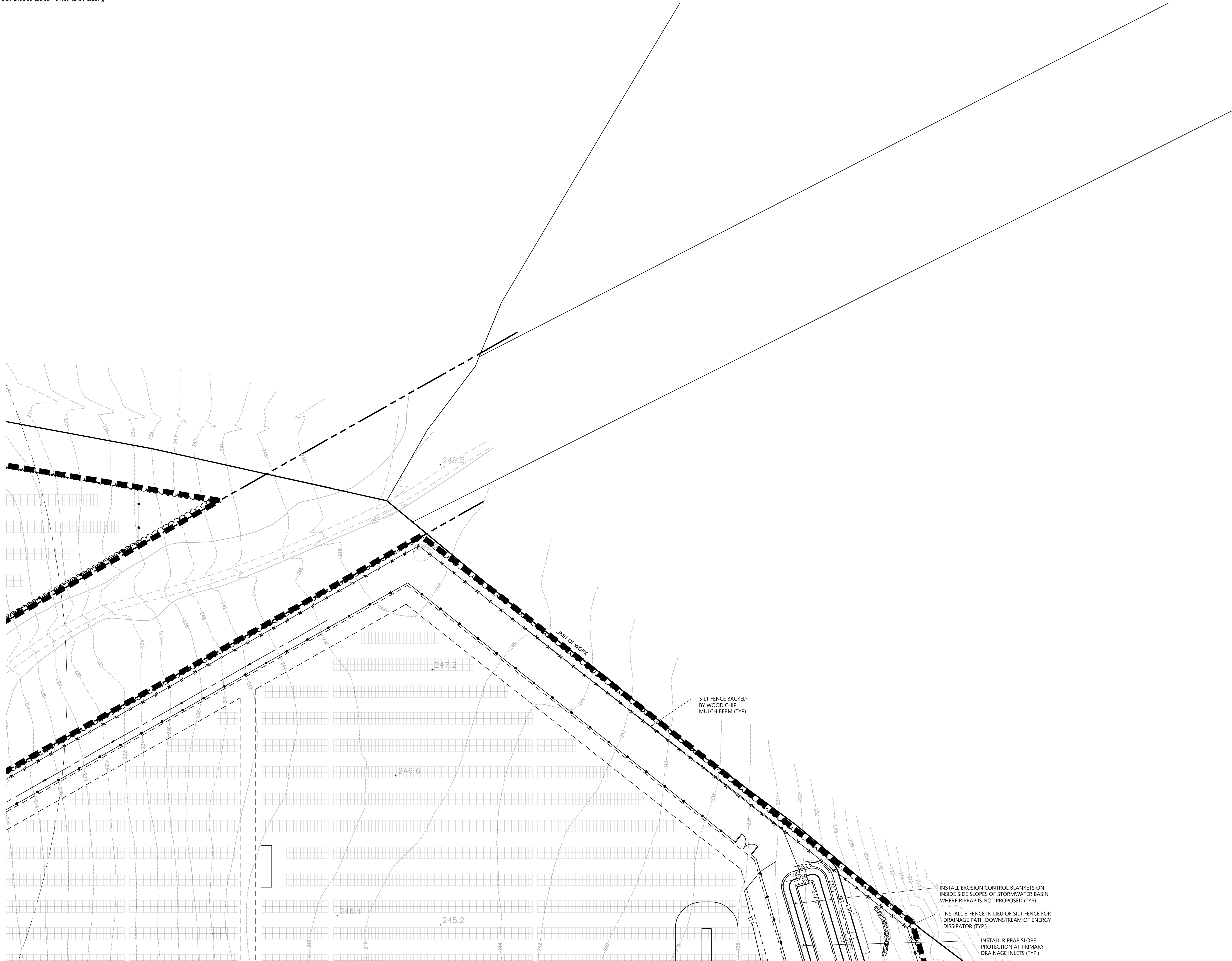
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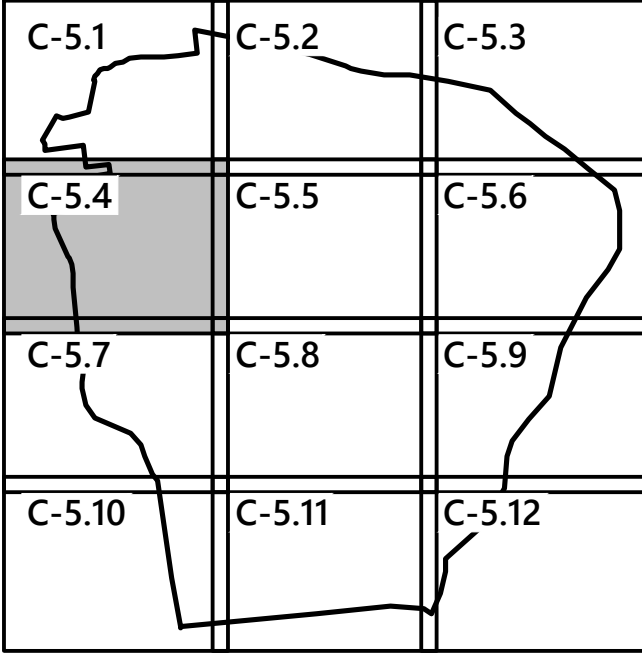
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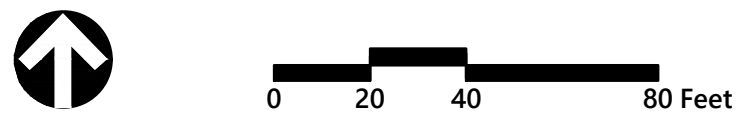
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Control Plan**

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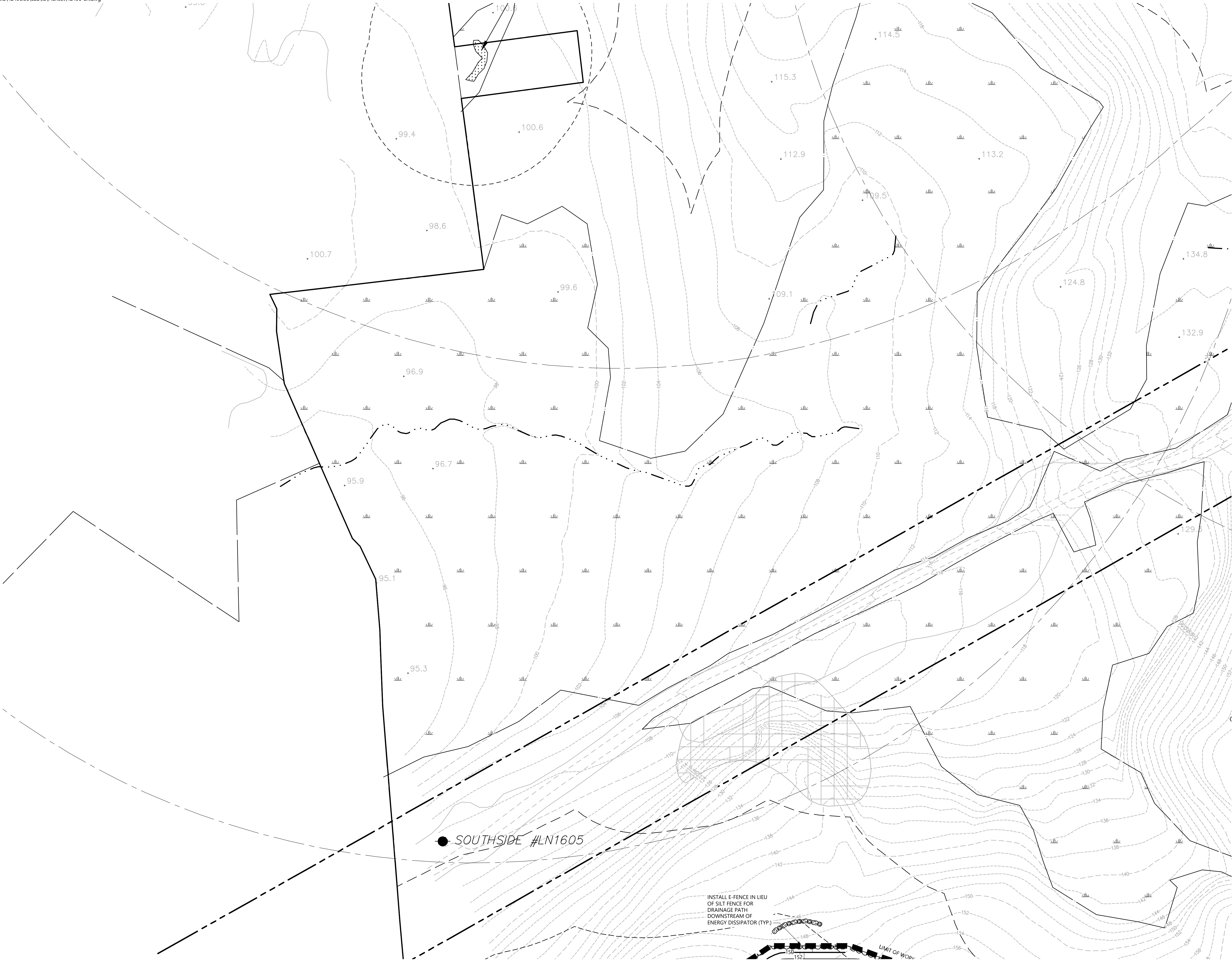


Figure 1 is a map of the study area, showing a grid of 12 cells labeled C-5.1 through C-5.12. The cells are arranged in a 4x3 grid. Cell C-5.5 is shaded gray. The map shows the lake's shoreline and internal grid lines.

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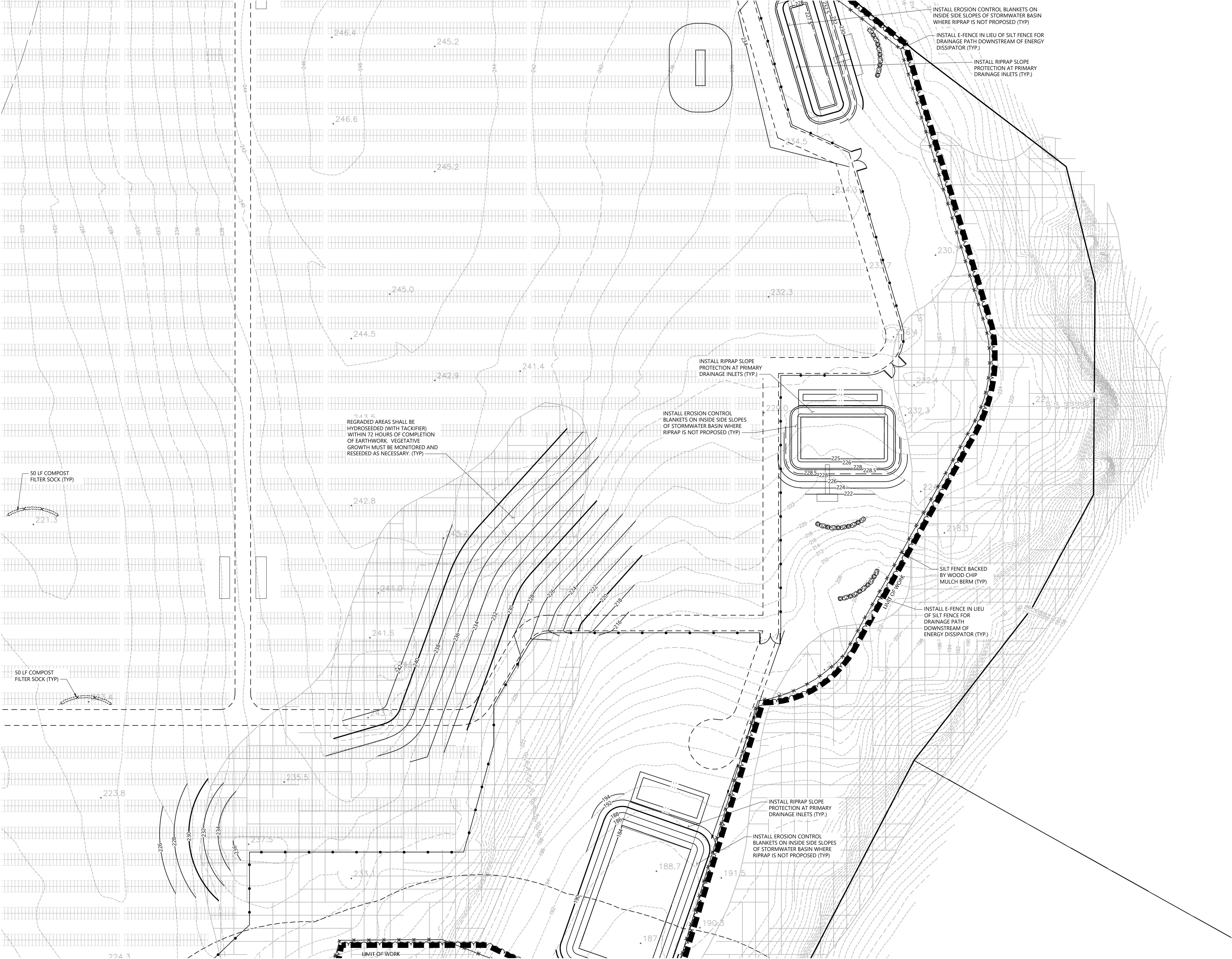
Erosion and Sediment Control Plan

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C-5.5

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C-5.1	C-5.2	C-5.3
C-5.4	C-5.5	C-5.6
C-5.7	C-5.8	C-5.9
C-5.10	C-5.11	C-5.12

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C-5.6

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Application
December 2, 2019

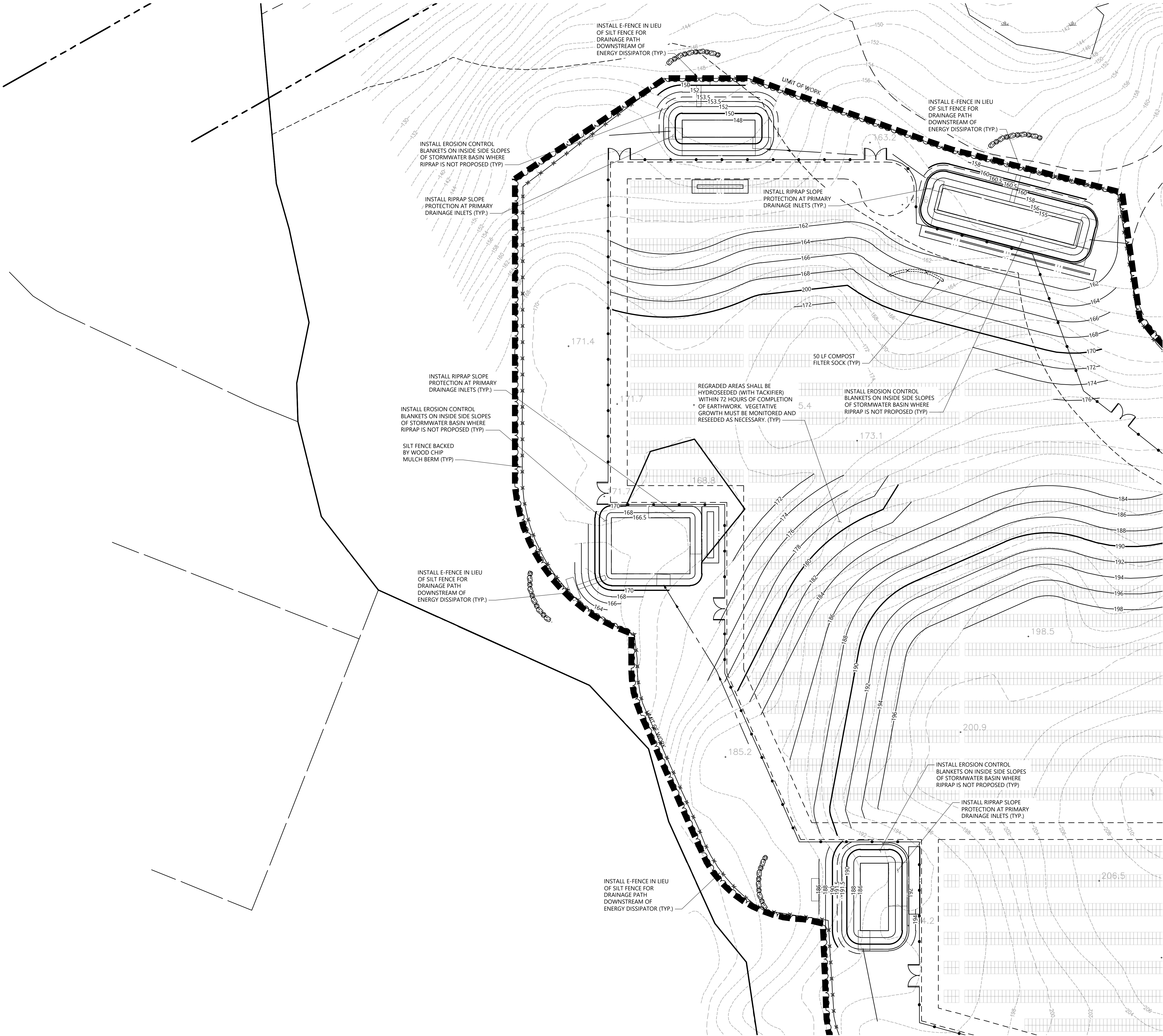
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Drawing Title
Erosion and Sediment
Control Plan

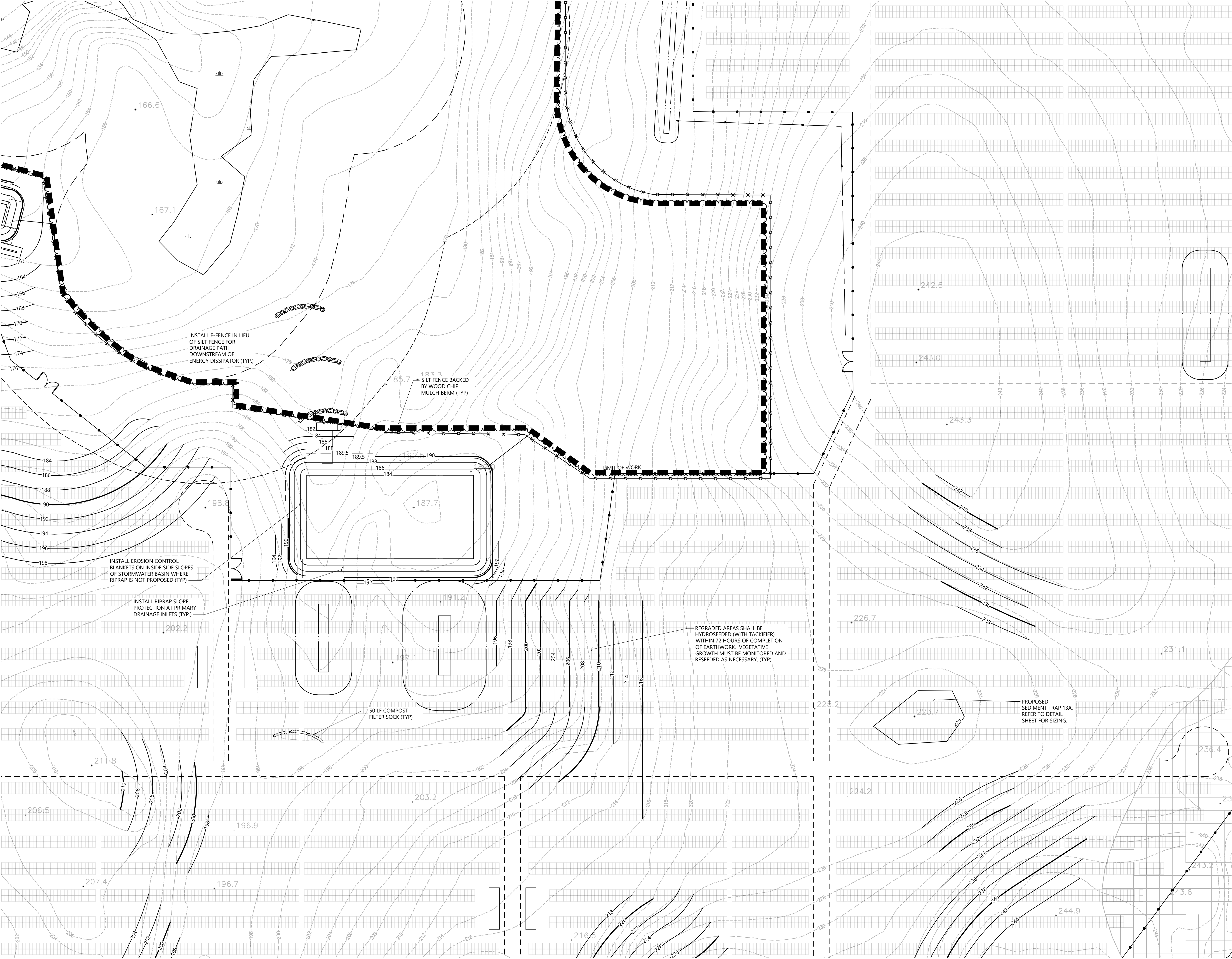
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C-5.7

Sheet
36 of 43

Project Number
42496.00







100 Great Meadow Road
Suite 200
Wethersfield, CT 06109
860.807.4300

C-5.1	C-5.2	C-5.3
C-5.4	C-5.5	C-5.6
C-5.7	C-5.8	C-5.9
C-5.10	C-5.11	C-5.12

Key
Not To Scale



0204080 Feet

Photovoltaic Installation
117 Oil Mill Road
Waterford, Connecticut

No.	Revision	Date	Apprd.
1	CTDEEP Comments	3/12/2020	SJK
2	CSC & CTDEEP Comments	7/28/2020	SJK

Designed by	Checked by
Issued for	Date
Application	December 2, 2019

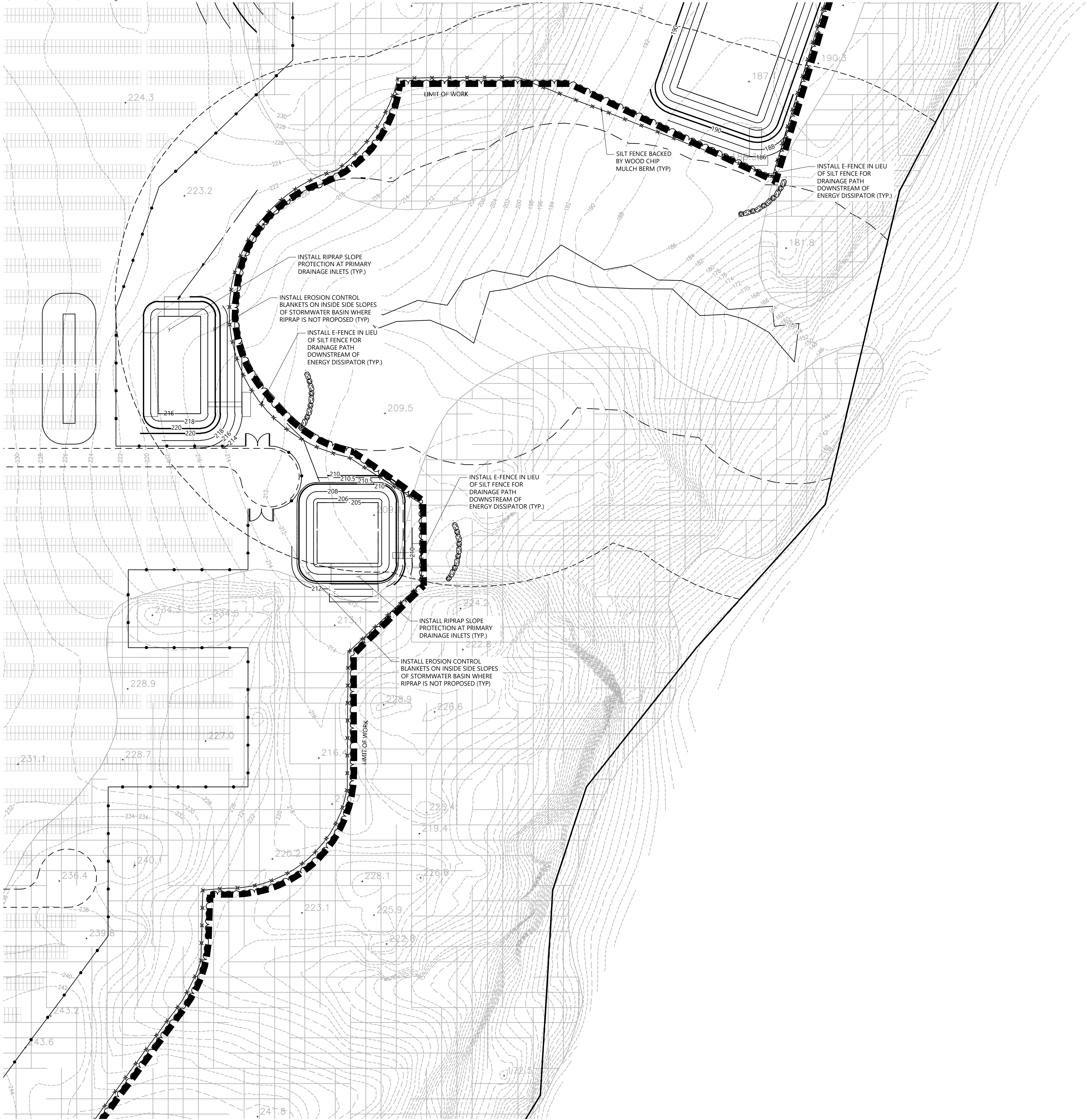
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Drawing Title
**Erosion and Sediment
Control Plan**

Drawing Number

C-5.8

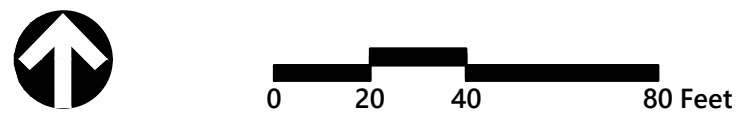
Sheet of
37 43

Project Number
42496.00



C-5.1	C-5.2	C-5.3
C-5.4	C-5.5	C-5.6
C-5.7	C-5.8	C-5.9
C-5.10	C-5.11	C-5.12

Key
Not To Scale



Photovoltaic Installation
117 Oil Mill Road
Waterford, Connecticut

No.	Revision	Date	Appr'd.
1	CTDEEP Comments	3/12/2020	SJK
2	CSC & CTDEEP Comments	7/28/2020	SJK

Designed by	Checked by
Issued for	Date

Application December 2, 2019

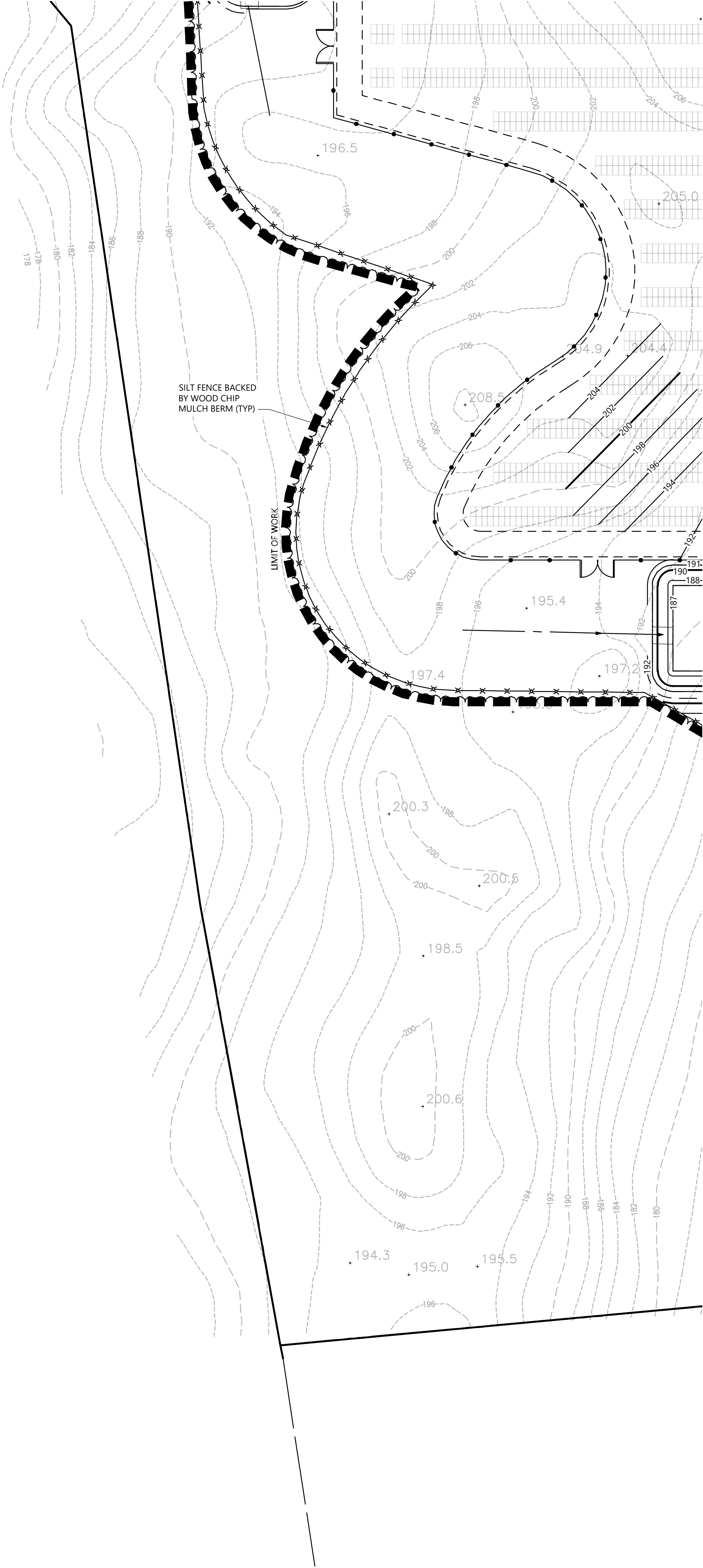
Not Approved for Construction
Drawing Title
**Erosion and Sediment
Control Plan**

Drawing Number

C-5.9

Sheet of
38 43

Project Number
42496.00





100 Great Meadow Road
Suite 200
Wethersfield, CT 06109
860.807.4300

C-5.1	C-5.2	C-5.3
C-5.4	C-5.5	C-5.6
C-5.7	C-5.8	C-5.9
C-5.10	C-5.11	C-5.12

Key
Not To Scale



0

20

40

80 Feet

Photovoltaic Installation
117 Oil Mill Road
Waterford, Connecticut

No.	Revision	Date	Appr'd.
1	CTDEEP Comments	3/12/2020	SJK
2	CSC & CTDEEP Comments	7/28/2020	SJK

Designed by	Checked by
Issued for	Date

Application December 2, 2019

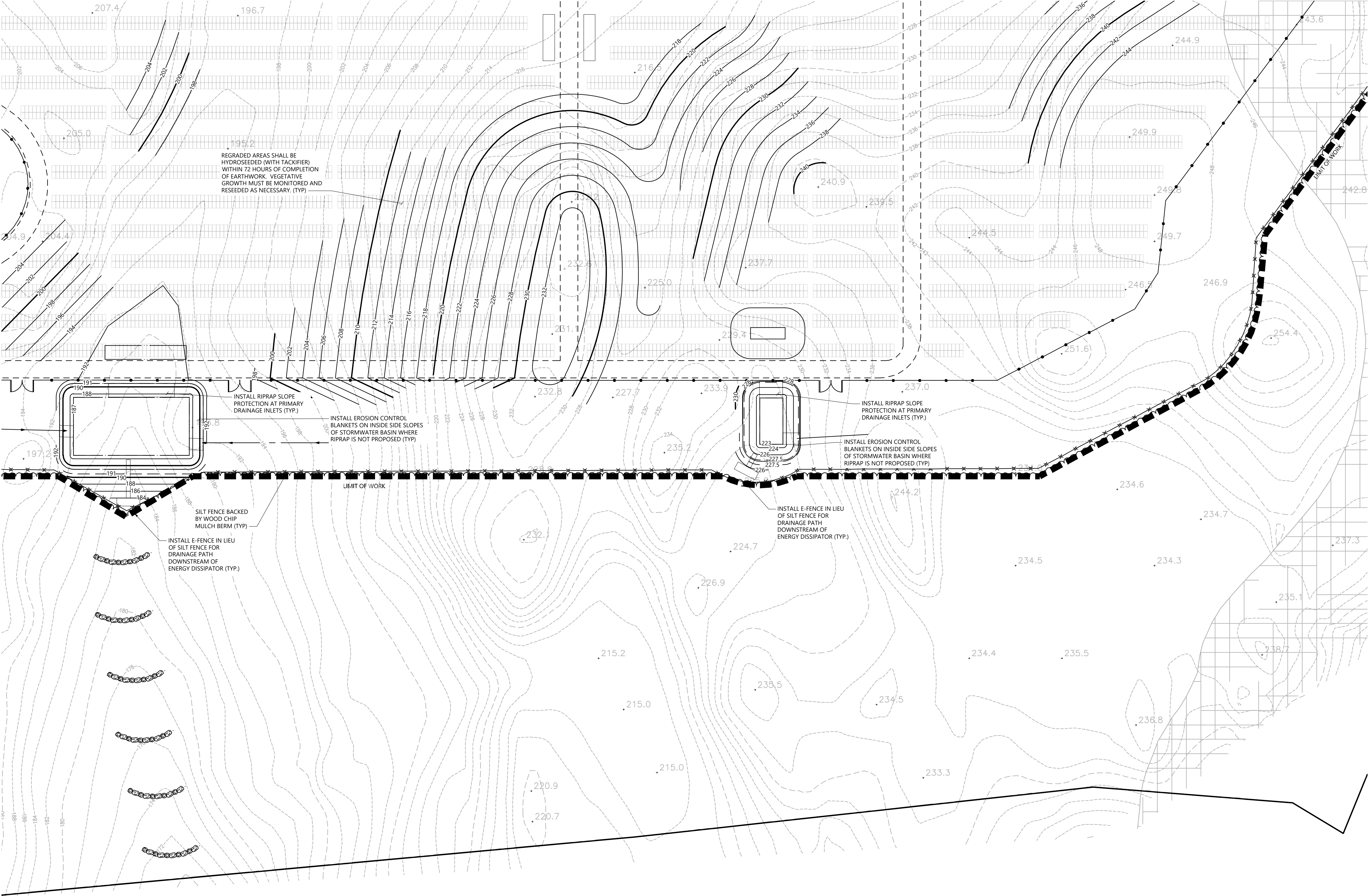
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Drawing Title
**Erosion and Sediment
Control Plan**

Drawing Number

C-5.10

Sheet of
39 43

Project Number
42496.00



100 Great Meadow Road
Suite 200
Wethersfield, CT 06109
860.807.4300

C-5.1	C-5.2	C-5.3
C-5.4	C-5.5	C-5.6
C-5.7	C-5.8	C-5.9
C-5.10	C-5.11	C-5.12

Key
Not To Scale



Photovoltaic Installation
117 Oil Mill Road
Waterford, Connecticut

No.	Revision	Date	Appr'd.
1	CTDEEP Comments	3/12/2020	SJK
2	CSC & CTDEEP Comments	7/28/2020	SJK

Designed by	Checked by
Issued for	Date

Application
December 2, 2019

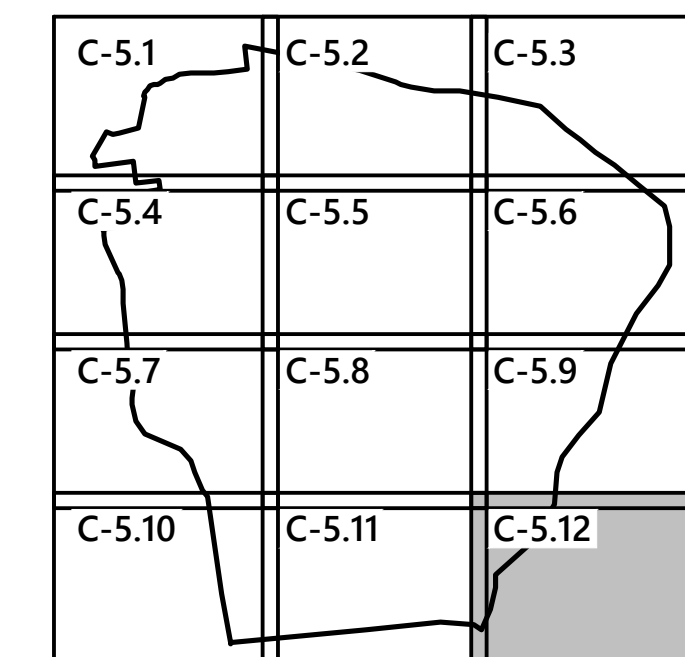
Not Approved for Construction
Drawing Title
Erosion and Sediment
Control Plan

Drawing Number

C-5.11

Sheet
40 of 43

Project Number
42496.00



Not To Scale



117 Oil Mill Road
Waterford, Connecticut

No.	Revision	Date	Apprvd.
1	CTDEEP Comments	3/12/2020	SJK
2	CSC & CTDEEP Comments	7/28/2020	SJK

Designed by	Checked by
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Issued for **Application** Date **December 2, 2019**

Not Approved for Construction

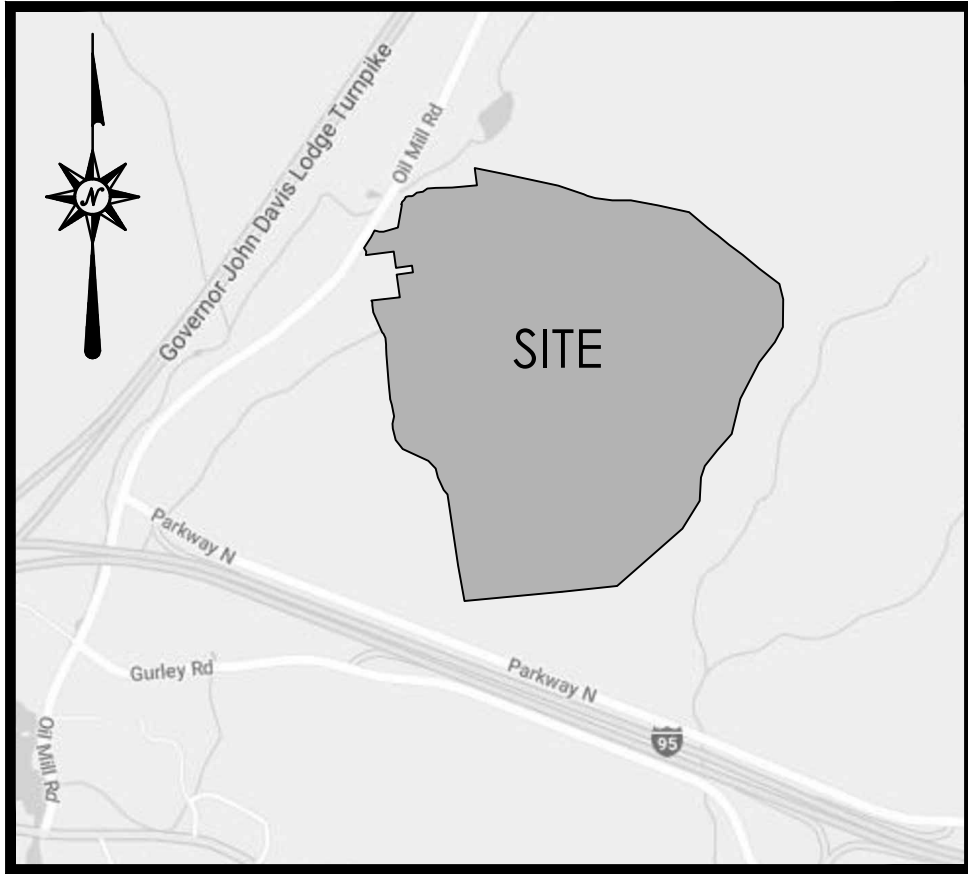
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Drawing Number

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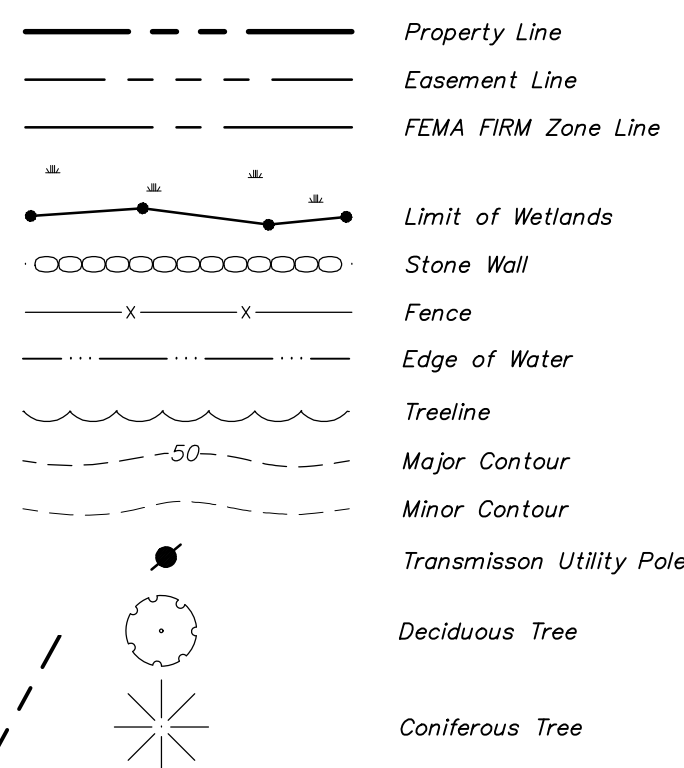
Sheet 41 of 43

Project Number
42496.00



LOCATION MAP
NOT TO SCALE

LEGEND

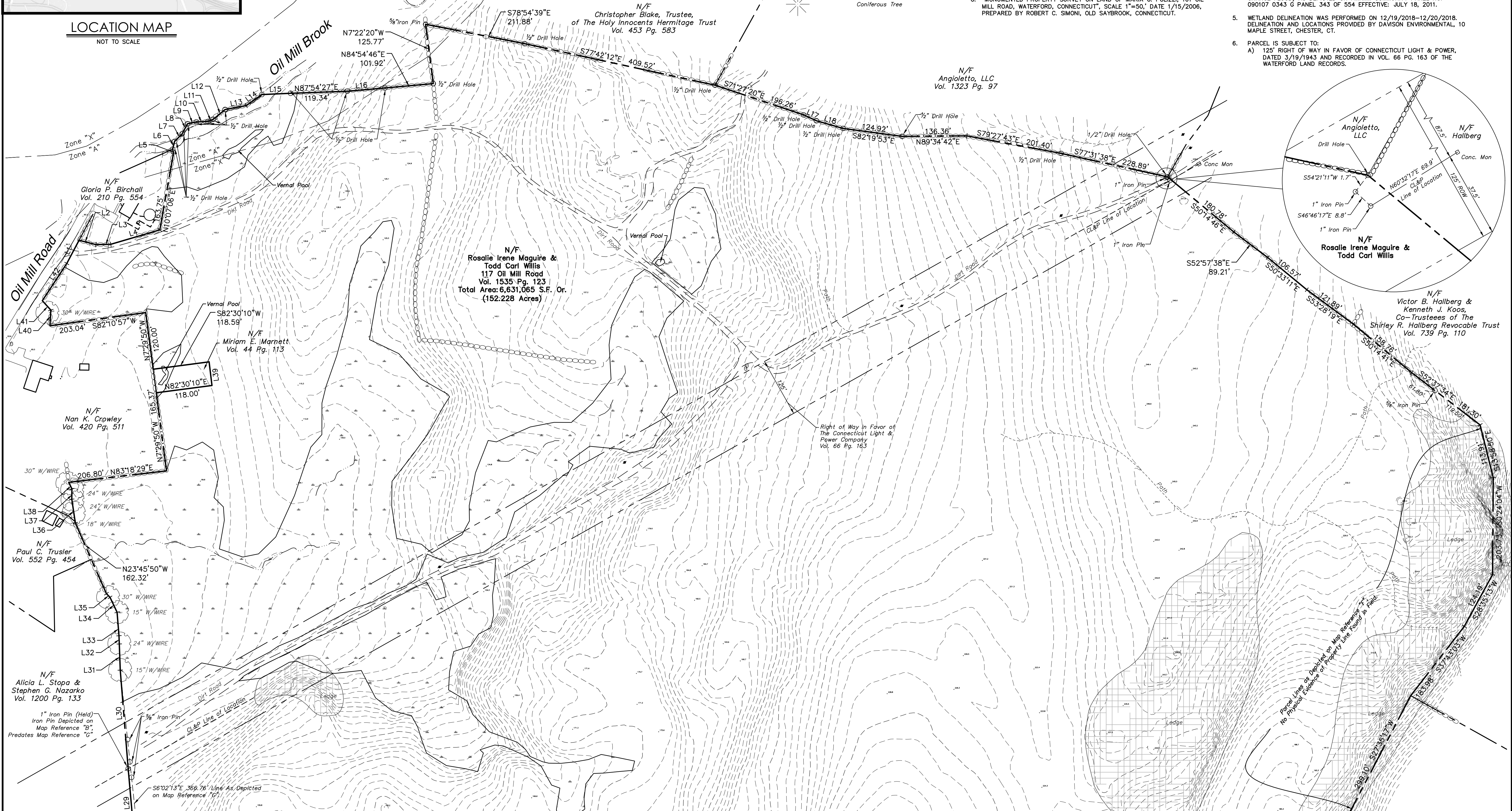


MAP REFERENCES

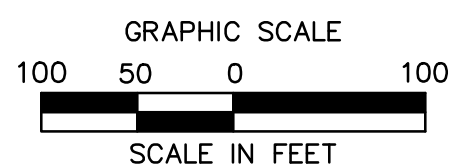
- "PLAN OF BARRETT HEIGHTS PARK, WATERFORD, NEW LONDON COUNTY, CONNECTICUT", SCALE 1"=100', DATE 10/1926, PREPARED BY K.H. HOLMES, NEW LONDON, CT.
- "LOCATION OF RIGHT OF WAY OF THE CONNECTICUT LIGHT & POWER COMPANY ACROSS THE PROPERTY OF SARAH S. HOLBROOK, TOWN OF WATERFORD COUNTY OF NEW LONDON, STATE OF CONNECTICUT", SCALE 1"=200', DATE 2/1943, SHEETS 1 & 2, MONTVILLE-FLANDERS LINE.
- "SURVEY OF PROPERTY ON OIL MILL ROAD, TOWN OF WALLINGFORD, CONN. BELONGING TO ESTATE OF ROBERT A. BRUBECK", DATE 9/1949, SCALE 1"=100', PREPARED BY ERNEST L. DESHEFY, NEW LONDON, CT.
- "PLAN OF SALTER PROPERTY, OIL MILL ROAD, WATERFORD, CONN", SCALE 1"=40', DATE 5/1956, PREPARED BY KENNETH H. HOLMES.
- "PLAT OF LANDS OF ANNIE G. KRAVCHUCK, GILEAD & OIL MILL ROADS, WATERFORD CONN.", SCALE 1"=100', DATE 5/1981, PREPARED BY ROBERT L. BUCHER, NEW LONDON, CT.
- "PROPERTY MAP PARCELS ABUTTING CLAM LANE AND FARGO ROAD, WATERFORD, CONNECTICUT, FOR: BERNHARD ASSOCIATES, NO. HAVEN, CT", SCALE 1"=100', DATE 4/7/1989, PREPARED BY CASCIO, BECHIR & ASSOCIATES, INC. NORTH HAVEN, CT.
- "MONUMENTED PROPERTY SURVEY ON LAND OF MARIA G. POLIZZI, 101 OIL MILL ROAD, WATERFORD, CONNECTICUT", SCALE 1"=50', DATE 1/15/2006, PREPARED BY ROBERT C. SIMONI, OLD SAYBROOK, CONNECTICUT.

GENERAL NOTES

- A) THIS MAP HAS BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.
B) THIS PLAN CONFORMS TO HORIZONTAL ACCURACY CLASS A-2 AND TOPOGRAPHICAL ACCURACY 1-3.
C) BOUNDARY DETERMINATION IS BASED UPON A FIRST SURVEY.
D) THE TYPE OF SURVEY PERFORMED IS A PROPERTY/TOPOGRAPHIC SURVEY AND IS INTENDED TO DEPICT THE EXISTING CONDITIONS WITH RESPECT TO MONUMENTATION FOUND, STRUCTURES, EASEMENTS, ENCROACHMENTS, VISIBLE UTILITIES, ROADWAYS AND CONTOURS.
- NORTH ARROW AND BEARINGS REFER TO NAD 83 AND ARE BASED ON GPS OBSERVATIONS PERFORMED BY BL COMPANIES ON 2/15/2018.
- ELEVATIONS REFER TO NAVD 88 AND ARE BASED ON GPS OBSERVATIONS PERFORMED BY BL COMPANIES ON 2/15/2018.
- PARCEL IS LOCATED IN A FLOOD HAZARD AREA "X", (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD) WITH A PORTION OF PARCEL IN SPECIAL FLOOD HAZARD AREA "A", (AREAS SUBJECT TO THE 1% ANNUAL CHANCE FLOOD) AS DEPICTED ON F.I.R.M. COMMUNITY PANEL NO. 090107 0343 G PANEL 343 OF 554 EFFECTIVE: JULY 18, 2011.
- WETLAND DELINEATION WAS PERFORMED ON 12/19/2018-12/20/2018. DELINEATION AND LOCATIONS PROVIDED BY DAWSON ENVIRONMENTAL, 10 MAPLE STREET, CHESTER, CT.
PARCEL IS SUBJECT TO:
A) 125' RIGHT OF WAY IN FAVOR OF CONNECTICUT LIGHT & POWER, DATED 3/19/1943 AND RECORDED IN VOL. 66 PG. 163 OF THE WATERFORD LAND RECORDS.



MATCHLINE ~ SEE SHEET 2 OF 2



TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

ROBERT H. ROPER L.S. #18469

NO CERTIFICATION IS EXPRESSED OR IMPLIED UNLESS THIS MAP BEARS THE ORIGINAL SIGNATURE AND EMBOSSED SEAL OF THE ABOVE NAMED LAND SURVEYOR.

Architecture
Engineering
Environmental
Land Surveying

BL Companies

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

**ROSALIE IRENE MAGUIRE &
TODD CARL WILLIS**
117 OIL MILL ROAD
WATERFORD, CONNECTICUT

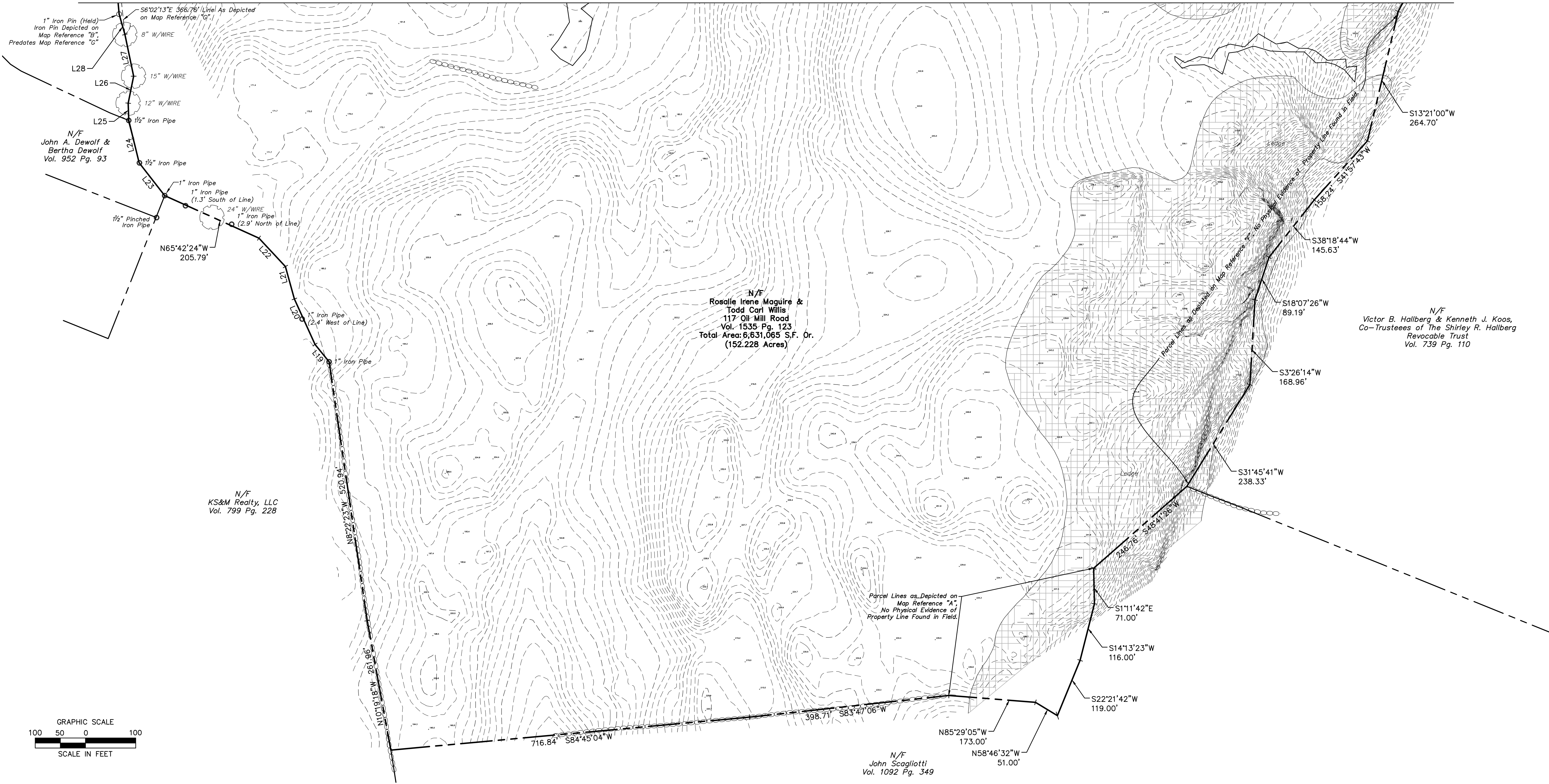
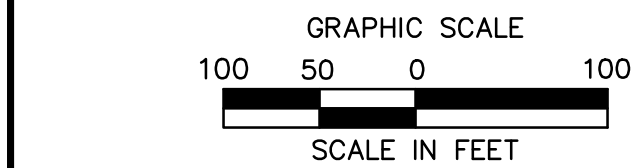
REVISIONS	
No.	Date

Surveyed	AV/SB
Drawn	AV
Reviewed	RHR
Scale	1"=100'
Project No.	17D3515
Date	2/22/2018
Field Book	519
CAD File:	BS17D351501
Title	PROPERTY SURVEY

Sheet No. 1 OF 2

BS-1

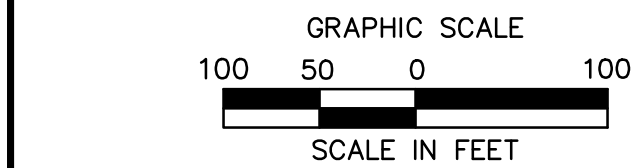
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Layout: 18170331501.dwg
Xref (g): 18170331501.dwg



Line Table			Line Table			Line Table		
Line #	Direction	Length (ft)	Line #	Direction	Length (ft)	Line #	Direction	Length (ft)
L1	N 27° 59' 52" E	55.18	L15	N 87° 27' 40" E	60.38	L29	N 05° 02' 35" W	117.66
L2	S 75° 32' 39" E	36.59	L16	N 85° 03' 09" E	79.20	L30	N 04° 37' 15" W	207.69
L3	N 88° 48' 53" E	31.12	L17	S 65° 18' 56" E	29.37	L31	N 02° 01' 32" W	55.03
L4	N 73° 31' 18" E	107.42	L18	S 73° 57' 46" E	58.40	L32	N 02° 20' 19" W	17.34
L5	N 13° 15' 04" W	8.28	L19	N 39° 05' 54" W	44.40	L33	N 04° 38' 16" W	49.37
L6	N 14° 24' 24" E	17.08	L20	N 24° 21' 09" W	99.55	L34	N 25° 21' 29" W	34.74
L7	N 45° 11' 11" E	22.36	L21	N 15° 27' 19" W	66.91	L35	N 43° 52' 10" W	10.74
L8	N 27° 32' 22" E	23.84	L22	N 42° 58' 29" W	77.22	L36	N 08° 25' 41" W	50.50
L9	N 77° 52' 03" E	19.12	L23	N 37° 52' 55" W	82.77	L37	N 00° 39' 54" E	21.55
L10	N 88° 03' 07" E	24.45	L24	N 13° 49' 05" W	86.87	L38	N 25° 32' 45" W	15.38
L11	N 67° 30' 14" E	12.22	L25	N 01° 44' 11" W	34.34	L39	N 06° 49' 36" W	50.00
L12	N 50° 13' 40" E	32.18	L26	N 11° 25' 11" E	54.86	L40	N 03° 05' 11" E	33.00
L13	N 79° 16' 06" E	45.36	L27	N 11° 52' 16" W	84.79	L41	N 42° 00' 53" W	26.55
L14	N 54° 51' 09" E	39.98	L28	N 15° 50' 40" W	42.11	L42	N 33° 17' 06" E	93.49

LEGEND	
	Property Line
	Easement Line
	FEMA FIRM Zone Line
	Limit of Wetlands
	Stone Wall
	Fence
	Edge of Water
	Treeline
	Major Contour
	Minor Contour
	Transmission Utility Pole
	Deciduous Tree
	Coniferous Tree

MATCHLINE ~ SEE SHEET 1 OF 2



N/F
Rosalie Irene Maguire &
Todd Carl Willis
117 Oil Mill Road
Vol. 1535 Pg. 123
Total Area: 6,631,065 S.F. Or.
(152.228 Acres)

N/F
Victor B. Hallberg & Kenneth J. Koos,
Co-Trustees of The Shirley R. Hallberg
Revocable Trust
Vol. 739 Pg. 110

Parcel Lines as Depicted on
Map Reference "A".
No Physical Evidence of
Property Line Found in Field.

N/F
John Scagliotti
Vol. 1092 Pg. 349

ROSALIE IRENE MAGUIRE &
TODD CARL WILLIS
117 OIL MILL ROAD
WATERFORD, CONNECTICUT

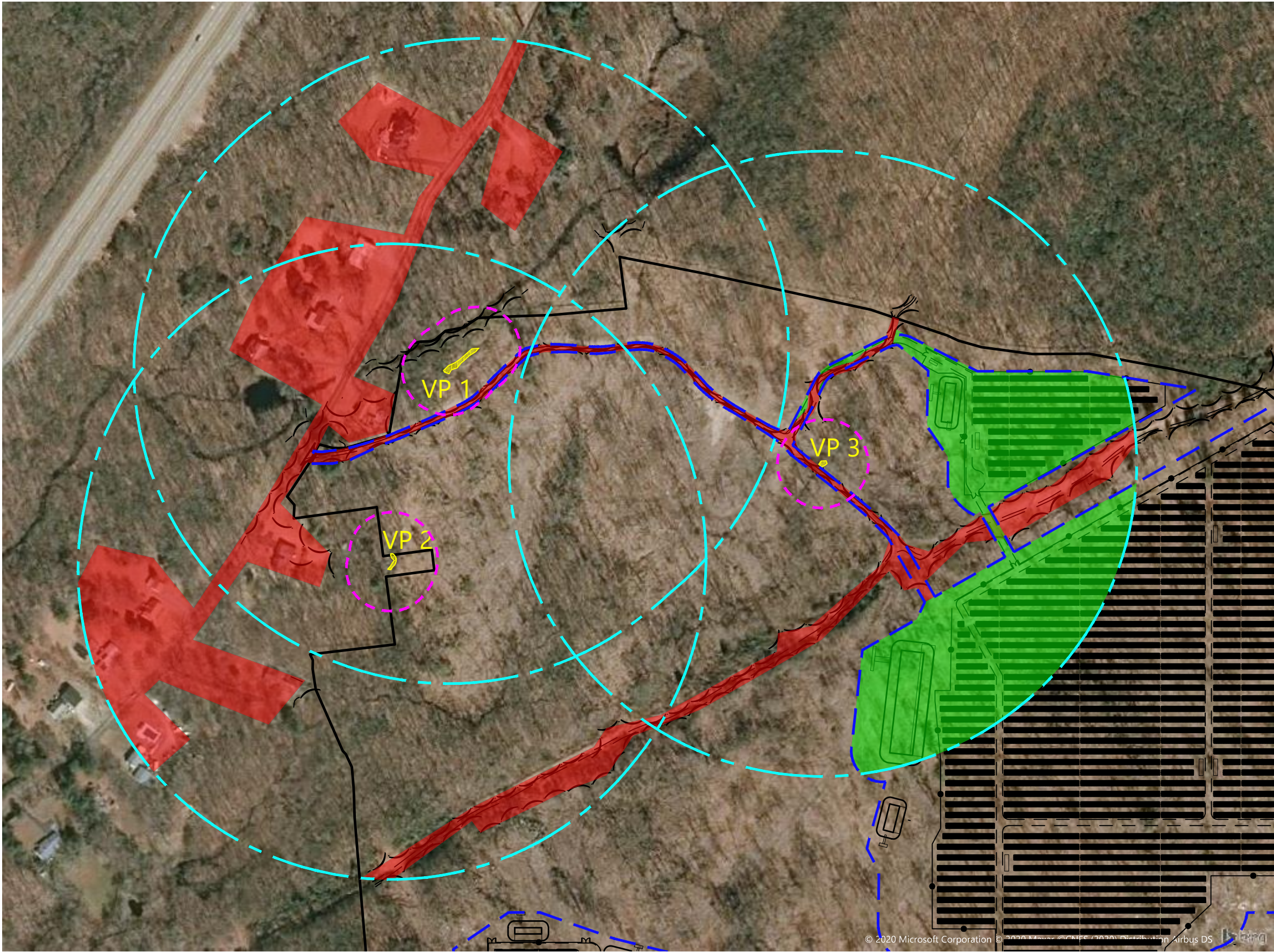
REVISIONS		Date	Desc.
No.	Date		
Surveyed	AV/SB		
Drawn	AV		
Reviewed	RHR		
Scale	1"=100'		
Project No.	17D3515		
Date	2/22/2018		
Field Book	519		
CAD File:	BS17D351501		

Title
PROPERTY
SURVEY

Sheet No. 2 OF 2

BS-1

Xref (g): 18170331501.dwg



Attachment C

Legend

- DELINEATED VERNAL POOL (VP)
- VERNAL POOL ENVELOPE (VPE) (0-100 FEET)
- CRITICAL TERRESTRIAL HABITAT (CTH) (100-750 FEET)
- LIMITS OF WORK
- EXISTING DISTURBANCE
- PROPOSED DISTURBANCE

Vernal Pool Disturbances

Vernal Pool #	1	2	3
VP Area, SF	±1,035	±315	±195
VPE Area, SF	±53,084	±41,349	±36,839
Ex. Disturb. in VPE, SF	±4,743 (8.9%)	0 (0.0%)	±4,736 (12.9%)
Pr. Disturb. in VPE, SF	±4,743 (8.9%)	0 (0.0%)	±4,736 (12.9%)
CTH Area, SF	±1,875,803	±1,799,163	±1,770,984
Ex. Disturb. in CTH, SF	±294,677 (15.7%)	±359,081 (20.0%)	±86,926 (4.9%)
Pr. Disturb. in CTH, SF	±294,677 (15.7%)	±359,081 (20.0%)	±440,863 (24.9%)

Attachment D



July 28, 2020

Ref: 42496.00

Jean-Paul La Marche
Development Director
Greenskies Clean Energy
363 Centennial Parkway, Suite 105
Louisville, CO 80027

Re: CT Siting Council Petition No. 1347A - GRE GACRUX LLC
Eastern Ribbon Snake Protection Measures Protocol
16.78 MW-AC Solar Project
117 Oil Mill Road, Waterford, Connecticut

Mr. Jean-Paul La Marche,

In response to the Connecticut Siting Council (CSC) memorandum, dated July 16, 2020, which documented additional late-filing exhibits to be submitted, Vanasse Hangen Brustlin, Inc. (VHB) is pleased to provide the following details on a monitoring protocol for the Eastern Ribbon Snake.

Eastern Ribbon Snake (*Thamnophis sauritus*) Monitoring Protocol- State Special Concern

As noted in the Connecticut Department of Energy and Environmental Protection (CTDEEP) Natural Data Base Diversity (NDDB) Determination letter, dated February 28, 2020, recommendations to protect the state special concern species- eastern ribbon snake will include protection measures including the following:

- 100 feet no disturbance buffer to wetlands.
- No planned disturbance within the utility Right-of-Way.
- Limited disturbance in the 100 to 200-foot wetland buffer in order to install the soil erosion and sedimentation measures, grading and installation of stormwater management measures (e.g., swales and basins).
- For proposed activities occurring within the 300-foot wetland buffer of Wetland 1 during the snake's active season (April 1- Oct 15), the following avoidance measures will be implemented:

Engineers | Scientists | Planners | Designers

100 Great Meadow Road
Wethersfield, Connecticut 06109
P 860.807.4300
F 860.372.4570



- A contractor awareness program will be developed and implemented to ensure that contractors working in the area have been instructed on the proper response in the event that an eastern ribbon snake is observed in the work area.
- If any snakes are observed, construction personnel will safely relocate them to an area immediately outside of the work area.
- Any silt fence utilized will be removed after clearing is complete and soils are stabilized.
- Any confirmed eastern ribbon snake sightings will be reported to the NDDb.

In order to make contractors aware of the snakes an Eastern Ribbon Snake education/training session will be administered to the contractor by a qualified biologist. The biologist will verbally describe:

- Life History and Importance of Protection,
- Species Identification, and
- Protection Methods:
 - Safe Handling,
 - Translocation,
 - Biologist Contact Information, and
 - Reporting Requirements.

The above information including photographs of the snake will assist in the identification and serve as a reminder of the need for Eastern Ribbon Snake Protection will also be compiled into a written document that will be provided to the contractor.

Please feel free to contact me with any questions, comments or require additional information.

Sincerely,

Vanasse Hangen Brustlin, Inc.

A handwritten signature in black ink, appearing to read "J. Shamas", with a stylized flourish at the end.

Jeffrey R Shamas

Director of Environmental Services
jshamas@vhb.com

Attachment E



July 28, 2020

Ref: 42496.00

Jean-Paul La Marche
Development Director
Greenskies Clean Energy
363 Centennial Parkway, Suite 105
Louisville, CO 80027

Re: CT Siting Council Petition No. 1347A - GRE GACRUX LLC
Vernal Pool & Wet Pond Monitoring Protocol
16.78 MW-AC Solar Project
117 Oil Mill Road, Waterford, Connecticut

Mr. Jean-Paul La Marche,

In response to the Connecticut Siting Council (CSC) memorandum, dated July 16, 2020, which documented additional late-filing exhibits to be submitted, Vanasse Hangen Brustlin, Inc. (VHB) is pleased to provide the following details on a monitoring protocol for the vernal pools on site and proposed stormwater wet ponds 1 and 16.

Stormwater Wet Pond Monitoring Protocol

- I. In order to preclude access for amphibians to the stormwater wet ponds 1 and 16 that are within the 750-foot Critical Terrestrial Habitat (CTH) of Vernal Pools (VP) 1 through 3, the following monitoring protocol is to be implemented and included in the project construction documents:
 1. Installing a permanent wildlife exclusion fence around the stormwater ponds 1 and 16 to preclude potential breeding, and
 2. Monitoring stormwater ponds 1 and 16 for 3 years to determine if breeding amphibians are observed within these ponds during the amphibian breeding season.
 3. Monitoring detailed in this protocol shall be by a qualified biologist that is experienced with the identification and classification of amphibian species that breed in vernal pools. This includes the identification of amphibian egg masses to adult stages.



II. The following actions will be taken during the monitoring period:

1. No breeding observed: Continuing monitoring through the 3-year period.
2. Breeding Observed: Translocate egg masses to Vernal Pools 1 through 3 and evaluate the effectiveness of the permanent exclusionary fence and provide maintenance measures to eliminate amphibian access. This could include closing off any potential accessway found under or through the fence or installing a secondary fence for example.
3. Provide a Vernal Pool Monitoring Report following each monitoring event that will include methods, observations and actions taken. If state listed species as endangered, threatened or special concern, the biologist will document and submit a formal reporting form to the CTDEEP NDDDB office.

Please feel free to contact me with any questions, comments or require additional information.

Sincerely,

Vanasse Hangen Brustlin, Inc.

A handwritten signature in black ink, appearing to read "J. Shamas", with a stylized flourish extending to the right.

Jeffrey R Shamas

Director of Environmental Services
jshamas@vhb.com