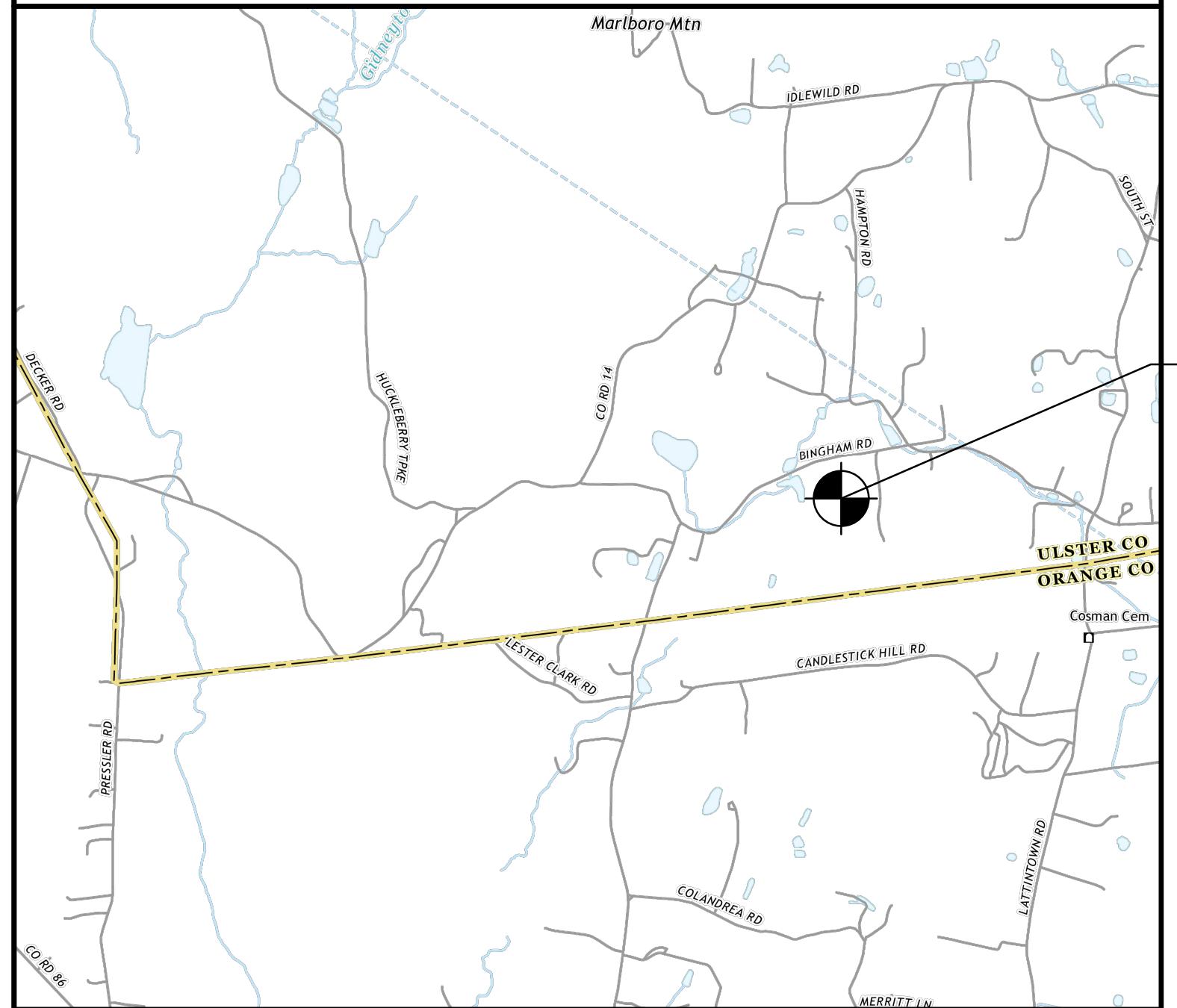


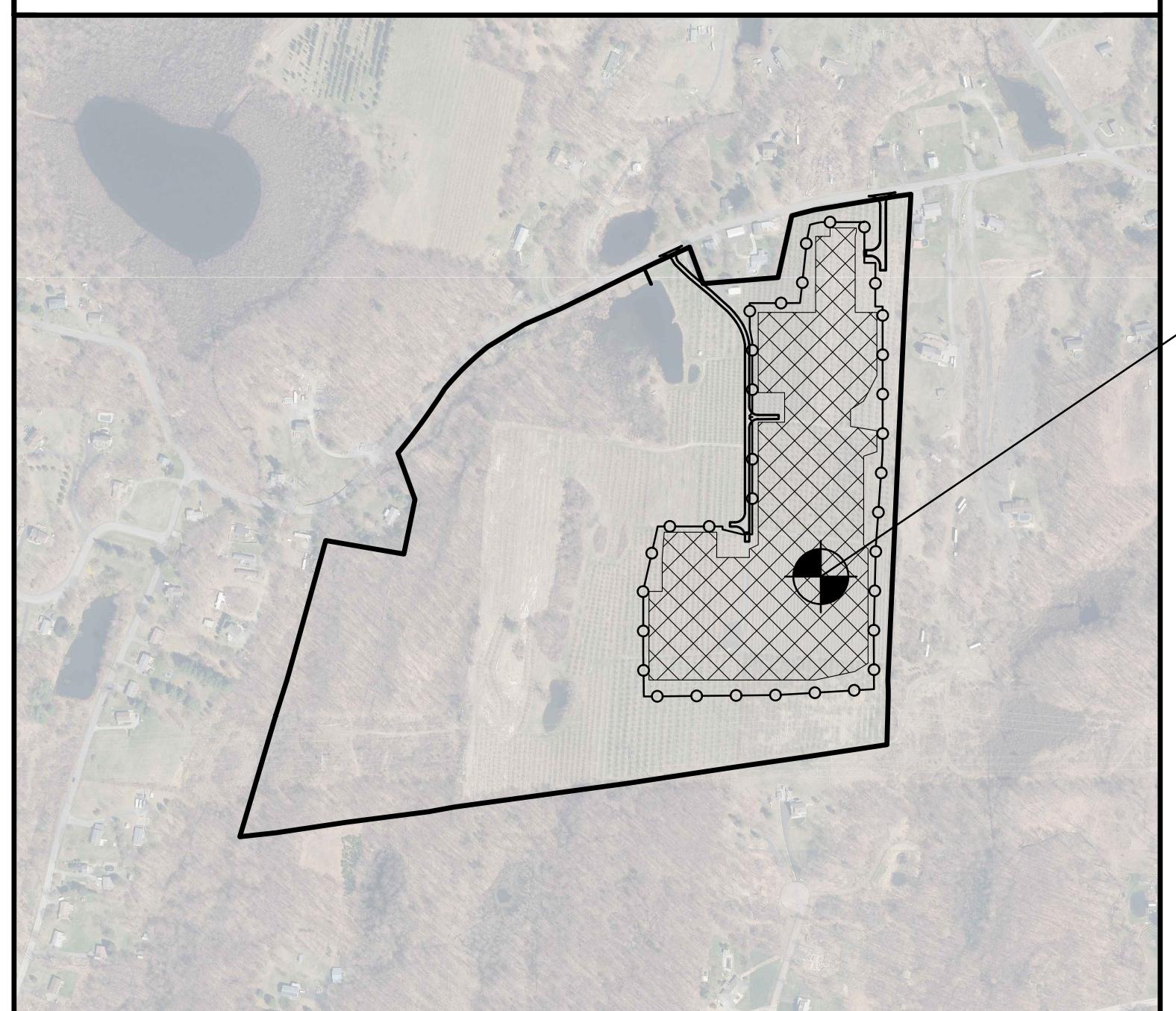
LOCATION MAP

SCALE: 1"=2000'



LOCATION MAP

SCALE: 1"=500'



DRAWINGS:

C-001 TITLE SHEET

C-002 LEGEND & NOTES

C-101 SITE PLAN - EXISTING CONDITIONS

C-102 SITE PLAN - PROPOSED SITE PLAN

C-103 SITE PLAN - PROPOSED GRADING & UTILITIES - 1

C-104 SITE PLAN - PROPOSED GRADING & UTILITIES - 2

C-105 SITE PLAN - PROPOSED GRADING & UTILITIES - 3

C-106 SITE PLAN - TEMPORARY EROSION & SEDIMENT CONTROL PLAN

C-501 CIVIL DETAILS - SHEET 1

C-502 CIVIL DETAILS - SHEET 2

ELP MARLBOROUGH SOLAR

SITE ADDRESS: 335 BINGHAM ROAD, MARLBOROUGH, NY 12542

TAX MAP ID: 108.3-3-21

PROPOSED USE: LARGE SCALE SOLAR ENERGY SYSTEM (5MW-AC)

DEVELOPER:

ELP MARLBOROUGH SOLAR LLC
14 ARROW STREET, SUITE 22
CAMBRIDGE, MA 02138

ENGINEER:



C&A #: 4996.26

DATE: APRIL 5, 2024

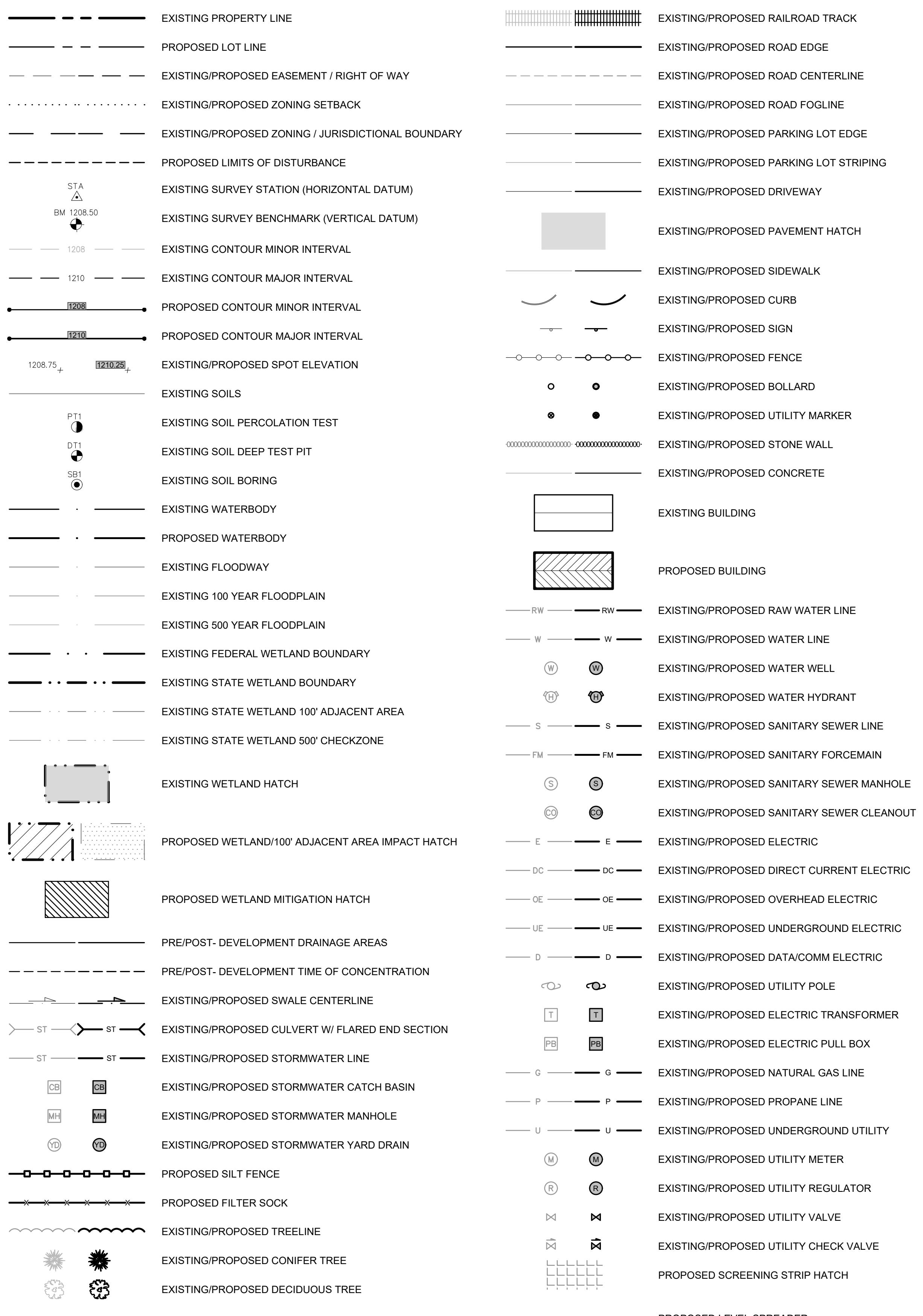
REVISED: JULY 3, 2024

REVISED: SEPTEMBER 6, 2024

REVISED: OCTOBER 25, 2024

REVISED: NOVEMBER 22, 2024

LEGEND



SITE PLAN NOTES:

1. ORTHOGRAPHIC IMAGERY DOWNLOADED FROM NYS GIS CLEARINGHOUSE. IMAGERY PUBLISHED SEPTEMBER 2023, ACCESSED BY C&A NOVEMBER 2023.
2. BACKGROUND DRAWING & TOPOGRAPHIC CONTOURS TAKEN FROM SURVEY TITLED "MAP OF A PORTION OF LANDS OF TRUNCAL PREPARED FOR ELP MARLBOROUGH SOLAR LLC, SBL:108.3-3-21, ULSTER COUNTY, STATE OF NY" DATED APRIL 22, 2024, PREPARED BY CONTROL POINT ASSOCIATES, INC., P.C.
3. ADJACENT PROPERTY BOUNDARIES DOWNLOADED FROM ULSTER COUNTY GIS DATABASE IN AUGUST 2023. SELECT BOUNDARIES ADJUSTED BY C&A TO REFLECT EXPECTED LOCATIONS OF INTERSECTION WITH SURVEYED BOUNDARY LINE.
4. EXISTING SITE FEATURES SUCH AS BUILDING LOCATIONS, DRIVEWAYS, ROADS, OVERHEAD UTILITIES, AND TREELINES OUTSIDE SURVEY AREA ESTIMATED FROM ORTHOGRAPHIC IMAGERY.
5. NWI POTENTIAL WETLAND BOUNDARIES DOWNLOADED FROM NATIONAL WETLANDS INVENTORY, ACCESSED NOVEMBER 2023.
6. FEMA NFHL CHECKED IN JANUARY 2024 AND NO FLOOD HAZARDS WERE IDENTIFIED WITHIN THE PROJECT AREA. PROJECT FALLS WITHIN FIRM PANEL #3611C0900F.
7. PROPOSED SOLAR FACILITY LAYOUT FROM DRAWING TITLED "PRELIMINARY PV SITE PLAN" PREPARED BY CS ENERGY DATED MARCH 2, 2023, AMENDED BY C&A PER VCR MARKUP PROVIDED ON 8/23/24.

PROPOSED SITE PLAN NOTES:

1. THE PROPOSED SOLAR ENERGY SYSTEM INSTALLATION SHALL BE PERFORMED BY A QUALIFIED SOLAR INSTALLER.
2. THE PROPOSED SOLAR ENERGY SYSTEM WILL MEET NEW YORK'S UNIFORM FIRE PREVENTION AND BUILDING CODE AND NATIONAL ELECTRICAL CODE STANDARDS.
3. PRIOR TO OPERATION OF THE SOLAR ENERGY SYSTEM, WRITTEN PROOF THAT ELECTRICAL CONNECTIONS HAVE BEEN INSPECTED AND APPROVED BY AN APPROPRIATE ELECTRICAL INSPECTION PERSON OR AGENCY, AS DETERMINED BY THE TOWN OF MARLBOROUGH WILL BE PROVIDED.
4. A MAP SHOWING THE LOCATIONS OF THE MAJOR COMPONENTS OF THE SOLAR SYSTEM INCLUDING THE LOCATION OF THE ARRAY, EQUIPMENT PADS, MAIN TRENCH LOCATIONS, AND DISCONNECTS SHALL BE POSTED AT THE FACILITIES ENTRANCE AND PROVIDED TO THE LOCAL FIRE DEPARTMENT OBLIGATED TO RESPOND TO A CALL AT THE FACILITY.
5. THE SOLAR PANELS SHALL NOT EXCEED 15' IN HEIGHT.
6. BUILDING SETBACK REQUIREMENTS SHALL BE AS STATED FOR THE RAG-1 (RURAL AGRICULTURAL DISTRICT) AS SHOWN IN THE ZONING TABLE BELOW. INVERTERS SHALL BE SET BACK THE LESSER OF 100 FEET OR UNTIL THE ELECTROMAGNETIC FIELD (EMF) MEETS BACKGROUND LEVEL, AS DETERMINED BY THE WORLD HEALTH ORGANIZATION (WHO).
7. COMMERCIAL SOLAR FACILITY'S AREA OF USE, AS DEFINED IN CODE SECTION 165-32.2 (B) EQUIATES TO APPROXIMATELY 16.2 ACRES.
8. NONINVASIVE GROUND COVER UNDER AND BETWEEN THE ROWS OF SOLAR PANELS SHALL BE LOW-MAINTENANCE, DROUGHT-RESISTANT, AND NON-FERTILIZER-DEPENDENT. SEE SEEDING PLAN ON C-501 FOR MORE DETAILS.
9. THE SOLAR ENERGY SYSTEM SHALL BE ENCLOSED BY A MINIMUM 8' TALL PERIMETER FENCE AND SHALL BE AN AGRICULTURAL STYLE FENCE CONSISTING OF WOODEN POSTS AND WOVEN WIRE. WARNING SIGNS WITH THE OWNER'S CONTACT INFORMATION WILL BE PLACED ON THE ENTRANCE AND PERIMETER OF THE FENCING.
10. A SIGN NO GREATER THAN TWO SQUARE FEET INDICATING THE NAME OF THE FACILITY OWNER(S) AND A TWENTY-FOUR-HOUR EMERGENCY TELEPHONE NUMBER SHALL BE POSTED. IN ADDITION, "NO TRESPASSING" OR OTHER WARNING SIGNS MAY BE POSTED.
11. THE OWNER WILL BE RESPONSIBLE FOR UPKEEP OF THE SOLAR FACILITY, INCLUDING ALL NECESSARY MAINTENANCE OF THE SYSTEM & PROPERTY INCLUDING MOWING AND TRIMMING IN AND AROUND THE FACILITY.
12. THE OWNER SHALL PREPARE AND COMPLY WITH A DECOMMISSIONING PLAN AS DETAILED IN THE TOWN OF MARLBOROUGH, NY, SUPPLEMENTARY REGULATIONS SECTION 155-32.2.
13. ALL TEMPORARILY STOCKPILED MATERIAL GENERATED BY CONSTRUCTION OF THE FACILITY WILL BE REMOVED FROM THE SITE IN A TIMELY MANNER.

SITE DATA / ZONING SUMMARY	
TAX ID NUMBER: 108.3-21 (+/- 80 ACRES)	
ZONING DISTRICT	RAG-1 (RURAL AGRICULTURAL DISTRICT)
USE CLASSIFICATION	LARGE SCALE SOLAR ENERGY SYSTEM (5 MW-AC)
REQUIRED	PROPOSED
MINIMUM LOT SIZE	1 ACRE
LOT COVERAGE, MAX.	50% ¹
LOT WIDTH (FT)	150'
LOT DEPTH (FT)	1845'
BUILDING HEIGHT (FT), MAX	200'
YARD SETBACKS - MINIMUM (FT)	1480'
FRONT	15'
SIDE (ONE)	35'
SIDE (BOTH)	80'
REAR	>100'

¹ REQUIREMENT ALTERED FROM ZONING SCHEDULE I "LOT, YARD, AND HEIGHT REGULATIONS" PER TOWN OF MARLBOROUGH CODE 155-32.2 "STANDARDS FOR LARGE-SCALE SOLAR SYSTEMS AS A SPECIAL USE".

² AN EXISTING, NON-COMFORMING, BUILDING TO REMAIN IS LOCATED APPROXIMATELY 24' FROM THE BOUNDARY LINE. THE PROPOSED SOLAR PROJECT SHALL RESPECT THE 50' ZONING SETBACK.

³ PROPOSED LOT COVERAGE CALCULATION INCLUDES PROPOSED DRIVEWAYS, CONCRETE EQUIPMENT PADS & MODULE AREA

E&SC PLAN AND CONSTRUCTION NOTES:

1. CONSTRUCTION SHALL NOT COMMENCE UNTIL APPROPRIATE PERMIT COVERAGE HAS BEEN OBTAINED UNDER NYSDEC SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY, GP-0-20-001.
2. TOTAL LIMITS OF DISTURBANCE (LOD), AS SHOWN, TOTALS 21.91 ACRES. LOD INCLUDES LAND CLEARING/GRUBBING, MINOR GRADING FOR ACCESS DRIVE AND EQUIPMENT PADS, TRENCHING, AND TEMPORARY E&SC MEASURES.
3. CONSTRUCTION SHALL BE COMMENCED IN ACCORDANCE WITH THE PHASING PLAN TO LIMIT DISTURBANCE OF GREATER THAN 5 ACRES PER PHASE:
 - 3.1. PHASE 1: APPROXIMATELY 4.85 ACRES OF DISTURBANCE, NOT LIMITED TO BUT INCLUDING: ESTABLISHMENT OF E&SC MEASURES (STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, FILTER SOCK, ETC.), CLEARING/GRUBBING OF EXISTING TREES AND SHRUBS, INSTALLATION OF TEMPORARY LAYDOWN AREA, ACCESS DRIVE, UNDERGROUND ELECTRIC, UTILITY POLES, EQUIPMENT PADS AND PANEL ARRAY.
 - 3.2. PHASE 2: APPROXIMATELY 4.87 ACRES OF DISTURBANCE, NOT LIMITED TO BUT INCLUDING: CLEARING/GRUBBING OF EXISTING TREES AND SHRUBS, INSTALLATION OF UNDERGROUND ELECTRIC AND PANEL ARRAY.
 - 3.3. PHASE 3: APPROXIMATELY 4.72 ACRES OF DISTURBANCE, NOT LIMITED TO BUT INCLUDING: CLEARING/GRUBBING OF EXISTING TREES AND SHRUBS, INSTALLATION OF UNDERGROUND ELECTRIC AND PANEL ARRAY.
 - 3.4. PHASE 4: APPROXIMATELY 2.96 ACRES OF DISTURBANCE, NOT LIMITED TO BUT INCLUDING: CLEARING/GRUBBING OF EXISTING TREES AND SHRUBS, INSTALLATION OF UNDERGROUND ELECTRIC AND PANEL ARRAY.
 - 3.5. PHASE 5: APPROXIMATELY 4.54 ACRES OF DISTURBANCE, NOT LIMITED TO BUT INCLUDING: CLEARING/GRUBBING OF EXISTING TREES AND SHRUBS, INSTALLATION OF UNDERGROUND ELECTRIC, PANEL ARRAY AND FINAL STABILIZATION OF THE SITE.
4. EACH PHASE SHALL BE TEMPORARILY STABILIZED BEFORE PROCEEDING TO A SUBSEQUENT PHASE.
5. THE TEMPORARY E&SC PLAN MEASURES SHOWN HEREIN, SHALL BE PUT IN PLACE AT THE BEGINNING OF CONSTRUCTION AND REMOVED UPON FINAL STABILIZATION OF THE SITE.
6. CONSTRUCTION OF THE PANEL ARRAYS SHALL BE COMPLETED IN SUCH A WAY THAT NULLIFIES DISTURBANCE AND/OR COMPACTION OF THE IN-SITU LAND COVER (I.E. TRACKED VEHICLE TRAVELING IN AND OUT OF ROWS IS RECOMMENDED). EXISTING GROUND COVER IN THE AREA OF THE PANEL ARRAY SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
7. ALL DISTURBED AREAS SHALL BE SEDED AND MULCHED AS DETAILED IN THE SEEDING PLAN ON DRAWING C-501.
8. THE TEMPORARY PARKING AND STAGING AREA FOR CONSTRUCTION EQUIPMENT AND MATERIALS SHALL CONSIST OF STONE DUST OR A SIMILAR MATERIAL. UPON COMPLETION OF CONSTRUCTION, THE STONE DUST, OR SIMILAR, SHALL BE REMOVED UP TO BUT NOT INCLUDING REMOVAL OF THE COVERED TOPSOIL. THE AREA SHALL BE SEDED AND MULCHED ACCORDING TO THE SEED AND MULCH SPECIFICATIONS DETAILED ON THE E&SC NOTES SHEET.

4	REVISED PER PB COMMENT - SCREENING & HYDRANT	11/22/24	ETY
REV #	DESCRIPTION	DATE	BY

ELP MARLBOROUGH SOLAR 335 BINGHAM ROAD

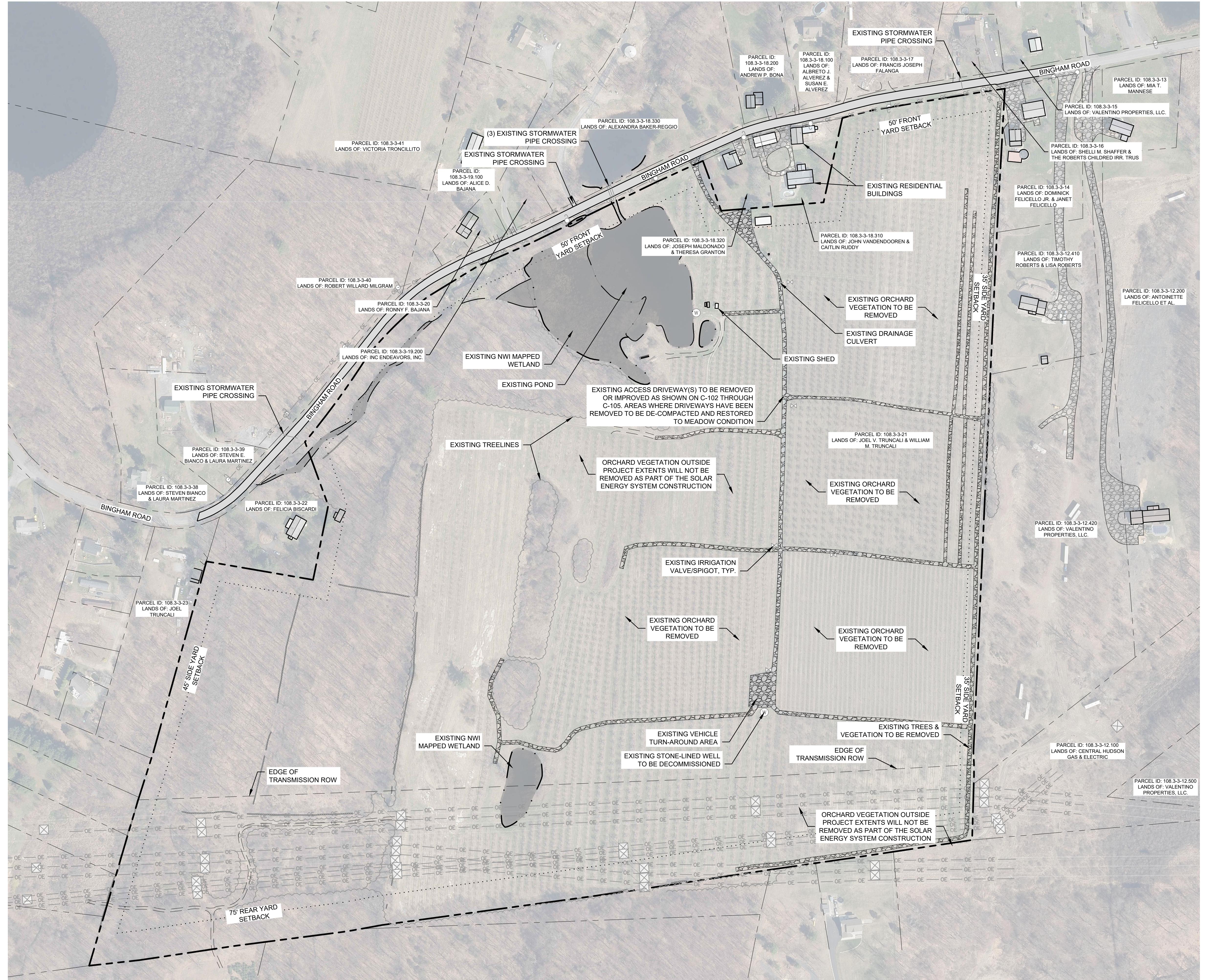
TOWN OF MARLBOROUGH, NY

LEGEND & NOTES



4411 Route 9, Suite 200, Hudson New York 12534 tel: (518) 828-2700
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4/5/2024	DESIGNED BY: TSB/DPB	C&A JOB#	
AS SHOWN	CHECKED BY: CJK	APPROVED BY: CJK	DRAWING: 4996.26
			C-002



<divTE PLAN NOTE

ORTHOGRAPHIC IMAGERY DOWNLOADED FROM NYS GIS CLEARINGHOUSE. IMAGERY PUBLISHED SEPTEMBER 2023, ACCESSED BY C&A NOVEMBER 2023.

BACKGROUND DRAWING & TOPOGRAPHIC CONTOURS TAKEN FROM SURVEY TITLED "MAP OF A PORTION OF LANDS OF TRUNCALI PREPARED FOR ELP MARLBOROUGH SOLAR LLC, SBL:108.3-3-21, ULSTER COUNTY, STATE OF NY" DATED APRIL 22, 2024, PREPARED BY CONTROL POINT ASSOCIATES, INC., P.C.

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FEMA NFHL CHECKED IN JANUARY 2024 AND NO FLOOD HAZARDS WERE IDENTIFIED WITHIN THE PROJECT AREA. PROJECT FALLS WITHIN FIRM PANEL #36111C0900F.

4	REVISED PER PB COMMENT – SCREENING & HYDRANT	11/22/24	ETY
REV. #	DESCRIPTION	DATE	BY

ELP MARLBOROUGH SOLAR 335 BINGHAM ROAD

SITE PLAN

EXISTING CONDITIONS & DEMO



CRAWFORD & ASSOCIATES

ENGINEERING & LAND SURVEYING, PC

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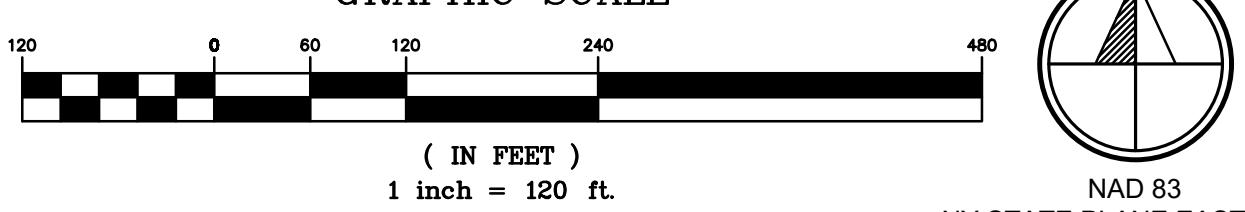
24	DRAWN BY:	TSB/DPB	H:\WORK\4996.26 Marlborough\DWG\4996.26 SITE.dwg	
	DESIGNED BY:	TSB/DPB	C&A JOB#	DRAWING:
	CHECKED BY:	04/06/06		

WN	APPROVED BY: CJK	4996.26	C-101
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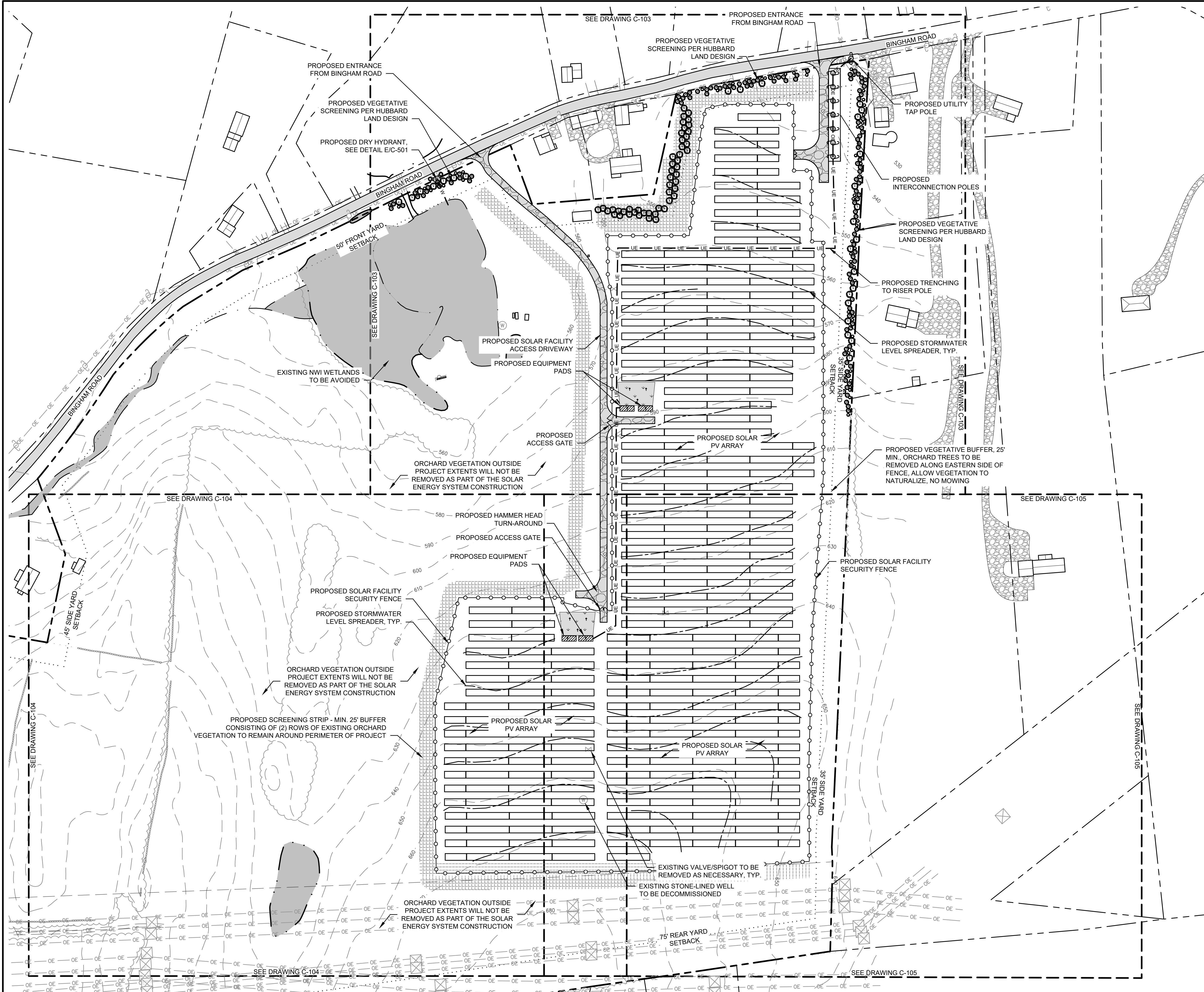
EXISTING CONDITIONS & DEMO

SCALE: 1"=120'

GRAPHIC SCALE



NAD 83
NY STATE PLANE EAST ZONE



PROPOSED OVERALL LAYOUT

SCALE: 1"=100'

GRAPHIC SCALE

(IN FEET)
1 inch = 100 ft.

NAD 83
NY STATE PLANE EAST ZONE

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7. COMMERCIAL SOLAR FACILITY'S AREA OF USE, AS DEFINED IN CODE SECTION 155-32.2 (B) EQUIATES TO APPROXIMATELY 16.2 ACRES.
8. NONINVASIVE GROUND COVER UNDER AND BETWEEN THE ROWS OF SOLAR PANELS SHALL BE LOW-MAINTENANCE, DROUGHT-RESISTANT, AND NON-FERTILIZER-DEPENDENT. SEE SEEDING PLAN ON C-501 FOR MORE DETAILS.
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SITE DATA / ZONING SUMMARY		
TAX ID NUMBER: 108.3-3-21 (+/- 80 ACRES)		
ZONING DISTRICT	RAG-1 (RURAL AGRICULTURAL DISTRICT)	
USE CLASSIFICATION	LARGE SCALE SOLAR ENERGY SYSTEM (5 MW-AC)	
REQUIRED	PROPOSED	
MINIMUM LOT SIZE	1 ACRE	+/- 80 ACRES
LOT COVERAGE, MAX.	50% ¹	10.5% ²
LOT WIDTH (FT)	150'	1845'
LOT DEPTH (FT)	200'	1480'
BUILDING HEIGHT (FT), MAX	15' ³	<15'
YARD SETBACKS - MINIMUM (FT)		
FRONT	50'	50 ²
SIDE (ONE)	35'	35'
SIDE (BOTH)	80'	80'
REAR	75'	>100'

¹ REQUIREMENT ALTERED FROM ZONING SCHEDULE I "LOT, YARD, AND HEIGHT REGULATIONS" PER TOWN OF MARLBOROUGH CODE 155-32.2I "STANDARDS FOR LARGE-SCALE SOLAR SYSTEMS AS A SPECIAL USE".

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4	REV #	REvised per PB comment - Screening & Hydrant	11/22/24	ETY

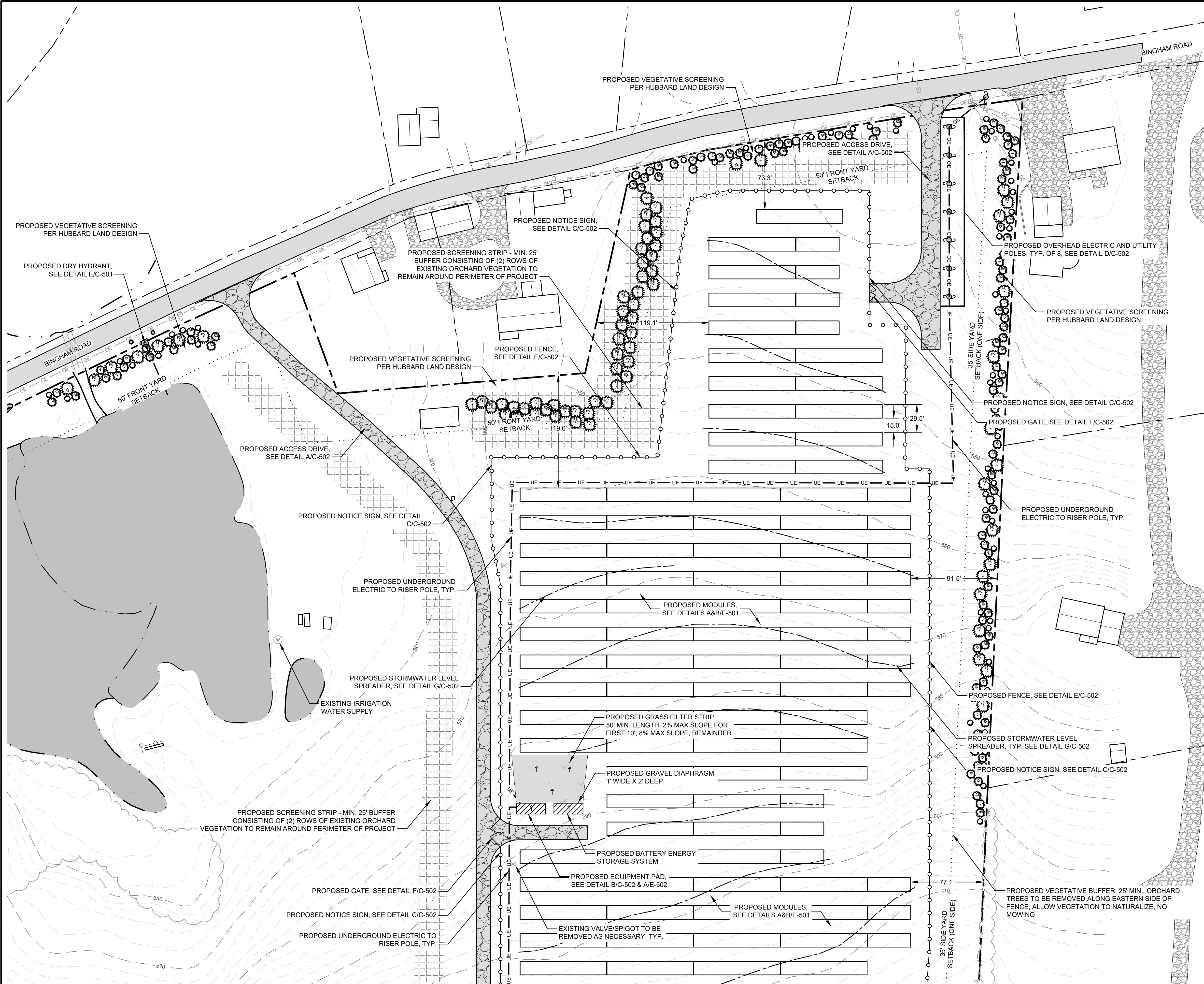
ELP MARLBOROUGH SOLAR
335 BINGHAM ROAD

TOWN OF MARLBOROUGH, NY

SITE PLAN
PROPOSED OVERALL LAYOUT

CRAWFORD & ASSOCIATES
ENGINEERING & LAND SURVEYING, PC
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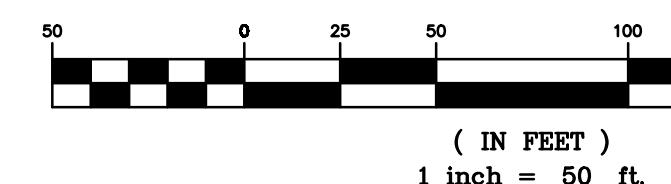
IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THESE DOCUMENTS IN ANY WAY, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.	DATE: 4/5/2024	DRAWN BY: TSB/DPB	4411 Route 9, Suite 200, Hudson New York 12534
	DESIGNED BY: TSB/DPB	AS SHOWN	
CHECKED BY: CJK	APPROVED BY: CJK		
C&A JOB# 4996.26	DRAWING: C-102		



PROPOSED GRADING & UTILITIES - 1

SCALE: 1"=50'

GRAPHIC SCALE



NAD 83
NY STATE PLANE EAST ZONE

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13. ALL TEMPORARILY STOCKPILED MATERIAL GENERATED BY CONSTRUCTION OF THE FACILITY WILL BE REMOVED FROM THE SITE IN A TIMELY MANNER.

4	REV #	REvised per PB Comment - SCREENING & HYDRANT	11/22/24	ETY

ELP MARLBOROUGH SOLAR
335 BINGHAM ROAD

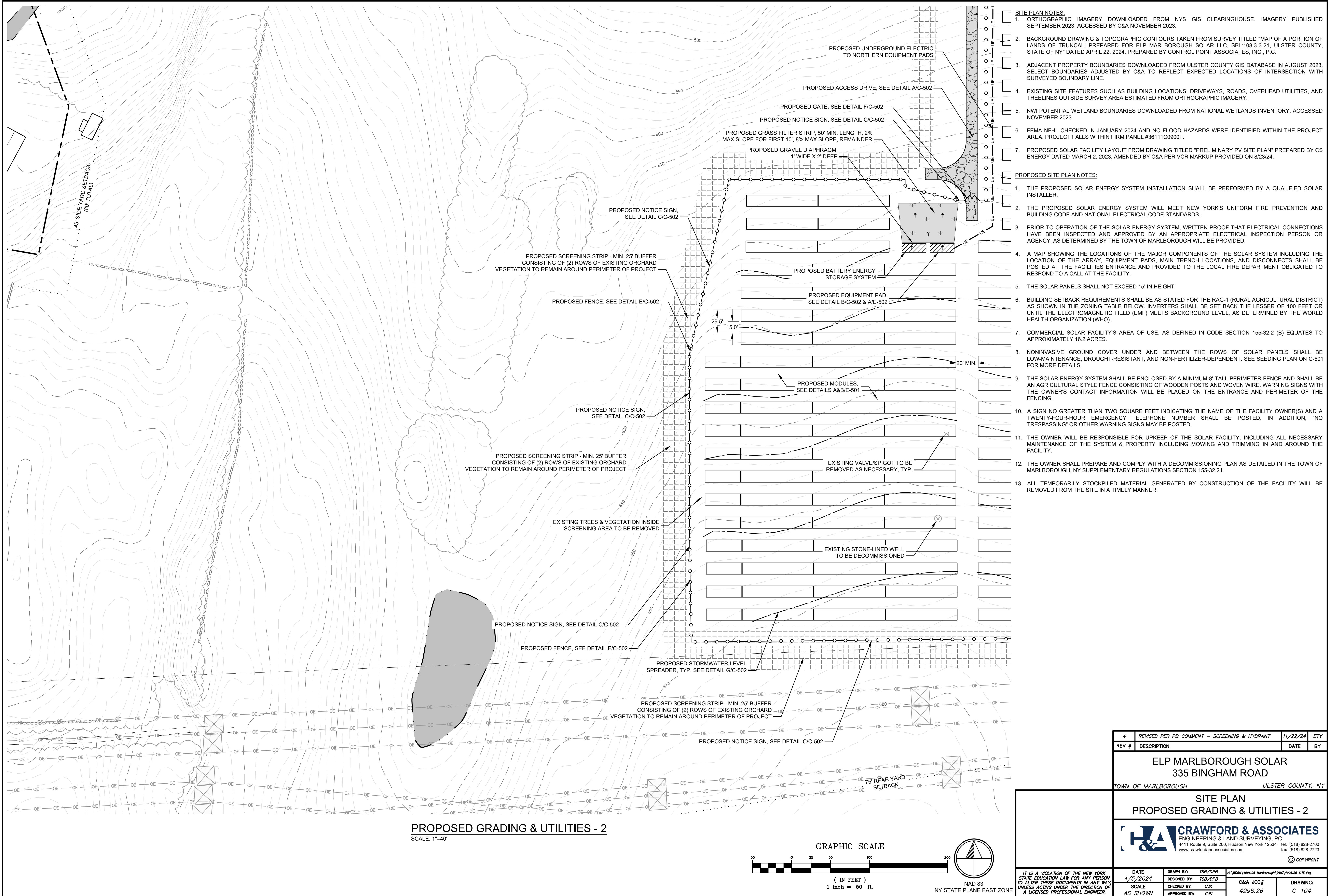
TOWN OF MARLBOROUGH, NY

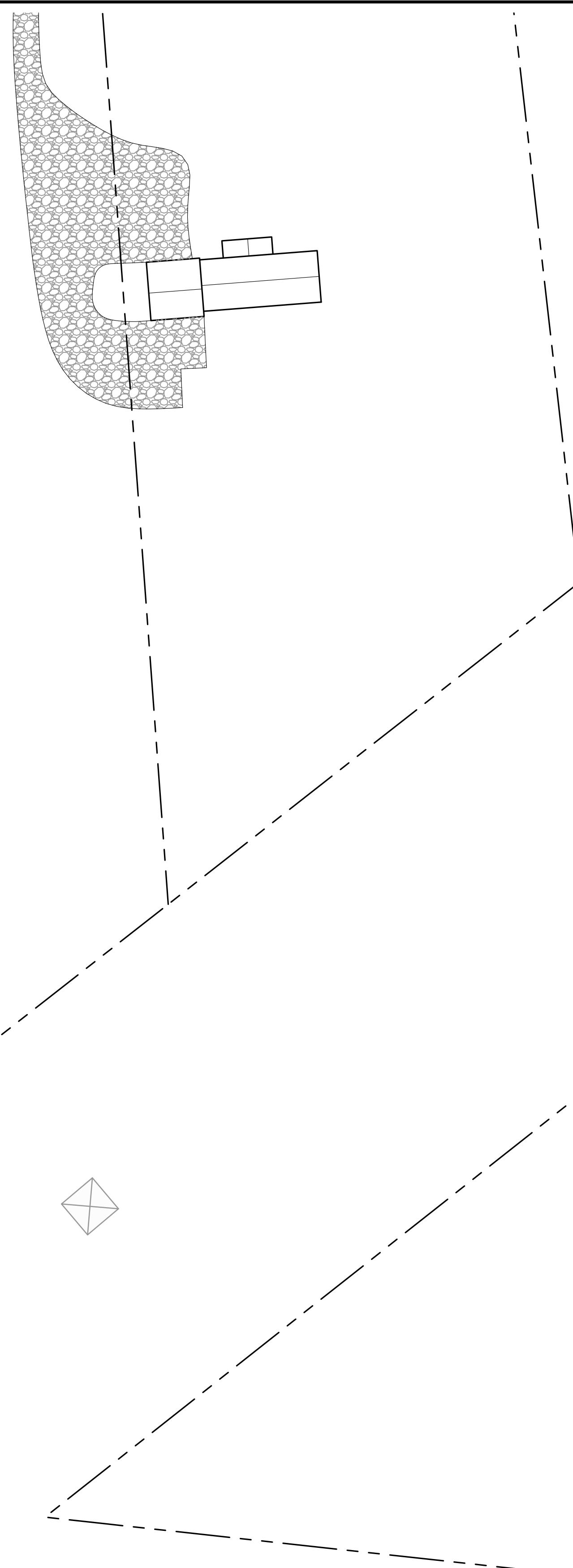
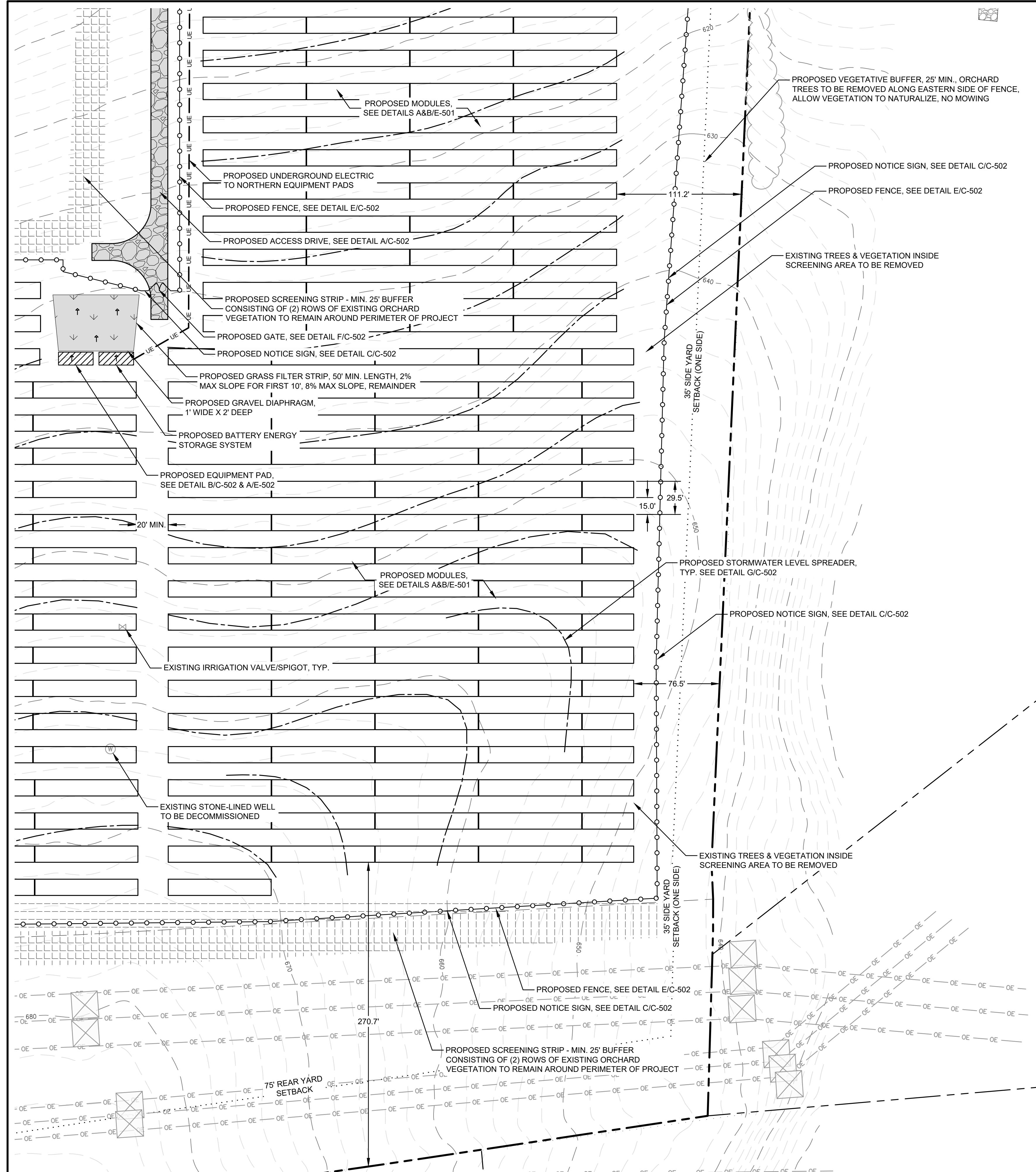
SITE PLAN
PROPOSED GRADING & UTILITIES - 1

CRAWFORD & ASSOCIATES
ENGINEERING & LAND SURVEYING, PC
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	DESIGNED BY: TSB/DPB		
	CHECKED BY: CJK		
APPROVED BY: CJK	AS SHOWN	4996.26	C-103





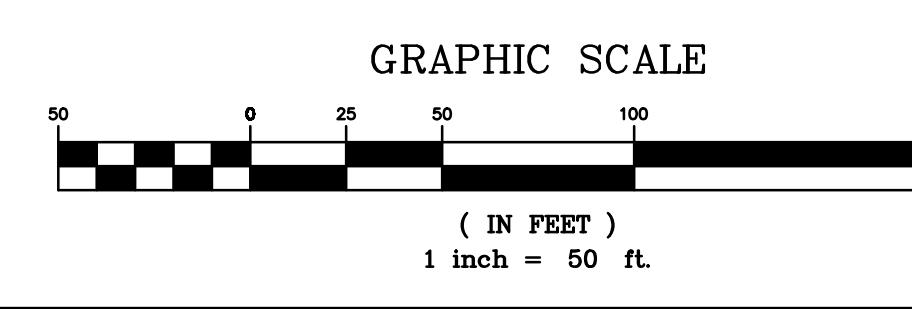
SITE PLAN NOTES:

1. ORTHOGRAPHIC IMAGERY DOWNLOADED FROM NYS GIS CLEARINGHOUSE. IMAGERY PUBLISHED SEPTEMBER 2023, ACCESSED BY C&A NOVEMBER 2023.
2. BACKGROUND DRAWING & TOPOGRAPHIC CONTOURS TAKEN FROM SURVEY TITLED "MAP OF A PORTION OF LANDS OF TRUNCALI PREPARED FOR ELP MARLBOROUGH SOLAR LLC, SBL-108.3-21, ULRSTER COUNTY, STATE OF NY" DATED APRIL 22, 2024, PREPARED BY CONTROL POINT ASSOCIATES, INC. P.C.
3. ADJACENT PROPERTY BOUNDARIES DOWNLOADED FROM ULRSTER COUNTY GIS DATABASE IN AUGUST 2023. SELECT BOUNDARIES ADJUSTED BY C&A TO REFLECT EXPECTED LOCATIONS OF INTERSECTION WITH SURVEYED BOUNDARY LINE.
4. EXISTING SITE FEATURES SUCH AS BUILDING LOCATIONS, DRIVEWAYS, ROADS, OVERHEAD UTILITIES, AND TREELINES OUTSIDE SURVEY AREA ESTIMATED FROM ORTHOGRAPHIC IMAGERY.
5. NWI POTENTIAL WETLAND BOUNDARIES DOWNLOADED FROM NATIONAL WETLANDS INVENTORY, ACCESSED NOVEMBER 2023.
6. FEMA NFHL CHECKED IN JANUARY 2024 AND NO FLOOD HAZARDS WERE IDENTIFIED WITHIN THE PROJECT AREA. PROJECT FALLS WITHIN FIRM PANEL #36111C0900F.
7. PROPOSED SOLAR FACILITY LAYOUT FROM DRAWING TITLED "PRELIMINARY PV SITE PLAN" PREPARED BY CS ENERGY DATED MARCH 2, 2023, AMENDED BY C&A PER VCR MARKUP PROVIDED ON 8/23/24.

PROPOSED SITE PLAN NOTES:

1. THE PROPOSED SOLAR ENERGY SYSTEM INSTALLATION SHALL BE PERFORMED BY A QUALIFIED SOLAR INSTALLER.
2. THE PROPOSED SOLAR ENERGY SYSTEM WILL MEET NEW YORK'S UNIFORM FIRE PREVENTION AND BUILDING CODE AND NATIONAL ELECTRICAL CODE STANDARDS.
3. PRIOR TO OPERATION OF THE SOLAR ENERGY SYSTEM, WRITTEN PROOF THAT ELECTRICAL CONNECTIONS HAVE BEEN INSPECTED AND APPROVED BY AN APPROPRIATE ELECTRICAL INSPECTION PERSON OR AGENCY, AS DETERMINED BY THE TOWN OF MARLBOROUGH WILL BE PROVIDED.
4. A MAP SHOWING THE LOCATIONS OF THE MAJOR COMPONENTS OF THE SOLAR SYSTEM INCLUDING THE LOCATION OF THE ARRAY, EQUIPMENT PADS, MAIN TRENCH LOCATIONS, AND DISCONNECTS SHALL BE POSTED AT THE FACILITIES ENTRANCE AND PROVIDED TO THE LOCAL FIRE DEPARTMENT OBLIGATED TO RESPOND TO A CALL AT THE FACILITY.
5. THE SOLAR PANELS SHALL NOT EXCEED 15' IN HEIGHT.
6. BUILDING SETBACK REQUIREMENTS SHALL BE AS STATED FOR THE RAG-1 (RURAL AGRICULTURAL DISTRICT) AS SHOWN IN THE ZONING TABLE BELOW. INVERTERS SHALL BE SET BACK THE LESSER OF 100 FEET OR UNTIL THE ELECTROMAGNETIC FIELD (EMF) MEETS BACKGROUND LEVEL, AS DETERMINED BY THE WORLD HEALTH ORGANIZATION (WHO).
7. COMMERCIAL SOLAR FACILITY'S AREA OF USE, AS DEFINED IN CODE SECTION 155-32.2 (B) EQUIATES TO APPROXIMATELY 16.2 ACRES.
8. NONINVASIVE GROUND COVER UNDER AND BETWEEN THE ROWS OF SOLAR PANELS SHALL BE LOW-MAINTENANCE, DROUGHT-RESISTANT, AND NON-FERTILIZER-DEPENDENT. SEE SEEDING PLAN ON C-501 FOR MORE DETAILS.
9. THE SOLAR ENERGY SYSTEM SHALL BE ENCLOSED BY A MINIMUM 8' TALL PERIMETER FENCE AND SHALL BE AN AGRICULTURAL STYLE FENCE CONSISTING OF WOODEN POSTS AND WOVEN WIRE. WARNING SIGNS WITH THE OWNER'S CONTACT INFORMATION WILL BE PLACED ON THE ENTRANCE AND PERIMETER OF THE FENCING.
10. A SIGN NO GREATER THAN TWO SQUARE FEET INDICATING THE NAME OF THE FACILITY OWNER(S) AND A TWENTY-FOUR-HOUR EMERGENCY TELEPHONE NUMBER SHALL BE POSTED. IN ADDITION, "NO TRESPASSING" OR OTHER WARNING SIGNS MAY BE POSTED.
11. THE OWNER WILL BE RESPONSIBLE FOR UPKEEP OF THE SOLAR FACILITY, INCLUDING ALL NECESSARY MAINTENANCE OF THE SYSTEM & PROPERTY INCLUDING MOWING AND TRIMMING IN AND AROUND THE FACILITY.
12. THE OWNER SHALL PREPARE AND COMPLY WITH A DECOMMISSIONING PLAN AS DETAILED IN THE TOWN OF MARLBOROUGH, NY SUPPLEMENTARY REGULATIONS SECTION 155-32.2J.
13. ALL TEMPORARILY STOCKPILED MATERIAL GENERATED BY CONSTRUCTION OF THE FACILITY WILL BE REMOVED FROM THE SITE IN A TIMELY MANNER.

4	REVISED PER PB COMMENT - SCREENING & HYDRANT	11/22/24	ETY
REV #	DESCRIPTION	DATE	BY
ELP MARLBOROUGH SOLAR 335 BINGHAM ROAD TOWN OF MARLBOROUGH ULSTER COUNTY, NY			
SITE PLAN PROPOSED GRADING & UTILITIES - 3			
CRAWFORD & ASSOCIATES ENGINEERING & LAND SURVEYING, PC 4411 Route 9, Suite 200, Hudson New York 12534 tel: (518) 828-2700 www.crawfordandassociates.com fax: (518) 828-2723			
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SCALE AS SHOWN		C&A JOB# 4996.26	DRAWING: C-105





EROSION & SEDIMENT CONTROL GENERAL NOTES:

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST VERSION OF THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL. (REFERRED TO IN REMAINING TEXT AS "THE NEW YORK GUIDELINES".)
2. THE SEDIMENT MEASURES DETAILED ON THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE IN PLACE PRIOR TO CONSTRUCTION STARTUP OF CONSTRUCTION. ONCE MEASURES ARE IN PLACE, ALL MEASURES SHALL BE PROPERLY MAINTAINED AND/OR REPLACED AS NECESSARY, AND THEN REMOVED FROM THE SITE BY THE CONTRACTOR ONCE SITE IS STABILIZED.
3. FOLLOWING THE COMMENCEMENT OF CONSTRUCTION, INSPECTIONS SHALL BE CONDUCTED PER THE FOLLOWING SCHEDULE. CONTRACTORS AND SUB CONTRACTORS ARE RESPONSIBLE FOR HAVING A "TRAINED INDIVIDUAL(S)" ON SITE DAILY WHEN SOIL DISTURBANCE ACTIVITIES ARE BEING PERFORMED TO INSPECT EROSION AND SEDIMENT CONTROL MEASURES. "TRAINED INDIVIDUAL" MEANING AN EMPLOYEE FROM A CONSTRUCTION FIRM THAT HAS RECEIVED FOUR (4) HOURS OF TRAINING, WHICH HAS BEEN ENDORSED BY THE NYS DEC, SOIL AND WATER CONSERVATION DISTRICT, CPESC INC. THE TRAINED INDIVIDUAL SHALL RECEIVE FOUR (4) HOURS OF TRAINING EVERY THREE (3) YEARS.
 - FOR CONSTRUCTION SITES WHERE SOIL DISTURBANCE ACTIVITIES ARE ON-GOING, THE QUALIFIED INSPECTOR SHALL CONDUCT A SITE INSPECTION AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS.
 - FOR CONSTRUCTION SITES WHERE SOIL DISTURBANCE ACTIVITIES ARE ON-GOING AND THE OWNER OR OPERATOR HAS RECEIVED AUTHORIZATION IN ACCORDANCE WITH PART II.C.3 TO DISTURB GREATER THAN FIVE (5) ACRES OF SOIL AT ANY ONE TIME, THE QUALIFIED INSPECTOR SHALL CONDUCT AT LEAST TWO (2) SITE INSPECTIONS EVERY SEVEN (7) CALENDAR DAYS.
4. THE TWO (2) INSPECTIONS SHALL BE SEPARATED BY A MINIMUM OF TWO (2) FULL CALENDAR DAYS.
5. BASED ON THE BI-WEEKLY SITE INSPECTIONS, THE EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE SHALL BE REVISED AS SITE CONDITIONS WARRANT. THE CONTRACTOR SHALL IMPLEMENT THESE REVISIONS AS SOON AS PRACTICABLE.
6. THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR UNTIL THE FINAL SURFACE TREATMENTS ARE INSTALLED AND THE VEGETATED AREAS HAVE BEEN STABILIZED WITH AT LEAST 80% VEGETATIVE COVER. THE PROPERTY OWNER WILL ASSUME RESPONSIBILITY FOR MAINTAINING THE EROSION AND SEDIMENT SYSTEM(S) THEREAFTER.
7. INLET PROTECTION MEASURES SHALL BE INSTALLED AROUND STORM DRAIN INLETS TO PREVENT SEDIMENT LADEN WATER FROM ENTERING.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES ONCE THE CONSTRUCTION PHASE HAS BEEN STABILIZED AND FUNCTIONING PROPERLY AS ACCEPTED BY THE ENGINEER.
9. DUST CONTROL AT DRIVING AREAS - THE SITE MAY BE SPRAYED WITH WATER UNTIL THE SURFACE IS WET. THIS IS ESPECIALLY EFFECTIVE ON HAUL ROADS AND ACCESS ROUTES.
10. THE LOCAL AHJ, NYSDEC, NYSDEP, OR THE SITE ENGINEER MAY REQUEST ADDITIONAL MEASURES TO MINIMIZE THE POTENTIAL FOR ON SITE OR OFF SITE EROSION PROBLEMS THAT MAY OCCUR DURING CONSTRUCTION.
11. COPIES OF THE SOIL EROSION AND SEDIMENT CONTROL PLANS AND SWPPP, IF APPLICABLE, MUST BE MAINTAINED ON SITE UNTIL THE SITE HAS BEEN STABILIZED.

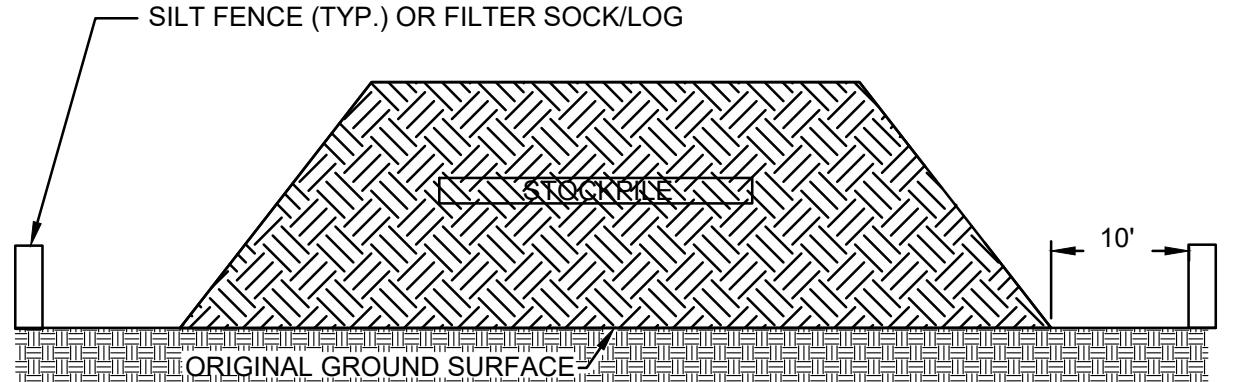
Maintenance Plan:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPERATION AND MAINTENANCE OF THE NEW DEVELOPMENT PROJECT AND PROJECT ACCESS DURING CONSTRUCTION.
2. NO EARTHWORK ACTIVITIES SHALL COMMENCE UNTIL SILT FENCES AND SILT SOCKS HAVE BEEN INSTALLED AS SHOWN ON DRAWINGS.
3. AREAS TO BE LEFT EXPOSED TO EROSION FOR MORE THAN 14 DAYS SHALL BE TEMPORARILY STABILIZED.
4. PAVED AREAS SHALL BE KEPT FREE OF SEDIMENT, AND SHALL BE CLEANED PERIODICALLY AS REQUIRED BY CONSTRUCTION ACTIVITIES.
5. CATCH BASINS, IF ANY, SHALL BE PERIODICALLY INSPECTED FOR ACCUMULATION OF SEDIMENT. ALL CATCH BASINS WITHIN THE PROJECT SHALL BE CLEANED.
6. THE CONTRACTOR IS RESPONSIBLE TO INSPECT AND REPAIR EROSION AND SEDIMENT CONTROL MEASURES AS REQUIRED TO PREVENT DAMAGE OR SEDIMENTATION.
7. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, REMOVE AND DISPOSE OF TEMPORARY EROSION CONTROL MEASURES. CLEAN SEDIMENT AND DEBRIS FROM TEMPORARY MEASURES AND FROM PERMANENT STORM DRAIN AND SANITARY SEWER SYSTEMS.

EESC PLAN AND CONSTRUCTION NOTES:

1. CONSTRUCTION SHALL NOT COMMENCE UNTIL APPROPRIATE PERMIT COVERAGE HAS BEEN OBTAINED UNDER NYSDEC SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY, GP-0-2001.
2. TOTAL LIMITS OF DISTURBANCE (LOD), AS SHOWN, TOTALS 21.91 ACRES. LOD INCLUDES LAND CLEARING/GRUBBING, MINOR GRADING FOR ACCESS DRIVE AND EQUIPMENT PADS, TRENCHING, AND TEMPORARY E&SC MEASURES.
3. CONSTRUCTION SHALL BE COMMENCED IN ACCORDANCE WITH THE PHASING PLAN TO LIMIT DISTURBANCE OF GREATER THAN 5 ACRES PER PHASE:
 - 3.1. PHASE 1: APPROXIMATELY 4.85 ACRES OF DISTURBANCE, NOT LIMITED TO BUT INCLUDING: ESTABLISHMENT OF E&SC MEASURES (STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, FILTER SOCK, ETC.), CLEARING/GRUBBING OF EXISTING TREES AND SHRUBS, INSTALLATION OF TEMPORARY LAYDOWN AREA, ACCESS DRIVE, UNDERGROUND ELECTRIC, UTILITY POLES, EQUIPMENT PADS AND PANEL ARRAY.
 - 3.2. PHASE 2: APPROXIMATELY 4.87 ACRES OF DISTURBANCE, NOT LIMITED TO BUT INCLUDING: CLEARING/GRUBBING OF EXISTING TREES AND SHRUBS, INSTALLATION OF UNDERGROUND ELECTRIC AND PANEL ARRAY.
 - 3.3. PHASE 3: APPROXIMATELY 4.72 ACRES OF DISTURBANCE, NOT LIMITED TO BUT INCLUDING: CLEARING/GRUBBING OF EXISTING TREES AND SHRUBS, INSTALLATION OF UNDERGROUND ELECTRIC AND PANEL ARRAY.
 - 3.4. PHASE 4: APPROXIMATELY 2.96 ACRES OF DISTURBANCE, NOT LIMITED TO BUT INCLUDING: CLEARING/GRUBBING OF EXISTING TREES AND SHRUBS, INSTALLATION OF UNDERGROUND ELECTRIC AND PANEL ARRAY.
 - 3.5. PHASE 5: APPROXIMATELY 4.54 ACRES OF DISTURBANCE, NOT LIMITED TO BUT INCLUDING: CLEARING/GRUBBING OF EXISTING TREES AND SHRUBS, INSTALLATION OF UNDERGROUND ELECTRIC, PANEL ARRAY AND FINAL STABILIZATION OF THE SITE.
4. EACH PHASE SHALL BE TEMPORARILY STABILIZED BEFORE PROCEEDING TO A SUBSEQUENT PHASE.
5. THE TEMPORARY E&SC PLAN MEASURES SHOWN HEREIN, SHALL BE PUT IN PLACE AT THE BEGINNING OF CONSTRUCTION AND REMOVED UPON FINAL STABILIZATION OF THE SITE.
6. CONSTRUCTION OF THE PANEL ARRAYS SHALL BE COMPLETED IN SUCH A WAY THAT NULLIFIES DISTURBANCE AND/OR COMPACTION OF THE IN-SITU LAND COVER (I.E. TRACKED VEHICLE TRAVELING IN AND OUT OF ROWS IS RECOMMENDED). EXISTING GROUND COVER IN THE AREA OF THE PANEL ARRAY SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
7. ALL DISTURBED AREAS SHALL BE SEADED AND MULCHED AS DETAILED IN THE SEEDING PLAN ON DRAWING C-501.
8. THE TEMPORARY PARKING AND STAGING AREA FOR CONSTRUCTION EQUIPMENT AND MATERIALS SHALL CONSIST OF STONE DUST OR A SIMILAR MATERIAL. UPON COMPLETION OF CONSTRUCTION, THE STONE DUST, OR SIMILAR, SHALL BE REMOVED UP TO BUT NOT INCLUDING REMOVAL OF THE COVERED TOPSOIL. THE AREA SHALL BE SEADED AND MULCHED ACCORDING TO THE SEED AND MULCH SPECIFICATIONS DETAILED ON THE E&SC NOTES SHEET.
9. IN HIGH TRAFFIC AREAS, THE AREA SHALL BE DE-COMPACTED PRIOR TO SEEDING TO ENSURE GROWTH OF VEGETATIVE COVER. THE AREA(S) SHALL BE DE-COMPACTED ACCORDING TO NYSDEC EROSION AND SEDIMENT CONTROL DE-COMPACTION GUIDELINES.

4	REVISED PER PB COMMENT - SCREENING & HYDRANT	11/22/24	ETY
REV #	DESCRIPTION	DATE	BY
ELP MARLBOROUGH SOLAR 335 BINGHAM ROAD			
TOWN OF MARLBOROUGH ULSTER COUNTY, NY			
PROPOSED EROSION & SEDIMENT CONTROL PLAN			
 CRAWFORD & ASSOCIATES ENGINEERING & LAND SURVEYING, PC 4411 Route 9, Suite 200, Hudson New York 12534 tel: (518) 828-2700 fax: (518) 828-2723 www.crawfordandassociates.com			
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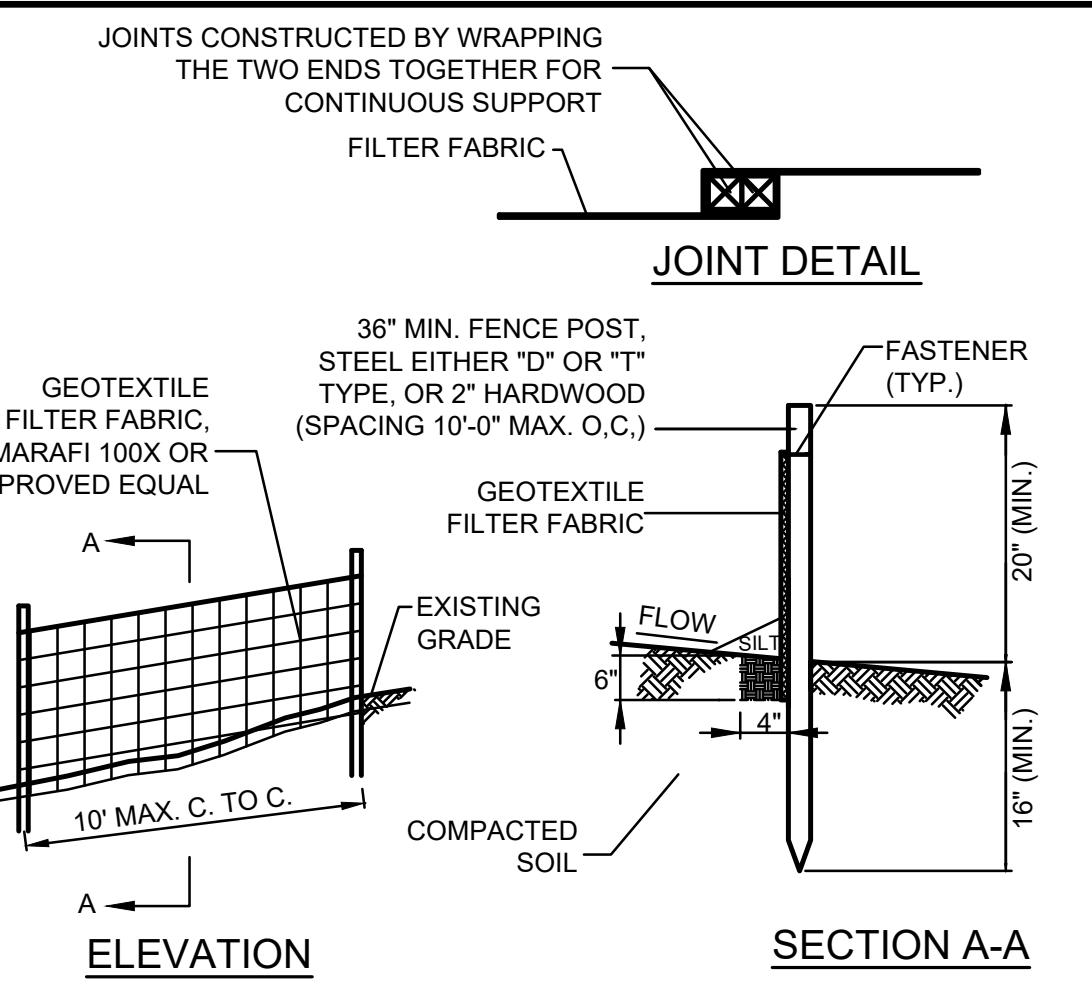
NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE. IN NO CASE SHALL MATERIALS BE STOCKPILED WITHIN 25 FEET OF ANY DITCH, STREAM, OR OTHER SURFACE WATER.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1:2.
3. UPON COMPLETION OF SOIL STOCKPILE, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAWBALES, THEN STABILIZED WITH VEGETATION OR COVERED. SILT FENCE OR FILTER SOCK/LOG ARE TO REMAIN IN PLACE UNTIL SUCH TIME AS SAID STOCKPILES ARE REMOVED.
4. SILT FENCE OR FILTER SOCK/LOG TO EXTEND AROUND DOWNSTREAM PORTION IF STOCKPILE IS ON SLOPE.

A STABILIZED STOCKPILE DETAIL

C-501

SCALE: N.T.S.



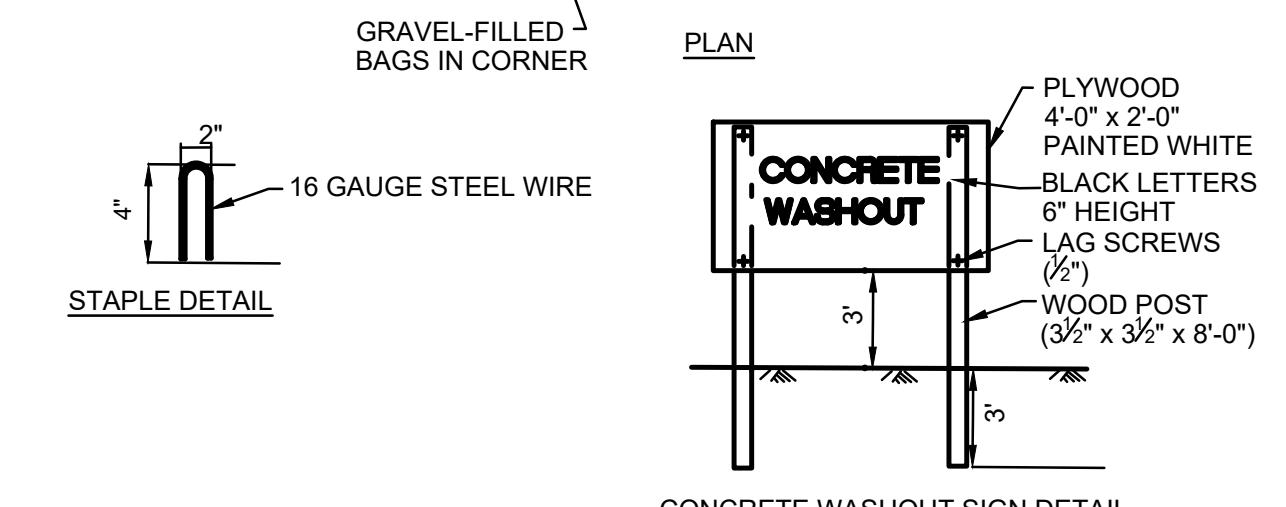
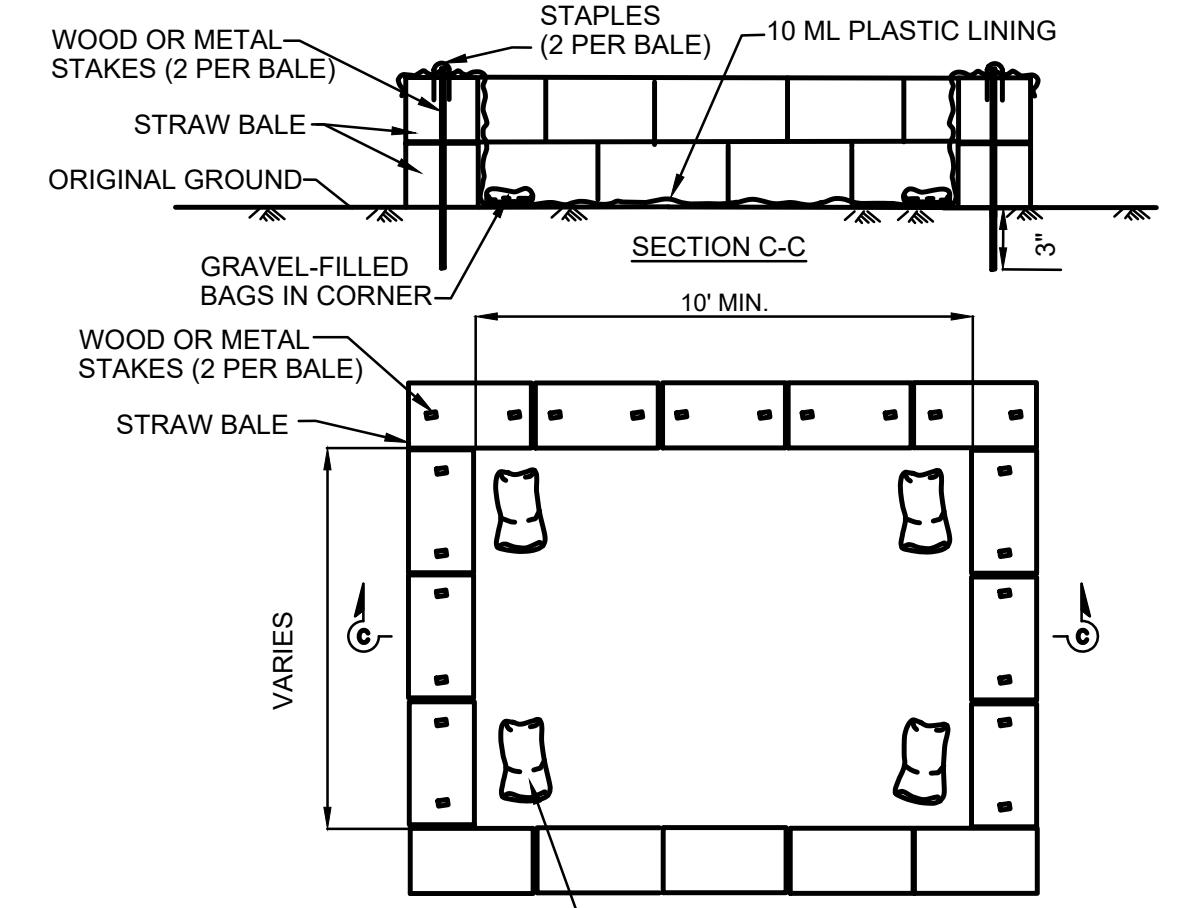
NOTES:

1. SILT FENCE SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. SILT FENCE SHALL BE PLACED ON THE DOWN SLOPE SIDE OF EXCAVATED AREAS AND AROUND SOIL STOCKPILES. SILT FENCE SHALL ALSO BE PLACED AROUND THE BOUNDARY OF WETLANDS ADJACENT TO THE WORK AREA AND AT THE EDGE OF THE WETLANDS AFTER CONSTRUCTION IS COMPLETE. WITHIN RESIDENTIAL AREAS THE SILT FENCE SHALL BE INSTALLED ALONG THE PERIMETER OF THE ENTIRE WORK AREA.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP.
4. SILT FENCE MUST BE REPAIRED OR REPLACED WHEN THE ENDS ARE FRAYED OR WORN, AND THE FENCE IS NOT ANCHORED 6" INTO THE GROUND. WHEN ACCUMULATED SEDIMENT REACHES 33% OF THE SILT FENCE HEIGHT, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROPRIATE UPLAND AREA.

B SILT FENCE DETAIL

C-501

SCALE: N.T.S.



CONCRETE WASHOUT SIGN DETAIL

STAPLE DETAIL

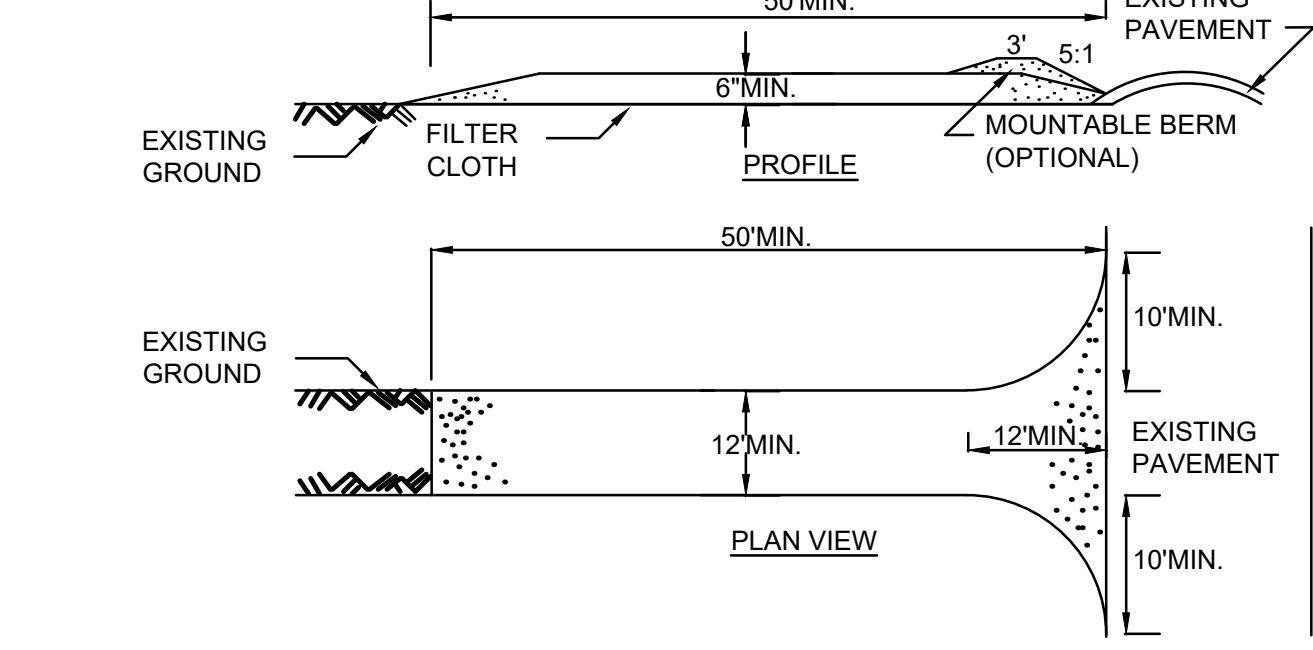
NOTES:

1. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE LOCATED A MINIMUM OF 100 FEET FROM STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATER COURSES. EACH FACILITY SHOULD BE LOCATED AWAY FROM CONSTRUCTION TRAFFIC OR ACCESS AREAS TO PREVENT SEDIMENT OR TRACKING.
2. A SIGN SHOULD BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.
3. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE CONSTRUCTED ABOVE GRADE. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
4. TEMPORARY WASHOUT FACILITIES SHOULD HAVE A TEMPORARY PIT OR BERMED AREAS OF SUFFICIENT VOLUME TO COMPLETELY CONTAIN ALL LIQUID AND WASTE CONCRETE MATERIALS GENERATED DURING WASHOUT PROCEDURES.
5. WASHOUT OF CONCRETE TRUCKS SHOULD BE PERFORMED IN DESIGNATED AREAS ONLY. ONLY CONCRETE FROM MIXER TRUCK CHUTES SHOULD BE WASHED INTO CONCRETE WASHOUT AREAS.
6. ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF PER SOLID WASTE MANAGEMENT STANDARDS. DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.
7. TEMPORARY ABOVE GRADE WASHOUT FACILITIES SHOULD BE CONSTRUCTED AS SHOWN IN THIS DETAIL.

C CONCRETE WASHOUT DETAIL

C-501

SCALE: N.T.S.



NOTES:

1. WHERE NECESSARY, STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED TO PREVENT SOIL AND SEDIMENT FROM BEING TRACKED ON TO ROADWAYS.
2. PERMANENT TRAFFIC CORRIDORS SHALL BE ESTABLISHED AND "ROUTES OF CONVENIENCE" SHALL BE AVOIDED. CONSTRUCTION TRAFFIC SHALL NOT CROSS STREAMS OR DITCHES EXCEPT AT SUITABLE CROSSING FACILITIES, AND SHALL NOT OPERATE UNNECESSARILY WITHIN WATERWAYS OR DRAINAGE DITCHES.
3. IF INTERNAL CONSTRUCTION ROADS ARE A SOURCE OF SEDIMENT-LADEN RUNOFF TO SENSITIVE AREAS, MEASURES SHALL BE TAKEN TO STABILIZE THE INTERNAL ROADWAYS AS SOON AS PRACTICABLE.
4. STONE SIZE - USE 1" - 4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
5. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
6. THICKNESS - NOT LESS THAN SIX (6) INCHES.
7. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
8. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
9. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
10. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
11. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
12. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

D CONSTRUCTION ENTRANCE DETAIL

C-501

SCALE: N.T.S.

MULCHING AND SEEDING NOTES:

1. STABILIZING MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT NOT MORE THAN 14 DAYS SHALL ELAPSE WITHOUT STABILIZATION AFTER WORK HAS CEASED. ACCEPTABLE TEMPORARY STABILIZATION INCLUDES MULCH, STRAW, HAY, EROSION CONTROL FABRIC, OR OTHER FUNCTIONAL EQUIVALENT.
2. TEMPORARY EROSION CONTROL PROTECTION BY MULCHING SHALL BE CARRIED OUT WITHIN 14 DAYS OF FILL PLACEMENT TO FINAL FINISHED GRADE IN ORDER TO AVOID ALL POSSIBLE CONTAMINATION OF PONDS, STREAMS, OR OTHER WATERCOURSES. PLACEMENT OF JUTE MESH OVER THE MULCH IS RECOMMENDED TO PROVIDE POSITIVE "TRACKING" OF THE MULCH AND INCREASED PROTECTION AGAINST EROSION.
3. DISTURBED AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH RECOMMENDATIONS CONTAINED IN THE LATEST VERSION OF THE NEW YORK GUIDELINES.
4. UNDISTURBED "MEADOW" AREAS WITHIN THE FENCED IN AREA SHALL BE OVER SEEDED ACCORDING TO THE SEEDING PLAN.
5. SEED MIX TO BE BY POLLINATOR HABITAT FRIENDLY. MIX NOT TO INCLUDE TURF GRASS AND AVOID NON-NATIVE SPECIES.

SEEDING PLAN:
SEEING TO REDUCE EROSION AND SEDIMENT TRANSPORT AFTER CONSTRUCTION COMPLETION.

SEED APPLICATION: 260 LBS. PER ACRE MINIMUM.
SEED SOLAR FARM SEED MIX:
35% FESTUCA RUBRA (CREEPING RED FESCUE)
35% FESTUCA RUBRA SSP. COMMUTATA (CHEWINGS FESCUE)
10% FESTUCA BREVIPILA 'BEACON' (HARD FESCUE, 'BEACON')
10% FESTUCA OVINIA VAR. DURUSCUL (F. LONGIFOLIA), 'JETTY' (HARD FESCUE, 'JETTY')
5% POA PRATENSIS, 'CORSAIR' (KENTUCKY BLUEGRASS, 'CORSAIR')
5% POA PRATENSIS, 'SHAMROCK' (KENTUCKY BLUEGRASS, 'SHAMROCK')

TEMPORARY SEEDING:
PER THE LATEST VERSION OF THE NEW YORK STANDARDS AND SPECIFICATION FOR EROSION AND SEDIMENT CONTROL, "SPRING OR LATE SUMMER OR FALL, THEN SEED THE AREA WITH RYEGRASS AT THIRTY (30) LBS. PER ACRE. LATE FALL OR EARLY WINTER, THEN SEED CERTIFIED "AROSTOCK" WINTER RYE AT ONE HUNDRED (100) LBS PER ACRE. MULCH AREA WITH HAY OR STRAW AT TWO (2) TONS PER ACRE.

TURF ESTABLISHMENT:
1. TOP SOIL (4 INCHES MINIMUM) SHALL CONSIST OF NATURAL LOAM TOPSOIL, FREE FROM SUBSOIL. TOPSOIL SHALL BE OF UNIFORM QUALITY, FREE FROM HARD CLODS, STIFF CLAY, HARD PAN, SODS, PARTIALLY DISINTEGRATED STONE, OR ANY OTHER UNDESIRABLE MATERIAL.
2. THE CONTRACTOR SHALL PROVIDE NECESSARY WATERING, FERTILIZER, MULCHING, ETC., REQUIRED TO ESTABLISH AND MAINTAIN SEEDED AREAS UNTIL SAME ARE ACCEPTED BY THE OWNER'S FIELD REPRESENTATIVE.

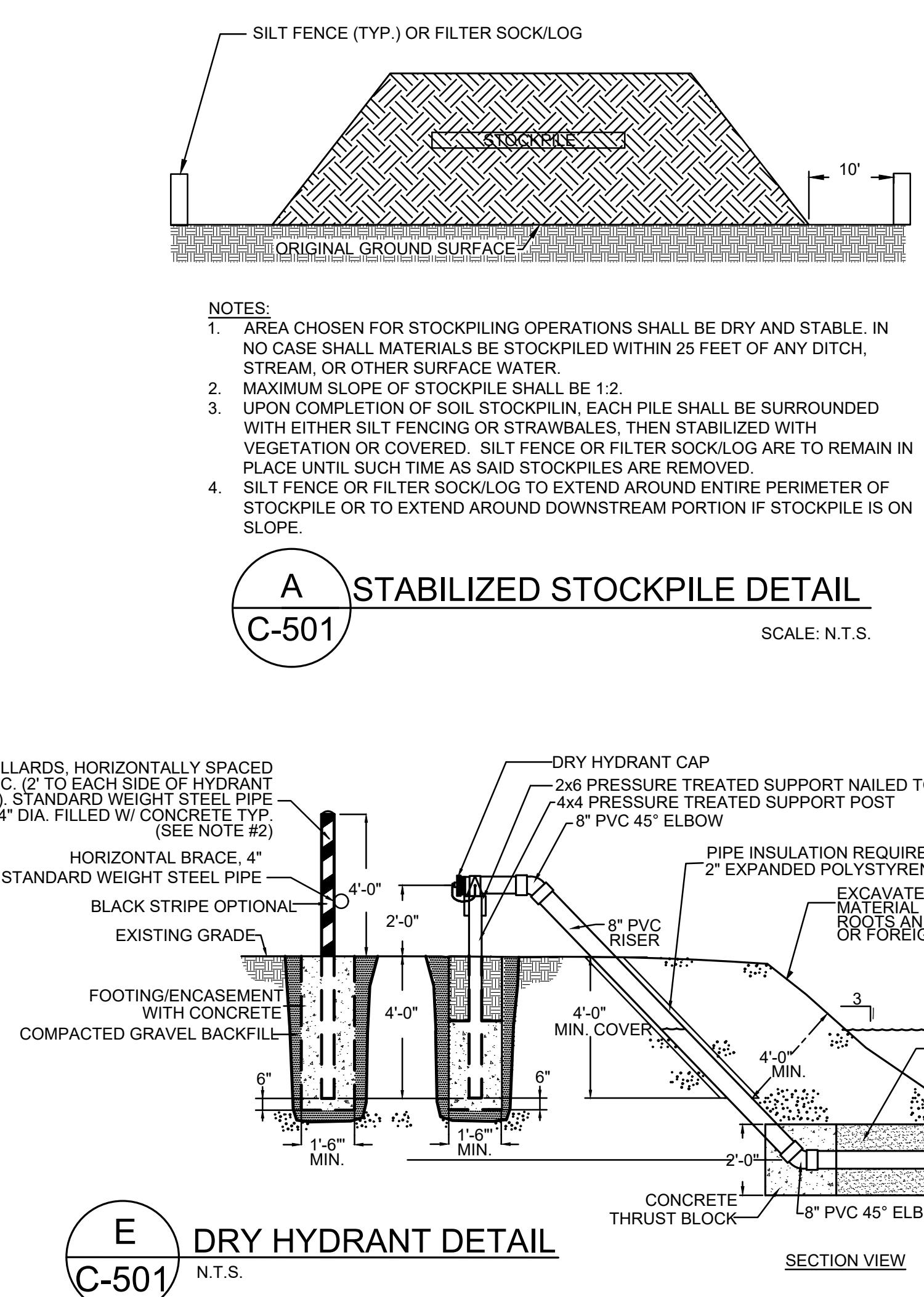
4	REV #	DESCRIPTION	DATE	BY
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ELP MARLBOROUGH SOLAR 335 BINGHAM ROAD

TOWN OF MARLBOROUGH
ULSTER COUNTY, NY

CIVIL DETAILS - SHEET 1

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DATE 4/5/2024	DRAWN BY: TSB/DPB	4 WORK 14996.26 Marlborough 335 BINGHAM ROAD DETAILS.dwg	DESIGNED BY: TSB/DPB	REVIEWED BY: CJK
SCALE AS SHOWN	CHECKED BY: CJK	C&A JOB # 4996.26	APPROVED BY: CJK	DRAWING: C-501



INSTALLATION NOTES:

1. COMPOSITE FILTER SOCKS SHALL BE FILTREXX(R) SILT SOX(R) OR APPROVED EQUAL.
2. LAND SURFACE SHOULD BE PREPARED BY MOWING GRASS OR MAKING SOIL OR PAVED SURFACES SMOOTH.
3. COMPOSITE FILTER SOCKS SHALL BE PLACED PERPENDICULAR TO STORM WATER FLOW, ACROSS THE SLOPE, SWALE, DITCH OR CHANNEL.
4. COMPOSITE FILTER SOCKS SHALL BE PLACED ON CONTOURS.
5. ON SOIL AND VEGETATED SURFACES, UNDER SHEET FLOW CONDITIONS, COMPOSITE FILTER SOCKS SHALL BE STAKED ON 10-FT CENTERS.
6. UNDER CONCENTRATED FLOW CONDITIONS COMPOSITE FILTER SOCKS SHALL BE STAKED ON 5-FT CENTERS.
7. STAKES SHALL BE DRIVEN THROUGH THE CENTER OF THE COMPOSITE FILTER SOCK AND INSTALLED A MINIMUM OF 8 INCHES AND A MAXIMUM OF 12 INCHES INTO THE EXISTING SOIL, LEAVING A MINIMUM STAKE HEIGHT OF 2 INCHES ABOVE THE COMPOSITE FILTER SOCK.
8. EDGES OF THE COMPOSITE FILTER SOCKS SHALL BE TURNED UPSLOPE TO PREVENT SLOW AROUND THE ENDS OF THE COMPOSITE FILTER SOCKS.
9. FILTER SOCKS SHALL BE SIZED APPROPRIATELY, ACCORDING TO NYSDEC STANDARDS & SPECIFICATIONS FOR EROSION & SEDIMENT CONTROL.

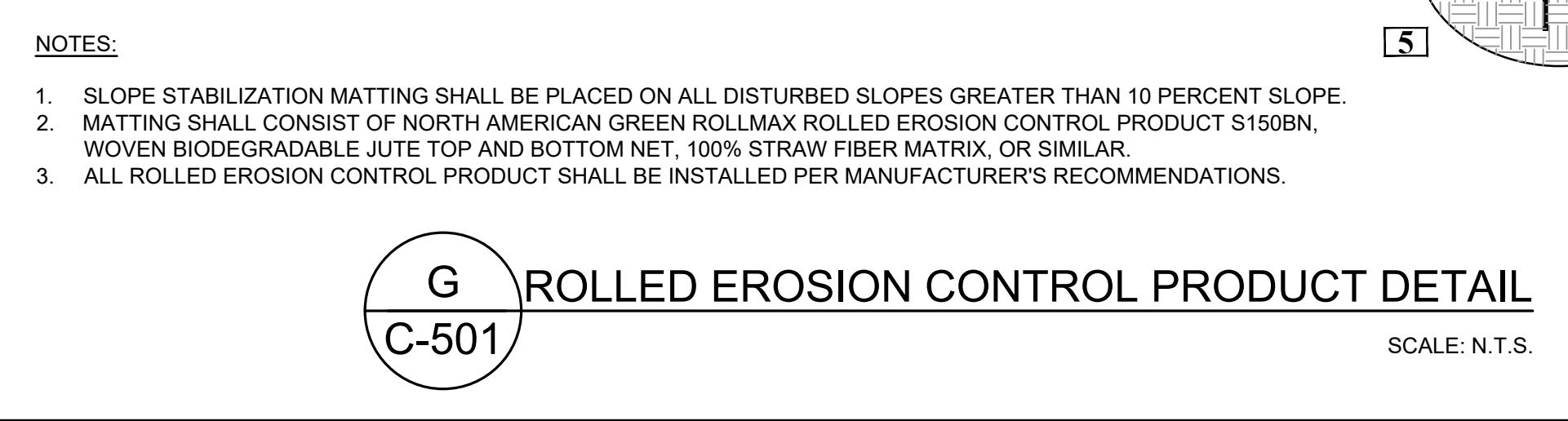
REMOVAL NOTES:

1. UPON REMOVAL OF THE COMPOSITE FILTER SOCK, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT ACCUMULATION PRIOR TO THE REMOVAL OF THE COMPOSITE FILTER SOCK. THE COMPOSITE FILTER SOCKS SHALL BE REMOVED IN THEIR ENTIRETY.
2. THE DISTURBED AREA SHALL BE SEEDED, FERTILIZED, AND MULCHED TO ENSURE THE VEGETATIVE COVER IS FULLY RESTORED.
3. MONITOR THE VEGETATIVE RESTORATION AREA UNTIL EXPOSED AREAS ARE FULLY STABILIZED WITH VEGETATIVE COVER, THEREBY INCREASING SOIL QUALITY AND REDUCING WASTE.
4. THE COMPOSITE MATERIAL MAY BE SPREAD OVER THE LANDSCAPE OR INCORPORATED INTO THE SOIL AT THE END OF THE PROJECT.
5. THE SOCK MESH SHALL BE PROPERLY DISPOSED.

F FILTER SOCK DETAIL

C-501

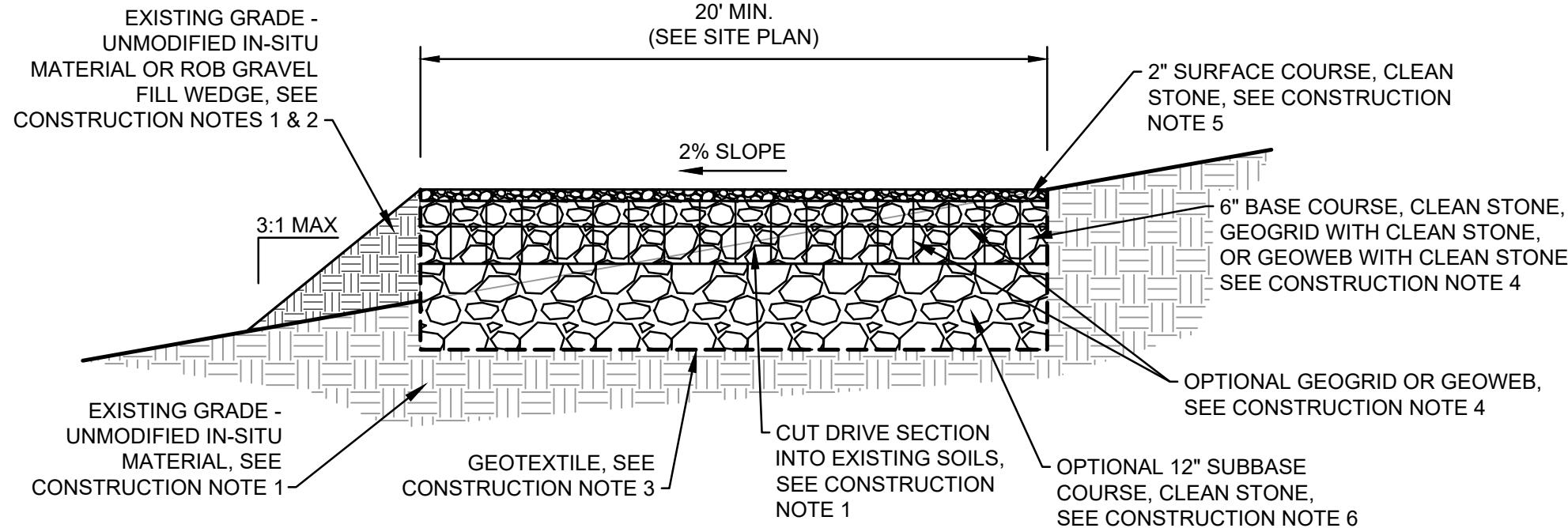
SCALE: N.T.S.



NOTES:

1. SLOPE STABILIZATION MATTING SHALL BE PLACED ON ALL DISTURBED SLOPES GREATER THAN 10 PERCENT SLOPE.
2. MATTING SHALL CONSIST OF NORTH AMERICAN GREEN ROLLMAX ROLLED EROSION CONTROL PRODUCT S150B, WOVEN BIODEGRADABLE JUTE TOP AND BOTTOM NET, 100% STRAW FIBER MATRIX, OR SIMILAR.
3. ALL ROLLED EROSION CONTROL PRODUCT SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

NOTES:
In loose soil conditions, the use of staple or stake lengths greater than 6'(15cm) may be necessary to properly secure the RECP's.



GENERAL NOTES:

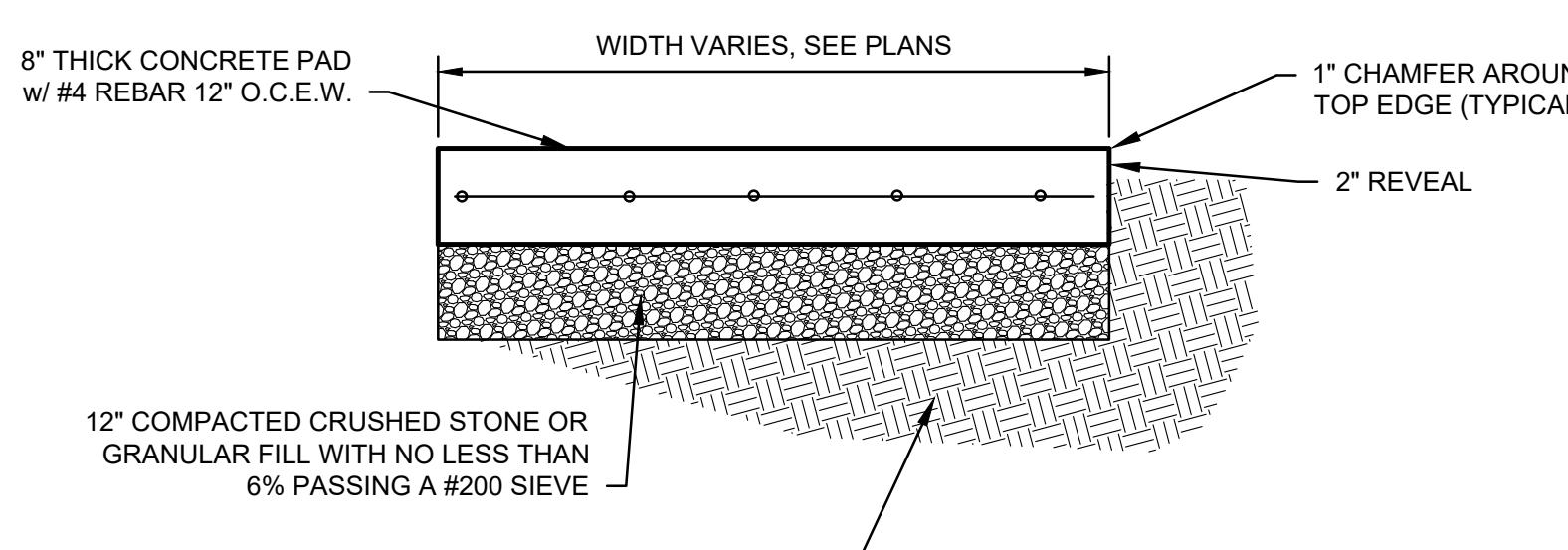
1. THIS DETAIL IS LIMITED TO CONSTRUCTION AND OCCASIONAL MAINTENANCE FOR SOLAR FACILITY PROJECTS IN NEW YORK STATE.
2. THE DRIVE SHALL NOT BE CONSTRUCTED ON NYSDOT SUBBASE MATERIAL OR EQUIVALENT.
3. CLEAN STONE SHALL NOT BE COMPACTION WITH A VIBRATORY ROLLER, PLATE COMPACTOR, OR EQUIVALENT. STONE MAY BE DEPOSITED AND SPREAD BY A TRACKED VEHICLE. COMPACTION FOR ALL COURSES MAY BE PROVIDED BY A NON-VIBRATORY VEHICLE.
4. DO NOT OIL, WATER BIND, SEALCOAT, CHOKER STONE, OR OVERLAY WITH CONCRETE, ASPHALT PAVEMENT, OR ANY MATERIAL THAT WILL CREATE AN IMPERVIOUS SURFACE.
5. APPROPRIATE EROSION AND SEDIMENT CONTROL TECHNIQUES SHALL BE USED DURING CONSTRUCTION TO ENSURE THAT SEDIMENT FINES ARE NOT DEPOSITED WITHIN THE VOIDS OF THE CLEAN STONE.
6. INSTALL ALL GEOTEXTILE AND GEOWEB COMPONENTS PER MANUFACTURER. CAREFULLY PLACE MATERIAL ATOP GEOTEXTILE AND/OR FOR INFILL OF GEOWEB TO PREVENT DISTORTION AND/OR COLLAPSE OF CELLS. UTILIZE KEY CONNECTORS TO JOIN ALL GEOWEB SECTIONS. UTILIZE ANCHORS TO STABILIZE GEOWEB DURING INFILL.
7. ALL CLEAN STONE TO BE WASHED, NO FINES, SHARP-ANGLED, UNIFORM QUALITY, CRUSHED STONE PER NYSDOT SPECIFICATIONS SECTION 703-2, TABLE 703-4, SIZE DESIGNATION AS INDICATED.

CONSTRUCTION NOTES:

1. THE DRIVE SECTION SHALL BE CUT INTO UN-COMPACTED IN-SITU SOIL MATERIAL. IN AREAS OF EVEN EXISTING GRADE, CUT IN SHALL BE OPTIONAL AND LIMITED TO 4" MAXIMUM. WHERE REQUIRED FOR LEVELING UNEVEN AREAS TO PROVIDE 2% CROSS SLOPE, A NATIVE SOIL OR ROB GRAVEL WEDGE, COMPACTED TO 80% MDD, MAY BE INSTALLED. WHERE DRIVE SECTION IS TO BE BUILT UP FROM EXISTING GRADE (SUCH AS ATOP CULVERT CROSSINGS), NATIVE SOIL OR ROB GRAVEL FILL, COMPACTED TO 80% MDD, MAY BE INSTALLED BENEATH BASE / SUBBASE. COMPACTION FOR ALL COURSES MAY BE PROVIDED BY A NON-VIBRATORY VEHICLE.
2. AT LOW POINTS ALONG THE DRIVE ALIGNMENT AND/OR AT LOCATIONS INDICATED BY THE SITE PLAN, THE DRIVE SHALL BE CONSTRUCTED WITH A ROB GRAVEL FILL WEDGE ON THE DOWNSLOPE SIDE FOR DRAINAGE OF THE DRIVE SECTION.
3. GEOTEXTILE SHALL BE MIRAFI TENCATE RS 280i (OR APPROVED EQUAL) ALONG THE ENTIRE DRIVE ALIGNMENT.
4. BASE COURSE SHALL BE AS FOLLOWS:
 - 4.1. IN AREAS OF STRAIGHT ALIGNMENT AND RUNNING SLOPES LESS THAN 5%.
 - 4.1.1. PROVIDE 6" THICKNESS NYSDOT #3 CLEAN STONE WHERE EXISTING SOILS EXHIBIT ADEQUATE DRAINAGE AND/OR STABILITY.
 - 4.1.2. PROVIDE 6" THICKNESS CLEAN GABION STONE, SIZE 4"-6" WHERE EXISTING SOILS EXHIBIT FREQUENT SATURATION, SETTLING, AND/OR HEAVING.
 - 4.1.3. GEOGRID MAY BE ADDED TO EITHER OF THE ABOVE BASE COURSE OPTIONS AT LOCATIONS OF DESIRED INCREASED STABILIZATION. GEOGRID SHALL BE ADS BX124GG (OR APPROVED EQUAL). GEOGRID SHALL BE PLACED APPROXIMATELY MID-BASE COURSE DEPTH (APPROXIMATELY 3" THICKNESS BASE MATERIAL BELOW AND ABOVE GEOGRID, MINIMUM 4" TOTAL MATERIAL COVER ABOVE GEOGRID).
 - 4.2. IN AREAS OF CURVED ALIGNMENT, UNEVEN SLOPES, RUNNING SLOPES GREATER THAN 5%, AT LOCATIONS OF DESIRED INCREASED STABILIZATION, AND/OR AT LOCATIONS INDICATED BY THE SITE PLAN, PROVIDE 6" THICKNESS PRESTO GEOSYSTEMS GEOWEB GW30V6 (OR APPROVED EQUAL) AND INFILL WITH 6" THICKNESS NYSDOT #2 CLEAN STONE.
5. SURFACE COURSE SHALL BE 2" THICKNESS NYSDOT #1 CLEAN STONE.
6. IN AREAS WHERE EXISTING SOILS EXHIBIT FREQUENT SATURATION, SETTLING, AND/OR HEAVING, AN OPTIONAL SUBBASE COURSE MAY BE IMPLEMENTED TO IMPROVE STABILITY. OPTIONAL SUBBASE COURSE SHALL BE 12" THICKNESS CLEAN GABION STONE, SIZE 6"-12".

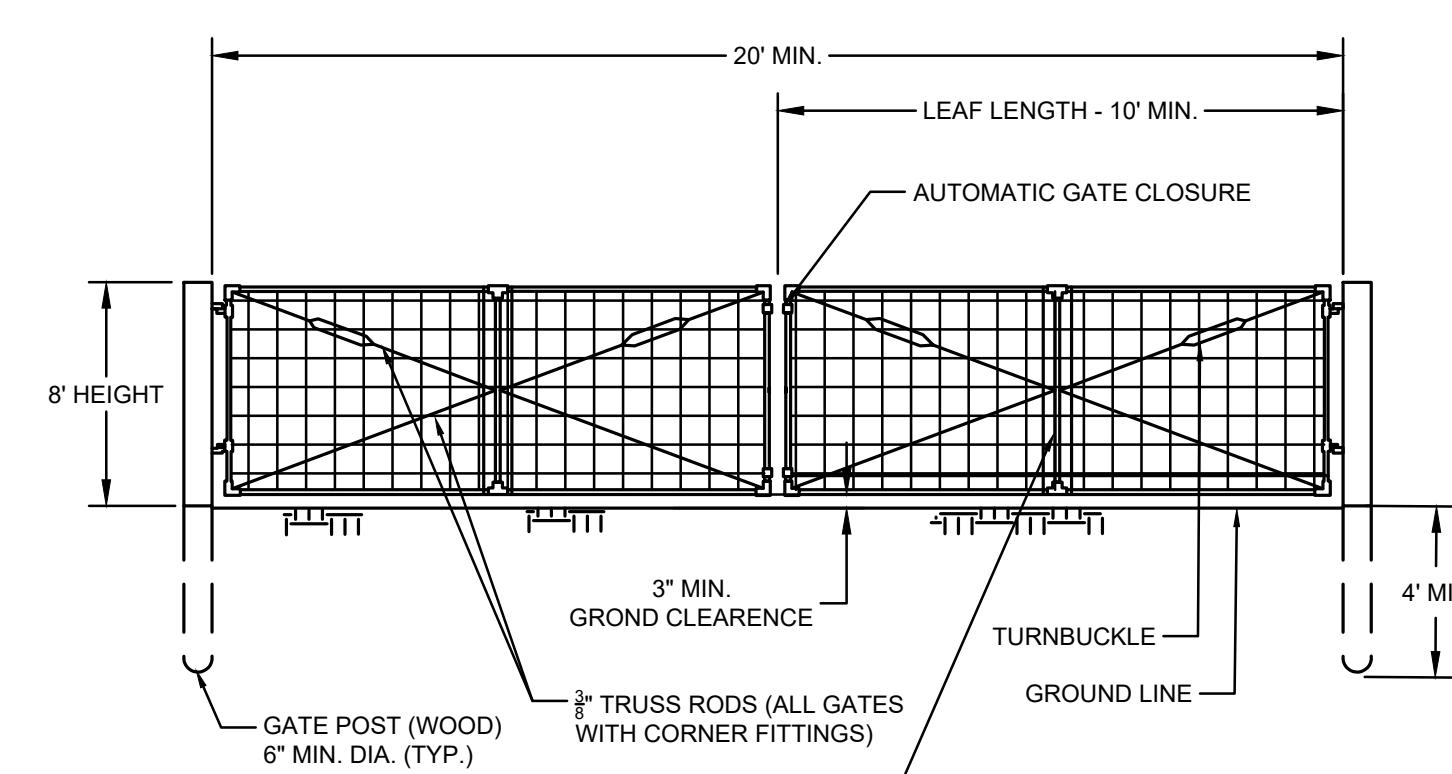
A PERVERIOUS ACCESS DRIVE DETAIL
C-502

SCALE: N.T.S.



B CONCRETE PAD DETAIL
C-502

SCALE: N.T.S.



F GATE DETAIL
C-502

SCALE: N.T.S.

NOTES:
1. COORDINATE KNOX BOX OR SIMILAR WITH LOCAL FIRE DEPARTMENT AS NEEDED.

NOTES:

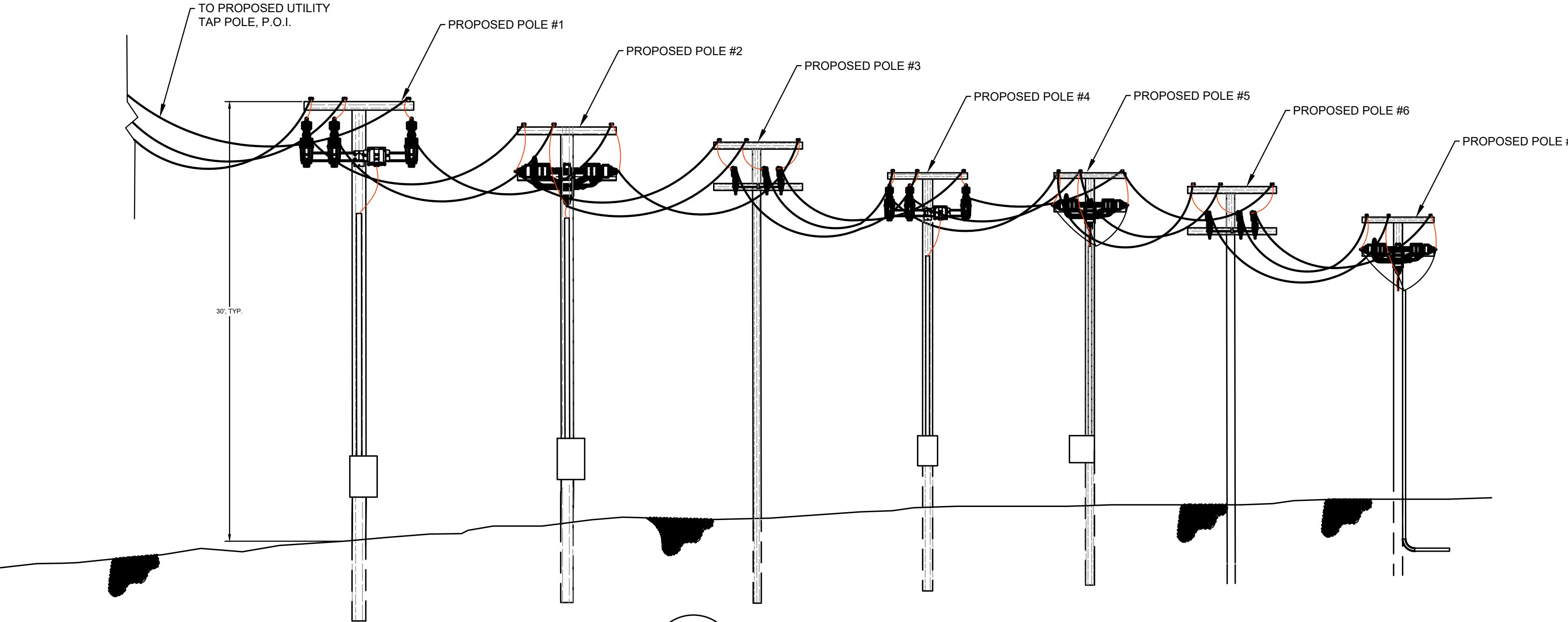
1. PROVIDE HEAVY DUTY EROSION CONTROL BLANKETS FOR DISTURBED AREAS WITH SLOPES 3:1 OR GREATER. SEE EROSION CONTROL BLANKET DETAIL.
2. TO PREVENT SEDIMENT LOADING OF CLEAN STONE, INSTALL LEVEL SPREADER AFTER UPSLOPE AREAS HAVE BEEN FULLY STABILIZED AND/OR UTILIZE TEMPORARY GEOTEXTILE COVERING. GEOTEXTILE COVERING SHALL BE US FABRICS US 315 OR EQUAL, EMBEDDED 6" MIN. ON UPSLOPE SIDE, DRAPE OVER ENTIRE LEVEL SPREADER SURFACE, EXTEND TO 1' MIN. PAST DOWNSLOPE SIDE AND STAKE / FASTEN SECURELY, REMOVE WHEN SITE IS FULLY STABILIZED.

G LEVEL SPREADER DETAIL
C-502

SCALE: N.T.S.

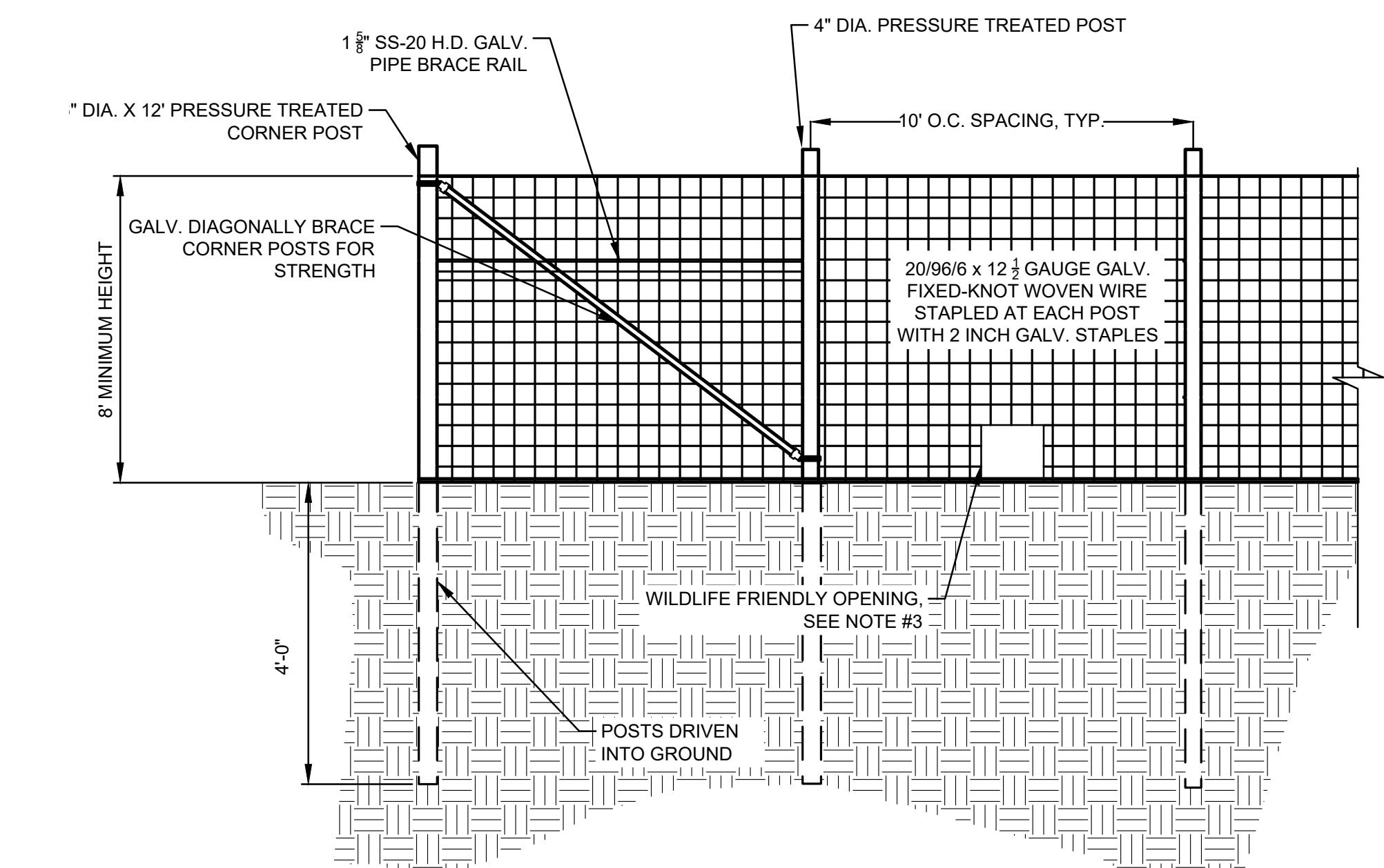
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CHECKED BY:	CJK	www.crawfordandassociates.com	
APPROVED BY:	CJK	tel: (518) 828-2700 fax: (518) 828-2723	



D OVERHEAD SPAN DETAIL
C-502

SCALE: N.T.S.



NOTES:

1. FENCE MATERIAL SHALL BE DARK OR NON-REFLECTIVE.
2. A GATE SHALL BE INSTALLED WHERE FENCE MEETS THE ACCESS DRIVE.
3. A WILDLIFE FRIENDLY OPENING, MEASURING 1 FOOT X 1 FOOT, MINIMUM, SHALL BE INSTALLED AT THE BOTTOM OF FENCE, SPACED EVERY 100 LF, MINIMUM.

E POST-DRIVEN FENCE DETAIL
C-502

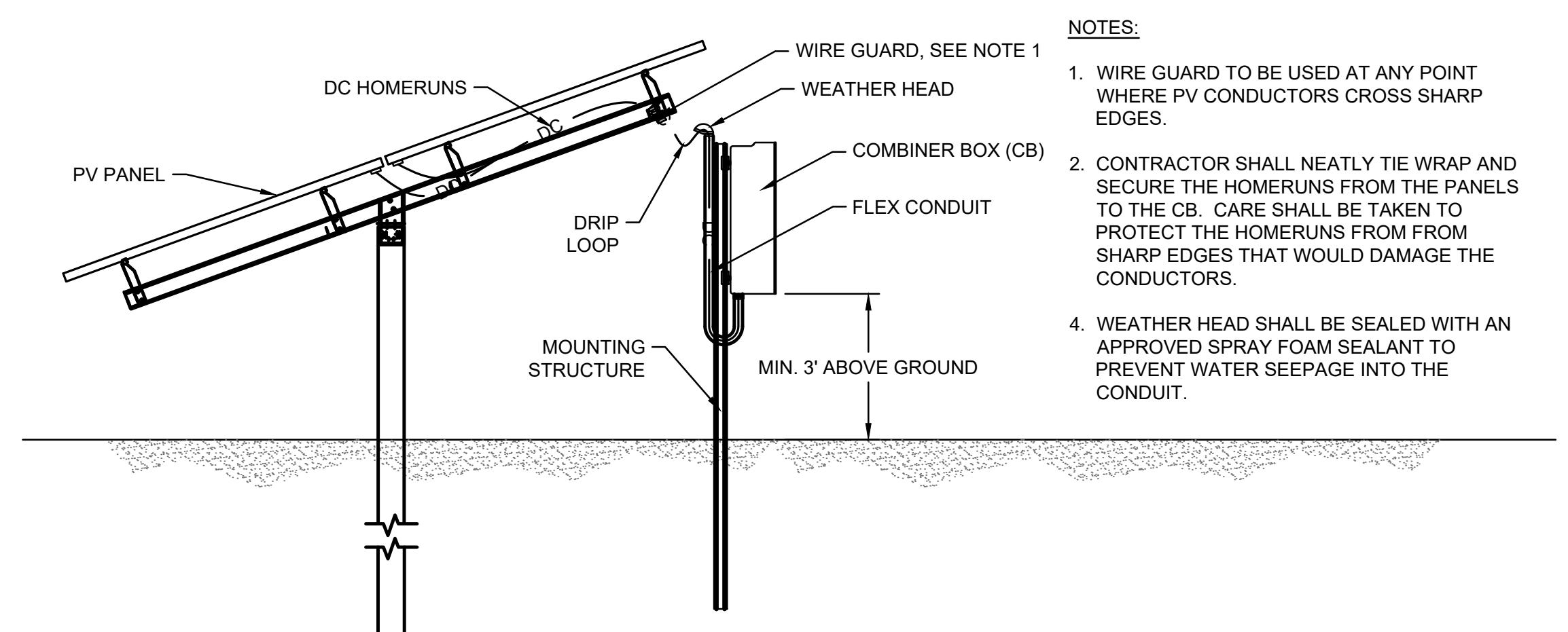
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4	REVISED PER PB COMMENT - SCREENING & HYDRANT	11/22/24	ETY
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335 BINGHAM ROAD			
TOWN OF MARLBOROUGH			
ULSTER COUNTY, NY			

CIVIL DETAILS - SHEET 2

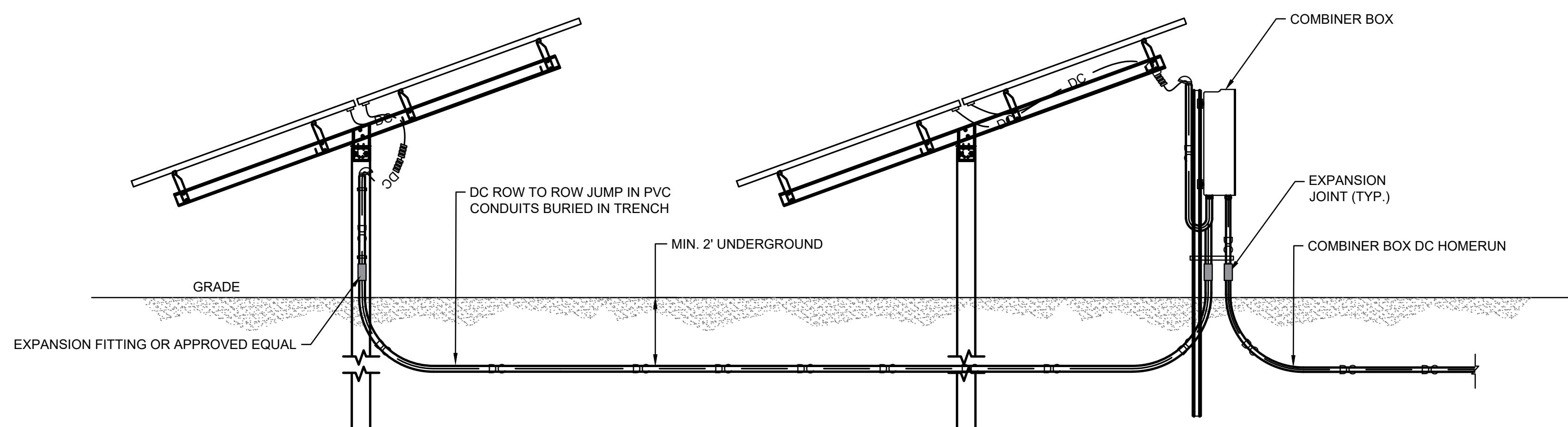
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A **FIXED TILT DC CONDUCTORS WIRE MANAGEMENT DETAIL**
E-501

SCALE: N.T.S.

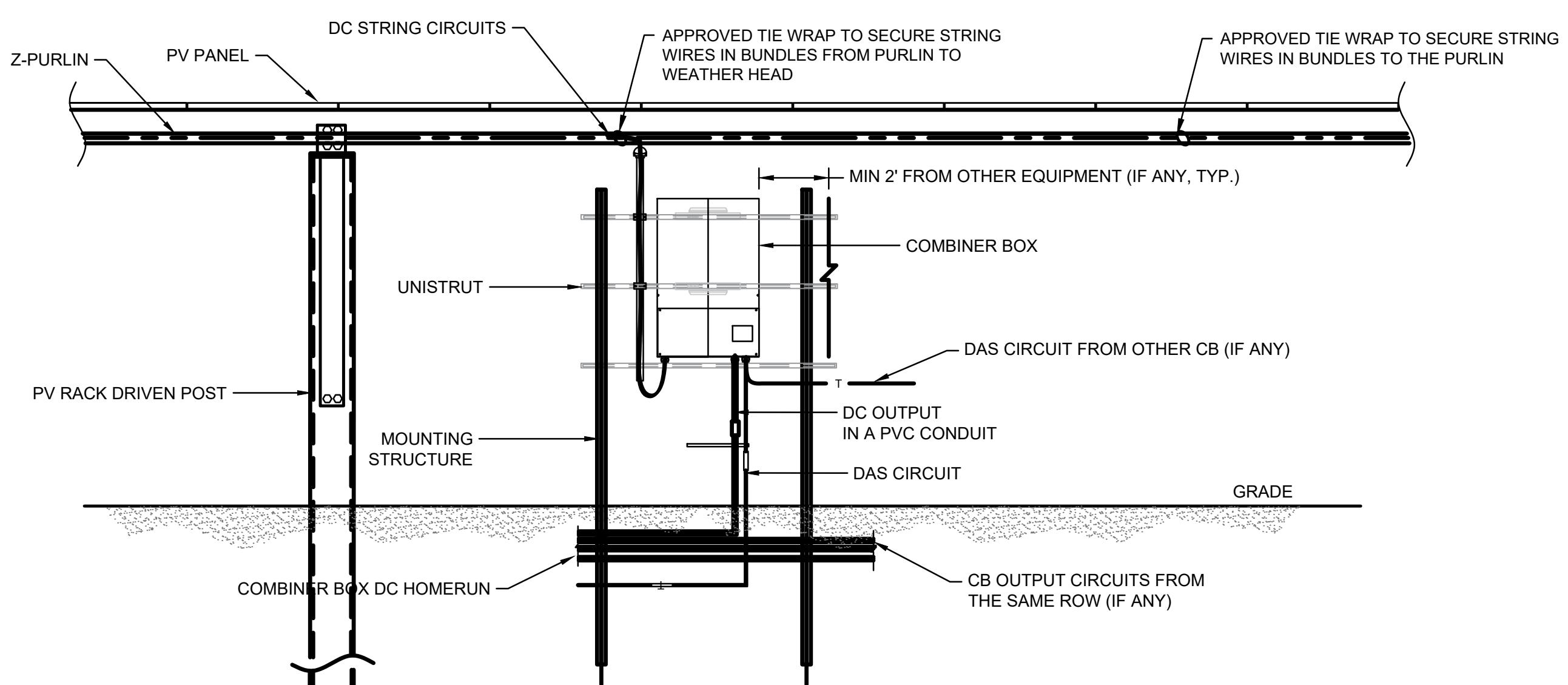


B **ROW TO ROW JUMPING DETAIL**
E-501

SCALE: N.T.S.

NOTE:

1. ELECTRICIANS TO PROVIDE CONDUIT FITTINGS, EXPANSION FITTINGS, AND PROTECTIVE BUSHINGS AS REQUIRED
2. A WIRE MANAGEMENT TRAY OR APPROVED EQUIVALENT SHALL BE PROVIDED TO HOUSE THE EXPOSED DC CONDUCTORS AT THE COMBINER BOX RACKING STRUCTURE
3. SPLIT-WIRE LOOM SHALL BE PROVIDED WHERE CABLES COME IN CONTACT WITH SHARP EDGES, IN CASE OF LARGER GAPS BETWEEN RACKING TABLES, AND FOR ADDITIONAL PROTECTION OF EXPOSED PV WIRES AT THE COMBINER BOX MOUNTING STRUCTURE
4. COMMUNICATION CONDUITS SHALL BE PLACED AT LEAST 1' FROM EITHER AC OR DC CIRCUITS



C **EQUIPMENT MOUNTING DETAIL FRONT VIEW**
E-501

SCALE: N.T.S.

ELECTRICAL DETAIL NOTES:

1. ALL ELECTRICAL DETAILS SHOWN HAVE BEEN INCLUDED FOR GENERAL REFERENCE AND DOES NOT REPRESENT THE SPECIFIC DESIGN OF ALL ELECTRICAL AND/OR RACKING COMPONENTS. THE ELECTRICAL DESIGN AND CONSTRUCTION DRAWINGS SHALL BE REFERENCED FOR ALL ELECTRICAL COMPONENTS DURING CONSTRUCTION OF THIS PROJECT.

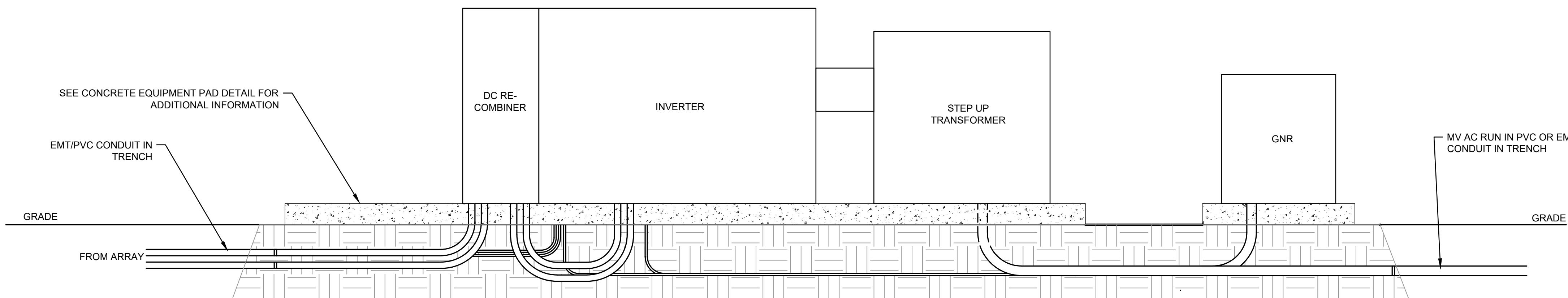
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ELECTRICAL DETAILS - SHEET 1

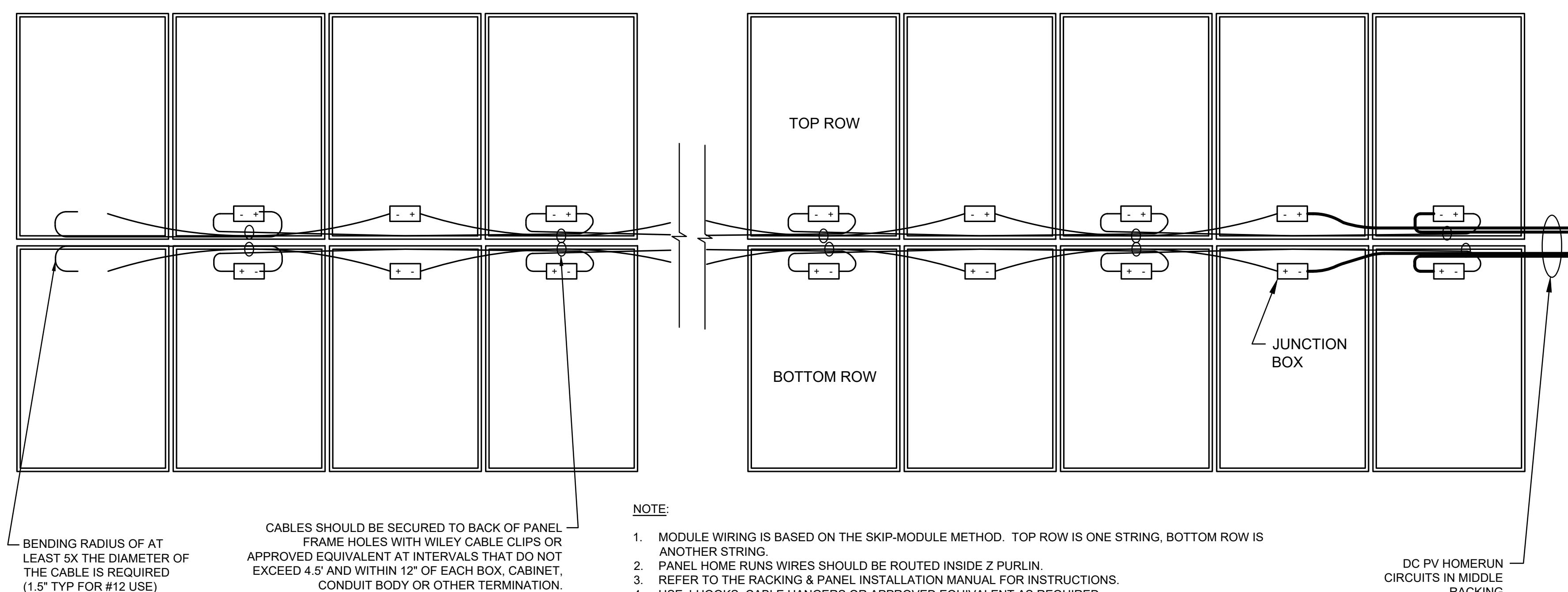


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	DESIGNED BY:	TSB/DPB	C&A JOB #	
	SCALE	C&A	4996.26	DRAWING:
	AS SHOWN	APPROVED BY:	CJK	E-501



A EQUIPMENT PAD WIRING MANAGEMENT
E-502

SCALE: N.T.S.

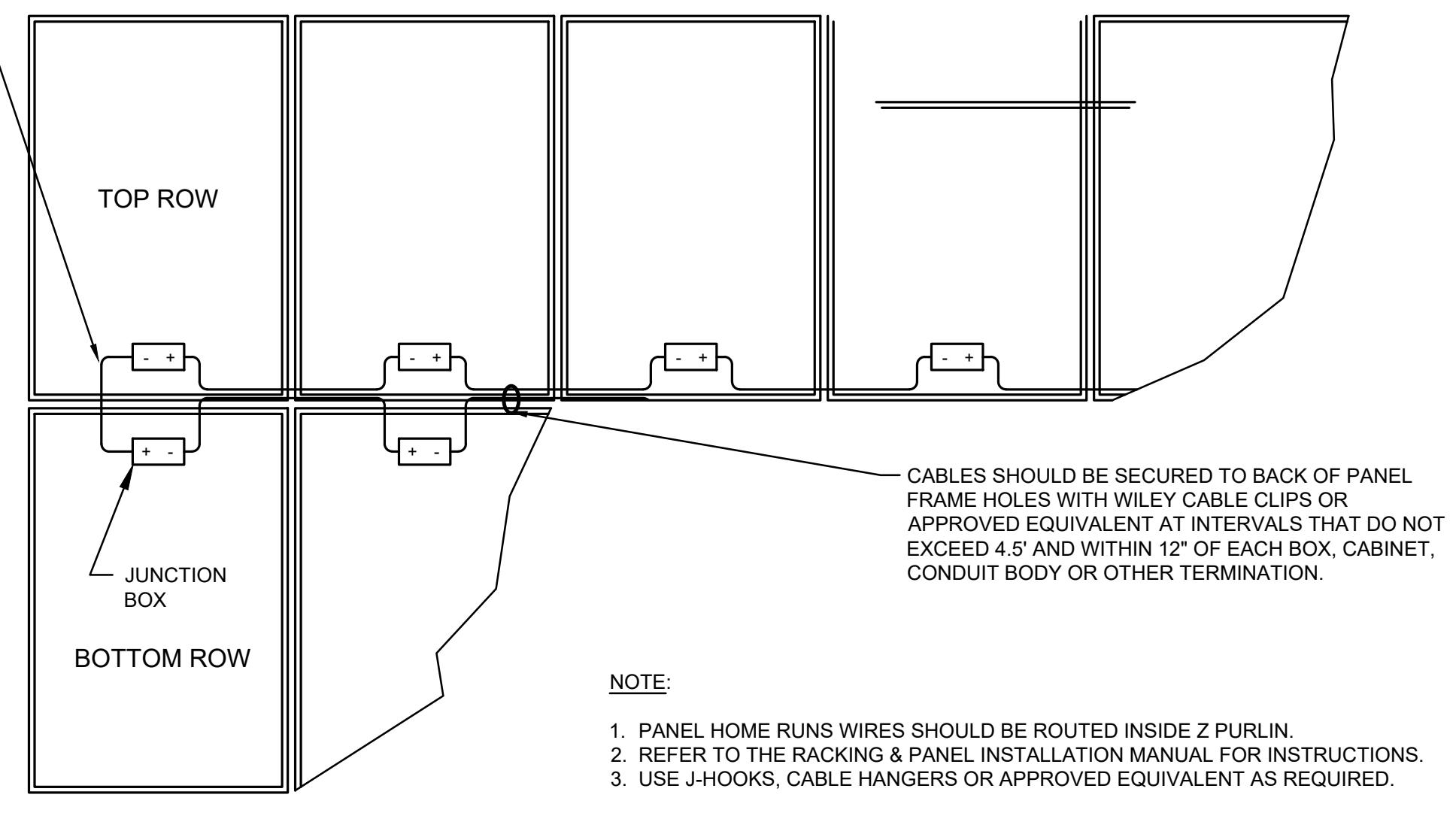


B PANEL WIRING MANAGEMENT DETAIL (FULL RACK WITH SKIP WIRING)
E-502

SCALE: N.T.S.

ELECTRICAL DETAIL NOTES:

1. ALL ELECTRICAL DETAILS SHOWN HAVE BEEN INCLUDED FOR GENERAL REFERENCE AND DOES NOT REPRESENT THE SPECIFIC DESIGN OF ALL ELECTRICAL AND/OR RACKING COMPONENTS. THE ELECTRICAL DESIGN AND CONSTRUCTION DRAWINGS SHALL BE REFERENCED FOR ALL ELECTRICAL COMPONENTS DURING CONSTRUCTION OF THIS PROJECT.



C PANEL WIRING MANAGEMENT DETAIL (HALF RACK)
E-502

SCALE: N.T.S.

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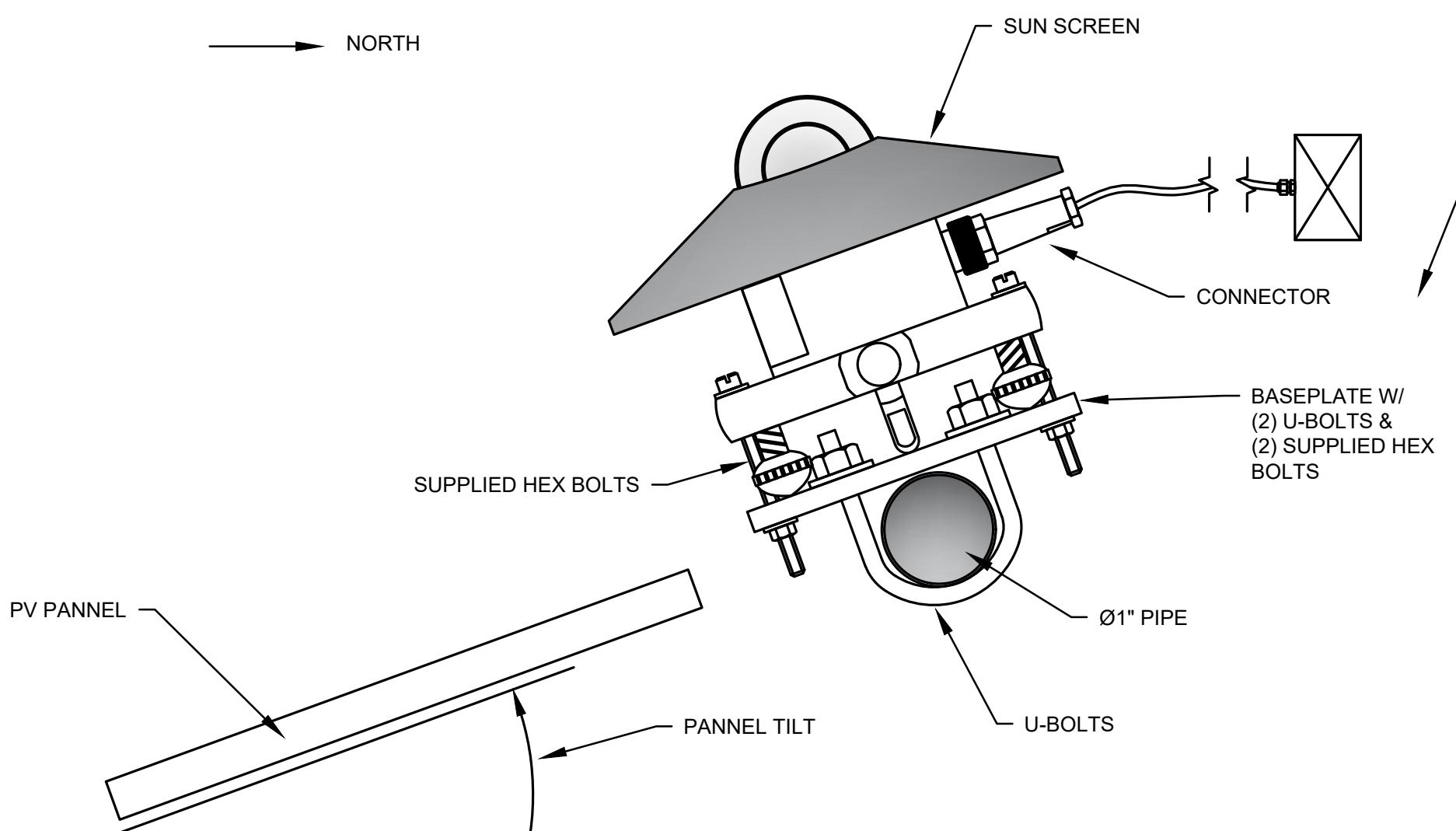
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ELECTRICAL DETAILS - SHEET 2

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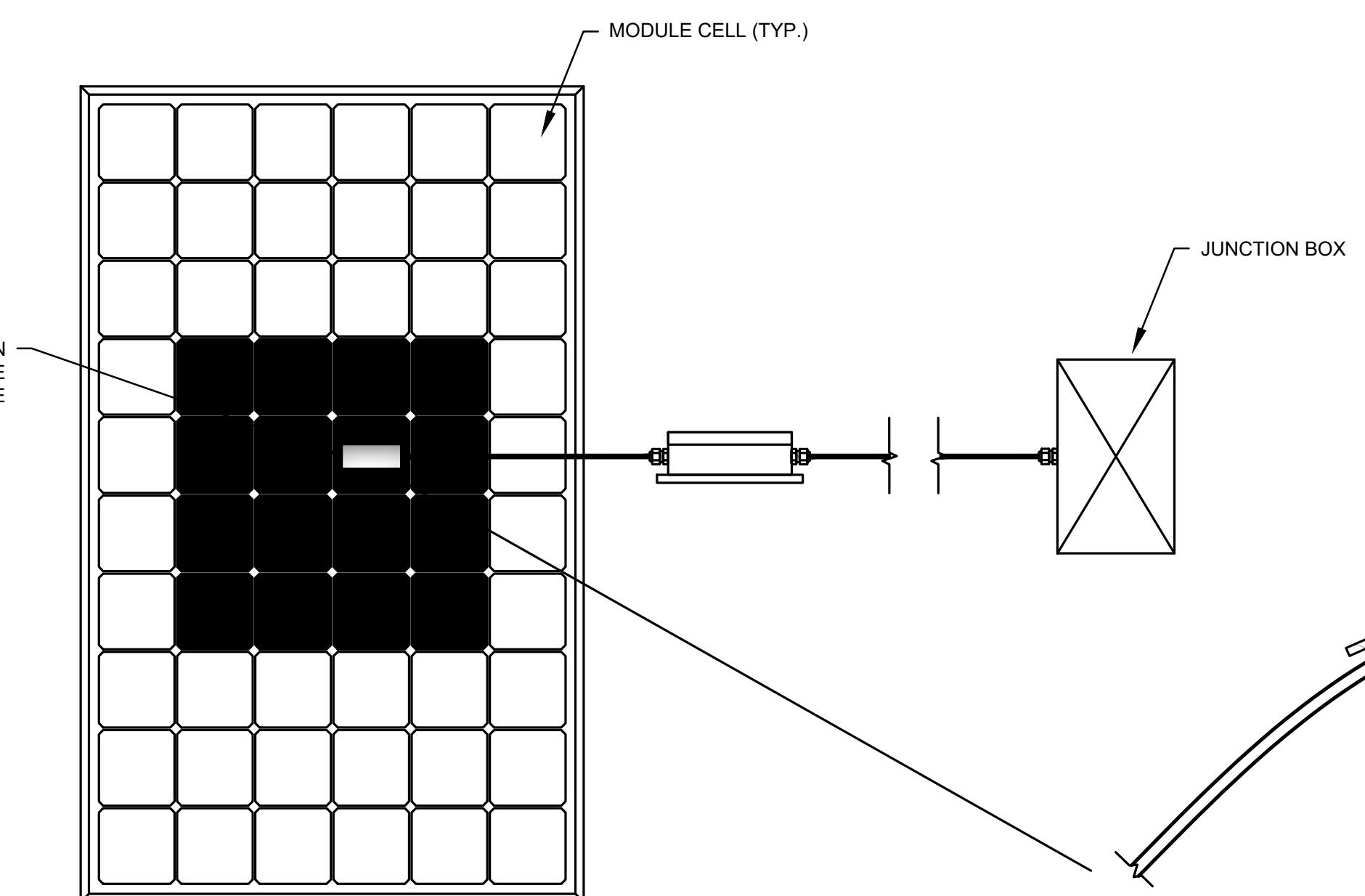


PYRANOMETER NOTE:

1. FOR POA PYRANOMETERS, ROTATE ASSEMBLY SO THAT THE BASEPLATE IS PARALLEL TO THE PV ARRAY AND FASTEN SNUGLY. FOR GHI PYRANOMETER, ROTATE ASSEMBLY SO THAT THE BASEPLATE IS PARALLEL TO THE GROUND.
2. PLACE PYRANOMETER ONTO THE MOUNTING BRACKET BASEPLATE AND ENSURE THEY ARE PARALLEL TO EACH OTHER USING THE LEVELING METER.
3. ELECTRICAL DETAILS REFERS TO DAS INFORMATION. IF THE SENSOR IS THE LAST DEVICE IN A MODBUS CHAIN WHICH CONSISTS OF 3 OR MORE DEVICES, THEN ADD A 120Ω RESISTOR BETWEEN THE DATA+ AND DATA- WIRES.

A PYRANOMETER (POA) INSTALLATION
E-503

SCALE: N.T.S.



TEMPERATURE SENSOR NOTE:

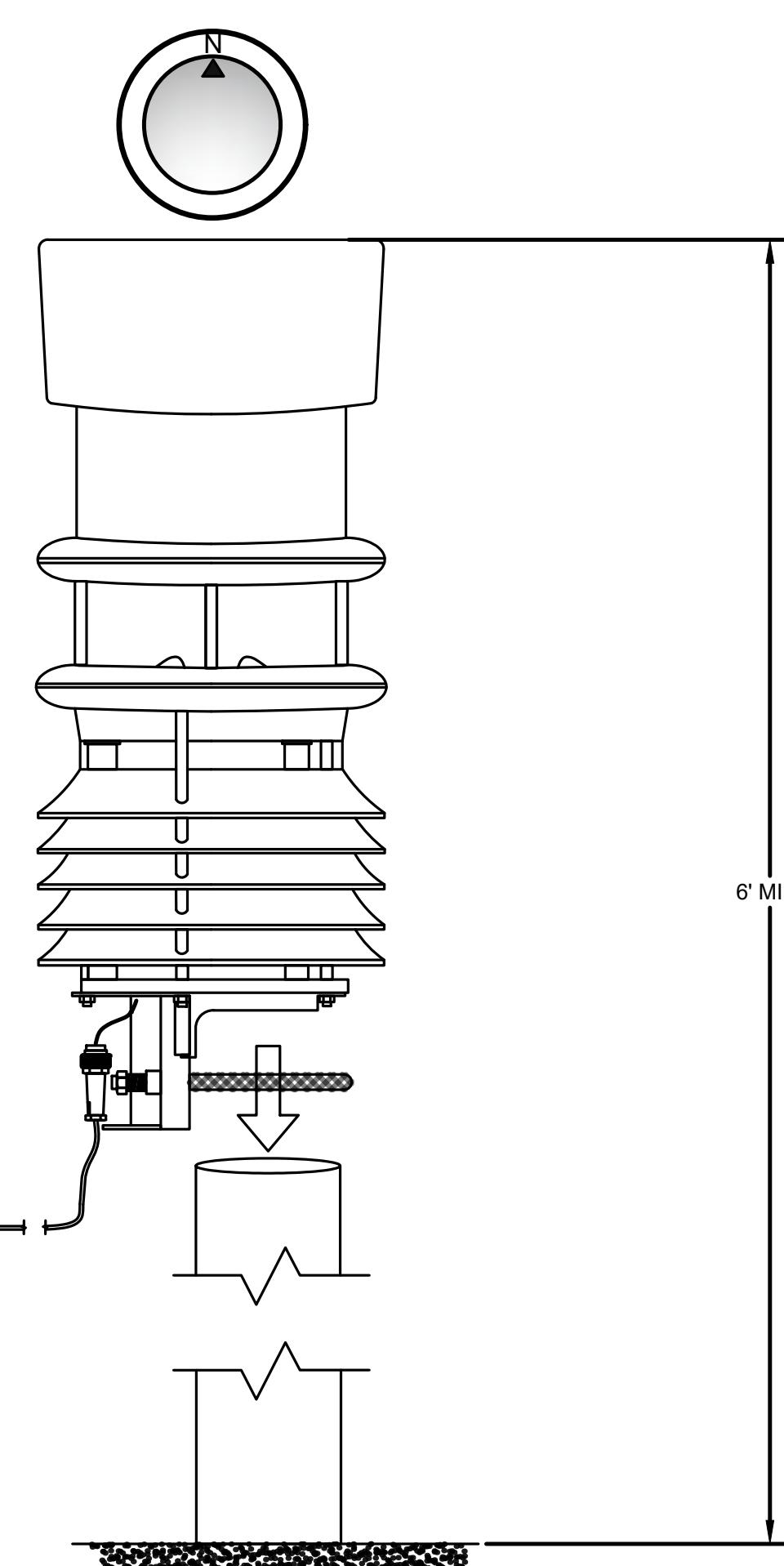
1. THE SENSOR SHALL BE PLACED ON A MODULE THAT IS AT LEAST 1 MODULE FROM THE EDGE OF THE ARRAY ON ALL SIDES WHEN POSSIBLE.
2. CLEAN THE CELL BEFORE ATTACHING A SENSOR ONTO IT.

C MODULE TEMPERATURE SENSOR INSTALLATION
E-503

SCALE: N.T.S.

WS601UMB NOTE:

1. VERTICALLY MOUNT ON A 2.5" TO 3" O.D. RIGID METAL POLE IN A LOCATION FREE OF OBSTRUCTIONS AND SHADING.
2. FIRST LOOSELY MOUNT THE WS601 MAKING SURE IT HAS AT LEAST 6" HEIGHT TO THE GROUND.
3. ALIGN THE NORTH INDICATORS ON THE WS601 WITH MAGNETIC NORTH USING A COMPASS AND TIGHTEN THE FASTENERS.

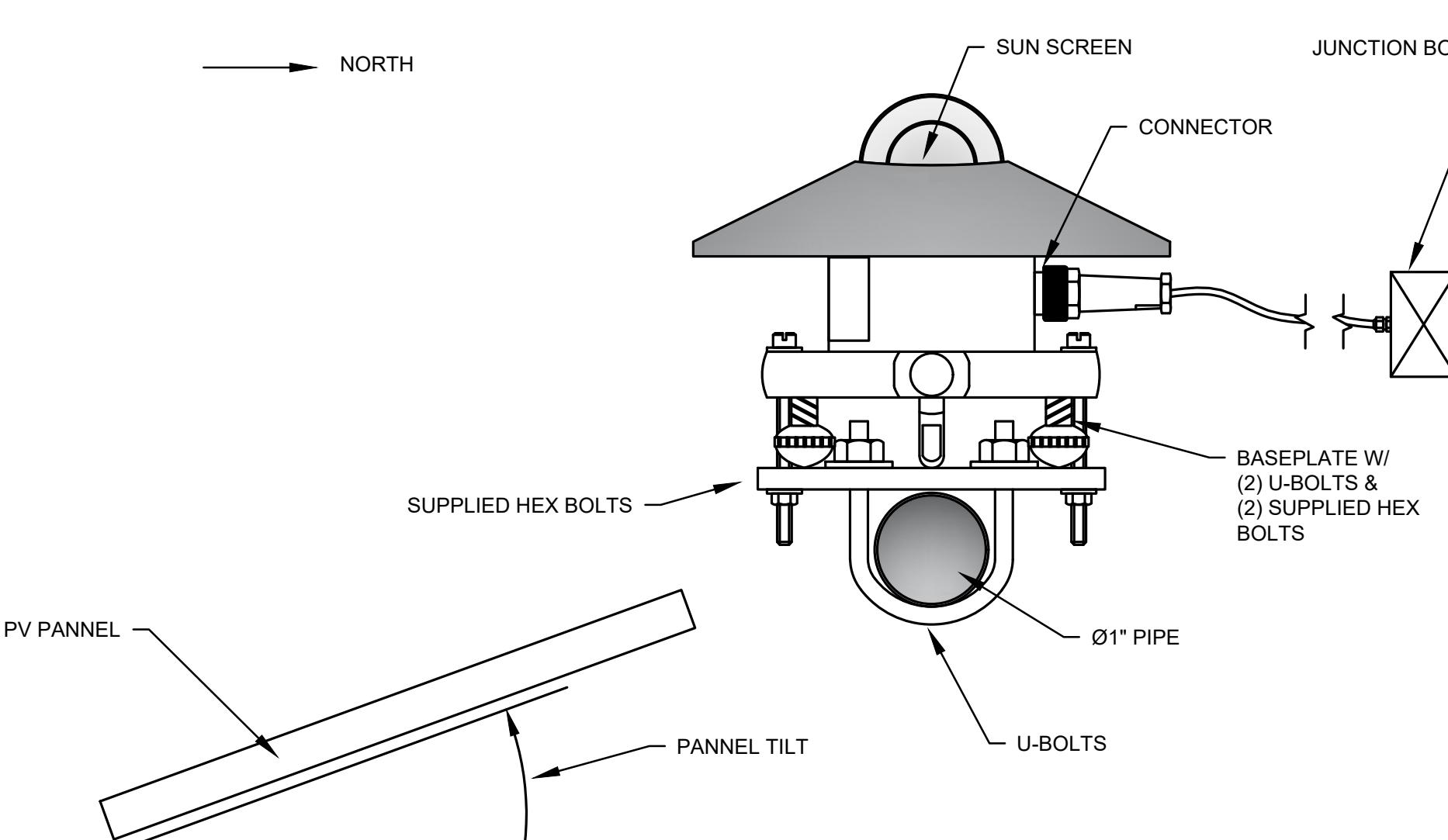


E LUFFT WS601USM INSTALLATION
E-503

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B PYRANOMETER (GHI) INSTALLATION
E-503

SCALE: N.T.S.

D AXIS CAMERA INSTALLATION
E-503

SCALE: N.T.S.

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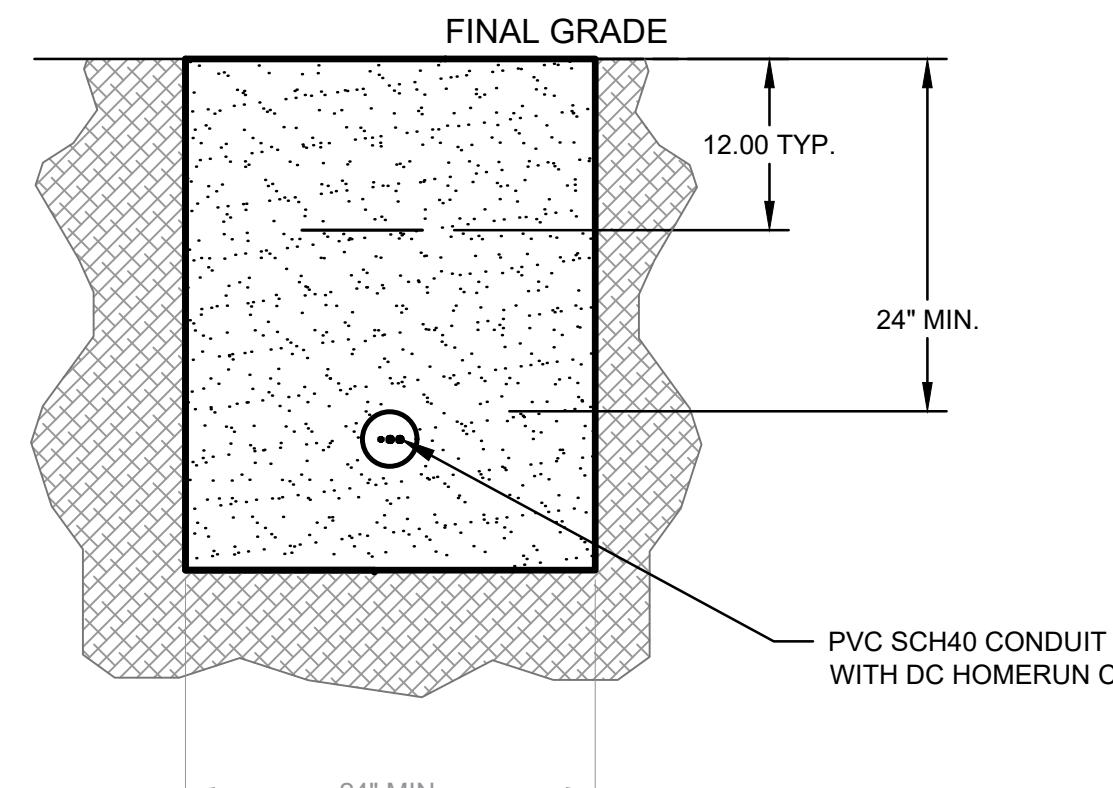
TOWN OF MARLBOROUGH ULSTER COUNTY, NY

ELECTRICAL DETAILS - SHEET 3

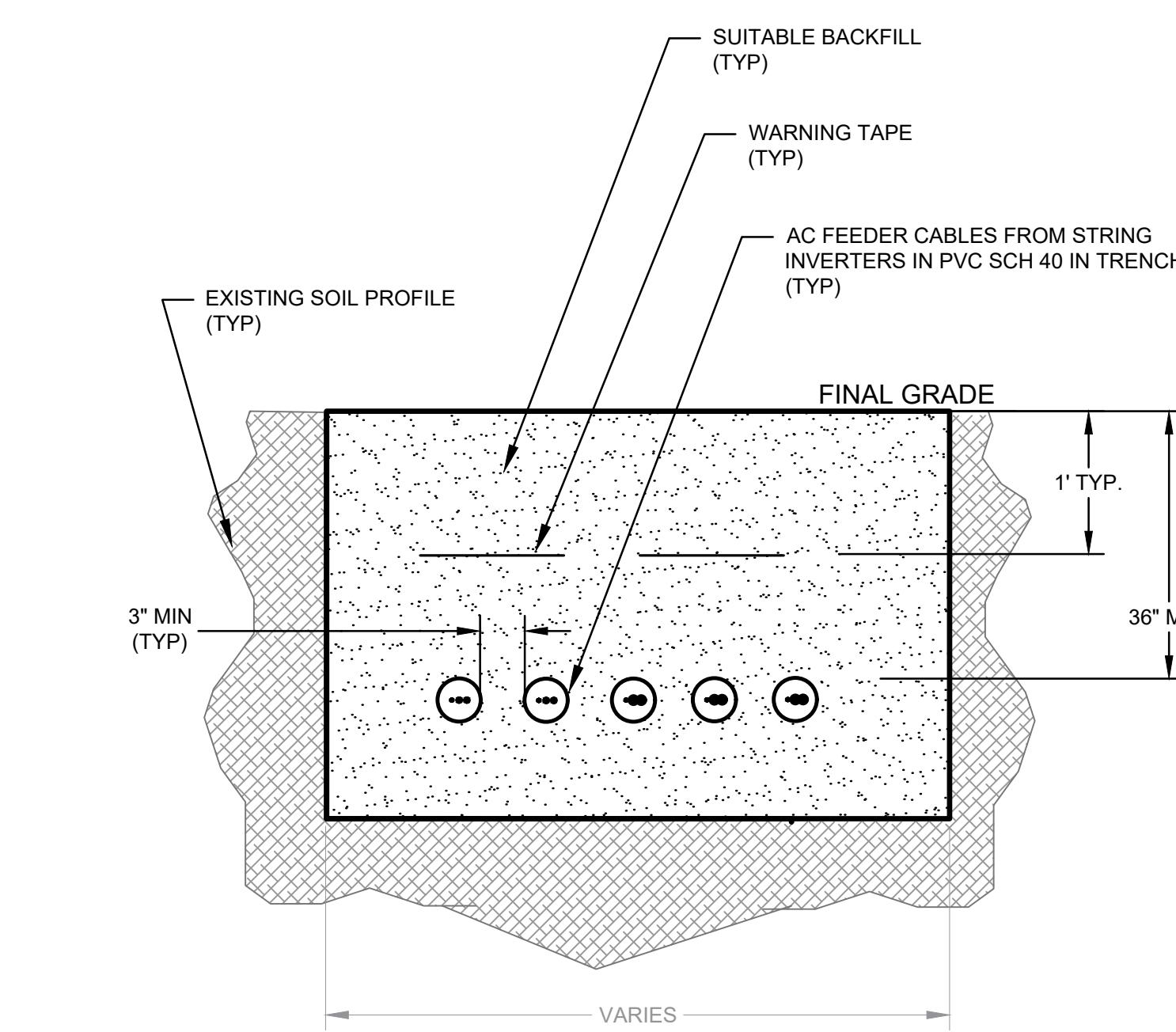
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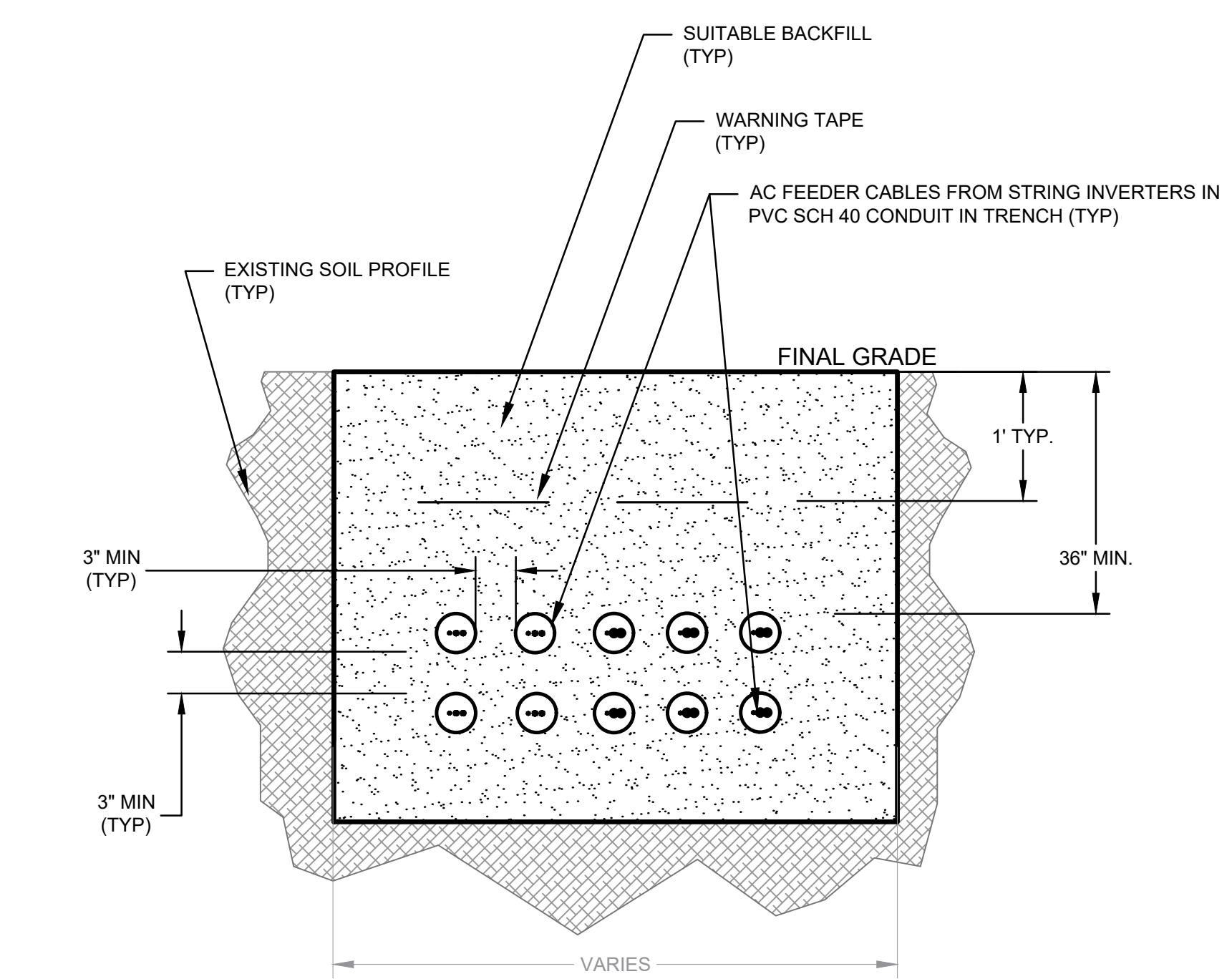
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AS SHOWN	C&A JOB #	4996.26	DRAWING: E-503



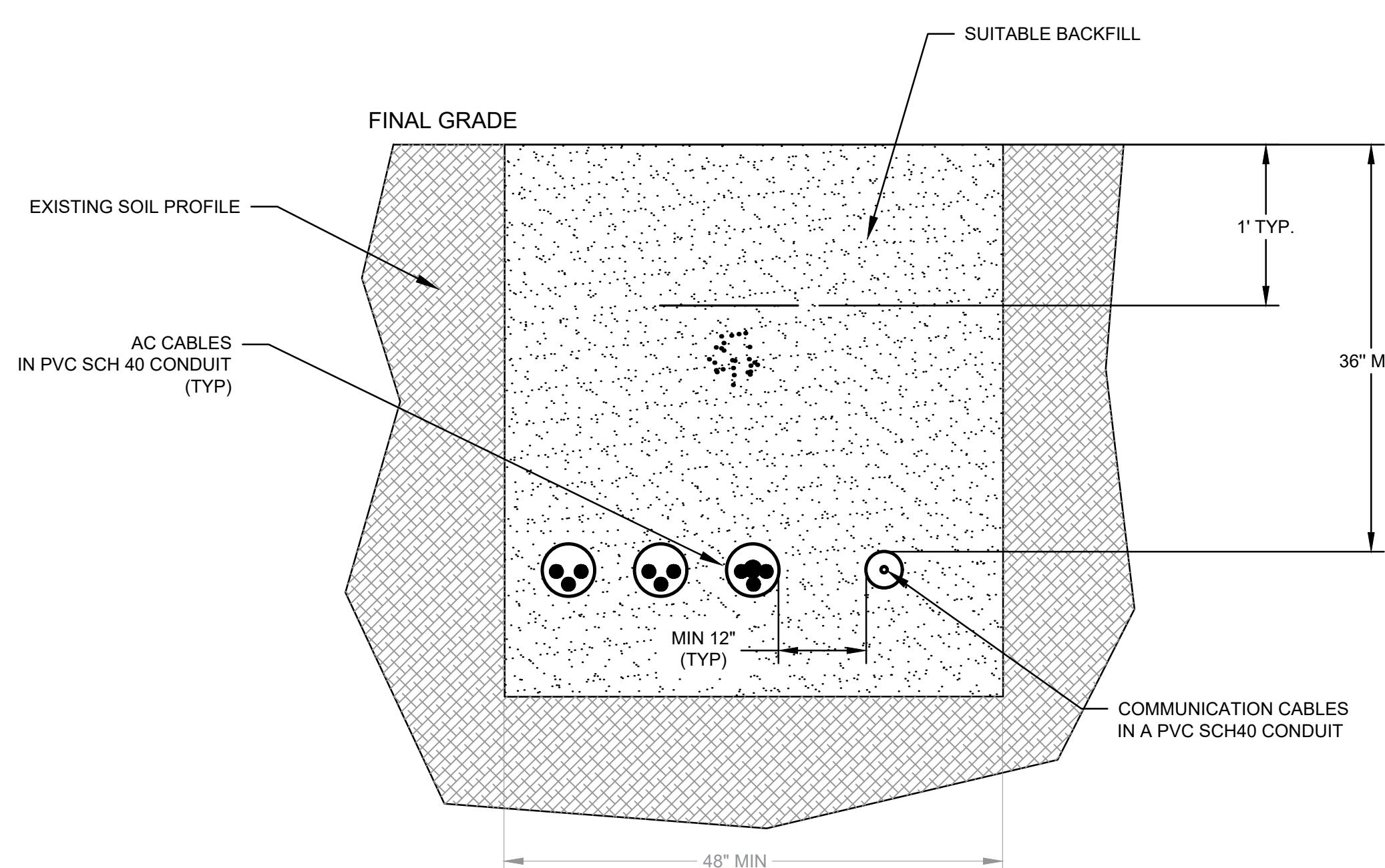
A DC HOMERUNS ROW TO ROW JUMPER TRENCH DETAIL
E-504 SCALE: N.T.



B AC FEEDER CIRCUITS TRENCH DETAIL (SINGLE LAYER)
E-504 SCALE: N.T.S.



C AC FEEDER CIRCUITS TRENCH DETAIL (TWO LAYERS)
E-504



D MEDIUM VOLTAGE CONDUCTORS WITH COMMUNICATIONS CABLES TRENCH DETAIL
E-504

NOTES:

1. ALL AC CONDUITS TO BE BURIED AT A MINIMUM OF 3'. ALL DC CONDUITS TO BE BURIED AT A MINIMUM OF 2'.
2. COMMUNICATION CABLES TO BE A MINIMUM OF 12" AWAY FROM DC AND AC CABLES.
3. WARNING TAPE TO BE METALLIC WITH THE PHRASE "CAUTION: BURIED ELECTRICAL LINES"
4. BACKFILL TO BE FREE FROM ANY ROCKS OR OTHER DELETERIOUS OBJECTS THAT ARE 3/4" IN DIAMETER OR GREATER.
5. ELECTRICIANS TO PROVIDE MATCHING FITTINGS AND EXPANSION COUPLINGS BY THE SAME MANUFACTURER AS THE CONDUIT

ELECTRICAL DETAIL NOTES:

1. ALL ELECTRICAL DETAILS SHOWN HAVE BEEN INCLUDED FOR GENERAL REFERENCE AND DOES NOT REPRESENT THE SPECIFIC DESIGN OF ALL ELECTRICAL AND/OR RACKING COMPONENTS. THE ELECTRICAL DESIGN AND CONSTRUCTION DRAWINGS SHALL BE REFERENCED FOR ALL ELECTRICAL COMPONENTS DURING CONSTRUCTION OF THIS PROJECT.

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