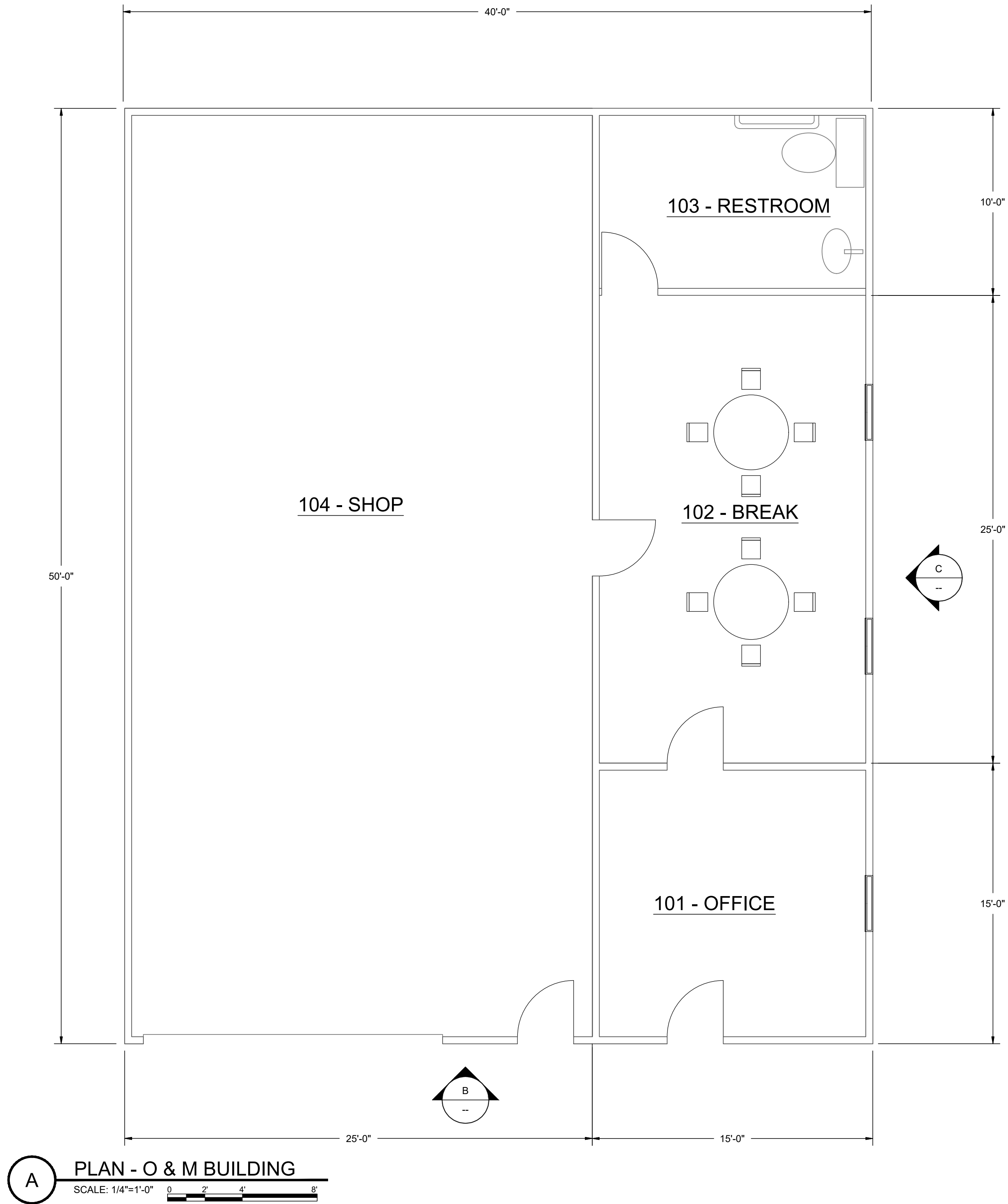
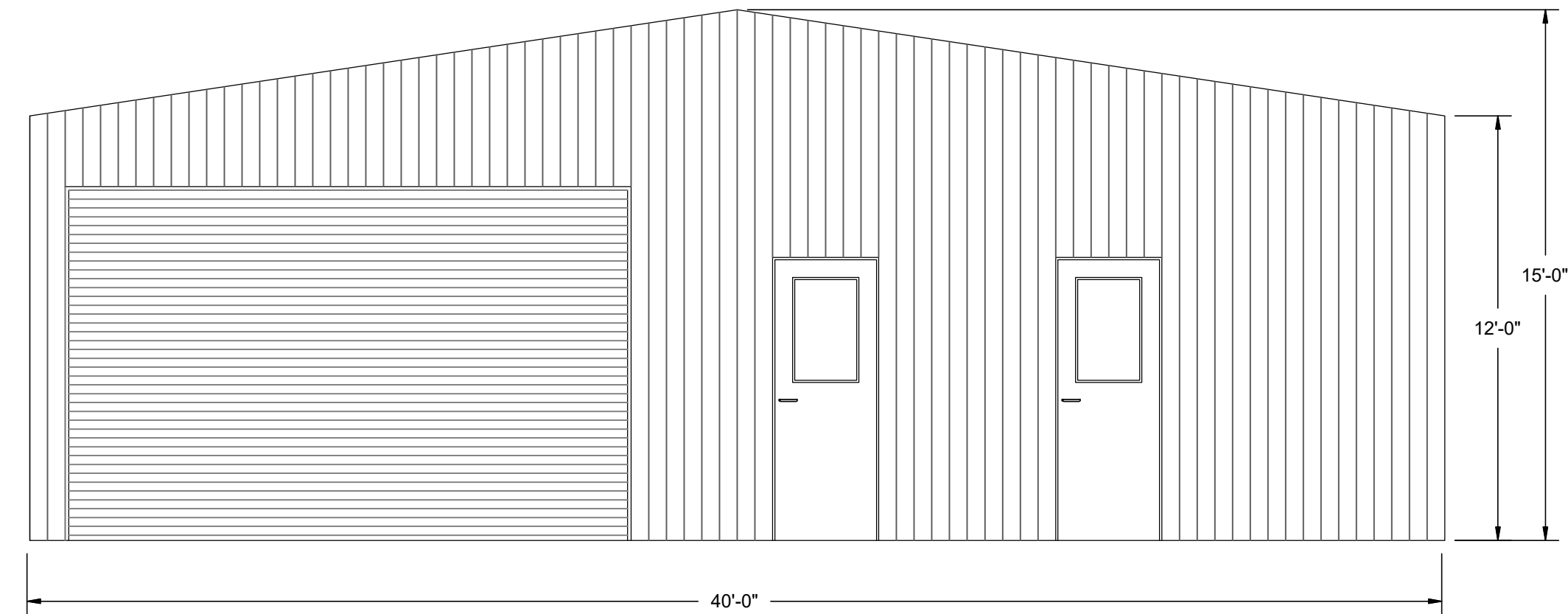
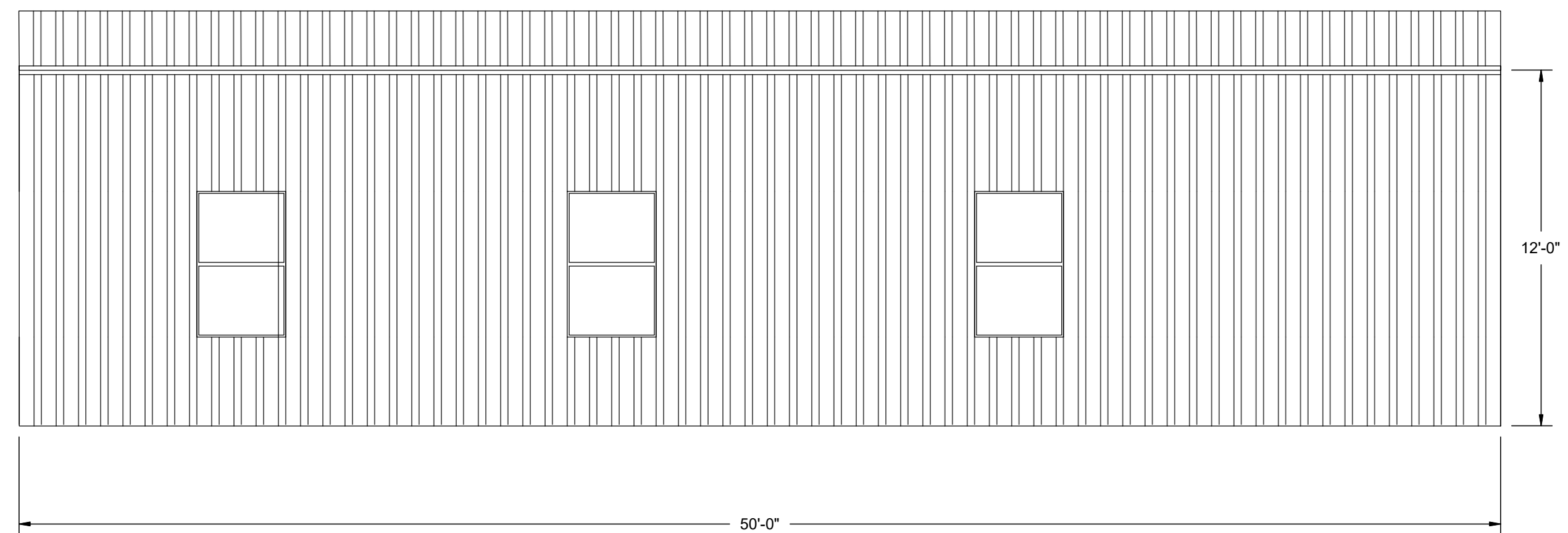




A PLAN - O & M BUILDING
SCALE: 1/4"=1'-0" 0 2' 4' 8'



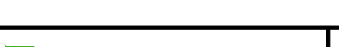
B ELEVATION - O & M BUILDING
SCALE: 1/4"=1'-0" 0 2' 4' 8'

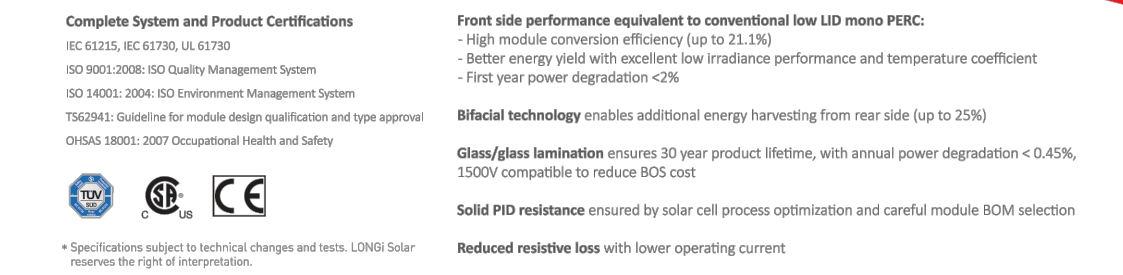


C ELEVATION - O & M BUILDING
SCALE: 1/4"=1'-0" 0 2' 4' 8'

PRELIMINARY
NOT FOR CONSTRUCTION

- NOTES:
- FACILITY SCHEMATIC IS PRELIMINARY AND SUBJECT TO CHANGE WITH FINAL DETAILED DESIGN.
 - CONTRACTOR SHALL DESIGN, PROCURE, AND CONSTRUCT O&M FACILITY IN ACCORDANCE WITH LOCAL, COUNTY, AND/OR STATE BUILDING CODE.
 - CONTRACTOR SHALL APPLY AND PROCURE ALL PERMITS REQUIRED TO PROCURE, TRANSPORT, ERECT AND INSTALL THE O&M BUILDING AND ALL ITS EXTERNAL AND INTERNAL FACILITIES.
 - O&M FACILITY EXTERIOR WILL UTILIZE CORRUGATED METAL AND BE WHITE OR ANSI GREY IN COLOR. FINAL MATERIAL TYPE AND FINISH COLOR DETAILS WILL BE UPDATED DURING DETAILED DESIGN.

 670 NORTH COMMERCIAL STREET SUITE 203 MANCHESTER, NH 03101				PROJECT NO: 443269				 DATE: 07-12-2024 LIC. EXP.: 09-30-2026	JAK DESIGNED JAK DRAWN JTG CHECKED DVL APPROVED		MILL POINT SOLAR I PROJECT CONNECTGEN MONTGOMERY COUNTY LLC O & M BUILDING PLAN AND ELEVATIONS					
REFERENCE ITEMS				REV	DESCRIPTION				DATE	DES	CHK	APP	GLEN	NEW YORK		
				E	ISSUED FOR 94-C DEFICIENCY SUPPLEMENT				07/12/24	JAK	JTG	DVL				
				D	ISSUED FOR 94-C				04/26/24	JAK	JTG	DVL				
				C	ISSUED FOR 94-C				01/15/24	JAK	JTG	DVL				
				B	ISSUED FOR REVIEW				09/01/23	JAK	JTG	DVL				
												REVIEW 1 REVIEW 2	07/12/24 DATE AS NOTED SCALE		MPS-E-405-01	REV: E



LONGi

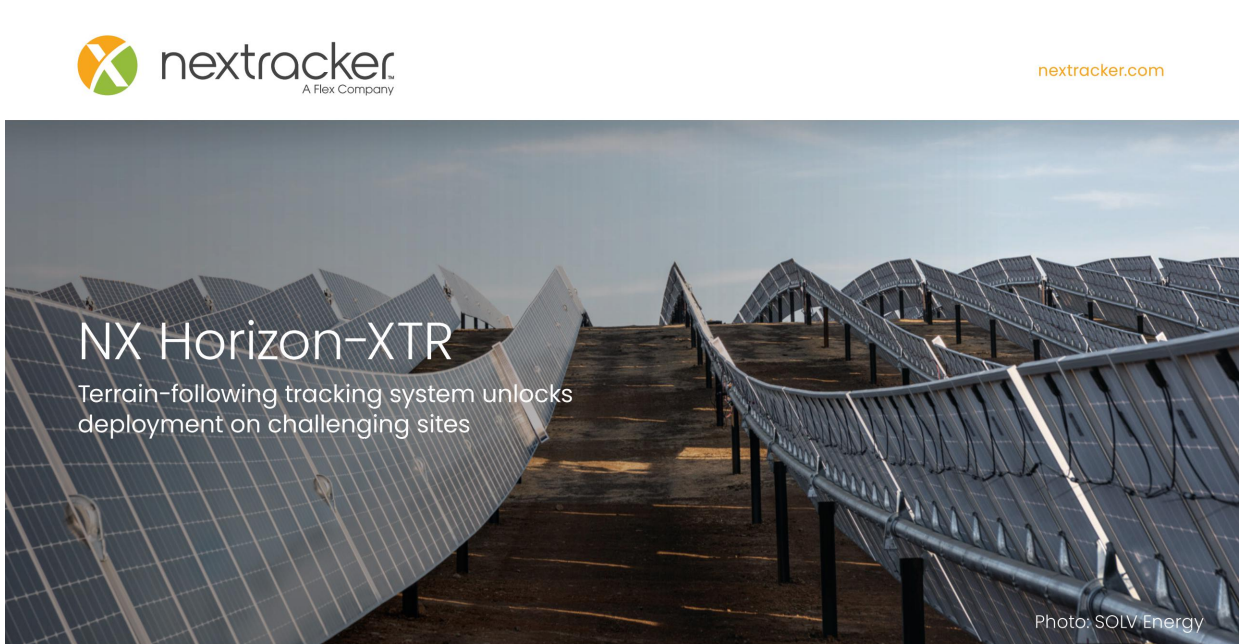
Room 801, Tower 3, Lujiazui Financial Plaza, No.826 Century Avenue, Pudong Shanghai, 200120, China
Tel: +86-21 86126206 E-mail: module@longi-silicon.com Facebook: www.facebook.com/LONGiSolar

Note: Due to continuous technical innovation, R&D and improvement, technical data above mentioned may be of modification accordingly. LONGi have the sole right to make such modification at anytime without further notice. Demanding party shall request for the latest datasheet for such as contract need, and make it a consisting and binding part of lawful documentation duly signed by both parties.

20200708-092 V03



- LOW LOCALE**
 - Effective cooling, full power operation at 40 °C
 - Wireless communication in block, "0" cost networking cost
 - Q at night function (optional), saving investment
- SMART O&M**
 - Modular equipment, 1.1 - 8.9 MW block flexible design
 - Modular system, flexible PV/DC/AC ratio and ESS capacity
 - Modular component, plug and play, no need professional
- SAFETY & RELIABLE**
 - DC arc fault protection, 20ms cut off fault
 - 24h real-time AC insulation monitoring
 - IPMS protection, adapt to harsh environment
- GRID SUPPORT**
 - SCR ≥ 102 , stable operation in extremely weak grid
 - Reactive power response time < 20 ms
 - Compliant with grid code



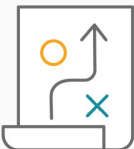
With an average of 50 GW of smart solar trackers deployed globally, NexTracker invests in technology innovations to mitigate project risks, reduce cost, and achieve better financial returns. Introducing our new terrain-following tracker for sites with undulating terrain: NX Horizon-XTR.

NX Horizon-XTR: A Tracking Solution for PV Projects with Challenging Terrain

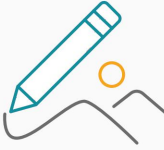
As solar power project opportunities expand into new regions and availability of once-ubiquitous flat land becomes increasingly rare, developers are turning to sites with sloping and undulating terrain.

The standard approach to dealing with undulating terrain includes careful selection of tracker row locations, performing cut-and-fill grading and increasing foundation pile lengths. While proven, this limits system size, increases construction costs, creates schedule risk, and introduces soil erosion issues over the lifetime of the project.

Building on our award-winning NX Horizon™ smart solar tracker, NX Horizon-XTR breaks the traditional constraint of “straight line” trackers, enabling track rows to follow the north-south contours of the native landscape. This reduces grading, minimizes foundation stress and mitigates risks associated with land disturbance. NX Horizon-XTR helps make topographically challenged project sites economically viable, and can be paired with TrueCapture™ to protect against limited losses Working closely with our EPC partners, NX has successfully deployed Horizon-XTR on over 2 GW of projects, with many more under construction or in planning stages.



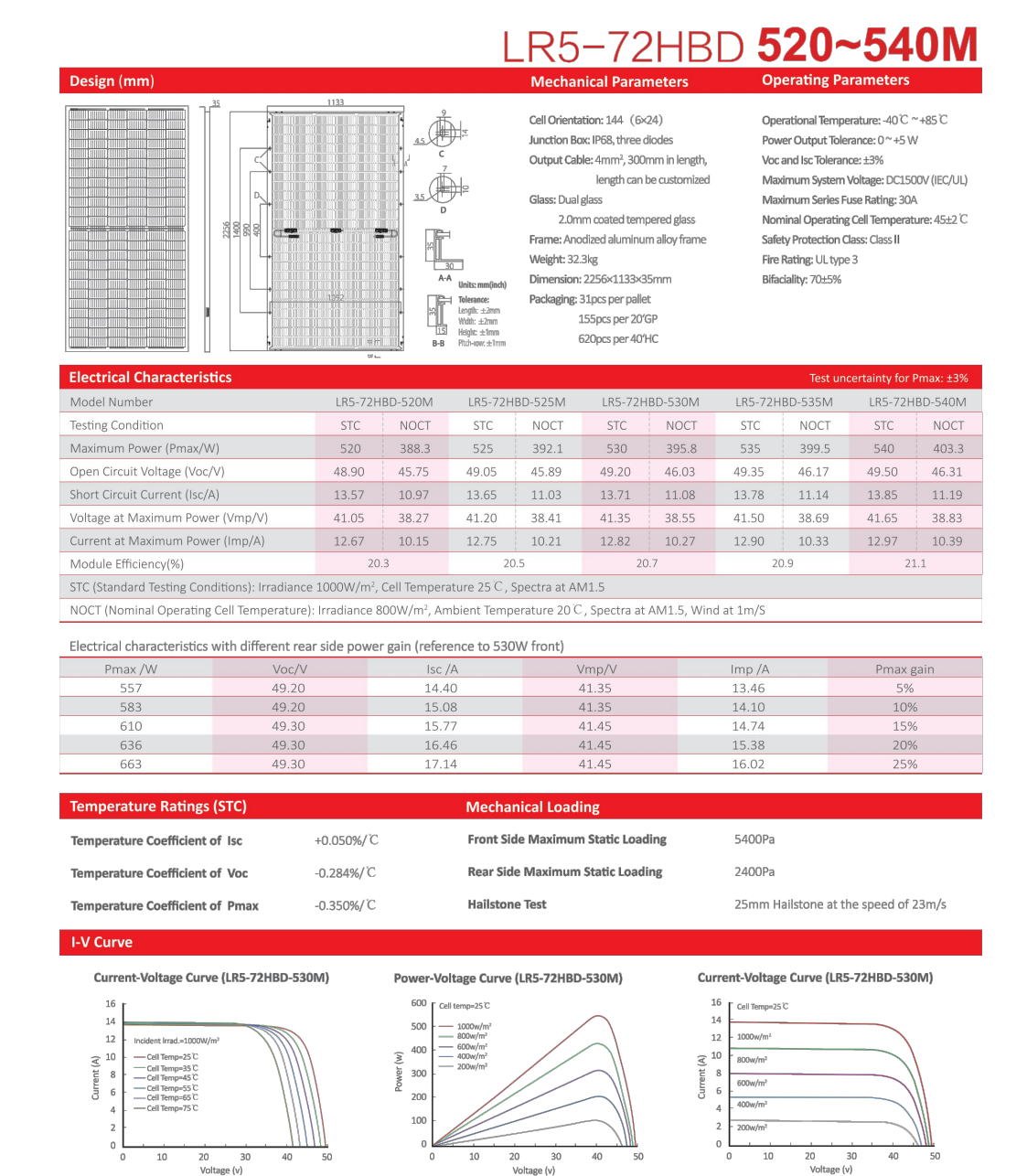
Accelerate project planning by reducing permitting risk and easing environmental concerns



Reduce project cost, mitigate schedule, and budget risks with up to 80% less grading and up to 30% less steel per foundation pile



Minimize land maintenance cost and erosion risk from erosion and hydrology impacts



LONGi

Room 801, Tower 3, Lujiazui Financial Plaza, No.826 Century Avenue, Pudong Shanghai, 200120, China
Tel: +86-21-602162605 E-mail: module@longi-silicon.com Facebook: www.facebook.com/LONGiSolar

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20200708 Draft V03

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		Clean power for all	
Type designation		SG3300UD	SG4400UD
Input (DC)			
Max. PV input voltage		1500 V	
Min. PV input voltage / Start-up input voltage		905 / 945 V	
MPP voltage range		905 - 1300 V	
No. of independent MPP inputs	3		4
No. of DC inputs	15 (optional 18/21 inputs negative grounding) 3 *1400 A 3 *5000 A		20 (optional 24/28 inputs negative grounding) 4 *1400 A 4 *5000 A
Max. PV input current			
Max. DC short-circuit current			
PV array configuration		Negative grounding or floating	
Output (AC)			
AC output power	3300 kVA @ 40 °C (104 °F), 3795 kVA @ 20 °C (68 °F)		4400 kVA @ 40 °C (104 °F), 5060 kVA @ 20 °C (68 °F)
Max. AC output current	3 *1160 A		4 *1160 A
Normal AC voltage		630 V	
AC voltage range		535 - 683 V	
Nominal grid frequency / Grid frequency range		50 Hz / 45 - 55 Hz, 60 Hz / 55 - 65 Hz	
Harmonic (THD)		< 3 % (as nominal power)	
Power factor at nominal power / Adjustable power factor		> 0.97 / 0.8 leading - 0.8 lagging	
Feed-in phases / AC connection		3 / 3-Ø	
Efficiency			
Max. efficiency		99.0 %	
European efficiency		98.7 %	
Protection & Functions			
DC input protection		Load break switch + Fuse	
AC output protection		Circuit breaker	
Surge protection		DC type II / AC type II	
Grid monitoring / Ground fault monitoring		Yes / Yes	
Insulation monitoring		Yes	
Overheat protection		Yes	
Q at night function		Optional	
General Data			
Dimensions (W*H*D)	2960*2600*700 mm [89"89"66.3"]		2860*2600*700 mm [92"89"66.3"]
Weight	> 3500 kg (7725 lbs)		> 3300 kg (7275 lbs)
Topology	Transformerless		Transformerless
Degree of protection		IP55 (optional: IP66) / NEMA 3P (optional: NEMA 4X)	
Night power consumption		≤ 200 W	
Operating ambient temperature range		-35 to 60 °C / -40 °C Deringing / -31 to 140 °F / 134 °F Deringing	
Allowable relative humidity range		0 - 100 %	
Cooling method		Temperature controlled forced air cooling	
Max. operating altitude		4000 m (= 3000 m derating) / 13121 ft (= 9843 ft derating)	
Display		LED indicators, WLAN+WebHMI	
Communication		Standard RS485, Ethernet, Optional optical fiber CE, IEC 62039, IEC 61772, IEC 616, IEC 62036, IEC 61772, IEC 62036, IEC 62068, IEC 60685, VDE-AR-N 4102/28, VDE-AR-N 4102/28, EN 50549-1/2, IEC 62069-1/2/2011, IEC 62133-1/17, IEC 772-1/2011, UL716, UL716A, IEEE1547, IEEE1547-1, CSA C22.1/2017-01-2001, California Rule 21	
Compliance		Q at night function (optional), LVRT, active & reactive power control and power ramp rate at grid fault, L-Curtail, P-Curtail control	
Grid support			

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Nexttracker	NX Horizon-XTR
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Terrain Specifications		
	INDUSTRY STANDARD TRACKER	NX HORIZON-XTR
Max N-S Slope	8.5° (15%)	8.5° (15%)
Undulation Tolerance	n/a	0.75° (1.3%) slope change between pliers
Solution for Ground Undulation	Long Pliers  Perform Earthwork 	Follow the Grade 

Case Study: 120 MW Solar Plant, Iowa USA
Grading Savings Scenario

	INDUSTRY STANDARD TRACKER	NX HORIZON-XTR
Grading Heat Map		
NX Horizon-XTR Savings	- Grading cut/fill reduction: 225,563 CuYd (172,455 m³) - Disturbed land area reduction: 3,079,039 sq. ft. (286,052 m²)	

NX Horizon-XTR Benefits

- **30-90% less** tracker-related grading
- **Up to 36"** pile length reduction
- **Mitigate** schedule risk
- **Minimize** environmental impact
- Available with TrueCapture for **maximum energy yield**
- Field proven, **>2 GW** deployed

Case Study: 328 MW Solar Plant, Texas USA

Foundation Savings Scenario

Site Topography

NX Horizon-XTR Savings

- Foundation pile length reduction: 27" (68 cm)
- Total foundation weight reduction: 1,528,602 lbs (679,704 kg)

“NX Horizon-XTR's ability to follow terrain can significantly reduce earthwork, allowing these otherwise infeasible sites to become economically viable solar projects. Less earthwork means lower upfront costs and improved scheduling – and less environmental impact. XTR has allowed us to win more projects by making us more competitive in our project bids, while also lowering our impact on the environment.”

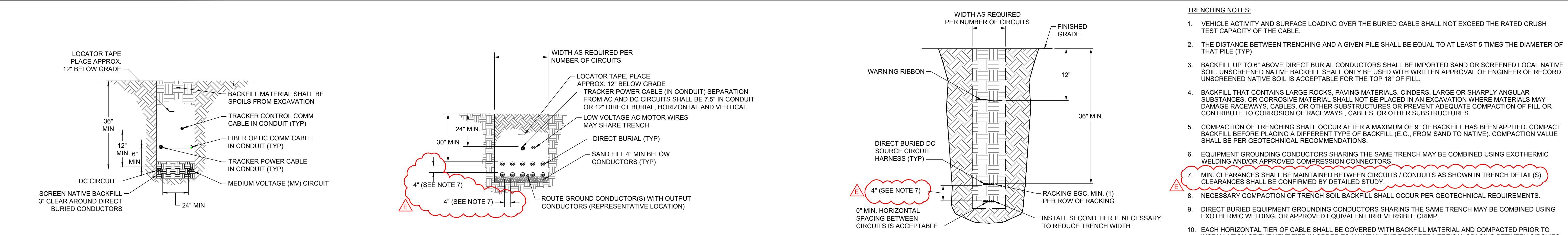
– **Denny Colclough,**
Vice President, **SEV Energy**

For further information or to request a quote, please reach out to insidesales@nextrackr.com

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6200 Paseo Padre Parkway | Fremont, CA 94555 | USA | +1 510 270 2500 | nextrackr.com

MKT-000000

 670 NORTH COMMERCIAL STREET SUITE 203 MANCHESTER, NH 03101							PROJECT NO: 443269							 DATE: 07-12-2024 LIC. EXP.: 09-30-2026		<u>JAK</u> DESIGNED <u>JAK</u> DRAWN <u>JTG</u> CHECKED <u>DVL</u> APPROVED MILL POINT SOLAR I PROJECT CONNECTING MONTGOMERY COUNTY LLC EQUIPMENT DATA SHEETS			
REV	DESCRIPTION					DATE	DES	CHK	APP	GLEN				NEW YORK					
E	ISSUED FOR 94-C DEFICIENCY SUPPLEMENT					07/12/24	JAK	JTG	DVL										
D	ISSUED FOR 94-C					04/26/24	JAK	JTG	DVL										
C	ISSUED FOR 94-C					01/15/24	JAK	JTG	DVL										
B	ISSUED FOR REVIEW					09/01/23	JAK	JTG	DVL										
										<u>REVIEW 1</u> <u>REVIEW 2</u> <u>07/12/24</u> DATE <u>AS NOTED</u> SCALE				MPS-E-406-01		REV. E			



A DC, AC, MV CIRCUITS AND TRACKER MOTOR AND CONTROL TRENCH DETAIL
SCALE: NTS

B LOW VOLTAGE (1500V AND UNDER) AC & DC TRENCH DETAIL
SCALE: NTS

C DC SOURCE CIRCUIT TRENCH SECTION
SCALE: NTS

- TRENCHING NOTES:
1. VEHICLE ACTIVITY AND SURFACE LOADING OVER THE BURIED CABLE SHALL NOT EXCEED THE RATED CRUSH TEST CAPACITY OF THE CABLE.
 2. THE DISTANCE BETWEEN TRENCHING AND A GIVEN PILE SHALL BE EQUAL TO AT LEAST 5 TIMES THE DIAMETER OF THAT PILE (TYP)
 3. BACKFILL UP TO 6" ABOVE DIRECT BURIAL CONDUCTORS SHALL BE IMPORTED SAND OR SCREENED LOCAL NATIVE SOIL. UNSCREENED NATIVE BACKFILL SHALL ONLY BE USED WITH WRITTEN APPROVAL OF ENGINEER OF RECORD. UNSCREENED NATIVE SOIL IS ACCEPTABLE FOR THE TOP 18" OF FILL.
 4. BACKFILL THAT CONTAINS LARGE ROCKS, PAVING MATERIALS, CINDERS, LARGE OR SHARPLY ANGULAR SUBSTANCES, OR CORROSIVE MATERIAL SHALL NOT BE PLACED IN AN EXCAVATION WHERE MATERIALS MAY DAMAGE RACEWAYS, CABLES, OR OTHER SUBSTRUCTURES OR PREVENT ADEQUATE COMPACTION OF FILL OR CONTRIBUTE TO CORROSION OF RACEWAYS, CABLES, OR OTHER SUBSTRUCTURES.
 5. COMPACTION OF TRENCHING SHALL OCCUR AFTER A MAXIMUM OF 9" OF BACKFILL HAS BEEN APPLIED. COMPACT BACKFILL BEFORE PLACING A DIFFERENT TYPE OF BACKFILL (E.G., FROM SAND TO NATIVE). COMPACTION VALUE SHALL BE PER GEOTECHNICAL RECOMMENDATIONS.
 6. EQUIPMENT GROUNDING CONDUCTORS SHARING THE SAME TRENCH MAY BE COMBINED USING EXOTHERMIC WELDING AND/OR APPROVED COMPRESSION CONNECTORS.
 7. MIN. CLEARANCES SHALL BE MAINTAINED BETWEEN CIRCUITS / CONDUITS AS SHOWN IN TRENCH DETAIL(S). CLEARANCES SHALL BE CONFIRMED BY DETAILED STUDY.
 8. NECESSARY COMPACTION OF TRENCH SOIL BACKFILL SHALL OCCUR PER GEOTECHNICAL REQUIREMENTS.
 9. DIRECT BURIED EQUIPMENT GROUNDING CONDUCTORS SHARING THE SAME TRENCH MAY BE COMBINED USING EXOTHERMIC WELDING, OR APPROVED EQUIVALENT IRREVERSIBLE CRIMP.
 10. EACH HORIZONTAL TIER OF CABLE SHALL BE COVERED WITH BACKFILL MATERIAL AND COMPACTED PRIOR TO INSTALLATION OF THE NEXT TIER IN ORDER TO MAINTAIN THE REQUIRED VERTICAL SPACING BETWEEN CIRCUITS.
 11. THE NUMBER OF CONDUITS / CIRCUITS SHOWN IS REPRESENTATIVE AND WILL VARY PER PLANS.
 12. FINISHED SURFACE SHALL BE RESTORED TO ORIGINAL CONDITION AND APPEARANCE.
 13. []" VERTICAL SEPARATION; []" HORIZONTAL SEPARATION. *[EDITORIAL NOTE: TRC ENGINEER TO DETERMINE MINIMUM SEPARATION DURING DETAILED DESIGN. INSERT VALUES AND REMOVE THIS EDITORIAL NOTE WHEN DONE.]*

D DC OUTPUT & DC SOURCE CIRCUIT TRENCH SECTION
SCALE: NTS

E DC OUTPUT CIRCUIT & MVAC CIRCUIT CROSSING
SCALE: NTS

PRELIMINARY
NOT FOR CONSTRUCTION



670 NORTH COMMERCIAL STREET SUITE 203
MANCHESTER, NH 03101

PROJECT NO: 443269

REFERENCE ITEMS	REV	DESCRIPTION	DATE	DES	CHK	APP
	E	ISSUED FOR 94-C DEFICIENCY SUPPLEMENT	07/12/24	JAK	JTG	DVL
	D	ISSUED FOR 94-C	04/26/24	JAK	JTG	DVL
	C	ISSUED FOR 94-C	01/15/24	JAK	JTG	DVL
	B	ISSUED FOR REVIEW	09/01/23	JAK	JTG	DVL



DATE: 07-12-2024
LIC. EXP.: 09-30-2026

JAK
DESIGNED

JAK
DRAWN

JTG
CHECKED

DVL
APPROVED

GLEN

NEW YORK

REVIEW 1

REVIEW 2

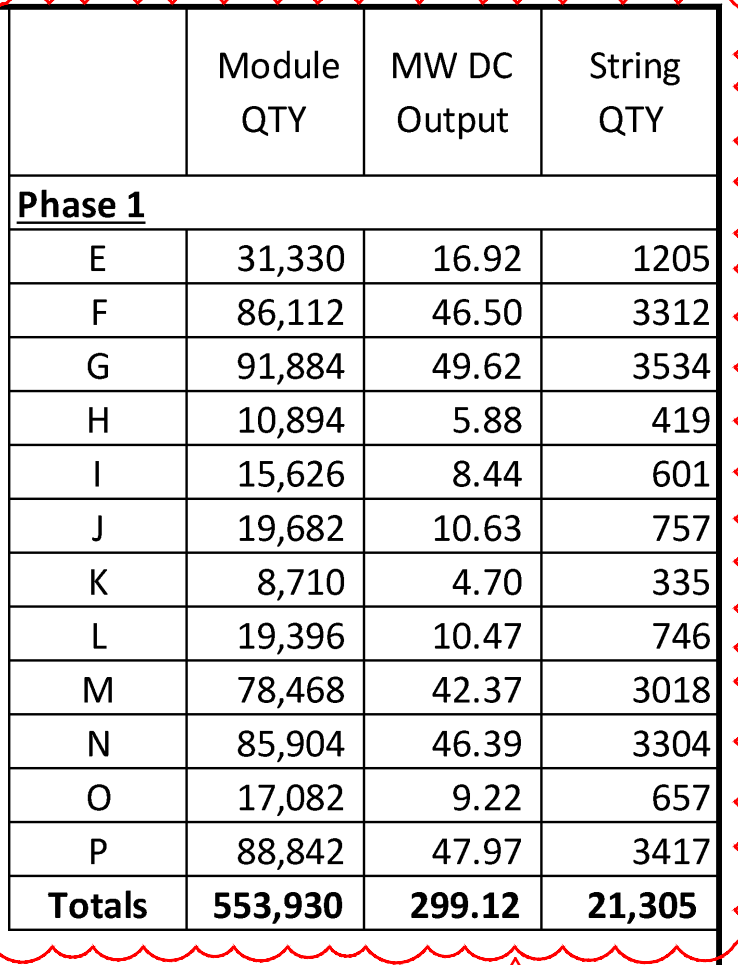
07/12/24
DATE

AS NOTED
SCALE



MPS-E-407-01

REV:
E

REV.
D

REFERENCE ITEMS		REV	DESCRIPTION	DATE	DES	CHK	APP
		D	ISSUED FOR 94-C DEFICIENCY SUPPLEMENT	06/11/24	JAK	JTG	DVL
		C	ISSUED FOR 94-C	01/15/24	JAK	JTG	DVL
		B	ISSUED FOR REVIEW	09/01/23	JAK	JTG	DVL
		A	ISSUED FOR REVIEW	08/11/23	JAK	JTG	DVL

MV AC CABLE SCHEDULE								
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	MIN CONDUIT SIZE	TOTAL CIRCUIT LENGTH
MV-01	SUBSTATION TO INV-N.05	368.17	22000	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	35602
	INV-N.05 TO INV-N.04	294.53	17600	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1614
	INV-N.04 TO INV-N.03	220.90	13200	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1060
	INV-N.03 TO INV-N.02	147.27	8800	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	824
	INV-N.02 TO INV-N.01	73.63	4400	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	711
							TOTAL VD:	
								2.21%

MV AC CABLE SCHEDULE								
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	MIN CONDUIT SIZE	TOTAL CIRCUIT LENGTH
MV-02	SUBSTATION TO INV-N.09	294.53	17600	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	34255
	INV-N.09 TO INV-N.08	220.90	13200	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1814
	INV-N.08 TO INV-N.07	147.27	8800	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1074
	INV-N.07 TO INV-N.06	73.63	4400	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1473
							TOTAL VD:	
								1.71%

MV AC CABLE SCHEDULE								
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	MIN CONDUIT SIZE	TOTAL CIRCUIT LENGTH
MV-03	SUBSTATION TO INV-L.01	294.53	17600	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	26916
	INV-L.01 TO INV-L.02	73.63	4400	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	634
	INV-L.01 TO INV-L.02	147.27	8800	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	6480
	INV-L.02 TO INV-L.01	73.63	4400	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	2545
							TOTAL VD:	
								0.54%

MV AC CABLE SCHEDULE								
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	MIN CONDUIT SIZE	TOTAL CIRCUIT LENGTH
MV-04	SUBSTATION TO INV-P.02	379.04	22650	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	18008
	INV-P.02 TO INV-P.03	73.63	4400	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1144
	INV-P.02 TO INV-P.01	231.78	13850	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1285
	INV-P.01 TO INV-J.01	158.14	9450	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	2657
	INV-J.01 TO INV-H.02	105.43	6300	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	2917
	INV-H.02 TO INV-H.01	52.71	3150	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	834
							TOTAL VD:	
								1.30%

MV AC CABLE SCHEDULE								
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	MIN CONDUIT SIZE	TOTAL CIRCUIT LENGTH
MV-05	SUBSTATION TO INV-P.08	368.17	22000	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	17575
	INV-P.08 TO INV-P.07	294.53	17600	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	3296
	INV-P.07 TO INV-P.06	220.90	13200	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	493
	INV-P.06 TO INV-P.05	147.27	8800	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	849
	INV-P.05 TO INV-P.04	73.63	4400	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1554
							TOTAL VD:	
								1.25%

MV AC CABLE SCHEDULE								
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	MIN CONDUIT SIZE	TOTAL CIRCUIT LENGTH
MV-06	SUBSTATION TO INV-M.04	368.17	22000	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	15304
	INV-M.04 TO INV-M.03	294.53	17600	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	793
	INV-M.03 TO INV-M.02	220.90	13200	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	983
	INV-M.02 TO INV-M.01	147.27	8800	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1028
	INV-M.01 TO INV-K.01	73.63	4400	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	2361
							TOTAL VD:	
								1.04%

MV AC CABLE SCHEDULE								
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	MIN CONDUIT SIZE	TOTAL CIRCUIT LENGTH
MV-07	SUBSTATION TO INV-M.09	368.17	22000	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	13567
	INV-M.09 TO INV-M.08	294.53	17600	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	895
	INV-M.08 TO INV-M.07	220.90	13200	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	910
	INV-M.07 TO INV-M.06	147.27	8800	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1213
	INV-M.06 TO INV-M.05	73.63	4400	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	842
							TOTAL VD:	
								0.93%

MV AC CABLE SCHEDULE								
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	MIN CONDUIT SIZE	TOTAL CIRCUIT LENGTH
MV-08	SUBSTATION TO INV-E.03	220.90	13200	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	12170
	INV-E.03 TO INV-E.02	147.27	8800	750 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	6.00"	643
	INV-E.02 TO INV-E.01	73.63	4400	750 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	6.00"	613
							TOTAL VD:	
								0.46%

MV AC CABLE SCHEDULE								
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	MIN CONDUIT SIZE	TOTAL CIRCUIT LENGTH
MV-09	SUBSTATION TO INV-F.05	368.17	22000	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	8494
	INV-F.05 TO INV-F.04	294.53	17600	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	780
	INV-F.04 TO INV-F.03	220.90	13200	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	935
	INV-F.03 TO INV-F.02	73.63	4400	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1109
	INV-F.03 TO INV-F.01	73.63	4400	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1864
							TOTAL VD:	
								0.62%

MV AC CABLE SCHEDULE								
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	MIN CONDUIT SIZE	TOTAL CIRCUIT LENGTH
MV-10	SUBSTATION TO INV-F.10	368.17	22000	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	4533
	INV-F.10 TO INV-F.09	294.53	17600	750 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1268
	INV-F.09 TO INV-F.08	220.90	13200	750 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	6.00"	1038
	INV-F.08 TO INV-F.07	147.27	8800	750 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	6.00"	951
	INV-F.07 TO INV-F.06	73.63	4400	750 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	6.00"	2717
							TOTAL VD:	
								0.48%

MV AC CABLE SCHEDULE								
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	MIN CONDUIT SIZE	TOTAL CIRCUIT LENGTH
MV-11	SUBSTATION TO INV-G.05	368.17	22000	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	7665
	INV-G.05 TO INV-G.04	294.53	17600	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1517
	INV-G.04 TO INV-G.03	220.90	13200	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1062
	INV-G.03 TO INV-G.02	147.27	8800	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1540
	INV-G.02 TO INV-G.01	73.63	4400	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	2280
							TOTAL VD:	
								0.65%

MV AC CABLE SCHEDULE								
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	MIN CONDUIT SIZE	TOTAL CIRCUIT LENGTH
MV-12	SUBSTATION TO INV-G.10	368.17	22000	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	8273
	INV-G.10 TO INV-G.09	294.53	17600	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1343
	INV-G.09 TO INV-G.07	220.90	13200	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	899
	INV-G.07 TO INV-G.08	73.63	4400	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1323
	INV-G.07 TO INV-G.06	73.63	4400	1000 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	1534
							TOTAL VD:	
								0.64%

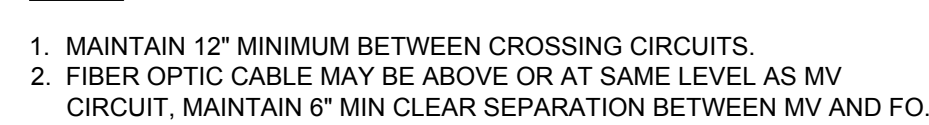
MV AC CABLE SCHEDULE								
CIRCUIT #	CIRCUIT LOCATION	LOAD CURRENT (A)	POWER PER CIRCUIT RUN (kW)	PHASE CONDUCTOR SIZE	WIRE TYPE	RACEWAY	MIN CONDUIT SIZE	TOTAL CIRCUIT LENGTH
MV-13	SUBSTATION TO INV-O.03	158.14	9450	1250 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	8.00"	2099
	INV-O.03 TO INV-O.02	105.43	6300	750 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	6.00"	2110
	INV-O.02 TO INV-O.01	52.71	3150	750 KCMIL	35kV TR-XLPE 100% MV-105, AL, 1/3N	DIRECT BURIED	6.00"	2350
							TOTAL VD:	
								0.13%

Average of Total VD of each circuit
0.92%

NOTES:

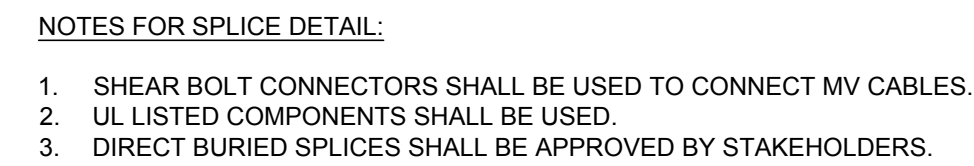
- SIZE OF CABLE MAY INCREASE AT CREEK CROSSING. DEPENDING ON DEPTH OF BORE. IF LARGER CABLE SIZE IS NOT AVAILABLE, TWO (2) PARALLEL SETS OF CABLE CAN BE USED PER CIRCUIT, AS NEEDED.
- ONE SET OF CABLES IS USED FOR EACH CIRCUIT, UNLESS NOTED OTHERWISE.

 670 NORTH COMMERCIAL STREET SUITE 203 MANCHESTER, NH 03101				PROJECT NO: 443269						JAK DESIGNED JAK DRAWN JTG CHECKED DVL APPROVED		MILL POINT SOLAR I PROJECT CONNECTGEN MONTGOMERY COUNTY LLC MV SINGLE LINE WIRE SCHEDULES		GLEN NEW YORK	
REFERENCE ITEMS				REV	DESCRIPTION	DATE	DES	CHK	APP	REVIEW 1 REVIEW 2		06/11/24 DATE AS NOTED SCALE	 MPS-E-601-02		REV. D
				D	ISSUED FOR 94-C DEFICIENCY SUPPLEMENT	06/11/24	JAK	JTG	DVL						
				C	ISSUED FOR 94-C	01/15/24	JAK	JTG	DVL						
				B	ISSUED FOR REVIEW	09/01/23	JAK	JTG	DVL						
				A	ISSUED FOR REVIEW	08/11/23	JAK	JTG	DVL						

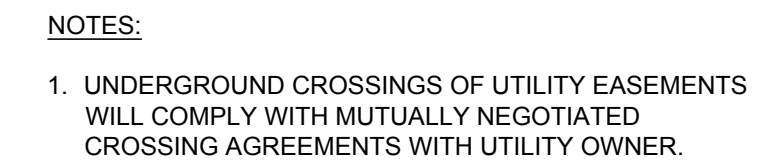


A MV & MV PERPENDICULAR TRENCHES
SCALE: NTS

B TYPICAL DIRECT BURY MV SEPARATION DETAIL
SCALE: NTS



C MV CABLE SPLICE DETAIL
SCALE: NTS

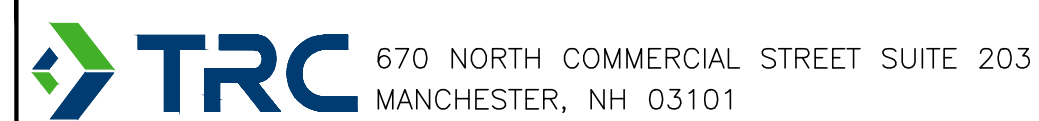


D MV DIRECTIONAL BORE / UTILITY CROSSING
SCALE: NTS

1. WIDTH OF TRENCH VARIES BY LOCATION & TOTAL NUMBER OF CIRCUITS.
2. NOT USED.
3. ALL EXPOSED ABOVE GROUND CONDUIT SHALL BE SCH. 80 PVC, UV RESISTANT.
4. NATIVE MATERIAL SHALL BE USED AS TRENCH BACKFILL, UNLESS OTHERWISE NOTED.
5. BACKFILL SHALL BE FREE OF MATERIALS THAT CAN DAMAGE THE CONDUIT / CABLES AND SHALL MATCH EXISTING SOIL THERMAL RESISTIVITY VALUE. ROCKS AND SHARP OBJECTS 3/8" OR MORE SHALL BE REMOVED FROM THE BACKFILL MATERIAL WITHIN 8" OF ANY CONDUIT / CABLES.
6. THE NUMBER OF CABLES AND SEPARATION SHOWN IS REPRESENTATIVE AND WILL VARY PER THE SITE TRENCHING PLAN.



		670 NORTH COMMERCIAL STREET SUITE 203 MANCHESTER, NH 03101		PROJECT NO: 443269			
REFERENCE	ITEMS	REV	DESCRIPTION	DATE	DES	CHK	AP
		D	ISSUED FOR 94--C DEFICIENCY SUPPLEMENT	06/11/24	JAK	JTG	DV
		C	ISSUED FOR 94--C	01/15/24	JAK	JTG	DV
		B	ISSUED FOR REVIEW	09/01/23	JAK	JTG	DV
		A	ISSUED FOR REVIEW	08/11/23	JAK	JTG	DV



JAK
DESIGNED

JAK
DRAWN

JTG
CHECKED

DVL
APPROVED

	REVIEW
	REVIEW

MILL POINT SOLAR I PROJECT
CONNECTGEN MONTGOMERY COUNTY LLC
TRENCH, BORE AND SECTIONALIZER DETAILS

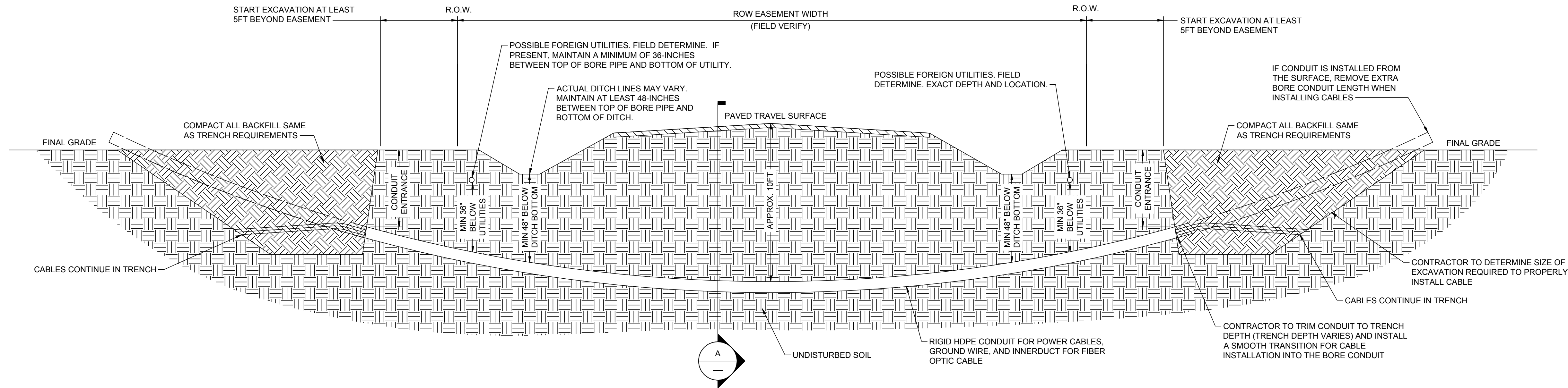
GLEN

NEW YORK

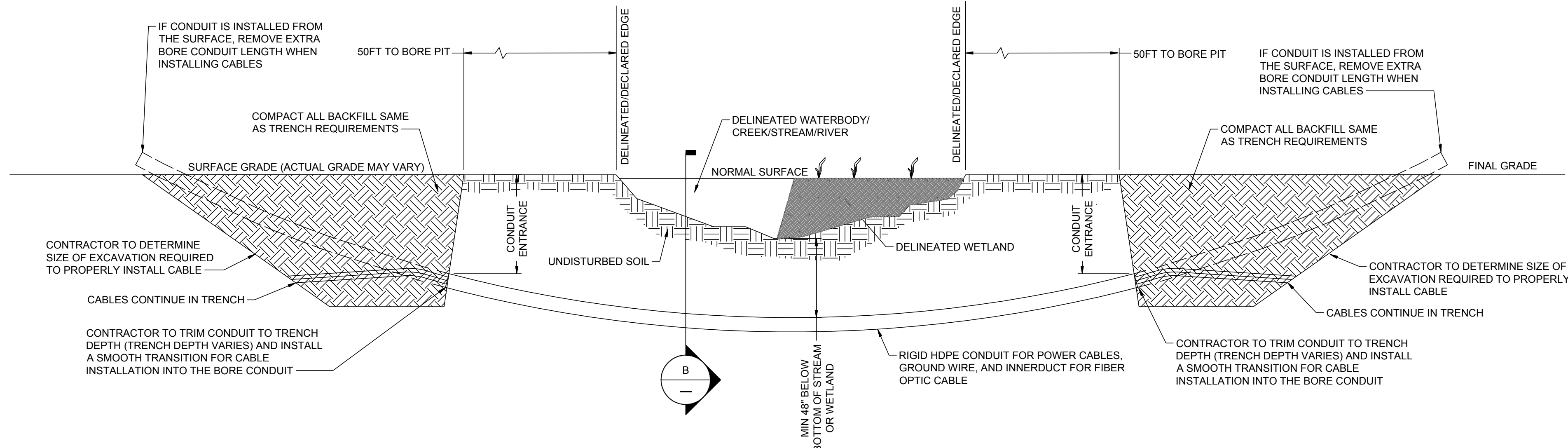


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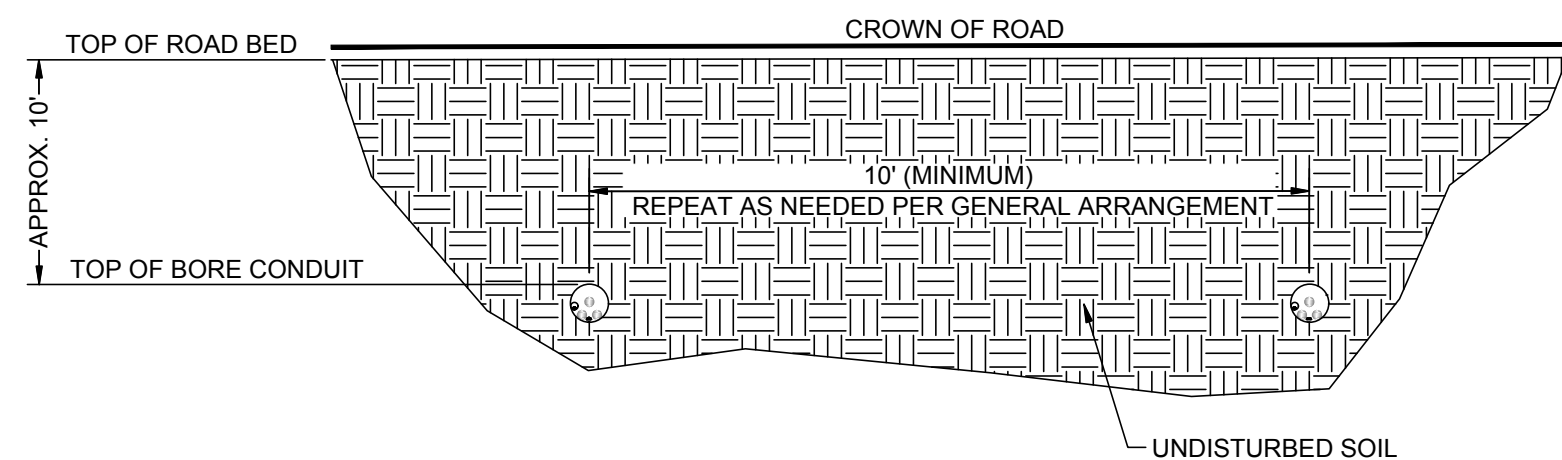
EV.



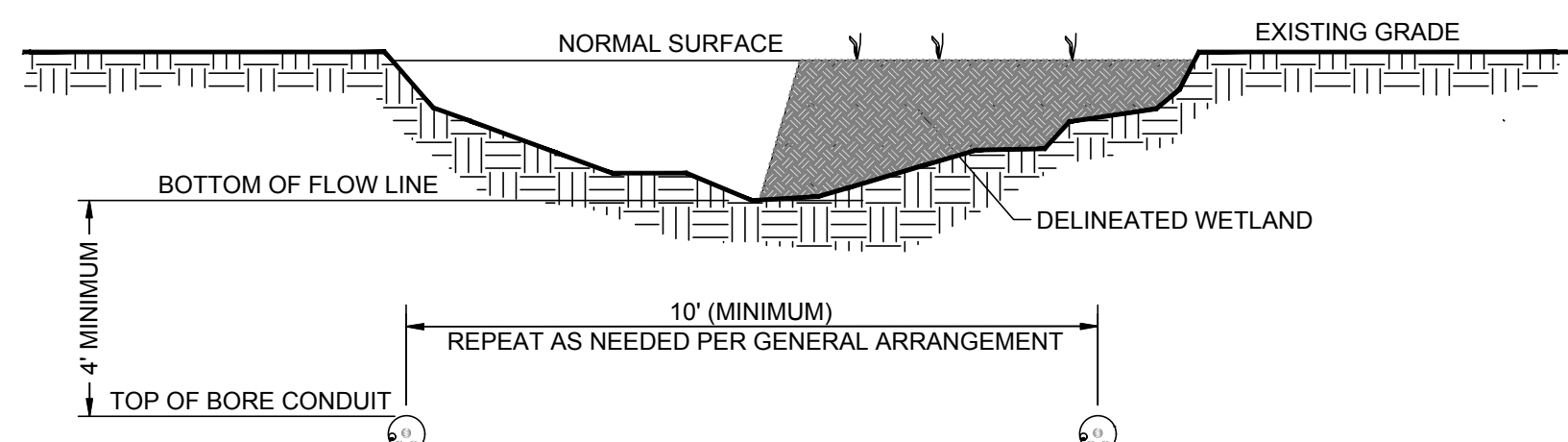
1 TYPICAL BORE SECTION UNDER LOCAL PAVED ROADS
SCALE: NTS



2 TYPICAL BORE SECTION UNDER DELINEATED WATER OR WETLAND
SCALE: NTS



A ROAD BORE SECTION
SCALE: NTS



B WATER / WETLAND BORE SECTION
SCALE: NTS

NOTES:

1. UNDERGROUND OR EXISTING UTILITIES MAY BE PRESENT WITHIN OR ADJACENT TO THE EXCAVATION AREA(S). CONTACT LOCAL "ONE CALL" UTILITY LOCATING SERVICE AT LEAST 48 HOURS PRIOR TO EXCAVATION. MAINTAIN LOCATION MARKS AS NEEDED UNTIL INSTALLATION IS COMPLETED.
2. CONTRACTOR SHALL COMPLY WITH ANY SPECIFIC AGREEMENTS AND PERMITS OBTAINED FOR EACH INSTALLATION.
3. ALL COUNTY ROAD CROSSINGS MUST MAINTAIN AT LEAST 36 INCHES UNDER ANY EXISTING UTILITIES, OR 48 INCHES UNDER THE CENTERLINE OF THE ROAD, OR 48 INCHES BELOW THE DITCH LINES, WHICHEVER IS DEEPER. VERIFY DEPTH REQUIRED WITH ENGINEER BEFORE CROSSING IS COMMENCED.
4. INSTALL ALL CABLES CROSSING UNDER COUNTY ROADS IN CONDUIT.
5. WHEN CROSSING LOCAL AND/OR COUNTY ROADS, ALL EXCAVATION WORK SHALL HAPPEN AT LEAST 5 FEET OUTSIDE THE ROAD EASEMENT, UNLESS APPROVED OTHERWISE BY THE AUTHORITY HAVING JURISDICTION. ANY DISTURBED PORTIONS OF THE ROADWAY OR ITS RIGHT-OF-WAY SHALL BE RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR.
6. ALL EXCAVATIONS FOR DRILLING, JACKING, RAMMING, BORING, RECEIVING, OR CABLE INSTALLATION SHALL BE BACKFILLED AND COMPACTED TO MATCH TRENCH BACKFILL AND COMPACTION REQUIREMENTS.
7. WHEN CROSSING DELINEATED SURFACE WATER, WETLAND, OR STREAM FEATURES, ALL EXCAVATION WORK SHALL HAPPEN NO CLOSER THAN 50FT BEYOND THE DESIGNATED EDGE OF SAID FEATURE. IF THIS SEPARATION IS NOT FEASIBLE, CONTRACTOR SHALL KEEP EXCAVATION AREA AS FAR AS POSSIBLE AND AS SMALL AS POSSIBLE TO SAFELY INSTALL CONDUIT AND/OR CABLE.
8. IF NEEDED TO MAINTAIN CABLE INSTALLATION REQUIREMENTS, A SPLICE MAY BE INSTALLED AT OR NEAR THE CONDUIT ENTRANCE. DO NOT ALLOW THE SPLICE TO ENTER THE CONDUIT.

PRELIMINARY
NOT FOR CONSTRUCTION



670 NORTH COMMERCIAL STREET SUITE 203
MANCHESTER, NH 03101

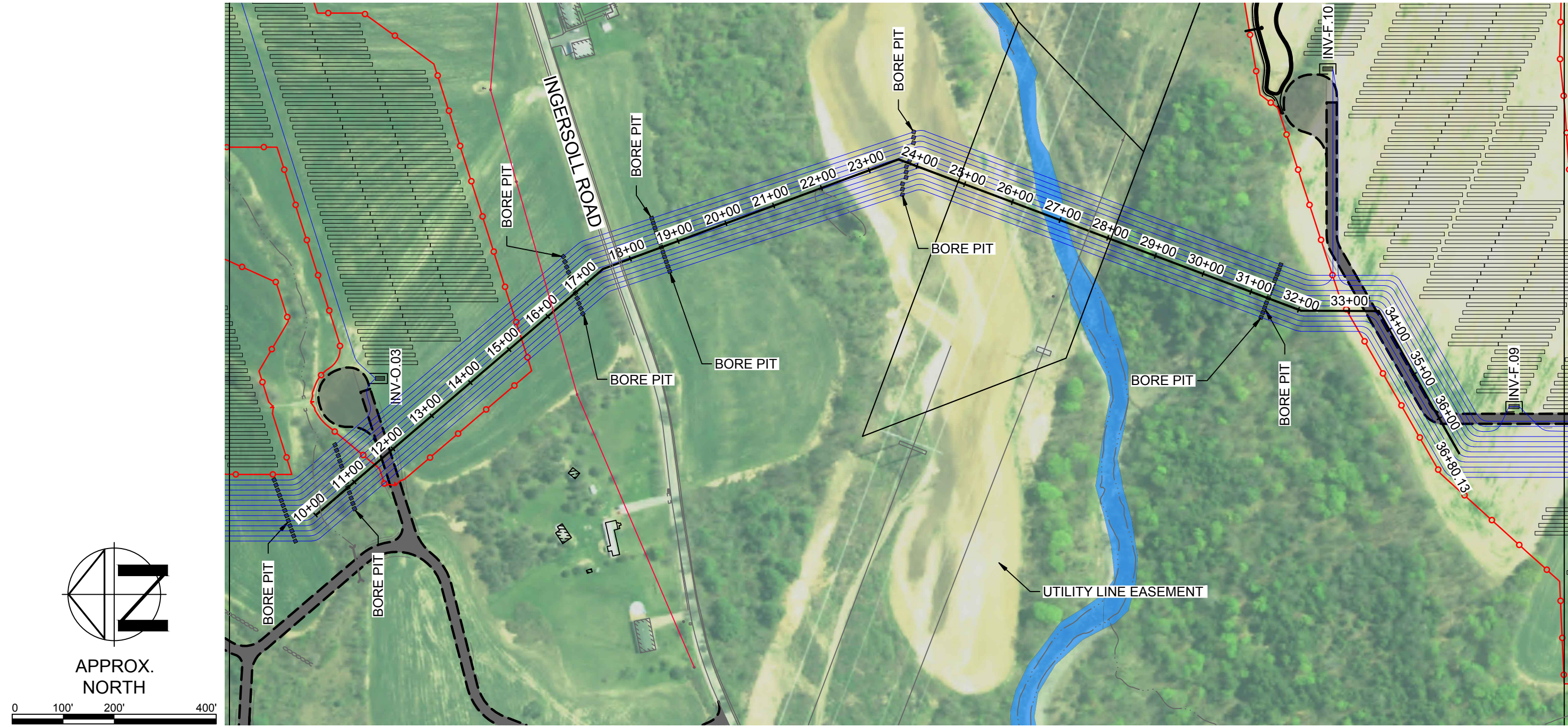
PROJECT NO: 443269

REFERENCE ITEMS	REV	DESCRIPTION	DATE	DES	CHK	APP
	D	ISSUED FOR 94-C DEFICIENCY SUPPLEMENT	06/11/24	JAK	JTG	DVL
	C	ISSUED FOR 94-C	01/15/24	JAK	JTG	DVL
	B	ISSUED FOR REVIEW	09/01/23	JAK	JTG	DVL
	A	ISSUED FOR REVIEW	08/11/23	JAK	JTG	DVL



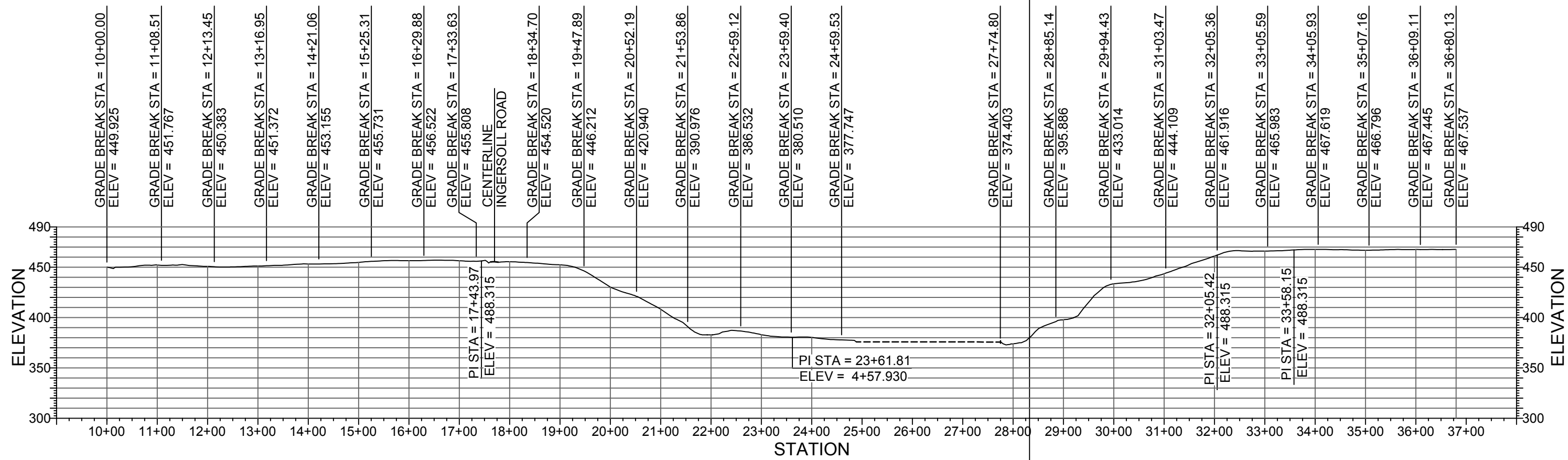
JAK DESIGNED
JAK DRAWN
JTG CHECKED
DVL APPROVED
REVIEW 1
REVIEW 2

MILL POINT SOLAR I PROJECT CONNECTGEN MONTGOMERY COUNTY LLC DIRECTIONAL BORE DETAILS		GLEN		NEW YORK	
DATE: 06-28-2024 LIC. EXP.: 09-30-2026	06/11/24 DATE AS NOTED SCALE	TRC	MPS-E-602-02	REV. D	

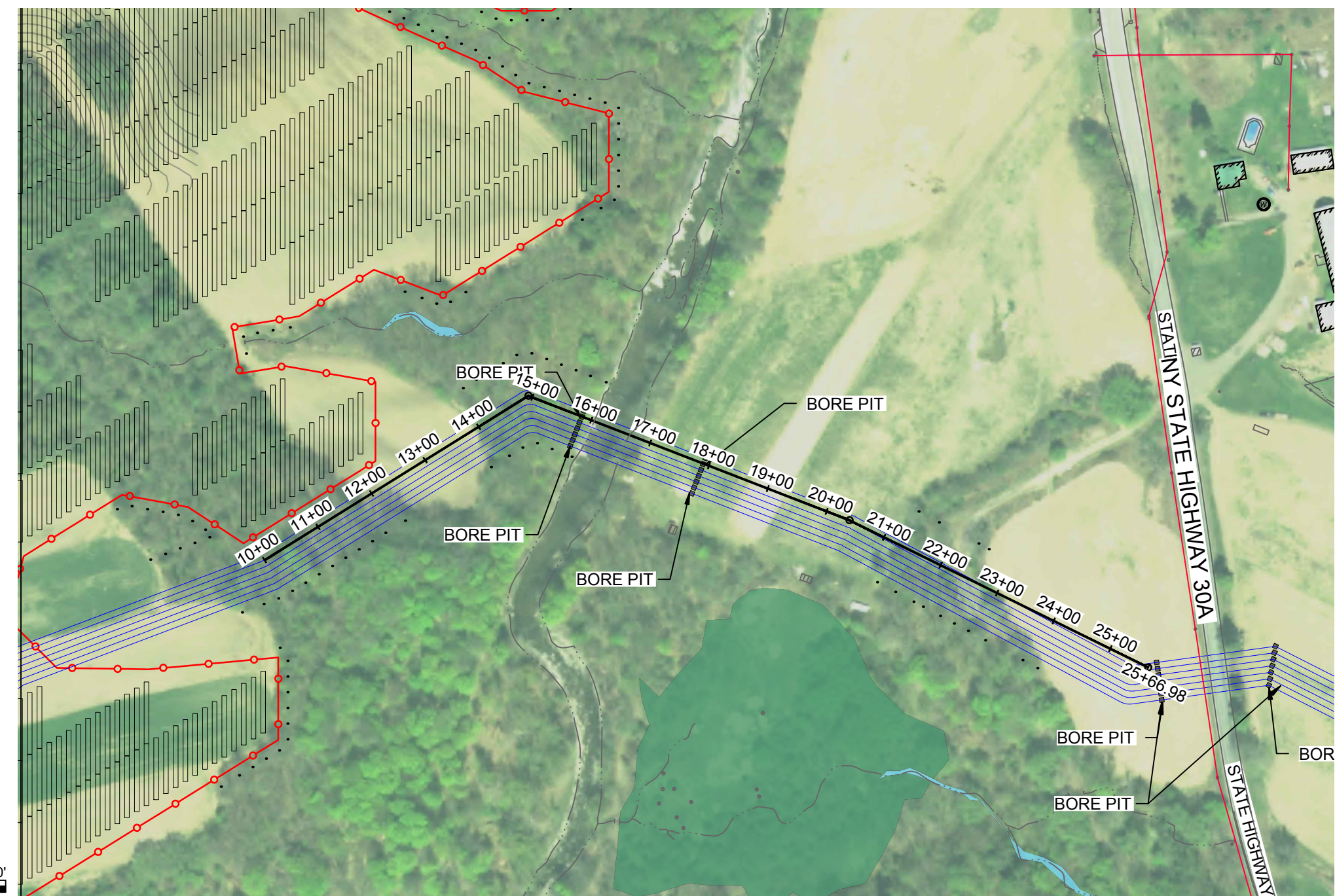


A PLAN - CREEK CROSSING 1 (NEAR SUBSTATION)
SCALE: 1" = 200'

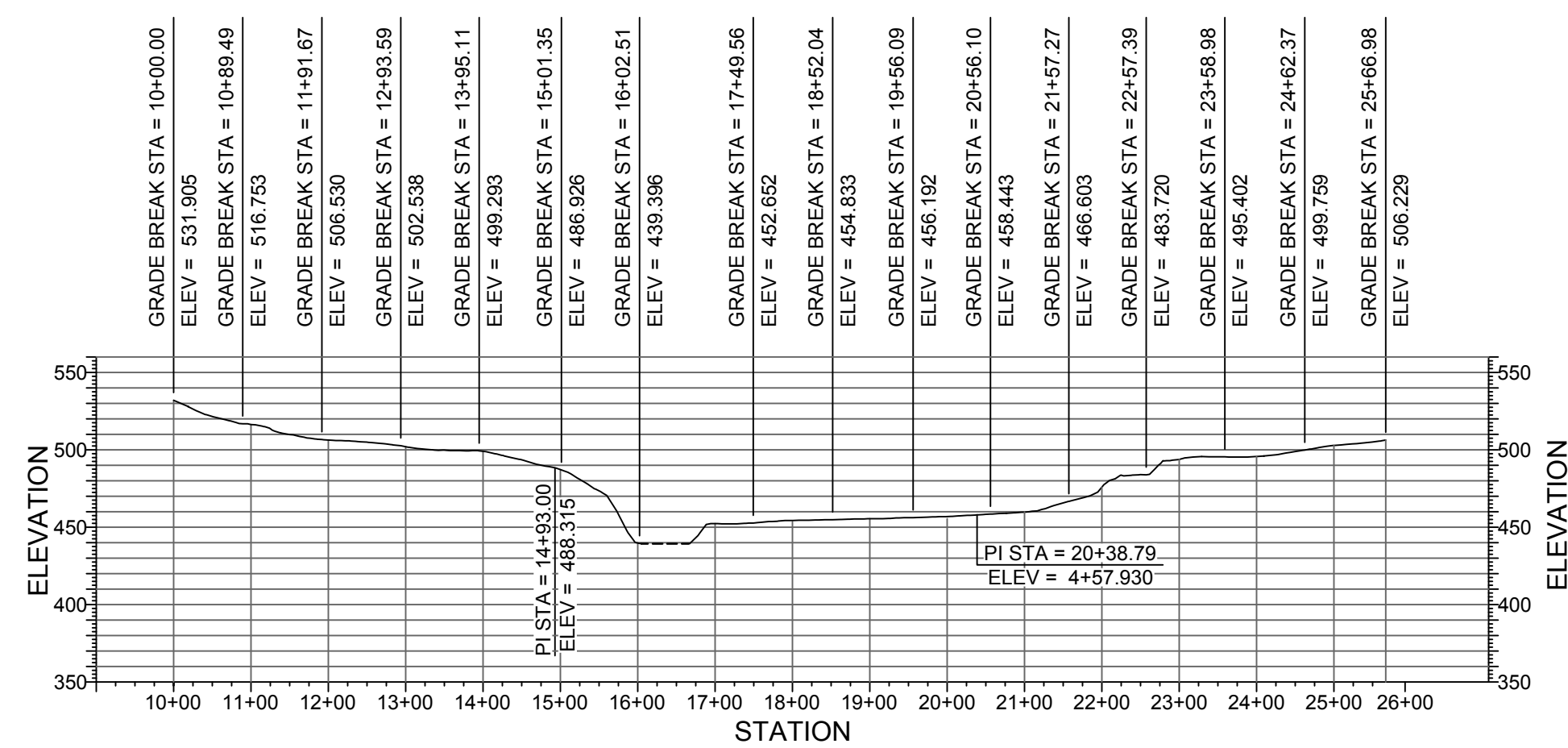
NOTES:
1. THE MV CABLES SHALL CROSS THE NATIONAL GRID EASEMENT PERPENDICULARLY AND AS A CONSEQUENCE IT WILL HAVE TO CROSS THE CREEK AT AN ANGLE, AS SHOWN HERE.



B PROFILE - CREEK CROSSING 1 (NEAR SUBSTATION)
SCALE: 1" = 200' HORIZ
1" = 100' VERT



C PLAN - CREEK CROSSING 2 (NEAR NY STATE ROUTE 30A)
SCALE: 1" = 200'



D PROFILE - CREEK CROSSING 2 (NEAR NY STATE ROUTE 30A)
SCALE: 1" = 200' HORIZ
1" = 100' VERT

LEGEND

	WETLAND (USACE)
	WETLAND (NYDEC)
	WETLAND (ISOLATED)
	SURFACE WATER (USACE)
	SURFACE WATER (NYDEC)
	PANEL EXCLUSION AREA (PEA)
	SINGLE AXIS TRACKER
	INVERTER
	MV ROUTING
	UTILITY EASEMENT
	OVERHEAD UTILITY
	BORE PIT
	FENCE

PRELIMINARY
NOT FOR CONSTRUCTION

 670 NORTH COMMERCIAL STREET SUITE 203 MANCHESTER, NH 03101						PROJECT NO: 443269						 DATE: 06-28-2024 LIC. EXP.: 09-30-2026	JAK DESIGNED JAK DRAWN JTG CHECKED DVL APPROVED		MILL POINT SOLAR I PROJECT CONNECTGEN MONTGOMERY COUNTY LLC PLAN & PROFILES			
REV	DESCRIPTION					DATE	DES	CHK	APP	GLEN	NEW YORK							
D	ISSUED FOR 94-C DEFICIENCY SUPPLEMENT					06/11/24	JAK	JTG	DVL	 MPS-E-603-01	 DATE: 06/11/24 AS NOTED SCALE		REV. D					
C	ISSUED FOR 94-C					01/15/24	JAK	JTG	DVL									
B	ISSUED FOR REVIEW					09/01/23	JAK	JTG	DVL									
A	ISSUED FOR REVIEW					08/11/23	JAK	JTG	DVL									