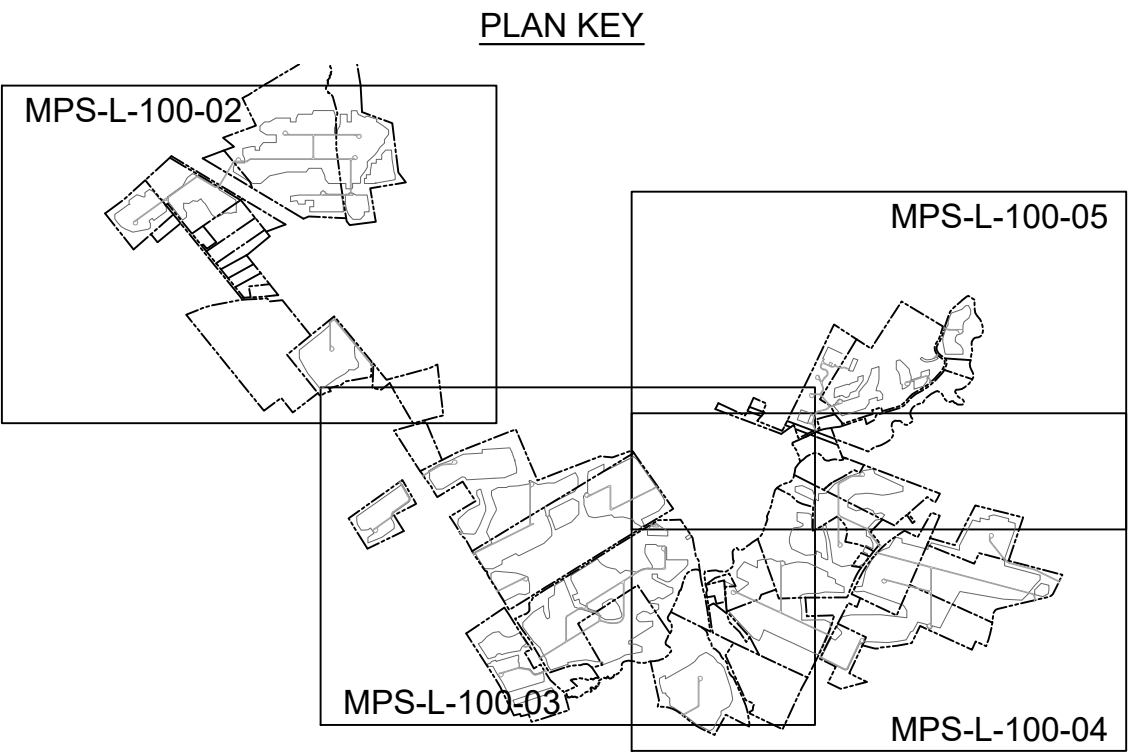


TYPICAL SCREENING: TYPE A PLANTINGS - MIX OF NATIVE EVERGREEN TREES, DECIDUOUS TREES, AND DECIDUOUS SHRUBS ARRANGED TO FORM A NATURAL APPEARANCE AND CONTINUOUS SCREEN. SEE PLANTING TEMPLATE "TYPE A" FOR ADDITIONAL INFORMATION.

SUPPLEMENTAL SCREENING: TYPE B PLANTINGS - MIX OF NATIVE EVERGREEN TREES, DECIDUOUS TREES, AND DECIDUOUS SHRUBS ARRANGED TO FORM A NATURAL APPEARANCE AND FILTERED VEGETATIVE SCREEN. SEE PLANTING TEMPLATE "TYPE B" FOR ADDITIONAL INFORMATION.

NATURALIZED AREAS: SCREENING TYPE C - MIX OF POLLINATOR PLANT SPECIES APPLIED AND LEFT UNMOWED TO ALLOW FOR SUCCESSIONAL GROWTH WHICH WILL FORM A NATURAL APPEARANCE AND VEGETATIVE SCREEN OVERTIME. SEE PLANTING TEMPLATE "TYPE C" FOR ADDITIONAL INFORMATION.

EXISTING VEGETATION: SEE BACKUP SCREENING SHOWN IN PLANTING TEMPLATE TYPE A & B FOR ADDITIONAL PLANTING INSTRUCTIONS.

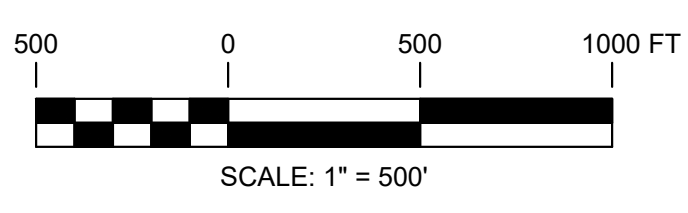


EXISTING	LEGEND	PROPOSED
---	PROPERTY BOUNDARY	---
---	94C SETBACK	---
---	NATURAL RESOURCE BUFFER	---
█	WETLAND (USACE)	---
█	WETLAND (NYDEC)	---
█	WETLAND (ISOLATED)	---
█	SURFACE WATER (USACE)	---
█	SURFACE WATER (NYDEC)	---
█	PANEL EXCLUSION AREA	---
---	FENCE	---
---	STREAM (USACE)	---
---	STREAM (NYDEC)	---
---	TRACKER ARRAY	---
---	ACCESS ROAD	---
---	MEDIUM VOLTAGE ROUTE	---
---	TYPICAL SCREENING	TYPE A
---	SUPPLEMENTAL SCREENING	TYPE B
---	NATURALIZED AREA SCREENING	TYPE C
---	EXISTING VEGETATION SCREENING	---

NOTE:
SOME EXISTING VEGETATION SCREENING MODULES REPRESENTED ON THE PLANS MAY NOT DEPICT EXISTING VEGETATION DIRECTLY ALONG THE FACILITY FENCE LINE AS INDICATED ON THE PLAN SHEET BUT OFFSET ADJACENT EXISTING VEGETATION SERVES AS SCREENING FOR PROPOSED FACILITY COMPONENTS. AS WITH THE NATURALIZED SCREENING MODULE, THESE DESIGNATED AREAS WILL BE SEEDED AND SHALL NOT BE MOWED, SO THAT THEY CAN SUSTAIN SUCCESSIONAL GROWTH TO PROVIDE ADDITIONAL SCREENING OF THE FACILITY. EXISTING VEGETATION AREAS ARE TO BE REVIEWED AND DETERMINED IN THE FIELD DURING CONSTRUCTION. IF WARRANTED, SEE TYPE A AND TYPE B VISUAL MITIGATION TEMPLATES (SHEETS MPS-L-103-01 & MPS-L-103-09) FOR BACKUP QUANTITIES IF EXISTING VEGETATION DOES NOT PROVIDE SUFFICIENT SCREENING.



PRELIMINARY
NOT FOR CONSTRUCTION



		249 Western Avenue Augusta, ME 04330		PROJECT NO: 443269		
REV	DESCRIPTION	DATE	DES	CHK	APP	
-	-	-	-	-	-	
B	ISSUED FOR 94-C DEFICIENCY SUPPLEMENT	05/31/2024	GMT	MJR	PMM	
A	ISSUED FOR 94-C	01/15/2024	GMT	MJR	PMM	

GMT DESIGNED GMT DRAWN MJR CHECKED PMM APPROVED	MILL POINT SOLAR I PROJECT CONNECTGEN MONTGOMERY COUNTY LLC OVERALL LANDSCAPE PLAN		GLEN NEW YORK
REVIEW 1 REVIEW 2	01/15/2024 DATE 1" = 500'-0" SCALE		MPS-L-100-05 REV. B

GENERAL LANDSCAPE AND SEEDING NOTES

- THE LANDSCAPE PLAN AND DETAILS ARE FOR LANDSCAPING INFORMATION ONLY. PLEASE REFER TO THE SITE LAYOUT PLAN, GRADING PLAN AND/OR UTILITIES PLAN FOR ALL OTHER INFORMATION.
- PER NYCRR § 900-6.4(L)(3) PLANT SURVIVAL: THE PERMITTEE SHALL RETAIN A QUALIFIED LANDSCAPE ARCHITECT, ARBORIST, OR ECOLOGIST TO INSPECT THE SCREEN PLANTINGS FOR TWO (2) YEARS FOLLOWING INSTALLATION TO IDENTIFY ANY PLANT MATERIAL THAT DID NOT SURVIVE, APPEARS UNHEALTHY, AND/OR OTHERWISE NEEDS TO BE REPLACED. THE PERMITTEE'S LANDSCAPE CONTRACTOR SHALL REMOVE AND REPLACE PLANTINGS THAT FALL IN MATERIALS, WORKMANSHIP OR GROWTH WITHIN TWO (2) YEARS FOLLOWING THE COMPLETION OF INSTALLING THE PLANTINGS. DURING THIS TIMEFRAME, THE LANDSCAPE CONTRACTOR SHALL GUARANTEE THAT ALL PLANTS, TREES, AND SHRUBS SHALL BE HEALTHY AND FREE OF DISEASE FOR A PERIOD OF (2) TWO YEARS AFTER SUBSTANTIAL COMPLETION AND ACCEPTANCE BY THE OWNER. THE LANDSCAPE CONTRACTOR SHALL REMOVE AND REPLACE ANY DEAD OR UNHEALTHY PLANTS AT THE CONTRACTOR'S EXPENSE. FINAL ACCEPTANCE SHALL BE MADE IF ALL PLANTS MEET THE GUARANTEE REQUIREMENTS INCLUDING MAINTENANCE. MAINTENANCE RESPONSIBILITIES INCLUDE INVASIVE SPECIES MONITORING, REMOVAL, AND SUPPLEMENTATION. MONITORING OF THE PROJECT SITE BY THE PERMITTEE'S CONSULTANT SHALL OCCUR IN THE SPRING AND THE FALL TO DETERMINE THE PLANT HEALTH AND ANY PRESENCE OF INVASIVE SPECIES. SHOULD ANY INVASIVE SPECIES BE IDENTIFIED WITHIN THE PROJECT SITE, THE LANDSCAPE CONTRACTOR SHALL REMOVE THE INVASIVE SPECIES IN ACCORDANCE WITH METHODS MOST LIKELY TO BE EFFECTIVE IN CONTROLLING THAT SPECIES AND SUPPLEMENTING ITS REPLACEMENT WITH APPROPRIATE VEGETATION AND SEED MIX IDENTIFIED (AND APPROVED) ON THIS PLAN AND/OR AN APPROVED EQUAL. ADDITIONAL MAINTENANCE RESPONSIBILITIES INCLUDE: APPROVED CULTIVATING, SPRAYING, WEEDING, WATERING, TIGHTENING OF TREE STRAP GUYS, PRUNING, FERTILIZING, MULCHING, AND ANY OTHER OPERATIONS NECESSARY TO MAINTAIN PLANT VIABILITY. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING AND CONTINUE UNTIL 90 DAYS AFTER FINAL ACCEPTANCE. WATERING OF THE LANDSCAPE BUFFER AREAS SHALL BE IMPLEMENTED BY THE USE OF A WATERING TRUCK.
- THE CONTRACTOR SHALL SUPPLY ALL LABOR, PLANTS, APPROVED SEEDING MIX, AND MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE WORK SHOWN ON THE DRAWING(S) AND LISTED IN THE PLANT SCHEDULE(S) AND/OR SEEDING TABLE(S). IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN IN THE PLANT SCHEDULE AND/OR SEEDING TABLE AND THOSE REQUIRED BY THE DRAWINGS, THE LARGER SHALL APPLY. ALL PLANTS SHALL BE ACCLIMATED BY THE SUPPLY NURSERY TO THE LOCAL HARDINESS ZONE AND BE CERTIFIED THAT THE PLANTING MATERIAL HAS BEEN GROWN FOR A MINIMUM OF (2) TWO YEARS AT THE SOURCE.
- THE LOCATIONS FOR PLANT MATERIAL ARE APPROXIMATE AND ARE SUBJECT TO FIELD ADJUSTMENT DUE TO SLOPE, VEGETATION, AND SITE FACTORS SUCH AS THE LOCATION OF ROCK OUTCROPS. PRIOR TO PLANTING THE CONTRACTOR SHALL ACCURATELY STAKE OUT THE LOCATIONS FOR ALL PLANTS. THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, OR LANDSCAPE ARCHITECT SHALL APPROVE THE FIELD LOCATIONS OR ADJUSTMENTS OF THE PLANT MATERIAL.
- ALL SHRUB MASSING AREAS SHALL BE MULCHED TO A DEPTH OF 2" WITH SHREDDED HARDWOOD BARK MULCH.
- NO PLANT SHALL BE PLACED IN THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, OR LANDSCAPE CONTRACTOR. STAKING THE LOCATION OF ALL TREES AND SHRUBS SHALL BE COMPLETED PRIOR TO PLANTING FOR APPROVAL BY THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, OR LANDSCAPE ARCHITECT. STAKING OF THE INSTALLED TREE MUST BE COMPLETED THE SAME DAY AS IT IS INSTALLED. ALL TREES SHALL BE STAKED OR GUYED AS PER THE DETAIL. SEE LANDSCAPING PLAN(S) FOR PLANTING DETAILS.
- COORDINATE PLANT MATERIAL LOCATIONS WITH SITE UTILITIES. SEE SITE LAYOUT, GRADING AND/OR UTILITY PLANS FOR STORM, SANITARY, GAS, ELECTRIC, TELEPHONE AND WATER LINES. UTILITY LOCATIONS ARE APPROXIMATE. EXERCISE CARE WHEN DIGGING IN AREAS OF POTENTIAL CONFLICT WITH UNDERGROUND OR OVERHEAD UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DUE TO CONTRACTOR'S NEGLIGENCE AND SHALL REPLACE OR REPAIR ANY DAMAGE AT CONTRACTOR'S EXPENSE.
- LANDSCAPE PLANTING PITS MUST BE FREE DRAINING. PAVEMENT, COMPACTED SUBGRADE, AND BLASTED ROCK SHALL BE REMOVED TO A DEPTH OF 2' OR TO A GREATER DEPTH IF REQUIRED BY PLANTING DETAILS OR SPECIFICATIONS. REPLACE SOIL WITH MODERATELY COMPACTED LOAM OR SANDY LOAM FREE FROM STONES AND RUBBISH 1" OR GREATER IN DIAMETER AND ANY OTHER MATERIAL HARMFUL TO PLANT GROWTH AND DEVELOPMENT. PLANTING INSTALLATION SHALL BE AS DETAILED AND CONTAIN PLANTING MIX AS SPECIFIED UNLESS OTHERWISE RECOMMENDED OTHERWISE BY SOIL ANALYSIS.

PLANTING SOIL MIXTURE:

- 2 PARTS PEAT MOSS
- 5 PARTS TOPSOIL

MYCORRHIZA INOCULANT - "TRANSPANT 1-STEP" AS MANUFACTURED BY ROOTS, INC. OR APPROVED EQUAL. USE PER MANUFACTURER'S RECOMMENDATIONS FOR TREES AND SHRUBS. FERTILIZER/LIME APPLY AS RECOMMENDED BY SOIL ANALYSIS

- TREES, AND SHRUBS: TREES AND SHRUBS SHALL BE NURSERY GROWN UNLESS OTHERWISE NOTED AND HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCATION OF THE PROJECT. THEY SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY, WITH NORMAL HABIT OF GROWTH. THEY SHALL BE SOUND, HEALTHY, VIGOROUS, WELL-BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS OR LARVAE. THEY SHALL HAVE HEALTHY AND WELL-DEVELOPED ROOT SYSTEMS. ALL TREES SHALL HAVE STRAIGHT SINGLE TRUNKS WITH THEIR MAIN LEADER INTACT. THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, LANDSCAPE ARCHITECT SHALL ONLY PERMIT SUBSTITUTIONS UPON WRITTEN APPROVAL. THEIR SIZES SHALL CONFORM TO THE MEASUREMENT SPECIFIED ON THE DRAWINGS. PLANTS LARGER THAN SPECIFIED ON THE DRAWINGS MAY BE USED IF APPROVED. THE USE OF SUCH PLANTS SHALL NOT INCREASE THE CONTRACT PRICE. ALL TREES AND SHRUBS SHALL BE MULCHED IN ACCORDANCE WITH THE RESPECTIVE PLANTING DETAIL(S) PROVIDED IN THE LANDSCAPING PLAN.
- ALL PRUNING SHALL CONFORM TO THE TREE CARE INDUSTRY ASSOCIATION (TCIA) ANSI A300 (PART 1) - 2017 PRUNING STANDARDS. PRUNING STANDARDS SHALL RECOGNIZE BUT, ARE NOT LIMITED TO, THE FOLLOWING PRUNING OBJECTIVES: MANAGE RISK, MANAGE HEALTH, DEVELOP STRUCTURE, PROVIDE CLEARANCE, MANAGE SIZE OR SHAPE, IMPROVE AESTHETICS, MANAGE PRODUCTION OF FRUIT, FLOWERS, OR OTHER PRODUCTS, AND/OR MANAGE WILDLIFE HABITAT. DEVELOPING STRUCTURE SHALL IMPROVE BRANCH AND TRUNK ARCHITECTURE, PROMOTE OR SUBORDINATE CERTAIN LEADERS, STEMS, OR BRANCHES; PROMOTE DESIRABLE BRANCH SPACING; PROMOTE OR DISCOURAGE GROWTH IN A PARTICULAR DIRECTION (DIRECTIONAL PRUNING); MINIMIZE FUTURE INTERFERENCE WITH TRAFFIC, LINES OF SIGHT, INFRASTRUCTURE, OR OTHER PLANTS; RESTORE PLANTS FOLLOWING DAMAGE; AND/OR REJUVENATE SHRUBS. PROVIDING CLEARANCE SHALL ENSURE SAFE AND RELIABLE UTILITY SERVICES; MINIMIZE CURRENT INTERFERENCE WITH TRAFFIC, LINES OF SITE, INFRASTRUCTURE, OR OTHER PLANTS; RAISE CROWN(S) FOR MOVEMENT OF TRAFFIC OR LIGHT PENETRATION; ENSURE LINES OF SIGHT OR DESIRED VIEWS; PROVIDE ACCESS TO SITES, BUILDINGS, OR OTHER STRUCTURES; AND/OR COMPLY WITH REGULATIONS.
- TOPSOIL SHALL BE INSTALLED AT A MINIMUM DEPTH OF 4 INCHES. CONTRACTOR SHALL SUBMIT TOPSOIL TO A CERTIFIED TESTING LABORATORY TO DETERMINE PH, FERTILITY, ORGANIC CONTENT AND MECHANICAL COMPOSITION. THE CONTRACTOR SHALL SUBMIT THE TEST RESULTS FROM REGIONAL EXTENSION OFFICE OF USDA TO THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, OR LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTOR SHALL INCORPORATE AMENDMENTS FOR GOOD PLANT GROWTH AND PROPER SOIL ACIDITY RECOMMENDED FROM THE TOPSOIL TEST.
- NO PHOSPHOROUS SHALL BE USED AT PLANTING TIME UNLESS SOIL TESTING HAS BEEN COMPLETED AND TESTED BY A HORTICULTURAL TESTING LAB AND SOIL TESTS SPECIFICALLY INDICATE A PHOSPHOROUS DEFICIENCY THAT IS HARMFUL, OR WILL PREVENT NEW LAWNS/GRASSES AND PLANTINGS FROM ESTABLISHING PROPERLY.
- IF SOIL TESTS INDICATE A PHOSPHOROUS DEFICIENCY THAT WILL IMPACT PLANT AND LAWN ESTABLISHMENT, PHOSPHOROUS SHALL BE APPLIED AT THE MINIMUM RECOMMENDED LEVEL PRESCRIBED IN THE SOIL TEST FOLLOWING ALL APPLICABLE STANDARDS, REQUIREMENTS, AND/OR REGULATIONS.
- ALL SLOPES GREATER THAN 3:1 RECEIVING A WILDFLOWER, WETLAND, AND/OR GRASS SEEDING MIXTURE SHALL BE COVERED BY EROSION CONTROL BLANKET.
- ALL WILDFLOWERS AND GRASSES SOWN SHALL BE ALLOWED TO GROW TO THEIR NATURALLY OCCURRING HEIGHTS WHENEVER POSSIBLE. NATIVE WILDFLOWERS AND/OR GRASSES CAN BE MOWED/MAINTAINED (WITHIN ACCEPTABLE AREAS IDENTIFIED AND/OR APPROVED BY APPROPRIATE REGULATORY AGENCIES) AS OFTEN AS NEEDED TO KEEP THE VEGETATION AT A DESIRED AND/OR MANAGEABLE/MANICURED HEIGHT.
- NON-NATIVE PLANT SPECIES SHALL NOT TOTAL MORE THAN 50% OF ALL PLANTINGS. INVASIVE SPECIES SHALL NOT BE PERMITTED.
- PLANT MATERIALS SHALL NOT INCLUDE MORE THAN 25% OF ANY SINGLE SPECIES. THE PLANTINGS SHALL INCLUDE A MIX OF EVERGREEN AND DECIDUOUS TREES, UNDERSTORY TREES, SHRUBS, AND FLOWERING HERBACEOUS LAYER.
- ALL PLANT MATERIAL SHALL CONFORM TO THE PLAN SIZE SPECIFICATIONS AS ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK LATEST EDITION.
- BLASTING AND THE USE OF EXPLOSIVE MATERIALS IS STRICTLY PROHIBITED.

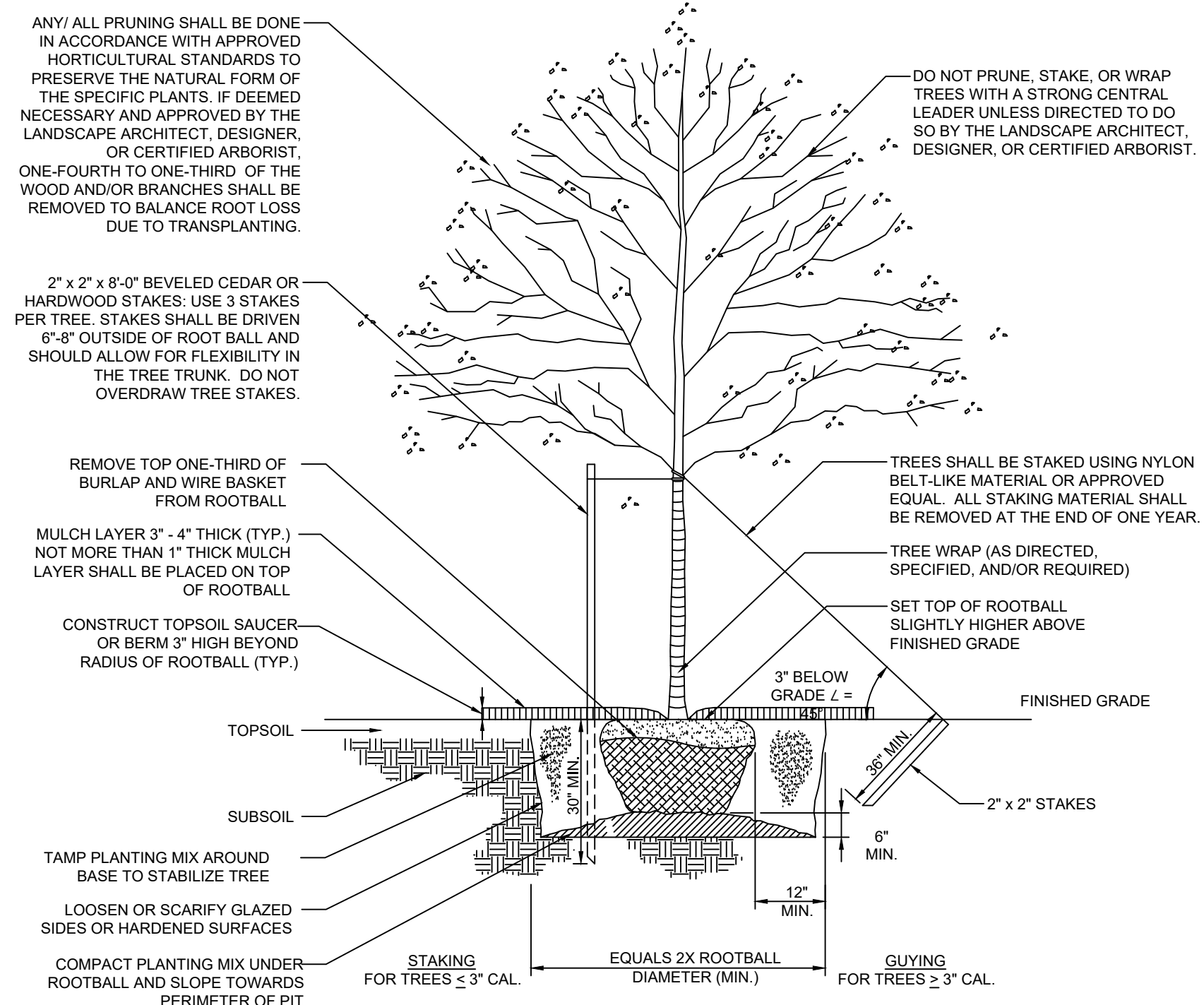
LEGEND - OVERALL PLANTING TOTALS

LANDSCAPE PLANTING SCHEDULE VISUAL MITIGATION PLANTING TEMPLATE TYPES A & B

DECIDUOUS AND EVERGREEN TREES					
SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	983	6'-8' HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	1201	5'-6' HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	1294	1" CAL. MIN.	B&B	15'-25' HT.
PG	PICEA GLAUCA WHITE SPRUCE	1384	5'-6' HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	1669	5'-6' HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	1655	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	1747	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMMELIS VIRGINIANA COMMON WITCH HAZEL	1504	3'-4' HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	1520	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM HIGHBUSH BLUEBERRY	1720	24"-30" HT.	#3/5 CONT.	6'-12' HT.
VT	VIBURNUM TRILOBUM AMERICAN CRANBERRY	1094	24"-30" HT.	#3/5 CONT.	8'-10' HT.



NATIVE/DECIDUOUS TREE PLANTING DETAIL

- NOTES:
- TREE PLANTING SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS IT WAS PRE-DUG IN THE NURSERY.
 - NEVER CUT THE PRIMARY LEADER.
 - IT IS NOT RECOMMENDED TO AMEND THE EXISTING SOIL BEFORE BACKFILLING THE HOLE UNLESS SOIL CONDITIONS ARE POOR FOR PLANTING.
 - WATER THOROUGHLY TO HELP ENSURE THE REMOVAL OF AIR POCKETS AND PROPERLY SET THE TREE.

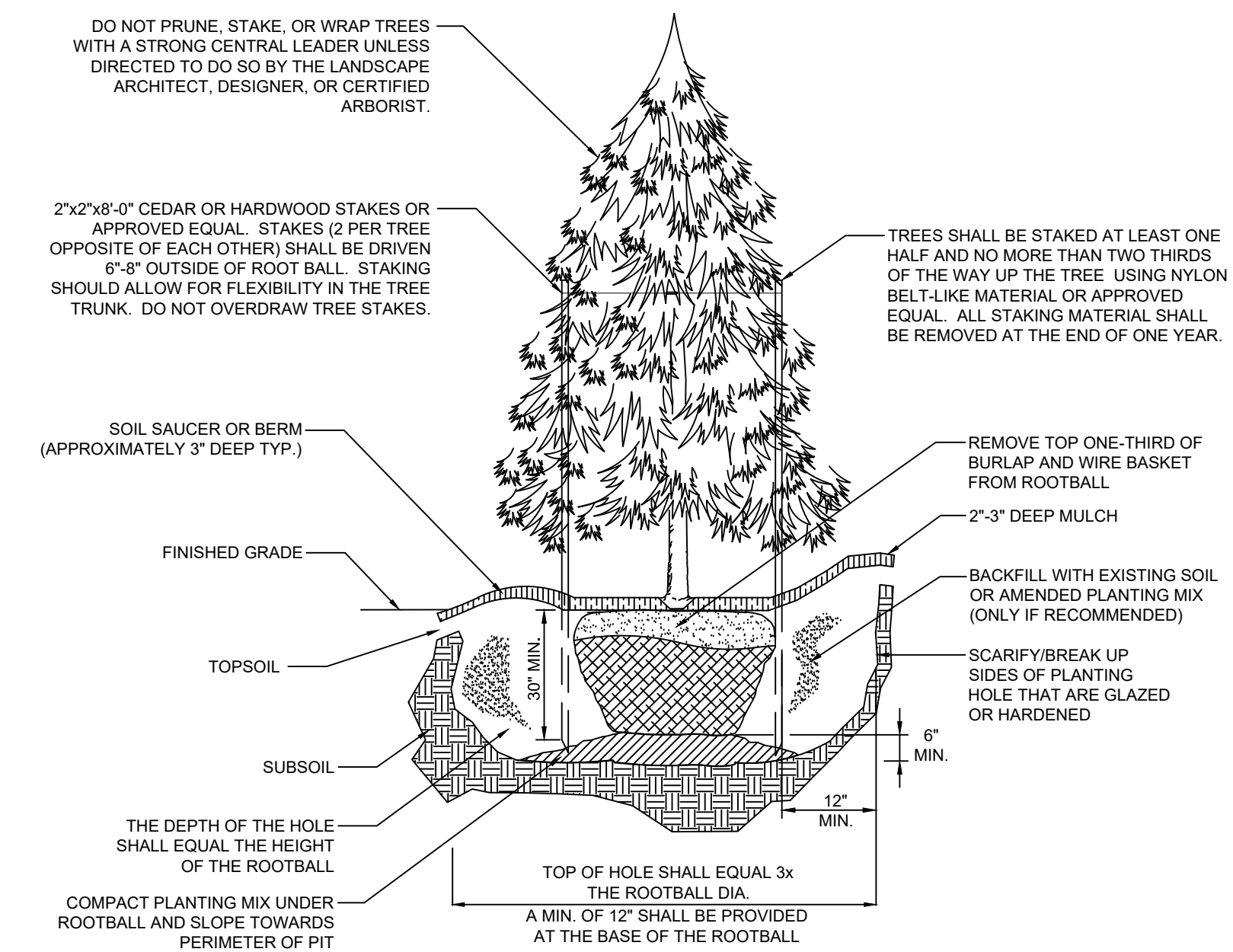
NORTHEAST NATIVE GRASS SEED MIX

ROUNDSTONE NATIVE SEED - NY SOLAR NATIVE GRASS MIX				
MIX CONCENTRATION	BOTANICAL NAME	COMMON NAME	RATE (LBS/ACRE)	RATE (LBS/1000 FT ²)
27.27%	SIDE OATS GRAMA	BOUTELLOIA CURTIPENDULA	11	.255
11.36%	VIRGINIA WILD RYE	ELYMUS VIRGINICUS		
3.98%	NIMBLEWILL	MUHLBERGIA SCHREBERI		
2.27%	TALL DROPSEED	SPOROBOLUS COMPOSITUS		
2.27%	PRAIRIE DROPSEED	SPOROBOLUS HETEROLEPIS		
2.27%	FRANK'S SEDGE	CAREX FRANKII		
2.27%	FOX SEDGE	CAREX VULPINOIDEA		
2.85%	JUNE GRASS	KOELERIA MACRANTHA	37	.850
9.10%	PURPLE TOP	TRIDENS FLAVUS		
36.36%	CREeping RED FESCUE	FESTUCA RUBRA		
NURSE CROPS AND OTHER INTRODUCED SPECIES				
86.500%	OATS	AVENA SATIVA	37	.850
8.100%	BROWN TOP MILLET	PANICUM RAMOSUM		
5.400%	ANNUAL RYE GRASS	LOLIUM MULTIFLORUM		

INCORPORATE NATIVE GRASS SEED, NURSE CROPS AND OTHER INTRODUCED SPECIES AT A RATE OF 48 LBS/ACRE OR 1.1 LBS/1000 FT²

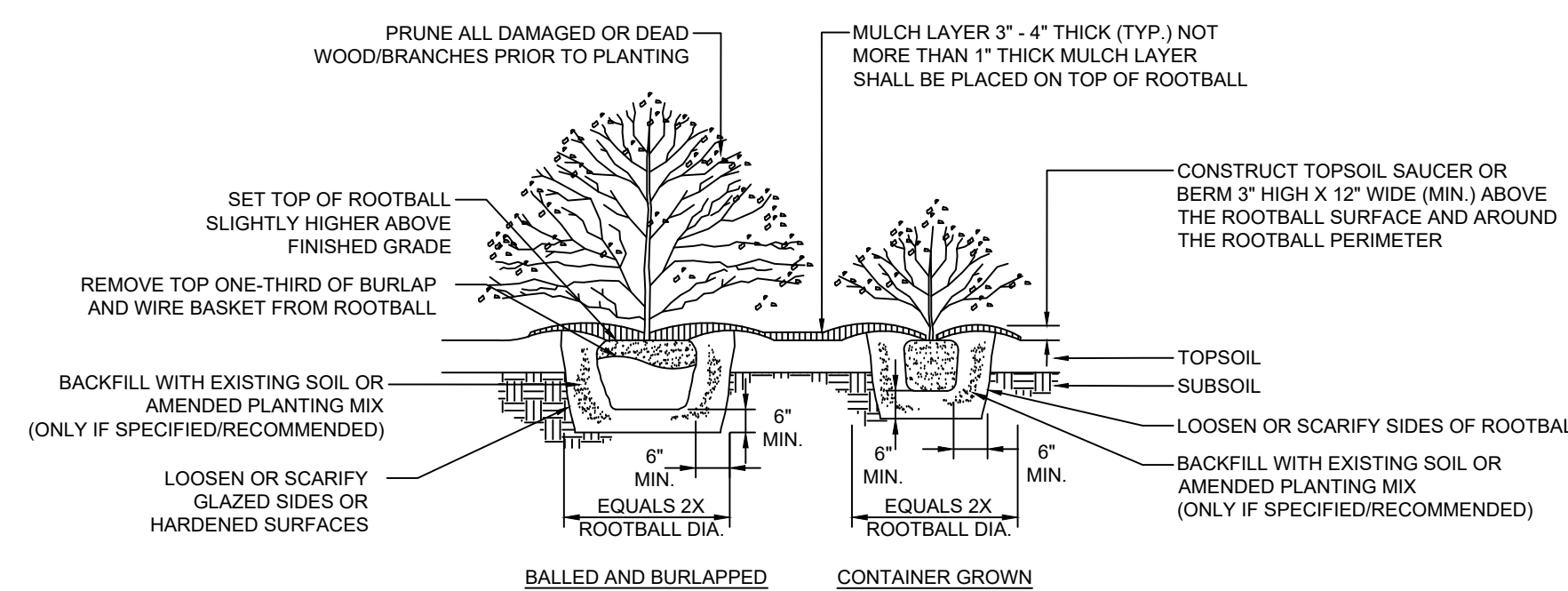
NOTE: GRASS SEED MIXES ARE COMPRISED OF GRASSES THAT ARE NATIVE AND/OR INDIGENOUS TO THE AREA AND/OR CONSIDERED FAVORABLE FOR WILDLIFE HABITAT AND SUSTAINABLE GROWTH. ADDITIONALLY, THE SOLAR SEED MIX WAS DEVELOPED ESPECIALLY FOR NATIVE GRASS PLANTINGS AROUND SOLAR ARRAY FIELDS AND SHALL BE UTILIZED ACCORDINGLY. THESE GRASSES WILL MATURE OUT TO A HEIGHT OF APPROXIMATELY 2 TO 2 1/2 FEET HIGH. THE SOLAR SEED MIX TO BE SOWN INSIDE THE PERIMETER FENCE AND UNDER THE SOLAR PANEL ARRAY.

SEE SHEET MPS-L-103-18 FOR THE POLLINATOR SEED MIX TO BE SOWN OUTSIDE THE PERIMETER FENCE AS NOTED AND WITHIN VISUAL MITIGATION AREAS TYPE C.



EVERGREEN TREE PLANTING DETAIL

- NOTES:
- TREE PLANTING SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS IT WAS PRE-DUG IN THE NURSERY.
 - NEVER CUT THE PRIMARY LEADER.
 - IT IS NOT RECOMMENDED TO AMEND THE EXISTING SOIL BEFORE BACKFILLING THE HOLE UNLESS SOIL CONDITIONS ARE POOR FOR PLANTING.
 - WATER THOROUGHLY TO HELP ENSURE THE REMOVAL OF AIR POCKETS AND PROPERLY SET THE TREE.



SHRUB PLANTING DETAIL

- NOTES:
- IN AREAS WITH MASS PLANTINGS, CONTINUOUS EXCAVATION AND MULCHING PRACTICES SHALL BE IMPLEMENTED WHENEVER POSSIBLE.
 - IT IS NOT RECOMMENDED TO AMEND THE EXISTING SOIL BEFORE BACKFILLING THE HOLE UNLESS SOIL CONDITIONS ARE POOR FOR PLANTING.
 - WATER THOROUGHLY TO HELP ENSURE THE REMOVAL OF AIR POCKETS.



249 Western Avenue
Augusta, ME 04330

PROJECT NO: 443269

REV	DESCRIPTION	DATE	DES	CHK	APP
-	-	-	-	-	-
B	ISSUED FOR 94-C DEFICIENCY SUPPLEMENT	05/31/2024	GMT	MJR	PMM
A	ISSUED FOR 94-C	01/15/2024	GMT	MJR	PMM

GMT
DESIGNED
GMT
DRAWN
MJR
CHECKED
APPROVED

MILL POINT SOLAR I PROJECT
CONNECTGEN MONTGOMERY COUNTY LLC
GENERAL LANDSCAPE NOTES AND DETAILS

GLEN

NEW YORK

01/15/2024
DATE



MPS-L-102-01

REV.
B

1" = 100'
SCALE



PRELIMINARY
NOT FOR CONSTRUCTION

VISUAL MITIGATION PLANTING TEMPLATE - TYPE A "TYPICAL SCREENING"

B

LEGEND - TYPE A TOTALS

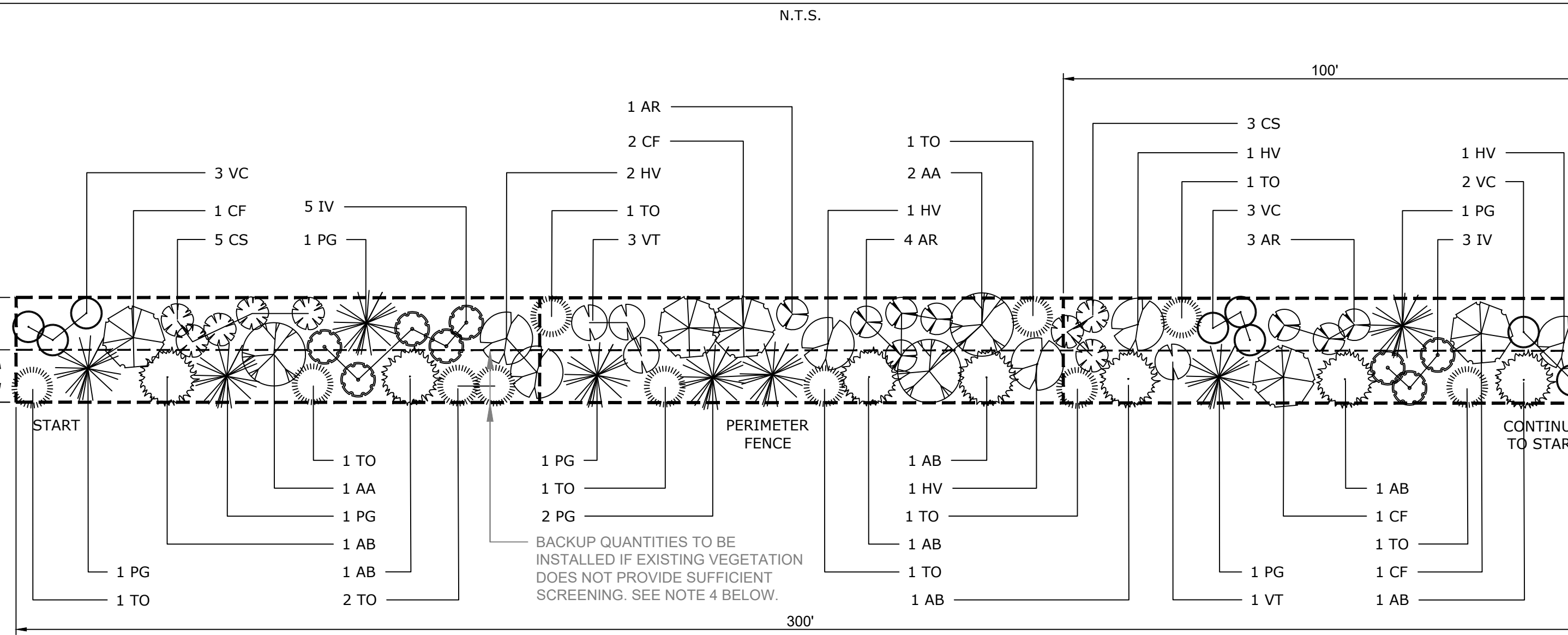
LANDSCAPE PLANTING SCHEDULE VISUAL MITIGATION PLANTING TEMPLATE TYPE A

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	380	6'-8" HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	855	5'-6" HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	621	1" CAL. MIN.	B&B	15'-25' HT.
PG	PICEA GLAUCA WHITE SPRUCE	1033	5'-6" HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	1395	5'-6" HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	951	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	1054	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	729	3'-4" HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	1006	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM Highbush Blueberry	993	24"-30" HT.	#3/5 CONT.	6'-12' HT.
VT	VIBURNUM TRILOBUM AMERICAN CRANBERRY	505	24"-30" HT.	#3/5 CONT.	8'-10' HT.



LEGEND

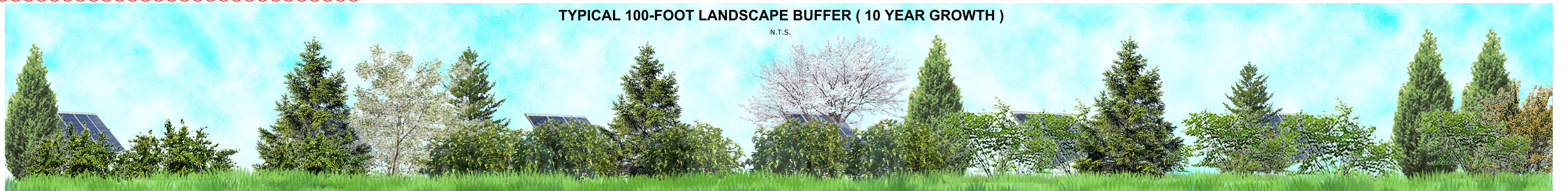
VISUAL MITIGATION PLANTING TEMPLATE - TYPE A
LANDSCAPE PLANTING SCHEDULE (TYPICAL VISUAL BUFFERS/SCREENING EFFORT)

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	BACKUP QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	3	2	6'-8" HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	7	7	5'-6" HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	5	1	1" CAL. MIN.	B&B	15'-25' HT.
PG	PICEA GLAUCA WHITE SPRUCE	8	6	5'-6" HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	11	8	5'-6" HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	BACKUP QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	8	1	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	8	1	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	6	2	3'-4" HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	8	4	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM Highbush Blueberry	8	1	24"-30" HT.	#3/5 CONT.	6'-12' HT.
VT	VIBURNUM TRILOBUM AMERICAN CRANBERRY	4	2	24"-30" HT.	#3/5 CONT.	8'-10' HT.



VISUAL MITIGATION PLANTING SCHEDULE - TYPE A

LEGEND - VMA (1)

LANDSCAPE PLANTING SCHEDULE PLANTING TEMPLATE TYPE A
TOTAL MITIGATION LENGTH = 625 LF

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	6	6'-8" HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	15	5'-6" HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	11	1" CAL. MIN.	B&B	15'-25' HT.
PG	PICEA GLAUCA WHITE SPRUCE	17	5'-6" HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	23	5'-6" HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	16	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	16	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	12	3'-4" HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	16	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM Highbush Blueberry	19	24"-30" HT.	#3/5 CONT.	6'-12' HT.
VT	VIBURNUM TRILOBUM AMERICAN CRANBERRY	8	24"-30" HT.	#3/5 CONT.	8'-10' HT.

LEGEND - VMA (2)

LANDSCAPE PLANTING SCHEDULE PLANTING TEMPLATE TYPE A
TOTAL MITIGATION LENGTH = 690 LF

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	7	6'-8" HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	16	5'-6" HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	11	1" CAL. MIN.	B&B	15'-25' HT.
PG	PICEA GLAUCA WHITE SPRUCE	19	5'-6" HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	25	5'-6" HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	16	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	21	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	12	3'-4" HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	21	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM Highbush Blueberry	19	24"-30" HT.	#3/5 CONT.	6'-12' HT.
VT	VIBURNUM TRILOBUM AMERICAN CRANBERRY	8	24"-30" HT.	#3/5 CONT.	8'-10' HT.

LEGEND - VMA (3)

LANDSCAPE PLANTING SCHEDULE PLANTING TEMPLATE TYPE A
TOTAL MITIGATION LENGTH = 1590 LF

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	16	6'-8" HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	37	5'-6" HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	26	1" CAL. MIN.	B&B	15'-25' HT.
PG	PICEA GLAUCA WHITE SPRUCE	43	5'-6" HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	58	5'-6" HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	40	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	45	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	30	3'-4" HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	45	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM Highbush Blueberry	43	24"-30" HT.	#3/5 CONT.	6'-12' HT.
VT	VIBURNUM TRILOBUM AMERICAN CRANBERRY	20	24"-30" HT.	#3/5 CONT.	8'-10' HT.

LEGEND - VMA (4)

LANDSCAPE PLANTING SCHEDULE PLANTING TEMPLATE TYPE A
TOTAL MITIGATION LENGTH = 760 LF

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	7	6'-8" HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	17	5'-6" HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	13	1" CAL. MIN.	B&B	15'-25' HT.
PG	PICEA GLAUCA WHITE SPRUCE	22	5'-6" HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	29	5'-6" HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	20	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	21	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	15	3'-4" HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	21	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM Highbush Blueberry	19	24"-30" HT.	#3/5 CONT.	6'-12' HT.
VT	VIBURNUM TRILOBUM AMERICAN CRANBERRY	11	24"-30" HT.	#3/5 CONT.	8'-10' HT.

LEGEND

VISUAL MITIGATION PLANTING TYPE "A":

BUFFER TYPE "A" NOTE:

- SEE GENERAL SEEDING AND LANDSCAPE NOTES FOR ADDITIONAL PLANTING REQUIREMENTS AND SEED MIXTURES.
- THE 20-FOOT-WIDE PROPOSED BUFFER TYPE "A" WILL BE A MIX OF NATIVE EVERGREEN TREES, DECIDUOUS TREES, AND DECIDUOUS SHRUBS ARRANGED TO FORM A NATURAL APPEARANCE AND CONTINUOUS VEGETATIVE SCREEN. SEE THE PLANTING TEMPLATE FOR ARRANGEMENT OF PLANTS AND THE PLANT SCHEDULES FOR TYPE AND SIZE.
- SEE SHEET L-102-01 FOR PLANT MATERIAL TOTALS.
- BACKUP QUANTITIES ARE INTENDED TO PROVIDE SCREENING IN THE EVENT THAT THE EXISTING VEGETATION DOES NOT PROVIDE SUFFICIENT SCREENING OF THE FACILITY. THE LOCATION AND QUANTITIES ARE TO BE DETERMINED IN THE FIELD DURING CONSTRUCTION. SEE BACKUP TEMPLATE AND QUANTITIES NOTED ABOVE.

PRELIMINARY
NOT FOR CONSTRUCTION



249 Western Avenue
Augusta, ME 04330

PROJECT NO: 443269

REFERENCE ITEMS	REV	DESCRIPTION	DATE	DES	CHK	APP
	-					
	B	ISSUED FOR 94-C DEFICIENCY SUPPLEMENT	05/31/2024	GMT	MJR	PMM
	A	ISSUED FOR 94-C	01/15/2024	GMT	MJR	PMM

GMT
DESIGNED
GMT
DRAWN
MJR
CHECKED
APPROVED

MILL POINT SOLAR I PROJECT
CONNECTGEN MONTGOMERY COUNTY LLC
TYPE A PLANTING TEMPLATE

GLEN

NEW YORK

REVIEW 1
REVIEW 2



MPS-L-103-01

REV. B



VISUAL MITIGATION PLANTING TEMPLATE - TYPE B "SUPPLEMENTAL SCREENING"

N.T.S.

LEGEND - TYPE B TOTALS

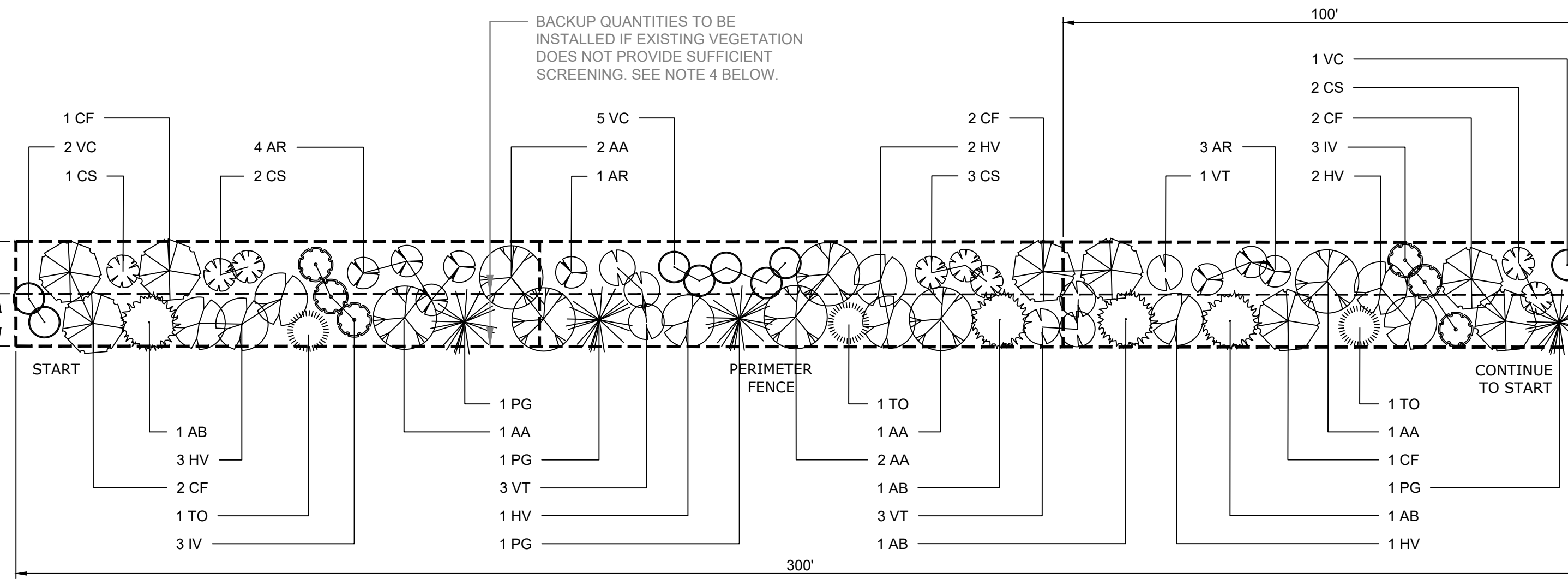
LANDSCAPE PLANTING SCHEDULE VISUAL MITIGATION PLANTING TEMPLATE TYPE B

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	603	6'-8" HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	346	5'-6" HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	673	1" CAL. MIN.	B&B	15'-25' HT.
PG	PICEA GLAUCA WHITE SPRUCE	351	5'-6" HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	274	5'-6" HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	704	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	693	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	775	3'-4" HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	514	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM HIGHBUSH BLUEBERRY	727	24"-30" HT.	#3/5 CONT.	6'-12' HT.
VT	VIBURNUM TRILOBUM AMERICAN CRANBERRY	589	24"-30" HT.	#3/5 CONT.	8'-10' HT.



LEGEND

VISUAL MITIGATION PLANTING TEMPLATE - TYPE B
LANDSCAPE PLANTING SCHEDULE (SUPPLEMENTAL VISUAL BUFFER/SCREENING EFFORT)

DECIDUOUS AND EVERGREEN TREES

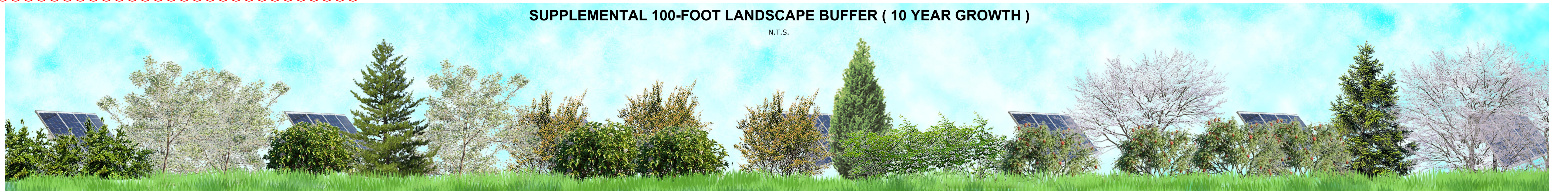
SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	BACKUP QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	7	4	6'-8" HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	4	4	5'-6" HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	8	3	1" CAL. MIN.	B&B	15'-25' HT.
PG	PICEA GLAUCA WHITE SPRUCE	4	4	5'-6" HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	3	3	5'-6" HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	BACKUP QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	8	1	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	8	1	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	9	7	3'-4" HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	6	3	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM HIGHBUSH BLUEBERRY	8	2	24"-30" HT.	#3/5 CONT.	6'-12' HT.
VT	VIBURNUM TRILOBUM AMERICAN CRANBERRY	7	4	24"-30" HT.	#3/5 CONT.	8'-10' HT.

SUPPLEMENTAL 100-FOOT LANDSCAPE BUFFER (10 YEAR GROWTH)

N.T.S.



VISUAL MITIGATION PLANTING SCHEDULE - TYPE B

LEGEND - VMB (1)

LANDSCAPE PLANTING SCHEDULE PLANTING TEMPLATE TYPE B
TOTAL MITIGATION LENGTH = 375 LF

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	8	6'-8" HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	5	5'-6" HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	11	1" CAL. MIN.	B&B	15'-25' HT.
PG	PICEA GLAUCA WHITE SPRUCE	4	5'-6" HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	4	5'-6" HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	11	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	11	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	12	3'-4" HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	9	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM HIGHBUSH BLUEBERRY	10	24"-30" HT.	#3/5 CONT.	6'-12' HT.
VT	VIBURNUM TRILOBUM AMERICAN CRANBERRY	7	24"-30" HT.	#3/5 CONT.	8'-10' HT.

LEGEND - VMB (2)

LANDSCAPE PLANTING SCHEDULE PLANTING TEMPLATE TYPE B
TOTAL MITIGATION LENGTH = 675 LF

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	15	6'-8" HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	9	5'-6" HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	19	1" CAL. MIN.	B&B	15'-25' HT.
PG	PICEA GLAUCA WHITE SPRUCE	8	5'-6" HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	7	5'-6" HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	19	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	19	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	21	3'-4" HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	15	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM HIGHBUSH BLUEBERRY	18	24"-30" HT.	#3/5 CONT.	6'-12' HT.
VT	VIBURNUM TRILOBUM AMERICAN CRANBERRY	14	24"-30" HT.	#3/5 CONT.	8'-10' HT.

LEGEND - VMB (3)

LANDSCAPE PLANTING SCHEDULE PLANTING TEMPLATE TYPE B
TOTAL MITIGATION LENGTH = 1505 LF

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	35	6'-8" HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	20	5'-6" HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	40	1" CAL. MIN.	B&B	15'-25' HT.
PG	PICEA GLAUCA WHITE SPRUCE	20	5'-6" HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	15	5'-6" HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	40	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	40	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	45	3'-4" HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	30	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM HIGHBUSH BLUEBERRY	42	24"-30" HT.	#3/5 CONT.	6'-12' HT.
VT	VIBURNUM TRILOBUM AMERICAN CRANBERRY	35	24"-30" HT.	#3/5 CONT.	8'-10' HT.

LEGEND - VMB (4)

LANDSCAPE PLANTING SCHEDULE PLANTING TEMPLATE TYPE B
TOTAL MITIGATION LENGTH = 95 LF

DECIDUOUS AND EVERGREEN TREES

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AA	AMELANCHIER ARBOREA DOWNY SHADBUSH	2	6'-8" HT. CLUMP	B&B	15'-20' HT.
AB	ABIES BALSAMEA BALSAM FIR	1	5'-6" HT.	B&B	40'-60' HT.
CF	CORNUS FLORIDA FLOWERING DOGWOOD	3	1" CAL. MIN.	B&B	15'-25' HT.
PG	PICEA GLAUCA WHITE SPRUCE	1	5'-6" HT.	B&B	40'-60' HT.
TO	THUJA OCCIDENTALIS NORTHERN WHITE CEDAR	1	5'-6" HT.	B&B	40'-50' HT.

SHRUBS

SYMBOL	BOTANICAL NAME/ COMMON PLANT NAME	QUANTITY	SIZE	ROOT	MATURE HEIGHT
AR	ARONIA ARBUTIFOLIA RED CHOKEBERRY	4	24"-30" HT.	#3/5 CONT.	7'-10' HT.
CS	CORNUS SERICEA RED TWIG DOGWOOD	3	24"-30" HT.	#3/5 CONT.	7'-9' HT.
HV	HAMAMELIS VIRGINIANA COMMON WITCH HAZEL	3	3'-4" HT.	B&B	15'-25' HT.
IV	ILEX VERTICILLATA COMMON WINTERBERRY	3	24"-30" HT.	#3/5 CONT.	10'-12' HT.
VC	VACCINIUM CORYMBOSUM HIGHBUSH BLUEBERRY	2	24"-30" HT.	#3/5 CONT.	6'-12' HT.
VT	VIBURNUM TRILOBUM AMERICAN CRANBERRY	0	24"-30" HT.	#3/5 CONT.	8'-10' HT.

LEGEND VISUAL MITIGATION PLANTING TYPE "B":

BUFFER TYPE "B" NOTE:

- SEE GENERAL SEEDING AND LANDSCAPE NOTES FOR ADDITIONAL PLANTING REQUIREMENTS AND SEED MIXTURES.
- THE 20-FOOT-WIDE PROPOSED BUFFER TYPE "B" WILL BE A MIX OF NATIVE EVERGREEN TREES, DECIDUOUS TREES, AND DECIDUOUS SHRUBS ARRANGED TO FORM A NATURAL APPEARANCE AND FILTERED VEGETATIVE SCREEN. SEE THE PLANTING TEMPLATE FOR ARRANGEMENT OF PLANTS AND THE PLANT SCHEDULES FOR TYPE AND SIZE.
- SEE SHEET L-102-01 FOR PLANT MATERIAL TOTALS
- BACKUP QUANTITIES ARE INTENDED TO PROVIDE SCREENING IN THE EVENT THAT THE EXISTING VEGETATION DOES NOT PROVIDE SUFFICIENT SCREENING OF THE FACILITY. THE LOCATION AND QUANTITIES ARE TO BE DETERMINED IN THE FIELD DURING CONSTRUCTION. SEE BACKUP TEMPLATE AND QUANTITIES NOTED ABOVE.

PRELIMINARY
NOT FOR CONSTRUCTION



249 Western Avenue
Augusta, ME 04330

PROJECT NO: 443269

REFERENCE ITEMS	REV	DESCRIPTION	DATE	DES	CHK	APP
	-					
	B	ISSUED FOR 94-C DEFICIENCY SUPPLEMENT	05/31/2024	GMT	MJR	PMM
	A	ISSUED FOR 94-C	01/15/2024	GMT	MJR	PMM

GMT
DESIGNED
GMT
DRAWN
MJR
CHECKED
APPROVED

MILL POINT SOLAR I PROJECT
CONNECTGEN MONTGOMERY COUNTY LLC
TYPE B PLANTING TEMPLATE

GLEN

NEW YORK

01/15/2024
DATE
1" = 100'
SCALE



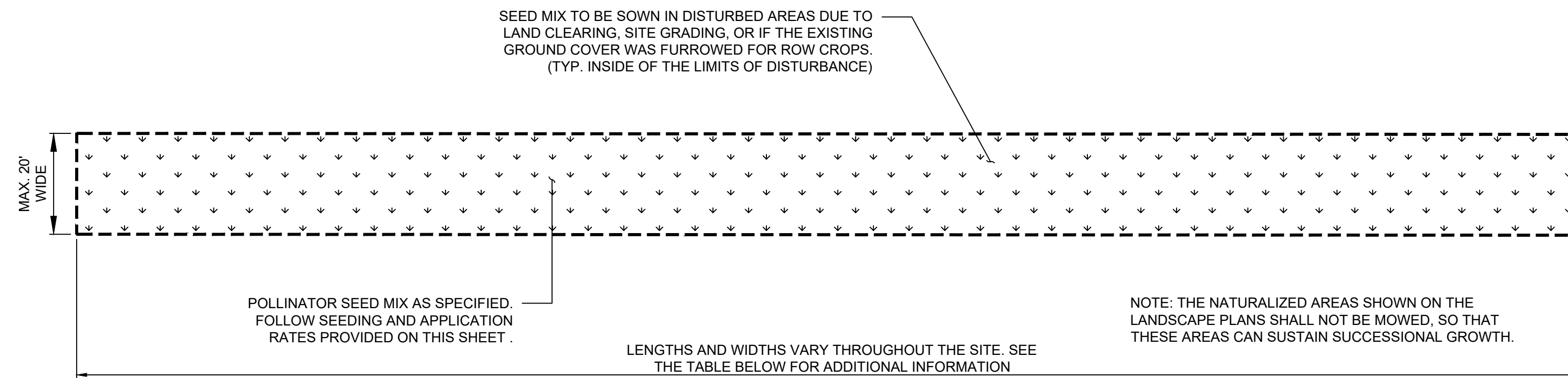
MPS-L-103-09

REV.
B



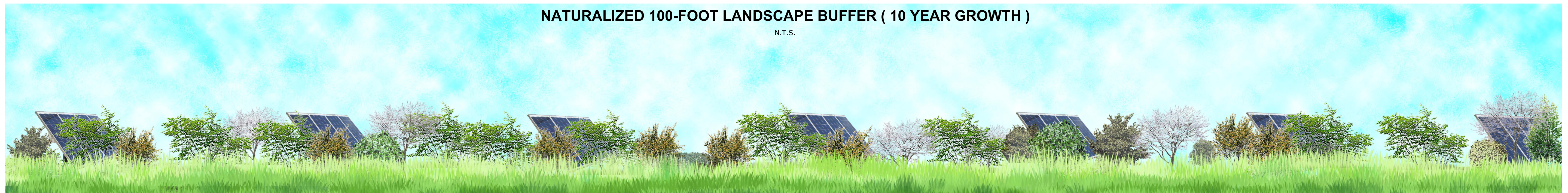
VISUAL MITIGATION PLANTING TEMPLATE - TYPE C "NATURALIZED SCREENING"

N.T.S.



LEGEND

- BUFFER TYPE "C" NOTE:**
- SEE GENERAL SEEDING AND LANDSCAPE NOTES FOR ADDITIONAL PLANTING REQUIREMENTS AND SEED MIXTURES.
 - THE 20-FOOT-WIDE PROPOSED BUFFER TYPE "C" WILL BE A MIX OF POLLINATOR PLANT SPECIES APPLIED AND LEFT UNMOWED TO ALLOW FOR SUCCESSIONAL GROWTH WHICH WILL FORM A NATURAL APPEARANCE AND VEGETATIVE SCREEN OVERTIME. SEE THE PLANTING TEMPLATE FOR ADDITIONAL NOTES AND THE SEED MIXTURE FOR PLANT TYPES AND APPLICATION RATES.
 - SEEDING SHALL OCCUR IN ALL DISTURBED NATURALIZED AREAS AS SHOWN ON THE LANDSCAPE PLANS. SEE SHEET L-102-01 FOR GENERAL PLANTING AND SEEDING NOTES.
 - SEE TEMPLATE NOTE REGARDING INSTALLATION OF POLLINATOR SEED MIX WITHIN THE LIMIT OF DISTURBANCE.



NATURALIZED 100-FOOT LANDSCAPE BUFFER (10 YEAR GROWTH)

N.T.S.

VISUAL MITIGATION LENGTHS: TYPE C

N.T.S.

POLLINATOR SEED MIX

ERNST - NORTHEAST NATIVE WILDFLOWER & GRASS SEED MIX				
CONCENTRATION MIX	BOTANICAL NAME	COMMON NAME	RATE (LBS/ACRE)	RATE (LBS/1000 FT ²)
40.0%	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	*20	0.46
23.4%	BOUTELOUA CURTIPENDULA	SIDEOATS GRAMA		
7.3%	COSMOS BIPINNATUS	COSMOS		
3.5%	COREOPSIS LANCEOLATA	LANCELEAF COREOPSIS		
3.5%	ECHINACEA PURPUREA	PURPLE CONEFLOWER		
3.0%	ELYMUS VIRGINICUS	VIRGINIA WILDRYE		
2.5%	SORGHASTRUM NUTANS	INDIANGRASS		
2.2%	LUPINUS POLYPHYLLUS	BIGLEAF LUPINE		
2.0%	CHAMAECRISTA FASCICULATA	PARTRIDGE PEA		
2.0%	DELPHINIUM AJACIS	ROCKET LARKSPUR		
2.0%	RUDBECKIA HIRTA	BLACKEYED SUSAN		
1.5%	GAILLARDIA ARISTATA	BLANKET FLOWER		
1.0%	SENNA HEBECARPA	WILD SENNA		
1.0%	PENSTEMON DIGITALIS	TALL WHITE BEARDTONGUE		
0.6%	PAPAVER RHOEAS	SHIRLEY MIX (CORN POPPY, SHIRLEY MIX)		
0.5%	ANDROPOGON GERARDII	BIG BLUESTEM		
0.5%	ELYMUS CANADENSIS	CANADA WILDRYE		
0.5%	COREOPSIS TINCTORIA	PLAINS COREOPSIS		
0.4%	LIATRIS SPICATA	BLAZING STAR		
0.4%	ASCLEPIAS SYRIACA	COMMON MILKWEED		
0.4%	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED		
0.3%	ZIZIA AUREA	GOLDEN ALEXANDERS		
0.3%	ASCLEPIAS INCARNATA	SWAMP MILKWEED		
0.2%	MONARDA FISTULOSA	WILD BERGAMONT		
0.2%	PENSTEMON LAEVIGATUS	APPALACHIAN BEARDTONGUE		
0.2%	SENNA MARILANDICA	MARYLAND SENNA		
0.1%	SOLIDAGO NEMORALIS	GRAY GOLDENROD		
0.1%	TRADESCANTIA OHIENSIS	OHIO SPIDERWORT		
0.1%	ASTER LAEVIS	SMOOTH BLUE ASTER		
0.1%	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER		
0.1%	ASTER PRENANTHOIDES	ZIGZAG ASTER		
0.1%	HELIOPSIS HELIANTHOIDES	OXEYE SUNFLOWER		

VMC (1 TO 36) TYPE C

NATURALIZED AREA SCHEDULE		TOTAL MITIGATION LENGTH	
NATURALIZED AREAS			
VMC 1 =	725 LF	VMC 19 =	1200 LF
VMC 2 =	315 LF	VMC 20 =	150 LF
VMC 3 =	635 LF	VMC 21 =	1240 LF
VMC 4 =	470 LF	VMC 22 =	750 LF
VMC 5 =	1100 LF	VMC 23 =	300 LF
VMC 6 =	510 LF	VMC 24 =	100 LF
VMC 7 =	790 LF	VMC 25 =	570 LF
VMC 8 =	450 LF	VMC 26 =	1025 LF
VMC 9 =	1605 LF	VMC 27 =	650 LF
VMC 10 =	440 LF	VMC 28 =	735 LF
VMC 11 =	1340 LF	VMC 29 =	650 LF
VMC 12 =	375 LF	VMC 30 =	865 LF
VMC 13 =	1245 LF	VMC 31 =	2765 LF
VMC 14 =	170 LF	VMC 32 =	3195 LF
VMC 15 =	95 LF	VMC 33 =	310 LF
VMC 16 =	275 LF	VMC 34 =	350 LF
VMC 17 =	680 LF	VMC 35 =	1100 LF
VMC 18 =	720 LF	VMC 36 =	1170 LF

PRELIMINARY
NOT FOR CONSTRUCTION

TRC 249 Western Avenue
Augusta, ME 04330

PROJECT NO: 443269

*SEED AT 20 LBS/ACRE WITH 30 LBS/ACRE OF A COVER CROP. USE GRAIN OATS (1 JAN TO 31 JUL) OR GRAIN RYE (1 AUG TO 31 DEC).

NOTE:
NATIVE POLLINATOR SEED MIXES ARE INTENDED TO PROVIDE AN EXCELLENT WILDLIFE FOOD AND SHELTER THAT WILL ATTRACT A VARIETY OF POLLINATORS AND SONGBIRDS. THE NATIVE WILDFLOWERS AND GRASSES IN THIS MIX PROVIDE AN ATTRACTIVE DISPLAY OF COLOR FROM SPRING TO FALL. POLLINATOR SEED MIXES ARE INTENDED TO PROVIDE NECTAR AND FOOD SOURCES FOR A VARIETY OF POLLINATORS AND LARVA. THESE MIXES ARE COMPRISED OF A FAIRLY EVEN MIX OF NATIVE AND/OR INDIGENOUS WILDFLOWERS AND GRASSES. THE POLLINATOR SEED MIX IS INTENDED TO BE SOWN IN THE DESIGNATED AREAS ADJACENT TO THE PERIMETER FENCE. SEE ADDITIONAL NOTES IN THE PLANTING TEMPLATE TYPE C SHOWN ABOVE.

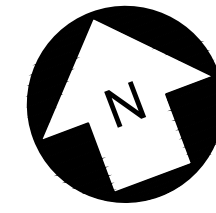
REFERENCE ITEMS	REV	DESCRIPTION	DATE	DES	CHK	APP
	-					
	-					
	B	ISSUED FOR 94-C DEFICIENCY SUPPLEMENT	05/31/2024	GMT	MJR	PMM
	A	ISSUED FOR 94-C	01/15/2024	GMT	MJR	PMM

GMT DESIGNED	MILL POINT SOLAR PROJECT CONNECTGEN, LLC TYPE C PLANT SCHEDULES	NEW YORK
GMT DRAWN		
MJR CHECKED		
APPROVED		
REVIEW 1	01/15/2024 DATE	TRC
REVIEW 2	1" = 100' SCALE	
GLEN		MPS-L-103-18
		REV. B



Revised Plan 6B
Substation and POI Switchyard Plan & Profile Drawings
*and Lighting Plan**

** An abbreviated version of this plan has been provided. Information not critical to the assessment of visual impacts has been removed. A complete plan is provided in the 94-c application in the following location: Revised Exhibit 5, Revised Appendix 5-3.*



LEGEND	
EXISTING	PROPOSED
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⊙	⊙
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---	---
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- GENERAL NOTES:**
1. ALL CONDUCTORS AND SHIELDWIRES TO BE NON-SPECULAR.
 2. TYPICAL LAYDOWN AREAS TO BE 70'X100' NEAR EACH STRUCTURE INSTALLATION LOCATIONS.
 3. ACCESS IN NATIONAL GRID RIGHT-OF-WAY TO UTILIZE EXISTING ACCESS ROADS.
 4. ALL NEW STEEL POLES TO BE GALVANIZED STEEL UNLESS OTHERWISE REQUESTED TO BE CORTEN WEATHERED STEEL.



PE STAMP:

KEY PLAN:

REVISIONS:

NO.	DATE	DESCRIPTION
1	10/23/2023	ISSUED FOR 94-C PERMIT
2	5/23/2024	RE-ISSUED FOR 94-C PERMIT
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

PROJECT TITLE:

MILL POINT SOLAR PROJECT I

PROJECT LOCATION:

TOWN OF GLEN MONTGOMERY CO., NY

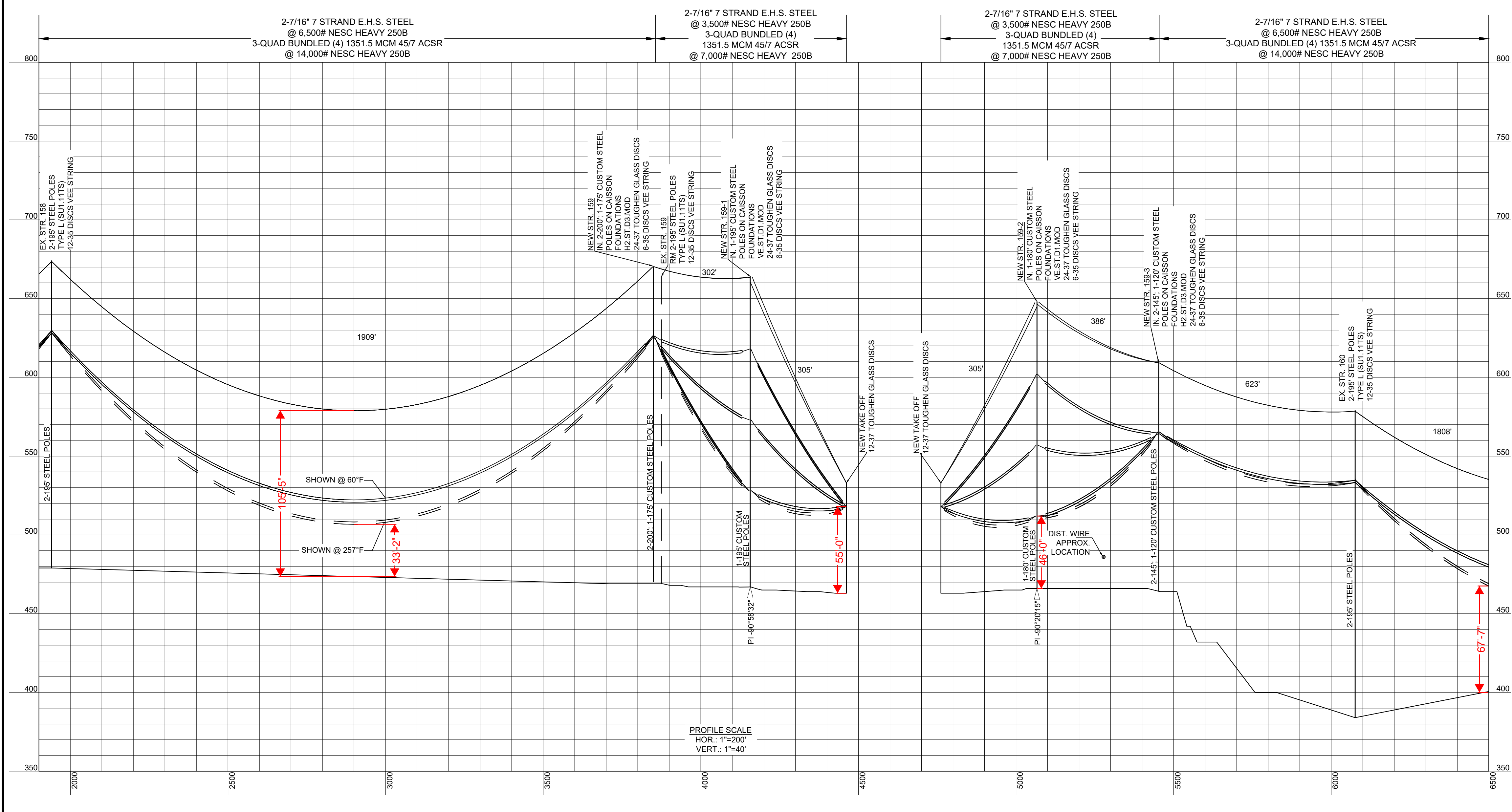
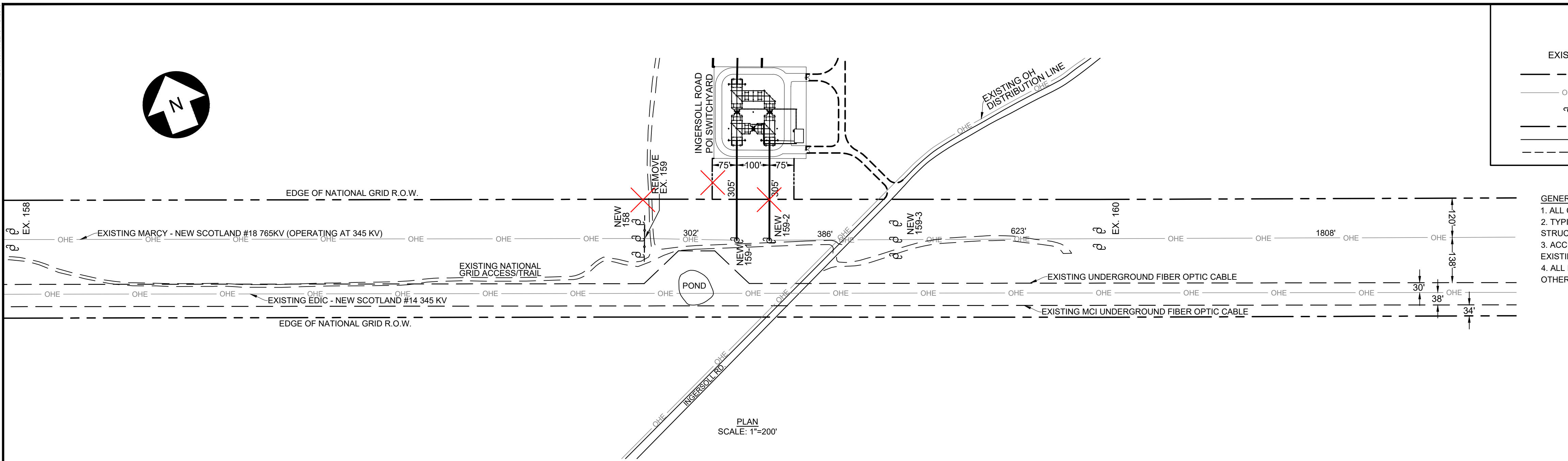
SHEET TITLE & DESCRIPTION:

TRANSMISSION INTERCONNECTION PLAN & PROFILE

PROJ. NUM:	XXXXXX
DES:	B. HACKLEY
DWN:	B. HACKLEY
CHK:	K. DRZEWIECKI
APV:	A. JAEGER
DATE:	5/23/2024
SCALE AT 22" x 34":	

AS SHOWN

SHEET NO:	MPS-T-102-01	REV:	2
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PRELIMINARY
NOT FOR CONSTRUCTION

PLOTTED: 05/23/2024 10:58 PM
 XREF: \\snp\proj\102\102001\MPS-T-102-01.dwg
 AEST: Thursday, 5/23/2024 10:58:10

DWG NO.	DRAWING TITLE	DATE	REV.	DATE	REV.	DATE	REV.	DATE	REV.	DATE	REV.	DATE	REV.
MPS-E-200-00	COVER SHEET	08/30/23	A	09/06/23	B	10/06/23	C	10/20/23	D	01/15/24	E	05/31/24	F
MPS-E-201-00	ONE-LINE DIAGRAM	08/30/23	A	10/6/2023	B	10/20/23	C	01/15/24	D				
MPS-E-210-01	COLLECTOR SUBSTATION GENERAL ARRANGEMENT	08/30/23	A	10/20/23	B	01/15/24	C	05/31/24	D				
MPS-E-210-02	COLLECTOR SUBSTATION SECTION A-A & B-B	08/30/23	A	10/20/23	B	01/15/24	C						
MPS-E-210-03	COLLECTOR SUBSTATION SECTION C-C	08/30/23	A	10/20/23	B	01/15/24	C						
MPS-E-210-04	COLLECTOR SUBSTATION CONTROL HOUSE ELEVATION	05/31/24	A										
MPS-E-210-10	POI SWITCHYARD GENERAL ARRANGEMENT	08/30/23	A	09/06/23	B	10/20/23	C	01/15/24	D	05/31/24	E		
MPS-E-210-11	POI SWITCHYARD SECTION A-A & B-B	09/06/23	A	10/06/23	B	10/20/23	C	01/15/24	D				
MPS-E-210-12	POI SWITCHYARD SECTION C-C	09/06/23	A	10/06/23	B	10/20/23	C	01/15/24	D				
MPS-E-210-13	POI SWITCHYARD SECTION D-D & E-E	09/06/23	A	10/06/23	B	10/20/23	C	01/15/24	D				
MPS-E-210-14	POI SWITCHYARD SECTION F-F, G-G, H-H, J-J	09/06/23	A	10/06/23	B	10/20/23	C	01/15/24	D				
MPS-E-210-15	PERIMETER FENCE AND WALL ERECTION DETAILS	08/30/23	A	10/20/23	B	01/15/24	C						
MPS-E-210-16	COLLECTOR PERIMETER WALL/FENCE DETAIL	05/31/24	A										
MPS-E-210-20	COLLECTOR SUBSTATION CONTROL HOUSE LAYOUT	08/30/23	A	10/20/23	B	01/15/24	C						
MPS-E-210-21	345KV COLLECTOR SUBSTATION LIGHTING PLAN	08/30/23	A	10/20/23	B	01/15/24	C	5/31/24	D				
MPS-E-210-22	345KV POI SWITCHYARD LIGHTING PLAN	08/30/23	A	10/20/23	B	01/15/24	C	5/31/24	D				

MILL POINT SOLAR I PROJECT

PREPARED FOR: CONNECTGEN MONTGOMERY COUNTY LLC

PREPARED BY: TRC ENGINEERS, INC.

ISSUE DATE: 05/31/24

ISSUE STATUS: 94-C

PROJECT DATA

LOCATION:

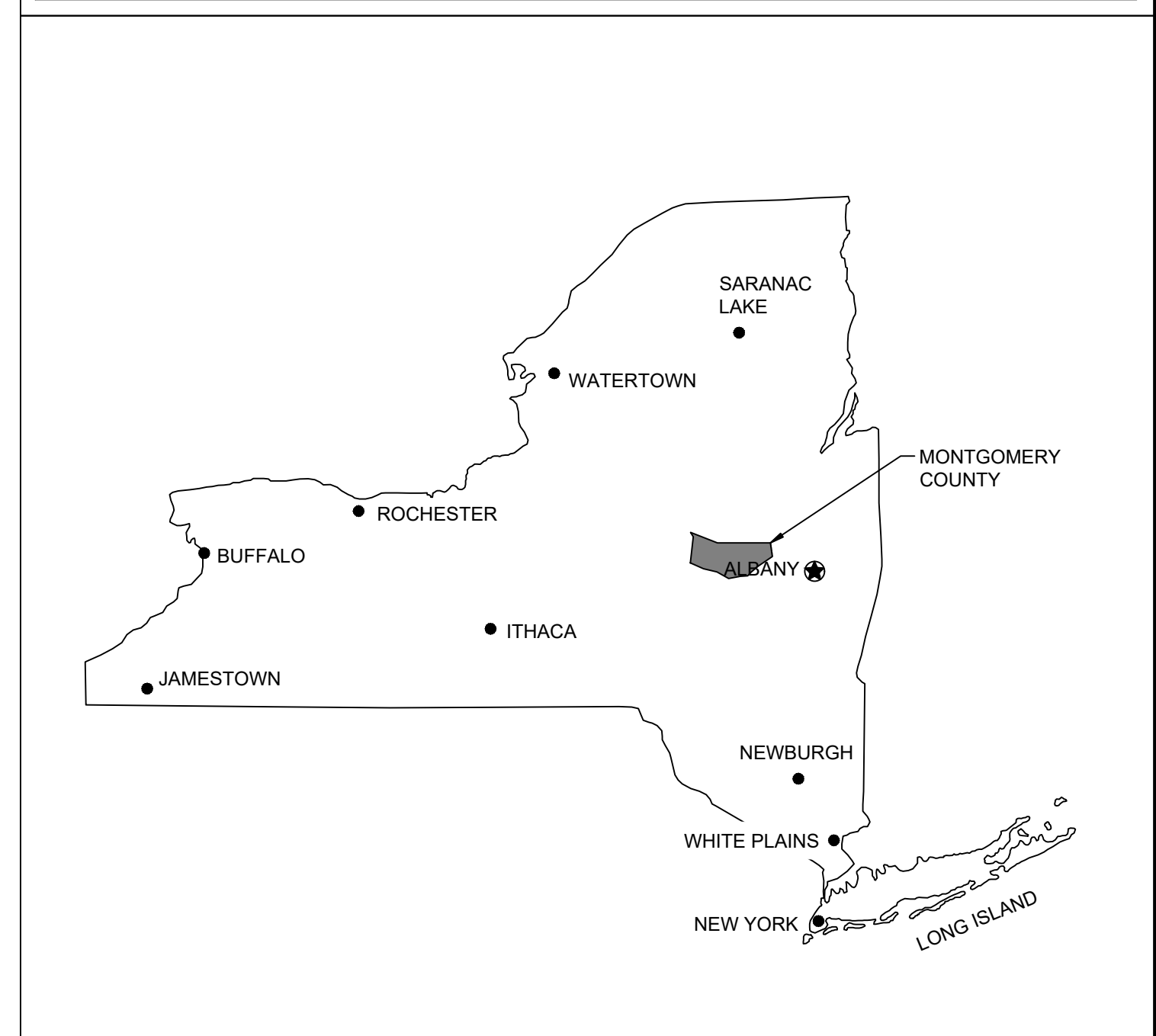
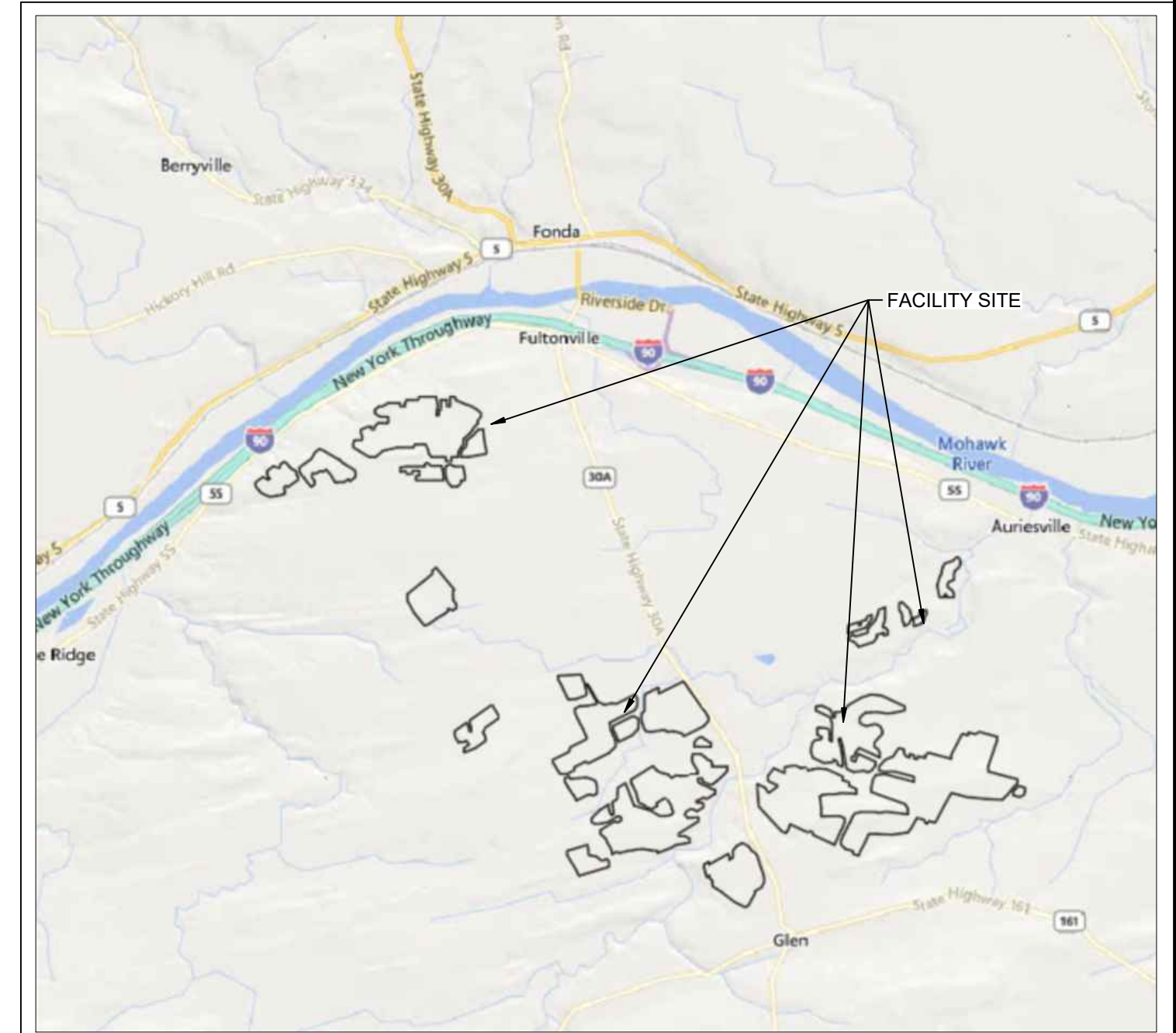
MONTGOMERY COUNTY, NY

PROJECTION:

STATE PLANE NAD 83 (NY82-EF)

POWER GENERATED: 250 MWac

SITE MAP



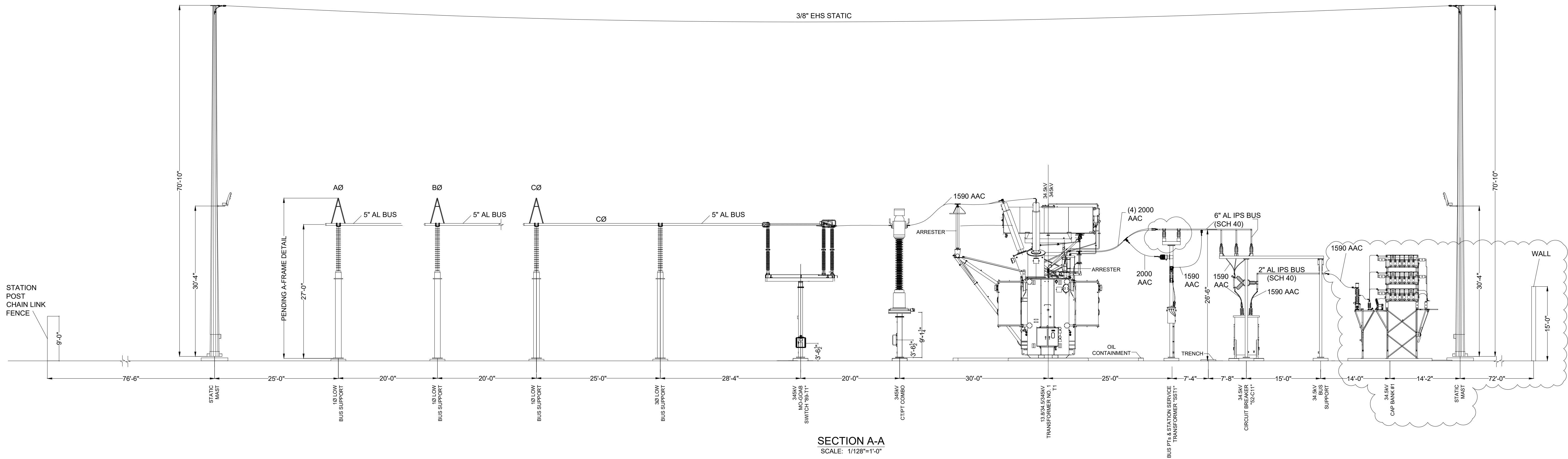
THE STATE OF NEW YORK

PRELIMINARY
NOT FOR CONSTRUCTION

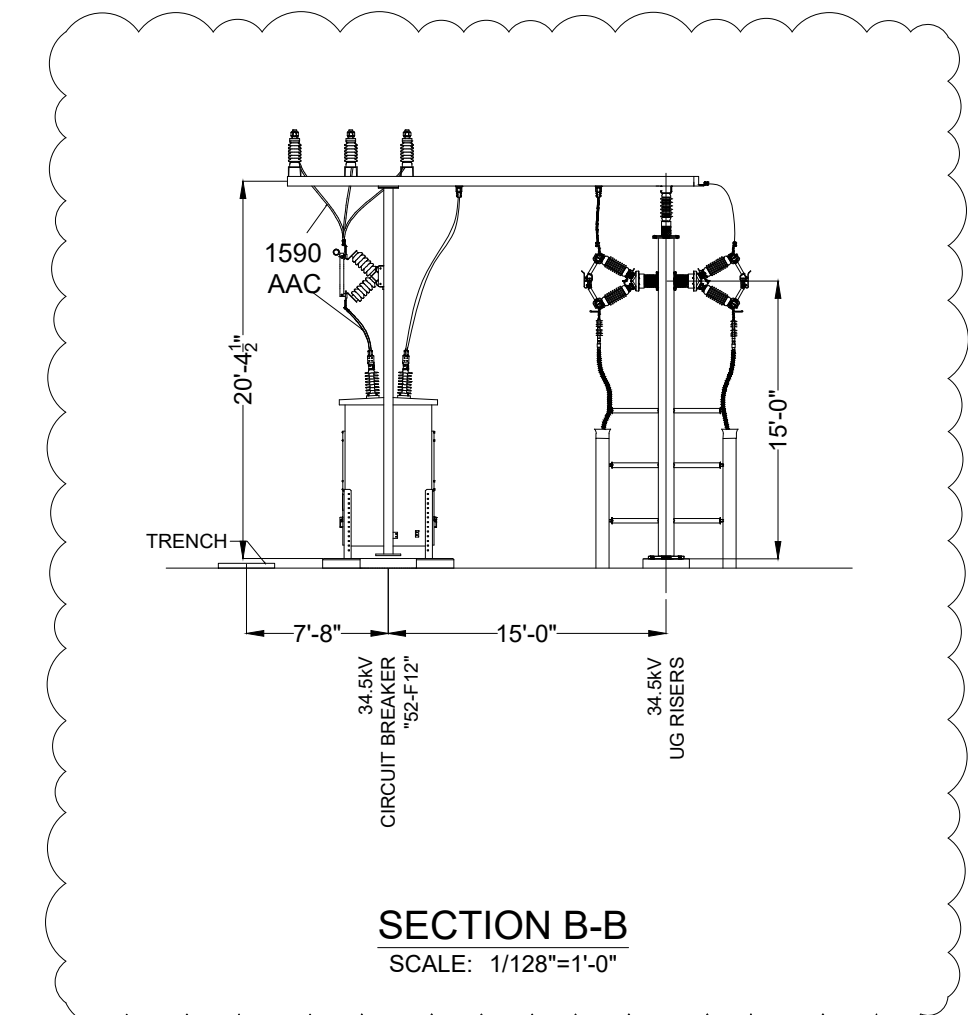
NOTE:

- DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC. LLC, CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018. DRAWING PREPARED FOR CONNECTGEN, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
- UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

		10 MAXWELL DRIVE, SUITE 200 CLIFTON PARK, NY 12065		PROJECT NO: 443269					TB DESIGNED EL DRAWN CT CHECKED APPROVED		MILL POINT SOLAR I PROJECT CONNECTGEN, MONTGOMERY COUNTY, LLC COVER SHEET		REV.	
REV	DESCRIPTION	DATE	DES	CHK	APP					REVIEW 1	01/15/24		MPS-E-200-00	F
F	ISSUE FOR 94-C DEFICIENCY SUPPLEMENT	06/28/24	TB	CT						DATE	N.T.S.			
E	RE-ISSUE FOR 94-C	01/15/24	TB	CT						SCALE				
D	ISSUED FOR 94-C	10/20/23	TB	CT						REVIEW 2				
C	RE-ISSUED FOR REVIEW	10/05/23	TB	CT										



SECTION A-A
SCALE: 1/128"=1'-0"



SECTION B-B
SCALE: 1/128"=1'-0"

DESIGN CRITERIA:

34.5kV CLEARANCE: (1300 kV BIL)

LIVE PARTS: MIN Ø-G = 104"
MIN Ø-Ø = 119"

34.5 kV CLEARANCE: (200 kV BIL)

LIVE PARTS: MIN Ø-G = 13"
MIN Ø-Ø = 18"

TO GRADE: 10'-0" (BUS)
22'-0" (DRIVEWAY)

NOTE:

- DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC, LLC, CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018. DRAWING PREPARED FOR CONNECTGEN, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
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PRELIMINARY
NOT FOR CONSTRUCTION

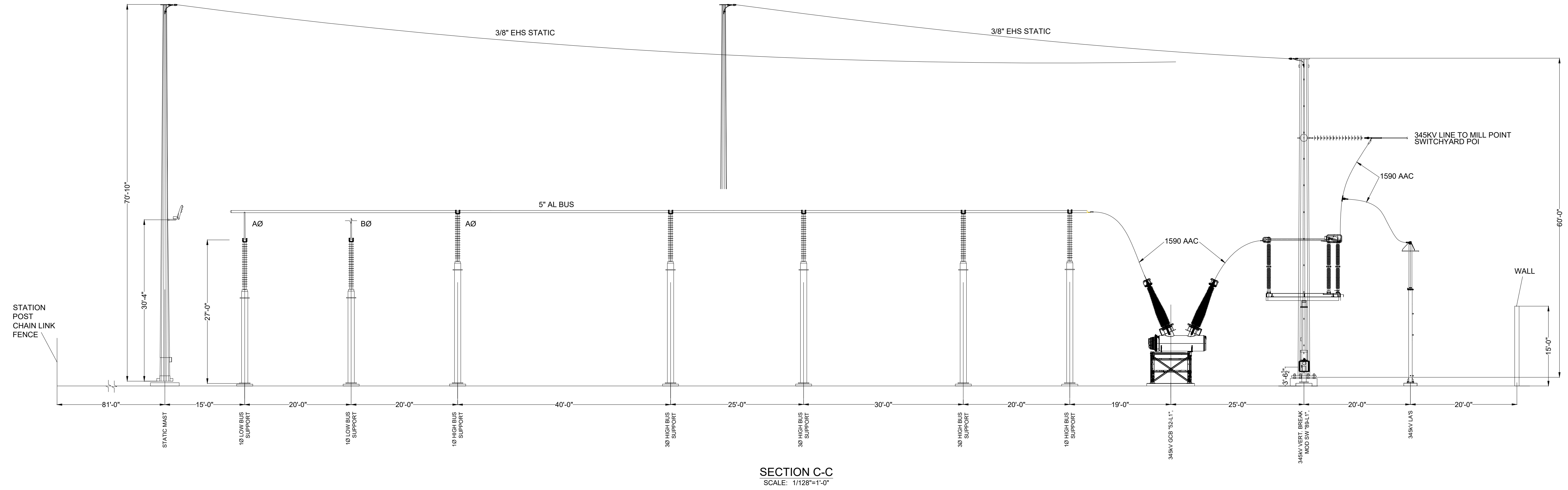
TRC 10 MAXWELL DRIVE, SUITE 200 CLIFTON PARK, NY 12065		PROJECT NO: 443269			
REV	DESCRIPTION	DATE	DES	CHK	APP
C	RE-ISSUE FOR 94-C	01/15/24	TB	CT	
B	ISSUE FOR 94-C	10/20/23	TB	CT	
A	ISSUE FOR REVIEW	08/30/23	TB	CT	

TB	DESIGNED
EL	DRAWN
CT	CHECKED
	APPROVED
REVIEW 1	01/15/24
REVIEW 2	1/128" = 1'-0"

MILL POINT SOLAR 34.5/34kV COLLECTOR SUBSTATION
SECTION A-A, B-B
(PHYSICAL)

TRC MPS-E-210-02

REV. C



SECTION C-C
SCALE: 1/128"=1'-0"

DESIGN CRITERIA:

345KV CLEARANCE: (1300 KV BIL)

LIVE PARTS: MIN Ø-G = 104"
MIN Ø-Ø = 119"

34.5 KV CLEARANCE: (200 KV BIL)

LIVE PARTS: MIN Ø-G = 13"
MIN Ø-Ø = 18"

TO GRADE: 10'-0" (BUS)
22'-0" (DRIVEWAY)

- NOTE:**
- DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC, LLC, CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018. DRAWING PREPARED FOR CONNECTGEN, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
 - UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

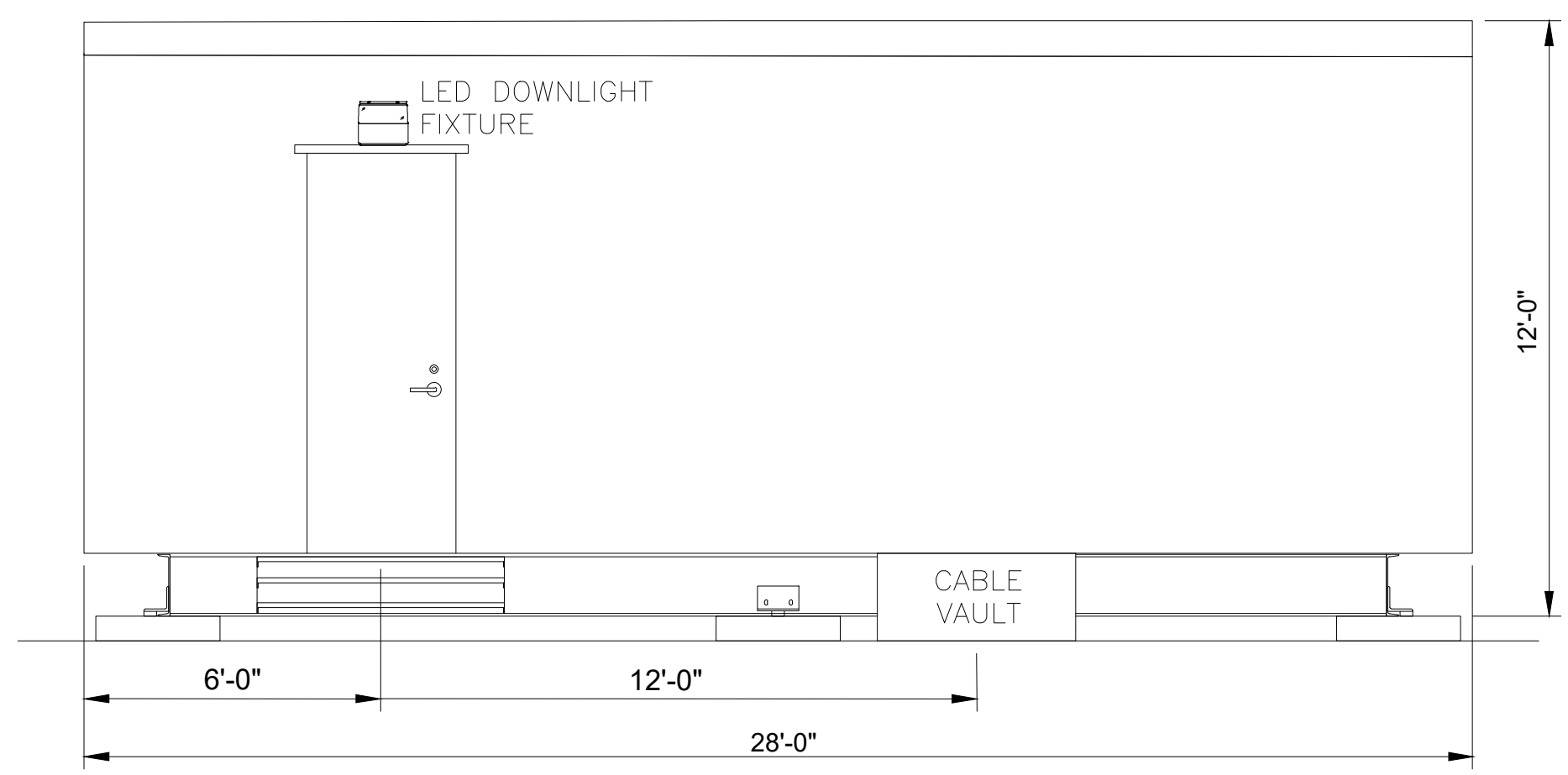


PRELIMINARY
NOT FOR CONSTRUCTION

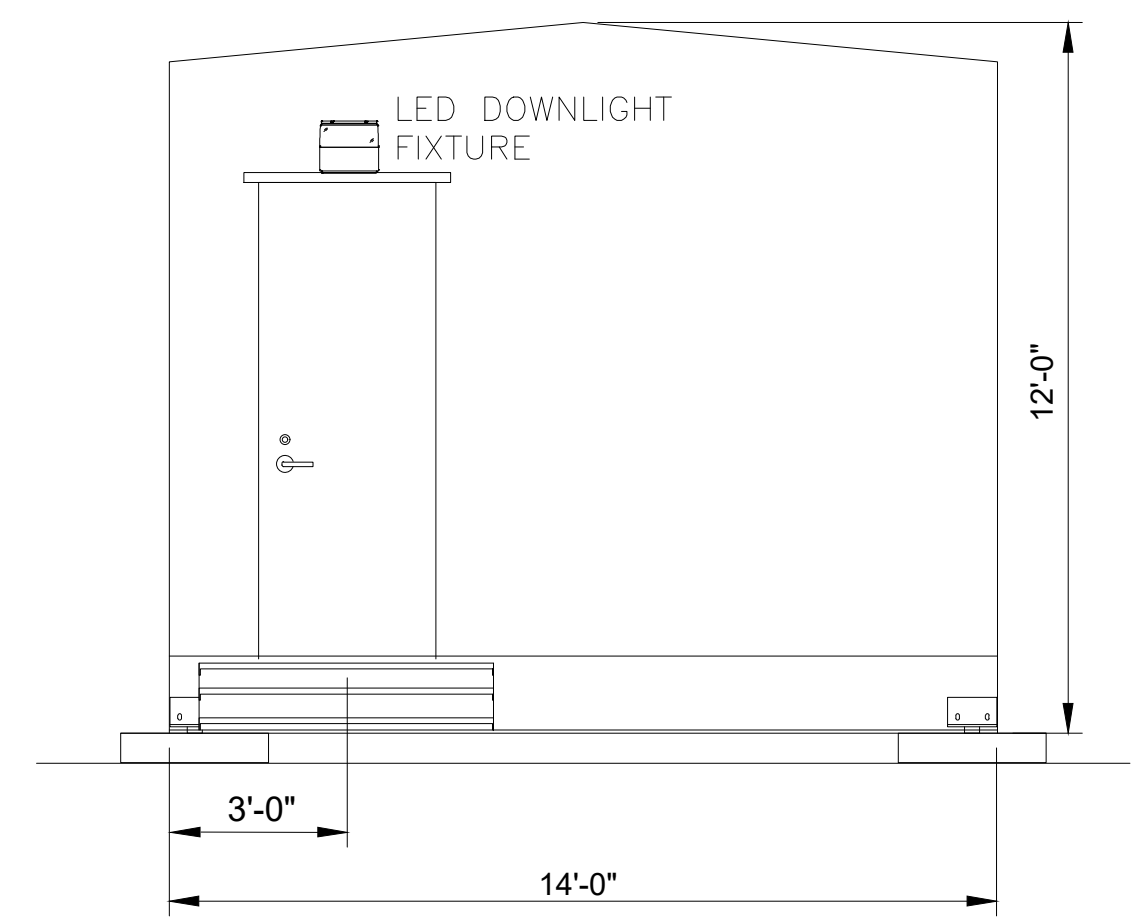
TRC 10 MAXWELL DRIVE, SUITE 200 CLIFTON PARK, NY 12065		PROJECT NO: 443269			
REV	DESCRIPTION	DATE	DES	CHK	APP
C	RE-ISSUE FOR 94-C	01/15/24	TB	CT	.
B	ISSUE FOR 94-C	10/20/23	TB	CT	.
A	ISSUE FOR REVIEW	08/30/23	TB	CT	.

TB DESIGNED	MILL POINT SOLAR 34.5/345KV COLLECTOR SUBSTATION SECTION C-C (PHYSICAL)
EL DRAWN	
CT CHECKED	
APPROVED	

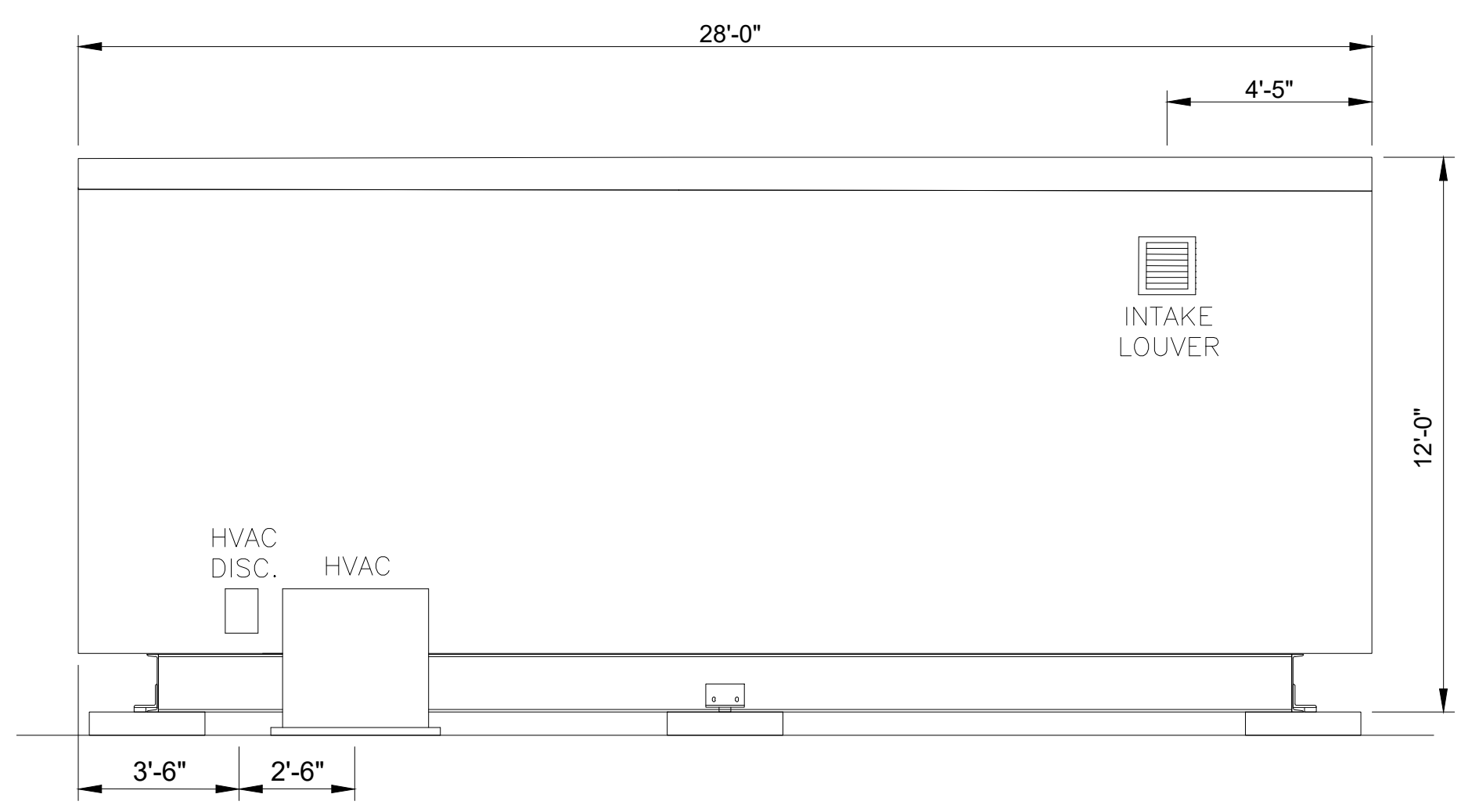
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REVIEW 2	1/128" = 1'-0" SCALE			



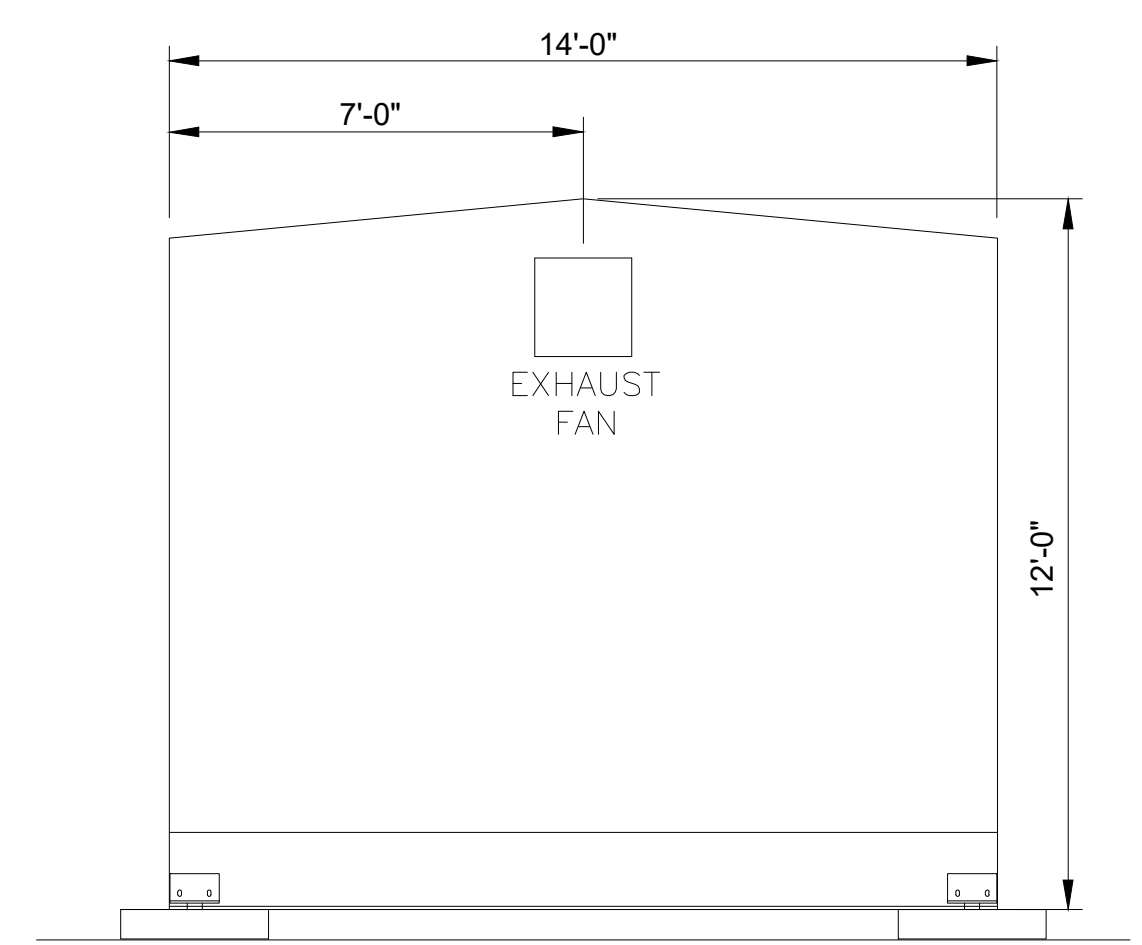
SECTION K-K
SCALE: NTS



SECTION L-L
SCALE: NTS



SECTION M-M
SCALE: NTS



SECTION N-N
SCALE: NTS

NOTE:

1. THE EQUIPMENT AND LAYOUT SHOWN IS FOR CONCEPTUAL USE ONLY.
2. ELECTRICAL EQUIPMENT WILL UTILIZE GALVANIZED STEEL MATERIAL AND EQUIPMENT COLOR WILL BE NATURAL GALVANIZED STEEL, WHITE OR ANSI GRAY. FINAL MATERIAL TYPE AND FINISH COLOR DETAILS WILL BE UPDATED DURING DETAILED DESIGN.

DESIGN CRITERIA:

345kV CLEARANCE: (1300 kV BIL)

LIVE PARTS: MIN Ø-G = 104"
MIN Ø-O = 119"

TO GRADE: 10'-0" (BUS)
22'-0" (DRIVEWAY)

NOTE:

1. DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC., LLC, CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018. DRAWING PREPARED FOR CONNECTGEN, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
2. UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



PRELIMINARY
NOT FOR CONSTRUCTION

TRC 10 MAXWELL DRIVE, SUITE 200 CLIFTON PARK, NY 12065		PROJECT NO: 443269			
REV	DESCRIPTION	DATE	DES	CHK	APP
D	-	-	-	-	-
C	-	-	-	-	-
B	-	-	-	-	-
A	ISSUE FOR 94-C DEFICIENCY SUPPLEMENT	05/31/24	KP	CT	-

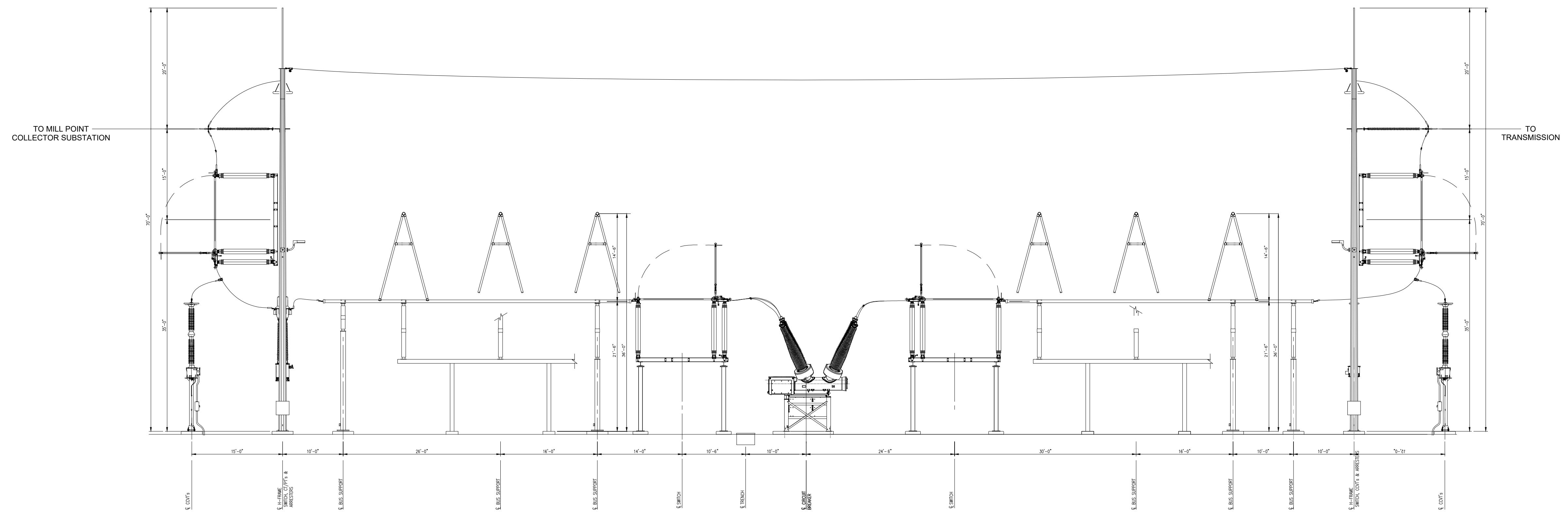
KP DESIGNED
KP DRAWN
CT CHECKED
APPROVED

MILL POINT SOLAR 34.5/345KV COLLECTOR SUBSTATION SECTION K-K, L-L, M-M, N-N (PHYSICAL)

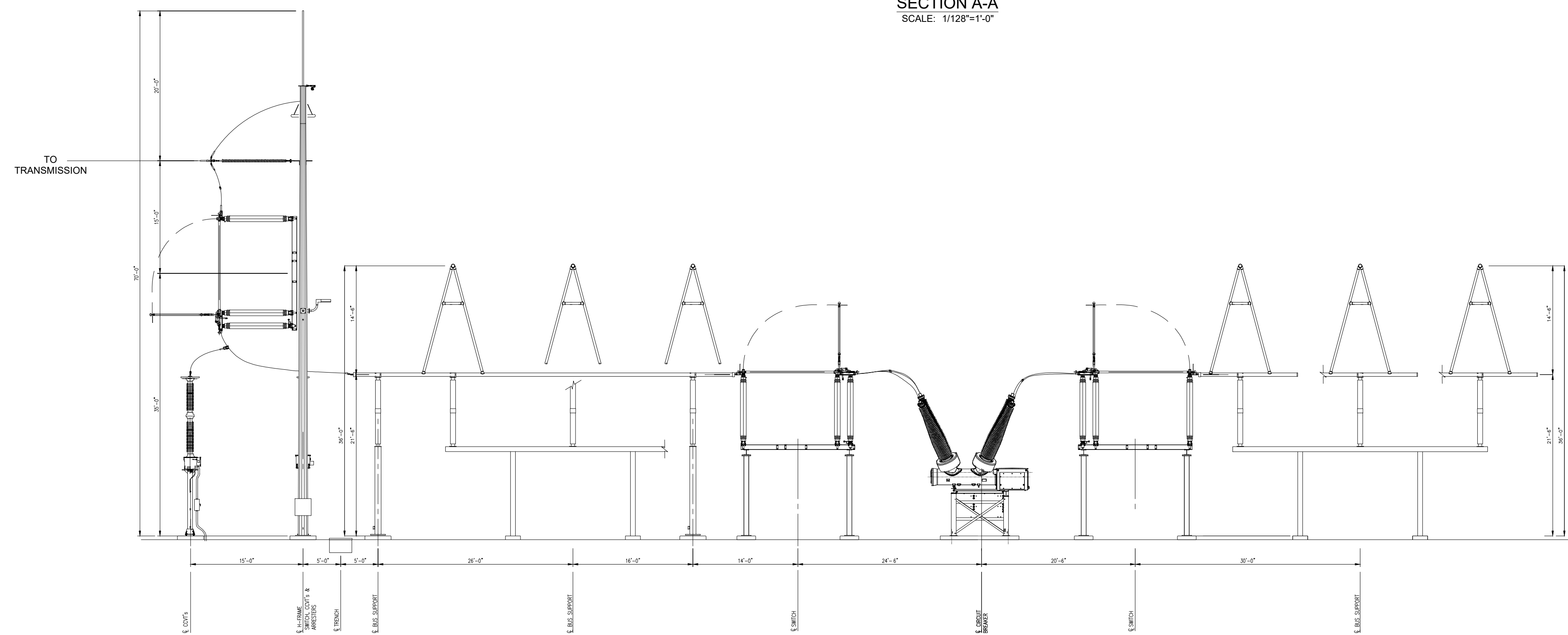
05/31/24 DATE
NTS SCALE

TRC MPS-E-210-04

REV. A



SECTION A-A
SCALE: 1/128"=1'-0"



SECTION B-B
SCALE: 1/128"=1'-0"

DESIGN CRITERIA:
 345kV CLEARANCE: (1300 kV BIL)
 LIVE PARTS: MIN Ø-G = 104"
 MIN Ø-Ø = 119"
 TO GRADE: 10'-0" (BUS)
 22'-0" (DRIVEWAY)

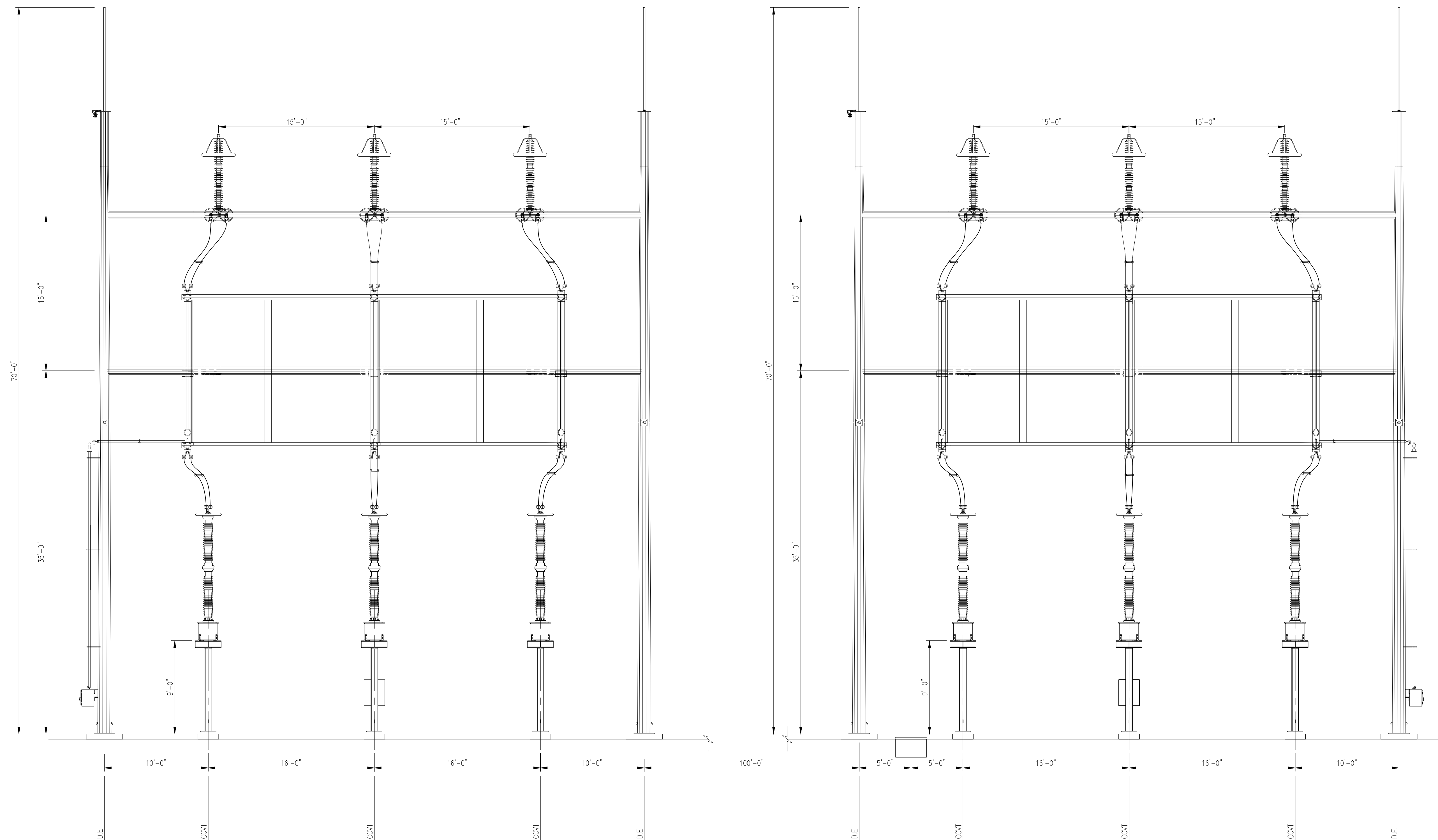
NOTE:
 1. DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025. TRC ENGINEERS, INC. LLC, CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018. DRAWING PREPARED FOR CONNECTGEN, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
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PRELIMINARY
NOT FOR CONSTRUCTION

TRC 10 MAXWELL DRIVE, SUITE 200 CLIFTON PARK, NY 12065		PROJECT NO: 443269			
REV	DESCRIPTION	DATE	DES	CHK	APP
D	RE-ISSUE FOR 94-C	01/15/24	TB	CT	.
C	ISSUE FOR 94-C	10/20/23	TB	CT	.
B	RE-ISSUE FOR REVIEW	10/06/23	TB	CT	.
A	ISSUE FOR REVIEW	09/06/23	TB	CT	.

TB DESIGNED	MILL POINT SOLAR 34.5/345KV POI SWITCHYARD SECTION A-A & B-B (PHYSICAL)	TRC	MPS-E-210-11	REV.
EL DRAWN				D
CT CHECKED				
APPROVED				
REVIEW 1	01/15/24			
REVIEW 2	1/128" = 1'-0" SCALE			



SECTION C-C
SCALE: 1/64"=1'-0"

DESIGN CRITERIA:
 345kV CLEARANCE: (1300 kV BIL)
 LIVE PARTS: MIN Ø-G = 104"
 MIN Ø-Ø = 119"
 TO GRADE: 10'-0" (BUS)
 22'-0" (DRIVEWAY)

NOTE:
 1. DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC, LLC, CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018. DRAWING PREPARED FOR CONNECTGEN, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
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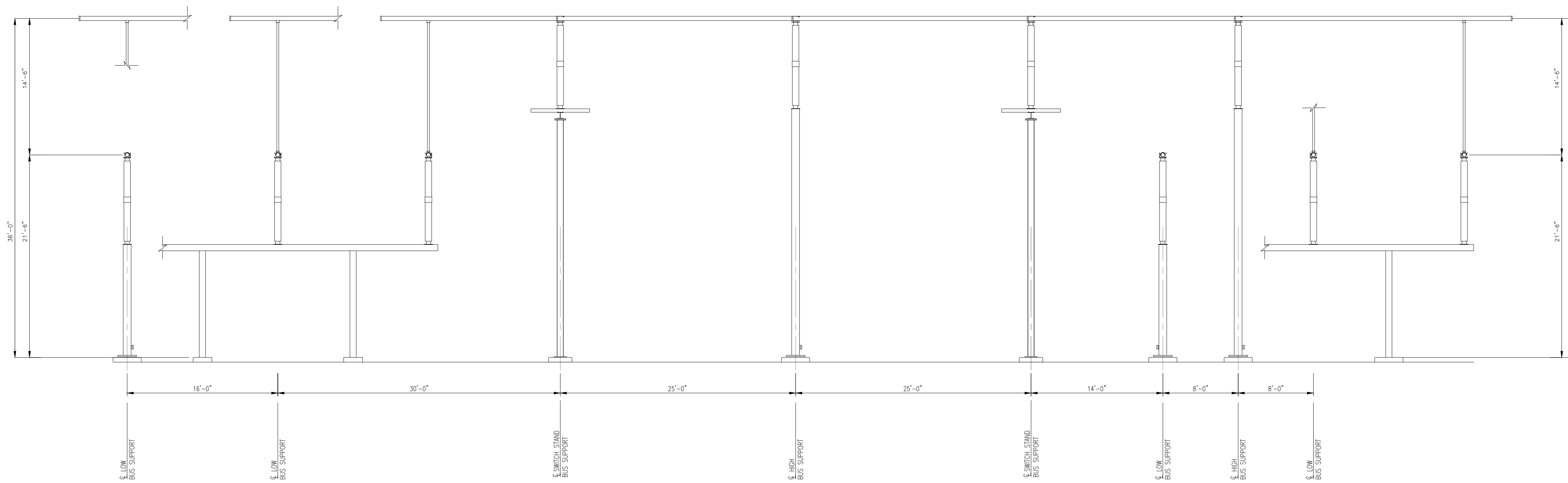


PRELIMINARY
NOT FOR CONSTRUCTION

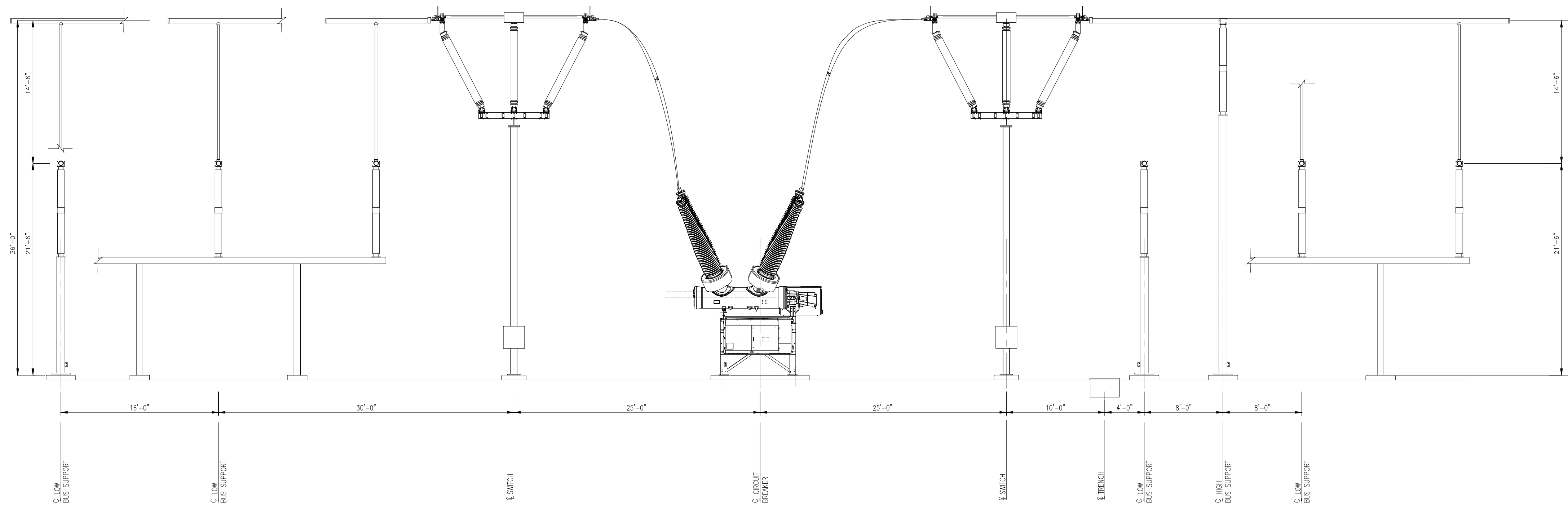
TRC 10 MAXWELL DRIVE, SUITE 200 CLIFTON PARK, NY 12065		PROJECT NO: 443269			
REV	DESCRIPTION	DATE	DES	CHK	APP
D	RE-ISSUE FOR 94-C	01/15/24	TB	CT	.
C	ISSUE FOR 94-C	10/20/23	TB	CT	.
B	RE-ISSUE FOR REVIEW	10/06/23	TB	CT	.
A	ISSUE FOR REVIEW	09/06/23	TB	CT	.

TB DESIGNED	TRC	MPS-E-210-12	REV. D
EL DRAWN			
CT CHECKED			
APPROVED			
REVIEW 1 DATE	01/15/24		
REVIEW 2 SCALE	1/64" = 1'-0"		

**MILL POINT SOLAR 34.5/345KV
 POI SWITCHYARD
 SECTION C-C
 (PHYSICAL)**



SECTION D-D
SCALE: NTS



SECTION E-E
SCALE: NTS

DESIGN CRITERIA:

345kV CLEARANCE: (1300 kV BIL)
LIVE PARTS: MIN Ø-G = 104"
MIN Ø-Ø = 119"
TO GRADE: 10'-0" (BUS)
22'-0" (DRIVEWAY)

NOTE:

- DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC, LLC, CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018. DRAWING PREPARED FOR CONNECTGEN, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
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PRELIMINARY
NOT FOR CONSTRUCTION

TRC 10 MAXWELL DRIVE, SUITE 200 CLIFTON PARK, NY 12065		PROJECT NO: 443269			
REV	DESCRIPTION	DATE	DES	CHK	APP
D	RE-ISSUE FOR 94-C	01/15/24	TB	CT	.
C	ISSUE FOR 94-C	10/20/23	TB	CT	.
B	RE-ISSUE FOR REVIEW	10/06/23	TB	CT	.
A	ISSUE FOR REVIEW	09/06/23	TB	CT	.

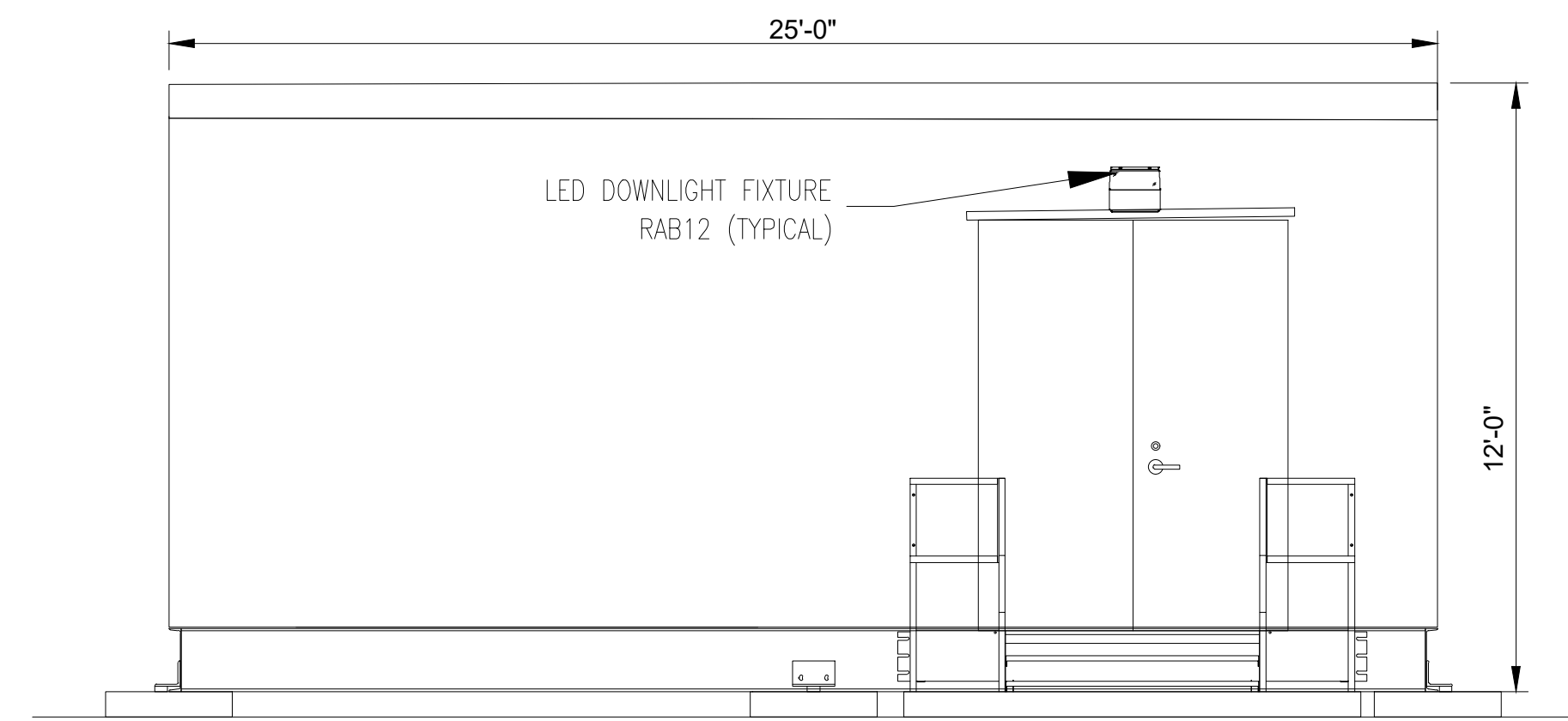
TB	DESIGNED
EL	DRAWN
CT	CHECKED
	APPROVED
REVIEW 1	01/15/24
REVIEW 2	NTS
	SCALE

**MILL POINT SOLAR 34.5/345KV
POI SWITCHYARD
SECTION D-D & E-E
(PHYSICAL)**

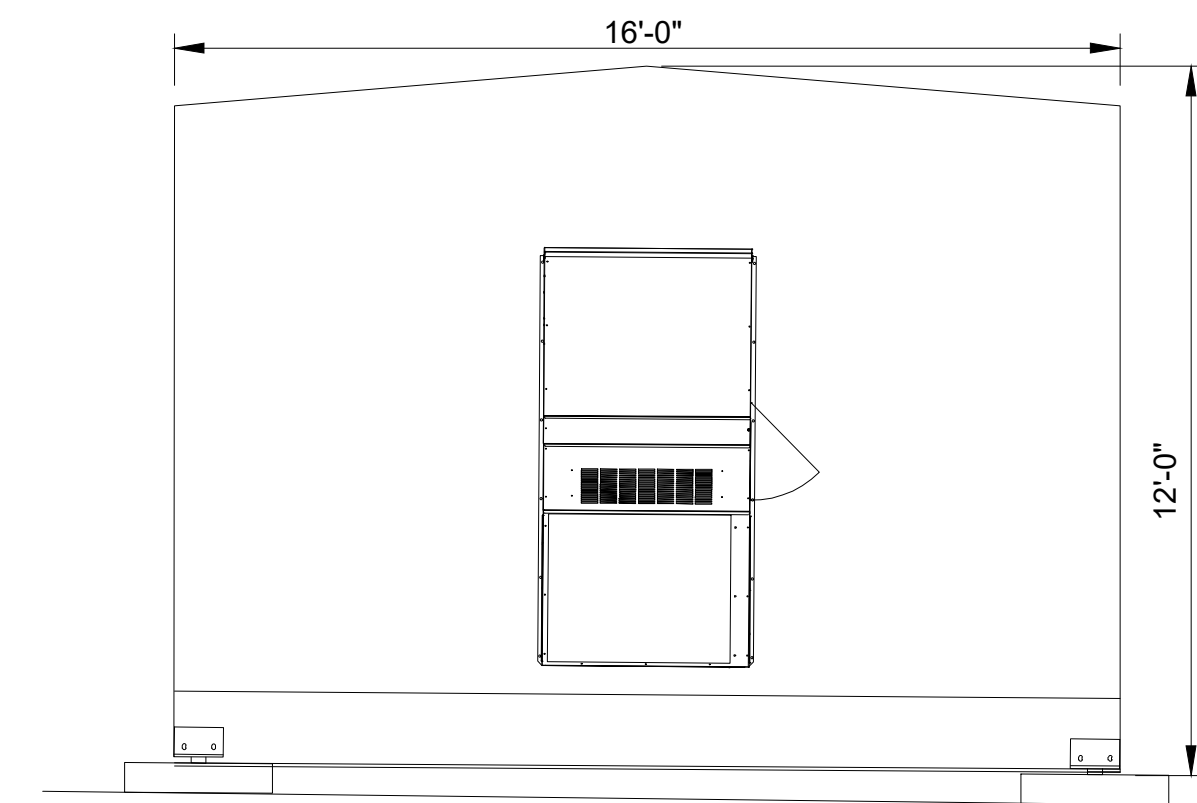


MPS-E-210-13

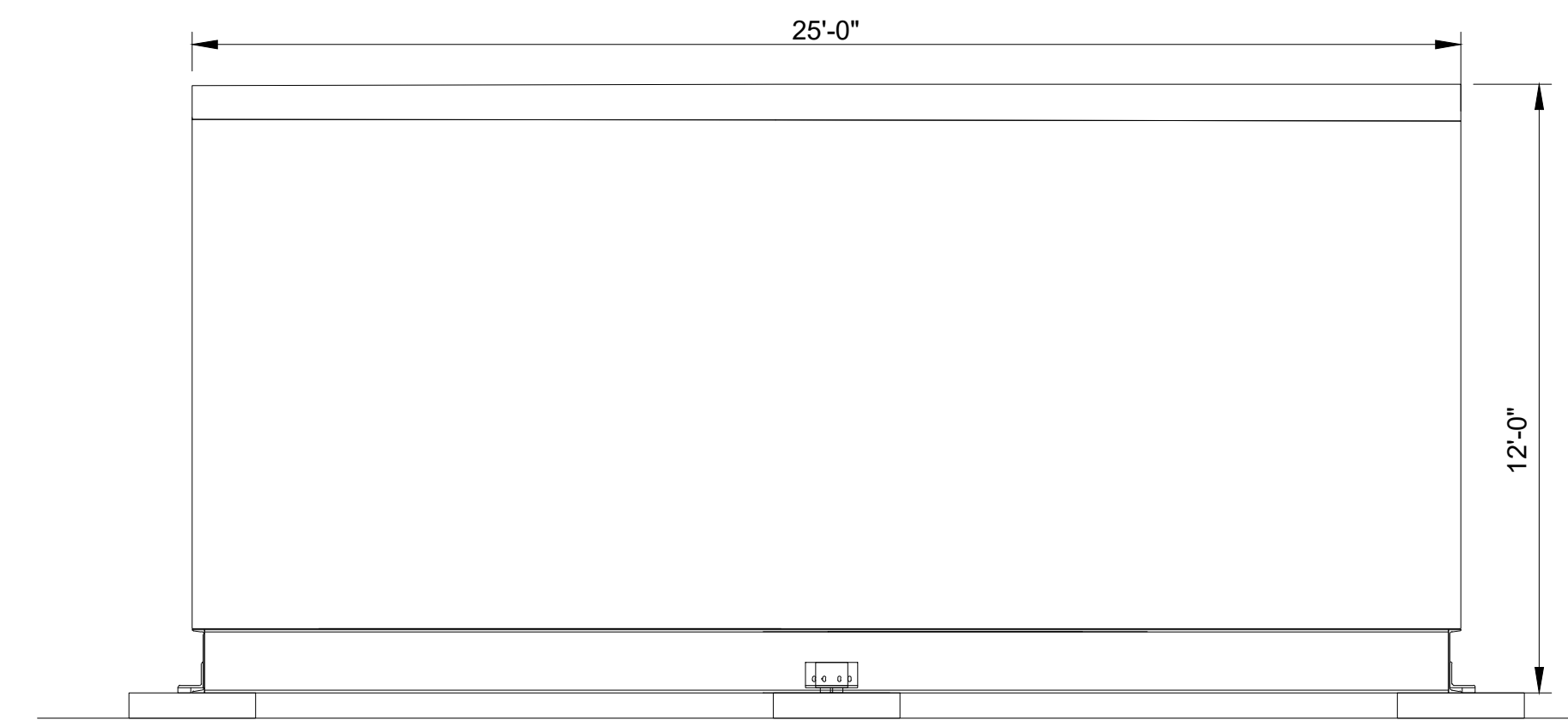
REV. D



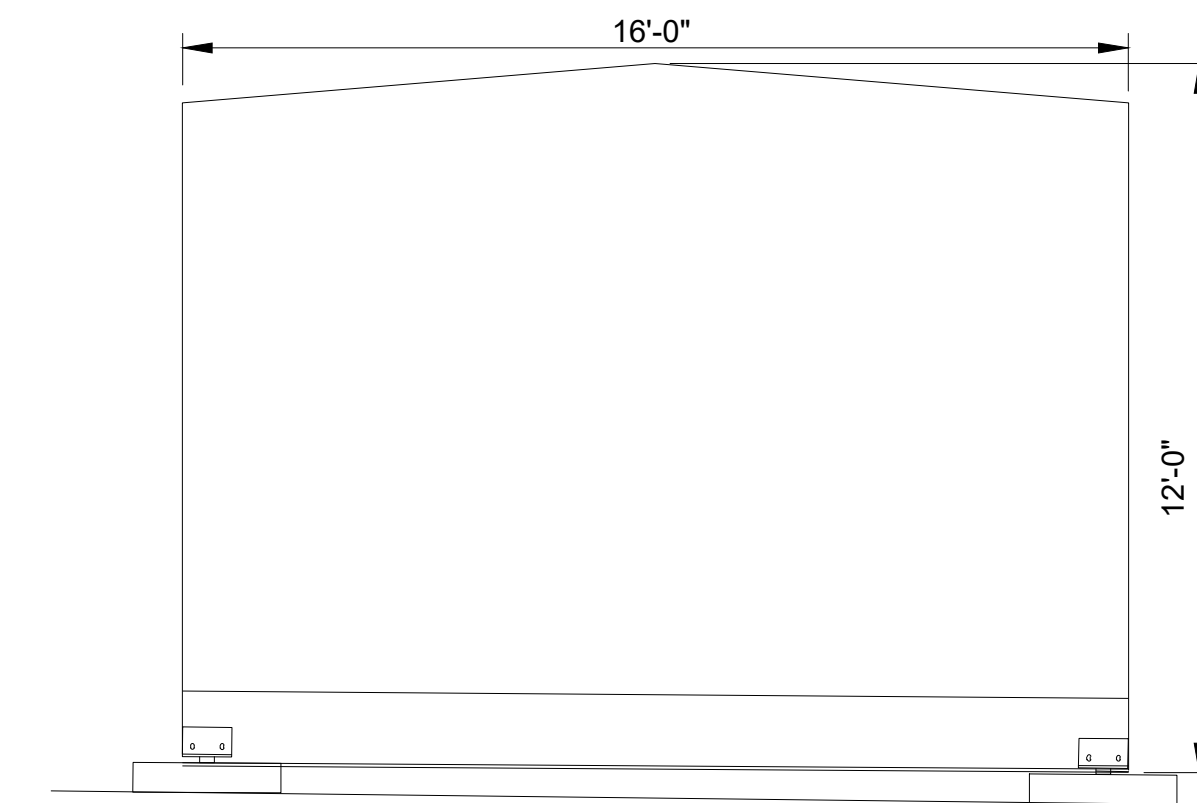
SECTION F-F
SCALE: NTS



SECTION G-G
SCALE: NTS



SECTION H-H
SCALE: NTS



SECTION J-J
SCALE: NTS

- NOTES:**
1. THE EQUIPMENT AND LAYOUT SHOWN IS FOR CONCEPTUAL USE ONLY.
 2. ELECTRICAL EQUIPMENT WILL UTILIZE GALVANIZED STEEL MATERIAL AND EQUIPMENT COLOR WILL BE NATURAL GALVANIZED STEEL, WHITE OR ANSI GRAY. FINAL MATERIAL TYPE AND FINISH COLOR DETAILS WILL BE UPDATED DURING DETAILED DESIGN.

DESIGN CRITERIA:

345kV CLEARANCE: (1300 kV BIL)

LIVE PARTS: MIN Ø-G = 104"
MIN Ø-Ø = 119"

TO GRADE: 10'-0" (BUS)
22'-0" (DRIVEWAY)

NOTE:

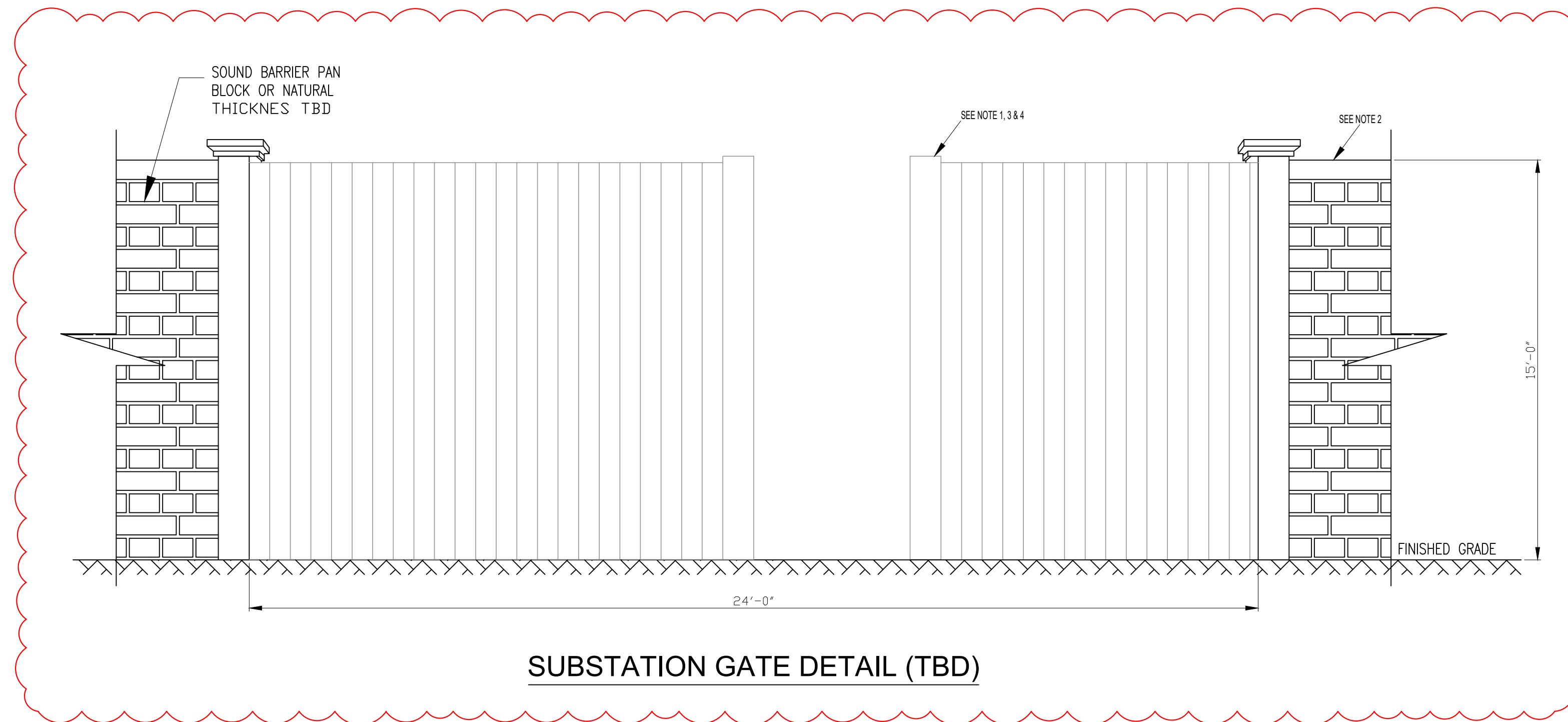
1. DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC, LLC, CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018. DRAWING PREPARED FOR CONNECTGEN, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
2. UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



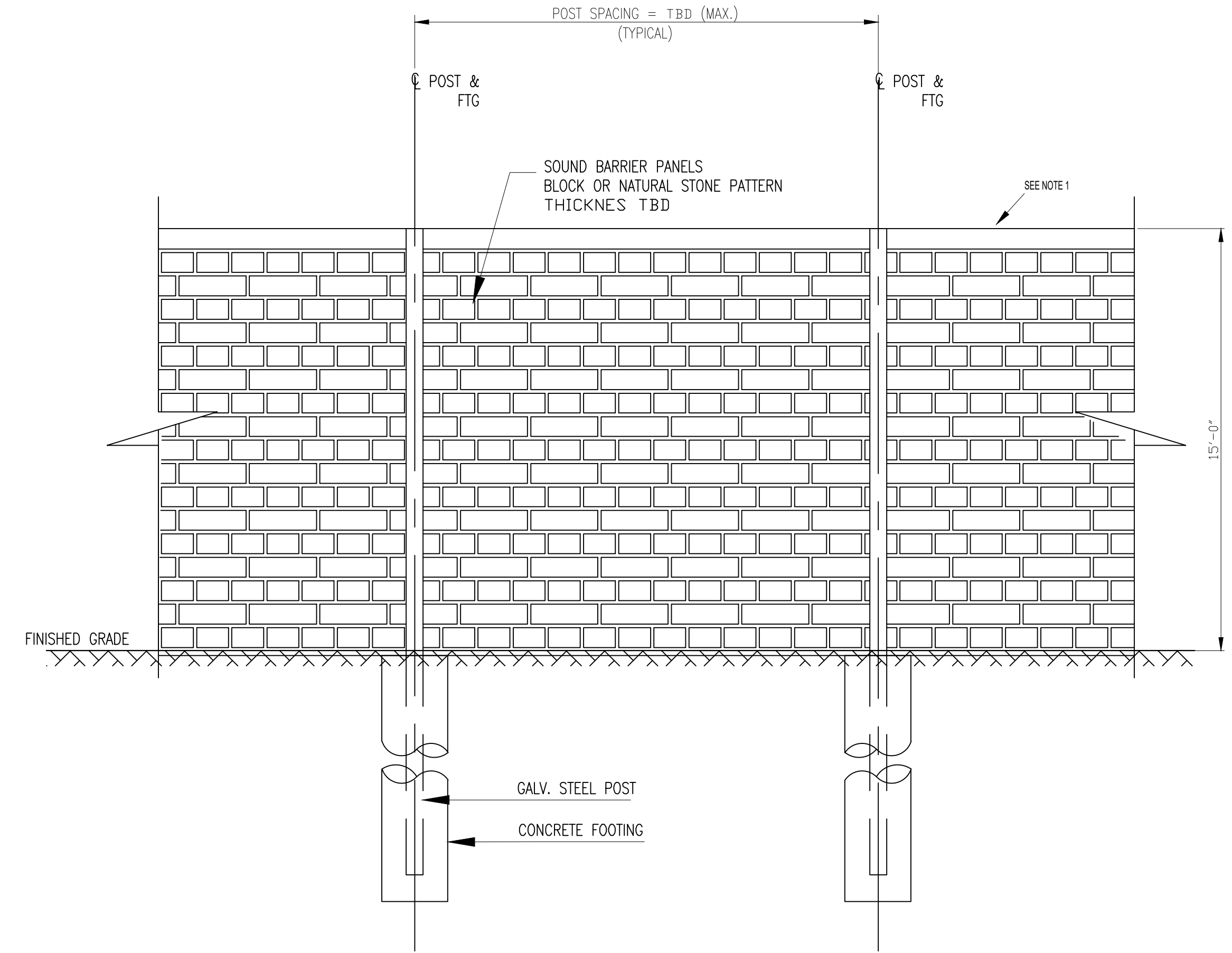
PRELIMINARY
NOT FOR CONSTRUCTION

TRC 10 MAXWELL DRIVE, SUITE 200 CLIFTON PARK, NY 12065		PROJECT NO: 443269			
REV	DESCRIPTION	DATE	DES	CHK	APP
D	RE-ISSUE FOR 94-C	01/15/24	TB	CT	.
C	ISSUE FOR 94-C	10/20/23	TB	CT	.
B	RE-ISSUE FOR REVIEW	10/06/23	TB	CT	.
A	ISSUE FOR REVIEW	09/06/23	TB	CT	.

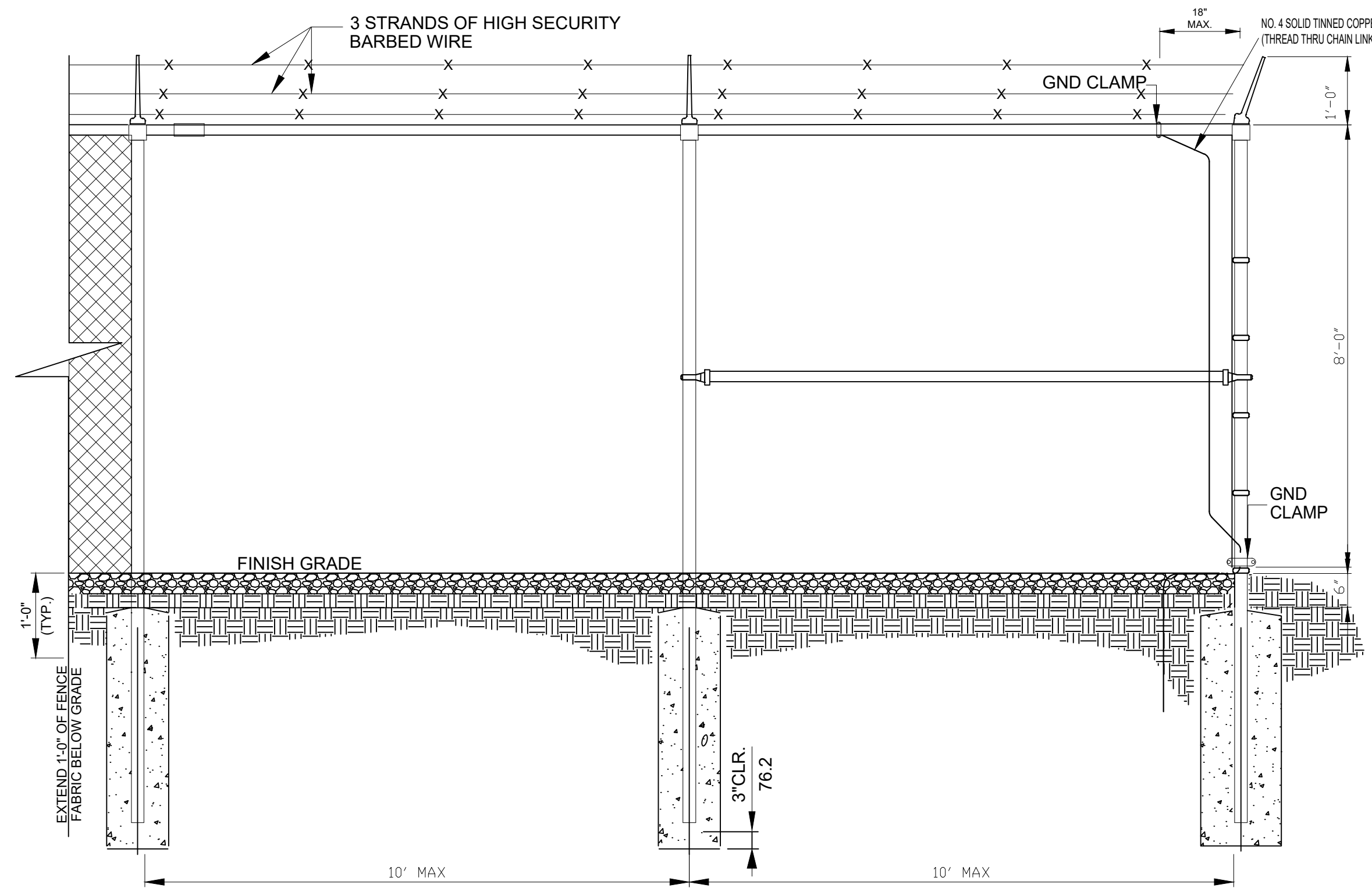
TB DESIGNED	MILL POINT SOLAR 34.5/345KV POI SWITCHYARD SECTION F-F,G-G,H-H,J-J (PHYSICAL)	TRC	MPS-E-210-14	REV.
EL DRAWN				D
CT CHECKED				
APPROVED				
REVIEW 1	01/15/24			
REVIEW 2	NTS			
	DATE			
	SCALE			



SUBSTATION GATE DETAIL (TBD)



SOUND WALL DETAIL



LINE AND CORNER POST ELEVATION

- NOTE:**
1. THE EQUIPMENT AND LAYOUT SHOWN IS FOR CONCEPTUAL USE ONLY.
 2. SOUND WALL WILL UTILIZE NATURAL STONE OR FLAT PRECAST MATERIAL WITH A GRAY, NATURAL, OR TAN COLOR (OR SIMILAR). FINAL MATERIAL TYPE AND FINISH COLOR DETAILS WILL BE UPDATED DURING FINAL DESIGN.
 3. GATE MATERIAL AND FINISH WILL COMPRISE OF SOUND ATTENUATING COMPOSITE AND STEEL AND WILL MATCH OR BE SIMILAR TO THE FINISH OF THE SOUND WALL.
 4. SUBSTATION GATE WILL BE OPENED AND CLOSED ON A MOTOR DRIVEN TRACK THAT WILL OPERATE INTERMITTENTLY AND ON RARE OCCASIONS WHEN ACCESS TO THE SUBSTATION IS NECESSARY.

DESIGN CRITERIA:

345KV CLEARANCE: (1300 KV BIL)

LIVE PARTS: MIN Ø-G = 104"
MIN Ø-Ø = 119"

TO GRADE: 10'-0" (BUS)
22'-0" (DRIVEWAY)

UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



PRELIMINARY
NOT FOR CONSTRUCTION

TRC		10 MAXWELL DRIVE, SUITE 200 CLIFTON PARK, NY 12065		PROJECT NO: 443269	
REV	DESCRIPTION	DATE	DES	CHK	APP
A	ISSUE FOR 94-C DEFICIENCY SUPPLEMENT	05/31/24	KP	CT	

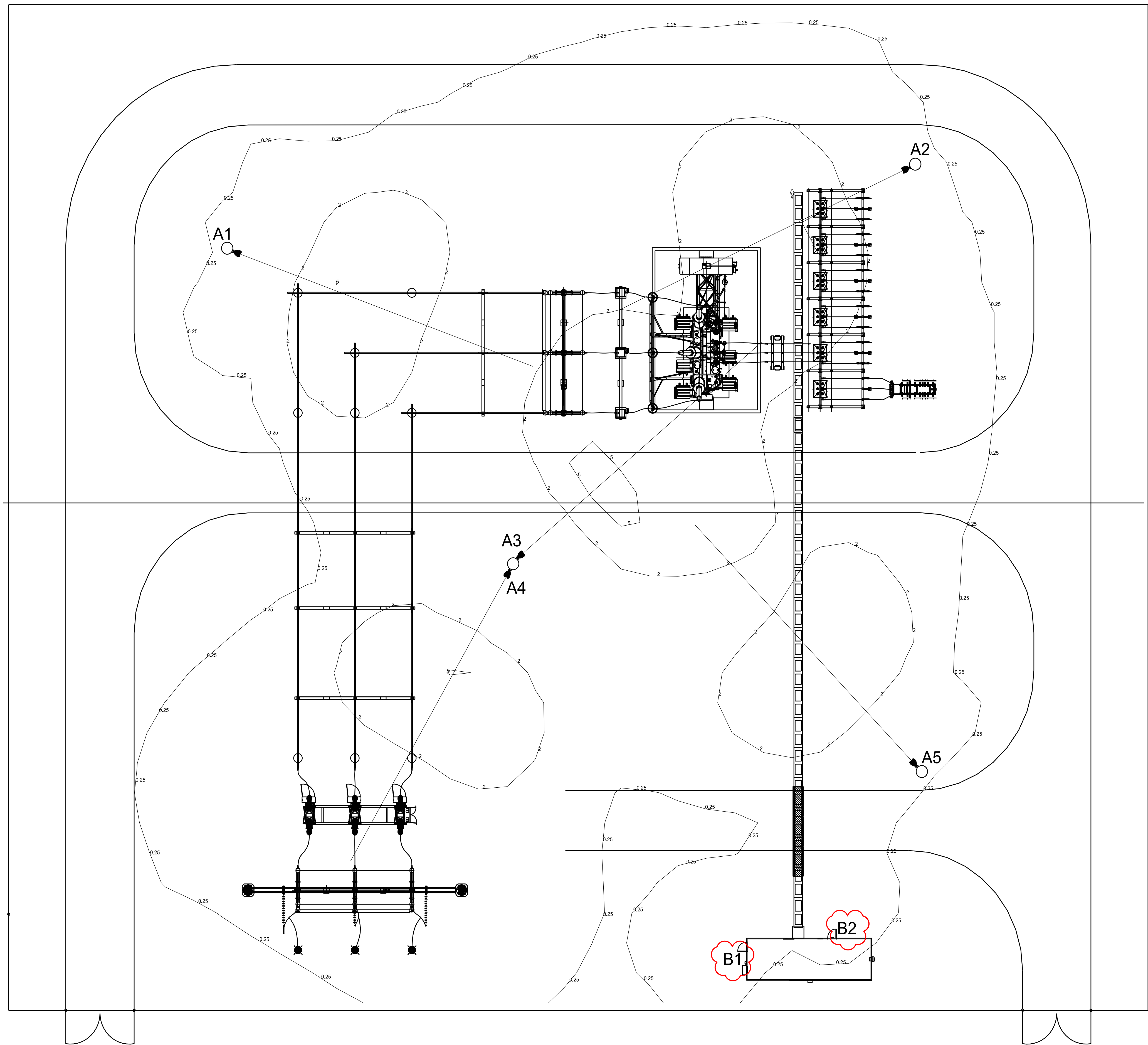


TB DESIGNED	
EL DRAWN	
CT CHECKED	
APPROVED	
REVIEW 1	08/30/23
REVIEW 2	

**MILL POINT SOLAR 34.5/345KV
COLLECTOR CHAIN LINK
FENCE & WALL DETAILS**
(PHYSICAL)

TRC MPS-E-210-16

REV. A



LIGHTING PLAN
SCALE: N.T.S.

FIXTURE							LAMP	PHOTO-ELECTRIC CONTROL
TYPE	WATTAGE	LIGHT SOURCE	VOLTAGE	WEIGHT (LBS)	LUMENS	NEMA CLASS	MANUFACTURER (GE) ITEM #	MANUFACTURER ITEM #
A1 - A5	357	LED	120V	54	50,700	N/A	AMERICAN ELECTRIC LIGHTING ACP2LED P10 MVOLT 55	N/A
B1 - B2	27.1	LED	120V	33	3,100	N/A	HLWPC2_P10_AMB_120_T2M	N/A

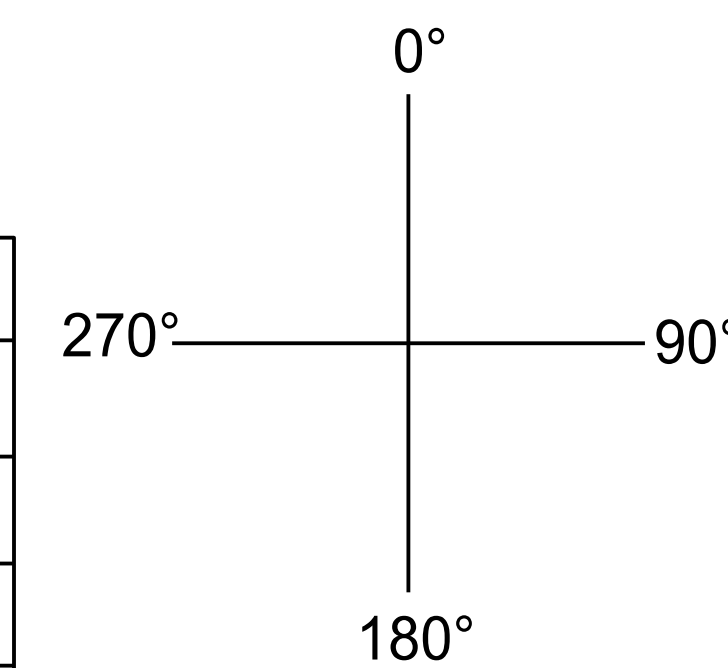
NOTES:

1. LIGHTING CALCULATIONS WERE PERFORMED USING VISUAL 2020, VERSION 2.11
2. PER CODE 19 NYCRR 900-2.9(d)(iii)(a) PERIMETER LIGHTING CONTROL ARE ON/OFF/AUTO
3. SEE DWG. MPS-E-210-01 FOR OVERALL SITE LAYOUT
4. PER CODE 19 NYCRR 900-2.9(d)(iii)(a) LIGHTING FIXTURES WERE DESIGNED TO BE PLACED AT THE LOWEST PRACTICAL HEIGHT AND DIRECTED TO THE GROUND AND/OR WORK AREAS. FIXTURE INSTALLATION HEIGHT AND TILT ARE SHOWN IN THE TABLE BELOW
5. THE NUMBERS ON THE CONTOURS REPRESENT THE FOOT CANDLE LEVELS AT THAT AREA.

LEGEND:

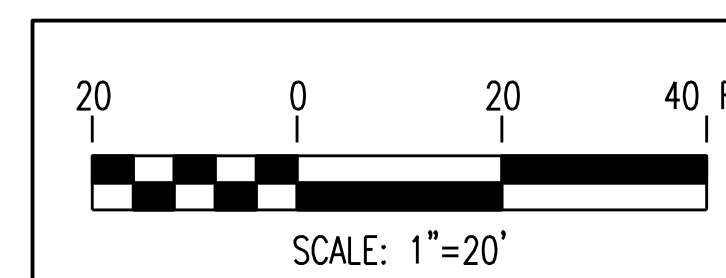
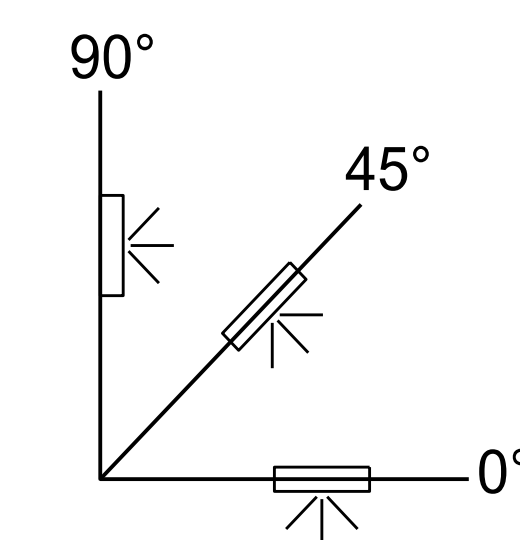
- Ø - LED FLOOD LIGHT
- - BUILDING LIGHT

ORIENTATION REFERENCE



	HEIGHT	ORIENTATION	TILT
A1	30.4'	110°	75°
A2	30.4'	245°	75°
A3	30.4'	50°	75°
A4	30.4'	210°	75°
A5	30.4'	316°	75°
B1	10'	0°	0°
B2	10'	270°	0°

TILT REFERENCE



NOTE:
1. DRAWING PREPARED UNDER JEREMIAH T. BRIDGWOOD - LICENSED PROFESSIONAL ENGINEER IN THE STATE OF NEW YORK; LICENSE NO. 107034, EXPIRATION DATE 11/30/2025, TRC ENGINEERS, INC. CERTIFICATE OF AUTHORIZATION NO. 001817, 1407 BROADWAY, SUITE 3301, NEW YORK, NEW YORK 10018, DRAWING PREPARED FOR CONNECTGE, MILL POINT SOLAR PROJECT LOCATED IN MONTGOMERY COUNTY, NY.
2. UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



PRELIMINARY
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TRC 10 MAXWELL DRIVE, SUITE 200
CLIFTON PARK, NY 12065

PROJECT NO: 443269

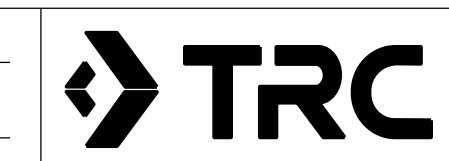
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C	RE-ISSUE FOR 94-C	1/15/24	TB	CT	
B	ISSUE FOR 94-C	10/20/23	MAD	CT	
A	ISSUE FOR REVIEW	8/28/23	MAD	CT	

TB DESIGNED
TB DRAWN
CT CHECKED
APPROVED

**MILL POINT SOLAR 34.5/345KV
345KV COLLECTOR SUBSTATION
LIGHTING PLAN**
(PHYSICAL)

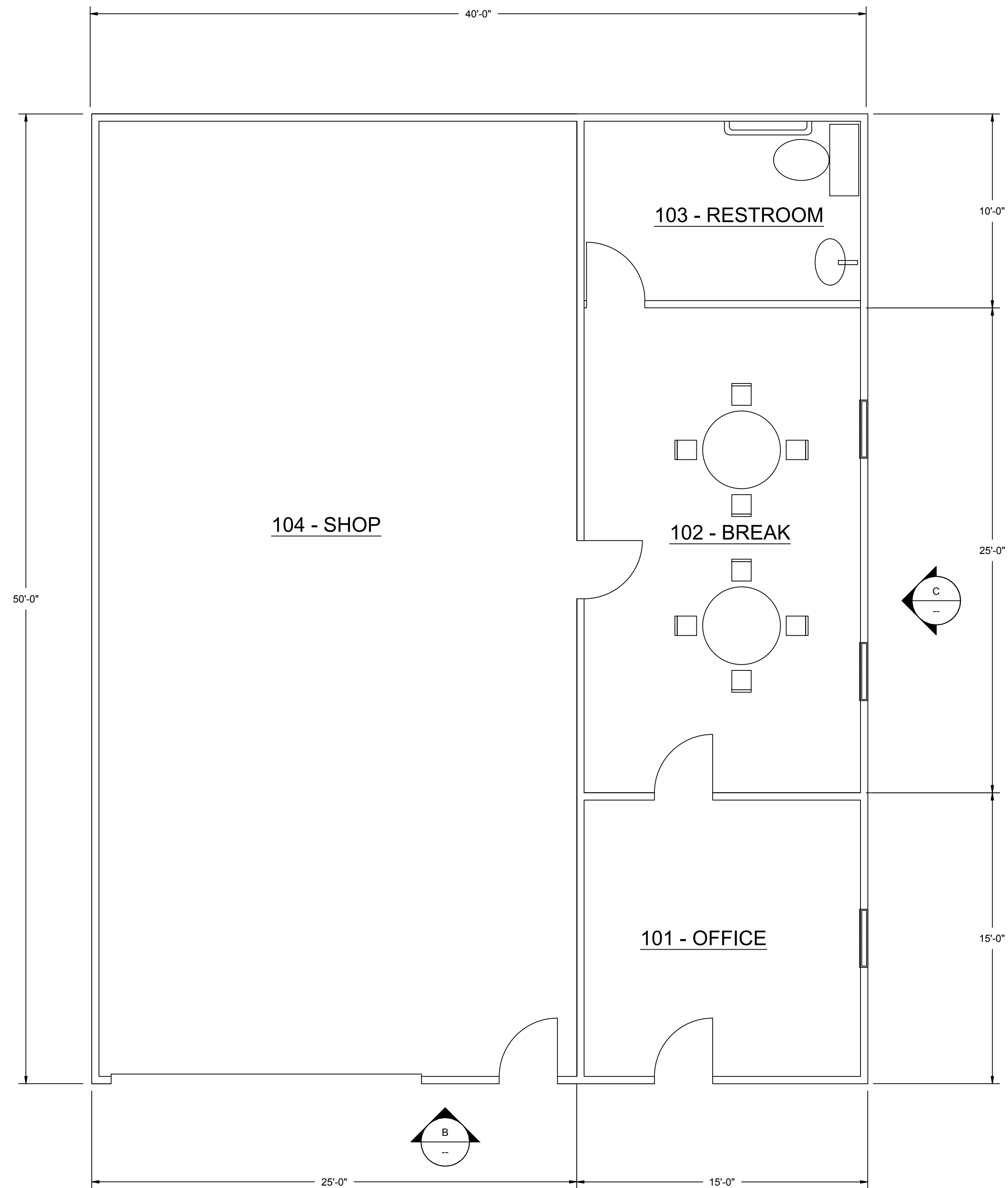
REVIEW 1
REVIEW 2

05/24/24
DATE
N.T.S.
SCALE

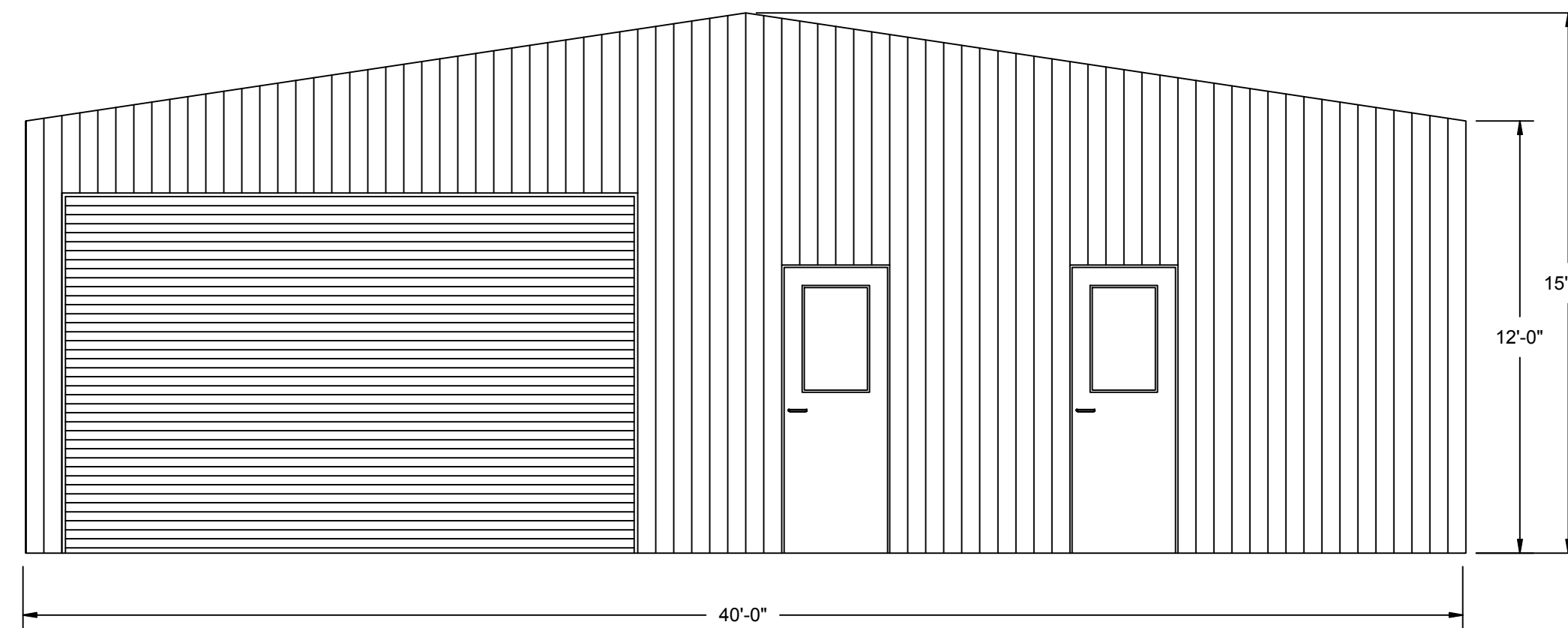


MPS-E-210-21

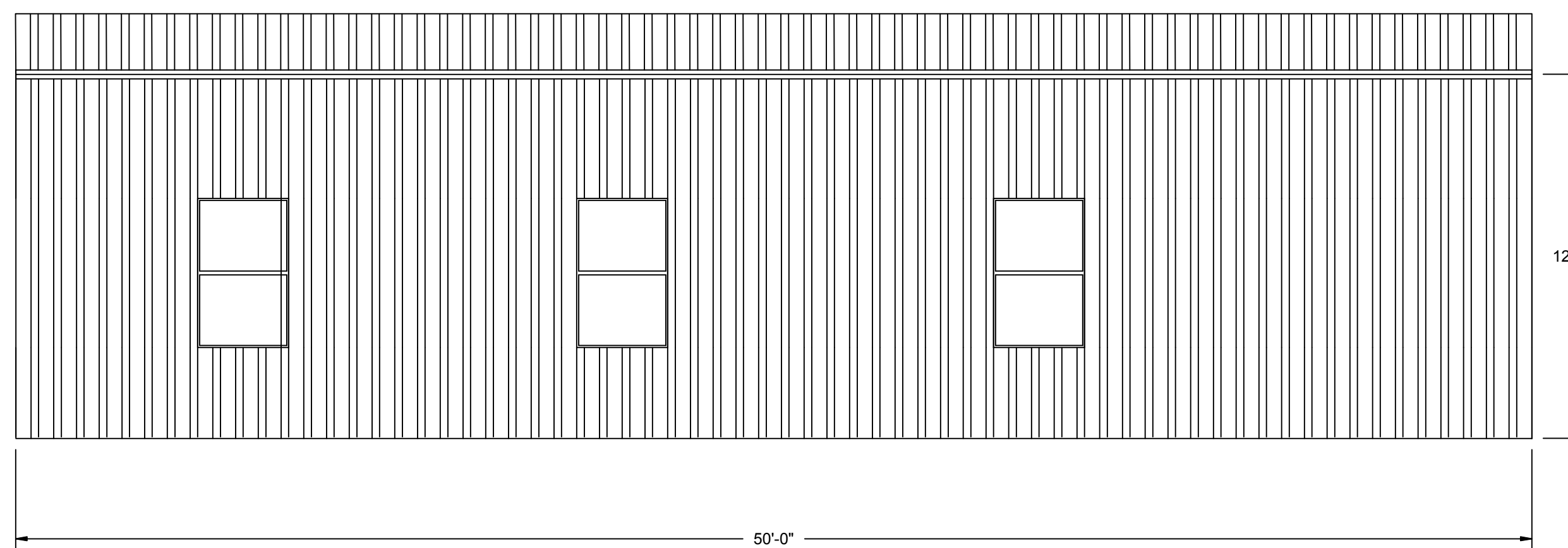
REV. D



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 6



C ELEVATION - O & M BUILDING
SCALE: 1/4"=1'-0" 0 2 4 6

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						MILL POINT SOLAR I PROJECT CONNECTGEN MONTGOMERY COUNTY LLC O & M BUILDING PLAN AND ELEVATIONS		GLEN NEW YORK		MPS-E-405-01	REV. E																														
	<table border="1"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> <th>DES</th> <th>CHK</th> <th>APP</th> </tr> </thead> <tbody> <tr> <td>E</td> <td>ISSUED FOR 94-C DEFICIENCY SUPPLEMENT</td> <td>05/31/24</td> <td>JAK</td> <td>JTG</td> <td>DVL</td> </tr> <tr> <td>D</td> <td>ISSUED FOR 94-C</td> <td>04/26/24</td> <td>JAK</td> <td>JTG</td> <td>DVL</td> </tr> <tr> <td>C</td> <td>ISSUED FOR 94-C</td> <td>01/15/24</td> <td>JAK</td> <td>JTG</td> <td>DVL</td> </tr> <tr> <td>B</td> <td>ISSUED FOR REVIEW</td> <td>09/01/23</td> <td>JAK</td> <td>JTG</td> <td>DVL</td> </tr> </tbody> </table>	REV	DESCRIPTION	DATE	DES	CHK	APP	E	ISSUED FOR 94-C DEFICIENCY SUPPLEMENT	05/31/24					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	<table border="1"> <thead> <tr> <th>REVIEW 1</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td></td> <td>05/31/24</td> </tr> </tbody> </table>	REVIEW 1	DATE		05/31/24	<table border="1"> <thead> <tr> <th>REVIEW 2</th> <th>DATE</th> <th>SCALE</th> </tr> </thead> <tbody> <tr> <td></td> <td>AS NOTED</td> <td></td> </tr> </tbody> </table>	REVIEW 2	DATE	SCALE
REV	DESCRIPTION	DATE	DES	CHK	APP																																							
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REVIEW 1	DATE																																											
	05/31/24																																											
REVIEW 2	DATE	SCALE																																										
	AS NOTED																																											

Catalog Number	
Notes	Type

HLWPC2

Wallpack® Full Cutoff LED



Mechanical

- Heavy grade A360 cast aluminum (aluminum with <1% copper)
- Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering
- Mounts to a standard junction box
- Wet location listed
- IP65 rated housing, down light only
- 3/4" painted threaded entry (3/4" - 14 NPT) on each side and on top, accepts 3/4" and 1/2" conduit
- 3/4" threaded plugs are painted on each side
- Vibration tested to 1.5G per ANSI C136.31.

Electrical

- Certified by UL or CSA
- Rated for -40°C (-40°F) minimum ambient
- A programmable electronic driver with 0-10V control leads
- Available in: 120-277V 50/60 Hz and 347-480V 50/60 Hz,
- Standard: 3000K, 4000K and 5000K CCT (>70 CRI)
- Optional >80 CRI (3000K, 4000K and 5000K CCT)
- Internally mounted emergency battery backup for operation in an ambient temperature ranging from -20°C (-4°F) to 30°C (86°F), available with P10 thru P40 performance packages, non CEC compliant
- All surge protection meets ANSI/IEEE C62.41.2 10kV/10kA
- Standard surge protection is 20kV/10kA per ANSI C136.2
- Optional surge protection is 10kV/5kA per ANSI C136.2

Optical

- Light engine housing is IP66 rated
- Acrylic optical system
- Type V: E (entry), M (medium), R (rectangle) & W (wide)
- Asymmetric

Controls

- Field adjustable output (AO)
- Button style photocontrol (PE)
- Motion sensor & ambient photocontrol combination for mounting low (8-15') (MASL) and high (15-30') (MASH) mounting heights

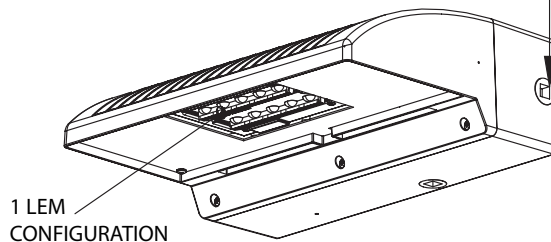
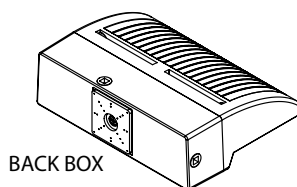
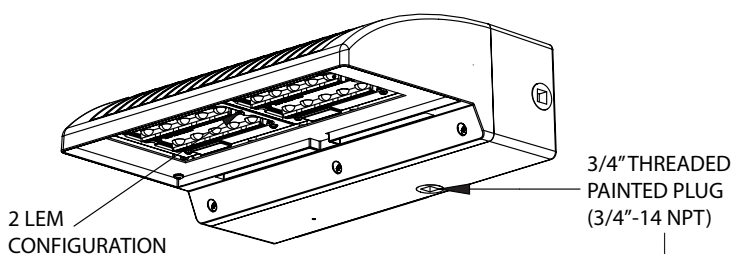
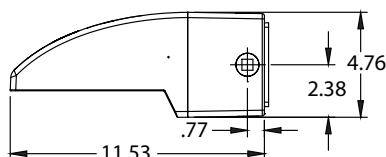
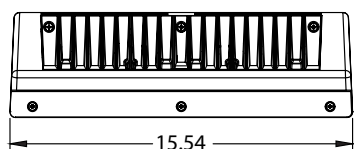
Certification and Standards

- Luminaire is CSA listed, US and Canada
- Suitable for operation in an ambient temperature up to 40°C/104°F per UL or CSA certification
- Design Lights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.
- LM-79 compliant
- The projected LED Lumen Maintenance shall be based only on IES LM-80-08 and TM-21

Warranty

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



Note: Maximum weight 22 lbs.

ORDERING INFORMATION

Example: HLWPC2 P20 40K AS T3M BZSDP

Series	Lumen Package	Color Temperature	Voltage	Optics	Color	CRI	
HLWPC2 Wallpack Full Cutoff LED	1 LEM Package P10 3,100 lm P20 5,600 lm	AMB True Amber	120 120 volts	T2S Type 2 Short	BKSDP Black	Blank 70 CRI (STD) 80CRI 80 CRI	
		30K 3,000 K CCT	208 208 volts	T2M Type 2 Medium	BZSDP Bronze		
		40K 4,000 K CCT	240 240 volts	T3S Type 3 Short	GYSDP Grey		
		50K 5,000 K CCT	277 277 volts	T3M Type 3 Medium	WHSDP White		
			347 347 volts	T4M Type 4 Medium			
	2 LEM Package P30 7,800 lm P40 9,900 lm P50 11,700 lm (Nominal Lumens, 4000K)			480 480 volts	TFTM Forward Throw Medium		
				HVOLT 347/480 volts	ASYDF Asymmetric Diffuse		
				MVOLT 120-277 volts	SYMDF Symmetric Diffuse		

Options:		
<p>Adjustable/Programmable Options</p> <p>A0 Field Adjustable Output</p> <p>Circuit Options</p> <p>2CI 2 Independent Circuits</p> <p>Control - Motion Sensor Options</p> <p>MASL^{1,2} Motion / Ambient Sensor, 8-15' Mounting Height Ambient Sensor Enabled at 5 FC</p> <p>MASH^{1,2} Motion / Ambient Sensor, 15-30' Mounting Height Ambient Sensor Enabled at 5 FC</p>	<p>Control - Photocontrol Options</p> <p>PE Button Style Photocontrol</p> <p>P3 N.E.M.A. Twistlock Receptacle Mount -3 PIN</p> <p>P7 N.E.M.A. Twistlock Receptacle Mount -7 PIN</p> <p>PCLL DTL Long Life Twistlock Photocontrol for Solid State</p> <p>PSC Shorting Cap</p>	<p>Fuse Option</p> <p>SF Single Fuse</p> <p>DF Double Fuse</p> <p>Safety Option</p> <p>EM Integral Emergency Battery</p> <p>TP Tamper Resistant Hardware</p> <p>Surge Protection Option - 20kV/10kA is Standard</p> <p>10KV 10kV/5kA Surge Protection, in place of 20kV/10kA</p>

- Notes**
- MASL and MASH sensors are not allowed with P10 lumen package option selected.
 - MASL and MASH options reduce luminaire light output to roughly 30% (not full OFF) when no motion is detected. When motion is detected, light output temporarily increases to 100%.

Options Location

Motion/Ambient Sensor mount options for Low (8-15') (MASL) and Height (15-30') (MASH) applications

N.E.M.A. Twistlock Receptacle P3 and P7 Options, P7 Shown

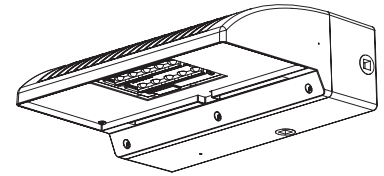
Internal Emergency Battery Test Button - EM Option

Button Style Photocontrol - PE Option

Driver & LEM Configuration Based on Circuit Options

Number of LEMs & Drivers / Circuit		Single Circuit (std.)		Two Circuit (2CI option)	
		LEMs	Drivers	LEMs	Drivers
Lumen Maintenance Factor	P10	1	1	-	-
	P20	1	1	2	2
	P30	2	1	2	2
	P40	2	1	2	2
	P50	2	1	-	-

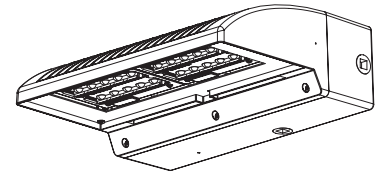
1 LEM Luminaire



SPD Based on Circuit Options

Number of LEMs & Drivers / Circuit		Single Circuit (std.)				Two Circuit (2CI option)			
		LEMs	Drivers	No. of SPDs	SPD	LEMs	Drivers	No. of SPDs	SPD
Lumen Maintenance Factor	P10	1	1	1	20kV/10kA	-	-	-	-
	P20	1	1	1	20kV/10kA	2	2	2	10kV/5kA
	P30	2	1	1	20kV/10kA	2	2	2	10kV/5kA
	P40	2	1	1	20kV/10kA	2	2	2	10kV/5kA
	P50	2	1	1	20kV/10kA	-	-	-	-

2 LEM Luminaire



Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platform noted in a 25°C ambient, based on 6,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

The italicized data is extrapolated beyond the TM-21 standard.

$$E = (LM) \times (CU) \times (LAT) \times (LLD)$$

LM and CU are obtained from published photometry.

Operating Hours (Standard)		0	25,000	30,000	36,000	45,000	50,000	60,000	75,000	100,000
		Lumen Maintenance Factor	P10	1	0.98	0.97	0.96	0.96	0.95	0.95
P20	1		0.97	0.95	0.94	0.93	0.92	0.90	0.88	0.85
P30	1		0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.92
P40	1		0.97	0.95	0.94	0.93	0.92	0.90	0.88	0.85

Operating Hours (2CI Option)		0	25,000	30,000	36,000	45,000	50,000	60,000	75,000	100,000
		Lumen Maintenance Factor	P10	1	0.99	0.99	0.99	0.99	0.99	0.99
P20	1		0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
P30	1		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
P40	1		0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Single Circuit Application

Ambient		P10	P20	P30	P40	P50
0°C	32°F	1.02	1.03	1.03	1.04	1.05
10°C	50°F	1.01	1.02	1.02	1.03	1.03
20°C	68°F	1.01	1.01	1.01	1.01	1.01
25°C	77°F	1.00	1.00	1.00	1.00	1.00
30°C	86°F	0.99	0.99	0.99	0.99	0.99
40°C	104°F	0.98	0.97	0.98	0.97	0.97

Optional Two Independent Circuit (2CI) Application

Ambient		P20	P30	P40
0°C	32°F	1.02	1.02	1.02
10°C	50°F	1.01	1.01	1.02
20°C	68°F	1.00	1.01	1.01
25°C	77°F	1.00	1.00	1.00
30°C	86°F	0.99	0.99	0.99
40°C	104°F	0.98	0.98	0.98

Electrical Load

Single Circuit Application

LEDs	Drive Current (mA)	System Watts/Circuit	Current (A)					
			120	208	240	277	247	480
P10	700	28	0.23	0.13	0.12	0.10	0.08	0.06
P20	1400	47	0.41	0.24	0.20	0.18	0.14	0.10
P30	1050	71	0.63	0.37	0.32	0.29	0.22	0.18
P40	1420	95	0.78	0.45	0.40	0.35	0.27	0.20
P50	1720	115	0.95	0.55	0.48	0.42	0.33	0.24

Optional Two Independent Circuit (2CI) Application

LEDs	Drive Current (mA)	System Watts/Circuit	Current (A)					
			120	208	240	277	247	480
P10	-	-	-	-	-	-	-	-
P20	700	22	0.10	0.06	0.05	0.04	-	-
P30	1000	32	0.14	0.08	0.07	0.06	-	-
P40	1250	47	0.18	0.10	0.09	0.08	-	-
P50	-	-	-	-	-	-	-	-

Operating Characteristics

LED Package	Distribution	System Watts	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P10	T2S	28	2,904	104	1	0	1	3,128	112	1	0	1	3,168	113	1	0	1
	T2M	28	2,887	103	1	0	1	3,110	111	1	0	1	3,149	112	1	0	1
	T3S	28	2,964	106	1	0	1	3,194	114	1	0	1	3,234	116	1	0	1
	T3M	28	2,801	100	1	0	1	3,017	108	1	0	1	3,055	109	1	0	1
	T4M	28	2,858	102	1	0	1	3,079	110	1	0	1	3,118	111	1	0	1
	TFTM	28	2,979	106	1	0	1	3,209	115	1	0	1	3,250	116	1	0	1
	SYMDF	28	2,771	99	1	0	1	2,986	107	1	0	1	3,023	108	1	0	1
	ASYDF	28	2,756	98	1	0	1	2,969	106	1	0	1	3,007	107	1	0	1
P20	T2S	47	5,303	113	1	0	1	5,713	122	1	0	1	5,785	123	1	0	1
	T2M	47	5,272	112	1	0	2	5,680	121	1	0	2	5,751	122	1	0	2
	T3S	47	5,414	115	1	0	2	5,832	124	1	0	2	5,906	126	1	0	2
	T3M	47	5,115	109	1	0	2	5,510	117	1	0	2	5,580	119	1	0	2
	T4M	47	5,220	111	1	0	2	5,623	120	1	0	2	5,694	121	1	0	2
	TFTM	47	5,440	116	1	0	2	5,861	125	1	0	2	5,935	126	1	0	2
	SYMDF	47	5,062	108	2	0	2	5,453	116	2	0	2	5,522	117	2	0	2
	ASYDF	47	5,033	107	1	0	1	5,422	115	2	0	1	5,491	117	2	0	1
P30	T2S	71	7,319	103	2	0	2	7,884	111	2	0	2	7,984	112	2	0	2
	T2M	71	7,276	102	2	0	2	7,838	110	2	0	2	7,937	112	2	0	2
	T3S	71	7,472	105	1	0	2	8,049	113	2	0	2	8,151	115	2	0	2
	T3M	71	7,059	99	2	0	2	7,604	107	2	0	2	7,700	108	2	0	2
	T4M	71	7,203	101	2	0	2	7,760	109	2	0	2	7,858	111	2	0	2
	TFTM	71	7,508	106	1	0	2	8,088	114	2	0	2	8,190	115	2	0	2
	SYMDF	71	6,985	98	2	0	2	7,525	106	3	0	3	7,620	107	3	0	3
	ASYDF	71	6,946	98	2	0	2	7,483	105	2	0	2	7,578	107	2	0	2
P40	T2S	95	9,320	98	2	0	2	10,041	106	2	0	2	10,168	107	2	0	2
	T2M	95	9,266	98	2	0	2	9,982	105	2	0	3	10,108	106	2	0	3
	T3S	95	9,515	100	2	0	2	10,251	108	2	0	2	10,381	109	2	0	2
	T3M	95	8,989	95	2	0	2	9,684	102	2	0	2	9,807	103	2	0	2
	T4M	95	9,174	97	2	0	2	9,883	104	2	0	3	10,008	105	2	0	3
	TFTM	95	9,561	101	2	0	2	10,300	108	2	0	2	10,431	110	2	0	2
	SYMDF	95	8,896	94	3	0	3	9,583	101	3	0	3	9,705	102	3	0	3
	ASYDF	95	8,846	93	2	0	2	9,530	100	2	0	2	9,650	102	2	0	2
P50	T2S	115	10,972	95	2	0	2	11,820	103	2	0	2	11,969	104	2	0	2
	T2M	115	10,908	95	2	0	3	11,751	102	2	0	3	11,900	103	2	0	3
	T3S	115	11,202	97	2	0	2	12,067	105	2	0	2	12,220	106	2	0	2
	T3M	115	10,582	92	2	0	2	11,400	99	2	0	3	11,544	100	2	0	3
	T4M	115	10,799	94	2	0	3	11,634	101	2	0	3	11,781	102	2	0	3
	TFTM	115	11,256	98	2	0	2	12,126	105	2	0	2	12,279	107	2	0	2
	SYMDF	115	10,472	91	3	0	3	11,282	98	3	0	3	11,424	99	3	0	3
	ASYDF	115	10,414	91	2	0	2	11,219	98	3	0	2	11,361	99	3	0	2

Use the following to scale 70CRI to 80CRI.

CCT	Multiplier
3000K	0.909
4000K	0.886
5000K	0.865

All IES files available on product web page

Operating Characteristics (continued)

LED Package	Distribution	System Watts	30K + 2CI Option (3000K, 70 CRI)					40K + 2CI Option (4000K, 70 CRI)					50K + 2CI Option (5000K, 70 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P20	T2S	49	5,015	102	1	0	1	5,402	110	1	0	1	5,471	112	1	0	1
	T2M	49	4,985	102	1	0	2	5,371	110	1	0	2	5,439	111	1	0	2
	T3S	49	5,120	104	1	0	1	5,515	113	1	0	2	5,585	114	1	0	2
	T3M	49	4,837	99	1	0	2	5,210	106	1	0	2	5,276	108	1	0	2
	T4M	49	4,936	101	1	0	2	5,317	109	1	0	2	5,385	110	1	0	2
	TFTM	49	5,144	105	1	0	2	5,542	113	1	0	2	5,612	115	1	0	2
	SYMDF	49	4,786	98	2	0	2	5,156	105	2	0	2	5,222	107	2	0	2
ASYDF	49	4,760	97	1	0	1	5,127	105	1	0	1	5,192	106	1	0	1	
P30	T2S	70	6,769	97	1	0	1	7,293	104	2	0	2	7,385	106	2	0	2
	T2M	70	6,730	96	2	0	2	7,250	104	2	0	2	7,342	105	2	0	2
	T3S	70	6,911	99	1	0	2	7,445	106	1	0	2	7,539	108	1	0	2
	T3M	70	6,529	93	2	0	2	7,033	100	2	0	2	7,123	102	2	0	2
	T4M	70	6,663	95	2	0	2	7,178	103	2	0	2	7,269	104	2	0	2
	TFTM	70	6,945	99	1	0	2	7,481	107	1	0	2	7,576	108	2	0	2
	SYMDF	70	6,461	92	2	0	2	6,960	99	2	0	2	7,049	101	2	0	2
ASYDF	70	6,425	92	2	0	2	6,922	99	2	0	2	7,009	100	2	0	2	
P40	T2S	89	8,370	94	2	0	2	9,017	101	2	0	2	9,131	103	2	0	2
	T2M	89	8,321	93	2	0	2	8,964	101	2	0	2	9,078	102	2	0	2
	T3S	89	8,545	96	2	0	2	9,205	103	2	0	2	9,322	105	2	0	2
	T3M	89	8,073	91	2	0	2	8,696	98	2	0	2	8,807	99	2	0	2
	T4M	89	8,238	93	2	0	2	8,875	100	2	0	2	8,987	101	2	0	2
	TFTM	89	8,586	96	2	0	2	9,250	104	2	0	2	9,367	105	2	0	2
	SYMDF	89	7,989	90	3	0	3	8,606	97	3	0	3	8,715	98	3	0	3
ASYDF	89	7,944	89	2	0	2	8,558	96	2	0	2	8,666	97	2	0	2	

Use the following to scale 70CRI to 80CRI.

CCT	Multiplier
3000K	0.909
4000K	0.886
5000K	0.865

All IES files available on product web page

LED Package	Distribution	System Watts	AMB (Wavelength)					LED Package	Distribution	System Watts	AMB (Wavelength)				
			Lumens	LPW	B	U	G				Lumens	LPW	B	U	G
P10	T2S	28	1,061	38	0	0	1	P30	T2S	28	1,975	71	0	0	1
	T2M	28	1,054	38	0	0	1		T2M	28	1,964	70	0	0	1
	T3S	28	1,083	39	0	0	1		T3S	28	2,016	72	0	0	1
	T3M	28	1,023	37	0	0	1		T3M	28	1,905	68	0	0	1
	T4M	28	1,044	37	0	0	1		T4M	28	1,944	69	0	0	1
	TFTM	28	1,088	39	0	0	1		TFTM	28	2,026	72	0	0	1
	SYMDF	28	1,012	36	1	0	1		SYMDF	28	1,885	67	1	0	1
	ASYDF	28	1,007	36	0	0	1		ASYDF	28	1,875	67	0	0	1

Options Matrix

Parameters		LED AMB	Options (Start with SF, DF, 2CI or EM if being used)														
			PE	P3	P7	PSC	PCLL	MASH	MASL	SF	DF	TP	10kV	AO	2CI	EM	
LED Performance Package	P10	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	N	Y
	P20	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P30	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P40	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P50	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Voltage	A5	Y	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y
	AH	Y	N	Y	Y	Y	N	N	N	N	N	Y	Y	Y	N	N	N
	12	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
	20	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
	24	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
	27	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
	34	Y	Y	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y	N	N	N
48	Y	N	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	N	N	N	
Options	PE	Y		N	N	N	N	N	N	Y	Y	Y	Y	Y	N	Y	
	P3	Y	N		N	M	Y	N	N	Y	Y	Y	Y	N	N	N	
	P7	Y	N	N		M	Y	N	N	Y	Y	Y	Y	N	N	N	
	PSC	Y	N	M	M		N	N	N	Y	Y	Y	Y	N	N	N	
	PCLL	Y	N	Y	Y	N		N	N	Y	Y	Y	Y	N	N	N	
	MASH	Y	N	N	N	N	N		N	Y	Y	Y	Y	N	N	N	
	MASL	Y	N	N	N	N	N	N		Y	Y	Y	Y	N	N	N	
	SF	Y	Y	Y	Y	Y	Y	Y	Y		N	Y	Y	Y	Y	Y	
	DF	Y	Y	Y	Y	Y	Y	Y	Y	N		Y	Y	Y	Y	Y	
	TP	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	
	10kV	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	M	M	
	AO	Y	Y	N	N	N	N	N	N	Y	Y	Y	Y		N	N	
	2CI	Y	P30	N	N	N	N	N	N	Y	Y	Y	M	N		N	
EM	Y	Y	N	N	N	N	N	N	Y	Y	Y	M	N	N			

Notes

I = Included with option

M = Must have: one of these must be installed for the luminaire to operate

N = Combination Not available

P30 = Valid Option Combination, not available with P10 Performance Packabe

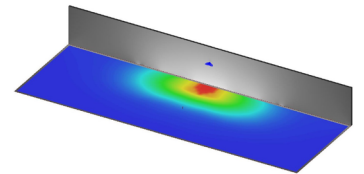
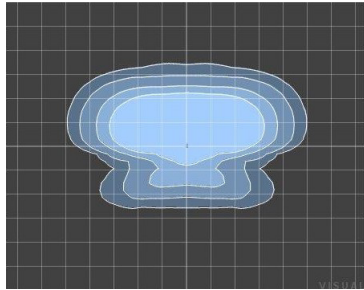
Y = Valid Option Combination

Photometric Diagrams

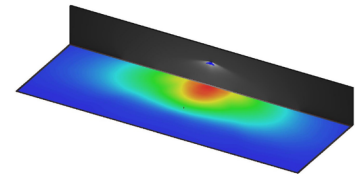
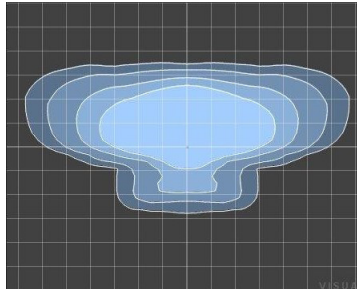
To see complete photometric reports or download .ies files for this product, visit the [Holophane's Wallpack FCO LED homepage](#). Isofootcandle plots for the HLWPC2 P30 40K. Distance are in units of mounting height (12"). Grid is 10'x10'.

0.1 fc 1 fc 0.2 fc 0.5 fc

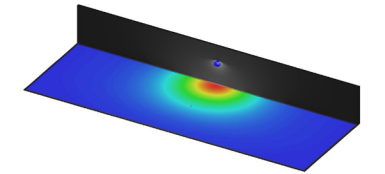
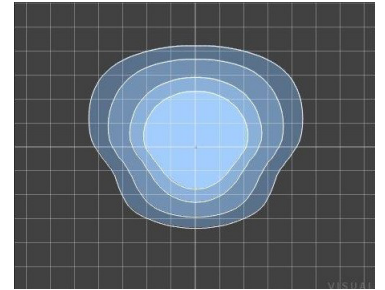
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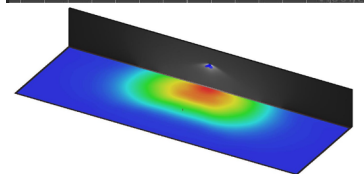
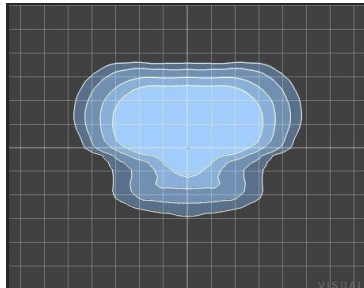
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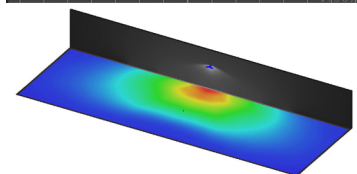
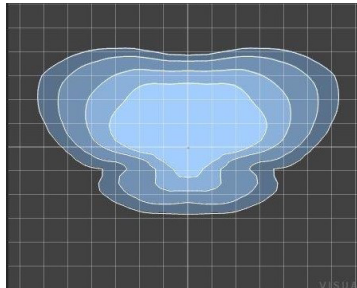
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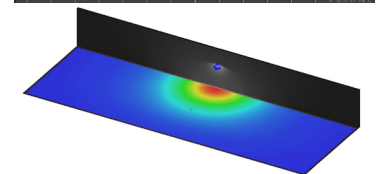
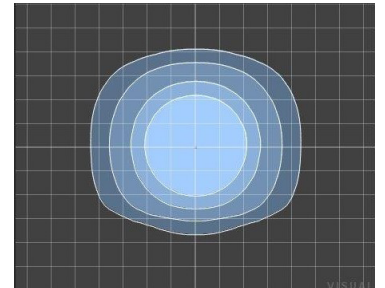
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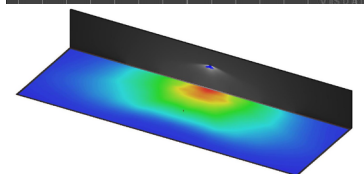
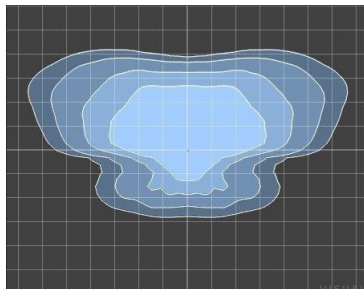
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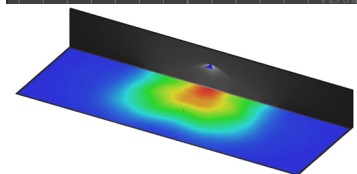
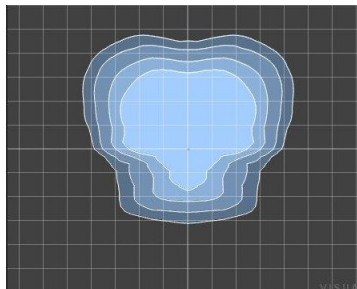
HLWPC2 P30 40K XX SYMDF



HLWPC2 P30 40K XX T4M

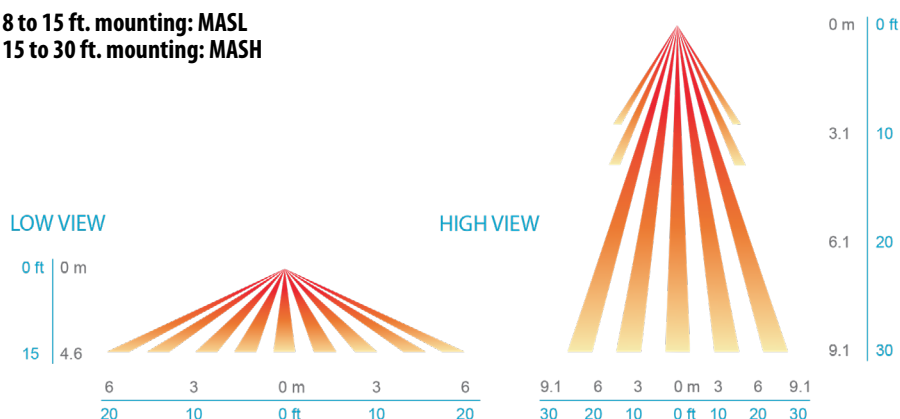


HLWPC2 P30 40K XX TFTM



Coverage Pattern

8 to 15 ft. mounting: MASL
15 to 30 ft. mounting: MASH



Control Options

Button Style Photocontrol

PE



N.E.M.A. Receptacle

P3

P7



Motion & Ambient Combined Sensor

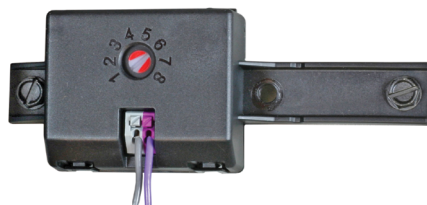
MASL/MASH



MASL and MASH options reduce luminaire light output to roughly 30% (not full OFF) when no motion is detected. When motion is detected, light output increases to 100%.

Field Adjustable Output Module

The Field Adjustable Output (AO) module is an onboard device that adjusts the light output and input voltage to meet specific requirements, allowing a single fixture configuration to be flexibly applied in many different applications. The AO option is available on the HLWPC2 series.



P10 - AS and AH		
AO Position	% Lumens	% Wattage
8	100%	100%
7	94%	95%
6	83%	82%
5	71%	69%
4	59%	57%
3	46%	45%
2	34%	33%
1	21%	21%

P20 - AS and AH		
AO Position	% Lumens	% Wattage
8	100%	100%
7	95%	94%
6	84%	80%
5	73%	67%
4	61%	54%
3	48%	42%
2	35%	30%
1	21%	18%

P30 - AS and AH		
AO Position	% Lumens	% Wattage
8	100%	100%
7	95%	94%
6	84%	80%
5	73%	67%
4	61%	54%
3	48%	42%
2	35%	30%
1	21%	18%

P40 - AS and AH		
AO Position	% Lumens	% Wattage
8	100%	100%
7	95%	95%
6	85%	82%
5	74%	68%
4	62%	55%
3	49%	43%
2	36%	30%
1	21%	17%

P50 - AS and AH		
AO Position	% Lumens	% Wattage
8	100%	100%
7	96%	95%
6	86%	81%
5	75%	68%
4	64%	55%
3	51%	42%
2	37%	29%
1	22%	17%



ACP2LED Series American Compact LED Floodlight

PRODUCT OVERVIEW



Applications:

- | | |
|------------------|------------------|
| Auto dealerships | Shopping centers |
| Schools | Parking lots |
| Churches | Substations |
| Industrial sites | Building facades |

Features:

Mechanical

Low copper content die cast aluminum A360 alloy castings. Die cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Bolted or stainless steel latch option disengages top electrical cover for easy access to LED drivers, surge module, and terminal block. Vibration rated to 3G applications per ANSI C136.31-2001 and rated IP66 per IEC60068-2-3.

Rigorous five-stage pre-treating and painting process yields a finish that achieves a scribe creepage of 8 after 5,000 hours exposure to salt fog chamber per ASTM B117. External fasteners shall be stainless steel. Yoke shall be painted steel or galvanized. Knuckle shall be adjustable to fit 2.375 inch to 2.875 tenon.

Electrical

LED light engine is rated for > 100,000 hours at 25C, L70. Electronic driver has an expected life of 100,000 hours at a 25C ambient.

Robust surge protection: 20kV/10kA surge protection per ANSI C136.2 is the default, with 10kV/5kA surge optional.

Driver power factor is 90% minimum. Driver meets maximum total harmonic distortion (THD) of 20% and is ROHS compliant.

XVOLT - Electrical option provides protection against dropped neutral in 277V input as derived from 480V Wye. XVOLT also provides greater immunity from six common power quality issues.

Programmable electronic driver with 0-10V dimming control leads is standard.

Optical

Nine multi-die LED's combined with highly specular reflectors provide superior field to beam ratios, uniformity, and spacing.

NEMA optical pattern choice of flood (5x5), wide flood (6x6), and wide flood rectangle (6x5). The luminaire is available with 3000K, 4000K, and 5000K CCT with minimum CRI of 70.

Optional shielding available to control light trespass and uplight. Optical enclosure shall be glass lens.

Controls

3 pin and 7 pin rotatable NEMA photocontrol receptacles available.

Optional premium solid state locking- style photocontrol – DSS (10 year rated life).

Optional extreme long life solid state locking –style photocontrol – DLL (20 year rated life).

Optional onboard adjustable output module allows the light output and input wattage to be modified to meet site specific requirements.

Optional networked nLightAIR occupancy and motion sensor

Warranty and Standards

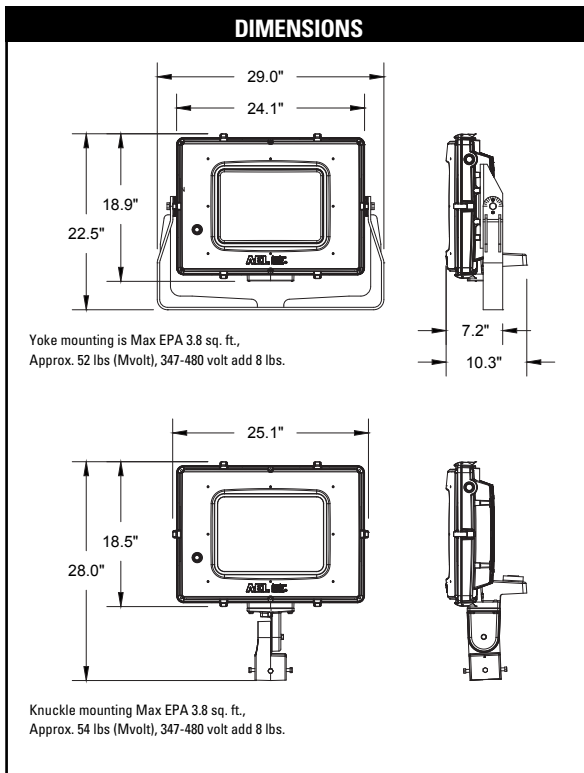
Five year warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Full warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

UL/CUL Listed

Suitable for ambient temperature -40C to 40C.

DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

BUY AMERICAN ACT – Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/buyamerican for additional information.



ACP2LED Series

American Compact LED Floodlight

ORDERING INFORMATION

Series	LED Performance Package	Voltage	Optics	Color Temperature
ACP2LED	P10 52000 Lumens P20 59000 Lumens P30 65000 Lumens P40 72000 Lumens P50 80000 Lumens	MVOLT Multi-volt (120V - 277V) 347 347V 480 480V XVOLT 277V-480V	55 Flood (5x5) 66 Wide Flood (6x6) 65 Wide Flood Rectangular (6x5)	Blank 4000K CCT 3K 3000K CCT 5K 5000K CCT
Mounting Methods	Color	Surge Protection	Controls	Cord Length
TM Tenon Slipfitter - knuckle (cord exits bottom slipfitter) KO Tenon Slipfitter - knuckle (cord exits via conduit entry) YK Yoke Painted Steel 3G YG Yoke Galvanized Steel 3G	Blank Gray paint BK Black paint BZ Bronze paint GI Graphite paint WH White paint	Blank Default: 20kV/10kA Extreme Surge w/Inductor Light (fail off) MP 10kV/5kA MOV (fail on)	Blank 3 pin rotatable NEMA receptacle P7 7 pin rotatable NEMA receptacle NR No PER receptacle PCLL Solid State Long Life Photocontrol PCSS Solid State Photocontrol HRSBOR ⁵ nLight Air Occ. and daylight sensor (15-30 ft) LRSBOR ⁶ nLight Air Occ. and daylight sensor (8-15 ft) SH Shorting Cap AO Field Adjustable Output DL DALI Driver - Consult Factory	04 4 ft cord length 05 5 ft cord length 06 6 ft cord length 08 8 ft cord length 10 10 ft cord length
Cord Type	Options	Miscellaneous	Accessories (Shipped Separately)	
23 12 gage, 3 conductor 43 14 gage, 3 conductor 63 16 gage, 3 conductor	TL Tool-less entry with latches NL Nema Label XL No terminal block cover and not certified	BAA Buy America (n) Act Compliant	ACP2LEDV BKSDP ¹ Full Visor - Black Paint ACP2LEDV BZSDP ¹ Full Visor - Bronze Paint ACP2LEDV GISDP ¹ Full Visor - Graphite Paint ACP2LEDV GYSDP ¹ Full Visor - Gray Paint ACP2LEDV WHSDP ¹ Full Visor - White Paint ACP2LEDUBV BKSDP ² Upper/Bottom Visor - Black Paint ACP2LEDUBV BZSDP ² Upper/Bottom Visor - Bronze Paint ACP2LEDUBV GISDP ² Upper/Bottom Visor - Graphite Paint ACP2LEDUBV GYSDP ² Upper/Bottom Visor - Gray Paint ACP2LEDUBV WHSDP ² Upper/Bottom Visor - White Paint ACP2LEDVG ³ Vandal Guard ACP2LEDWG ⁴ Wire Guard	

Notes:

- 1 Not compatible with WG, VG, or UBV
- 2 Not compatible with WG, VG, or FV
- 3 Not compatible with WG, FV, or UBV
- 4 Not compatible with FV, UBV or VG
- 5 Available with TM. NR required

Refer to Options Matrix for compatibility.



AEL Headquarters, One Lithonia Way, Conyers Georgia 30012
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 Email: TechSupportINF@AcuityBrands.com

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Warranty Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

ACP2LED Series

American Compact LED Floodlight

OPTIONS MATRIX

ACP2LED		LED Packages					Voltage				Options								
		P10	P20	P30	P40	P50	MVOLT	347	480	XVOLT	P7	P3	NR	PCLL	PCSS	xRSBOR	SH	AO	DL
LED Packages	P10						Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P20						Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P30						Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P40						Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P50						Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Voltage	MVOLT	Y	Y	Y	Y	Y					Y	Y	Y	Y	Y	Y	Y	Y	Y
	347	Y	Y	Y	Y	Y					Y	Y	Y	Y	N	Y	Y	Y	Y
	480	Y	Y	Y	Y	Y					Y	Y	Y	Y	N	Y	Y	Y	Y
	XVOLT	Y	Y	Y	Y	Y					Y	Y	Y	N	N	Y	Y	Y	Y
Options	P7	Y	Y	Y	Y	Y	Y	Y	Y	Y		N	N	Y	Y	N	Y	Y	Y
	P3	Y	Y	Y	Y	Y	Y	Y	Y	Y	N		N	Y	Y	N	Y	Y	Y
	NR	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N		N	N	Y	N	Y	Y
	PCLL	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N		N	N	N	Y	Y
	PCSS	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	N	N		N	N	Y	Y
	xRSBOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	N	N		N	N	N
	SH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N		Y	Y
	AO	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y		N
	DL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	

ACP2LED	Distribution	Input Watts	3000K		4000K		5000K		LDD @ 25°C		
			Lumens	LPW	Lumens	LPW	Lumens	LPW	50k hours	75k hours	100k hours
P10	55	357	50,549	142	51,484	144	52,419	147	0.92	0.89	0.85
	65		51,108	143	52,053	146	52,998	148			
	66		52,042	146	53,004	148	53,966	151			
P20	55	409	56,993	139	58,047	142	59,101	144	0.92	0.89	0.85
	65		57,623	141	58,669	143	59,754	146			
	66		58,676	143	59,761	146	60,846	149			
P30	55	462	63,226	137	64,395	139	65,564	142	0.92	0.89	0.85
	65		63,925	138	65,107	141	66,289	143			
	66		65,093	141	66,296	143	67,500	146			
P40	55	521	69,845	134	71,137	136	72,428	139	0.91	0.87	0.84
	65		70,617	135	71,922	138	73,228	140			
	66		71,907	138	73,237	140	74,566	143			
P50	55	581	77,290	133	78,720	135	80,149	138	0.90	0.85	0.81
	65		78,145	134	79,584	137	81,035	139			
	66		79,573	137	81,044	139	82,515	142			

Ambient Temperature Factor				
0°C	15°C	25°C	35°C	40°C
1.03	1.01	1.00	0.99	0.98

Performance Package	Watts	Current (A)					
		120V	208V	240V	277V	347V	480V
P10	357	3.0	1.7	1.5	1.3	1.1	0.8
P20	409	3.5	2.0	1.7	1.5	1.2	0.9
P30	463	3.9	2.3	2.0	1.7	1.4	1.0
P40	522	4.4	2.5	2.2	1.9	1.5	1.1
P50	581	4.9	2.8	2.4	2.1	1.7	1.2

Plan 6C
Revised Glare
Analysis

Mill Point Solar Project

TRC

Montgomery, New York

Glare Analysis

July 2, 2024



Capitol Airspace Group

capitolairspace.com

(703) 256 - 2485



Summary

TRC is proposing to construct photovoltaic (PV) arrays in Montgomery County, New York (**Figure 1**). On behalf of TRC, Capitol Airspace performed an independent glare analysis utilizing ForgeSolar's GlareGauge toolset to identify the potential for glare impacts. Specifically, this analysis considered the potential for glare impacts on Fulton County Airport (NYO) approaches as well as nearby residences and roadways.

The results of this analysis indicate that there are no predicted glare occurrences for Fulton County Airport (NYO) approaches as a result of the proposed single-axis tracking PV arrays. Additionally, it should be noted that the current FAA policy no longer considers the potential for glare impacts on aircraft approach paths resulting from off-airport PV projects. Since Fulton County Airport (NYO) does not have an air traffic control tower (ATCT), an assessment of potential glare impacts on ATCT personnel was not required.

There are no predicted glare occurrences for nearby residences or roadways as a result of the proposed single-axis tracking arrays. These results are based on the application of FAA glare standards in the absence of non-aviation regulatory guidelines.



Figure 1: Mill Point Solar project PV panel layout (gray) with sub-arrays for GlareGauge assessment (purple and blue outlines)



Methodology

In cooperation with the Department of Energy, the FAA developed and validated the Sandia National Laboratories Solar Glare Hazard Analysis Tool (SGHAT), now licensed through ForgeSolar as GlareGauge. ForgeSolar has enhanced GlareGauge for glare hazard analysis beyond the aviation environment. These enhancements include a route module for analyzing roadways as well as an observation point module for analyzing residences. However, it should be noted that GlareGauge does not automatically account for physical obstructions between reflectors and receptors.

GlareGauge analyzes the potential for glare over the entire calendar year in one-minute intervals from when the sun rises above the horizon until the sun sets below the horizon. The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. When GlareGauge identifies glare, the associated ocular impact is quantified into three categories based on the retinal irradiance and subtended angle (size/distance) of the glare source. These three categories are Green – low potential for after-image, Yellow – potential for after-image, and Red – potential for retinal burn (*Figure 2*).

The FAA policy for *Review of Solar Energy System Projects on Federally Obligated Airports* requires that proposed on-airport solar projects will not result in ocular impacts (no glare of any category) on the airport's ATCT cab. Although not required, the FAA encourages that off-airport solar energy systems in proximity to airports with ATCTs are assessed for potential ocular impact. Currently, there are no defined standards for acceptable ocular impact on residences or roadways.

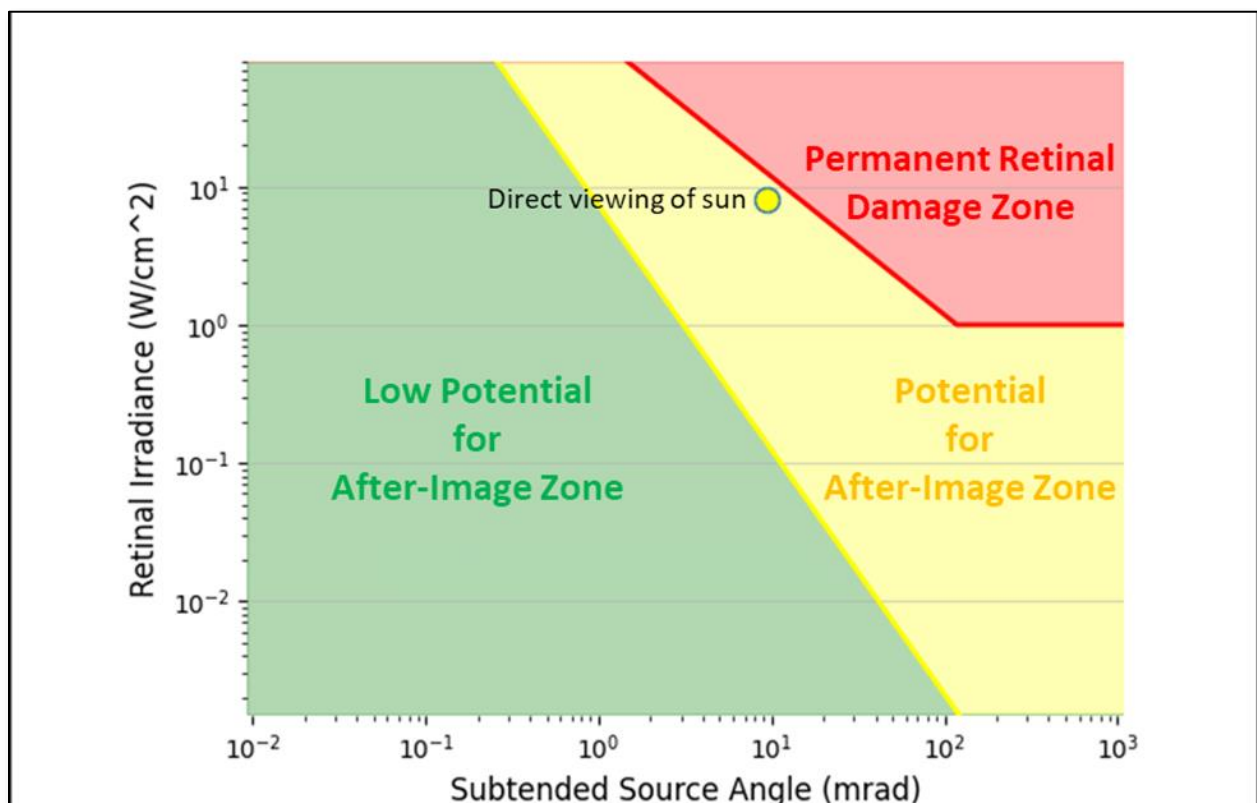


Figure 2: GlareGauge glare hazard plot depicting ocular impact as a function of retinal irradiance and subtended source angle



Data

PV array specifications ([Table 1](#)) as well as location and height information were provided by TRC. Based on this data, the PV arrays will rotate to track the sun through the range of rotation determined by the maximum tracking angle. When the sun’s position is outside the range of rotation, the single-axis tracking arrays will use a slope-aware shade backtracking strategy to reduce row-to-row shading ([Figure 3](#)). Backtracking will begin and end at a 20-degree resting angle as defined by the Resting Angle/Backtracking Limit parameter.

Runway end coordinates, elevations, threshold crossing heights (TCH), and visual glidepath angles (VGPA) were obtained from the FAA National Flight Data Center (NFDC) National Airspace System Resource (NASR) dataset. When the NASR dataset did not contain this data, aerial imagery, the United States Geological Survey (USGS) 1/3 arc-second Digital Elevation Model (DEM), and the FAA approved default settings (TCH: 50 feet, VGPA: 3.00°) were used.

Aerial imagery was used to determine observation point and route receptor locations in collaboration with TRC. The USGS 1/3 arc-second DEM was used to determine observation point ground elevations. Ground elevations along the assessed routes were calculated by GlareGauge using the Google Elevation service.

Table 1: Mill Point Solar project PV array specifications

Parameter	Value
Rotation Axis Height	4.92 feet
Axis Tracking	Single-axis rotation
Tracking Axis Orientation	180°
Max Tracking Angle	±60°
Backtracking Strategy	Shade-slope
Resting Angle/Backtracking Limit	20°
Panel Material	Smooth glass, With Anti-Reflection Coating

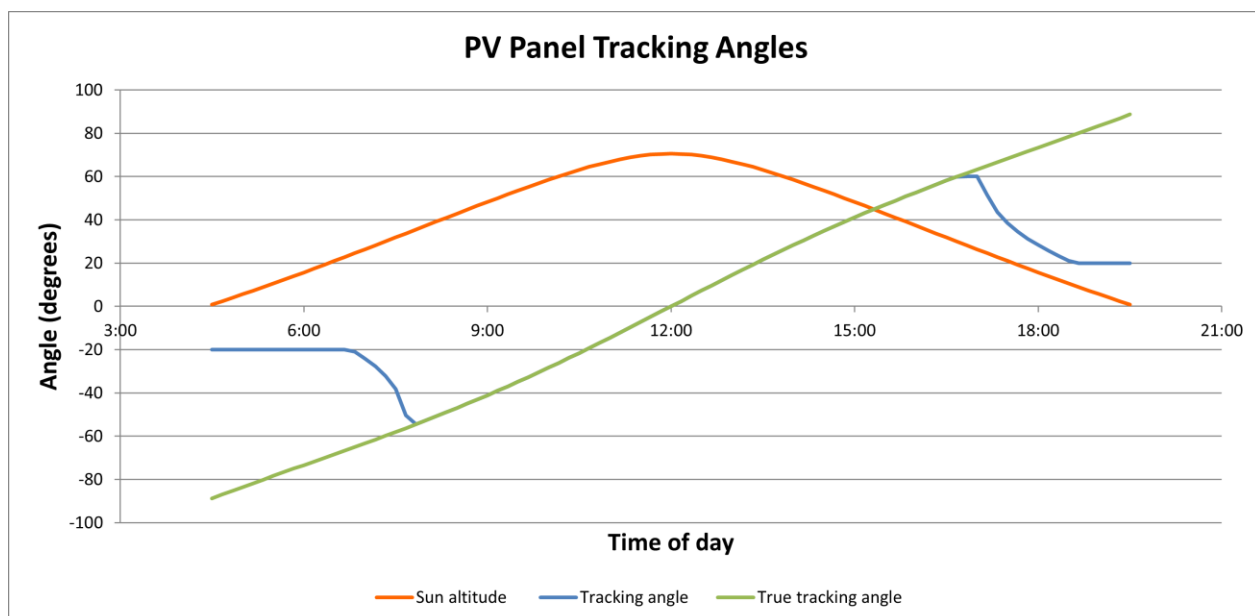


Figure 3: Sample PV panel tracking angle plot for June 21st



Results

Fulton County Airport (NY0)

The GlareGauge assessed the potential for glare occurrences along two approach path receptors (hashed black lines, **Figure 4**). Each approach path was assessed using a pilot restricted view with a vertical view restriction of 30 degrees downward and an azimuthal view restriction of 50 degrees left and right (100-degree total field of view).

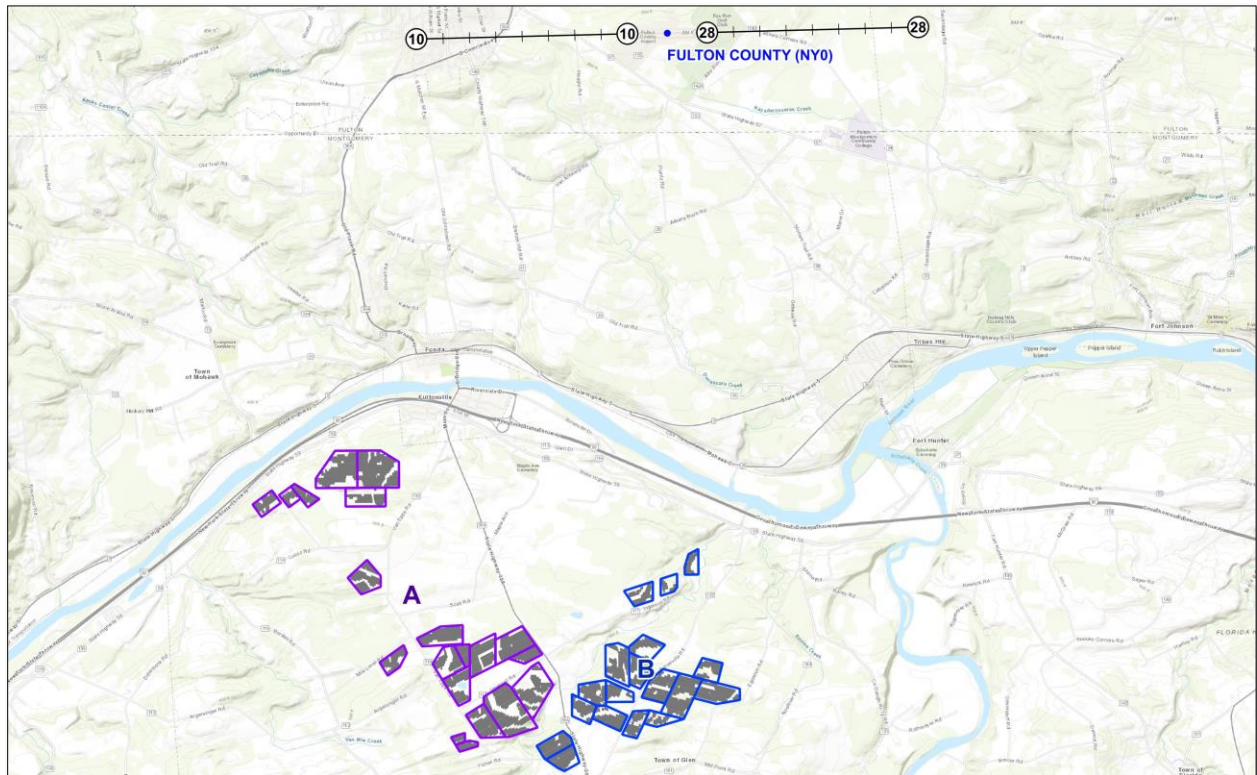


Figure 4: Fulton County Airport (NY0) approach paths (hashed black lines) in proximity to the Mill Point Solar project

Runway 10

The GlareGauge results do not predict glare occurrences along the approach path.

Runway 28

The GlareGauge results do not predict glare occurrences along the approach path.



Observation Points

GlareGauge assessed the potential for glare occurrences at 312 discrete observation point receptors (black points, *Figure 5*). Each of the 312 residences was assessed at an eight-foot first story viewing height and a 16-foot second story viewing height. The GlareGauge results do not predict glare occurrences for any of the 312 observation points as a result of the proposed single-axis tracking arrays.

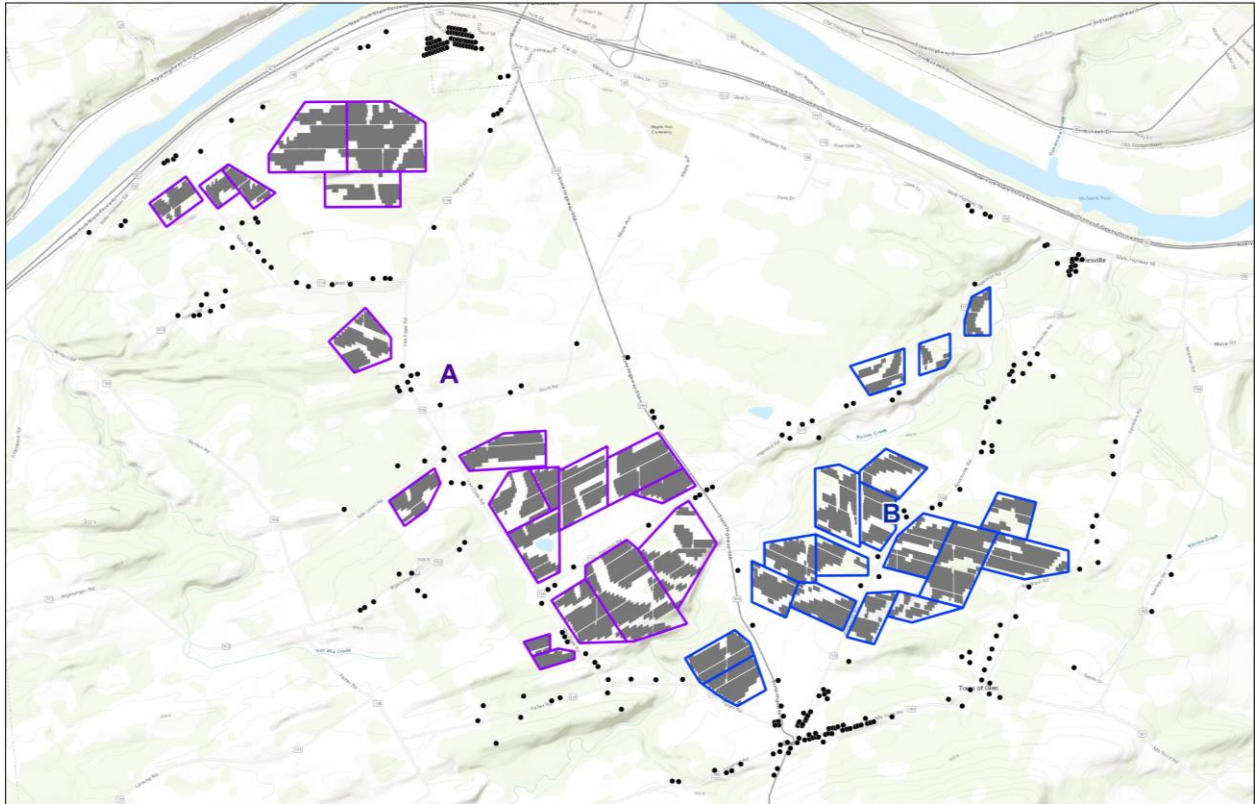


Figure 5: Discrete observation point receptors (black points) in proximity to the Mill Point Solar project



Routes

GlareGauge assessed the potential for glare occurrences along 16 route receptors. Each of the 16 roadways (dashed black lines, [Figure 6](#)) was assessed at a four-foot car viewing height and an eight-foot truck viewing height. The GlareGauge results do not predict glare occurrences for any of the 16 routes as a result of the proposed single-axis tracking arrays.

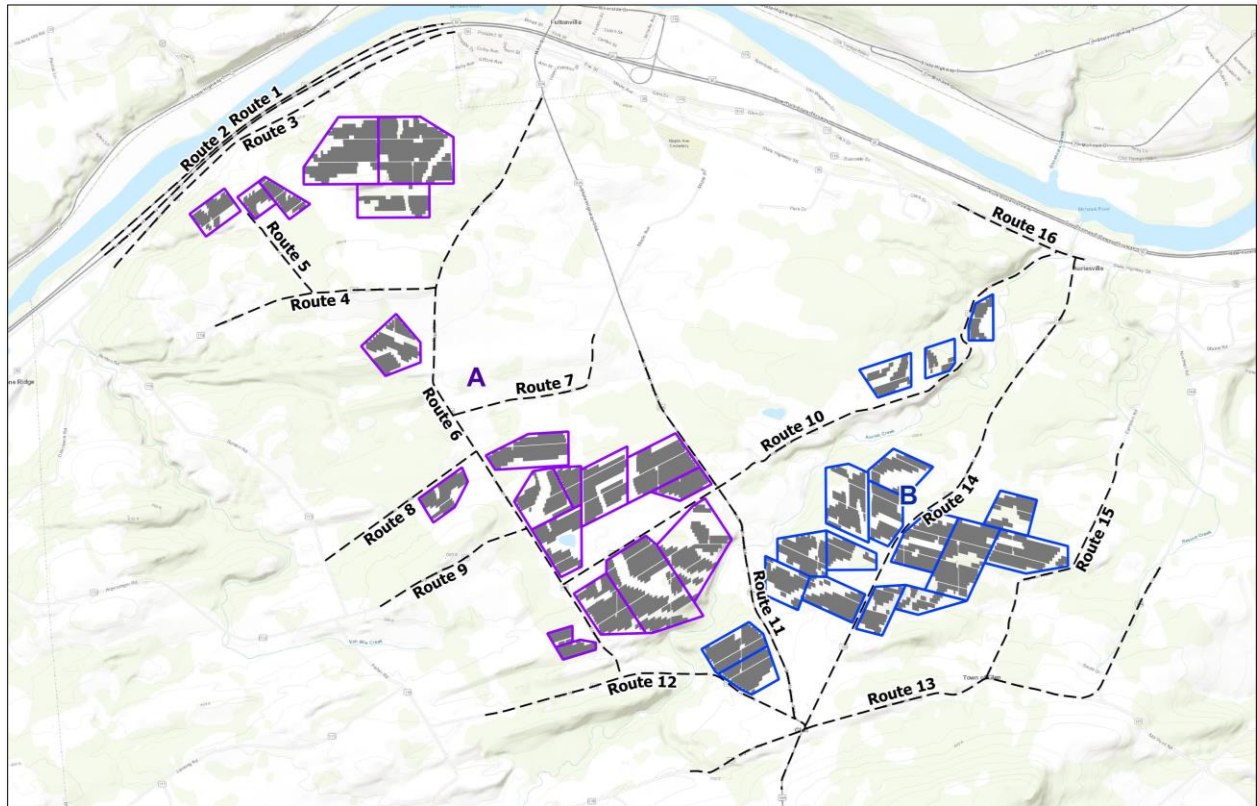


Figure 6: Route receptors (dashed lines) in proximity to Mill Point Solar project



Conclusion

GlareGauge does not predict glare occurrences for Fulton County Airport (NYO) approaches as a result of the proposed single-axis tracking PV arrays ([Table 2](#)). Additionally, it should be noted that the current FAA policy no longer considers the potential for glare impacts on aircraft approach paths resulting from off-airport PV projects. Since Fulton County Airport (NYO) does not have an ATCT, an assessment for potential glare impacts on ATCT personnel was not required.

Additionally, GlareGauge does not predict any glare occurrences for nearby residences or roadways as a result of single-axis tracking arrays ([Table 2](#)). These results are based on the application of FAA glare standards in the absence of non-aviation regulatory guidelines. As noted in the methodology, this glare analysis does not consider vegetation, fencing, or other natural obstructions. This glare analysis takes the most conservative approach in assessing the possibility of glare occurrences.

Table 2: Predicted glare durations for analyzed receptors

Receptor Type	Receptor ID	Glare	Date		Time (HH:MM)		Daily Duration (minutes)	
			Earliest	Latest	Earliest	Latest	Longest	Average
Approaches	NYO – Runway 10	None	-	-	-	-	-	-
	NYO – Runway 28	None	-	-	-	-	-	-
Residences	All (312)	None	-	-	-	-	-	-
Roadways	All (16)	None	-	-	-	-	-	-

The GlareGauge component data used to conduct this analysis is available upon request. If you have any questions regarding the findings of this analysis, please contact [Rick Coles](#) or [Travis Harrison](#) at (703) 256-2485.

The Revised Glare Analysis meta data is included on the USB.