

SRS\_E-610-02\_SUP A Symbol Legend 34.5KV STRUCTURE JUNCTION BOX PCSXX.XX PCS ID 20 STRUCTURE & ID PAD MOUNTED SCALE: 1" = 200' SWITCHGEAR Plan View Legend (Collector System Feeders organized by color) FEEDER 1 CABLES FEEDER 2 CABLES FEEDER 3 CABLES - FEEDER 4 CABLES 34.5KV BESS CABLES PROFILE LINE LEGEND 795 ACSR 26/7 STRAND DRAKE 36 FIBER AFL AC-20/47/607 OPGW 1/2-INCH 7-STRAND EHS 8IN PVC CONCRETE ENCASED CONDUIT EXISTING/FINAL GRADE EXISTING GRADE TO BE REMOVED

VERTICAL CLEARANCE LINE (21') . POLE LOCATIONS ARE INDICATIVE ONLY AND BASED ON LIDAR DATA PROVIDED ON 05/18/2021 AND ESRI WMS IMAGES. 2. THE COORDINATE SYSTEM IS NAD83 (3103), NEW YORK WEST, US SURVEY 3. PHASE CONDUCTOR AND DOWNLEADS INCORPORATE A TWIN 795 KCMIL 26/7 STRAND DRAKE ACSR CONDUCTOR, 36 FIBRE ALUMACORE OPGW AND 1/2 INCH 7-STRAND EHS. 4. PHASE CONDUCTOR IS DISPLAYED AT EMERGENCY TEMPERATURE OF 212°F AND OPGW AND EHS AT 120°F. GROUND CLEARANCE LINE IS SHOWN AT 21 FT ABOVE GROUND. 3. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE STATED. DESIGN TENSIONS: 795 ACSR 26/7 STRAND DRAKE 25% CREEP @ NESC TENSION LIMIT 261H1C 36 FIBRE AFL AC/20/47/607 AND 1/2 INCH 7 STRAND EHS 20% CREEP @ NESC TENSION LIMIT 250B HEAVY SLACK SPAN 795 ACSR 26/7 STRAND DRAKE 2000 LBS INITIAL @ NESC 250B HEAVY SLACK SPAN 36 FIBRE AFL AC/20/47/607 AND 1/2 INCH 7-STRAND EHS 1000 LBS INITIAL @ NESC 250B HEAVY 8. LOCATIONS 3 TO 67: TRIPLE CIRCUIT POLE 1, 2, 3, AND 68 TO 122: SINGLE CIRCUIT 01/18/2022 EHK ISSUED FOR 94C ISSUED FOR REVIEW 07/20/2021 JD ISSUED FOR REVIEW 07/02/2021 JD 01/29/2021 EHK ISSUED FOR REVIEW Rev Date Drawn Description

MOTT **MACDONALD** 

101 Station Drive Suite 130 Westwood, MA 02090 United States **T** +1 (781) 915-0015 **F** +1 (781) 915-0001

W www.mottmac.com

JS RA

EHK JS

EHK JAB

BG JB

Ch'k'd App'd

Client



SOUTH RIPLEY SOLAR 34.5KV COLLECTOR SYSTEM PLAN AND PROFILE SHEET 8

**PRELIMINARY** NOT FOR CONSTRUCTION REPLACE WITH ENGINEERS STAMP AT CONSTRUCTION AND/OR FABRICATION

Designed	JD	Eng check	EHK
Drawn	JD	Approved	JS
Scale at ANSI D		Date	Rev
As Noted		01/18/2022	D
Drawing Num	her		

SRS-E-610-09

HORIZ. SCALE 1" = 200'-0"

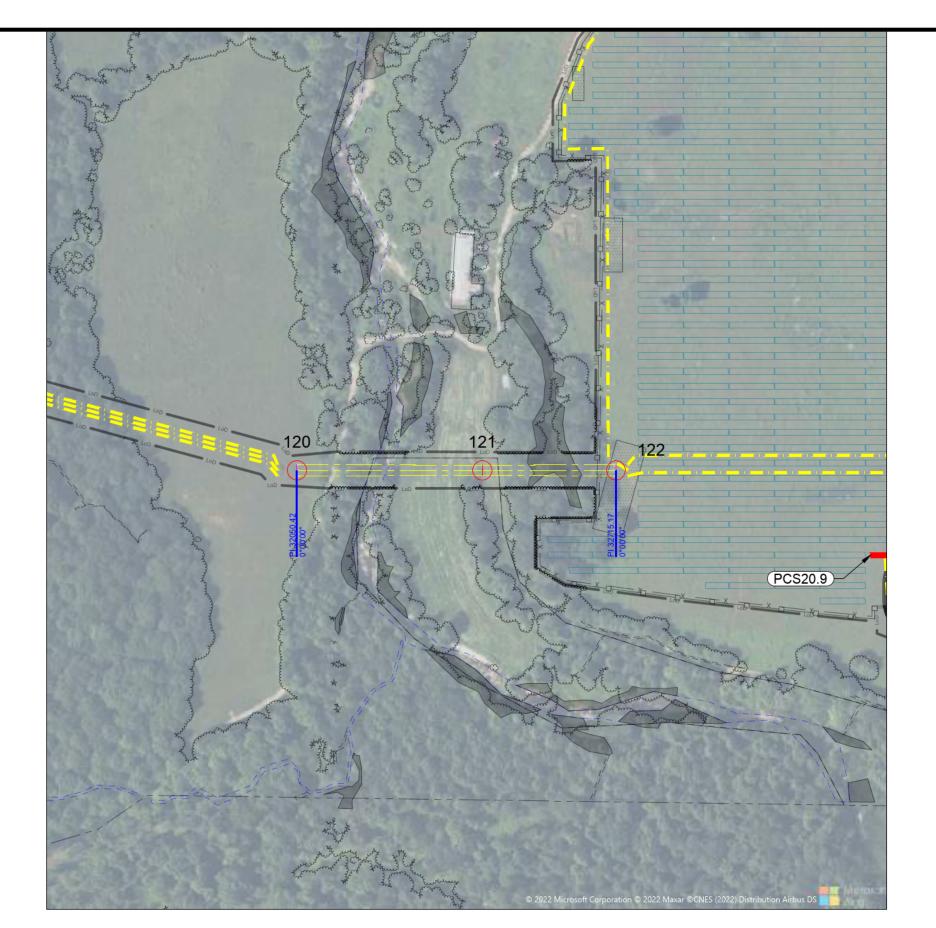
VERT. SCAL 1" = 30'-0"

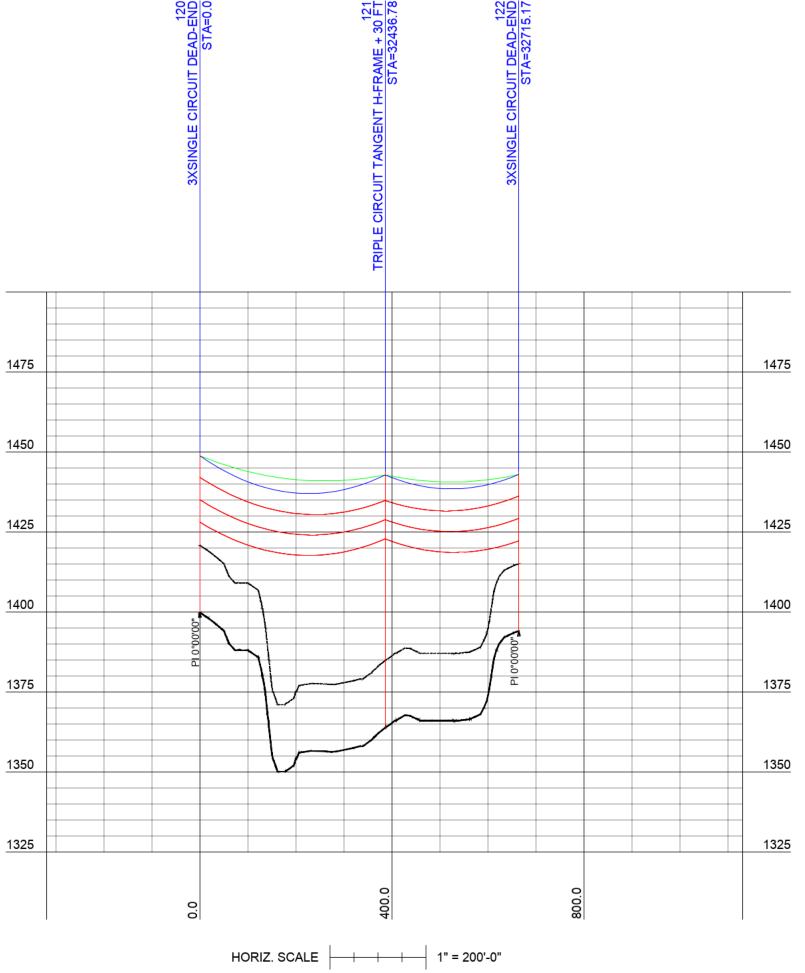
CONCEPTUAL - NOT FOR CONSTRUCTION

This drawing was prepared under the direction of an engineer licensed in New York State. It is a violation of New York State Education Law for any person, unless acting under the direction of an engineer to alter this document in any way.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

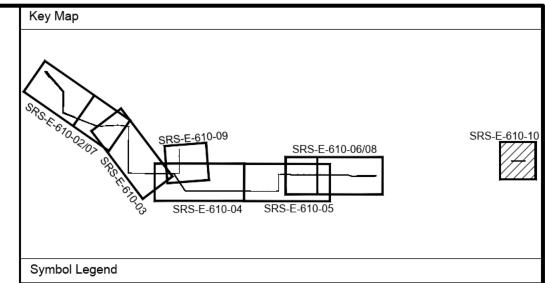
This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.





VERT. SCAL 1" = 30'-0"

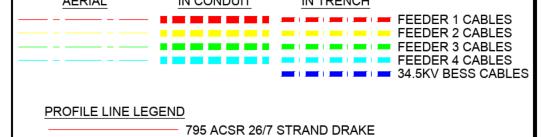
SCALE: 1" = 200'



34.5KV STRUCTURE JUNCTION BOX PCSXX.XX PCS ID 20 STRUCTURE & ID

SWITCHGEAR

Plan View Legend (Collector System Feeders organized by color)



36 FIBER AFL AC-20/47/607 OPGW

8IN PVC CONCRETE ENCASED CONDUIT

 EXISTING/FINAL GRADE EXISTING GRADE TO BE REMOVED --- VERTICAL CLEARANCE LINE (21')

1/2-INCH 7-STRAND EHS

- . POLE LOCATIONS ARE INDICATIVE ONLY AND BASED ON LIDAR DATA PROVIDED ON 05/18/2021 AND ESRI WMS IMAGES.
- 2. THE COORDINATE SYSTEM IS NAD83 (3103), NEW YORK WEST, US SURVEY
- 3. PHASE CONDUCTOR AND DOWNLEADS INCORPORATE A TWIN 795 KCMIL 26/7 STRAND DRAKE ACSR CONDUCTOR, 36 FIBRE ALUMACORE OPGW AND 1/2 INCH 7-STRAND EHS.
- 4. PHASE CONDUCTOR IS DISPLAYED AT EMERGENCY TEMPERATURE OF 212°F AND OPGW AND EHS AT 120°F.
- 5. GROUND CLEARANCE LINE IS SHOWN AT 21 FT ABOVE GROUND. 6. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE STATED.
- DESIGN TENSIONS: 795 ACSR 26/7 STRAND DRAKE

25% CREEP @ NESC TENSION LIMIT 261H1C

36 FIBRE AFL AC/20/47/607 AND 1/2 INCH 7 STRAND EHS 20% CREEP @ NESC TENSION LIMIT 250B HEAVY

SLACK SPAN 795 ACSR 26/7 STRAND DRAKE 2000 LBS INITIAL @ NESC 250B HEAVY

SLACK SPAN 36 FIBRE AFL AC/20/47/607 AND 1/2 INCH 7-STRAND EHS 1000 LBS INITIAL @ NESC 250B HEAVY

B. LOCATIONS 3 TO 67: TRIPLE CIRCUIT POLE 1, 2, 3, AND 68 TO 122: SINGLE CIRCUIT

D	01/18/2021	EHK	ISSUED FOR 94C	EHK	RA
С	07/20/2021	JD	ISSUED FOR REVIEW	EHK	JS
В	07/02/2021	JD	ISSUED FOR REVIEW	EHK	JAB
Α	01/29/2021	EHK	ISSUED FOR REVIEW	BG	JB

Rev Date Drawn Description

> MOTT **MACDONALD**

101 Station Drive Suite 130 Westwood, MA 02090 United States **T** +1 (781) 915-0015 **F** +1 (781) 915-0001

W www.mottmac.com

Ch'k'd App'd

Client



SOUTH RIPLEY SOLAR 34.5KV COLLECTOR SYSTEM PLAN AND PROFILE SHEET 9

**PRELIMINARY** NOT FOR CONSTRUCTION REPLACE WITH
ENGINEERS STAMP
AT CONSTRUCTION
AND/OR FABRICATION

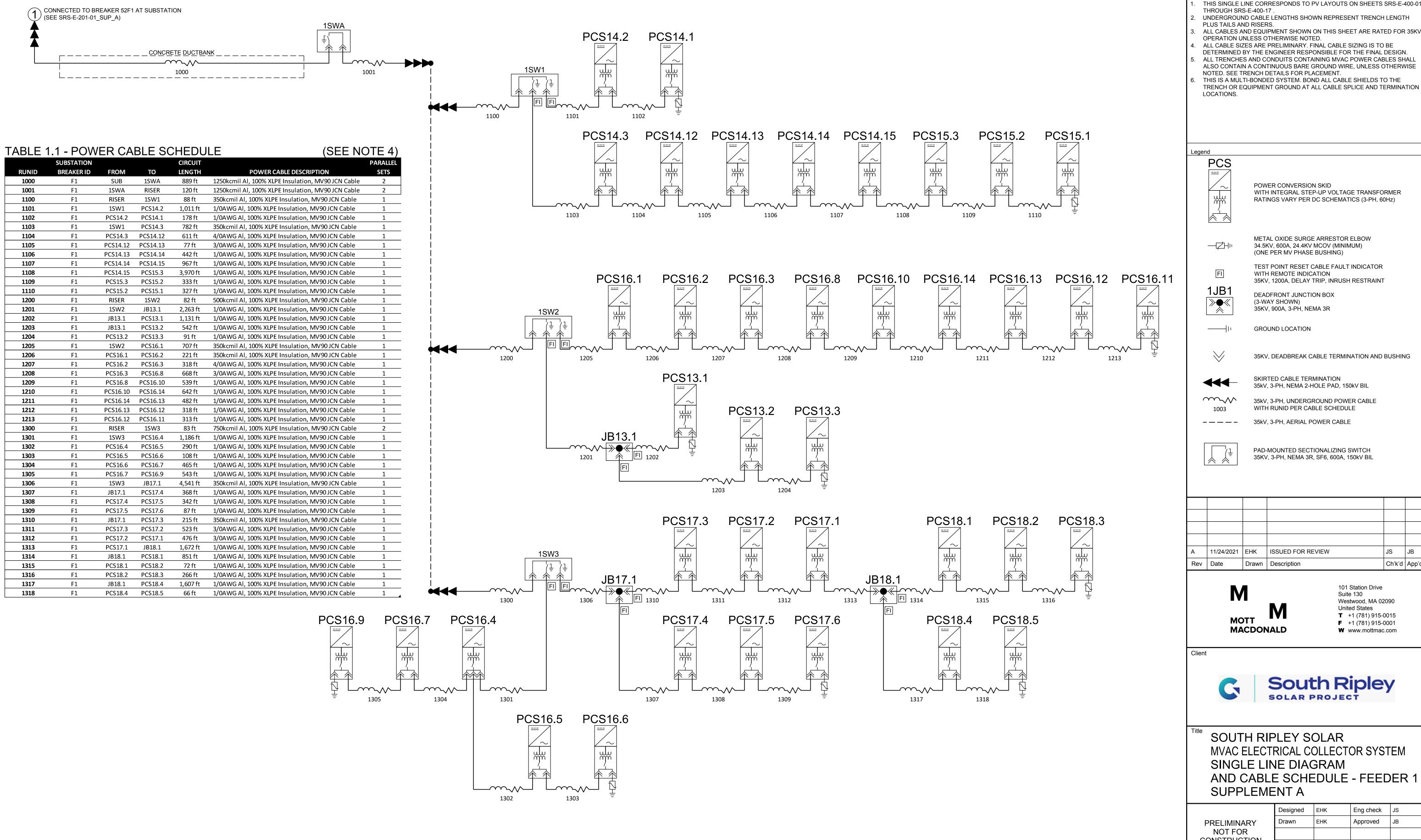
	Designed	JD	Eng check	JS
٧	Drawn	JD	Approved	RA
	Scale at ANSI D		Date	Rev
	As Noted		01/18//2022	D

Drawing Number

SRS-E-610-10

This drawing was prepared under the direction of an engineer licensed in New York State. It is a violation of New York State Education Law for any person, unless acting under the direction of an engineer to alter this document in any way. This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose. We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

CONCEPTUAL - NOT FOR CONSTRUCTION



NOT FOR CONSTRUCTION REPLACE WITH **ENGINEERS STAMP** AT CONSTRUCTION AND/OR FABRICATION

Eng check Approved Drawn Scale at ANSI D 11/24/2021 Not to Scale

POWER CONVERSION SKID

WITH REMOTE INDICATION

DEADFRONT JUNCTION BOX

35KV, 900A, 3-PH, NEMA 3R

SKIRTED CABLE TERMINATION

35kV, 3-PH, NEMA 2-HOLE PAD, 150kV BIL

35kV, 3-PH, UNDERGROUND POWER CABLE

PAD-MOUNTED SECTIONALIZING SWITCH

35KV, 3-PH, NEMA 3R, SF6, 600A, 150kV BIL

JS JB

Ch'k'd App'c

101 Station Drive

Westwood, MA 02090

**T** +1 (781) 915-0015

**F** +1 (781) 915-0001

www.mottmac.com

Suite 130

South Ripley

United States

WITH RUNID PER CABLE SCHEDULE

35kV, 3-PH, AERIAL POWER CABLE

11/24/2021 EHK ISSUED FOR REVIEW

**MOTT** 

**MACDONALD** 

Drawn Description

**SOUTH RIPLEY SOLAR** 

SINGLE LINE DIAGRAM

SUPPLEMENT A

MVAC ELECTRICAL COLLECTOR SYSTEM

AND CABLE SCHEDULE - FEEDER 1

(3-WAY SHOWN)

GROUND LOCATION

WITH INTEGRAL STEP-UP VOLTAGE TRANSFORMER

RATINGS VARY PER DC SCHEMATICS (3-PH, 60Hz)

METAL OXIDE SURGE ARRESTOR ELBOW

TEST POINT RESET CABLE FAULT INDICATOR

35KV, 1200A, DELAY TRIP, INRUSH RESTRAINT

35KV, DEADBREAK CABLE TERMINATION AND BUSHING

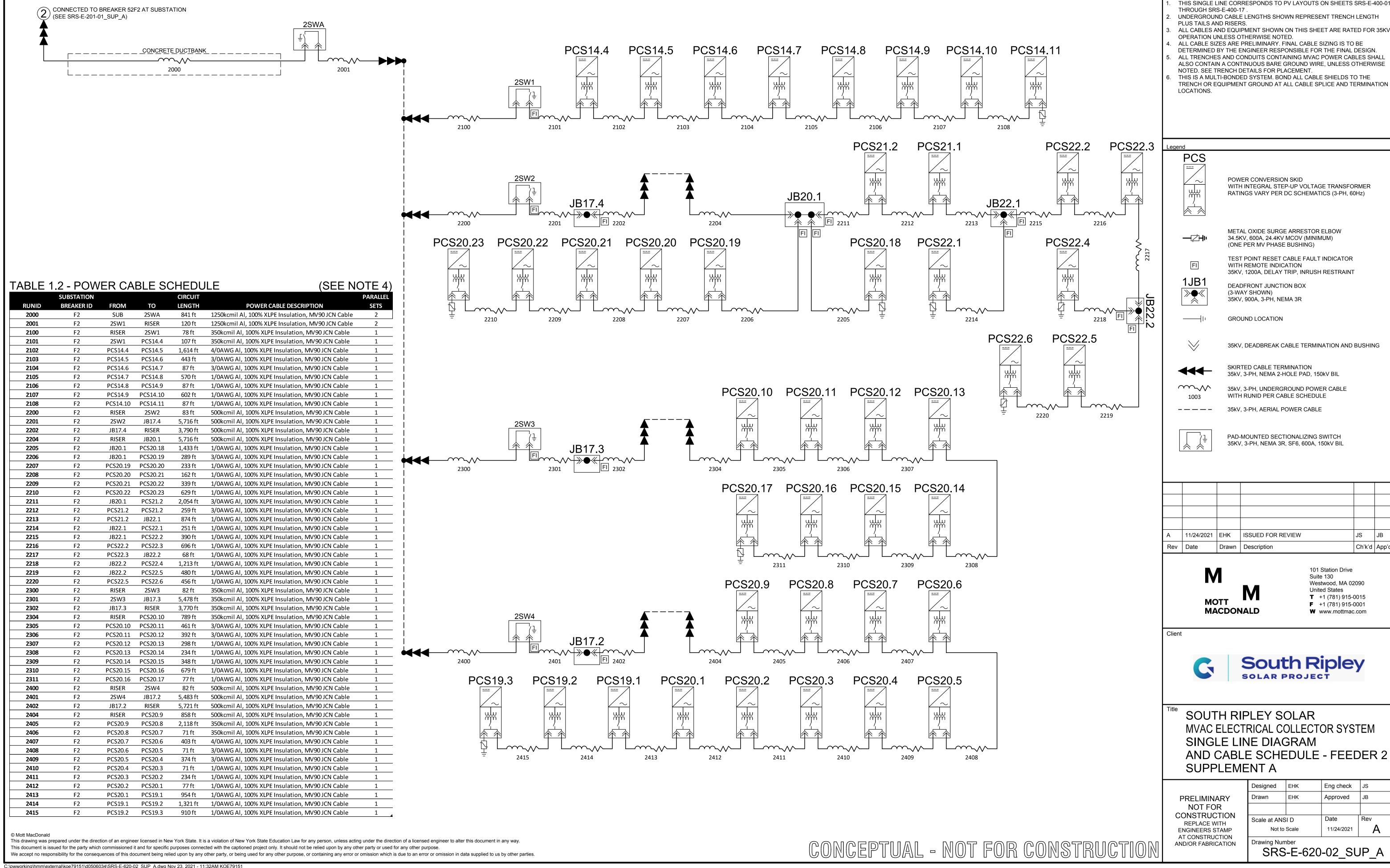
34.5KV, 600A, 24.4KV MCOV (MINIMUM) (ONE PER MV PHASE BUSHING)

> Drawing Number SRS-E-620-01 SUP A

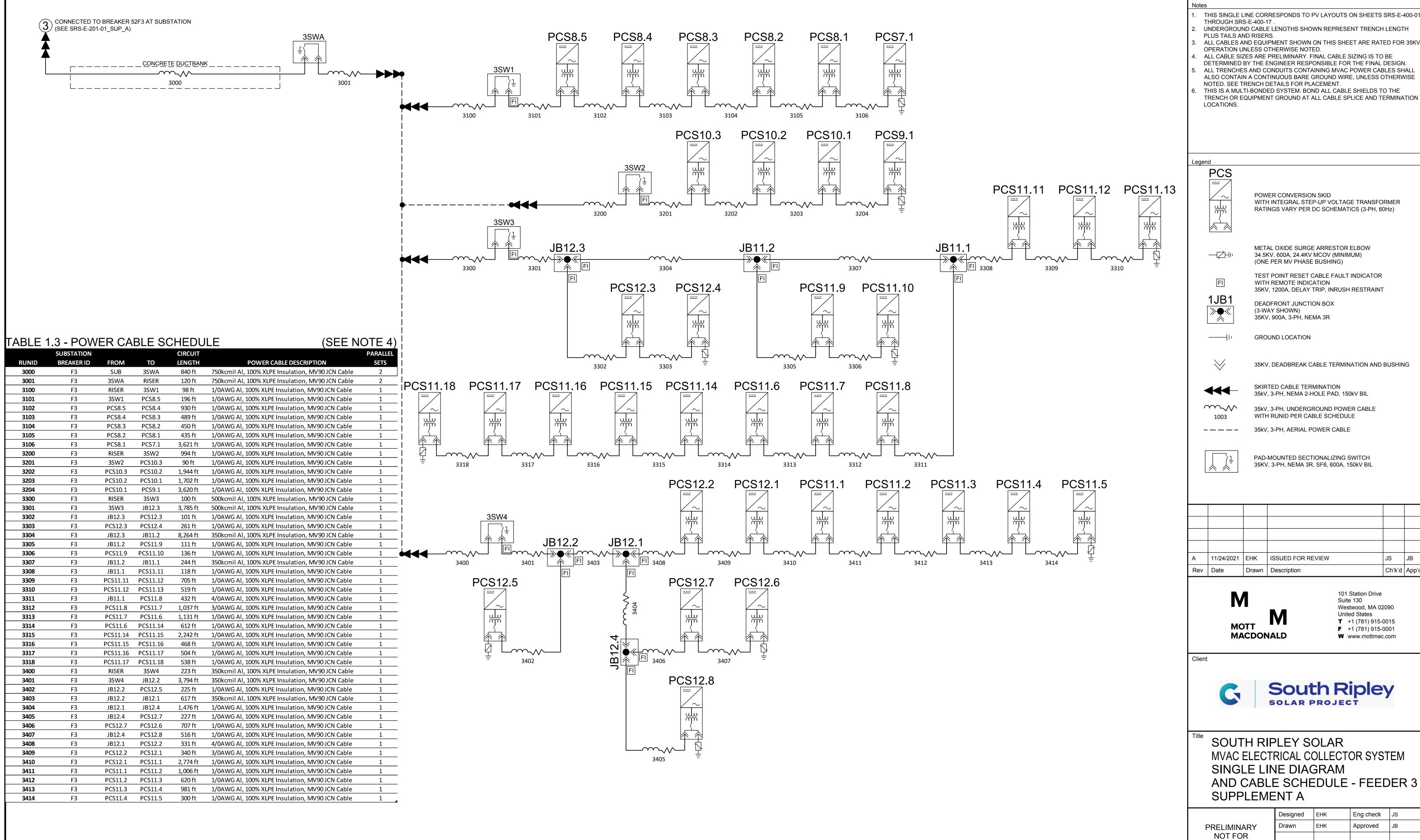
This drawing was prepared under the direction of an engineer licensed in New York State. It is a violation of New York State Education Law for any person, unless acting under the direction of a licensed engineer to alter this document in any way.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose



C:\pwworking\hmm\external\koe79151\d0506034\SRS-E-620-02\_SUP\_A.dwg Nov 23, 2021 - 11:32AM KOE79151



PRELIMINARY NOT FOR

CONSTRUCTION REPLACE WITH **ENGINEERS STAMP** AT CONSTRUCTION AND/OR FABRICATION

Eng check Designed | EHK Approved Drawn Scale at ANSI D Date Rev 11/24/2021 Not to Scale

POWER CONVERSION SKID

WITH REMOTE INDICATION

DEADFRONT JUNCTION BOX

35KV, 900A, 3-PH, NEMA 3R

SKIRTED CABLE TERMINATION

35kV, 3-PH, AERIAL POWER CABLE

Drawn Description

**MOTT** 

**MACDONALD** 

35kV, 3-PH, NEMA 2-HOLE PAD, 150kV BIL

35kV, 3-PH, UNDERGROUND POWER CABLE WITH RUNID PER CABLE SCHEDULE

PAD-MOUNTED SECTIONALIZING SWITCH

35KV, 3-PH, NEMA 3R, SF6, 600A, 150kV BIL

JS

101 Station Drive

Westwood, MA 02090

**T** +1 (781) 915-0015

**F** +1 (781) 915-0001

**W** www.mottmac.com

Suite 130

South Ripley

United States

Ch'k'd App'o

(3-WAY SHOWN)

GROUND LOCATION

WITH INTEGRAL STEP-UP VOLTAGE TRANSFORMER RATINGS VARY PER DC SCHEMATICS (3-PH, 60Hz)

METAL OXIDE SURGE ARRESTOR ELBOW 34.5KV, 600A, 24.4KV MCOV (MINIMUM) (ONE PER MV PHASE BUSHING)

TEST POINT RESET CABLE FAULT INDICATOR

35KV, 1200A, DELAY TRIP, INRUSH RESTRAINT

35KV, DEADBREAK CABLE TERMINATION AND BUSHING

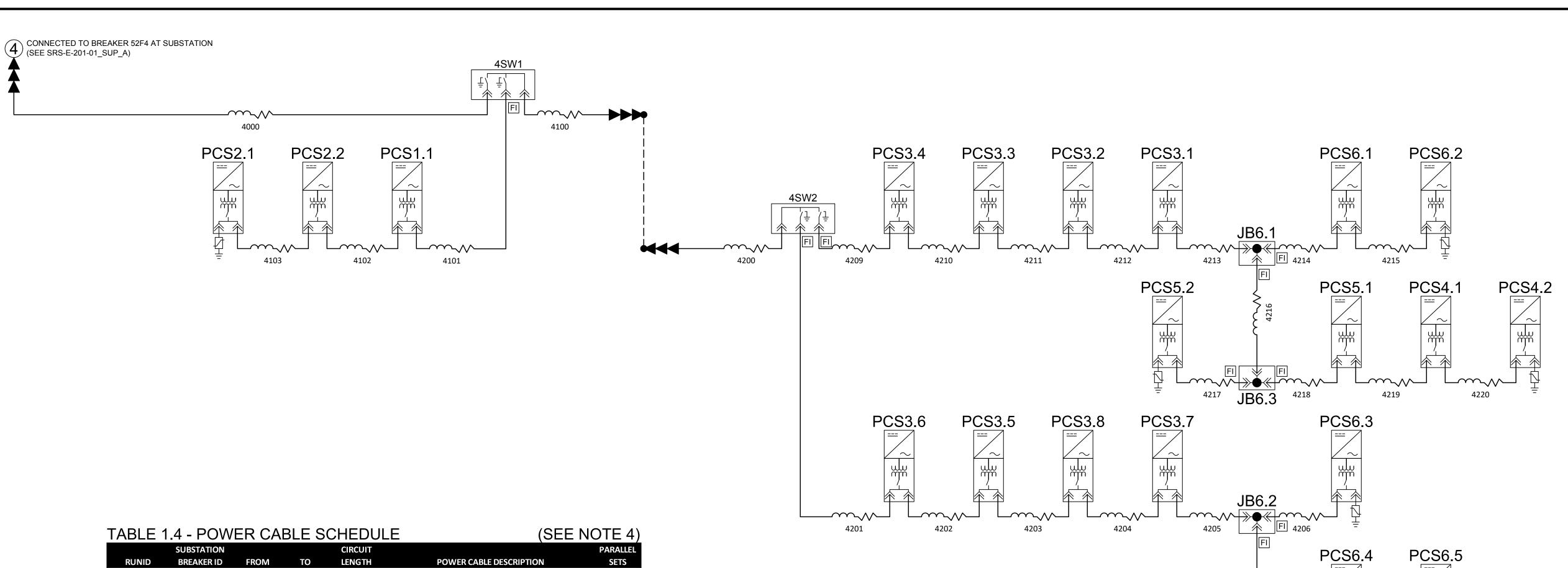
Drawing Number SRS-E-620-03 SUP A

This drawing was prepared under the direction of an engineer licensed in New York State. It is a violation of New York State Education Law for any person, unless acting under the direction of a licensed engineer to alter this document in any way.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose

© Mott MacDonald



- THIS SINGLE LINE CORRESPONDS TO PV LAYOUTS ON SHEETS SRS-E-400-01 THROUGH SRS-E-400-17.
- UNDERGROUND CABLE LENGTHS SHOWN REPRESENT TRENCH LENGTH PLUS TAILS AND RISERS.
- ALL CABLES AND EQUIPMENT SHOWN ON THIS SHEET ARE RATED FOR 35KV
- OPERATION UNLESS OTHERWISE NOTED. ALL CABLE SIZES ARE PRELIMINARY. FINAL CABLE SIZING IS TO BE
- DETERMINED BY THE ENGINEER RESPONSIBLE FOR THE FINAL DESIGN.
- ALL TRENCHES AND CONDUITS CONTAINING MVAC POWER CABLES SHALL ALSO CONTAIN A CONTINUOUS BARE GROUND WIRE, UNLESS OTHERWISE NOTED. SEE TRENCH DETAILS FOR PLACEMENT.
- THIS IS A MULTI-BONDED SYSTEM. BOND ALL CABLE SHIELDS TO THE TRENCH OR EQUIPMENT GROUND AT ALL CABLE SPLICE AND TERMINATION LOCATIONS.

POWER CONVERSION SKID WITH INTEGRAL STEP-UP VOLTAGE TRANSFORMER RATINGS VARY PER DC SCHEMATICS (3-PH, 60Hz)

METAL OXIDE SURGE ARRESTOR ELBOW 34.5KV, 600A, 24.4KV MCOV (MINIMUM) (ONE PER MV PHASE BUSHING)

> TEST POINT RESET CABLE FAULT INDICATOR WITH REMOTE INDICATION 35KV, 1200A, DELAY TRIP, INRUSH RESTRAINT

DEADFRONT JUNCTION BOX (3-WAY SHOWN)

35KV, 900A, 3-PH, NEMA 3R

GROUND LOCATION

35KV, DEADBREAK CABLE TERMINATION AND BUSHING

35kV, 3-PH, NEMA 2-HOLE PAD, 150kV BIL 35kV, 3-PH, UNDERGROUND POWER CABLE

1003 **- — — —**  35kV, 3-PH, AERIAL POWER CABLE

WITH RUNID PER CABLE SCHEDULE

SKIRTED CABLE TERMINATION



PAD-MOUNTED SECTIONALIZING SWITCH 35KV, 3-PH, NEMA 3R, SF6, 600A, 150kV BIL

11/24/2021 EHK ISSUED FOR REVIEW JS JB Ch'k'd App'c Drawn Description

**MOTT** 

**MACDONALD** 

101 Station Drive Suite 130 Westwood, MA 02090 United States **T** +1 (781) 915-0015 **F** +1 (781) 915-0001

www.mottmac.com

Client



SOUTH RIPLEY SOLAR MVAC ELECTRICAL COLLECTOR SYSTEM SINGLE LINE DIAGRAM AND CABLE SCHEDULE - FEEDER 4 SUPPLEMENT A

**PRELIMINARY** NOT FOR CONSTRUCTION REPLACE WITH **ENGINEERS STAMP** AT CONSTRUCTION

Eng check Approved Drawn Scale at ANSI D Date Rev 11/24/2021 Not to Scale Drawing Number

SRS-E-620-04\_SUP\_A

CONCEPTUAL - NOT FOR CONSTRUCTION AND/OR FABRICATION

4207

This drawing was prepared under the direction of an engineer licensed in New York State. It is a violation of New York State Education Law for any person, unless acting under the direction of a licensed engineer to alter this document in any way. This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

841 ft 1250kcmil Al, 100% XLPE Insulation, MV90 JCN Cable

120 ft 500kcmil Al, 100% XLPE Insulation, MV90 JCN Cable

1/0AWG AI, 100% XLPE Insulation, MV90 JCN Cable

1/0AWG AI, 100% XLPE Insulation, MV90 JCN Cable

1/0AWG AI, 100% XLPE Insulation, MV90 JCN Cable

500kcmil Al, 100% XLPE Insulation, MV90 JCN Cable

1/0AWG AI, 100% XLPE Insulation, MV90 JCN Cable

1/0AWG Al. 100% XLPE Insulation, MV90 JCN Cable

1/0AWG AI, 100% XLPE Insulation, MV90 JCN Cable

4/0AWG AI, 100% XLPE Insulation, MV90 JCN Cable

3/0AWG AI, 100% XLPE Insulation, MV90 JCN Cable

3/0AWG AI, 100% XLPE Insulation, MV90 JCN Cable

1/0AWG Al, 100% XLPE Insulation, MV90 JCN Cable

1/0AWG AI, 100% XLPE Insulation, MV90 JCN Cable

4000

4100

4101

4102

4103

4200

4201

4202

4203

4204

4205

4207

4208

4209

4210

4211

4212

4213

4214

4215

4216

4217

4218

4219

4220

F4

SUB

4SW1

4SW1

RISER

4SW2

PCS3.5

PCS3.8

JB6.2

PCS6.4

4SW2

PCS3.4

PCS3.3

PCS3.2

PCS3.1

JB6.1

PCS6.1

JB6.1

JB6.3

JB6.3

PCS5.1

PCS4.1

4SW1

RISER

PCS1.1

4SW2

PCS3.6

PCS3.8

PCS3.7

JB6.2 PCS6.3

PCS6.4

PCS6.5

PCS3.4

PCS3.3

PCS3.2

PCS3.1

JB6.1

PCS6.1

PCS6.2

JB6.3

PCS5.2

PCS5.1

PCS4.1

PCS4.2

1,798 ft

185 ft

169 ft

489 ft

435 ft

580 ft

408 ft

PCS1.1 PCS2.2

PCS2.2 PCS2.1

PCS3.6 PCS3.5

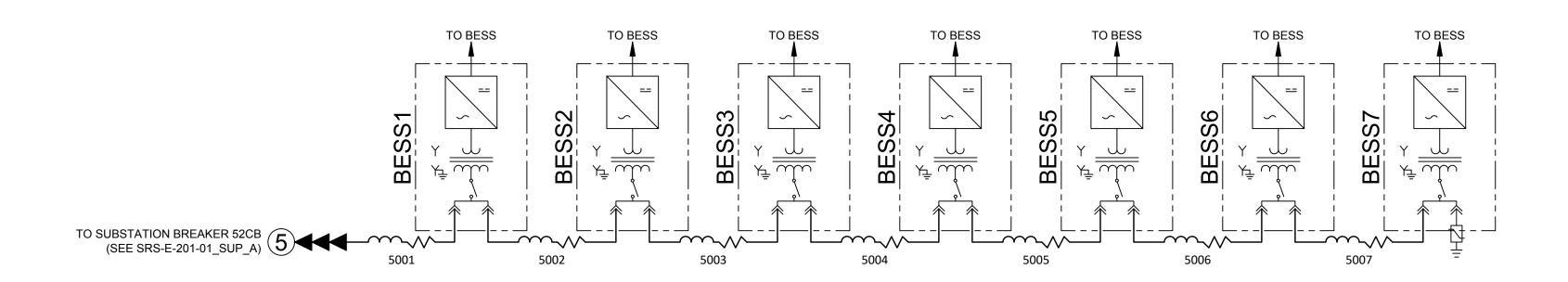


TABLE 1.5 - POWER CABLE SCHEDULE

(SEE NOTE 3)

	SUBSTATION			CIRCUIT	,	PARALLEL
RUNID	<b>BREAKER ID</b>	FROM	ТО	LENGTH	POWER CABLE DESCRIPTION	SETS
5001	F5	SUB	BESS1	465 ft	350kcmil Al, 100% XLPE Insulation, MV90 JCN Cable	1
5002	F5	BESS1	BESS2	89 ft	350kcmil AI, 100% XLPE Insulation, MV90 JCN Cable	1
5003	F5	BESS2	BESS3	89 ft	3/0AWG AI, 100% XLPE Insulation, MV90 JCN Cable	1
5004	F5	BESS3	BESS4	89 ft	3/0AWG AI, 100% XLPE Insulation, MV90 JCN Cable	1
5005	F5	BESS4	BESS5	89 ft	1/0AWG AI, 100% XLPE Insulation, MV90 JCN Cable	1
5006	F5	BESS5	BESS6	89 ft	1/0AWG AI, 100% XLPE Insulation, MV90 JCN Cable	1
5007	F5	BESS6	BESS7	89 ft	1/0AWG AI, 100% XLPE Insulation, MV90 JCN Cable	1

- UNDERGROUND CABLE LENGTHS SHOWN REPRESENT TRENCH LENGTH PLUS TAILS AND RISERS.
- ALL CABLES AND EQUIPMENT SHOWN ON THIS SHEET ARE RATED FOR 35KV OPERATION UNLESS OTHERWISE NOTED.
- ALL CABLE SIZES ARE PRELIMINARY. FINAL CABLE SIZING IS TO BE DETERMINED BY THE ENGINEER RESPONSIBLE FOR THE FINAL DESIGN.
  - ALL TRENCHES AND CONDUITS CONTAINING MVAC POWER CABLES SHALL ALSO CONTAIN A CONTINUOUS BARE GROUND WIRE, UNLESS OTHERWISE
  - NOTED. SEE TRENCH DETAILS FOR PLACEMENT. THIS IS A MULTI-BONDED SYSTEM. BOND ALL CABLE SHIELDS TO THE TRENCH OR EQUIPMENT GROUND AT ALL CABLE SPLICE AND TERMINATION

LOCATIONS.

Legend

BESS YARD POWER CONVERSION SKID WITH INTEGRAL STEP-UP VOLTAGE TRANSFORMER 3.45MVA, 3-PH, 60Hz

METAL OXIDE SURGE ARRESTOR ELBOW 34.5KV, 600A, 24.4KV MCOV (MINIMUM)



35KV, DEADBREAK CABLE TERMINATION AND BUSHING

SKIRTED CABLE TERMINATION 35kV, 3-PH, NEMA 2-HOLE PAD, 150kV BIL

35kV, 3-PH, UNDERGROUND POWER CABLE WITH RUNID PER CABLE SCHEDULE

11/24/2021 EHK ISSUED FOR REVIEW JS JB Ch'k'd App'd Drawn Description

> MOTT **MACDONALD**

101 Station Drive Suite 130 Westwood, MA 02090 **United States T** +1 (781) 915-0015

**F** +1 (781) 915-0001 www.mottmac.com

Client



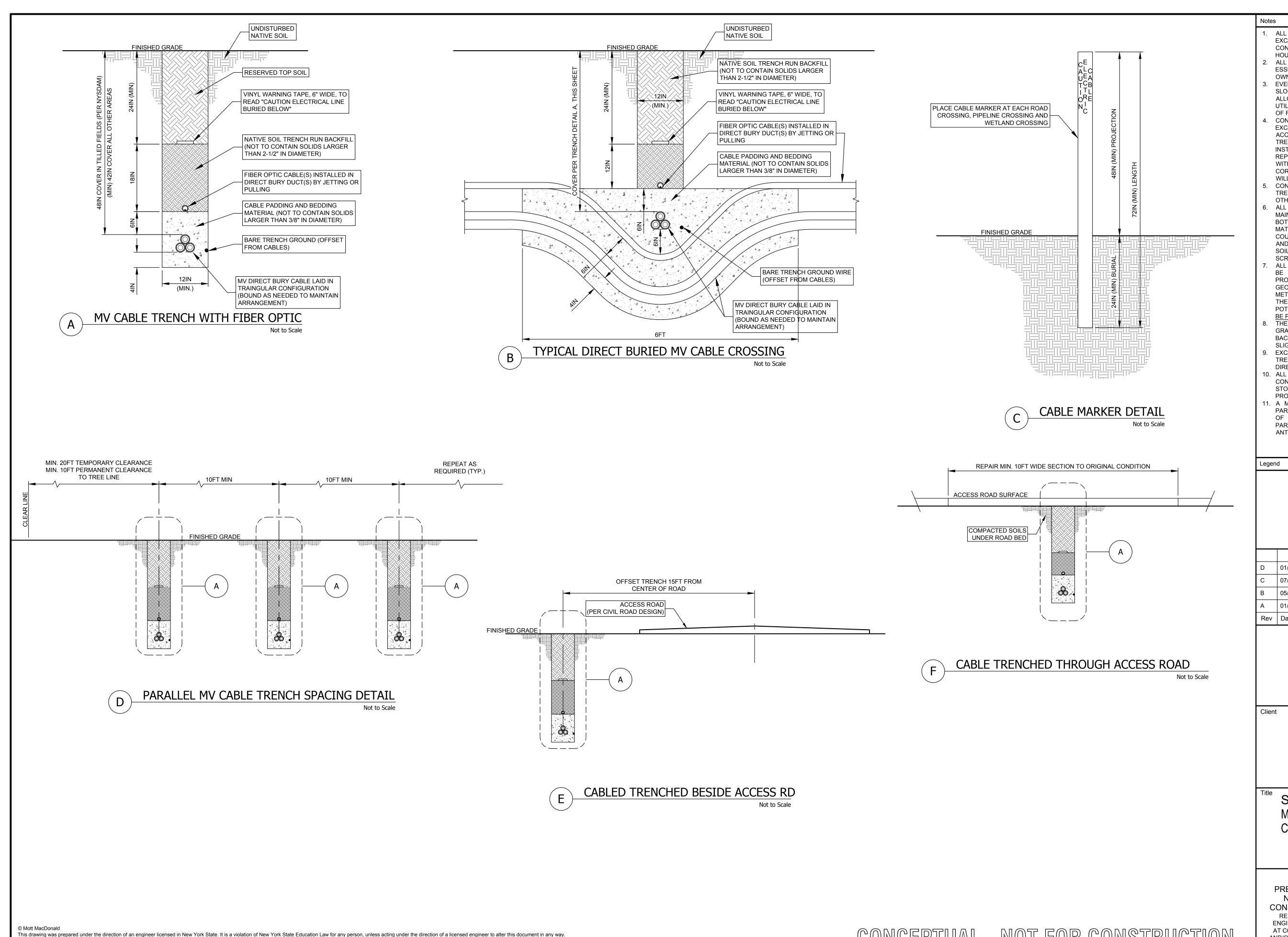
SOUTH RIPLEY SOLAR MVAC ELECTRICAL COLLECTOR SYSTEM BESS SINGLE LINE DIAGRAM AND CABLE SCHEDULE SUPPLEMENT A

**PRELIMINARY** NOT FOR CONSTRUCTION REPLACE WITH **ENGINEERS STAMP** AT CONSTRUCTION AND/OR FABRICATION

Not to Scale		11/24/2021	Α
Scale at ANSI D		Date	Rev
Drawn	EHK	Approved	JAB
Designed	EHK	Eng check	JS

SRS-E-620-05\_SUP\_A

This drawing was prepared under the direction of an engineer licensed in New York State. It is a violation of New York State Education Law for any person, unless acting under the direction of a licensed engineer to alter this document in any way. This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.



ALL EXISTING UTILITIES MUST BE LOCATED BEFORE ANY EXCAVATION/TRENCHING IS STARTED. REGARDLESS OF OTHER UTILITY CONTACTS, CONTRACTOR MUST NOTIFY LOCAL LOCATING CLEARING HOUSE (I.E. ONECALL) OR OTHER STATE BODY.

2. ALL GRADE SURFACES THAT ARE DISTURBED SHALL BE RESTORED TO ESSENTIALLY ORIGINAL CONDITION AND TO THE SATISFACTION OF THE

OWNER.
3. EVERY TRENCH MUST BE A MINIMUM OF 12-INCHES WIDE (WITH PROPER SLOPE FOR WEAK SOILS), AND MUST PROVIDE SUFFICIENT SPACE TO ALLOW COMPACTION AS SPECIFIED WITH THE EQUIPMENT BEING UTILIZED. THE CONTRACTOR SHALL ENSURE THAT SUFFICIENT AMOUNT OF FINE SOIL IS ADDED ABOVE CABLE FOR BACKFILLS.

4. CONTRACTOR SHALL PROTECT ALL TRENCHES AND OTHER EXCAVATIONS FROM SURFACE WATER RUNOFF. ANY WATER THAT HAS ACCUMULATED IN THE EXCAVATION SHALL BE REMOVED AND ANY SOFT TRENCH BOTTOM REMOVED AND REPLACED PRIOR TO THE INSTALLATION OF THE CABLES. THIS INCLUDES REMOVAL AND REPLACEMENT OF SAND BACKFILL THAT HAS BECOME CONTAMINATED WITH SILT, ROCKS, MUD, CLAY, ETC. THE REMOVAL OF WATER AND CORRECTION OF SOFT GROUND CONDITIONS DUE TO SURFACE WATER WILL BE THE RESPONSIBILITY OF CONTRACTOR.

5. CONTRACTOR MUST PROTECT THE PUBLIC AND LIVESTOCK FROM ALL TRENCHES AND EXCAVATIONS BY UTILIZING SUITABLE BARRICADES OR OTHER WARNING DEVICES.

MAINTAIN THE SPECIFIED COVER OVER THE INSTALLED CABLE. IF THE BOTTOM OF THE TRENCH CONTAINS ROCKS, WOOD, VEGETATION MATERIAL OR OTHER HARD, ROUGH, OR SHARP MATERIALS THAT COULD DAMAGE THE CABLE, THE TRENCH SHALL BE OVER-EXCAVATED AND BACKFILLED WITH A 4-INCH LAYER OF COMPACTED FINE CLEAN SOIL (NOTHING LARGER THAN WHAT WOULD PASS THROUGH A 3/8-INCH SCREEN) OR SAND PRIOR TO THE CABLE BEING LAID IN PLACE.

ALL EXCAVATED AREAS, INCLUDING TRENCHES AND BELL HOLES MUST BE THOROUGHLY COMPACTED TO NO LESS THAN 85% STANDARD PROCTOR, UNLESS OTHERWISE NOTED IN THE PROJECT GEO-TECHNICAL REPORT. COMPACTION SHALL BE BY PROVEN METHODOLOGY. SPECIAL CARE MUST BE TAKEN IN THE AREAS WHERE THE THERMAL TESTING OF SOILS IN THAT AREA INDICATES A POTENTIALLY HIGH RESISTIVITY. COMPACTION BY FLOODING WILL NOT BE PERMITTED.

THE CONTRACTOR SHALL FILL THE TRENCH TO PRE-CONSTRUCTION GRADE WITH THE STOCKPILED TOP SOIL AND WITH ADDITIONAL BACKFILL ADDED TO ALLOW FOR SETTLING. CONTRACTOR MAY SLIGHTLY OVERFILL TRENCH IN ORDER TO ALLOW FOR SETTLING.

EXCAVATED SOIL AND ROCK THAT IS NOT REUSED IN BACKFILLING THE TRENCHES IS TO BE DISTRIBUTED ACROSS THE SITE PER THE DIRECTION OF THE OWNER.

10. ALL EXCAVATION, TRENCHING AND ELECTRICAL SYSTEM CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THE FORMAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE PROJECT

11. A MINIMUM OF 10 FEET OF SEPARATION IS REQUIRED BETWEEN PARALLEL HOME RUN CIRCUITS AS NOTED ON SYSTEM MAP. A MINIMUM OF 15 FEET OF SEPARATION IS REQUIRED BETWEEN ALL OTHER PARALLEL CIRCUITS. A MAXIMUM OF FOUR PARALLEL CIRCUITS IS ANTICIPATED.

D	01/18/2022	EHK	ISSUED FOR 94-C	JS	RA
С	07/02/2021	EHK	ISSUED FOR REVIEW	JAB	JAB
В	05/18/2021	EHK	ISSUED FOR REVIEW		JB
Α	01/29/2021	EHK	ISSUED FOR REVIEW	BG	JB
Rev	Date	Drawn	Description	Ch'k'd	App'd

MOTT MACDONALD

101 Station Drive
Suite 130
Westwood, MA 02090
United States
T +1 (781) 915-0015

**F** +1 (781) 915-0001

www.mottmac.com



SOUTH RIPLEY SOLAR
MVAC ELECTRICAL COLLECTOR SYSTEM
CABLE TRENCHING AND BURIAL DETAILS

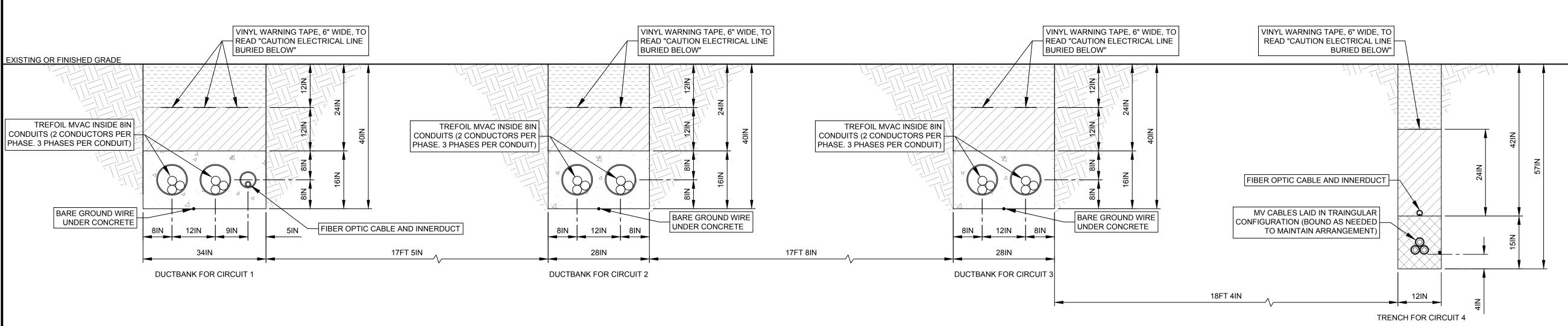
PRELIMINARY
NOT FOR
CONSTRUCTION
REPLACE WITH
ENGINEERS STAMP
AT CONSTRUCTION
AND/OR FABRICATION

	Designed	EHK	Eng check	JAB
	Drawn	EHK	Approved	JAB
	Scale at ANSI D  Not to Scale		Date	Rev
			01/18/2022	D
	Drawing Num	her		

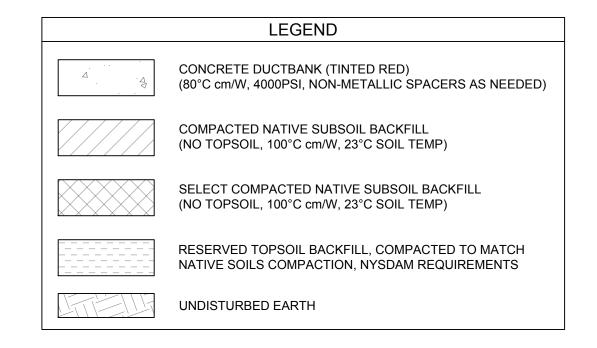
SRS-E-640-01

This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.



SCALE: 3/4" = 1'-0"



Notes

- 1. ALL EXISTING UTILITIES MUST BE LOCATED BEFORE ANY EXCAVATION/TRENCHING IS STARTED. REGARDLESS OF OTHER UTILITY CONTACTS, CONTRACTOR MUST NOTIFY LOCAL LOCATING CLEARING HOUSE (I.E. ONECALL) OR OTHER STATE BODY.
- 2. ALL GRADE SURFACES THAT ARE DISTURBED SHALL BE RESTORED TO ESSENTIALLY ORIGINAL CONDITION AND TO THE SATISFACTION OF THE
- 3. PROTECT ALL TRENCHES AND OTHER EXCAVATIONS FROM SURFACE WATER RUNOFF. ANY WATER THAT HAS ACCUMULATED IN THE EXCAVATION SHALL BE REMOVED AND ANY SOFT TRENCH BOTTOM REMOVED AND REPLACED PRIOR TO THE INSTALLATION OF THE CABLES. THIS INCLUDES REMOVAL AND REPLACEMENT OF SAND BACKFILL THAT HAS BECOME CONTAMINATED WITH SILT, ROCKS, MUD, CLAY, ETC. THE REMOVAL OF WATER AND CORRECTION OF SOFT GROUND CONDITIONS DUE TO SURFACE WATER WILL BE THE RESPONSIBILITY OF CONTRACTOR.
- 4. PROTECT THE PUBLIC AND LIVESTOCK FROM ALL TRENCHES AND EXCAVATIONS BY UTILIZING SUITABLE BARRICADES OR OTHER WARNING DEVICES.
- 5. EXCAVATE TO DEPTH NECESSARY TO MAINTAIN THE SPECIFIED COVER OVER THE INSTALLED CABLE, AS A MINIMUM.
- 6. FILL THE TRENCHES TO PRE-CONSTRUCTION GRADE WITH THE STOCKPILED TOP SOIL AND WITH ADDITIONAL BACKFILL ADDED TO ALLOW FOR SETTLING. CONTRACTOR MAY SLIGHTLY OVERFILL TRENCH IN ORDER TO ALLOW FOR SETTLING.
- 7. EXCAVATED SOIL AND ROCK THAT IS NOT REUSED IN BACKFILLING THE TRENCHES IS TO BE DISTRIBUTED ACROSS THE SITE PER THE DIRECTION OF THE OWNER.
- 8. ALL EXCAVATION, TRENCHING AND ELECTRICAL SYSTEM CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THE FORMAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE PROJECT.

O	01/18/2022	EHK	ISSUED FOR 94C	JS	RA
В	12/08/21	EHK	ISSUED FOR REVIEW	JS	JB
Α	11/24/2021	EHK	ISSUED FOR REVIEW	JS	JB
Rev	Date	Drawn	Description	Ch'k'd	App'd

MOTT MACDONALD

101 Station Drive Suite 130 Westwood, MA 02090 United States **T** +1 (781) 915-0015 **F** +1 (781) 915-0001

www.mottmac.com

Client



SOUTH RIPLEY SOLAR
MVAC ELECTRICAL COLLECTOR SYSTEM
CABLE TRENCHING AND BURIAL DETAILS
SUPPLEMENT A

PRELIMINARY
NOT FOR
CONSTRUCTION
REPLACE WITH
ENGINEERS STAMP
AT CONSTRUCTION
AND/OR FABRICATION

Designed EHK Eng check JS

Drawn EHK Approved JAB

Scale at ANSI D

Not to Scale 01/18/2022 C

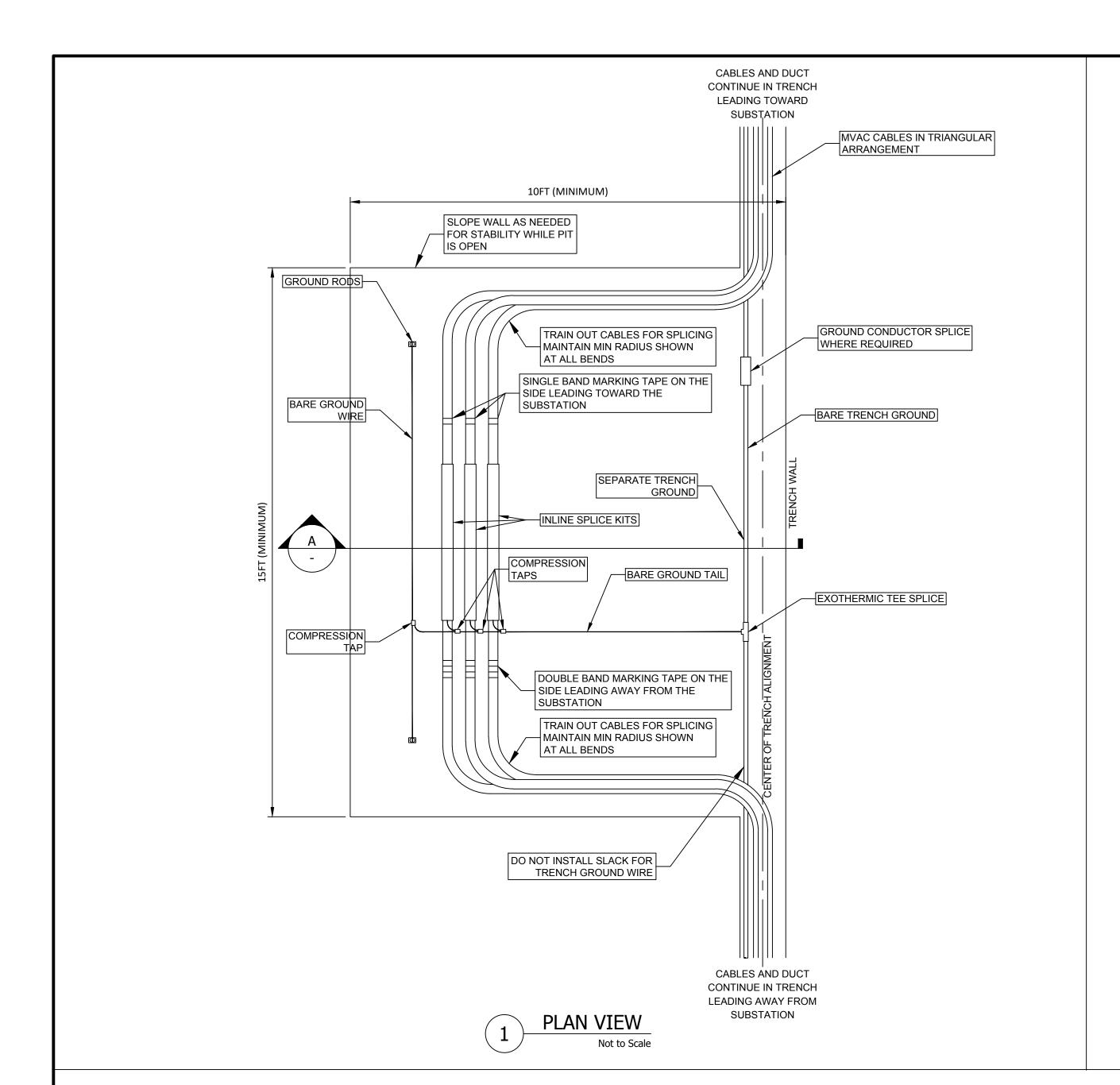
Drawing Number SRS-E-640-01\_SUP\_A

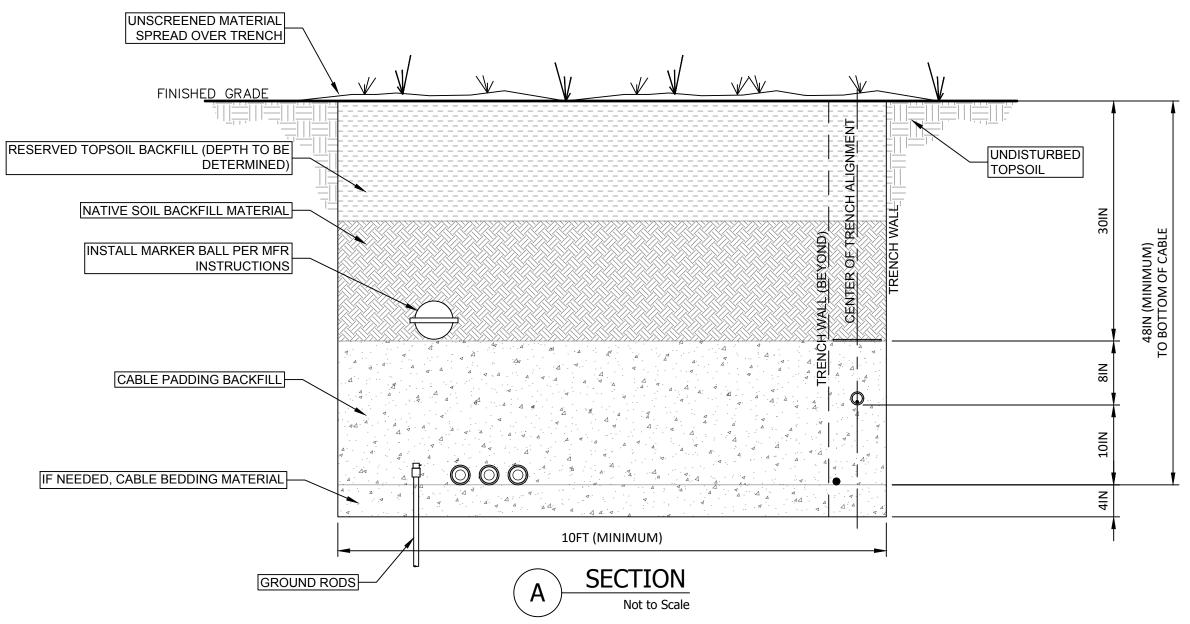
© Mott MacDonald
This drawing was prepared under the direction of an engineer licensed in New York State. It is a violation of New York State Education Law for any person, unless acting under the direction of a licensed engineer to alter this document in any way.

This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

35KV DUCTBANK SECTION APPROACHING SUBSTATION





Notes

- EXISTING UNDERGROUND UTILITIES MAY BE PRESENT NEAR THE SPLICING LOCATION. CONTACT THE LOCAL "ONE CALL" UTILITY LOCATING SERVICE PRIOR TO EXCAVATION AND MAINTAIN ANY LOCATION MARKS UNTIL INSTALLATION IS APPROVED AND COMPLETED.
- 2. INSTALL ALL SPLICES PER THE MANUFACTURER'S INSTRUCTIONS, AND THIS DRAWING.
- 3. SPLICES ARE TO BE MINIMIZED BY CAREFUL REEL MANAGEMENT. OTHERWISE, SPLICES MAY BE INSTALLED AT CROSSING BORES OR AT THE END OF A FULL REEL OF CABLE. DO NOT INSTALL SPLICES IN DESIGNATED WETLAND AREAS, AREAS PRONE TO CATCHING SURFACE WATER, OR TRENCHES WITH WET BOTTOMS.
- . DO NOT SPLICE TOGETHER CABLES OF DIFFERENT SIZE.
- 5. DO NOT BEND CABLE WITHIN 12-INCHES OF THE END OF A SPLICE.
- 6. AFTER THE CABLE IS CUT, APPLY END CAPS TO ANY EXPOSED ENDS OF CABLE TO PREVENT DIRT AND MOISTURE ENTERING THE CABLE.
- 7. BOND THE SHIELD WIRES TO THE TRENCH GROUND WIRE AT ALL SPLICE LOCATIONS.
- 3. RECORD THE GPS COORDINATES AND MARKER BALL RFID FOR EACH SPLICE KIT INSTALLED ON THE AS-BUILT COLLECTION SYSTEM DRAWINGS.

Legend

 C
 07/02/2021
 EHK
 ISSUED FOR 94-C
 JAB
 JAB

 B
 05/18/2021
 EHK
 ISSUED FOR REVIEW
 JB

 A
 01/29/2021
 EHK
 ISSUED FOR REVIEW
 BG
 JB

 Rev
 Date
 Drawn
 Description
 Ch'k'd
 App'd

M MOTT MACDONALD

Suite 130
Westwood, MA 02090
United States **T** +1 (781) 915-0015 **F** +1 (781) 915-0001

www.mottmac.com

101 Station Drive

Client



SOUTH RIPLEY SOLAR
MVAC ELECTRICAL COLLECTOR SYSTEM
UNDERGROUND CABLE SPLICING DETAILS

PRELIMINARY
NOT FOR
CONSTRUCTION
REPLACE WITH
ENGINEERS STAMP
AT CONSTRUCTION
AND/OR FABRICATION

	Designed	EHK	Eng check	JAB
	Drawn	EHK	Approved	JAB
	Scale at ANSI D  Not to Scale		Date	Rev
			07/02/2021	C
	Drawing Num	nber		

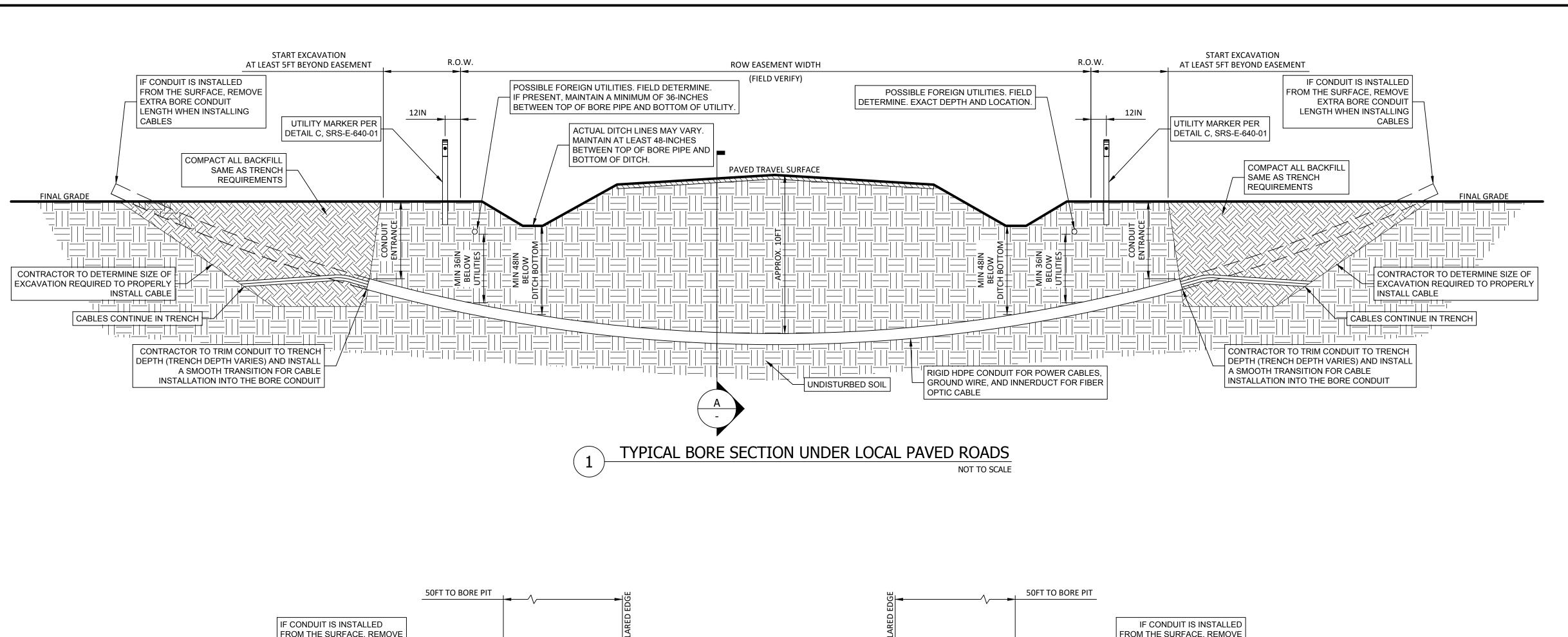
SRS-E-640-02

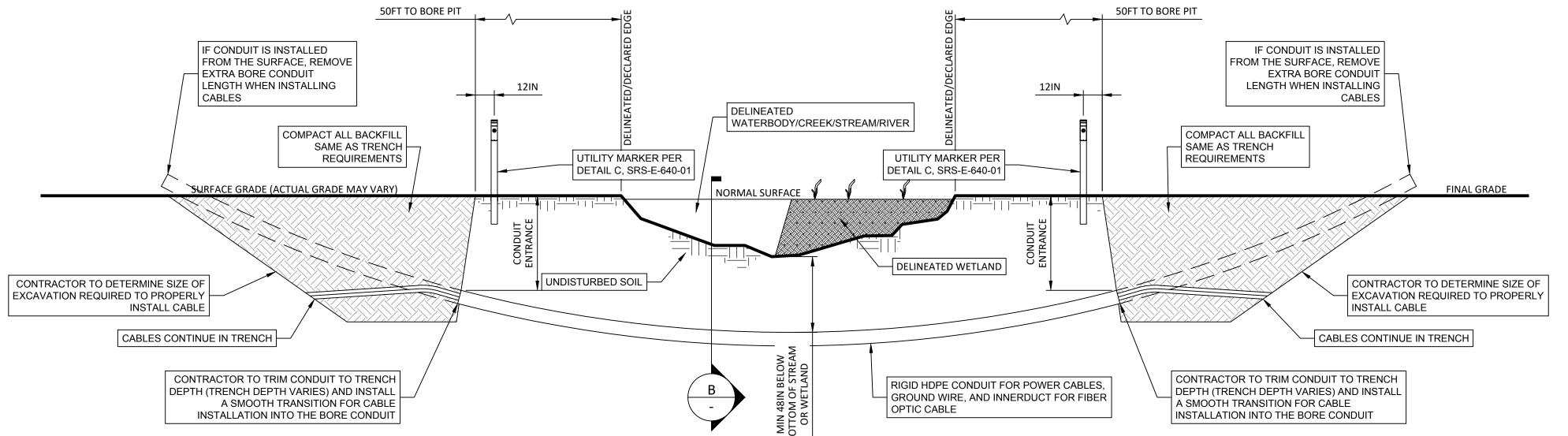
© Mott MacDonald

This drawing was prepared under the direction of an engineer licensed in New York State. It is a violation of New York State Education Law for any person, unless acting under the direction of a licensed engineer to alter this document in any way.

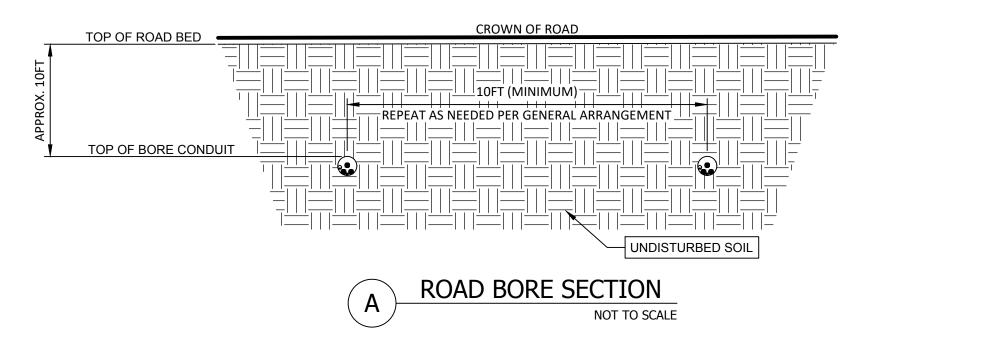
This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.





TYPICAL BORE SECTION UNDER DELINEATED WATER OR WETLAND
NOT TO SCALE



TOP OF BORE CONDUIT

UNDISTURBED SOIL

AD BORE SECTION

NOT TO SCALE

B

WATER/WETLAND

NOT TO SCALE

ION Law for any person, unless acting under the direction of a licensed engineer to alter this document in any way.

© Mott MacDonald
This drawing was prepared under the direction of an engineer licensed in New York State. It is a violation of New York State Education Law for any person, unless acting under the direction of a licensed engineer to alter this document in any way.

This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

TOP OF BORE CONDUIT

BOTTOM OF FLOW LINE

10FT (MINIMUM)

REPEAT AS NEEDED PER GENERAL ARRANGEMENT

WATER/WETLAND BORE SECTION

NOT TO SCALE

CONCEPTUAL - NOT FOR CONSTRUCTION

Notes

- UNDERGROUND OR EXISTING UTILITIES MAY BE PRESENT WITHIN OR ADJACENT TO THE EXCAVATION AREA(s). CONTACT LOCAL "ONE CALL" UTILITY LOCATING SERVICE AT LEAST 48 HOURS PRIOR TO EXCAVATION. MAINTAIN LOCATION MARKS AS NEEDED UNTIL INSTALLATION IS COMPLETED.
- REFERENCES TO ANY UNDERGROUND OR EMBEDDED FACILITIES ARE PROVIDED TO ASSIST THE CONTRACTOR /INSTALLER IN THE FIELD LOCATING THOSE FACILITIES AND OTHER POSSIBLE UNDERGROUND OR EMBEDDED INTERFERENCES WITH THE WORK.
  - CONTRACTOR SHALL COMPLY WITH ANY SPECIFIC AGREEMENTS AND PERMITS OBTAINED FOR EACH INSTALLATION. IN THE CASE THAT THIS DOCUMENT CONFLICTS WITH THESE SPECIFIC AGREEMENTS AND/OR PERMITS, THE CONTRACTOR SHALL COMPLY WITH THE AGREEMENTS/PERMITS AND NOTIFY THE ENGINEER OF RECORD OF THE CONFLICT.
- 4. ALL COUNTY ROAD CROSSINGS MUST MAINTAIN AT LEAST 36 INCHES UNDER ANY EXISTING UTILITIES, OR 48 INCHES UNDER THE CENTERLINE OF THE ROAD, OR 48 INCHES BELOW THE DITCH LINES, WHICHEVER IS DEEPER. VERIFY DEPTH REQUIRED WITH ENGINEER BEFORE CROSSING IS COMMENCED.
- INSTALL ALL CABLES CROSSING UNDER COUNTY ROADS IN CONDUIT. INSTALL CABLES CROSSING UNDER TURBINE ACCESS ROADS IN TRENCH.
- 6. WHEN CROSSING LOCAL AND/OR COUNTY ROADS, ALL EXCAVATION WORK SHALL HAPPEN AT LEAST 5 FEET OUTSIDE THE ROAD EASEMENT, UNLESS APPROVED OTHERWISE BY THE AUTHORITY HAVING JURISDICTION. ANY DISTURBED PORTIONS OF THE ROADWAY OR ITS RIGHT-OF-WAY SHALL BE RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR.
- 7. ALL EXCAVATIONS FOR DRILLING, JACKING, RAMMING, BORING, RECEIVING, OR CABLE INSTALLATION SHALL BE BACKFILLED AND COMPACTED TO MATCH TRENCH BACKFILL AND COMPACTION REQUIREMENTS.
- 8. WHEN CROSSING DELINEATED SURFACE WATER, WETLAND, OR STREAM FEATURES, ALL EXCAVATION WORK SHALL HAPPEN NO CLOSER THAN 50FT BEYOND THE DESIGNATED EDGE OF SAID FEATURE. IF THIS SEPARATION IS NOT FEASIBLE, CONTRACTOR SHALL KEEP EXCAVATION AREA AS FAR AS POSSIBLE AND AS SMALL AS POSSIBLE TO SAFELY INSTALL CONDUIT AND/OR CABLE.
- 9. IF NEEDED TO MAINTAIN CABLE INSTALLATION REQUIREMENTS, INSTALL A SPLICE MAY BE INSTALLED AT OR NEAR THE CONDUIT ENTRANCE. DO NOT ALLOW THE SPLICE TO ENTER THE CONDUIT. INSTALL THE SPLICE ACCORDING TO THE DETAILS AND INSTRUCTIONS ON SRS-E-640-02.

B 05/18/2021 EHK ISSUED FOR REVIEW JB
A 01/29/2021 EHK ISSUED FOR REVIEW BG JB
Rev Date Drawn Description Ch'k'd App'd

ISSUED FOR 94-C

M MOTT MACDONALD

07/02/2021 EHK

Suite 130
Westwood, MA 02090
United States **T** +1 (781) 915-0015 **F** +1 (781) 915-0001

www.mottmac.com

101 Station Drive

JAB

Client

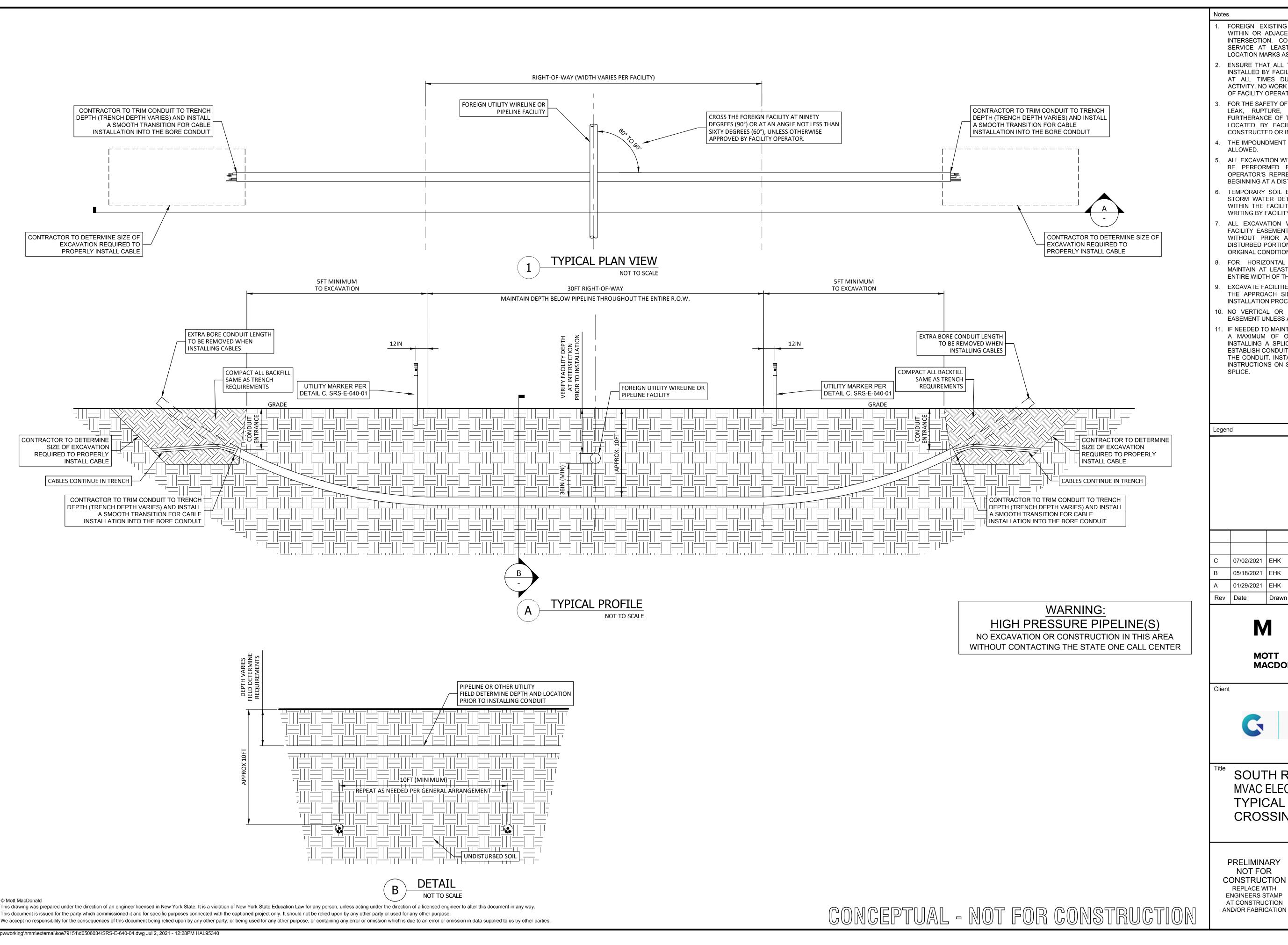


SOUTH RIPLEY SOLAR
MVAC ELECTRICAL COLLECTOR SYSTEM
TYPICAL ROADWAY AND WETLAND
UNDERGROUND CROSSING DETAILS

PRELIMINARY
NOT FOR
CONSTRUCTION
REPLACE WITH
ENGINEERS STAMP
AT CONSTRUCTION
AND/OR FABRICATION

Designed	EHK	Eng check	JAB
Drawn	EHK	Approved	JAB
Scale at ANS	I D	Date	Rev
Not to Scale		07/02/2021	C
Drawing Nur	hor		

SRS-E-640-03



- FOREIGN EXISTING UNDERGROUND FACILITIES MAY BE PRESENT WITHIN OR ADJACENT TO THE EXCAVATION AREA(s) AND POINT OF INTERSECTION. CONTACT LOCAL "ONE CALL" UTILITY LOCATING SERVICE AT LEAST 48 HOURS PRIOR TO EXCAVATION. MAINTAIN LOCATION MARKS AS NEEDED UNTIL INSTALLATION IS COMPLETED.
- ENSURE THAT ALL TEMPORARY AND PERMANENT FACILITY MARKERS INSTALLED BY FACILITY OPERATOR ARE PROTECTED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION OR CROSSING RELATED ACTIVITY. NO WORK IS ALLOWED TO COMMENCE UNTIL, IN THE OPINION OF FACILITY OPERATOR, SUFFICIENT MARKERS ARE IN PLACE.
- FOR THE SAFETY OF THE PUBLIC AND TO LESSEN THE RISK OF A BREAK, LEAK, RUPTURE, OR OTHER DAMAGE TO FACILITY AND IN FURTHERANCE OF THE STATE CODE, FACILITY SHALL BE POSITIVELY LOCATED BY FACILITY OPERATOR BEFORE ANY CROSSINGS ARE CONSTRUCTED OR INSTALLED NEAR FACILITY.
- I. THE IMPOUNDMENT OF WATER WITHIN THE FACILITY EASEMENT IS NOT
- 5. ALL EXCAVATION WITHIN EIGHTEEN INCHES (18") OF ANY FACILITY WILL BE PERFORMED BY HAND. AT THE DISCRETION OF FACILITY OPERATOR'S REPRESENTATIVE, EXCAVATORS MAY BE USED TO DIG BEGINNING AT A DISTANCE GREATER THAN EIGHTEEN INCHES.
- TEMPORARY SOIL EROSION AND SEDIMENT CONTROL DEVICES AND STORM WATER DETENTION BASINS/TRAPS WILL NOT BE PERMITTED WITHIN THE FACILITY EASEMENT UNLESS OTHERWISE AGREED TO IN WRITING BY FACILITY OPERATOR.
- 7. ALL EXCAVATION WORK SHALL HAPPEN AT LEAST OUTSIDE THE FACILITY EASEMENT. DO NOT EXCAVATE INSIDE THE RIGHT OF WAY WITHOUT PRIOR APPROVAL FROM THE UTILITY AUTHORITY. ANY DISTURBED PORTIONS OF THE RIGHT-OF-WAY SHALL BE RESTORED TO ORIGINAL CONDITION, OR BETTER.
- FOR HORIZONTAL DIRECTIONALLY DRILLED BORE CROSSINGS, MAINTAIN AT LEAST 36IN OF CLEARANCE BELOW FACILITY FOR THE ENTIRE WIDTH OF THE RIGHT-OF-WAY.
- 9. EXCAVATE FACILITIES AT THE POINT OF THE PROPOSED CROSSING ON THE APPROACH SIDE TO VERIFY THE AUGER HEAD, BORING AND INSTALLATION PROCESS WILL NOT DAMAGE THE PIPELINE FACILITIES.
- 10. NO VERTICAL OR HORIZONTAL BENDS ALLOWED WITHIN FACILITY EASEMENT UNLESS APPROVED BY EASEMENT OWNER.
- 11. IF NEEDED TO MAINTAIN CABLE INSTALLATION REQUIREMENTS, INSTALL A MAXIMUM OF ONE SPLICE PER BORING INSTALLATION. WHEN INSTALLING A SPLICE, PLACE THE SPLICE INSIDE THE PIT USED TO ESTABLISH CONDUIT ENTRANCE. DO NOT ALLOW THE SPLICE TO ENTER THE CONDUIT. INSTALL THE SPLICE ACCORDING TO THE DETAILS AND INSTRUCTIONS ON SRS-E-640-02 WITH SLACK ON BOTH SIDES OF THE SPLICE.

С	07/02/2021	EHK	ISSUED FOR 94-C	JAB	JAE
В	05/18/2021	EHK	ISSUED FOR REVIEW		JB
Α	01/29/2021	EHK	ISSUED FOR REVIEW	BG	JB
Rev	Date	Drawn	Description	Ch'k'd	App

**MOTT MACDONALD** 

101 Station Drive Suite 130 Westwood, MA 02090 United States **T** +1 (781) 915-0015

**F** +1 (781) 915-0001

www.mottmac.com

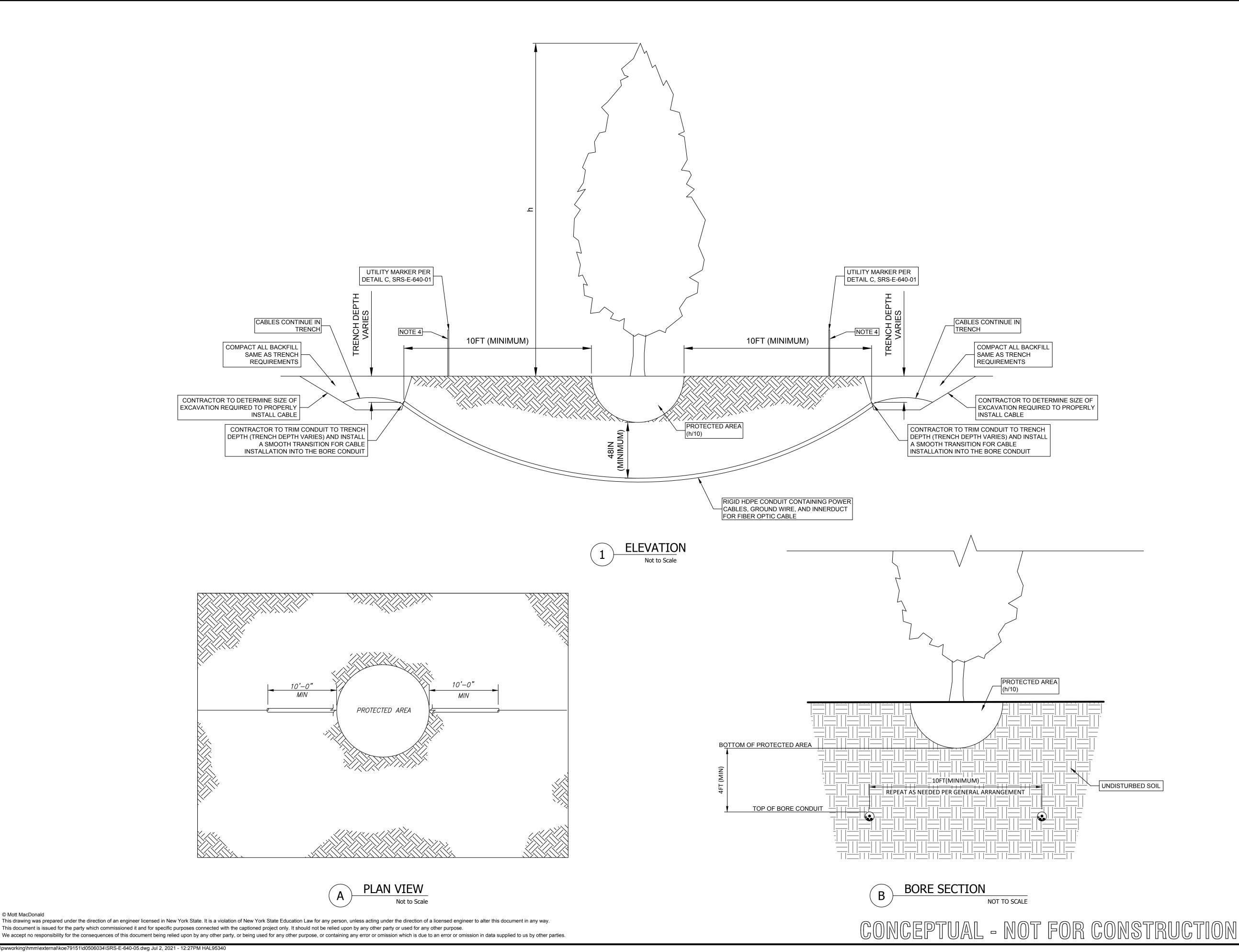


SOUTH RIPLEY SOLAR MVAC ELECTRICAL COLLECTOR SYSTEM TYPICAL UNDERGROUND PIPELINE **CROSSING DETAIL** 

**PRELIMINARY** NOT FOR CONSTRUCTION REPLACE WITH **ENGINEERS STAMP** AT CONSTRUCTION

	Designed	EHK	Eng check	JAB
	Drawn	EHK	Approved	JAB
\ I				
N	Scale at ANS	I D	Date	Rev
	Not to	Scale	07/02/2021	C
NI I	Drawing Num	nber		

SRS-E-640-04



Notes

- UNDERGROUND OR EXISTING UTILITIES MAY BE PRESENT WITHIN OR ADJACENT TO THE EXCAVATION AREA(s). CONTACT LOCAL "ONE CALL" UTILITY LOCATING SERVICE AT LEAST 48 HOURS PRIOR TO EXCAVATION. MAINTAIN LOCATION MARKS AS NEEDED UNTIL INSTALLATION IS COMPLETED.
- TIME TO COMPLETE A BORE SHALL BE KEPT WITHIN THE LIMITS OF OPEN BORING OR ADVANCING A CONDUIT THAT CAN BE PROPERLY REAMED AND CLEANED OUT WITHIN ONE WORKING DAY. UNDER NO CIRCUMSTANCES SHALL MUCK OR WATER BE LEFT STANDING INSIDE THE BORE AT THE END OF A WORKING DAY, OR DUE TO A BREAK-DOWN OF EQUIPMENT OF MORE THAN EIGHT HOURS.
- REFERENCES TO ANY UNDERGROUND OR EMBEDDED FACILITIES ARE PROVIDED TO ASSIST THE CONTRACTOR /INSTALLER IN THE FIELD LOCATING THOSE FACILITIES AND OTHER POSSIBLE UNDERGROUND OR EMBEDDED INTERFERENCES WITH THE WORK.
- 4. UTILITY MARKERS SHALL BE PLACED AT EITHER SIDE OF VEGETATION CROSSING, UNLESS OTHERWISE PROHIBITED BY USE AGREEMENT.
- COLLECTION SYSTEM WIRELINE FACILITIES SHALL BE INSTALLED IN CONDUIT WHEN INSTALLED UNDER PROTECTED AREA.
- TRENCH DEPTH VARIES PER USE AGREEMENT. TRIM CONDUIT TO TRENCH DEPTH AND INSTALL A SMOOTH TRANSITION BETWEEN DIRECT BURIED CABLE AND THE CONDUIT.
- IF NEEDED TO MAINTAIN CABLE INSTALLATION REQUIREMENTS, A SPLICE MAY BE INSTALLED AT OR NEAR THE CONDUIT ENTRANCE. DO NOT ALLOW THE SPLICE TO ENTER THE CONDUIT. INSTALL THE SPLICE ACCORDING TO THE DETAILS AND INSTRUCTIONS ON SRS-E-640-02.

Legend

С	07/02/2021	EHK	ISSUED FOR 94-C	JAB	JAB
В	05/18/2021	EHK	ISSUED FOR REVIEW		JB
Α	01/29/2021	EHK	ISSUED FOR REVIEW	BG	JB
Rev	Date	Drawn	Description	Ch'k'd	App'd

MOTT **MACDONALD** 

101 Station Drive Suite 130 Westwood, MA 02090 United States **T** +1 (781) 915-0015

**F** +1 (781) 915-0001 www.mottmac.com

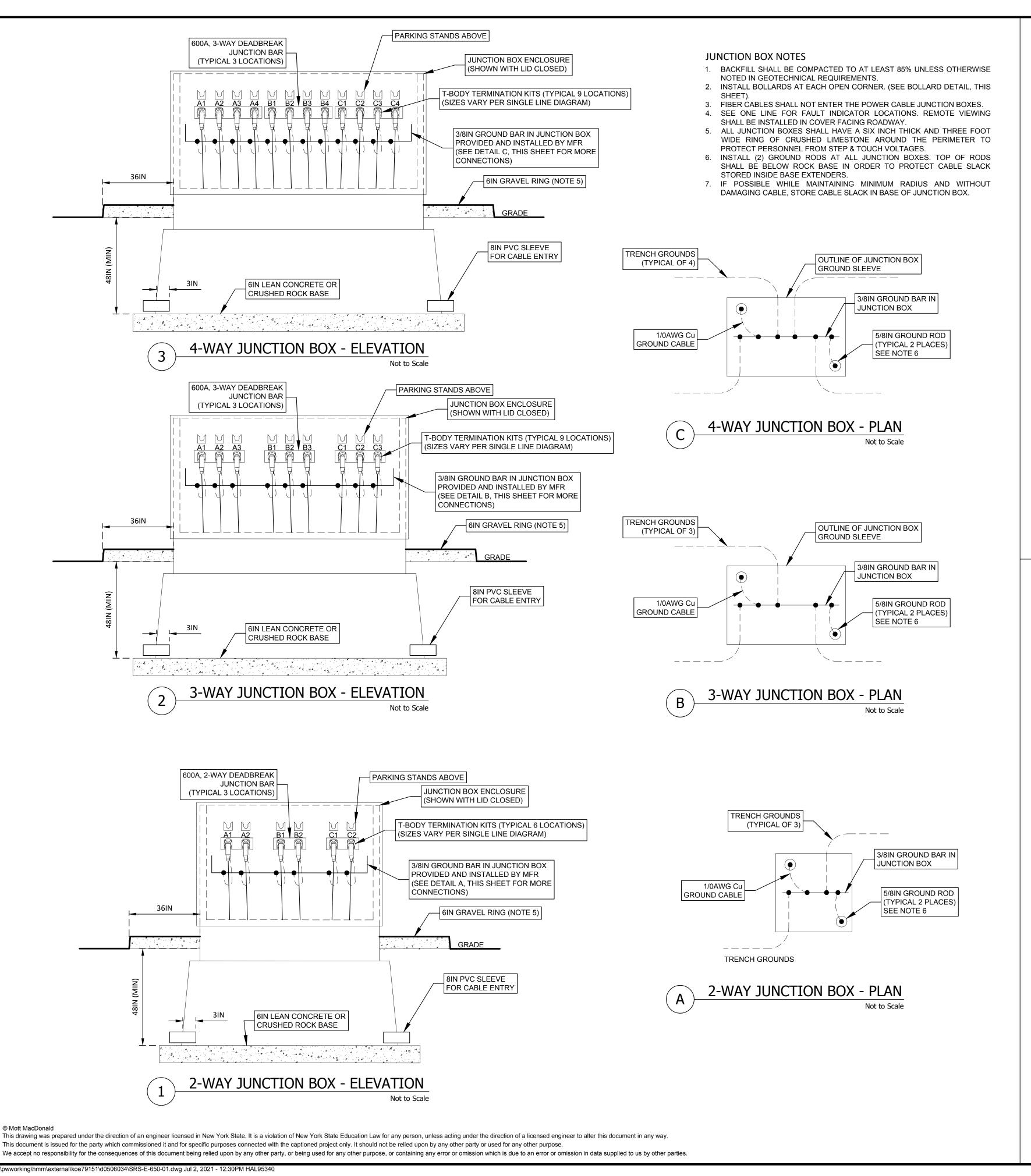
Client

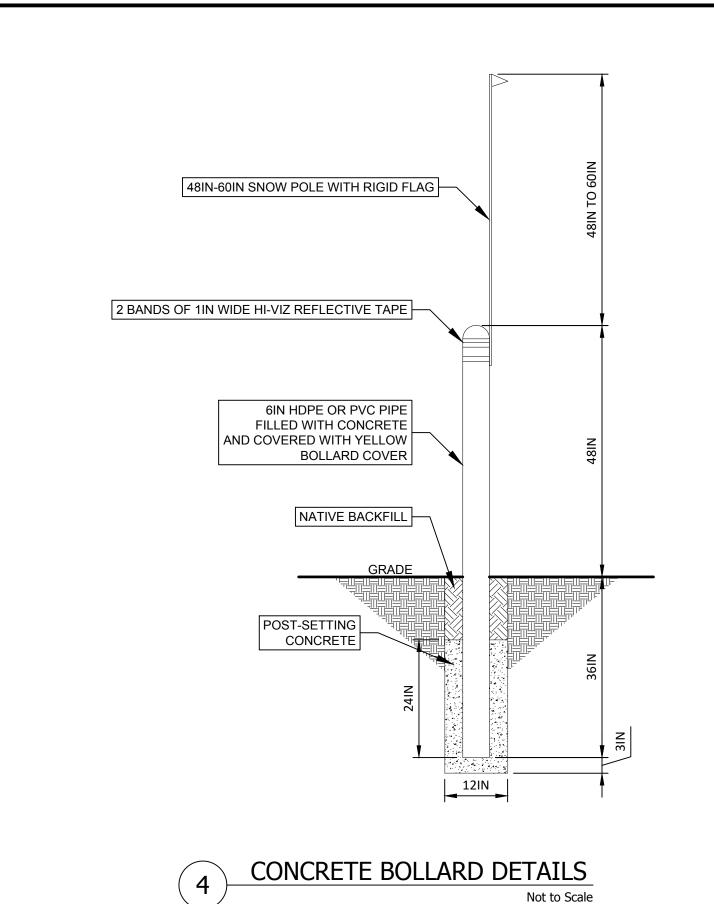


SOUTH RIPLEY SOLAR MVAC ELECTRICAL COLLECTOR SYSTEM TYPICAL PROTECTED VEGETATION **CROSSING DETAIL** 

Designed	EHK	Eng check	JAB
Drawn	EHK	Approved	JAB
Scale at ANSI D		Date	Rev
Not to	Scale	07/02/2021	C
Drawing Num	nber		

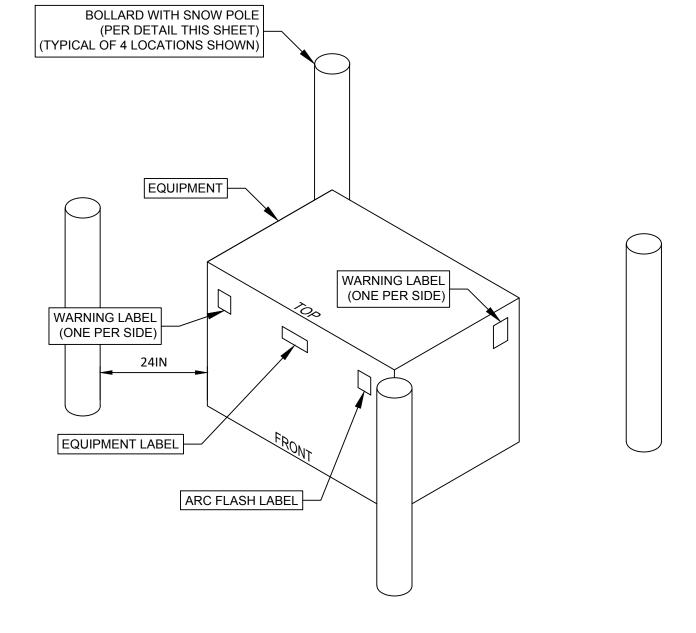
SRS-E-640-05





## **BOLLARD AND MARKER PLACEMENT NOTES**

- 1. THIS DETAIL APPLIES TO COLLECTOR SYSTEM JUNCTION BOXES AND PAD-MOUNTED EQUIPMENT OUTSIDE SECURED AREAS.
- 2. VERIFY BOLLARD PLACEMENT PRIOR TO INSTALLATION. 3. BOLLARDS SHALL BE IN PLACE PRIOR TO THE CABLE BEING ENERGIZED.
- 4. ALL BOLLARDS SHALL BE INSTALLED AT THE SAME FINISHED HEIGHT.



**BOLLARD AND MARKER PLACEMENT** Not to Scale

CONCEPTUAL - NOT FOR CONSTRUCTION

ISSUED FOR 94-C JAB 07/02/2021 EHK 05/18/2021 EHK ISSUED FOR REVIEW 01/29/2021 EHK ISSUED FOR REVIEW BG JB Rev Date Drawn Description Ch'k'd App'o

> **MOTT MACDONALD**

101 Station Drive Suite 130 Westwood, MA 02090 United States **T** +1 (781) 915-0015 **F** +1 (781) 915-0001

www.mottmac.com

Client

Notes

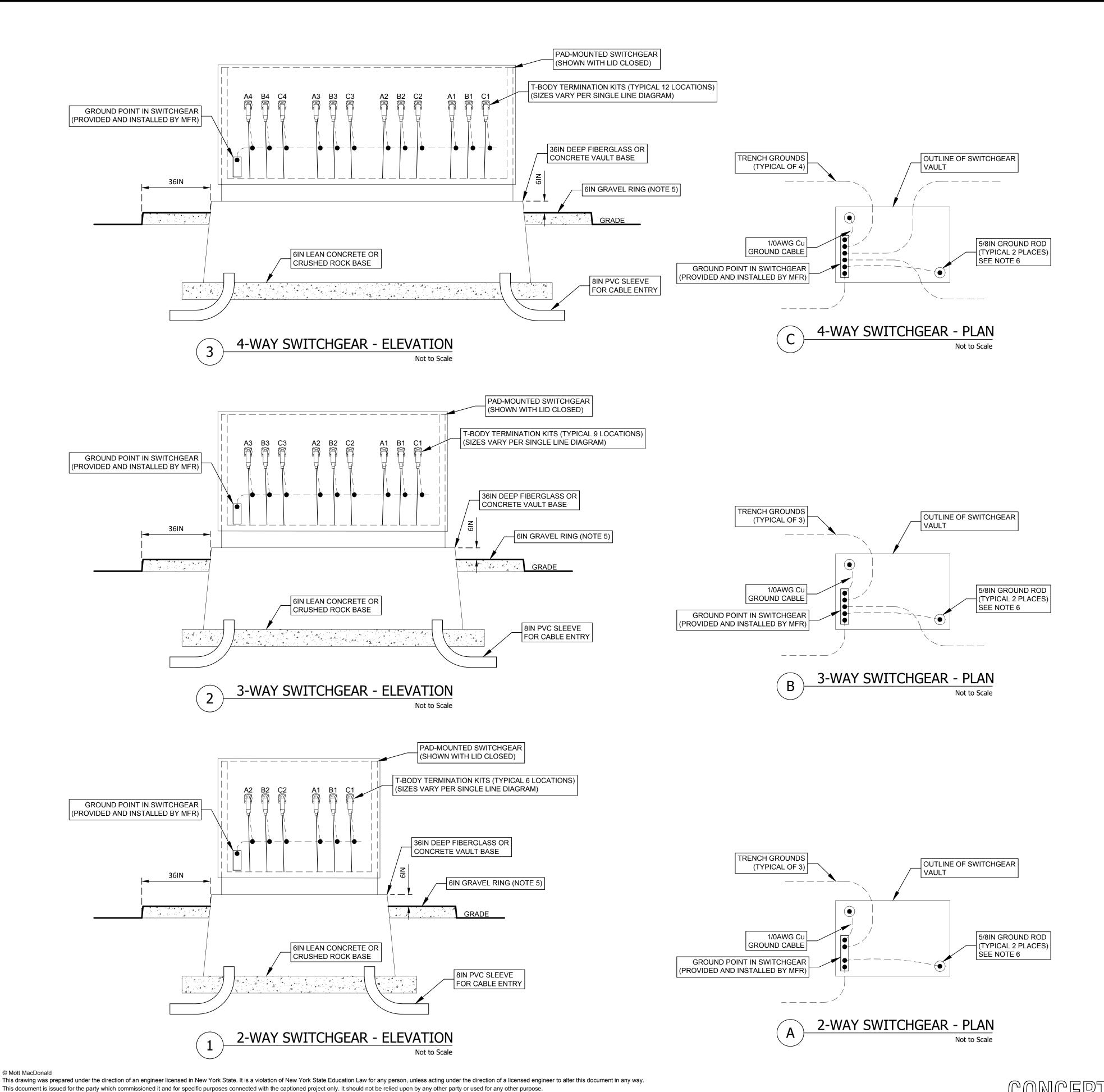
Legend



SOUTH RIPLEY SOLAR MVAC ELECTRICAL COLLECTOR SYSTEM JUNCTION BOX DETAILS

**PRELIMINARY** NOT FOR CONSTRUCTION REPLACE WITH **ENGINEERS STAMP** AT CONSTRUCTION AND/OR FABRICATION

Eng check Drawn Approved Scale at ANSI D Date Rev 07/02/2021 Not to Scale **Drawing Number** SRS-E-650-01



Notes

- 1. BACKFILL SHALL BE COMPACTED TO AT LEAST 85% UNLESS OTHERWISE NOTED IN GEOTECHNICAL REQUIREMENTS.
- INSTALL BOLLARDS AT EACH OPEN CORNER. (SEE BOLLARD DETAIL, SHEET SRS-E-650-01).
- FIBER CABLES SHALL NOT ENTER THE SWITCHGEAR OR ITS BASEMENT.
   SEE ONE LINE FOR FAULT INDICATOR LOCATIONS. REMOTE VIEWING SHALL BE INSTALLED IN COVER FACING ROADWAY.
- 5. ALL SWITCHGEAR SHALL HAVE A SIX INCH THICK AND THREE FOOT WIDE RING OF CRUSHED LIMESTONE AROUND THE PERIMETER TO PROTECT PERSONNEL FROM STEP & TOUCH VOLTAGES.
- install (2) ground rods at all switchgear. Top of rods shall be below rock base in order to protect cable slack stored inside
- IF POSSIBLE WHILE MAINTAINING MINIMUM RADIUS AND WITHOUT DAMAGING CABLE, STORE CABLE SLACK IN BASE OF SWITCHGEAR.

Legend

 C
 07/02/2021
 EHK
 ISSUED FOR 94-C
 JAB
 JAB

 B
 05/18/2021
 EHK
 ISSUED FOR REVIEW
 JB

 A
 01/29/2021
 EHK
 ISSUED FOR REVIEW
 BG
 JB

 Rev
 Date
 Drawn
 Description
 Ch'k'd
 App'd

M MOTT

**MACDONALD** 

101 Station Drive
Suite 130
Westwood, MA 02090
United States
T +1 (781) 915-0015

**F** +1 (781) 915-0001

www.mottmac.com

Client



SOUTH RIPLEY SOLAR
MVAC ELECTRICAL COLLECTOR SYSTEM
PAD-MOUNTED SWITCHGEAR DETAILS

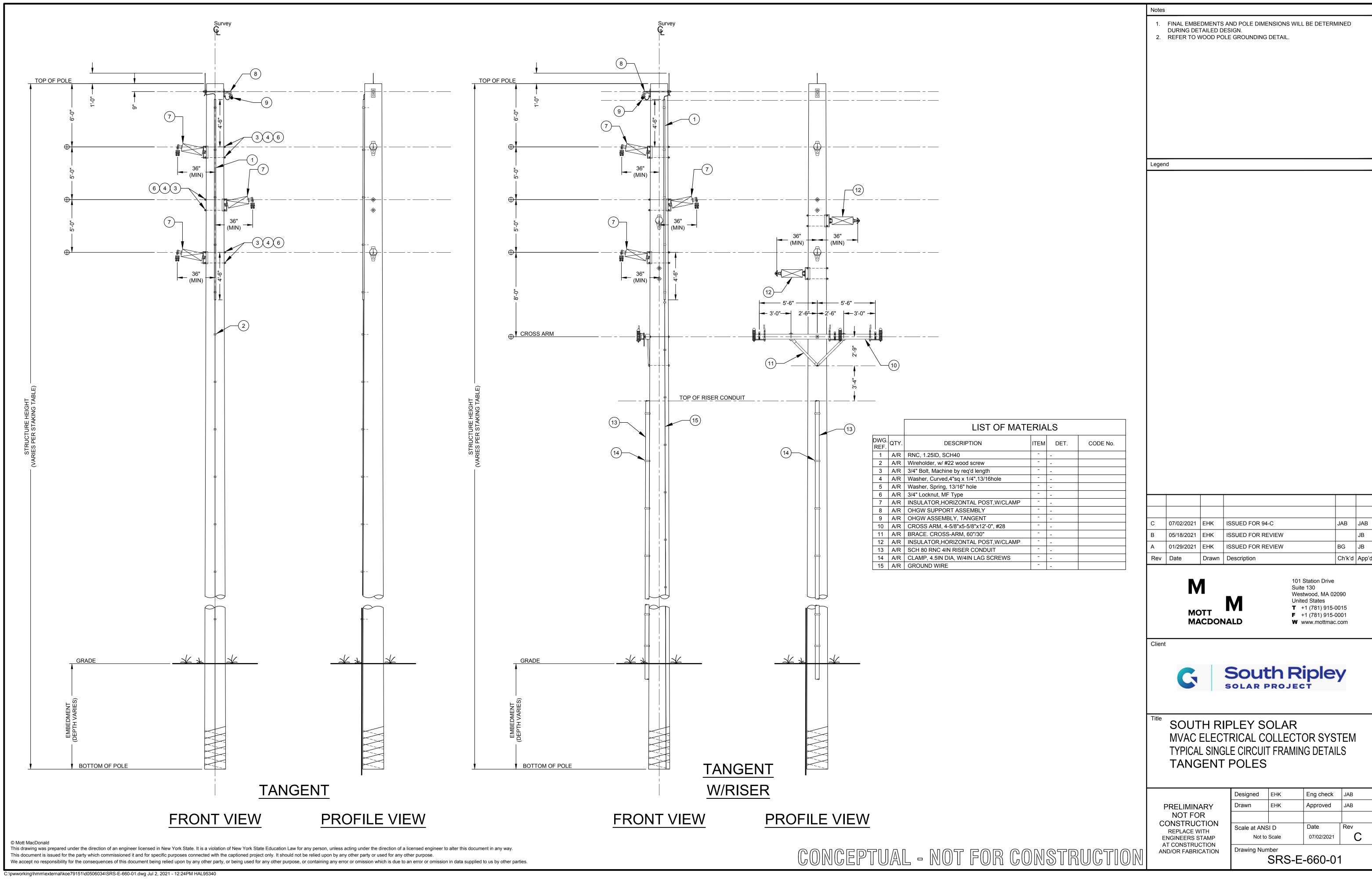
PRELIMINARY
NOT FOR
CONSTRUCTION
REPLACE WITH
ENGINEERS STAMP
AT CONSTRUCTION
AND/OR FABRICATION

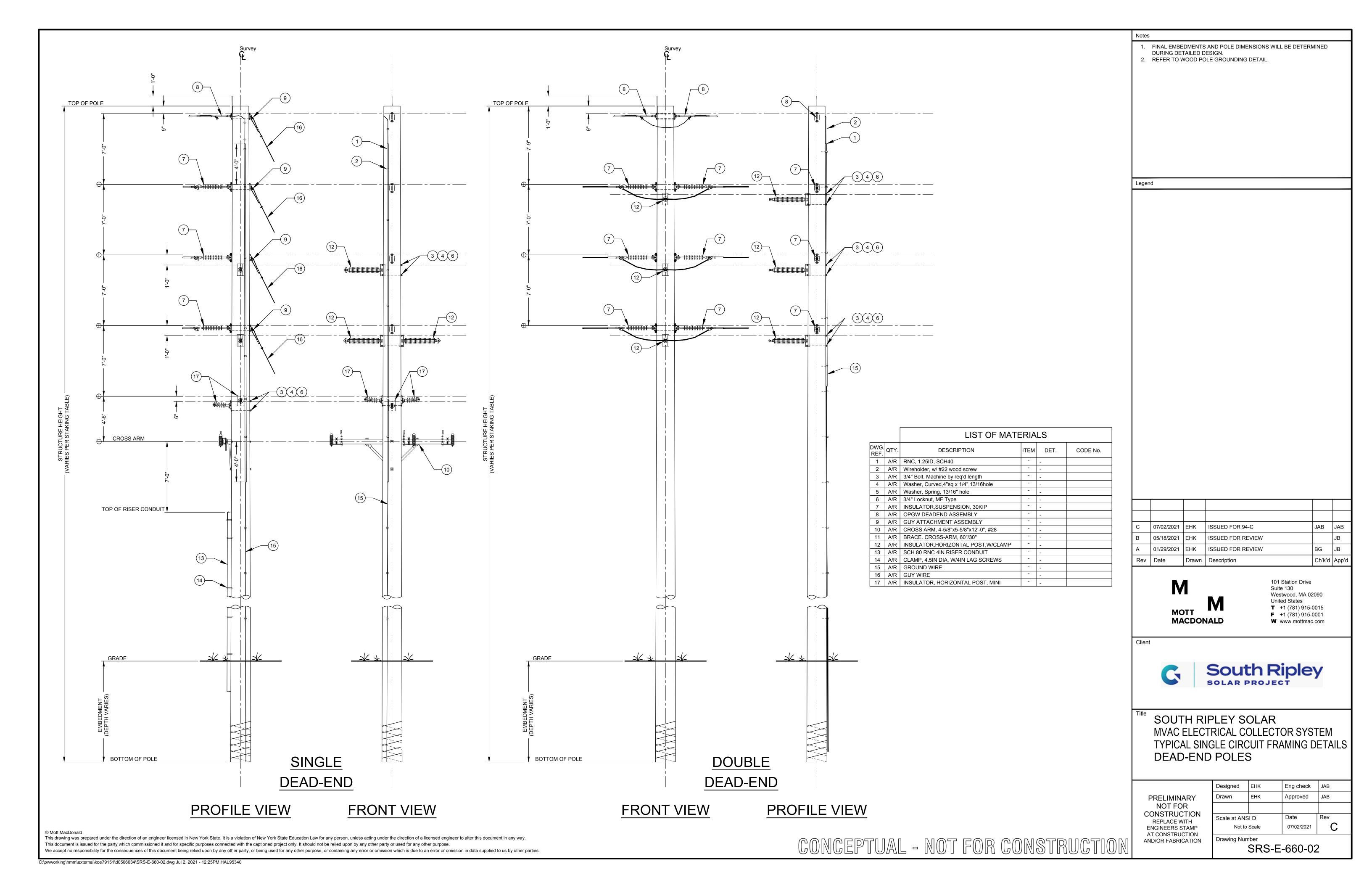
	Designed	EHK	Eng check	JAB
	Drawn	EHK	Approved	JAB
	Scale at ANSI D  Not to Scale		Date	Rev
			07/02/2021	С
	Drawing Num	nber		

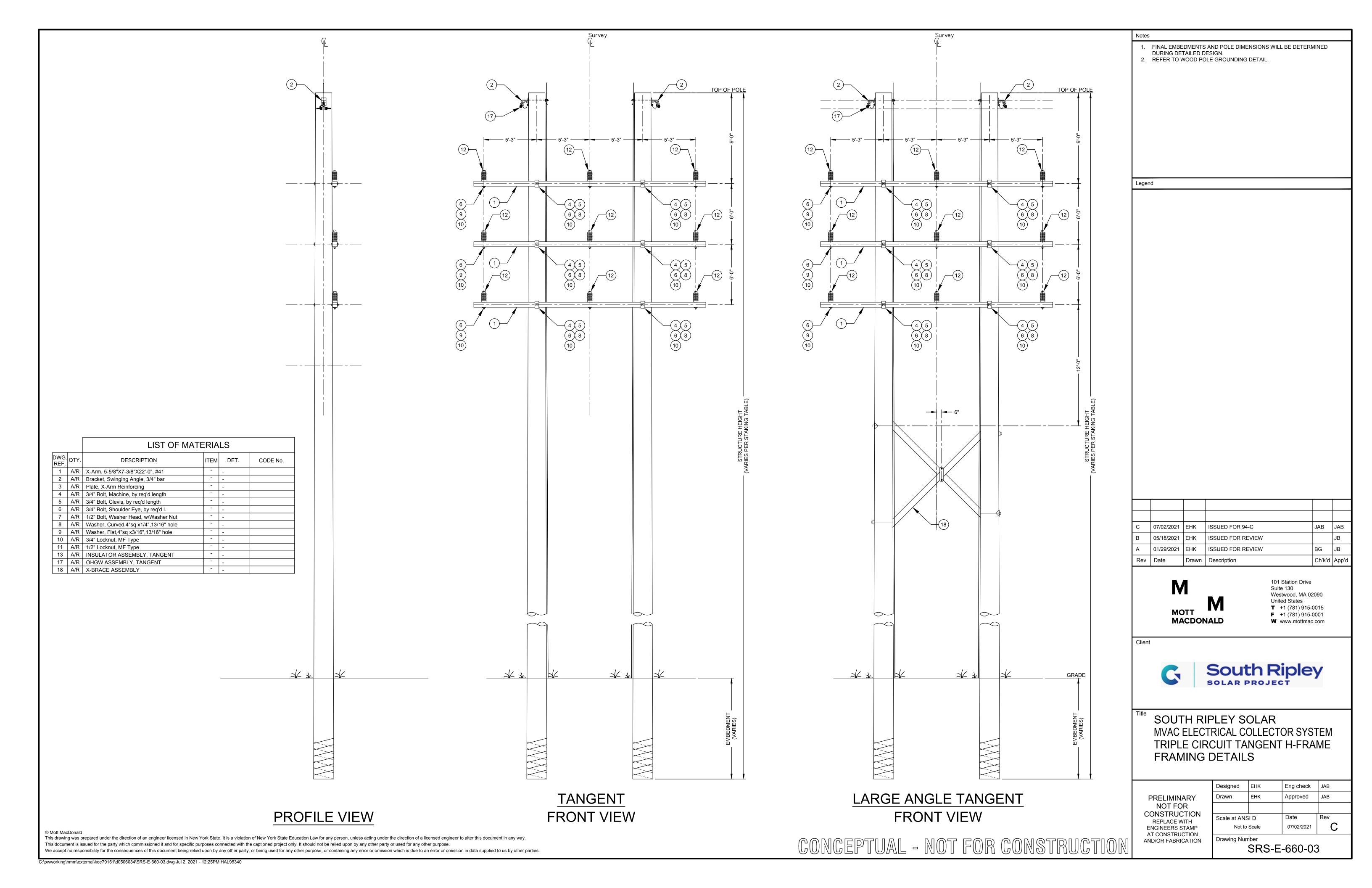
SRS-E-650-02

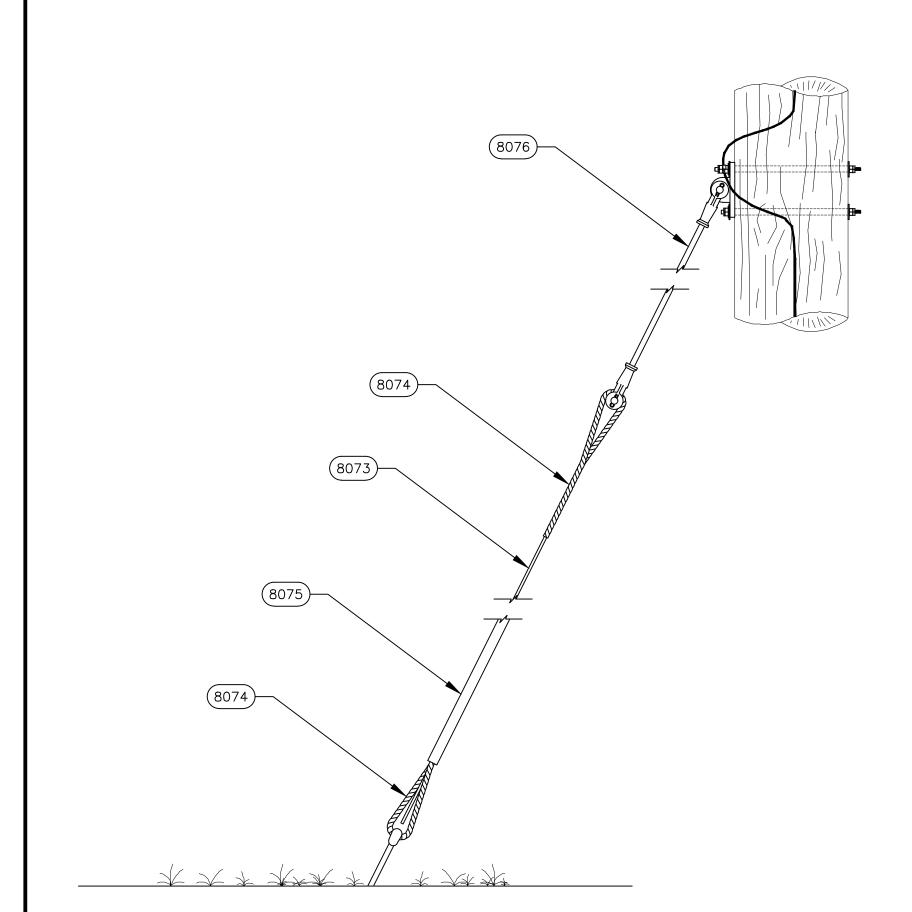
CONCEPTUAL - NOT FOR CONSTRUCTION

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.









Item ID Item Description

8073 Guy Wire, 1/2" 7 Strand EHS

8074 Guy Grip, 1/2" Guy

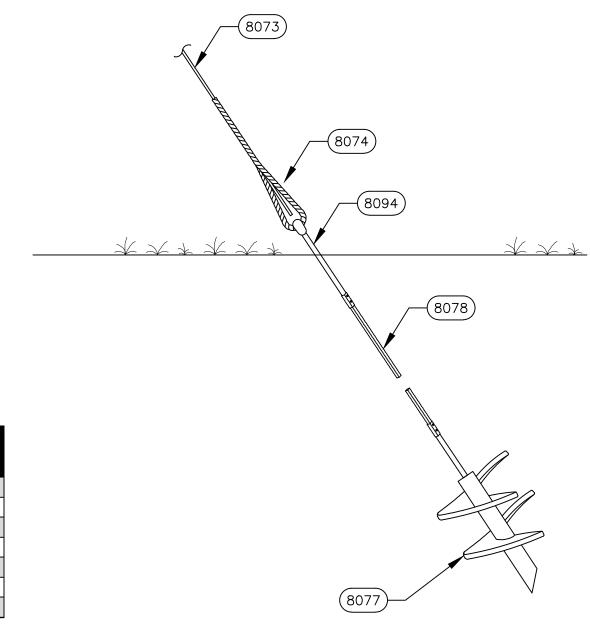
8075 Cattle Guard, single piece

8076 Guy Strain Insulator, Clevis - Thimble, 30,000lbs

8077 Single Guy Eyenut for 1" Diameter Rod

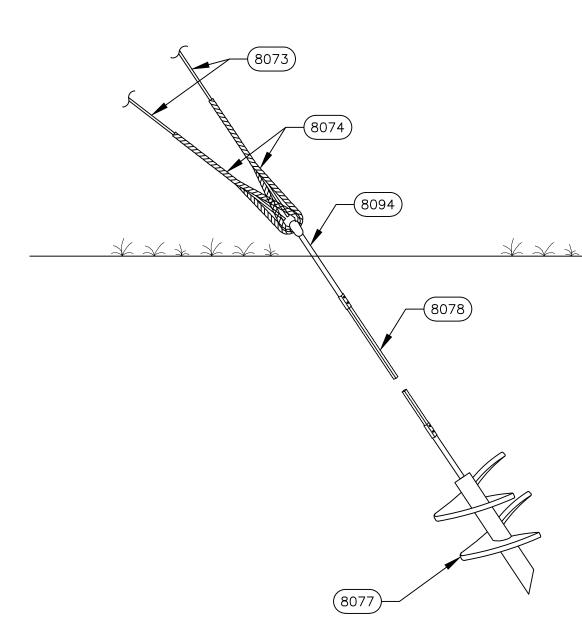
8078 1" Diameter Power Hub Rod

8094 Double Guy Eyenut for 1" Diameter Rod



2 SCREW ANCHOR DETAIL

Not to Scale



3 DOUBLE GUY SCREW ANCHOR DETAIL

Not to Scale

CONCEPTUAL - NOT FOR CONSTRUCTION

Note

- GUY AND ANCHOR LOCATIONS AND QUANTITIES TO BE DETERMINED DURING DETAILED DESIGN.
- 2. USE HELICAL ANCHORS WHERE SOIL CONDITIONS ALLOW, HOWEVER DUE TO THE PRESENCE OF SHALLOW LIMESTONE AT MUCH OF THE SITE, IT IS EXPECTED THAT HELICAL ANCHOR MAY ENCOUNTER REFUSAL. IF SOIL CONDITIONS DO NOT ALLOW THE USE OF HELICAL ANCHORS DUE TO REFUSAL, AND THE ANCHOR IS NOT IN A DESIGNATED WETLAND AREA, THEN PLATE ANCHORS WITH CONCRETE BACKFILL MAY BE USED. HOWEVER, IF THE SOIL IS SOLID OR HOMOGENOUS ROCK, THEN ROCK ANCHORS MAY BE USED.
- 3. FOLLOW ALL MANUFACTURER RECOMMENDATIONS FOR ANCHOR EMBEDMENT DEPTH

Legend

 C
 07/02/2021
 EHK
 ISSUED FOR 94-C
 JAB
 JAB

 B
 05/18/2021
 EHK
 ISSUED FOR REVIEW
 JB

 A
 01/29/2021
 EHK
 ISSUED FOR REVIEW
 BG
 JB

 Rev
 Date
 Drawn
 Description
 Ch'k'd
 App'd

M MOTT

**MACDONALD** 

101 Station Drive
Suite 130
Westwood, MA 02090
United States **T** +1 (781) 915-0015

**F** +1 (781) 915-0001

www.mottmac.com

Client



SOUTH RIPLEY SOLAR
MVAC ELECTRICAL COLLECTOR SYSTEM
GUY AND ANCHOR DETAILS

PRELIMINARY
NOT FOR
CONSTRUCTION
REPLACE WITH
ENGINEERS STAMP
AT CONSTRUCTION
AND/OR FABRICATION

Designed EHK Eng check JAB

Drawn EHK Approved JAB

Scale at ANSI D
Not to Scale 07/02/2021 C

Drawing Number

Drawing Number SRS-E-663-01

© Mott MacDonald

This drawing was prepared under the direction of an engineer licensed in New York State. It is a violation of New York State Education Law for any person, unless acting under the direction of a licensed engineer to alter this document in any way.

This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

C:\pwworking\hmm\external\koe79151\d0506034\SRS-E-663-01.dwg Jul 2, 2021 - 1:19PM KOE79151