

NORMAL POWER RISER DIAGRAM

-- E-601 SCALE: NONE

TRANSFORMER SCHEDULE						
KVA RATING	PRIMARY CONNECTION			SECONDARY CONNECTION		
	OCPD (AMPS)	NUMBER OF SETS	WIRING	OCPD (AMPS)	NUMBER OF SETS	WIRING
15	30	1	3 - #10 + 1 - #10, 1/2"C.	60	1	4 - #6 + 1 - #10, 3/4"C
30	50	1	3 - #6 + 1 - #10, 3/4"C	110	1	4 - #1 + 1- #6, 1 1/4"C
45	70	1	3 - #4 + 1 - #8, 1"C	175	1	4 - #2/0 + 1 - #6, 1 1/2"C
75	125	1	3 - #2 + 1 - #6, 1 1/4"C	300	1	4 - 300KCMIL + 1 - #4, 2 1/2"C
112	175	1	3- #2/0 + 1- #6, 1 1/2"C	400	1	4 - 600KCMIL + 1- #3G, 3" C.
150	225	1	3 - #4/0 + 1 - #4, 2"C	600	2	4 - 300KCMIL + 1 - #1, 2 1/2"C
225	350	1	3 - 500KCMIL, 1 #3G, 2 1/2"C	800	2	4 - 600KCMIL + 1 - #1/0, 3"C
300	500	2	3 - 250KCMIL + 1 - #1, 2 1/2"C	1200	3	4 - 500KCMIL + 1 - #3/0, 3"C

WIRE SIZES INDICATED ARE APPLICABLE UNLESS OTHERWISE NOTED ON THE RISER(S).
 ALL SIZES ARE BASED ON COPPER CONDUCTORS. CONDUCTORS MAY BE SUBSTITUTED FOR ALUMINIMUM AS ALLOWED IN THE SPECIFICATIONS. ADJUST WIRE AND CONDUIT SIZES IN ACCORDANCE WITH NEC REQUIREMENTS.

GRADE

FEEDER SCHEDULE NUMBER
OF
SETSNUMBER
OF PHASE
CONDUCTORSPHASE
CONDUCTOREQUIPMENT
GROUND (G)
CONDUCTORRACEWAY
(3C+G)RACEWAY
(3C+NG) 1 1/4" 1 1/4" AL60 #6 1 1/4" 1 1/2" 100 1 1/2" 1 1/4" AL100 125 1 1/4" 1 1/2" 150 #1/0 1 1/2" 1 1/2" 175 #2/0 1 1/2" 200 #3/0 2 1/2" 225 2 1/2" 2 1/2" 2 1/2" AL225 2 1/2" 300 KCMIL 250 2 1/2" 250 KCMIL 2 1/2" 300 2 1/2" 350 KCMIL 2 1/2" AL300 3 1/2" 2 1/2" 400 KCMIL 350 2 1/2" 3 1/2" 500 KCMIL 400 600 KCMIL 3 1/2" 3 1/2" AL400 2 1/2" 2 1/2" 300 KCMIL 500 2 1/2" 2 1/2" 250 KCMIL 600 350 KCMIL 2 1/2" 2 1/2" 800 600 KCMIL 3 1/2" 3 1/2" 1000 400 KCMIL #2/0 2 1/2" 1200 2 1/2" 4" 350 KCMIL #3/0 1600 600 KCMIL 3 1/2" 2000 600 KCMIL 350 KCMIL 3000 8 600 KCMIL 400 KCMIL 3" 3 1/2" 600 KCMIL 500 KCMIL 3" 3 1/2"

GENERAL NOTES:

1. NEUTRAL CONDUCTOR (N) SIZES ARE BASED ON THE CONDUCTOR SIZES OF PHASE CONDUCTORS.

2. FEEDER DESIGNATION WITH SUBSCRIPT "G" INDICATES THREE-PHASE CONDUCTORS AND

5. FEEDERS DESIGNATED WITH AN "AL" PREFIX ARE ALUMINUM CONDUCTORS.

GROUNDING CONDUCTOR.

3. FEEDER DESIGNATION WITH SUBSCRIPT "NG" INDICATES THREE-PHASE CONDUCTORS, A NEUTRAL CONDUCTOR AND GROUNDING CONDUCTOR.

4. FEEDER DESIGNATION WITH SUBSCRIPT "NNG" INDICATES THREE-PHASE CONDUCTORS, TWO NEUTRAL CONDUCTORS AND GROUNDING CONDUCTOR.

architecture

architecture

...

architecture

...

3200 LEE HIGHWAY, ARLINGTON, VIRGINIA 22207
p. 703.524.6616 www.MTFA.net

BURNT MILLS ELEMENTARY SCHOOL

MSDE - PUBLIC SCHOOL CONSTRUCTION PROGRAM (PSCP) #15.208

MONTGOMERY COUNTY
PUBLIC SCHOOLS

415 PRELUDE DRIVE
SILVER SPRING, MD 20901

CIVIL ENGINEER

ADTEK ENGINEERS, INC.
150 SOUTH EAST STREET, SUITE 201
FREDERICK, MD 21701
301.360.4345

MEP / FP

2RW CONSULTANTS, INC.
2677 PROSPERITY AVE., SUITE 275
FAIRFAX, VA 22031

2677 PROSPERITY AVE., SUITE 275 FAIRFAX, VA 22031 703.718.4335 STRUCTURAL

LINTON ENGINEERING 46090 LAKE CENTER PLAZA, SUITE 309 POTOMAC FALLS, VA 20165 571.323.0320

FOOD SERVICE

NYIKOS-GARCIA

7146 STARMOUNT WAY

NEW MARKET, MD 21774

240.683.9530

ACOUSTICS
POLYSONICS
405 BELLE AIR LANE
WARRENTON, VA 20186
540.341.4988



PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND,
LICENSE NUMBER: 41028 EXPIRATION DATE: 08/17/2023

PROJECT # 2004

DATE: ISSUE: /#

04/27/2021 DESIGN DEVELOPMENT
07/22/2021 65% CD SUBMISSION
08/19/2021 95% CD IAC SUBMISSION
09/01/2021 BID SET
09/24/2021 ADDENDUM 4
09/27/2021 PERMIT SUBMISSION

10/11/2021 CONFORMING BID SET

02/04/2022 ASI-01 09/02/2022 ASI-11

DRAWN: CHECKED:

JTP BMW

SCALE: AS INDICATED

NORMAL POWER RISER DIAGRAM

© MTFA 2021 ALL RIGHTS RESERVED

SHEET TITLE:

E-601

| Electrical | E-601_ NORMAL POWER RISER DIAGRAM Rev.3 markup.pdf