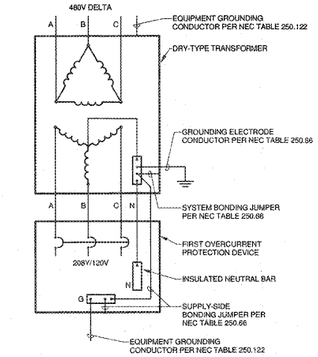
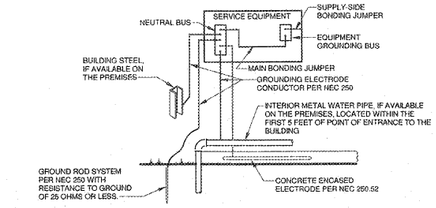
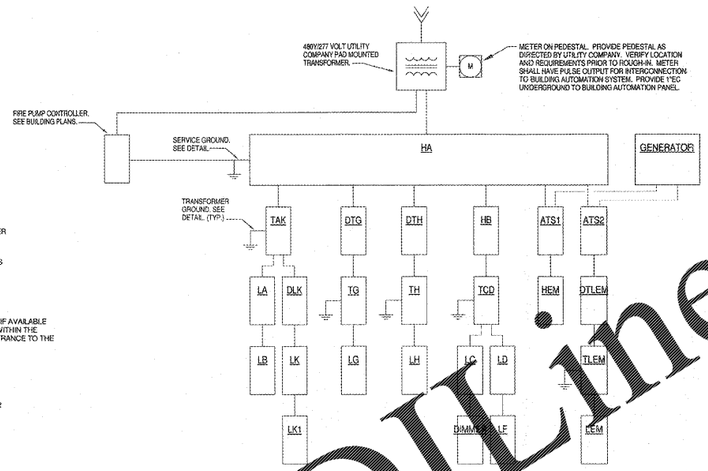


3 E5.01 TRANSFORMER GROUNDING DETAIL
NOT TO SCALE



2 E5.01 SERVICE GROUNDING DETAIL
NOT TO SCALE



1 E5.01 ONE-LINE DIAGRAM
NOT TO SCALE

CONTACTOR SCHEDULE

CONTACTOR	DESCRIPTION	CONTACTOR VOLTAGE	CONTACTOR AMPERAGE	CIRCUITS CONTROLLED	NOTES
C1	EXTERIOR LIGHTING	277	30	HB-23, 25	1

CONTACTOR SCHEDULE SPECIFIC NOTES

1. NUMBER OF POLES AS REQUIRED PLUS TWO (2) SPARE POLES. CONTACTOR SHALL BE CONTROLLED VIA BUILDING AUTOMATION SYSTEM (BAS). BAS SHALL BE PROGRAMMED TO TURN CONTACTOR ON / OFF FOR DUSK TO DAWN OPERATION (VERIFY WITH OWNER). VERIFY ELECTRICALLY OR MECHANICALLY HELD WITH ENERGY MANAGEMENT SYSTEM VENDOR.

CONTACTOR SCHEDULE GENERAL NOTES

1. ALL CONTACTORS SHALL BE NORMALLY OPEN.
2. PROVIDE NEMA 1 ENCLOSURE. WALL MOUNT ABOVE PANEL.
3. PROVIDE ALL NECESSARY CONTROL COMPONENTS. PROVIDE HAND / OFF / AUTO CONTROLS ON COVER OF ALL CONTACTORS.
4. ALL CONTACTORS SHALL BE LABELED ON THE FRONT COVER, INDICATING THE LOAD THAT IS CONTROLLED AS STATED IN THE DESCRIPTION COLUMN.

ONE-LINE DIAGRAM NOTES

1. PROVIDE HANDLE-TIES ON MULTI-POLE CIRCUIT BREAKERS FOR ALL MULTI-WIRE BRANCH CIRCUITS.

GENERATOR / TRANSFER SWITCH SCHEDULE

GENERATOR		TRANSFER SWITCHES				
GENERATOR SIZE	30KVA		AUTO / MANUAL		POLES	NEW FEEDER	SECONDARY FEEDER
CIRCUIT BREAKER #1	30A / 3-POLE	ATS1	AUTOMATIC	100A	3	MSB	GENERATOR CB #1
CIRCUIT BREAKER #2	30A / 3-POLE	ATS2	AUTOMATIC	100A	3	MSB	GENERATOR CB #2

SERVICE GROUND SCHEDULE

PANEL	AMPACITY	GROUNDING ELECTRODE CONDUCTOR
HA	800	#2/0 - 1"C.
FIRE PUMP CONTROLLER	200	#2/0 - 1"C.

DISCONNECT SCHEDULE

MARK	VOLTAGE	P.S.	SIZE
DLK	208	3	400/3/F-300/1
DTG			60/3/NF/1
DTH	480	3	60/3/NF/1
DTLEM	480	3	30/3/F-25/1

FEEDER SCHEDULE

FROM	TO	VOLTAGE	AMPACITY	CALLOUT
ATS1	HEM	480Y/277 V / 3Ø / 4W	30	4#10, #10G, 3/4"C
ATS2	DTLEM	480 V / 3Ø / 3W	25	3#10, #10G, 3/4"C
DLK	LK	208Y/120 V / 3Ø / 4W	300	4-350kcmil, #4G, 3"C
DTG	TG	480 V / 3Ø / 4W	45	3#6, #10G, 3/4"C
DTH	TH	480 V / 3Ø / 4W	45	3#6, #10G, 3/4"C
DTLEM	TLEM	480 V / 3Ø / 4W	25	3#10, #10G, 3/4"C
HA	DTG	480 V / 3Ø / 3W	45	3#6, #10G, 1"C
HA	DTH	480 V / 3Ø / 3W	45	3#6, #10G, 3/4"C
HA	HB	480Y/277 V / 3Ø / 4W	200	4-3/0, #6G, 2-1/2"C
HA	TAK	480 V / 3Ø / 4W	225	3-4/0, #4G, 2-1/2"C
HB	TCD	480 V / 3Ø / 4W	175	3-2/0, #6G, 1-1/2"C
LA	LB	208Y/120 V / 3Ø / 4W	225	4-4/0, #4G, 2-1/2"C
LC	DIMMER	208Y/120 V / 3Ø / 4W	100	4#1, #8G, 2"C
LD	LF	208Y/120 V / 3Ø / 4W	200	4-3/0, #6G, 2-1/2"C
LK	LK1	208Y/120 V / 3Ø / 4W	350	4-350kcmil, #4G, 3"C
TAK	DLK	208Y/120 V / 3Ø / 4W	300	4-350kcmil, 1/0G, 3-1/2"C
TAK	LA	208Y/120 V / 3Ø / 4W	200	4-3/0, 1/0G, 2-1/2"C
TCD	LC	208Y/120 V / 3Ø / 4W	225	4-4/0, 1/0G, 2-1/2"C
TCD	LD	208Y/120 V / 3Ø / 4W	200	4-3/0, 1/0G, 2-1/2"C
TG	LG	208Y/120 V / 3Ø / 4W	110	4#1, #6G, 1-1/2"C
TH	LH	208Y/120 V / 3Ø / 4W	110	4#1, #6G, 1-1/2"C
TLEM	LEM	208Y/120 V / 3Ø / 4W	60	4#6, #6G, 1-1/4"C
UTILITY	FIRE PUMP	480Y/277 V / 3Ø / 4W	200	4-3/0, #4G, 2"C
UTILITY	HA	480Y/277 V / 3Ø / 4W	800	(2)4-500kcmil, 1/0G, 3-1/2"C
HA	ATS1	480Y/277 V / 3Ø / 4W	30	4#10, #10G, 3/4"C
HA	ATS2	480Y/277 V / 3Ø / 4W	25	4#10, #10G, 3/4"C
GENERATOR	ATS1	480Y/277 V / 3Ø / 4W	30	4#8, #8G, 1"C
GENERATOR	ATS2	480Y/277 V / 3Ø / 4W	25	4#8, #8G, 1"C

TRANSFORMER SCHEDULE

TRANSFORMER	kVA RATING	PRIMARY	SECONDARY	GROUND	TAPS
TAK	150	480V / 3Ø / 3W	208Y/120V / 3Ø / 4W	#1/0 - 1"C.	NORMAL
TCD	112.5	480V / 3Ø / 3W	208Y/120V / 3Ø / 4W	#1/0 - 1"C.	2.5% FCBN
TG	30	480V / 3Ø / 3W	208Y/120V / 3Ø / 4W	#6 - 1"C.	2.5% FCBN
TH	30	480V / 3Ø / 3W	208Y/120V / 3Ø / 4W	#6 - 1"C.	2.5% FCBN
TLEM	15	480V / 3Ø / 3W	208Y/120V / 3Ø / 4W	#6 - 1"C.	NORMAL

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Dawsonville, Georgia
FOR
Dawson County Schools
Overall Squarefootage = 35,800 SF
FTE = 1025

ITE = 74 (Existing) + 11 (New) = 85 ITE

REVISIONS

SHEET TITLE
ELECTRICAL ONE-LINE DIAGRAM

DATE
04-24-2018

PROJECT NUMBER
17-303

SHEET NUMBER
E5.01