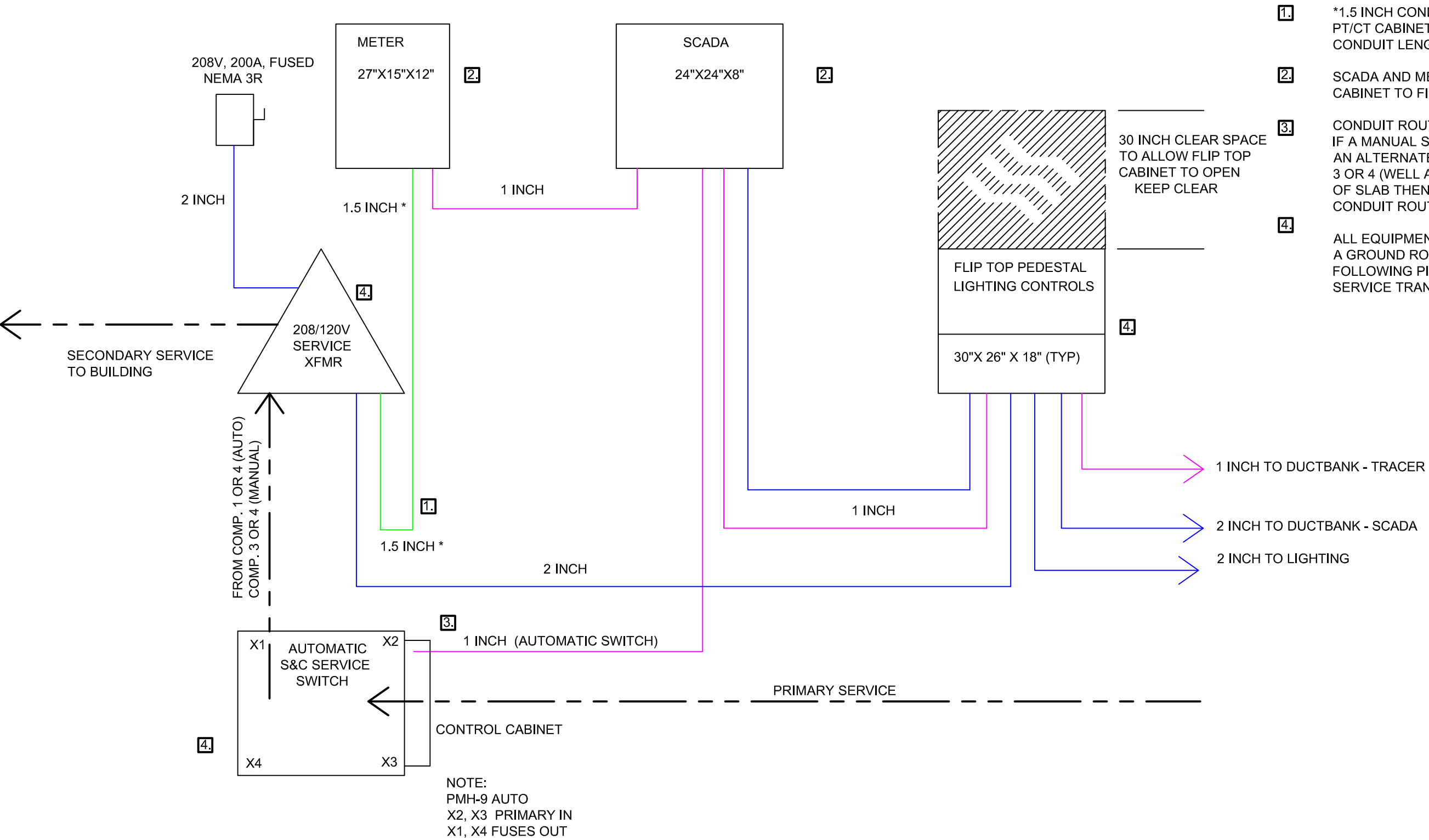


208/120V SERVICE & AUTOMATIC S&C SWITCH

GENERAL NOTES:



- 1. *1.5 INCH CONDUIT FROM SERVICE TRANSFORMER TO PT/CT CABINET SHALL BE LESS THAN 30 FEET TOTAL CONDUIT LENGTH
- 2. SCADA AND METER CABINETS ARE 80 INCHES TOP OF CABINET TO FINISHED FLOOR
- 3. CONDUIT ROUTING SHOWN FOR AUTOMATIC SWITCH IF A MANUAL S&C SERVICE SWITCH IS USED IT REQUIRES AN ALTERNATE 1 INCH CONDUIT ROUTING TO COMPARTMENT 3 OR 4 (WELL AREA), NEMA 3R JUNCTION BOX ON TOP OF SLAB THEN TO THE SCADA SEE MANUAL S&C CONDUIT ROUTING DRAWING FOR MORE DETAIL
- 4. ALL EQUIPMENT AND CABINETS SHALL BE GROUNDED A GROUND ROD SHALL BE INSTALLED FOR EACH OF THE FOLLOWING PIECES OF EQUIPMENT: FLIP TOP CABINET, SERVICE TRANSFORMER, (2) AT SERVICE SWITCH

30 INCH CLEAR SPACE TO ALLOW FLIP TOP CABINET TO OPEN KEEP CLEAR

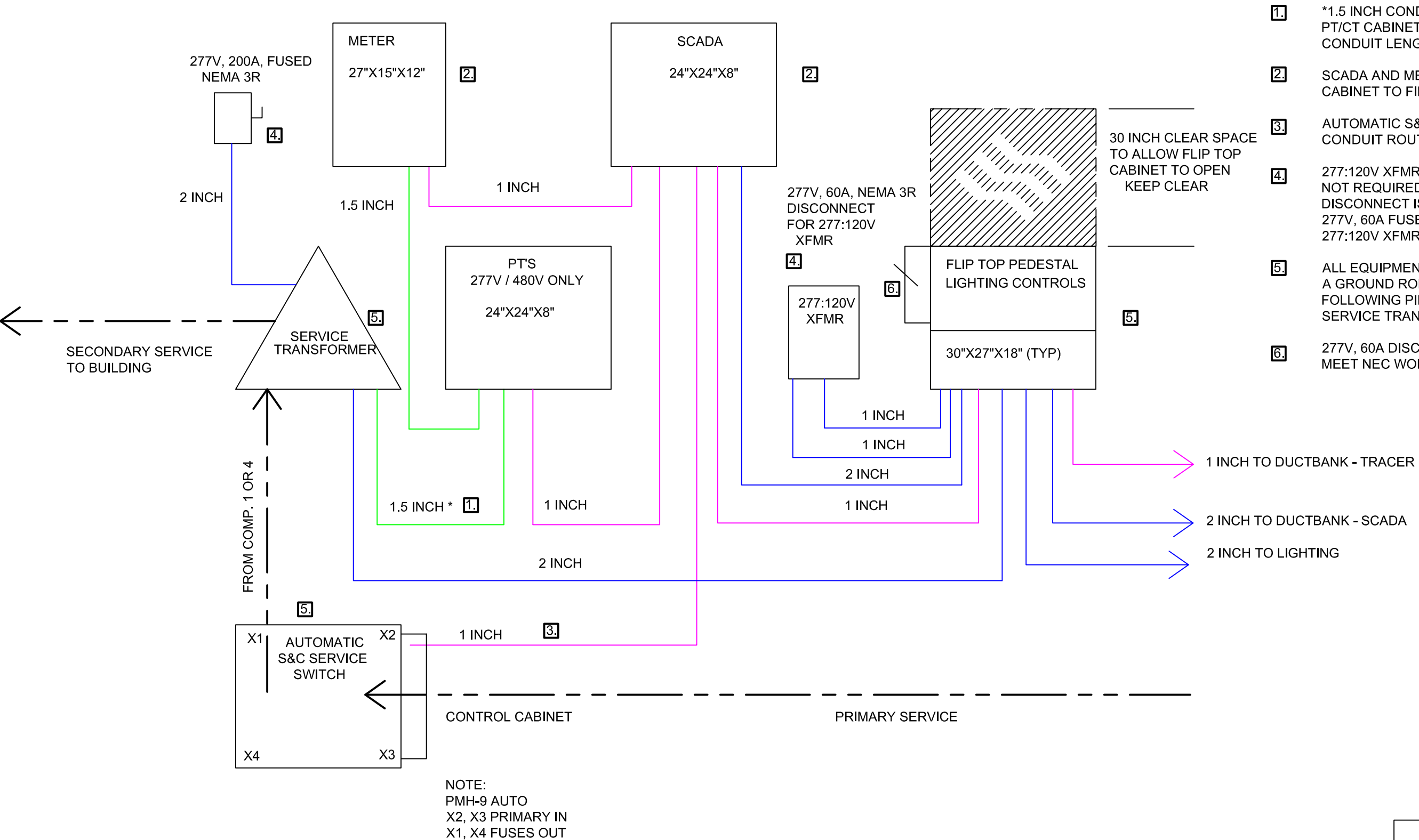
- 1 INCH TO DUCTBANK - TRACER
- 2 INCH TO DUCTBANK - SCADA
- 2 INCH TO LIGHTING

NOTE:
PMH-9 AUTO
X2, X3 PRIMARY IN
X1, X4 FUSES OUT

208/120V SERVICE AUTO S&C SWITCH		<i>Virginia Tech Electric Service</i> BLACKSBURG, VIRGINIA
DRAWN BY: SFH	DATE: 7/27/17	REV. DATE:
		DRAWING NAME: 208/120VAUTOS&C

480V PRIMARY WITH AUTOMATIC S&C SWITCH

GENERAL NOTES:



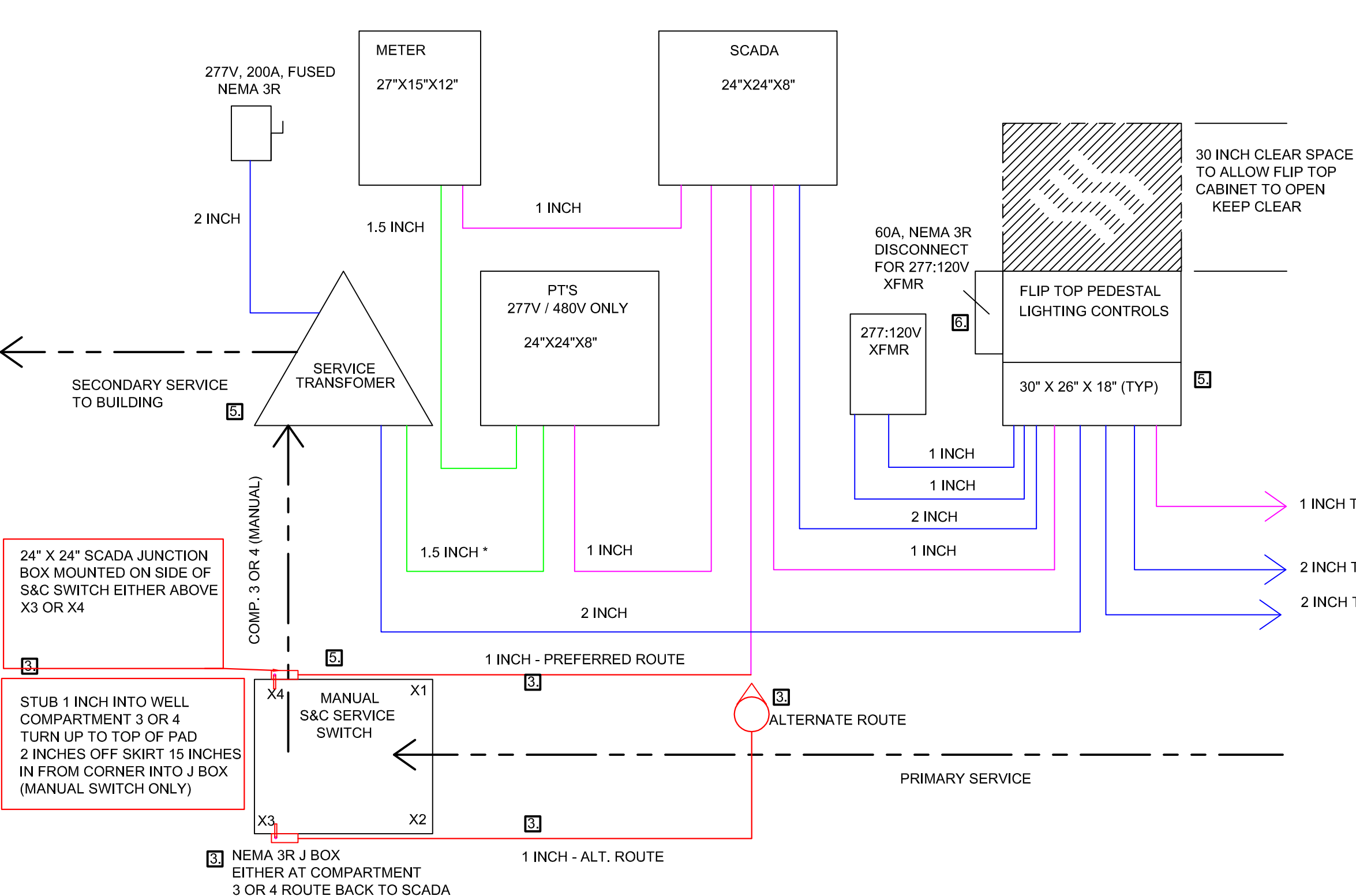
- [1] *1.5 INCH CONDUIT FROM SERVICE TRANSFORMER TO PT/CT CABINET SHALL BE LESS THAN 30 FEET TOTAL CONDUIT LENGTH
- [2] SCADA AND METER CABINETS ARE 80 INCHES TOP OF CABINET TO FINISHED FLOOR
- [3] AUTOMATIC S&C SERVICE SWITCH REQUIRES 1 INCH CONDUIT ROUTING TO CONTROL COMPARTMENT
- [4] 277:120V XFMR AND ASSOCIATED DISCONNECT IS NOT REQUIRED FOR A 120V SECONDARY SERVICE DISCONNECT IS SINGLE PHASE, NEMA 3R, RATED FOR 277V, 60A FUSED 277:120V XFMR IS NEMA 3R RATED
- [5] ALL EQUIPMENT AND CABINETS SHALL BE GROUNDED A GROUND ROD SHALL BE INSTALLED FOR EACH OF THE FOLLOWING PIECES OF EQUIPMENT: FLIP TOP CABINET, SERVICE TRANSFORMER, (2) AT SERVICE SWITCH
- [6] 277V, 60A DISCONNECT MUST BE ORIENTATED AS TO MEET NEC WORKING SPACE REQUIREMENTS

NOTE:
 PMH-9 AUTO
 X2, X3 PRIMARY IN
 X1, X4 FUSES OUT

480V SERVICE AUTO S&C		<i>Virginia Tech Electric Service</i> BLACKSBURG, VIRGINIA
DRAWN BY: SFH	DATE: 7/27/17	REV. DATE:
		DRAWING NAME: 480V AUTOS&C

480V SERVICE WITH MANUAL S&C SWITCH

GENERAL NOTES:



1. *1.5 INCH CONDUIT FROM SERVICE TRANSFORMER TO PT/CT CABINET SHALL BE LESS THAN 30 FEET TOTAL CONDUIT LENGTH
2. SCADA AND METER CABINETS ARE 80 INCHES TOP OF CABINET TO FINISHED FLOOR
3. MANUAL S&C SERVICE SWITCH REQUIRES ALTERNATE 1 INCH CONDUIT ROUTING TO COMPARTMENT 3 OR 4 (WELL AREA), NEMA 3R JUNCTION BOX ON TOP OF SLAB THEN TO THE SCADA SEE BELOW BASED ON WORK AREA AVAILABLE
4. 277:120V XFMR AND ASSOCIATED DISCONNECT NOT REQUIRED FOR 120V SECONDARY SERVICE DISCONNECT IS SINGLE PHASE, NEMA 3R, RATED FOR 277V, 60A FUSED 277:120V XFMR IS NEMA 3R
5. ALL EQUIPMENT AND CABINETS SHALL BE GROUNDED A GROUND ROD SHALL BE INSTALLED FOR EACH OF THE FOLLOWING PIECES OF EQUIPMENT: FLIP TOP CABINET, METER, SERVICE TRANSFORMER, (2) AT SERVICE SWITCH
6. 277V, 60A DISCONNECT MUST BE ORIENTATED AS TO MEET NEC WORKING SPACE REQUIREMENTS

24" X 24" SCADA JUNCTION BOX MOUNTED ON SIDE OF S&C SWITCH EITHER ABOVE X3 OR X4

STUB 1 INCH INTO WELL COMPARTMENT 3 OR 4 TURN UP TO TOP OF PAD 2 INCHES OFF SKIRT 15 INCHES IN FROM CORNER INTO J BOX (MANUAL SWITCH ONLY)

3. NEMA 3R J BOX EITHER AT COMPARTMENT 3 OR 4 ROUTE BACK TO SCADA

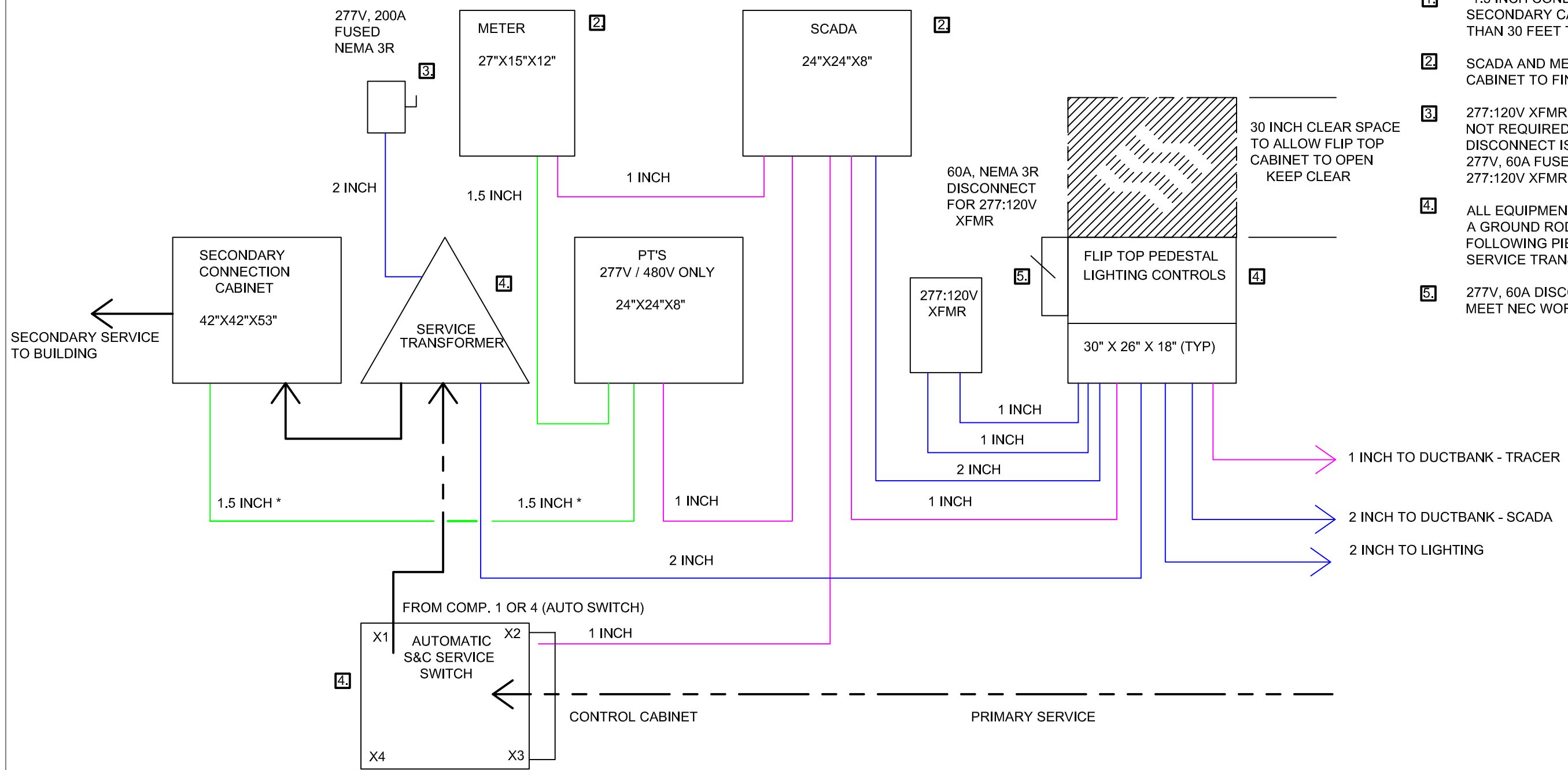
1 INCH TO DUCTBANK - TRACER
 2 INCH TO DUCTBANK - SCADA
 2 INCH TO LIGHTING

480V SERVICE MANUAL S&C		<i>Virginia Tech Electric Service</i> BLACKSBURG, VIRGINIA
DRAWN BY: SFH	DATE: 7/27/17	REV. DATE:
		DRAWING NAME: 480V MAN S&C

480V SECONDARY CONNECTION CABINET WITH AUTOMATIC S&C SWITCH

GENERAL NOTES:

- 1. *1.5 INCH CONDUIT FROM SERVICE TRANSFORMER OR SECONDARY CABINET TO PT/CT CABINET SHALL BE LESS THAN 30 FEET TOTAL CONDUIT LENGTH
- 2. SCADA AND METER CABINETS ARE 80 INCHES TOP OF CABINET TO FINISHED FLOOR
- 3. 277V:120V XFMR AND ASSOCIATED DISCONNECT NOT REQUIRED FOR 120V SECONDARY SERVICE DISCONNECT IS SINGLE PHASE, NEMA 3R, RATED FOR 277V, 60A FUSED 277V:120V XFMR IS NEMA 3R
- 4. ALL EQUIPMENT AND CABINETS SHALL BE GROUNDED A GROUND ROD SHALL BE INSTALLED FOR EACH OF THE FOLLOWING PIECES OF EQUIPMENT: FLIP TOP CABINET, SERVICE TRANSFORMER, (2) AT SERVICE SWITCH
- 5. 277V, 60A DISCONNECT MUST BE ORIENTATED AS TO MEET NEC WORKING SPACE REQUIREMENTS



480V SERVICE AUTO S&C SECONDARY CAB.		<i>Virginia Tech Electric Service</i> BLACKSBURG, VIRGINIA
DRAWN BY: SFH	DATE: 7/27/17	REV. DATE:
		DRAWING NAME: 480V AUTOS&C