

Studio Collaborative, LLC.  
800 Jackson | Suite 600 | Dallas, TX 75202  
260 Peachtree Street | Suite 500 | Atlanta, GA 30303

ARCHITECT  
800 Jackson St., Suite 600  
Dallas, TX 75202  
Rick Walker - 214.670.0050

STRUCTURAL ENGINEER  
L.A. Fuess Partners Engineers  
3333 Lee Parkway, Suite 300  
Dallas, TX 75219  
Jeff Tracy - 214.881.0110

MEP ENGINEER  
EnviroDesign, Inc.  
900 Ranch Rd 620 So., Suite C101-301  
Austin, TX 78738  
Sam Patton - 512.693.9015  
Lead PE Firm Number 1-3847

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### TRANSFORMER FEEDER (CU/AL) SCHEDULE

SYMBOL	XFRM SIZE (KVA)	PRIMARY SIDE				SECONDARY SIDE				XFRM GROUNDING CONDUCTOR SIZE (AWG)	INSULATION TYPE										
		COOPER (THHN)	ALUMINUM (XHHW)	CONDUCTORS	CONDUIT SIZE (INCHES)	COOPER (THHN)	ALUMINUM (XHHW)	CONDUCTORS	CONDUIT SIZE (INCHES)												
(A)	45	3 #6	3 #4	3/4"	3 #4	#8	1"	125	4 #1	#6	2"	#2	2"	4 #2/0	#2	2"	#4	#2	THHN/THWN	XHHW	
(B)	75	3 #2	3 #1	1-1/4"	3 #1/0	#6	1-1/2"	200	4 #3/0	#4	2-1/2"	4 #250 MCM	#2	2"	4 #250 MCM	#2	2"	#4	#2	THHN/THWN	XHHW
(C)	112.5	3 #1	3 #2/0	1-1/2"	3 #2/0	#4	2"	300	4 #350	#2	3-1/2"	4 #500 MCM	#1/0	2-1/2"	2 SETS OF 4 #250 MCM	#1/0	2-1/2"	#1/0	#1/0	THHN/THWN	XHHW
(D)	150	3 #2/0	3 #1	1-1/2"	3 #1/0	#4	2"	400	2 SETS OF 4 #3/0	#1/0	2-1/2"	2 SETS OF 4 #250 MCM	#1/0	2-1/2"	2 SETS OF 4 #250 MCM	#1/0	2-1/2"	#1/0	#1/0	THHN/THWN	XHHW
(E)	225	3 #250 MCM	3 #1	2-1/2"	3 #350 MCM	#2	2-1/2"	600	2 SETS OF 4 #350 MCM	#2/0	3-1/2"	2 SETS OF 4 #500 MCM	#4/0	3"	2 SETS OF 4 #500 MCM	#4/0	3"	#2/0	#4/0	THHN/THWN	XHHW
(F)	300	3 #500 MCM	3 #1	3-1/2"	2 SETS 3 #4/0	#1	2"	800	3 SETS OF 4 #300	#3/0	3"	3 SETS OF 4 #400 MCM	#250 MCM	3"	#3/0	#250 MCM	THHN/THWN	XHHW			

### BRANCH CIRCUIT CONDUCTOR SCHEDULE

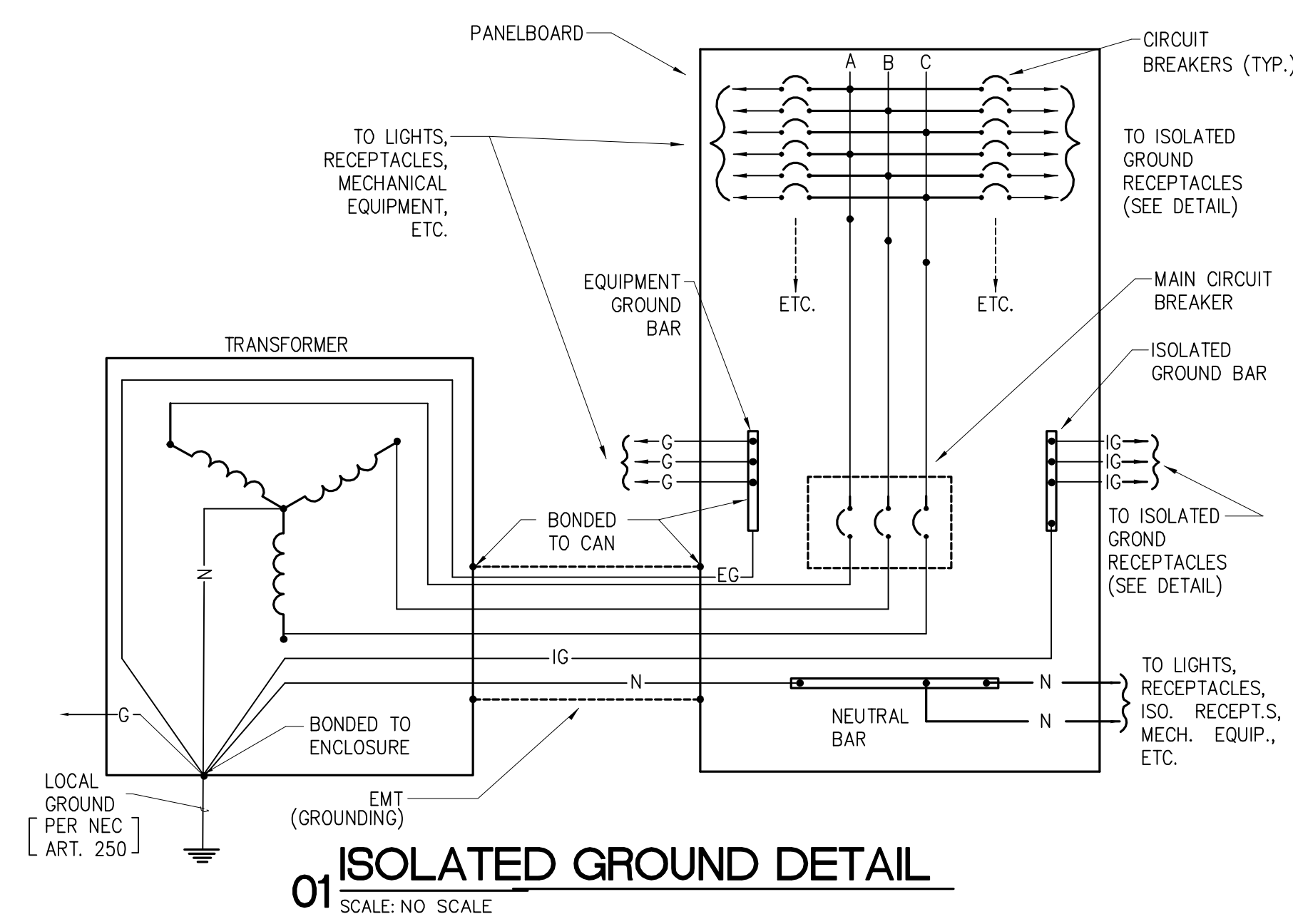
BREAKER OR FUSE	QUANTITY OF CONDUCTORS	PHASE AND NEUTRAL SIZE	CONDUIT SIZE (INCHES)	INSULATION TYPE	CONDUCTOR TYPE	REMARKS
1P-15A	2	12	12	3/4	THHN/THWN	CU
3P-15A	3	12	12	3/4	THHN/THWN	CU
1P-20A	2	12	12	3/4	THHN/THWN	CU
1P-30A	2	10	10	3/4	THHN/THWN	CU
2P-20A	2	12	12	3/4	THHN/THWN	CU
3P-40A	3	8	8	1	THHN/THWN	CU
3P-25A	3	8	10	3/4	THHN/THWN	CU
3P-30A	3	10	10	3/4	THHN/THWN	CU
3P-40A	3	10	8	1	THHN/THWN	CU
3P-30A	4	10	8	1	THHN/THWN	CU
3P-45A	3	10	6	1	THHN/THWN	CU
3P-60A	3	10	4	1-1/4	THHN/THWN	CU

### ELECTRICAL NOTES

- ALL FEEDERS ARE COPPER UNLESS NOTED OTHERWISE.
- ALL CONDUIT SIZES ARE BASED UPON METALLIC THWN.
- ALL ELECTRICAL EQUIPMENT TO BE GROUNDED AND BONDED IN ACCORDANCE WITH NEC 230-63.
- CONTRACTOR TO VERIFY EXACT LOCATION OF UTILITY TRANSFORMER WITH THE UTILITY.
- TRANSFORMER AND METER TO BE INSTALLED AS PER POWER COMPANY'S EXACT REQUIREMENTS.
- ALL AIC RATINGS OF BREAKERS SHALL MEET OR EXCEED THE AIC RATING OF THE RESPECTIVE PANEL BOARD IN WHICH IT IS INSTALLED. NO SERIES RATING IS ALLOWED.

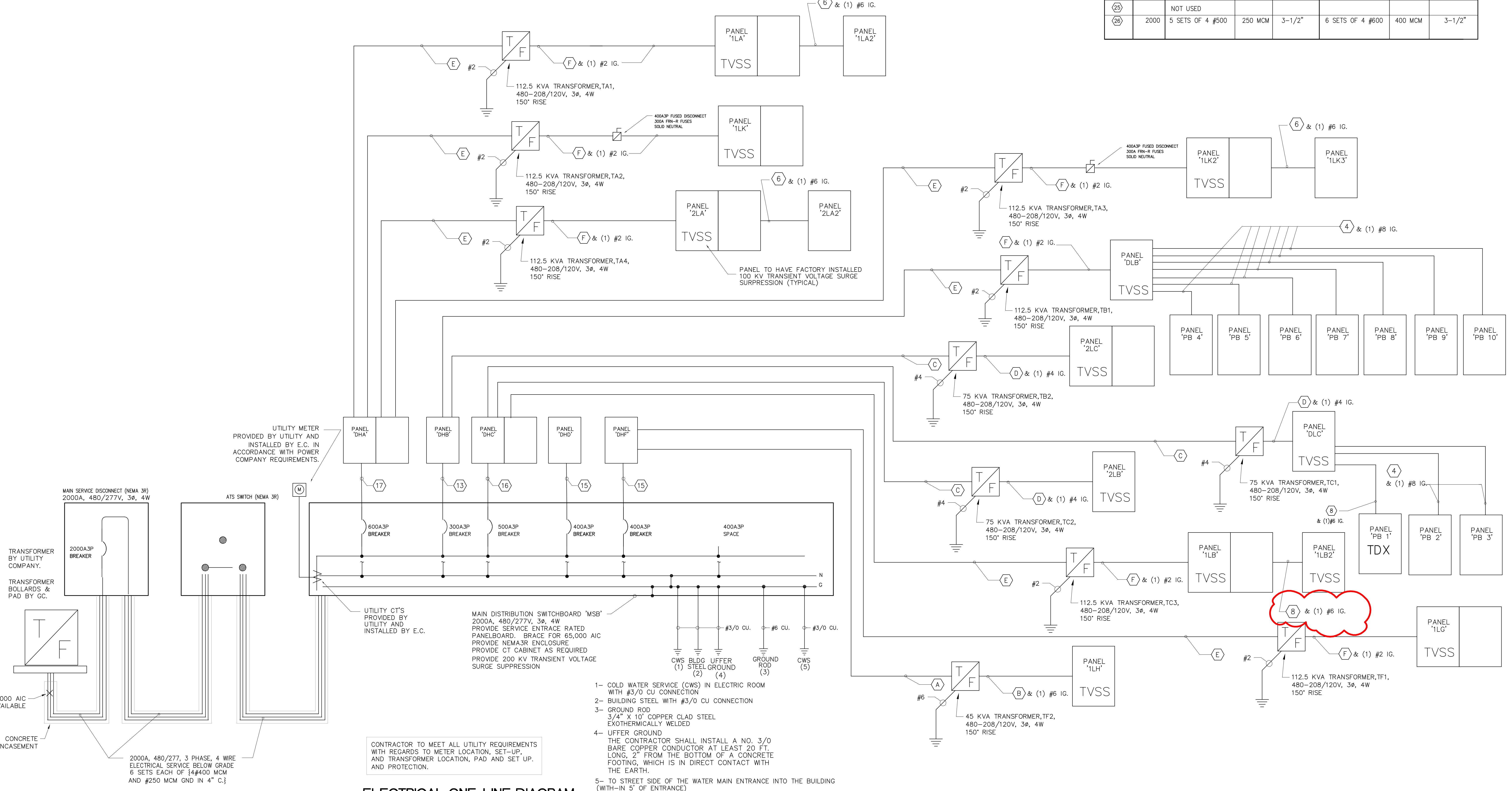
### FEEDER SCHEDULE

SYMBOL	OVER-CURRENT DEVICE RATING	COPPER (THHN/THWN INSULATION)			ALUMINUM (XHHW INSULATION)		
		CONDUCTORS	CONDUIT SIZE (INCHES) EA. SET	CONDUIT SIZE (INCHES) EA. SET	CONDUCTORS	CONDUIT SIZE (INCHES) EA. SET	CONDUIT SIZE (INCHES) EA. SET
(1)	40	3 #8	#10	3/4"	NOT TO BE USED		
(2)	40	4 #8	#10	3/4"	NOT TO BE USED		
(3)	60	3 #4	#10	1"	NOT TO BE USED		
(4)	60	4 #4	#10	1-1/4"	NOT TO BE USED		
(5)	125	3 #1	#6	1-1/2"	3 #2/0	#4	2"
(6)	125	4 #1	#6	1-1/2"	4 #2/0	#4	2"
(7)	150	3 #1/0	#6	1-1/2"	3 #3/0	#4	2"
(8)	150	4 #1/0	#6	2"	4 #3/0	#4	2"
(9)	175	3 #2/0	#6	2"	3 #4/0	#4	2-1/2"
(10)	175	4 #2/0	#6	2"	4 #4/0	#4	2-1/2"
(11)	200	4 #3/0	#6	2"	4 #250 MCM	#4	2-1/2"
(12)	225	4 #4/0	#4	2-1/2"	4 #300 MCM	#2	2-1/2"
(13)	300	4 #350 MCM	#4	3"	4 #500 MCM	#2	3"
(14)		NOT USED					
(15)	400	2 SETS OF 4 #3/0	#3	2"	2 SETS OF 4 #250	#1	2-1/2"
(16)	500	2 SETS OF 4 #250	#2	3"	2 SETS OF 4 #300	#1/0	2-1/2"
(17)	600	2 SETS OF 4 #350	#1	3-1/2"	2 SETS OF 4 #400	#2/0	3"
(18)	600	2 SETS OF 3 #350	#1	3-1/2"	2 SETS OF 3 #400	#2/0	3"
(19)	800	3 SETS OF 4 #300	#1/0	3-1/2"	3 SETS OF 4 #400	#3/0	3"
(20)	800	3 SETS OF 3 #300	#1/0	3-1/2"	3 SETS OF 3 #400	#3/0	3"
(21)	1000	3 SETS OF 4 #400	#2/0	3-1/2"	3 SETS OF 4 #600	#4/0	3-1/2"
(22)	1200	4 SETS OF 4 #350	#3/0	3-1/2"	4 SETS OF 4 #500	250 MCM	3"
(23)	1400	4 SETS OF 4 #500	#4/0	3-1/2"	5 SETS OF 4 #500	350 MCM	3"
(24)	1600	5 SETS OF 4 #400	#4/0	3-1/2"	5 SETS OF 4 #600	350 MCM	3-1/2"
(25)		NOT USED					
(26)	2000	5 SETS OF 4 #500	250 MCM	3-1/2"	6 SETS OF 4 #600	400 MCM	3-1/2"



NOTES:  
1. ALL CONDUCTORS AND CONDUITS ARE TO BE SIZED PER 2002 NEC, 310-16, 250-95 AND TABLE C.  
2. CONTRACTOR TO UPSIZE AS REQUIRED FOR VOLTAGE DROP.  
3. GROUNDING CONDUCTORS TO BE SIZED ACCORDING TO REQUIREMENTS OF NEC SECTION 250

NOTES ON MC CABLE  
MC CABLE, WHEN ALLOWED BY THE GOVERNING AUTHORITIES, MAY ONLY BE USED ON 12 ga (20 AMP) BRANCH CIRCUITS ABOVE LAY-IN CEILINGS, BUT NOT IN THE AUDITORIUMS.  
IF MC CABLE IS USED, IT SHALL BE SUPPORTED AND SECURED AT INTERVALS NOT EXCEEDING SIX FOOT (6') AND NOT LIE ON ANY CEILING GRID. CABLES NO LARGER THAN NO.10 WITH FOUR (4) OR LESS CONDUCTORS SHALL BE SECURED WITHIN TWELVE INCHES (12") OF EVERY BOX, CABINET OR FITTING. (NEC 2002 SECTION 330.30)



REV	DATE	PERMIT ISSUE	ISSUE
5/12/17		PERMIT ISSUE	
5/24/17		ISSUE FOR BID	
6/8/17		ADDENDUM #1	

CINERGY AMARILLO  
SHEET DESCRIPTION  
**ELECTRICAL ONE-LINE DIAGRAM**