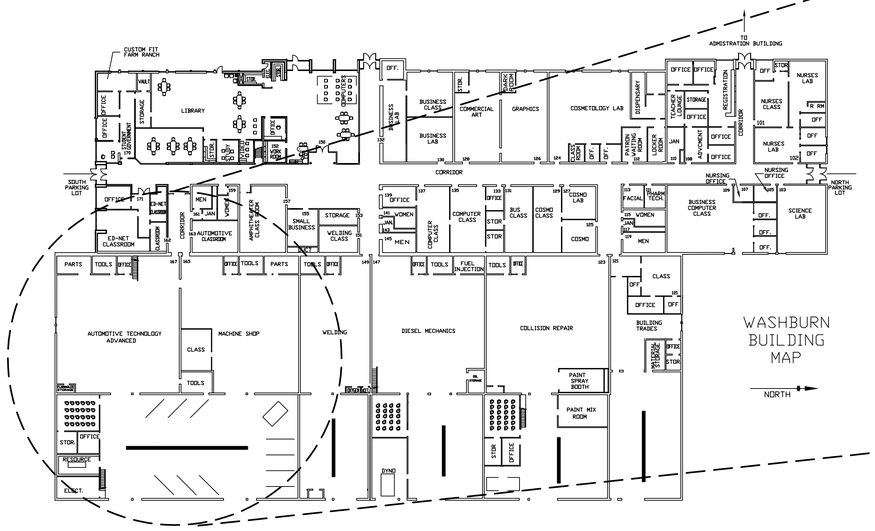
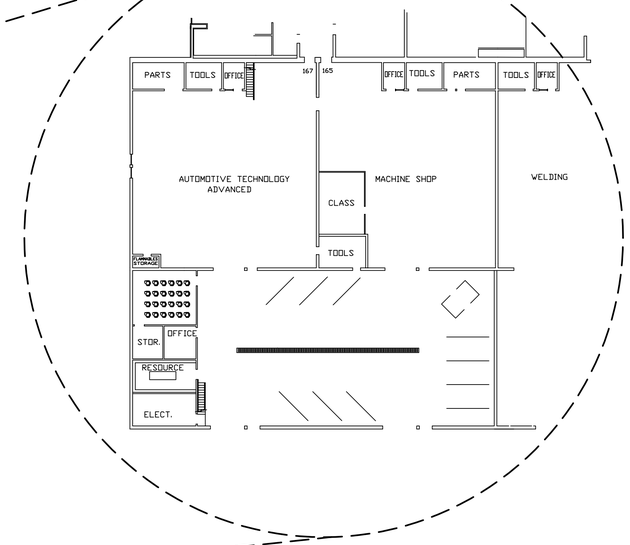
SNOW COLLEGE RICHFIELD

WASHBURN BUILDING - MACHINE SHOP ELECTRICAL REMODEL

DFCM PROJECT NO. 08253710





BYTHEWAY ENGINEERING

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REVISIONS

STAMP

PROFESSIONAL ENGINEER
No. 160986-2202
CECELIA H. BYTHEWAY
STATE OF UTAH
4-21-09

PROJECT NAME

SNOW COLLEGE SOUTH
WASHBURN BUILDING
MACHINE SHOP
ELECTRICAL REMODEL
800 WEST 200 SOUTH
RICHFIELD, UTAH
84701

DFCM PROJECT NUMBER

08253710

DATE

April 21, 2009

SCALE

None

SHEET TITLE

TITLE SHEET

SHEET NUMBER

E01

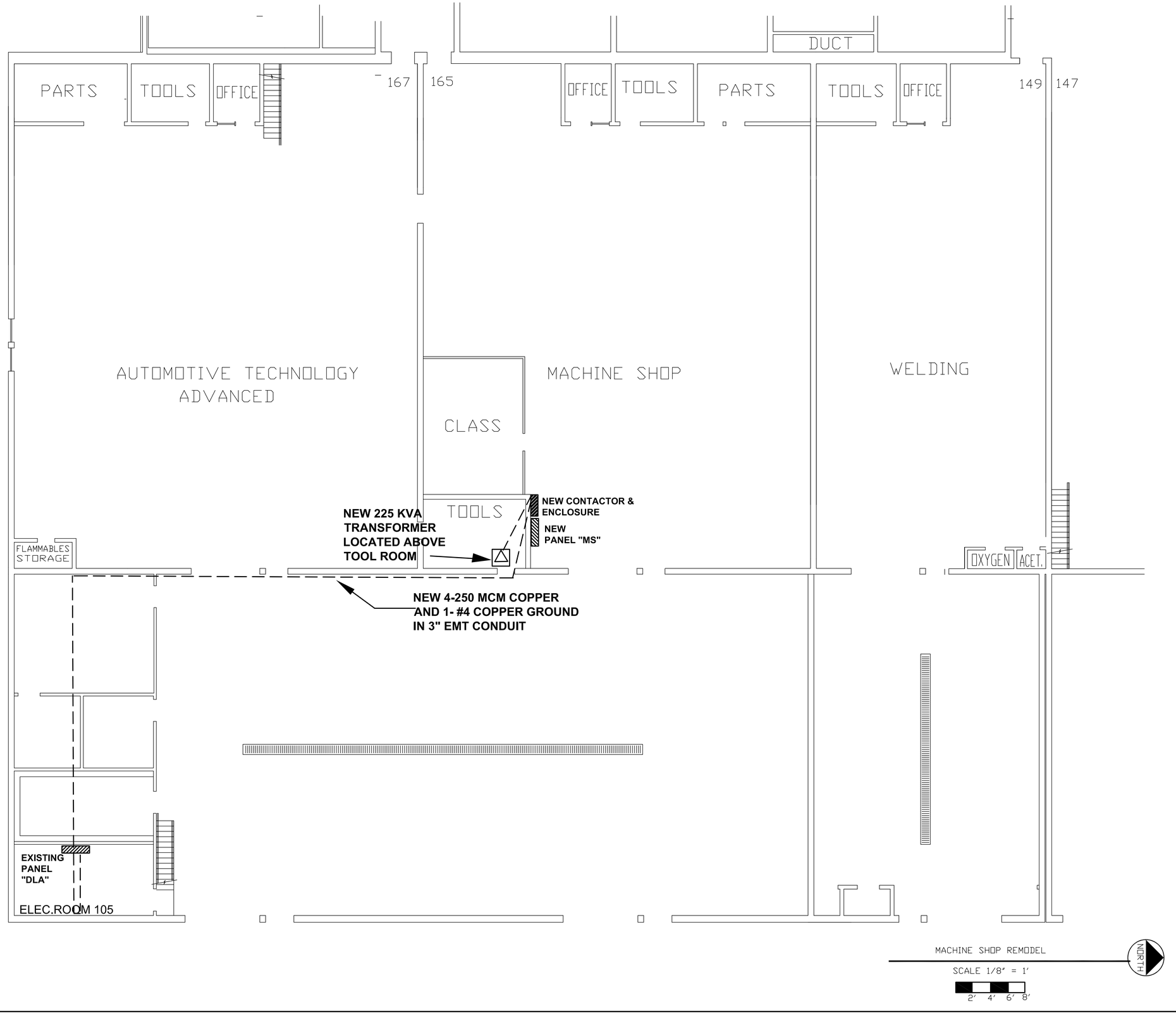
Sheet 1 of 6

LEGEND

- PANEL
- DRY-TYPE TRANSFORMER
- CONDUIT & CONDUCTORS

NOTES:

1. CONDUIT FROM BREAKER IN PANEL "DLA" SHALL BE ROUTED TO CEILING OF ELECTRICAL ROOM AND EAST TO WALL.
2. CORE DRILL CEMENT OF ELECTRICAL ROOM 105 FOR CONDUIT.
3. ROUTE CONDUIT TO UP TO CEILING OF BUILDING ALONG THE WALL. PROPERLY SUPPORT CONDUIT.
4. HANG CONDUIT JUST BELOW TRUSSES USING UNISTRUT. ROUTE CONDUIT TO WEST WALL ON TRUSSES.
5. AT WEST WALL ATTACH CONDUIT TO WALL USING UNISTRUT OFFSET FROM CINDERBLOCK WALL TO TRANSFORMER LOCATION.
6. CORE DRILL THROUGH CINDERBOCK WALL TO BRING CONDUIT TO CONTACTOR SWITCH AND TRANSFORMER LOCATION.
7. THE NEW DRY-TYPE TRANSFORMER SHALL BE LOCATED ABOVE THE TOOL SHOP. THE CEILING IN THE TOOL SHOP WILL NOT SUPPORT THE WEIGHT OF THE TRANSFORMER. THE CONTRACTOR SHALL DESIGN AND INSTALL A STEEL SUPPORT STRUCTURE SUFFICIENT FOR THE WEIGHT OF TRANSFORMER. THE STEEL SUPPORT SYSTEM SHALL SPAN THE TOOL SHOP. THE TRANSFORMER SHALL BE SEISMICALLY BRACED IN CONFORMANCE WITH CURRENT BUILDING CODES. FOR BIDDING PURPOSES IT SHALL BE ASSUMED THAT THE BLOCK WALL IS ADEQUATE TO SUPPORT THE WEIGHT OF THE TRANSFORMER BY BOILTING THROUGH OR BEARING UPON. THE CONTRACTOR SHALL HAVE THE STEEL SUPPORT SYSTEM DESIGNED BY OR REVIEWED BYA UTAH STATE LICENSED ENGINEER. THE DRAWINGS OF THE STEEL SUPPORT SHALL BE STAMPED BY THE ENGINEER AND SUBMITTED FOR APPROVAL PRIOR TO FABRICATION. NOTE: WHERE WELDING IS REQUIRED, THE CONTRACTOR SHALL COMPLY WITH INTERNATIONAL BUILDING CODE 1704.2. FOR PRE-APPROVED STEEL FABRICATORS REFER TO THE BUILDING OFFICAL LINK ON THE DFCM WEBSITE.
8. SEE ONE-LINE DIAGRAM ON SHEET EO4.
9. SIMILAR TRANSFORMER INSTALLED IN ELECTRICAL ROOM 105.



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PROFESSIONAL ENGINEER 4-21-09 No.160986-2202 CECELIA H. BYTHEWAY STATE OF UTAH

PROJECT NAME

SNOW COLLEGE SOUTH WASHBURN BUILDING MACHINE SHOP ELECTRICAL REMODEL 800 WEST 200 SOUTH RICHFIELD, UTAH 84701

DFCM PROJECT NUMBER

08253710

DATE

April 21, 2009

SCALE

1/8" = 1'

SHEET TITLE

ELECTRICAL ROOM POWER

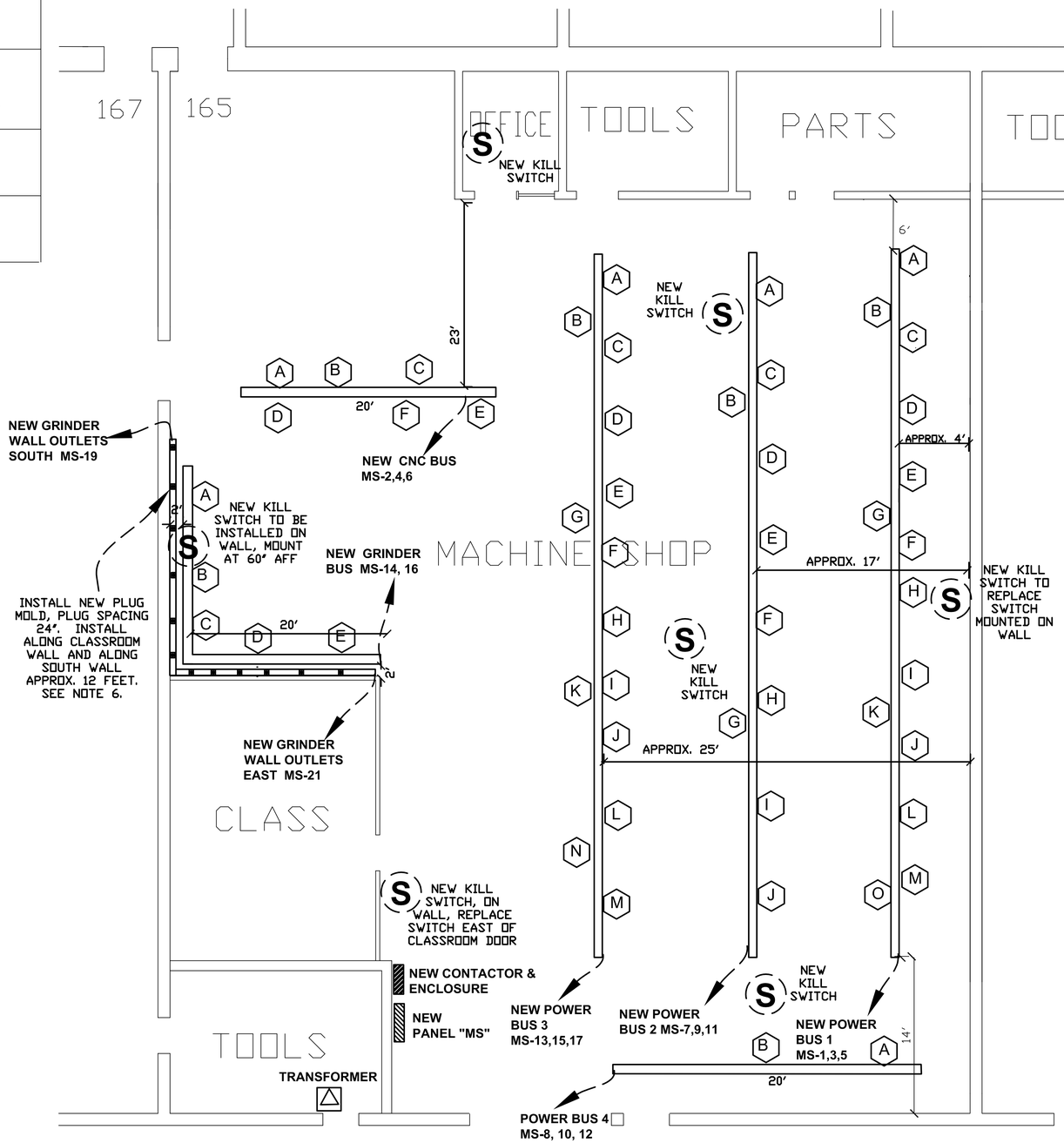
SHEET NUMBER

E02

Sheet 2 of 6

LEGEND

- THREE PHASE OUTLET
- POWER BUS
- PLUG IN UNIT (TYP.) SEE POWER BUS SCHEDULE
- KILL/STOP SWITCH
- PLUG MOLD



NOTES:

1. ALL KILL/STOP SWITCHES SHALL BE MOUNTED SO THAT THEY HANG 66" ABOVE FLOOR. ALL SWITCHES ARE CONNECTED IN SERIES SO THE CONTACTOR WILL TRIP WHEN ANY OF THE KILL SWITCHES ARE PUSHED. CONTACTOR MUST BE RESET MANUALLY FOR TRANSFORMER AND PANEL MS TO BE ENERGIZED.
2. POWER FOR KILL/STOP SWITCHES FROM 120 VOLT BREAKER IN EXISTING PANELS ON WEST WALL. VERIFY POWER TO BE 120 VOLT AND COMPATIBLE WITH CONTACTOR COIL.
3. PROVIDE NEW WOODHEAD OR EQUIVALENT PENDANT BOX FOR KILL SWITCHES WITH STRAIN RELIEF AT BOTH ENDS OF DROP CORD TO KILL SWITCHES, COLOR YELLOW.
4. INSTALL NEW KILL SWITCHES IN EACH LOCATION SHOWN ON DRAWING. KILL SWITHCES SHALL BE COMPATIBLE WITH 120 VOLT CIRCUIT AND IF ANY SWITCH IS PUSHED, SHALL OPEN THE CONTACTOR TO TURN OFF POWER.
5. POWER BUSWAYS SHALL BE ATTACHED TO ROOF TRUSS. ATTACH TO NEAREST ROOF TRUSS TO APPROXIMATE DIMENSIONS SHOWN ON DRAWING. MOUNT WITHIN 12" OF BOTTOM OF ROOF TRUSS. SEE DETAIL ON SHEET E05.
6. PLUG MOLD (OUTLET STRIP) LOCATED AT GRINDERS TO BE MOUNTED ON WALL. ONCLASSROM WALL, MOUNT JUST UNDER CLASSROOM WINDOW. ON SOUTH WALL MOUNT PLUG MOLD APPROXIMATELY 4" ABOVE COUNTER TOP.

MACHINE SHOP REMODEL

SCALE 1/4" = 1'

1' 2' 3' 4'

NORTH

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MACHINE SHOP POWER

SHEET NUMBER

E03

Sheet 3 of 6

BUSWAY #1 EQUIPMENT SCHEDULE- THREE PHASE

	SHOP EQUIPMENT	PLUG IN UNIT	BREAKER SIZE	DESCRIPTION
60 FT	POWER BUS	n/a	n/a	SQUARE D POWERBUS 225 BUSWAY with BUSBAR CONFIGURATION 4A OR EQUIVALENT MANUFACTURER
A	BREAKER FOR COLD SAW	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER
B	120 VOLT POWER FOR EQUIPMENT	QOR UNIT OR EQUIVALENT	3-20 A	PLUG IN UNIT, THREE QO BREAKERS, 120 VOLT AND THREE 20 AMP LOCKING RECEPTACLES
C	BREAKER FOR LATHE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
D	BREAKER FOR LATHE	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER
E	BREAKER FOR LATHE	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER
F	BREAKER FOR LATHE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
G	120 VOLT POWER FOR EQUIPMENT	QOR UNIT OR EQUIVALENT	3-20 A	PLUG IN UNIT, THREE QO BREAKERS, 120 VOLT AND THREE 20 AMP LOCKING RECEPTACLES
H	BREAKER FOR LATHE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
I	BREAKER FOR LATHE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
J	BREAKER FOR LATHE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
K	120 VOLT POWER FOR EQUIPMENT	QOR UNIT OR EQUIVALENT	3-20 A	PLUG IN UNIT, THREE QO BREAKERS, 120 VOLT AND THREE 20 AMP LOCKING RECEPTACLES
L	BREAKER FOR LATHE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
M	BREAKER FOR LATHE	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER

BUSWAY #2 EQUIPMENT SCHEDULE- THREE PHASE

	SHOP EQUIPMENT	PLUG IN UNIT	BREAKER SIZE	DESCRIPTION
60 FT	POWER BUS	n/a	n/a	SQUARE D POWERBUS 225 BUSWAY with BUSBAR CONFIGURATION 4A OR EQUIVALENT MANUFACTURER
A	BREAKER FOR MACHINE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
B	120 VOLT POWER FOR EQUIPMENT	QOR UNIT OR EQUIVALENT	3-20 A	PLUG IN UNIT, THREE QO BREAKERS, 120 VOLT AND THREE 20 AMP LOCKING RECEPTACLES
C	BREAKER FOR MACHINE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
D	BREAKER FOR MACHINE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
E	BREAKER FOR MACHINE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
F	BREAKER FOR MACHINE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
G	120 VOLT POWER FOR EQUIPMENT	QOR UNIT OR EQUIVALENT	3-20 A	PLUG IN UNIT, THREE QO BREAKERS, 120 VOLT AND THREE 20 AMP LOCKING RECEPTACLES
H	BREAKER FOR MACHINE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
I	BREAKER FOR MACHINE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
J	BREAKER FOR MACHINE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER

CNC BUSWAY EQUIPMENT SCHEDULE- THREE PHASE

	SHOP EQUIPMENT	PLUG IN UNIT	BREAKER SIZE	DESCRIPTION
20 FT	POWER BUS	n/a	n/a	SQUARE D POWERBUS 225 BUSWAY with BUSBAR CONFIGURATION 4A OR EQUIVALENT MANUFACTURER
A	BREAKER FOR CNC MACHINE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
B	120 VOLT POWER FOR EQUIPMENT	QOR UNIT OR EQUIVALENT	5-20 A	PLUG IN UNIT, THREE QO BREAKERS, 120 VOLT AND THREE 20 AMP LOCKING RECEPTACLES
C	BREAKER FOR CNC MACHINE	FA UNIT OR EQUIVALENT	50 A	PLUG IN UNIT, THREE PHASE, WITH 50 AMP BREAKER
D	BREAKER FOR FSG GRINDER	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER
E	BREAKER FOR EDM MACHINE	FA UNIT OR EQUIVALENT	70 A	PLUG IN UNIT, THREE PHASE, WITH 70 AMP BREAKER
F	120 VOLT POWER FOR EQUIPMENT	QOR UNIT OR EQUIVALENT	3-20 A	PLUG IN UNIT, THREE QO BREAKERS, 120 VOLT AND THREE 20 AMP LOCKING RECEPTACLES

BUSWAY #3 EQUIPMENT SCHEDULE - THREE PHASE

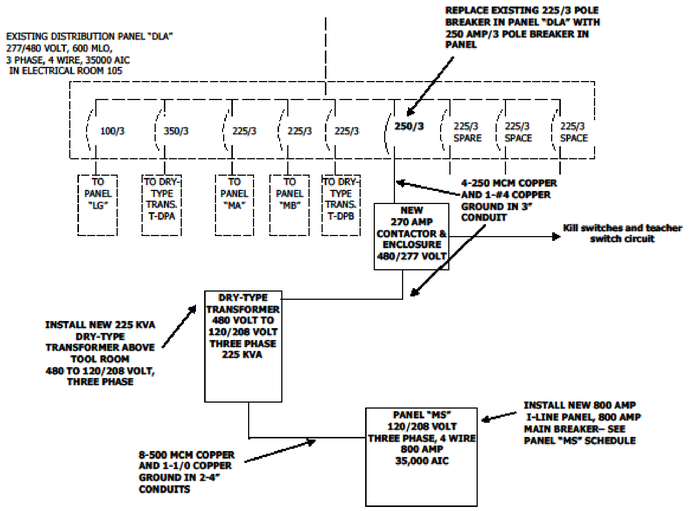
	SHOP EQUIPMENT	PLUG IN UNIT	BREAKER SIZE	DESCRIPTION
60 FT	POWER BUS	n/a	n/a	SQUARE D POWERBUS 225 BUSWAY with BUSBAR CONFIGURATION 4A OR EQUIVALENT MANUFACTURER
A	BREAKER FOR MILL	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER
B	120 VOLT POWER FOR EQUIPMENT	QOR UNIT OR EQUIVALENT	3-20 A	PLUG IN UNIT, THREE QO BREAKERS, 120 VOLT AND THREE 20 AMP LOCKING RECEPTACLES
C	BREAKER FOR MILL	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER
D	BREAKER FOR MILL	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER
E	BREAKER FOR MILL	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER
F	BREAKER FOR MILL	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER
G	120 VOLT POWER FOR EQUIPMENT	QOR UNIT OR EQUIVALENT	3-20 A	PLUG IN UNIT, THREE QO BREAKERS, 120 VOLT AND THREE 20 AMP LOCKING RECEPTACLES
H	BREAKER FOR MILL	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER
I	BREAKER FOR MILL	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER
J	BREAKER FOR MILL	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER
K	120 VOLT POWER FOR EQUIPMENT	QOR UNIT OR EQUIVALENT	3-20 A	PLUG IN UNIT, THREE QO BREAKERS, 120 VOLT AND THREE 20 AMP LOCKING RECEPTACLES
L	BREAKER FOR MILL	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER
M	BREAKER FOR MILL	FA UNIT OR EQUIVALENT	20 A	PLUG IN UNIT, THREE PHASE, WITH 20 AMP BREAKER
N	120 VOLT POWER FOR EQUIPMENT	QOR UNIT OR EQUIVALENT	3-20 A	PLUG IN UNIT, THREE QO BREAKERS, 120 VOLT AND THREE 20 AMP LOCKING RECEPTACLES

BUSWAY #4 EQUIPMENT SCHEDULE - THREE PHASE

	SHOP EQUIPMENT	PLUG IN UNIT	BREAKER SIZE	DESCRIPTION
40 FT	POWER BUS	n/a	n/a	SQUARE D POWERBUS 225 BUSWAY with BUSBAR CONFIGURATION 4A OR EQUIVALENT MANUFACTURER
A	BREAKER FOR SHELL TALUS	FA UNIT OR EQUIVALENT	100 A	PLUG IN UNIT, THREE PHASE, WITH 100 AMP BREAKER
B	120 VOLT POWER FOR EQUIPMENT AND BAND SAW	QOR UNIT OR EQUIVALENT	3-20 A	PLUG IN UNIT, THREE QO BREAKERS, 120 VOLT AND THREE 20 AMP LOCKING RECEPTACLES

GRINDER BUSWAY EQUIPMENT SCHEDULE - SINGLE PHASE

	SHOP EQUIPMENT	PLUG IN UNIT	BREAKER SIZE	DESCRIPTION
40 FT	POWER BUS WITH 90 DEGREE ANGLE CONNECTION	n/a	n/a	SQUARE D POWERBUS 100 AMP BUSWAY with BUSBAR CONFIGURATION 3E OR EQUIVALENT MANUFACTURER
A	120 VOLT BREAKERS FOR GRINDER	QOR UNIT OR EQUIVALENT	3-20 A	PLUG IN UNIT, THREE QO BREAKERS
B	120 VOLT BREAKERS FOR GRINDER	QOR UNIT OR EQUIVALENT	3-20 A	PLUG IN UNIT, THREE QO BREAKERS



ONE-LINE DIAGRAM
ELECTRICAL ROOM TO MACHINE SHOP PANEL "MS"

PANEL SCHEDULE

PANEL "MS" | BUS AMPS: 800 AMP | USE:
120/208 VOLTS | MOUNTING: SURFACE | E=Equipment Load | M=Motor Load
THREE PHASE, FOUR WIRE | MAIN OVERCURRENT DEVICE: 800 AMP Main breaker | L=Lighting Load | K=Kitchen
ENCLOSURE: NEMA 1 | EQUIPMENT RATING: 35,000 AIC | R=Receptacle Load | Equipment

Wire Size	Ground Size	Circuit Description	Pole #	Brk. Size	USE	LOAD (VA)	A AMPS	C AMPS	B AMPS	LOAD (VA)	USE	Brk. Size	Pole #	Circuit Description	Wire Size	Ground Size
4/0 CU	#6 CU	BUSWAY #1	1	225 A	M	37980	183		182	37800	M	225 A	2	CNC BUSWAY	4/0 CU	#6 CU
4/0 CU		BUSWAY #1	3	225 A	M			183/182			M	225 A	4	CNC BUSWAY	4/0 CU	
4/0 CU		BUSWAY #1	5	225 A	M		182		183		M	225 A	6	CNC BUSWAY	4/0 CU	
4/0 CU	#6 CU	BUSWAY #2	7	225 A	M	41960	202		79	16528	M	100 A	8	BUSWAY #4	#3 CU	#8 CU
4/0 CU		BUSWAY #2	9	225 A	M			202/79			M	100 A	10	BUSWAY #4	#3 CU	
4/0 CU		BUSWAY #2	11	225 A	M		79		202		M	100 A	12	BUSWAY #4	#3 CU	
4/0 CU	#6 CU	BUSWAY #3	13	225 A	M	25680	124		40	8320	M	100 A	14	GRINDER BUSWAY	#3 CU	#8 CU
4/0 CU		BUSWAY #3	15	225 A	M			124/40			M	100 A	16	GRINDER BUSWAY	#3 CU	
4/0 CU		BUSWAY #3	17	225 A	M				124				18	SPACE		
#12 CU	#12 CU	GRINDER WALL OUTLETS SOUTH	19	20 A	R	1800	15						20	SPACE		
#12 CU	#12 CU	GRINDER WALL OUTLETS EAST	21	20 A	R	1800		15					22	SPACE		
		SPACE	23										24	SPACE		
		SPACE	25										26	SPACE		
		SPACE	27										28	SPACE		
		SPACE	29										30	SPACE		
				TOTALS		109220	785	825	810	62648						

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DFCM PROJECT NUMBER

08253710

DATE

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SCALE

None

SHEET TITLE

SCHEDULES ONE-LINE DIAGRAM

SHEET NUMBER

E04

Sheet 4 of 6

Electrical Notes:

1. **See written specifications, Division 16000, for complete information.**

2. **Verify all dimensions prior to construction.**

3. **DEMOLITION: Remove all unused conduit and conductors from existing ceiling junction boxes to machinery. Terminate ends of conductors and cover all junction boxes. In existing panels on west wall, label all circuit breakers where circuits and conductors are not longer used for machinery as part of this project.**

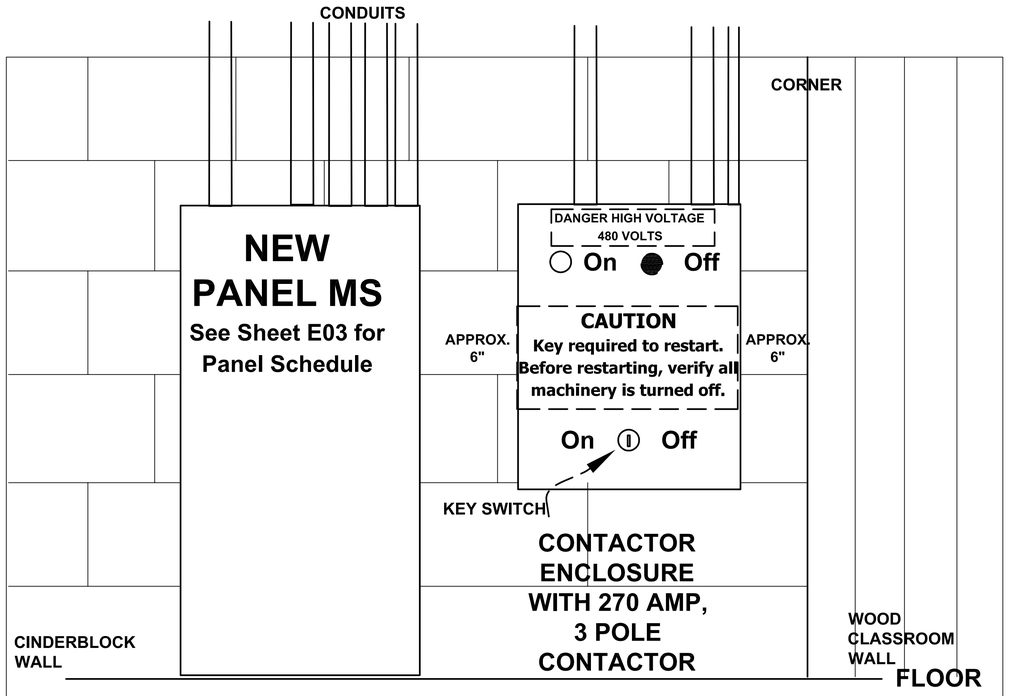
4. **CONTACTOR AND ENCLOSURE: As part of the contactor and enclosure provide the following:**
   a. **Provide new 270 Amp, 480 Volt, 3 pole contactor, Square D 8502 SGG 3 VO2 AS or equivalent.**
   b. **Contactor will open when one of the kill switches is pushed or when power goes off to building.**
   c. **Indicating lights: green – on or contactor is closed, red – off or contactor is open.**
   d. **Key switch mounted on contactor enclosure required to turn contactor back on (close). Also, key switch has position to turn contact off (open.)**
   e. **Provide lock for contactor enclosure. Enclosure must have sign indicating: "Danger High Voltage, 480 Volt"**
   f. **Provide Red plastic engraved sign, next to or on front of contactor enclosure, which reads: "CAUTION. Key required to restart. Before restarting, verify all machinery is turned off."**

5. **DROP CORDS TO MACHINERY:**
   Provide new drop cords and plugs to all machinery.
   a. **Each machine shall have a three phase drop cord from the overhead unit.**
   b. **Each machine shall have a 120 volt , single phase drop cord with Woodhead or equivalent pendant box and duplex outlet located at machine.**
   c. **Provide strain relief on each end of drop cord.**
   d. **CNC Machines and machines exceeding 25 Amps will be hard wired from overhead breaker unit on busway to machine.**
   e. **See Sheet E06 for machinery list and locations.**

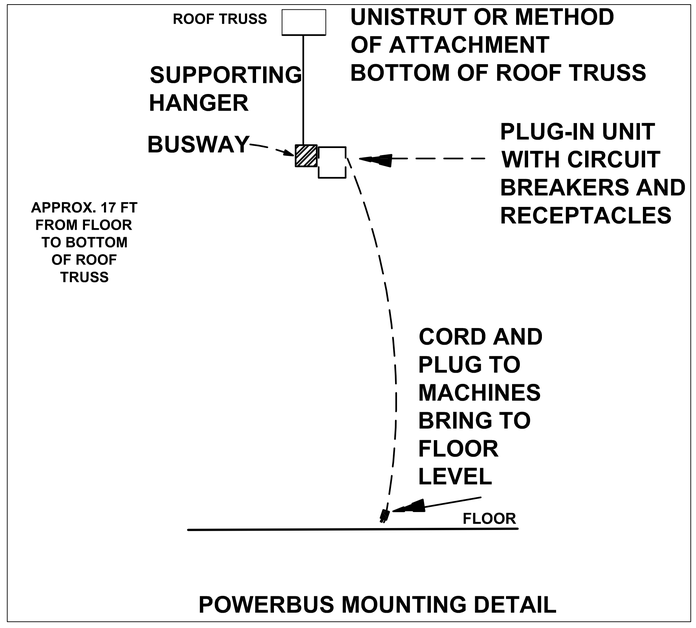
6. **Contractor shall furnish and install all materials required for the grounding and /or bonding on the building of all equipment and power systems.**

7. **Conductors: All conductors shall bear the marking of UL, soft-drawn copper, and shall have a conductivity of not less than 98% of ANSI Standard annealed copper. Feeder and branch circuits conductor sizes shall not be less than those shown on drawings and never less than No. 12 AWG. All conductors No. 8 AWG and larger shall be stranded. The wire and cable insulation shall be rated at 600 volt. All mains and feeders shall be type THWN. In all locations conductors must be in conduit.**

8. **Conduit: Furnish IMC or EMT conduit in locations permitted by NEC, Article 345, rigid steel in all other locations in accordance with NEC Article 346. Conduits shall be surface run and attached to walls and ceilings. Conduits must be kept at least 6 inches from parallel runs of flues, steam pipes or hot water pipes. Conduit or tubing shall have supports spaced not more than 5 feet apart. Do not install conduit which has been crushed or deformed. Conduit and tubing shall be installed to have no traps for moisture wherever possible.**



PANEL MS AND CONTACTOR WALL MOUNT DETAIL



POWERBUS MOUNTING DETAIL

NO SCALE

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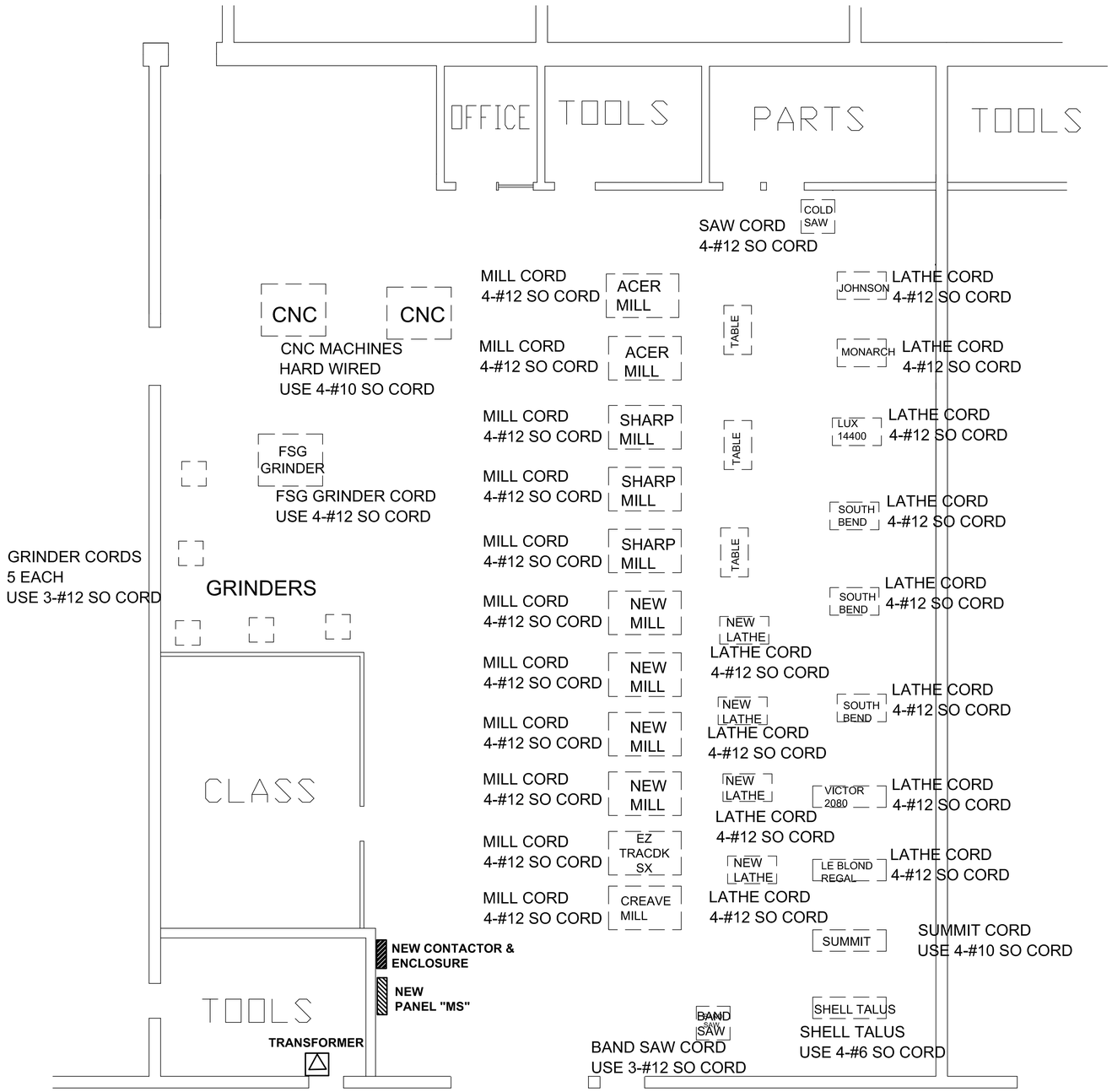
SHEET TITLE

DETAIL

SHEET NUMBER

E05

Sheet 5 of 6



NOTES:

1. FOR ALL CORDS USE COPPER WIRE WITH SIZE INDICATED ON DRAWINGS IN TYPE DO CORDS.
2. IN ADDITION TO CORDS SHOWN, EACH MACHINE SHALL HAVE A 3-#12 SO CORD TO A "WOODHEAD" OR EQUIVAENT TYPE DUPLEX OUTLET TO BE LOCATED AT EACH MACHINE FROM A 120 VOLT BREAKER UNIT
3. ALL CORDS AND PLUGS TYPE L1420.
4. CORDS TO MACHINES SHALL BE LONG ENOUGH TO TOUCH THE FLOOR BEFORE BEING PLUGGED INTO MACHINE.
5. ALL CORDS SHALL HAVE STRAIN RELIEF INSTALLED ON BOTH ENDS.

MACHINE SHOP REMODEL

SCALE 1/4" = 1'

1' 2' 3' 4'

NORTH

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State of Utah-Department of Administrative Services
DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
4110 State Office Building/Salt Lake City, Utah 84114/538-3018

REVISIONS

STAMP

PROFESSIONAL ENGINEER 4-21-09 No. 160986-2202 CECELIA H. BYTHEWAY STATE OF UTAH

PROJECT NAME

SNOW COLLEGE SOUTH WASHBURN BUILDING MACHINE SHOP ELECTRICAL REMODEL 800 WEST 200 SOUTH RICHFIELD, UTAH 84701

DFCM PROJECT NUMBER

08253710

DATE

April 21, 2009

SCALE

1/4" = 1'

SHEET TITLE

MACHINE SHOP LAYOUT

SHEET NUMBER

E06

Sheet 6 of 6