

HIDALGO COUNTY SHERIFF'S OFFICE -
Modifications to Incorporate Motorola and 911 Equipment

EDINBURG, TEXAS



OFFICIALS

COUNTY JUDGE
COMMISSIONER PRECINCT 1
COMMISSIONER PRECINCT 2
COMMISSIONER PRECINCT 3
COMMISSIONER PRECINCT 4
COUNTY SHERIFF

RAMON GARCIA
A.C. CUELLAR, JR.
HECTOR "TITO" PALACIOS
JOE M. FLORES
JOSEPH PALACIOS
GUADALUPE TREVINO



Owner:
HIDALGO COUNTY

Project Location:
HIDALGO COUNTY SHERIFF'S OFFICE
711 EL CIBOLO RD
Edinburg, Texas 78539

PROJECT LOCATION:



VICINITY MAP N.T.S.

Sheet Index

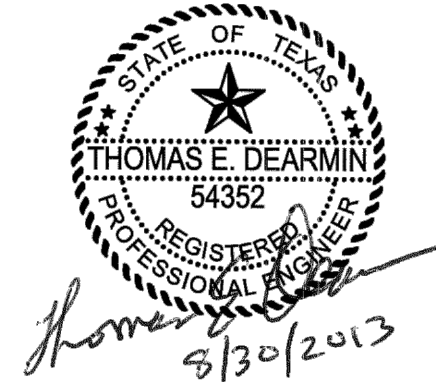
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Edinburg, Texas



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EDINBURG, TEXAS 78539
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TBPPE FIRM #F-312

Revision No.	Date	Description



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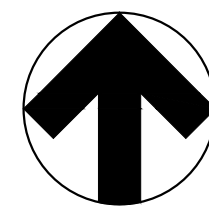
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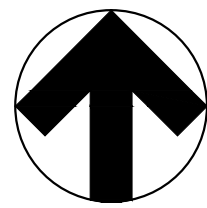
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GENERAL
ARCHITECTURAL NOTES:

- KEY NOTES: 

- Sheet Number

MECHANICAL GENERAL LEGEND

DUCTWORK SYMBOLS			PIPING SYMBOLS		MISCELLANEOUS SYMBOLS		GENERAL ABBREVIATIONS				GENERAL MECHANICAL NOTES
DESCRIPTION	SINGLE LINE	DOUBLE LINE	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION					
ACCESS DOOR			CHWS	CHILLED WATER SUPPLY		DUCT STATIC PRESSURE SENSOR	AAV	AUTOMATIC AIR VALVE	MAX	MAXIMUM	1. INFORMATION ON THIS PLAN HAS BEEN OBTAINED FROM EXISTING DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK. ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND CONSTRUCTION DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER AND/OR ARCHITECT.
BACKDRAFT DAMPER			CHWR	CHILLED WATER RETURN		DUCT SMOKE DETECTOR	AFF	ABOVE FINISHED FLOOR	MFR	MANUFACTURER	
FIRE DAMPER			HWS	HOT WATER SUPPLY		CARBON DIOXIDE SENSOR	AFMS	AIR FLOW MEASURING STATION	MIN	MINIMUM	2. THE CONTRACTOR IS FULLY RESPONSIBLE FOR PERFORMING THE WORK IN FULL COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES UNDER THIS SECTION OF THE CONTRACT. IF THE CONTRACTOR DETERMINES THAT THE CONTRACT DOCUMENTS AND PLANS ARE NOT IN COMPLIANCE WITH THE APPLICABLE LOCAL CODES, HE SHALL INFORM THE ARCHITECT PRIOR TO CONSTRUCTION START FOR DIRECTION. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO MEET APPLICABLE LOCAL CODES, AND REWORK SHALL BE AT CONTRACTOR'S EXPENSE.
FLEXIBLE CONNECTION			HWR	HOT WATER RETURN		END OF DEMOLITION WORK	AMB	AMBIENT	MVD	MOTORIZED VOLUME DAMPER	
MOTORIZED DAMPER			PCWS	PRIMARY CHILLED WATER SUPPLY		NEW CONNECTION TO EXISTING	APD	AIR PRESSURE DROP	MW	MAKE UP WATER	3. CONTRACTOR SHALL HANG AND INSTALL ALL DUCTWORK TIGHT WITH THE BUILDING STRUCTURE WHEN FEASIBLE TO ACCOMMODATE NEW CEILINGS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION WORK WITH ARCHITECTURAL AND ELECTRICAL DESIGN. ALL DUCTWORK SHALL BE MODIFIED AS NECESSARY AND REQUIRED TO FIT AROUND BUILDING STRUCTURES, ARCHITECTURAL BUILD-OUT AND ELECTRICAL CABLE TRAY INSTALLATIONS. MECHANICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE WORK SCOPE OF OTHER TRADES AND PARTICIPATE IN COORDINATING ALL CONSTRUCTION EFFORTS.
CONTROL DAMPER			PCWR	PRIMARY CHILLED WATER RETURN		HUMIDISTAT	BD	BLOWDOWN	NC	NORMALLY CLOSED	
VOLUME DAMPER, MANUAL			SOWS	SECONDARY CHILLED WATER SUPPLY		RELATIVE HUMIDITY SENSOR	BF	BLIND FLANGE	NK	NECK	4. CONTRACTOR SHALL INSTALL ALL EXHAUST SYSTEMS, INCLUDING FANS AND EXHAUST DUCTS. PROVIDE COMPLETE NEW SYSTEMS AS INDICATED.
DUCT ELBOW WITH TURNING VANES			SOWR	SECONDARY CHILLED WATER RETURN		THERMOSTAT OR TEMPERATURE SENSOR (MOUNT 48" AFF)	BFP	BACKFLOW PREVENTER	NO	NORMALLY OPEN OR NUMBER	
DUCT SECTION - SUPPLY AIR			D	DRAIN		TIME CLOCK	BFV	BUTTERFLY VALVE	NTS	NOT TO SCALE	5. CONTRACTOR SHALL PROVIDE ALL CEILING DIFFUSERS AS SHOWN. CONNECT EACH DIFFUSER TO THE MAIN DISTRIBUTION DUCT WITH A FLEX-DUCT SECTION; CONNECTIONS SHALL BE COMPLETED IN ACCORDANCE WITH THE DETAIL. EACH FLEX-DUCT CONNECTION SHALL INCLUDE A BUTTERFLY DAMPER TO BE INSTALLED AT THE TRUNK DUCT.
DUCT SECTION - EXHAUST AIR			DP	DIRECTION OF PITCH (DOWN)		FREEZESTAT	BHP	BRAKE HORSEPOWER	OA	OUTSIDE AIR	
DUCT SECTION - RETURN, OUTSIDE, OR RELIEF AIR			DFD	FLUID FLOW DIRECTION		DIFFUSER, GRILLE OR REGISTER MARK	BLV	BALANCING VALVE	OBD	OPPOSED BLADE DAMPER	6. CONTRACTOR SHALL PROVIDE ALL DUCTWORK REQUIRED TO COMPLETE THE HVAC SYSTEM. FIT IN BRANCH DUCTS TO MAIN DUCTS WITH SHEET METAL FLANGES. FLANGE CONNECTION SHALL BE FASTENED WITH CRIMPED SHEET METAL STRIPS AND SEALED WITH SILICONE CAULK.
DUCT, INCLINED DROP			SV	SECTIONAL VALVE (SEE SPECS)		AIR FLOW (CFM)	BOD	BOTTOM OF DUCT			
DUCT, INCLINED RISE			GV	GATE VALVE		RECTANGULAR FACE SIZE (WHERE APPLICABLE)	BOP	BOTTOM OF PIPE			7. CONTRACTOR SHALL SUPPLY AND INSTALL FIRE DAMPERS AND ACCESS DOORS IN THE HORIZONTAL DUCTS WHERE THEY PENETRATE FIRE BARRIERS.
FLEXIBLE DUCT - ROUND			CV	CHECK VALVE		ANGLE VALVE	BOS	BOTTOM OF STEEL			
DUCT TRANSITION			TV	THROTTLING VALVE (SEE SPECS)		SOLENOID VALVE	BV	BALL VALVE			8. CONTRACTOR SHALL PROVIDE FIRE DAMPERS IN ALL DIFFUSERS AND GRILLES LOCATED IN FIRE RATED CEILINGS. ALL HALLWAY DIFFUSERS AND GRILLES SHALL BE INSTALLED WITH FIRE DAMPERS. ALL DIFFUSERS AND GRILLES SHOWN WITH A CIRCLED "F" SHALL BE EQUIPPED WITH FIRE DAMPERS.
DUCT TRANSITION (SQUARE OR RECTANGULAR TO ROUND)			3CV	3-WAY MOTOR OPERATED CONTROL VALVE		2-WAY CONTROL VALVE					
RECTANGULAR DUCT, SIZE IN INCHES, FIRST DIMENSION IS SIDE SHOWN (NET CLEAR INSIDE DIMENSION)			3WCV	3-WAY MOTOR OPERATED CONTROL VALVE		3-WAY CONTROL VALVE					9. ALL OPENINGS CUT IN MASONRY AND PLASTER WALLS OR CONCRETE FLOORS SHALL BE PATCHED OR SAWN WHEN POSSIBLE. CONTRACTOR SHALL CHECK BUILDING CONSTRUCTION BEFORE MAKING PENETRATIONS TO AVOID CUTTING THROUGH STRUCTURAL BEAMS AND REINFORCING. CONTRACTOR SHALL INFORM THE ENGINEER IF REINFORCING IS CUT OR DAMAGED WHILE MAKING OPENINGS. CONTRACTOR SHALL REINFORCE ALL OPENINGS AS REQUIRED BY DRAWINGS AND SPECIFICATIONS. PATCH AND SEAL OPENINGS WITH 6000 PSI CEMENT GROUT. INSTALL DECORATIVE TRIM (EQUIPMENT FLANGES, FRAMING OR ESCUTCHEONS) AROUND OPENINGS IN FINISHED AREAS. COORDINATE ALL CUTTING AND PATCHING WITH THE OTHER TRADES.
ROUND DUCT, DIAMETER IN INCHES (NET CLEAR INSIDE DIMENSION)			TRDV	TRIPLE DUTY VALVE		TRIPLE DUTY VALVE					
AIR FLOW IN DIRECTION OF ARROW			PV	PLUG VALVE		MATCHLINE					10. ON ANY WORK SHOWN ON MECHANICAL DRAWINGS REQUIRING DEMOLITION OF EXISTING OR NEW BUILDING STRUCTURES AND FINISHES, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETE THE NECESSARY DEMOLITION. CONTRACTOR SHALL PATCH AND REPAIR ALL DEMOLITION WORK. PATCHING SHALL BE COMPLETED WITH THE SAME MATERIALS AS THE SURROUNDING AREAS, OR WITH ARCHITECT-APPROVED PATCHING MATERIALS. REPAIRS SHALL BE COMPLETED ACCORDING TO ARCHITECTURAL SPECIFICATIONS. ALL REFINISHING SHALL BE APPROVED BY THE ARCHITECT.
45° BRANCH TAKE-OFFS			FCV	FLOW CONTROL VALVE		LINE WITH HATCHING DESIGNATES DEMOLITION WORK					
CONICAL LATERAL BRANCH TAKE-OFFS			FLA	FULL LOAD AMP							11. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE INSTALLATION OF THE AIR DISTRIBUTION SYSTEM SHOWN. DUCTWORK, DUCT ACCESSORIES AND CONTROLS SHOWN AND REQUIRED SHALL BE SUPPLIED AND INSTALLED. ALL INSTALLATION WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE CODES, INCLUDING NFPA 90A AND 90B.
CEILING SUPPLY DIFFUSERS			FLX	FLEXIBLE							
CEILING RETURN GRILLE/REGISTER			FM	FLOW METER							12. CONTRACTOR SHALL BALANCE ALL AIR DISTRIBUTION SYSTEMS TO ACHIEVE THE AIR VOLUME REQUIREMENTS INDICATED. BALANCING SHALL INCLUDE ADJUSTMENT OF ALL MANUAL VOLUME DAMPERS, SPLITTER DAMPERS, ZONE DAMPERS (IF REQUIRED), AND BUTTERFLY DAMPERS. CONTRACTOR SHALL SUPPLY THE ENGINEER WITH A COMPLETE BALANCING REPORT WHICH INCLUDES VOLUME, ROOM REFERENCE AND ZONE VOLUME TOTALS.
CEILING EXHAUST FAN (EF-...)			FWL	FIXED WALL LOUVER							
CEILING EXHAUST GRILLE/REGISTER			GR	GRILLE							13. MOUNT ALL THERMOSTATS (SENSORS) 48" ABOVE THE FINISHED FLOOR LEVEL UNLESS NOTED OTHERWISE. THERMOSTATS SHOWN SHALL BE IN CONTROL OF THE ZONE SYSTEM WHICH IS SUPPLYING AIR TO THE AREA WHERE THE THERMOSTAT IS LOCATED. CONTRACTOR SHALL COORDINATE THE FINAL LOCATION OF EACH THERMOSTAT WITH THE ROOM FINISHES AND USES. CONTRACTOR SHALL SUPPLY AND INSTALL ALL CONTROL VOLTAGE WIRING AND CONDUIT FOR THERMOSTAT (DDC CONTROL) INSTALLATION.
SIDEWALL SUPPLY GRILLE/REGISTER			GV	GATE VALVE							
SIDEWALL RETURN/EXHAUST GRILLE/REGISTER			HZ	CYCLES PER SECOND (HERTZ)							14. CONTRACTOR SHALL COORDINATE THE FINAL LOCATIONS OF ALL CEILING DIFFUSERS WITH LIGHTING INSTALLATIONS AND ARCHITECTURAL REFLECTED CEILING PLANS. MOVE THE DIFFUSER LOCATIONS IF REQUIRED TO AVOID OBSTRUCTIONS FROM DUCTWORK AND LIGHT FIXTURES. COORDINATE RELOCATION WITH ENGINEER.
EXTRACTOR			KW	KILOWATT							
DUCT TEE WITH SPLITTER DAMPER			LAT	LEAVING AIR TEMPERATURE							15. CONTRACTOR SHALL INSTALL NEW REFRIGERANT PIPING FLUSH WITH THE BUILDING STRUCTURE AND MECHANICAL ROOM BOUNDARIES AS SHOWN. CONTRACTOR SHALL COORDINATE ALL INSTALLATION WORK WITH DUCTS AND ELECTRICAL CONDUIT. MECHANICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE WORK SCOPE OF OTHER TRADES AND PARTICIPATE IN COORDINATING ALL CONSTRUCTION EFFORTS.
DOOR UNDERCUT			LDB	LEAVING DRYBULB TEMPERATURE							
DOOR LOUVER			LWT	LEAVING WATER TEMPERATURE							16. ALL PIPING SHALL BE INSULATED AND JACKETED. REFER TO THE SPECIFICATIONS. CONDENSER COILS ARE TO BE COATED IN ACCORDANCE WITH THE SPECIFICATIONS
											17. VERIFY THE LOCATION OF ALL WALLS, PARTITIONS, DOORS, CABINETS, AND CEILINGS FROM ACTUAL FIELD MEASUREMENTS.
											18. PROVIDE SMOKE DETECTOR AND SHUTDOWN CONTROLS ON AIR HANDLERS AND SUPPLY FANS. SMOKE DETECTORS SHALL BE PROVIDED, INSTALLED AND WIRED FOR SHUT DOWN BY DIVISION 16. PROVIDE BOTH SUPPLY AND RETURN SIDE DEVICES.

AIRFLOW DIAGRAM SYMBOLS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	COOLING COIL		MOTORIZED OPPOSED BLADE DAMPER
	HEATING COIL		MOTORIZED PARALLEL BLADE DAMPER
	LOUVER		FAN STARTER
	BACKDRAFT DAMPER		FAN
	FIRE/SMOKE DAMPER		FAN WITH ADJUSTABLE FREQUENCY MOTOR CONTROLLER
	AIR FLOW MEASURING STATION		

EQUIPMENT ABBREVIATIONS			
AAV	AUTOMATIC AIR VALVE	FCU	FAN COIL CONDENSING UNIT
AFF	ABOVE FINISHED FLOOR	FPB	FAN POWER BOX
AFMS	AIR FLOW MEASURING STATION	GFUH	GAS FIRED UNIT HEATER
AMB	AMBIENT	HC	HOT WATER HEATING COIL
APD	AIR PRESSURE DROP	HWP	HOT WATER PUMP
BD	BLOWDOWN	OAH	OUTSIDE AIR HOOD
BF	BLIND FLANGE	L	LOUVER
BFP	BACKFLOW PREVENTER	P	PRIMARY PUMP
BFV	BUTTERFLY VALVE	PTAC	PACKAGE TERMINAL AIR CONDITIONING
BHP	BRAKE HORSEPOWER	RH	RELIEF HOOD
BLV	BALANCING VALVE	REFR	RELIEF HOOD EXHAUST FAN
BOD	BOTTOM OF DUCT	RTU	ROOF TOP UNIT
BOP	BOTTOM OF PIPE	SDB	SINGLE DUCT BOX
BOS	BOTTOM OF STEEL	SP	SECONDARY PUMP
BV	BALL VALVE	ST	CHILLED WATER STORAGE TANK
CAP	CAPACITY	VAV	VARIABLE AIR VOLUME BOX
CCMS	CENTRAL CONTROL MONITORING SYSTEM	VFD	VARIABLE FREQUENCY DRIVE
CENT	CENTRIFUGAL		
CMBST	COMBUSTION AIR		
CL	CENTERLINE		
CV	CONTROL VALVE OR CONSTANT VOLUME		
CHWS	CHILLED WATER SUPPLY		
CHWR	CHILLED WATER RETURN		
D	DIFFUSER OR DAMPER		
DB	DRY BULB		
DEG	DEGREES		
DIA	DIAMETER		
DN	DOWN		
DX	DIRECT EXPANSION		
EAT	ENTERING AIR TEMPERATURE	SA	SUPPLY AIR
EDB	ENTERING DRYBULB TEMPERATURE	SENS	SENSIBLE
EFF	EFFICIENCY	SL	SOUND LINING
ENT	ENTERING	SD	SMOKE DETECTOR
ESP	EXTERNAL STATIC PRESSURE	SOV	SOLENOID OPERATED VALVE OR SHUT-OFF VALVE
ENB	ENTERING WET BULB	SP	STATIC PRESSURE
ENT	ENTERING WATER TEMPERATURE	SS	STAINLESS STEEL
FCV	FLOW CONTROL VALVE	SCW	SECONDARY CHILLED WATER
FLA	FULL LOAD AMP	SCWS	SECONDARY CHILLED WATER SUPPLY
FLX	FLEXIBLE	SCWR	SECONDARY CHILLED WATER RETURN
FM	FLOW METER	SCWP	SECONDARY CHILLED WATER PUMP
FWL	FIXED WALL LOUVER		
GR	GRILLE	TOD	TOP OF DUCT
GV	GATE VALVE	TOP	TOP OF PIPE
		TOS	TOP OF STEEL
		TS	TEMPERATURE SENSOR
		TSTAT	THERMOSTAT
		TSP	TOTAL STATIC PRESSURE
		UNO	UNLESS NOTED OTHERWISE
		VEL	VELOCITY
		VFD	VARIABLE FREQUENCY DRIVE
		VTR	VENT THROUGH ROOF
		WB	WET BULB
		WPD	WATER PRESSURE DROP
		WTR	WATER
		WxHxL	WIDTH BY HEIGHT BY LENGTH

1. INFORMATION ON THIS PLAN HAS BEEN OBTAINED FROM EXISTING DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK. ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND CONSTRUCTION DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER AND/OR ARCHITECT.

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3. CONTRACTOR SHALL HANG AND INSTALL ALL DUCTWORK TIGHT WITH THE BUILDING STRUCTURE WHEN FEASIBLE TO ACCOMMODATE NEW CEILINGS. CONTRACTOR SHALL COORDINATE ALL INSTALLATION WORK WITH ARCHITECTURAL AND ELECTRICAL DESIGN. ALL DUCTWORK SHALL BE MODIFIED AS NECESSARY AND REQUIRED TO FIT AROUND BUILDING STRUCTURES, ARCHITECTURAL BUILD-OUT AND ELECTRICAL CABLE TRAY INSTALLATIONS. MECHANICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE WORK SCOPE OF OTHER TRADES AND PARTICIPATE IN COORDINATING ALL CONSTRUCTION EFFORTS.

4. CONTRACTOR SHALL INSTALL ALL EXHAUST SYSTEMS, INCLUDING FANS AND EXHAUST DUCTS. PROVIDE COMPLETE NEW SYSTEMS AS INDICATED.

5. CONTRACTOR SHALL PROVIDE ALL CEILING DIFFUSERS AS SHOWN. CONNECT EACH DIFFUSER TO THE MAIN DISTRIBUTION DUCT WITH A FLEX-DUCT SECTION; CONNECTIONS SHALL BE COMPLETED IN ACCORDANCE WITH THE DETAIL. EACH FLEX-DUCT CONNECTION SHALL INCLUDE A BUTTERFLY DAMPER TO BE INSTALLED AT THE TRUNK DUCT.

6. CONTRACTOR SHALL PROVIDE ALL DUCTWORK REQUIRED TO COMPLETE THE HVAC SYSTEM. FIT IN BRANCH DUCTS TO MAIN DUCTS WITH SHEET METAL FLANGES. FLANGE CONNECTION SHALL BE FASTENED WITH CRIMPED SHEET METAL STRIPS AND SEALED WITH SILICONE CAULK.

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8. CONTRACTOR SHALL PROVIDE FIRE DAMPERS IN ALL DIFFUSERS AND GRILLES LOCATED IN FIRE RATED CEILINGS. ALL HALLWAY DIFFUSERS AND GRILLES SHALL BE INSTALLED WITH FIRE DAMPERS. ALL DIFFUSERS AND GRILLES SHOWN WITH A CIRCLED "F" SHALL BE EQUIPPED WITH FIRE DAMPERS.

9. ALL OPENINGS CUT IN MASONRY AND PLASTER WALLS OR CONCRETE FLOORS SHALL BE PATCHED OR SAWN WHEN POSSIBLE. CONTRACTOR SHALL CHECK BUILDING CONSTRUCTION BEFORE MAKING PENETRATIONS TO AVOID CUTTING THROUGH STRUCTURAL BEAMS AND REINFORCING. CONTRACTOR SHALL INFORM THE ENGINEER IF REINFORCING IS CUT OR DAMAGED WHILE MAKING OPENINGS. CONTRACTOR SHALL REINFORCE ALL OPENINGS AS REQUIRED BY DRAWINGS AND SPECIFICATIONS. PATCH AND SEAL OPENINGS WITH 6000 PSI CEMENT GROUT. INSTALL DECORATIVE TRIM (EQUIPMENT FLANGES, FRAMING OR ESCUTCHEONS) AROUND OPENINGS IN FINISHED AREAS. COORDINATE ALL CUTTING AND PATCHING WITH THE OTHER TRADES.

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13. MOUNT ALL THERMOSTATS (SENSORS) 48" ABOVE THE FINISHED FLOOR LEVEL UNLESS NOTED OTHERWISE. THERMOSTATS SHOWN SHALL BE IN CONTROL OF THE ZONE SYSTEM WHICH IS SUPPLYING AIR TO THE AREA WHERE THE THERMOSTAT IS LOCATED. CONTRACTOR SHALL COORDINATE THE FINAL LOCATION OF EACH THERMOSTAT WITH THE ROOM FINISHES AND USES. CONTRACTOR SHALL SUPPLY AND INSTALL ALL CONTROL VOLTAGE WIRING AND CONDUIT FOR THERMOSTAT (DDC CONTROL) INSTALLATION.

14. CONTRACTOR SHALL COORDINATE THE FINAL LOCATIONS OF ALL CEILING DIFFUSERS WITH LIGHTING INSTALLATIONS AND ARCHITECTURAL REFLECTED CEILING PLANS. MOVE THE DIFFUSER LOCATIONS IF REQUIRED TO AVOID OBSTRUCTIONS FROM DUCTWORK AND LIGHT FIXTURES. COORDINATE RELOCATION WITH ENGINEER.

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18. PROVIDE SMOKE DETECTOR AND SHUTDOWN CONTROLS ON AIR HANDLERS AND SUPPLY FANS. SMOKE DETECTORS SHALL BE PROVIDED, INSTALLED AND WIRED FOR SHUT DOWN BY DIVISION 16. PROVIDE BOTH SUPPLY AND RETURN SIDE DEVICES.

AIRFLOW DIAGRAM SYMBOLS

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	BACKDRAFT DAMPER		FAN
	FIRE/SMOKE DAMPER		FAN WITH ADJUSTABLE FREQUENCY MOTOR CONTROLLER
	AIR FLOW MEASURING STATION		

EQUIPMENT ABBREVIATIONS

AHU	AIR HANDLING UNIT	FCU	FAN COIL CONDENSING UNIT
ACU	AIR CONDENSING UNIT	FPB	FAN POWER BOX
ACCU	AIR COOLED CONDENSING UNIT	GFUH	GAS FIRED UNIT HEATER
AS	AIR SEPARATOR	HC	HOT WATER HEATING COIL
B	BOILER	HWP	HOT WATER PUMP
BCU	BLOWER COIL UNIT	OAH	OUTSIDE AIR HOOD
CC	COOLING COIL	L	LOUVER
CF	CHEMICAL FEEDER	P	PUMP
CH	CHILLER	PP	PRIMARY PUMP
CP	CONDENSOR PUMP	PTAC	PACKAGE TERMINAL AIR CONDITIONING
CRAC	COMPUTER ROOM AIR CONDITIONER	RH	RELIEF HOOD
CROU	COMPUTER ROOM CONDENSING UNIT	RHEF	RELIEF HOOD EXHAUST FAN
CT	COOLING TOWER	RTU	ROOF TOP UNIT
CWP	CHILLED WATER PUMP	SDB	SINGLE DUCT BOX
EDH	ELECTRIC DUCT HEATER	SP	SECONDARY PUMP
DC	DUST COLLECTOR	ST	CHILLED WATER STORAGE TANK
EF	EXHAUST FAN	VAV	VARIABLE AIR VOLUME BOX
EH	ELECTRIC HEATER	VFD	VARIABLE FREQUENCY DRIVE
ET	EXPANSION TANK		
F	FILTER		
FCU	FAN COIL UNIT		

Hidalgo County Sheriff's Office -
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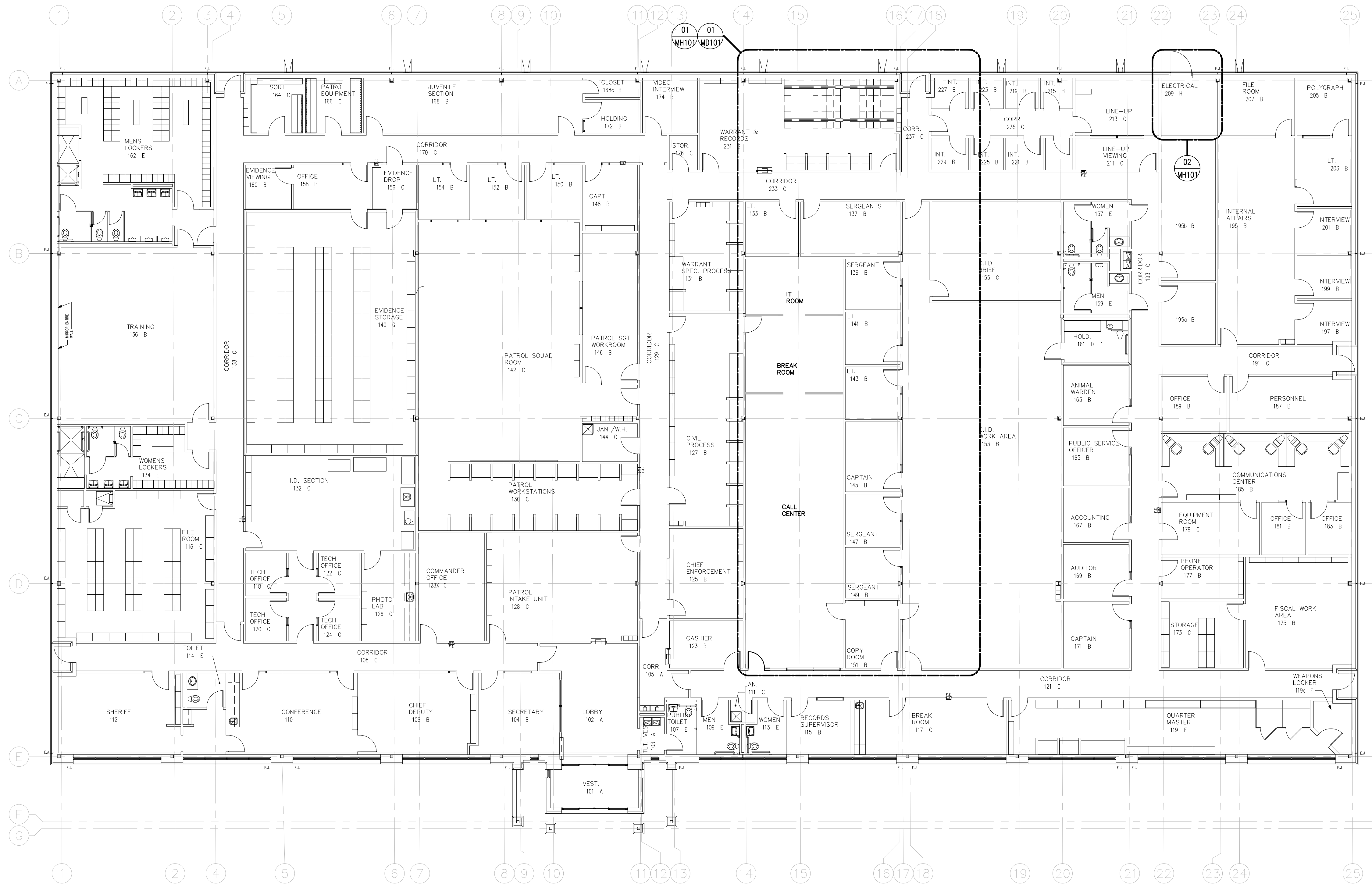
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Project No.:	29607 (WA01)
Issued:	08 / 30 / 13
Drawn By:	MH / BB
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Scale:	AS NOTED
Sheet Title	MECHANICAL GENERAL LEGEND
M001	
Sheet Number	

File Name: I:\29000a\29607\WA01\CADD\DWG\M101 MECHANICAL OVERALL PLAN.dwg
Current Tab (Layout): M101 MECHANICAL OVERALL PLAN User: AH2522
Printed Date: 8/30/2013 3:58:54 PM



GENERAL NOTES:

1. REFER TO SHEET MH001 FOR GENERAL MECHANICAL NOTES.

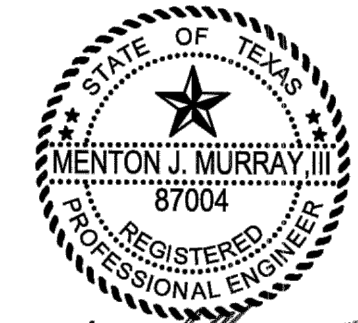
Hidalgo County Sheriff's Office -
Modifications to Incorporate Motorola
and 911 Equipment
Edinburg, Texas



HALFF

5000 WEST MILITARY, SUITE 100
EDINBURG, TEXAS 78541
TEL: (361) 964-0286
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TDP# FIRM #F-312

Revision No.	Date	Description



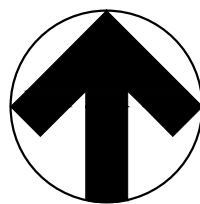
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MECHANICAL OVERALL PLAN

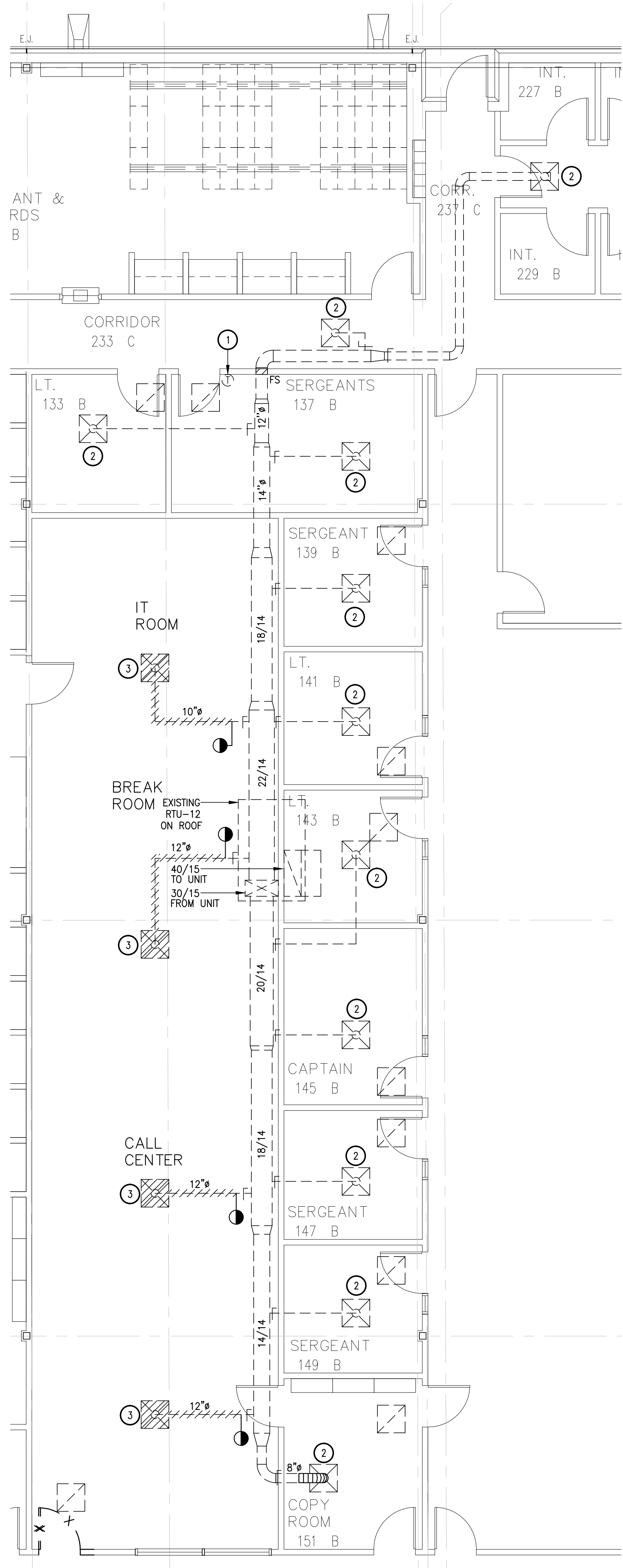
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01 ENLARGED EXISTING MECHANICAL PLAN

SCALE: 3/16" = 1'-0"



GENERAL DEMOLITION NOTES:

1. INFORMATION ON THE PLAN HAS BEEN OBTAINED FROM EXISTING DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK. ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND CONSTRUCTION DOCUMENTS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER AND/OR ARCHITECT.
2. THE CONTRACTOR IS FULLY RESPONSIBLE FOR PERFORMING THE DEMOLITION WORK UNDER THIS SECTION OF THE PROJECT IN FULL COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES. IF THE CONTRACTOR DETERMINES THAT THE CONTRACT DOCUMENTS AND PLANS ARE NOT IN COMPLIANCE WITH THE APPLICABLE CODES, HE SHALL INFORM THE ARCHITECT PRIOR TO CONSTRUCTION START FOR DIRECTION. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO MEET CODE REQUIREMENTS AND REWORK SHALL BE AT CONTRACTOR'S EXPENSE. APPLICABLE CODES AND STANDARDS ON DEMOLITION WORK SHALL INCLUDE THOSE PUBLISHED BY OSHA AND EPA. AN ASBESTOS SURVEY SHALL BE KEPT ON SITE AT ALL TIMES PER TEXAS DEPARTMENT OF HEALTH REQUIREMENTS.
3. ALL DUST PRODUCTION, SMOKE PRODUCTION AND NOISE SHALL BE SUBJECT TO REAL TIME REVIEW BY THE ARCHITECT. WORK SHALL BE SHUT DOWN DURING CRITICAL ACTIVITIES BY FORMAL REQUEST FROM THE DESIGNATED AUTHORITY OR CONTRACTING ARCHITECT. WORK IN DUSTY AREAS SHALL BE CONTROLLED WITH TEMPORARY PARTITIONS. FLAME CUTTING SHALL BE MINIMIZED TO ELIMINATE SMOKE PRODUCTION. PROVIDE FIRE EXTINGUISHERS IN THE IMMEDIATE AREA.
4. GENERAL CONTRACTOR SHALL BE ADVISED OF ALL NEW PROPOSED ROOF OPENINGS BY ANY SUB-CONTRACTOR.
5. ON ANY WORK SHOWN ON MECHANICAL DRAWINGS WHICH REQUIRES DEMOLITION OF BUILDING STRUCTURES AND FINISHES, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETE THE NECESSARY DEMOLITION. CONTRACTOR SHALL PATCH AND REPAIR ALL BUILDING DAMAGE CREATED BY DEMOLITION WORK. PATCHING SHALL BE COMPLETED WITH THE SAME MATERIALS AS THE SURROUNDING AREAS, OR WITH ARCHITECT APPROVED PATCHING MATERIALS.
6. ALL OPENINGS CUT IN MASONRY AND PLASTER WALLS OR CONCRETE FLOORS SHALL BE CORE-DRILLED OR SAWED WHEN POSSIBLE. CONTRACTOR SHALL CHECK BUILDING CONSTRUCTION WITH STRUCTURAL ENGINEER BEFORE MAKING PENETRATIONS TO AVOID CUTTING THROUGH STRUCTURAL BEAMS AND REINFORCING. CONTRACTOR SHALL INFORM THE ENGINEER IF REINFORCING IS CUT OR DAMAGED WHILE MAKING OPENINGS AS REQUIRED BY DRAWINGS AND SPECIFICATIONS. PATCH AND SEAL OPENINGS WITH 8000 PSI CEMENT GROUT. INSTALL DECORATIVE TRIM (EQUIPMENT FLANGES, FRAMING, OR ESCUTCHEONS) AROUND OPENINGS IN FINISHED AREAS. COORDINATE ALL CUTTING AND PATCHING WITH THE OTHER TRADES.
7. ALL SURFACES COVERED BY "SPRAY POLY" AND PROTECTED BY TEMPORARY PARTITIONS SHALL REMAIN PROTECTED THROUGHOUT THE PROJECT. REMOVE THE PROTECTIVE BARRIERS ONLY AFTER THE NEW EQUIPMENT PIPING AND DUCTWORK IS INSTALLED. PATCH AND MAINTAIN THE PROTECTIVE BARRIERS DURING CONSTRUCTION. COVER ALL EQUIPMENT OPENINGS WITH 4 MIL. POLY AND DUCT TAPE IN PLACE.
8. ALL NEW ROOF PENETRATIONS SHALL BE ROUTED THRU ANY EXISTING OPENING WHEREVER POSSIBLE. LARGER AND NEW OPENINGS SHALL BE KEPT TO A MINIMUM.
9. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL UNDERGROUND UTILITIES IN AREAS OF EXCAVATION WORK.
10. CONTRACTOR SHALL REMOVE AND RETURN ANY AND ALL EXISTING EQUIPMENT/MATERIALS TO OWNER. OWNER SHALL HAVE FULL RIGHT OF OWNERSHIP UNLESS SPECIFIED OTHERWISE. IF THE OWNER WAIVES THIS OPTION, ANY EQUIPMENT, MATERIAL, ETC SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
11. CONTRACTOR SHALL KEEP THE ENTIRE MEP DEMOLITION SITE CLEAN AT ALL TIMES.
12. CONTRACTOR AND OWNER SHALL BE FULLY RESPONSIBLE TO IDENTIFY ANY AND ALL ASBESTOS PRESENT IN THE BUILDING PRIOR TO DEMOLITION AS REQUIRED BY LAW.
13. COORDINATION AMONG OTHER CONSTRUCTION DISCIPLINES PRIOR TO DEMOLITION IS MANDATORY.
14. CONTRACTOR SHALL IDENTIFY ALL WATER CONNECTION LINES, NATURAL GAS LINES AND SANITARY SEWER LINES PRIOR TO COMMENCING DEMOLITION WORK.

KEY NOTES: ④

1. EXISTING TEMPERATURE SENSOR SHALL BE REMOVED TO BE RELOCATED. PATCH AND SEAL TO MATCH EXISTING CONDITIONS.
2. EXISTING DIFFUSERS SHALL BE RE-BALANCED. REFER TO SHEET MH101 FOR NEW AIRFLOW REQUIREMENTS.
3. REMOVE DIFFUSER AND ASSOCIATED FLEX DUCT AND BRANCH DUCT TO LOCATION SHOWN ON PLANS.

Hidalgo County Sheriff's Office -
Modifications to Incorporate Motorola
and 911 Equipment
Edinburg, Texas



5000 WEST MILITARY, SUITE 100
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TEL (956) 864-0286
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TBP# FIRM #F-312

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Project No.:	29607 (WA01)
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Sheet Title	EXISTING MECHANICAL PLAN

MD101

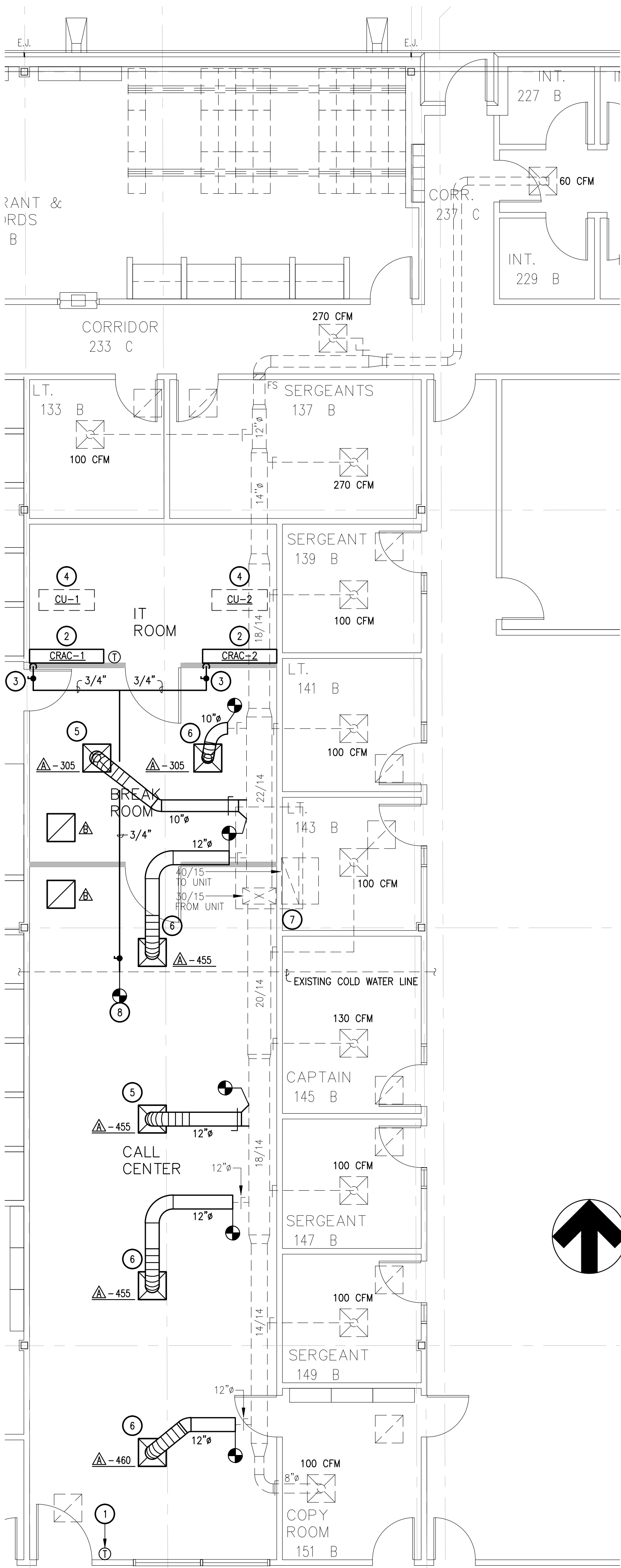
Sheet Number

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Current Tab (Layout): MH101 ENLARGED MECHANICAL PLAN User: AH2522
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TRANSFER FAN SCHEDULE												
MARK	CFM	SERVICE	LOCATION	TYPE	RPM	EXT SP (IN WG)	HP	DRIVE	VOLTAGE	MAX. SONES	CONTROL	MFGR.
TF-1	465	ELECTRICAL 209	PLENUM	CABINET	1023	0.3	178w	DIRECT	120/1	0.8	THERMOSTAT	L. COOK
NOTES												
1. FAN SHALL HAVE INTEGRAL DISCONNECT SWITCH FROM FACTORY. 2. PROVIDE PREMIUM EFFICIENT MOTOR. 3. MOUNT WITH NEOPRENE ISOLATORS. 4. FAN SHALL BE PROVIDED WITH FAN SPEED CONTROLLER. 5. OPERATED VIA EXISTING THERMOSTAT. INTERLOCK TRANSFER FAN WITH EXISTING EXHAUST FAN.												

CRAC UNIT SCHEDULE		
INDOOR UNIT MARK	CRAC-1	CRAC-2
MAX SUPPLY CFM	1320	1320
FAN MOTOR HP	0.27	0.27
TOTAL COOLING CAP. (BTUH)	32,700	32,700
SENSIBLE COOLING CAP. (BTUH)	28,000	28,000
REHEAT CAPACITY (KW)	5.5	5.5
HUMIDIFIER INPUT POWER (KW)	1	1
VOLTAGE/PHASE	208-230/1	208-230/1
MCA	37.5	37.5
MAX. FUSE SIZE	40	40
FLA	30	30
MANUFACTURER	LIEBERT	LIEBERT
MODEL NO.	DME037E	DME037E
WEIGHT (LBS)	365	365
CONDENSING UNIT MARK	CU-1	CU-2
VOLTAGE/PHASE	208-230/1	208-230/1
MCA	23.8	23.8
MAX. FUSE SIZE (AMPS)	40	40
AMB. AIR TEMP. (°F)	95	95
REFRIGERANT	R-407C	R-407C
MANUFACTURER	LIEBERT	LIEBERT
MODEL NO.	PFH037A-PL7	PFH037A-PL7
WEIGHT (LBS)	241	351
NOTES	ALL	ALL
NOTES: 1. PROVIDE NON-LOCKING DISCONNECT AT EVAPORATOR AND CONDENSER. 2. PROVIDE AUTO-CHANGEOVER SWITCH (AC-4) TO STAGE UNITS. 3. PROVIDE LIEBERT WALL-BOX CONTROL. 4. INCLUDE HUMIDIFIER & ELECTRIC REHEAT PACKAGE. 5. PROVIDE DUAL FLOAT CONDENSATE PUMP. 6. BOTH LIQUID AND SUCTION LINES MUST BE INSULATED. 7. INSTALL PER MANUFACTURER'S INSTRUCTIONS AND PIPING RECOMMENDATIONS. 8. CONFIGURE ALARMS PER OWNER'S REQUIREMENTS.		

GRILLE/DIFFUSER/REGISTER SCHEDULE					
MARK	SERVICE	DESCRIPTION	MANUFACTURER MODEL NO.	MAX. NC. LEVEL (1)	REMARKS
A	SUPPLY	24"X24" PERFORATED FACE, ALUMINUM CEILING SUPPLY DIFFUSER WITH BORDER FOR LAY-IN CEILING, 4-WAY THROW, ROUND NECK, NECK SIZE AS INDICATED BELOW.	TITUS PAS-AA	30	#26 WHITE FINISH
B	RETURN	24"X24" PERFORATED FACE, ALUMINUM CEILING RETURN DIFFUSER WITH BORDER FOR LAY-IN CEILING.	TITUS PAR-AA	35	#26 WHITE FINISH
C	RETURN	SURFACE MOUNTED RETURN GRILLE WITH 3/4" SPACING. ALUMINUM CONSTRUCTION, 35 DEGREES DEFLECTION.	TITUS 350FL	30	#26 WHITE FINISH
AIR OUTLET DESIGNATION ON PLANS			NECK/FLEXIBLE CAPACITY CONNECTION		
MARK → Δ - 200 ← AIR FLOW (CFM)			0-185 6"		
12 X 8 ← RECTANGULAR FACE SIZE (WHERE APPLICABLE)			186-270 8"		
			271-360 10"		
			361-470 12"		
			471-570 14"		
			571-680 16"		



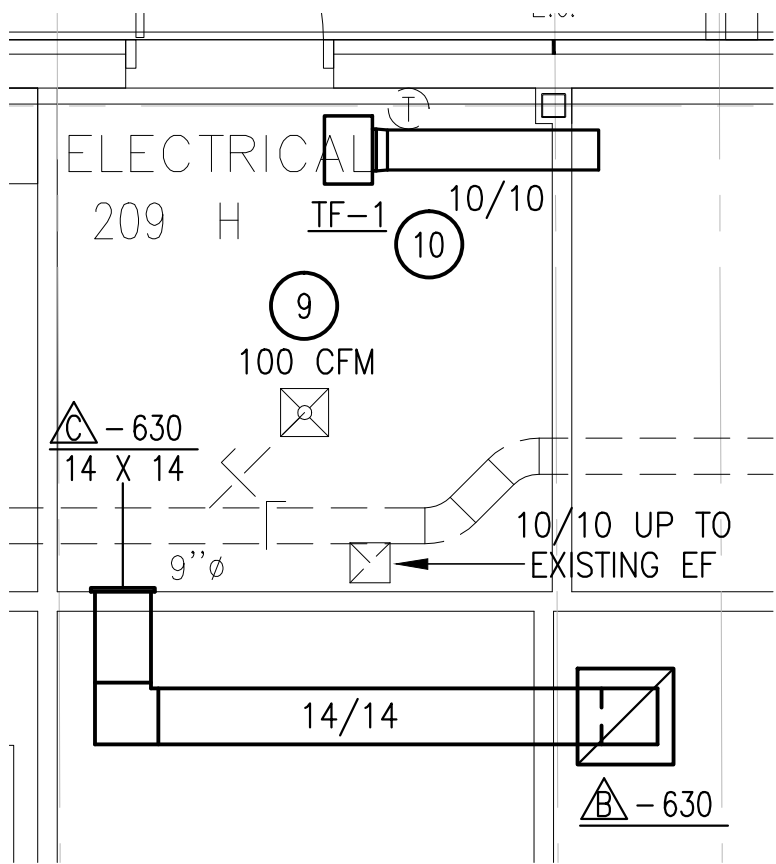
01 ENLARGED MECHANICAL PLAN
SCALE: 3/16" = 1'-0"

GENERAL NOTES:

- REFER TO SHEET MH001 FOR GENERAL MECHANICAL NOTES.
- RE-BALANCE RTU-12 TO VALUES SHOWN ON PLAN. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING EXISTING RTU (COILS, FAN, INTERNAL PATH, ETC.) COMPLETE AND PROVIDING NEW BELTS, SHEAVES, ETC. AS REQUIRED TO ESTABLISH NEW AIRFLOWS. ALL DAMPERS/ACTUATORS SHALL BE VERIFIED OPERATIONALLY (AND BE REPLACED AS NEEDED). ALL OTHER COMPONENT AND SAFETIES SHALL BE VERIFIED OPERATIONALLY.
- FIELD VERIFY ALL EXISTING CONDITIONS.

KEY NOTES: ⊕

- RELOCATED TEMPERATURE SENSOR FROM SERGEANTS-137. NEW CONDUCTORS SHALL BE ROUTED IN CONCEALED LOCATIONS.
- COMBINE 3" CONDENSATE DRAIN LINES FROM CRAC UNIT'S CONDENSATE PUMP AND ROUTE ABOVE CEILING TO JAN/WH-144. TERMINATE AT MOP BASIN. DRAIN LINE SHALL BE RATED FOR 212°F. FIRE CAULK AND SEAL ANY IT ROOM PENETRATIONS.
- CONNECT 3" PIPE TO CRAC UNIT HUMIDIFIER USING REDUCER AS REQUIRED. PROVIDE AN ISOLATION VALVE AT EACH UNIT FOR SERVICEABILITY. FIRE CAULK AND SEAL ANY IT ROOM PENETRATIONS.
- CONDENSING UNIT ON ROOF. PROVIDE NEW EQUIPMENT CANT FOR CONDENSING UNIT. PATCH ROOF AT NEW CANT LOCATIONS AND ROOF PENETRATIONS WATERTIGHT. COORDINATE EXACT LOCATION WITH EXISTING ROOF JOISTS AND CEILING STRUCTURE BELOW. ALL ROOFING WORK SHALL BE PERFORMED IN ACCORDANCE WITH EXISTING ROOF WARRANTY TO MAINTAIN THIS WARRANTY. FIRE CAULK AND SEAL ANY IT ROOM PENETRATIONS.
- PROVIDE NEW DIFFUSER AND ROUTE DUCTWORK AS SHOWN ON PLAN. PROVIDE NEW TAP AND DAMPER AT MAIN BRANCH DUCT. RE-INSULATE MAIN DUCTWORK AS NECESSARY.
- PROVIDE NEW DIFFUSER AND ROUTE DUCTWORK AS SHOWN. CONNECT TO EXISTING BRANCH DUCT. RE-INSULATING BRANCH DUCT AS NECESSARY.
- PLUG CONDENSATE DRAIN OPENING ON SOUTHERN WALL OF RTU, ON ROOF, SO THAT CONDENSATE DOES NOT LEAK ONTO ROOF.
- TAP NEW WATERLINE WITH AN ISOLATION VALVE INTO EXISTING COLD WATER LINE AND ROUTE PIPE TO CRAC UNITS.
- RE-BALANCE DIFFUSER IN ELECTRICAL ROOM TO SUPPLY 100 CFM.
- SECURE TRANSFER FAN AND ASSOCIATED DUCTWORK TIGHT TO STRUCTURE.

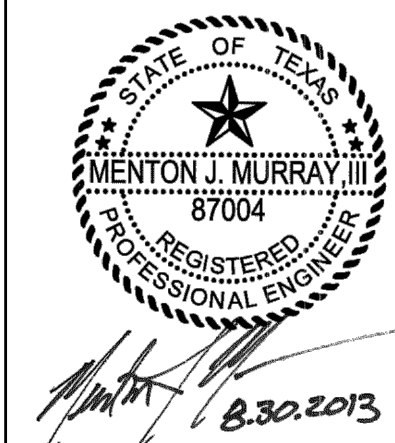


02 ENLARGED MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

Hidalgo County Sheriff's Office -
Modifications to Incorporate Motorola
and 911 Equipment
Edinburg, Texas



Revision No.	Date	Description

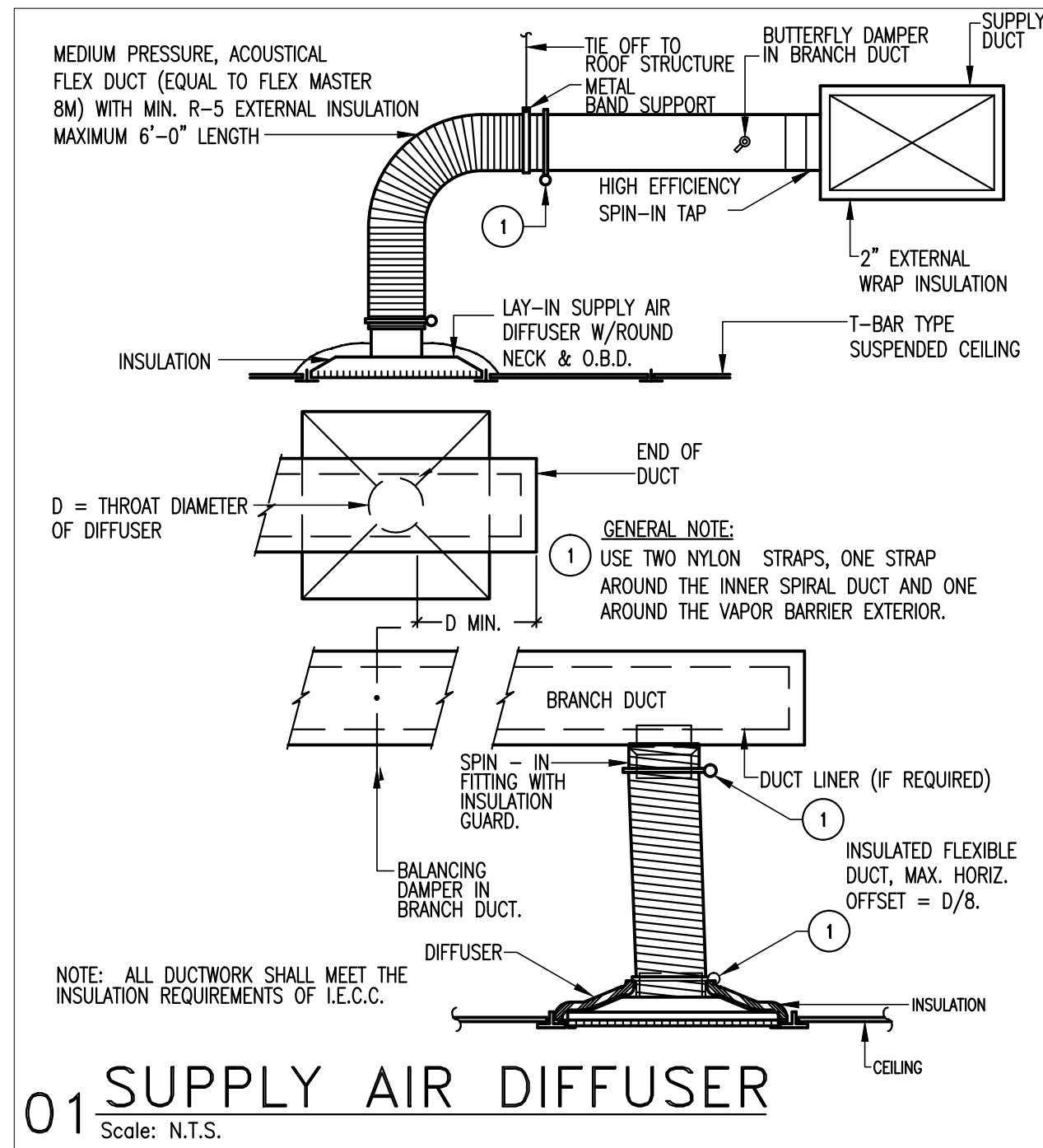


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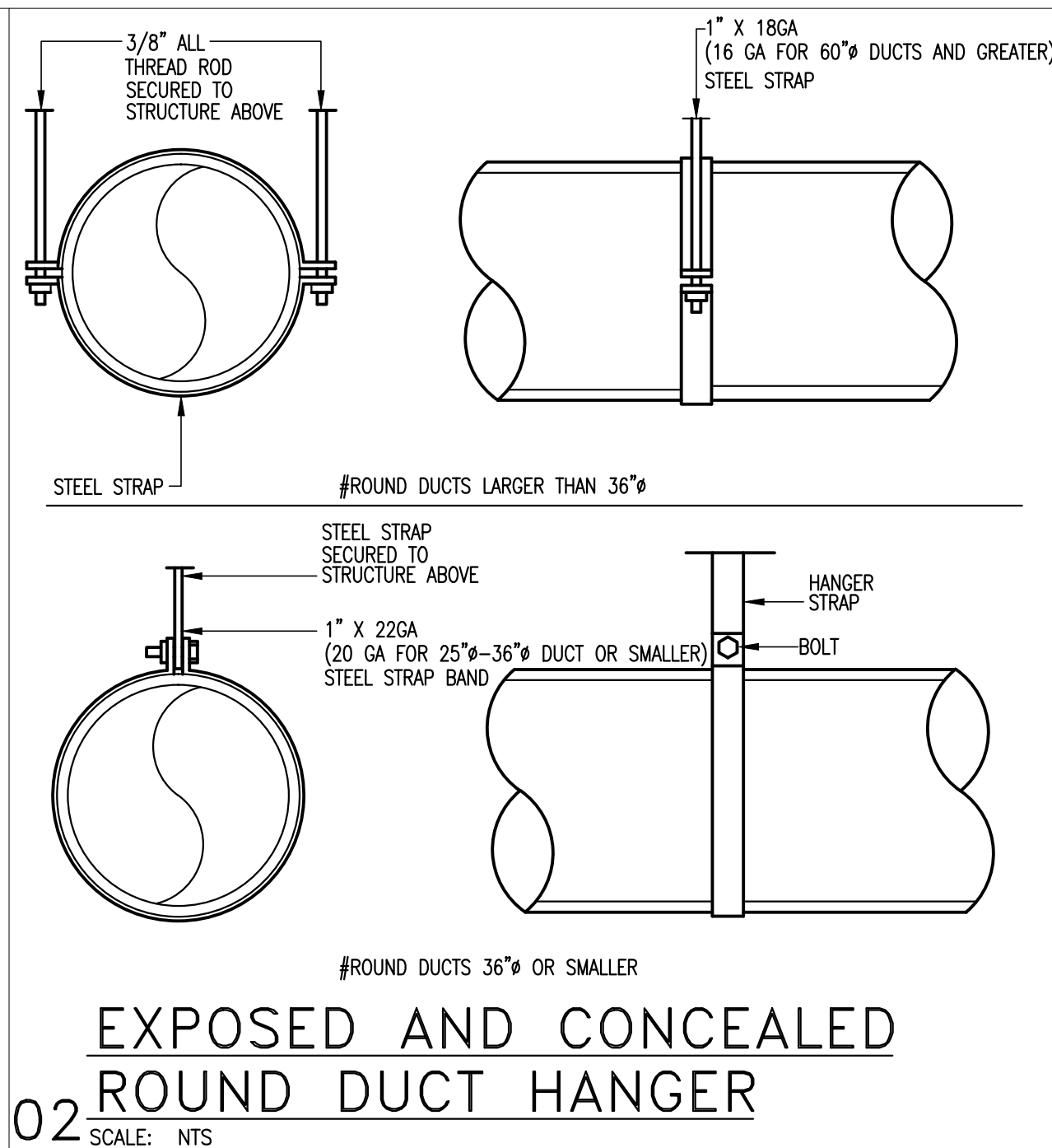
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Sheet Title	

ENLARGED MECHANICAL PLAN

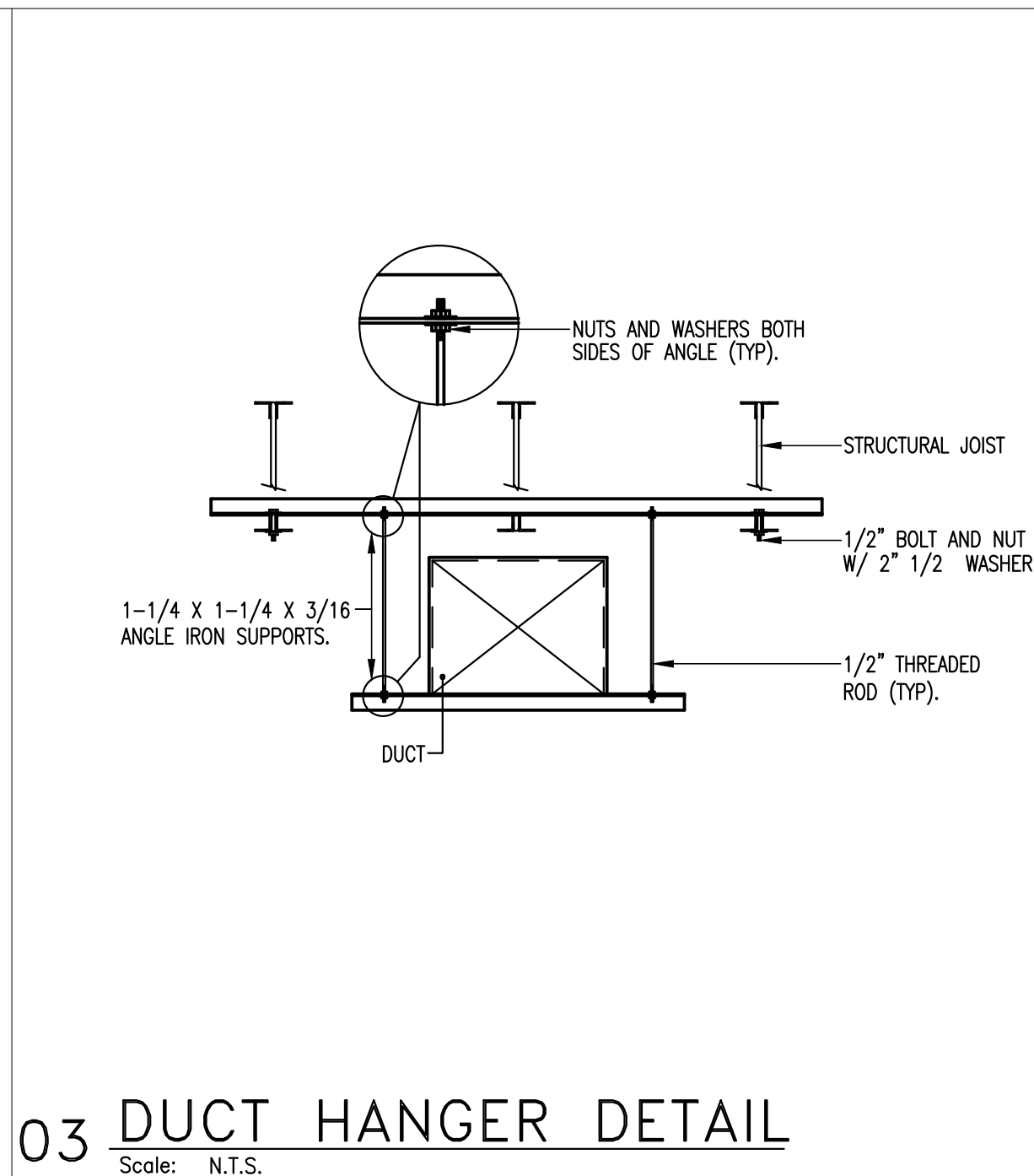
MH101
Sheet Number



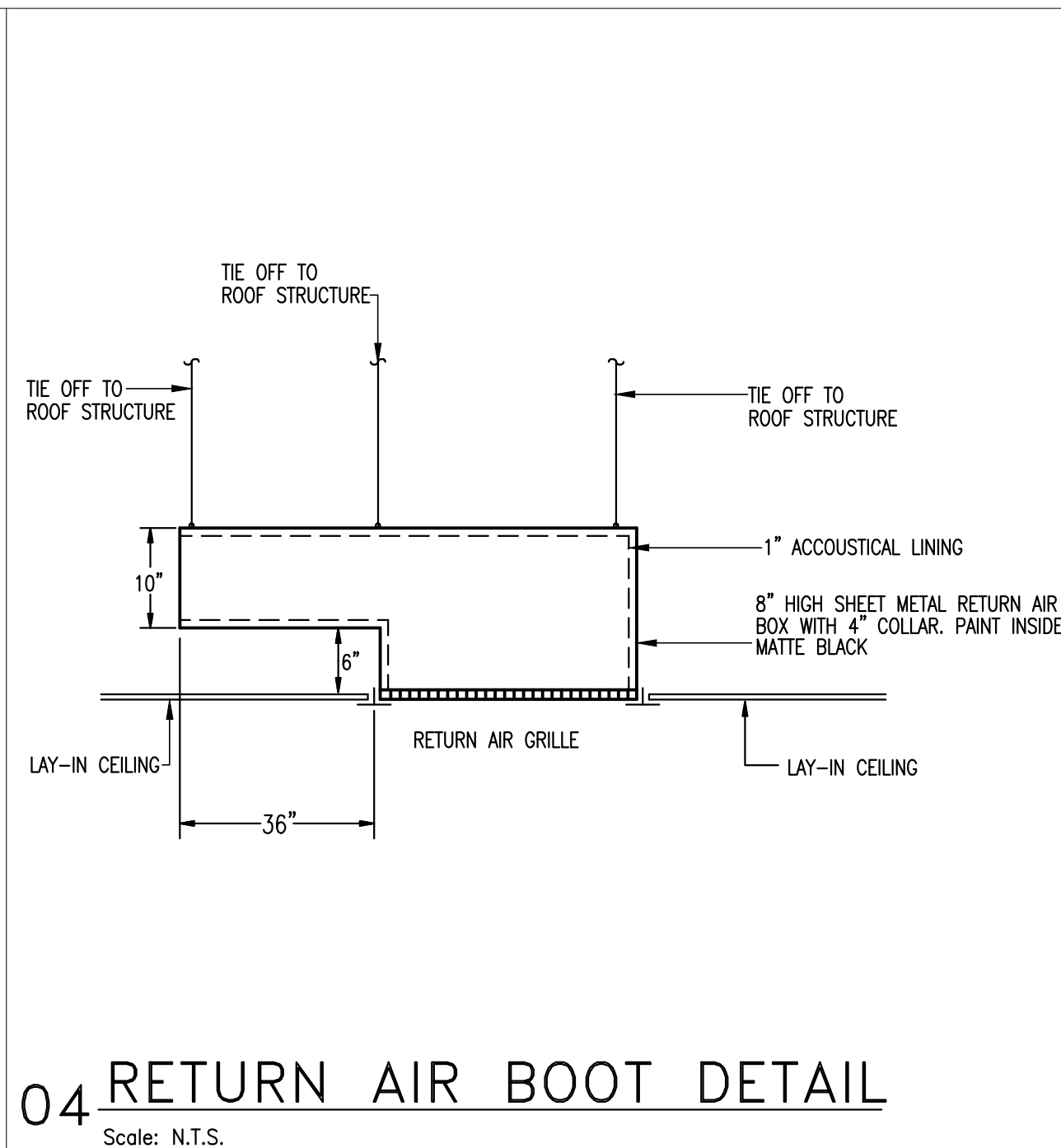
01 SUPPLY AIR DIFFUSER
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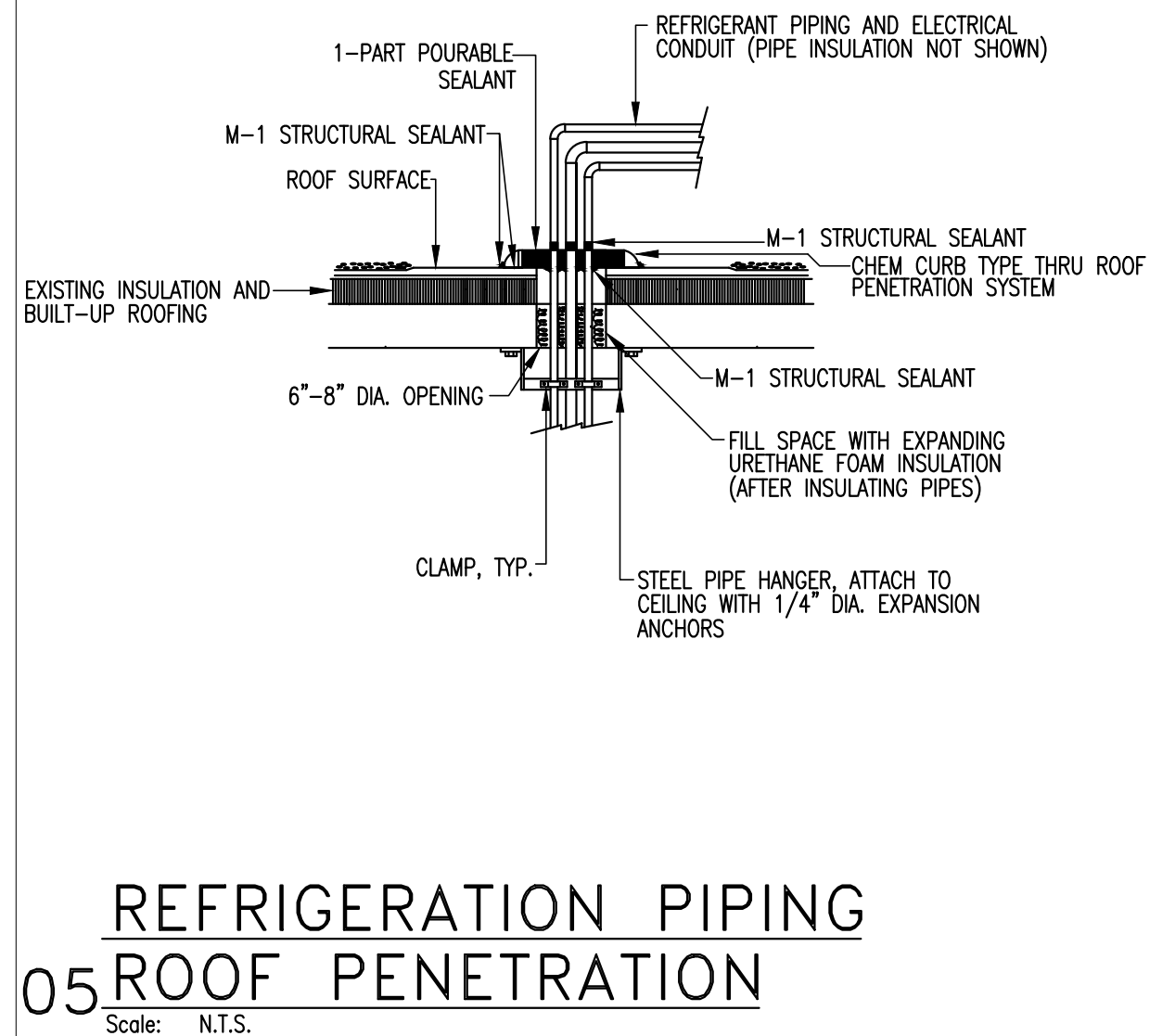
02 EXPOSED AND CONCEALED ROUND DUCT HANGER
Scale: N.T.S.



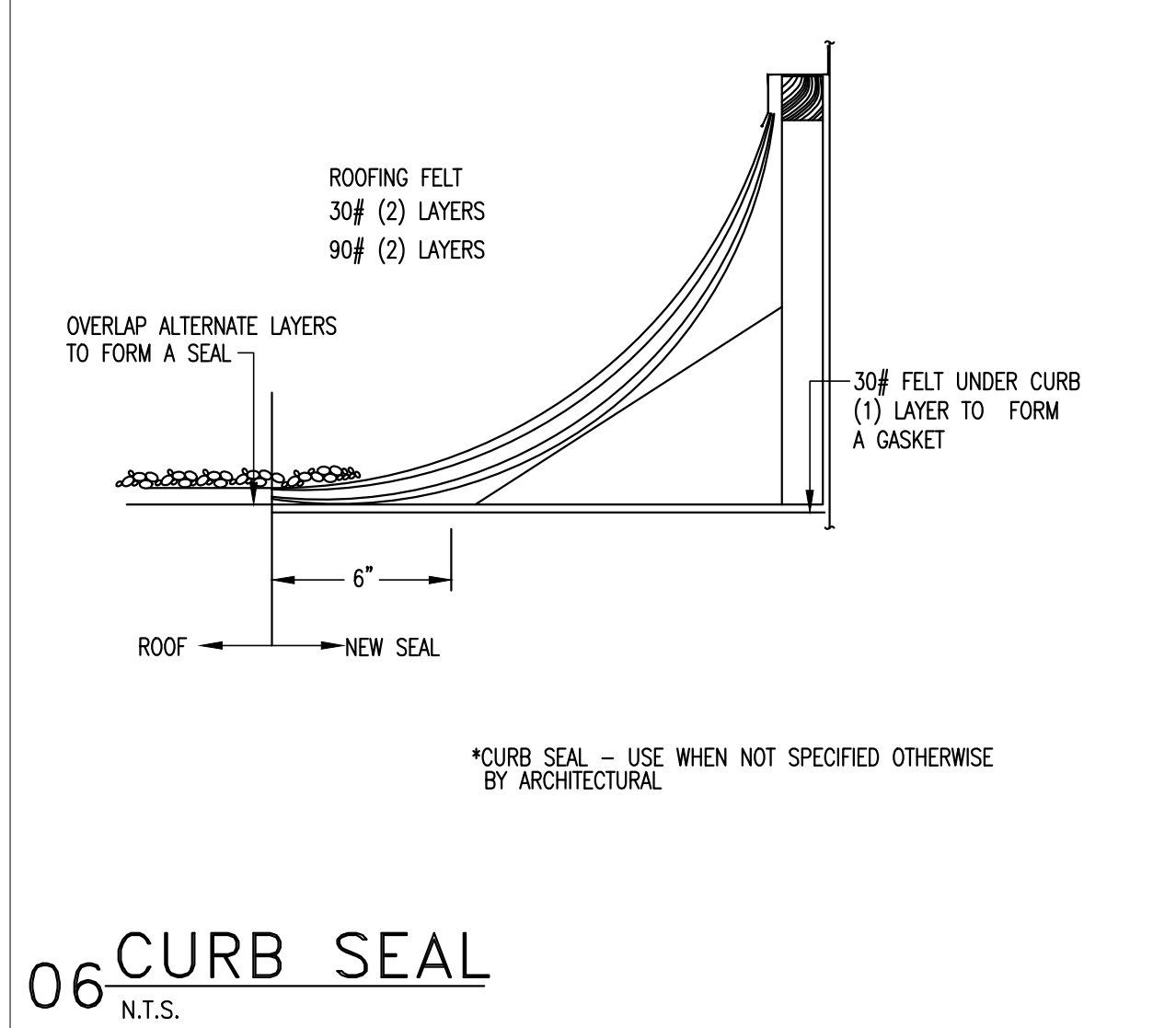
03 DUCT HANGER DETAIL
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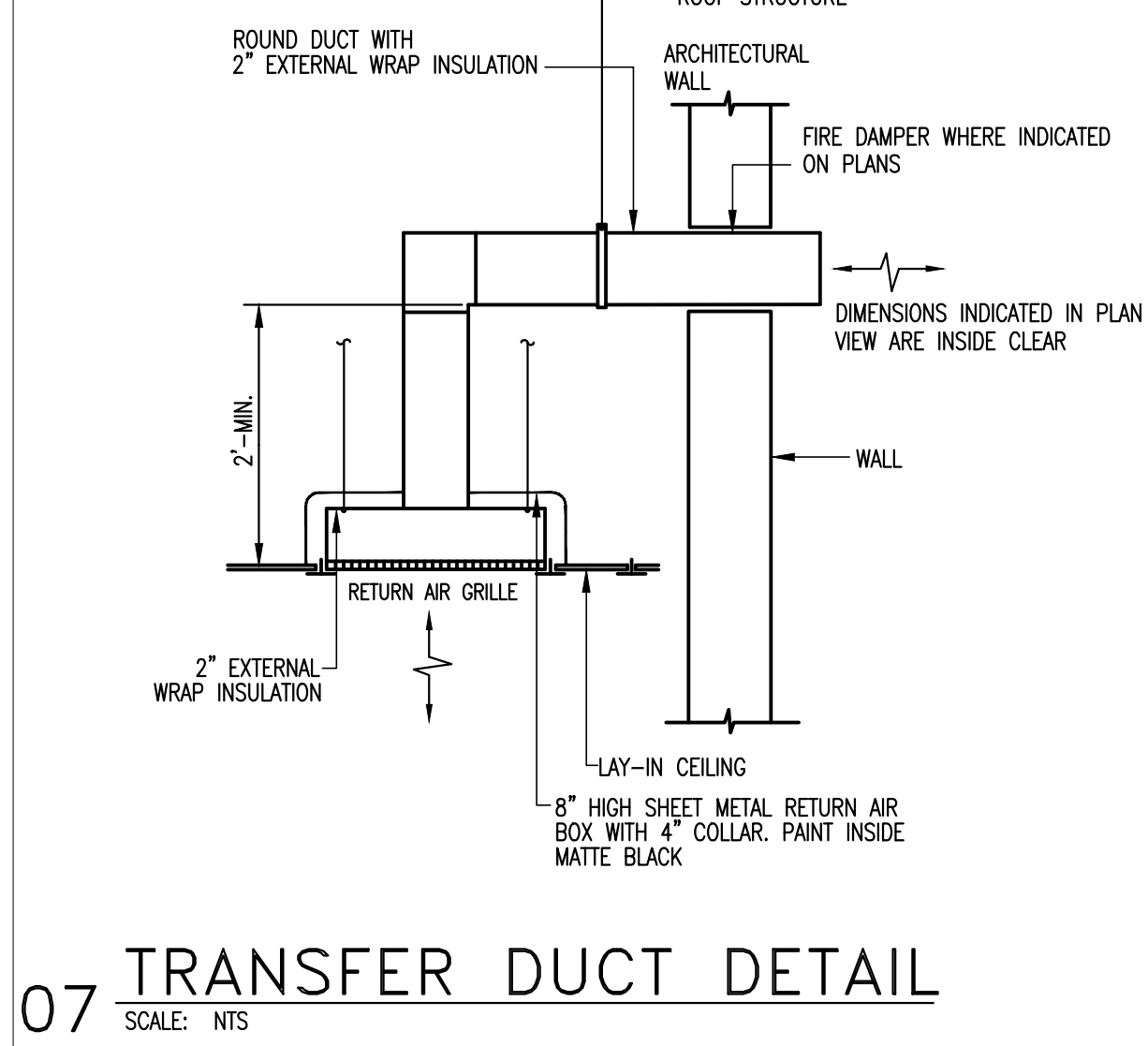
04 RETURN AIR BOOT DETAIL
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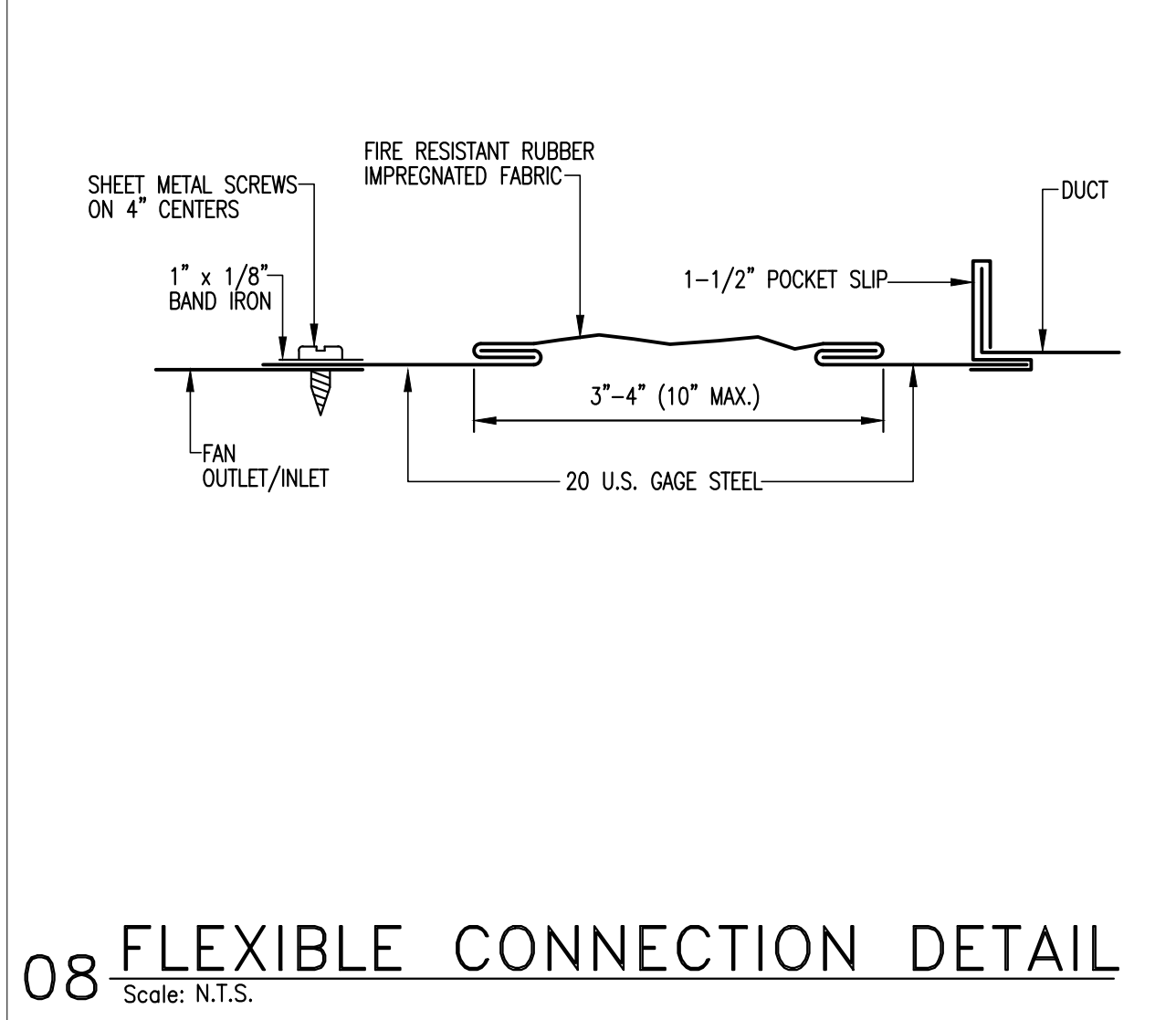
05 REFRIGERATION PIPING ROOF PENETRATION
Scale: N.T.S.



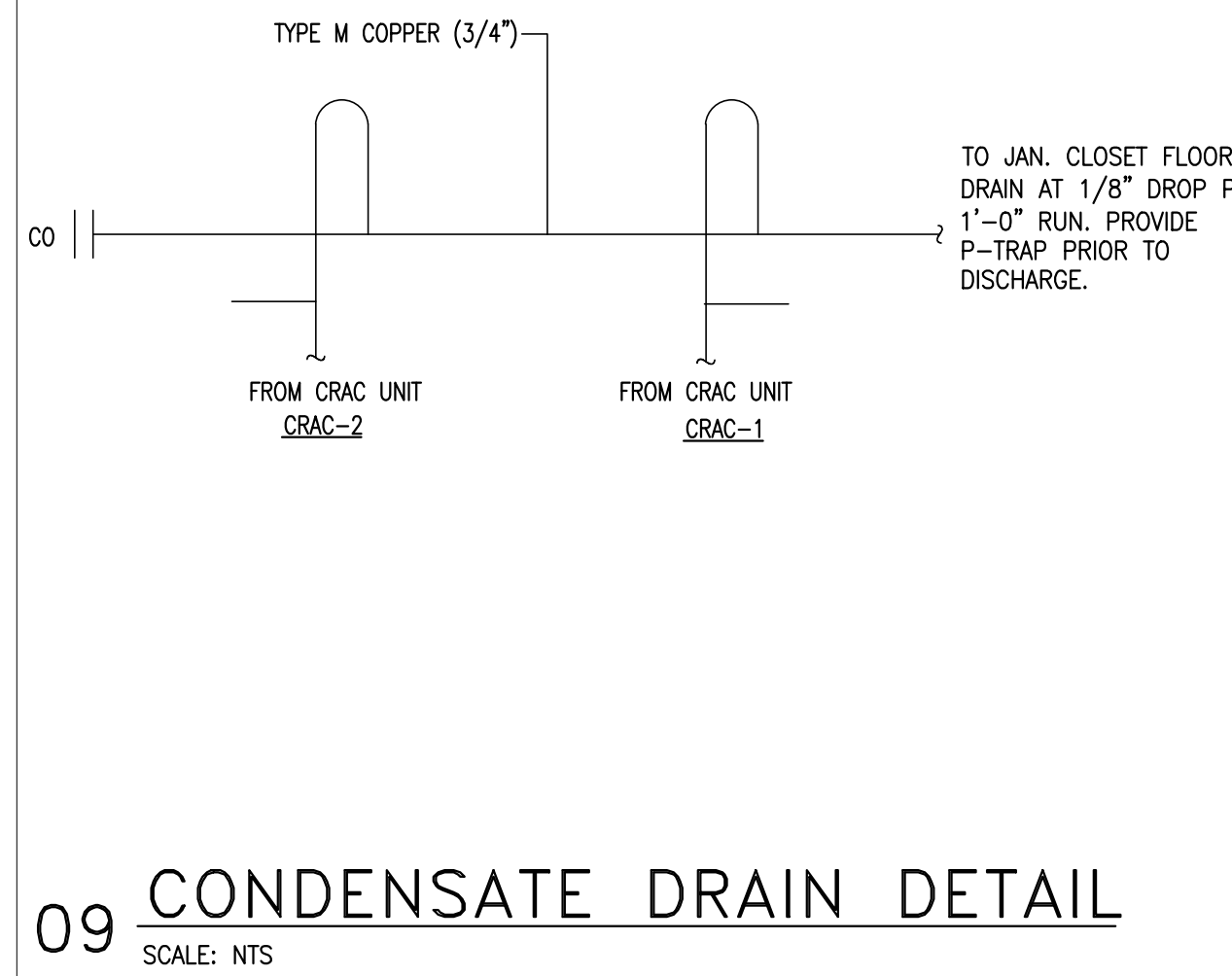
06 CURB SEAL
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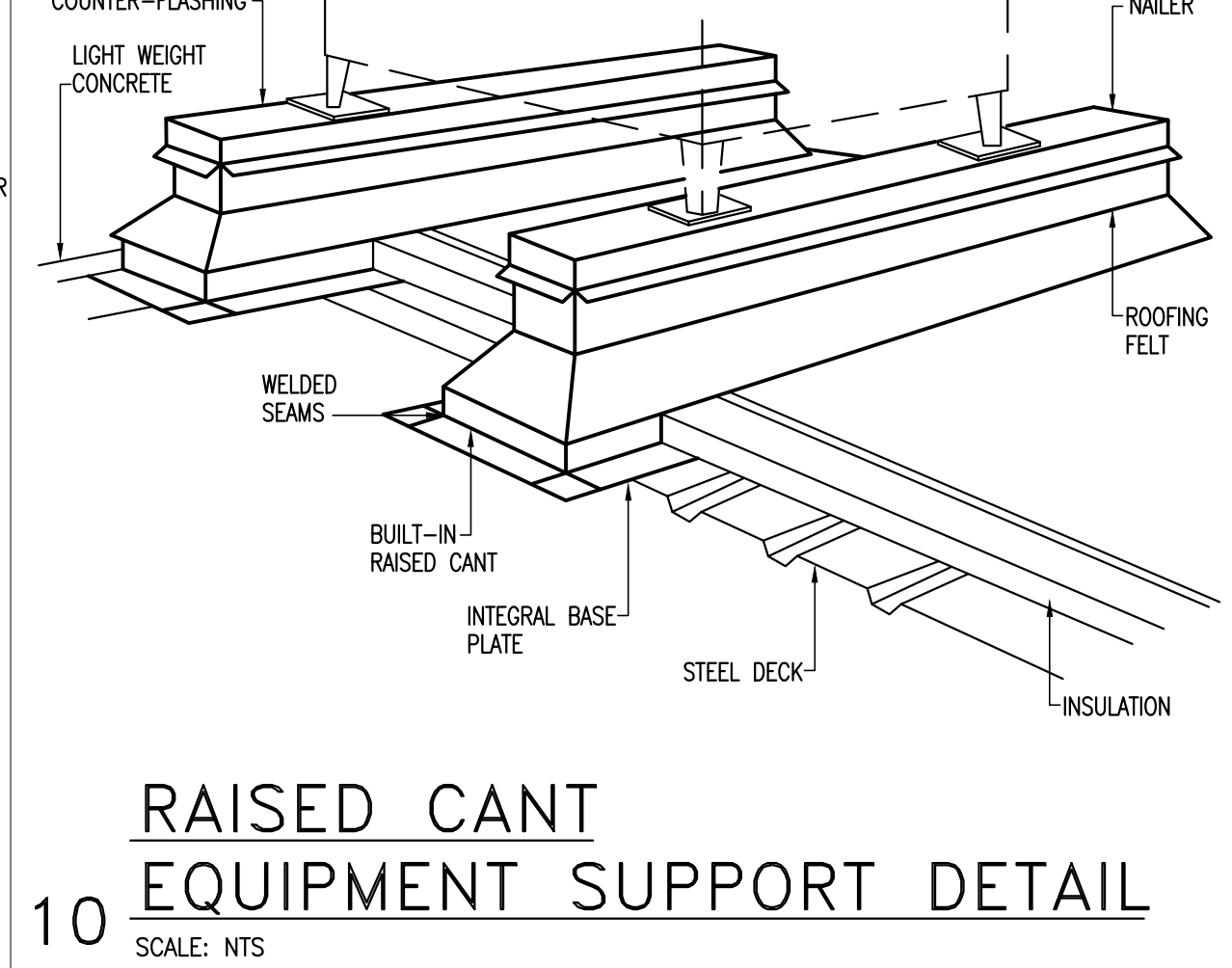
07 TRANSFER DUCT DETAIL
Scale: N.T.S.



08 FLEXIBLE CONNECTION DETAIL
Scale: N.T.S.



09 CONDENSATE DRAIN DETAIL
Scale: N.T.S.



10 RAISED CANT EQUIPMENT SUPPORT DETAIL
Scale: N.T.S.

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Project No.: 29607 (WA01)
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Sheet Title

MECHANICAL DETAILS

MH201
Sheet Number

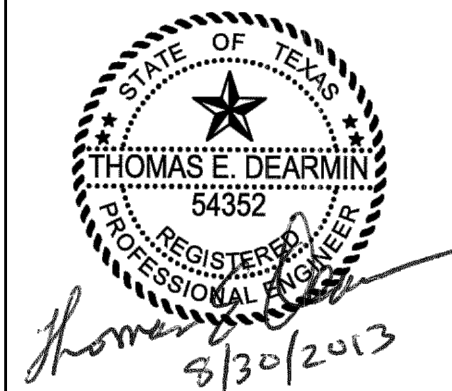
ELECTRICAL GENERAL LEGEND									
ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.									
SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)	SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)	SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)	
LIGHTING			POWER			FIRE ALARM			
	2'x4' FLUORESCENT LIGHT FIXTURE	SEE FIX. SCH.		DUPLEX RECEPTACLE – 20A/125V/1P/3W/G NEMA 5–20R	15" AFF		FIRE ALARM PULL STATION	48" AFF	
	2'x4' FLUORESCENT LIGHT FIXTURE WITH EMERGENCY BATTERY	SEE FIX. SCH.		DUPLEX RCPT. GFI/WATER PROOF – 20A/125V/1P/3W/G NEMA 5–20R	15" AFF		FIRE ALARM AUDIBLE/VISUAL SIGNAL	80" AFF	
	2'x2' FLUORESCENT LIGHT FIXTURE	SEE FIX. SCH.		QUADRAPLEX RECEPTACLE (TWO DUPLEX RCPTS. UNDER ONE COVERPLATE)	15" AFF		FIRE ALARM AUDIBLE SIGNAL	80" AFF	
	2'x2' FLUORESCENT LIGHT FIXTURE WITH EMERGENCY BATTERY	SEE FIX. SCH.		ISOLATED GROUND QUADRAPLEX RECEPTACLE (TWO DUPLEX RCPTS. UNDER ONE COVERPLATE)	15" AFF		FIRE ALARM VISUAL SIGNAL	80" AFF	
	FLUORESCENT STRIP LIGHT	SEE FIX. SCH.		ISOLATED GROUND DUPLEX RECEPTACLE – 20A/125V NEMA 5–20R	15" AFF		FIRE ALARM SPRINKLER FLOW SWITCH	–	
	FLUORESCENT STRIP LIGHT WITH EMERGENCY BATTERY	SEE FIX. SCH.		SPECIAL PURPOSE RECEPTACLE (NEMA NO. OR RATING AS INDICATED)	15" AFF		FIRE ALARM SPRINKLER TAMPER SWITCH	–	
	LED, FLUORESCENT, OR HID FIXTURE CLG. OR WALL MTD.	SEE FIX. SCH.		JUNCTION BOX – SIZE & MOUNTING AS REQUIRED	15" AFF		FIRE ALARM SMOKE DETECTOR CEILING OR WALL MOUNTED	80" AFF	
	FLUORESCENT, OR HID FIXTURE WITH EMERGENCY BATTERY CLG. OR WALL MTD.	SEE FIX. SCH.		DISCONNECT SWITCH – 30/-/3 INDICATES 30A, 3–POLE, NONFUSED; 30/30/3 INDICATES 30A, 3–POLE, 30A FUSE	AS REQD.		HEAT DETECTOR CEILING OR WALL MOUNTED	–	
	EMERGENCY FIXTURE	SEE FIX. SCH.		DISCONNECT SWITCH – 30/30/3 INDICATES 30A, 3–POLE, 30A FUSE	AS REQD.		DUCT SMOKE DETECTOR	–	
	EXIT LIGHT, CEILING OR WALL MOUNTED – SHADING INDICATING SINGLE OR DOUBLE FACE; DIRECTIONAL ARROWS AS INDICATED	9" BFC		PANELBOARD	–		FIRE ALARM CONTROL PANEL	–	
	SINGLE POLE	48" AFF		TRANSFORMER	–		P.A. SPEAKER, CEILING OR WALL MOUNTED	9" BFC, UNO	
	3-WAY/4-WAY TOGGLE SWITCH	48" AFF							
	CEILING MOUNT OCCUPANCY SENSOR (DUAL TECHNOLOGY CEILING SENSOR) – BASIS OF DESIGN: SENSOR SWITCH #CM-PDT-9-R	–		MOTOR	–				
	LIGHTING CONTACTOR, NEMA-1, W/H.O.A. SWITCH			SINGLE LINE CONTINUATION	–				
	CORNER WALL MOUNT OCCUPANCY SENSOR (DUAL TECHNOLOGY CEILING/WALL SENSOR) – BASIS OF DESIGN: SENSOR SWITCH #WVR-PDT-2P-W			CIRCUIT HOME RUN TO PANELBOARD (2 #12, 1 #12G, 3/4" C. 20A/1P CB UNO)	–				
				THERMOSTAT WALL MOUNTED – STUB 1/2" C ABOVE CEILING FROM OUTLET BOX. COORDINATE EXACT LOCATION AND HEIGHT WITH MECHANICAL DIVISION.	–				
				TELECOMMUNICATION MAIN GROUNDING BAR					
						TELECOMMUNICATION			
							TELEPHONE/DATA OUTLET. WALL MOUNTED – STUB MIN. 3/4" C. ABOVE ACCESSIBLE CEILING D=DATA, V=VOICE, X=NUMBER OF DROPS	15" AFF	
							TELEPHONE OUTLET. WALL MOUNTED – STUB MIN. 3/4" C. ABOVE ABOVE ACCESSIBLE CEILING D=DATA, V=VOICE, X=NUMBER OF DROPS	15" AFF	
							DATA OUTLET. WALL MOUNTED – STUB MIN. 3/4" C. ABOVE ABOVE ACCESSIBLE CEILING D=DATA, V=VOICE, X=NUMBER OF DROPS	15" AFF	
							TELEPHONE OUTLET. WALL MOUNTED – MIN. STUB 3/4" C. ABOVE ACCESSIBLE CEILING	48" AFF	
				FIRE SUPPRESSION SYSTEM			WIRELESS ACCESS POINT(POE)	–	
				ADDRESSABLE FIRE SUPPRESSION CONTROL PANEL	–		TELEVISION OUTLET. CLG. OR WALL MOUNTED – STUB 3/4" C. ABOVE ACCESSIBLE CEILING	–	
				AGENT RELEASING ACTUATOR	–		TELEPHONE BOARD	–	
				KEYED MAINTENANCE/BYPASS SWITCH	–		J-HOOKS	–	
				ADDRESSABLE RELEASING MODULE WITHIN 36" OF ACTUATOR	–		RELAY	–	
				ABORT SWITCH	–				
				ADDRESSABLE AGENT RELEASING MONITOR	–				
				FIRST ALARM ELECTRIC BELL	–				
				PRE-DISCHARGE HORN STROBE	–				
				DISCHARGE STROBE	–				
				ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR	–				
GENERAL ABBREVIATIONS									
ABS	ABOVE BACK SPLASH	EX	EXISTING	IG	ISOLATED GROUND	NL	NIGHT LIGHT	SW	SWITCH
AFF	ABOVE FINISHED FLOOR	F	FUSE	MTD	MOUNT OR MOUNTED	NO (N.O.)	NORMALLY OPEN	UF	UNDERFLOOR
BFC	BELOW FINISHED CEILING	G	GROUND (EQUIPMENT)	NC (N.C.)	NORMALLY CLOSED	RCPT(S)	RECEPTACLE(S)	UG	UNDERGROUND
C	CONDUIT	GFI	GROUND FAULT INTERRUPTER	NF	NON				

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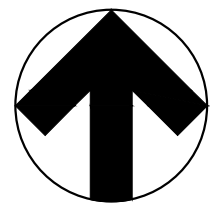
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Sheet Title	

ELECTRICAL GENERAL LEGEND

EL001

Sheet Number

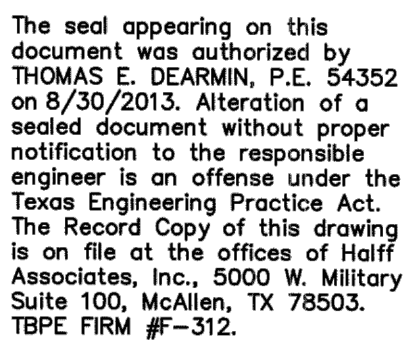


SCALE: 3/32" = 1'-0"

- A. THE CONTRACTOR IS FULLY RESPONSIBLE FOR PERFORMING THE DEMOLITION WORK UNDER THIS SECTION OF THE PROJECT IN FULL COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE, SCHOOL'S, AND FEDERAL CODES. IF THE CONTRACTOR DETERMINES THAT THE CONTRACT DOCUMENTS AND PLANS ARE NOT IN COMPLIANCE WITH THE APPLICABLE CODES, HE SHALL INFORM THE ENGINEER PRIOR TO CONSTRUCTION START FOR DIRECTION. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO MEET CODE REQUIREMENTS AND REWORK SHALL BE AT CONTRACTOR'S EXPENSE. APPLICABLE CODES AND STANDARDS ON DEMOLITION WORK SHALL INCLUDE THOSE PUBLISHED BY OSHA AND EPA, AN ASBESTOS SURVEY SHALL BE KEPT ON SITE ALL TIMES PER TEXAS DEPARTMENT OF HEALTH REQUIREMENTS.
- B. ALL DUST PRODUCTION, SMOKE PRODUCTION AND NOISE SHALL BE SUBJECT TO REAL TIME MEASUREMENT. THE SCHOOL WORK SHALL BE SHUT DOWN DURING CRITICAL ACTIVITIES BY FORMAL REQUEST FROM THE DESIGNATED AUTHORITY. WORK IN DUSTY AREAS SHALL BE CONTROLLED WITH TEMPORARY PARTITIONS. FLAME CUTTING SHALL BE UTILIZED TO ELIMINATE SMOKE PRODUCTION. PROVIDE FIRE EXTINGUISHERS IN THE IMMEDIATE AREA.
- C. ON ANY WORK SHOWN ON ELECTRICAL DRAWINGS WHICH REQUIRES DEMOLITION OF BUILDING STRUCTURES AND FINISHES, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETE THE NECESSARY DEMOLITION. CONTRACTOR SHALL PATCH AND REPAIR ALL BUILDING DAMAGE CREATED BY DEMOLITION WORK. PATCHING SHALL BE COMPLETED WITH THE SAME MATERIALS AS THE SURROUNDING AREAS.
- D. ALL OPENINGS CUT IN MASONRY AND PLASTER WALLS OR CONCRETE FLOORS SHALL BE CORE-DRILLED OR SAWED WHEN POSSIBLE. PATCH AND SEAL OPENINGS WITH 8000 PSI CEMENT GROUT. INSTALL DECORATIVE TRIM (EQUIPMENT FLANGES, FRAMING, OR ESCUTCHEONS) AROUND OPENINGS IN FINISHED AREAS. COORDINATE ALL CUTTING AND PATCHING WITH THE OTHER TRADES.
- E. ALL SURFACES COVERED BY "SPRAY POLY" AND PROTECTED BY TEMPORARY PARTITIONS SHALL REMAIN PROTECTED THROUGHOUT THE PROJECT. REMOVE THE PROTECTIVE BARRIERS ONLY AFTER THE NEW DUCTWORK JUNCTION BOXES AND CONDUITS INSTALLED. PATCH AND MAINTAIN THE PROTECTIVE BARRIERS DURING CONSTRUCTION. COVER ALL EQUIPMENT OPENINGS WITH 4 MIL. POLY AND DUCT TAPE IN PLACE.
- F. CONTRACTOR SHALL KEEP THE ENTIRE MEP DEMOLITION SITE CLEAN AT ALL TIMES.
- G. CONTRACTOR AND OWNER SHALL BE FULLY RESPONSIBLE TO IDENTIFY ANY AND ALL ASBESTOS PRESENT IN THE BUILDING PRIOR TO DEMOLITION AS REQUIRED BY LAW.
- H. COORDINATION AMONG OTHER CONSTRUCTION DISCIPLINES PRIOR TO DEMOLITION IS MANDATORY.
- I. ANY DAMAGE TO EXISTING FLOORING, DRAINAGE OR EXISTING STRUCTURES SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITION AT CONTRACTOR'S EXPENSE.
- J. ALL DAMAGE TO BE REPAIRED AT CONTRACTOR'S EXPENSE. ALL COSTS FOR INTERRUPTION OF GAS, ELECTRICAL, COMMUNICATIONS AND/OR WATER SERVICE DUE TO CONTRACTOR'S WORK SHALL BE BORNE BY THE CONTRACTOR.
- K. DEMOLITION, REMOVAL & DISPOSAL OF ALL EXCESS CONCRETE, RUBBLE, ETC. TO BE DONE IN A LEGAL MANNER AT CONTRACTOR'S EXPENSE.
- L. CONTRACTOR SHALL REMOVE AND RETURN ANY AND ALL EXISTING EQUIPMENT/MATERIALS TO OWNER. OWNER SHALL HAVE FULL RIGHT OF REFUSAL, UNLESS SPECIFICALLY OTHERWISE. IF THE OWNER ANY WAIVES THIS OPTION, ANY EQUIPMENT, MATERIAL, ETC. SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
- M. FOR ANY WORK SHOWN ON RENOVATION DRAWINGS WHICH REQUIRES DEMOLITION OF BUILDING STRUCTURES AND FINISHES, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETE THE NECESSARY DEMOLITION. CONTRACTOR SHALL PATCH AND REPAIR ALL BUILDING DAMAGE CREATED BY DEMOLITION WORK. PATCHING SHALL BE COMPLETED WITH THE SAME MATERIALS AS THE SURROUNDING AREAS, OR WITH OWNER APPROVED PATCHING MATERIALS.
- N. ANY EXISTING ELECTRICAL EQUIPMENT TO BE RE-USED THAT GETS DAMAGED DURING DEMOLITION SHALL BE REPLACED WITH ONE OF EQUAL OR GREATER GRADE.
- O. INFORMATION ON THIS SHEET HAS BEEN TAKEN FROM RECORD DRAWINGS AND A SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK. IF THE OWNER ANY AND ALL DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THESE PLANS TO THE ENGINEER IMMEDIATELY.

1. REMOVE EXISTING GYPSUM BOARD AT EXISTING WALL.
2. REMOVE AND DEMOLISH PORTION OF EXISTING WALL FOR INSTALLATION OF NEW 4' DOOR WITH FRAME.

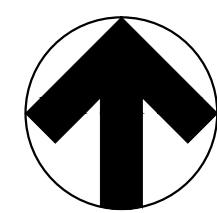
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EXISTING OVERALL
ELECTRICAL DEMOLITION PLAN

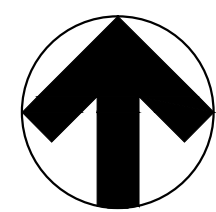
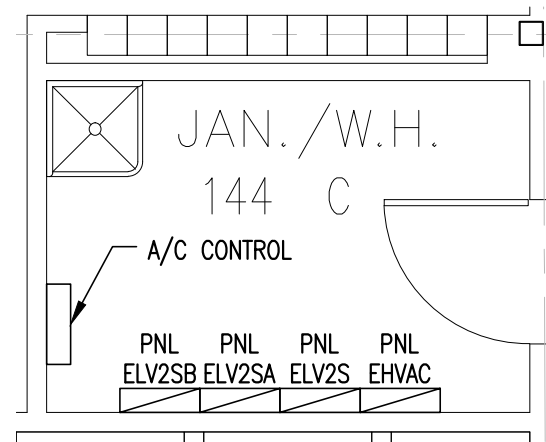
ED101
Sheet Number

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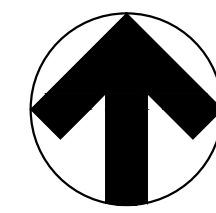
02 ENLARGED MAIN ELECTRICAL ROOM

SCALE: 1/4" = 1'-0"



03 ENLARGED ELECTRICAL ROOM

SCALE: 1/4" = 1'-0"



01 ENLARGED EXISTING ELECTRICAL PLAN

SCALE: 3/16" = 1'-0"

GENERAL NOTES:

- INFORMATION ON THIS SHEET HAS BEEN TAKEN FROM RECORD DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND REPORT ANY AND ALL DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THESE PLANS TO THE ENGINEER IMMEDIATELY.
- REFER TO ED101 FOR DEMOLITION NOTES.
- REMOVE AND REPLACE GYPSUM BOARD AS REQUIRED FOR INSTALLATION OF NEW ELECTRICAL DEVICES.

KEY NOTES: ①

- EXISTING ATS TO BE DEMOLISHED ONCE NEW ELECTRICAL POWER SYSTEM COMPONENTS ARE IN PLACE. ELECTRICAL CONTRACTOR SHALL COORDINATE THE CONNECTION OF NEW SERVICES TO MINIMIZE THE AMOUNT OF DOWN TIME FOR THE BUILDING. REFER TO NEW ELECTRICAL PLANS FOR FURTHER INFORMATION.
- EXISTING OUTLETS ARE CIRCUITED TO PANEL ELV2. CONTRACTOR SHALL REMOVE CIRCUIT WIRING FROM DEVICES TO ELECTRICAL PANEL BOARD. COORDINATE LOCATION OF NEW ELECTRICAL DEVICES AND REUSE BACK BOXES AND CONDUIT WHERE APPROPRIATE.
- EXISTING DATA DEVICES. CONTRACTOR SHALL COORDINATE REMOVAL OF EXISTING DATA/TELEPHONE WITH OWNER. OWNER WILL REMOVE CABLES. COORDINATE LOCATION OF NEW ELECTRICAL DEVICES AND REUSE BACK BOXES AND CONDUIT WHERE APPROPRIATE.
- EXISTING 2x4 LIGHT FIXTURES SHALL BE REUSED. REFER TO NEW ELECTRICAL WORK, SHEET EP101, FOR LIGHT FIXTURE RELOCATION.
- EXISTING 3' DOOR TO BE REPLACED WITH 4' DOOR. RELOCATE EXISTING THREE WAY SWITCH.
- PULL OUT EXISTING FEEDER FROM EXISTING AEP TRANSFORMER AND GENERATOR. PULL NEW FEEDER TO NEW ATS THRU EXISTING CONDUIT. EXTEND NEW FEEDER AND CONDUIT TO NEW TRANSFER SWITCH. REFER TO SUGGESTED SEQUENCE.

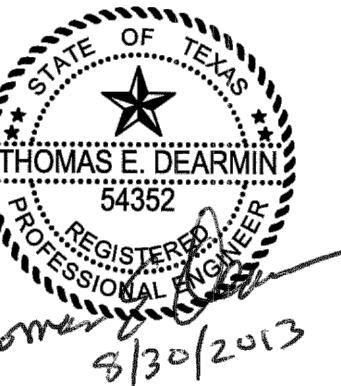
LEGEND:

- EXISTING TO REMAIN
- X - X - X - EXISTING WIRING CONDUIT TO REMAIN
- - - - - EXISTING TO BE RELOCATED
- - ○ - ○ - EXISTING CONDUIT AND WIRE TO BE REMOVED OR CAPPED.

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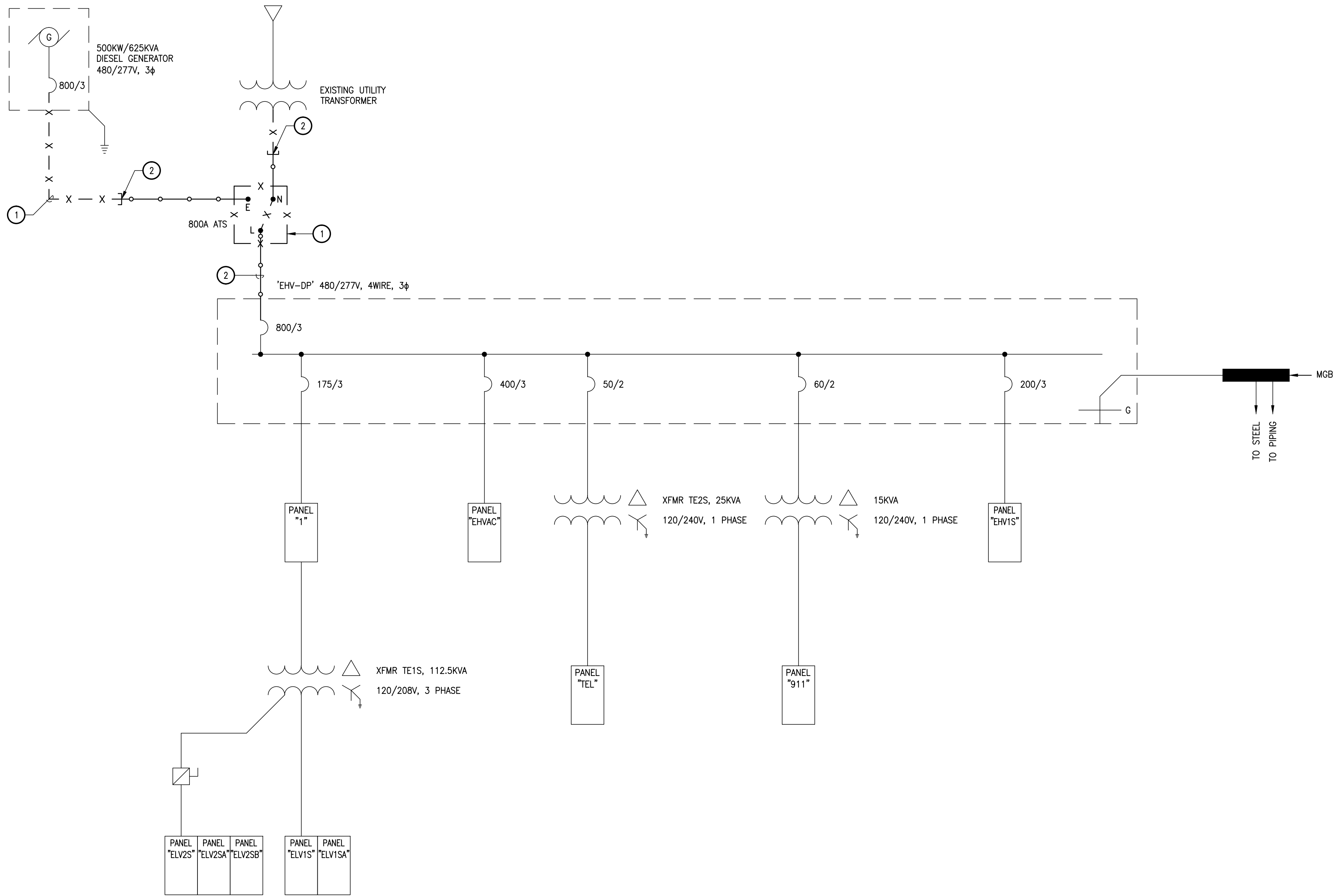


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Project No.:	29607 (WA01)
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Checked By:	T.D.
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Sheet Title	EXISTING ENLARGED ELECTRICAL PLANS

ED201
Sheet Number

File Name: I:\290008\29607\WA01\CADD\DWG\ED401 EXISTING ELECTRICAL SINGLE LINE DIAGRAM.dwg
Current Tab (Layout): ED401 EXISTING ELECTRICAL SINGLE LINE DIAGRAM User: AH2522
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01 ELECTRICAL EXISTING ONE LINE DIAGRAM

SCALE: NOT TO SCALE

GENERAL NOTES:

- INFORMATION ON THIS SHEET HAS BEEN TAKEN FROM RECORD DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND REPORT ANY AND ALL DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THESE PLANS TO THE ENGINEER IMMEDIATELY.

KEY NOTES: ⓘ

- ELECTRICAL CONTRACTOR SHALL DEMOLISH EXISTING WIRING SEQUENCE. THE NEW ELECTRICAL SYSTEMS IN ORDER TO MINIMIZE DOWNTIME. REFER TO SHEET EP401 FOR NEW FEEDER/EQUIPMENT INFORMATION.
- APPROXIMATE LOCATION TO INTERCEPT EXISTING CONDUIT.

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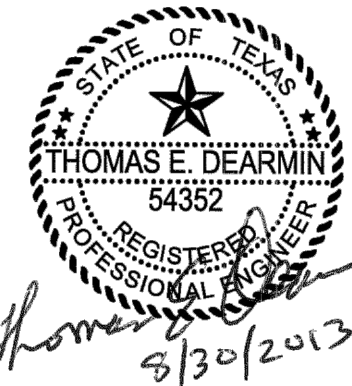
- EXISTING TO REMAIN
- X - X - X - EXISTING WIRING CONDUIT TO REMAIN
- ○ ○ EXISTING CONDUIT AND WIRE TO BE REMOVED

Hidalgo County Sheriff's Office -
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Edinburg, Texas



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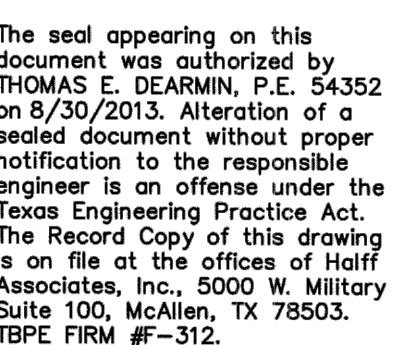
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Issued:	08 / 30 / 13
Drawn By:	CHAVEZ
Checked By:	T.D.
Scale:	AS NOTED
Sheet Title	EXISTING ELECTRICAL SINGLE LINE DIAGRAM

ED401

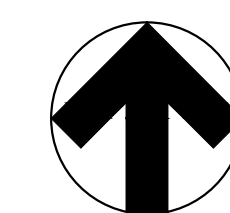
Sheet Number

A. INFORMATION ON THIS SHEET HAS BEEN TAKEN FROM RECORD DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND REPORT ANY AND ALL DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THESE PLANS TO THE ENGINEER IMMEDIATELY.

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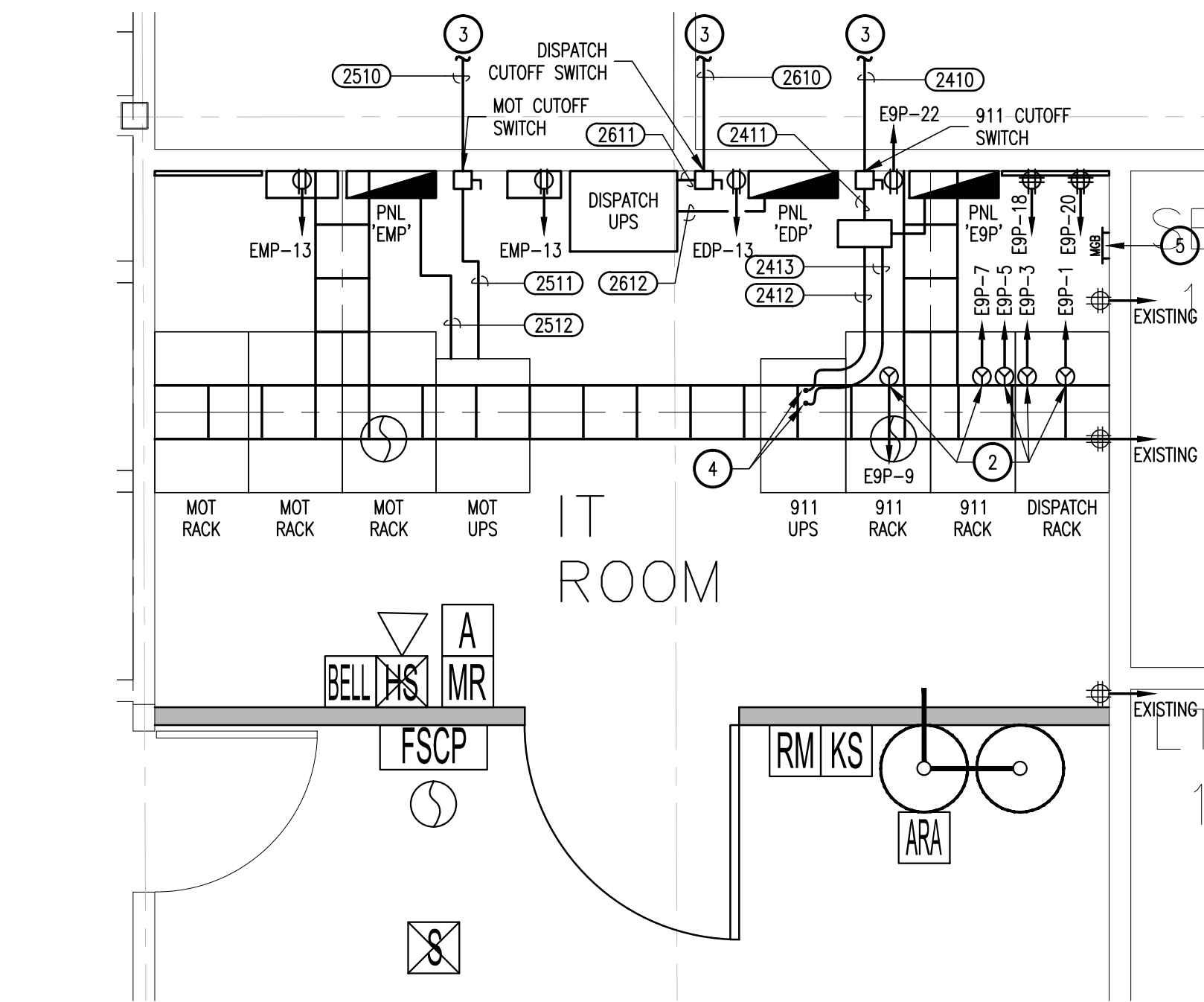
EP101



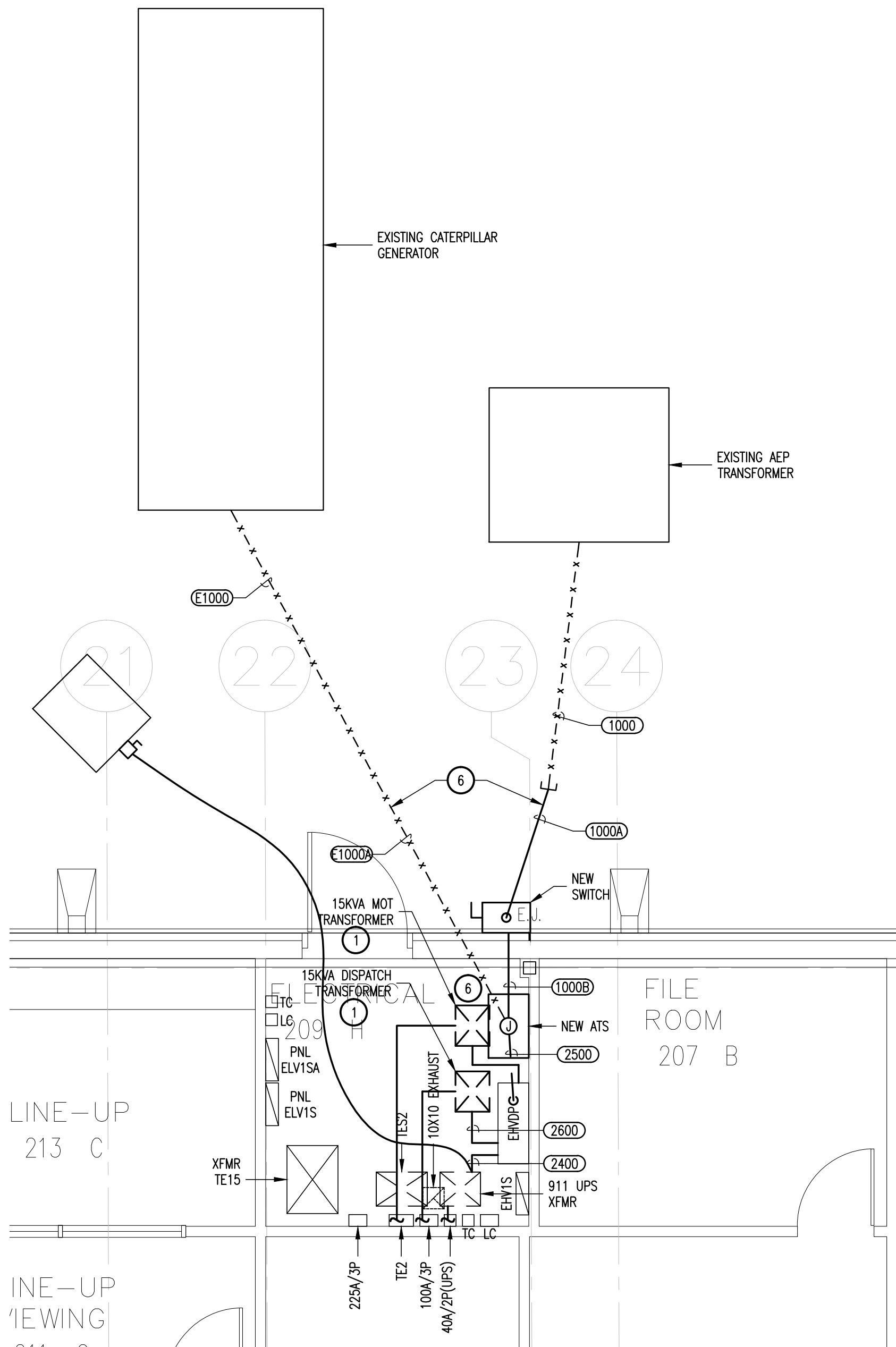
01 ELECTRICAL OVERALL PLAN



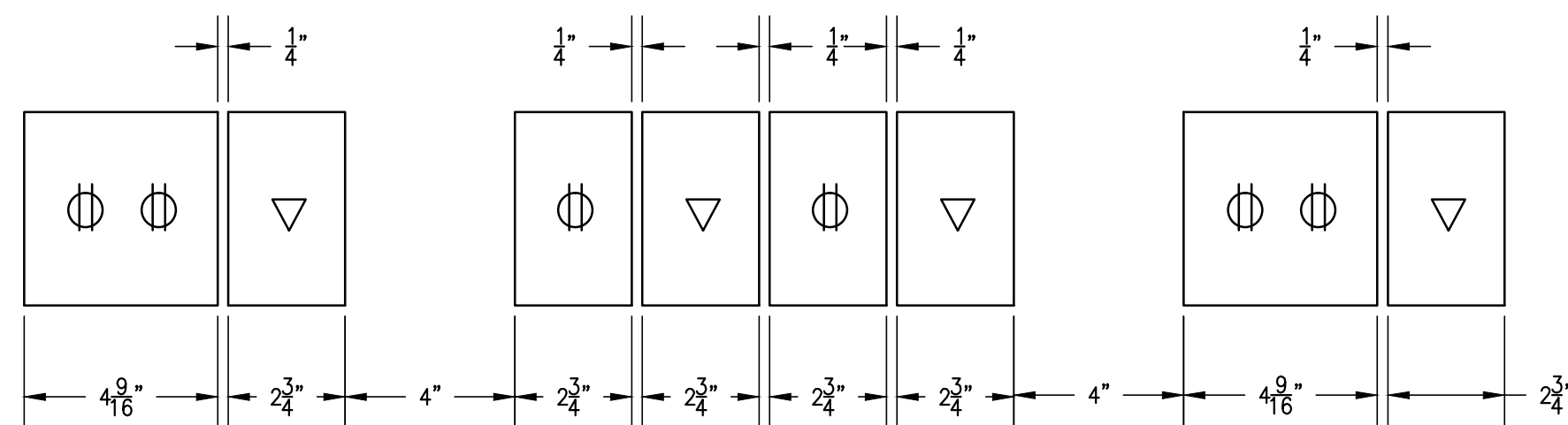
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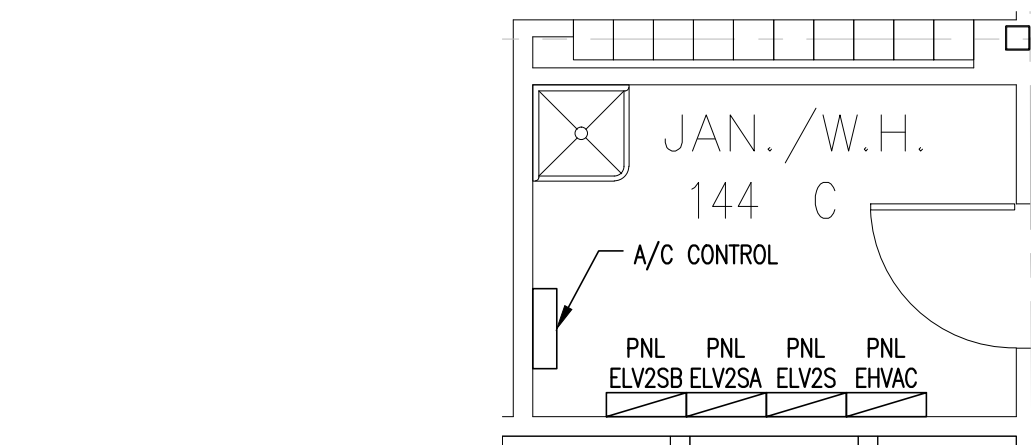
04 ENLARGED IT ROOM ELECTRICAL PLAN
SCALE: 3/8" = 1'-0"



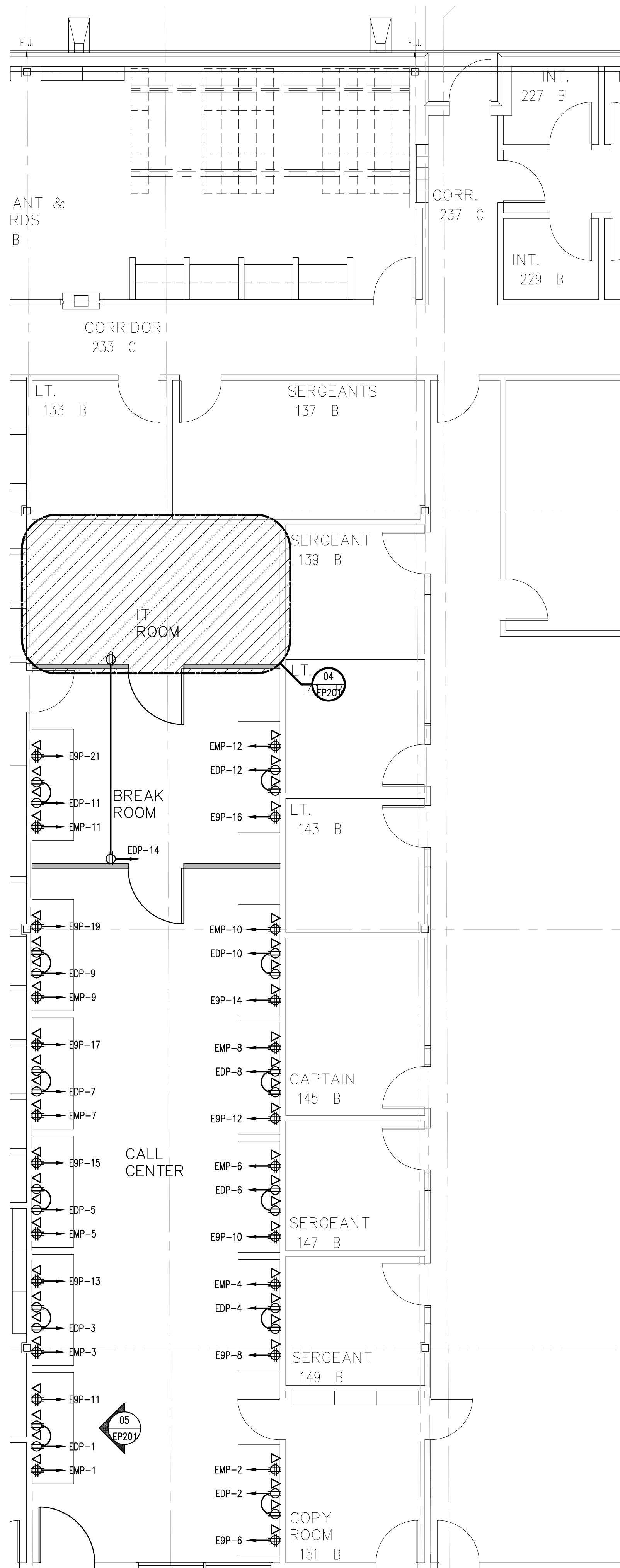
02 ENLARGED MAIN ELECTRICAL ROOM
SCALE: 1/4" = 1'-0"



05 PARTIAL ELEVATION
N.T.S.



03 ENLARGED ELECTRICAL ROOM
SCALE: 1/4" = 1'-0"



01 ENLARGED ELECTRICAL POWER-SPECIAL SYSTEMS PLAN
SCALE: 3/16" = 1'-0"

GENERAL NOTES:

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KEY NOTES: ①

1. SUSPEND NEW TRANSFORMER FROM EXISTING BUILDING STRUCTURE. PROVIDE ADEQUATE SUPPORT FOR ENTIRE WEIGHT OF TRANSFORMER. REFER TO TRANSFORMER SCHEDULE FOR FURTHER INFORMATION.
2. MOUNT 20A TWIST LOCK RECEPTACLE ON CABLE TRAY ABOVE EQUIPMENT.
3. ROUTE HOME RUN TO MAIN ELECTRICAL ROOM SEE RISER DIAGRAM FOR CONNECTION TO 240/120 VOLT TRANSFORMER.
4. 1" FLEX CONNECTION TO AND FROM UPS EQUIPMENT.
5. MAIN GROUNDING BAR "MGB" PROVIDE 1-#2 GRND. TO BUILDING GROUNDING SYSTEM. ALL EQUIPMENT IN NEW IT ROOM SHALL BE GROUNDED TO MGB.
6. ROUTE CONDUIT BELOW DUCTWORK.

OPERATION NOTES:

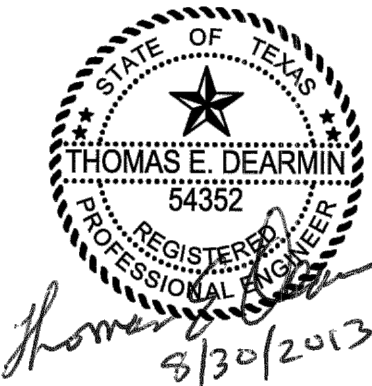
1. REFER TO SHEET EP401 FOR SUGGESTED SEQUENCE OF ATS CONNECTION.

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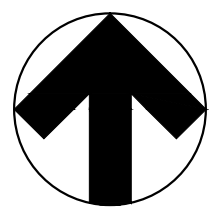
Project No.: 29607 (WA01)
Issued: 08 / 30 / 13
Drawn By: CHAVEZ
Checked By: T.D.
Scale: AS NOTED
Sheet Title

ENLARGED ELECTRICAL PLANS

EP201

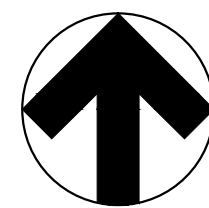
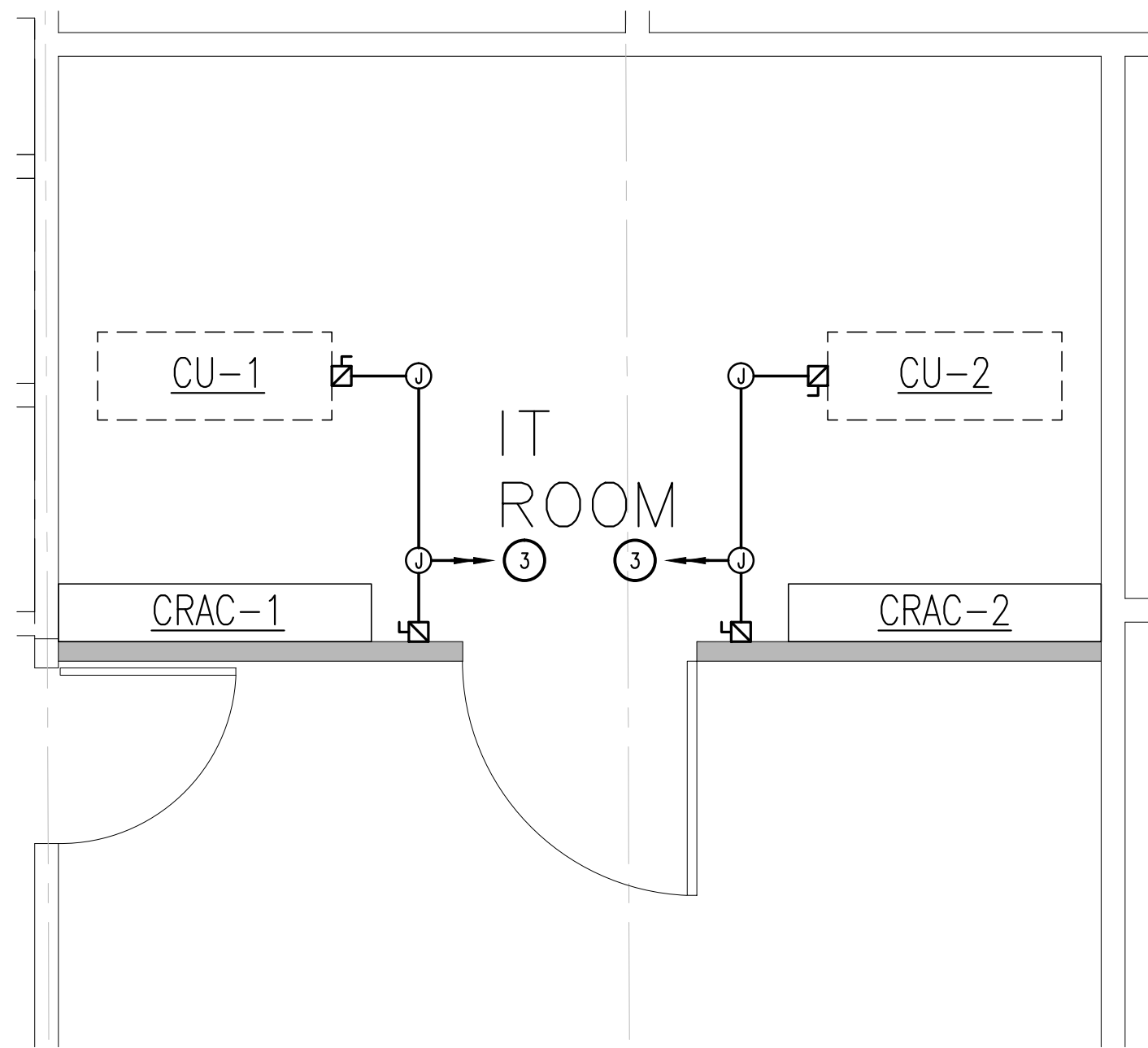
Sheet Number

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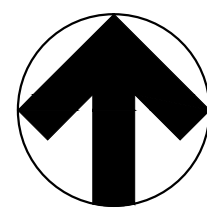
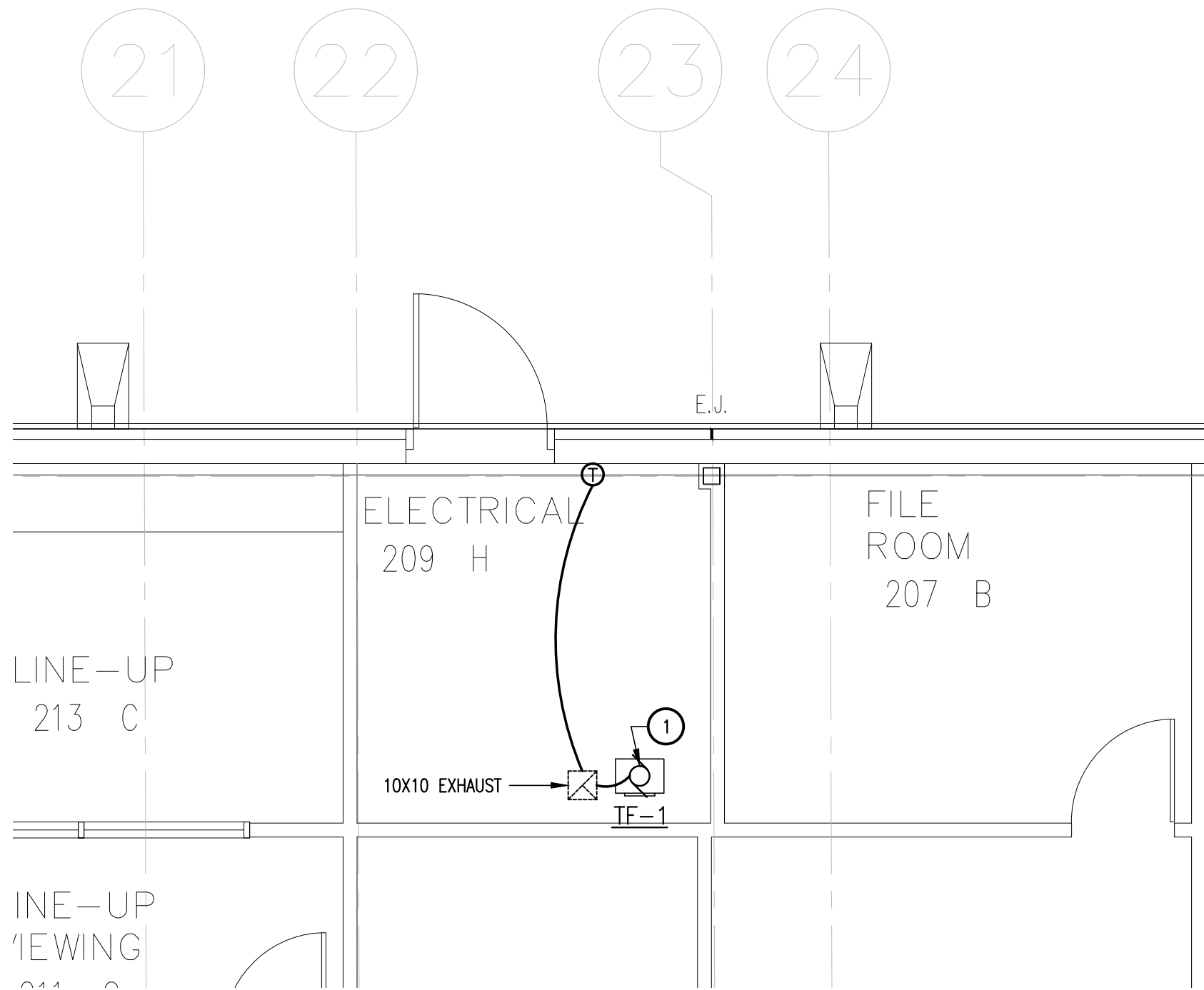
04 ENLARGED IT ROOM MECHANICAL PLAN

SCALE: 3/8" = 1'-0"



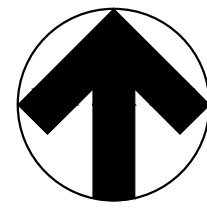
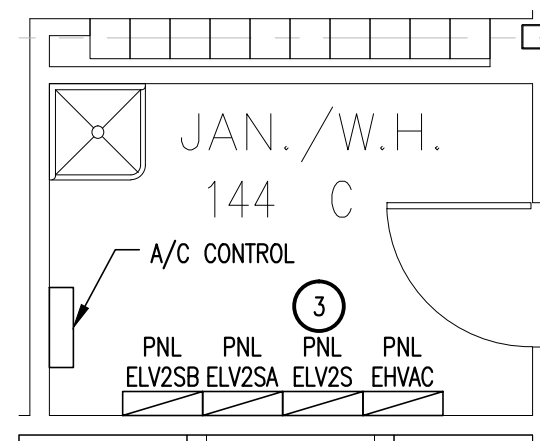
02 ENLARGED MAIN ELECTRICAL ROOM

SCALE: 1/4" = 1'-0"



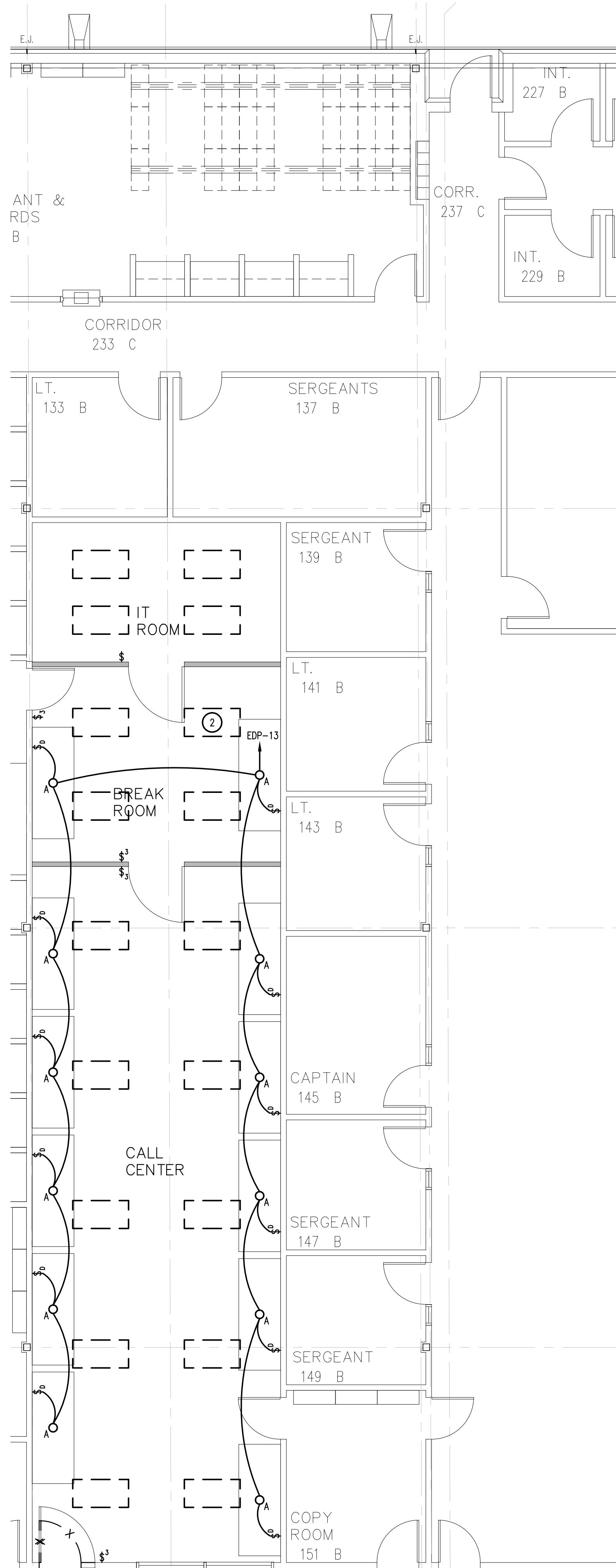
03 ENLARGED ELECTRICAL ROOM

SCALE: 1/4" = 1'-0"



01 ENLARGED ELECTRICAL LIGHTING PLAN

SCALE: 3/16" = 1'-0"



GENERAL NOTES:

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KEY NOTES: ①

1. CONNECT 120 VOLT POWER TO NEW TRANSFER FAN TF-1. FAN TO BE CONTROLLED FROM EXISTING T-STAT.
2. RELOCATE EXISTING LIGHT FIXTURES TO NEW LAYOUT AND RE WIRE TO NEW SWITCHES SHOWN. RECONNECT TO EXISTING LIGHTING CIRCUIT
3. PROVIDE 80A/2P CIRCUIT BREAKER IN EXISTING ELV2S PANEL. MOUNT CIRCUIT BREAKER IN AVAILABLE CIRCUIT SPACES AFTER REMOVAL OF RECEPTACLE CIRCUITS.

LEGEND:

- EXISTING TO REMAIN
- NEW EQUIPMENT
- - - EXISTING RELOCATED EQUIPMENT

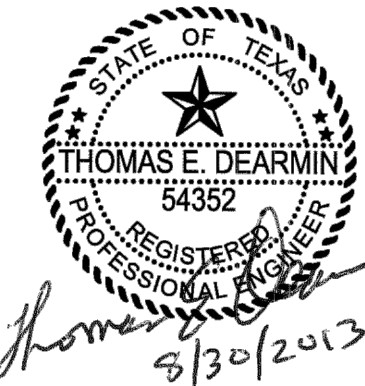
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Sheet Title	

ENLARGED ELECTRICAL PLANS

EP202

Sheet Number

File Name: I:\29000a\29607\WA01\CADD\DWG\EP301 ELECTRICAL SCHEDULES.dwg
Current Tab (Layout): EP301 ELECTRICAL SCHEDULES User: AH2522
Printed Date: 8/30/2013 4:00:56 PM

PANELBOARD 'EDP'															
VOLTAGE: 120/240 VOLT 1 PHASE 3 WIRE										LOCATION: ROOM					
80A MAIN CIRCUIT BREAKER										MOUNTING: SURFACE					
BUSES: MAIN – 200 A; 100% NEUTRAL: EQUIPMENT GROUND										Isc = 10,000 A RMS SYM AVAILABLE					
VA:L	VA:R	VA:O	LOAD	BKR	CKT	PH	CKT	BKR	LOAD	VA:L	VA:R	VA:O			
0	360		REC: CALL CENTER	20/1	1	A	2	20/1	REC: CALL CENTER	0	360				
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0	0			20/1	31	B	32	20/1		0	0				
0	0			20/1	33	A	34	20/1		0	0				
0	0			20/1	35	B	36	20/1		0	0				
0	0			20/1	37	A	38	20/1		0	0				
0	0			20/1	39	B	40	20/1		0	0				
0	0			20/1	41	A	42	20/1		0	0				
VA:L (LIGHTING)				600 CONNECTED						750 DEMAND					
VA:R (RECEPTACLES)				4680 CONNECTED						4680 DEMAND					
VA:O (OTHER)				0 CONNECTED						0 DEMAND					
VA: TOTAL				5280 CONNECTED						5430 DEMAND					
AMPS: TOTAL				22 CONNECTED						23 DEMAND					
L				R				O				TOTAL			
600		2520		0		VA CONNECTED TO A PHASE		3120		VA =		26 AMPS CONNECTED TO A PHASE @ 120 VOLTS			
0		2160		0		VA CONNECTED TO B PHASE		2160		VA =		18 AMPS CONNECTED TO B PHASE @ 120 VOLTS			
600		4680		0		TOTAL		5280		VA					

VOLTAGE: 120/240 VOLT 1 PHASE 3 WIRE

80A MAIN CIRCUIT BREAKER

BUSES: MAIN – 200 A; 100% NEUTRAL: EQUIPMENT GROUND

LOCATION: ROOM

MOUNTING: SURFACE

Isc = 10,000 A RMS SYM AVAILABLE

VA:L	VA:R	VA:O	LOAD	BKR	CKT	PH	CKT	BKR	LOAD	VA:L	VA:R	VA:O
0	720		REC: IT ROOM	20/1	1	A	2	20/1		0	0	
0	720		REC: IT ROOM	20/1	3	B	4	20/1		0	0	
0	720		REC: IT ROOM	20/1	5	A	6	20/1	REC: CALL CENTER	0	360	
0	720		REC: IT ROOM	20/1	7	B	8	20/1	REC: CALL CENTER	0	360	
0	720		REC: IT ROOM	20/1	9	A	10	20/1	REC: CALL CENTER	0	360	
0	360		REC: CALL CENTER	20/1	11	B	12	20/1	REC: CALL CENTER	0	360	
0	360		REC: CALL CENTER	20/1	13	A	14	20/1	REC: CALL CENTER	0	360	
0	360		REC: CALL CENTER	20/1	15	B	16	20/1	REC: CALL CENTER	0	360	
0	360		REC: CALL CENTER	20/1	17	A	18	20/1	REC: IT ROOM	0	360	
0	360		REC: CALL CENTER	20/1	19	B	20	20/1	REC: IT ROOM	0	360	
0	0		REC: CALL CENTER	20/1	21	A	22	20/1	REC: IT ROOM	0	180	
0	0			20/1	23	B	24	20/1		0	0	
0	0			20/1	25	A	26	20/1		0	0	
0	0			20/1	27	B	28	20/1		0	0	
0	0			20/1	29	A	30	20/1		0	0	
0	0			20/1	31	B	32	20/1		0	0	
0	0			20/1	33	A	34	20/1		0	0	
0	0			20/1	35	B	36	20/1		0	0	
0	0			20/1	37	A	38	20/1		0	0	
0	0			20/1	39	B	40	20/1		0	0	
0	0			20/1	41	A	42	20/1		0	0	

VA:L (LIGHTING)0 CONNECTED0 DEMAND

VA:R (RECEPTACLES)8460 CONNECTED8460 DEMAND

VA:O (OTHER)0 CONNECTED0 DEMAND

VA: TOTAL8460 CONNECTED8460 DEMAND

AMPS: TOTAL35 CONNECTED35 DEMAND

L

R

O

045000

039600

084600

VA CONNECTED TO A PHASE

VA CONNECTED TO B PHASE

TOTAL

4500 VA =

3960 VA =

8460 VA

38 AMPS CONNECTED TO A PHASE @ 120 VOLTS

33 AMPS CONNECTED TO B PHASE @ 120 VOLTS

FEEDER / BRANCH CIRCUIT SCHEDULE					
MARK	RACEWAY	PHASE CONDUCTORS	NEUTRAL CONDUCTORS	GROUND CONDUCTORS	REMARKS
1000A	2"	3#3/0	1#3/0	1#1/0	FOUR PARALLEL FEEDERS REQUIRED PARTIAL CONDUIT REUSE
D1000	2"	3#3/0	1#3/0	1#1/0	FOUR PARALLEL FEEDERS TO BE REMOVED
D1001	2"	3#3/0	1#3/0	1#1/0	FOUR PARALLEL FEEDERS TO BE REMOVED
DE1000	2"	3#3/0	1#3/0	1#1/0	FOUR PARALLEL FEEDERS TO BE REMOVED
E1000A	2"	3#3/0	1#3/0	1#1/0	FOUR PARALLEL FEEDERS TO BE REMOVED
E1001	2"	3#3/0	1#3/0	1#1/0	FOUR PARALLEL FEEDERS REQUIRED PARTIAL CONDUIT REUSE
2100	2"	3#2/0	1#2/0	1#6	
2200	2"	3#3/0	1#3/0	1#3	TWO PARALLEL FEEDERS REQUIRED
2300	3/4"	3#8	----	1#10	----
2400	3/4"	2#8	----	1#10	----
2410	1"	2#4	1#4	1#8	----
2411	1"	2#4	1#4	1#8	----
2412	1"	2#4	1#4	1#8	----
2413	1"	2#4	1#4	1#8	----
2414	1"	2#4	1#4	1#8	----
D2410	1"	2#4	1#4	1#8	----
2500	3/4"	2#8	----	1#10	----
2510	1"	2#4	1#4	1#8	----
2511	1"	2#4	1#4	1#8	----
2512	1"	2#4	1#4	1#8	----
2600	3/4"	2#8	----	1#10	----
2610	1"	2#4	1#4	1#8	----
2611	1"	2#4	1#4	1#8	----
2612	1"	2#4	1#4	1#8	----

PANELBOARD 'EMP'														
VOLTAGE: 120/240 VOLT 1 PHASE 3 WIRE										LOCATION: ROOM				
80A MAIN CIRCUIT BREAKER										MOUNTING: SURFACE				
BUSES: MAIN - 200 A; 100% NEUTRAL: EQUIPMENT GROUND										Isc = 10,000 A RMS SYM AVAILABLE				
VA:L	VA:R	VA:O	LOAD			BKR	CKT	PH	CKT	BKR	LOAD			VA:O
0	360		REC: CALL CENTER			20/1	1	A	2	20/1	REC: CALL CENTER		0	360
0	360		REC: CALL CENTER			20/1	3	B	4	20/1	REC: CALL CENTER		0	360
0	360		REC: CALL CENTER			20/1	5	A	6	20/1	REC: CALL CENTER		0	360
0	360		REC: CALL CENTER			20/1	7	B	8	20/1	REC: CALL CENTER		0	360
0	360		REC: CALL CENTER			20/1	9	A	10	20/1	REC: CALL CENTER		0	360
0	360		REC: CALL CENTER			20/1	11	B	12	20/1	REC: CALL CENTER		0	360
0	360		REC: IT ROOM			20/1	13	A	14	20/1			0	0
0	0					20/1	15	B	16	20/1			0	0
0	0					20/1	17	A	18	20/1			0	0
0	0					20/1	19	B	20	20/1			0	0
0	0					20/1	21	A	22	20/1			0	0
0	0					20/1	23	B	24	20/1			0	0
0	0					20/1	25	A	26	20/1			0	0
0	0					20/1	27	B	28	20/1			0	0
0	0					20/1	29	A	30	20/1			0	0
0	0					20/1	31	B	32	20/1			0	0
0	0					20/1	33	A	34	20/1			0	0
0	0					20/1	35	B	36	20/1			0	0
0	0					20/1	37	A	38	20/1			0	0</

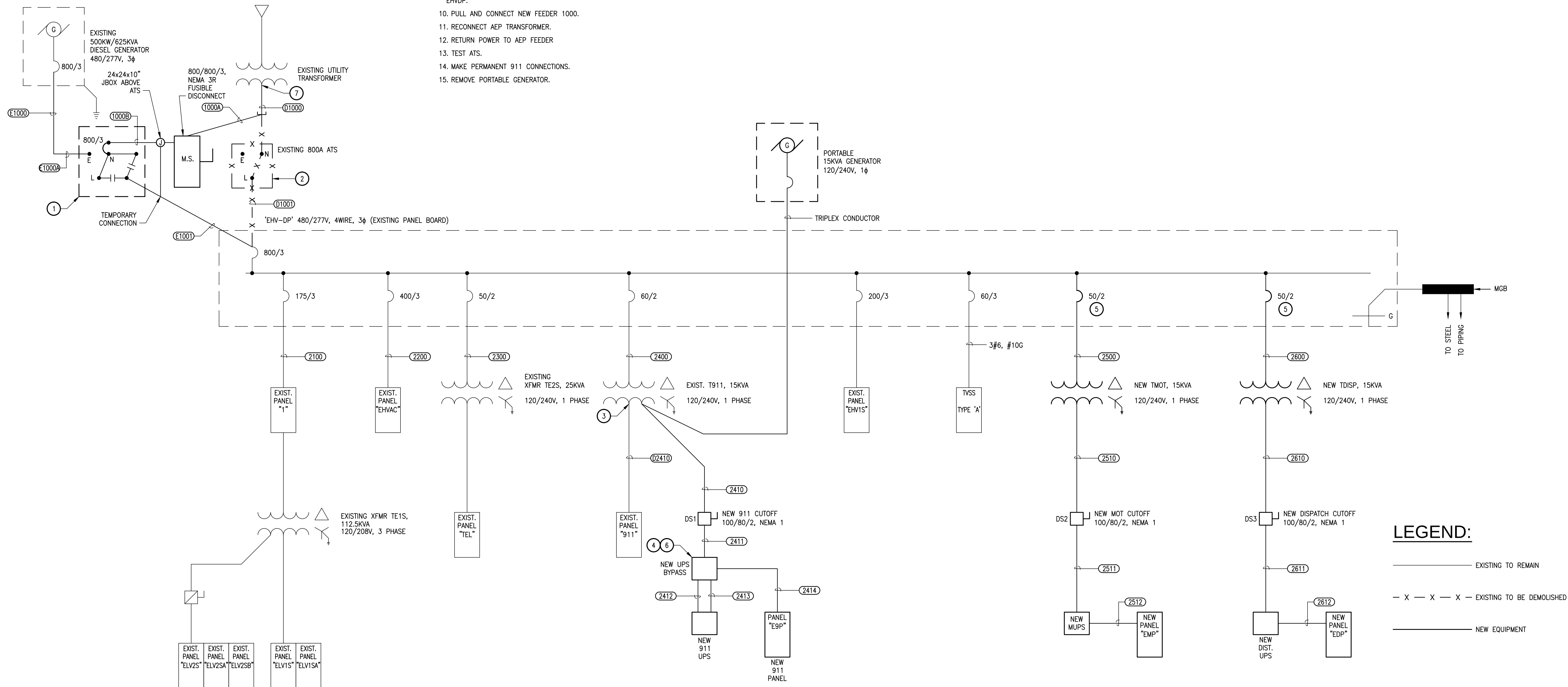
GENERAL: THE DOWNTIME FOR THE INSTALLATION OF NEW EQUIPMENT IS CRITICAL. OUTAGES SHALL BE LIMITED TO SATURDAYS. THE USE OF THE EXISTING STANDBY GENERATOR SHALL BE USED TO MINIMIZE THE OVERALL BUILDING OUTAGE. CLOSE COORDINATION WITH AEP WILL BE NECESSARY TO SCHEDULE THE EXISTING TRANSFORMER OUTAGE ON A SATURDAY. NEW CONDENS AND WIRING FOR NEW MAIN SWITCH AND NEW AUTOMATIC TRANSFER SWITCH SHALL BE INSTALLED AS MUCH AS POSSIBLE PRIOR TO DISCONNECTION OF EXISTING SERVICE AND GENERATOR FEEDS. THE 911 FEED IS THE MOST CRITICAL AND CANNOT BE DOWN FOR MORE THAN A FEW MINUTES. A SMALL GENERATOR SHALL BE FURNISHED AND INSTALLED FOR CONNECTION TO THE 911 FEED AS INDICATED ON DRAWINGS.

14. MAKE PERMANENT 911 CONNECTIONS.
15. REMOVE PORTABLE GENERATOR.

A. INFORMATION ON THIS SHEET HAS BEEN TAKEN FROM RECORD DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK AND REPORT ANY AND ALL DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THESE PLANS TO THE ENGINEER IMMEDIATELY.

B. CONTRACTOR SHALL CONFIRM WITH ENGINEER PLANNED SEQUENCE OF INSTALLATION PRIOR TO PROCEEDING. SUGGESTED SEQUENCE IS FOR ESTIMATING PURPOSES ONLY. ACTUAL SEQUENCE SHALL BE PREPARED BY CONTRACTOR.

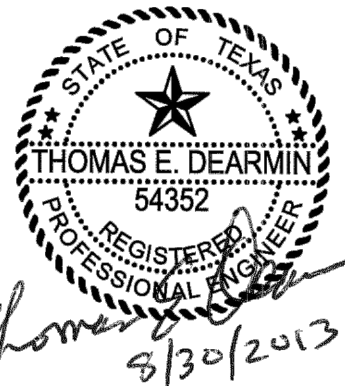
1. FURNISH AND INSTALL NEW 800A/3P, 4 WIRE SWITCHED NEUTRAL TRANSFER SWITCH. LOCATE ON EXTERIOR OF BUILDING, ONCE NEW SERVICE FROM TRANSFORMER AND GENERATOR ARE IN PLACE, CONNECT TO PANEL EHV-DP. HAVE NEW SERVICE PREPARED TO MINIMIZE DOWN TIME.
2. REMOVE EXISTING AUTOMATIC TRANSFER SWITCH AND CONNECTION CONDUCTORS AFTER NEW SWITCH IS INSTALLED.
3. ROUTE FEEDER FROM EXISTING 15KVA TRANSFORMER SECONDARY TO NEW 911 SYSTEM DISCONNECT DS1.
4. EXTERNAL UPS BYPASS FOR 911 UPS.
5. NEW 50/2P CIRCUIT BREAKER FOR EXISTING SIEMENS PANEL.
6. 911 UPS BYPASS SWITCH BY 911 EQUIPMENT INSTALLER.
7. CONTRACTOR SHALL MAKE ARRANGEMENTS WITH AEP TO MINIMIZE SHUTDOWN.



_____ EXISTING TO REMAIN

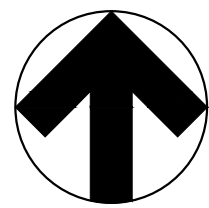
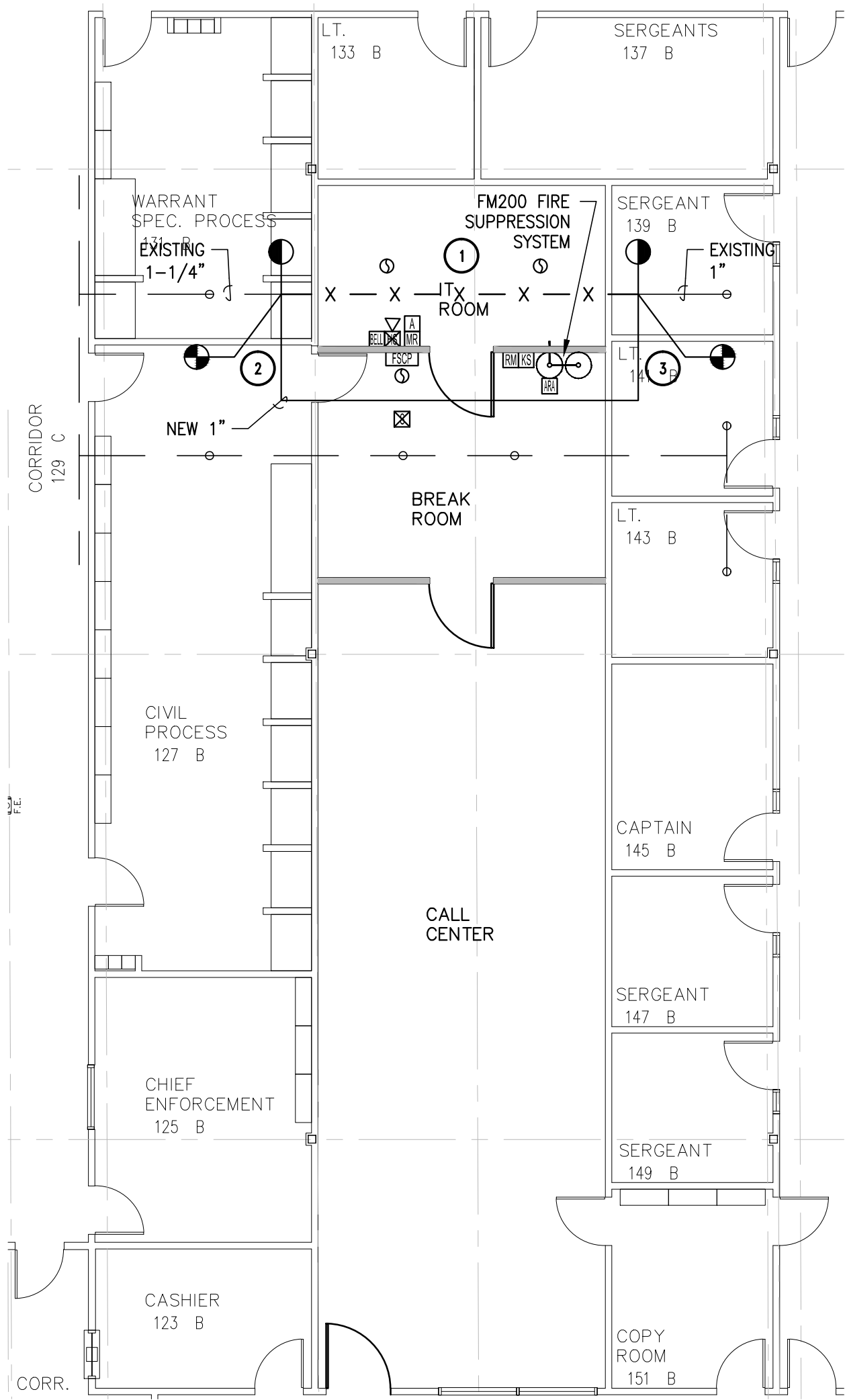
— X — X — X — EXISTING TO BE DEMOLISHED

_____ NEW EQUIPMENT

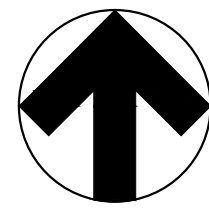
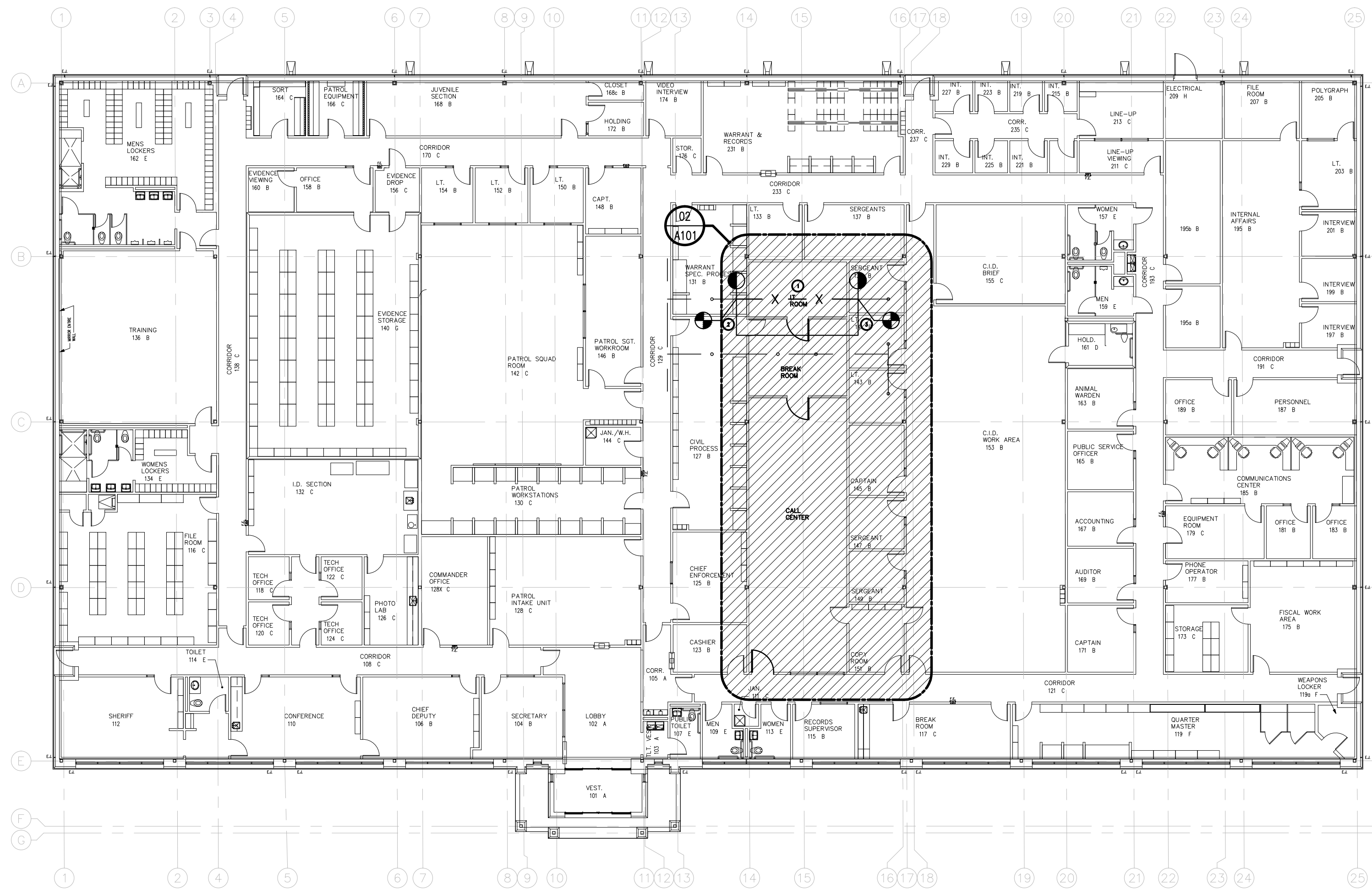
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Project No.:	29607 (WA01)
Issued:	08 / 30 / 13
Drawn By:	CHAVEZ
Checked By:	T.D.
Scale:	AS NOTED
Sheet Title	
ELECTRICAL SINGLE LINE DIAGRAM	



02 ENLARGED FIRE SPRINKLER PLAN
SCALE: 1/8" = 1'-0"



01 FIRE SPRINKLER OVERALL PLAN
SCALE: 1/16" = 1'-0"

GENERAL IT ROOM FIRE SUPPRESSION NOTES:

1. ALL CEILING TILES SHOULD BE CLIPPED AND OPENINGS CAULKED.
2. ALL WALLS SHOULD BE CAULKED AROUND THE INSIDE PERIMETER OR THE ROOM WHERE THE WALLS REST ON THE FLOOR SLAB AND THE WALLS INTERSECT WITH THE CEILING SLAB ABOVE.
3. PROVIDE A NEW 2'x2' NON-COMBUSTIBLE GYPSUM CEILING TILES, SIMILAR TO GRIDSTONE FIRE-SHEILD.
4. DRYWALL SHOULD BE CAULKED AT JOINTS OF THE WALLS AND FLOOR, AND AT THE ROOF OR FLOOR ABOVE.
5. ANY PENETRATION, INCLUDING ALL CONDUIT, CABLE TRAYS, OUTLETS, SWITCHES AND WIRE TROUGHS MUST BE FIRE CAULKED AND SEALED.
6. PROVIDE FLOOR SEAL AT IT ROOM DOOR.
7. FURNISH AND INSTALL FM200 DRY FIRE SUPPRESSION PER SPECIFICATION SECTION 212200 AND NFPA. FIRE SUPPRESSION SYSTEM SHALL COVER THE ENTIRE I.T. ROOM.

FIRE SPRINKLER NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO RE-ROUTE SPRINKLER LINE AS SHOWN. PROVIDE A FULLY WORKING AND APPROVED AUTOMATIC SPRINKLER SYSTEM IN AREAS REMODELED. CONSTRUCTION SHALL CONFORM WITH ALL THE LATEST REQUIREMENTS OF THE INTERNATIONAL FIRE AND BUILDING CODE, THE LOCAL FIRE DEPARTMENT AND NFPA 13 - STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS. FIELD VERIFY EXISTING MAINS, BRANCH PIPING, HEADS, ETC., PRIOR TO COMMENCEMENT OF WORK TO AVOID CONFLICTS.
2. RE-ROUTING AND INSTALLATION OF FIRE SPRINKLER LINE SHALL BE DONE BY A LICENSED FIRE SPRINKLER CONTRACTOR.
3. THE EXACT ROUTING OF PIPING SHALL BE COORDINATED WITH ARCHITECT. RELOCATED, OR NEW, SPRINKLER HEADS SHALL BE CONNECTED TO THE EXISTING, OR EXTENDED, BRANCH LINES VIA THREADED CONNECTIONS. SADDLE TYPE CLAMP CONNECTIONS ARE NOT ACCEPTABLE.
4. ALL SPRINKLER SYSTEM COMPONENTS SHALL BE OF LISTED AND APPROVED TYPE.
5. ALL HANGER COMPONENTS SHALL BE OF LISTED AND APPROVED TYPE.
6. CONTRACTOR SHALL RUN AND PAY FOR ALL TEST REQUIRED TO ENSURE THAT THE SYSTEM HAS ADEQUATE FLOW AND PRESSURE.
7. CONTRACTOR SHALL BE RESPONSIBLE DURING INSTALLATION AND TEST FOR ANY DAMAGE CAUSED BY LEAKS.

KEY NOTES: ④

1. REMOVE EXISTING 1-1/4" WET PIPE SPRINKLER PIPE AND SPRINKLER HEADS ABOVE NEW IT ROOM LOCATION.
2. CONNECT NEW 1" WET PIPE SPRINKLER PIPE TO EXISTING 1-1/4" WET SPRINKLER PIPE AND ROUTE ABOVE BREAK ROOM. PIPE MUST NOT RUN OVER IT ROOM.
3. CONNECT NEW 1" WET PIPE SPRINKLER PIPE TO EXISTING 1" LINE ABOVE SERGEANT - 139 OFFICE.

LEGEND:

- — — — — EXISTING FIRE SPRINKLER PIPING TO REMAIN
- X — X — X — EXISTING FIRE SPRINKLER PIPING TO BE DEMOLISHED
- — — — — NEW FIRE SPRINKLER PIPING

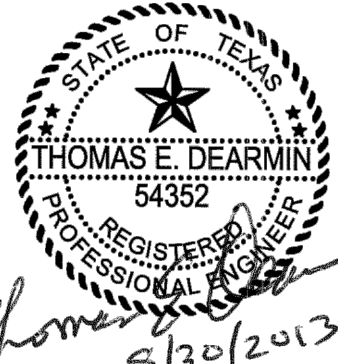
Hidalgo County Sheriff's Office -
Modifications to Incorporate Motorola
and 911 Equipment
Edinburg, Texas



HALFF

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Revision No.	Date	Description



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Sheet Title

FIRE PROTECTION PLAN

F5101

Sheet Number