

# PORTABLE NO. 4 UTRGV COASTAL RESEARCH

100% CONSTRUCTION DOCUMENTS

OWNER:

# The University of Texas Rio Grande Valley

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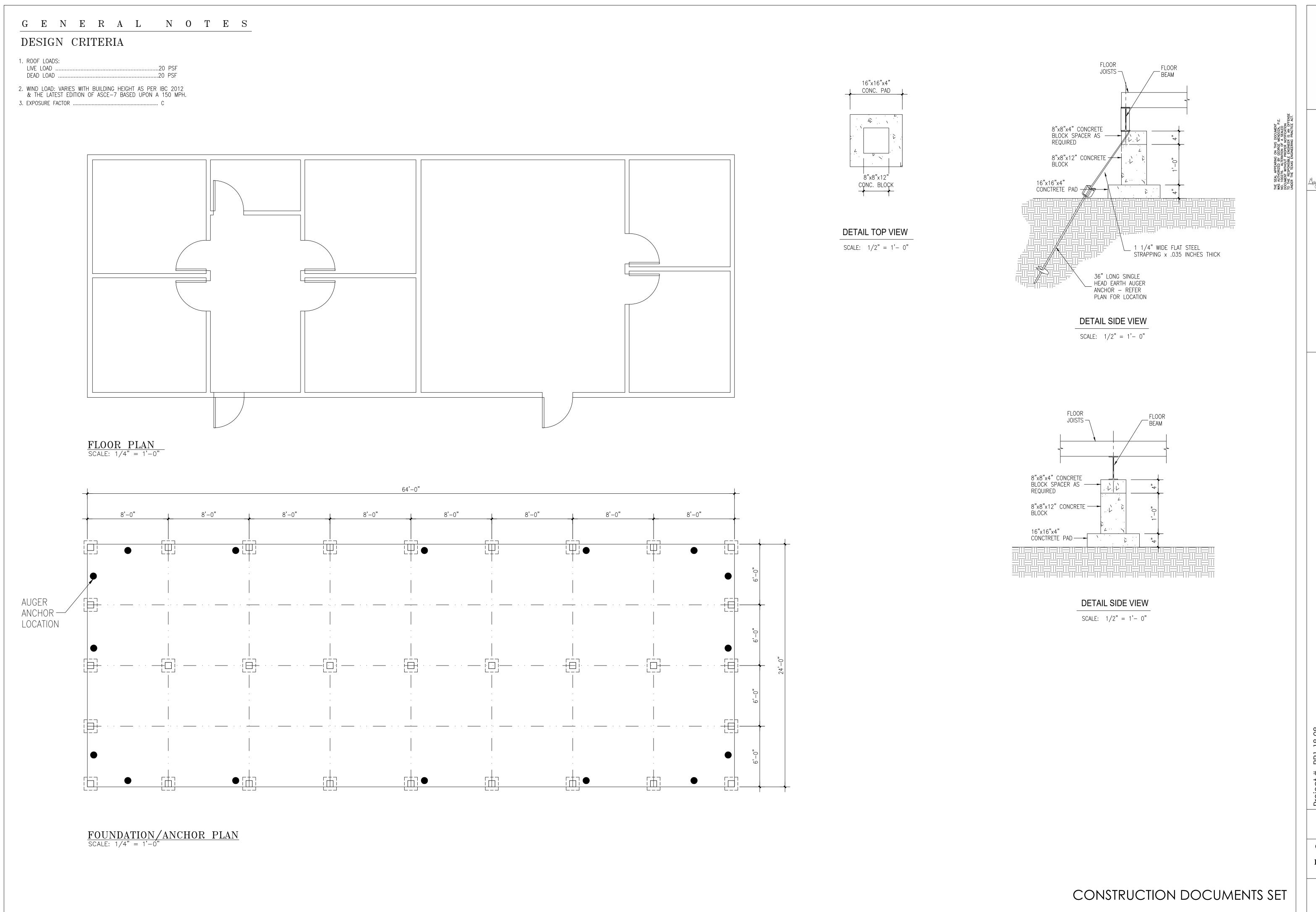


Project # PP1 18-08
UTRGV COASTAL RESEARCH
PORTABLE NO. 4
901 SOUTH GARCIA ST.

Drawn by Au
Issue Date 04/29/

COVER SHEET

A100



& CONSTRUCTION 956.65.2770

MENDOZA ENGINEERING, P. L. L. C.

GM, SG Drawn by

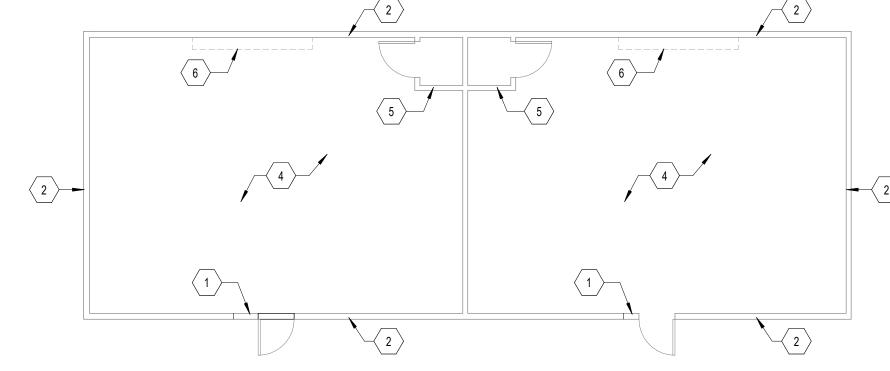
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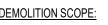
GENERAL NOTES FOUNDATION PLAN & DETAILS











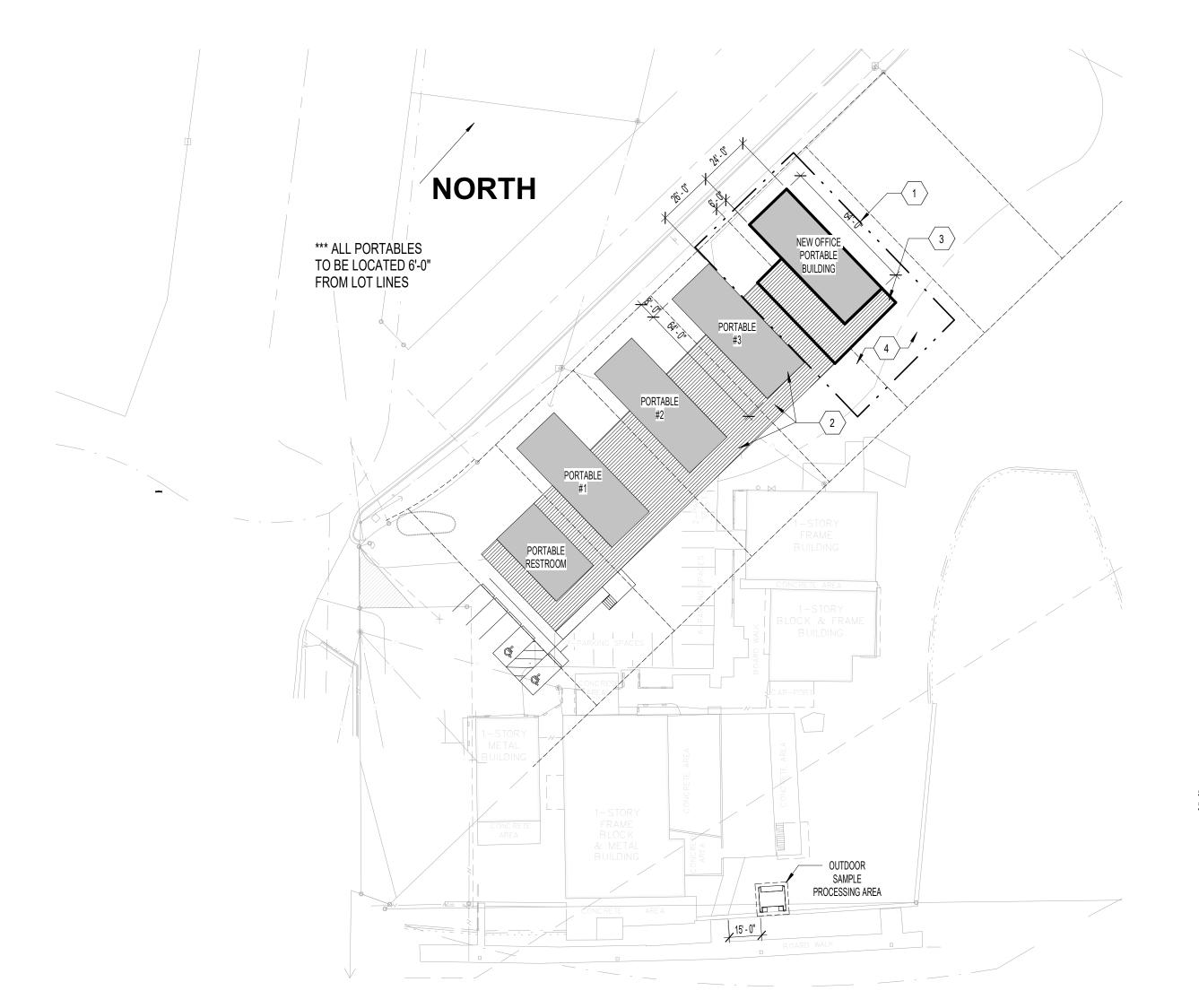
- EXISTING ROOF TO BE REMOVED IN ITS ENTIRETY, REPLACE EXISTING PLYWOOD DECK WITH 5/8" EXTERIOR GRADE AND PROVIDE NEW 30 YEAR TYPE ASPHALT SHINGLES.
- EXTERIOR SIDING TO BE REPLACED WITH SMART BOARD SIDING, MATCH ADJACENT BUILDINGS. PROVIDE MINIMUM OF R-19 INSULATION FOR PERIMETER WALLS. - ALL EXTERIOR OPENINGS TO BE REMOVED. INSTALL 2 NEW H.M. DOOR & FRAMES, MATCH ADJACENT PORTABLE FINISHES.

- COMPLETE INTERIOR TEAR-DOWN. EXISTING WOOD FRAMING AROUND PERIMETER WALLS TO REMAIN. PREPARE TO

**EXISTING CONDITIONS** 

2 SITE PLAN 1" = 40'-0"

RECEIVE NEW FINISHES THROUGHOUT.



#### **DEMOLITION GENERAL NOTES**

1. CONTRACTOR'S FORCES ARE RESTRICTED TO DESIGNATED AREAS.

2. THE EXTENT OF DEMOLITION WORK IS SHOWN ON THE DRAWINGS, IT IS NOT POSSIBLE TO SHOW ALL REQUIRED DEMOLITION. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL VISIT THE FACILITY TO DETERMINE THE EXTENT OF DEMOLITION AND REMODELING WORK, AND FAMILIRIZE HIMSELF WITH THE CONDITIONS UNDER WHICH WORK WILL BE PERFORMED PRIOR TO SUBMITTING A BID AND COMMENCING WORK.

3. USE CAUTION TO AVOID DAMAGE TO ANY EXISTING UNDERGROUNG OR OVERHEAD UTILITY LINES THAT ARE TO REMAIN IN USE WHEN EXCAVATING. CONTRACTOR SHALL REPAIR AT HIS OWN EXPENSE, ALL DAMAGE TO EXISTING SITE UTILITIES RESULTING FROM THE WORK OF HIS CONTRACT

4. CONTRACTOR SHALL FURNISH AND MAINTAIN SATISFACTORY BARACADES AND/OR OTHER SUITABLE BARRIERS AS REQUIRED TO PROVIDE PROTECTION TO THE PUBLIC AND WORKERS DURING ALL DEMOLITION ACTIVITIES.

FURNITURE THAT IS TO BE LEFT IN PLACE. WHERE EXISTING STRUCTURE OR ELEMENTS ARE DAMAGED BY CONTRACTOR DURING DEMOLITION WHICH ARE NOT SCHEDULED TO BE REMOVED, CONTRACTOR SHALL BE

6. ITEMS OR MATERIALS THAT ARE TO REMAIN, SHALL BE PATCHED, CLEANED, RUBBED, SANDED, FLOATED, ETC. TO A "LIKE NEW" CONDITION, AS TO MATCH ADJACENT NEW SCHEDULED MATERIALS.

7. ALL DEMOLITION ACTIVITIES MUST BE COORDINATED WITH UTRGV AND ITS FACILITIES STAFF.

## **DEMOLITION**

EXISTING WINDOWS, DOORS AND FRAMES ASSEMBLY TO BE REMOVED. DISPOSE PER UTRGV'S DIRECTIONS. HARDWARE TO BE SALVAGED FOR

FINISH AND PERIMETER WALLS TO RECEIVE NEW FINISHES.

INCLUDING DOORS, FRAMES AND MILLWORK.

6. REMOVE BOOKSHELVES.

OFFICE 4

OFFICE 5

12' - 6"

5. CONTRACTOR TO PROTECT EXISTING STRUCTURES, EQUIPMENT AND RESPONSIBLE FOR REPAIRING DAMAGED ITEMS.

## **KEYNOTES**

1. PROVIDE OPENING IN EXISTING WALL TO ACCOMODATE NEW DOOR AND FRAME ASSEMBLY OR WINDOWS AS SCHEDULED

REMOVE EXTERIOR SIDING. PREPARE TO RECEIVE NEW SMART BOARD

4. REMOVE EXISTING FLOORING AND PREPARE FLOOR TO RECEIVE NEW

REMOVE INTERIOR PARTITION IN ITS ENTIRETY OR PORTION ONLY,

(11)—

**ELECT** 

**WORK AREA** 

9' - 4"

OFFICE 3

OFFICE 2

11' - 5"

29' - 6"

64' - 0"

## **NEW CONSTRUCTION GENERAL NOTES**

. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL BECOME FAMILIAR WITH THE SCOPE OF WORK, PROJECT ON-SITE/OFF-SITE CONDITIONS AND FIELD VERIFY PRIOR TO BIDDING. ANY UNCLEAR ITEMS SHALL BE BROUGHT TO THE ATTENTION OF UTRGV IN WRITING PRIOR TO SUBMITTAL PROPOSAL.

P. THE GENERAL CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE PROJECT LIMITS.

THE GENERAL CONTRACTOR IS TO COMPLY WITH FEDERAL, STATE AND LOCAL CODE REQUIREMENTS. ADDITIONALLY, THE CONTRACTOR IS TO COMPLETE TEXAS HEALTH DEPARTMENT NOTIFICATIONS AND SUBMIT FORMS AND REQUIRED INFORMATION TO MEET "TEXAS COMMISSION OF ENVIRONMENTAL QUALITY" (TCEQ) REQUIREMENTS PRIOR TO START OF

SHOULD THE CONTRACTOR SUSPECT THAT HAZARDOUS MATERIALS ARE PRESENT, IMMEDIATELY NOTIFY OWNER TO ARRANGE FOR PROPER REMOVAL OF ANY AND ALL HAZARDOUS MATERIALS.

5. THE GENERAL CONTRACTOR SHALL REMOVE DELETERIOUS MATERIALS AND DEBRIS FROM PROJECT SITE ON A DAILY BASIS, AND DISPOSE OF ITEMS ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL CODE REQUIREMENTS.

S. THE GENERAL CONTRACTOR SHALL VERIFY LOCATIONS OF ALL OVERHEAD AND UNDERGROUND UTILITIES BEFORE BEGINNING WORK.

'. REFER TO CIVIL, STRUCTURAL AND MEP DRAWINGS FOR ADDITIONAL NOTES AND INSTRUCTIONS.

B. COORDINATE ROOF PENETRATIONS WITH M.E.P. PENETRATIONS SHALL BE FLASHED TO MEET "SMACNA" DETAIL REQUIREMENTS.

1. REFER TO ARCHITECTURAL DRAWINGS FOR BUILDING DIMENSIONS AND INFORMATION.

2. THE GENERAL CONTRACTOR SHALL NOTIFY UTRGV IMMEDIATELY OF ANY AND ALL DISCREPANCIES FOUND ON THE PLANS OR DEVIATIONS FROM DOCUMENTED ON-SITE CONDITIONS. FAILURE TO NOTIFY THE ARCHITECT IN A TIMELY MANNER SHALL RESULT IN THE CONTRACTOR TAKING RESPONSIBILITY FOR ANY AND ALL REMEDIAL MEASURES REQUIRED.

3. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, OBTAIN CLARIFICATION FROM UTRGV BEFORE CONTINUINING THE WORK.

4. FIELD VERIFY DIMENSIONS BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE WORK.

5. IF DISCREPANCIES APPEAR BETWEEN DRAWINGS AND SPECIFICATIONS, THE HIGHER QUALITY, QUANTITY AND PRICE SHALL SUPERSEDE.

6. EXAMINE SPECIFIED PRODUCTS AND SUBMIT WRITTEN EXCEPTIONS, OBJECTIONS, OR SUBSTITUTIONS WITH ANALYSIS AND RECOMMENDATIONS PRIOR TO SUBMITTING BID COST AND/OR COMMENCING WORK.

7. THE RESPONSIBILITY FOR THE ADEQUACY OF PROPOSED SUBSTITUTIONS FALLS ON THE GENERAL CONTRACTOR. SHOULD A SUBSTITUTION PRODUCT FAIL TO PERFORM WHERE THE ORIGINALLY SPECIFIED PRODUCT WOULD HAVE PERFOMRED ALL NECESSARY WORK TO

REINCOPORATE THE ORIGINAL PRODUCT MUST BE DONE AT NO ADDITIONAL

8. WHERE COMPLEX ASSEMBLY INVOLVING TWO OR MORE TRADES IS CALLED FOR ON THE DRAWINGS, THE GENERAL CONTRACTOR SHALL RELATED COMPONENTS FOR ARCHITECTS REVIEW. THEGENERAL CONTRACTOR IS RESPONSIBLE FOR THE PROPER TESTING, OPERATING AND

9. THE WORD "PROVIDE" SHALL MEAN FURNISH AND INSTALL COMPLETE AND READY TO USE.

PERFORMANCE OF THE ENTIRE COMPOSITE SYSTEM.

**OPEN WORK** 

20' - 8"

10' - 5"

16' - 0"

20. WHEREVER MATERIALS ARE STORED AT THE JOBSITE, THEY SHOULD BE PROTECTED FROM DAMAGE, VANDALISM, FIRE AND INCLEMENT WEATHER. THE GENERAL CONTRACTOR SHALL PRODUCE EVIDENCE OF INSURANCE FOR MATERIALS STORED PRIOR TO PAYMENT BY OWNER.

1. THE GENERAL CONTRACTOR AND SUBCONTRACTORS ARE TO SCHEDULE AND COMPLETE THEIR WORK SO AS TO KEEP MECHANICAL, ELECTRICAL, TELEPHONE, DATA, HVAC CONTROL(S), INTERCOM AND OTHER EXISTING SYSTEMS OPERATIONAL IN AREAS OCCUPIED BY THE OWNER DURING RENOVATION AND CONSTRUCTION OF THIS PROJECT.

## SITE PLAN

1. OUTLINE OF LIMITS OF CONSTRUCTION

2. CONTRACTOR TO PROTECT EXISTING STRUCTURES, WHERE EXISTING STRUCTURE OR ELEMENTS ARE DAMAGED BY CONTRACTOR DURING CONSTRUCTION WHICH ARE NOT SCHEDULED TO BE REMOVED, CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING DAMAGED ITEMS.

B. PROVIDE NEW WOOD DECK, STAIRS AND HANDRAILS TO MATCH EXISTING, IT MUST COMPLY WITH TAS 2012 EDITION.

4. NEW RE-GRADED LANDSCAPED AREAS. REFER TO CIVIL.

### **MILLWORK GENERAL NOTES**

PROVIDE CLEAR SEALED SELECT WHITE MAPLE ON ALL EXPOSED SURFACES AND EDGES OF MILLWORK, ENDS, ETC. UNLESS NOTED

2. PROVIDE PLASTIC LAMINATE ON COUNTERTOPS UNLESS OTHERWISE

3. ALL PLASTIC LAMINATE COUNTERTOPS TO HAVE PLASTIC LAMINATE ON ALL EXPOSED SURFACES AND EDGES UNLESS NOTED OTHERWISE. PLASTIC LAMINATE COLOR AND PATTERN TO BE SELECTED BY THE

4. EXPOSED WALL UNDER COUNTER(S) TO RECEIVE FINISH AS SCHEDULED. 5. UTRGV TO SELECT ALL COLORS AND PATTERNS.

6. ALL SHELVES IN CABINETS AND BOOK CASES SHALL BE ADJUSTABLE. UNLESS OTHERWISE NOTED.

CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATING CASEWORK TO ASSURE PROPER FIT WITH AS-BUILT

8. CONTRACTOR TO VERIFY WITH OWNER EXACT SIZE OF ALL EQUIPMENT FURNISHED BY OWNER FOR PROPER FIT WITH CONTRACTOR SUPPLIED

9. MODIFY MILLWORK AS REQUIRED FOR COLUMN BUMPOUT(S) AND FURRING TO CONCEAL CONDUITS, PIPES, ETC. REF: ARCHITECTURAL

STRUCTURAL, STRUCTURAL AND M.E.P. DRAWINGS FOR POTENTIAL

10. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF ALL MILLWORK TO BE REVIEWED BY UTRGV.

11. ALL MILLWORK MUST COMPLY WITH TAS 2012 EDITION.

LOCATIONS.

12. PROVIDE LOCKS AT CABINETS AS NOTED OR REFER TO SPECIFICATIONS.

3. PROVIDE ALL PULLS, HINGES, K-V STANDARDS, SLIDES AND MISC. HARDWARE ON ALL MILLWORK. REFER TO SPECIFICATIONS.

14. PROVIDE TREATED WOOD BLOCKING OR METAL BLOCKING IN WALLS WHERE REQUIRED TO SUPPORT MILLWORK.

#### **FLOOR PLAN GENERAL NOTES**

1. REFER TO "CONSTRUCTION GENERAL NOTES" FOR ADDTIONAL INFORMATION.

2. FOR PERIMETER WALLS, WHERE OPENINGS NEED TO BE ENCLOSED. CONTRACTOR TO MATCH EXISTING WALL TYPE CONSTRUCTION.

2. SEAL ALL GAPS WHERE MEP SYSTEMS PENETRATE WALLS, FLOORS, CEILINGS, FIRE ASSEMBLIES AND ROOFING.

3. ALL APPLIANCES TO BE DEPARTMENT PROVIDED/ DEPARTMENT

4. PAINT ALL DOORS AND FRAMES. REFER TO ROOM FINISH SCHEDULE. 5. PAINT ALL GYPSUM BOARD ASSEMBLIES. REFER TO ROOM FINISH PLANS

6. WHERE STRUCTURE IS SCHEDULED TO BE EXPOSED, LEAVE CLEAN, BLEMISH FREE DECK WITH FACTORY FINISH EXPOSED TO VIEW.

7. ALL EXPOSED WOOD ON ENTIRE PROJECT SHALL BE PREMIUM GRADE "A" PLAIN SLICED, PREMIUM WHITE MAPLE FINISH WITH TRANSPARENT FINISH.

8. PROVIDE FIRE TREATED WOOD BLOCKING OR METAL BLOCKING IN WALLS WHERE REQUIRE SUPPORT FOR MILLWORK AND ALL OTHER WALL OR CEILING MOUNTED EQUIPMENT.

#### FLOOR PLAN **KEYNOTES**

1. WALL TYPE 1 -

PROVIDE FURR-OUT 5/8" TYPE "X" GYPSUM BOARD AT EXISTING WALLS. PROVIDE BATT INSULATION. NEW BOARD TO EXTEND 6" ABOVE CEILING

TYPICAL PARTITION THROUGHOUT BUILDINGS UNLESS OTHERWISE NOTED.

3. PROVIDE NEW FINISHES. REFER TO MATERIAL SCHEDULE AND ROOM

3-5/8" 25 GA. METAL STUDS SPACES @16" O.C. WITH 5/8" TYPE "X" GYPSUM

BOARD ON EACH SIDE. PROVIDE SOUND BATT INSULATION. THIS PARTITION

4. PROVIDE NEW SINK. MATCH TYPICAL USED IN ADJACENT PORTABLES.

TYPE SHALL BE BRACED TO THE STRUCTURE.

5. ALL APPLIANCES TO BE DEPARTMENT PROVIDED/DEPARTMENT

6. PROVIDE NEW EXTERIOR H.M. DOOR & FRAME. MATCH FINISHES FROM ADAJCENT PORTABLE BUILDINGS.

. PROVIDE NEW H.M. FRAME & WOOD DOOR. PROVIDE SMALL LITE KITS FOR OFFICE & CONFERENCE ROOM DOORS. SOLID DOORS FOR REST OF SPACES. FOR DOOR HARDWARE CONSULT UTRGV STANDARDS.

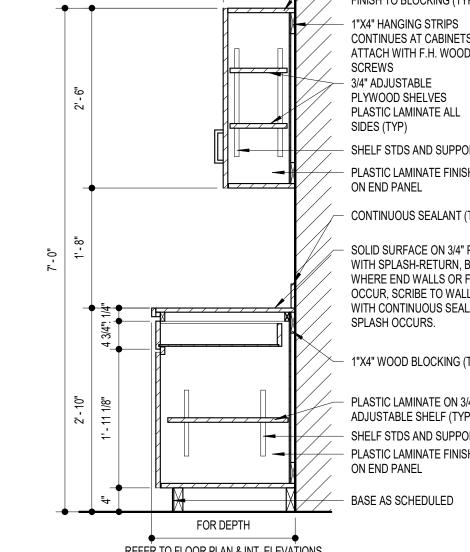
3. PROVIDE NEW 6'-0" X 4'-0" MAGNETIC WHITEBOARD, CONTRACTOR PROVIDED/CONTRACTOR INSTALLED.

9. ALL MILLWORK MUST COMPLY WITH LATEST TAS EDITION. REFER TO

10. FIRE ALARM PULL STATIONS/VISUALS.

MILLWORK GENERAL NOTES.

11. DATA RACK LOCATION - COORDINATE FINAL SIZE AND LOCATION WITH



REFER TO FLOOR PLAN & INT. ELEVATIONS

4 MILLWORK SECTION 3/4" = 1'-0"

WOOD FINISH ON ALL NON-EXPOSED SURFACES ATTACH WITH WOOD SCREWS THROUGH WALL FINISH TO BLOCKING (TYP) **CONTINUES AT CABINETS** ATTACH WITH F.H. WOOD SHELF STDS AND SUPPORTS PLASTIC LAMINATE FINISH CONTINUOUS SEALANT (TYP) SOLID SURFACE ON 3/4" PLYWOOD TOP WITH SPLASH-RETURN, BACKSPLASH WHERE END WALLS OR FURRINGS OCCUR, SCRIBE TO WALL AND FINISH WITH CONTINUOUS SEALANT WHERE NO 1"X4" WOOD BLOCKING (TYP). PLASTIC LAMINATE ON 3/4" PLYWOOD ADJUSTABLE SHELF (TYP). SHELF STDS AND SUPPORTS PLASTIC LAMINATE FINISH REFER TO FLOOR PLAN & INT. ELEVATIONS

100% CONSTRUCTION DOCUMENTS SET





Issue Date 04/29/2019

**DEMOLITION** 

A101

Drawn by

ABLE

901 SOUTH GARCIA ST. PORT ISABEL, TEXAS 7857

#### RCP GENERAL NOTES

1. ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER ENGINEERING DRAWINGS FOR LOCATION OF LIGHT FIXTURES, DIFFUSERS, ETC. SEE M.E.P. DRAWINGS FOR ADDITIONAL INFORMATION AND INSTRUCTIONS.

2. LIGHTING FIXTURES THAT ARE NOT THE FULL SIZE OF A CEILING PANEL SHALL BE LOCATED IN THE CENTER OF THE CEILING PANEL.

3. COORDINATE ALL CEILING MOUNTED PROJECTOR AND SECURITY CAMERA LOCATIONS WITH LIGHT FIXTURES.

4. TAPE AND FLOAT ALL FIRE RATED GYPSUM BOARD. SEAL ALL PENETRATIONS WITH FIRE CAULK.

5. CEILING GRID TO BE CENTERED IN ROOMS UNLESS OTHERWISE NOTED.6. DOWNLIGHTS TO BE CENTERED IN CEILING PANELS UNLESS OTHERWISE

7. ALL GP. BD. CEILINGS AND SOFFITS ARE 1/2" GP.BD. UNLESS SHOWN OTHERWISE. ALL VERTICAL FACES OF INTERIOR SOFFITS ARE GP.BD. UNLESS SHOWN OTHERWISE.

8. ALL EXPOSED GP.BD. TO BE PAINTED UNLESS SHOWN OTHERWISE.

CABLE TRAY TO AVOID CONFLICTS WITH LIGHTS AND STRUCTURE.

9. COORDINATE ALL MECH. DUCT WORK, PIPING, SPRINKLER LINES, AND

10. PAINT ALL EXPOSED CONDUITS, JUNCTION BOXES, ELECTRICAL ITEMS (NOT FACTORY FINISHED), SPRINKLER LINES, MECH., DUCTWORK, PIPING UNLESS ROOM FINISH SCHEDULE CALLS FOR EXPOSED CONSTRUCTION.

## RCP KEYNOTES

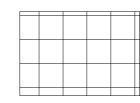
1. CEILING MOUNTED POWERED PROJECTION SCREEN, OWNER PROVIDED/CONTRACTOR INSTALLED.

CEILING MOUNTED PROJECTOR, OWNER PROVIDED/CONTRACTOR INSTALLED.

3. WALL MOUNTED TELEVISION AT 6'-0" A.F.F, OWNER PROVIDED/CONTRACTOR INSTALLED.

4. WIRELESS ACCESS POINT.

#### RCP LEGEND



NEW 2' X 2' ACOUSTICAL CEILING TILE WITH NEW LIGHT FIXTURES AND REGISTERS

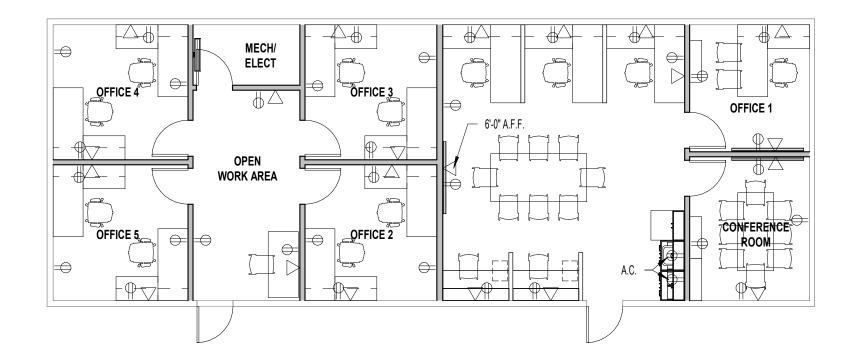


CEILING MOUNTED - FIRE ALARM SPEAKER STROBE

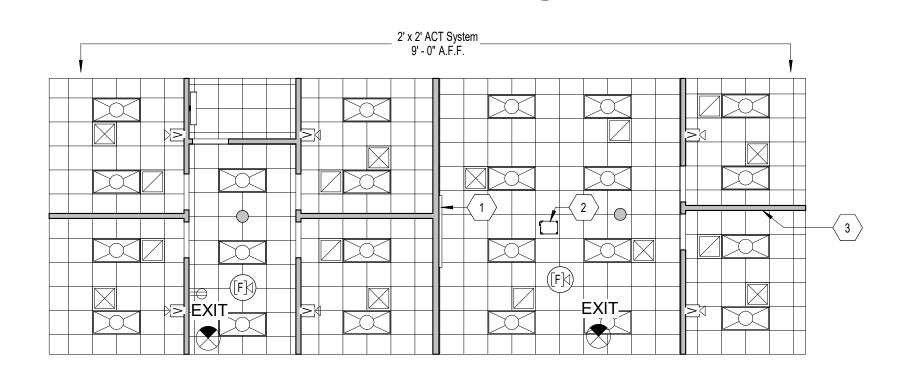


WALL MOUNTED - FIRE ALARM VISUAL SIGNAL

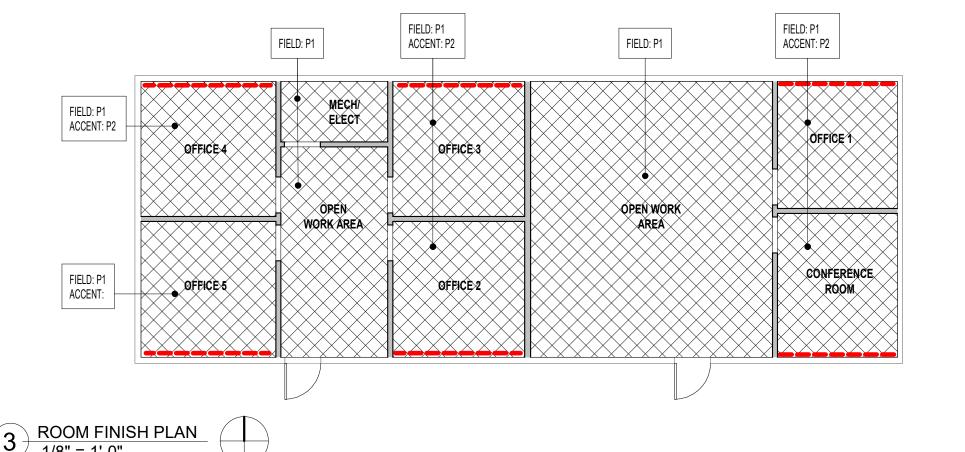
WIRELESS ACCESS POINT



## 2 FURNITURE PLAN WITH POWER & DATA LOCATIONS 1/8" = 1'-0"

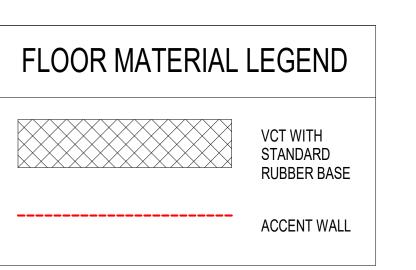


1 REFLECTIVE CEILING PLAN 1/8" = 1'-0"



	MATERIAL SCHEDULE LEGEND								
CEILING MATERIALS:									
C1	ACOUSTICAL CEILING TILE								
C2	GYPSUM BOARD CEILING - PURE WHITE - SW 7005								
WALL I	MATERIALS: FIELD COLORS								
P1	SHERWIN WILLIAMS - KILIM BEIGE - SW 6016								
P2	SHERWIN WILLIAMS - MEDIATATIVE - SW 6227								
FLOOR	NG MATERIALS:								
F1	MANNINGTON - PROGRESSION - SANDRIFT 55137								
F2	ROPPE - BLACK BROWN - 193								
MILLWO	DRK MATERIALS:								
M1	CORIAN - NOCTURNE								
M2	FORMICA - NATURAL MAPLE - 756-58								

\* EXTERIOR FINISHES TO MATCH ADJACENT PORTABLE BUILDINGS.



Project # PP1 18-08
UTRGV COASTAL RESEARCH
PORTABLE NO. 4

901 SOUTH GARCIA ST.
PORT ISABEL, TEXAS 78578

Drawn by Y
Issue Date 04/29/2

RCP, FURNITURE PLAN & ROOM FINISH PLAN

A102







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Project # 32032.0 UNIVERSITY OF PORTABL

Drawn by Issue Date 05-01-2019

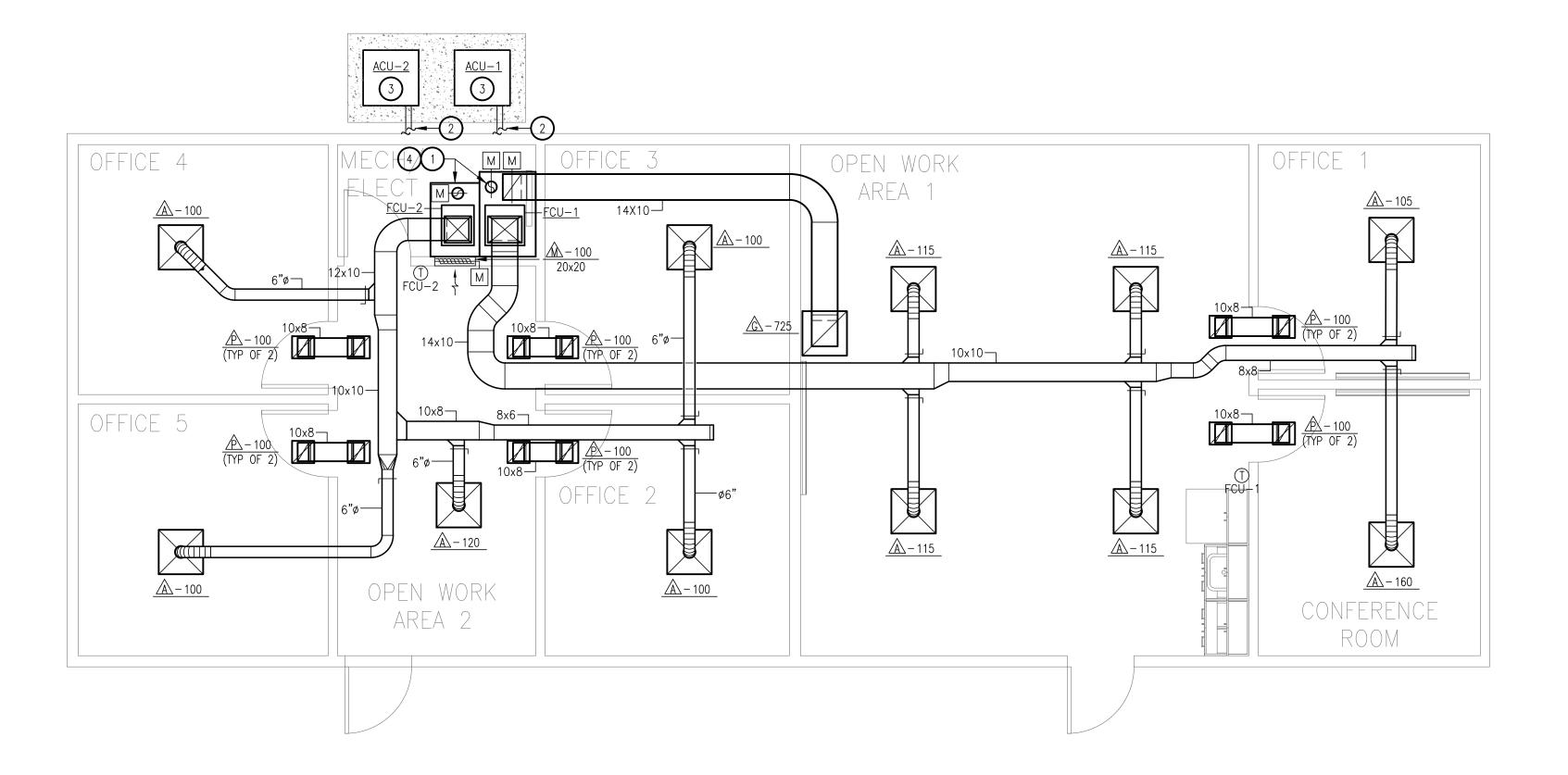
MECHANICAL GENERAL NOTES

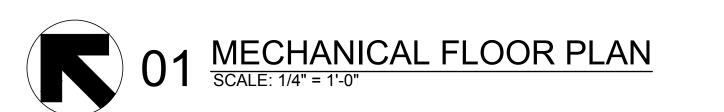






- 2. ROUTE REFRIGERANT TO UNIT UNDER BUILDING SEAL FLOOR PENETRATION.
- 3. PROVIDE ANCHORS TO ANCHOR UNIT TO CONCRETE SLAB.
- 4. RISE DUCT UP TO ROOF CAP.





Project # 32032.027
UNIVERSITY OF TEXAS R
PORTABLE NC

Drawn by Issue Date 05-01-2019

MECHANICAL HVAC PLAN

	SPLIT DX HEAT PUMP UNIT SCHEDULE																															
	AIR HANDLING UNIT																															
				LxWxH	WEIGHT	AIRFLOW	OUTSIDE	E.S.P.	POWER	SENSIBLE	TOTAL	EAT-DB	EAT-WB	LAT-DB	LAT-WB	HEATING	HEATING	HEATING	VOLTAGE /						LxWxH	WEIGHT .	AMBIENT	VOLTAGE /				
TAG	MANUFACTURER	MODEL	SERVICE	(in)	(LBS)	(CFM)	AIR	(in. WC)	(HP)	CAPACITY	CAPACITY	°F	°F	°F	°F	KW	LAT	LAT	PHASE	MCA	MOCP	TAG	MANUFACTURER	MODEL	(in)	(LBS)	AIR	PHASE	MCA	MOCP	SEER	NOTES
							(CFM)			(BTUH)	(BTUH)						MIN.°F	MAX.°F								Т	EMP. °F					
FCU-1	TRANE	GAM5	OFFICES	22 X 22 X 52	140	750	180	0.5	0.33	20.1	27.5	80	66	54.8	53.4	5.77	85	95	208/1	38	40	ACU-1	TRANE	4TTR6	30 X 32 X 37	184	98	208/1	17	25	16.5	ALL
FCU-2	TRANE	GAM5	OFFICES	18 X 22 X 50	126	550	70	0.5	0.33	13.3	16.3	77.7	64	55.1	53.7	3.6	85	95	208/1	25	25	ACU-2	TRANE	4TTR6	30 X 32 X 29	161	98	208/1	12	20	17	ALL

CONTRACTOR TO PROVIDE CONCRETE PAD FOR CONDENSING UNITS.

PROVIDE WITH SINGLE POINT POWER FOR INDOOR UNIT AND INDEPENDENT SINGLE POINT POWER FOR OUTDOOR UNIT.

NOTE: COORDINATE ALL AIR DEVICE TYPE WITH ARCHITECTURAL RCP.

3. PROVIDE WITH DOUBLE WALL FOAM CONSTRUCTION WITH MULTISPEED FAN ON THE AHU 4. PROVIDE CONDENSOR COIL COATING FOR COASTAL AREAS.

5. PROVIDE HAIL GUARDS FOR CONDENSING UNIT.

6. PROVIDE COATING FOR UNIT CASING FOR COASTAL AREAS.

	G	RILLE/D	IFFU:	SER/REGISTER S	CHEDUL	.E	
					MANUFACTURER	MAX. NC.	
MARK	SERVICE			DESCRIPTION	MODEL NO.	LEVEL (1)	REMARKS
		24"X24" MODULE S	IZE, ALUMINUM	M, LOUVERED, LAY IN DIFFUSER WITH 4 WAY	TITUS		#26 WHITE
Α	SUPPLY	THROW, ROUND NEG	CK, FACE SIZE	AS INDICATED BELOW.	OMNI-AA	30	FINISH
		24"X24" EGGCRATE	FACE, CEILING	RETURN GRILL WITH BORDER FOR LAY-IN	TITUS		#26 WHITE
G	RETURN	CEILING, ALUMINUM	CONSTRUCTION	N.	50F	30	FINISH
		HEAVY DUTY SURFA	CE MOUNTED .	ALUMINUM RETURN GRILLE WITH 1/2"	TITUS		#26 WHITE
М	RETURN	BLADE SPACING AND	) 30° FIXED C	DEFLECTION.	63FL	30	FINISH
		12"X12" EGGCRATE	FACE, CEILING	RETURN GRILLE, SURFACE MOUNTED,	TITUS		#26 WHITE
Р	RETURN	ALUMINUM CONSTRU	JCTION WITH C	DBD.	63FL	30	FINISH
F	=THIS WILL DE	SIGNATE A STEEL					NECK/FLEXIBLE
	FIRE RATE	O AIR DEVICE TYPE.	AIR OUTI	LET DESIGNATION ON PLANS	<u>CAPACITY</u>	<u>FACE</u>	CONNECTION
					0-150	6 X 6	6"
BA = COLOR	BY ARCHITECT				151-285	9 X 9	8"
			MARK	A - 200 AIR FLOW (CFM	286-440	12 X 12	10"
= SEE ARCH	TECTURAL DRAWI	NGS		12 X 8 RECTANGULAR FACE SIZE	441-550	12 X 12	12"
PROPER	BORDER TYPES			(WHERE APPLICABLE	551-750	15 X 15	14"
					750-1000	18 X 18	16"

			F	IVAC DU	C	TWORK MATER	IALS SCHEDULE		
							INSULATION		
SERVICE	SHAPE	METAL TYPE	DUCT TYPE	JOINTS	W.G.	CONDITIONED SPACES	UNCONDITIONED SPACED	OUTDOORS	NOTE
SUPPLY LOW PRESSURE	ROUND/OVAL	GALVANIZED	SPIRAL	MASTIC & COUPLING	1"	2" AND 1.5LB/CF DENSITY	2" AND 1.5LB/CF DENSITY	N/A	
CONCEALED	RECTANGULAR	GALVANIZED	SINGLE WALL	SLIPS AND DRIVES	1"	2" AND 1.5LB/CF DENSITY	2" AND 1.5LB/CF DENSITY	RIGID: 3" AND 1.5LB/CF DENSITY	W/ FLEXCLAD 400 JACKET OUTDOORS
SUPPLY LOW PRESSURE	ROUND/OVAL	GALVANIZED	DOUBLE WALL WITH INSULATION	MASTIC & COUPLING	1"	DOUBLE WALL W/ INTERSTITUAL	DOUBLE WALL W/ INTERSTITUAL	N/A	
EXPOSED	RECTANGULAR	GALVANIZED	DOUBLE WALL WITH INSULATION	SLIPS AND DRIVES	1"	DOUBLE WALL W/ INTERSTITUAL	DOUBLE WALL W/ INTERSTITUAL	RIGID: 3" AND 1.5LB/CF DENSITY	W/ FLEXCLAD 400 JACKET OUTDOORS
RETURN AIR	ROUND	GALVANIZED	SPIRAL	MASTIC & COUPLING	-1"	2" AND 1.5LB/CF DENSITY	2" AND 1.5LB/CF DENSITY	N/A	
CONCEALED	RECTANGULAR	GALVANIZED	SINGLE WALL	SLIPS AND DRIVES	-1"	2" AND 1.5LB/CF DENSITY	2" AND 1.5LB/CF DENSITY	RIGID: 3" AND 1.5LB/CF DENSITY	W/ FLEXCLAD 400 JACKET OUTDOORS
RETURN AIR	ROUND	GALVANIZED	DOUBLE WALL WITH INSULATION	MASTIC & COUPLING	-1"	NONE	DOUBLE WALL W/ INTERSTITUAL	N/A	
EXPOSED	RECTANGULAR	GALVANIZED	DOUBLE WALL WITH INSULATION	SLIPS AND DRIVES	-1"	NONE	DOUBLE WALL W/ INTERSTITUAL	RIGID: 3" AND 1.5LB/CF DENSITY	W/ FLEXCLAD 400 JACKET OUTDOORS
OUTCIDE AID	ROUND	GALVANIZED	SPIRAL	MASTIC & COUPLING	-1"	2" AND 1.5LB/CF DENSITY	2" AND 1.5LB/CF DENSITY	NONE	
OUTSIDE AIR	RECTANGULAR	GALVANIZED	SINGLE WALL	SLIPS AND DRIVES	-1"	2" AND 1.5LB/CF DENSITY	2" AND 1.5LB/CF DENSITY	NONE	
GENERAL EXHAUST	ROUND	GALVANIZED	SPIRAL	MASTIC & COUPLING	-1"	NONE	2" AND 1.5LB/CF DENSITY	N/A	

			HVAC	PIPI	NG M	IATERIALS SCH	EDULE	
SERVICE	SIZE	PIPE	FITTINGS	JOINTS	HANGERS		INSULATION	
SERVICE	SIZE	FIFE	FILLINGS	JUINTS	HANGERS	CONDITIONED SPACES	UNCONDITIONED SPACES	OUTDOORS
CONDENSATE	ALL	TYPE M COPPER	WROT COPPER	95–5 SOLDER	COPPER PLATED	3/4" FLEXIBLE ELASTOMERIC — PVC JACKET	3/4" FLEXIBLE ELASTOMERIC — PVC JACKET	3/4" FLEXIBLE ELASTOMERIC — ALUMINUM JACKET
DEEDIGEDANT	0-4"	TYPE L COPPER ACR	WROT COPPER LONG RAD.	SILFOS	COPPER PLATED	1" FLEXIBLE ELASTOMERIC	1" FLEXIBLE ELASTOMERIC	1" FLEXIBLE ELASTOMERIC
REFRIGERANT :	5" & UP	TYPE L COPPER ACR	WROT COPPER LONG RAD.	SILFOS	COPPER PLATED	1" FLEXIBLE ELASTOMERIC	1" FLEXIBLE ELASTOMERIC	1" FLEXIBLE ELASTOMERIC

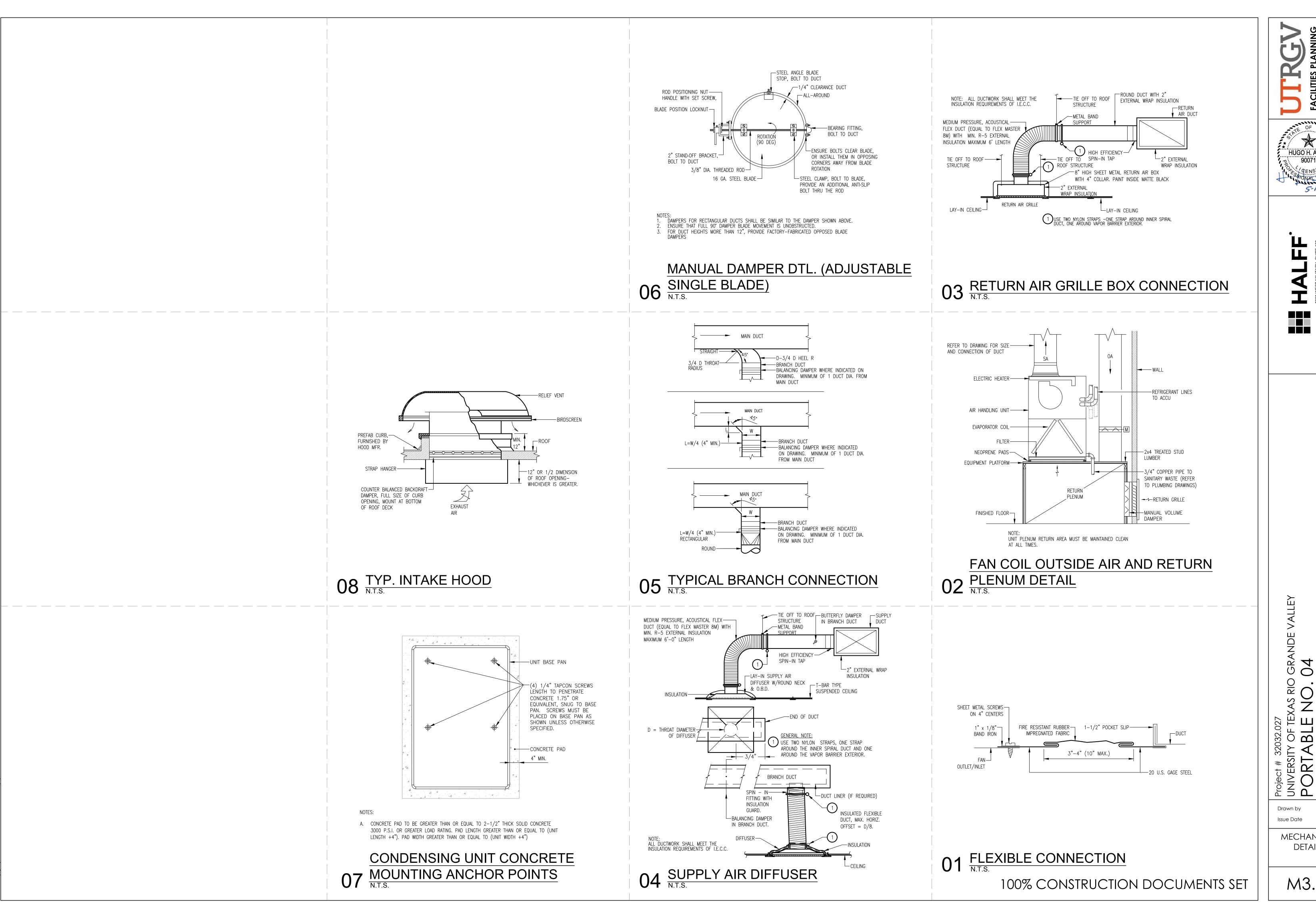






Issue Date 05-01-2019

MECHANICAL SCHEDULES









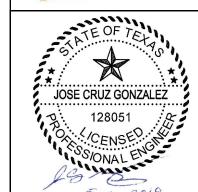
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MECHANICAL DETAILS

M3.01

	ELECTRICAL GENERAL LEGEND		ELECTRICAL GENE		COMMISSIONING NOTES	
	ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.		ELECTRICAL SITE PLAN NOTES  A. ELECTRICAL CONTRACTOR SHALL CONTACT	A. INSTALL AND MAKE FINAL CONNECTIONS OF	COMMISSIONING AGENCY     A COMMISSIONING AGENCY WILL BE CONTRACTED	
SYMBOL	DESCRIPTION	MNTG. HT.UNC	UTILITY COMPANY SERVICE REPRESENTATIVE AND COORDINATE SERVICE INSTALLATION PRIOR	ELECTRICAL FIXTURES PROVIDED BY CASEWORK CONTRACTOR.	DIRECTLY WITH AND BY THE OWNER FOR THIS PROJECT. THE COMMISSIONING AGENCY HAS	
	LIGHTING FIXTURES	(SEE NOTE 1)	TO COMMENCING WORK.  B. ELECTRICAL CONTRACTOR SHALL INSTALL ALL UNDERGROUND CONDUIT, CONDUCTORS, AND	B. MOUNTING HEIGHT OF DEVICES AS PER PROJECT SPECIFICATIONS UNLESS NOTED OTHERWISE. C. COORDINATE ROUGH—IN LOCATION OF ALL	OVERALL RESPONSIBILITY FOR PLANNING AND COORDINATING THE COMMISSIONING PROCESS. HOWEVER COMMISSIONING INVOLVES ALL PARTIES	
	2'x4' LIGHT FIXTURE  HATCHING = EMERGENCY LIGHT, CIRCUITED THROUGH LIGHTING INVERTER	REFER TO	CABLE AS SPECIFIED IN PROJECT MANUAL.  C. INFORMATION IN ELECTRICAL DRAWINGS HAS	DEVICES WITH ARCHITECTURAL ELEVATIONS DETAILS, AND PLANS.	TO THE DESIGN AND CONSTRUCTION PROCESS, INCLUDING THE CONTRACTOR.	
	WALLPACK	ARCH.CLG. PLAN REFER TO PLANS	BEEN TAKEN FROM RECORD DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING	D. REFER TO ARCHITECTURAL MILLWORK AND ELEVATION PLANS FOR EXACT LOCATION AND MOUNTING HEIGHT OF ALL WIRING DEVICES.	2. CONTRACTOR RESPONSIBILITY	
	EXIT LIGHT, CEILING OR WALL MOUNTED — SHADING INDICATING	REFER TO	WORK AND REPORT ANY AND ALL DISCREPANCIES BETWEEN ACTUAL CONDITIONS	E. ALL PENETRATIONS THROUGH FIRE RATED WALLS SHALL HAVE SOUND RETARDING/ABSORBING FIRE STOP MATERIAL.	THE ELECTRICAL SPECIFICATIONS DEFINES THE CONTRACTOR'S RESPONSIBILITIES WITH RESPECT	
	SINGLE OR DOUBLE FACE; DIRECTIONAL ARROWS AS INDICATED	ARCH.CLG. PLAN	AND THESE PLANS TO THE ENGINEER/ARCHITECT IMMEDIATELY.  D. ELECTRICAL CONTRACTOR SHALL INSTALL ALL	STOP MATERIAL.  F. USE #10 AWG CONDUCTORS FOR 20AMPERE, 120 VOLT BRANCH CIRCUITS LONGER THAN 100 FEET.	TO THE COMMISSIONING PROCESS. EACH CONTRACTOR AND SUB-CONTRACTOR SHALL	
			UNDERGROUND CONDUIT, CONDUCTORS, AND CABLE AS SPECIFIED IN PROJECT MANUAL.	G. THE CONTRACTOR SHALL FULLY REVIEW ALL ELECTRICAL SPECIAL SYSTEMS PLANS TO IDENTIFY	REVIEW THE SPECIFICATION SECTIONS, AND SHALL INCLUDE IN THEIR BIDS FOR CARRYING OUT THE WORK DESCRIBED, AS IT APPLIES TO EACH	
	LIQUITING CONTROL C			ALL RESPONSIBILITIES AND SCOPE OF WORK.	DIVISION AND SECTION OF THOSE SPECIFICATIONS, INDIVIDUALLY AND COLLECTIVELY.	
ф	LIGHTING CONTROLS				3. DESCRIPTION OF WORK	
<u> </u>	SINGLE POLE SWITCH	48" AFF			THE PURPOSE OF THE COMMISSIONING PROCESS IS TO PROVIDE THE OWNER/OPERATOR OF THE FACILITY WITH ASSURANCE THAT THE BUILDING	
	1 CHANNEL ON/OFF TOGGLE WITH DIMMING BASIS OF DESIGN: nLIGHT #nPODM DX	48" AFF			FACILITY WITH ASSURANCE THAT THE BUILDING  ENVELOPE, MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS HAVE BEEN INSTALLED	
	CEILING MOUNT OCCUPANCY SENSOR(STANDARD RANGE) BASIS OF DESIGN: nLIGHT #CM-PDT-9	-		MECH & PLUMB EQUIPMENT NOTES	ACCORDING TO THE CONTRACT DOCUMENTS, AND OPERATE WITHIN THE PERFORMANCE GUIDELINES	
PE	PHOTOCELL	2' BELOW ROOF		A. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF ALL POWER SOURCE WIRING IN ACCORDANCE WITH ARCHITECTURAL MILLWORK.	SET OUT IN THE DESIGN INTENT DOCUMENTS AND THE SPECIFICATIONS. THE COMMISSIONING	
				B. CONTRACTOR SHALL VERIFY ALL REQUIREMENTS BEFORE ANY ROUGH—IN IN ORDER TO	AGENCY WILL PROVIDE THE OWNER WITH AN UNBIASED, OBJECTIVE VIEW OF THE SYSTEM'S INSTALLATION, OPERATION, AND PERFORMANCE.	
				COORDINATE MANUFACTURER'S DRAWINGS FOR EQUIPMENT LOCATION AND INSTALLATION ACCESSORIES.	THE COMMISSIONING PROCESS DOES NOT TAKE AWAY OR REDUCE THE RESPONSIBILITY OF THE	
				C. COORDINATE RUNS FOR CONDUIT UP IN JOIST AND FOR SUSPENDING REQUIREMENTS IN	INSTALLING CONTRACTORS TO PROVIDE A FINISHED PRODUCT THAT IS INSTALLED AND FULLY FUNCTIONAL IN ACCORDANCE WITH THE	
	POWER			ACCORDANCE STRUCTURAL PLANS.  D. REFER TO DIVISION 23 FOR ALL MECHANICAL EQUIPMENT LOCATION(S). COORDINATE EXACT	CONTRACT DOCUMENTS. COMMISSIONING IS INTENDED TO ENHANCE THE QUALITY OF SYSTEM	
φ	DUPLEX RECEPTACLE - 20A/125V/1P/3W/G NEMA 5-20R	15" AFF		LOCATION(S) OF ALL MÉCHANICAL EQUIPMENT WITH MECHANICAL DRAWINGS TO MEET	START-UP AND AID IN THE ORDERLY COMPLETION AND TRANSFER OF SYSTEMS FOR BENEFICIAL USE BY THE OWNER. THE COMMISSIONING AGENCY	
	DUPLEX GFI/WEATHER PROOF RECEPTACLE WITH "WHILE IN USE COVER — 20A/125V/1P/3W/G NEMA 5-20R	15" AFF	ELECTRICAL LIGHTING PLAN NOTES	ELECTRICAL AND MECHANICAL REQUIRED  CLEARANCE BY THE LATEST CODE. SOME EQUIPMENT MAYBE LOCATED ON ROOF.	WILL BE THE LEADER OF THE COMMISSIONING TEAM, PLANNING AND COORDINATING ALL	
	CONTROLLED RECEPTACLE. PROVIDE WITH UL LISTED AND REQUIRED BY NEC 2014 POWER SYMBOL MARKING CONTROLLED SIDE OF RECEPTACLE SHALL BE CONTROLLED WITH OCC SENSOR SHOWN ON LIGHTING PLAN	S. 15" AFF	A. REFER TO ARCHITECTURAL REFLECTED CEILING	E. COORDINATE ALL ROOF PENETRATIONS WITH CONTRACTOR AND ALL OTHER TRADES. SEAL ALL	COMMISSIONING ACTIVITIES IN CONJUNCTION WITH THE DESIGN PROFESSIONALS, SUBCONTRACTORS, MANUFACTURERS AND EQUIPMENT SUPPLIERS.	
₽PRJ	DUPLEX RECEPTABLE - CEILING MOUNTED FOR PROJECTOR - 20A/125V/1P/3W/G NEMA 5-20R	15" AFF	PLAN (RCP) FOR EXACT LOCATION OF LIGHT FIXTURES. FURNISH FIXTURES WITH TRIM	ROOF PENETRATIONS AS RECOMMENDED BY THE WARRANTY SYSTEM. VERIFY WITH GENERAL AND ROOFING CONTRACTOR.	THE GENERAL CONTRACTOR, MECHANICAL CONTRACTOR, ALL DIVISION 22 AND 23 SUB-	
H(J) (J)	JUNCTION BOX — SIZE & MOUNTING AS REQUIRED TYPICAL OF ALL	_	COMPATIBLE WITH THE TYPE OF CEILING AS INDICATED ON THE RCP.	F. ELECTRICAL CONTRACTOR SHALL PROVIDE J-BOX AND ONE INCH CONDUIT (1"C) FOR HVAC	CONTRACTORS, AND THE ELECTRICAL CONTRACTOR, DIVISION 26 & 28, SHALL BE	
	COMBINATION STARTER — DISCONNECT SWITCH	_	B. CONNECT EXIT SIGNS TO UNSWITCHED HOT LEG OF LOCAL LIGHTING CIRCUIT. C. COORDINATE PLACEMENT OF FIXTURES WITH	CONTROLS AND THERMOSTATS. COORDINATE EXACT LOCATION WITH MECHANICAL	RESPONSIBLE FOR COOPERATING, AND COORDINATING THEIR WORK, WITH THE COMMISSIONING AGENCY. EACH SHALL ALSO BE	
	DISCONNECT SWITCH - 30/-/3 INDICATES 30A, NONFUSED, 3-POLE; 30/30/3 INDICATES 30A, 30A FUSE,	AS REQUIRED	ACTUAL INSTALLATION OF MECHANICAL EQUIPMENT AND DUCTWORK.	CONTRACTOR. REFER TO MECHANICAL PLANS FOR THERMOSTAT LOCATIONS. G. ELECTRICAL CONTRACTOR SHALL PROVIDE	RESPONSIBLE FOR CARRYING OUT ALL THE PHYSICAL ACTIVITIES REQUIRED FOR INSTALLATION	
	3-POLE	AS REQUIRED	D. CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER THE COST OF ALL CONTROL PANELS, DEVICES, NETWORK CABLING AND LOW OR LINE	STARTERS, RELAYS, CONTACTORS AND THE REQUIRED ELECTRICAL ACCESSORIES FOR AN	OF COMPONENTS AND SYSTEMS AND FOR OPERATING THEM DURING THE COMMISSIONING PROCESS AS REQUIRED BY THE PROJECT	
	TRANSFORMER		VOLTAGE WIRING FOR A COMPLETE LIGHTING CONTROL SYSTEM AS SPECIFIED. REFER TO	OPERABLE MECHANICAL SYSTEM. H. ALL ELECTRICAL CONDUIT AND WIRING SHALL BE CONCEALED. IF NOT POSSIBLE PROVIDE SURFACE	SPECIFICATIONS.	
	PANELBOARD  CIRCUIT HOMERUN TO PANELBOARD	_	MANUFACTURERS WIRING DIAGRAMS AND INSTALLATION MANUALS PRIOR TO BID. E. CONTROL SYSTEM FOR LIGHTING IS DESIGNED TO	MOUNT STEEL RACEWAY. STEEL RACEWAY SHALL BE WIREMOLD #V2100 SERIES. PROVIDE ALL	4. COMMISSIONING PLAN	
	(2#12, 1#12G, 3/4"C 20A/1P CB UNO)	_	MEET ASHRAE 90.1, 2013 ENERGY CODE. ALL LIGHT SWITCHES	RELATED #V2100 SERIES ACCESSORIES FOR AN OPERABLE SYSTEM.  I. CONTRACTOR SHALL PROVIDE 120V POWER TO	THE PROJECT COMMISSIONING PLAN SHALL BE DEVELOPED BY THE COMMISSIONING AGENCY AND SHALL INCLUDE THE FOLLOWING:	
	SPECIAL SYSTEMS  DATA OUTLET. WALL MOUNTED – STUB 3/4" C. ABOVE		SHALL OPERATE AS BOTH MANUAL AND AUTOMATIC LINE VOLTAGE SWITCHES OR AS	ANY SMOKE DAMPERS REQUIRED AT ALL SMOKE  PARTITIONS, INCLUDE A 20A/1P CIRCUIT BREAKER	A. A NARRATIVE DESCRIPTION OF THE ACTIVITIES	
$\nabla$	ACCESSIBLE CEILING — CONDUIT ROUGH—IN ONLY	15" AFF	MOMENTARY DIGITAL SWITCHES IN CONJUNCTION WITH RELAY CONTROL PANELS, UNLESS OTHERWISE NOTED.	AND WIRING 2#12,#12G,1/2"EMT AS REQUIRED BY HVAC SYSTEM. REFER TO MECHANICAL PLANS.	THAT WILL BE ACCOMPLISHED DURING EACH PHASE OF COMMISSIONING, INCLUDING THE PERSONNEL INTENDED TO ACCOMPLISH EACH	
			F. ALL CONTROL AND POWER WIRING FOR LIGHTING CONTROL SYSTEM SHALL BE IN CONDUIT.	PROVIDE RELAYS FOR FIRE ALARM INTERFACE AS REQUIRED.  J. CONTRACTOR SHALL PROVIDE 120V POWER TO	OF THE ACTIVITIES.  B. A LISTING OF THE SPECIFIC EQUIPMENT OR	
			G. COORDINATE LOCATION OF LIGHTS WITH DIFFUSERS AND GRILLS. H. COORDINATE PLACEMENT OF FIXTURES WITH	ALL DDC CONTROL PANELS AS REQUIRED BY CONTROLS CONTRACTOR, INCLUDE A 20A/1P	SYSTEMS TO BE TESTED AND A DESCRIPTION OF THE TESTS TO BE PERFORMED. C. FUNCTIONS TO BE TESTED INCLUDING	
			ACTUAL INSTALLATION OF MECHANICAL EQUIPMENT AND DUCTWORK.	CIRCUIT BREAKER AND WIRING 2#12,#12G,1/2"EMT AS REQUIRED BY HVAC SYSTEM. K. VERIFY REQUIRED PLUMBING AND MECHANICAL	CALIBRATIONS AND ECONOMIZER CONTROLS. OTHER TEST LISTED ON THE CONSTRUCTION	
			I. SWITCH LEGS ARE NOT SHOWN WHERE DIGITAL SWITCHES ARE USED TO CONTROL LIGHTS. J. CONTRACTOR SHALL INCLUDE IN HIS BID TO	POWER CONNECTION PRIOR TO ROUGH—IN. L. ALL CABLES SHALL BE PLENUM RATED.	DOCUMENTS.  D. CONDITIONS UNDER WHICH THE TEST WILL BE PERFORMED. TESTING SHALL AFFIRM WINTER	
			OWNER THE COST OF ALL CONTROL PANELS, DEVICES, POWER PACKS, DIMMING POWER		AND SUMMER DESIGN CONDITIONS AND FULL OUTSIDE AIR CONDITIONS.	
			PACKS, NETWORK CABLING AND LOW OR LINE VOLTAGE WIRING FOR A COMPLETE LIGHTING CONTROL SYSTEM AS SPECIFIED. REFER TO		E. MEASURABLE CRITERIA FOR PERFORMANCE.  REFER TO PROJECT SPECIFICATIONS FOR	
			MANUFACTURERS WIRING DIAGRAMS AND INSTALLATION MANUALS PRIOR TO BID.		ADDITIONAL COMMISSIONING PLAN REQUIREMENTS.	
			K. USE #10 AWG CONDUCTORS FOR 20 AMPERE, 120 VOLT BRANCH CIRCUITS LONGER THAN 100 FEET. L. USE #10 AWG CONDUCTORS FOR 20 AMPERE, 227		5. PROJECT CLOSEOUT PROCEDURES	
	GENERAL ABBREVIATIONS		- VOLT BRANCH CIRCUITS LONGER THAN 200 FEET. M. CONTRACTOR SHALL PROVIDE ALL POWER		CONTRACTOR SHALL CERTIFY THAT LIGHTING CONTROLS ARE INSTALLED PER	
ABS	ABOVE BACK SPLASH  NF  NONFUSED		PACKS REQUIRED FOR THE LIGHTING SYSTEM.  N. PROVIDE ALL REQUIRED POWER PACKS, REFER TO E1.01 DETAILS FOR TYPICAL SPACE POWER		2013 ASHRAE 90.1 CODE. LIGHTING AND FUNCTIONAL TESTING OF CONTROLS AND AUTOMATIC LIGHTING SYSTEMS SHALL	
ACT	ABOVE COUNTERTOP NIC NOT IN CONTRACT		PACK REQUIREMENTS.	ELECTRICAL COORDINATION NOTES	INCLUDE: OCCUPANCY SENSOR CONTROLS, TIME SWITCH CONTROLS, AND DAYLIGHT RESPONSIVE	
AFF	ABOVE FINISHED FLOOR TYP TYPICAL			A. ELECTRICAL COORDINATION NOTES  A. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL	CONTROLS.  6. REQUIRED DOCUMENTS	
BAS BFC	BUILDING AUTOMATION SYSTEM EP ELECTRICAL PRIMARY  BELOW FINISHED CEILING NICHT LIGHT			ROUGH-INS, CONDUITS, PATHWAYS SUPPORTS FOR THE DIVISIONS 27 AND 28. REFER TO DIVISION	THE FOLLOWING DOCUMENTS SHALL BE PROVIDE	
BOCT	BOTTOM OF CABLE TRAY  NO (N.O.) NORMALLY OPEN			27 AND 28 PLANS AND SPECIFICATIONS.  B. THE CONTRACTOR SHALL FULLY REVIEW ALL CABLE TRAY, FIRE ALARM, SECURITY AND	TO THE BUILDING OWNER WITHIN 90 DAYS OF THE RECEIPT OF THE CERTIFICATE OF OCCUPANCY.	
C	CONDUIT RCPT(S) RECEPTACLE(S)			TELECOMMUNICATIONS PLANS TO IDENTIFY ALL RESPONSIBILITIES AND SCOPE OF WORK.	A. FINAL AS BUILT DRAWINGS B. OPERATING AND MAINTENANCE MANUALS	
CB CLG	CIRCUIT BREAKER PNL PANEL CEILING SD SMOKE DAMPER				C. FINAL CERTIFIED TEST REPORT REPORTS FOR LIGHTING AND CONTROLS D. FINAL COMMISSIONING REPORT	
EC	CEILING SD SMOKE DAMPER  EMPTY CONDUIT SO (S.O.) SPACE ONLY				D. THE SOME SOCIALISM INC. INC.	
EX	EXISTING SP SPARE					
F	FUSE ST (S.T.) SHUNT TRIP					
FSD G	FIRE & SMOKE DAMPER SW SWITCH  GROUND (EQUIPMENT) UF UNDERFLOOR				THE GENERAL CONTRACTOR AND SUB-	
GAP	GROUND (EQUIPMENT)  UF  UNDERFLOOR  GENERATOR ANNUNCIATOR PANEL  UG  UNDERGROUND				CONTRACTORS SHALL INCLUDE IN THEIR BIDS ALL COST ASSOCIATED WITH	
GFI	GROUND FAULT INTERRUPTER WG WIRE GUARD				ROUGH-IN AND CABLING FOR POWER,	
IC IG	INTERRUPTING CAPACITY WP WEATHERPROOF  ISOLATED GROUND WEATHERPROOF WITH WHILE IN LISE COVER				DATA, AND A/V SYSTEMS	
MTD	MOUNT OR MOUNTED WP/WIU WEATHERPROOF WITH WHILE—IN—USE COVER  XFMR TRANSFORMER					
NC (N.C.)	NORMALLY CLOSED UNO UNLESS NOTED OTHERWISE					
MTD  NC (N.C.)  NOTES:  1. 48" AFF INDICATION OF THE SECONDARY	ISOLATED GROUND  WP/WIU  WEATHERPROOF WITH WHILE—IN—USE COVER  MOUNT OR MOUNTED  XFMR  TRANSFORMER				<u>'</u>	







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ELECTRICAL GENERAL LEGEND

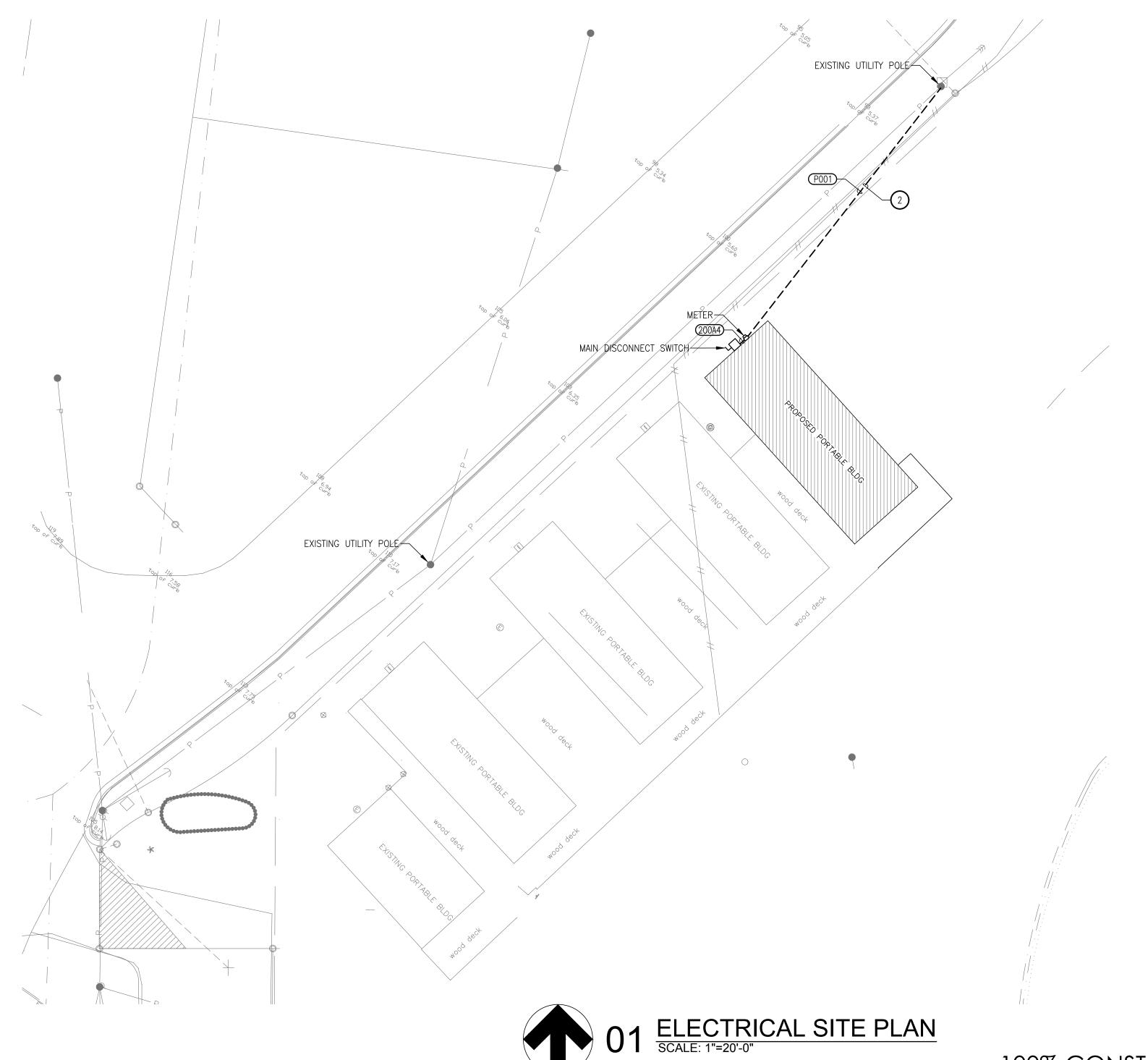
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		FEEDER	/ BRANCH	CIRCUIT SCH	HEDULE
MARK	RACEWAY	PHASE CONDUCTORS	NEUTRAL CONDUCTORS	GROUND CONDUCTORS	REMARKS
P001	4"				
200A4	2"	3#3/0	1#3/0	1#6	

UTILITY POWER POLE MOUNTED TRANSFORMER	\$	
	MAIN DISC. SWITCH 200A/200AF/3P NEMA 3R	PANEL "L"
L — — — — — — — — — — — — — — — — — — —		

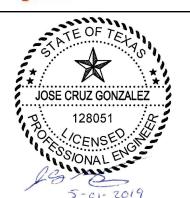
02 ELECTRICAL RISER DIAGRAM



KEY NOTES: #

1. FURNISH AND INSTALL #6 GROUNDING ELECTRODE CONDUCTOR IN 1" PVC SCH-40 CONDUIT.

PRIOR TO COMMENCING WORK, CONTRACTOR TO COORDINATE WITH AEP FOR EXACT UTILITY TIE IN POINT.

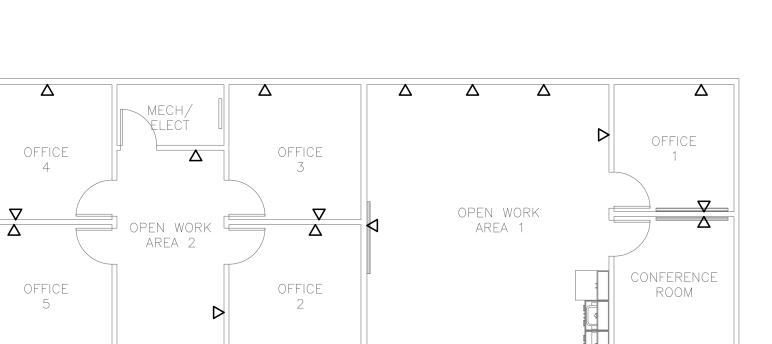


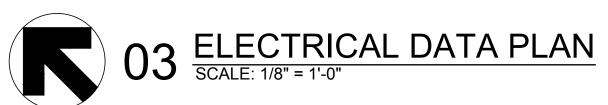
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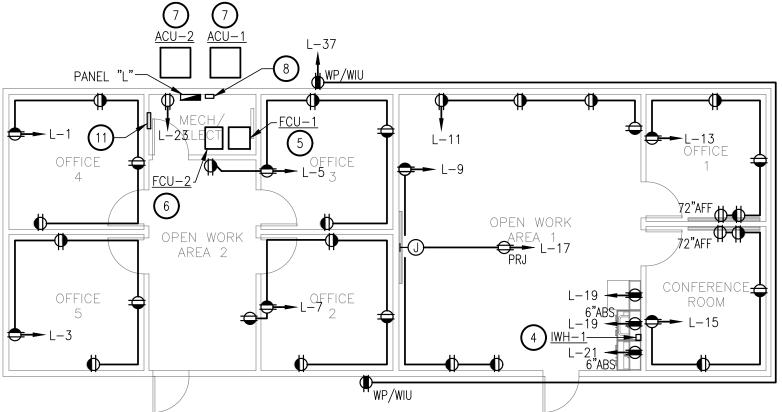
ELECTRICAL SITE PLAN

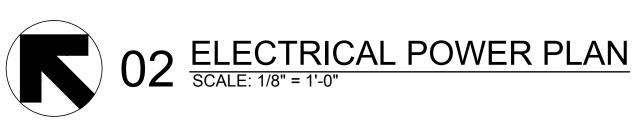
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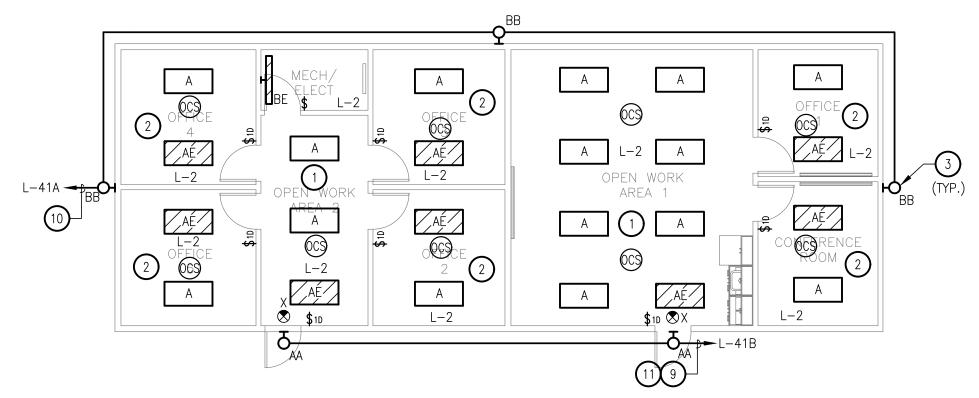
100% CONSTRUCTION DOCUMENTS SET

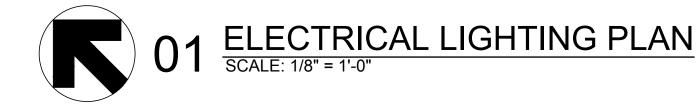


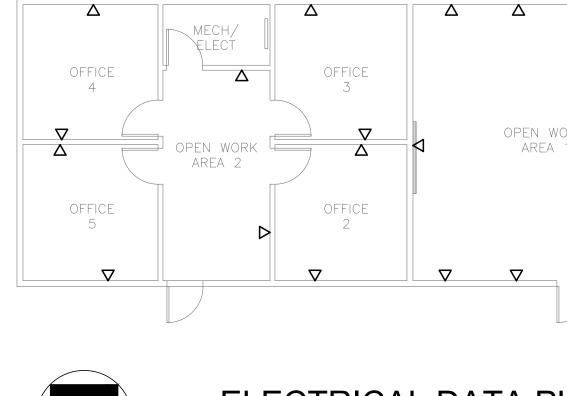


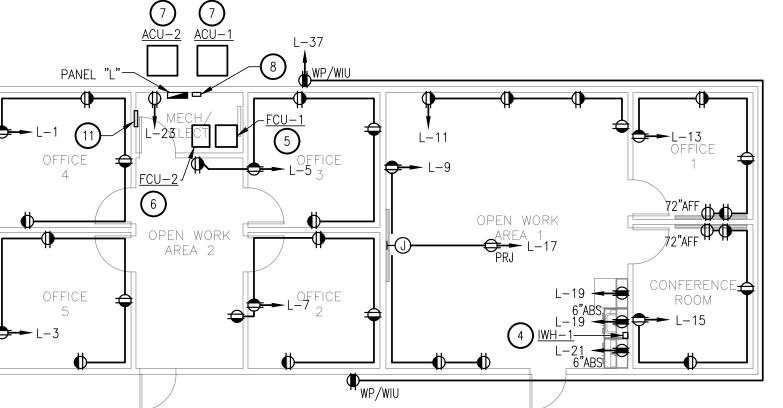




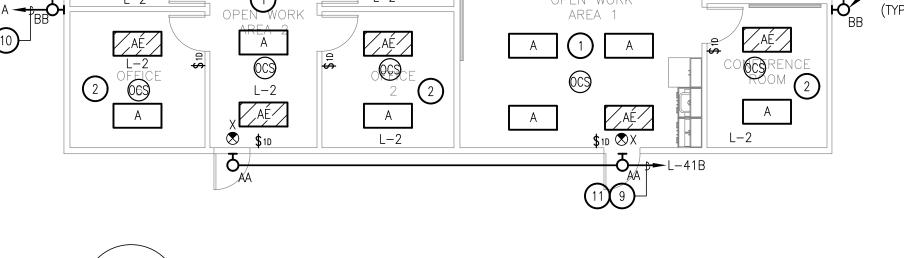


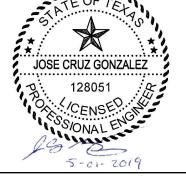












KEY NOTES: #

1. REFER TO DETAIL 04/E1.01 FOR LIGHTING CONTROLS IN THIS ROOM.

2. REFER TO DETAIL 05/E1.01 FOR LIGHTING CONTROLS IN

3. TYPICAL OF ALL "AA" LIGHT FIXTURES. MOUNT HEIGHT SHALL MATCH EXISTING PORTABLES.

4. IWH-1, PROVIDE 30A/-/2P, NEMA 1 DISCONNECT ABOVE CEILING AND LABEL WITH LOCATION.

5. FCU-1. PROVIDE 60A/-/2P, NEMA 1 DISCONNECT. 2#8,#10G,3/4°C.

6. FCU-2. PROVIDE 30A/-/2P, NEMA 1 DISCONNECT. 2#10,#10G,3/4°C.

7. ACU-1 & 2. PROVIDE 30A/-/2P, NEMA 3R DISCONNECT. 2#10,#10G,3/4"C.

8. PROVIDE TIME CLOCK, TORK #DTS400B OR EQUAL TO CONTROL EXTERIOR LIGHTING. PROVIDE WITH PHOTOCELL ON BUILDING EXTERIOR FOR THE LIGHTING.

9. EXTERIOR LIGHTING CONTROLLED BY INTREGAL PHOTOCELL.

10. EXTERIOR LIGHTING CONTROLLED BY TIME CLOCK AND SHALL BE PROGRAMMED TO SWITCH OFF AT 12 MIDNIGHT OR WITHIN 1 HOUR OF THE END OF BUSINESS OPERATIONS, WHICHEVER IS LATER, UNTIL 6AM OR BUSINESS OPENING, WHICHEVER IS EARLIER.

11. FURNISH AND INSTALL INVERTER. MYERS #1-LVM-1-W. CIRCUIT L-41B TO INVERTER TO PROVIDE EGRESS LIGHTING.

Project # 320 UNIVERSITY PORTA

Drawn by Issue Date 05-01-2019

ELECTRICAL PLAN

E1.01

**SEQUENCE OF OPERATION:** 

- FOR EMERGENCY LIGHTING CONTROL ADD A

- DAYLIGHT ZONES DEFINED BY ROWS

**DIAGRAM LEGEND** 

SENSOR

(QUANTITY PER SEQUENCE OF OPERATION:

TYPICAL LIGHTING CONTROLS - OFFICE &

LIGHT FIXTURE

LIGHT FIXTURE

**FIXTURE** 

FIXTURE

- INDIVIDUAL ROW CONTROL (nPODM 4 DX)(IF SHOWN ON PLANS)

TYPICAL LIGHTING CONTROLS - OPEN WORK

(SENSORS PER PLANS)

LIGHT FIXTURES AUTOMATICALLY TURN ON TO 50% WHEN OCCUPANT ENTERS THE SPACE

- MASTER ON/OFF & RAISE/LOWER CONTROL OF ENTIRE ROOM(nPODM DX)(IF SHOWN ON PLANS)

LIGHT FIXTURES AUTOMATICALLY TURN OFF WHEN ROOM BECOMES VACANT

GRAPHIC WALLPOD (MODEL NPOD GFX) FOR INDIVIDUAL ROW(IF SHOWN ON PLANS)

DAYLIGHT(IF DAYLIGHT SENSORS ARE SHOWN ON PLANS)

\*PLUGLOAD ONLY CONFERENCE ROOMS OFFICES & OPEN OFFICES

LIGHT FIXTURE

LIGHT **FIXTURE** 

FIXTURE

**FIXTURE** 

\*PLUGLOAD ONLY CONFERENCE ROOMS OFFICES & OPEN OFFICES

nPODM DX

(DEFAULT SO BELOW FOR OTHER

OPTIONS

\*LINE VOLTAGE WIRES

NOT SHOWN.

DIAGRAM LEGEND

— 0-10VDC WIRES

LINE FEED

 $04 \frac{AREA}{N.T.S.}$ 

PER PLANS)

nCM PDT 9

05 CONFERENCE RM

- LIGHT FIXTURES TO BE SET TO BE AUTO ON TO 50% WHEN

POWER PACK/ PLUG LOAD CONTROL POWER PACK

nPODM DX (DEFAULT SEE BELOW FOR OTHER

LIGHT FIXTURE

LIGHT FIXTURE

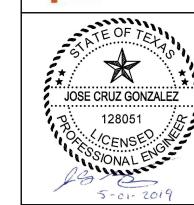
**FIXTURE** 

FIXTURE

LINE VOLTAGE WIRES

TYPE	MANUF & MODEL NUMBER	LAMPS	COLOR	VA	<b>VOLTAGE</b>	DESCRIPTION	NOTES
Α	LITHONIA #EPANL-2X4-4000LM-80CRI-40K-MIN10-ZT-120	LED	4000K	38	120	2X4 EPANL LED	
AE	LITHONIA #EPANL-2X4-4000LM-80CRI-40K-MIN10-ZT-120-E10WCP	LED	4000K	38	120	2X4 EPANL LED PROVIDE WITH EMERGENCY BATTERY PACK	
BE	LITHONIA #WL4-20L-EZ1-LP840-E10WLCP	LED	4000K	19	120	WALL BRACKET PROVIDE WITH EMERGENCY BATTERY PACK	
Х	LITHONIA #LQMSW3R120/277ELN	LED'S FURNISHED	-	10	120/277	UNIVERSAL EXIT LIGHT WITH BATTERY PACK, NUMBER OF FACES AND DIRECTIONAL CHEVRONS AS INDICATED ON THE DRAWINGS	
AA	LITHONIA #TWP LED-20C-700-50K-T3M-MVOLT-PE-SF-XX	LED	5000K	45	120	WALLPACK  XX = MATCH EXISTING FINISH  WALLPACK CIRCUITED THRU INVERTER FOR EGRESS  PROVIDE WITH PHOTOCELL	
ВВ	LITHONIA #TWP LED-20C-700-50K-T3M-MVOLT-SF-XX	LED	5000K	45	120	WALLPACK  XX = MATCH EXISTING FINISH	

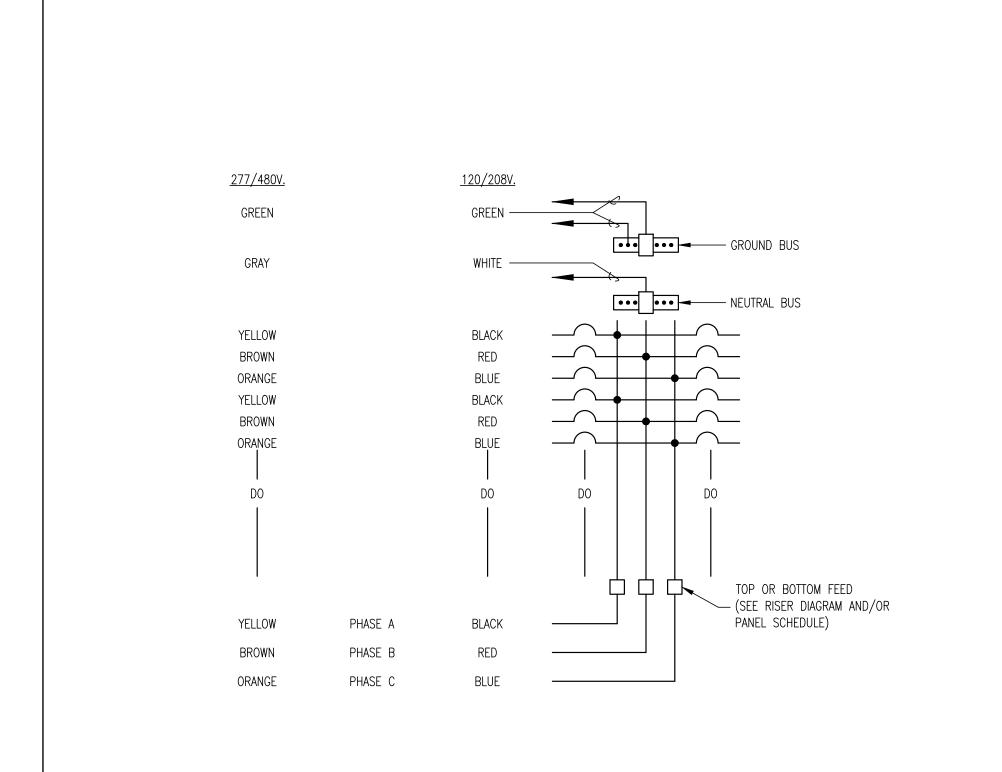
			HASE 4 WIRE								ATION: ME	
	N BREAKE		AL 4000/ FOURDMENT OPOUND						I		OUNTING: S	
BUSES: N	IAIN - 200 A	A; NEUTRA	AL - 100%; EQUIPMENT GROUND						ISC =	10,000 A RI	MS SYM A	VAILABL
VA:L	VA:R	VA:O	LOAD	BKR	CKT	PH	CKT	BKR	LOAD	VA:L	VA:R	VA:O
0	720		RECEPT - OFFICE 4	20/1	1	Α	2	20/1	LIGHTING - INTERIOR	912	0	
0	720		RECEPT - OFFICE 5	20/1	3	В	4	25/2	ACU-1	0	0	141
0	900		RECEPT - OFFICE 3	20/1	5	С	6	-	"	0	0	141
0	900		RECEPT - OFFICE 2	20/1	7	Α	8	20/2	ACU-2	0	0	99
0	540		RECEPT - WORK AREA 1	20/1	9	В	10	-	"	0	0	99
0	720		RECEPT - WORK AREA 1	20/1	11	С	12	20/1	SPARE	0	0	
0	540		RECEPT - OFFICE 1	20/1	13	Α	14	20/1	SPARE	0	0	
0	720		RECEPT - CONFERENCE ROOM	20/1	15	В	16	20/1	SPARE	0	0	
0	1080		PROJECTOR AND SCREEN	20/1	17	С	18	20/1	SPARE	0	0	
0	900		GFI RECEPT - WORK AREA 1	20/1	19	Α	20	20/1	SPARE	0	0	
0	900		GFI RECEPT - WORK AREA 1	20/1	21	В	22	20/1	SPARE	0	0	
0	1440		SERVER	20/1	23	С	24	20/1	SPARE	0	0	
0	0	2500	IWH-1	30/2	25	Α	26	_	SPACE	0	0	
0	0	2500	n .	_	27	В	28	_	SPACE	0	0	
0	0		FCU-1	40/2	29	С	30	_	SPACE	0	0	
0	0	3162	п	-	31	Α	32	_	SPACE	0	0	
0	0	2080	FCU-2	25/2	33	В	34	-	SPACE	0	0	
0	0	2080	"	-	35	С	36	_	SPACE	0	0	
0	360		RECEPT - EXTERIOR	20/1	37	Α	38	-	SPD	0	0	
0	1440		FRIDGE	20/1	39	В	40	-	п	0	0	
195	0		LIGHTING - EXTERIOR	20/1	41	С	42	-	п	0	0	
VA:L (LIGI	HTING)		1107	CONNEC	TED				1384	DEMAND		
VA:R (RE	CEPTACLE	S)		CONNEC						DEMAND		
VA:O (OTI	HER)		20312	CONNEC	TED				20312	DEMAND		
VA: TOTA	L		33299	CONNEC	TED				32636	DEMAND		
AMPS: TO	TAL		92	CONNEC	TED				91	DEMAND		
ı	R	0		TOTAL								
912	3420	6661	VA CONNECTED TO A PHASE	10993	<b>\</b> /Δ =			an	AMPS CONNECTED TO A PHASE @ 120	VOLTS		
0	4320	6994	VA CONNECTED TO A THASE	11314					AMPS CONNECTED TO B PHASE @ 120			
195	4140	6657	VA CONNECTED TO B PHASE	10992				92	**************************************			
190	11880	20312	TOTAL	33299	_			92				





Issue Date 05-01-2019

ELECTRICAL SCHEDULES



NOTES BY SYMBOL "#"

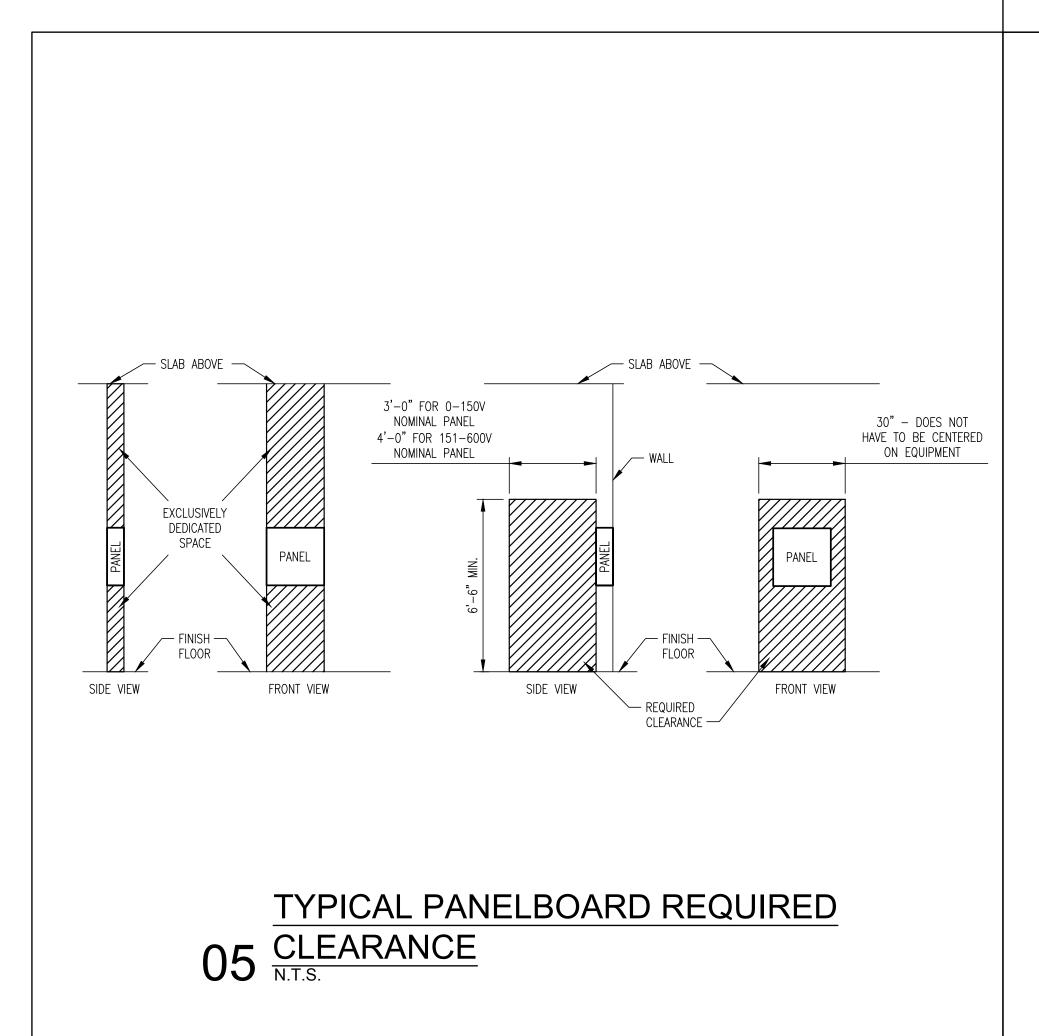
1. 2'x4' LAY-IN FLUORESCENT FIXTURE

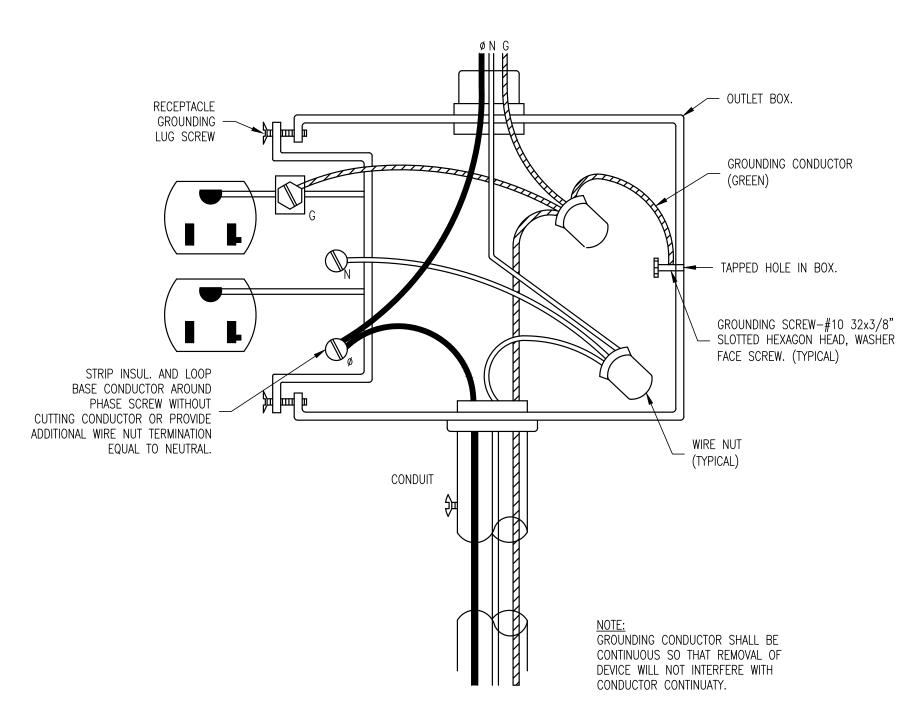
3. TIE WIRE, CONNECT TO ALL FOUR CORNERS OF FIXTURE TO STRUCTURE ABOVE, INDEPENDENT OF CEILING SUPPORTS.

2. SUSPENDED CEILING

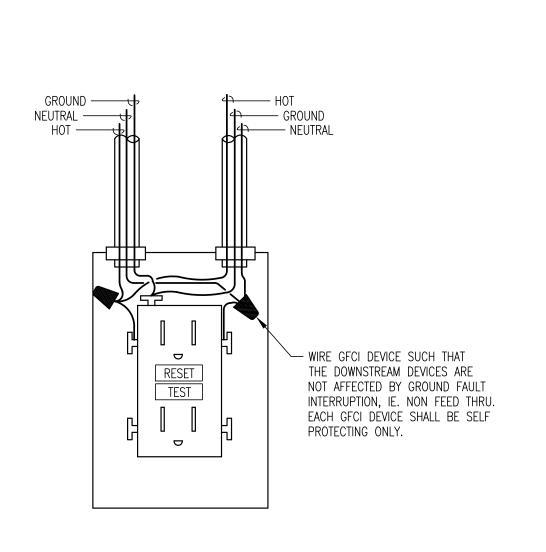
04 TYPICAL PANEL COLOR CODE

 $02 \frac{\text{TYPICAL LAY-IN FIXTURE SUPPORT}}{\text{N.T.S.}}$ 





03 TYPICAL RECEPTACLE GROUNDING DETAIL



01 GFCI RECEPTACLE - WIRING DIAGRAM N.T.S.

JOSE CRUZ GONZALEZ

128051

CENSE

9: 128051 & O. CENSED ON LENGTH SS/ONAL ENGINEERS 5-01-2019

5000 WEST MILITARY, SUITE 100
MCALLEN, TEXAS 78503
TEL (956) 664-0286
FAX (956) 664-0282
TBPE FIRM #F-312

NO. 04

oject # 32032.027 NIVERSITY OF TE)

Drawn by GC Issue Date 05-01-2019

ELECTRICAL DETAILS

E3.01

#### PLUMBING ABBREVIATIONS

AB ABS ABV AC ACCU AD ADA ADJ AD AFF AFG AFS AHU AL AMP AP APPROX ARCH AS ASHRAE  ATF AUX AV AW	ASSEMBLY BILL ACRYLONITRILE BUTADIENE STYRENE ABOVE AIR COMPRESSOR AIR COOLED CONDENSING UNIT AREA DRAIN AMERICAN WITH DISABILITIES ACT ADJUSTABLE ACCESS DOOR ABOVE FINISH FLOOR ABOVE FINISH GRADE ABOVE FINISH SURFACE AIR HANDLING UNIT ALUMINUM AMPERE(S) ACCESS PANEL APPROXIMATE ARCHITECT, ARCHITECTURAL AIR SEPARATOR AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS AUTOMATIC TRANSMISSION FLUID AUXILIARY AIR VENT ACID WASTE	FCO FCW FD FFE, F.F.E. FGE, F.G.E. FIN FLA FLR FP FPM FS FT FWD  G G G G G G G G G G G G G G G G G G	FLOOR CLEANOUT FILTERED COLD WATER FLOOR DRAIN FINISH FLOOR ELEVATION FINISH GRADE ELEVATION FINISH FULL LOAD AMPS FLOOR FIRE PROTECTION FEET PER MINUTE FLOOR SINK FOOT, FEET FOOD WASTE DISPOSER  NATURAL GAS (LOW PRESSURE) GAUGE, GAGE GALLON GALVANIZED GRID LINE GAS METER GALLONS PER HOUR GALLONS PER HOUR GALLONS PER MINUTE GAS PRESSURE REGULATOR GREASE GREASE WASTE (KITCHEN)	PRV PS PSF PSI PSIA PSIG PSV PV PVC	PRESSURE REDUCING VALVE PRESSURE SWITCH POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH POUNDS PER SQUARE INCH ABSOLUTE POUNDS PER SQUARE INCH GAUGE PRESSURE SAFETY VALVE PLUG VALVE POLYVINYL CHLORIDE  QUANTITY  RELOCATED ROOF DRAIN REFERENCE, REFER RECIRCULATE REINFORCING REQUIRED REVISION, REVISE REFRIGERATOR ICE CONNECTION BOX RUNNING LOAD AMPERES ROOM REVOLUTIONS PER MINUTE
B BD BEL BFF BFP BFV BHP BKR BLDG BOD BOI BOP, B.O.P. BOS BTU BTUH BV BWV	BOILER BLOW-DOWN BELOW BELOW FINISH FLOOR BACKFLOW PREVENTER BUTTERFLY VALVE BRAKE HORSEPOWER BREAKER BUILDING BOTTOM OF DUCT BID OPTION ITEM BOTTOM OF PIPE BOTTOM OF STEEL BRITISH THERMAL UNIT BRITISH THERMAL UNIT BALL VALVE BACK WATER VALVE	H HB HC HD HOA HORIZ HP HPW HTG HTR HVAC HW HWR HZ	HEIGHT HOSE BIBB HEATING COIL HEAD HAND-OFF-AUTOMATIC HORIZONTAL HORSE POWER HIGH PRESSURE WATER HEATING HEATER HEATING, VENTILATION AND AIR CONDITIONING DOMESTIC HOT WATER (SUPPLY) DOMESTIC HOT WATER RETURN HERTZ INDUSTRIAL COLD WATER	RTU RW RWH  S S SD SECT SEER SH SHD SF SHT SIM SHT MTL SK SMACNA SOV SP	ROOF TOP UNIT RAIN WATER RAIN WATER HARVESTING  SOIL (SANITARY SEWER) STORM DRAIN SECTION SEASONAL ENERGY EFFICIENCY RATIO SHOWER SHOWER DRAIN SQUARE FEET SHEET SIMILAR SHEET METAL SINK SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION SHUT-OFF VALVE SUMP PUMP
CACAPCBVCDCDFCDPCFCFMCHCIRCQCONDCONNCCONTCCONTCCONTCCONTCCONTCCOTGCCONTCCOTGCCONTCCOTGCCONTCCOTGCCONTCCOTGCCONTCCOTGCCONTCCOTGCCONTCCOTGCCONTCCOTGCCONTCCOTGCCONTCCOTGCCONTCCCPCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	COMPRESSED AIR CAPACITY CALIBRATED BALANCE VALVE CONDENSATE DRAIN CONDENSATE DRAIN FUNNEL CONDENSATE DRAIN PUMP CUBIC FEET CUBIC FEET PER HOUR CUBIC FEET PER MINUTE CHILLER CAST IRON CIRCULATING CENTER LINE CEILING CONCRETE MASONRY UNIT CLEANOUT COLUMN CONDENSATE CONNECT, CONNECTION CONTINUE, CONTINUATION CLEANOUT TO GRADE CONTRACTOR CIRCULATING PUMP CHLORINATED POLYVINYL CHLORIDE CONDENSATE RECEIVER COMPUTER ROOM AIR CONDITIONING CONDENSING UNIT	ID I.E., IE IN IN WG IN W.C. IT IW  J-BOX  K KW KWH  L LBS OR # LF LO LOC  M	INSIDE DIAMETER INVERT ELEVATION INCH INCHES WATER GAUGE INCHES OF WATER COLUMN INFORMATION TECHNOLOGY INDUSTRIAL WASTE  JUNCTION BOX  KILOWATT KILOWATT—HOUR  LAVATORY POUND(S) LINEAR FEET LUBRICATING OIL LOCATION  MAXIMUM	TP TYP TW	SPECIFICATION SQUARE STAINLESS STEEL, SERVICE SINK STANDARD STEEL STRUCTURAL SURFACE SUSPEND COLD WATER (SOFT) SUPPLY VALVE SYMBOL SLOPE AT PERCENTAGE SHOWN  TOTAL DYNAMIC HEAD TEMPERATURE THROUGH THERMOSTATIC MIXING VALVE TOP OF PIPE TRAP PRIMER OR TRAP PRIMING TYPICAL TEPID WATER  URINAL UNDER CUT
CW °C  D  D  dB  DESIG  DEG  DFU  DIA OR Ø  DIM  DISC  DISCH  DISCH  DIST  DN  DS  DWG(S)  DWH	DOMESTIC COLD WATER DEGREES CELSIUS  DEPTH DECIBEL DESIGNATION DEGREE(S) DRAINAGE FIXTURE UNIT DIAMETER DIMENSION DISCONNECT DISCHARGE DISTANCE DOWN DOWNSPOUT DRAWING(S) DOMESTIC WATER HEATER	MAX MBH MECH MFR MIN MPG MS MTD MV  N/A NC NEMA NIC NO NO. NOM N.T.S., NTS	NATAINOM  1000 BTU PER HOUR  MECHANICAL  MANUFACTURER  MINIMUM  MEDIUM PRESSURE GAS  MOP SINK  MOUNTED  MIXING VALVE   NOT APPLICABLE  NORMALLY CLOSED  NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION  NOT IN CONTRACT  NORMALLY OPEN  NUMBER  NOMINAL  NOT TO SCALE	U/G U/S UFC UTR	UNDER FLOOR UNDER GROUND UNDER SLAB UNIFIED FACILITIES CRITERIA UP THROUGH ROOF UNDERWRITERS LABORATORIES, INC. UNLESS NOTED OTHERWISE UNINTERRUPTIBLE POWER SUPPLY UNIT STORAGE BUILDING  VENT VOLTAGE ALTERNATING CURRENT VENT BELOW FLOOR VELOCITY VERTICAL VARIABLE FREQUENCY DRIVE VALVE VALVE ON RISER VENT THROUGH ROOF
(E) EA ECC EER EF EFF ELEV, EL ELEC ENCL EQ EQUIP EQV ET EXH EXT EXP. JOINT EWC EWS	EXISTING EACH ECCENTRIC ENERGY EFFICIENCY RATIO EXHAUST FAN EFFICIENCY ELEVATION ELECTRICAL ENCLOSURE EQUAL EQUIPMENT EARTHQUAKE VALVE EXPANSION TANK EXHAUST EXTERNAL EXPANSION JOINT ELECTRIC WATER COOLER EMERGENCY SHOWER AND EYE WASH  DEGREE FAHRENHEIT FAN COIL	OC OD OF OH OMS OPNG OPER OSHA  P PCD PD PH PIV PLBG PLC PNL POC POD PRESS PRS	ON CENTER OUTSIDE DIAMETER OVERFLOW OVERHEAD ORGANIZATIONAL MAINTENANCE SHOP OPENING OPERATING OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION  PUMP PUMP CONDENSATE DRAIN PRESSURE DROP, PERIMETER DRAIN PHASE POST INDICATOR VALVE PLUMBING PUMP LEVEL CONTROL(S) PANEL POINT OF CONNECTION POINT OF DISCONNECT PRESSURE PRESSURE REDUCING STATION	W W/O WAP WC W.C. WCO WF WHA WM WP WPD WR WS WSFU WT  XFMR	WASTE WITH WITHOUT WALL ACCESS PANEL WATER CLOSET WATER COLUMN WALL CLEANOUT WASH FOUNTAIN WATER HAMMER ARRESTER WATER METER WEATHER PROOF WATER PRESSURE DROP WATER RISER WATER SOFTENER WATER SUPPLY FIXTURE UNIT WEIGHT  TRANSFORMER

#### PLUMBING GENERAL NOTES:

- A. 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.
- B. PLUMBING CONTRACTOR SHALL ADHERE TO ALL CITY CODES, ORDINANCES, AND OTHER STATE AND LOCAL CODES THAT HAVE AUTHORITY OVER THIS PROJECT.
- C. PLUMBING CONTRACTOR SHALL EXTEND ALL CONDENSATE AND INDIRECT DRAINS FROM
- EQUIPMENT TO FLOOR DRAIN AND/OR FLOOR SINK, IN MECHANICAL ROOM.
- D. PLUMBING CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR ANY INSTALLATION OF PIPING AND DUCTWORK PRIOR TO BEGINNING OF CONSTRUCTION E. PLUMBING CONTRACTOR SHALL TERMINATE ALL WATER ROUGH-IN WITH SHUT-OFF VALVES
- BEFORE CONNECTING TO EQUIPMENT AND RELATED FIXTURES. F. REFER TO ARCHITECTS DRAWINGS FOR MOUNTING HEIGHTS OF ALL PLUMBING FIXTURES.
- G. INSULATE "P" TRAPS AND SUPPLIES AT HANDICAP LAVATORIES WITH INSULATION KIT. H. PROVIDE VACUUM BREAKER TO ALL FIXTURES WITH HOSE CONNECTION AND APPLIANCES WITH DIRECT CONNECTIONS TO DOMESTIC WATER.
- I. ALL FLOOR DRAINS AND/OR FLOOR SINKS SHALL BE PROVIDED WITH TRAP PRIMER
- CONNECTION. J. PROVIDE STOPS AND WATER HAMMERS AT EACH FIXTURE OR GROUP OF FIXTURES.
- K. ALL VENTS THROUGH ROOF SHALL BE FLASHED A MINIMUM OF 12" ABOVE ROOF. ALL VENTS SHALL BE MINIMUM OF 15' AWAY FROM ANY OUTSIDE INTAKE.
- L. PROVIDE CEILING ACCESS PANEL FOR WATER ISOLATION VALVES, WATER HAMMER ARRESTORS AND TRAP PRIMER VALVES LOCATED IN OTHERWISE INACCESSIBLE AREAS.
- M. PROVIDE INTUMESENT PUTTY AND SLEEVE ALL PIPING CROSSING FIRE RATED WALLS. N. SLEEVE ALL OUTSIDE WALL, FLOOR SLAB, AND BEAM PENETRATIONS. COORDINATE WITH
- STRUCTURAL ENGINEER PRIOR TO COMMENCEMENT OF WORK TO AVOID CONFLICT. O. DOMESTIC WATER LINE SHALL BE ROUTED, SO AS TO AVOID CROSSING OVER LIGHT
- FIXTURES WHERE POSSIBLE AND ELECTRICAL PANELS IN ALL CASES. P. PLUMBING CONTRACTOR SHALL COORDINATE EXACT LOCATION OF UTILITIES WITH CIVIL ENGINEER, AND CITY PRIOR TO INSTALLATION. FAILURE TO COMPLY SHALL RESULT IN
- CORRECTING AT NO COST TO THE OWNER REPRESENTATIVE. Q. GENERAL CONTRACTOR TO CONTACT CITY WATER, AND WASTE DEPARTMENTS 48 HOURS PRIOR TO TAP. NO EXCEPTIONS.

PLUMBING SYMBOL LEGEND							
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION				
	SANITARY WASTE LINE		BALL VALVE				
	VENT LINE	<u> </u>	CHECK VALVE				
GW	GREASE WASTE LINE	<b></b>	GATE VALVE				
——AW——	ACID WASTE LINE	<del></del>	GAS COCK				
RD	PRIMARY ROOF DRAIN LINE		BALANCING VALVE				
——OD——	SECONDARY OVERFLOW ROOF DRAIN LINE		WATER HAMMER ARRESTOR				
——CD——	CONDENSATE DRAIN LINE		GLOBE VALVE				
•	DOMESTIC COLD WATER	—— <b>o</b> FC0	FLOOR CLEANOUT				
••	DOMESTIC HOT WATER (110°F)	— <b>o</b> YCO	YARD CLEANOUT				
—— 120°F ——	DOMESTIC HOT WATER (120°F)	<del></del>	FLOOR DRAIN				
——140°F ——	DOMESTIC HOT WATER (140°F)	<del></del>	FLOOR SINK				
•••	DOMESTIC HOT WATER RETURN LINE	<del></del> @	ROOF DRAIN / OVERFLOW ROOF DRAIN				
TW	DOMESTIC TEPID WATER LINE	<del></del>	HOSE BIBB				
——CA——	COMPRESSED AIR LINE	<del></del>	WALL HYDRANT				
	NATURAL GAS LINE	—II	UNION				
•	EXISTING TO NEW CONNECTION	t	BRANCH - TOP CONNECTION				
		<u>Ŷ</u>	BRANCH - BOTTOM CONNECTION				
		o	PIPE RISE				
		G <del>i</del>	PIPE DROP				

NOTE: NOT ALL SYMBOLS MAY BE USED ON THIS PROJECT

LUMBING RISER DESIGNATION

LUMBING DETAIL REFERENCE







Drawn by Issue Date 05-01-2019

PLUMBING GENERAL LEGEND

P0.01







KEY NOTES: #

1. ROUTE SEWER AND WATER PIPING UNDER PORTABLE BUILDING. PROVIDE FIBREGLASS PIPE SUPPORT FOR FIVE FEET ON CENTER.

- 2. CONNECT NEW 3/4"ø DOMESTIC WATER PIPING TO EXISTING DOMESTIC WATER PIPING SERVING ADJACENT EXISTING PORTABLE BUILDING. FIELD VERIFY POINT OF CONNECTION TO EXISTING PRIOR TO COMMENCEMENT OF WORK TO AVOID CONFLICT.
- 4. PROVIDE AND INSTALL INSULATED 3/4"ø COPPER CONDENSATE DRAIN PIPING. ROUTE AND DRAIN CONDENSATE DRAIN LINE TO HUB DRAIN.

3. CONNECT NEW 2"ø SANITARY SEWER PIPING TO EXISTING SANITARY SEWER PIPING SERVING ADJACENT EXISTING PORTABLE BUILDING. FIELD VERIFY INVERT AND POINT OF CONNECTION TO EXISTING PRIOR TO COMMENCEMENT OF WORK TO AVOID CONFLICT.



OPEN WORK

AREA 1

3/4"øCW─

└\_3/4"øCW

1/2"øCW

OFFICE

CONFERENCE

2"HUB DRAIN

SHUT OFF VALVE BELOW FLOOR

2"C.O. PILOCO
BELOW
FLOOR
FCU-2
FCU-1
2'

OPEN WORK AREA 2

OFFICE

OFFICE

2"C.O. BELOW FLOOR

2"øS----

OFFICE

2"øS—(1)

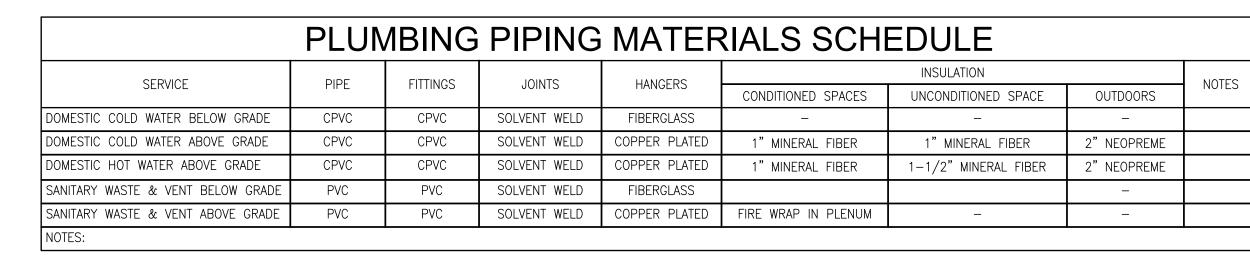
3/4"øCW—1

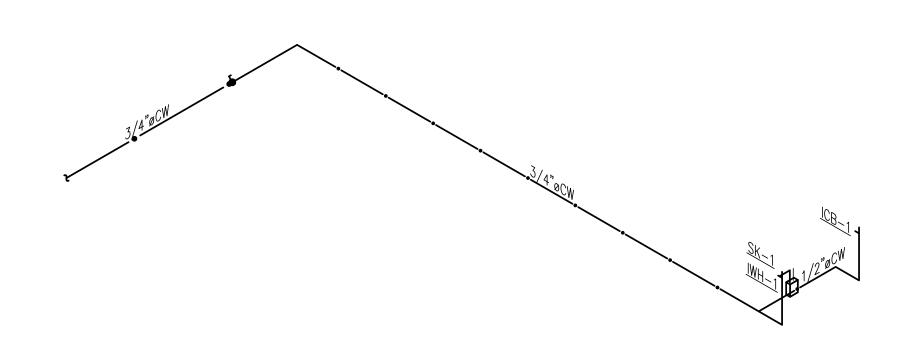
Drawn by Issue Date 05-01-2019

PLUMBING PLAN

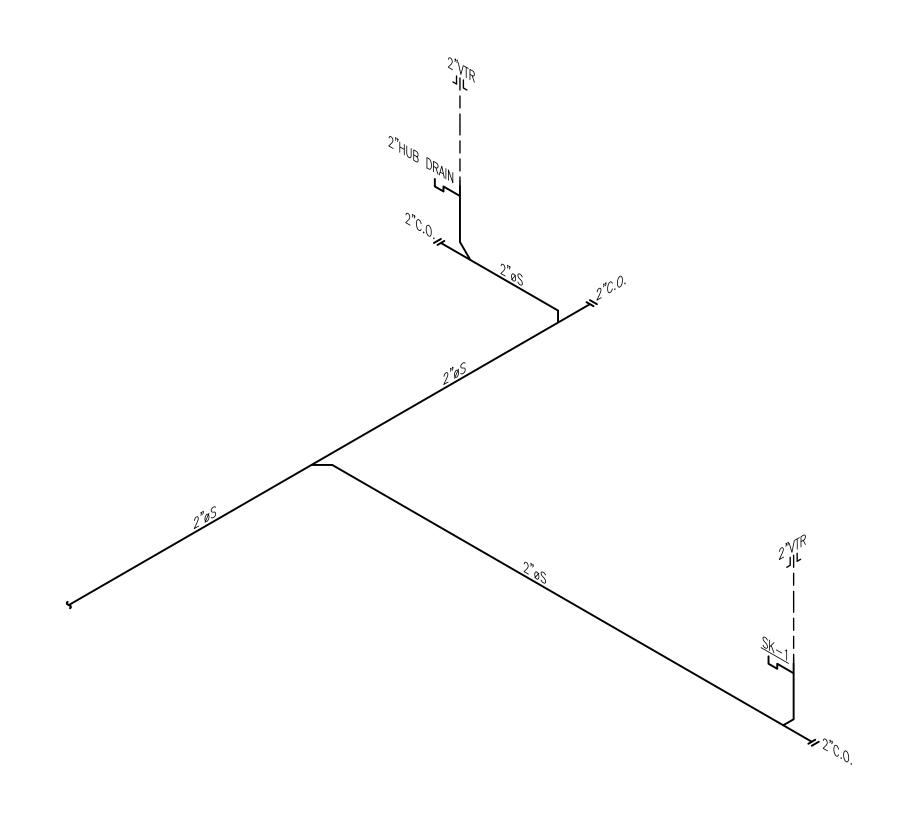
GRANDE O

Project # 32032.027
UNIVERSITY OF TEXAS RIO C
PORTABLE NO. C

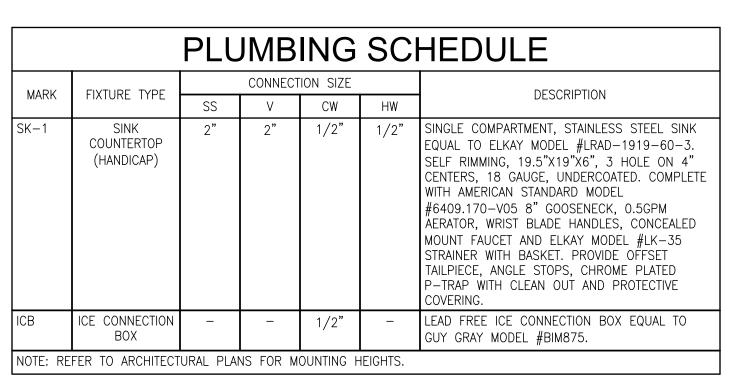




04 PLUMBING RISER SCHEMATIC DIAGRAM – DOMESTIC WATER
SCALE: 1/4" = 1'-0"

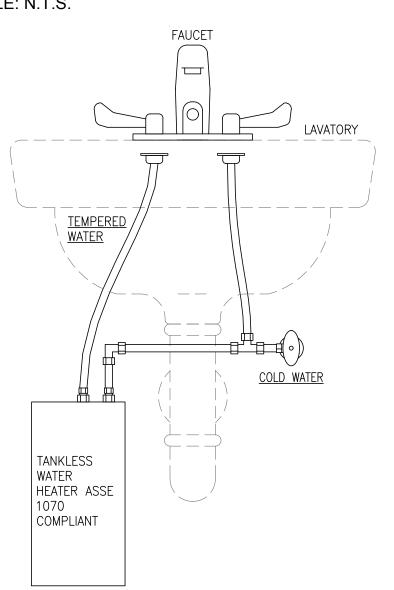


03 PLUMBING RISER SCHEMATIC DIAGRAM – SANITARY SEWER



TANKLESS WATER HEATER SCHEDULE										
MARK	LOCATION	SELECTION BASED ON		VOLTAGE	WATTS	TEMP. RISE @	NOTES			
		MFR	MODEL	/PHASE	INPUT	0.5GMP FLOW	NOTES			
IWH-1	OPEN WORK AREA 1	EeMAX	AM007240T	208/1	5000	68°F RISE	ALL			
NOTES: 1. INSTANTANEOUS WATER HEATER UNIT SHALL MEET ASSE 1070.										

02 VENT THROUGH ROOF DETAIL SCALE: N.T.S.



TAMKLESS WATER HEATER 01 MOUNTING DETAIL
SCALE: N.T.S.



PLUMBING DETAILS & SCHEDULES

P2.01