



# U.S. FISH & WILDLIFE SERVICE

## INKS DAM RESIDENCE #3 REHAB DESIGN

ASSET #: 10006240



INDEX OF DRAWINGS	
C-1	COVER/INDEX OF DRAWINGS
A-1	FLOOR PLAN
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E-5	ELECTRICAL SCHEDULES



VICINITY MAP  
NO SCALE

### APPROVAL SIGNATURES

REGIONAL ENGINEER	DATE
PROGRAM SUPERVISOR	DATE
ASS'T. REGIONAL DIR.	DATE
FACILITIES	DATE
SAFETY/IND. HYGIENIST	DATE
CULTURAL RESOURCES	DATE

NOTE TO BIDDERS:  
ANY PRINT ACCOMPANYING THIS INVITATION TO BID MAY BE A REDUCED REPRODUCTION OF THE WORKING DRAWINGS. IF LINE BELOW DOES NOT MEASURE SIX INCHES IN LENGTH, THE INDICATED SCALES ARE TO BE ADJUSTED ACCORDINGLY.



UNITED STATES DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE  
REGION 2 DIV. OF INFRASTRUCTURE MANAGEMENT

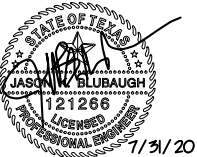
### INKS DAM RESIDENCE #3 REHAB DESIGN

BURNET TX

INKS DAM RESIDENCE #3 REHAB DESIGN

COVER/INDEX OF DRAWINGS

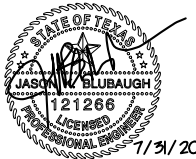
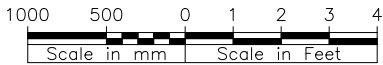
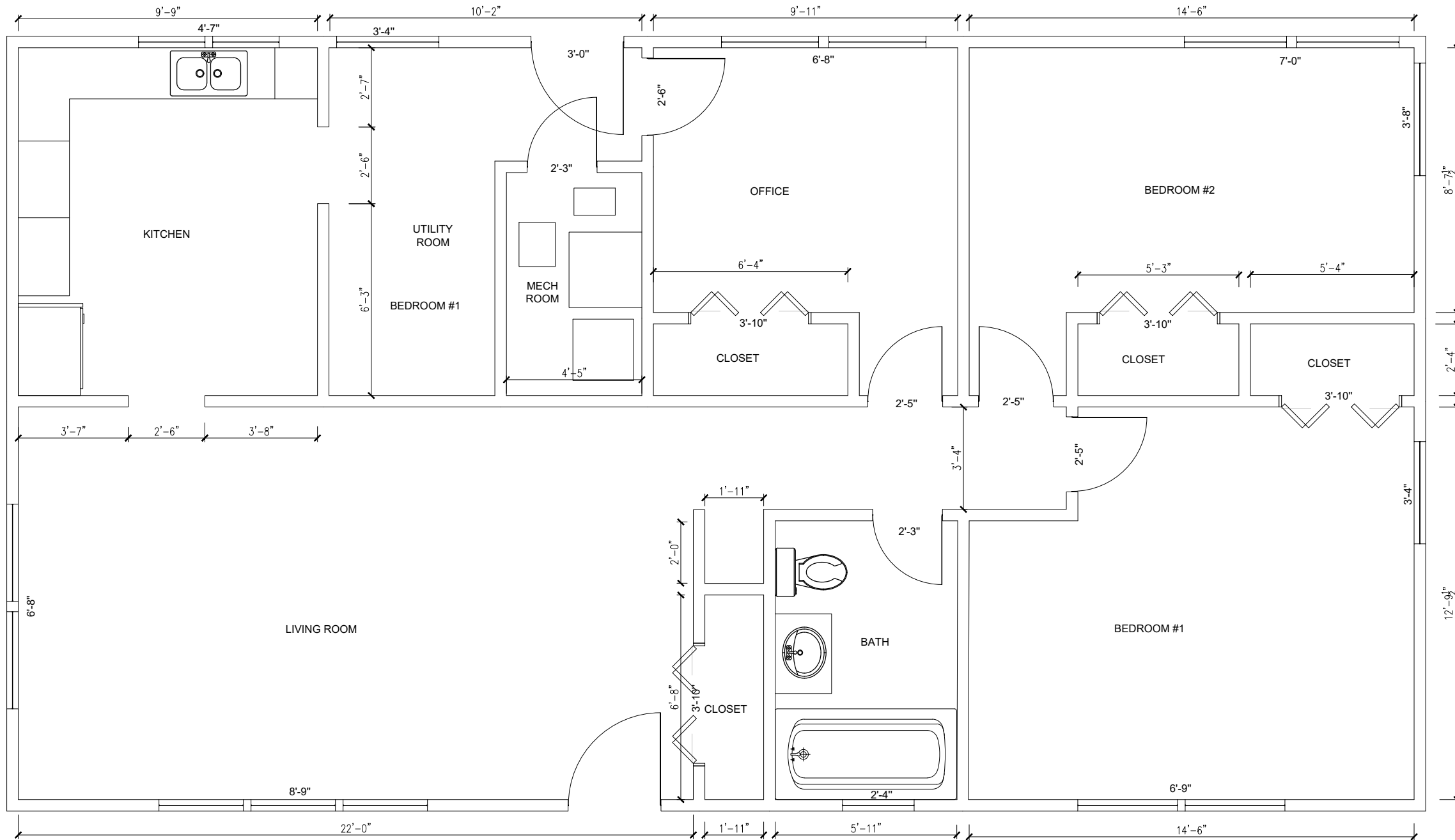
DESIGNED: JKB	DRAWN: ARF	CHECKED: DEW
DATE: 7/31/20	DRAWING NO. C-1	SHEET 1 OF 12



100% DESIGN  
SUBMITTAL  
JULY 31, 2020

GENERAL NOTES:

- DIMENSIONS SHOWN OF EXISTING WALLS ARE APPROXIMATE.
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS.
- ALL GYPSUM BOARD WALLS AND WOOD TRIM SHALL RECEIVE A PROTECTIVE COATING OF PRIMER AND PAINT AFTER OTHER WORK IS COMPLETED. REFER TO SPECIFICATION 099600 PROTECTIVE COATINGS FOR DETAILS.
- ALL CEILING HEIGHTS ARE 8'-0".



1/31/20

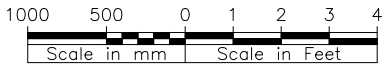
INKS DAM					SUB-SHEET
FLOOR PLAN					A-1
INKS DAM RESIDENCE #3 REHAB DESIGN					
DESIGNED JKB	DRAWN ARF	CHECKED EWM	DATE 7/31/20	DRAWING NO. A-1	SHEET 2 OF 12

GENERAL NOTES:

1. PRIOR TO ANY ELECTRICAL AND PLUMBING DEMOLITION OR CONSTRUCTION, ALL INDICATED GYPSUM BOARD MUST BE DEMOLISHED AND REMOVED FROM RESIDENCE.
2. GYPSUM BOARD AND INSULATION SHALL BE DEMOLISHED FROM ALL CEILINGS, EXTERIOR WALLS AND PAINTED INTERIOR WALLS. ALL GYPSUM BOARD AND INSULATION DEBRIS AND DUST MUST BE REMOVED OFF OF HATCHERY PROPERTY AND PROPERLY DISPOSED OF PRIOR TO ELECTRICAL AND PLUMBING CONTRACTORS BEGINNING WORK.
3. A QUALIFIED ASBESTOS ABATEMENT CONTRACTOR SHALL BE USED DURING DEMOLITION PHASE FOR PROPER SETUP AND CONTAINMENT.
4. INSTALL NEW R11 INSULATION ON ALL EXTERIOR WALLS AND APPLY GYPSUM BOARD. INSTALL NEW GYPSUM BOARD ON INTERIOR WALLS WHERE REMOVED. INSTALL NEW GYPSUM BOARD ON CEILINGS. MUD, TAPE,SAND AND PAINT TO MATCH EXISTING CONDITIONS. PAINT ALL PAINTED WOOD TRIM. ALL COLORS SHALL BE COORDINATED WITH THE OWNER PRIOR TO PAINTING.
5. REPAIR OR REPLACE WOOD TRIM THAT IS DAMAGED OR UNUSABLE.
6. BLOW IN NEW R38 INSULATION IN ATTIC TO A MINIMUM DEPTH OF THE MANUFACTURES RECOMMENDATIONS..
7. CONTRACTOR SHALL PROTECT EXISTING FLOORING DURING CONSTRUCTION AND SHALL REPAIR NECESSARY DAMAGES TO RETURN FLOOR TO CONDITIONS BEFORE CONSTRUCTION.
8. ALL ELECTRICAL AND PLUMBING DEMOLISHED DEBRIS MUST BE REMOVED OFF OF HATCHERY PROPERTY AND PROPERLY DISPOSED OF.

KNOWN LEAD PAINT AND ASBESTOS LOCATIONS:

1. A LEAD-BASED PAINT INSPECTION WAS COMPLETED IN 2000 AND IDENTIFIED THE FOLLOWING FINDINGS;
  - a. INTERIOR PAINT WAS FOUND IN "GOOD" CONDITION AND THE AMOUNT OF LEAD IS INDICATIVE OF 1950S OR EARLY 1960S PAINT.
  - b. EXTERIOR WOOD PAINT ON THE SOFFIT AND ROOF TRIM OF THE CARPORT WAS IN "POOR" CONDITION AND CONTAINS MORE THAN 10SQFT OF LBP.
  - c. EXTERIOR WOOD PAINT ON THE GABLE, SOFFIT AND ROOF TRIM OF THE SOUTH SIDE OF THE RESIDENCE WAS IN "POOR" CONDITION AND CONTAINS MORE THAN 10SQFT OF LBP.
2. AN ASBESTOS SURVEY WAS COMPLETED IN 1999 AND IDENTIFIED ASBESTOS IN THE FOLLOWING AREAS:
  - a. WALL SKIM COAT THROUGHOUT RESIDENCE.
  - b. MECHANICAL ROOM FLOOR TILE.
  - c. GARAGE SHINGLES.
3. ALL GYPSUM BOARD ON EXTERIOR WALLS SHALL BE REMOVED. ALL PAINTED GYPSUM BOARD ON INTERIOR WALLS SHALL BE REMOVED.
4. MECHANICAL ROOM FLOOR TILE WITH ASBESTOS SHALL REMAIN IN PLACE AND UNDISTURBED.
5. GARAGE SHINGLES WITH ASBESTOS SHALL REMAIN IN PLACE AND UNDISTURBED.



DEMOLITION LEGEND

- ////// DEMO ALL MATERIAL ON EXTERIOR WALLS FROM FLOOR TO CEILING IN PREPARATION FOR NEW INSULATION.
- ~~~~~ DEMO ALL PAINTED GYPSUM BOARD ON INTERIOR WALLS SHALL BE REMOVED.

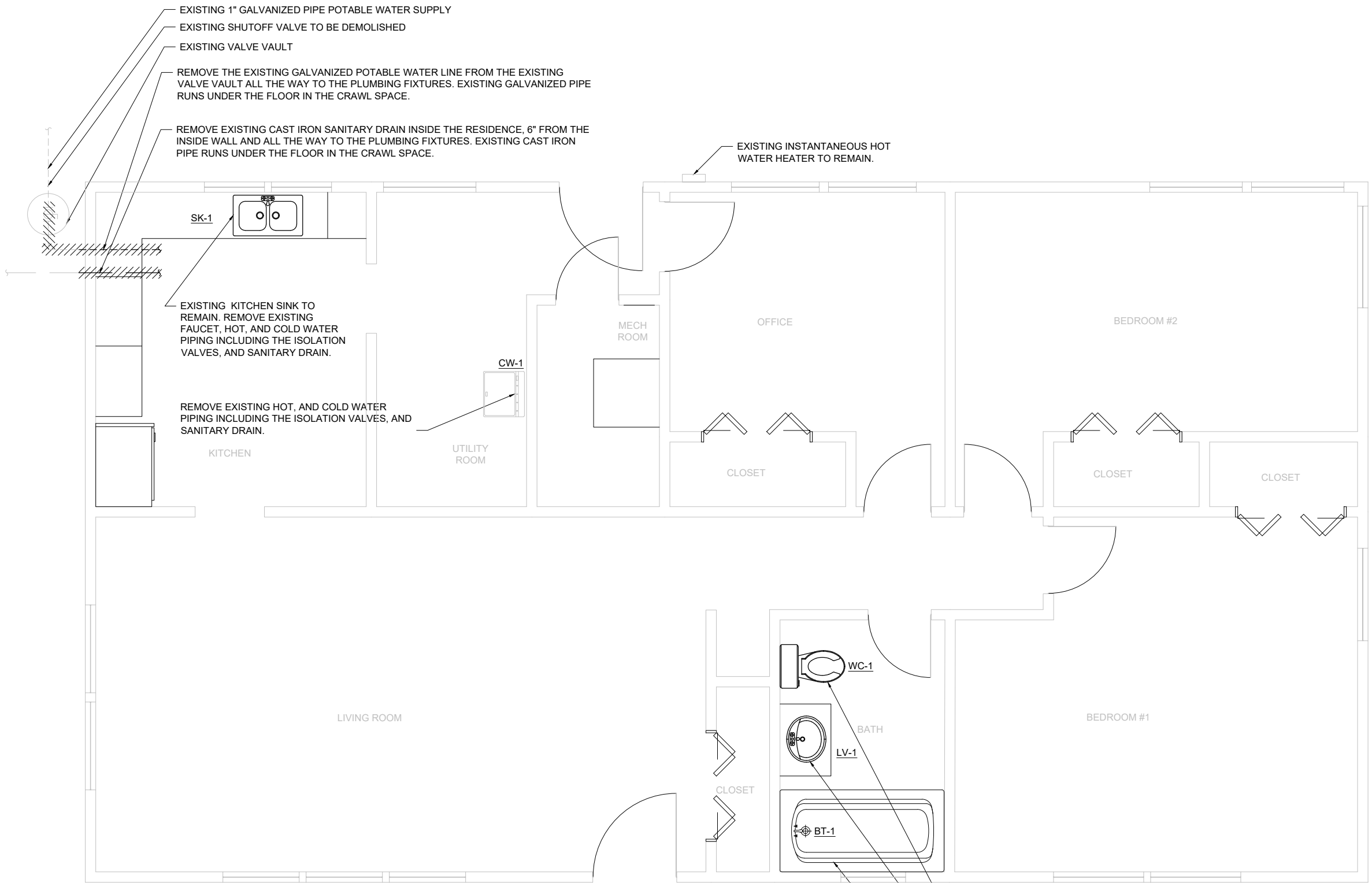


INKS DAM					SUB-SHEET
GYPSUM BOARD AND INSULATION PLAN					A-2
INKS DAM RESIDENCE #3 REHAB DESIGN					
DESIGNED JKB	DRAWN ARF	CHECKED EWM	DATE 7/31/20	DRAWING NO. A-2	SHEET 3 OF 12

ABBREVIATIONS		LEGEND	GENERAL PLUMBING NOTES																																										
<div><div>AFF</div><div>ABOVE FINISHED FLOOR</div><div>CFH</div><div>CUBIC FEET PER HOUR</div><div>CO</div><div>CLEAN OUT</div><div>CP</div><div>CIRCULATING PUMP</div><div>DHWR</div><div>DOMESTIC HOT WATER RETURN</div><div>DHWS</div><div>DOMESTIC HOT WATER SUPPLY</div><div>DS</div><div>DRENCH SHOWER</div><div>ECR</div><div>ENGINE COOLING WATER RETURN</div><div>ECS</div><div>ENGINE COOLING WATER SUPPLY</div><div>ES/EW</div><div>EMERGENCY SHOWER AND EYE WASH</div><div>ET</div><div>EXPANSION TANK</div><div>EWC</div><div>ELECTRIC WATER COOLER</div><div>EWH</div><div>ELECTRIC WATER HEATER</div><div>FCO</div><div>FLOOR CLEAN OUT</div><div>FD</div><div>FLOOR DRAIN</div><div>FW</div><div>FIRE PROTECTION WATER</div><div>GPM</div><div>GALLONS PER MINUTE</div><div>HB</div><div>HOSE BIBB</div><div>HWR</div><div>HOT WATER RETURN</div><div>HWS</div><div>HOT WATER SUPPLY</div><div>LAV</div><div>LAVATORY</div><div>MSB</div><div>MOP SERVICE BASIN</div><div>NG</div><div>NATURAL GAS</div><div>PW</div><div>POTABLE WATER</div><div>RPBFP</div><div>REDUCED PRESSURE BACK FLOW PREVENTER</div><div>SD</div><div>SANITARY DRAIN</div><div>SH</div><div>SHOWER</div><div>SK</div><div>SINK</div><div>THW</div><div>TEMPERED HOT WATER</div><div>TMV</div><div>THERMOSTATIC MIXING VALVE</div><div>TW</div><div>TEMPERED WATER</div><div>U</div><div>URINAL</div><div>UW</div><div>UTILITY WATER</div><div>VTR</div><div>VENT THROUGH ROOF</div><div>WC</div><div>WATER CLOSET</div><div>WCO</div><div>WALL CLEAN OUT</div><div>WH</div><div>WATER HEATER</div></div>		<div><div><div><div></div></div><div>POTABLE COLD WATER</div></div><div><div><div></div></div><div>POTABLE HOT WATER</div></div><div><div><div></div></div><div>POTABLE HOT CIRCULATION WATER</div></div><div><div><div>NG</div></div><div>NATURAL GAS</div></div><div><div><div></div></div><div>FLOOR CLEANOUT</div></div><div><div><div></div></div><div>WALL CLEANOUT</div></div><div><div><div></div></div><div>BUTTERFLY VALVE</div></div><div><div><div></div></div><div>GLOBE VALVE</div></div><div><div><div></div></div><div>BALL VALVE</div></div><div><div><div></div></div><div>BACKFLOW PREVENTER</div></div><div><div><div></div></div><div>SANITARY DRAIN</div></div><div><div><div></div></div><div>VENT PIPING</div></div><div><div><div></div></div><div>CHECK VALVE</div></div><div><div><div></div></div><div>DOWN PIPE</div></div><div><div><div></div></div><div>VALVE IN RISER</div></div><div><div><div></div></div><div>FLOOR DRAIN</div></div></div>	<div><div><div>1. THE ENTIRE PLUMBING SYSTEM SHALL BE IN ACCORDANCE WITH THE 2015 EDITION OF THE INTERNATIONAL PLUMBING CODE AND LOCAL PLUMBING STATUTES/ORDINANCES.</div><div>2. THE PIPING INDICATED ON THESE PLANS ARE DIAGRAMATIC. ALL WORK SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION. SUBCONTRACTOR SHALL COORDINATE ROUTING OF ALL PIPING WITH EXISTING CONDITIONS AND SHALL PROVIDE ANY NECESSARY OFFSETS, REROUTING, TEES, ELBOWS, ETC. REQUIRED FOR A COMPLETE AND COORDINATED INSTALLATION.</div><div>3. ALL PLUMBING &amp; PIPING SYSTEMS SHALL BE SUPPORTED AS REQUIRED BY THE LOCAL CODE REQUIREMENTS AND PER MANUFACTURER'S RECOMMENDATIONS.</div><div>4. ALL PIPING PENETRATIONS THROUGH NEW, EXISTING WALL, OR FLOOR SHALL BE SEALED TO EQUAL THE RATING OF THE NEW, EXISTING WALL OR FLOOR.</div><div>5. TEST POTABLE WATER SYSTEM UNDER A WATER PRESSURE NOT LESS THAN 1-1/2 TIME THE WORKING PRESSURE, BUT NOT LESS THAN 125 PSI. SEE SPECIFICATION 220000 FOR SPECIFIC TESTING AND REPORTING REQUIREMENTS.</div><div>6. TEST THE DRAINAGE AND VENTING SYSTEMS WITH WATER. SEE SPECIFICATION 220000 FOR SPECIFIC TESTING AND REPORTING REQUIREMENTS.</div><div>7. TEST GAS PIPING SYSTEM UNDER A PRESSURE NOT LESS THAN 1-1/2 TIME THE WORKING PRESSURE, BUT NOT LESS THAN 3 PSIG. SEE SPECIFICATION 220000 FOR SPECIFIC TESTING AND REPORTING REQUIREMENTS.</div><div>8. ALL (VTR'S) VENT THRU ROOF PENETRATIONS INDICATED ON PLANS ARE PRELIMINARY. FINAL LOCATIONS SHALL BE COORDINATED WITH ALL TRADES.</div></div><div><table><tr><th colspan="6">EXISTING PLUMBING FIXTURE CONNECTION SCHEDULE</th></tr><tr><th>ID</th><th>DESCRIPTION</th><th>WASTE</th><th>VENT</th><th>CW</th><th>HW</th></tr><tr><td>WC-1</td><td>TANK TYPE WATER CLOSET</td><td>3"</td><td>2"</td><td>1/2"</td><td>-</td></tr><tr><td>LAV-1</td><td>LAVATORY</td><td>2"</td><td>1-1/2"</td><td>1/2"</td><td>1/2"</td></tr><tr><td>BT-1</td><td>BATHTUB</td><td>3"</td><td>1-1/2"</td><td>1/2"</td><td>1/2"</td></tr><tr><td>SK-1</td><td>SINK</td><td>3"</td><td>2"</td><td>1/2"</td><td>3/4"</td></tr><tr><td>CW-1</td><td>CLOTHES WASHER</td><td>2"</td><td>1-1/2"</td><td>1/2"</td><td>1/2"</td></tr></table></div></div>	EXISTING PLUMBING FIXTURE CONNECTION SCHEDULE						ID	DESCRIPTION	WASTE	VENT	CW	HW	WC-1	TANK TYPE WATER CLOSET	3"	2"	1/2"	-	LAV-1	LAVATORY	2"	1-1/2"	1/2"	1/2"	BT-1	BATHTUB	3"	1-1/2"	1/2"	1/2"	SK-1	SINK	3"	2"	1/2"	3/4"	CW-1	CLOTHES WASHER	2"	1-1/2"	1/2"	1/2"
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<div><div><div><div>STATE OF TEXAS</div><div>JASON W. BLUBAUGH</div><div>121286</div><div>PLUMBING</div><div>7/31/20</div></div></div></div>		<div><div><div>INKS DAM</div><div>PLUMBING NOTES, SYMBOLS AND DETAILS</div><div>INKS DAM RESIDENCE #3 REHAB DESIGN</div><div><div>DESIGNEDSS</div><div>DRAWNDJK</div><div>CHECKEDAK</div><div>DATE7/31/20</div><div>DRAWING NO.P-1</div></div></div></div>																																											

GENERAL SHEET NOTES:

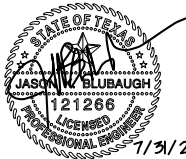
1. ALL WORK SHALL COMPLY WITH THE 2015 INTERNATIONAL PLUMBING CODE.
2. COORDINATE WITH OWNER TO SHUT OFF MAIN WATER SUPPLY FOR WORK ON MAIN WATER VALVE.



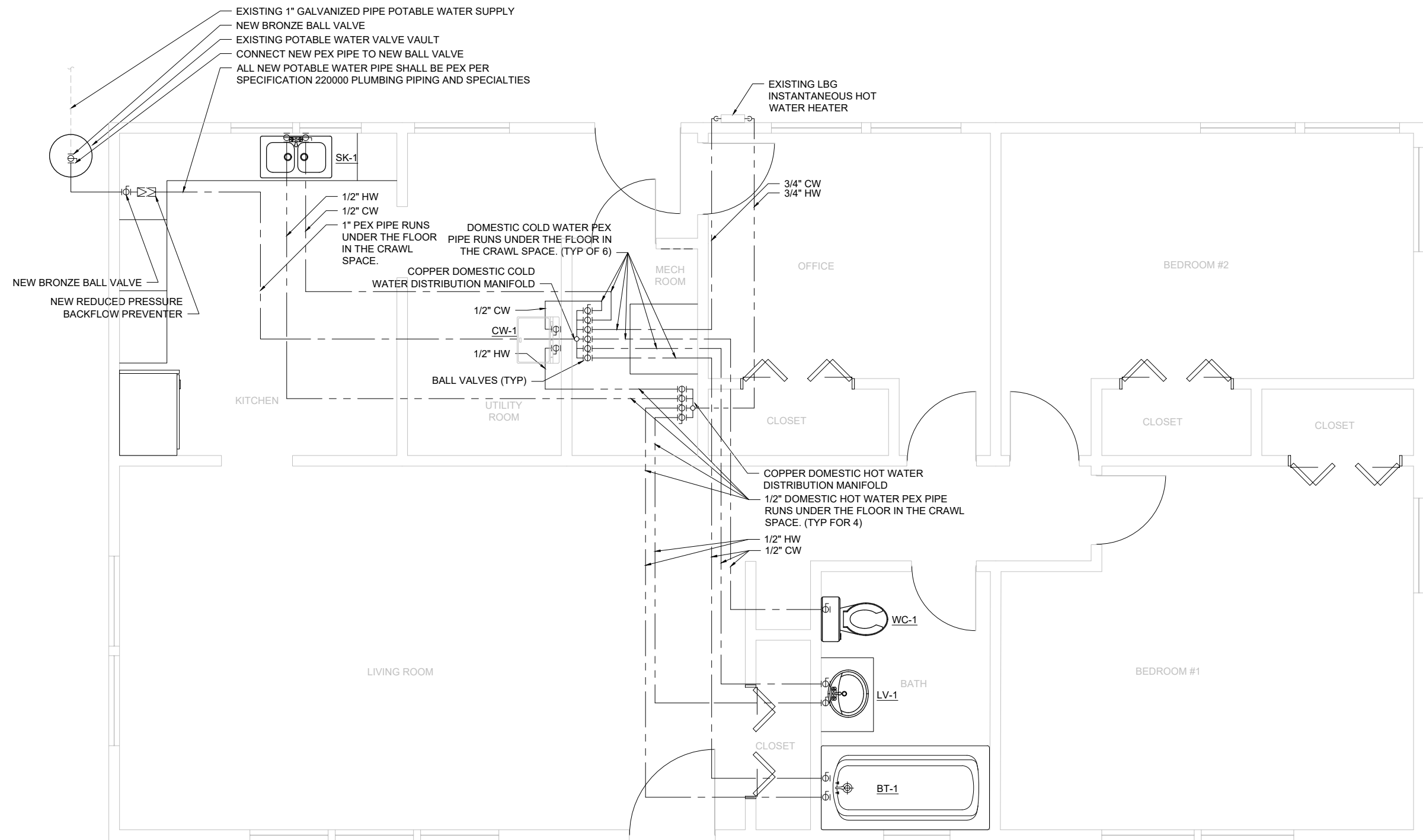
EXISTING TOILET TO REMAIN. REMOVE EXISTING FLASH VALVE, COLD WATER PIPING INCLUDING THE ISOLATION VALVE, AND SANITARY DRAIN.

EXISTING LAVATORY TO REMAIN. REMOVE EXISTING FAUCET, COLD WATER PIPING INCLUDING THE ISOLATION VALVE, AND SANITARY DRAIN.

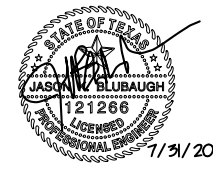
EXISTING BATHTUB TO REMAIN. REMOVE EXISTING FAUCET, COLD WATER PIPING INCLUDING THE ISOLATION VALVE, AND SANITARY DRAIN.



INKS DAM					SUB-SHEET
INKS DAM RESIDENCE #3 REHAB DESIGN					P-2
DESIGNED SS	DRAWN DJK	CHECKED AK	DATE 7/31/20	DRAWING NO. P-2	SHEET 5 OF 12



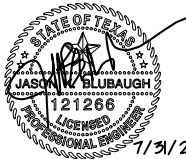
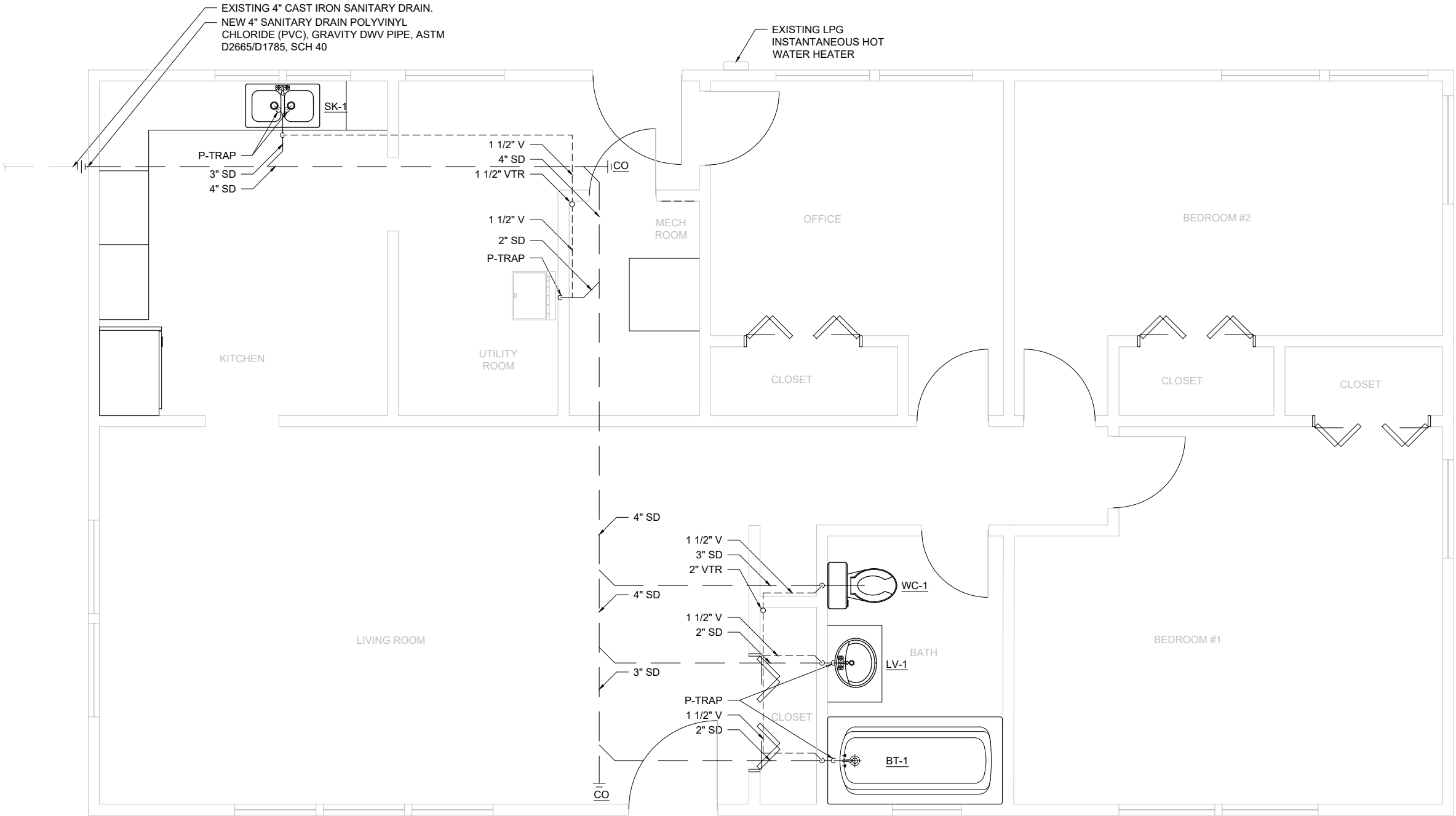
- GENERAL SHEET NOTES:
1. ALL WORK SHALL COMPLY WITH THE 2015 INTERNATIONAL PLUMBING CODE.
  2. COORDINATE WITH OWNER TO SHUT OFF MAIN WATER SUPPLY FOR WORK ON MAIN WATER VALVE.
  3. RETAIN VALVE IN EXTERIOR VALVE VAULT. REPLACE SUPPLY PIPING FROM VALVE TO NEW COLD WATER MANIFOLD WITH PEX TO MATCH EXISTING SIZE. USE DIELECTRIC FITTING AT THE CONNECTION TO THE EXISTING PIPE.
  4. WATER SUPPLY LINE ENTERS CRAWLSPACE AT OR BELOW EXISTING GROUND LEVEL. RAISE NEW PEX PIPE SUPPLY LINE TO ABOVE EXISTING GROUND LEVEL AND FEED COLD WATER MANIFOLD IN MECHANICAL ROOM.
  5. ALL NEW POTABLE WATER PIPE SHALL BE PEX PER SPECIFICATION 220000 PLUMBING PIPING AND SPECIALTIES.
  6. PROVIDE PIPE INSULATION ON ALL HOT AND COLD LINES PER SPECIFICATION 220000 PLUMBING PIPING AND SPECIALTIES.
  7. REPLACE TOILET FLUSH VALVE. SEE SPECIFICATION 220000.
  8. CLOTHES WASHER SUPPLY PART OF WATER DRAIN ROUGH IN BOX. INSTALL ROUGH IN BOX AT 42" AFF.
  9. IF EXTERIOR HOSE BIBS EXIST ON THE RESIDENCE SUBMIT A SEPARATE COST PROPOSAL FROM THE BASE BID FOR THEIR REMOVAL AND REPLACEMENT.
  10. INSPECT AND MAKE APPROPRIATE REPAIRS TO ALL ROOF AND EVE VENTS TO PREVENT WATER AND RODENT ACCESS TO THE ATTIC SPACES.
  11. CONTRACTOR SHALL PROTECT EXISTING FLOORING DURING CONSTRUCTION AND SHALL REPAIR NECESSARY DAMAGES TO RETURN FLOOR TO CONDITIONS BEFORE CONSTRUCTION.



INKS DAM					SUB-SHEET
PLUMBING POTABLE WATER					P-3
INKS DAM RESIDENCE #3 REHAB DESIGN					
DESIGNED SS	DRAWN DJK	CHECKED AK	DATE 7/31/20	DRAWING NO. P-3	SHEET 6 OF 12

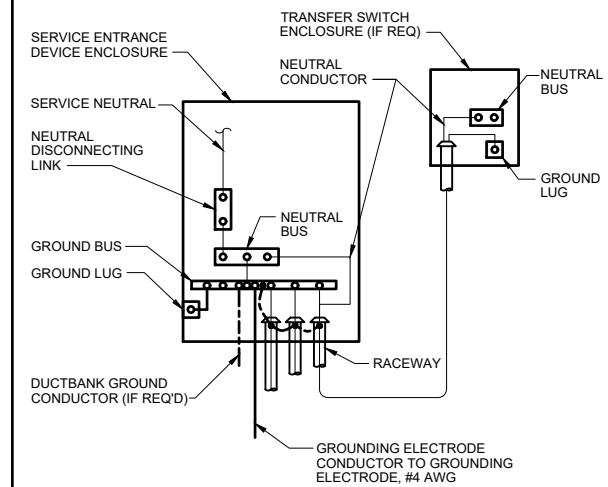
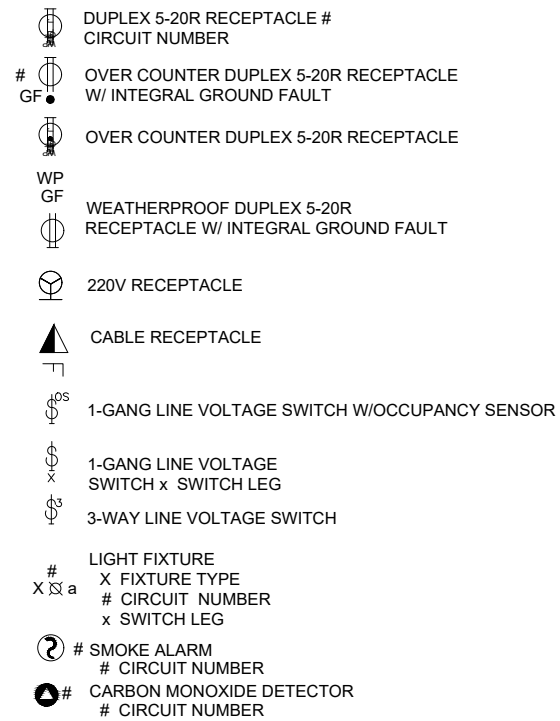
GENERAL SHEET NOTES:

1. ALL WORK SHALL COMPLY WITH THE 2015 INTERNATIONAL PLUMBING CODE.
2. INTERCEPT SANITARY DRAINS BELOW FLOOR AND REPLACE BRANCH AND MAIN LINES WITH PVC PIPE. TRANSITION NEW MAIN TO EXISTING MAIN SEWER LINE AT 6" INSIDE RESIDENCE SOUTH WALL.
3. ALL NEW SANITARY DRAINS AND VENTS SHALL BE POLYVINYL CHLORIDE (PVC), GRAVITY PIPE ASTM D2665/D1785.
4. SLOPE DRAINAGE PIPING 1/4" PER LINEAR FOOT OF DRAIN PIPE.
5. CLOTHES WASHER DRAIN PART OF WATER SUPPLY ROUGH IN BOX. INSTALL DRAIN P-TRAP AT 12" AFF AND ROUGH IN BOX AT 42" AFF.

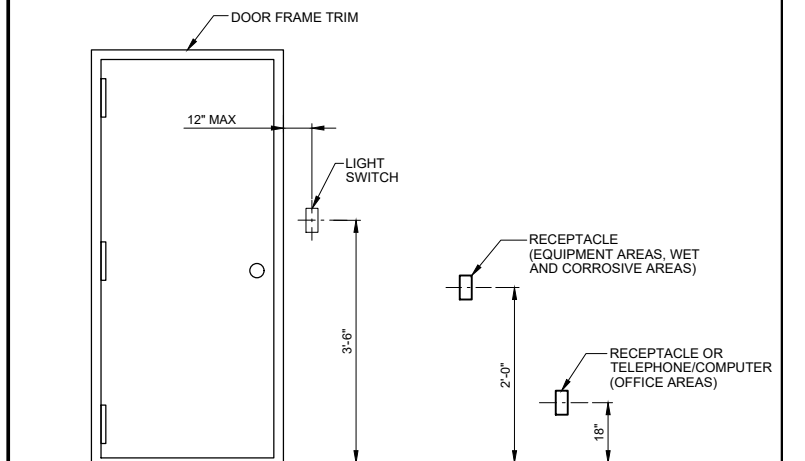


INKS DAM					SUB-SHEET
PLUMBING SANITARY DRAIN					P-4
INKS DAM RESIDENCE #3 REHAB DESIGN					
DESIGNED SS	DRAWN DJK	CHECKED AK	DATE 7/31/20	DRAWING NO. P-4	SHEET 7 OF 12

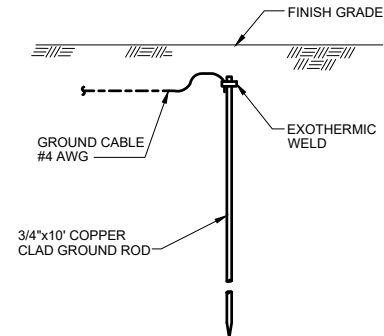
### ELECTRICAL LEGEND



E-300 SERVICE GROUNDING  
NON-SEPARATELY DERIVED SOURCE  
REV 010119



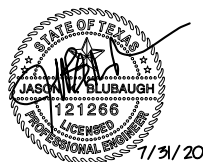
**E-450** **OUTLET BOX MOUNTING**  
REV 010119



NOTE:

1. ELECTRICAL SAMPLE DETAIL.

ES351 BURIED GROUND ROD  
INSTALLATION  
REV 010119

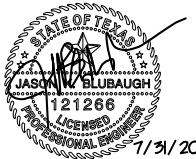
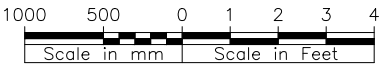
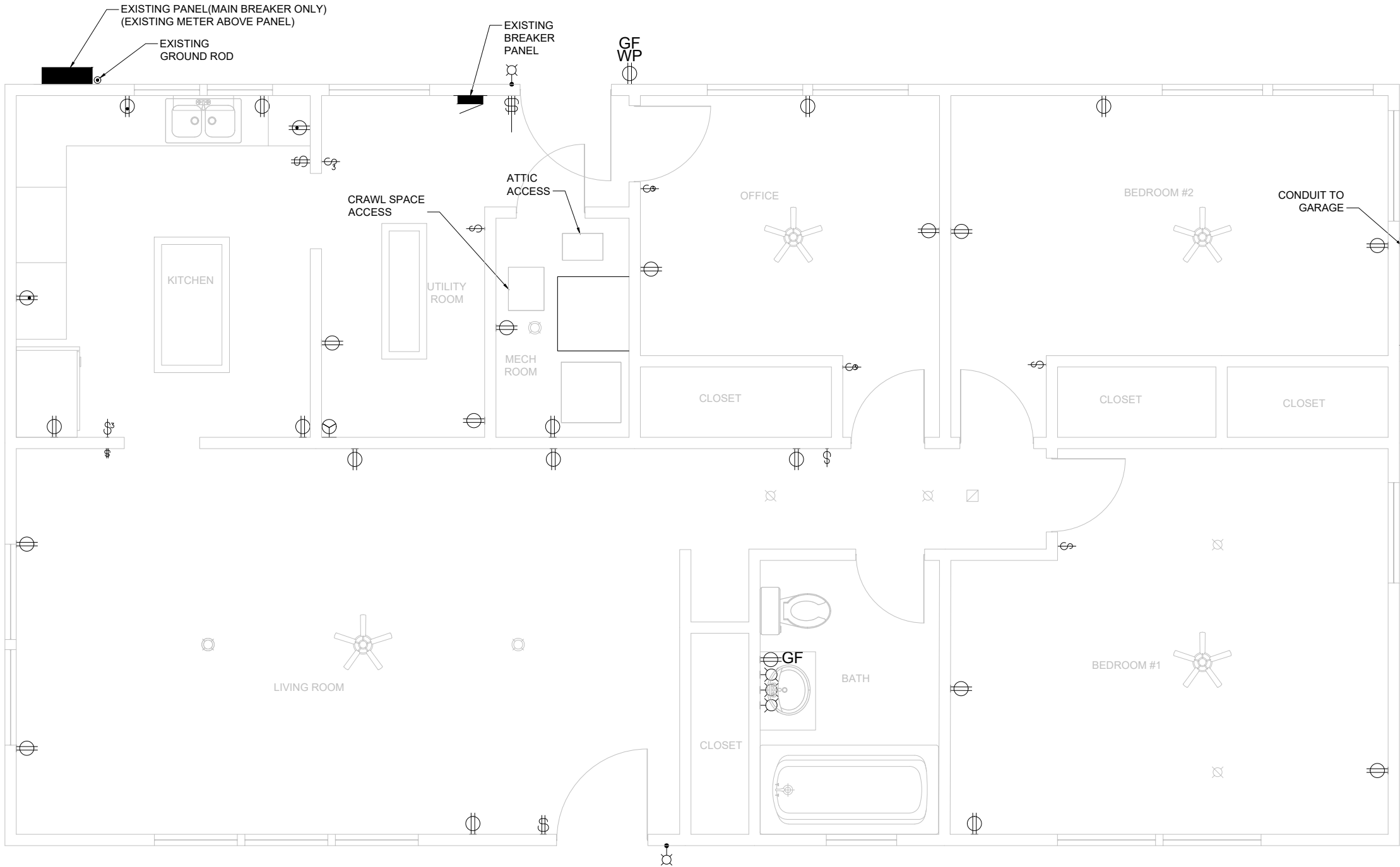


INKS DAM					SUB-SHEET
ELECTRICAL SYMBOLS & DETAILS					E-1
INKS DAM RESIDENCE #3 REHAB DESIGN					
DESIGNED JKB	DRAWN ARF	CHECKED KES	DATE 7/31/20	DRAWING NO. F-1	SHEET 8 OF 12



GENERAL NOTES:

- COORDINATE WITH LOCAL POWER COMPANY TO DISCONNECT POWER TO EXISTING SERVICE PRIOR TO WORK.
- DEMOLISH ALL RECEPTACLES, SWITCHES, LIGHT FIXTURES AND FANS ON INTERIOR AND EXTERIOR OF RESIDENCE. RETAIN FANS FOR REINSTALLATION IN ORIGINAL LOCATIONS.
- DEMOLISH EXISTING SERVICE PANELS CONDUIT AND JUNCTION BOXES DOWNSTREAM OF EXISTING METER. NEW MAIN PANEL WILL BE INSTALLED INSIDE RESIDENCE. SEAL ALL HOLES WITH PAINTABLE WATERPROOF SEALANT AND PAINT TO MATCH RESIDENCE EXTERIOR.
- DEMOLISH ALL EXISTING RECEPTACLES, SWITCHES, INTERIOR OR EXTERIOR PULL BOXES NOT LOCATED IN ATTIC OR CRAWL SPACES AND WIRING. REMOVE FANS AND RETAIN TO BE RE-INSTALLED DURING CONSTRUCTION.
- DEMOLISH AC POWER WHIP IN PREPARATION FOR NEW AC DISCONNECT AND WHIP.
- TEST EXISTING GROUND ROD (UNDER EXISTING MAIN DISTRIBUTION PANEL) FOR RESISTANCE TO GROUND AT OR BELOW 25 OHMS. IF RESISTANCE IS LOWER THAN THRESHOLD, IT CAN BE USED AS PART OF NEW SERVICE GROUNDING ELECTRODE SYSTEM. IF RESISTANCE IS HIGHER THAN 25 OHMS, DISCONNECT AND DRIVE NO LESS THAN 6" BELOW GRADE.
- DEMO CONDUIT AND WIRE TO GARAGE. NEW CONDUIT AND WIRE WILL BE INSTALLED IN SAME APPROXIMATE LOCATION.
- CONTRACTOR SHALL PROTECT EXISTING FLOORING DURING CONSTRUCTION AND SHALL REPAIR NECESSARY DAMAGES TO RETURN FLOOR TO CONDITIONS BEFORE CONSTRUCTION.
- DEMO ALL EXTERIOR PHONE AND COAXIAL CABLES. AS WELL AS THE DEVICES ON WHICH THEY TERMINATE INSIDE THE RESIDENCE. SEAL ALL HOLES WITH PAINTABLE WATERPROOF SEALANT AND PAINT TO MATCH RESIDENCE EXTERIOR.



INKS DAM					SUB-SHEET	
ELECTRICAL DEMOLITION PLAN					E-2	
INKS DAM RESIDENCE #3 REHAB DESIGN					SHEET	
DESIGNED JKB	DRAWN ARF	CHECKED KES	DATE 7/31/20	DRAWING NO. E-2	9 OF 12	

GENERAL NOTES:

1. INSTALLATION SHALL BE IN ACCORDANCE TO THE 2017 NEC, INCLUDING ALL APPLICABLE LOCAL ORDINANCES. WIRING AND DETAILS IN COMMONLY DESCRIBED IN CODE MAY NOT BE SHOWN ON PLANS BUT ARE APPLICABLE PER CODE REQUIREMENTS.
2. REFER TO SPECIFICATIONS FOR MATERIALS AND METHODS FOR ELECTRICAL CONSTRUCTION.
3. ALL INTERIOR ELECTRICAL CABLE SHALL BE TYPE NM.
4. COORDINATE EXACT LOCATION OF ALL LIGHTING FIXTURES WITH EQUIPMENT, DUCTWORK AND PIPING.
5. ALL CIRCUITING; 2#12, 1#12G UNLESS NOTED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATIONS.
6. CIRCUIT 1,3 TO AC SHALL BE FED WITH 2#10, 1#10G.
7. CIRCUIT 9,11 TO DRYER SHALL BE FED WITH 2#10, 1#10G.
8. CIRCUIT 19, 21 TO OVEN SHALL BE FED WITH 2#8, 1#8G.
9. CIRCUIT 22, 28 TO GARAGE SHALL BE FED WITH 3#8, 1#8G.

10. ARRANGE WITH AUTHORITIES AND UTILITY COMPANIES FOR PERMITS, FEES AND SERVICE CONNECTIONS, VERIFYING LOCATIONS AND ARRANGEMENT AND PAYING ALL CHARGES, INCLUDING INSPECTIONS.
11. COORDINATE WORK WITH ARCHITECTURAL FEATURES AND COORDINATE WORK SO THAT INTERFERENCE BETWEEN CONDUITS, LIGHTING, EQUIPMENT, PLUMBING WORK AND BUILDING STRUCTURE WILL BE AVOIDED.
12. ALL RACEWAYS AND EQUIPMENT SHALL BE INSTALLED AND GROUNDED IN ACCORDANCE WITH THE 2017 EDITION OF THE NEC AND APPLICABLE LOCAL CODES.
13. THE CONTRACTOR SHALL PROVIDE PULLBOXES WHERE REQUIRED TO MAKE A WORKABLE INSTALLATION.
14. ALL RECEPTACLES IN OUTDOOR AND ANTICIPATED WET AREAS SHALL BE GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLES WITH WEATHERPROOF, IN-USE COVERS.
15. FOR LIGHTING AND RECEPTACLE SYSTEMS, ONLY CIRCUIT NUMBERS ARE SHOWN. CONTRACTOR SHALL PROVIDE ALL NECESSARY CONDUITS, WIRES, FITTINGS, JUNCTION BOXES AND ALL NECESSARY COMPONENTS TO MAKE THE ELECTRICAL INSTALLATION COMPLETE AND OPERATIONAL. CIRCUIT LOADING SHALL BE AS INDICATED IN THE PANEL SCHEDULES. ALL CIRCUITS SHALL INCLUDE GROUND WIRE.

16. MULTI-WIRE BRANCH CIRCUITS USING ONE COMMON GROUNDED OR "SHARED" NEUTRAL CONDUCTOR ARE NOT PERMITTED.
17. ALL CONDUCTORS SHALL BE COPPER. ALUMINUM BRANCH CIRCUITS OR FEEDER CONDUCTORS ARE NOT PERMITTED.
18. RECEPTACLES IN KITCHEN, LIVING ROOM, BEDROOMS AND OFFICE SHALL BE TAMPER-RESISTANT.
19. SURGE PROTECTIVE DEVICE (SPD) SHALL BE INSTALLED IN PANELBOARD.
20. CONTRACTOR SHALL PROTECT EXISTING FLOORING DURING CONSTRUCTION AND SHALL REPAIR NECESSARY DAMAGES TO RETURN FLOOR TO CONDITIONS BEFORE CONSTRUCTION.
21. CONNECT COMMUNICATIONS OUTLETS TO COMMUNICATIONS PANEL WITH RG6 CABLE. COIL CABLE INSIDE PANEL FOR FUTURE TERMINATION.

INSTALL NEW 200A SERVICE DISCONNECT BELOW EXISTING UTILITY METER. CONNECT WITH 3#3/0 CONDUCTOR.

- ① INSTALL INTERSYSTEM TERMINATION BONDING DEVICE WITH NOT LESS THAN THREE TERMINALS AND CONNECT TO THE GROUNDING ELECTRODE CONDUCTOR WITH #6AWG COPPER CONDUCTOR.
- ②

CONNECT NEW MAIN DISTRIBUTION PANEL TO SERVICE DISCONNECT WITH 3#3/0, 1#4G. CONNECT GROUNDING ELECTRODE CONDUCTOR TO GROUND RODS NEAR DISCONNECT WITH PERMANENT CADWELD EXOTHERMIC WELDED CONNECTIONS.

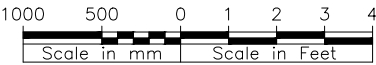
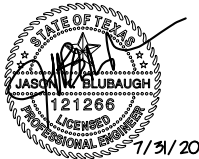
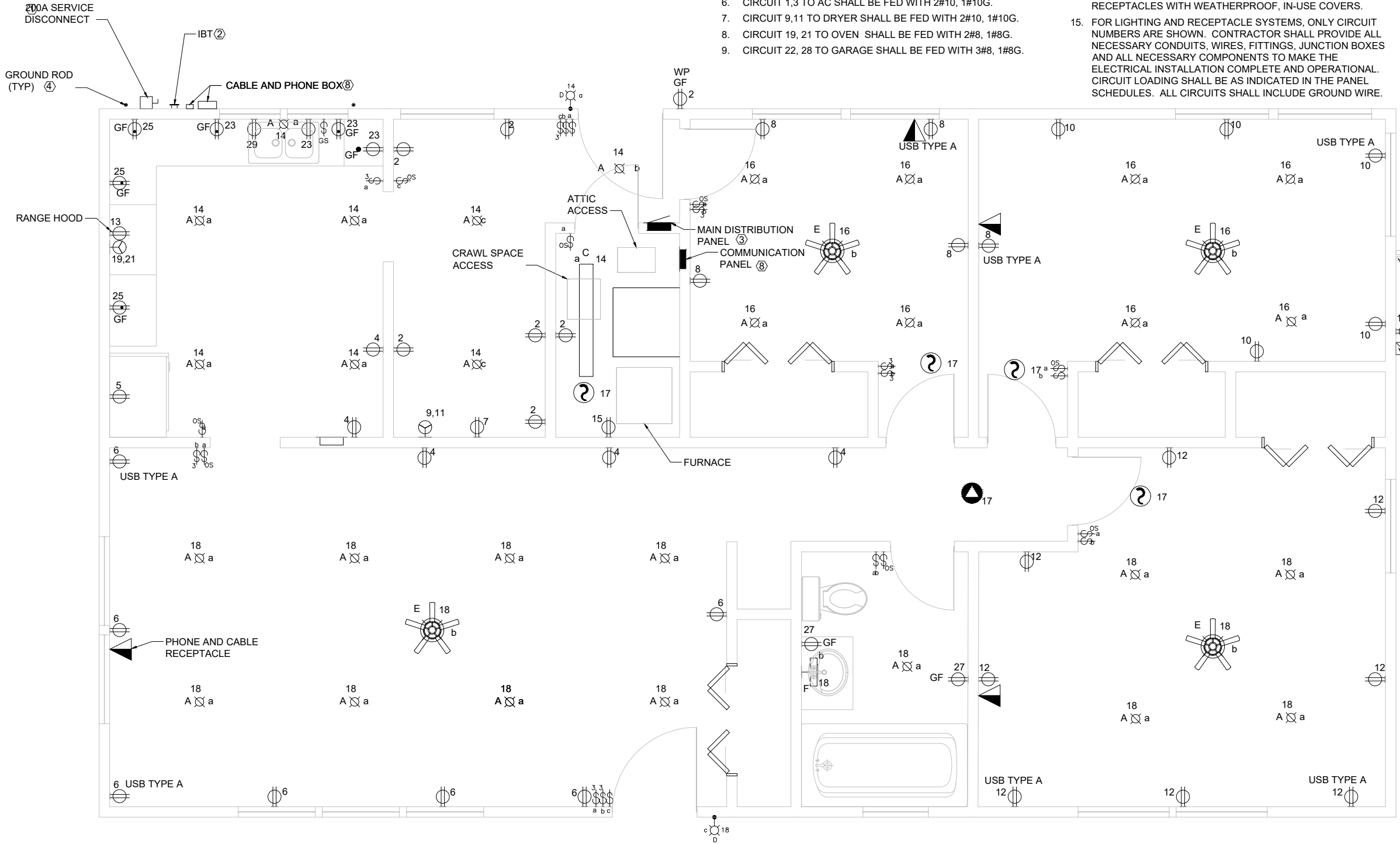
- ④ TEST EXISTING GROUND ROD (UNDER EXISTING MAIN DISTRIBUTION PANEL) FOR RESISTANCE TO GROUND AT OR BELOW 25 OHMS. IF RESISTANCE IS LOWER THAN THRESHOLD, IT CAN BE USED AS PART OF NEW SERVICE GROUNDING ELECTRODE SYSTEM. IF RESISTANCE IS HIGHER THAN 25 OHMS, DISCONNECT AND DRIVE NO LESS THAN 6" BELOW GRADE. A MINIMUM OF TWO GROUND RODS, SPACED NO CLOSER THAN 6' ARE REQUIRED, WITH A TOTAL SYSTEM RESISTANCE OF NO MORE THAN 25 OHMS. OTHER SYSTEM GROUNDING METHODS ARE PERMITTED PER THE 2017 NEC, BUT A MINIMUM OF TWO GROUND RODS ARE REQUIRED PER THIS CONTRACT.

- ⑤ INSTALL NEW 30A FUSED DISCONNECT AND REFEED AC CONDENSER WITH 2#10, 1#10G.

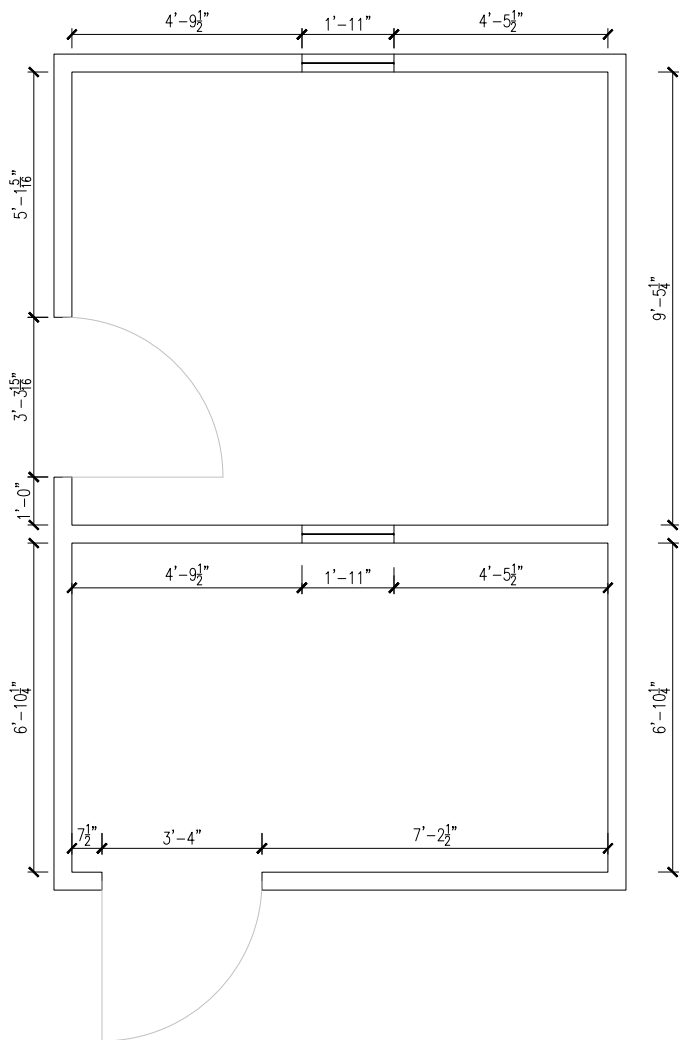
- ⑥ ALL NON-FAN LIGHT SWITCHES SHALL INCORPORATE OCCUPANCY SENSORS COMPATIBLE WITH LED LIGHTING.

- ⑦ RUN NEW 3/4" EMT CONDUIT FROM ATTIC OF RESIDENCE TO GROUND IN SAME LOCATION OF EXISTING 1/2" CONDUIT FEEDING GARAGE. TRANSITION TO PVC CONDUIT, SAWCUT PAVING AND RUN NEW GARAGE FEED IN SAME APPROXIMATE LOCATION AS EXISTING FEED. FEED NEW 30A SUBPANEL WITH 3#8, 1#8G IN 1" CONDUIT.

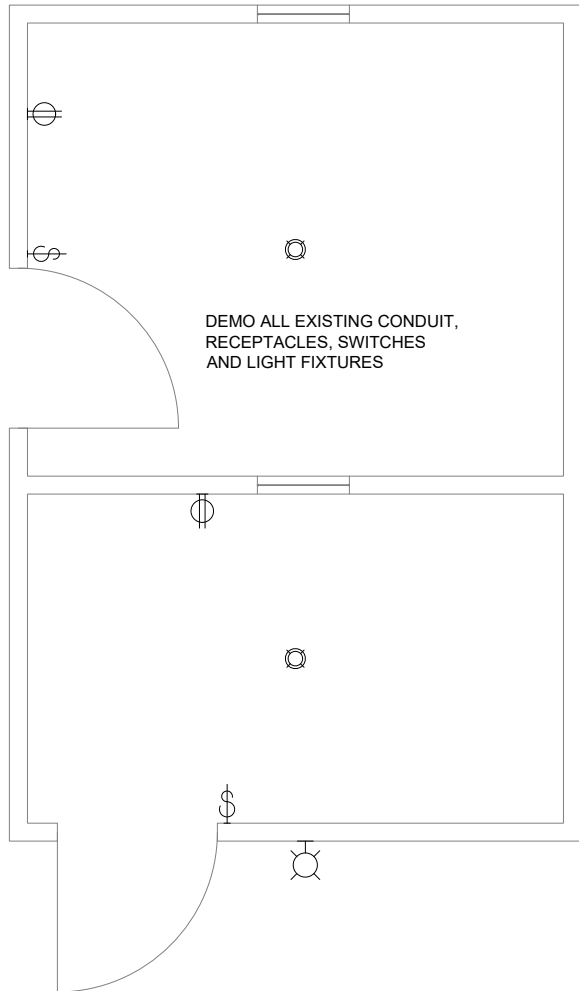
- ⑧ CONNECT RG6 CABLE FROM COMMERCIAL COMMUNICATIONS TERMINAL ON EXTERIOR OF RESIDENCE TO INTERIOR COMMUNICATIONS PANEL. CONNECT TO INDIVIDUAL ROOMS USING PASSIVE COAXIAL SPLITTER BOX MANUFACTURED FOR THE NUMBER OF DEVICES ATTACHED. LABEL EXTERIOR AND ROOM RG6 CABLES INSIDE COMMUNICATIONS BOX. CONNECT COPPER PHONE CABLE FROM COMMERCIAL TERMINAL ON EXTERIOR OF HOUSE TO COMMUNICATIONS BOX. LAND PHONE CABLE ON A PHONE TERMINATION BLOCK AND CONTINUE CABLE TO LIVING ROOM PHONE RECEPTACLE.



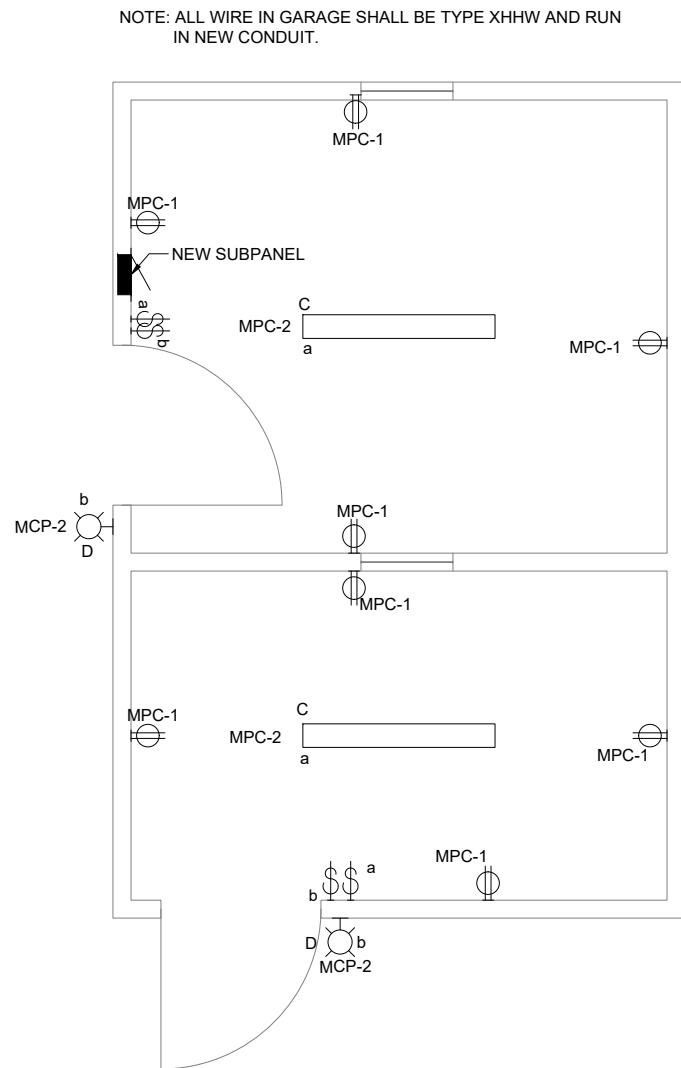
INKS DAM					SUB-SHEET	
ELECTRICAL PLAN					E-3	
INKS DAM RESIDENCE #3 REHAB DESIGN					SHEET	
DESIGNED JKB	DRAWN ARF	CHECKED KES	DATE 7/31/20	DRAWING NO. E-3	10 OF 12	



1 FLOOR PLAN  
1/2" = 1' - 0"



2 ELECTRICAL DEMO PLAN  
1/2" = 1' - 0"

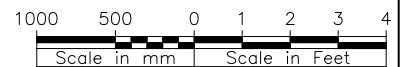


NOTE: ALL WIRE IN GARAGE SHALL BE TYPE XHHW AND RUN IN NEW CONDUIT.

3 ELECTRICAL PLAN  
1/2" = 1' - 0"

#### GENERAL NOTES:

1. INSTALLATION SHALL BE IN ACCORDANCE TO THE 2017 NEC, INCLUDING ALL APPLICABLE LOCAL ORDINANCES. WIRING AND DETAILS IN COMMONLY DESCRIBED IN CODE MAY NOT BE SHOWN ON PLANS BUT ARE APPLICABLE PER CODE REQUIREMENTS.
2. REFER TO SPECIFICATIONS FOR MATERIALS AND METHODS FOR ELECTRICAL CONSTRUCTION.
3. COORDINATE EXACT LOCATION OF ALL LIGHTING FIXTURES WITH EQUIPMENT, DUCTWORK AND PIPING.
4. ALL CIRCUITING; 2#12, 1#12G UNLESS NOTED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATIONS.
5. COORDINATE WORK WITH ARCHITECTURAL FEATURES AND COORDINATE WORK SO THAT INTERFERENCE BETWEEN CONDUITS, LIGHTING, EQUIPMENT, PLUMBING WORK AND BUILDING STRUCTURE WILL BE AVOIDED.
6. ALL RACEWAYS AND EQUIPMENT SHALL BE INSTALLED AND GROUNDED IN ACCORDANCE WITH THE 2017 EDITION OF THE NEC AND APPLICABLE LOCAL CODES.
7. THE CONTRACTOR SHALL PROVIDE PULLBOXES WHERE REQUIRED TO MAKE A WORKABLE INSTALLATION.
8. ALL RECEPTACLES IN OUTDOOR AND ANTICIPATED WET AREAS SHALL BE GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLES WITH WEATHERPROOF, IN-USE COVERS.
9. FOR LIGHTING AND RECEPTACLE SYSTEMS, ONLY CIRCUIT NUMBERS ARE SHOWN. CONTRACTOR SHALL PROVIDE ALL NECESSARY CONDUITS, WIRES, FITTINGS, JUNCTION BOXES AND ALL NECESSARY COMPONENTS SHOWN OR NOT SHOWN ON THE DRAWINGS, TO MAKE THE ELECTRICAL INSTALLATION COMPLETE AND OPERATIONAL. CIRCUIT LOADING SHALL BE AS INDICATED IN THE PANEL SCHEDULES. ALL CIRCUITS SHALL INCLUDE GROUND WIRE.
10. MULTI-WIRE BRANCH CIRCUITS USING ONE COMMON GROUNDED OR "SHARED" NEUTRAL CONDUCTOR ARE NOT PERMITTED.
11. ALL CONDUCTORS SHALL BE COPPER. ALUMINUM BRANCH CIRCUITS OR FEEDER CONDUCTORS ARE NOT PERMITTED.
12. RUN NEW 1" EMT CONDUIT FROM ATTIC OF RESIDENCE TO GROUND IN SAME LOCATION OF EXISTING 1/2" CONDUIT FEEDING GARAGE. TRANSITION TO PVC CONDUIT, SAWCUT PAVING AND RUN NEW GARAGE FEED IN SAME APPROXIMATE LOCATION AS EXISTING FEED. FEED NEW 30A SUBPANEL WITH 3#8, 1#8G IN 1" CONDUIT.



INKS DAM					SUB-SHEET
GARAGE PLAN					E-4
INKS DAM RESIDENCE #3 REHAB DESIGN					
DESIGNED JKB	DRAWN ARF	CHECKED KES	DATE 7/31/20	DRAWING NO. E-4	SHEET 11 OF 12

GENERAL NOTES:

1. CIRCUIT BREAKERS IN BEDROOMS, LIVING ROOM, OFFICE AND PORCH SHALL BE ARC-FAULT TYPE.
2. CIRCUIT BREAKER FOR DISHWASHER SHALL BE GFCI TYPE.

MAIN REAR HALL		PANELBOARD LOCATION		BUS AMPS: 200		VOLTS: 240/120V					
				MAIN BKR AMPS: 200		PHASE: 1					
				MOUNTING: IN-WALL		WIRE: 3					
LOAD DESCRIPTION	KVA		C	B		B	C	KVA		LOAD DESCRIPTION	
	PH.A	PH.B	K T	K R		K R	K T	PH.A	PH.B		
AC CONDENSOR	2.16		1	30		20	2	1.26		MECH/UTILITY/W OUTDOOR REC	
AC CONDENSOR		2.16	3			20	4		0.9	N KITCHEN/W LIVING REC	
REFRIGERATOR	0.72		5	20		20	6	1.26		LIVING ROOM REC	
CLOTHES WASHER		0.4	7	20		20	8		0.9	OFFICE REC	
CLOTHES DRYER	1.5		9	30		20	10	1.08		BEDROOM2/N OUTDOOR REC	
CLOTHES DRYER		1.5	11			20	12		1.44	BEDROOM 1 REC	
RANGE HOOD	0.24		13	20		20	14	0.2		KITCHEN/MECH/UTILITY LIGHTING	
FURNACE		1.14	15	20		20	16		0.48	OFFICE/BEDROOM 2 LIGHTING	
SMOKE DETECTORS	0.18		17	20		20	18	0.61		LIVING ROOM/BEDROOM 1 LIGHTING	
OVEN		3.0	19	40		30	20		2.88	GARAGE	
OVEN	3.0		21				22	2.88		GARAGE	
KITCHEN COUNTER 1		0.54	23	20		20	24		1.2	ON-DEMAND WATER HEATER	
KITCHEN COUNTER 2	0.54		25	20		20	26	0.0		SPARE	
BATHROOM		0.36	27	20		20	28		0.0	SPARE	
DISHWASHER	1.2		29	20		20	30	0.0		SPARE	
SPACE		0.0	31				32		0.0	SPACE	
SPACE	0.0		33				34	0.0		SPACE	
SPACE		0.0	35				36		0.0	SPACE	
SPACE	0.0		37				38	0.0		SPACE	
SPACE		0.0	39			20	40		0.0	SPD	
SPACE	0.0		41				42	0.0		SPD	
		9.54	9.1	TOTAL				7.29	7.8		
		PHASE LOAD		TOTAL LOAD							
		16.83	16.9	33.73 KVA							

MAIN		PANELBOARD		BUS AMPS: 30				VOLTS: 240/120V			
GARAGE		LOCATION		MAIN BKR AMPS: 30				PHASE: 1			
				MOUNTING: IN-WALL				WIRE: 3			
LOAD DESCRIPTION	KVA		C	B		B	C	KVA		LOAD DESCRIPTION	
	PH.A	PH.B	K	K		K	K	PH.A	PH.B		
RECEPTACLES	1.44		1	20							
LIGHTING		0.12	2	20							
	1.44	0.12	TOTAL				0.0		0.0		
	PHASE LOAD		TOTAL LOAD								
	1.44	0.12	1.56 KVA								

CAN FIXTURE COLOR  
TEMPURATURE SCHEDULE

ROOM	COLOR TEMP
BEDROOM	2700K
OFFICE	5000K
KITCHEN	4000K
UTILITY	5000K
MECHANICAL	5000K
LIVING ROOM	2700K

LUMINAIRE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	MODEL	LAMP	VOLTAGE	COLOR TEMP	REMARKS
A	6" CANLESS RECESSED FIXTURE	COMMERCIAL ELECTRIC	CER608943K50WH	LED	120V	2700K-5000K	5 SETABLE COLOR TEMPERATURES
C	4' LINEAR FLUSH MOUNT STRIP LIGHT	SUNLIGHT	HD02402-1	LED	120V	5000K	
D	1-LIGHT AGED IRON OUTDOOR WALL LANTERN SCONCE	HOME DECORATORS COLLECTION	FEU1611LM	LED	120V	3000K	DUSK TO DAWN
E	REUSE EXISTING FIXTURE, REPLACE BULBS WITH LED	NA	NA	LED	120V	2700K	PER BULB
F	24" 3-LIGHT ANTIQUE BRONZE VANITY LIGHT W/ALABASTER GLASS	PROGRESS LIGHTING	P2103-20	LED	120V	2700K	PER BULB

NOTE: THE DESIGN IS BASED ON THE ABOVE MANUFACTURERS AND MODELS, BUT ANY OTHER APPROVED EQUAL MAY BE USED.



INKS DAM

ELECTRICAL SCHEDULES

INKS DAM RESIDENCE #3 REHAB DESIGN

DESIGNED  
JKB

DRAWN  
ARF

CHECKED  
KES

DATE  
7/31/20

DRAWING NO.  
E-5

SUB-SHEET

E-5

SHEET  
12 OF 12