



CITY OF PERRIS OFFICE PLUMBING PLANS

PROJECT INFORMATION

PROJECT NAME:
CITY OF PERRIS OFFICE
AS-BUILT PLUMBING PLANS

OWNER:
CITY OF PERRIS
227 N D STRETT,
PERRIS, CA 92570

PROJECT ADDRESS:
227 N. D. STREET,
PERRIS, CA 92570

ENGINEERING:
BLUEBERRY, INC.
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NO.	REVISION	DATE
1	ISSUED FOR REVIEW	08/11/2023



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OWNER/CLIENT:
CITY OF PERRIS

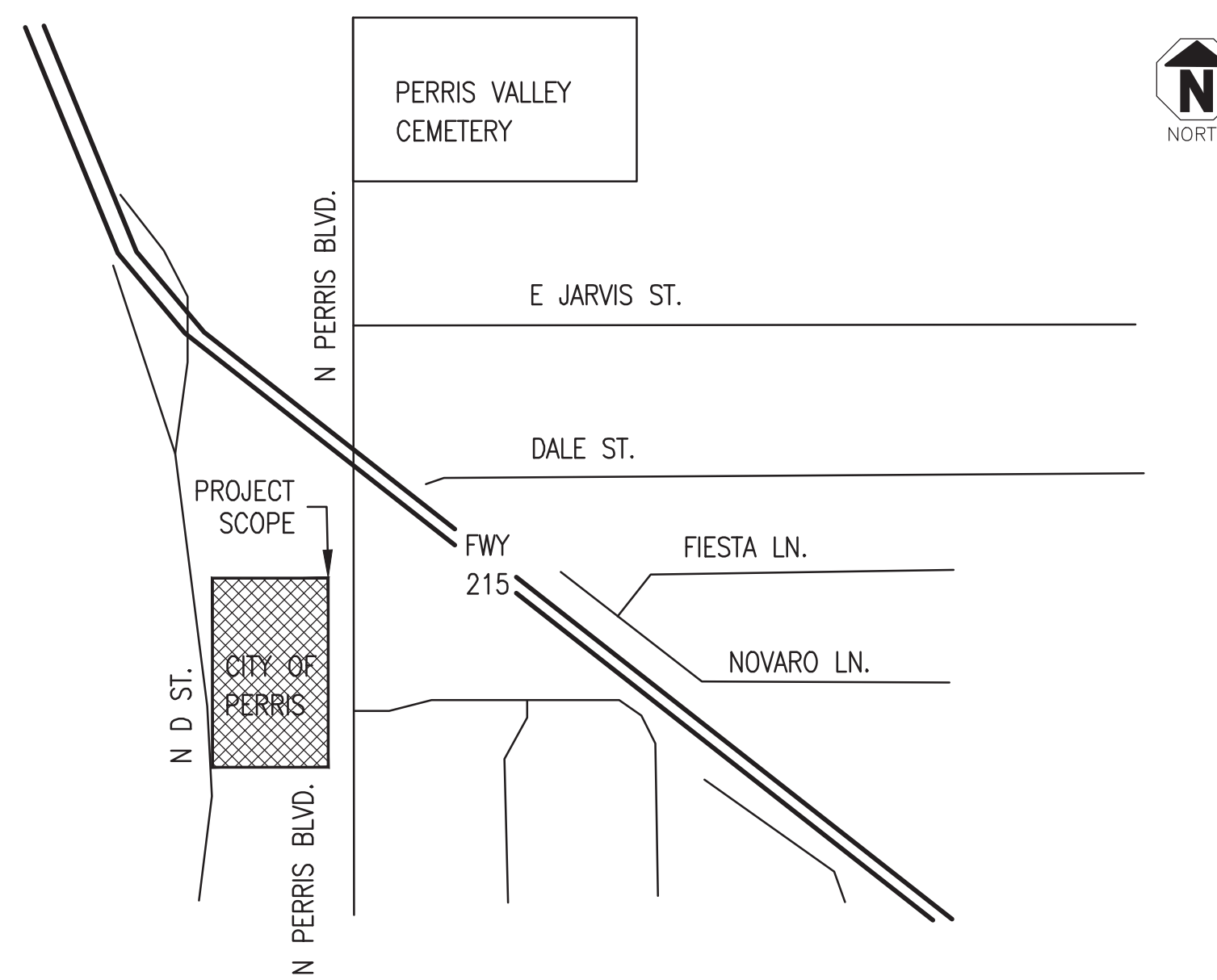


PROJECT ADDRESS
CITY OF PERRIS
227 N. D STREET,
PERRIS, CA 92570

DRAWING INDEX

DRAWING NO	DESCRIPTION
PP001	PROJECT INFORMATION & DRAWINGS INDEX
PP100	PLUMBING GENERAL NOTES & LEGEND
PP101	PLUMBING DETAILS
PP110	PLUMBING CALCULATIONS
PP200	WATER SYSTEM SITE PLAN
PP210	WATER SYSTEM PLAN
PP220	WATER SYSTEM ISO. PLAN
PP300	PLUMBING TITLE-24

PROJECT VICINITY MAP



PROJECT CODE INFORMATION

CODE INFORMATION:

- CALIFORNIA BUILDING CODE (CBC) 2022
- CALIFORNIA BUILDING CODE (CMC) 2022
- CALIFORNIA BUILDING CODE (CPC) 2022
- CALIFORNIA PLUMBING CODE (CEC) 2022
- CALIFORNIA ENERGY CODE (TITLE 24, PART 6) 2022

True North Compliance Services, Inc.
PLAN REVIEW APPROVAL
THESE PLANS AND SPECIFICATIONS HAVE BEEN REVIEWED FOR COMPLIANCE WITH THE APPLICABLE CALIFORNIA BUILDING STANDARDS CODES AS ADOPTED BY THE STATE OF CALIFORNIA AND APPROVED BY THE JURISDICTION. PLAN REVIEW ACCEPTANCE OF CALIFORNIA CODES DOES NOT IMPLY OR GUARANTEE THE QUALITY OF THE WORK OR ANY FEDERAL, STATE, NOR LOCAL REGULATION BY **Mark Sledge** DATE: 08/22/2023
THIS SET OF THE PLANS AND SPECIFICATIONS MUST BE KEPT ON THE JOB SITE AT ALL TIMES AND BE AVAILABLE TO MAKE ANY CHANGES OR ALTERATIONS WITHOUT PERMISSION FROM THE CITY OCCUPANCY INSPECTOR. THESE PLANS ARE FOR THE USE OF THE FINAL APPROVAL, AS SHOWN BY ALL APPLICABLE DEPARTMENTS.

PROJECT TITLE
PLUMBING SYSTEM

SHEET TITLE
COVER SHHET

PROJECT NO.:
236412

DATE:
08/11/2023

SCALE:
AS SHOWN

DRAWING NO.

PP001

of

CODE INFORMATION:

THE CONTRACTOR SHALL CONFORM TO ALL CODES, ORDINANCES, ETC. WHICH HAVE JURISDICTION OVER THIS WORK. BELOW IS A LIST OF MAJOR STANDARDS LISTED FOR CONVENIENCE ONLY. REFERENCE TO A STANDARD MEANS, THE LATEST EDITION OF SUCH STANDARD AT DATE OF BUILDING PERMIT. THE CONTRACTOR SHALL RETAIN RESPONSIBILITY FOR COMPLIANCE WITH LATEST REVISIONS OF ALL OTHER APPLICABLE CODES AND ORDINANCES NOT LISTED HEREIN .

- CALIFORNIA BUILDING CODE (CBC) 2022
CALIFORNIA MECHANICAL CODE (CMC) 2022
CALIFORNIA PLUMBING CODE (CPC) 2022
CALIFORNIA ELECTRICAL CODE (CEC) 2022
CALIFORNIA ENERGY CODE (TITLE 24, PART 6) 2022

CONSTRUCTION NOTES:

- 1. HOT WATER AND DRAIN PIPES EXPOSED UNDER SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED SO AS TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER SINKS.
2. FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL NOT BE GREATER THAN 5 LB. FT.
3. NEW PLUMBING FIXTURES AND FITTINGS SHALL NOT EXCEED THE MAXIMUM ALLOWABLE FLOW RATES SPECIFIED IN SECTION 5.303.2
4. HOT WATER PIPING SHALL BE INSULATED AS PER CPC 609.11 AND CAL ENERGY CODE TABLE 120.3-A.
5. NO VENTING SYSTEM SHALL TERMINATE LESS THAN 3 FEET ABOVE ANY FORCED AIR INLET LOCATED WITHIN 10 FEET OR LESS THAN 4 FEET FROM ANY PROPERTY LINE EXCEPT A PUBLIC WAY.
6. NO VENT FROM INDIRECT WASTE PIPING SHALL BE COMBINED WITH ANY SEWER CONNECTED VENT BUT SHALL EXTEND SEPARATELY TO THE OUTSIDE AIR.
7. STEAM AND/OR HOT WATER DRAINAGE REQUIRES AN INDIRECT WASTE LINE.
8. EACH PLUMBING FIXTURE SHALL BE SEPARATELY TRAPPED BY AN APPROVED TYPE WATER SEAL TRAP.
9. BUILDING SEWER SHALL BE TESTED TO COMPLY WITH CPC 732.0

PLUMBING SPECIFICATION:

- 1. CLEANOUTS
PROVIDE CLEANOUTS WITH BRASS SCREW PLUG AT ALL CHANGES OF DIRECTION TO PERMIT ROUTING OF ALL SEWERS. ALL CLEAN OUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. THE CONTRACTOR SHALL COORDINATE ALL CLEAN OUT LOCATIONS OF EQUIPMENT, CABINETS, ETC., WITH THE ARCHITECT PRIOR TO ANY INSTALLATION.
2. VALVES
EVERY PLUMBING FIXTURE SHALL BE INDEPENDENTLY VALVED.
3. TESTING
ALL SEWERS AND WATER PIPING SHALL BE PROPERLY TESTED TO THE SATISFACTION OF THE ARCHITECT AND THE LOCAL BUILDING INSPECTOR.
4. EXCAVATION AND BACK FILLING
TRENCHES SHALL BE BACK FILLED AND SETTLED BY PUDDLING. NO PIPE SHALL BE LESS THAN 12" BELOW FINISH GRADE.
5. PIPING SUPPORTS
ALL PIPING TO BE SUPPORTED WITH HANGERS AND BRACKETS WHICH PROVIDE ISOLATION FROM FRAMING. CONTACT BETWEEN PIPE AND SUPPORT TO BE LINED WITH PLASTIC OR FELT.
6. WATER HEATER INSTALLATION
A. APPLIANCES IN GARAGES AND IN ADJACENT SPACES THAT OPEN TO THE GARAGE AND ARE NOT PART OF THE LIVING SPACE OF A DWELLING UNIT SHALL BE INSTALLED SO THAT BURNERS AND BURNER-IGNITION DEVICES ARE LOCATED NOT LESS THAN 18 INCHES ABOVE THE FLOOR UNLESS LISTED AS FLAMMABLE VAPOR RESISTANT.
B. APPLIANCES INSTALLED IN GARAGES, WAREHOUSES, OR OTHER AREAS SUBJECT TO MECHANICAL DAMAGE SHALL BE GUARDED AGAINST SUCH DAMAGE BY BEING INSTALLED BEHIND PROTECTIVE BARRIERS OR BY BEING ELEVATED OR LOCATED OUT OF THE NORMAL PATH OF VEHICLES.

ENERGY CONSERVATION STANDARDS:

- 1. DOMESTIC HOT WATER SYSTEM.
FLUID TEMPERATURE RANGE 105-140 °F
CONDUCTIVITY RANGE 0.22 - 0.28 BTU-IN PER HOUR PER FT² PER °F
INSULATION MEAN RATING TEMP 100 °F
MINIMUM INSULATION VALUES ARE LISTED BELOW FOR EACH PIPE DIAMETER.

Table with 2 columns: NOMINAL PIPE DIAMETER, MINIMUM INSULATION REQUIRED. Rows include diameters < 1, 1 TO < 1.5, 1.5 TO < 4, and 1.5 TO < 4 MULTIFAMILY & HOTEL/MOTEL.

- 2. TIME CLOCKS TO BE INSTALLED TO CONTROL ANY HOT WATER CIRCULATING PUMPS.
3. SINKS AND LAVATORY FAUCETS AND SHOWER HEADS TO BE CERTIFIED BY STATE FOR
4. ENERGY APPLIANCE STANDARD COMPLIANCE.
5. MAXIMUM FLUSH VOLUMES AND FLOW RATES:
WATER CLOSETS: 1.28 GALLONS PER FLUSH(BLOWOUT TYPE EXEMPT)
LAVATORY: 1.2 GALLON PER MINUTE @ 60PSI
SHOWER: 1.8 GALLON PER MINUTE @ 80PSI
KITCHEN FAUCETS: 1.8 GALLON PER MINUTE @ 60 PSI

CA GREEN BUILDING NOTES:

- 5.303.2 PLUMBING FIXTURES SHALL MEET THE MAXIMUM FLOW RATE VALUES SHOWN IN TABLE 5.303.2.3.
5.303.3 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS.PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS AND SHOWERHEADS) SHALL COMPLY WITH THE FOLLOWING:
5.303.3.1 WATER CLOSETS. THE EFFECTIVE FLUSH VOLUME OF ALL WATER CLOSETS SHALL NOT EXCEED 1.28 GALLONS PER FLUSH. TANK-TYPE WATER CLOSETS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S.EPA WATER SENSE SPECIFICATION FOR TANK-TYPE TOILETS.
NOTE: THE EFFECTIVE FLUSH VOLUME OF DUAL FLUSH TOILETS IS DEFINED AS THE COMPOSITE, AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSHES AND ONE FULL FLUSH.
5.303.6 PLUMBING FIXTURES AND FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE, AND SHALL MEET THE APPLICABLE STANDARDS REFERENCED IN TABLE 1401.1 OF THE CALIFORNIA PLUMBING CODE AND IN CHAPTER 6 OF THIS CODE.

PLUMBING LEGEND & ABBREVIATIONS

Table with 3 columns: SYMBOL, ABBREVIATION, DESCRIPTION. Lists symbols for various plumbing components like valves, pipes, drains, and fixtures.

NOTE: ALL SYMBOLS MAY NOT BE USED



PLUMBING GENERAL NOTES

- 1. SHOULD A CONFLICT OCCUR BETWEEN OR WITH THE SPECIFICATIONS AND/OR DRAWINGS, CODES, STANDARDS, REQUIREMENTS, MANUFACTURER'S INSTRUCTIONS, THE MORE COMPLETE AND/OR RESTRICTIVE CONDITION SHALL HAVE PRECEDENCE. AS DETERMINED BY THE CONTRACTING OFFICER.
2. THE DRAWINGS PRESENTS THE FINISHED PROJECT UNLESS OTHERWISE NOTED. THEY DON'T INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, AND SEQUENCES.
3. ALL DIMENSIONS, EXISTING JOB SITE CONDITIONS, AND SERVICE REQUIREMENTS SHALL BE VERIFIED BY THE CONTRACTOR BEFORE THE START OF CONSTRUCTION AND/OR FABRICATION OF MATERIALS. IF DISCREPANCIES ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED FOR CLARIFICATION.
4. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH CALIFORNIA LOCAL CODES APPLYING TO THE PROPOSED CONSTRUCTION.

FIXTURES:

- 1. ALL FIXTURES SHALL BE MADE IN ACCORDANCE WITH THE CPC 2022 CH.4 AND ALL APPLICABLE SECTIONS OF THE CPC 2022.
2. ALL FIXTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE CPC 2022, CH.4 WITH REGARD TO WORKMANSHIP, ALIGNMENT AND TESTING
3. FIXTURES SHALL BE CERTIFIED FOR THE FOLLOWING FLOW RATES:
a. WATER CLOSET MAX = 1.28 GPF
b. LAVATORY FAUCETS MAX = 1.0 GPM
c. SHOWER HEADS MAX = 1.8 GPM
4. FIXTURE CONNECTIONS TO THE DRAINAGE SYSTEM SHALL BE THROUGH AN APPROVED WET SEAL TRAP AS PER CPC,CH7 & CH.10
5. FAUCET AND VALVE OPENINGS SHALL HAVE A MINIMUM AIR GAP AS PER CPC , CH 6 & 2X THE DIAMETER MIN. 1" FROM THE POTABLE WATER OUTLET TO THE FLOOD LEVEL RIM OF THE FIXTURE SERVED
6. ALL STORAGE TANK WATER HEATERS SHALL INSTALLED AS PER CPC,CH.5
7. ALL FIXTURES WILL BE PROVIDED WITH INDIVIDUAL SHUT-OFF VALVES

MATERIALS:

- 1. ALL MATERIALS SHALL BE APPROVED FOR THE USE AND SYSTEM INTENDED, AND SHALL BE NEW AND IN GOOD CONDITION, FREE FROM DEFECT.
2. ALL MATERIALS SHALL BE INSTALLED , PROTECTED , AND SUPPORTED AS PER CPC 2022
3. COPPER TUBING MAY NOT BE INSTALLED ON A MANNER THAT ALLOWS IT TO BE IN CONTACT WITH OTHER METAL PIPING, CONDUIT OR METAL FRAMING MEMBERS.
4. ABS, COPPER TUBING AND STEEL PIPE MUST BE WRAPPED WHERE THEY PASS THROUGH CONCRETE AND/OR MASONRY BUILDING COMPONENTS.
5. WATER PIPING MATERIAL WITHIN BUILDING SHALL BE IN ACCORDANCE WITH SEC. 604.1 OF THE CALIFORNIA PLUMBING CODE. PEX,CPPVC AND OTHER PLASTIC WATER PIPING SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF SEC.604 OF THE CPC, INSTALLATION STANDARDS OF APPENDIX I OF THE CPC AND MANUFACTURERS RECOMMENDED INSTALLATION STANDARDS. CPVC WATER PIPING REQUIRES A CERTIFICATION OF COMPLIANCE AS SPECIFIED IN SEC. 604.1.1 OF THE CPC PRIOR TO PERMIT ISSUANCE.

DRAINAGE,WASTE AND VENT(DMW):

- 1. ALL DRAINAGE LINES TO BE SLOPED MINIMUM OF 2% , 1/4" PER FOOT
2. CLEANOUTS TO BE INSTALLED ACCORDING TO CPC , CH.7
3. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING LINES BEFORE STARTING TRENCHING. SHOULD IT BE NECESSARY TO RE-ROUTE LINES DUE TO CONDITIONS FOUND ON SITE.
4. CHANGES OF DIRECTION OF DRAINAGE PIPE WILL BE MADE USE OF APPROVED FITTINGS AS PER CPC, CH7 SECTION 706.0
5. VENTS SHALL TERMINATE NOT LESS THAN 10'-0" FROM OR 3'-0" ABOVE ANY OPENING WINDOW , DOOR ,AIR INTAKE OR VENTILATION SHAFT AS PER CPC, CH.9
6. ACROSS-SECTIONAL AREA OF THE VENT(S) MUST EQUAL THE CROSS-SECTIONAL AREA OF THE BUILDING DRAIN AS PER CPC, CH.9 SECTION 904.0
7. METER PROTECTION SHALL BE INSTALLED PER CITY STANDARD. (THIS DEVICE IS A LEAD-FREE REDUCE PRESSURE PRINCIPLE DEVICE-RPPD)
8. LANDSCAPE IRRIGATION DEVICE SHALL BE INSTALLED PER CITY STANDARD (THIS DEVICE IS A REDUCE PRESSURE PRINCIPLE DEVICED-RPPD)
9. A REDUCE PRESSURE PRINCIPLE DEVICE SHALL BE INSTALLED PER CITY STANDARD(THIS DEVICE SHALL BE LOCATED ON THE INLET SIDE OF THE CARBONATOR MACHINE)
10. AN ABOVE GROUND DOUBLE CHECK DETECTOR ASSEMBLY (DCDA) PER CITY STANDARD SHALL BE INSTALLED(THIS DEVICE IS A FIRE PROTECTION).
11. 12-ALL DEVICES SHALL BE TESTED BY A CERTIFIED BACK-FLOW TESTER.

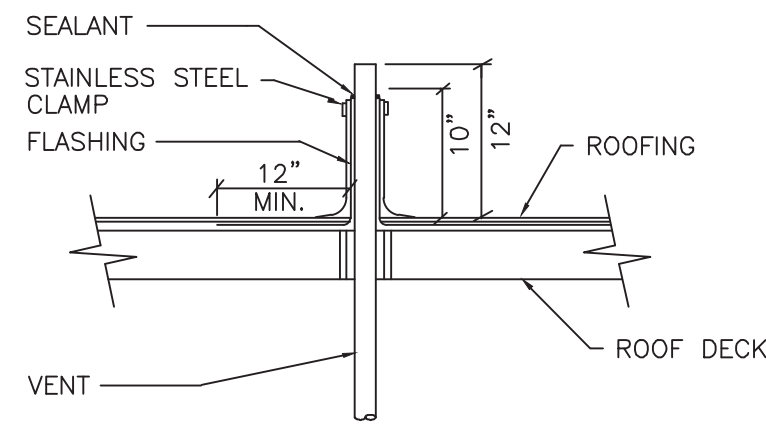
FUEL GAS:

- 1. ALL GAS APPLIANCES SHALL BE PROVIDED WITH AN APPROVED SHUT OF VALVE
2. APPLIANCE CONNECTORS SHALL BE OF AN APPROVED SIZE AND LENGTH ACCORDING CPC 2022, CH.12
3. ALL GAS PIPING SHALL BE SUPPORTED AS PER CPC 2022,CH.3

ADDITIONAL NOTES:

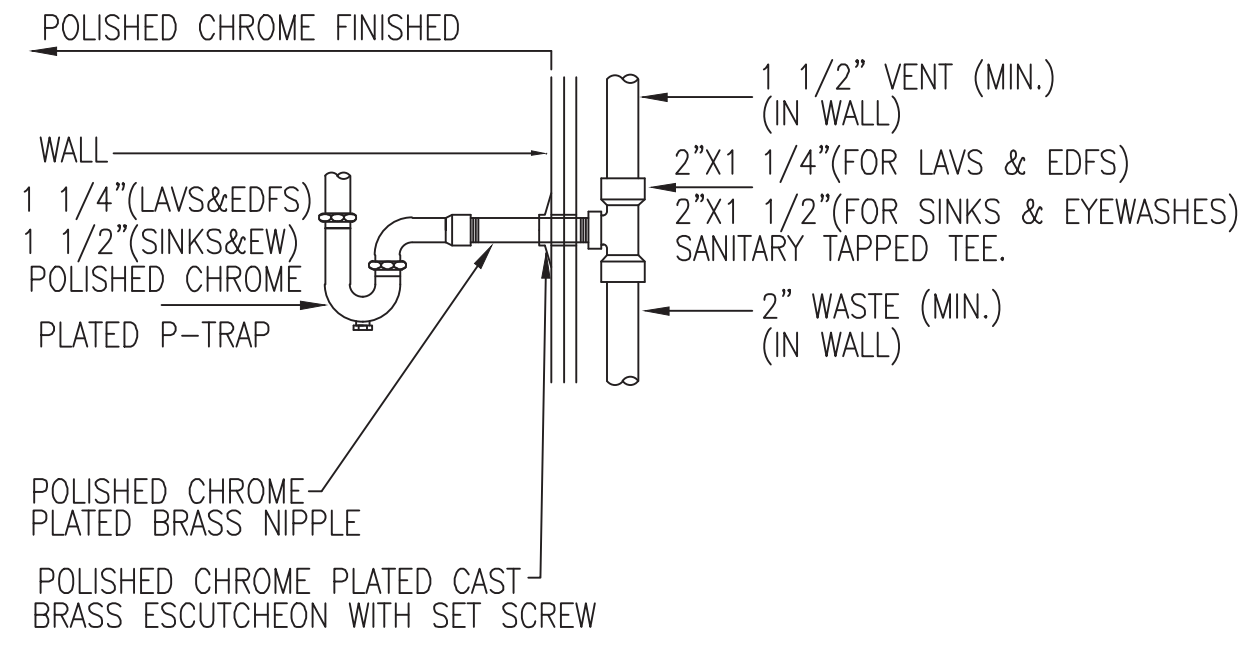
- 1. ALL WORK TO COMPLY WITH 2022 CALIFORNIA PLUMBING CODE, 2022 CALIFORNIA BUILDING CODE, AND 2022 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS.
2. LEAD FREE COMPLIANCE REQUIRED EFFECTIVE JANUARY 1,2010 PER CALIFORNIA HEALTH & SAFETY CODE SEC. 116875
3. ALL FIXTURES IN HANDICAP RESTROOMS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE OF CALIFORNIA HANDICAP CODE AND LOCAL HANDICAP CODES HAVING JURISDICTION.
4. ALL SERVICE WATER HEATING EQUIPMENT TO BE IN COMPLIANCE WITH THE MODEL ENERGY CODE REQUIREMENTS AND LABELED.
5. WATER CLOSETS REQUIRED TO HAVE ELONGATED BOWLS WITH OPEN FRONT SEATS.
6. ALL HOSE BIBS ARE TO BE PROVIDED WITH A BACK-FLOW/ ANTI-SIPHON VALVE.
7. WATER HEATER CLEARANCES SHALL BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTION.
8. NEW OR REPAIRED POTABLE WATER SYSTEMS SHALL BE DISINFECTED PRIOR TO USE ACCORDING TO THE METHOD SET IN SEC. 609.9 OF CALIFORNIA PLUMBING CODE.
9. HOT WATER PIPING SHALL BE INSULATED AS PER CPC 609.11 AND CAL ENERGY CODE TABLE 120.3-A.
10. SANITARY WASTE VENTS SHALL RISE VERTICALLY TO A POINT NOT LESS THEN SIX(6) INCHES IN HEIGHT ABOVE THE FLOOR LEVEL RIM OF THE FIXTURE BEFORE BEING CONNECTED TO ANY OTHER VENT.
11. DRAINAGE PIPING SERVING FIXTURE WHICH HAVE FLOODWATER RIMS LOCATED BELOW THE ELEVATION OF THE NEXT UPSTREAM MANHOLE COVER OF THE SEWER SERVING SUCH DRAINAGE PIPING SHALL BE PROTECTED FROM BACK-FLOW OF SEWAGE BY INSTALLING AN APPROVED TYPE BACKWATER VALVE.
12. TRAP SEAL PROTECTION REQUIRED FOR ALL FLOOR SINKS AND FLOOR DRAINS.
13. INDIRECT WASTES LONGER THAN FIVE (5) FEET MUST BE TRAPPED, AND IT LONGER THAN FIFTEEN (15) FEET MUST BE TRAPPED AND VENTED INDIRECT WASTES FROM FOOD SERVICE EQUIPMENT MUST DISCHARGE TO RECEPTOR WITH A MINIMUM AIR-GAP OF ONE (1) INCH.
14. PRIMARY CONDENSATE PIPING TO TERMINATE AT TAILPIECE OF LAVATORY/SINK IN THE UNIT IT SERVES, FLOOR SINK OR DEDICATED ROOF TOP RECEPTOR.
15. ROOF DRAINS, OVERFLOW DRAINS, AND RAINWATER PIPING WITHIN THE INTERIOR OF THE BUILDING SHALL BE TESTED IN ACCORDANCE WITH THE PROVISIONS OF THE 2022 CPC FOR TESTING DRAIN, WASTE AND VENT SYSTEMS.
16. ROOF DRAINS AND OVERFLOW PIPING WITHIN THE BUILDING SHALL UTILIZE APPROVED DRAINAGE FITTINGS.
17. TESTING PROCEDURE OF GAS SYSTEMS SHOULD BE PERFORMED AS PER SEC. 1214.0 OF THE CALIFORNIA PLUMBING CODE.
18. THE PREMISE OWNER OR RESPONSIBLE PERSON IS RESPONSIBLE TO COORDINATE WITH GAS COMPANY FOR NEW GAS DEMAND, METER LOCATION AND TYPE OR PRESSURE AVAILABLE. COORDINATE WITH TENANT FOR PRESSURE REQUIRED AT EACH APPLIANCE.
19. THE PREMISE OWNER OR RESPONSIBLE PERSON SHALL COORDINATE WITH CITY OF CORONA WATER DISTRICT FOR NEW WATER DEMAND, METER LOCATION AND TYPE OF PRESSURE AVAILABLE.

Vertical sidebar containing: DATE (08/11/2023), REVISION, NO., PROFESSIONAL ENGINEER stamp (ZAHARA), blueberry,inc. logo, PROJECT ADDRESS (CITY OF PERRIS, 227 N. D STREET, PERRIS, CA 92570), PROJECT TITLE (PLUMBING SYSTEM), SHEET TITLE (PLUMBING GENERAL NOTES LEGEND & ABBREVIATIONS), PROJECT NO. (236412), DATE (08/11/2023), SCALE (AS SHOWN), DRAWING NO. (PP100), and of.

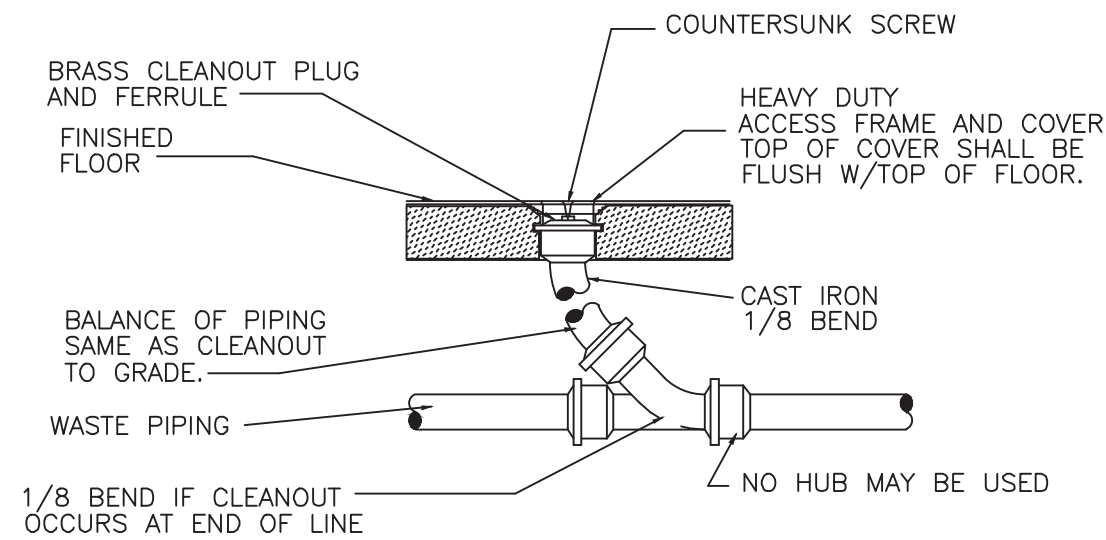


- CONTRACTOR TO VERIFY AND KEEP 10' CLEARANCE BETWEEN THE VTR AND ANY AIR INTAKE TO THE BUILDING

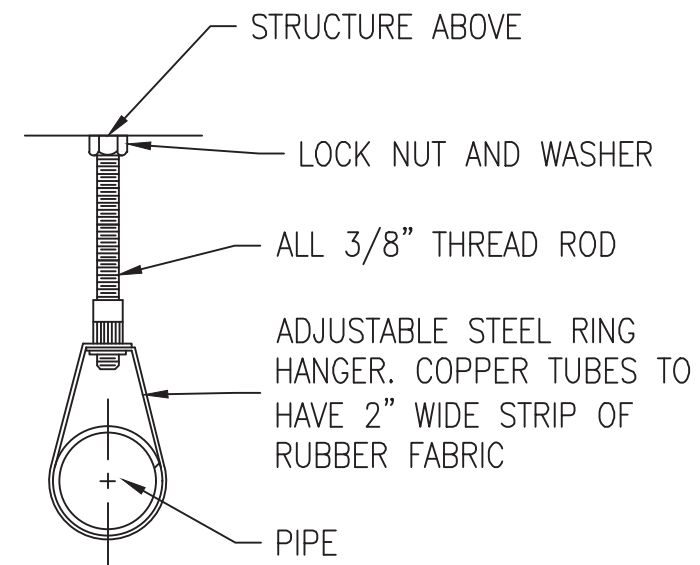
VENT THRU ROOF DETAIL
N.T.S.



DRAIN PIPING DETAIL
N.T.S.

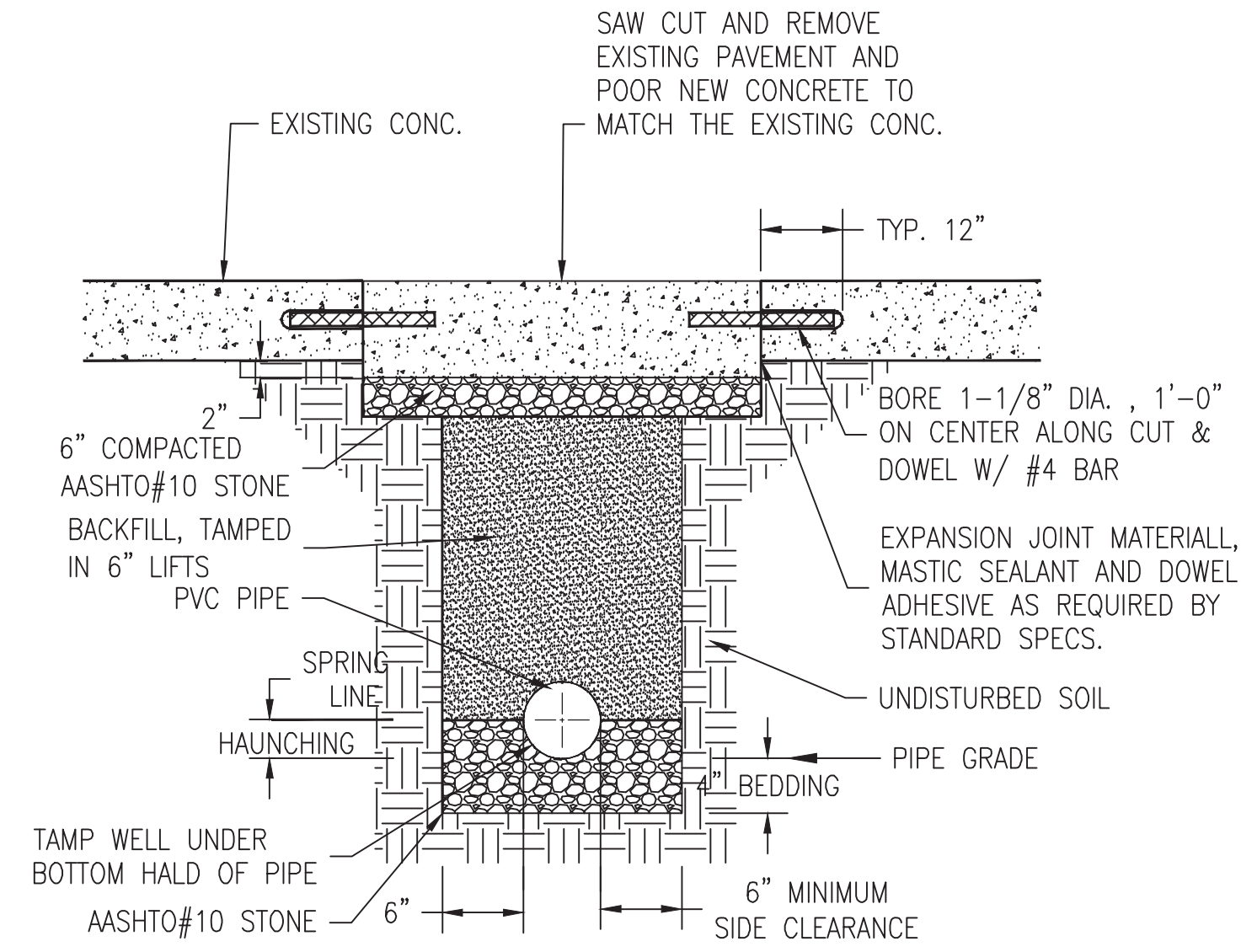


FLOOR CLEAN-OUT DETAIL
N.T.S.



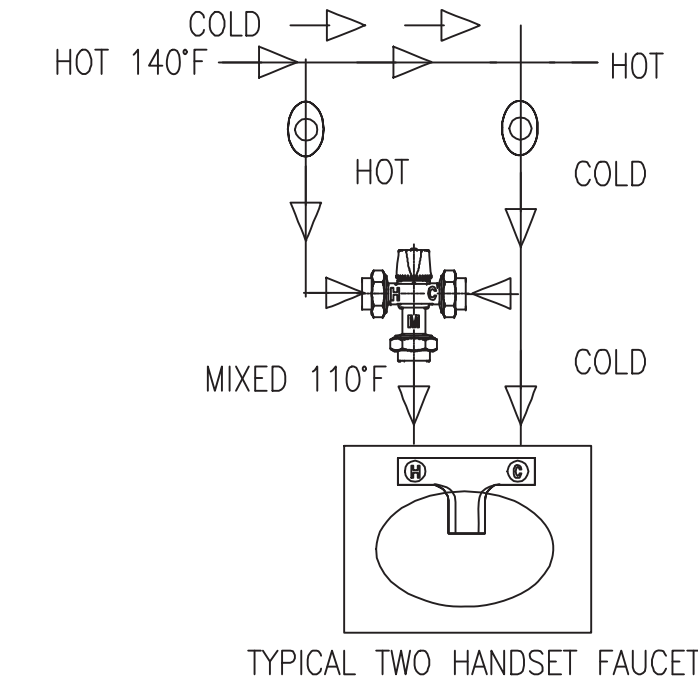
- NOTES:
- MAXIMUM PIPE SUPPORT SPACING FOR COPPER SOLDERED AND BRAZED 1-1/2" AND SMALLER SHALL BE 6 FEET AND 2" AND LARGER SHALL BE 10 FEET HORIZONTALLY AND VERTICALLY SHALL BE A MAXIMUM OF 10 FEET.

PIPE SUPPORT DETAIL
N.T.S.



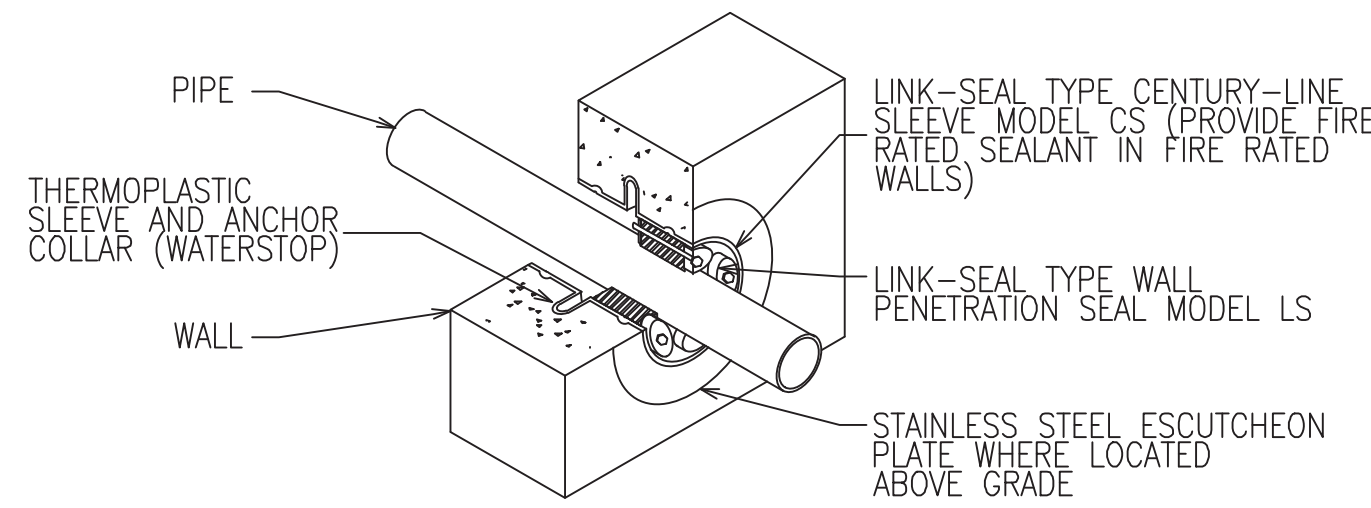
- NOTES:
- PAVEMENT SAW CUT SHALL BE DONE BY AN APPROVED SAW CUT MACHINE.
 - NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN INITIAL BACKFILL.
 - ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.
 - BACKFILL SHALL BE TAMPED IN 6" LIFTS IN TRAFFIC AREAS, 12" IN NON-TRAFFIC AREAS.

SEWER TRENCH DETAILS
N.T.S.

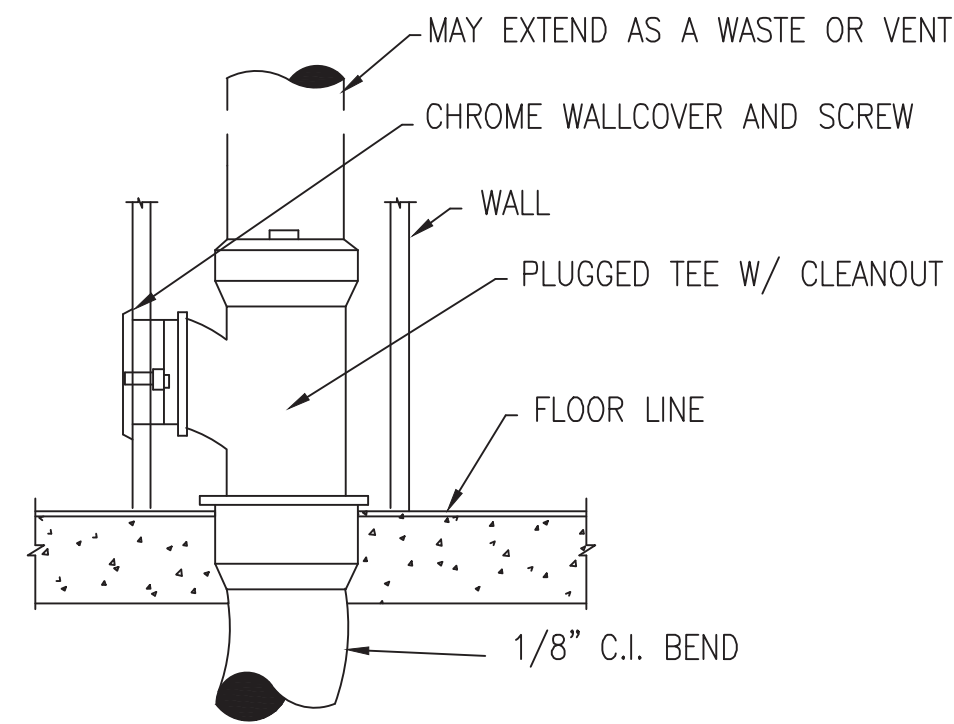


USG-B LAVATORY VALVE THAT CONFORMS ASSE1070 TO ACHIEVE 110°F.

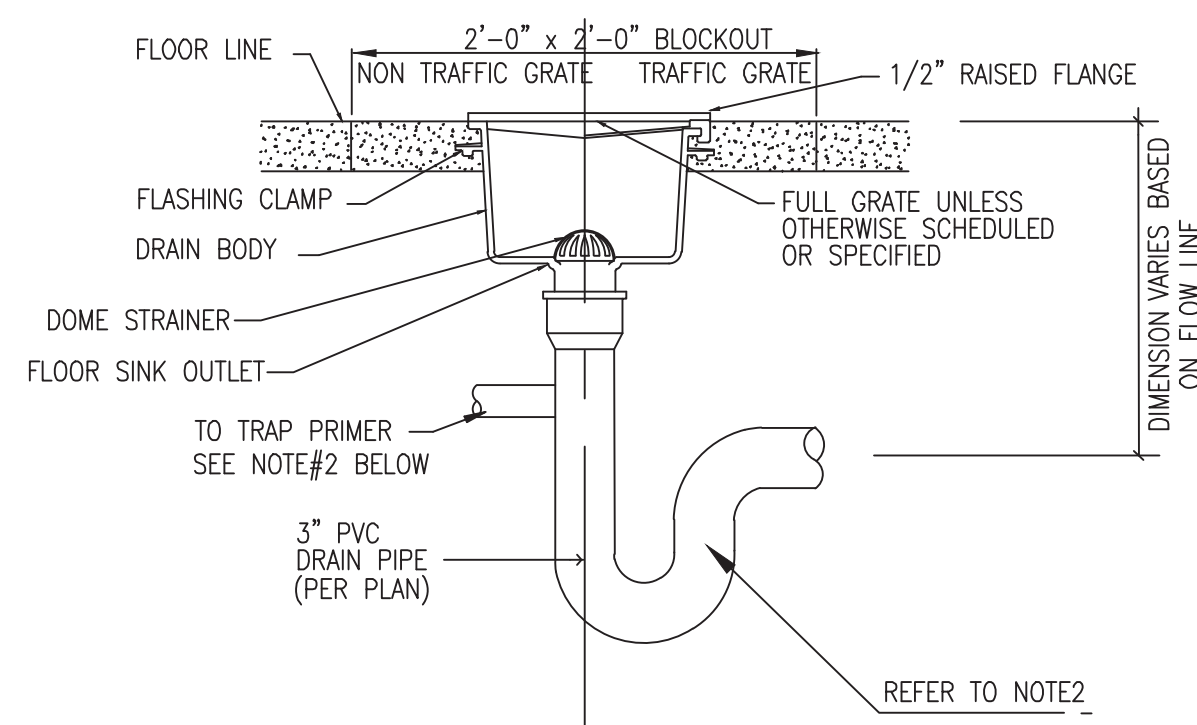
LAVATORY MIXING VALVE
N.T.S.



PIPE SLEEVE AT EXTERIOR WALLS
N.T.S.



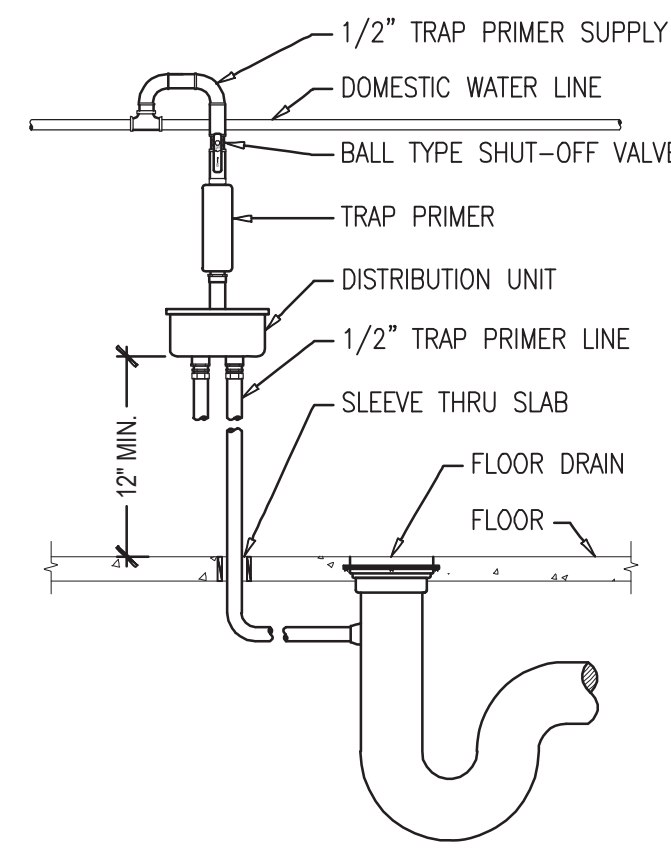
WALL CLEAN-OUT DETAIL
N.T.S.



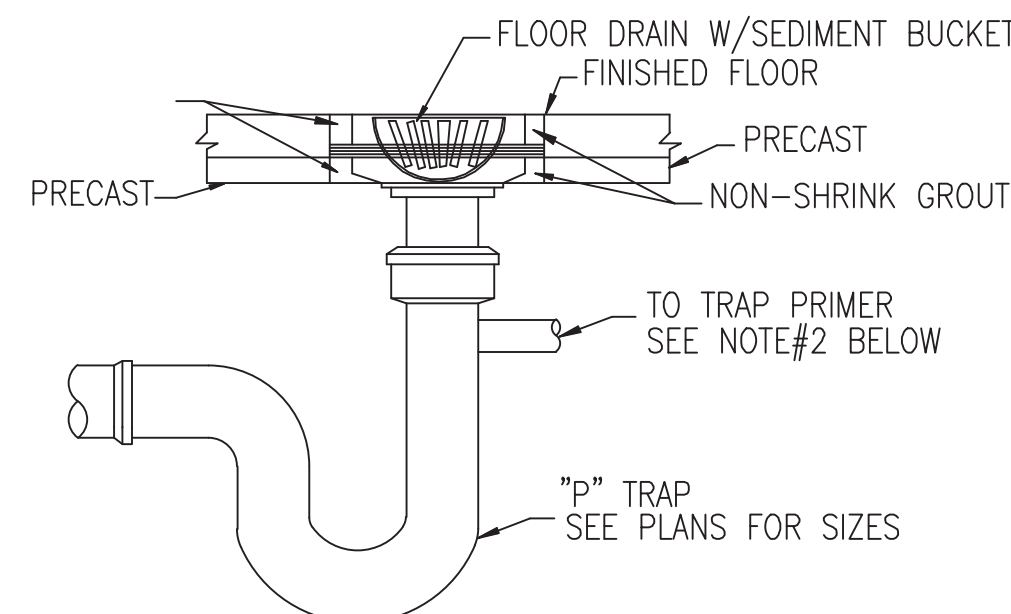
- NOTES:
- PROVIDE EXTENSIONS WHERE REQUIRED TO ACCOMMODATE FLOOR THICKNESS.
 - ADD TRAP PRIMER AS INDICATED ON DRAWINGS AND PER CODE.
 - NO CWV SYSTEMS PERMITTED.

FLOOR DRAIN DETAIL
N.T.S.

- PRESSURE ACTIVATED PRIMER NOTES:
- THE PRIMING VALVE MUST BE INSTALLED ON A FRESH COLD WATER LINE OF 1/2" TO 1-1/2" DIAMETER.
 - DISTRIBUTION UNIT MUST BE INSTALLED LEVEL WITH AN ACCESS DOOR FOR PERIODIC INSPECTION.
 - DO NOT SUBJECT TRAP PRIMER VALVE TO ROUGH-IN PRESSURE TEST.
 - DISTANCE FROM DISTRIBUTION UNIT TO FLOOR MUST BE 12" FOR EVERY 20' HORIZONTALLY.
 - TRAP PRIMER SHALL BE PRECISION PLUMBING PRODUCTS MODEL CPO-500 WITH DU DISTRIBUTION UNIT IF REQUIRED. APPROVED ALTERNATES: MIFAB, SIOUX CHIEF, AND ZURN.

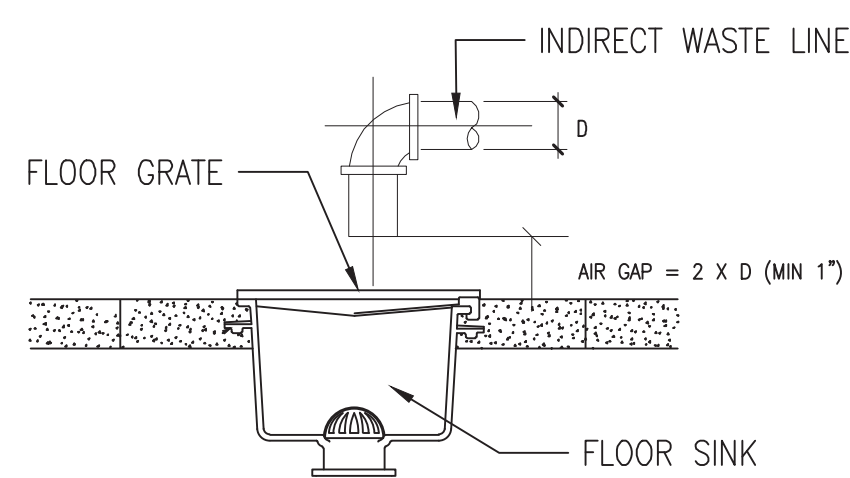


TRAP PRIMER DETAIL
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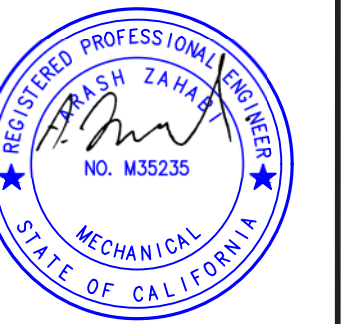
FLOOR DRAIN DETAIL
N.T.S.

- NOTES:
- PROVIDE EXTENSIONS WHERE REQUIRED TO ACCOMMODATE FLOOR THICKNESS.
 - ADD TRAP PRIMER AS INDICATED ON DRAWINGS AND PER CODE.



INDIRECT WASTE DETAIL
N.T.S.

NO.	REVISION	DATE
1	ISSUED FOR REVIEW	08/11/2023



blueberry, inc.
ENGINEERING SERVICES
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OWNER/CLIENT:
CITY OF PERRIS

PROJECT ADDRESS
CITY OF PERRIS
227 N. D STREET,
PERRIS, CA 92570

PROJECT TITLE
PLUMBING SYSTEM

SHEET TITLE
PLUMBING DETAILS

PROJECT NO.:
236412

DATE:
08/11/2023

SCALE:
AS SHOWN

DRAWING NO.

PP101

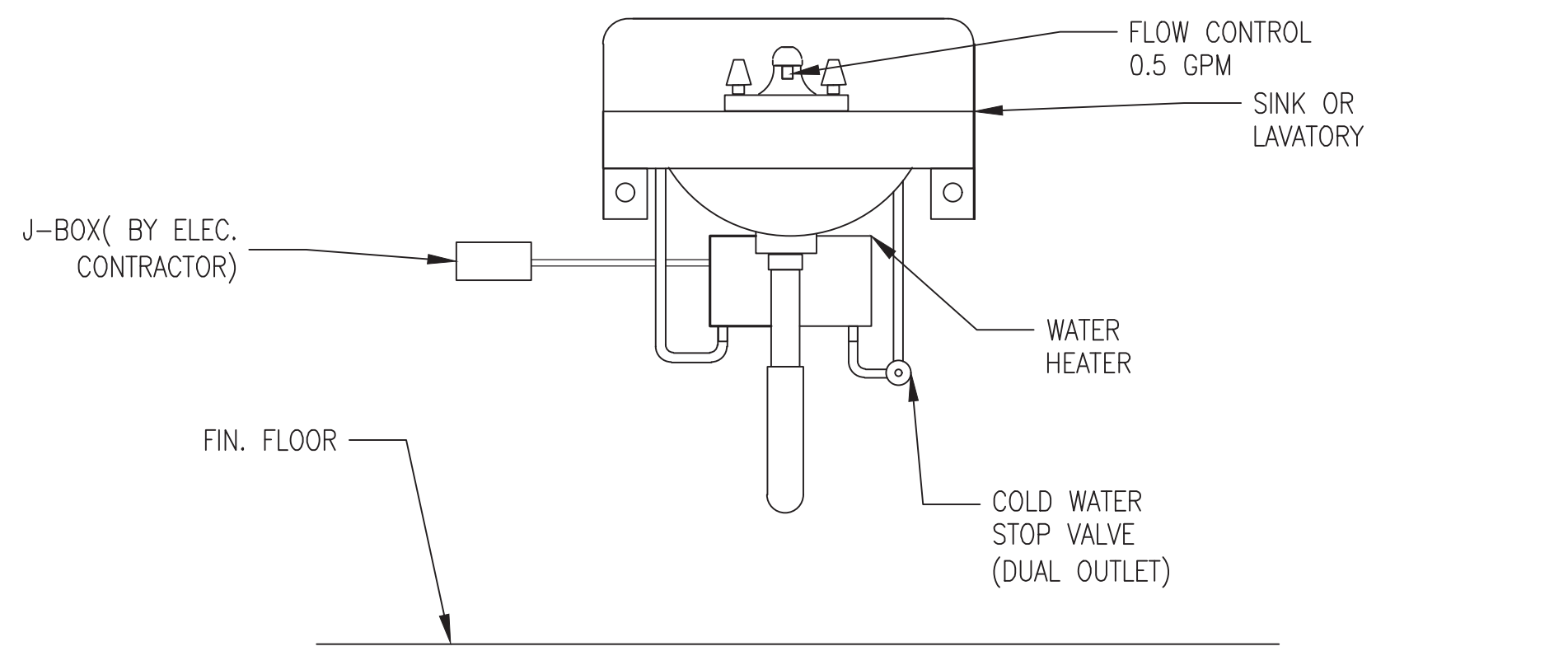
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THIS SET OF THE PLANS AND SPECIFICATIONS MUST BE KEPT ON THE JOB SITE AT ALL TIMES AND NOT BE LOANED, TO BE MADE ANY CHANGES OR ALTERATIONS WITHOUT PERMISSION FROM THE CITY OCCUPANCY INSPECTOR. STRUCTURES ARE NOT PERMITTED TO BE BUILT WITHOUT APPROVAL BY ALL APPLICABLE DEPARTMENTS.

ELECTRIC WATER HEATER KW REQUIREMENTS table with columns TAG, FIXTURE, COUNTS, GPH, T. GPH

NOTE: 1. CONTRACTOR SHALL VERIFY WITH THE OWNER PRIOR TO ORDERING THE FIXTURES. 2. ALL PLUMBING FIXTURES AND PIPING SHALL BE LISTED AND LABELED BY AN APPROVED AGENCY...

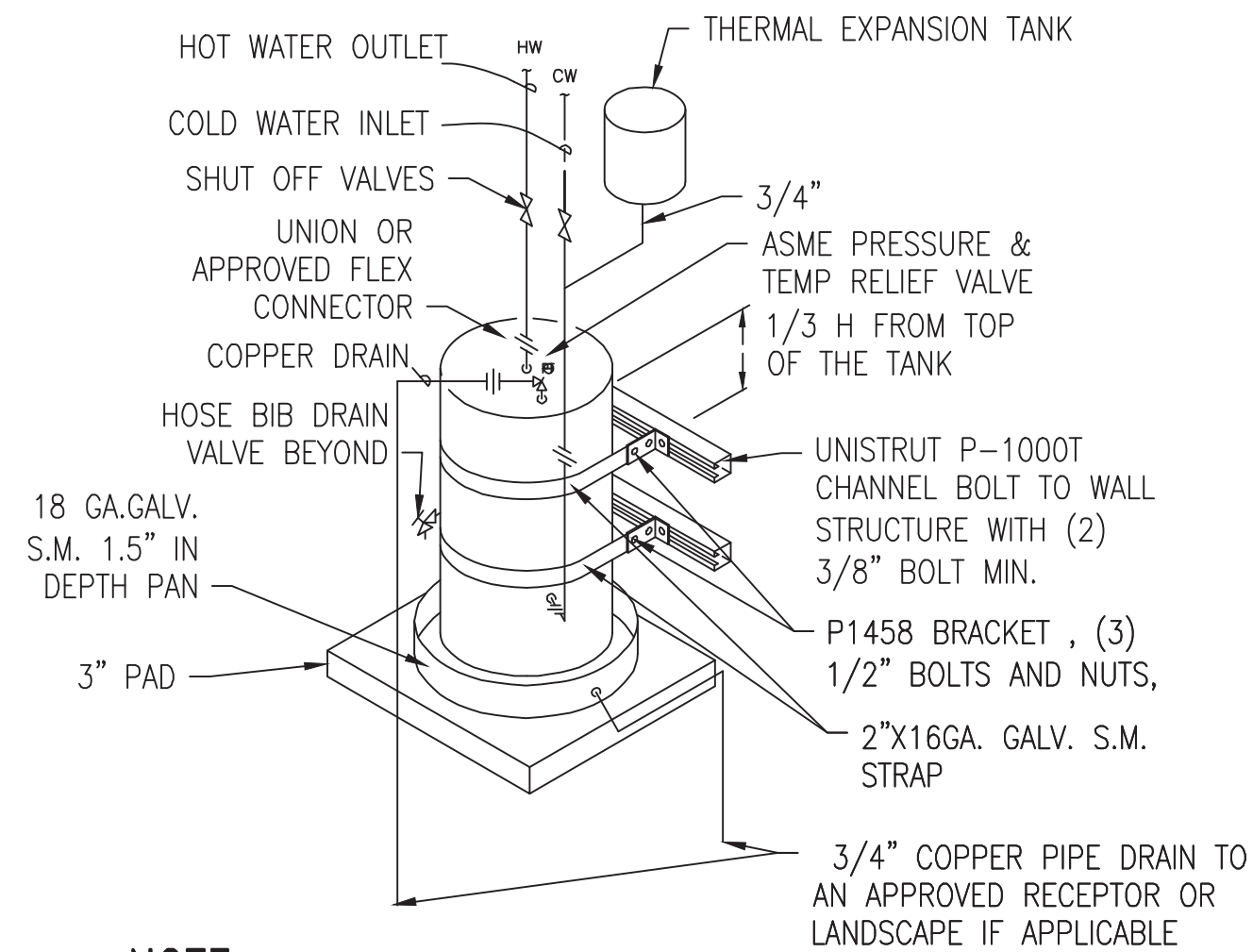
UL LISTED ELECTRIC TANK LESS WATER HEATER SCHEDULE

UL LISTED ELECTRIC TANK LESS WATER HEATER SCHEDULE table with columns TAG, MAKE, MODEL#, POWER, V/P/F, AMP S, RECOVERY TIME, TANK VOLUME, WATER CONNECTION, RELIEF VALVE, NOTE



NOTE: POINT OF USE WATER HEATER SHALL BE POSITIONED SO AS NOT TO ENROACH INTO ANY REQUIRED WHEELCHAIR ACCESS CLEARANCES...

1 WATER HEATER INSTALLATION N.T.S.



NOTE:

- 1. CONTRACTOR SHALL VERIFY WITH THE OWNER PRIOR TO ORDERING THE WATER HEATER. 2. CONTRACTOR TO FOLLOW THE MANUFACTURER INSTALLATION INSTRUCTIONS.

2 ELEC. WATER HEATER INSTALLATION N.T.S.

PLUMBING FIXTURE & EQUIPMENT SCHEDULE table with columns MARK, TYPE, FU, DFU, WASTE, VENT, CW, HW, DESCRIPTION, STATUS, QTY.

ELECTRIC WATER HEATER KW REQUIREMENTS FOR EACH UNIT

ELECTRIC WATER HEATER KW REQUIREMENTS FOR EACH UNIT table with columns TAG, FIXTURE, COUNTS, GPH, T. GPH

WATER HEATER SCHEDULE

WATER HEATER SCHEDULE table with columns EQUIP. NO., MANUFACTURER, MODEL #, INPUT KW, FIRST HOUR OF DELIVERY, CAPACITY, INLET/OUTLET NPT, VOLTAGE/PHASE/AMPS, EFFICIENCY

GENERAL NOTES:

- 1. ALL WORK TO COMPLY WITH 2022 CALIFORNIA PLUMBING CODE, 2022 CALIFORNIA BUILDING CODE, 2022 CALIFORNIA GREEN CODE... 2. WATER PIPE AND FITTINGS WITH A LEAD CONTENT WHICH EXCEED 0.25% SHALL BE PROHIBITED... 30. ALL PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE CAULKED OR SLEEVED.

WATER SYSTEM SIZING table with columns WATER INFO., MAX PRESSURE, PSI, MIN PRESSURE, 90 PSI, DATE, MAIN METER SIZE, 2.00 INCH

WATER CLOSETS AND URINALS table with columns TAG, W/TANK, W/FLUSH VALVE, MAKE, MODEL

SYSTEM COMPONENTS table with columns PIPING MATERIALS, SEE PIPE SPECIFICATIONS TABLE, PRESSURE REDUCING VLAVE, 2.00 INCH, MAKE, WATTS, MODEL, LF223

HYDRAULIC CALCULATIONS table with columns A, B, C, D, E, F, G, H, I, J, K, MINIMUM PRESSURE AT CITY MAIN, SET PRESSURE AT PRESSURE REDUCE VALVE, PRESSURE LOSS THROUGH, PRESSURE LOSS THRU, OTHER PRESSURE LOSSES, PRESSURE LOSS DUE TO ELEVATION, RESIDUAL PRESSURE, TOTAL PRESSURE LOSSES, PRESSURE AVAILABLE FOR FRICTION LOSS IN THE SYSTEM, PRESSURE/100FT

FIXTURE UNIT TYPE and PIPE SIZE SCHEDULE tables with columns FIXTURE UNIT TYPE, F.U., QTY., TOTAL, PIPE MATERIAL, SEE PIPE SPECIFICATIONS TABLE, PRESS. LOSS, ALLOWABLE F.U., FLUSH TANK, F. VLV., PIPE SIZE, HOT, COLD, COLD, 5FT/S, 8FT/S, 8FT/S, URINAL W/FLUSHOMETER, FIRST HOSE BIBB, ADDITIONAL HOSE BIBBS, DRINKING FOUNTAIN, ICE MAKER, REFRIGERATOR, TOTAL FIXTURE UNITS, ADDITIONAL FLOW, TOTAL FLOW

NOTE: 1. WATER PRESSURE TO ALL FIXTURES AND EQUIPMENT SHALL BE IN COMPLIANCE AS PER SECTION 608.1 CPC 2022. 2. THESE WATER CALCULATIONS ARE BASED ON THE SPECIFIED FIXTURES IN THIS PROJECT AS NOTED ABOVE WITH THE PRESSURE LOSS AS PROVIDED BY THE MANUFACTURER.

PIPE SPECIFICATION table with columns APPLICATION, TYPE, WATER, DOWN SPOT WASTE AND VENT, CONDENSATE DRAINS, SANITARY SEWER

PIPE SPECIFICATIONS NOTE: ALL PIPE AND FITTINGS TO BE PRODUCED BY A SINGLE MANUFACTURER AND TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS...

True North Compliance Services, Inc. PLAN REVIEW APPROVAL... THESE PLANS HAVE BEEN REVIEWED FOR COMPLIANCE WITH THE APPROPRIATE CALIFORNIA STANDARDS...

Professional Engineer stamp for Zahra A. Vaziri, Mechanical, State of California, No. M35235, dated 08/11/2023.

blueberry, inc. ENGINEERING SERVICES e-mail: info@blueberryinc.com Tel: (949)945-9614 www.blueberryeng.com

OWNER/CLIENT: CITY OF PERRIS

CITY OF PERRIS logo and PROJECT ADDRESS: CITY OF PERRIS 227 N. D STREET, PERRIS, CA 92570

PROJECT TITLE: PLUMBING SYSTEM

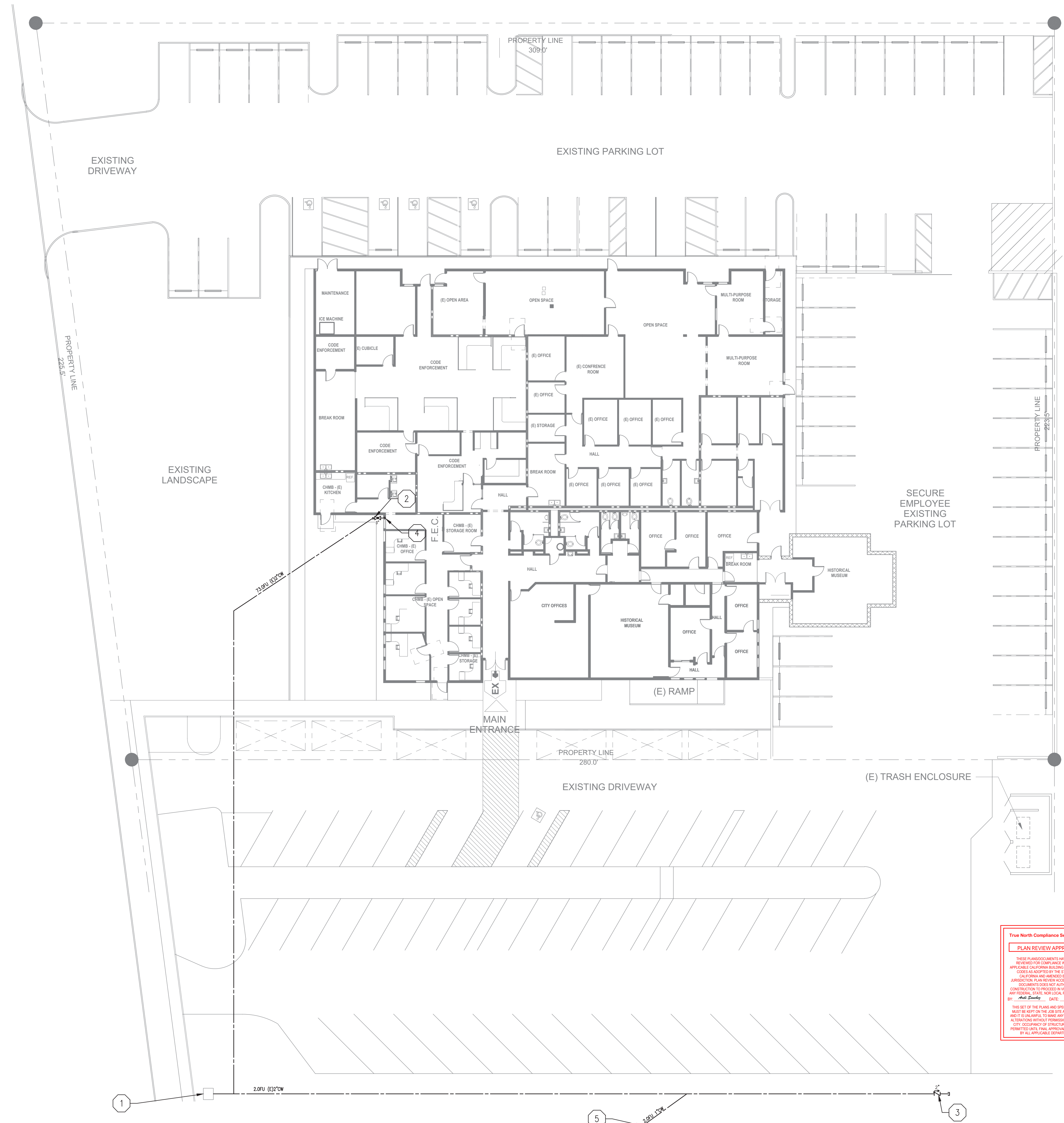
SHEET TITLE: PLUMBING CALCULATIONS & SCHEDULES

PROJECT NO.: 236412 DATE: 08/11/2023 SCALE: AS SHOWN DRAWING NO. PP110

Vertical text on the far left edge of the page: W:\CLOUD\B\CULTRA\B\blueberry\01 - Blueberry Inc\02 - Blueberry Engineering\03 - Project\10 - 2023\Programs\236412 - 227 N D Plumbing Design\2 - Technical\2 - Native\Final\236412 - Rev 001 - Drawings\236412-PPREV.dwg

KEYED NOTES:

- 1 EXISTING 2" WATER METER.
- 2 EXISTING 3" MAIN SHUT-OFF VALVE AND 3" PIPE TO THE BUILDING.
- 3 EXISTING 2" BACKFLOW PREVENTER VALVE.
- 4 SEE P210 FOR CONTINUATION
- 5 1" PIPE TO GAZEBO AREA.



True North Compliance Services, Inc.
PLAN REVIEW APPROVAL
 THESE PLANS AND SPECIFICATIONS HAVE BEEN REVIEWED FOR COMPLIANCE WITH THE APPLICABLE CALIFORNIA BUILDING STANDARDS CODES AS ADOPTED BY THE STATE OF CALIFORNIA AND APPROVED BY THE JURISDICTION. PLAN REVIEW ACCEPTANCE OF DOCUMENTS DOES NOT CONSTITUTE OR IMPLY ANY FEES, STATE, NOR LOCAL REGULATION, BY **True North Compliance Services, Inc.** DATE: **08/22/2023**
 THIS SET OF THE PLANS AND SPECIFICATIONS MUST BE KEPT ON THE JOB SITE AT ALL TIMES AND IF ANY CHANGES TO THESE ARE MADE OR ALTERATIONS WITHOUT PERMISSION FROM THE CITY, DOCUMENT OR SPECIFICATIONS MUST BE NOTIFIED WITH TABLE DEPARTMENTS.
 ALL APPROVALS ARE SUBJECT TO THE CITY OF PERRIS DEPARTMENT.

1 SITE PLAN
 1/16"=1'-0"



NO.	REVISION	DATE
1	ISSUED FOR REVIEW	08/11/2023

blueberry, inc.
 ENGINEERING SERVICES
 e-mail: info@blueberryinc.com
 Tel: (949)945-9614
 www.blueberryeng.com

OWNER/CLIENT:
 CITY OF PERRIS

PROJECT ADDRESS
 CITY OF PERRIS
 227 N. D STREET,
 PERRIS, CA 92570

PROJECT TITLE
 PLUMBING SYSTEM

SHEET TITLE
 PLUMBING
 SITE PLAN

PROJECT NO.:
 236412

DATE:
 08/11/2023

SCALE:
 AS SHOWN

DRAWING NO.
PP200

of

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF BLUEBERRY INC., AND IS NOT TO BE USED IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF BLUEBERRY ENGINEERING © 2023 BLUEBERRY INC. ALL RIGHTS RESERVED.

KEYED NOTES:

- ① 3" COLD WATER PIPE AND SHUTOFF VALVE TO MAIN 2" PIPE, SEE P200 FOR CONTINUATION.
- ② INSTANTANEOUS ELECTRIC WATER HEATER.SEE WATER HEATER SCHEDULE ON SHEET P-110
- ③ ELECTRIC WATER HEATER .SEE WATER HEATER SCHEDULE ON SHEET P-110
- ④ SEE 1/P200 FOR CONTINUATION

NOTES:

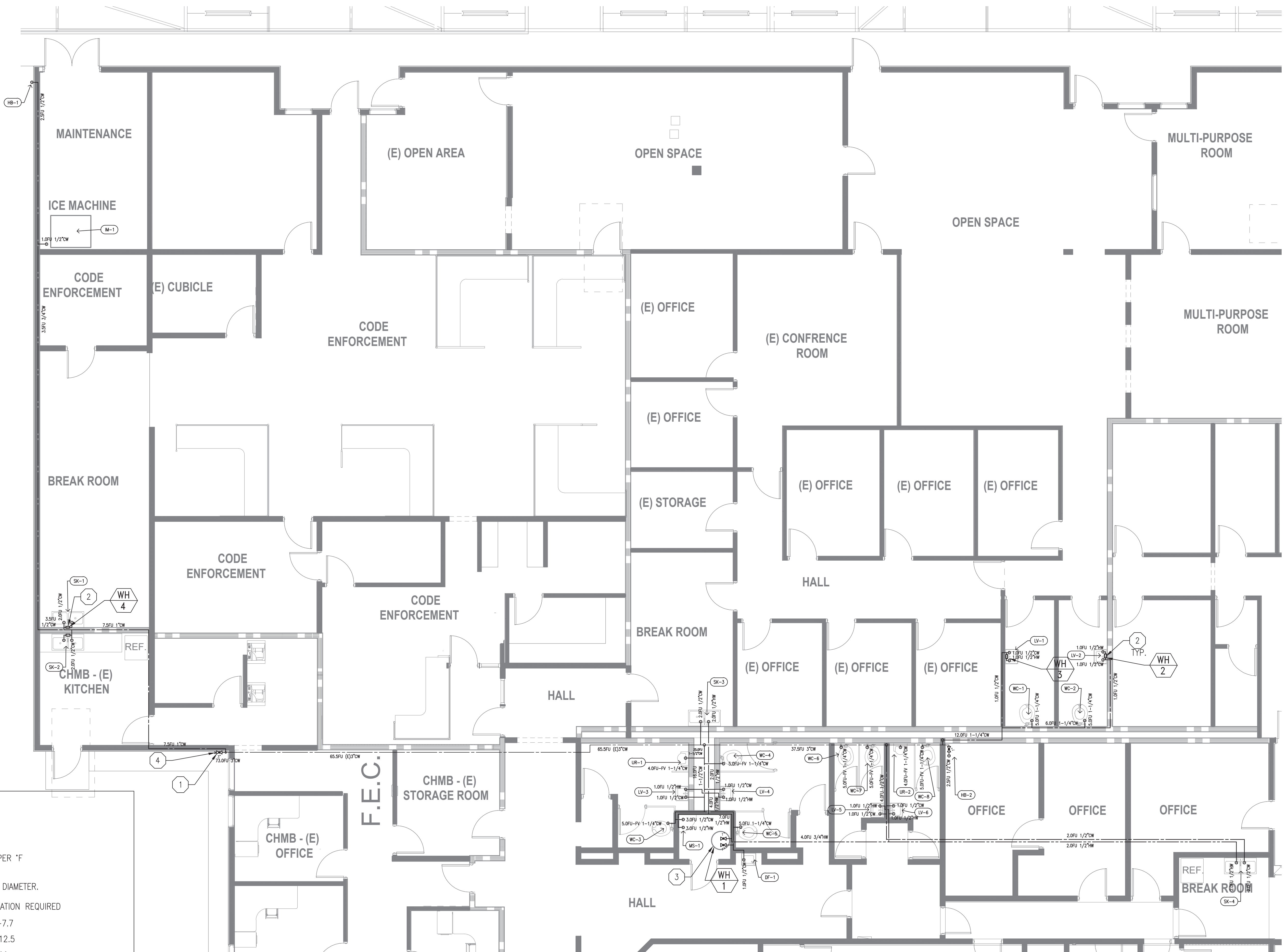
- 1. HOT WATER AND DRAIN PIPES EXPOSED UNDER SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED SO AS TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER SINKS.
- 2. FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL NOT BE GREATER THAN 5 LB. FT.
- 3. ALL FAUCETS SHALL BE METERED.
- 4. NEW PLUMBING FIXTURES AND FITTINGS SHALL NOT EXCEED THE MAXIMUM ALLOWABLE FLOW RATES SPECIFIED IN SECTION 5.303.2
- 5. HOT WATER PIPING SHALL BE INSULATED AS PER CPC 609.11 AND CAL ENERGY CODE TABLE 120.3-A.
- 6. NO VENTING SYSTEM SHALL TERMINATE LESS THAN 3FEET ABOVE ANY FORCED AIR INLET LOCATED WITHIN 10 FEET OR LESS THAN 4 FEET FROM ANY PROPERTY LINE EXCEPT A PUBLIC WAY.
- 7. NO VENT FROM INDIRECT WASTE PIPING SHALL BE COMBINED WITH ANY SEWER CONNECTED VENT BUT SHALL EXTEND SEPARATELY TO THE OUTSIDE AIR.
- 8. STEAM AND/OR HOT WATER DRAINAGE REQUIRES AN INDIRECT WASTE LINE.
- 9. EACH PLUMBING FIXTURE SHALL BE SEPARATELY TRAPPED BY AN APPROVED TYPE WATER SEAL TRAP.
- 10. BUILDING SEWER SHALL BE TESTED TO COMPLY WITH CPC 732.0
- 11. CONTRACTOR TO VERIFY AND INVERT ELEVATION OF EXISTING SANITARY SEWER AND ADJUST SYSTEM LAYOUT TO ACCOMMODATE.
- 12. CONTRACTOR SHALL CAP ALL UNUSED SEWER LINES.IN THE INSTALLATION OR REMOVAL OF ANY PART OF A DRAINAGE SYSTEM. DEAD ENDS SHALL BE PROHIBITED. CLEANOUTS EXTENSIONS AND APPROVED FUTURE FIXTURE DRAINAGE PIPING SHALL NOT BE CONSIDERED AS DEAD ENDS.
- 13. ALL PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE CAULKED OR SLEEVED.

ENERGY CONSERVATION STANDARDS:

- 1. DOMESTIC HOT WATER SYSTEM.
FLUID TEMPERATURE RANGE 105-140 °F
CONDUCTIVITY RANGE 0.22 - 0.28 BTU-IN PER HOUR PER FT² PER °F
INSULATION MEAN RATING TEMP 100 °F
MINIMUM INSULATION VALUES ARE LISTED BELOW FOR EACH PIPE DIAMETER.

NOMINAL PIPE DIAMETER	MINIMUM INSULATION REQUIRED
< 1	1.0 IN. OR R-7.7
1 TO < 1.5	1.5 IN. OR R-12.5
1.5 TO < 4	1.5 IN. OR R-11
1.5 TO < 4 MULTIFAMILY & HOTEL/MOTEL	2 IN. OR R-16

- 2. TIME CLOCKS TO BE INSTALLED TO CONTROL ANY HOT WATER CIRCULATING PUMPS.
- 3. SINKS AND LAVATORY FAUCETS AND SHOWER HEADS TO BE CERTIFIED BY STATE FOR ENERGY APPLIANCE STANDARD COMPLIANCE.
- 4. MAXIMUM FLUSH VOLUMES AND FLOW RATES:
WATER CLOSETS: 1.28 GALLONS PER FLUSH(BLOWOUT TYPE EXEMPT)
LAVATORY: 1.2 GALLON PER MINUTE @ 60PSI
SHOWER: 1.8 GALLON PER MINUTE @ 80PSI
KITCHEN FAUCETS: 1.8 GALLON PER MINUTE @ 60 PSI



① WATER SYSTEM PLAN
3/16"=1'-0"

True North Compliance Services, Inc.
PLAN REVIEW APPROVAL
THESE PLANS AND SPECIFICATIONS HAVE BEEN REVIEWED FOR COMPLIANCE WITH THE APPLICABLE CALIFORNIA BUILDING STANDARDS CODE AS ADOPTED BY THE STATE OF CALIFORNIA AND MANAGED BY THE CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS. THIS REVIEW IS LIMITED TO THE TECHNICAL ASPECTS OF THE PLANS AND DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OF THE INFORMATION PROVIDED HEREON. THE REVIEWER ACCEPTS NO LIABILITY FOR ANY ERRORS OR OMISSIONS. THE REVIEWER'S LIABILITY IS LIMITED TO THE REVIEW OF THE PLANS AND SPECIFICATIONS. THE REVIEWER'S LIABILITY IS LIMITED TO THE REVIEW OF THE PLANS AND SPECIFICATIONS. THE REVIEWER'S LIABILITY IS LIMITED TO THE REVIEW OF THE PLANS AND SPECIFICATIONS.
DATE: 01/22/2024

CALGREEN NOTE:
1. PER SECTION 301.1. CALGREEN AND CIVIL CODE 1101.3(C), ALL NON-COMPLIANT PLUMBING FIXTURES WITHIN THIS BUILDING SHALL BE REPLACED WITH WATER-CONSERVING PLUMBING FIXTURES.

DATE	08/11/2023
REVISION	ISSUED FOR REVIEW
NO.	1

REGULATED PROFESSIONAL ENGINEER
MECHANICAL
STATE OF CALIFORNIA
NO. M35235

blueberry, inc.
ENGINEERING SERVICES
e-mail: info@blueberryinc.com
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www.blueberryeng.com

OWNER/CLIENT:
CITY OF PERRIS

PROJECT ADDRESS
CITY OF PERRIS
227 N. D STREET,
PERRIS, CA 92570

PROJECT TITLE
PLUMBING SYSTEM

SHEET TITLE
WATER SYSTEM PLAN

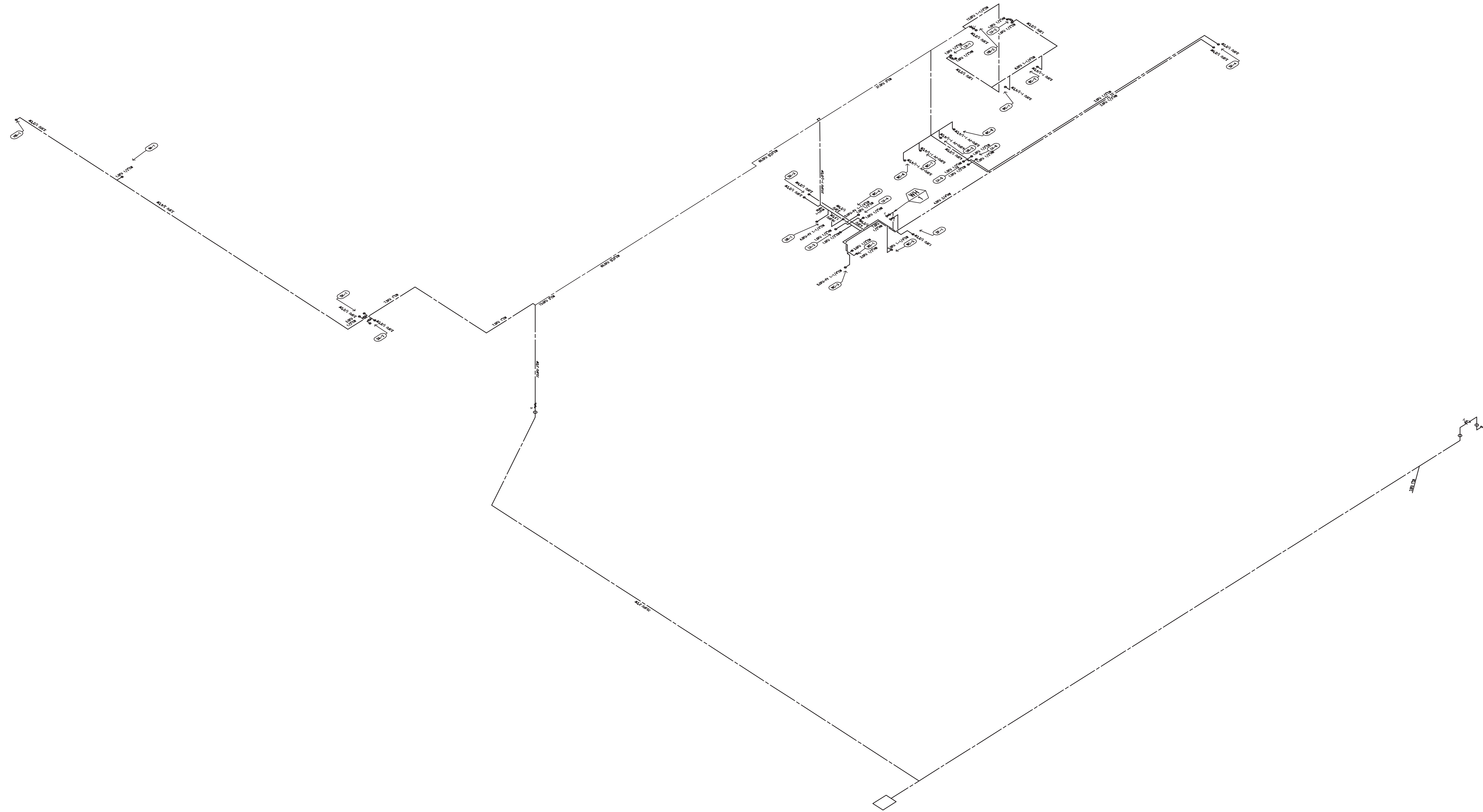
PROJECT NO.:
236412

DATE:
08/11/2023

SCALE:
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DRAWING NO.
PP210

of



1 WATER SYSTEM ISO. PLAN
- N.T.S.

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PLAN REVIEW APPROVAL
 THESE PLANS AND SPECIFICATIONS HAVE BEEN REVIEWED FOR COMPLIANCE WITH THE APPLICABLE CALIFORNIA BUILDING STANDARDS CODES AS ADOPTED BY THE STATE OF CALIFORNIA AND APPROVED BY THE JURISDICTION. PLAN REVIEW ACCEPTANCE OF THIS DOCUMENT DOES NOT IMPLY OR GUARANTEE THE QUALITY OF THE DESIGN OR ANY FEDERAL, STATE, NOR LOCAL REGULATION.
 BY: *Mark Sledge* DATE: 08/22/2023
 THIS SET OF THE PLANS AND SPECIFICATIONS MUST BE KEPT ON THE JOB SITE AT ALL TIMES AND NOT PERMITTED TO BE LOANED, COPIED, REPRODUCED, ALTERED, OR OTHERWISE USED FOR ANY PURPOSES WITHOUT PERMISSION FROM THE CITY OCCUPANCY OF STRUCTURES IS NOT FORBE TO BE FINAL APPROVAL. IS ISSUED BY ALL APPLICABLE DEPARTMENTS.

NO.	REVISION	DATE
1	ISSUED FOR REVIEW	08/11/2023

<p>ENGINEERING SERVICES e-mail: info@blueberryinc.com Tel: (949)945-9614 www.blueberryeng.com</p>
OWNER/CLIENT: CITY OF PERRIS
PROJECT ADDRESS CITY OF PERRIS 227 N. D STREET, PERRIS, CA 92570
PROJECT TITLE PLUMBING SYSTEM
SHEET TITLE WATER SYSTEM ISO. PLAN
PROJECT NO.: 236412
DATE: 08/11/2023
SCALE: AS SHOWN
DRAWING NO. PP220
of

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION Domestic Water Heating System NRC-C-PLB-E-1

CERTIFICATE OF COMPLIANCE Report Page: (Page 1 of 8)

Project Name: City of Perris Plumbing System Report Page: (Page 1 of 8)

Project Address: 227 N D ST., PERRIS, CA 92570 Date Prepared: 08/08/2023

A. GENERAL INFORMATION

01	Project Location (city)	Perris	02	Climate Zone	10
03	Occupancy Types Within Project (select all that apply):				
• Office					

B. PROJECT SCOPE

This table includes domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in 140.1, 140.2(d) and 141.0(a) / 180.1, or 141.0(b)(2) / 180.2 for additions or alterations. Solar water heating systems are documented on the NRCC-SAB compliance document. Combined hydronic water heating systems are documented on the NRCC-MCH compliance document.

01	My project consists of (check all that apply):	02	System Type ^{1,2}	03	System Components				
<input checked="" type="checkbox"/>	New system (DHW system being installed for the first time)	<input checked="" type="checkbox"/>	Individual System (serving nonresidential spaces)	<input checked="" type="checkbox"/>	Equipment	<input checked="" type="checkbox"/>	Distribution	<input checked="" type="checkbox"/>	Controls
<input type="checkbox"/>	System Alteration (equipment, distribution or controls)	<input type="checkbox"/>		<input type="checkbox"/>	Equipment	<input type="checkbox"/>	Distribution	<input type="checkbox"/>	Controls

FOOTNOTES: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.
¹ Dwelling units refers to hotel/motel guest rooms and units in a multifamily residential occupancy.
² DHW systems serving 2 or more dwelling units are considered "Central Systems" for multifamily occupancies

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. or the table indicated as not compliant for guidance.

01	02	03	04
Domestic Hot Water Equipment	Distribution Systems	Controls	Compliance Results
Table F	Table G	Table H	
Yes	Yes	Yes	

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: 125460-0823-0006 Report Generated: 2023-08-08 12:54:32

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION Domestic Water Heating System NRC-C-PLB-E-1

CERTIFICATE OF COMPLIANCE Report Page: (Page 4 of 8)

Project Name: City of Perris Plumbing System Report Page: (Page 4 of 8)

Project Address: 227 N D ST., PERRIS, CA 92570 Date Prepared: 2023-08-08 12:54:30

F. DOMESTIC HOT WATER EQUIPMENT

Water Heating Equipment All Occupancies

	Yes	No	Not Applicable	Requirement
18	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Unfired storage tank insulation shall have Internal + External >R-16 OR External >R-3.5. Label required per 110.3(c)3
19	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	New state buildings 60% of energy for service water heating from site solar energy or recovered energy per 110.3(c)5
20	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Isolation valves for instantaneous water heater with input rating >6.8 kBtu/h or 2 kW has been specified per 110.3(c)6
21	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	School buildings < 25,000 ft ² and < 4 stories must install a heat pump water heating system per 140.5(a)1. Water heating systems serving an individual bathroom space may be an instantaneous electric water heater.

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: 125460-0823-0006 Report Generated: 2023-08-08 12:54:32

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION Domestic Water Heating System NRC-C-PLB-E-1

CERTIFICATE OF COMPLIANCE Report Page: (Page 7 of 8)

Project Name: City of Perris Plumbing System Report Page: (Page 7 of 8)

Project Address: 227 N D ST., PERRIS, CA 92570 Date Prepared: 2023-08-08 12:54:30

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title

NR-C-PLB-E - Must be submitted for all buildings

J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

K. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no forms required for this project.

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: 125460-0823-0006 Report Generated: 2023-08-08 12:54:32

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION Domestic Water Heating System NRC-C-PLB-E-1

CERTIFICATE OF COMPLIANCE Report Page: (Page 2 of 8)

Project Name: City of Perris Plumbing System Report Page: (Page 2 of 8)

Project Address: 227 N D ST., PERRIS, CA 92570 Date Prepared: 2023-08-08 12:54:30

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: 125460-0823-0006 Report Generated: 2023-08-08 12:54:32

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION Domestic Water Heating System NRC-C-PLB-E-1

CERTIFICATE OF COMPLIANCE Report Page: (Page 5 of 8)

Project Name: City of Perris Plumbing System Report Page: (Page 5 of 8)

Project Address: 227 N D ST., PERRIS, CA 92570 Date Prepared: 2023-08-08 12:54:30

G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM

This table is used to demonstrate compliance for nonresidential occupancies with distribution requirements in 120.3 and 140.5. For multifamily and hotel/motel occupancies, compliance is demonstrated with requirements 110.3(c), 160.4, 170.2(d).

Mandatory Pipe Insulation All Occupancies

13	<input type="checkbox"/>	For systems serving dwelling units, pipe insulation must meet the minimum insulation requirements in Table 160.4-A (see below) except: • Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is made with the metal framing. Insulation shall abut securely against all framing members • Piping installed in interior or exterior walls shall not be required to have pipe insulation if all of the requirements are met for compliance with Quality Insulation Installation (QII) as specified in the Reference Residential Appendix RA3.5 • Piping surrounded with a minimum of 1 inch of wall insulation, 2 inches of crawlspace insulation, or 4 inches of attic insulation, shall not be required to have pipe insulation.
14	<input checked="" type="checkbox"/>	For systems serving nonresidential spaces, pipe insulation for the following applications is specified to comply with Table 120.3-A (see below) per 120.3: • Recirculating system piping, including supply and return piping of the water heater • The first 8 ft of hot and cold outlet piping, including between storage tank and heat trap, for a nonrecirculating storage system • Pipes that are externally heated
15	<input checked="" type="checkbox"/>	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service per 120.3(b) / 160.4(f). Pipe insulation buried below grade must be installed in a water proof and non-crushable casing or sleeve.

TABLE 120.3-A / 160.4-A PIPE INSULATION THICKNESS

Fluid Temperature Range (°F)	Conductivity Range (Btu-in per hour per ft ² per °F)	Insulation Mean Rating Temp (°F)	Nominal Pipe Diameter (in)			
			< 1	1 to < 1.5	1.5 to < 4	1.5 to < 4 Multifamily & Hotel/Motel
			Minimum Insulation Required			
105-140	0.22 - 0.28	100	1.0 in or R-7.7	1.5 in or R-12.5	1.5 in or R-11	2.0 in or R-16

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: 125460-0823-0006 Report Generated: 2023-08-08 12:54:32

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION Domestic Water Heating System NRC-C-PLB-E-1

CERTIFICATE OF COMPLIANCE Report Page: (Page 8 of 8)

Project Name: City of Perris Plumbing System Report Page: (Page 8 of 8)

Project Address: 227 N D ST., PERRIS, CA 92570 Date Prepared: 08/08/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: ARASH ZAHABI, PE Documentation Author Signature:

Company: BLUEBERRY INC. Signature Date: 08/08/2023

Address: 25108 MARGUERITE PKWY., SUITE A123 CEAH/HERS Certification Identification (if applicable): License: M352325

City/State/Zip: MISSION VIEJO, CA 92692 Phone: 949-945-9614

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: ARASH ZAHABI, PE Responsible Designer Signature:

Company: BLUEBERRY INC. Date Signed: 08/08/2023

Address: 25108 MARGUERITE PKWY., SUITE A123 License: M352325

City/State/Zip: MISSION VIEJO, CA 92692 Phone: 949-945-9614

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: 125460-0823-0006 Report Generated: 2023-08-08 12:54:32

STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION Domestic Water Heating System NRC-C-PLB-E-1

CERTIFICATE OF COMPLIANCE Report Page: (Page 3 of 8)

Project Name: City of Perris Plumbing System Report Page: (Page 3 of 8)

Project Address: 227 N D ST., PERRIS, CA 92570 Date Prepared: 2023-08-08 12:54:30

F. DOMESTIC HOT WATER EQUIPMENT

This table is used to demonstrate compliance with mandatory equipment requirements in 110.1 and 110.3. Compliance with prescriptive requirements in 140.5(c) / 170.2(f) must also be demonstrated and with 141.0 / 180.1 / 180.2 for addition and alteration scopes.

Equipment Schedule: Water Heating Efficiency and Standby Loss

03		04		05		06			
System Name	P110	Exception to 140.5(c)/ 170.2(d)3	Exceptions Do Not Apply	<input type="checkbox"/>	Gas Service Water Heating System >= 1MMBtu/h ¹	Capacity-weighted Average Efficiency %			
07	08	09	10	11	12	13	14	15	
Name or Item Tag	Equipment Type	Volume (gal)	Rated Input Capacity (Btu/h)	Max GPM/ First Hour Rating (FHR)	Rated Efficiency	Minimum Efficiency Required	Efficiency Unit	Designed Standby Loss	Maximum Standby Loss
WH-1	Commercial Electric Storage Water Heater	50	15,000					0.8	0.84
WH-2	Consumer Rated Electric Instantaneous (<=12kW)	<=2	5,000	0 <= GPM <1.7	0.93	0.91	UEF		
WH-3	Consumer Rated Electric Instantaneous (<=12kW)	<=2	5,000	0 <= GPM <1.7	0.93	0.91	UEF		
WH-4	Consumer Rated Electric Instantaneous (<=12kW)	<=2	5,000	0 <= GPM <1.7	0.93	0.91	UEF		

FOOTNOTE: In systems >= 1MMBtu/h with multiple units, gas water heaters with input capacity > 100,000 Btu/h may meet 90% E requirements via an input capacity-weighted average.

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STATE OF CALIFORNIA CALIFORNIA ENERGY COMMISSION Domestic Water Heating System NRC-C-PLB-E-1

CERTIFICATE OF COMPLIANCE Report Page: (Page 6 of 8)

Project Name: City of Perris Plumbing System Report Page: (Page 6 of 8)

Project Address: 227 N D ST., PERRIS, CA 92570 Date Prepared: 2023-08-08 12:54:30

H. DOMESTIC HOT WATER CONTROLS

This table is used to demonstrate compliance with control requirements in 110.3 for all occupancies. For multifamily residential and hotel/motel occupancies, compliance is also demonstrated with requirements in 160.4(e) / 170.2(d).

	Yes	No	Not Applicable	Requirement
01	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Construction documents require manufacturer certification that service water-heating systems are equipped with automatic temperature controls capable of adjusting temperature settings per 110.3(a).
02	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Systems with capacity > 167,000 BTUH equipped with outlet temperature controls per 110.3(c)1 unless covered by California Plumbing Code 613.0.
03	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Controls for circulating pumps or electrical heat trace systems are capable of automatically turning off the system per 5110.3(c)2 unless systems serves healthcare facility.
04	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	For recirculation systems serving multiple dwelling units, design includes automatic pump controls per 170.2(d) or 180.1(b)3 for additions.
05	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	For recirculation systems serving individual dwelling units, design includes manual on/off controls as specified in Reference Appendix RA4.4.9 per 170.2(d).
06	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Combustion air positive shut-off shall be provided per 160.4(3) on all newly installed commercial boilers as follows: • Boilers with input capacity >= 2.5 MMBtu/h, in which the boiler is designed to operate with a nonpositive vent static pressure • Boilers where one stack serves two or more boilers with a total combined input capacity per stack of 2.5 MMBtu/h.
07	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Boiler combustion air fans with motor >= 10 hp shall meet one of the following • The fan motor shall be driven by a variable speed drive OR • The fan motor shall include controls that limit the fan motor demand to <=30% of the total design wattage at 50% of the design air volume.
08	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Newly installed boilers with an input capacity (d-gte) 5MMBtu/h and a steady state full-load combustion efficiency < 90% shall maintain excess (stack-gas) oxygen concentrations <= 5% by volume on a dry basis over firing rates of 20-100%. Combustion air volume shall be controlled with respect to firing rate or flue gas oxygen concentration. Use of a common gas and combustion air control linkage or jack shaft is prohibited.

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DATE: 08/11/2023

REVISION: ISSUED FOR REVIEW

NO. 1

REGISTERED PROFESSIONAL ENGINEER
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PROJECT TITLE
PLUMBING SYSTEM

SHEET TITLE
PLUMBING TITLE-24

PROJECT NO.: 236412
DATE: 08/11/2023
SCALE: AS SHOWN
DRAWING NO. PP300

of

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PLAN REVIEW APPROVAL

THESE PLAN DOCUMENTS HAVE BEEN REVIEWED FOR COMPLIANCE WITH THE APPLICABLE CALIFORNIA BUILDING STANDARDS CODES AS ADOPTED BY THE STATE OF CALIFORNIA AND WETTERED BY THE JURISDICTION. PLAN REVIEW ACCEPTANCE OF DOCUMENTS DOES NOT CONSTITUTE AN ENDORSEMENT OF THE PROJECT OR THE PROJECT'S DESIGN OR ANY FEDERAL, STATE, OR LOCAL REGULATION BY ANY ENTITY. DATE: 08/22/2023

THIS SET OF THE PLANS AND SPECIFICATIONS MUST BE KEPT ON THE JOB SITE AT ALL TIMES AND NOT BE LOANED, TO BE MADE OR CHANGED OR ALTERED WITHOUT PERMISSION FROM THE CITY OCCUPANCY INSPECTOR. ANY CHANGES OR ALTERATIONS TO THE PLANS MUST BE APPROVED BY ALL APPLICABLE DEPARTMENTS.

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