PLUMBING SPECIFICATIONS

1. **GENERAL REQUIREMENTS**:

- A. PROVIDE ALL PLUMBING WORK SHOWN ON THE CONTRACT DOCUMENTS AND IN ACCORDANCE WITH THE LATEST LOCAL AND STATE CITY BUILDING.
- B. PATCH AND/OR REPLACE DAMAGED ARCHITECTURAL COMPONENTS AS A RESULT OF SYSTEM INSTALLATION. CLEAN UP THE CONSTRUCTION SITE DAILY DURING CONSTRUCTION SO AS NOT TO INTERFERE WITH THE WORK OF OTHER TRADES, AND AFTER THE COMPLETION OF INSTALLATION AND TESTING
- C. THE CONTRACTOR SHALL EXAMINE THE PREMISED BEFORE SUBMITTING HIS BID, AND SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH CONDITIONS WHICH AFFECT HIS WORK.
- D. REPORT ANY CONDITIONS WHICH WOULD PREVENT THE INSTALLATION OF THE WORK TO THE ARCHITECT PRIOR TO STARTING ANY WORK.
- E. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN INSTALLING PIPING IN FINISHED WALLS, PARTITIONS, AND HUNG CEILINGS.
- F. INTERRUPTION OF EXISTING BUILDING SERVICES IN ORDER TO CONNECT NEW PIPING TO EXISTING SHALL BE MADE AT SUCH TIME AS TO CAUSE THE LEAST INTERFERENCE WITH ESTABLISHED BUILDING OPERATING PROCEDURE. ALL EXISTING SERVICE SHUTDOWNS SHALL BE SUPERVISED AS DIRECTED BY BUILDING MANAGEMENT. THE CONTRACTOR SHALL GIVE NOTICE 48 HOURS PRIOR TO ANY SHUTDOWN.
- G. LOCATION OF EXISTING BUILDING SERVICES IN ORDER TO CONNECT NEW PIPING TO EXISTING SHALL BE MADE AT SUCH TIME AS TO CAUSE THE LEAST PLUMBING CONTRACTOR SHALL PAY ALL FEES, OBTAIN ALL PERMITS AND APPROVALS NECESSARY FOR THE COMPLETION OF ALL WORK SHOWN ON THE CONTRACT DRAWINGS.
- H. THE PLUMBING CONTRACTOR SHALL PAY ALL FEES, OBTAIN ALL PERMITS AND APPROVALS NECESSARY FOR THE COMPLETION AND NEW WORK SHOWN ON THE CONTRACT DRAWINGS.
- I. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THE EXISTING CONDITIONS AND NEW WORK OF ALL THE OTHER TRADES.
- J. PROVIDE NEW PLUMBING FIXTURES, PIPING AND EQUIPMENT WHERE SHOWN ON THE CONTRACT DRAWINGS. CONNECT NEW PIPING TO EXISTING STACKS AND RISERS.
- K. PREPARE AS-BUILT DRAWINGS INDICATING ACTUAL LOCATIONS OF PLUMBING FIXTURES AND PIPING. AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE OWNER UPON COMPLETION OF INSTALLATION AND TESTING. SUBMIT THREE SETS OF PRINTS AND ONE SET OF REPRODUCABLES. IN ADDITION PROVIDE ON DISK TO OWNER THE AS-BUILT CONDITIONS IN AUTOCAD 2004.

2. EXAMINATION OF CONTRACT DOCUMENTS:

- A. EXAMINE THE CONTRACT DOCUMENTS OF THIS TRADE AND ALL OTHER TRADES FOR THIS PROJECT. VERIFY ALL EXISTING CONDITIONS AT THE SITE, AND BECOME FULLY INFORMED AS TO THE EXTENT AND CHARACTER OF THE WORK IN THE BUILDING. SUBMITTAL OF A BID IS AN AGREEMENT THAT ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS ARE FULLY UNDERSTOOD.
- B. THE CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS SPECIFIED, OR UNSPECIFIED, NECESSARY TO PROVIDE ALL WORK SHOWN ON THE CONTRACT DOCUMENTS IN ACCORDANCE WITH THE LOCAL BUILDING CODE.
- C. REPORT, IN WRITING, TO THE ARCHITECT ANY AND ALL CONDITIONS WHICH MAY INTERFERE WITH OR OTHERWISE AFFECT OR PREVENT THE PROPER EXECUTION AND COMPLETION OF THE WORK OF THIS SECTION. DO NOT COMMENCE WORK UNTIL ANY AND ALL SUCH CONDITIONS HAVE BEEN CORRECTED BY THE TRADE OR TRADES RESPONSIBLE.
- D. FAILURE TO NOTIFY THE ARCHITECT OF UNSATISFACTORY CONDITIONS WILL BE CONSIDERED AS AN ACCEPTANCE OF ALL CONDITIONS.
- E. THE EXECUTION OF THE WORK OF THIS SECTION CONSTITUTES ACCEPTANCE OF THE BASE OR ADJOINING WORK AND OTHER CONDITIONS AS BEING SATISFACTORY IN EVERY RESPECT AND LATER CLAIMS OF DEFECTS IN SUCH CASES WILL NOT BE ALLOWED.
- F. THE DRAWINGS INDICATE AND THE SPECIFICATIONS DESCRIBED THE GENERAL ARRANGEMENT AND THE APPROXIMATE LOCATION OF EQUIPMENT, FIXTURES, PIPING ETC. EXACT LOCATIONS MAY BE ADJUSTED IN THE FIELD TO SUIT EXISTING CONDITIONS.
- G. THE CONTRACTOR SHALL WITHOUT EXTRA COST TO THE OWNER, MAKE ALL REASONABLE MODIFICATIONS IN THE WORK AS MAY BE REQUIRED TO PREVENT CONFLICT WITH THE WORK OF OTHER TRADES, OR FOR THE PROPER INSTALLATION OF THE WORK.

3. QUALITY ASSURANCE:

- A. ALL PIPES SHALL BE MARKED TO INDICATE MANUFACTURER AND ASTM STANDARD. EACH FULL TYPE LENGTH SHALL HAVE THE MANUFACTURER'S NAME CAST, STAMPED OR ROLLED ON.
- B. EACH FIXTURE SHALL HAVE THE MANUFACTURER'S SYMBOL AND PRESSURE RATING CAST, STAMPED OR ROLLED ON.

4. SCOPE OF WORK:

- A. FURNISH AND INSTALL NEW PLUMBING FIXTURES, PIPING AND EQUIPMENT WHERE INDICATED ON THE CONTACT DRAWINGS. CONNECT TO EXISTING STACKS AND RISERS.
- B. PROVIDE AND INSTALL ALL NEW WORK IN ACCORDANCE WITH BUILDING CODE REQUIREMENTS.
- C. PROVIDE ROUGH CUTTING AND PATCHING FOR THE INSTALLATION OF NEW PIPING.

5. <u>SUBMITTALS:</u>

- A. SUBMIT THE FOLLOWING ITEMS FOR APPROVAL:
- 1. PLUMBING FIXTURES, SUPPORTS AND TRIM
- 2. PIPE MATERIAL
- 3. FITTINGS
 4. HANGERS, ESCUTCHEONS AND SLEEVES
- 5. INSULATION
- 6. VALVES 7. WATER HEATER
- 8. FLOOR DRAIN
 9. VALVE TAGS & CHART
- B. PREPARE AND SUBMIT PIPING INSTALLATION DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. SUCH APPROVAL SHALL NOT RELIEVE CONTRACTOR OF INSTALLATION RESPONSIBILITIES.
- 6. PRODUCT DELIVERY, STORAGE AND HANDLING:
- A. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE ON—TIME DELIVERY OF HIS MATERIALS AND EQUIPMENT.
- B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFE STORAGE OF ALL EQUIPMENT, FIXTURES, PIPES, VALVES, ETC., EITHER AT THE JOB SITE WHERE DIRECTED BY THE OWNER'S REPRESENTATIVE OR IN HIS OWN WAREHOUSE.
- C. ANY EQUIPMENT, FIXTURES OR PIPING DAMAGED DURING HANDLING, STORAGE OR INSTALLATION SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.

7. <u>GUARANTEE:</u>

- A. AS PART OF THIS CONTRACT, THE PLUMBING CONTRACTOR SHALL GUARANTEE AND CERTIFY THAT ALL WORK INCLUDED IN THESE CONTRACT DOCUMENTS IS FREE FROM DEFECTS FOR A PERIOD OF ONE YEAR FROM THE DATE OF THE OWNER'S FINAL ACCEPTANCE. THE PLUMBING CONTRACTOR SHALL REPAIR OR REPLACE ANY MATERIALS FOUND TO BE DEFECTIVE FOR THAT PERIOD OF TIME. OWNER'S FINAL ACCEPTANCE STARTS WHEN FINAL PAYMENT TO THE CONTRACTOR IS MADE.
- 8. PIPE AND FITTINGS:
 - A. ALL MATERIALS SHALL BE NEW AND INSTALLED IN A FIRST CLASS MANNER.

- B. PIPE AND FITTINGS SHALL CONFORM TO THE LATEST ASA, ASTM, AND/OR FS STANDARD. IN ADDITION ALL CAST IRON SOIL PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE (CISPI) AND BE LISTED BY NSF INTERNATIONAL.
- C. REFER TO PIPING AND FITTINGS SCHEDULE ON DRAWING P-300.00 FOR PIPING MATERIALS.

9. <u>VALVES:</u>

- A. ISOLATION CONTROL VALVES (2-1/2" AND SMALLER): BRONZE TWO-PIECE BALL TYPE 250 PSI WSP, THREADED ENDS, AND SOLDERED JOINT END SIMILAR TO CONBRACO, APOLLO 70-300 SERIES
- B. CHECK VALVES: BRONZE SWING TYPE, 125 PSI, SIMILAR TO STOCKHAM NO. B-319.
- C. THROTTLING VALVES: GLOBE BRONZE, SOLDER ENDS, CLASS 125 SIMILAR TO STOCKHAM NO.

D. GAS VALVES:

- 1. FOR GAS PIPING, 2" SIZE AND SMALLER, A TOP ENTRY VALVE, CRANE "ACCESSO" WITH BUENA "N" SEAT IN CARBON STEEL BODY AND FIXED HANDLE, SHALL BE USED.
- 2. VALVES FOR GAS PIPING, 2-1/2" AND LARGER SHALL BE IRON, THREADED END CONSTRUCTION, LUBRICATED PLUG COCK WITH SQUARE HEAD OPERATING PLUG. VALVE SHALL BE RATED AT 2003 W.O.G. VALVE SHALL BE WALWORTH CO. NO. 1700F.

10. INSULATION (INDOORS):

- A. COLD, HOT WATER PIPING, HORIZONTAL STORM PIPING AND HORIZONTAL FLOOR DRAIN WASTE PIPING IN MECH. ROOMS.
- 1. JOHN MANSVILLE MICRO-LR 850 FIBERGLASS PIPE INSULATION TYPE AP-T, 1 INCH THICK COMPOSITE INSULATION. FIRE AND SMOKE HAZARD RATING NOT TO EXCEED A FLAME SPREAD OF 25 OR SMOKE DEVELOPMENT OF 50.
- B. COLD, HOT WATER, HORIZONTAL STORM PIPING FITTINGS AND VALVES.
- 1. JOHN MANSVILLE PRE-CUT, HI-LO TEMP INSULATION INSERTS AND ZESTON 25/50 RATING PVC INSULATED FITTING COVERS.

11. HANGERS:

- A. EXCEPT AS OTHERWISE INDICATED, PROVIDE FACTORY FABRICATED HANGERS, CLAMPS, RODS, BUILDING ATTACHMENTS, SADDLES AND SHIELDS COMPLYING WITH ANSI MSS—SP—58. CONTRACTOR SHALL SELECT AND APPLY HANGERS AND SUPPORTS IN ACCORDANCE WITH MSS—SP—69.
- B. ALL HANGER, ANCHORS AND SUPPORTS SHALL BE AS MANUFACTURES BY THE FEE AND MASON COMPANY OR APPROVED EQUAL AS FOLLOWS:
- 1. ALL BARE HORIZONTAL CAST IRON PIPING SHALL BE HUNG WITH FIG. #239 ADJUSTABLE GALVANIZED STEEL HANGERS.
- 2. ALL INSULATED HORIZONTAL PIPING SHALL BE HUNG WITH FIG. #239 ADJUSTABLE GALVANIZED STEEL CLEVIS HANGERS WITH FIG. #71 RIGID INSULATION SADDLE. SADDLE BA S 180° SECTION OF 1 INCH POLYURETHANE FOAM, ALUMINUM FACED, WATERPROOF JACK EXTENDING ALL AROUND A 180° SECTION OF GALVANIZED METAL SHIELD. SHIELD AND SECTION OF INSULATION SHALL BE FIBERGLASS AS SPECIFIED IN INSULATION SECTIONS OF THE SPECIFICATION.
- 3. VERTICAL LINES SHALL BE SUPPORTED BY MEANS OF RISER CLAMPS. RISER CLAMPS SHALL FIT EXACT PIPE SIZE OR BARE PIPES. FOR CAST IRON PIPES USE FIG. #241. TWO BOLT, GALVANIZED BLACK STEEL CLAMPS OR FIG. #368 CARBON STEEL COPPER PLATED RISER CLAMP.
- GALVANIZED BLACK STEEL CLAMPS OR FIG. #368 CARBON STEEL COPPER PLATED RISER CLAM
 4. RODS FOR PIPE HANGERS SHALL BE FIG. #263. CONTINUOUS THREADED ROD, GALVANIZED
 STEEL SIZED FOR THE LOAD REQUIRED.

C. INSTALLATION

- 1. ATTACH HANGER RODS TO THE BUILDING IN A MANNER APPROVED BY THE ARCHITECT.
- 2. DO NOT HANG PIPING FROM DUCTWORK OR OTHER PIPING.
- 3. THE CONTRACTOR MAY COORDINATE WITH THE OTHER WORK OR EXISTING PIPING TO USE A COMMON MEANS OF SUPPORT. SUBMIT FOR APPROVAL ALL PERTINENT DESIGN DATA RELATING TO THE SUPPORT AS WELL AS VERIFICATION OF THE RESPONSIBILITY FOR THE SUPPORT.
- 4. HANGERS SHALL NOT PENETRATE INSULATION
- D. INTERVAL OF SUPPORTS
- 1. HORIZONTAL PIPING SHALL BE SUPPORTED AT INTERVALS AS FOLLOWS:
- a. CAST IRON PIPE SHALL BE SUPPORTED AT 5 FT. INTERVALS
- b. COPPER TUBING SHALL BE SUPPORTED AT 6 FT. INTERVALS
- 2. ADDITIONAL HANGERS TO PREVENT SAGGING WILL BE ADDED AS REQUIRED.

12. SLEEVES

- A. PROVIDE SLEEVES FOR ALL PIPES PASSING THROUGH FLOORS, WALLS AND PARTITIONS.
- 1. SLEEVES THROUGH WALLS, AND WHERE SERVING EXPOSED PIP PENETRATING FLOORS SHALL BE SCHEDULE 40 STEEL PROVIDED WHERE NECESSARY.
- SLEEVES WITHIN FURRED OUT ENCLOSURE SHEET ROCK PARTITIONS AND BLOCK WALLS SHALL BE 18 GAUGE GALVANIZED SHEET METAL.
- B. PROVIDE OPENINGS WITH AN I.D. AT LEAST 1/2 INCH GREATER THAN THE OUTSIDE OF THE PIPE SERVED.
- C. DO NOT SUPPORT PIPES BY RESTING PIPE CLAMPS ON SLEEVES.

13. PLUMBING FIXTURES AND TRIM

- A. PLUMBING FIXTURES AND TRIM
- 1. FURNISH AND INSTALL NEW PLUMBING FIXTURES AND TRIM WHERE SHOWN ON THE CONTRACT DRAWINGS. THE ARCHITECT'S INTERIOR FINISH DRAWINGS SHALL BE FOLLOWED FOR THE LOCATION OF ALL NEW FIXTURES.
- 2. FIXTURES SHALL BE SET LEVEL AND SQUARE WITH RELATION TO FINISHED FLOOR AND WALL LINES.
- 3. FAUCETS SHALL BE CHROME—PLATED BRASS, MONEL OR STAINLESS MATERIALS SHALL BE THOROUGHLY CLEANED AND POLISHED BEFORE PLATING. PLATE SHALL BE HEAVY, THOROUGHLY AND EVENLY APPLIED, AND GUARANTEED NOT TO STRIP OR PEEL. PLATED WORK SHALL BE HIGHLY BUFFED. FAUCETS SHALL HAVE METAL INDICES AND SHALL BE OF THE RENEWABLE SEAT TYPE
- 4. EACH FIXTURE SUPPLY CONNECTION SHALL BE PROVIDED WITH INDIVIDUAL SHUT-OFF OR STOP VALVES.
- 5. ESCUTCHEONS SHALL BE ONE PIECE CAST BRASS CHROMIUM—PLATES AND SHALL BE PROVIDED WITH SET SCREWS TO PROPERLY HOLD ESCUTCHEON IN PLACE.
- 6. BEFORE FINAL ACCEPTANCE, ADJUST FIXTURE STOPS FOR AN AMPLE NON-SPLASHING FLOW.
- 7. WHERE WASTE, VENT OR WATER SUPPLY PIPING IS EXPOSED TO VIEW AT FIXTURES, THE PIPES ALL BE CHROMIUM—PLATED. NO COVER TUBING WILL BE PERMITTED.

WITH A WATERPROOF SEALANT TO PREVENT WATER SEEPAGE.

8. NECESSARY CARRIERS, BRACKETS, PLATES, CLEATS, BOLTS, ETC. SHALL BE FURNISHED FOR SECURING FIXTURES RIGIDLY IN PLACE.9. SPACES BETWEEN PLUMBING FIXTURES AND FLOORS, WALLS OR COUNTERS SHALL BE SEALED

10. PROVIDE VACUUM BREAKERS WHERE REQUIRED FOR SUBMERGED INLETS.

B. FIXTURE INSTALLATION

- 1. EACH FIXTURE SHALL BE INDIVIDUALLY CONTROLLED WITH INDIVIDUAL STOPS.
- 2. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PLUMBING FIXTURES FROM DAMAGE.
- 3. UPON COMPLETION OF INSTALLATION AND TESTING, PLUMBING FIXTURES SHALL BE CLEANED AND LEFT IN FIRST CLASS CONDITION AND IN WORKING ORDER.

14. ESCUTCHEONS

- A. INSTALL ESCUTCHEONS ON BOTH SIDES OF CONSTRUCTION WHEREVER PIPES PASS THROUGH WALLS, FLOORS, PARTITIONS OR CEILINGS. ESCUTCHEONS SHALL BE HELD IN PLACE WITH SET SCREWS. TAKE SPECIAL CARE TO PROTECT ESCUTCHEONS DURING THE COURSE OF CONSTRUCTION.
- B. ESCUTCHEON APPLICATION SCHEDULE
- 1. FINISHED SPACES SHALL BE POLISHED BRASS.
- 2. UNFINISHED SPACES SHALL BE PLAIN BRASS OR CAST IRON.

15. VACUUM BREAKER

- A. VACUUM BREAKER (TYPE A) CAST BRASS CHROME PIPE IS EXPOSED TO PUBLIC VIEW SIMILAR TO WATTS NO. 800MCQT. (CONSTANT PRESSURE VACUUM BREAKER).
- B. VACUUM BREAKER (TYPE B) CAST BRASS CHROME PIPE IF EXPOSED TO PUBLIC VIEW SIMILAR TO WATTS NO. 909—S.
- C. PROVIDE WHERE INDICATED ON THE DRAWINGS

16. DISINFECTION

A. DISINFECTION INTERIOR POTABLE WATER DISTRIBUTION SYSTEM IN ACCORDANCE WITH REQUIREMENTS OF LOCAL BUILDING CODE.

17. DISSIMILAR METALS

A. PROVIDE ISOLATION FLANGES FOR CONNECTIONS WITH ANY DISSIMILATION METALS.

R INSTALLATION

- A. ALL DRAINAGE PIPING 3" AND LARGER SHALL RUN AT A UNIFORM GRADE OF AT LEAST 1/8" PER FOOT, UNLESS OTHERWISE INDICATED. ALL DRAINAGE PIPING AT 2" AND SMALLER PITCH AT 1/4" PER FOOT MINIMUM.
- B. ALL DRAINAGE PIPING SHALL BE RUN AS STRAIGHT AS POSSIBLE AND SHALL HAVE EASY BENDS WITH LONG TURN FITTINGS. DRAINAGE PIPING AT FIRST FLOOR CEILING SHALL BE RUN AS HIGH AS EXISTING CONDITIONS WILL PERMIT.
- C. ALL VENT PIPES SHALL BE GRADED TO FREE THEMSELVES OF ANY WATER OR CONDENSATION.
- D. ALL WATER PIPING SHALL RUN FREE OF TRAPS AND UNNECESSARY BENDS. ANY TRANSFORMED SHALL BE PROVIDED WITH VALVES TO COMPLETELY DRAIN THE SYSTEM. ALL HOT AND COLD WATER PIPING SHALL BE SEPERATED BY A MINIMUM OF 6" ON CENTER.
- E. ALL CONNECTIONS BETWEEN DISSIMILAR METALS SHALL BE MADE WITH DIELECTRIC UNIONS.
- F. ALL PIPING SHALL HAVE REDUCING FITTINGS. NO BUSHING WILL BE PERMITTED ON ANY PIPING.
- G. NO PIPING OR WORK OF ANY KIND SHALL BE CONCEALED OR COVERED UNTIL ALL REQUIRED TESTS HAVE BEEN SATISFACTORILY COMPLETED AND THE WORK HAS BEEN INSPECTED AND APPROVED BY THE OWNER'S REPRESENTATIVE AND ALL AUTHORITIES HAVING JURISDICTION.
- H. NO DEAD ENDS SHALL BE LEFT ON ANY DRAINAGE PIPE UPON COMPLETION OF THE WORK.

19. COORDINATION

- A. CERTAIN MATERIALS WILL BE FURNISHED, INSTALLED OR FURNISH INSTALLED, UNDER OTHER SECTIONS. EXAMINE THE CONTRACT DOCUMENTS TO ASCERTAIN THESE.
- B. TRASNMIT TO THE TRADES DOING THE WORK OF OTHER SECTIONS ALL THE INFORMATION REQUIRED FOR WORK TO BE PROVIDED UNDER THEIR RESPECTIVE SECTIONS IN AMPLE TIME FOR THEIR INSTALLATION
- C. ALL NEW WORK SHALL BE COORDINATED WITH EXISTING CONDITIONS

20. TESTING AND BALANCING

- A. PROVIDE LABOR MATERIALS, INSTRUMENTS, POWER, ETC. AS REQUIRED FOR TESTING AND BALANCING. ALL PIPING AND EQUIPMENT SHALL BE TESTED AS REQUIRED BY THE LOCAL BUILDING CODE. TESTS SHALL BE PERFORMED IN THE PRESENCES OF THE OWNER'S REPRESENTATIVE AND SUCH OTHER PARTIES AS MAY HAVE LEGAL JURISDICTION.
- B. NOTIFY THE OWNER'S REPRESENTATIVE AT LEAST 48 HOURS IN ADVANCE OF MAKING THE REQUIRED TESTS, SO THAT ARRANGEMENTS MAY BE MADE FOR THEIR PRESENCE TO WITNESS THE
- C. TESTS SHALL BE APPLIED TO COMPLETED OR PARTIALLY COMPLETED SYSTEMS. IN NO CASE SHALL PIPING AND EQUIPMENT BE SUBJECTED TO PRESSURES EXCEEDING THEIR RATING.
- D. ALL DEFECTIVE WORK SHALL BE PROMPTLY REPAIRED OR REPLACED AND THE TESTS SHALL BE REPEATED UNTIL THE PARTICULAR SYSTEM AND ALL COMPONENTS PARTS RECEIVE THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
- E. ANY DAMAGES RESULTING FROM TESTS SHALL BE REPAIRED AND/OR DAMAGED MATERIALS REPLACED. ALL TO THE SATISFACTION OF THE OWNER. THE DURATION OF TESTS SHALL NE AS

DETERMINED BY ALL AUTHORITIES HAVING JURISDICTION. 21. SUBSTITUTION OR SPECIFIC MATERIALS

A. THE PRODUCTS AND/OR MATERIALS LISTED IN THESE SPECIFICATIONS REPRESENT DESIRED MATERIALS AND CONSTRUCTION STANDARDS FOR THE VARIOUS ITEMS OR WORK. MANUFACTURER NAMES AND MODEL NUMBERS ARE USED TO DESCRIBE, TYPES, STYLES AND QUALITY. MATERIALS SUBMITTED FOR APPROVAL OTHER THAN SPECIFIED HEREIN MUST OR EXCEED THESE STANDARDS.

22. VALVE TAGS AND CHART

- A. EACH VALVE, EXCEPT VALVES AT FIXTURES, WILL HAVE A 2" DIAMETER. BRASS TAG WITH 1" HIGH NUMERAL STAMPED THEREON, SECURED TO THE VALVE BY MEANS OF BRASS S HOOK OR BRASS CHAIN. EACH SYSTEM TO HAVE A LETTER DESIGNATION AS WELL.
- B. THE CONTRACTOR SHALL FURNISH AN APPROVED, NEATLY DRAWN VALVE CHART, PROPERLY FRAMED SHOWING THE USE AND LOCATION OF EACH VALVE THAT IS TAGGED.

23. SLEEVE FIRE STOPPING

- A. ALL SLEEVES THROUGH RATED WALLS OR PARTITIONS SHALL FORM A U.L. (UL 1479 & ASTM E814 ASTM TESTED) CLASSIFIED FIRESTOP CAPABLE OF RETURNING THE WALL PARTITION BACK TO ITS
- B. FIRESTOPPING CAULK SHALL BE SIMILAR TO 3M CP 25WB + CAULK.

UNPENETRATED FIRE RESISTANCE.

C. FIRESTOPPING WRAP SHALL BE SIMILAR TO 3M FS-195 + WRAP/STRIP.



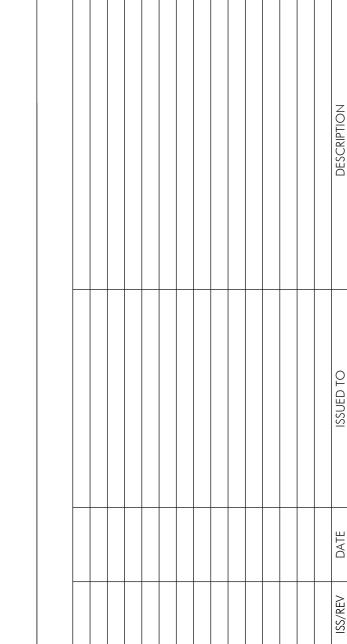
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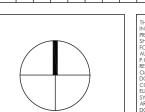
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DOB BSCAN





OLD OAKS COUNTRY
CLUB

NORTH

PLUMBING SPECIFICATIONS

PROJECT ADRESS

SEAL & SIGNATURE

PROJECT NO.: 21-826

DRAWN BY: AG

CHECKED BY: TL

08-13-21

DATE:

P500.00

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