1.GENERAL PROVISIONS: DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK IN CONTRACT.

2.SCOPE: PERFORM WORK AND PROVIDE NEW MATERIAL AND EQUIPMENT AS SHOWN ON DRAWINGS AND AS SPECIFIED IN THIS SECTION OF THE SPECIFICATIONS. PROVIDE ALL COMPONENTS AND MATERIALS, WHETHER SPECIFICALLY SHOWN OR NOT, THAT ARE NECESSARY TO MAKE THE SYSTEMS COMPLETE AND FULLY OPERATIONAL AS INTENDED IN THE CONSTRUCTION DOCUMENTS. WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

a) THE DESIGN INTENT AS ILLUSTRATED ON THESE DRAWING

b) REQUIREMENTS INCLUDED IN THE "NARRATIVE REPORT FOR COMPLIANCE WITH THE ENERGY CONSERVATION SECTION OF THE MASSACHUSETTS STATE BUILDING CODE (780 CMR) — APPROVAL AND

ACCEPTANCE".
c) ALL TESTING AND CERTIFICATIONS NECESSARY FOR COMPLIANCE AND ANY REQUIRED REMEDIAL ACTIONS AND RETESTING DUE TO FAILURE.

3.SITE VISIT: VISIT AND CAREFULLY EXAMINE SITE TO IDENTIFY EXISTING CONDITIONS THAT MAY AFFECT WORK OF THIS SECTION BEFORE SUBMITTING BID. NO EXTRA PAYMENT WILL BE ALLOWED FOR ADDITIONAL WORK CAUSED BY UNFAMILIARITY WITH SITE CONDITIONS THAT ARE VISIBLE OR READILY DISCERNED BY AN EXPERIENCED OBSERVER.

4.RELATED WORK: THE FOLLOWING WORK IS NOT INCLUDED IN THIS SECTION AND WILL BE PROVIDED

UNDER OTHER SECTIONS:
a) PAINTING, EXCEPT AS SPECIFIED.

b) TEMPORARY LIGHT, POWER, WATER, HEAT, GAS AND SANITARY FACILITIES FOR USE DURING CONSTRUCTION.

c) ELECTRICAL POWER WIRING TO ALL EQUIPMENT.

5.CODES, STANDARDS, AUTHORITIES AND PERMITS: CODES, LAWS AND ORDINANCES PROVIDE A BASIS FOR THE MINIMUM INSTALLATION CRITERIA. THESE DRAWINGS AND SPECIFICATIONS ILLUSTRATE THE SCOPE REQUIRED FOR THIS PROJECT, WHICH MAY EXCEED MINIMUM CODE, LAW AND STANDARDS CRITERIA. GIVE NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY FEES AND BACKCHARGES AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES HAVING JURISDICTION AS REQUIRED FOR THE EXECUTION OF ALL WORK ASSOCIATED WITH THIS PROJECT. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITIONS OF:

a) THE STATE BUILDING CODE

PLUMBING SPECIFICATIONS

PART 1 - GENERAL

b) THE STATE BUILDING CODE

b) THE STATE PLUMBING AND FUEL GAS CODE

c) THE STATE ELECTRICAL CODE d) NFPA

e) DEPARTMENT OF ENVIRONMENTAL PROTECTION

f) DEPARTMENT OF PUBLIC SAFETY CODES
q) ARCHITECTURAL ACCESS BOARD

h) ALL OTHER APPLICABLE CODES, REGULATIONS, STANDARDS AND LAWS OF LOCAL, STATE AND FEDERAL GOVERNMENT AND OTHER AUTHORITIES HAVING JURISDICTION.

i) APPLICABLE BASE BUILDING STANDARDS AND SPECIFICATIONS.

6.INTERPRETTIONS OF DOCUMENTS: WHERE DRAWINGS OR SPECIFICATIONS DO NOT COINCIDE WITH MANUFACTURER'S RECOMMENDATIONS, OR ARE UNCLEAR AS TO INTENT, OR REQUIRED MATERIAL QUALITY, ADVISE THE ENGINEER IN WRITING BEFORE PROCEDING WITH THE WORK. ALL COST FOR REWORK NECESSARY TO RESOLVE DISCREPANCIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

7.REQUESTS FOR INFORMATION: ANY RFI FOR RESOLVING AN APPARENT CONFLICT OR UNCLARITY, OR A REQUEST FOR AN ADDITIONAL DETAIL, SHALL INCLUDE A SKETCH OR EQUIVALENT DESCRIPTION OF CONTRACTOR'S PROPOSED SOLUTION.

8.SUBMITTALS: PROVIDE SPECIFIED ITEMS AND EQUIPMENT UNLESS "EQUAL" OR "APPROVED EQUAL" IS EXPLICITLY INDICATED ON THE DRAWINGS. DEVIATIONS TO SPECIFIED ITEMS SHALL BE AT THE SOLE RISK OF THE CONTRACTOR, WHO SHALL BE RESPONSIBLE FOR ALL ASSOCIATED CHANGES TO THIS AND OTHER TRADES. REVIEW OF THE SHOP DRAWINGS BY THE ENGINEER SHALL NOT ABSOLVE THE CONTRACTOR FROM MEETING THE FULL DESIGN INTENT OF THE ASSOCIATED SYSTEM(S). SUBMITTALS SHALL INDICATE PRIOR REVIEW AND APPROVAL BY THE RESPONSIBLE CONTRACTOR. SUBMIT FOR REVIEW (6) SETS OF MANUFACTURER'S PRODUCT DATA FOR THE FOLLOWING ITEMS:

a) FIXTURES
b) PIPE MATERIALS

c) FITTINGS

d) VALVES
e) WATER HEATERS
f) BACKFLOW PREVENTERS

g) INSULATION h) HANGERS

i) TEST REPORTS

j) all certificates Allow engineer a minimum of 10 working days for processing and review of each submission.

9.OPERATION AND MAINTENANCE DATA: SUBMIT (3) SETS OF OPERATING AND MAINTENANCE MANUALS PRIOR TO THE COMPLETION OF THE PROJECT. O&M MANUALS SHALL INCLUDE SYSTEM DESCRIPTIONS, WIRING DIAGRAMS, WRITTEN WARRANTEES, RECOMMENDED SPARE PARTS AND ROUTINE MAINTENANCE REQUIREMENTS WITH RECOMMENDED INTERVALS FOR ALL THE FOLLOWING:

a) SUMP PUMPS

b) BACKFLOW PREVENTERS

c) WATER HEATERS

d) RECIRCULATION PUMP
e) FIXTURES

10. RECORD DRAWINGS: CAD RECORD DRAWING FILES SHALL BE SUBMITTED AT THE COMPLETION OF THE PROJECT SHOWING THE "AS-BUILT" CONDITION INCLUDING WORK INSTALLED AND ALL MODIFICATIONS OR ADDITIONS TO ORIGINAL DESIGN. OBTAIN THE AUTOCAD FILES FOR PREPARATION OF AS-BUILT DRAWINGS FROM THE ARCHITECT. THE ARCHITECT AND ENGINEER ARE NOT GRANTING ANY OWNERSHIP OR PROPERTY INTEREST IN THE CAD DRAWINGS BY THE DELIVERY OF THE CAD FILES. THE USE OF THE CAD FILES AND DRAWINGS ARE LIMITED FOR THE SOLE PURPOSE OF ASSISTING IN THE CONTRACTOR'S PERFORMANCE IN ITS CONTRACTURAL OBLIGATIONS WITH RESPECT TO THIS PROJECT. ANY REUSE AND/OR OTHER USE BY THE CONTRACTOR WILL BE AT THE CONTRACTOR'S SOLE RISK AND WITHOUT LIABILITY TO THE ARCHITECT AND ENGINEER.

11. WARRANTIES: WARRANTY INSTALLATION IN WRITING FOR ONE YEAR FROM DATE OF OWNER'S ACCEPTANCE OF CERTIFICATE OF SUBSTANTIAL COMPLETION. WHERE INDIVIDUAL EQUIPMENT SECTIONS SPECIFY LONGER WARRANTEES, PROVIDE THE LONGER WARRANTEE. REPAIR, REPLACE OR PROVIDE TEMPORARY ACCOMMODATIONS FOR DEFECTIVE MATERIALS, EQUIPMENT, WORKMANSHIP AND INSTALLATION THAT DEVELOP WITHIN 24 HOURS OF NOTIFICATION. WARRANTY SHALL INCLUDE A CONTACT PERSON (NAME AND 24 HOUR TELEPHONE NUMBER) FOR SERVICE REQUESTS. CORRECT DAMAGE CAUSED WHILE MAKING NECESSARY REPAIRS AND REPLACEMENTS UNDER WARRANTY PERIOD AT NO ADDITIONAL COST.

12. COORDINATION: CONFER WITH ALL OTHER TRADES RELATIVE TO LOCATION OF ALL APPARATUS AND EQUIPMENT TO BE INSTALLED AND SELECT LOCATIONS SO AS NOT TO CONFLICT WITH OR HINDER THE PROGRESS OF THE WORK OF OTHER SECTIONS. WORK INSTALLED THAT CREATES INTERFERENCE OR RESTRICTS ACCESS REQUIRED BY CODE OR MAINTENANCE AND/OR ADJUSTMENTS SHALL BE MODIFIED AT NO ADDITIONAL COST TO THE OWNER.

13. SUPPORTS: INCLUDE ALL STRUCTURAL STEEL SUPPORTS, HANGER BRACKETS, ETC., REQUIRED FOR THE EXECUTION OF THE WORK OF THIS SECTION. THE WELDS AND EDGES OF ALL BRACKETS SHALL BE FILED OR GROUND SMOOTH FOR PAINTING.

14. CUTTING AND PATCHING: INCLUDE ALL CORING, CUTTING, PATCHING AND FIREPROOFING NECESSARY FOR THE EXECUTION OF THE WORK OF THIS SECTION. STRUCTURAL ELEMENTS SHALL NOT BE CUT WITHOUT WRITTEN APPROVAL OF THE ARCHITECT. REPAIR AND PATCH AROUND THE WORK SPECIFIED HEREIN TO MATCH THE EXISTING ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT. FILL AND PATCH ALL OPENINGS OR HOLES LEFT IN THE EXISTING STRUCTURES BY THE REMOVAL OF EXISTING EQUIPMENT THAT IS PART OF THIS SECTION OF THE SPECIFICATIONS. PROVIDE FIRE STOPPING TO MAINTAIN THE FIRE RATING OF THE FIRE RESISTANCE RATED ASSEMBLY. ALL PENETRATIONS AND ASSOCIATED FIRE STOPPINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE FIRE STOPPING MANUFACTURER'S LISTED INSTALLATION DETAILS AND BE LISTED BY UL OR FM.

15. HOISTING, SCAFFOLDING AND PLANKING: INCLUDE THE FURNISHING, SET—UP AND MAINTENANCE OF ALL HOISTING MACHINERY, CRANES, SCAFFOLDS, STAGING AND PLANKING AS REQUIRED FOR THE EXECUTION OF WORK FOR THIS SECTION.

16. SAFETY PRECAUTIONS: LIFE SAFETY AND ACCIDENT PREVENTION SHALL BE A PRIMARY CONSIDERATION. COMPLY WITH ALL OF THE SAFETY REQUIREMENTS OF THE OWNER AND OSHA THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD OF THE PROJECT. FURNISH, PLACE AND MAINTAIN PROPER GUARDS AND ANY OTHER NECESSARY CONSTRUCTION REQUIRED TO SECURE SAFETY OF LIFE AND PROPERTY.

17. ACCESSIBILITY: ALL WORK PROVIDED UNDER THIS SECTION OF THE SPECIFICATION SHALL BE INSTALLED SO THAT PARTS REQUIRING PERIODIC INSPECTION, MAINTENANCE AND REPAIR ARE READILY ACCESSIBLE. WORK OF THIS TRADE SHALL NOT INFRINGE UPON CLEARANCES REQUIRED BY EQUIPMENT OF OTHER

TRADES, ESPECIALLY CODE REQUIRED CLEARANCES TO ELECTRICAL EQUIPMENT.

18. PROTECTION OF WORK AND PROPERTY: THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE AND PROTECTION OF ALL WORK INCLUDED UNDER THIS SECTION UNTIL THE COMPLETION AND FINAL ACCEPTANCE OF THIS PROJECT. PROTECT ALL EQUIPMENT AND MATERIALS FROM DAMAGE FROM ALL CAUSES INCLUDING, BUT NOT LIMITED TO, FIRE, VANDALISM AND THEFT. ALL MATERIALS AND EQUIPMENT DAMAGED OR STOLEN SHALL BE REPAIRED OR REPLACED WITH EQUAL MATERIAL OR EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER. PROTECT ALL EQUIPMENT, OUTLETS AND OPENINGS, AND ROOF PENETRATIONS WITH TEMPORARY PLUGS, CAPS AND COVERS. PROTECT WORK AND MATERIALS OF OTHER TRADES FROM DAMAGE THAT MIGHT BE CAUSED BY WORK OR WORKMEN UNDER THIS SECTION AND MAKE GOOD DAMAGE THUS CAUSED. DAMAGED MATERIALS ARE TO BE REMOVED FROM THE SITE; NO SITE STORAGE OF DAMAGED MATERIALS WILL BE ALLOWED. ANY DAMAGE TO EXISTING SYSTEMS AND EQUIPMENT CAUSED BY THIS CONTRACTOR DURING INSTALLATION SHALL BE REPAIRED AND/OR REPLACED AT THIS CONTRACTOR'S EXPENSE TO THE COMPLETE SATISFACTION OF THE BUILDING OWNER.

19. SEISMIC RESTRAINT REQUIREMENTS: PROVIDE SEISMIC RESTRAINTS AS REQUIRED IN ACCORDANCE WITH THE STATE BUILDING CODE. A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER, LICENSED IN THE APPLICABLE STATE FOR THE PROJECT LOCATION, SHALL PREPARE THE SEISMIC RESTRAINT DESIGN AND CERTIFY THAT THE DESIGN IS IN COMPLIANCE WITH THE STATE BUILDING CODE REQUIREMENTS.

20. PROJECT CLOSEOUT: A CERTIFICATE OF COMPLETION SHALL BE ISSUED BY THE CONTRACTOR INDICATING THAT THE INSTALLATION IS IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS AND ALL APPLICABLE LOCAL, STATE AND FEDERAL STATUTES AND CODES. ALL SUBMITTALS, AS—BUILTS, O&M MANUALS, AND TESTING AND BALANCING REPORTS ARE TO BE PROVIDED, FOR ENGINEER'S REVIEW, PRIOR TO REQUEST FOR COMPLETION CERTIFICATES. IN ADDITION, AND ALSO PRIOR TO REQUEST FOR COMPLETION CERTIFICATES, ALL PUNCH LIST ITEMS MUST BE COMPLETED TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR MUST VERIFY THAT ALL SEQUENCES OF OPERATIONS AND CONTROLS HAVE BEEN INCORPORATED AND ALL SYSTEMS AND EQUIPMENT ARE WORKING PER THE SPECIFIED SEQUENCES OF OPERATIONS. A BLANK CONTRACTOR'S CERTIFICATE FORM CAN BE FURNISHED BY RDK ENGINEERS UPON REQUEST. FINAL INSPECTION BY THE ENGINEER SHALL BE CONDUCTED AFTER RECEIPT OF THE CERTIFICATE OF COMPLETION. PREMATURE REQUESTS FOR FINAL INSPECTIONS THAT REQUIRE REINSPECTION OF DEFICIENT ITEMS WILL RESULT IN BACK CHARGES OF THE COSTS ASSOCIATED WITH THE REINSPECTION.

21. ELECTRICAL WORK: ALL ELECTRICAL APPARATUS AND CONTROLS FURNISHED AND THE INSTALLATION THERE OF, AS A PART OF PLUMBING WORK, SHALL CONFORM TO APPLICABLE REQUIREMENTS UNDER THE ELECTRICAL DRAWINGS AND SPECIFICATION.

PART 2 - PRODUCTS

1. PLUMBING FIXTURES AND TRIM: REFER TO ARCHITECTURAL AND PLUMBING DRAWINGS FOR QUANTITIES, LOCATIONS AND MOUNTING HEIGHTS OF FIXTURES PROVIDED UNDER THIS SECTION. FIXTURE TRIM, TRAPS, FAUCETS, ESCUTCHEONS AND WASTE PIPES EXPOSED TO VIEW IN THE FINISHED SPACES SHALL BE I.P.S. BRASS WITH POLISHED CHROMIUM PLATING OVER NICKEL FINISH.

2.PIPE MATERIALS:

a) SERVICE:
PIPE MATERIAL:
TYPE L HARD DRAWN COPPER TUBING, ASTM B88
FITTING MATERIAL:
WROUGHT COPPER AND BRONZE SOLDER JOINTS

JOINTS: 95-5 LEAD-FREE SOLDER

d) SERVICE: ABOVE GROUND, SANITARY WASTE, VENT, AND

d) SERVICE:

ABOVE GROUND, SANITARY WASTE, VENT, AND STORM DRAINAGE

PIPE MATERIAL:

DWV COPPER TUBE, OR TYPE M COPPER FOR DRAINAGE

ONLY, CAST IRON NO HUB (CISPI301)

WROUGHT COPPER DRAINAGE FITTINGS TO SUIT PIPE

MATERIAL, CAST IRON

JOINTS:

SOLDER WITH 95-5 LEAD FREE SOLDER, STAINLESS

STEEL COUPLING WITH NEOPRENE GASKET

3.VALVES:

a) DOMESTIC WATER — BALL VALVES SHALL BE FULL PORT WITH STAINLESS STEEL STEM AND BALL, BRONZE BODY, SOLDER JOINT AND EQUAL TO APOLLO 77—200 SERIES FOR PIPING UP TO 2" SIZE.

4.INSULATION:

INSULATION SYSTEM.

a) ALL INTERIOR COLD WATER, TEMPERED WATER, TEMPERED WATER RETURN, HOT WATER AND HOT WATER RETURN PIPING SHALL BE INSULATED WITH A PREFORMED FIBERGLASS INSULATION WHICH MEETS THE PROPERTY REQUIREMENTS OF ASTM C547, "STANDARD SPECIFICATION FOR MINERAL FIBER PIPE INSULATION". PIPE INSULATION SHALL HAVE A WHITE, FACTORY APPLIED, FIRE RETARDANT, REINFORCED VAPOR BARRIER JACKET.

1.INSULATION SHALL BE CONTINUOUS THROUGH SLEEVES AND HAVE A THICKNESS OF 1—INCH.
2.ENDS OF INSULATION AT TERMINATION POINTS SHALL BE SEALED TO THE PIPE WITH A PRE—MOLDED PVC TYPE FITTING. PIPE FITTINGS AND VALVES SHALL BE PROVIDED WITH PRE—MOLDED PVC COVERS WITH FIBERGLASS INSERTS.

3.PIPE INSULATION WITHIN 6'-0" OF FINISHED FLOOR, IN EXPOSED INSTALLATIONS, SHALL BE PROVIDED WITH 20 MIL. PVC CONTINUOUS COVERS IN ADDITION TO THE VAPOR BARRIER JACKET. FITTINGS AND SEAMS SHALL BE SOLVENT WELDED.

4.INSULATION SHALL BE MANUFACTURED BY OWENS—CORNING FIBER GLASS CORP., KNAUF FIBERGLASS, CERTAINTEED OR EQUAL.

b) HANDICAPPED ACCESSIBLE LAVATORIES AND SINKS

1. INSULATION OF WASTE, TRAP, HOT AND COLD AND TEMPERED WATER SUPPLIES AT ALL HANDICAPPED ACCESSIBLE LAVATORIES AND SINKS SHALL BE FULLY MOLDED, PAINTABLE AND FLEXIBLE VINYL

5. HANGERS, ANCHORS, CLAMPS AND INSERTS:

a) PROVIDE STEEL BAND HANGERS FOR PIPING 4" AND SMALLER. PIPING LARGER THAN 4" SHALL BE SUPPORTED WITH CLEVIS TYPE HANGERS. SUPPORT PIPING FROM BUILDING STRUCTURE TO MAINTAIN REQUIRED GRADE AND PITCH OF PIPE LINES, PREVENT VIBRATION, SECURE PIPING IN PLACE. SECURE HANGERS TO INSERTS WHERE PRACTICAL. HANGER RODS SHALL HAVE MACHINE THREADS.

b) HANGER RODS SHALL BE CONNECTED TO BEAM CLAMP, UL—APPROVED CONCRETE INSERTS OR PHILLIPS OR APPROVED EQUAL EXPANSION SHIELDS. RAMSET OR POWER DRIVEN INSERTS WILL NOT BE ALLOWED.

c) HANGER SPACING SHALL MEET REQUIREMENTS OF STATE AND LOCAL CODES.

d) ALL HANGERS, RODS AND CLAMPS INSTALLED IN EXTERIOR LOCATIONS OR SUBJECT TO A CORROSIVE ATMOSPHERE SHALL BE ELECTRO—GALVANIZED COATED.6. SLEEVES AND PENETRATIONS:

6. SLEEVES AND PENETRATIONS:

a) PIPE SLEEVES THROUGH FIRE—RATED CONSTRUCTION SHALL BE SCHEDULE 40 STEEL. SLEEVES THROUGH PARTITIONS AND NON—FIRE—RATED CONSTRUCTION SHALL BE 22 GAUGE GALVANIZED STEEL WITH LOCK LONGITUDINAL SEAMS.

b) FIRE STOP PENETRATION SEALS IN FIRE—RATED CONSTRUCTION SHALL BE CERAMIC FIBRE, MINERAL FIBRE, OR SILICONE FOAM. PROVIDE MINERAL FIBRE BOARD, MATTING OR PUTTY FOR DAMMING AND FORMING. FINISH SEALS FLUSH TO WALL SURFACE AND FILL GAPS WITH SILICONE ADHESIVE SEALANT

c) PACKING FOR SLEEVES THAT DO NOT REQUIRE MAINTENANCE OF FIRE RATING SHALL BE OAKUM, SILICATE FOAM, CERAMIC FIBRE OR MINERAL FIBRE WITH APPROVED SEALANT. PACK OR FOAM TO WITHIN ONE INCH OF BOTH WALL SURFACES. SEAL PENETRATION PACKING WITH APPROVED CAULKING AND PAINTABLE WATER—PROOF MASTIC SURFACE FINISH OR SILICONE CAULKING.

7.WATER HAMMER ARRESTORS: STAINLESS STEEL WATER HAMMER ARRESTORS SHALL BE INSTALLED ON WATER SUPPLY LINES TO PLUMBING FIXTURES TO CONTROL WATER HAMMER. WATER HAMMER ARRESTORS SHALL BE SIZED AND SELECTED IN ACCORDANCE WITH P.D.I. STANDARD WH201. WATER HAMMER ARRESTORS SHALL BE ZURN Z1700, JAY R. SMITH, JOSAM OR APPROVED EQUAL. PROVIDE ACCESS PANEL AT WATER HAMMER ARRESTORS, WHERE REQUIRED.

PART 3 - EXECUTION

1.IDENTIFICATION:

a) FURNISH AND AFFIX APPROVED ADHESIVE BANDS IDENTIFYING THE SERVICE AND DIRECTION OF FLOW OF EACH PIPING SYSTEM INSTALLED UNDER THIS WORK.

b) PROVIDE VALVE TAGS ON ALL VALVES. VALVE NUMBERS AND LEGEND ON VALVE TAGS SHALL CORRESPOND TO NUMBERS INDICATED ON RECORD DRAWINGS AND VALVE LIST.

2.TESTING: THE PLUMBING SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLUMBING CODE AND FUEL GAS CODE.

3.MATERIALS AND WORKMANSHIP: MAINTAIN MAXIMUM HEADROOM AT ALL TIMES. DO NOT RUN PIPES EXPOSED UNLESS SHOWN EXPOSED ON DRAWINGS. MATERIAL AND EQUIPMENT SHALL BE NEW AND INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDED BEST PRACTICE SO THAT COMPLETED INSTALLATION SHALL OPERATE SAFELY AND EFFICIENTLY.

4.CONTINUITY OF SERVICES: DO NOT INTERRUPT EXISTING SERVICES WITHOUT OWNER'S APPROVAL.

5.ACCESS: PROVIDE PROPER ACCESS TO EQUIPMENT THAT REQUIRE INSPECTION, REPLACEMENT OR REPAIR. ACCESS PANELS SHALL BE A MINIMUM OF 12" X 12".

6.CLEANING:

a) CLEAN SYSTEMS THOROUGHLY BEFORE TESTING. FIXTURES, EQUIPMENT, PIPE, VALVES AND FITTINGS
 SHALL BE FREE OF GREASE, METAL CUTTINGS, DIRT AND OTHER FOREIGN MATERIAL.
 b) REPAIR DISCOLORATION AND DAMAGE TO PARTS OF BUILDING FINISH AND FURNISHINGS DUE TO

FAILURE TO PROPERLY CLEAN PIPING SYSTEM.

7.DISINFECTION OF WATER SYSTEMS: WATER PIPING SYSTEMS SHALL BE THOROUGHLY DISINFECTED WITH A

SOLUTION CONTAINING NO LESS THAN 50 PARTS PER MILLION OF AVAILABLE CHLORINE. CHLORINATING MATERIALS SHALL BE EITHER LIQUID CHLORINE OR SODIUM HYPOCHLORITE SOLUTION, SHALL BE INTRODUCED INTO THE SYSTEM AND DRAWN TO ALL POINTS IN THE SYSTEM. DISINFECTION SOLUTION SHALL BE ALLOWED TO REMAIN IN SYSTEM FOR 24 HOURS, DURING THIS TIME, VALVES AND FAUCETS SHALL BE OPENED AND CLOSED SEVERAL TIMES. AFTER DISINFECTION, SOLUTION SHALL BE FLUSHED FROM THE SYSTEM WITH CLEAR WATER UNTIL RESIDUAL CHLORINE CONTENT IS NO GREATER THAN 0.2 PARTS PER MILLION.

56 NORTHPORT DRIVE (1361 WASHINGTON AVENUE) PORTLAND, ME

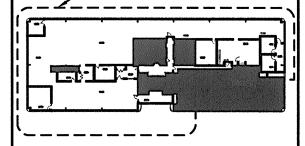




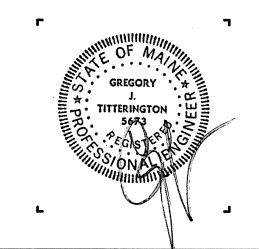
PROJECT SCOPE

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ISSUED FOR PERMIT

Date

12/23/08

ISSUANCES
No. Description

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Checked by:		

PLUMBING SPECIFICATIONS

Drawing Scale:

Job No.

P-600

N.T.S.

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