

PLUMBING SPECIFICATIONS

PART 1.00 – GENERAL REQUIREMENTS

1.1 GENERAL

- A. WORK OF THIS SECTION SHALL CONFORM TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- B. ALL WORK SHALL COMPLY WITH TRUMP BUILDING STANDARDS.
- C. WORK AND MATERIALS SHALL BE PROVIDED AS INDICATED AND HEREIN SPECIFIED AND SHALL BE IN STRICT ACCORDANCE WITH THE LATEST APPLICABLE EDITION OF PLUMBING CODES, BUILDING CODES, STATE CODES, HEALTH CODES AND AUTHORITIES HAVING JURISDICTION.
 - 1. MATERIALS: NEW, UNUSED, BEST OF THEIR RESPECTIVE KINDS AND FREE FROM ALL DEFECTS. QUALITY SHALL CONFORM TO THE LATEST STANDARDS OF ASTM, ASA, ANSI, FEDERAL SPECIFICATIONS AND ALL OTHER ACCEPTABLE STANDARDS.
 - 2. PAY ALL FEES AND OBTAIN ALL PERMITS AND CERTIFICATES OF APPROVAL.
 - 3. COORDINATION OF WORK WITH ALL OTHER TRADES.
 - 4. REMOVE RUBBISH FROM PREMISES AT END OF EACH WORK DAY AND AS OFTEN AS NECESSARY AND AS DIRECTED BY OWNER.

1.2 SCOPE OF WORK

- A. STORM PIPING
- B. INSULATION.
- H. FIRESTOPING
- I. REMOVALS.

1.3 SUBMITTALS

- A. FURNISH, FOR APPROVAL, MANUFACTURER’S TECHNICAL LITERATURE, DRAWINGS AND DIAGRAMS DESCRIBING EACH ITEM SPECIFIED OR ILLUSTRATED.
- B. SUBMIT AS BUILT DRAWINGS
- C. SUBMIT SIGNED AND SEALED DOCUMENTS FOR FILING WITH THE BUILDING DEPARTMENT AND OBTAINING APPROVALS.

1.4 VISITING THE SITE

- A. BEFORE SUBMITTING A BID ON THE WORK, VISIT THE SITE AND FAMILIARIZE WITH ALL VISIBLE EXISTING CONDITIONS. AS A RESULT OF HAVING VISITED THE PREMISES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE WORK AS IT RELATES TO SUCH VISIBLE CONDITIONS.

PART 2.00 – MATERIALS

2.1 PIPE AND FITTINGS

- A. PIPE

SERVICE	MATERIAL	SCHEDULE	DESIGNATION
STORM LEADER ABOVE GROUND	NO-HUB CAST IRON	SERVICE WEIGHT	CISPI-310-78

B. FITTINGS

SERVICE	SIZE	MATERIAL	WEIGHT	TYPE
STORM LEADER ABOVE GROUND	ALL	CAST IRON	SERVICE	NO-HUB CLAMP-ALL 125 OR HUSKY ORANGE SHIELD HD 4000 COUPLING ASSEMBLY

- C. NO-HUB COUPLING: CLAMP ALL HY-TORQ 125 HUSKY SD4000 ORANGE SHIELD, HEAVY DUTY OR APPROVED EQUAL.

2.2 INSULATION

- A. INSULATE ALL STORM WATER PIPING AND FITTINGS
- B. PIPE INSULATION

- 1. 0.4 LB DENSITY FIBROUS GLASS, ONE-PIECE MOLDED SECTIONAL PIPE COVERING, MAXIMUM K FACTOR 0.26 AT 75OF MEAN TEMPERATURE. OWENS-CORNING CORP. OR APPROVED EQUAL.
- 2. JACKETS: FIRE RETARDANT ALL SERVICE OR ALL PURPOSE TYPE. LAMINATE OF VINYL COATED WHITE KRAFT FACING, GLASS REINFORCING AND ALUMINUM FOIL.
- 3. FITTINGS: A PREFORMED ASTM D1784, CLASS 14253-C NEW YORK CITY MEA #7-87.

2.4 HANGERS AND SUPPORTS

- A. SUPPORT PIPING TO SECURE IN PLACE, MAINTAIN REQUIRED PITCH, PREVENT VIBRATION AND PROVIDE FOR EXPANSION AND CONTRACTION.
- B. ALL PIPING SHALL BE INDEPENDENTLY SUPPORTED FROM STRUCTURE. DO NOT HANG PIPES FROM METAL DECKS, OTHER PIPES OR DUCTWORK. SUSPEND FROM CONCRETE SLABS UNLESS OTHERWISE REQUIRED BY BUILDING STANDARDS.
- C. HANGER SYSTEM SHALL NOT PENETRATE WATERPROOFING.
- D. REPAIR ALL DAMAGED OR REMOVED FIREPROOFING.
- E. FOR GROUPS OF PIPING, TRAPEZE HANGERS ARE ACCEPTABLE.
- F. CHAIN, STRAP, PERFORATED BAR AND WIRE HANGERS ARE NOT PERMITTED.
- G. HANGERS AND SUPPORTS SHALL BE AS MANUFACTURED BY GRINNELL OR APPROVED EQUAL.
- H. SUSPENDED HORIZONTAL PIPING

- 1. HEAVY IRON HINGED TYPE, GRINNELL CLEVIS NO. 260.
- 2. PARALLEL LINES OF PIPING: TRAPEZE HANGERS OF ANGLES BOLTED BACK TO BACK, OR CHANNELS.
- 3. SUSPENSION: STEEL FISHPLATES, CANTILEVER BRACKETS OR OTHER APPROVED METHODS.
- 4. METAL COVERING SHIELDS ON HANGERS FOR INSULATED PIPING: 180 DEGREE ARC, GALVANIZED, 18 USSG; 12” LONG FOR PIPE UP TO 3” SIZE.
- 5. SPACING

- A. NO-HUB CAST IRON: EVERY 5 FT. AND AT EVERY FITTING OR JOINT.

2.5 SLEEVES, ESCUTCHEONS AND FIRESAFING

A. SLEEVES

- 1. PROVIDE SLEEVES FOR ALL PIPING PASSING THROUGH WALLS AND FLOORS. SLEEVE DIAMETER TO BE LARGE ENOUGH TO ACCOMMODATE INSULATED PIPING. SLEEVES TO EXTEND 2” ABOVE FINISHED FLOORS.
- 2. SLEEVES THROUGH NON-BEARING AND NON-WATERPROOF WALLS: 18 GAUGE GALVANIZED SHEET METAL.
- 3. SLEEVES THROUGH BEARING WALLS AND FLOORS NO WATER-PROOFED SCHEDULE 40 GALVANIZED STEEL PIPE.
- 4. SLEEVES THROUGH WATERPROOFED SLABS: J.R. SMITH NO. 1720. ADD CLAMPING COLLAR AND 4 LB. LEAD FLASHING WHERE CONSTRUCTION HAS MEMBRANE.

- B. ESCUTCHEONS: DEEP TYPE CAST IRON OR CAST BRASS WITH SET SCREW OR ALL PIPING AT WALL AND PARTITION, CEILING AND FLOOR SURFACES. CHROME PLATED IN FINISHED AREAS.

- C. FIRESTOPPING: SEAL OFF ANNULAR SPACE OF OPENINGS BETWEEN PIPE AND SLEEVE AND AROUND PIPING AT EACH FLOOR SLAB AND AT FIRE WALLS WITH U.L. LISTED 3M BRAND FIRE BARRIER SEALING SYSTEM. CAULK: CP25; PUTTY: 303.

PART 3.00 – EXECUTION

3.1 CONCEALED PIPING

- A. ALL PIPING INSTALLED IN FINISHED AREAS SHALL BE COMPLETELY CONCEALED WITHIN HUNG CEILINGS, FURRING, SOFFITS, PIPE SPACES, ETC.
- B. ALL PIPING, ETC. SHALL BE COMPLETELY TESTED AND APPROVED BY ALL AUTHORITIES HAVING JURISDICTION BEFORE ANY CONCEALMENT BEGINS.

3.2 ALTERATION WORK

- A. ALL EQUIPMENT, PIPING, PLUMBING FIXTURES, ETC. TO BE REMOVED SHALL BE DISPOSED OF, TURNED OVER TO OR SALVAGED AS DIRECTED. THEY SHALL NOT BE REMOVED FROM THE PREMISES WITHOUT APPROVAL.
- B. ALL PIPING TO BE REMOVED SHALL BE PROPERLY PLUGGED OR CAPPED SO THAT, UPON COMPLETION OF ALL NEW WORK, ALL ABANDONED PIPING SHALL BE CONCEALED IN FINISHED AREAS.
- C. NO DEAD ENDS SHALL BE LEFT ON ANY PIPING UPON COMPLETION OF JOB.
- D. EXISTING EXPOSED PIPING NOT REUSED AND NOT SPECIFICALLY NOTED OR SHOWN ON DRAWING TO BE ABANDONED SHALL BE COMPLETELY REMOVED.
- E. THE EXISTING SYSTEM SHALL BE LEFT IN PERFECT WORKING ORDER UNTIL COMPLETION OF ALL NEW WORK.
- F. LOCATIONS AND SIZES OF EXISTING PIPING ARE APPROXIMATE. EXACT SIZES AND LOCATIONS OF ALL EXISTING PIPING SHALL BE VERIFIED ON THE JOB.
- G. NO REMOVED EXISTING PIPING, ETC. SHALL BE REUSED.
- H. ALL EXISTING EXPOSED, UNNECESSARY PIPING RELATED TO WORK BEING REMOVED SHALL BE COMPLETELY REMOVED.
- I. DO NOT INTERRUPT ANY OF THE SERVICES OF THE EXISTING BUILDING, NOR INTERFERE WITH THE SERVICES IN ANY WAY WITHOUT EXPRESS PERMISSION OF THE OWNER. SUCH INTERRUPTIONS AND INTERFERENCES SHALL BE MADE AS BRIEF AS POSSIBLE AND ONLY AT THE DESIGNATED TIMES.
- J. UNDER NO CIRCUMSTANCES SHALL WORKMEN BE PERMITTED TO USE ANY PART OF THE BUILDING AS A SHOP, EXCEPT PARTS DESIGNATED FOR SUCH PURPOSES.
- K. REROUTE OR REMOVE ALL EXISTING PIPING EXPOSED TO VIEW WHERE NECESSARY TO AVOID NEW EQUIPMENT, STRUCTURAL OR MASONRY WORK AS REQUIRED BY THE PROPOSED ALTERATIONS.
- L. COORDINATE INSTALATION OF PIPING IN THE CEILING BELOW WITH THE TENANT AND BUILDING MANAGEMENT AS NOT TO INTERRUPT THEIR OPERATION. VERIFY THAT PITCHED DRAINAGE PIPES ARE ARE WITHIN HUNG CEILING. PROVIDE PREMIUM TIME WORK AS REQUIRED.

3.3 TESTING

- A. FURNISH ALL TESTING INSTRUMENTS, GAUGES, PUMPS, AND ALL OTHER EQUIPMENT NECESSARY TO PERFORM TESTS.
- B. ALL TESTS SHALL BE MADE IN THE PRESENCE OF THE REPRESENTATIVES OF THE ARCHITECT, THE OWNER AND THE PLUMBING INSPECTOR. GIVE NOT LESS THAN 5 DAYS NOTICE.
- C. TEST

- 1. DRAINAGE AND VENT PIPING: TEST WITH WATER AT 10 FT. HD.
- 2. DOMESTIC WATER: TEST WITH WATER AT 125 PSI.
- 3. UTILITY CO. REQUIREMENT AND ALL AUTHORITIES HAVING JURISDICTION.

3.5 PIPE INSTALLATION

- A. THE WORD "PIPING" SHALL MEAN ALL PIPES, FITTINGS, NIPPLES, VALVES AND ALL ACCESSORIES CONNECTED THERETO.
- B. MODIFY PIPING INSTALLATION TO SUIT BUILDING CONDITIONS AND TO AVOID INTERFERENCES WITH OTHER TRADES, MAINTAINING ACCESS TO ALL PARTS OF THE PIPING SYSTEMS AND DUCTWORK AND TO MAINTAIN PROPER PITCH.
- C. PROVIDE REDUCING FITTINGS FOR CHANGES IN PIPE SIZE. NO BUSHINGS ARE PERMITTED.
- D. SLOPE LOCAL HORIZONTAL DRAINAGE PIPING AT 1/4" PER FOOT WHERE POSSIBLE.
- E. CHANGES IN DIRECTION OF DRAINAGE PIPING SHALL BE MADE BY USE OF 45 DEGREE WYES, LONG TERM TEE WYES, AND LONG SWEEP QUARTER BENDS.
- F. VENT PIPING SHALL BE GRADED TO DRAIN OUT CONDENSATION.
- G. RUN WATER PIPING FREE OF TRAPS. GRADE AND VALVE FOR COMPLETE CONTROL AND DRAINAGE OF SYSTEM.
- H. PREVENTION OF WATER CONTAMINATION: PROVIDE APPROVED VACUUM BREAKERS, BACKFLOW PREVENTERS AS REQUIRED FOR CONNECTIONS TO HVAC EQUIPMENT, HOSE CONNECTIONS, BELOW RIM CONNECTIONS, WHERE NOTED AND WHERE REQUIRED.
- I. PROVIDE APPROVED WATER HAMMER ARRESTERS FOR QUICK CLOSING VALVES.
- J. CONNECTIONS TO EQUIPMENT WITH FLANGES AND/OR UNIONS.
- K. VALVES SHALL BE INSTALLED SO THAT THEY ARE READILY ACCESSIBLE. ALL VALVES INSTALLED WITHIN CONCEALED SPACES SHALL HAVE ADEQUATELY SIZED ACCESS DOORS.
- L. VALVES SHALL NOT BE INSTALLED WITH THE OPERATING HANDLE POINTING DOWNWARD.
- M. VALVES SHALL BE INSTALLED ON THE ENTIRE SYSTEM, SO LOCATED AS TO GIVE COMPLETE REGULATING CONTROL TO ALL FIXTURES AND EQUIPMENT.
- N. INSTALL DRAIN VALVES AT BASE OF ALL RISERS AND AT LOW POINTS OF PIPING SYSTEM

3.6 CLEANING AND ADJUSTING

- A. BRUSH AND CLEAN WORK PRIOR TO CONCEALING, PAINTING AND ACCEPTANCE.
- B. FLUSH OUT PIPING AFTER INSTALLATION.
- C. ADJUST VALVES AND CONTROL DEVICES.
- D. REMOVE ALL DEBRIS FROM INSIDE AND OUTSIDE OF MATERIALS AND EQUIPMENT.

3.7 GUARANTEES

- A. ALL WORK SHALL BE GUARANTEED TO BE FREE FROM LEAKS OR DEFECTS. ANY DEFECTIVE MATERIALS OR WORKMANSHIP AS WELL AS DAMAGE TO THE WORK OF OTHER TRADES RESULTING FROM SAME SHALL BE REPLACED OR REPAIRED.
- B. THE DURATION OF GUARANTEE SHALL BE FOR A PERIOD OF ONE YEAR FOLLOWING DATE OF ACCEPTANCE OF SYSTEM BY THE OWNER.

4.0 HOLD HARMLESS

- A. TO THE MAXIMUM EXTENT PERMITTED BY LAW, CONTRACTOR HEREBY AGREES TO INDEMNIFY AND HOLD HARMLESS, THE OWNER, ARCHITECT, AND GOLDMAN COPELAND ASSOCIATES ("GCA"), ITS OFFICERS, AGENTS AND EMPLOYEES, FROM ANY AND ALL CLAIMS, JUDGEMENTS, DAMAGES, COSTS, EXPENSES TO WHICH THE OWNER, ARCHITECT, AND GCA MAY BE SUBJECTED, OR WHICH THE OWNER, ARCHITECT, AND GCA MAY SUFFER OR INCUR BY REASON OF ANY LOSS, PROPERTY DAMAGE, BODILY INJURY, WRONGFUL DEATH, ETC., WHICH WAS CAUSED, IN WHOLE OR IN PART, BY ANY ACT, ERROR, OMISSION, OR FAILURE OF CONTRACTOR OR ANYONE EMPLOYED BY CONTRACTOR, IN THE PERFORMANCE OF ITS WORK, OR FROM THE FAILURE TO COMPLY WITH ANY OF THE PROVISIONS OF ITS CONTRACT, OR THE LAW.
- B. IN THE EVENT THE OWNER, ARCHITECT OR GCA IS A PARTY TO ANY ACTION ARISING IN WHOLE OR IN PART OUT OF CONTRACTOR'S SERVICES HEREUNDER, CONTRACTOR AGREES TO INDEMNIFY THE OWNER, ARCHITECT, AND GCA FOR ALL COSTS INCURRED IN DEFENDING SUCH ACTION, INCLUDING BUT NOT LIMITED TO, THE OWNER'S, ARCHITECT'S AND GCA'S ATTORNEY'S FEES, DEFENSE COST AND TIME OF THE OWNER'S, ARCHITECT'S AND GCA'S PERSONNEL IN ASSISTING IN THE DEFENSE OF SUCH ACTION.

Bank Street
College of Education



AUDITORIUM RENOVATION

610 W 112TH STREET
NEW YORK, NY 10025
212.875.4400



STUDIO A



ARCHITECTURE / ENGINEERING / INTERIORS / PRESERVATION

740 BROADWAY, NY, NY 10003
P. 212.420.1160 F. 212.420.1163

MEP ENGINEERS
GOLDMAN COPELAND

520 8th Ave
New York, NY 10018
P. 212.868.4660

OWNER'S REPRESENTATIVE
MACRO CONSULTANTS, INC

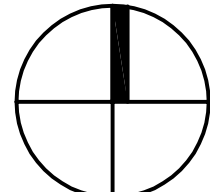
186 Duffield st
Brooklyn, NY 11201
P. 718.222.8123 F. 718.222.8145

ISSUES

	ISSUED FOR CONSTRUCTION	06/20/06
	ISSUED FOR BID	02/08/06
NO.	ITEM	DATE

SIGN OFF:

DATE:



PROJECT NORTH

PLUMBING
SPECIFICATIONS

PROJECT NO. 05092 FILE NO.	DATE 02/08/06 SCALE 1/4"=1'-0"
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THESE PLANS ARE APPROVED ONLY FOR THE WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

Drawing No.

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