

LEGEND	
SYMBOL	DESCRIPTION
	PIPING UP
	PIPING DOWN
	PIPING RISE OR DROP
	BRANCH-TOP CONNECTION
	BRANCH-BOTTOM CONNECTION
	REDUCER
	CLEANOUT
	FLOOR CLEANOUT
	CAPPED PIPE
	METER
	FLOOR DRAIN
	AQUASTAT
	PUMP
	STRAINER
	UNION
	THERMOSTATIC MIXING VALVE
	BALANCING VALVE (BLV)
	GLOBE VALVE (GLV)
	CHECK VALVE (CV)
	GAS COCK, GAS STOP
	BALL VALVE (BV)
	BUTTERFLY VALVE (BFV)
	SOLENOID VALVE
	PRESSURE-REDUCING VALVE (PRV)
	GATE VALVE (GV)
	PRESSURE-RELIEF VALVE (RV)
	BACKFLOW PREVENTER
	FROST FREE HOSE BIBB
	HOSE BIBB
	RECESSED-BOX HOSE BIBB OR WALL HYDRANT
	EXPANSION JOINT
	WATER HAMMER ARRESTER
	VALVE IN RISER
	WALL CLEANOUT (WCO)
	PITCH DOWN OR UP IN DIRECTION OF ARROW
	FLOW IN DIRECTION OF ARROW
	COLD WATER (CW)
	TEMPERED WATER (TW)
	HOT WATER (HW)
	TEMPERED WATER RETURN (TWR)
	HOT WATER RETURN (HWR)
	WASTE PIPING (W,S,OW)
	BELOW SLAB WASTE PIPING
	VENT PIPING (V)
	GAS PIPING (G)
	TO BE REMOVED
	POINT OF CONNECTION
	POINT OF DISCONNECTION

ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
BTU	BRITISH THERMAL UNIT
BTUH	BTU PER HOUR
CLG	CEILING
CO	CLEAN OUT
CODP	CLEAN OUT DECK PLATE
COWP	CLEAN OUT WALL PLATE
CW	COLD WATER
(D)	DEMOLISH
DCV	DOUBLE CHECK VALVE DEVICE
DEG. F	° FAHRENHEIT
DIA	DIAMETER
DN	DOWN
(E)	EXISTING
EA	EACH
FAI	FRESH AIR INTAKE
FD	FLOOR DRAIN
G	GAS
'GC'	GENERAL CONSTRUCTION CONTRACTOR
GPM	GALLONS PER MINUTE
GPH	GALLONS PER HOUR
'H'	HVAC CONTRACTOR
HP	HORSEPOWER
HW	HOT WATER
HWR	HOT WATER RETURN
IN.	INCHES
IN. W.C. (W.G.)	INCHES WATER COLUMN (WATER GAUGE)
KW	KILOWATTS
LBS	POUNDS
M	METER
MAX	MAXIMUM
MIN	MINIMUM
NTS	NOT TO SCALE
OD	OUTER DIAMETER
(P)	PROPOSED
'P'	PLUMBING CONTRACTOR
PD	PRESSURE DROP
RD	ROOF DRAIN
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
SAN / S	SANITARY
ST	STORM DRAIN
TEMP	TEMPERATURE
TYP	TYPICAL
TW	TEMPERED WATER (110°F)
TWR	TEMPERED WATER RETURN
V	VENT
VTR	VENT THROUGH ROOF
W	WASTE

GENERAL PLUMBING NOTES	
1.	PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE PLUMBING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
2.	THE CONTRACTOR, BY PRESENTING THEIR BID FOR THE WORK, REPRESENTS THAT HE/SHE HAS INSPECTED THE SITE AND IS COMPLETELY FAMILIAR WITH THE SCOPE OF WORK AND ALL FIELD CONDITIONS RELATED TO, AND AFFECTING THE WORK AND ITS PERFORMANCE. EXCEPTIONS AFFECTING THE WORK AND ITS PERFORMANCE, OR CONFLICTS BETWEEN FIELD CONDITIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO THE SUBMISSION OF BIDS.
3.	PERFORM ALL WORK IN ACCORDANCE WITH THE 2020 PLUMBING CODE OF NEW YORK STATE (PCNYS), MECHANICAL (MCNYS), ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE (ECCCNYS) CODE AND THE REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION.
4.	APPLY FOR AND SECURE ALL REQUIRED PERMITS AND INSPECTIONS AND PAY ALL COSTS FOR THE SAME.
5.	DO NOT SCALE DRAWINGS. DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE AND GENERAL ARRANGEMENT ONLY. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE.
6.	COORDINATE CONTRACT DOCUMENTS PROJECT REQUIREMENTS, WORK OF OTHERS, AND EQUIPMENT AND MATERIALS PURCHASED WITH FIELD DIMENSIONS, MANUFACTURERS REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE, CONTRACTORS INTENDED MEANS AND METHODS OF INSTALLATION AND CONTRACTORS FABRICATED ITEMS TO ENSURE A PROPER "FIT" AND INSTALLATION. BRING ANY CONFLICTS TO THE ATTENTION OF THE ARCHITECT/ENGINEER DURING THE SUBMITTAL PHASE FOR RESOLUTION PRIOR TO PURCHASING ANY EQUIPMENT.
7.	FIELD VERIFY AND COORDINATE ALL PIPING DIMENSIONS BEFORE FABRICATION. MAKE MODIFICATIONS IN THE LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF OTHER TRADES OR FOR PROPER EXECUTION OF THE WORK. OBTAIN THE APPROVAL OF THE ARCHITECT/ENGINEER FOR MODIFICATIONS.
8.	PROVIDE PRODUCTS OF ONE MANUFACTURER WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF MATERIAL OR EQUIPMENT IS REQUIRED.
9.	INSTALL ALL EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS. REFER TO DETAILS FOR ADDITIONAL PIPING AND EQUIPMENT INSTALLATION REQUIREMENTS.
10.	LOCATE ALL TEMPERATURE, PRESSURE, AND FLOW MEASURING DEVICES IN ACCESSIBLE LOCATIONS WITH STRAIGHT SECTION OF PIPE UP- AND DOWNSTREAM AS RECOMMENDED BY THE MANUFACTURER TO ENSURE MANUFACTURER CERTIFIED ACCURACY.
11.	COORDINATE ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. COORDINATE AND PROVIDE ALL PIPING TRANSITIONS REQUIRED FOR FINAL CONNECTIONS TO EQUIPMENT.
12.	COORDINATE LOCATIONS AND SIZES OF ALL FLOOR, WALL, AND ROOF OPENINGS WITH ALL OTHER TRADES. COORDINATE ALL PIPING AND EQUIPMENT SUPPORTED FROM STRUCTURE WITH GENERAL CONSTRUCTION WORK.
13.	COMPLETE ALL PRESSURE TESTS BEFORE ANY PLUMBING EQUIPMENT, OR PIPING INSULATION IS APPLIED.
14.	MAKE ALL ATTACHMENTS TO JOISTS, TRUSSES, OR JOIST GIRDERS AT PANEL POINTS. PROVIDE BEAM CLAMPS MEETING MSS STANDARDS. THE USE OF C-CLAMPS IS NOT PERMITTED.
15.	PROVIDE CONCRETE PADS A MINIMUM OF 4 INCHES HIGH FOR ALL FLOOR MOUNTED EQUIPMENT. EXTEND PAD 4 INCHES BEYOND THE EQUIPMENT ON ALL SIDES.
16.	INSTALL PIPING, AND CONDUIT CONCEALED IN AREAS HAVING HUNG CEILINGS AND/OR FURRED SPACES UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
17.	REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL ACCESSIBLE FIXTURES. MOUNT ALL SUCH FIXTURES IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
18.	PROVIDE ACCESS DOORS IN WALLS, PARTITIONS, AND CEILINGS AS REQUIRED TO MAKE VALVES, WATER HAMMER ARRESTERS, ETC. READILY ACCESSIBLE.
19.	ARRANGE FOR, COORDINATE, AND MAKE CONNECTION TO ALL SERVICES PROVIDED BY OTHERS. CONFORM TO ALL REQUIREMENTS APPLICABLE TO CONNECTIONS IMPOSED BY UTILITY COMPANIES AND AUTHORITIES HAVING JURISDICTION.
20.	INSTALL FIXTURES AND EQUIPMENT WITH VALVES, UNIONS, ETC. TO ALLOW FOR EASE OF SERVICE AND/OR REMOVAL.
21.	PROVIDE A CLEANOUT AT THE BASE OF WASTE AND VENT STACKS WITH FINISHED WALL PLATE IN FINISHED WALLS.
22.	FURNISH AND INSTALL WATER PRESSURE REDUCING VALVE AND PRESSURE RELIEF VALVE IN ACCORDANCE WITH THE PLUMBING CODE OF NEW YORK STATE ON ALL INCOMING DOMESTIC WATER SYSTEMS IN EXCESS OF 80 P.S.I.G.
23.	SLOPE ALL VENT PIPING TO DRAIN BACK TO THE DRAINAGE SYSTEM.
24.	FLUSH AND DISINFECT ALL DOMESTIC POTABLE WATER PIPING AND TEST THE WATER IN ACCORDANCE WITH THE PLUMBING CODE OF NEW YORK STATE. PROVIDE CERTIFICATE OF PERFORMANCE AND LABORATORY TEST REPORT TO LOCAL AUTHORITIES HAVING JURISDICTION AND OBTAIN THEIR APPROVAL.
25.	PROVIDE WATER HAMMER ARRESTORS AT ALL QUICK CLOSING FIXTURE VALVE LOCATIONS.
26.	ALL PIPING, VALVES AND FITTINGS USED FOR POTABLE WATER SHALL BE NSF 61/372 COMPLIANT AND BE TESTED FOR LOW LEAD.
27.	ANY PENETRATIONS THROUGH AIR BARRIER SHALL BE SEALED AS PER 2020 BCNYS AND COMMERCIAL PROVISIONS.
28.	ALL PIPING IN PLENUM SPACES SHALL BE CAST IRON FOR SANITARY, STORM, VENT SYSTEMS, AND COPPER PIPING FOR DOMESTIC SYSTEMS, AND STEEL PIPING FOR GAS SYSTEMS. NO PLASTIC PIPING ALLOWED.
29.	HOT WATER TEMPERATURE FOR ALL PUBLIC HAND WASHING FIXTURES SHALL BE TEMPERED TO A MAXIMUM TEMPERATURE OF 110 DEGREES F.
30.	ALL FIXTURES SHALL MEET THE WATER CONSERVATION REQUIREMENTS LISTED IN THE TABLE 604.4 OF THE 2020 PLUMBING CODE OF NEW YORK STATE.
31.	ALL FIXTURES THAT HAS THE ABILITY TO HAVE A HOSE CONNECTED TO IT, OR DIRECT CONNECTED FIXTURES, SHALL HAVE A BACKFLOW PREVENTION DEVICE ON THE FAUCET, VACUUM BREAKER (ASSE 1052 AND ASME A112.21.3).
32.	ALL SANITARY FITTINGS SHALL BE "WYE" TYPE AND SHALL FOLLOW THE DIRECTION OF FLOW.
33.	IN THE EVENT THAT THERE IS A DISCREPANCY BETWEEN DESIGN PLANS, RISER DIAGRAMS, AND/OR SPECIFICATIONS CONCERNING PIPE SIZES, FIXTURES, AND/OR EQUIPMENT, THE MOST STRINGENT REQUIREMENTS SHALL BE APPLIED TO THE PROJECT.
34.	FIRE STOP ALL OPENINGS IN FIRE RATED CONSTRUCTION FOR PIPING, CONDUIT, ETC.
35.	MAINTAIN MAXIMUM HEADROOM AND SPACE CONDITIONS AT ALL POINTS. WHERE HEADROOM AND SPACE CONDITIONS APPEAR INADEQUATE, NOTIFY ARCHITECT PRIOR TO PROCEEDING WITH INSTALLATION. MAINTAIN A MINIMUM OF 6'-8" CLEARANCE FROM FINISHED FLOOR TO UNDERSIDE OF PIPES, CONDUITS, SUSPENDED EQUIPMENT, ETC., THROUGHOUT ACCESS ROUTES IN MECHANICAL ROOMS.
36.	CORE DRILL ALL PENETRATIONS THROUGH CONCRETE FLOORS, WALLS, AND FOOTINGS.
37.	INSTALL LINK SEAL TYPE PROTECTION FOR WATER RESISTANT SEALS AT ALL SLAB AND BELOW GROUND WALL FOOTING PENETRATIONS.
38.	COVER ALL COPPER PIPING BELOW SLAB WITH "ARMAFLEX" TYPE INSULATION.

ENERGY NOTES

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE NOTES: STATEMENT OF COMPLIANCE:

TO THE BEST OF MY KNOWLEDGE, AND PERSONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 NEW YORK STATE ENERGY CONSERVATION CODE (ECCCNYS).

1. SERVICE WATER HEATING EQUIPMENT PERFORMANCE EFFICIENCY:
 - 1.1. WATER HEATING EQUIPMENT AND HOT WATER STORAGE TANKS SHALL MEET THE REQUIREMENTS OF TABLE C404.2 IN THE 2020 ECCCNYS. (ECCCNYS C404.2)
 - 1.2. SERVICE WATER HEATING SHALL BE COMMISSIONED AND COMPLETED IN ACCORDANCE WITH SECTION C408.2 OF THE 2020 ECCCNYS.
2. TEMPERATURE CONTROL:
 - 2.1. SERVICE WATER HEATING EQUIPMENT SHALL BE PROVIDED WITH CONTROLS ALLOWING A SETPOINT OF 110°F AND 90 °F FOR OTHER OCCUPANCIES. PUBLIC REST ROOM LAVATORIES SHALL HAVE A MAXIMUM OUTLET TEMPERATURE OF 110°F.
 - 2.2. WHERE WATER HEATING EQUIPMENT SERVING NONCIRCULATING SYSTEMS IS NOT SUPPLIED WITH INTEGRAL HEAT TRAPS, HEAT TRAPS SHALL BE PROVIDED ON THE SUPPLY AND DISCHARGE PIPING. (ECCCNYS C404.3)
3. PIPE INSULATION:
 - 3.1. AUTOMATIC CIRCULATING HOT WATER SYSTEM PIPING SHALL BE INSULATED WITH 1 INCH OF INSULATION WITH A CONDUCTIVITY NOT EXCEEDING 0.27 BTU PER INCH, OR THE INSULATION REQUIREMENTS, WHICHEVER IS GREATER. THE FIRST 8 FT OF PIPING IN NONCIRCULATING SYSTEMS WITH EQUIPMENT WITHOUT INTEGRAL HEAT TRAPS SHALL BE INSULATED WITH 0.5 INCH OF MATERIAL HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 BTU PER INCH, OR THE INSULATION REQUIREMENTS, WHICHEVER IS GREATER. (ECCCNYS C404.5)
 - 3.2. ALL PIPING TO BE INSULATED WITH 0.21-0.28 CONDUCTIVITY
 - 3.3. COLD WATER PIPING - ALL SIZES - 1-INCH INSULATION, A.S. JACKET.
 - 3.4. STORM DRAINAGE PIPING ALL HORIZONTAL RUNS AND DRAIN BODY - MINIMUM 1-INCH INSULATION, A.S. JACKET.
 - 3.5. HOT WATER PIPING (140°F) AND TEMPERED WATER PIPING (110°F)
 - 3.5.1. PIPE SIZE: < 1" INSULATION: 1"
 - 3.5.2. PIPE SIZE: 1" TO < 1-1/2" INSULATION: 1"
 - 3.5.3. PIPE SIZE: 1-1/2 TO < 4" INSULATION: 1.5"
 - 3.5.4. PIPE SIZE: 4" TO < 8" INSULATION: 1.5"
4. HOT WATER SYSTEM CONTROLS:
 - 4.1. CIRCULATING HOT WATER SYSTEM PUMPS OR HEAT TRACE SHALL BE ARRANGED TO BE TURNED OFF EITHER AUTOMATICALLY OR MANUALLY WHEN THERE IS LIMITED HOT WATER DEMAND. READY ACCESS SHALL BE PROVIDED TO THE OPERATING CONTROLS. (ECCCNYS C404.6)
5. PIPE VOLUME AND MAXIMUM LENGTHS
 - 5.1. PER SECTION OF C404.5.1 OF THE 2020 ECCCNYS, ALL MAXIMUM PIPE LENGTHS FROM FIXTURES SHALL COMPLY WITH THE MAXIMUM PIPE LENGTHS ON THE CHART BELOW. CONTRACTOR TO ENSURE HOT WATER RETURN PIPING IS INSTALLED AS PER PLANS AND THAT THESE LENGTHS ARE MAINTAINED.

NOMINAL PIPE SIZE (INCHES)	VOLUME (LIQUID OUNCES PER FOOT LENGTH)	MAXIMUM PIPING LENGTH (FEET)	
		PUBLIC LAVATORY FAUCETS	OTHER FIXTURES AND APPLIANCES
1/4"	0.33	6	50
5/16"	0.5	4	50
3/8"	0.75	3	50
1/2"	1.5	2	43
5/8"	2	1	32
3/4"	3	0.5	21
7/8"	4	0.5	16
1"	5	0.5	13
1-1/4"	8	0.5	8
1-1/2"	11	0.5	6
2" OR LARGER	18	0.5	4

LEAD FREE NOTE

1. ALL FAUCETS, FITTINGS, AND VALVES MUST COMPLY WITH NSF 61 AND ANSI / NSF 372 FOR LOW LEAD PERCENTAGE
2. CONTRACTOR SHALL BE RESPONSIBLE TO DEMONSTRATE COMPLIANCE WITH THE NYS DEPARTMENT OF HEALTH LEAD IN WATER REGULATION (10 NYCRR 67-4).
3. AT THE CONCLUSION OF NEW PLUMBING WORK, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE SERVICES OF A THIRD PARTY NYS LICENSED ENVIRONMENTAL TESTING LABORATORY TO PROVIDE LEAD TESTING AT ALL NEW LAVATORIES, SINKS, DRINKING FOUNTAINS AND ALL OTHER FIXTURES WHERE WATER MAY BE CONSUMED FOR DRINKING. TWO COPIES OF THE REPORT MUST BE SUBMITTED, ONE COPY TO THE ENGINEER AND THE OTHER ONE TO THE OWNER.


DEMOLITION NOTES

GENERAL

1. PRIOR TO PROPOSAL SUBMISSION, THIS CONTRACTOR SHALL VISIT THE SITE TO REVIEW THE EXISTING CONDITIONS ASSOCIATED WITH THE SCOPE OF WORK AND ADJACENT AREAS TO ASCERTAIN THE DIFFICULTIES WHICH WILL AFFECT THE EXECUTION OF THE WORK OF THIS CONTRACT.
2. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT THE ABOVE SITE EXAMINATION HAS BEEN MADE AND LATER CLAIMS WILL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAD SUCH AN EXAMINATION BEEN MADE.
3. ALL DEMOLITION WORK SHALL BE IN COMPLIANCE WITH ALL FEDERAL AND NEW YORK STATE APPLICABLE BUILDING AND LIFE AND SAFETY REGULATIONS.

SCOPE OF WORK

1. DEMOLITION WORK SHALL INCLUDE ALL MATERIALS, LABOR, EXTENSIONS, CONNECTIONS, CUTTING, REPAIRING, ADAPTING AND OTHER PLUMBING WORK REQUIRED TO MAINTAIN SERVICE PENDING THE COMPLETION OF THE PERMANENT WORK. COORDINATE THE EXTENT OF DEMOLITION WORK WITH THE ARCHITECT AND BUILDING MANAGEMENT.
2. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CONSTRUCTION DEBRIS AND UNWANTED MATERIAL OFF SITE IN ACCORDANCE WITH CONTRACT SPECIFICATIONS.
3. THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE ADJOINING SURFACES OUTSIDE THE CONTRACT AREA OR SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE TO EXISTING CONDITIONS SURFACE DAMAGED DURING CONSTRUCTION INCLUDING PATCHING AND PAINTING AS REQUIRED AND DEEMED NECESSARY BY THE ARCHITECT.
4. ALL PLUMBING WORK REQUIRED TO REMAIN BUT INTERFERING WITH PROPOSED NEW PLUMBING (AS WELL AS ELECTRICAL, MECHANICAL AND GENERAL CONSTRUCTION WORK) SHALL BE RELOCATED AND RECONNECTED USING MATERIALS CONFORMING TO STANDARDS OF THIS CONTRACT.
5. REMOVE ALL FIXTURES AS NOTED ON THE ARCHITECTURAL PLANS. PROVIDE TEMPORARY CAPS FOR HOT, COLD AND SANITARY CONNECTIONS DURING NEW CONSTRUCTION.
6. REMOVE BASE BUILDING PIPING AS INDICATED BELOW:
 - 6.1. REMOVE ALL ABANDONED BASE BUILDING PIPING BACK TO THE EXISTING WET COLUMN AND/OR SHAFTS, OR AS NOTED ON DRAWINGS.
 - 6.2. CONTRACTOR TO CONTACT BUILDING MANAGEMENT AND TENANT REGARDING REMOVAL SCOPE OF WORK TO MAINTAIN CONTINUITY OF ALL SERVICES TO ALL TENANTS WHO ARE TO REMAIN OPERATIONAL AND NOT BE AFFECTED BY DEMOLITION WORK.
 - 6.3. ALL EXISTING BUILDING VALVES FOR DOMESTIC WATER MAINS AT SHAFTS ARE TO REMAIN.
7. PROVIDE ADDITIONAL SUPPORT FOR ALL EXISTING PIPING TO REMAIN WHICH ARE AFFECTED BY DEMOLITION OF EXISTING CEILING AND PARTITIONS.
8. COORDINATE WITH OWNER TO DETERMINE WHETHER REMOVED EQUIPMENT IS TO BE TURNED OVER TO THE OWNER.



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[illegible]

The image shows the official seal of the State of New York, which features a central shield with a sun rising over mountains and a river, flanked by a Native American holding a bow and arrow, and a figure representing Liberty. The shield is encircled by the words "STATE OF NEW YORK" and "1784". Below the shield is a scroll with the motto "EXCELSIOR". The seal is overlaid with a circular registration stamp. The outer ring of the stamp reads "NEW YORK STATE" at the top and "PROFESSIONAL ENGINEER" at the bottom. Inside this ring, the text "JONATHAN R. MURATORE, P.E." is written in a large, bold font. Below the name, the number "036440" is printed. At the bottom of the stamp, the words "LICENSE" and "REGISTERED" are visible on either side of a central vertical line.

CLIENT

**WHITE PLAINS CITY
SCHOOL DISTRICT**

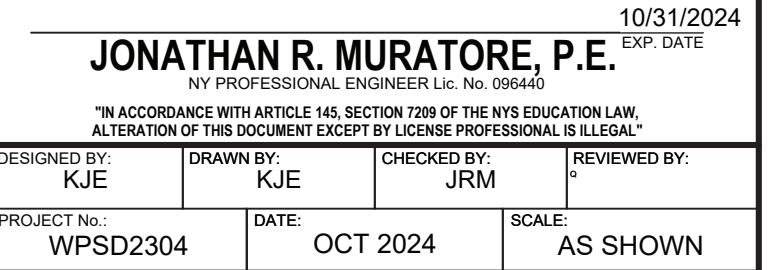
**UPGRADES AT CHURCH STREET
ELEMENTARY SCHOOL**



**295 Church St
White Plains, NY 10603**

**SED PROJECT CONTROL
66-22-00-01-0-004-021**

CONTRACT	
SINGLE CONTRACT	
STATUS	BID SUBMISSION
SHEET TITLE	
PLUMBING GENERAL NOTES, LEGENDS, AND ABBREVIATIONS	
DRAWING No.	P 001.00

[illegible]

UPGRADES AT RIDGEWAY ELEMENTARY SCHOOL



CONTRACT

SINGLE CONTRACT

STATUS **BID SUBMISSION**

DRAWING No.

P 100.00



1. ALL DEMOLITION WORK SHALL BE IN COMPLIANCE WITH ALL FEDERAL, STATE, AND CITY OF WHITE PLAINS APPLICABLE BUILDING AND LIFE AND SAFETY REGULATIONS.
2. VERIFY IN FIELD EXACT LOCATIONS OF EXISTING HOT WATER AND COLD WATER SUPPLY PIPING, SANITARY, WASTE & VENT PIPING.
3. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CONSTRUCTION DEBRIS AND UNWANTED MATERIAL OFF SITE IN ACCORDANCE WITH CONTRACT SPECIFICATIONS.
4. THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE ADJOINING SURFACES OUTSIDE THE CONTRACT AREA OR SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE TO EXISTING CONDITIONS SURFACE DAMAGE DURING CONSTRUCTION INCLUDING PATCHING AND PAINTING AS REQUIRED AND DEEMED NECESSARY BY THE ARCHITECT.
5. CONTRACTORS SITE ACCESS SHALL BE AS CALLED OUT ON THE ARCHITECTURAL SHEETS. THE CONTRACTOR SHALL ADEQUATELY PROTECT THE WALLS, FLOOR, AND FINISHES FROM DAMAGE DURING THE PROJECT DURATION. THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND RESTORE ALL SURFACES THAT ARE DAMAGED TO THE SATISFACTION OF THE ARCHITECT.
6. THE CONTRACTOR SHALL TAKE CARE AS TO ADEQUATELY PROTECT ALL ADJOINING ROOMS, CLOSETS, CORRIDORS, CRITICAL BARRIERS (DUCTS, VENTS, ETC.), AND OTHER SPACES FROM DUST AND DEBRIS DURING THE DEMOLITION AND INSTALLATION OF THE FLOORING AND PAINTING. THE CONTRACTOR SHALL BE RESPONSIBLE TO WIPE DOWN AND CLEAN ALL AFFECTED ROOMS UPON COMPLETION OF THE PROJECT.
7. ALL EQUIPMENT SHALL BE EXISTING TO REMAIN UNLESS OTHER WISE NOTED AND THUS BE PROTECTED THROUGH THE PROJECT DURATION. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DEFECTIVE OR NON-WORKING EQUIPMENT PRIOR TO WORK STARTING AND FOLLOWING INSTALLATION OF NEW FINISHES. SHALL VERIFY THAT ALL OF THE ITEMS ARE IN PROPER WORKING ORDER UPON COMPLETION.

1. COMPLETELY REMOVE AND DISPOSE OF PLUMBING FIXTURE AND ALL DEVICES USED TO SECURE THIS FIXTURE IN PLACE. WORK SHALL INCLUDE THE REMOVAL OF EXISTING SUPPORT CARRIERS AND TO CUT AND CAP ALL PLUMBING PIPING. PREPARE PIPING FOR RECONNECTION AS NECESSARY. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADEQUATE ACCESS INTO WALLS, CHASES, AND SOFFITS TO ENSURE REMOVAL. UPON INSTALLATION OF NEW FIXTURES, CARRIERS, AND PIPING, THE CONTRACTOR SHALL PATCH ALL ACCESS AREAS AND PREPARE SURFACES FOR NEW FINISHES.
- 1.1 REMOVE AND DISPOSE OF ALL WALL/FLOOR CARRIERS, AND BRANCH PIPING AS NEEDED TO ACCOMMODATE NEW FIXTURE LAYOUTS. SEE ARCHITECTURAL SHEETS FOR NEW FIXTURE LAYOUT.
- 1.2 PRIOR TO THE REMOVALS OF FIXTURES, THE CONTRACTOR SHALL MAKE ALL NECESSARY DISCONNECTS. WORK SHALL INCLUDE SANITARY, HW, CW, HWR AND VENT PIPING. THE CONTRACTORS SHALL SHUT WATER OFF TO THE FIXTURES AND REPLACE ANY DAMAGED VALVES.
- 1.3 REMOVE AND DISPOSE OF ALL PIPING DEEMED OBSOLETE, INCLUDING WATER DISTRIBUTION, SANITARY, VENT, HANGERS, SUPPORTS, STRAPS, FITTINGS, VALVES AND ALL DEVICES USED TO SECURE THEIR PIPING/FITTINGS IN PLACE.
- 1.4 SEAL ALL PIPING PENETRATIONS AND INSTALL FIRE-STOPPING IN ALL RATED WALLS, FLOORS, SOFFITS ETC. OPENING LARGER THAN 1.5x THE DIAMETER OF THE PIPING PASSING THROUGH SHALL BE SEALED WITH NON-SHRINKING EPOXY GROUT.
- 1.5 FLUSH AND SNAKE ALL SANITARY/WASTE LINES INCLUDING FLOOR DRAINS AND CLEANOUTS BACK TO THEIR ASSOCIATED RISERS PRIOR TO THE START OF THE WORK.
2. EXISTING FLOOR SINK BODY TO REMAIN. REPLACE STRAINER AND RAISE/LOWER TO MATCH NEW FINISHED FLOOR HEIGHT.

1. VERIFY IN FIELD EXACT LOCATIONS OF HOT WATER AND COLD WATER SUPPLY PIPING, SANITARY, WASTE & VENT PIPING. REROUTE AND MODIFY EXISTING PLUMBING PIPING AS REQUIRED FOR CONNECTIONS TO NEW AND EXISTING PLUMBING FIXTURES.
2. INSULATE ALL NEW WATER PIPING AND RE-INSULATE ALL EXISTING WATER PIPING WHERE INSULATION IS DAMAGED.
3. ALL 3" & 4" SANITARY PIPING TO BE SLOPED A MINIMUM OF 1/8"/FT. ALL 1-1/2" & 2" SANITARY PIPING TO BE SLOPED A MINIMUM OF 1/4"/FT.
4. CHASE WALL WILL NEED TO BE OPENED TO ALLOW ACCESS TO EXISTING PIPING AND THEN REPAIRED. REFER TO ARCHITECTURAL DRAWINGS FOR MORE DETAIL.

1. PROVIDE INDIRECT 1-1/2" DRAIN FROM DRAIN VALVES ON SERVING LINE HOT FOOD TABLE AND SERVING LINE 2-TIER CERAMIC GLASS SHELF TABLE TO EXISTING FLOOR SINK. MAINTAIN MINIMUM 3" AIR GAP BETWEEN INDIRECT DRAIN AND FLOOR SINK.
2. CONNECT NEW 3/4" HOT WATER PIPING TO NEW UNDERCOUNTER DISHWASHER FROM EXISTING 3 COMPARTMENT SINK 3/4" HOT WATER SUPPLY. 1-1/2" DRAIN FROM DISHWASHER TO EXISTING FLOOR SINK WITH 3" AIR GAP. MODIFY PIPING AS REQUIRED.
3. CONNECT NEW 1/2" CW TO NEW POT FILLER FROM EXISTING CW.

The diagram illustrates the experimental setup. A participant is positioned at a starting point, indicated by a black square, and aims a laser at a target, indicated by a black circle. The target is located on a building, which is represented by a white outline. A north arrow is shown in the top right corner. Below the building, two circular diagrams represent the laser's field of view. The left circle is labeled '2' and 'P 100', and the right circle is labeled '1' and 'P 100'. An arrow points from the target to the right circle.