



	Sheet List				
NO.	DRAWING NAME		ISSUED FOR 90% REVIEW	ISSUED FOR BID	ISSUED FOR REBID
GENERAL					
A000	COVER SHEET	•	•	•	•
LS100	LIFE SAFETY PLAN	•	•	•	•
G001	SIGNAGE PLANS			•	•
ARCHITECTUR	E				
A001	ARCHITECTURAL ABBREVEATIONS, SYMBOLS, AND NOTES	•	•	•	•
A002	TYPICAL NOTES	•	•	•	•
AD101	GROUND FLOOR DEMOLITION & ABATEMENT PLAN	•	•	•	•
AD102	FIRST FLOOR DEMOLITION & ABATEMENT PLAN	•	•	•	•
A101	GROUND FLOOR CONSTRUCTION PLAN	•	•	•	•
A102	FIRST FLOOR CONSTRUCTION PLAN	•	•	•	•
A111	GROUND FLOOR CEILING PLAN	•	•	•	•
A112	FIRST FLOOR CEILING PLAN	•	•	•	•
A201	ELEVATIONS	•	•	•	•
A202	ELEVATIONS	•	•	•	•
A301	WALL SECTIONS	•	•	•	•
A321	SECTIONS DETAILS	•	•	•	•
A401	INTERIOR ELEVATIONS	•	•	•	•
A501	PLAN DETAILS		•	•	•
A502	TYPICAL DETAILS	•	•	•	•
A601	DOOR AND WINDOW SCHEDULES, AND DETAILS	•	•	•	•
A602	PARTITION TYPES & DOOR DETAILS		•	•	•
MECHANICAL					
M001	MECHANICAL COVER PAGE	•	•	•	•
M002	MECHANICAL GENERAL NOTES	•	•	•	•
MD101	MECHANICAL GROUND & FIRST FLOOR DEMOLITION PLANS			•	•
M101	MECHANICALGROUND & FIRST FLOOR PLANS	•	•	•	•
M201	MECHANICAL DETAILS	•	•	•	•
M301	MECHANICAL SCHEDULES	•	•	•	•
M401	MECHANICAL SPECIFICATIONS	•	•	•	•
M402	MECHANICAL SPECIFICATIONS	•	•	•	•
M403	MECHANICAL SPECIFICATIONS	•	•	•	•
M404	MECHANICAL SPECIFICATIONS	•	•	•	•

	Sheet List				
NO.	DRAWING NAME		ISSUED FOR 90% REVIEW		ISSUED FOI REBID
MBING					
	PLUMBING COVER PAGE	•	•	•	•
	PLUMBING SCHEDULES	•	•	•	•
)1	PLUMBING GROUND & FIRST FLOOR DEMOLITION PLANS	•	•	•	•
	PLUMBING GROUND & FIRST FLOOR PLANS	•	•	•	•
	PLUMBING DETAILS	•	•	•	•
)	PLUMBING DETAILS & SPECIFICATIONS	•	•	•	•
CTRICAL	ELECTRICAL COVER PACE		_	_	T _
	ELECTRICAL COVER PAGE	•	•	•	•
:)1	ELECTRICAL ODGUND & FIRST FLOOD DEMOLITION DLANG	•	•	•	•
) [ELECTRICAL GROUND & FIRST FLOOR DEMOLITION PLANS	•	•	•	•
	ELECTRICAL GROUND & FIRST FLOOR POWER PLANS	•	•	•	•
	ELECTRICAL GROUND & FIRST FLOOR LIGHTING PLANS	•	•	•	•
	ELECTRICAL PANEL SCHEDULE	•	•	•	•
	ELECTRICAL DETAILS	•	•	•	•
	ELECTRICAL DETAILS	•	•	•	•
	ELECTRICAL SPECIFICATIONS	•	•	•	•
	ELECTRICAL SPECIFICATIONS	•	•	•	•
				L	l

1923 BUILDING RENOVATION FLOWER PARK

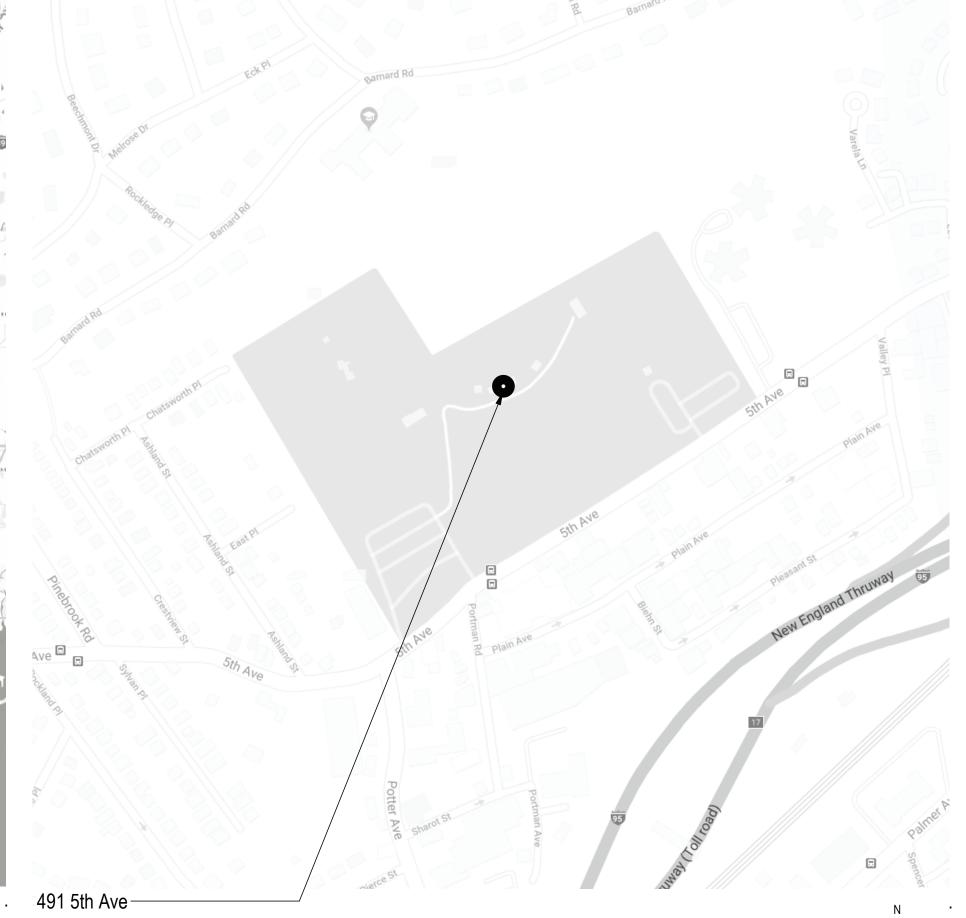
491 5TH AVE, NEW ROCHELLE, NY 10801

ISSUED FOR REBID 2022.01.12

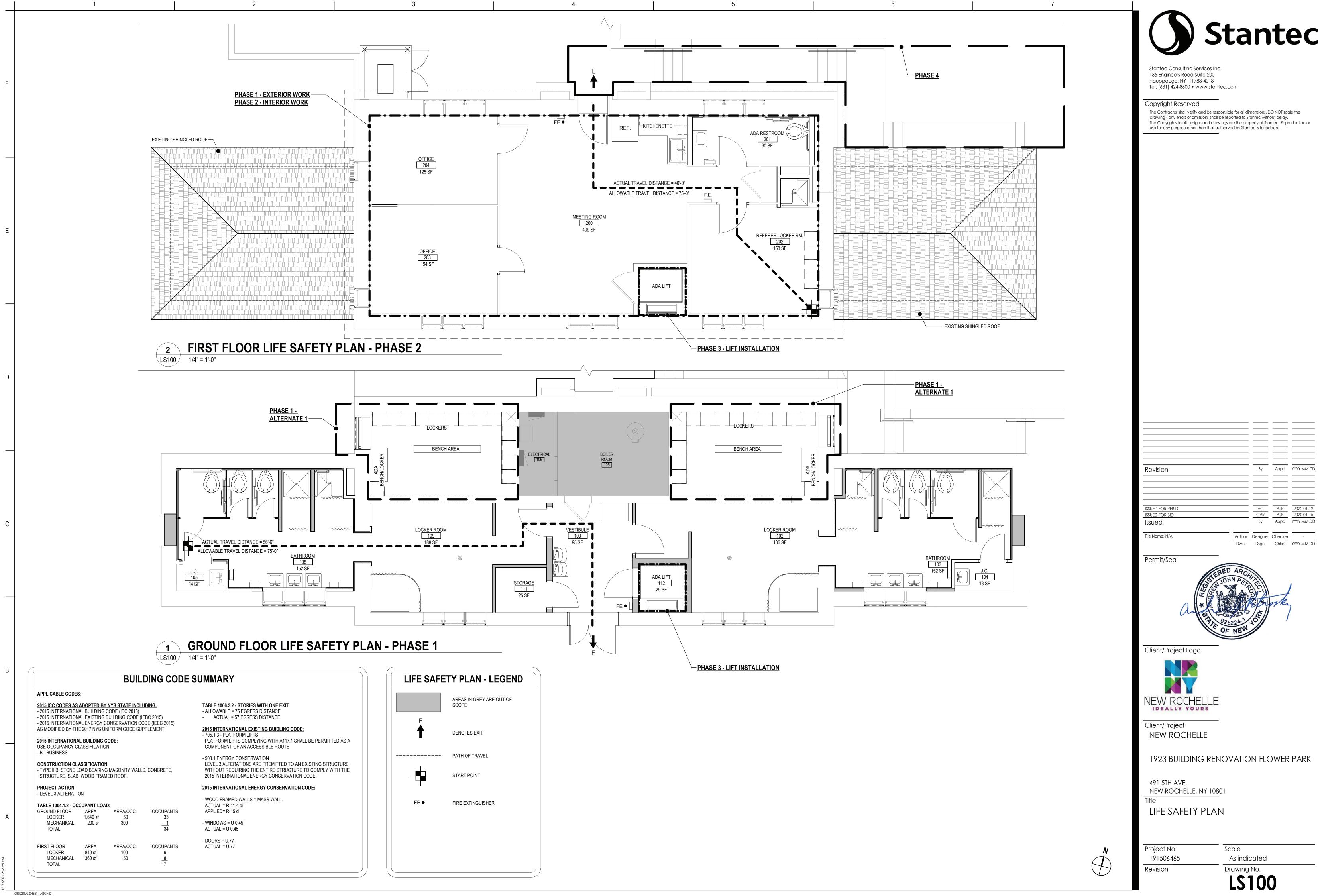
Stantec Project Number: 191506465





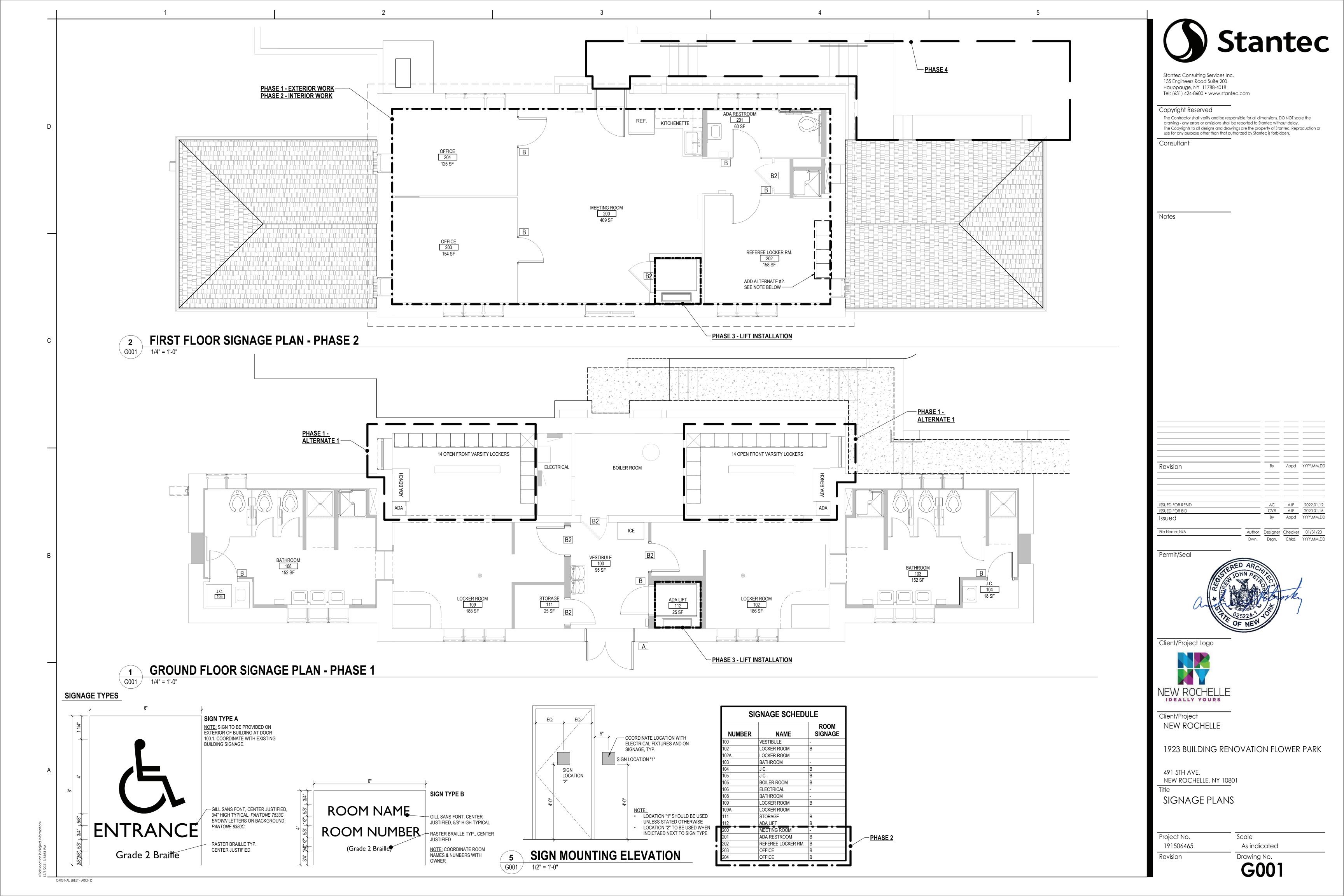


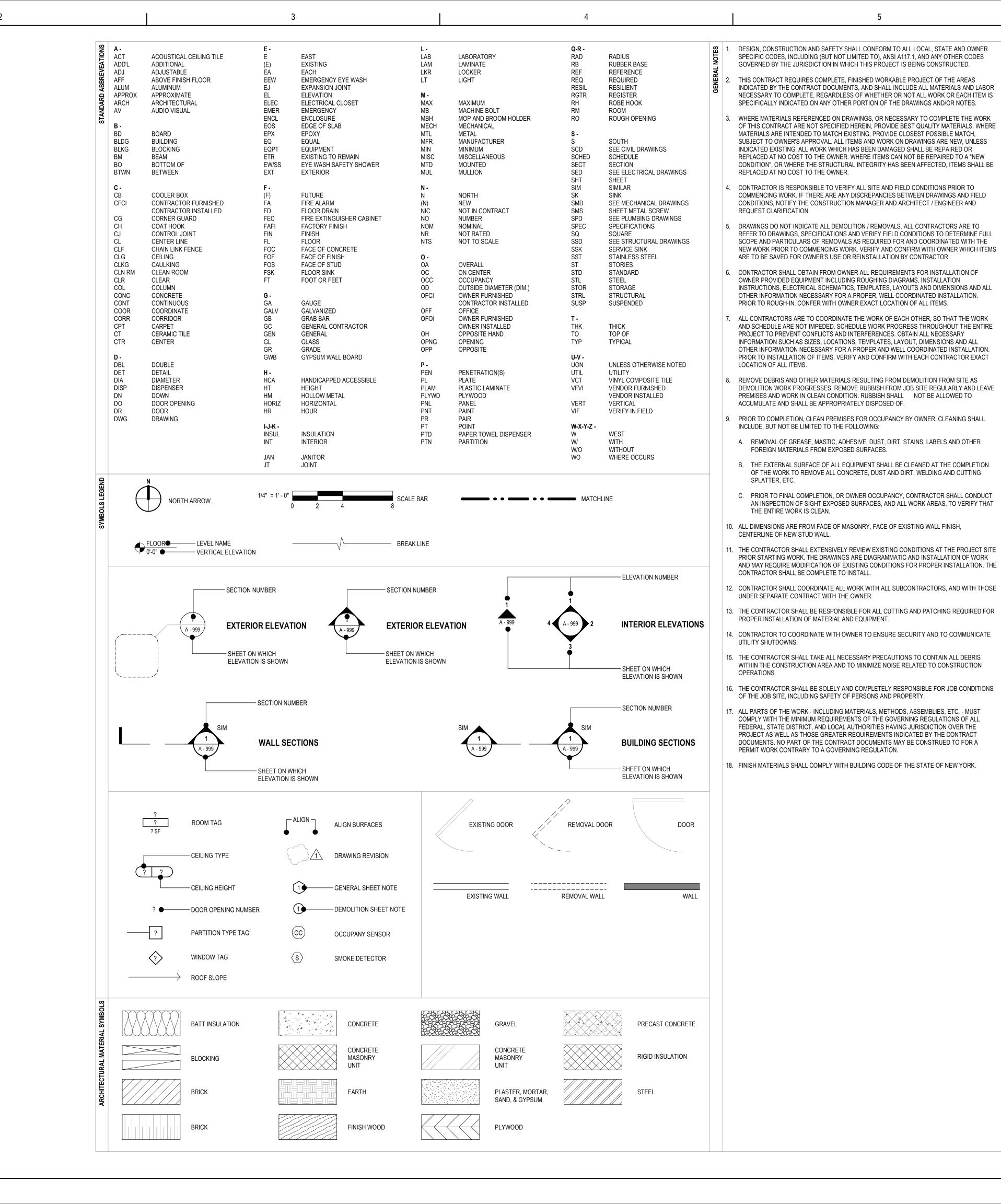




The Contractor shall verify and be responsible for all dimensions. DO NOT scale the

1923 BUILDING RENOVATION FLOWER PARK





ORIGINAL SHEET - ARCH D



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

Notes

Revision

By Appd YYYY,MM.DD

ISSUED FOR REBID

ISSUED FOR BID

Client/Project Logo



Client/Project
NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

ARCHITECTURAL ABBREVEATIONS, SYMBOLS, AND NOTES

Project No. 191506465

Revision

12" = 1'-0"

Drawing No.

Scale

A001

ORIGINAL SHEET - ARCH D

1 - GENERAL NOTES

- A. ALL STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND SPECIFICATIONS.
- B. CONTRACTORS SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, ELEVATIONS, ETC., IN FIELD AND NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION OR SHOP DRAWINGS.
- THE DRAWINGS ARE INTENDED TO REQUIRE AND TO INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT PROPER FOR
- D. ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE AND NATIONAL CODES AND REQUIREMENTS.
- E. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND SAFETY PROCEDURES. THE ARCHITECT/ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS OR THEIR AGENTS OR EMPLOYEES OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK.
- OBSERVE ALL OSHA AND OTHER APPLICABLE SAFETY REQUIREMENTS INCLUDING THE USE OF SAFETY GLASSES, HARD HATS, AND PROTECTION OF AREA WHEN WORKING OVERHEAD. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR CONSTRUCTION SAFETY AT ALL TIMES.
- COORDINATE WORK OF ALL DISCIPLINES (ARCH., STRUCT., ELECT., ETC.) WITH EXISTING CONDITIONS, SPECIAL REQUIREMENTS, CONSTRUCTION SCHEDULE AND OTHER CONTRACTORS PERFORMING WORK AT THE SITE.
- THE CONTRACTOR SHALL DESIGN AND PROVIDE ANY TEMPORARY SHORING, BRACING, ETC., AS NEEDED FOR THE WORK SO AS NOT TO ENDANGER THE STRUCTURAL INTEGRITY OF ANY EXISTING FEATURE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR ANY DAMAGE DONE TO EXISTING FEATURES AS A RESULT OF THIS WORK. DAMAGED ITEMS SHALL BE REPLACED IN KIND AND AT NO ADDITIONAL COST TO THE OWNER.
- SEE SPECIFICATIONS FOR FULL SCOPE OF REQUIREMENTS APPLICABLE TO THIS PROJECT.
- SHOP DRAWINGS: REPRODUCTION OF DESIGN DRAWINGS SHALL NOT BE PERMITTED FOR SHOP DRAWING SUBMISSIONS. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL REVIEW AND PROVIDE REVIEW STAMP ON SHOP DRAWING SUBMISSIONS PRIOR TO SUBMITTAL TO ARCHITECT/ENGINEER INDICATING UNDERSTANDING AND ACCEPTANCE OF SUBMITTAL AND CONFIRMING CONFORMANCE TO PROJECT PLANS/SPECIFICATIONS.

2 - DESIGN CRITERIA

. FLOOR LIVE LOADS

- 50 PSF OFFICE ASSEMBLY AREAS - 100 PSF

B. BUILDING IS DESIGNED USING 2016 NEW YORK UNIFORM CODE SUPPLEMENT TO THE 2015 INTERNATIONAL BUILDING CODE.

A. SUBMITTALS

- a. SUBMIT SHOP DRAWINGS SHOWING FABRICATION, BENDING AND PLACEMENT OF CONCRETE REINFORCEMENT. DETAILING SHALL COMPLY WITH THE ACI DETAILING MANUAL.
- SUBMIT CONCRETE MIX PROPORTIONS WITH SUPPORTING TEST DATA, MATERIAL CERTIFICATIONS AND PRODUCT DATA, TO DEMONSTRATE COMPLIANCE WITH THE REQUIREMENTS BELOW AND THE PROJECT SPECIFICATIONS.
- B. COMPLY WITH THE FOLLOWING CODES AND STANDARDS, LATEST EDITION:
- a. ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
- ACI 305, ACI 306, ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
- c. ACI DETAILING MANUAL, LATEST EDITION.
- d. ACI 347 "RECOMMENDED PRACTICE FOR CONCRETE FORM WORK".
- e. CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE".
- f. ACI 304 "RECOMMENDED PRACTICE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE".

. MATERIALS:

- (A) FOR SLABS-ON-GRADE USE CONCRETE BRICKS OR CHAIRS TO SUPPORT AND MAINTAIN PROPER
- LOCATION OF WWF AND REINFORCING BARS. (B) BOLSTERS, CHAIRS, SPACERS, ETC. SHALL BE WIRE BAR TYPE SUPPORTS COMPLYING WITH CRSI SPECS. FOR EXPOSED TO VIEW SURFACES WHERE SUPPORTS ARE IN CONTACT WITH FORMS, PROVIDE SUPPORTS

- AIR ENTRAINING ADMIXTURE-ASTM C260, CERTIFIED BY MANUFACTURER TO BE COMPATIBLE WITH OTHER REQUIRED ADMIXTURES.
- PROHIBITED ADMIXTURES-CALCIUM CHLORIDE THYOCYANATES OR ADMIXTURES CONTAINING MORE THAN 0.1%
- b. PREPARE DESIGN MIXES FOR EACH TYPE, AND STRENGTH OF CONCRETE BY EITHER LABORATORY TRIAL BATCH
- NORMAL WEIGHT CONCRETE-MINIMUM 28 COMPRESSIVE STRENGTH 4000 PSI. (TYP. UNO) COORDINATE WITH

- b. PROTECT CONCRETE WORK FROM THE DETRIMENTAL EFFECTS OF COLD TEMPERATURES IN COMPLIANCE WITH
- c. PROTECT CONCRETE WORK FROM THE DETRIMENTAL EFFECTS OF HOT WEATHER OR WINDY CONDITIONS IN
- d. PLACE FLOOR SLABS TO SURFACE LEVEL TOLERANCES OF FF20-FL17.

I. CONCRETE FINISHES:

- a. FORMED SURFACES EXPOSED TO VIEW SMOOTH RUBBED FINISH. SLAB FINISH PROVIDE TROWEL FINISH.
- PROVIDE MOISTURE CURE TO SLAB SURFACES FOR 7 DAYS BY EITHER COVERING THE CONCRETE WITH WATER, APPLYING A CONTINUOUS WATER-FOG SPRAY, OR COVERING WITH AN ABSORPTIVE COVER. CHEMICAL CURING COMPOUNDS WILL NOT BE ALLOWED ON FLOOR SLABS.
- THE OWNER WILL EMPLOY A TESTING AGENCY TO PERFORM SAMPLING AND TESTING AND SUBMIT TEST REPORTS.
- K. SAMPLING AND TESTING OF CONCRETE SHALL INCLUDE:
- TESTS WHEN CONCRETE C CONSISTENCY SEEMS TO HAVE CHANGED.
- AIR ENTRAINMENT-ASTM C173 VOLUMETRIC METHOD, OR ASTM C231 PRESSURE METHOD, ONE FOR EACH DAY'S
- c. CONCRETE TEMPERATURE-TEST HOURLY WHEN AIR TEMPERATURE IS 41°F AND BELOW OR WHEN 80°F AND
- COMPRESSION TEST SPECIMENS-ASTM C31-ONE SET OF 6 CYLINDERS FOR EACH COMPRESSIVE STRENGTH TEST. MOLD AND STORE CYLINDERS FOR LABORATORY CURED TEST SPECIMENS. COMPRESSIVE STRENGTH TESTS-ASTM C39-ONE SET FOR EACH DAY'S PLACEMENT EXCEEDING 5 CUBIC YARDS PLUS ADDITIONAL SETS FOR EACH 50 CUBIC YARDS OVER AND ABOVE THE FIRST 25 CUBIC YARDS OF EACH CONCRETE CLASS PLACED IN ONE DAY; TWO SPECIMENS TESTED AT 7 DAYS, TWO SPECIMENS TESTED AT 28 DAYS, AND TWO SPECIMENS RETAINED IN RESERVE FOR LATER TESTING IF REQUIRED.
- e. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF f'c=4000 PSI (TYPICAL UNLESS NOTED)
- f. ALL LAP SPLICES SHALL BE 48 BAR DIAMETERS (TYP. UNO)

4 - MASONRY

- A. SEE STRUCTURAL AND ARCHITECTURAL DRAWINGS FOR LOCATION, SIZE AND SPACING OF REINFORCED MASONRY.
- a. SUBMIT SHOP DRAWINGS FOR FABRICATION, BENDING AND PLACEMENT OF MASONRY REINFORCEMENT COMPLYING WITH ACI DETAILING MANUAL.
- C. SUBMIT DESIGN MIXES FOR EACH TYPE GROUT AT LEAST 15 DAYS PRIOR TO START OF WORK.
- D. MATERIALS
- a. CONCRETE MASONRY UNITS: HOLLOW OR SOLID UNITS ASTM C90. ALL UNITS SHALL BE TYPE I,NORMAL WEIGHT AUTOCLAVED CURED. MOISTURE CONTENT SHALL NOT EXCEED 30% OF MAXIMUM ABSORPTION, AND
- SHRINKAGE SHALL BE LESS THAN 0.35% AS PER ASTM C426. MORTAR: ASTM C270, TYPE S. NO MASONRY CEMENT WILL BE ALLOWED.
- f'm=1,500 psi
- d. REINFORCEMENT BARS: ASTM A615 GRADE 60. e. JOINT REINFORCEMENT: TRUSS TYPE WITH 0.148 INCH DIAMETER
- f. FINE GROUT: ASTM C476.

D. TESTING PROCEDURE:

- E. BLOCKS SHALL BE TESTED PER ASTM C-140 FOR STRENGTH, ABSORPTION AND SIZE.
- STRENGTH OF MASONRY CONSTRUCTION SHALL BE DETERMINED BY UNIT STRENGTH METHOD IN ACCORDANCE WITH ACI 530.1, SPECIFICATION FOR MASONRY STRUCTURES, SECTION 1.4.
- a. GROUT COMPRESSIVE STRENGTH SHALL BE DETERMINED IN ACCORDANCE WITH ASTM C-1019. GROUT SLUMP SHALL BE DETERMINED IN ACCORDANCE WITH ASTM C-143. ONE SET OR MORTAR CUBES (3 EACH) SHALL BE PREPARED EVERY 5000 SQ. FT. OF WALL CONSTRUCTED.
- PROTECT MASONRY WORK FROM DAMAGE DUE TO OTHER WORK AND THE WEATHER AS RECOMMENDED BY NCMA. ALL UNITS SHALL BE LAID WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. SOLID UNITS SHALL BE LAID WITH FULL HEAD AND BED JOINTS, 3/8" THICK. LAY IN FULL RUNNING BOND UNLESS INDICATED
- H. PLACE HORIZONTAL REINFORCING ON FULL MORTAR BED AT 16" O.C. MIN. OR AS INDICATED ON DRAWINGS. VERTICAL REINFORCING IN MASONRY WHERE SHOWN SHALL BE PLACED IN GROUT FILLED CORES AND PROPERLY LOCATED AS INDICATED. SPLICES SHALL BE MINIMUM 48 X BAR DIAMETER.

USE LOW-LIFT GROUTING TECHNIQUES TO FILL CORES, UNLESS HIGH-LIFT GROUTING (VERTICAL PLACEMENT >4'0") IS APPROVED BY THE OWNER'S REPRESENTATIVE IN WRITING.

- J. USE UNIT TEST METHOD, ACCORDING TO ASTM C -140, TO VERIFY MATERIALS PROPERTIES.
- K. ALL EXPOSED MORTAR JOINTS SHALL BE TOOLED.

5 - STRUCTURAL STEEL

- A. STRUCTURAL STEEL WORK INCLUDES ALL STRUCTURAL STEEL TO BE FURNISHED AND ERECTED, BEAMS, COLUMNS, CHANNELS, ANGLES, JOISTS, LINTELS, BEARING PLATES, ETC., AS INDICATED ON THE DRAWINGS.
- B. COMPLY WITH THE FOLLOWING CODES AND STANDARDS:
- a. AISC STEEL CONSTRUCTION MANUAL, ASD, 14TH EDITION
- b. AMERICAN WELDING SOCIETY (AWS) DI.1 "STRUCTURAL WELDING CODE STEEL". c. CURRENT OSHA ERECTION AND FABRICATION REQUIREMENTS.
- a. ANGLES, BARS, PLATES AND CHANNELS: ASTM A-36.
- b. HIGH STRENGTH BOLTS: ASTM A 325. c. WELDS: E70XX ELECTRODES.
- D. ALL STRUCTURAL STEEL SHOP CONNECTIONS SHALL BE WELDED AND ALL FIELD CONNECTIONS SHALL BE HIGH-STRENGTH BOLTED UNLESS SHOWN OTHERWISE.
- E. ALL BOLTS SHALL BE TIGHTENED TO THE SNUG TIGHT CONDITION UNLESS NOTED OTHERWISE. SLIP CRITICAL BOLTS SHALL BE USED AT ALL MOMENT CONNECTIONS.
- F. PROVIDE ANCHORS AND OTHER DEVICES TO BE BUILT INTO CONCRETE WORK.
- G. STEEL SHALL RECEIVE ONE COAT OF PRIMER PAINT, UNLESS NOTED OTHERWISE.
- H. SHOP DRAWINGS: SUBMIT SHOP DRAWINGS INCLUDING COMPLETE DETAILS AND SCHEDULES FOR FABRICATION AND ASSEMBLY OF STRUCTURAL STEEL MEMBERS, PROCEDURES AND DIAGRAMS.

ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED.

- J. ALL CONNECTIONS NOT SPECIFICALLY DETAILED SHALL BE EITHER BOLTED OR WELDED CONNECTIONS.
- K. ALL BOLTED CONNECTIONS SHALL BE (2) 3/4" DIA. A325 BOLTS MINIMUM (TYP. UNO). L. ALL WELDED CONNECTIONS SHALL BE IN 3/16" FILLET WELDED ALL AROUND (TYP. UNO).

ISSUED FOR REBID

File Name: N/A

ISSUED FOR BID

Issued



Appd YYYY.MM.DD

 EW
 EW
 MS
 07/23/19

 Dwn.
 Dsgn.
 Chkd.
 YYYY.MM.DD

Client/Project Logo



Stantec Consulting Services Inc.

Tel: (631) 424-8600 • www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

use for any purpose other than that authorized by Stantec is forbidden.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or

135 Engineers Road Suite 200

Hauppauge, NY 11788-4018

Copyright Reserved

Consultant

Notes

Client/Project NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801 TYPICAL NOTES

Project No. 191506465

Revision

Scale 12" = 1'-0" Drawing No.

3 - CONCRETE WORK

a. REINFORCING BARS - ASTM A615, GRADE 60, DEFORMED.

b. WELDED WIRE FABRIC (WWF) - ASTM A185, FLAT SHEETS.

c. SUPPORTS FOR REINFORCEMENT:

WITH LEGS WHICH ARE PROTECTED BY PLASTIC OR STAINLESS STEEL.

- d. PORTLAND CEMENT-ASTM C150, TYPE II.
- e. AGGREGATES-ASTM C33.
- CHLORIDE IONS ARE NOT PERMITTED.
- a. PROPORTIONING AND DESIGN OF MIXES:
- OR FIELD EXPERIENCE METHODS AS SPECIFIED IN ACI 318.
- SPECIFICATIONS.

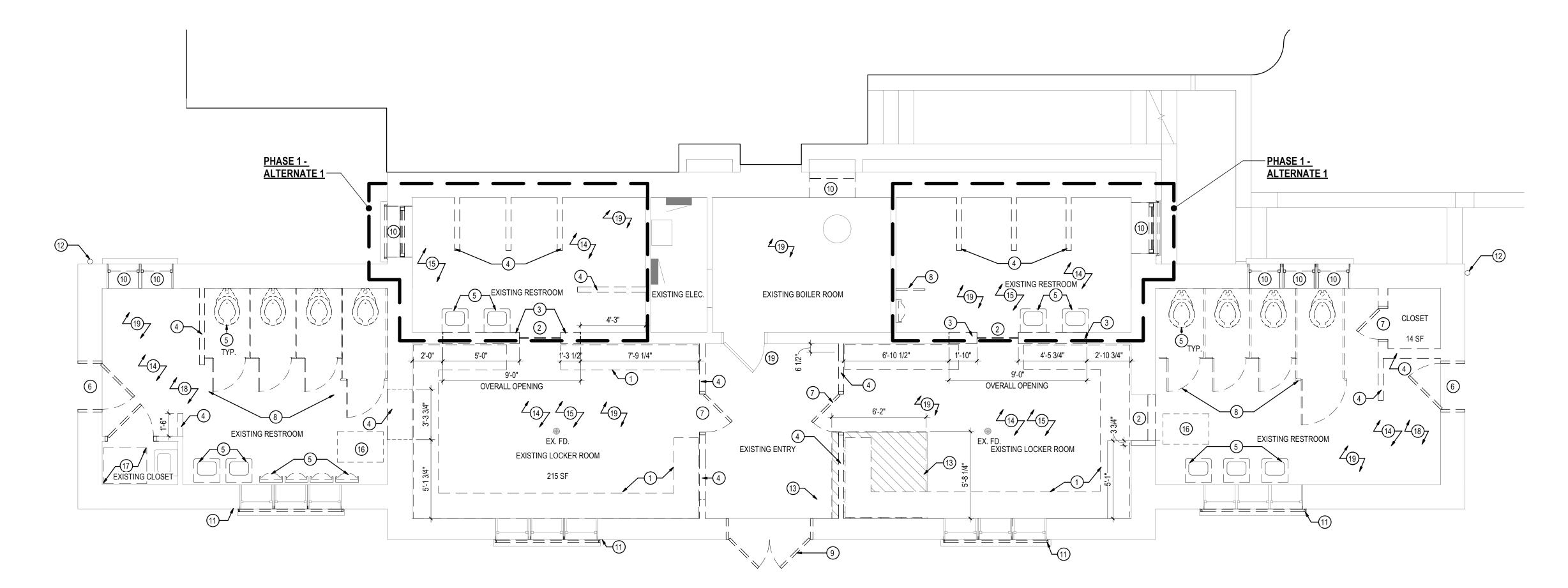
FORM WORK:

- a. PROVIDE OPENINGS IN CONCRETE FORM WORK TO ACCOMMODATE WORK OF OTHER TRADES.
- CONCRETE SHALL BE READY MIXED PER ASTM C94. JOB SITE MIXING SHALL NOT BE PERMITTED.
- G. CONCRETE PLACEMENT:
- a. THE ADDITION OF WATER TO THE CONCRETE MIX AT THE JOB SITE IS NOT PERMITTED UNLESS SPECIFICALLY ALLOWED BY THE OWNER'S REPRESENTATIVE.
- COMPLIANCE WITH ACI 305.

- a. SLUMP-ASTM C143-ONE TEST AT POINT OF PLACEMENT FOR EACH TRUCK LOAD OF EACH TYPE OF CONCRETE UNTIL CONCRETE CONSISTENCY IS UNIFORM, AND AT LEAST EVERY THIRD TRUCK THEREAFTER; ADDITIONAL
- PLACEMENT OF EACH TYPE OF AIR ENTRAINED CONCRETE.
- ABOVE; AND EACH TIME A SET OF COMPRESSION TEST CYLINDERS IS MADE.

PHASE 1 - ALTERNATE 1 -**DEMOLITION SCOPE**

- 3. SHORE EXISTING STRUCTURE AND REMOVE MASONRY WALL AS
- INDICATED. SEE DETAIL 1/A502.
- 4. REMOVE EXISTING NON-BEARING PARTITION WALL AS INDICATED. 5. REMOVE EXISTING PLUMBING FIXTURES AS INDICATED. REFER TO
- PLUMBING DRAWINGS FOR EXTENT OF DEMOLITION SCOPE. 8. REMOVE EXISTING TOILET PARTITIONS, AND CASEWORK AS INDICATED IN THEIR ENTIRETY, INCLUDING ASSOCIATED HARDWARE AND
- ACCESSORIES. 14. REMOVE ALL FLOOR FINISHES AND PREPARE FLOOR FOR EPOXY FLOOR
- INSTALLATION. 15. CLEAN AND PREPARE WALLS FOR EPOXY PAINT SYSTEM.
- 19. EXISTING LIGHT FIXTURES TO BE REMOVED REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.



GROUND FLOOR DEMOLITION PLAN - PHASE 1

DEMOLITION - SHEET NOTES

- GENERAL CONTRACTOR. ANY DEMOLITION OR REMOVAL INDICATED OR IMPLIED BY THESE DRAWINGS IS SHOWN IN GENERAL TO PROVIDE THE FULL EXTENT OF DEMOLITION. IT IS NOT TO BE CONSIDERED A RECORD DRAWING OF EXISTING CONDITIONS. IT S THE GENERAL CONTRACTORS RESPONSIBILITY TO DETERMINE THE FULL SCOPE, INTENT, NATURE AND
- MANNER OF DEMOLITION REQUIRED. ALL DEMOLITION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL GOVERNING BUILDING CODES, LOCAL CODES, AND ALL RULES AND
- REGULATIONS AS ESTABLISHED BY THE AUTHORITIES HAVING JURISDICTION.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS AND DIMENSIONS. DO NOT SCALE DRAWINGS. THE GENERAL CONTRACTOR SHALL PROVIDE ALL MATERIALS INDICATED GRAPHICALLY OR AS NOTED. GENERAL CONTRACTOR TO NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES IN IDENTIFICATION
- OF MATERIALS REQUIRED ALL EXISTING FIRE & LIFE SAFETY DEVICES AND SYSTEMS TO REMAIN AND SHALL BE FULLY OPERATIONAL AT ALL TIMES DURING DEMOLITION AND CONSTRUCTION. WHERE SERVICE MUST BE INTERRUPTED, G.C. SHALL PROVIDE APPROVED PERSONNEL OR SYSTEMS TO SERVE AS TEMPORARY FIRE WATCH. ALL FIRE-WATCH PERSONNEL AND PROCEDURES SHALL COMPLY WITH BUILDING OWNER REQUIREMENTS
- AND ALL AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY LIGHTING THROUGHOUT SPACE AS REQUIRED BY BUILDING OWNER AND LOCAL AUTHORITIES HAVING JURISDICTION. FOR ANY CUTS/PENETRATIONS THROUGH THE ROOF G.C. SHOULD CONTRACT WITH OWNER - REQUIRED VENDORS TO MAINTAIN ANY

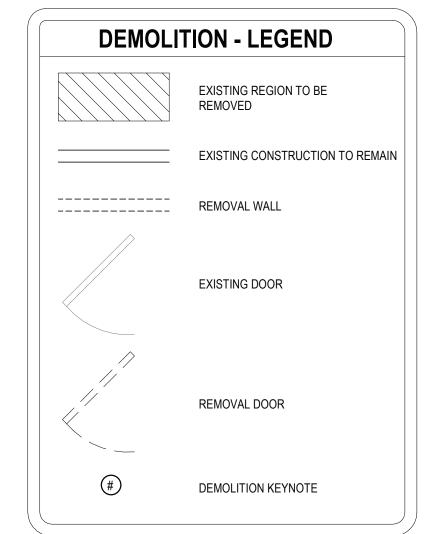
- SCOPE OF DEMOLITION IS GENERALLY INDICATED ON THIS DRAWING FOR 8. ASBESTOS-CONTAINING MATERIALS (ACM) ARE ASSUMED TO BE PRESENT WITHIN THE WORK AREA. REFER TO SPECIFICATION AND THE DEMOLITION KEYNOTE LEGEND FOR ASBESTOS CONTAINING MATERIAL FOR REMOVAL. THE RESULTS OF THE TESTING FOR ACM & PCB'S ARE LISTED IN THE BUILDING ASBESTOS SURVEY REPORT BOUND IN THE APPENDIX OF THE
 - SPECIFICATION. 9. THE GENERAL CONTRACTOR SHALL PERFORM ALL CONTRACT WORK IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS, NEW YORK STATE DEPARTMENT OF LABOR (N.Y.S.D.O.L.) INDUSTRIAL CODE RULE 56, OSHA,
 - NESHAPS AND ALL OTHER APPLICABLE CODES. 10. ATTEND THE PRE-WORK CONFERENCE AND PROVIDE A DETAILED ABATEMENT
 - WORK PLAN FOR REVIEW. 11. THE GENERAL CONTRACTOR SHALL COORDINATE THE SCHEDULED WORK WITH THE OWNER'S REPRESENTATIVE. 12. CONTRACTOR IS RESPONSIBLE FOR ON-SITE SAFETY AND SECURITY OF
 - THEIR EMPLOYEES DURING ALL HAZARDOUS REMOVAL ACTIVITIES AND ASSUMES RESPONSIBILITY FOR PROCEEDING WITH THE WORK IN A MANNER THAT OFFERS THEIR EMPLOYEES A WORKPLACE FREE FROM RECOGNIZED HAZARDS CAUSING SERIOUS HEALTH, HARM, OR INJURY.
 - 13. ASBESTOS WASTE DUMPSTER LOCATION TO BE COORDINATED WITH THE OWNER. VERIFY THAT LANDFILL ACCEPTS ALL TYPES OF HAZARDOUS MATERIALS WITHIN THE PROJECTS SCOPE OF WORK.
 - 14. COORDINATE HOOKUP OF WATER SERVICE FOR DECONTAMINATION PURPOSES WITH THE OWNER'S REPRESENTATIVE. 15. UNDER NO CIRCUMSTANCES SHALL CONTAMINATED LIQUIDS OR DEBRIS
 - THROUGH A SYSTEM CAPTURING 5.0 MICRON PARTICLE SIZE AND ABOVE. 16. GENERAL CONTRACTOR SHALL RECEIVE APPROVAL FROM THE PROJECT MONITOR BASED ON INSPECTION, TO ASSURE ALL OPENINGS AND PENETRATIONS HAVE BEEN SEALED PROPERLY BEFORE ANY ABATEMENT IS

ENTER THE EXISTING SEWER SYSTEM. ALL WASTEWATER SHALL BE FILTERED

- 16. ANY QUESTIONABLE MATERIAL OR SUSPECT ASBESTOS MATERIAL DISCOVERED SHALL NOT BE DISTURBED WITHOUT DIRECTION. CEASE OPERATIONS AND NOTIFY THE OWNER AND/OR OWNER'S
- REPRESENTATIVE IMMEDIATELY. 17. IF WATER LEAKS THROUGH THE CONTAINMENT AREAS OR UNDER THE DECONTAMINATION UNITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WATER DAMAGE TO THE FLOOR BELOW. CONTRACTOR SHALL DOCUMENT ALL PRE-EXISTING WATER DAMAGE PRIOR TO ESTABLISHING
- CONTAINMENT AREAS. 18. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH OTHER TRADES AS APPLICABLE IN ORDER TO DETERMINE EXACT LOCATIONS OF REQUIRED REMOVALS AND TIMING OF SUCH REMOVALS.
- PERMITS AND MAKING ARRANGEMENTS FOR ALL REQUIRED INSPECTIONS. 20. REMOVAL WORK OR ANY OTHER WORK IN THESE AREAS SHALL COMMENCE ONLY AFTER THE HAZARDOUS MATERIAL REMOVAL WORK IS

19. GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED

- COMPLETED AND ONLY AFTER THE NECESSARY CLEARANCES ARE OBTAINED. 21. PROVIDE TO THE OWNER'S REPRESENTATIVE ALL WASTE TRANSPORTER PERMITS, WASTE DISPOSAL RECEIPTS AND THE CONTRACTORS POST ABATEMENT REPORT. SEE THE CLOSEOUT SUBMITTAL SECTION IN THE
- 22. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF ALL BUILDING CODES AND ORDINANCES. IN CASE OF CONFLICT, THE MOST STRINGENT SHALL GOVERN.



DEMOLITION - KEY NOTES

- REMOVE BENCHES AND ALL ASSOCIATED
- 2 REMOVE BOARDED ENTRY DOOR IN ITS ENTIRETY. 3 SHORE EXISTING STRUCTURE AND REMOVE MASONRY WALL AS INDICATED. SEE DETAIL
- 4 REMOVE EXISTING NON-BEARING PARTITION WALL AS INDICATED. 5 REMOVE EXISTING PLUMBING FIXTURES AS
- EXTENT OF DEMOLITION SCOPE 6 REMOVE EXTERIOR DOOR, FRAME AND ALL ASSOCIATED HARDWARE. PREP OPENING TO
- REMOVE EXISTING INTERIOR DOOR IN ITS ENTIRETY INCLUDING FRAME AND HARDWARE. REMOVE EXISTING TOILET PARTITIONS, AND CASEWORK AS INDICATED IN THEIR ENTIRETY, INCLUDING ASSOCIATED HARDWARE AND
- ACCESSORIES. 9 REMOVE EXISTING EXTERIOR DOOR, FRAME, ASSOCIATED HARDWARE.
- 10 REMOVE EXISTING WINDOW AND PLYWOOD IN IT'S ENTIRETY INCLUDING FRAME, AND ASSOCIATED
- SCREENS. REPAIR MASONRY. PREPARE FOR NEW DOWNSPOUT INSTALLATION.

- HARDWARE.
- INDICATED. REFER TO PLUMBING DRAWINGS FOR
- RECEIVE WALL INFILL.
- 11 REMOVE EXISTING SECURITY AND INSECT
- 12 REMOVE DOWNSPOUT AND SECTION OF GUTTER.

- 13 REMOVE CONCRETE SLAB TO EXTENTS INDICATED. PREP FOR DEPRESSED CONCRETE SLAB. CORE EACH CORNER OF SLAB SECTION TO BE REMOVED AND USE A CHIPPING HAMMER TO

#

- SQUARE ALL HOLES. 14 REMOVE ALL FLOOR FINISHES AND PREPARE
- FLOOR FOR EPOXY FLOOR INSTALLATION. 15 CLEAN AND PREPARE WALLS FOR EPOXY PAINT
- 16 REMOVE ENTIRE ASBESTOS CONTAINING EXHAUST DUCT FROM UNIT HEATER IN ACCORDANCE WITH INDUSTRIAL CODE RULE 56.

17 PREP AND PREPARE EXISTING HOLE FOR NEW

- ACCESS HATCH. 18 REMOVE CONCRETE SLAB AS REQUIRED FOR UNDERGROUND PIPE REMOVAL AND INSTALLATION. COORDINATE FULL SCOPE OF PIPE REMOVAL AND INSTALLATION WITH PLUMBING
- 19 EXISTING LIGHT FIXTURES TO BE REMOVED -REFER TO ELECTRICAL DRAWINGS FOR

ADDITIONAL INFORMATION.



Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or

use for any purpose other than that authorized by Stantec is forbidden.

Consultant

ISSUED FOR REBIL ISSUED FOR BID Appd YYYY.MM.DD Issued

Author Designer Checker - Chkd. YYYY.MM.DD File Name: N/A

Permit/Seal





IDEALLY YOURS Client/Project

NEW ROCHELLE

NEW ROCHELLE, NY 10801

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE,

GROUND FLOOR DEMOLITION & ABATEMENT PLAN

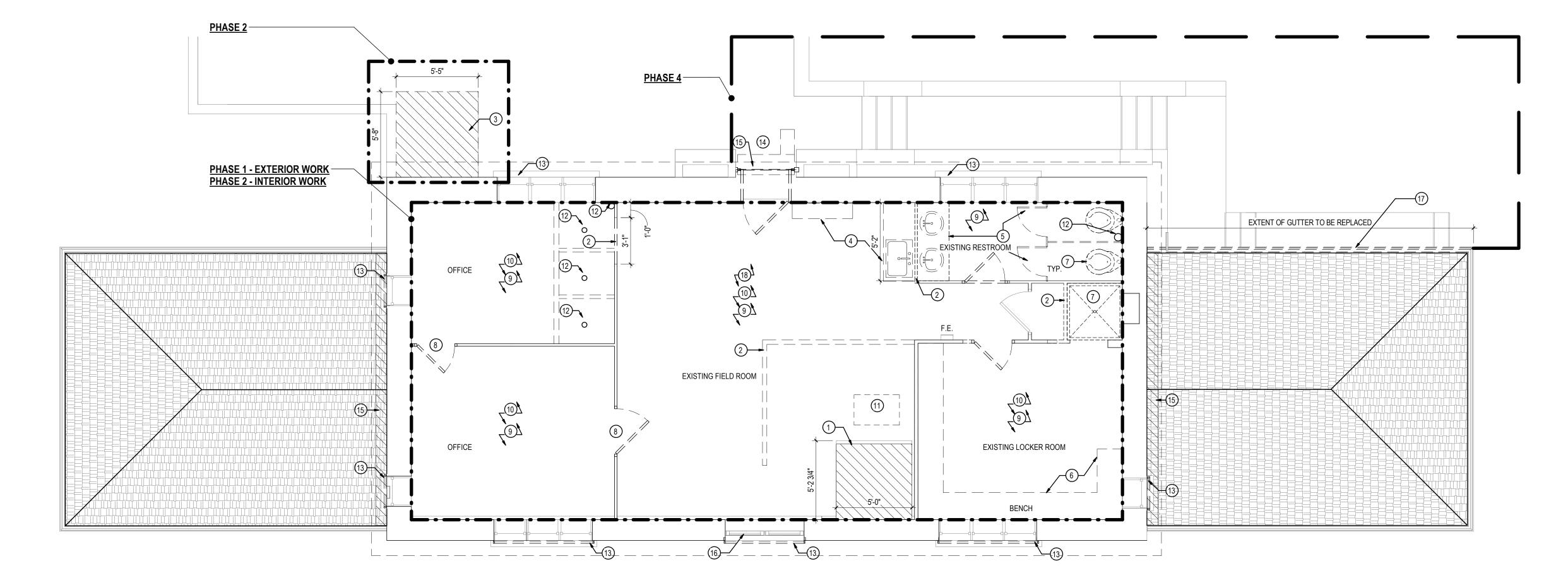
Project No. 191506465

Revision

Scale As indicated

Drawing No.

- 3. PREPARE EXISTING AREA WHERE INDICATED FOR A CONCRETE PAD. REFER TO FIRST FLOOR PLAN FOR ADDITIONAL INFORMATION.
- 13. REMOVE EXISTING SECURITY AND INSECT SCREENS. REPAIR MASONRY 14. REMOVE EXISTING COILING SECURITY SCREEN AND FRAME. REPAIR
- MASONRY. 15. REMOVE ASBESTOS CONTAINING FLASHING CEMENT AT ROOF FLASHING AND CHIMNEY FLASHING IN ACCORDANCE WITH INDUSTRIAL
- CODE RULE 56. 16. REMOVE EXISTING GLAZING FROM WINDOW FRAME AND PREPARE FOR
- NEW GLAZING. 17. REMOVE EXISTING DAMAGED GUTTERS. REFER TO CONSTRUCTION NOTES FOR NEW GUTTER INSTALLATION.



FIRST FLOOR DEMOLITION PLAN - PHASE 2

\AD102 \ 1/4" = 1'-0"

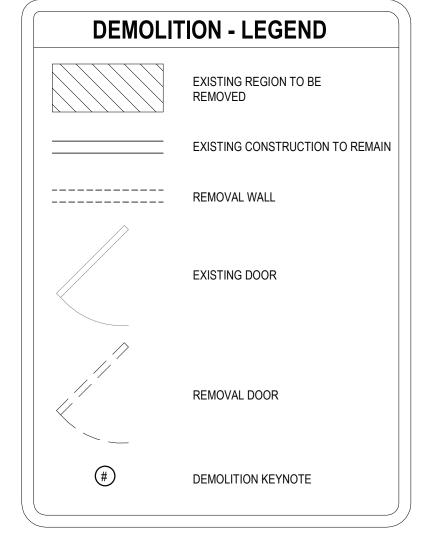
DEMOLITION - SHEET NOTES

- GENERAL CONTRACTOR. ANY DEMOLITION OR REMOVAL INDICATED OR IMPLIED BY THESE DRAWINGS IS SHOWN IN GENERAL TO PROVIDE THE FULL EXTENT OF DEMOLITION. IT IS NOT TO BE CONSIDERED A RECORD DRAWING OF EXISTING CONDITIONS. IT S THE GENERAL CONTRACTORS RESPONSIBILITY TO DETERMINE THE FULL SCOPE, INTENT, NATURE AND
- MANNER OF DEMOLITION REQUIRED. ALL DEMOLITION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL GOVERNING BUILDING CODES, LOCAL CODES, AND ALL RULES AND REGULATIONS AS ESTABLISHED BY THE AUTHORITIES HAVING
- JURISDICTION. GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS AND DIMENSIONS. DO NOT SCALE DRAWINGS.
- THE GENERAL CONTRACTOR SHALL PROVIDE ALL MATERIALS INDICATED GRAPHICALLY OR AS NOTED. GENERAL CONTRACTOR TO NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES IN IDENTIFICATION OF MATERIALS REQUIRED.
- ALL EXISTING FIRE & LIFE SAFETY DEVICES AND SYSTEMS TO REMAIN AND SHALL BE FULLY OPERATIONAL AT ALL TIMES DURING DEMOLITION AND CONSTRUCTION. WHERE SERVICE MUST BE INTERRUPTED, G.C. SHALL PROVIDE APPROVED PERSONNEL OR SYSTEMS TO SERVE AS TEMPORARY FIRE WATCH. ALL FIRE-WATCH PERSONNEL AND PROCEDURES SHALL COMPLY WITH BUILDING OWNER REQUIREMENTS
- AND ALL AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY LIGHTING THROUGHOUT SPACE AS REQUIRED BY BUILDING OWNER AND LOCAL AUTHORITIES HAVING JURISDICTION. FOR ANY CUTS/PENETRATIONS THROUGH THE ROOF G.C. SHOULD CONTRACT WITH OWNER - REQUIRED VENDORS TO MAINTAIN ANY WARRANTIES.

- SCOPE OF DEMOLITION IS GENERALLY INDICATED ON THIS DRAWING FOR 8. ASBESTOS-CONTAINING MATERIALS (ACM) ARE ASSUMED TO BE PRESENT WITHIN THE WORK AREA. REFER TO SPECIFICATION AND THE DEMOLITION KEYNOTE LEGEND FOR ASBESTOS CONTAINING MATERIAL FOR REMOVAL. THE RESULTS OF THE TESTING FOR ACM & PCB'S ARE LISTED IN THE BUILDING ASBESTOS SURVEY REPORT BOUND IN THE APPENDIX OF THE
 - SPECIFICATION. 9. THE GENERAL CONTRACTOR SHALL PERFORM ALL CONTRACT WORK IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS, NEW YORK STATE DEPARTMENT OF LABOR (N.Y.S.D.O.L.) INDUSTRIAL CODE RULE 56, OSHA, NESHAPS AND ALL OTHER APPLICABLE CODES.
 - 10. ATTEND THE PRE-WORK CONFERENCE AND PROVIDE A DETAILED ABATEMENT WORK PLAN FOR REVIEW. 11. THE GENERAL CONTRACTOR SHALL COORDINATE THE SCHEDULED WORK
 - WITH THE OWNER'S REPRESENTATIVE. 12. CONTRACTOR IS RESPONSIBLE FOR ON-SITE SAFETY AND SECURITY OF THEIR EMPLOYEES DURING ALL HAZARDOUS REMOVAL ACTIVITIES AND ASSUMES RESPONSIBILITY FOR PROCEEDING WITH THE WORK IN A MANNER
 - THAT OFFERS THEIR EMPLOYEES A WORKPLACE FREE FROM RECOGNIZED HAZARDS CAUSING SERIOUS HEALTH, HARM, OR INJURY. 13. ASBESTOS WASTE DUMPSTER LOCATION TO BE COORDINATED WITH THE OWNER. VERIFY THAT LANDFILL ACCEPTS ALL TYPES OF HAZARDOUS
 - MATERIALS WITHIN THE PROJECTS SCOPE OF WORK. 14. COORDINATE HOOKUP OF WATER SERVICE FOR DECONTAMINATION
 - PURPOSES WITH THE OWNER'S REPRESENTATIVE. 15. UNDER NO CIRCUMSTANCES SHALL CONTAMINATED LIQUIDS OR DEBRIS ENTER THE EXISTING SEWER SYSTEM. ALL WASTEWATER SHALL BE FILTERED THROUGH A SYSTEM CAPTURING 5.0 MICRON PARTICLE SIZE AND ABOVE.
 - 16. GENERAL CONTRACTOR SHALL RECEIVE APPROVAL FROM THE PROJECT MONITOR BASED ON INSPECTION, TO ASSURE ALL OPENINGS AND PENETRATIONS HAVE BEEN SEALED PROPERLY BEFORE ANY ABATEMENT IS UNDERTAKEN.

- 16. ANY QUESTIONABLE MATERIAL OR SUSPECT ASBESTOS MATERIAL DISCOVERED SHALL NOT BE DISTURBED WITHOUT DIRECTION. CEASE OPERATIONS AND NOTIFY THE OWNER AND/OR OWNER'S
- REPRESENTATIVE IMMEDIATELY. 17. IF WATER LEAKS THROUGH THE CONTAINMENT AREAS OR UNDER THE DECONTAMINATION UNITS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WATER DAMAGE TO THE FLOOR BELOW. CONTRACTOR SHALL DOCUMENT ALL PRE-EXISTING WATER DAMAGE PRIOR TO ESTABLISHING
- CONTAINMENT AREAS. 18. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH OTHER TRADES AS APPLICABLE IN ORDER TO DETERMINE EXACT
- LOCATIONS OF REQUIRED REMOVALS AND TIMING OF SUCH REMOVALS. 19. GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND MAKING ARRANGEMENTS FOR ALL REQUIRED INSPECTIONS. 20. REMOVAL WORK OR ANY OTHER WORK IN THESE AREAS SHALL
- COMMENCE ONLY AFTER THE HAZARDOUS MATERIAL REMOVAL WORK IS COMPLETED AND ONLY AFTER THE NECESSARY CLEARANCES ARE OBTAINED. 21. PROVIDE TO THE OWNER'S REPRESENTATIVE ALL WASTE TRANSPORTER PERMITS, WASTE DISPOSAL RECEIPTS AND THE CONTRACTORS POST
- ABATEMENT SPEC. 22. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF ALL BUILDING CODES AND ORDINANCES. IN CASE OF CONFLICT, THE MOST STRINGENT SHALL GOVERN.

ABATEMENT REPORT. SEE THE CLOSEOUT SUBMITTAL SECTION IN THE



DEMOLITION - KEY NOTES

- REMOVE SECOND FLOOR CONCRETE SLAB AFTER INSTALLATION OF NEW SHAFT WALLS. CORE EACH CORNER OF SLAB SECTION TO BE REMOVED AND USE A CHIPPING HAMMER TO SQUARE ALL HOLES.
- REMOVE EXISTING NON-BEARING PARTITION WALL AS INDICATED. PREPARE EXISTING AREA WHERE INDICATED FOR A CONCRETE PAD. REFER TO FIRST FLOOR PLAN FOR ADDITIONAL
- INFORMATION. REMOVE EXISTING CABINETS & KITCHENETTE IN THEIR ENTIRETY. REMOVE EXISTING TOILET PARTITIONS, AND CASEWORK AS INDICATED IN THEIR
- HARDWARE AND ACCESSORIES. REMOVE BENCHES AND ALL ASSOCIATED HARDWARE. REMOVE EXISTING PLUMBING FIXTURES AS

ENTIRETY, INCLUDING ASSOCIATED

- INDICATED. REFER TO PLUMBING DRAWINGS FOR EXTENT OF DEMOLITION SCOPE. REMOVE EXISTING INTERIOR DOOR IN ITS ENTIRETY INCLUDING FRAME AND
- REMOVE ALL FLOOR FINISHES AND PREPARE FLOOR FOR EPOXY FLOOR INSTALLATION.

CLEAN AND PREPARE WALLS FOR EPOXY PAINT SYSTEM. REMOVE ENTIRE ASBESTOS CONTAINING EXHAUST DUCT FROM UNIT HEATER IN ACCORDANCE WITH INDUSTRIAL CODE RULE

#

- REMOVE EXISTING PLUMBING. COORDINATE WITH PLUMBING DRAWINGS FOR FULL SCOPE OF DEMOLITION PERIODS, TYP
- REMOVE EXISTING SECURITY AND INSECT SCREENS. REPAIR MASONRY. REMOVE EXISTING COILING SECURITY
- SCREEN AND FRAME. REPAIR MASONRY. REMOVE ASBESTOS CONTAINING FLASHING CEMENT AT ROOF FLASHING AND CHIMNEY
- FLASHING IN ACCORDANCE WITH INDUSTRIAL CODE RULE 56. REMOVE EXISTING GLAZING FROM WINDOW FRAME AND PREPARE FOR NEW GLAZING.
- REMOVE EXISTING DAMAGED GUTTERS. REFER TO CONSTRUCTION NOTES FOR NEW GUTTER INSTALLATION.
- EXISTING LIGHT FIXTURES TO BE REMOVED -REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

Appd YYYY.MM.DD Issued Author Designer Checker - Chkd. YYYY.MM.DD File Name: N/A

Permit/Seal

ISSUED FOR REBID ISSUED FOR BID





Client/Project **NEW ROCHELLE**

IDEALLY YOURS

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

FIRST FLOOR DEMOLITION & ABATEMENT PLAN

Project No. 191506465

Revision

Scale As indicated

Drawing No.

PHASE 1 - ALTERNATE 1 -**NEW WORK SCOPE**

FLOOR BASE SECTION DETAILS.

2. PATCH AND REPAIR CONCRETE SLAB. MATCH EXISTING ADJACENT ELEVATION AND CREATE A SMOOTH TRANSITION

4. LINTEL ABOVE; REFER TO STRUCTURAL FOR MORE INFORMATION. FINISH OPENING TO MATCH EXISTING ADJACENT.

8. PROVIDE EPOXY FLOORING AND FLOOR BASE. REFER TO A321 FOR

PHASE 3 - NEW SCOPE WORK

1. PROVIDE ACCESSIBLE LIFT, REFER TO SECTION ON A301.

PHASE 4 - NEW SCOPE WORK

15. NEW CONCRETE SIDEWALK, LANDINGS, STAIRS, AND PARTIAL WALL

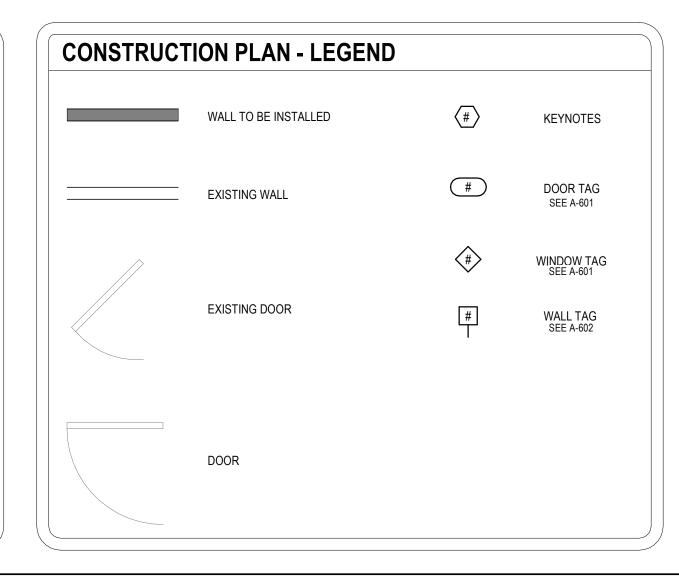
REPLACEMENT. SEE ADD ALTERNATE #1. 16. GALVANIZED STEEL HANDRAIL SET IN CONCRETE. SEE ADD ALTERNATE #1.

PHASE 4 -<u>PHASE 1 -</u> **ALTERNATE 1** PHASE 1 -ALTERNATE 1 — 14 OPEN FRONT VARSITY LOCKERS 14 OPEN FRONT VARSITY LOCKERS ELECTRICAL **BOILER ROOM** OCKER ROOM 25 SF EXAM TABLE -EXAM TABLE -BY OWNER BY OWNER (100.1) ∮ 9'-0" L12'-9 3/4"L

REFER TO A-001 ARCHITECTURAL ABBREVIATIONS, SYMBOLS, & GENERAL NOTES FOR ADDITIONAL INFORMATION ALL WALLS TO RECEIVE EPOXY PAINT SYSTEM, UNLESS OTHERWISE NOTED. BASIS OF DESIGN SHERWIN WILLIAMS HIGH PERFORMANCE EPOXY PAINT. ALL FLOORS TO RECEIVE EPOXY FLOOR SYSTEM, UNLESS OTHERWISE NOTED. 4. REPAIR FLOORS, WALLS, AND CEILINGS AT EXISTING, DAMAGED, AND OPENINGS INCLUDING ASBESTOS, AND NEW SERVICES, CONDUITS, AND PIPE PENETRATIONS. PROVIDE 2 COATS OF BLOCK FILLER AT ALL CMU WALLS TO BE PAINTED. PROVIDE LINTELS AND OPENINGS AT ALL NEW DUCT PENETRATIONS AT NEW AND EXISTING MASONRY WALLS. SEE LOSE LINTEL SCHEDULE 3/A502.

CONSTRUCTION PLAN - GENERAL NOTES

√ A101 /



GROUND FLOOR CONSTRUCTION PLAN - PHASE 1

CONSTRUCTION PLAN - KEY NOTES # PROVIDE ACCESSIBLE LIFT, REFER TO SECTION ON ACCESSIBLE SHOWER PROVIDE CURTAIN; REFER TO CEILING PLAN. PATCH AND REPAIR CONCRETE SLAB. MATCH NEW CONCRETE SIDEWALK, LANDINGS, STAIRS AND EXISTING ADJACENT ELEVATION AND CREATE A PARTIAL WALL REPLACEMENT. SMOOTH TRANSITION. GALVANIZED STEEL HAND RAIL SET IN CONCRETE. INFILL WALL OPENING WITH STONE TO MATCH PROVIDE MECHANICAL LOUVER IN EXISTING EXISTING. OPENING. SEE MECHANICAL DRAWINGS FOR LINTEL ABOVE; REFER TO STRUCTURAL FOR MORE ADDITIONAL INFORMATION. INFORMATION. FINISH OPENING TO MATCH EXISTING ADJACENT. SEE A502 FOR DETAILS. PROVIDE AND INSTALL SECURITY SCREENS; BASIS OF DESIGN KANE SECURITY SCREENS LEVEL 4 PROTECTOR SERIES. FINISH OPENINGS, JAMBS, HEADERS, AND FLOOR ADJACENT. PROVIDE SMOOTH AND LEVEL TRANSITIONS. SEE 3/A501. PROVIDE GUTTER, DOWNSPOUT, AND TIE INTO EXISTING STORM WATER DRAIN AS INDICATED IN PLAN AND ELEVATIONS. PROVIDE EPOXY FLOORING AND FLOOR BASE. REFER TO A321 FOR FLOOR BASE SECTION INSTALL CURTAIN. REFER TO GROUND FLOOR CEILING PLAN. GARMENT HOOKS. (2) PER SHOWER INSTALL FLOOR MOUNTED ACCESS HATCH PROVIDE 36"X36" SHOWER

-PHASE 3 - LIFT INSTALLATION



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

ISSUED FOR REBID ISSUED FOR BID Appd YYYY.MM.DD Issued Author Designer Checker - Chkd. YYYY.MM.DD File Name: N/A



Client/Project Logo



Client/Project **NEW ROCHELLE**

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

GROUND FLOOR CONSTRUCTION PLAN

Project No. 191506465 Revision

Scale As indicated Drawing No.

PHASE 1 - NEW SCOPE WORK PHASE 3 - NEW SCOPE WORK 1. PROVIDE ACCESSIBLE LIFT, REFER TO SECTION ON A301. 5. REMOVE AND REPLACE EXISTING FLASHING. RE-GLAZE WINDOWS WITH INSULATED AND TEMPERED UNITS. 9. PROVIDE SECURITY SCREEN; BASIS OF DESIGN KANE SECURITY SCREENS LEVEL 4 PROTECTOR SERIES. 15. NEW CUSTOM H.M. DOOR AND FRAME. REPAIR INTERIOR PLASTER AT PHASE 2 PHASE 4 **PHASE 1 - EXTERIOR WORK PHASE 2 - INTERIOR WORK** KITCHENETTE **EXISTING SHINGLES** SHALL REMAIN ---REFEREE LOCKER RM. - EXISTING SHINGLES SHALL REMAIN 98 -PHASE 3 - LIFT INSTALLATION FIRST FLOOR CONSTRUCTION PLAN - PHASE 2 **CONSTRUCTION PLAN - GENERAL NOTES CONSTRUCTION PLAN - LEGEND** CONSTRUCTION PLAN - KEY NOTES # 1. REFER TO A-001 ARCHITECTURAL ABBREVIATIONS, SYMBOLS, & GENERAL NOTES PROVIDE ACCESSIBLE LIFT, REFER TO SECTION ON PROVIDE EPOXY FLOORING AND FLOOR BASE. REFER FOR ADDITIONAL INFORMATION TO A321 FOR FLOOR BASE SECTION DETAILS. ALL WALLS TO RECEIVE EPOXY PAINT SYSTEM, UNLESS OTHERWISE NOTED. WALL TO BE INSTALLED KEYNOTES CONDENSER, REFER TO MECHANICAL DRAWINGS FOR PATCH AND REPAIR WALL TO MATCH EXISTING BASIS OF DESIGN SHERWIN WILLIAMS HIGH PERFORMANCE EPOXY PAINT. CONSTRUCTION AND CREATE SMOOTH TRANSITION MORE INFORMATION. ALL FLOORS TO RECEIVE EPOXY FLOOR SYSTEM, UNLESS OTHERWISE NOTED. BETWEEN NEW AND EXISTING. PROVIDE SECURITY FENCE AROUND MECHANICAL 4. REPAIR FLOORS, WALLS, AND CEILINGS AT EXISTING , DAMAGED, AND OPENINGS PROVIDE ADA STALL WITH ACCESSIBLE GRAB BARS & EQUIPMENT. SEE A501 FOR DETAILS. INCLUDING ASBESTOS, AND NEW SERVICES, CONDUITS, AND PIPE PENETRATIONS. TOILET, REFER TO INTERIOR ELEVATIONS. NEW CUSTOM H.M. DOOR AND FRAME. REPAIR PROVIDE 2 COATS OF BLOCK FILLER AT ALL CMU WALLS TO BE PAINTED. DOOR TAG EXISTING WALL PROVIDE KNEE HIGH WALL, REFER TO SECTION ON INTERIOR PLASTER AT INSTALLATION. PROVIDE LINTELS AND OPENINGS AT ALL NEW DUCT PENETRATIONS AT NEW AND SEE A-601 EXISTING MASONRY WALLS. SEE LOSE LINTEL SCHEDULE 3/A502. REMOVE AND REPLACE EXISTING FLASHING. PROVIDE CONCRETE SLAB, REFER TO STRUCTURAL WINDOW TAG SEE A-601 FOR MORE INFORMATION. REPAIR PLASTER SILL AND JAMBS RE-GLAZE WINDOWS WITH INSULATED AND TEMPERED EXISTING DOOR WALL TAG SEE A-602 PROVIDE SECURITY SCREEN; BASIS OF DESIGN KANE SECURITY SCREENS LEVEL 4 PROTECTOR SERIES. FIRE HYDRANT PANEL AND FIRE EXTINGUISHER TO REMAIN. PROVIDE EPOXY PAINT AT ALL WALLS, UNLESS NOTED OTHERWISE. BASIS OF DESIGN SHERWIN WILLIAMS



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

Notes

Permit/Seal

File Name: N/A



Author Designer Checker Dwn. Dsgn. Chkd. YYYY.MM.DD

Client/Project Logo



Client/Project
NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

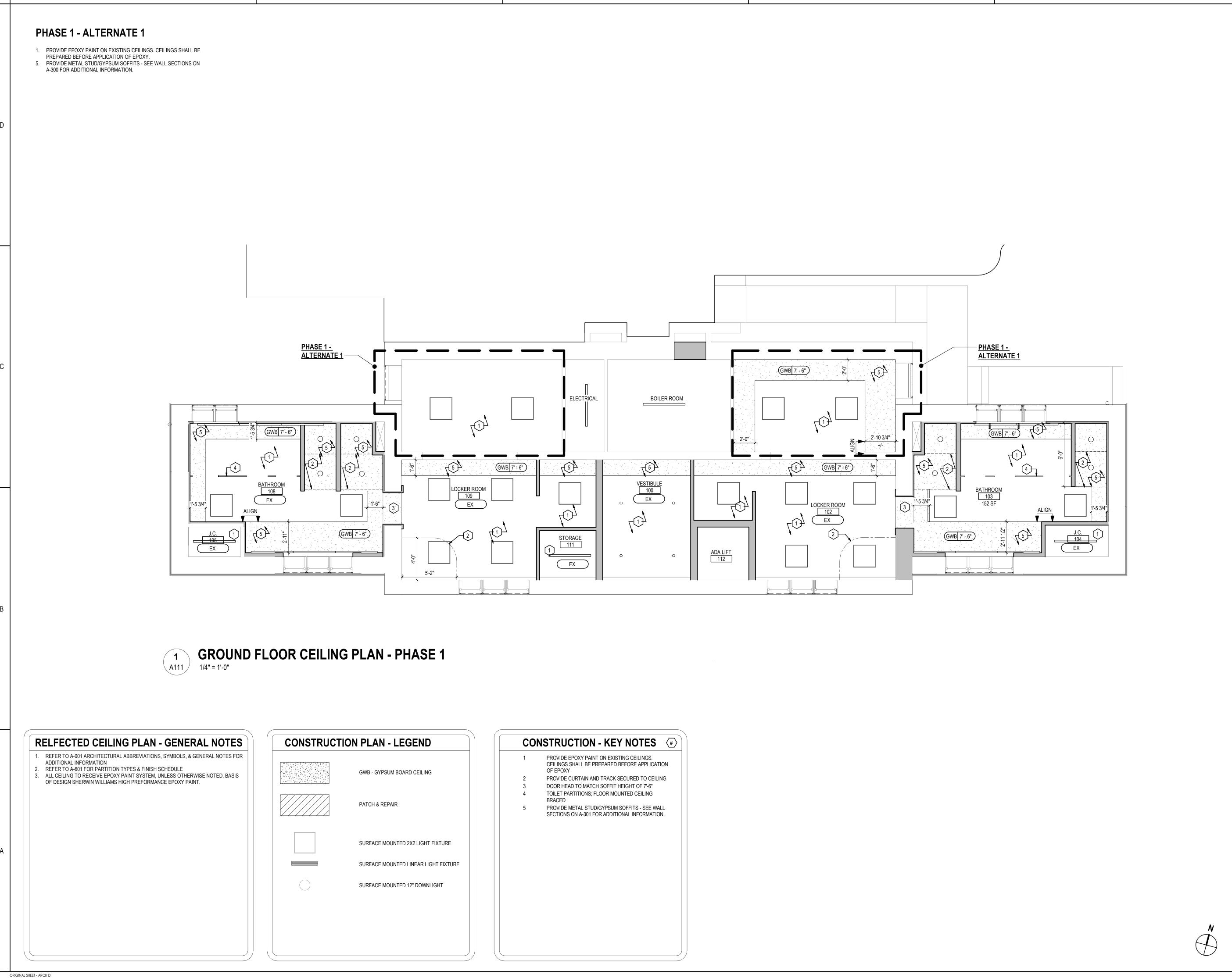
FIRST FLOOR CONSTRUCTION PLAN

Project No. 191506465

Revision

Scale
As indicated

Drawing No.
A102





Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

ISSUED FOR REBID Issued Author Designer Checker Dwn. Dsgn. Chkd. YYYY.MM.DD

Permit/Seal

File Name: N/A



Client/Project Logo



Client/Project NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

Project No. 191506465

Revision

GROUND FLOOR CEILING PLAN

Scale As indicated

Drawing No.

Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Copyright Reserved Consultant ISSUED FOR REBID SLOPE Issued GWB 8' - 10" File Name: N/A Permit/Seal FIRST FLOOR CEILING PLAN - PHASE 2 A112 1/4" = 1'-0" Client/Project Logo RELFECTED CEILING PLAN - GENERAL NOTES **CONSTRUCTION PLAN - LEGEND** CONSTRUCTION - KEY NOTES (#) 1. REFER TO A-001 ARCHITECTURAL ABBREVIATIONS, SYMBOLS, & GENERAL NOTES FOR **ALTERNATE 2A** NEW ROCHELLE ADDITIONAL INFORMATION 2. REFER TO A-601 FOR PARTITION TYPES & FINISH SCHEDULE
3. ALL CEILING TO RECEIVE EPOXY PAINT SYSTEM, UNLESS OTHERWISE NOTED. BASIS OF DESIGN SHERWIN WILLIAMS HIGH PREFORMANCE EPOXY PAINT. GWB - GYPSUM BOARD CEILING PROVIDE EPOXY PAINT ON EXISTING CEILINGS. CEILINGS SHALL BE PREPARED BEFORE APPLICATION Client/Project PROVIDE G.W.B. GYPSUM CEILING. REFER TO DETAIL NEW ROCHELLE PATCH & REPAIR PATCH AND REPAIR EXISTING CEILING AS REQUIRED. SURFACE MOUNTED 2X2 LIGHT FIXTURE 491 5TH AVE, NEW ROCHELLE, NY 10801 SURFACE MOUNTED LINEAR LIGHT FIXTURE SURFACE MOUNTED 12" DOWNLIGHT Project No. 191506465 Revision

Tel: (631) 424-8600 • www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.



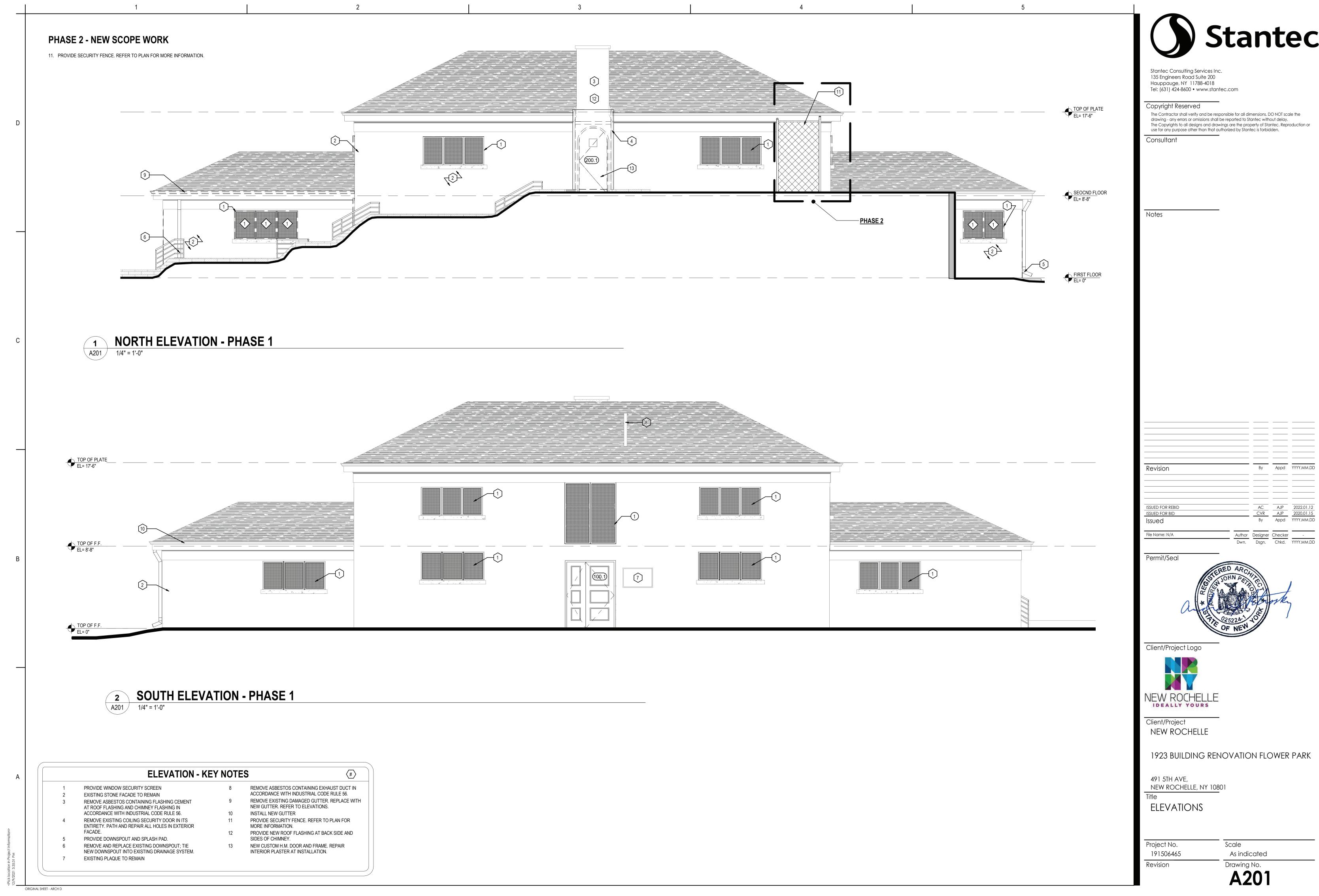
Author Designer Checker Dwn. Dsgn. Chkd. YYYY.MM.DD

1923 BUILDING RENOVATION FLOWER PARK

FIRST FLOOR CEILING PLAN

Scale As indicated

Drawing No.
A112



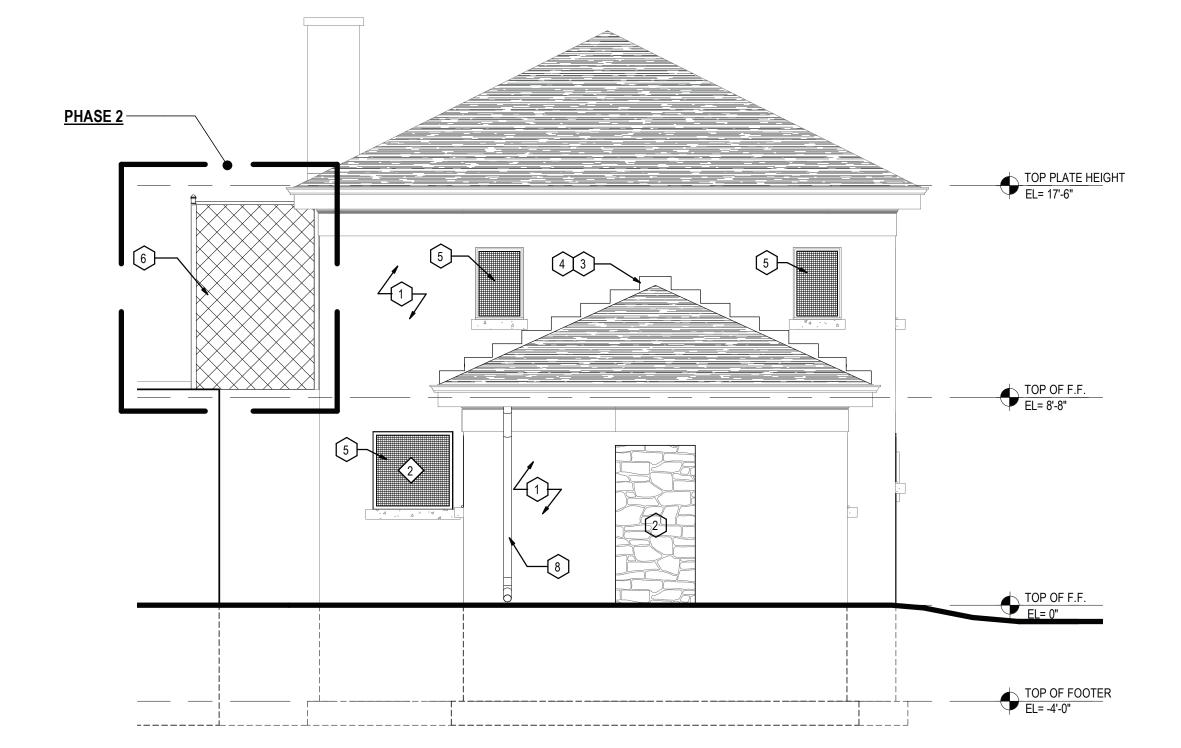
1923 BUILDING RENOVATION FLOWER PARK

PHASE 2 - NEW SCOPE WORK

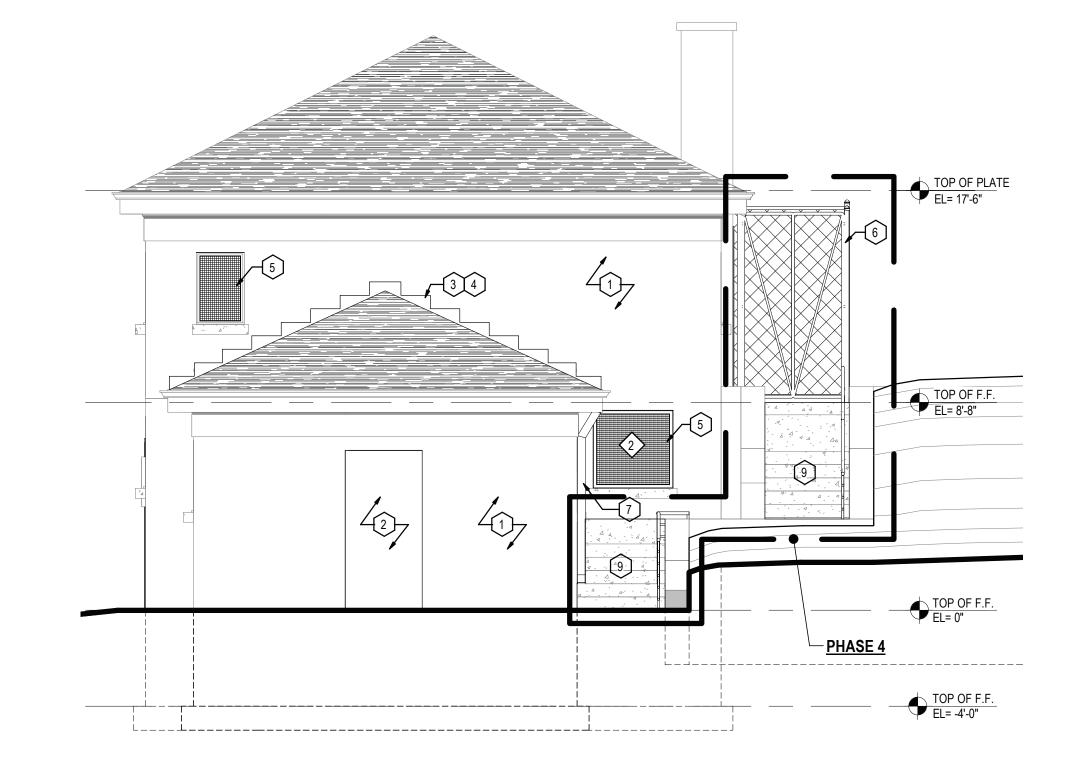
6. PROVIDE SECURITY FENCE. REFER TO PLAN FOR MORE INFORMATION.

PHASE 4 - NEW SCOPE WORK

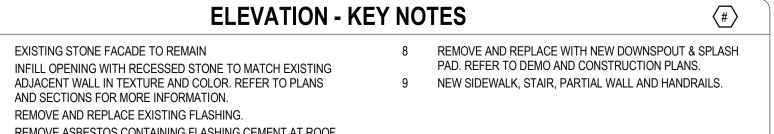
6. PROVIDE SECURITY FENCE. REFER TO PLAN FOR MORE INFORMATION. 9. NEW SIDEWALK, STAIR, PARTIAL WALL AND HANDRAILS.







A202 1/4" = 1'-0"



ORIGINAL SHEET - ARCH D

REMOVE ASBESTOS CONTAINING FLASHING CEMENT AT ROOF FLASHING AND CHIMNEY FLASHING IN ACCORDANCE WITH INDUSTRIAL CODE RULE 56. PROVIDE WINDOW SECURITY SCREEN PROVIDE SECURITY FENCE. REFER TO PLAN FOR MORE 7 REMOVE AND REPLACE EXISTING DOWNSPOUT; TIE NEW DOWNSPOUT INTO EXISTING DRAINAGE SYSTEM.



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

ISSUED FOR REBID ISSUED FOR BID Issued Author Designer Checker Dwn. Dsgn. Chkd. YYYY,MM.DD File Name: N/A

Client/Project Logo

Permit/Seal



Client/Project NEW ROCHELLE

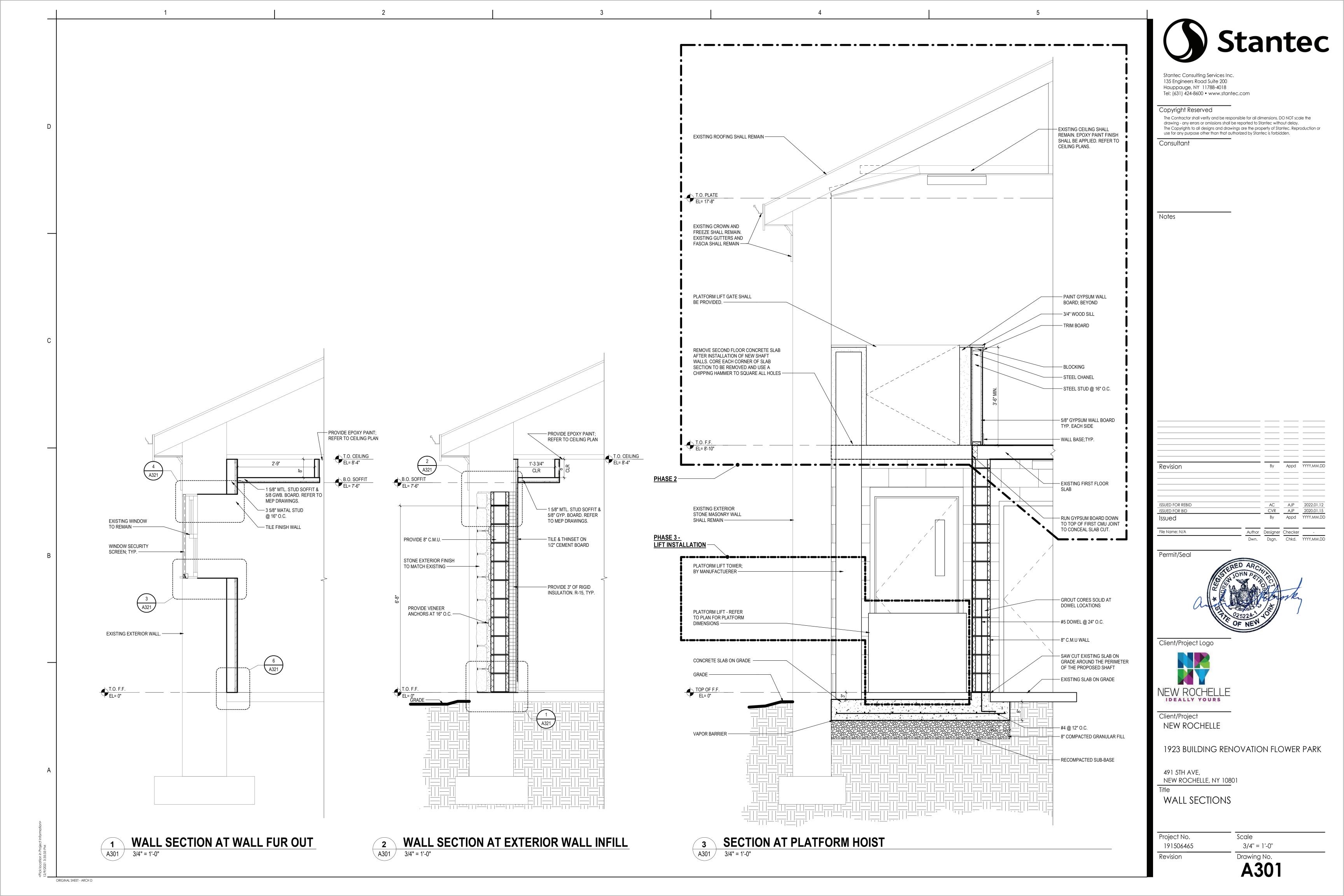
1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801 **ELEVATIONS**

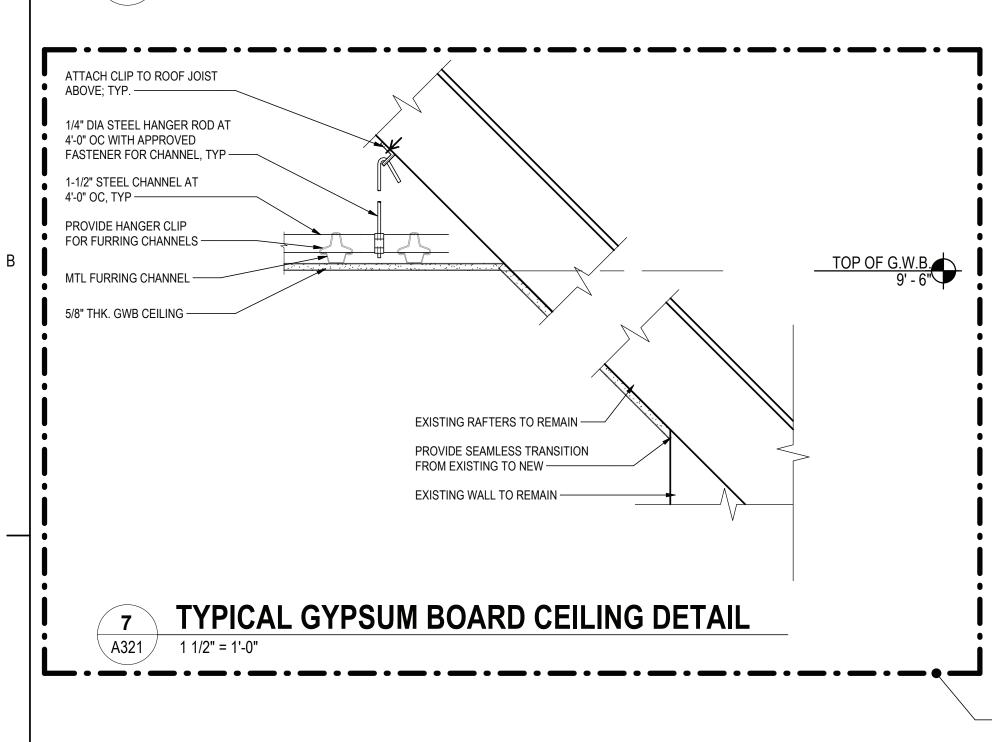
Project No. 191506465 Revision

As indicated Drawing No.

Scale



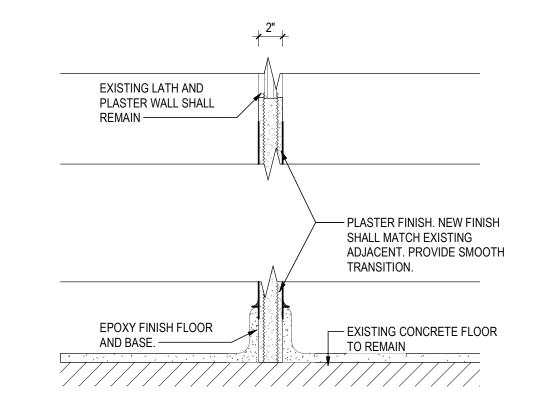
3" RIGID INSULATION, TYP. - PROVIDE Z CHANNEL CMU BLOCK — — TILE AND THINSET BASE FLASHING -FASTEN TO HAT CHANNEL MORTAR — - METAL COVE STRIP EPOXY FLOOR BASE & FLOOR FINISH STONE VENEER ---- EXISITNG SLAB ON GRADE TO REMAIN BASE DETAIL AT EXTERIOR WALL INFILL A321 1 1/2" = 1'-0" - EXISTING WINDOW TO REMAIN - EXISTING EXTERIOR WALL - 1/2" CEMENT BOARD - TILE AND THINSET; TYP. - ALUMINUM TILE EDGE; BASIS OF DESIGN: SCHLUTER EDGE JOLLY - METAL STUDS @ 16" O.C. — TILE; BEYOND - 1/4" CEMENT BOARD - LAMINATED - WINDOW SECURITY SCREEN; TYP. SECURE PER MANUFACTERER INSTRUCTIONS WALL HEAD DETAIL AT WALL FUR OUT ATTACH CLIP TO ROOF JOIST ABOVE; TYP. —— 1/4" DIA STEEL HANGER ROD AT



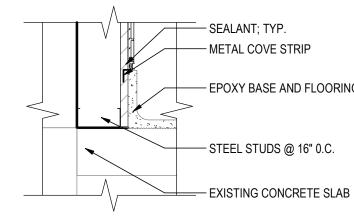
ORIGINAL SHEET - ARCH D

EXISTING FREEZE BOARD TO REMAIN -— EXISTING EXTERIOR WALL CONSTRUCTION TO REMAIN SOAP BLOCKING — - EXISTING STEEL LINTEL TO REMAIN STONE EXTERIOR VENEER - 7/8" MTL. HAT CHANNEL TO MATCH EXISTING — — STEEL TOP PLATE TILE; REFER TO INTERIOR ELEVATIONS — 3" RIGID INSULATION R-15 - METAL AT 16" O.C. REFER TO PLAN FOR WALL TYPE 8" C.M.U. BLOCK 1/2" CEMENT BOARD WALL INFILL — HORIZ. JOINT REINFORCING @ 16" 0.C.









WINDOW BASE DETAIL AT FURRED WALL

1 1/2" = 1'-0"

- WINDOW SECURITY SCREEN; TYP. SECURE PER MANUFACTUERER

RECCOMMENDATIONS

TILE AND THINSET; TYP.

TILE; BEYOND

- EXISTING WINDOW TO REMAIN

- CEMENT BOARD - LAMINATED TO SILL

— TILE; REFER TO INTERIOR ELEVATIONS

- ALUMINUM TILE EDGE; BASIS OF

DESIGN: SCHLUTER EDGE JOLLY

— STEEL STUDS @ 16" O.C.

— EXISTING EXTERIOR WALL

- 1/2" CEMENT BOARD





Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

AJP 2022.01.12 AJP 2020.01.15 Appd YYYY.MM.DD Issued Author Designer Checker 07/23/19
Dwn. Dsgn. Chkd. YYYY.MM.DD File Name: N/A

Permit/Seal



Client/Project Logo



Client/Project **NEW ROCHELLE**

1923 BUILDING RENOVATION FLOWER PARK

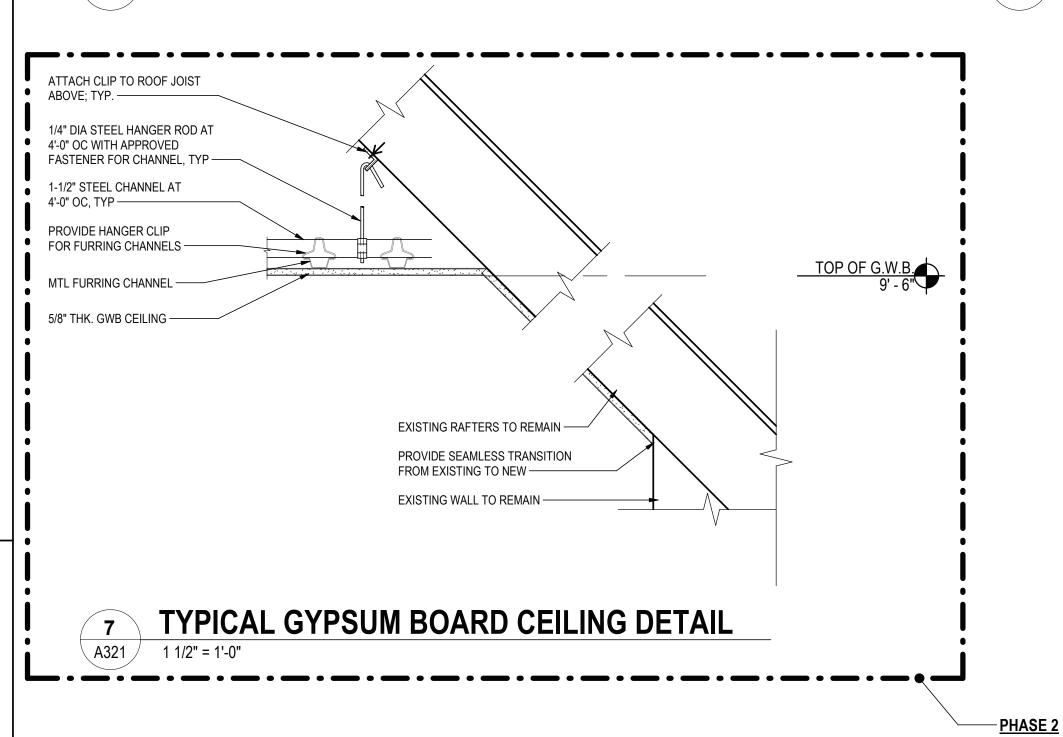
491 5TH AVE, NEW ROCHELLE, NY 10801 SECTIONS DETAILS

Project No. 191506465

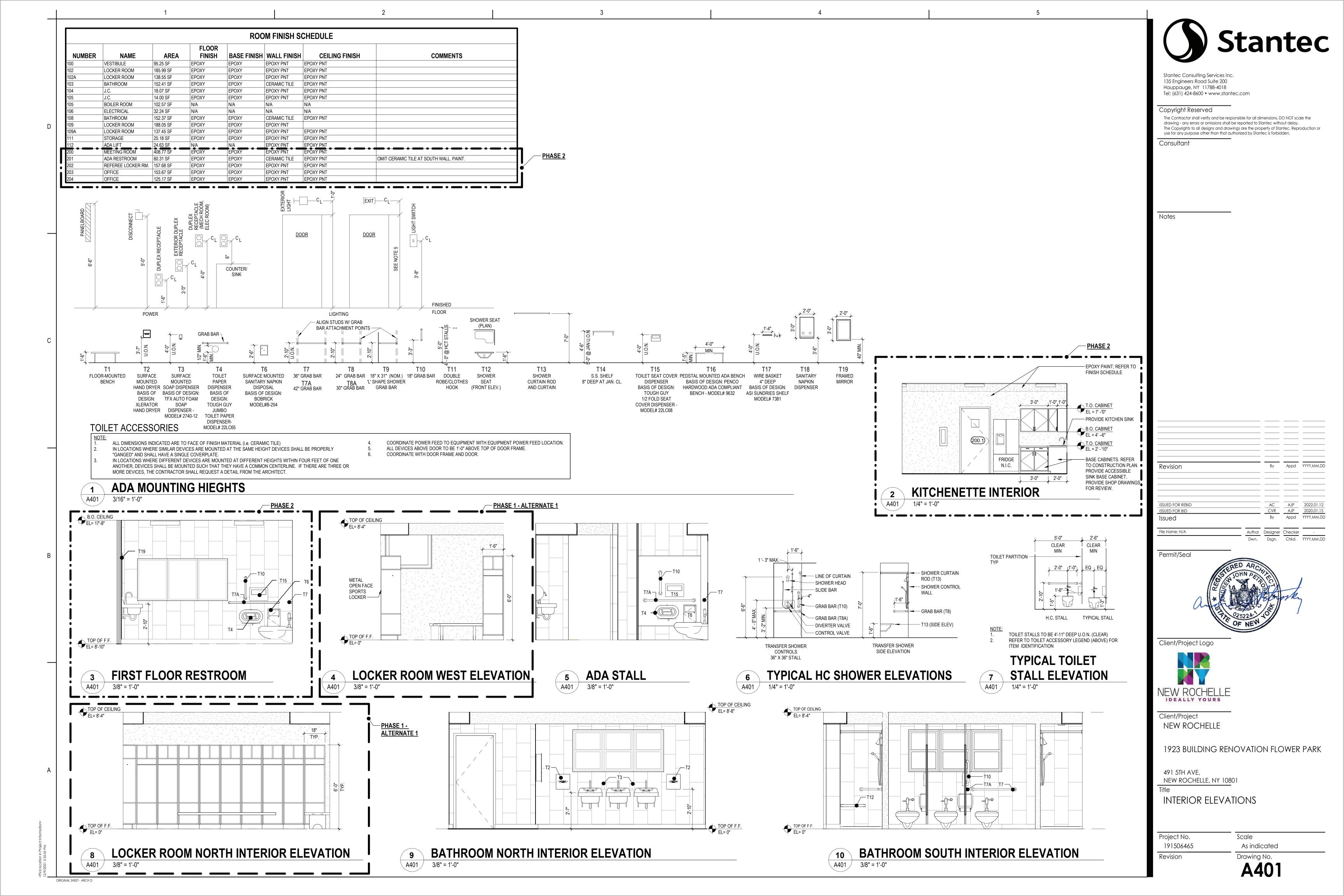
Revision

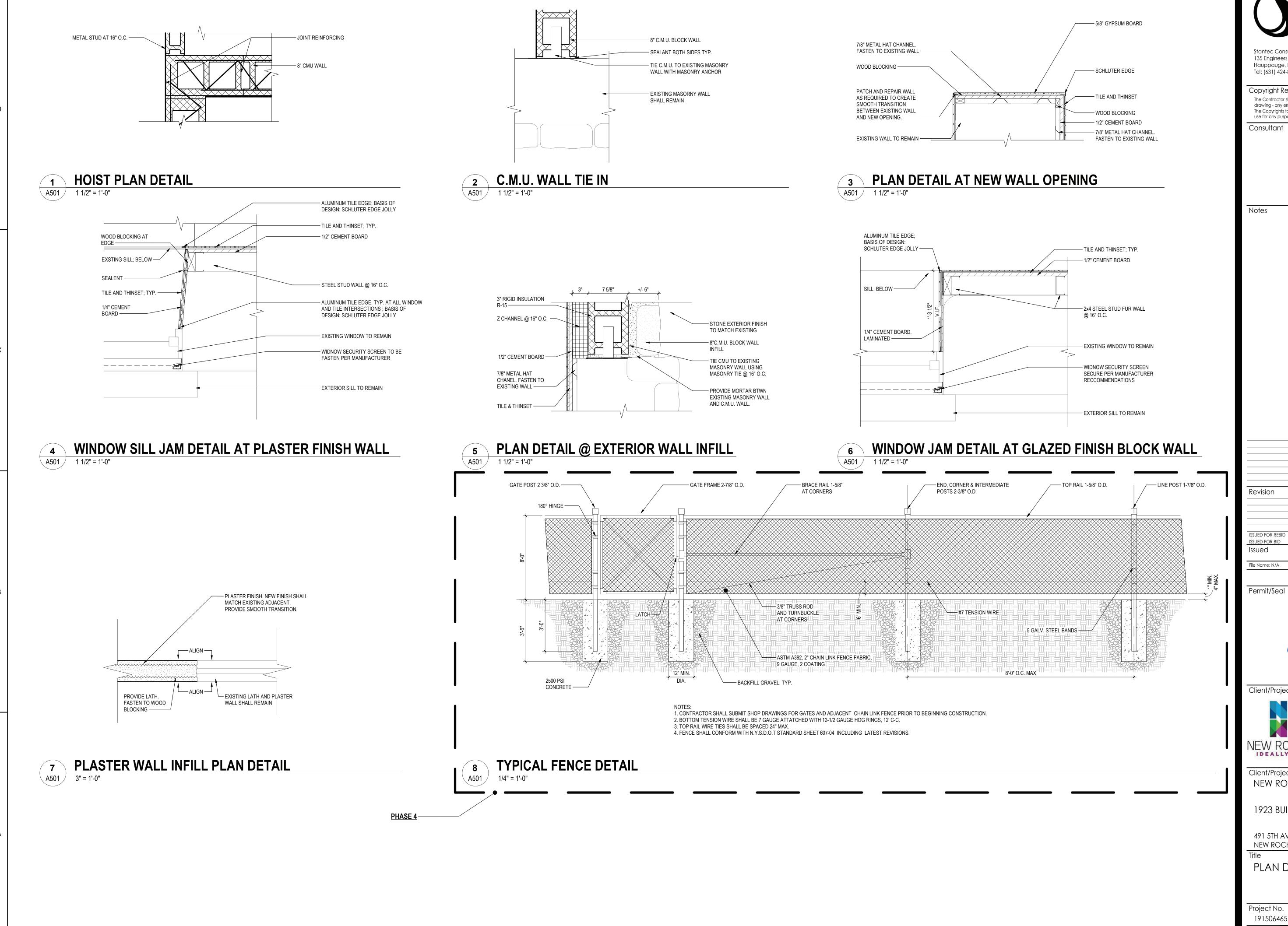
1 1/2" = 1'-0" Drawing No.

Scale



- EPOXY BASE AND FLOORING





ORIGINAL SHEET - ARCH D

Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

AJP 2020.01.15 Appd YYYY.MM.DD Author Designer Checker 07/18/19
Dwn. Dsgn. Chkd. YYYY.MM.DD

Client/Project Logo



Client/Project **NEW ROCHELLE**

1923 BUILDING RENOVATION FLOWER PARK

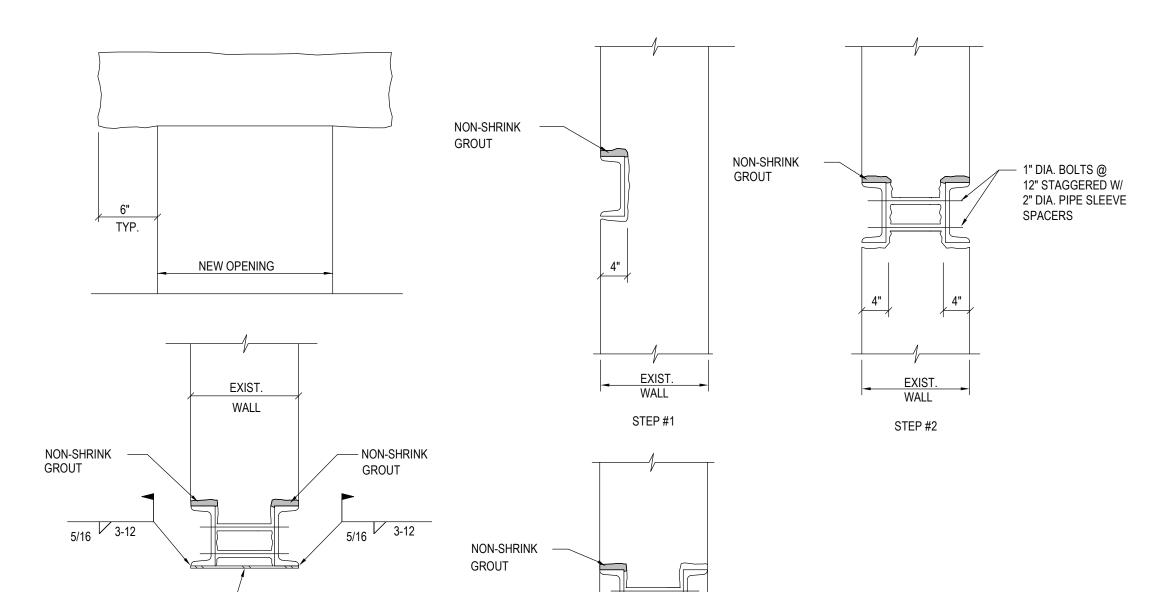
491 5TH AVE, NEW ROCHELLE, NY 10801

PLAN DETAILS

191506465 Revision

As indicated Drawing No.

Scale



CONSTRUCTION PROCEDURE

- 1. SHORE EXISTING WALL AS REQUIRED.
- 2. CUT INTO EXISTING WALL A MAX. OF 4" DEEP ON ONE SIDE ONLY.
- 3. INSTALL CHANNEL AND GROUT SOLID ABOVE FOR FULL WIDTH OF FLANGE THE ENTIRE LENGTH OF CHANNEL. GROUT SOLID BELOW FLANGE ON BOTH SIDES AT NEW BEARING AREA.
- 4. ALLOW GROUT TO REACH COMPRESSIVE STRENGTH OF 1500 PSI. 5. CUT INTO EXISTING WALL A MAX. OF 4" DEEP ON OTHER SIDE.
- 6. DRILL PIPE SPACER HOLES THRU CENTER OF WALL AND INSTALL 1" DIA. BOLTS AND SPACERS.
- 7. INSTALL CHANNEL AND GROUT SOLID ABOVE FOR FULL WIDTH OF FLANGE THE ENTIRE LENGTH OF CHANNEL. GROUT SOLID BELOW FLANGE ON BOTH SIDES AT NEW BEARING AREA. 8. FASTEN CHANNELS TOGETHER AND WELD NUTS TO THREADED ROD.
- 9. ALLOW GROUT TO REACH COMPRESSIVE STRENGTH OF 1500 PSI.
- 10. REMOVE TOP 2'-0" OF WALL BELOW BOTTOM OF CHANNELS. 11. INSTALL CONT. BOTTOM PLATE AND WELD AS SHOWN ON DETAIL.
- 12. REMOVE REMAINDER OF WALL TO OPENING SIZE SHOWN ON PLANS. 13. STEEL TO BE GALVANIZED.

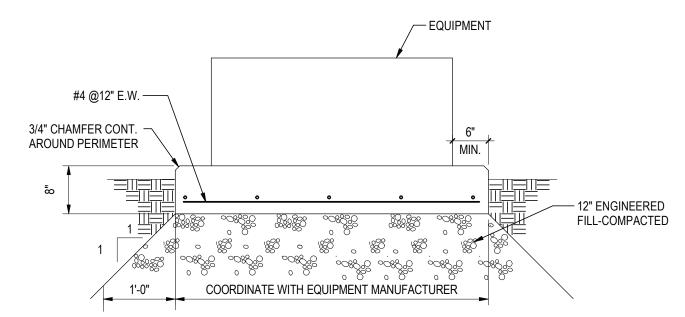
STEEL LINTEL SCHEDULE L-1 (2) MC6x16.3 SEE DETAILS

LINTEL FOR EXISTING WALL DETAIL

STEP #3

A502 SCALE: N.T.S.

3/8" CONT. PL.

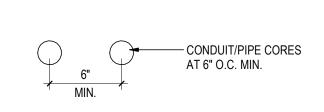


	LOOSE LINTEL SCHEDULE
	(LOADBERING MASONRY PARTITION WALLS ONLY)
MAX.	MASONRY WALL THICKNESS
MASONRY OPENING	8 INCH WALLS
3'-0"	(2) L3x3x5/16

TYPICAL EXTERIOR EQUIPMENT PAD DETAIL

A502 SCALE: N.T.S.

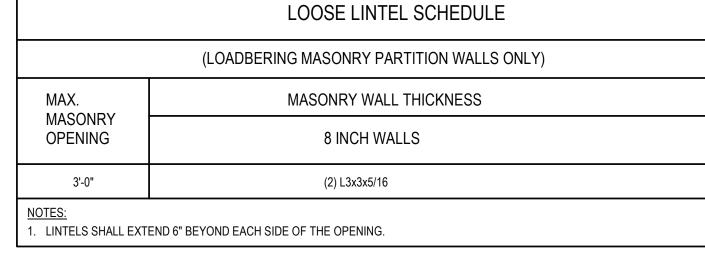
> 8" DIA. CORE ----USE CHIPPIN HAMMER TO SPAWL OFF OPENING -MECHANICAL DUCT WORK; REFER TO MECHANICAL PLANS FOR MORE



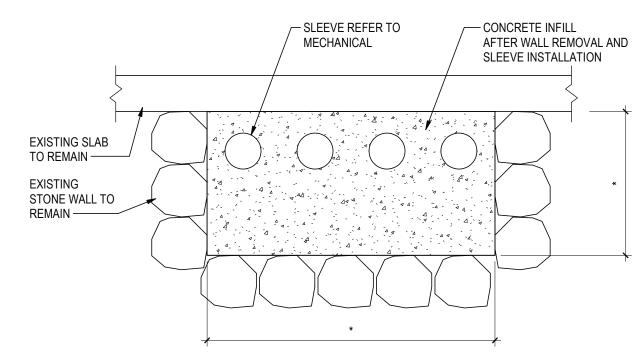
TYPICAL DUCT PENETRATION IN CONCRETE WALL

TYPICAL PIPE PENETRATION IN CONCRETE WALL

TYPICALPENTRATIONS IN CONCRETE WALL



LOOSE LINTEL SCHEDULE A502

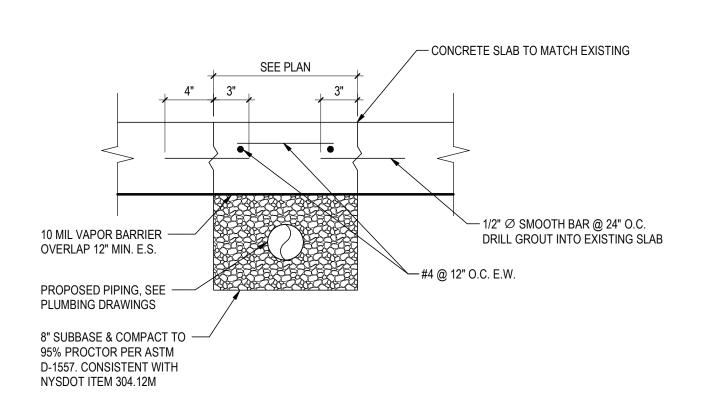


NOTE:

* = REMOVE EXISTING WALL AS REQ'D.

TO INSTALL PIPING & CONDUITS.

TYPICAL STONE WALL PIPE PENTRATION DETAIL A502



TYP. INTERIOR TRENCH DETAIL



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

Notes

AJP 2022.01.12 AJP 2020.01.15 Appd YYYY.MM.DD ISSUED FOR REBID Issued EW EW MS 07/24/19
Dwn. Dsgn. Chkd. YYYY.MM.DD File Name: N/A

Permit/Seal



Client/Project Logo



Client/Project NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

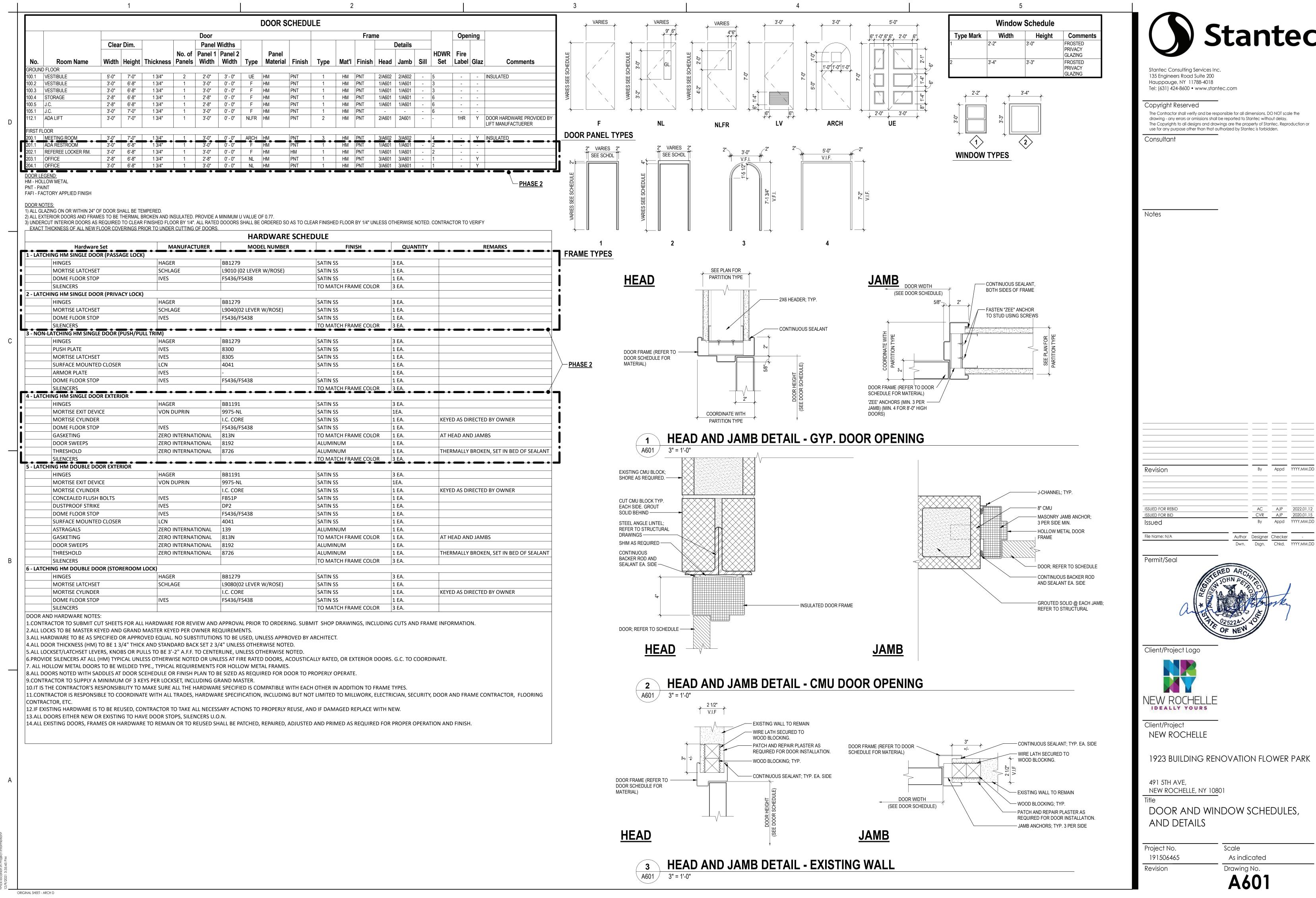
491 5TH AVE, NEW ROCHELLE, NY 10801 TYPICAL DETAILS

Project No. 191506465

Revision

Scale As indicated Drawing No.

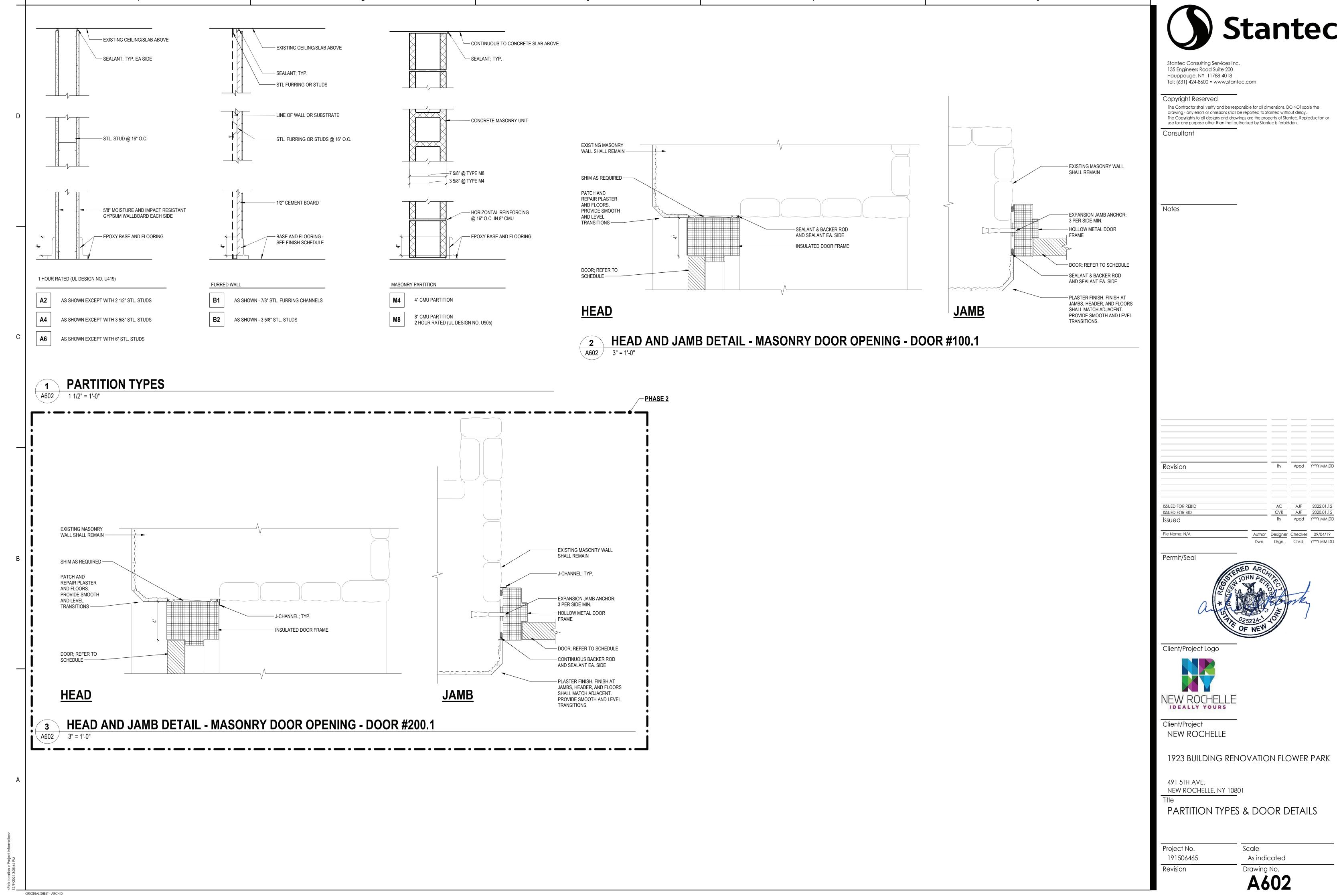
A502



The Contractor shall verify and be responsible for all dimensions. DO NOT scale the

1923 BUILDING RENOVATION FLOWER PARK

DOOR AND WINDOW SCHEDULES,



	,
SYMBOL	DESCRIPTION
Ф	20A, 125V DECORA STYLE DUPLEX RECEPTACLE — FLUSH WALL MOUNTED
⊕ usb	20A, 125V DECORA STYLE DUPLEX RECEPTACLE WITH DUAL USB PORTS
Φ	20A, 125V SINGLE RECEPTACLE — FLUSH WALL MOUNTED
**	20A, 125V DECORA STYLE QUADRUPLEX RECEPTACLE - FLUSH WALL MOUNTED
•	20A, 125V DECORA STYLE GFCI TYPE DUPLEX RECEPTACLE — FLUSH WALL MOUNTED
WP	20A, 125V GFCI TYPE WEATHER RESISTANT DUPLEX RECEPTACLE IN WEATHER PROOF ENCLOSURE
•	SPECIAL PURPOSE RECEPTACLE — FLUSH WALL MOUNTED
	20A, 125V DECORA STYLE HALF SWITCHED DUPLEX RECEPTACLE — FLUSH WALL
	MOUNTED. BOTTOM HALF OF DUPLEX RECEPTACLE TO BE SWITCHED VIA WALL SWITCH FLUSH FLOOR MOUNTED COMBINATION VOICE/DATA & POWER OUTLET
0	CEILING MOUNTED JUNCTION BOX WITH FINAL EQUIPMENT CONNECTION
<u> </u>	FLUSH WALL MOUNTED JUNCTION BOX WITH FINAL EQUIPMENT CONNECTION
J	FLUSH FLOOR MOUNTED JUNCTION BOX WITH FINAL EQUIPMENT CONNECTION
	UNFUSED DISCONNECT SWITCH - 30A, 3P, U.O.N.
100A	FUSED DISCONNECT SWITCH - 100 AMP SWITCH, 60 AMP FUSE, UNFUSED (EXCEPT
© 60A	WHERE FUSE SIZE IS INDICATED) 3-POLE (EXCEPT WHERE NOTED) COMBINATION MOTOR CONTROLLER AND DISCONNECT SWITCH FURNISHED BY MECHANICAL CONTRACTOR INSTALLED BY ELECTRICAL CONTRACTOR. COOR. LOCATION W/MECH. CONT.
CB 100A 60A	CIRCUIT BREAKER 100A FRAME/60A TRIP, 3 POLE, U.O.N. ST - SHUNT TRIP
VFD	VARIABLE FREQUENCY DRIVE (VFD), FURNISHED BY MECHANICAL CONTRACTOR INSTALLED BY ELECTRICAL CONTRACTOR. COORD. LOCATION WITH MECH. CONTRACTOR
TVSS	SURGE SUPPRESSER, LIEBERT ACCUVAR #ACV-120-Y-111-RKE FED WITH 30A/3P C/B MOUNT WITHIN 3ft OF TOTAL WIRE LENGTH FROM SOURCE
[FSD]	COMBINATION FIRE/SMOKE DAMPER — COORD. LOCATION WITH MECH. CONTRACTOR INTERCONNECT TO FIRE ALARM SYSTEM
M	MOTOR
	PULLBOX, SIZED PER NEC
T	DRY TYPE 480-208V TRANSFORMER DELTA-WYE WITH GROUNDED SECONDARY SIDE, UON.
	FLUSH MOUNTED PANELBOARD
	SURFACE MOUNTED PANELBOARD
GND	GROUND BAR
	2#12+1#12G-3/4"C FOR ONE CKT. HOMERUN, U.O.N.
	3#12+1#12G-3/4"C FOR TWO CKT. HOMERUN, U.O.N.
	4#12+1#12G-3/4"C FOR THREE CKT. HOMERUN, U.O.N.
	3#12+1#12G-3/4"C HOMERUN, U.O.N.
	CONCEALED CONDUIT
-	CONDUIT TURNING UP
-	CAPPED CONDUIT
5	FLEXIBLE EQUIPMENT CONNECTION
Ţ	GROUND CONNECTION
	CIRCUIT BREAKER — MOLDED CASE TYPE
-<←^→> ≻	DRAW OUT TYPE CIRCUIT BREAKER
	FUSED SWITCH, TYPE 'FA' FUSE
	FUSE
	UNFUSED SWITCH - 100 AMP SWITCH
(M)	UTITLITY METER WITH CT. COMPARTMENT
SUB	DIGITAL SUB-METER E-MON D-MON 2000 CLASS #208400D KIT, PROVIDE A 20A/3-POLE BREAKER IN LOCAL POWER PANEL
CHIME DB / DB T	DOOR BELL PUSH BUTTON / DOOR BELL CHIME AND ASSOCIATED TRANSFORMER
Ţ	WALL MOUNTED TELEVISION OUTLET WITH 3/4" EMPTY CONDUIT & DRAG LINE TERMINATED IN A 90° BEND 6" INTO NEAREST ACCESSIBLE CEILING
V	VOICE & DATA OUTLET LOCATION WITH 1" EMPTY CONDUIT & DRAG LINE TERMINATED IN A 90 DEG. BEND 6" INTO NEAREST ACCESSIBLE CEILING
₽ \$н	ADA "CALL FOR ASSISTANCE" PULL CORD SWITCH, HORN/STROBE & 24V TRANS., EST EDWARDS KIT MODEL #6538-G5
\$ _T	MANUAL STARTER — TOGGLE TYPE WITH THERMAL ELEMENT — 250V HP RATED, FURNISHED BY ELEC CONTRACTOR
⊗ ⊗ ⊚	CEILING MOUNTED EDGE-LIT LED EXIT SIGN WITH EMERGENCY BATTERY BACKUP, DUAL-LITE LE SERIES
<u> </u>	WALL MOUNTED EDGE—LIT LED EXIT SIGN WITH EMERGENCY BATTERY BACKUP, DUAL—LITE LE SERIES
	WALL MOUNTED EMERGENCY LIGHTING UNIT, DUAL-LITE #LZ-25-03L
	RECESSED CEILING MOUNTED EMERGENCY LIGHTING UNIT, LIGHTALARMS PHANTOM SERIES #PHN100-2LD7-IDNA WITH REMOTE TEST SWITCH PSW-1

ELECTRICAL SYMBOL LIST

(NOT ALL SYMBOLS SHOWN ARE NECESSARILY USED ON THIS PROJECT)

	LIGHTING CONTROL SYMBOL LIST
	(NOT ALL SYMBOLS SHOWN ARE NECESSARILY USED ON THIS PROJECT)
SYMBOL	DESCRIPTION
\$	SINGLE POLE LINE VOLTAGE SWITCH
\$ ³	3-WAY LINE VOLTAGE SWITCH
\$ ^K	KEY ACTIVATED LINE VOLTAGE SWITCH
P	LUTRON NOVA T SERIES DIMMER SWITCH, U.O.N., EXACT DEVICE SPEC SHALL BE COORDINATED WITH LIGHT FIXTURE DIMMING CAPABILITIES
PP	POWER PACK MOUNTED IN JUNCTION BOX LOCATED ABOVE FINISHED CEILING LUTRON #RMJS-16R-DV-B
PPEM	POWER PACK MOUNTED IN JUNCTION BOX LOCATED ABOVE FINISHED CEILING LUTRON #RMJS-16R-DV-B-EM
DM	0-10V DIMMING MODULE MOUNTED IN JUNCTION BOX LOCATED ABOVE FINISHED CEILING, LUTRON #RMJS-8T-DV-B
DM _{EM}	0-10V EMERGENCY DIMMING MODULE MOUNTED IN JUNCTION BOX LOCATED ABOVE FINISHED CEILING, LUTRON #RMJS-8T-DV-B-EM
WS	WIRELESS OCCUPANCY SENSOR, CEILING MOUNTED, LUTRON #LRF2-OCR2B-P-WH
WH	VIVE WIRELESS HUB, FLUSH MOUNTED, LUTRON #HJS-0-FM + #PS-J-20W-UNV POWER SUPPLY MOUNTED IN JUNCTION BOX
os	DUAL TECHNOLOGY VACANCY SENSOR, WALL MTD. LUTRON #MS-B102
DS	WIRELESS DAYLIGHT SENSOR, CEILING MOUNTED, LUTRON #LRF2-DCRB-WH
ws	WALL MTD WIRELESS OCCUPANCY SENSOR, LUTRON #LRF2-O-W-LB-P-WH
\$ WS	WIRELESS 2-BUTTON SWITCH, LUTRON #PJ2-2B-GWH-L01 + #CW-1-WH
\$ DS	WIRELESS 3-BUTTON RAISE/LOWER SWITCH, LUTRON #PJ2-3BRL-GWH-L01 + #CW-1-WH
\$ ^{SS}	WIRELESS 4-BUTTON SCENE SWITCH, LUTRON #PJ2-4B-GWH-L31 + #CW-1-WH
\$ ^{OR}	REMOTE TIMED OVERRIDE SWITCH TORK #SSA200R-24
TC	DIGITAL TIME CLOCK TORK DLC SERIES #DLC400BP
©	SINGLE FIXTURE GENERATOR TRANSFER DEVICE, PHILLIPS BODINE #GTD
BLCD	SINGLE CIRCUIT GENERATOR TRANSFER DEVICE WITH OVERRIDE, PHILLIPS BODINE #BLCD-20B
GTD	SINGLE CIRCUIT GENERATOR TRANSFER DEVICE WITH DIMMING CONTROL AND OVERRIDE, PHILLIPS BODINE #GTD-20A

	ELECTRICAL A	BBREVIATIO	<u>ONS</u>
	(NOT ALL SYMBOLS SHOWN ARE NE	CESSARILY USE	D ON THIS PROJECT)
Α	AMPERE	КСМ	THOUSAND CIRCULAR MILS
AC	ABOVE COUNTER	KV	KILOVOLT
AFF	ABOVE FINISHED FLOOR	KVA	KILOVOLT AMPERE
AIC	AMP INTERRUPTING CAPACITY	KW	KILOWATT
ATS	AUTOMATIC TRANSFER SWITCH	KWH	KILOWATT HOUR
AUTO	AUTOMATIC	LTG	LIGHTING
AWG	AMERICAN WIRE GAUGE	MAX	MAXIMUM
BLDG	BUILDING	MCB	MAIN CIRCUIT BREAKER
С	CONDUIT	мсс	MOTOR CONTROL CENTER
СВ	CIRCUIT BREAKER	MIN	MINIMUM
CCTV	CLOSED CIRCUIT TELEVISION	MTD	MOUNTED
CKT	CIRCUIT	N	NEUTRAL
CO	CARBON MONOXIDE	NIC	NOT IN CONTRACT
СОММ	COMMUNICATION	NTS	NOT TO SCALE
СТ	CURRENT TRANSFORMER	ОС	ON CENTER
CU	COPPER	Р	POLE
DEG	DEGREE	ø or PH	PHASE
DGP	DATA GATHERING PANEL	PNL	PANEL
DISC	DISCONNECT	PWR	POWER
DN	DOWN	R	RELOCATED
DWG	DRAWING	RECEPT	RECEPTACLE
E/EX	EXISITNG TO REMAIN	TEL	TELEPHONE
EC	ELECTRICAL CONTRACTOR	TOS	TOP OF SHAFT
EM	EMERGENCY	TV	TELEVISION
ER	EXISTING TO BE REMOVED	TYP	TYPICAL
FA	FIRE ALARM	UON	UNLESS OTHERWISE NOTED
FACP	FIRE ALARM CONTROL PANEL	٧	VOLT OR VOLTAGE
FL	FLOOR	VA	VOLT AMPERE
FT	FEET OR FOOT	VIF	VERIFY IN FIELD
GRD	GROUND	W	WATT
GFI	GROUND FAULT INTERRUPTER	WP	WEATHERPROOF
HID	HIGH INTENSITY DISCHARGE	WT	WATERTIGHT
HP	HORSE POWER	XP	EXPLOSION PROOF
HZ	HERTZ		
JB	JUNCTION BOX		

NEW YORK STATE CODES & STANDARDS

- 2015 INTERNATIONAL BUILDING CODE
- 2015 INTERNATIONAL FIRE CODE 2015 INTERNATIONAL PLUMBING CODE
- 2015 INTERNATIONAL MECHANICAL CODE
- 2015 INTERNATIONAL FUEL GAS CODE
- 2017 NYS UNIFORM CODE SUPPLEMENT LOCAL FIRE DEPARTMENT/FIRE MARSHAL
- ALL OTHER LOCAL AUTHORITIES HAVING JURISDICTION

NEW YORK STATE ENERGY CODES

- 2015 INTERNATIONAL ENERGY CONSERVATION CODE
- 2013 ASHRAE 90.1 2016 SUPPLEMENT TO THE NEW YORK STATE ENERGY CONSERVATION CODE (REVISED AUGUST 2016)

LOCAL CODES

NEW ROCHELLE MUNICIPAL CODE

REFERENCED STANDARDS

APPLICABLE REFERENCE STANDARDS SHALL BE AS REFERENCED BY ALL STATE AND LOCAL CODES. THE LIST BELOW IS FOR QUICK REFERENCE AND DOES NOT INCLUDE ALL APPLICABLE REFERENCE

- 2013 NPFA 13 STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS
- 2013 NFPA 14 STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS
- 2013 NFPA 20 STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
- 2014 NFPA 70 NATIONAL ELECTRICAL CODE
- 2013 NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE

PROFESSIONAL STATEMENT

TO THE BEST OF OUR KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2016 SUPPLEMENT TO THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE.

ELECTRICAL DRAWING LIST				
SHEET NUMBER	SHEET TITLE			
E-001	ELECTRICAL COVER PAGE			
E-002	ELECTRICAL NOTES			
ED-101	ELECTRICAL GROUND & FIRST FLOOR DEMOLITION PLANS			
E-101	ELECTRICAL GROUND & FIRST FLOOR POWER PLANS			
E-201	ELECTRICAL GROUND & FIRST FLOOR LIGHTING PLANS			
E-301	ELECTRICAL PANEL SCHEDULE			
E-401	ELECTRICAL DETAILS			
E-402	ELECTRICAL DETAILS			
E-501	ELECTRICAL SPECIFICATIONS			
E-502	ELECTRICAL SPECIFICATIONS			

ELECTRICAL POWER NOTES

- A. CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS AND ARCHITECT IN FIELD FOR EXACT LOCATION, QUANTITY AND ELEVATION OF RECEPTACLE OUTLETS PRIOR TO INSTALLATION.
- B. RECEPTACLES SHALL BE CIRCUITED IN ACCORDANCE WITH CIRCUIT NUMBER INDICATED ADJACENT TO EACH DEVICE. CIRCUITRY MAY BE SHOWN IN CERTAIN INSTANCES.
- C. ALL RECEPTACLES SPECIFIED FOR PERSONAL COMPUTERS, LASER PRINTERS AND SIMILAR TYPES OF EQUIPMENT SHALL BE PROVIDED WITH A SEPARATE NEUTRAL AND GROUND CONDUCTOR. THIS IS TO COMPENSATE FOR HARMONIC CURRENTS. SHARED NEUTRAL CONDUCTORS FOR THESE HOMERUNS ARE NOT PERMITTED, UNLESS OTHERWISE
- D. THE ELECTRICAL CONTRACTOR SHALL CONFIRM THE CONFIGURATION TYPE FOR ALL SPECIAL RECEPTACLES FOR COPIERS, DATA PROCESSING EQUIPMENT. ETC. WITH OWNER AND ENGINEER PRIOR TO ORDERING.
- CIRCUIT NUMBERS ARE INDICATED FOR INTENT ONLY. THE ELECTRICAL CONTRACTOR SHALL ADJUST ACCORDINGLY IN THE FIELD, TO BALANCE THE CIRCUITS EVENLY ON ALL PHASES. VERIFY SPARE CIRCUIT BREAKERS IN THE FIELD.
- MECHANICAL EQUIPMENT IS LOCATED ABOVE THE HUNG CEILING UNLESS OTHERWISE NOTED. EXACT LOCATION SHALL BE DETERMINED FROM MECHANICAL DRAWINGS.
- G. COORDINATE LOCATION FOR ALL MOTORIZED DAMPERS, DUCT MOUNTED SMOKE DETECTORS & MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR.
- COORDINATE THE HARDWARE REQUIREMENTS FOR THE DOORS WITH THE ARCHITECT & SECURITY CONSULTANT PRIOR TO INSTALLATION (I.E. ELECTRIC HINGES, CARD READERS, ELECTRIC STRIKES, MAGNETIC SWITCHES, POWER SUPPLIES, ETC.)
- ALL BRANCH CIRCUIT HOME RUNS SHALL BE 2#12 & 1#12 GRD IN 3/4" CONDUIT, U.O.N. TO PANEL & CIRCUIT INDICATED. MAXIMUM OF THREE HOMERUNS PER CONDUIT.
- J. ALL POWER AND LIGHTING CIRCUITS, AND LOW VOLTAGE CABLING (VOICE/DATA, FIRE ALARM, LIGHTING CONTROLS, AUDIO/VISUAL, HVAC CONTROLS, ETC.) ROUTED THROUGH EXPOSED CEILINGS SHALL BE IN EMT CONDUIT. COORDINATE INSTALLATION WITH OTHER TRADES. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF EXPOSED CEILINGS.

ELECTRICAL LIGHTING NOTES

- A. FOR EXACT LOCATION, QUANTITY AND ELEVATION OF LIGHTING FIXTURES AND SWITCHES REFER TO ARCHITECTURAL DRAWINGS AND COORDINATE WITH ARCHITECT IN THE FIELD.
- B. LIGHTING FIXTURES SHALL BE CIRCUITED IN ACCORDANCE WITH CIRCUIT NUMBER INDICATED ADJACENT TO EACH FIXTURE. CIRCUITRY MAY BE SHOWN IN CERTAIN INSTANCES.
- C. ALL JUNCTION OR OUTLET BOXES SHALL BE INSTALLED SO AS TO ALLOW ACCESS TO COVER. PROVIDE ARCHITECT APPROVED ACCESS DOORS OR PLATES AS REQUIRED IN AREAS WHERE UNOBSTRUCTED ACCESS TO BOX OR OUTLET IS NOT POSSIBLE.
- D. PRIOR TO ORDERING LIGHTING FIXTURES, COORDINATE WITH ARCHITECTURAL DRAW-INGS AND SPECIFICATIONS. IF DISCREPANCIES EXIST BETWEEN ARCHITECTURAL AND ENGINEERING INFORMATION OBTAIN CLARIFICATION PRIOR TO PROCEEDING.
- CIRCUIT NUMBERS ARE INDICATED FOR INTENT ONLY. THE ELECTRICAL CONTRACTOR SHALL ADJUST ACCORDINGLY IN THE FIELD TO BALANCE THE CIRCUITS EVENLY ON ALL PHASES.
- F. MULTIPLE SWITCHES SHOWN IN SAME LOCATION SHALL BE GANGED TOGETHER WITH A COMMON FACEPLATE.
- G. ALL LIGHTING FIXTURES UTILIZING ELECTRONIC BALLASTS SHALL BE PROVIDED WITH A DEDICATED NEUTRAL OR AN OVERSIZED NEUTRAL WHEN SHARED.
- H. ALL LIGHTING FIXTURES CONTROLLED BY DIMMER SWITCHES SHALL BE PROVIDED WITH DEDICATED NEUTRAL CONDUCTOR.
- ALL NIGHT LIGHTS AND EMERGENCY LIGHTS (NL/EM) SHALL BE UNSWITCHED AND CIRCUITED DIRECTLY TO ASSOCIATED ELECTRICAL EMERGENCY PANEL.
- ALL LIGHT FIXTURES DESIGNATED WITH "EM" OR ARE INDICATED TO BE PROVIDED WITH AN EMERGENCY BATTERY BACK UP BALLAST SHALL HAVE CAPABILITY OF ILLUMINATING ALL LAMPS WITHIN FIXTURE FOR A MINIMUM OF 90 MINUTES.



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

ISSUED FOR BID Issued By Appd YYYY.MM.DD _ ___ __ ___ Dwn. Dsgn. Chkd. YYYY.MM.DD

Permit/Seal



Client/Project Logo



Client/Project NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

ELECTRICAL COVER PAGE

Project No. 191506465

Revision

NONE Drawing No.

Scale

ELECTRICAL DEMOLITION NOTES

- 1.2. SEE HVAC DRAWINGS FOR HVAC EQUIPMENT TO BE REMOVED. REMOVE ALL ASSOCIATED CONDUIT, WIRE, SWITCHES, BOXES ASSOCIATED WITH EQUIPMENT TO BE REMOVED.
- 1.3. SEE PLUMBING DRAWINGS FOR PLUMBING EQUIPMENT TO BE REMOVED.
- 1.4. FOR EQUIPMENT TO BE REMOVED DISCONNECT POWER AND REMOVED CONDUIT/WIRING BACK TO PANEL.
- 1.5. REMOVE ALL DUPLEX RECEPTACLES AND ASSOCIATED CIRCUITING. WHERE OUTLETS ARE REMOVED AND THROUGH CIRCUITING SERVE OTHER OUTLETS BEYOND THE DEMOLITION AREA, RESTORE OR MAINTAIN THROUGH CIRCUITING.
- 1.6. CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS AS REQUIRED TO BUNDLE, NEATEN, AND CLEAN UP EXISTING LOOSE CABLING INCLUDING BUT NOT LIMITED TO LOW VOLTAGE CABLING, FIRE ALARM CABLING, MC CABLING, ETC. WHERE CEILINGS ARE EXPOSED, CONTRACTOR SHALL REINSTALL ALL EXISTING CABLING IN EMT CONDUIT AS CLOSE TO UNDERSIDE OF STRUCTURE AS POSSIBLE.
- 1.7. REMOVE ALL CLIPS AND HANGERS FROM CEILING SLAB AND REPAIR IF REQUIRED.

2. FLOOR OUTLETS — POWER

- 2.1. ALL FLOOR OUTLETS SERVICE FITTINGS SHALL BE REMOVED WITH WIRE, REMOVED BACK TO THE ELECTRIC PANEL FROM WHICH THEY ARE SERVED.
- 2.2. REMOVE FLOOR AFTERSET INSERT. PROVIDE SHEETMETAL "PENNY" AND PATCH BY FILLING WITH CONCRETE. FLUSH WITH FLOOR

3. FLOOR OUTLETS — LOW TENSION

- 3.1. ALL FLOOR OUTLET SERVICE FITTINGS SHALL BE REMOVED WITH DATA/TELEPHONE CABLE. REMOVED BACK TO TELEPHONE
- CLOSET TERMINAL STRIPS. 3.2. REMOVE FLOOR AFTERSET INSERT, PROVIDE SHEETMETAL "PENNY" AND FILL WITH CONCRETE FLUSH WITH FLOOR SLAB.

4. EXISTING CONDUIT

4.1. THIS CONTRACTOR SHALL REMOVE ALL WALL CONDUITS, BOXES, CEILING CONDUITS LEFT AFTER WALL DEMOLITION. REMOVE ALL WIRING BACK TO EXISTING PANELS.

5. EXISTING ELECTRICAL PANELS

5.1. CONTRACTOR SHALL USE CARE IN DISCONNECTING WIRING FROM PANELS AND CIRCUIT BREAKERS. CAREFULLY STORE ALL PANEL COVERS AS CONTRACTOR WILL BE RESPONSIBLE FOR COMPLETE USABLE PANEL INSTALLATION.

6. EXISTING HEADERDUCT

- 6.1. CLEAN OUT EXISTING HEADERDUCT FROM ALL EXISTING WIRING, TAKING CARE NOT TO DISCONNECT ANY LIGHTING CIRCUITS.
- 6.2. CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCHHEADER ACCESS COVER PLATES, GASKETS AND SCREW WHICH WILL HAVE TO BE REPLACED IF LOST AS PART OF THIS WORK.
- 6.3. ELECTRICAL CONTRACTOR SHALL REMOVE ALL EXISTING TELEPHONE AND ELECTRICAL CABLING FROM FLOOR CELLS AND HEADERDUCT BACK TO THEIR RESPECTIVE TELEPHONE AND ELECTRIC CLOSETS. REPLACE AND SECURE ALL COVER PLATES.

7. EXISTING LIGHTING FIXTURES

- 7.1. REMOVE ALL LIGHTING FIXTURES AND DETERMINED IF BALLAST CONTAINS PCB AS DIRECTED TURN OVER TO OWNER/TENANT ALL FIXTURES OR DISPOSE OF THEM IN AN APPROVED MANNER. IF FIXTURES CONTAIN BALLASTS WITH PCB REMOVE BALLASTS FROM FIXTURES AND DISPOSE OF IN AN APPROVED MANNER.
- 7.2. CONTRACTOR SHALL PULL OUT ALL WIRING AND REMOVE ALL CONDUIT. FOR OVERHEAD LIGHTING CIRCUITS RUN IN CELLULAR DECK REMOVE WIRING AND PROPERLY BLANK OFF OUTLET BOXES.
- 7.3. REMOVE ALL ASSOCIATED CONDUIT, WIRE, SWITCHES, BOXES ASSOCIATED WITH EQUIPMENT TO BE REMOVED.
- 7.4. DISCONNECT POWER AND REMOVE CONDUIT/WIRING BACK TO PANEL FOR EQUIPMENT TO BE REMOVED.

8. TEMPORARY LIGHTING AND POWER

- 8.1. FURNISH AND INSTALL WIRING FOR ADEQUATE LIGHT AND SMALL POWER TOOLS FOR THE PROJECT.
- 8.2. MAINTAIN THE SYSTEM IN GOOD AND ADEQUATE WORKING CONDITIONS AT ALL TIMES.
- 8.3. FURNISH AND INSTALL ALL LAMPS, BREAKERS, AND FUSING, AS IS NECESSARY.
- 8.4. REPLACE BURNED OUT LAMPS, DEFECTIVE BREAKERS, OR BLOWN FUSES.
- 8.5. TEMPORARY MAINTENANCE FOR THE ABOVE SHALL BE BASED ON OPERATION 1/2 HOUR BEFORE START OF FIRST TRADE THROUGH 1/2 HOUR AFTER END OF LAST TRADE NORMAL WORK DAY.
- 8.6. TEMPORARY LIGHT AND POWER SHALL BE INSTALLED IN ACCORDANCE WITH CODES AND AUTHORITIES HAVING JURISDICTION.

1. ALL WORK SHALL COMPLY WITH REQUIREMENTS OF THE NATIONAL ELECTRIC CODE, BUILDING DEPARTMENT, BUILDING MANAGEMENT, ALL AUTHORITIES HAVING JURISDICTION, AND APPLICABLE NATIONAL STATE, AND LOCAL CODES. LAWS AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK SHALL BE INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS. CONTRACTOR IS TO INFORM THE ENGINEER OF ANY EXISTING WORK OR MATERIALS WHICH VIOLATE ANY OF THE ABOVE LAWS AND REGULATIONS. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATION OF LAWS AND REGULATIONS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE BY THIS CONTRACTOR AND AT NO EXPENSE TO THE OWNER.

ELECTRICAL GENERAL NOTES

- 2. PRIOR TO SUBMISSION OF BID, THIS CONTRACTOR SHALL VISIT THE JOB SITE TO ASCERTAIN THE ACTUAL FIELD CONDITIONS AS THEY RELATED TO THE WORK AS INDICATED ON THE DRAWINGS AND DESCRIBED HEREIN. DISCREPANCIES, IF ANY, SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO SUBMISSION OF BID, AND, IF NOT RESOLVED TO SATISFACTION, SHALL BE SUBMITTED AS A WRITTEN QUALIFICATION OF THE BID. SUBMISSION OF A BID SHALL BE EVIDENCE THAT SITE VERIFICATION HAS BEEN PERFORMED AS DESCRIBED ABOVE.
- 3. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK AND APPROXIMATE LOCATION OF EQUIPMENT. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS AND COORDINATE FINAL LOCATIONS OF SWITCHES, LIGHT FIXTURES, RECEPTACLES, ETC. WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID CONFLICTS. IF A CONFLICT OCCURS IN THE SPECIFICATIONS AND/OR ON THE DRAWINGS, THE MORE STRINGENT SITUATION SHALL APPLY.
- 4. PRIOR TO SUBMISSION OF BID, THIS CONTRACTOR SHALL REVIEW ALL DRAWINGS OF THE ENTIRE PROJECT INCLUDING GENERAL CONSTRUCTIONS, DEMOLITION, ARCHITECTURAL, MECHANICAL, ELECTRICAL, TELECOM/AV/SECURITY, PLUMBING, AND FIRE PROTECTION AND SHALL INCLUDE ANY WORK REQUIRED IN THE BID WHICH IS INDICATED OR IMPLIED TO BE PERFORMED BY THIS TRADE IN OTHER SECTIONS OF THE WORK.
- 5. ANY EQUIPMENT. PARTS. MATERIALS. ACCESSORIES. OR LABOR THAT IS NECESSARY FOR PROPER PERFORMANCE OF THE ELECTRICAL WORK, ALTHOUGH NOT SPECIFICALLY MENTIONED HEREIN, OR SHOWN ON THE DRAWINGS, SHALL BE FURNISHED AND INSTALLED AS IF CALLED FOR IN DETAIL WITHOUT ADDITIONAL COST.
- 6. ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF THIS WORK. FINAL ACCEPTANCE SHALL BE DEFINED AS THE TIME AT WHICH THE ELECTRICAL WORK IS TAKEN OVER AND ACCEPTED BY THE OWNER, AND IS UNDER CARE, CUSTODY, AND CONTROL OF THE OWNER. ENGAGE THE SERVICES OF VARIOUS MANUFACTURER'S SUPPLYING THE
- 7. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, AND CONTRACTOR'S SERVICES NECESSARY FOR THE COMPLETE AND SAFE INSTALLATION OF ALL ELECTRICAL WORK. THE SCOPE OF
 - ELECTRICAL REQUIREMENTS SHALL BE IN CONFORMANCE WITH ENGINEERING BID DOCUMENTS AS WELL AS DOCUMENTS (SPECIFICATIONS & DRAWINGS) PREPARED BY LOCAL UTILITY COMPANY AND REFERENCED DRAWINGS IN THE UTILITY COMPANY DOCUMENTS NOT INCLUDED
 - CONTRACTOR SHALL COORDINATE AND ARRANGE TO RECEIVE AND/OR PICK UP SPECIFIC
 - REMOVAL AND RELOCATION OF EQUIPMENT AS REQUIRED WHEN INTERFERING WITH NEW WORK.
 - INSTALLATION OF NEW RACEWAY AND CONDUCTORS.
 - CUTTING, CHANNELING, CHASING, AND ROUGH PATCHING REQUIRED TO ACCOMMODATE THE
 - ADDITION OR MODIFICATION OF EXISTING ELECTRICAL DISTRIBUTION EQUIPMENT.
 - AFOREMENTIONED EQUIPMENT.
 - MAINTENANCE AND PROPER OPERATION OF EXISTING BASE BUILDING SYSTEMS WITHIN THE
 - TEMPORARY LIGHT AND POWER DURING CONSTRUCTION.
- 8. THIS CONTRACTOR IS TO OBTAIN A COPY OF THE BUILDING RULES AND REGULATIONS PRIOR TO BID SUBMISSION TO DETERMINE REQUIREMENTS AND THE EXTENT OF PREMIUM TIME WORK REQUIRED BY BUILDING MANAGEMENT. FOR THE PURPOSE OF BID, ASSUME ANY NOISY WORK (E.G., CHOPPING, CORE
- 9. "THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION" AIA DOCUMENT A201 LATEST EDITION, OR AS REQUIRED BY THE ARCHITECTS DOCUMENTS AND/OR THE STRUCTURAL ENGINEERS DOCUMENTS, AS APPLICABLE, ARE PART OF THIS DOCUMENT.
- 10. SUBMIT SHOP DRAWINGS CERTIFIED BY ALL TRADES THAT COORDINATION HAS BEEN ESTABLISHED. SUBMIT ALL CERTIFIED EQUIPMENT CUTS WITH CONSTRUCTIONS WIRING DIAGRAMS. PROVIDE DIGITAL COPIES OF ALL DRAWINGS. SPECIFIC JOB REQUIREMENTS MAY BE MORE STRINGENT AND CONTRACTOR IS RESPONSIBLE TO OBTAIN REQUIREMENTS FROM CONSTRUCTION MANAGER, GENERATOR CONTRACTOR,
- 11. SUBMIT (4) LOOSE-LEAF BOUND OPERATING AND MAINTENANCE MANUALS WITH INDEX AND INDEX TABS
- AS-BUILT CONDITION (DEVICES, EQUIPMENT, CIRCUITRY, ETC.) DRAWINGS UPON COMPLETION OF THE PROJECT. FINAL SUBMISSION OF REPRODUCIBLE AS-BUILT DRAWINGS ARE TO BE SIGNED AND CERTIFIED
- 13. NO SUBSTITUTE MATERIAL OR MANUFACTURER OF EQUIPMENT SHALL BE PERMITTED WITHOUT A FORMAL WRITTEN SUBMITTAL TO THE ENGINEER WHICH INCLUDES ALL DIMENSION, PERFORMANCE, AND MATERIAL SPECIFICATIONS. ANY CHANGES IN LAYOUT, ELECTRICAL CHARACTERISTICS, STRUCTURAL REQUIREMENTS, OR DESIGN DUE TO THE USE OF A SUBSTITUTION SHALL BE SUBMITTED TO THE ENGINEER AS PART OF THIS PROPOSAL. THE CONTRACTOR TAKES FULL RESPONSIBILITY FOR THE SUBSTITUTION AND ALL CHANGES RESULTING FROM SUBSTITUTION.
- 14. THIS CONTRACTOR SHALL SUBMIT FOR APPROVAL, A PLAN INDICATING THE SIZE AND LOCATION OF ALL ACCESS DOORS REQUIRED FOR OPERATION AND MAINTENANCE OF ALL CONCEALED EQUIPMENT, DEVICES,

ELECTRICAL GENERAL NOTES (CONTINUED)

- INSTALLATION OF ALL ACCESS DOORS IN FINISHED CONSTRUCTION AND INCLUDE COSTS IN THE BID.
- 15. REMOVAL, TEMPORARY CONNECTIONS, AND RELOCATION OF CERTAIN EXISTING WORK WILL BE NECESSARY FOR THE INSTALLATION OF THE NEW SYSTEMS. ALL EXISTING CONDITIONS ARE NOT COMPLETELY DETAILED ON THE DRAWINGS. THE CONTRACTOR SHALL SURVEY THE SITE AND MAKE ALL NECESSARY CHANGES REQUIRED BASED ON EXISTING CONDITIONS FOR PROPER INSTALLATION OF NEW WORK.
- 16. PLAN INSTALLATION OF NEW WORK AND CONNECTIONS TO EXISTING WORK TO INSURE MINIMUM INTERFERENCE WITH REGULAR OPERATION OF EXISTING FACILITIES. ALL SYSTEM SHUTDOWNS AFFECTING OTHER AREAS SHALL BE ORGANIZED WITH BUILDING MANAGEMENT. PROVIDE TEMPORARY FEEDERS, CIRCUITRY, ETC., AS REQUIRED TO MINIMIZE DOWNTIME.
- 17. DISCONNECTS SHALL BE 'QUICK-BREAK' HEAVY DUTY TYPE IN NEMA 1 ENCLOSURE FUSED OR UN-FUSED AS INDICATED ON THE DRAWINGS. FUSES FOR SWITCHES SHALL BE CURRENT LIMITING TYPE WITH AN INTERRUPTING CAPACITY OF 200,000 RMS AMPERES AND OF THE CONTINUOUS CURRENT RATING AS SHOWN ON THE DRAWINGS.
- 18. CIRCUIT BREAKERS SHALL BE 'THERMAL MAGNETIC' TYPE, QUICK—MAKE, QUICK—BREAK WITH NON-WELDING CONTACTS COMPENSATED FOR AMBIENT TEMPERATURES AND SHALL HAVE A MINIMUM SHORT CIRCUIT RATING OF 10,000 AMPERES SYMMETRICAL FOR 120/208V PANELS AND 14,000 AMPERES SYMMETRICAL FOR 277/480V PANELS OR HIGHER WHERE NOTES.
- 19. CONDUIT SHALL BE RIGID THREADED REGARDLESS OF SIZE.
- 20. ALL CONDUCTORS SHALL BE COPPER, TYPE THHN/THWN INSULATED. ALL CONDUCTORS SHALL HAVE 600 VOLT RATED INSULATION. UNLESS OTHERWISE NOTED. UNLESS SPECIFIED ALL WIRE #10 AWG AND SMALLER SHALL BE SOLID CONDUCTORS AND 8 AWG AND LARGER SHALL BE STRANDED.
- 21. BRANCH CIRCUIT WIRE SIZE: THE MINIMUM WIRE SIZE FOR BRANCH CIRCUITS SHALL BE NO. 12 AWG EXCEPT 120V CIRCUITS OVER 80 FEET IN LENGTH SHALL BE 10 AWG.
- 22. PULL BOXES, JUNCTION BOXES, AND OUTLET BOXES SHALL BE MANUFACTURED FROM GALVANIZED INDUSTRY STANDARD SHALL STEEL.
- 23. PROVIDE PULL BOXES AND JUNCTION BOXES IN LONG STRAIGHT RUNS OF RACEWAY TO ASSURE THAT CABLES ARE NOT DAMAGED WHEN THEY ARE PULLED, TO FULFILL REQUIREMENTS AS TO THE NUMBER OF BENDS PERMITTED IN RACEWAY BETWEEN CABLE ACCESS POINTS, THE ACCESSIBILITY OF CABLE JOINTS AND SPLICES, AND THE APPLICATION OF CABLE SUPPORTS.
- 24. PULL BOXES AND JUNCTION BOXES SHALL BE SIZED SO THAT THE MINIMUM BENDING RADIUS CRITERIA SPECIFIED FOR THE WIRES AND CABLE ARE MAINTAINED.
- 25. ALL EQUIPMENT, DEVICE BOXES, JUNCTION BOXES, PULL BOXES, AND OUTLET BOXES SHALL BE INSTALLED SO AS TO ALLOW ACCESS TO THE BOX. IF NECESSARY AND APPROVED BY OWNER/ENGINEER, PROVIDE ACCESS DOOR OR COVER PLATES IN AREAS WHERE UNOBSTRUCTED ACCESS IS NOT POSSIBLE.
- 26. OPENINGS AROUND ELECTRICAL PENETRATION THROUGH FIRE RESISTANCE RATED WALL, PARTITIONS, FLOOR OR CEILING SHALL BE FIRE STOPPED USING APPROVED METHODS. SEALANT SHALL BE RATED FOR THREE (3) HOURS.
- 27. HEIGHTS OF OUTLETS FROM FINISHED FLOOR TO CENTERLINE OF OUTLET:
 - RECEPTACLES AND TELEPHONES GENERALLY OVER WORK BENCHES 4'0" WALL SWITCHES 6'0" WALL FIXTURES 5'0" MOTOR CONTROLLERS
 - FIRE ALARM PULL STATIONS • FIRE ALARM HORN/SPEAKER/STROBES 6' 8" AFF OR 6" BELOW CEILING (WHICHEVER IS

GREATER) EXCEPTIONS: AT JUNCTION BOXES OF DIFFERENT WALL FINISH MATERIALS, ON MOLDING OR BREAK IN WALL SURFACE, IN VIOLATION OF CODE REQUIREMENTS. AS NOTED OR DIRECTED.

- 28. PROVIDE WEIGHTS, LOCATIONS, AND DIMENSIONS OF EQUIPMENT IN EXCESS OF 200 LBS. SUPPORTED ON FLOOR OR HUNG FROM BUILDING STRUCTURE TO BASE BUILDING STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- 29. THE ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH HVAC, PLUBMING, FIRE PROTECTION. TELECOM/AV/SECURITY. AND OTHER TRADES FOR EXACT LOCATION OF ALL MOTOR AND CONTROL DEVICES, BACK BOXES, AND CONDUIT REQUIREMENTS. LOCATIONS AS SHOWN ON ELECTRICAL DRAWINGS ARE APPROXIMATE.
- 30. PROVIDE PRICING FOR EXTENDED WARRANTIES (2-5 YEARS) FOR THE SYSTEMS NOTED ON THE ELECTRICAL DRAWINGS AND SPECIFICATIONS. PROVIDE PRICING FOR WARRANTIES BEYOND 5-YEARS WHERE POSSIBLE.
- 31. EXTERIOR RECEPTACLES SHALL BE PROVIDED WITH WEATHERPROOF "WHILE IN USE" COVERS.
- 32. COORDINATION WITH BUILDING MANAGEMENT
 - THIS CONTRACTOR IS TO OBTAIN A COPY OF THE BUILDING RULES AND REGULATIONS PRIOR TO BID SUBMISSION TO DETERMINE THE REQUIREMENTS AND THE EXTENT OF PREMIUM TIME WORK REQUIRED BY THE
 - BUILDING. THIS CONTRACTOR IS RESPONSIBLE FOR ADHERING TO THE BUILDING OWNER'S RULES AND REGULATIONS. ANY DISCREPANCIES BETWEEN THE CONTRACT DOCUMENTS AND THE BUILDING RULES AND REGULATIONS SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT/ENGINEER FOR REVIEW WITH BID SUBMISSION.
 - COORDINATE WITH BUILDING OWNER FOR ANY SERVICE INTERRUPTION OF EXISTING SYSTEMS AND GIVE NOTICE AS REQUIRED BY BUILDING RULES AND REGULATIONS, OR CONTRACTOR TO PROVIDE A MINIMUM OF TWO (2) DAYS NOTICE PRIOR TO ANY WORK BEING PERFORMED, WHICHEVER IS THE MORE STRINGENT. CONTRACTOR IS TO PERFORM WORK ON PREMIUM TIME, IF SO DIRECTED BY BUILDING OWNER, SO AS NOT TO DISTURB EXISTING TENANTS ON OTHER FLOORS.
 - ALL NEW ELECTRICAL DEVICES SHALL MATCH THE BASE BUILDING STANDARD.



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

 TR
 KF
 2022.01.12

 TR
 KF
 2020.01.15
 ISSUED FOR REBID ISSUED FOR BID ssued Appd YYYY.MM.DD _ ___ ___ ___ File Name: N/A Dwn. Dsgn. Chkd. YYYY.MM.DD

Permit/Seal



Client/Project Logo



Client/Project NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE. NEW ROCHELLE, NY 10801

ELECTRICAL NOTES

Project No. 191506465

Revision

Drawing No.

Scale

NONE

ORIGINAL SHEET - ARCH D

EQUIPMENT FOR THE PROPER STARTUP, OPERATION, AND SERVICING OF EQUIPMENT.

WORK SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING: SHALL BE PART OF THIS CONTRACT.

EQUIPMENT OUTLINED PRE-PURCHASE ITEMS.

ELECTRICAL INSTALLATION.

INSTALLATION OF CONDUIT, JUNCTION BOXES, PULL BOXES, ETC., REQUIRED FOR THE

CONTRACT AREA IN ACCORDANCE WITH THE REQUIREMENTS OF BUILDING MANAGEMENT.

GROUNDING OF ALL EQUIPMENT AS REQUIRED BY CODE AND SPECIFIED.

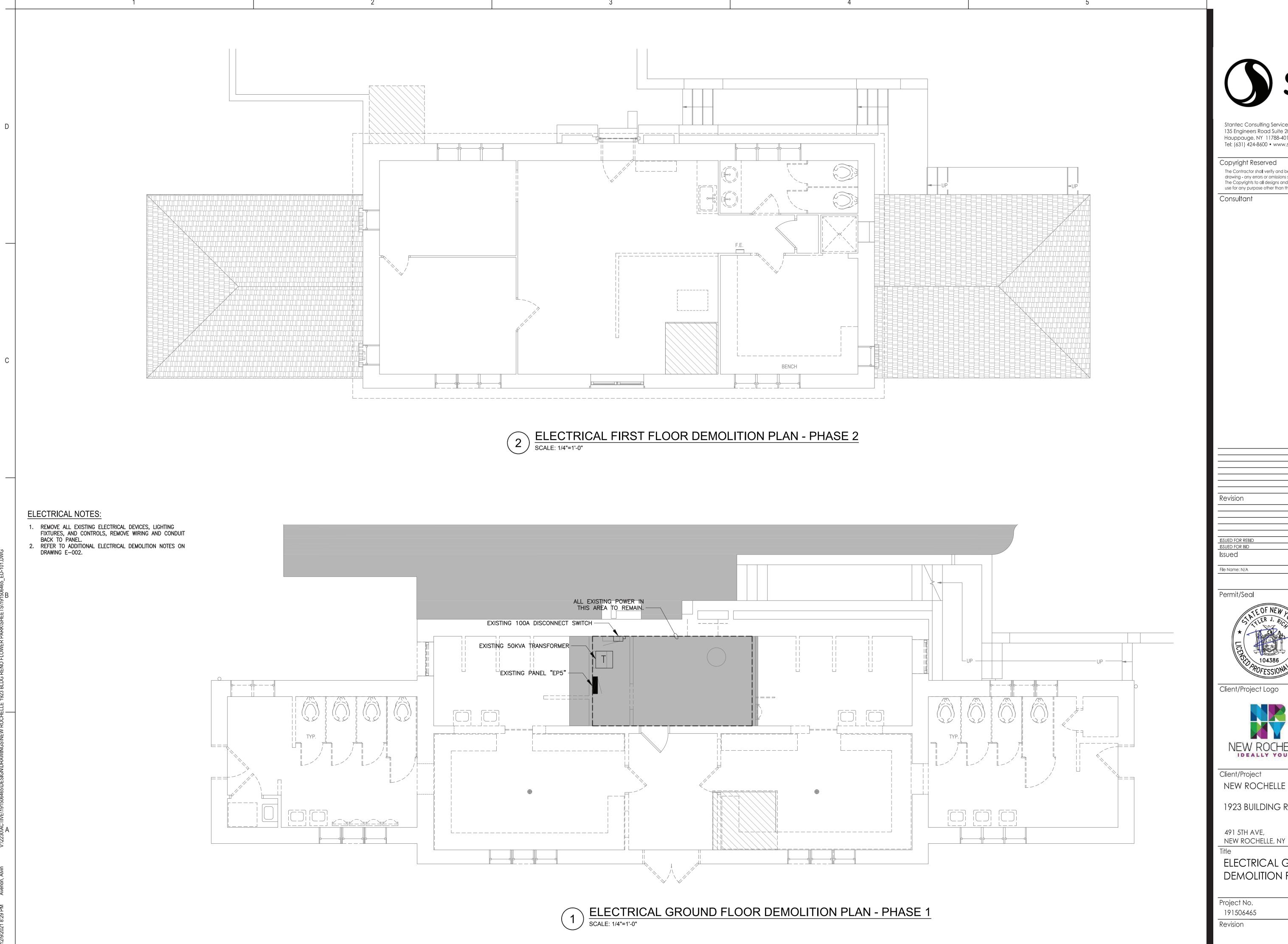
DRILLING, ETC.) AND BASE BUILDING SYSTEM INTERRUPTIONS ARE TO BE PERFORMED OUTSIDE NORMAL BUSINESS HOURS.

OR ARCHITECT.

TO INCLUDE ALL SHOP DRAWINGS AND OPERATING AND MAINTENANCE INSTRUCTIONS ON ALL SYSTEMS.

12. CONTRACTOR SHALL REVISE SHIP DRAWINGS TO CONFORM TO RECORD DRAWINGS AND SUBMIT AN BY THE INSTALLING CONTRACTOR THAT THIS IS AS-BUILT CONDITION OF THE WORK.

JUNCTION BOXES, PULL BOXES, ETC. THIS CONTRACTOR SHALL ARRANGE FOR FURNISHING AND

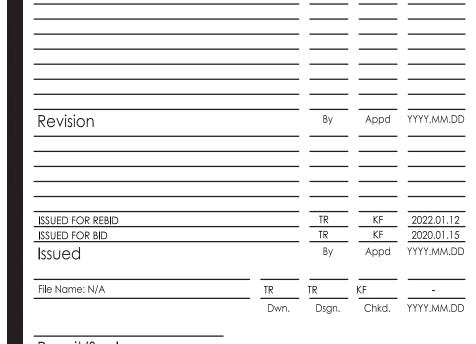


ORIGINAL SHEET - ARCH D



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.





Client/Project Logo



Client/Project

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

ELECTRICAL GROUND & FIRST FLOOR DEMOLITION PLANS

Project No.

Scale **AS NOTED**

Drawing No.

ED-101

ELECTRICAL FIRST FLOOR POWER PLAN - PHASE 2 SCALE: 1/4"=1'-0"

ELECTRICAL NOTES:

- 1. ELECTRICAL CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND HEIGHT OF ELECTRICAL DEVICES, SWITCHES, AND LIGHT FIXTURES.
- 2. ELECTRICAL CONTRACTOR SHALL REFER TO MECHANICAL DRAWINGS, PLUMBING DRAWINGS AND COORDINATE WITH MECHANICAL CONTRACTOR AND PLUMBING CONTRACTOR FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT.
- 3. ELECTRICAL CONTRACTOR SHALL FIELD COORDINATE THE VOLTAGE, PHASE AND HORSEPOWER OF ELECTRICAL EQUIPMENT PURCHASED AND SUPPLY TO THE SITE. ELECTRICAL CONTRACTOR SHALL SUPPLY FUSES OR CIRCUIT BREAKERS PER MANUFACTURER'S RECOMMENDATIONS WHERE NECESSARY.
- 4. CIRCUIT NUMBERS ARE FOR DIAGRAMMATIC PURPOSES ONLY.
- 5. ALL RECEPTACLES INSTALLED WITHIN 6' OF THE OUTSIDE EDGE OF THE SINK SHALL HAVE GROUND-FAULT

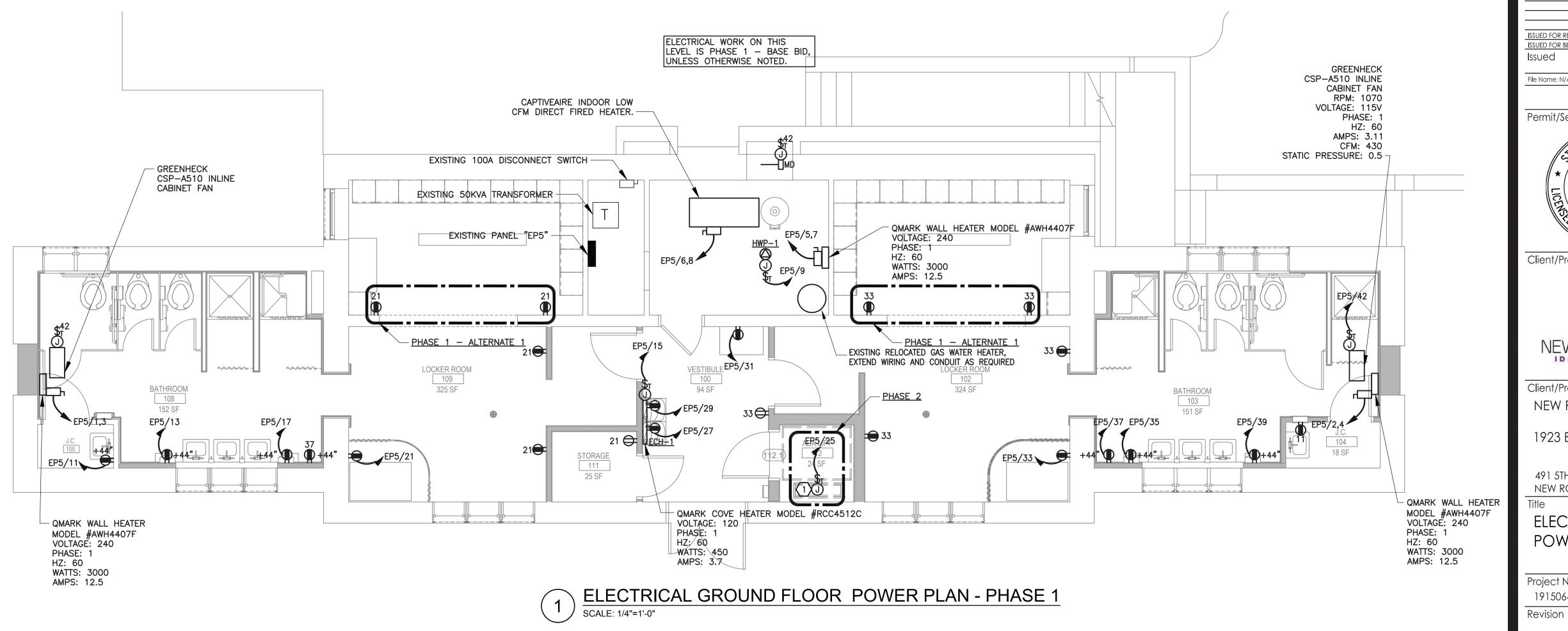
CIRCUIT-INTERRUPTER PROTECTION.

PANEL SCHEDULE DIRECTORY.

- 6. ELECTRICAL CONTRACTOR SHALL IDENTIFY ALL RECEPTACLES WITH PANEL DESIGNATION AND CIRCUIT NUMBER FROM WHICH THEY ARE FED, BY LABELING EACH WALLPLATE WITH PERMANENT TYPE LABEL. LABEL SHALL BE TYPED, SELF-ADHEVISE TYPE. PROVIDE COMPLETE TYPEWRITTEN
- 7. ALL JUNCTION BOXES AND DISCONNECT SWITCH LOCATIONS SHALL BE COORDINATED IN THE FIELD.
- 8. COORDINATE ALL DEVICE FINISHES WITH ARCHITECT.
- 9. ALL CONDUIT AND WIRING SHALL BE CONCEALED IN SOFFITS WHERE FEASIBLE. COORDINATE INSTALLATION WITH OTHER

POWER KEY NOTES:

- ELECTRICAL CONTRACTOR SHALL PROVIDE A 20A, 120V CIRCUIT FOR ADA LIFT. PROVIDE ALL CONDUIT AND WIRING FOR SWITCHES AND CONTROLS AS REQUIRED. COORDINATE WITH MANUFACTURER FOR EXACT REQUIREMENTS.
- ELECTRICAL CONTRACTOR SHALL PROVIDE (3) #12 WIRE IN 3/4" CONDITITE FROM OUTDOOR ACCULATE A STATE OF THE PROVIDE IN THE PROVIDE ACCULATE A STATE OF THE PROVIDE IN THE PROVIDE IN THE PROVIDE ACCULATE A STATE OF THE PROVIDE IN THE PRO 3/4" CONDUIT FROM OUTDOOR ACCU-HP-1 UNIT TO INDOOR HP-1 UNIT.



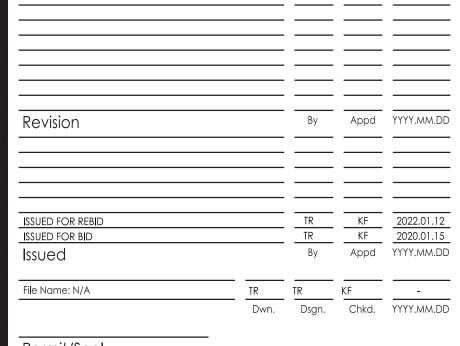


Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant



Permit/Seal



Client/Project Logo



Client/Project **NEW ROCHELLE**

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

ELECTRICAL GROUND & FIRST FLOOR POWER PLANS

Scale

Project No. 191506465

AS NOTED Drawing No.

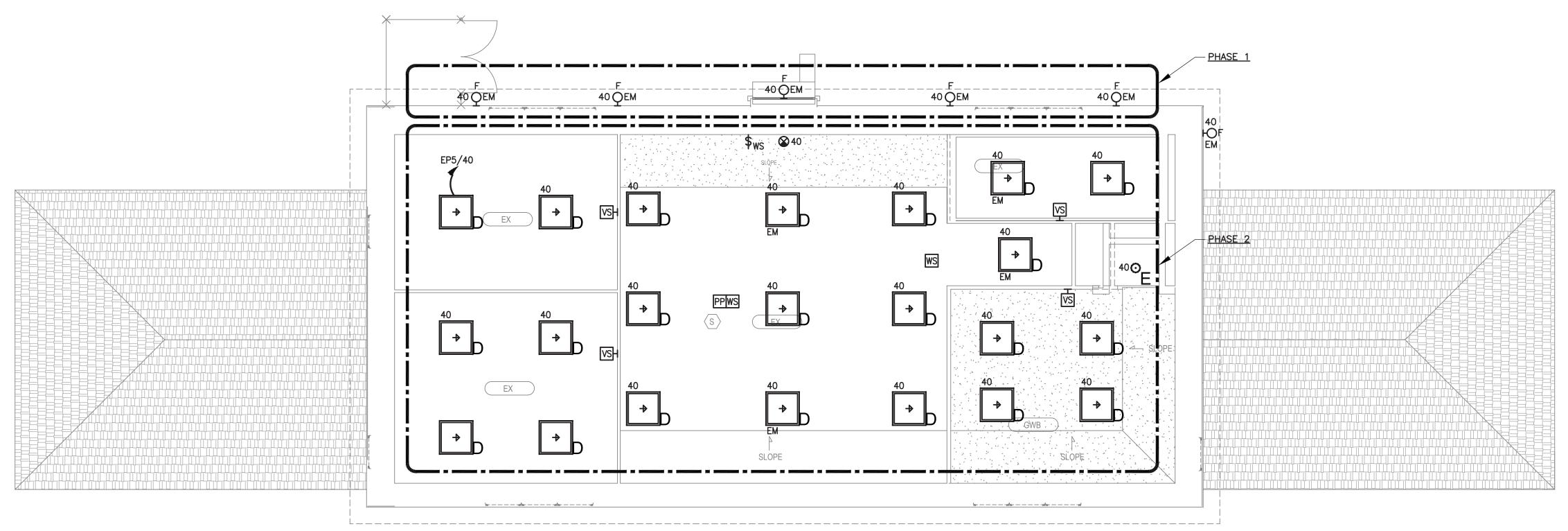
E-101

LIGHTING NOTES:

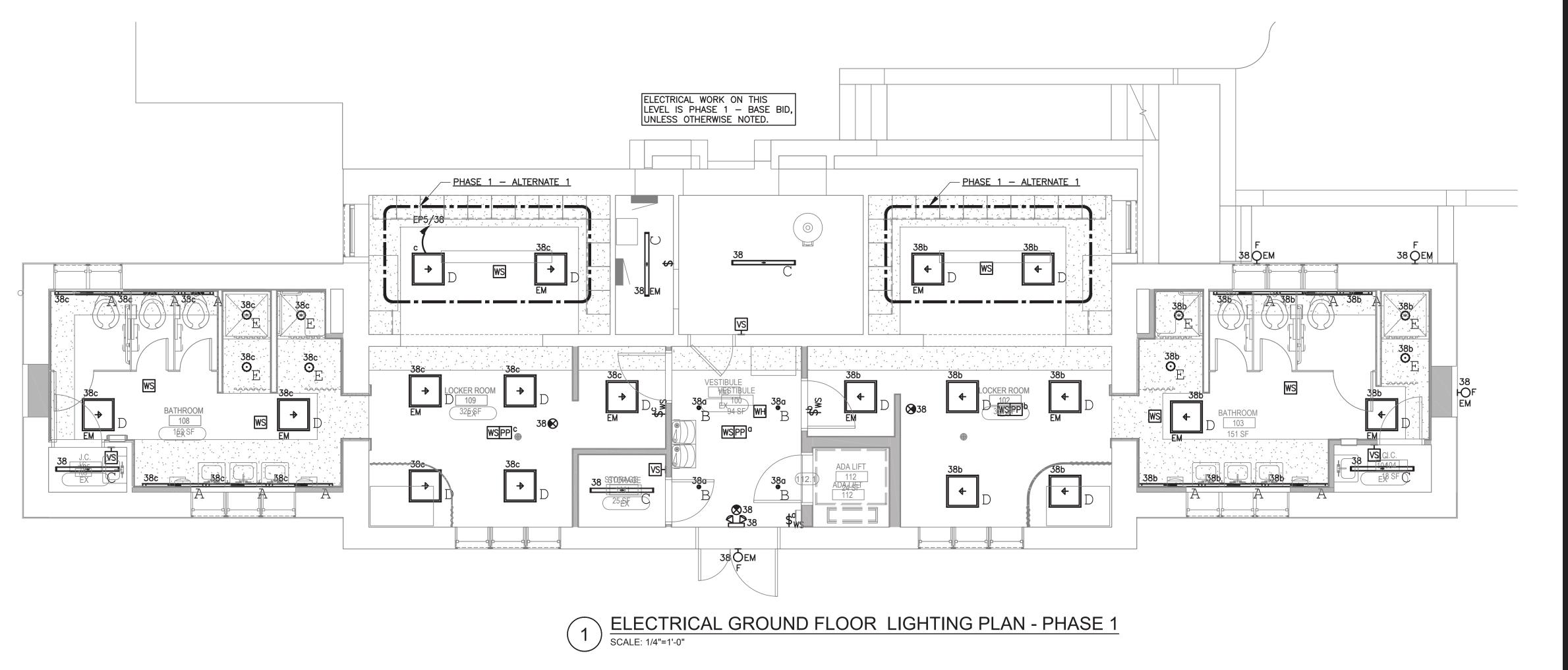
- 1. ELECTRICAL CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND HEIGHT OF LIGHT FIXTURES AND SWITCHES. REFER TO DRAWING E-402 FOR LIGHTING FIXTURE SCHEDULE.
- 2. ALL EXIT SIGNS SHALL BE CIRCUITED AHEAD OF ANY CONTROLS.
- 3. "EM" INDICATES FIXTURE SHALL BE PROVIDED WITH EMERGENCY BATTERY PACK. FIXTURES SHALL ILLUMINATE TO 100% UPON LOSS OF NORMAL POWER.
- 4. REFER TO MANUFACTURER'S INSTALLATION REQUIREMENTS FOR CEILING MOUNTED SENSOR AND WALL MOUNTED SENSOR LOCATIONS.
- 5. PROVIDE ON-SITE VISITS BY CONTROL SYSTEM VENDOR'S APPLICATION ENGINEER AND SYSTEMS PROGRAMMER TO INSPECT, START-UP, COMMISSION, AND PROGRAM THE LIGHTING SYSTEM IN ORDER TO PROVIDE A COMPLETE, FULLY-FUNCTIONING LIGHTING SYSTEM.
- 6. PROVIDE EIGHT (8) HOURS INSTRUCTION TO THE OWNER'S REPRESENTATIVE DESIGNATED STAFF ON THE USE, OPERATION AND MAINTENANCE OF THE SYSTEM, SCHEDULED AS A MINIMUM OF TWO (2) SEPARATE SESSIONS, BY AN INSTRUCTOR FULLY KNOWLEDGEABLE AND QUALIFIED IN SYSTEM OPERATION. THE SYSTEM REFERENCE MANUALS SHOULD BE COMPLETE AND AVAILABLE DURING THESE DEMONSTRATIONS/INSTRUCTION.
- 7. ALL CONDUIT AND WIRING SHALL BE CONCEALED IN SOFFITS WHERE FEASIBLE. COORDINATE INSTALLATION WITH OTHER TRADES.

SEQUENCE OF OPERATIONS:

- 1. LIGHTING SHALL BE CONTROLLED VIA LUTRON VIVE'S BUILT IN TIMECLOCK. COORDINATE EXACT TIME SETTINGS WITH EACH TENANT.
- 2. SWITCHES CAN TURN ON/OFF ANY ZONE AS INDICATED BY LOWERCASE SUBSCRIPTS 'a-d.' SWITCHES OR OCCUPANCY SENSORS SHALL OVERRIDE TIMECLOCK SETTINGS AND MAINTAIN ALL LIGHTING FIXTURES IN THOSE AREAS ON FOR A MAXIMUM OF 2 HOURS.
- 3. ALL LIGHTING SHALL AUTOMATICALLY SHUT OFF WITHIN 20 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE DURING AFTER HOURS.
- 4. ALL LIGHTING IN INDIVIDUAL ROOMS WITH WALL MOUNTED SENSORS SHALL AUTOMATICALLY SHUT OFF WITHIN 20 MINUTES OF ALL OCCUPANTS LEAVING THE ROOM.



ELECTRICAL FIRST FLOOR LIGHTING PLAN - PHASE 1 & 2



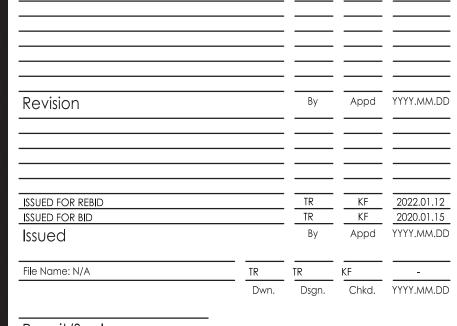


Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant



Permit/Seal



Client/Project Logo



Client/Project NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

ELECTRICAL GROUND & FIRST FLOOR LIGHTING PLANS

Project No. 191506465

Scale **AS NOTED**

Drawing No. E-201

PANEL DESIGNATION : EP5 120/240 V QUANTITY OF POLES 42 **VOLTAGE** 100% NEUTRAL SCC RATING (SYM) MAIN CIRCUIT BREAKER 200 A PHASE 42 K.A.I.C. **WIRE** 3 W + G MAIN BUS 200 A SURFACE MOUNTED X NEMA 1 ENCLOSURE X GROUND BUS X FEED THROUGH LUGS X REMARKS: EXISTING CKT LOAD DESCRIPTION LOAD DESCRIPTION (VA) (VA) BATHROOM HEATER BATHROOM HEATER 2#12 + 1#12 GRD - 3/4"C. 2#12 + 1#12 GRD - 3/4"C. BATHROOM HEATER **HEATER** 2#12 + 1#12 GRD - 3/4"C. 2#12 + 1#12 GRD - 3/4"C. **EXISTING** 9 20A HWP-1 1 20A 1ST FL. JAN. CL GFI REC. **EXISTING** 13 20A 1ST FL. BATHROOM GFI REC. 2ND FL. QUAD REC. 20A 15 20A COVE HEATER17 20A 1ST FL. BATHROOM GFI REC. 2ND FL. OFFICE REC. 20A 16

EXT REC. | 20A | 18

20A 38

2ND FL. REF. REC. | 20A | 20

2ND FL. KITCHEN GFI REC. | 20A | 22

2ND FL. KITCHEN GFI REC. 20A 24

2ND FL. KITCHEN GFI REC. | 20A | 26

2ND FL. FAN

1ST FL. LIGHTING

2ND FL. LIGHTING 20A 40

1ST FL. FAN | 20A | 42

2ND FL. ADA RESTROOM GFI REC. 20A 28

2ND FL. ADA RESTROOM GFI REC.

ACCU-HP-1 2#10 + 1#10 GRD - 3/4"C.

ELECTRICAL KEY NOTES:

TOTAL CONNECTED LOAD PER PHASE (kVA)

19 20A **SPARE**

23 20A **SPARE**

25 | 20A | ADA LIFT

41 20A SPARE

27 20A 1ST FL. GFI REC.

29 | 20A | 1ST FL. GFI REC.

31 20A 1ST FL. ICE GFI REC.

33 20A 1ST FL. EXAM TABLE REC.

35 20A 1ST FL. BATHROOM GFI REC.

37 20A 1ST FL. BATHROOM GFI REC.

39 20A 1ST FL. BATHROOM GFI REC.

TOTAL CONNECTED LOAD

TOTAL DEMAND LOAD

21 20A 1ST FL. EXAM TABLE REC.

ELECTRICAL CONTRACTOR SHALL PROVIDE (31) 20A/1P CIRCUIT BREAKERS IN EXISTING PANEL. MATCH EXISTING TYPE AND KAIC RATING.

50

13.58 10.56

24.14 KVA 116.1 A

24.52 KVA 117.9 A

- ELECTRICAL CONTRACTOR SHALL PROVIDE (1) 30A/2P CIRCUIT BREAKER IN EXISTING PANEL. MATCH EXISTING TYPE AND KAIC RATING.
- ELECTRICAL CONTRACTOR SHALL PROVIDE (2) 20A/2P CIRCUIT BREAKERS IN EXISTING PANEL. MATCH EXISTING TYPE AND KAIC RATING.

Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

Revision		Ву	Appd	YYYY.MM.DD
SSUED FOR REBID		TR	KF	2022.01.12
SSUED FOR BID		TR	KF	2020.01.15
ssued		Ву	Appd	YYYY.MM.DD
330CG		,		
To Nove or NI/A				
ile Name: N/A	TR	TR	KF	
	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

Permit/Seal



Client/Project Logo



Client/Project NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

ELECTRICAL PANEL SCHEDULE

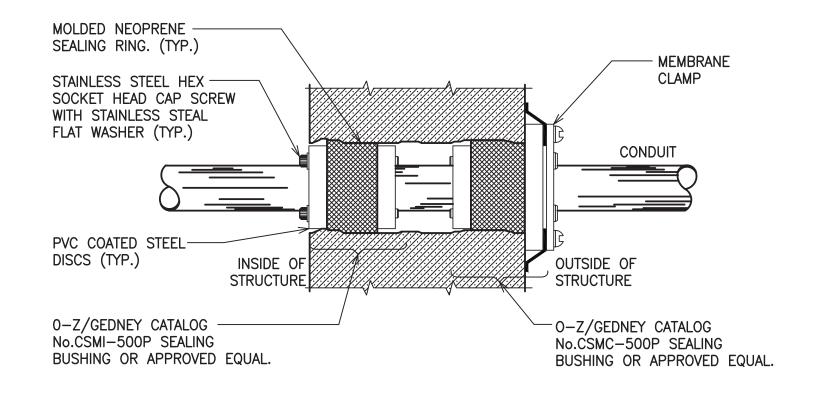
Project No. 191506465

Revision

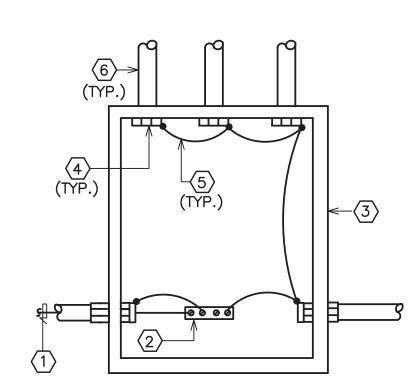
Scale NONE Drawing No.

DETAIL OF CONDUIT THROUGH CONCRETE FLOOR/WALL OR BLOCK WALL

- 1. CONDUIT MAY BE CENTERED OR OFFSET IN HOLE. MAXIMUM DIAMETER OF HOLE OPENING IS 14 INCHES.
- 2. TEMPORARY FORMS MAY BE REQUIRED TO SUPPORT THE FIRESTOP SEALANT WHILE IT CURES.
- 3. FOR CONDUIT SLEEVE INSTALATIONS PROVIDE AROUND CONDUCTORS WITHIN SLEEVE.



EXTERIOR WALL PENETRATION DETAIL N.T.S.

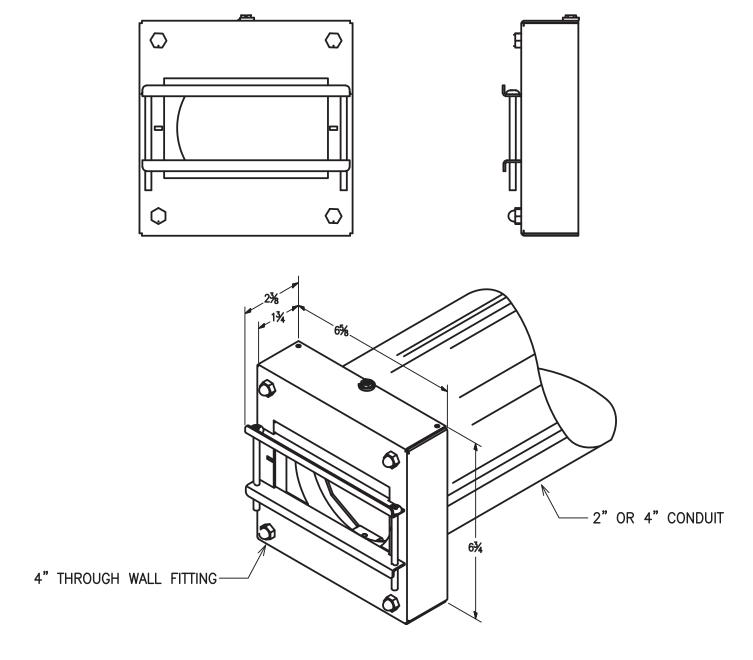


RACEWAY EQUIPMENT GROUNDING SYSTEM

SYSTEM EQUIPMENT GROUNDING CONDUCTOR SIZED AS PER NEC TABLE 250.122

<u>N.T.S.</u>

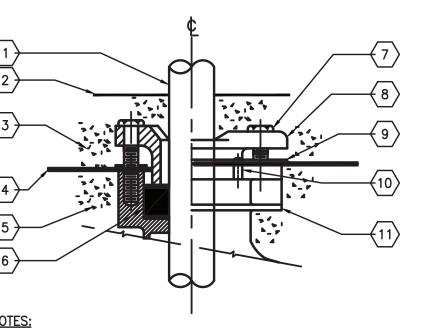
- 2 PANELBOARD EQUIPMENT GROUND BUS
- SERVICE ENTRANCE EQUIPMENT SWITCHBOARD/PANELBOARD ENCLOSURE.
- 4 GROUNDING BUSHING
- 5 BONDING JUMPER INSTALLED AS PER NEC ARTICLE 250
- 6 METAL CONDUIT, TYPICAL



TYPICAL CONDUIT THRU-WALL FIRESTOPPING DETAIL

NOTES:

- 1. CONTRACTOR TO PROVIDE FITTING ON EACH END OF CONDUIT(S). FOR 4" CONDUITS UTILIZE WIREMOLD FLAMSTOPPER CAT No.FS4-FY. FOR 2" CONDUITS UTILIZE WIREMOLD FLAMSTOPPER CAT No.FS2-FY. AT CONTRACTORS OPTION, UTILIZE PRE-CUT 2", 4" CONDUITS, WIREMOLD CAT No.FSPCC2725 OR FSPCC4725 RESPECTIVELY. PRE-CUT CONDUITS ARE 7-5/16" IN LENGTH. PROVIDE ADEQUATE SPACING BETWEEN CONDUIT BANKS TO ALLOW FOR INSTALLATION OF FITTING.
- 2. DETAIL/SPECIFICATIONS APPLICABLE FOR ALL LOW VOLTAGE CABLING PASSING THROUGH ALL FIRE RATED WALLS. CONTRACTOR SHALL REFERENCE ARCHITECTURAL DRAWINGS FOR RATED WALL LOCATIONS.
- 3. IF UTILIZED IN CONJUNCTION WITH CABLE TRAY, PROVIDE GROUND HARDWARE AND CONNECTIONS AS REQUIRED.



7 PRESSURE CLAMP BOLT

9 MEMBRANE CLAMP RING

(10) MEMBRANE CLAMP SCREW

8 PRESSURE CLAMP

(11) CAST IRON BODY

- 1 RIGID STEEL CONDUIT
- 2 FLOOR FINISH
- 3 CONCRETE FILL
- 4 > WATERPROOF MEMBRANE 5 > STRUCTURAL SLAB
- \langle 6 angle SEALING GROMMET

FLOOR SLEEVE

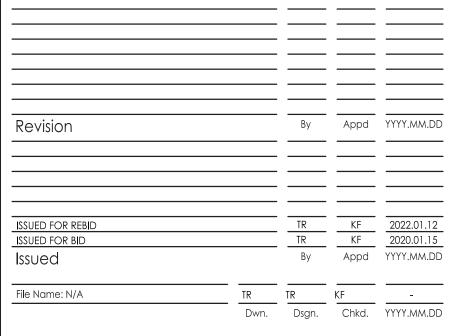


Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant



Permit/Seal



Client/Project Logo



Client/Project NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

ELECTRICAL DETAILS

Project No. 191506465

Revision

NONE Drawing No.

Scale

E-401

TYPICAL EMERGENCY LIGHTING FIXTURE WIRING DIAGRAM

N.T.S.

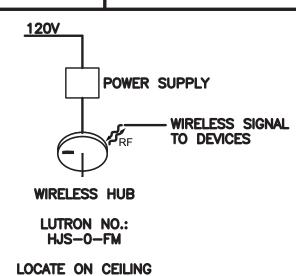
NOTES:

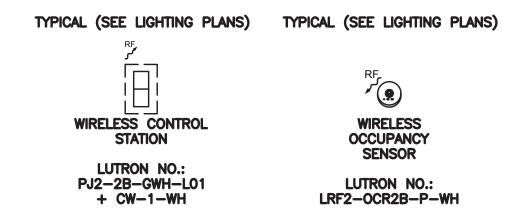
- 1. WIRING DIAGRAMS ARE APPLICABLE TO 'T-5', 'T-8' AND COMPACT FLUORESCENT TYPE EMERGENCY BALLAST AS MODIFIED BY FOLLOWING NOTES.
- 2. FOR FIXTURES WITH COMPACT FLUORESCENT TYPE LAMPS, CHARGEING INDICATOR LIGHT IS WIRED ADJACENT TO FIXTURE, WITH TEST BUTTON ON COMMON FACEPLATE.
- 3. ALL WIRING INDICATED EXTERNAL TO FIXTURE IS BRANCH CIRCUIT WIRING TO BE RUN IN CONDUIT. TEST SWITCH AND CHARGEING INDICATOR LIGHT SHALL BE WIRED IN ACCORDANCE WITH MANUFACTURERS WIRING DIAGRAMS.
- 4. EMERGENCY BALLAST SHALL BE BODINE CAT. #B30 FOR T-8 AND T-12 LAMPS, BODINE CAT.# B426 FOR 2 PIN COMPACT LAMPS, BODINE CAT.# B413 FOR 2 PIN TWIN TUBE AND QUAD LAMPS, AND BODINE CAT.# 94C FOR 4 PIN LAMPS W/O STARTER.

LIGHTING FIXTURE SCHEDULE

COORDINATE WITH ARCHITECT FOR ALL LIGHT FIXTURE FINISHES AND MOUNTING REQUIREMENTS. REFER TO LIGHTING PLANS FOR LENGTHS REQUIRED FOR FIXTURE TYPE 'A.'

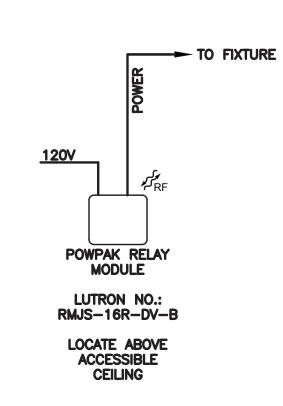
		i e		•	i
FIXT. TYPE/ SYMBOL	DESCRIPTION	VOLTAGE	MANUFACTURER	CATALOG NUMBER	LAMP
A	SURFACE MOUNTED LINEAR	120	AXIS	BSLED-500-80-30-SO-#-W-UNV-DP-1-S	(18W) LED
• B	SURFACE MOUNTED 3" CYLINDER	120	LIGHTHEADED	C3S-R-6-21-21-B40-30-9010-P-X-3C-X	(13W) LED
	MULTIPURPOSE LINEAR	120	COLUMBIA LIGHTING	MPS4-30MW-CW-EU	(31W) LED
• D	SURFACE MOUNTED 2X2	120	AXIS	DAYLED-22-2500-80-30-W-UNV-DP-1-SM	(22W) LED
o _E	SURFACE MOUNTED 12" DOWNLIGHT	120	KIRLIN	LSV-12487-1000L-D1-30K-23-80	(19W) LED
Юғ	EXTERIOR WALLPACK	120	HUBBELL OUTDOOR	LNC2-12LU-4K-3-BL-PCU-EH	(28W) LED



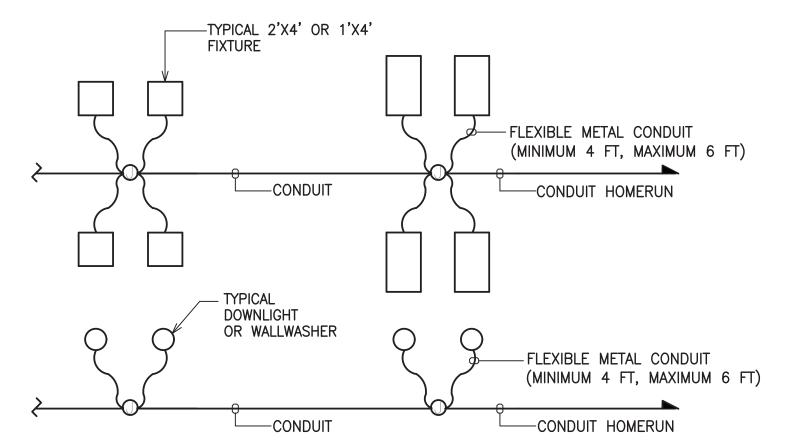


TYPICAL (SEE LIGHTING PLANS)

LOCATE ON CEILING



LIGHTING CONTROLS WIRING DIAGRAM

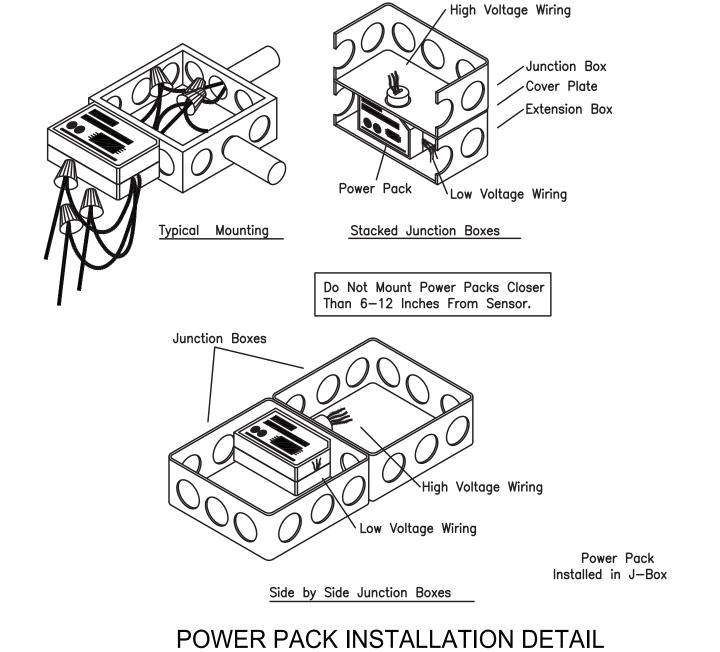


TYPICAL LIGHTING FIXTURE CIRCUITING DETAIL

N.T.S.

NOTE:

- LIGHTING FIXTURES SHALL BE CIRCUITED IN ACCORDANCE WITH CIRCUIT NUMBER INDICATED ADJACENT TO EACH FIXTURE ON THE LIGHTING
- 2. ARMORED CABLE MAYBE PROPOSED AS AN ALTERNATE TO CONDUIT. REFER TO SPECIFICATION.

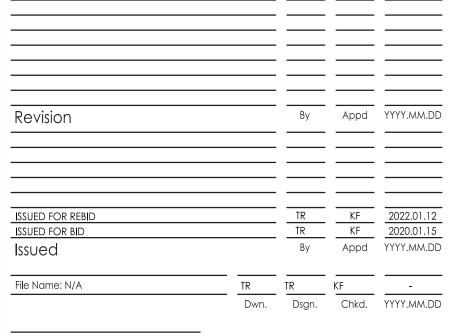


Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant



Permit/Seal



Client/Project Logo



Client/Project NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

ELECTRICAL DETAILS

Project No. 191506465

Revision

NONE Drawing No.

Scale

1.1 SCOPE OF WORK:

FURNISH ALL REQUIRED LABOR, MATERIALS, EQUIPMENT AND CONTRACTOR'S SERVIC-ES NECESSARY FOR THE COMPLETE INSTALLATION OF ELECTRICAL ITEMS AS INDI-CATED ON THE DRAWINGS, INCLUDED BUT NOT LIMITED TO THE FOLLOWING:

- A. DEMOLITION AND REMOVAL OF ELECTRICAL EQUIPMENT AS REQUIRED INCLUDING ALL CONDUCTORS AND CONDUIT BACK TO ITS SOURCE.
- B. INSTALLATION OF LIGHT FIXTURES AND LAMPS INCLUDING EXIT AND EMERGEN-CY LIGHTING.
- C. INSTALLATION OF WALL SWITCHES, RECEPTACLES, TELEPHONE OUTLETS, ETC.
- INSTALLATION OF NEW RACEWAY AND CONDUCTORS FOR LIGHTING AND POWER.
- E. CUTTING, CHANNELLING AND CHASING REQUIRED TO ACCOMMODATE THE INSTAL-LATION OF ELECTRICAL WORK AND ROUGH PATCHING.
- F. ADDITION AND/OR MODIFICATION OF EXISTING ELECTRICAL DISTRIBUTION EQUIP-
- G. INSTALLATION OF HVAC POWER WIRING AND FINAL CONNECTIONS TO HVAC EQUIPMENT.
- H. INSTALLATION OF CONDUIT, JUNCTION BOXES, PULL BOXES, ETC. REQUIRED FOR THE AFOREMENTIONED EQUIPMENT.
- MAINTENANCE OF PROPER OPERATION OF EXISTING BASE BUILDING SYSTEMS WITHIN THE CONTRACT AREA IN ACCORDANCE WITH THE REQUIREMENTS OF THE
- J. TEMPORARY LIGHT AND POWER DURING CONSTRUCTION.
- K. GROUNDING OF ALL EQUIPMENT AS REQUIRED BY CODE.
- L. MODIFICATION OF EXISTING FIRE ALARM SYSTEM.

1.2 INTERPRETATION OF DOCUMENTS:

HEREIN.

- A. AS USED IN THE DRAWINGS AND SPECIFICATIONS FOR ELECTRICAL WORK. CERTAIN NON-TECHNICAL WORDS SHALL BE UNDERSTOOD TO HAVE SPECIFIC MEANINGS AS FOLLOWS REGARDLESS OF INDICATIONS TO THE CONTRARY IN THE GENERAL CONDITIONS OF OTHER DOCUMENTS GOVERNING THE ELECTRICAL WORK.
 - "ELECTRICAL CONTRACTOR," "THIS CONTRACTOR," THE PARTY OR PARTIES WHO HAVE BEEN DULY AWARDED THE CONTRACT FOR AND ARE THEREBY MADE RESPONSIBLE FOR THE ELECTRICAL WORK AS DESCRIBED
 - 2. "THIS CONTRACT," "THE CONTRACT" THE AGREEMENT COVERING THE WORK TO BE PERFORMED BY "THIS CONTRACTOR."
 - 3. "EQUAL," "SATISFACTORY," "ACCEPTED," "ACCEPTABLE" "EQUIVALENT" - ACCEPTABLE FOR USE ON THE PROJECT, AS DETERMINED BY THE ENGINEER BASED ON DOCUMENTS PRESENTED FOR SUCH DETERMINATION.
 - 4. "THESE SPECIFICATIONS," "THIS SECTION, PART, DIVISION" (OF THE SPECIFICATION) - THE DOCUMENT SPECIFYING THE WORK TO BE PER-FORMED BY "THIS CONTRACTOR."
 - 5. "THE ELECTRICAL WORK," "THIS WORK" ALL LABOR MATERIALS, EQUIPMENT APPARATUS. CONTROLS. ACCESSORIES. AND OTHER ITEMS REQUIRED FOR A PROPER AND COMPLETE INSTALLATION BY THE ELEC-TRICAL CONTRACTOR.
 - 6. "ARCHITECT." "ENGINEER." "OWNER'S REPRESENTATIVE" THE PARTY OR PARTIES RESPONSIBLE FOR INTERPRETING, ACCEPTING AND OTHER-WISE RULING ON THE PERFORMANCE UNDER THIS CONTRACT.
 - 7. "FURNISH" PURCHASE AND DELIVER TO THE PROJECT SITE COMPLETE WITH EVERY NECESSARY APPURTENANCE AND SUPPORT, ALL AS PART OF THE ELECTRICAL WORK.
 - "INSTALL" UNLOAD AT THE DELIVERY POINT AT THE SITE AND PERFORM EVERY OPERATION NECESSARY TO ESTABLISH SECURE MOUNTING AND CORRECT OPERATION AT THE PROPER LOCATION IN THE PROJECT, ALL AS PART OF THE ELECTRICAL WORK.
 - 9. "PROVIDE" "FURNISH" AND "INSTALL."

DELIVER THEM TO THE OWNER'S REPRESENTATIVE.

"NEW" - MANUFACTURED WITHIN THE PAST TWO YEARS AND NEVER BEFORE USED.

1.3 GENERAL REQUIREMENTS:

- A. DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. CONTRACTOR SHALL FURNISH ALL NECESSARY OUTLETS, SUPPORTS, FITTINGS AND ACCESSORIES TO FULFILL APPLICABLE CODES, REGULATIONS, BUILDING STANDARDS AND THE BEST PRACTICES OF THE TRADE FOR INSTALLATION OF ELECTRICAL WORK.
- B. THE ELECTRICAL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, LOCAL CODES/REQUIRMENTS, STANDARD OF THE NATIONAL BOARD OF UNDERWRITERS. OSHA AND ALL AUTHORITIES HAVING JURISDICTION. WORK SHALL ALSO COMPLY WITH APPLICABLE BUILDING RULES AND REGULATIONS. THE BUILDING RULES AND REGULATIONS WHERE MORE STRINGENT THAN THIS SPECIFICATION. SHALL TAKE PRECEDENCE OVER THE SPECIFICATION UNLESS OTHERWISE NOTED. THIS CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF THE REGULATIONS PRIOR TO SUBMISSION OF BID. THE CONTRACTOR SHALL SECURE ALL CERTIFICATES OF REQUIRED ORDINANCES, AND

- THE CONTRACTOR SHALL VISIT AND EXAMINE CAREFULLY THE AREAS AFFECTED BY THIS WORK TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND WITH DIFFICULTIES THAT WILL ATTEND THE EXECUTION OF THIS WORK. THE CONTRACTOR SHALL PERFORM THIS PRIOR TO SUBMITTING HIS PROPOSAL THIS WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN 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.
- D. UPON REVIEW OF ELECTRICAL DRAWINGS AND PRIOR TO SUBMITTING HIS PROPOSAL, THE ELECTRICAL CONTRACTOR SHALL INFORM THE ARCHITECT AND/OR ENGINEER OF ANY DISCREPANCIES OR REQUEST CERTIFICATION, IF NECESSARY, CONCERNING THE INTENT OF THE PLANS AND SPECIFICATIONS TO PROVIDE A COMPLETE ELECTRICAL INSTALLATION. WHERE ANY INFORMATION OR DIRECTION IS CONFLICTING BETWEEN THIS SPECIFICATION AND THE DRAWINGS OR BETWEEN DIFFERENT SPECIFICATION SECTIONS, OR BETWEEN DIFFERENT DRAWINGS AND CLARIFICATION CANNOT BE OBTAINED, THE MORE EXPENSIVE AND STRINGENT REQUIREMENT OR DIRECTION SHALL BE ADHERED TO. LATER CLAIMS WILL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUIPMENT OR MATERIALS SHOULD THIS PROCEDURE NOT BE FOLLOWED.
- THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS WHOSE WORK MIGHT AFFECT THIS INSTALLATION. CONTRACTOR SHALL ARRANGE ALL PARTS OF THIS WORK AND EQUIPMENT IN PROPER RELATION TO THE WORK AND EQUIPMENT OF OTHERS AND WITH BUILDING CONSTRUCTION AND ARCHITEC-TURAL FINISH SO THAT IT WILL HARMONIZE IN SERVICE AND APPEARANCE.
- F. THE DRAWINGS INDICATE SIZE AND GENERAL LOCATION OF WORK. SCALED DIMENSIONS SHALL NOT BE USED. THE EXACT LOCATION AND ELEVATION OF ALL LIGHTING FIXTURES, RECEPTACLES, ETC., SHALL BE DETERMINED FROM THE ARCHITECTURAL DRAWINGS.
- G. THE CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR, THE ARCHITECT AND THE OWNER PRIOR TO SUBMISSION OF BID TO DETERMINE WHAT WORK MUST BE PERFORMED AFTER NORMAL BUSINESS HOURS. UNLESS OTHER-WISE DIRECTED ANY NOISY WORK (CHOPPING, CORE DRILLING, HAMMERING, ETC.) AND BUILDING POWER INTERRUPTIONS SHALL BE PERFORMED OUTSIDE OF NORMAL BUSINESS HOURS. CONFIRM NORMAL BUSINESS HOURS WITH BUILDING MANAGEMENT.
- WHERE PANELBOARDS, SWITCHES, CIRCUIT BEAKERS, TRANSFORMERS, ETC. ARE EXISTING TO BE REUSED THE CONTRACTOR SHALL CLEAN AND REFURBISH THE EQUIPMENT. THIS SHALL INCLUDE TIGHTENING ALL CONNECTIONS, REPLACING DEFECTIVE MECHANISMS, EXERCISING MECHANISMS AND PROVIDING ANY MISCELLANEOUS COMPONENTS SO THE EQUIPMENT IS IN FIRST CLASS WORKING ORDER. ALL TRANSFORMER WINDINGS SHALL BE MEGGER TESTED.

PART 2 - PRODUCTS

2.1 PANELBOARDS:

- A. PANELBOARD BOX SHALL BE MADE OF SHEET STEEL "BENT-UP" OR RIVETED OR BOLTED TOGETHER WITH EXTERIOR ANGLE IRON FRAME. BOX SHALL BE OF SUFFICIENT SIZE TO ALLOW A GUTTER AT LEAST 5-3/4" IN WIDTH ENTIRELY SURROUNDING EACH SECTION OF BOARD. INCREASE SIZE TO ACCOMMODATE FEEDER SIZE. PANELBOARDS SHALL BE SURFACE OR FLUSH TYPE AS NOTED ON THE DRAWINGS. PANEL BOXES SHALL BE GIVEN TWO COATS OF GREY ENAMEL
- PROVIDE CODE GAUGE STEEL DOORS AND TRIMS (DOOR WITHIN A DOOR) FOR ALL PANELBOARD BOXES.
- TRIMS SHALL BE ATTACHED DIRECTLY TO BOX BY A FULL LENGTH PIANO HINGE. PROVIDE LOCKS AND KEYS.
- D. PANEL BUS BARS SHALL BE COPPER PROPORTIONED FOR A CURRENT DENSITY OF 1000 AMPERES PER SQUARE INCH OF CROSS-SECTIONAL AREA. PROVIDE A COPPER GROUND BAR IN EACH PANEL. PROVIDE AN ISOLATED GROUND BAR IN PANELS AS INDICATED ON PANEL SCHEDULES.
- E. PANELS SHALL BE PROVIDED WITH NEUTRAL BARS SIZED AT 200% OF THE PHASE BUS BARS AS CALLED FOR ON PANEL SCHEDULES.
- F. A TYPEWRITTEN LIST OF CIRCUITS SHOWING CLEARLY THE LOADS SUPPLIED BY EACH CIRCUIT SHALL BE INSTALLED ON THE INSIDE OF EACH PANELBOARD DOOR. THIS LIST SHALL BE MOUNTED IN A STEEL FRAME UNDER A PLASTIC WINDOW. EACH PANEL SHALL BE EXTERNALLY TAGGED WITH PERMANENT LAMACOID PLATE INDICATING PANEL IDENTIFICATION AND VOLTAGE.
- PHASE LEGS OF ALL PANELS SHALL BE BALANCED AT SUPPLY POINT. ANY PANEL FOUND WITH UNBALANCED LOADS SHALL HAVE ITS CIRCUITS REARRANGED AS REQUIRED TO BALANCE PHASE LEGS WITHIN 10%.
- H. PANELS SHALL BE AS MANUFACTURED BY WESTINGHOUSE, GENERAL ELECTRIC OR SQUARE "D" OR APPROVED EQUAL.

2.2 DISCONNECT SWITCHES:

- A. UNLESS OTHERWISE NOTED, DISCONNECT SWITCHES SHALL BE "QUICK-MAKE, QUICK-BREAK," HEAVY DUTY TYPE IN NEMA 1 ENCLOSURES FUSED OR UNFUSED AS INDICATED ON THE DRAWINGS. PROVIDE ALL FUSES AS REQUIRED. PROVIDE WEATHERPROOF DISCONNECT SWITCHES WHERE INSTALLED OUTDOORS OR AS INDICATED ON DRAWINGS.
- DISCONNECT SWITCHES SHALL BE AS MANUFACTURED BY ITE, WESTINGHOUSE, GENERAL ELECTRIC, OR SQUARE 'D'.

2.3 CIRCUIT BREAKERS:

A. CIRCUIT BREAKERS SHALL BE BOLTED TO THE PANELBOARD BUS BARS. WHERE CIRCUIT BREAKERS ARE INSTALLED IN EXISTING PANELBOARDS. BREAKERS SHALL BE OF THE SAME MANUFACTURER AND BE COMPATIBLE WITH EXISTING

- B. CIRCUIT BREAKERS SHALL BE QUICK-MAKE, QUICK-BREAK WITH NON-WELDING MINIMUM SHORT CIRCUIT RATING OF 10,000 AMPERES SYMMETRICAL FOR 120/280V PANELS AND 14,000 AMPERES SYMMETRICAL FOR 277/480V PANELS OR HIGHER WHERE NOTED.
- C. CIRCUIT BREAKERS SHALL BE OF THE "THERMAL-MAGNETIC" TYPE HAVING A ELEMENT FOR SHORT CIRCUIT PROTECTION.
- D. THE CIRCUIT BREAKER SHALL BE CONTAINED IN AN INDIVIDUAL CASE ENCLOS-
- E. ANY CIRCUIT BREAKER MADE AVAILABLE DUE TO DEMOLITION SHALL BE DESIGNATED AS SPARE ON PANELBOARD DIRECTORIES.
- A. FUSES SHALL BE CURRENT LIMITING TYPE WITH A MINIMUM INTERRUPTING CAPACITY OR 200,000 RMS AMPERES AND OF THE CONTINUOUS CURRENT
- B. THEY SHALL HAVE AVERAGE MELTING TIME—CURRENT CHARACTERISTICS TO MEET

2.5 RACEWAYS:

- A. ALL WIRES SHALL BE RUN IN CONDUIT AS SPECIFIED HEREINAFTER. EACH PLANS INDICATE THE GENERAL LOCATION OF OUTLET BOXES AND CIRCUITING. INSTALLATION TO ADAPT SAME TO BUILDING CONSTRUCTION.
- B. FOR ALL SIZES OF CONDUIT LARGER THAN 1-1/2", USE STANDARD ELBOWS; IN SMALLER SIZES, FIELD BENDS WILL BE PERMITTED INSTEAD OF USING LESS THAN THAT PERMITTED BY CODE.
- C. CONDUIT SHALL BE SECURELY FASTENED IN PLACE AND HANGERS, SUPPORTS OR STRAIGHT RUN TERMINATED AT A BOX OR CABINET. WHERE RISER CONDUITS CLAMPS, PIPE STRAPS OR HEAVY IRON TIES WIRED TO THE STRUCTURAL HANGERS AND RODS SHALL BE PAINTED WITH ONE COAT OF ENAMEL.
- D. INSTALL CONDUIT EXPANSION FITTINGS IN EACH CONDUIT RUN WHEREVER IT CROSSES AN EXPANSION JOINT AND WHEREVER THE CONDUIT LENGTH EXCEEDS 200 FEET. EXPANSION FITTINGS AS MANUFACTURED BY OZ/GEDNEY.
- NEY SPLIT COUPLINGS, OR ERICKSON COUPLINGS SHALL BE USED.
- F. LAY OUT AND INSTALL ALL CONDUIT RUNS TO AVOID PROXIMITY TO STEAM AND HOT WATER PIPES. DO NOT RUN CONDUIT WITHIN THREE INCHES OF SUCH PIPES EXCEPT WHERE CROSSINGS ARE UNAVOIDABLE, THEN THE CONDUIT SHALL
- G. FFFDERS AND BRANCH CIRCUITRY ABOVE HUNG CFILING AND IN PARTITIONS. SHALL BE RUN IN ELECTRICAL METALLIC TUBING (EMT) UNLESS OTHERWISE
- H. ALL CONDUIT IN MECHANICAL ROOMS, ELECTRICAL CLOSETS AND WHERE CONCEALED IN CONCRETE SHALL BE RIGID THREADED REGARDLESS OF SIZE.
- ELECTRIC METALLIC TUBING SHALL BE INDUSTRY STANDARD THIN WALL CONDUIT. EMT SHALL BE HOT DIPPED GALVANIZED STEEL ONLY. IT SHALL NOT BE LESS THAN 3/4" TRADE SIZE. IT SHALL BE USED FOR TRADE SIZE UP TO 4" UNLESS OTHERWISE NOTED.
- J. FLEXIBLE METALLIC CONDUIT SHALL BE OF THE GROUNDING TYPE. IT SHALL CONSIST OF GALVANIZED STEEL TAPS FORMED INTO AN INDUSTRY STANDARD INTERLOCKING COIL. IT SHALL NOT BE LESS THAN 3/4" TRADE SIZE.
- K. RIGID METAL CONDUIT SHALL BE INDUSTRY STANDARD STEEL CONDUIT. IT SHALL NOT BE LESS THAN 3/4" TRADE SIZE. STEEL CONDUIT SHALL BE HOT DIPPED GALVANIZED. IT SHALL BE USED FOR TRADE SIZE GREATER THAN 4"
- COMPRESSION FITTINGS SHALL BE USED WITH EMT.
- M. EMPTY CONDUIT FOR NEW TELEPHONE AND DATA OUTLETS IN PARTITIONS SHALL BE 1" THIN WALL RUN CONCEALED IN WALLS, TERMINATED AND BUSHED 6" IN
- N. RACEWAY SHALL BE MANUFACTURED BY NATIONAL WIRE PRODUCTS, TRIANGLE OR REPUBLIC.

2.6 WIRE AND CABLE:

- A. METAL CLAD CABLE (TYPE MC) FOR CONCEALED BRANCH CIRCUITRY MAYBE USED WHEN AN ALTERNATE PRICE IS SUBMITTED FOR ITS USE AND WHEN WRITTEN APPROVAL IS GIVEN TO THE CONTRACTOR FROM THE BUILDING OWNER AND ENGINEER. IT SHALL ONLY BE INSTALLED WHERE PERMITTED BY CODE. ARMORED CABLE SHALL BE AS MANUFACTURED BY AFC OR APPROVED EQUAL.
- B. ALL CONDUCTORS SHALL BE COPPER, TYPE THHN/THWN INSULATED. ALL CONDUCTORS SHALL HAVE 600 VOLT RATED INSULATION UNLESS OTHERWISE
- C. THE MINIMUM WIRE SIZE FOR BRANCH CIRCUITS SHALL BE NO. 12 AWG EXCEPT 120 VOLT CIRCUITS OVER 100' IN LENGTH SHALL BE NO. 10 AWG.
- D. UNLESS SPECIFIED OTHERWISE, ALL WIRES #10 AWG AND SMALLER SHALL BE SOLID, CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED.
- E. FACTORY COLOR CODING SHALL BE AS FOLLOWS:
 - 120/208 VOLT SYSTEM: PHASE 'A' BLACK, PHASE 'B' RED, PHASE 'C' -BLUE, NEUTRAL - WHITE, EQUIPMENT GROUND - GREEN.
 - 277/480 VOLT SYSTEM: PHASE 'A' BROWN, PHASE 'B' YELLOW, PHASE 'C' - ORANGE, NEUTRAL - WHITE, EQUIPMENT GROUND - GREEN.
- F. INSTALL AND CONNECT UP COMPLETE CONDUCTORS FOR ALL CIRCUITS AND WIRING SYSTEMS (NOT MORE THAN A SINGLE 3 CIRCUIT HOMERUN IN A CONDUIT) UNLESS OTHERWISE NOTED.
- G. NO CONDUCTORS SHALL BE PULLED INTO ANY CONDUIT RUN BEFORE ALL CONDUIT JOINTS ARE MADE UP TIGHTLY, AND THE ENTIRE RUN IS SECURED IN PLACE. WHEN REQUIRED TO EASE THE PULLING OF WIRES INTO CONDUIT, USE POWDERED SOAPSTONE, MINERALLAC #100 OR APPROVED EQUAL BY THOMAS AND
- H. TAG ALL FEEDERS IN ALL PULL BOXES, GUTTER SPACES, AND WIREWAYS THROUGH WHICH THEY PASS.
- LEAVE ALL WIRES WITH SUFFICIENT SLACK AT TERMINAL ENDS FOR CONVE-NIENT LOCATIONS TO DEVICES AND FOR CONVENIENT SERVICING.
- J. MAKE SPLICES IN FEEDER TAPS IN PANEL BOX GUTTERS WITH PRESSURE TYPE CONNECTORS - BURNDY, NEPCO, OR O.Z./GEDNEY WITH COMPOSITION INSULAT-
- K. SPLICES IN BRANCH WIRING SHALL BE TWISTED AND MADE MECHANICALLY TIGHT; THEN SECURED WITH 3M, SCOTCHLOCK OR THOMAS AND BETTS PIGTAIL CONNECTORS, CRIMP TYPE CONNECTORS SHALL NOT BE USED.
- L. SUPPORT CONDUCTORS IN VERTICAL RACEWAYS AT THE TOP OF ANY RACEWAY LONGER THAN 20 FEET. INCLUDE ADDITIONAL SUPPORTS SPACED AT INTER-VALS WHICH ARE NOT GREATER THAN 40 FEET. SUPPORT SHALL BE 0.Z./GED-
- M. WIRE AND CABLE SHALL BE MANUFACTURED BY ROME, PHELPS DODGE, GENERAL CABLE, SIMPLEX, GENERAL ELECTRIC CO. OR ANACONDA.

2.7 DEVICES:

- WIRING DEVICES SHALL BE SPECIFICATION GRADE UNLESS OTHERWISE NOTED. ALL DEVICES SHALL BE FLUSH MOUNTED UNLESS OTHERWISE NOTED. REFER TO
- B. SINGLE POLE SWITCHES SHALL BE 120/277 VOLTS, RATED AT 20 AMPERES, QUIET OPERATION TYPE. FINISH OF TOGGLE AND DEVICE PLATE AS DIRECT-
- C. THREE WAY SWITCHES SHALL BE 120/277 VOLT. 20 AMPERES.
- D. DIMMER SWITCHES SHALL BE LUTRON NOVA T STAR SERIES OR APPROVED EQUAL. UTILIZE NT SERIES FOR STANDARD INCANDESCENT AND NTLV SERIES FOR LOW VOLTAGE LIGHTING WHICH UTILIZE TRANSFORMERS. DIMMERS SHALL BE RATED AT 120 VOLT. WATTAGE SIZE AS REQUIRED. FINISH AS DIRECTED BY ARCHITECT. WHERE DIMMER SWITCHES ARE LOCATED NEXT TO SINGLE POLE LOCK AND TOGGLE TYPE SWITCHES, THE SINGLE POLE SWITCH SHALL MATCH THE DIMMING SWITCH STYLE.
- E. SWITCH AND RECEPTACLE PLATES SHALL BE PLUMB AND SHALL FIT FLAT AGAINST THE WALL.
- F. ALL SWITCH AND RECEPTACLE MOUNTING HEIGHTS AND LOCATIONS SHALL BE

TAKEN FROM ARCHITECT'S DRAWING UNLESS OTHERWISE NOTED.

G. MULTIPLE DEVICES AT A COMMON LOCATION SHALL BE INSTALLED IN A COMMON MULTIGANG BOX WITH A COMMON FACEPLATE. DERATE DIMMER SWITCHES PER MANUFACTURER'S REQUIREMENTS WHEN GANGED.

PULLBOXES, JUNCTION BOXES AND OUTLET BOXES:

- PULLBOXES, JUNCTION BOXES AND OUTLET BOXES SHALL BE MANUFACTURED FROM GALVANIZED INDUSTRY STANDARD GAUGE SHEET STEEL.
- PROVIDE PULL BOXES AND JUNCTION BOXES IN LONG STRAIGHT RUNS OF RACEWAY TO ASSURE THAT CABLES ARE NOT DAMAGED WHEN THEY ARE PULLED. TO FULFILL REQUIREMENTS AS TO THE NUMBER OF BENDS PERMITTED IN RACEWAY BETWEEN CABLE ACCESS POINTS, THE ACCESSIBILITY OF CABLE JOINTS AND SPLICES, AND THE APPLICATION OF CABLE SUPPORTS.
- PULLBOXES AND JUNCTION BOXES SHALL BE SIZED SO THAT THE MINIMUM BENDING RADIUS CRITERIA SPECIFIED FOR THE WIRES AND CABLE ARE MAINTAINED.
- SWITCH, RECEPTACLE AND WALL OUTLET BOXES SHALL BE A NOMINAL 4 INCH SQUARE, 1-1/2 INCH OR 2-1/8 INCH DEEP AS REQUIRED BY CODE WITH A RAISED COVER, UNLESS OTHERWISE INDICATED ON THE DRAWING. PROVIDE 3/8 INCH FIXTURE STUD AS REQUIRED. GANGED OUTLET BOXES SHALL BE SUFFICIENT LENGTH TO SUIT CONDITIONS.



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

ISSUED FOR REBID
 TR
 KF
 2022.01.12

 TR
 KF
 2020.01.15
 ISSUED FOR BID ssued By Appd YYYY.MM.DD _____ File Name: N/A Dwn. Dsgn. Chkd. YYYY.MM.DD

Permit/Seal



Client/Project Logo



Client/Project NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE. NEW ROCHELLE, NY 10801

ELECTRICAL SPECIFICATIONS

Project No. 191506465 Revision

Drawing No.

Scale

NONE

CONTACTS COMPENSATED FOR AMBIENT TEMPERATURES AND SHALL HAVE A

- BIMETALLIC ELEMENT FOR TIME DELAY OVERLOAD PROTECTION AND A MAGNETIC
- ING ONLY THE NUMBER OF POLES REQUIRED FOR THE PARTICULAR BREAKER.
- F. CIRCUIT BREAKERS SHALL BE AS MANUFACTURED BY ITE, WESTINGHOUSE, GENERAL ELECTRIC, OR SQUARE "D".

2.4 FUSES:

- RATINGS AS SHOWN ON THE DRAWINGS.
- THE UNDERWRITERS' LABORATORIES REQUIREMENTS FOR "CLASS K" 0-600 AMP FUSES AND "CLASS L" OVER 600 AMP FUSES. FUSES SHALL BE AS MANUFAC-TURED BY BUSSMAN OR SHAWMUTT.

- LENGTH OF CONDUIT SHALL BEAR THE MAKER'S TRADEMARK OR STAMP. THE THE CONDUIT RUNS FOR THESE CIRCUITS MAY BE MODIFIED AT THE TIME OF
- MANUFACTURED ELBOWS BUT CARE MUST BE TAKEN NOT TO DAMAGE THE CON-DUIT. THE RADIUS OF THE INNER CURVE OF ANY BEND SHALL NOT BE ANY
- FASTENINGS SHALL BE PROVIDED AT EACH ELBOW AND AT EACH END OF EACH PIERCE FLOOR SLABS, THEY SHALL REST ON EACH FLOOR WITH APPROVED BEAM MEMBERS SUPPORTING EQUIPMENT. SIZE AND TYPE OF ANCHOR SHALL BE BASED ON THE COMBINED WEIGHTS OF CONDUIT, HANGER AND CABLES. ALL
- RUNNING THREADS SHALL NOT BE USED. WHERE CONDUIT WITH TAPERED THREADS CANNOT BE COUPLED WITH STANDARD CONDUIT COUPLINGS, O.Z./GED-
- BE KEPT AT LEAST 1 INCH FROM THE COVERING OF THE PIPE CROSSING.
- NOTED. FINAL CONNECTIONS TO MOTORS, LIGHT FIXTURES, ETC. MAY BE DONE WITH FLEXIBLE METALLIC CONDUIT (NO LONGER THAN SIX FEET).

- UNLESS OTHERWISE NOTED. THREADED FITTINGS SHALL BE USED WITH RIGID CONDUIT. SET SCREW OR
- ACCESSIBLE HUNG CEILING AND DIRECTED TOWARDS PARTICULAR TELE-PHONE/DATA ROOM OR CLOSET. FURNISH DRAG LINE.

- F. INCLUDE ALL REQUIRED JUNCTION/PULL BOXES AND OUTLET BOXES REGARDLESS OF INDICATIONS ON THE DRAWINGS (WHICH DUE TO SYMBOLIC METHODS OF NOTATION, MAY NOT SHOW ALL THAT ARE ACTUALLY REQUIRED).
- G. WHERE BOXES HAVE ANY SINGLE HORIZONTAL DIMENSION LARGER THAN 36", THEY SHALL BE FITTED WITH CABLE SUPPORT RACKS CONSISTING OF 3/4" DIAMETER STEEL PIPES WITH FLANGED ENDS BOLTED TO THE SIDES OR FRAME OF THE PULL BOXES. EACH PIPE SUPPORT SHALL BE FITTED WITH A CONTIN—UOUS FIBER INSULATING SLEEVE. THE PIPE SUPPORTS SHALL BE ARRANGED IN TIERS CORRESPONDING TO THE CABLES ENTERING AND LEAVING THE BOX. SUFFICIENT PIPE SUPPORT RACKS WILL BE INCLUDED WITH THE PULL BOX SO THAT NO CABLE SHALL REMAIN UNSUPPORTED FOR A HORIZONTAL DISTANCE GREATER THAN 36". IN NO CASE SHALL CABLE SUPPORT PIPE RACKS BE MOUNTED SO THAT THEY INTERFERE WITH THE REMOVAL OF SCREW COVERS.
- H. WHERE THE WIRES AND CABLES FOLLOWING THE SAME ROUTING ARE INDICATED AS RUNNING IN SEPARATE PULL BOXES, IT SHALL BE UNDERSTOOD THAT A SEGREGATION OF THE WIRES AND CABLES IS REQUIRED.
- I. BARRIERS SHALL BE PROVIDED FOR SYSTEMS AS FOLLOWS:
 - 1. BETWEEN WIRING WITH DIFFERENT VOLTAGE INSULATION RATINGS.
 - 2. BETWEEN NORMAL AND EMERGENCY WIRING.
 - 3. BETWEEN 277 VOLT WIRING CONNECTED TO DIFFERENT PHASES WITHIN THE SAME LIGHT SWITCH OUTLET BOX.
- J. BARRIERS IN JUNCTION AND PULL BOXES SHALL BE OF NON-CURRENT CARRYING MATERIAL OF ADEQUATE THICKNESS FOR MECHANICAL STRENGTH BUT IN NO CASE LESS THAN 1/4". EACH BARRIER SHALL HAVE AN ANGLE IRON FRAMING SUPPORT ALL AROUND.
- K. ALL EQUIPMENT, DEVICE BOXES, JUNCTION BOXES, PULLBOXES AND OUTLET BOXES SHALL BE INSTALLED SO AS TO ALLOW ACCESS TO THE COVER. IF NECESSARY AND APPROVED BY ARCHITECT, PROVIDE ACCESS DOOR OR COVERPLATES IN AREAS WHERE UNOBSTRUCTED ACCESS IS NOT POSSIBLE.
- BOXES SHALL BE MANUFACTURED BY APPLETON ELECTRIC, CROUSE HINDS OR O.Z./GEDNEY CO.

2.9 SLEEVES AND INSERTS

- A. FURNISH AND INSTALL SLEEVES AND INSERTS AS INDICATED ON DRAWINGS.
 ALL CONDUITS AND BOXES PENETRATING WATERPROOF CONSTRUCTION SHALL BE FLASHED AND MADE WATERTIGHT.
- B. SLEEVES FOR INTERIOR PARTITIONS AND FLOORS SHALL BE 16—GAUGE AND GALVANIZED.
- C. SLEEVES THROUGH FLOORS SHALL EXTEND TWO (2) INCHES ABOVE FINISHED FLOOR EXCEPT AS NOTED. ALL FUTURE SLEEVES SHALL BE CAPPED.
- D. ALL SLEEVES SHALL BE SECURELY ANCHORED IN PLACE AND PROPERLY CAPPED TO PREVENT SEEPAGE OF CONCRETE INTO SLEEVE.
- E. SLEEVES SHALL BE SEALED WITH AN APPROVED FIREPROOF MATERIAL AFTER INSTALLATION OF FEEDERS.

2.10 SUPPORTS AND FASTENINGS

- A. ALL SUPPORTS AND FASTENINGS NECESSARY FOR THE SUPPORT OF ELECTRICAL EQUIPMENT SHALL BE IN ACCORDANCE WITH THE BEST INDUSTRY PRACTICE AND AS SPECIFIED HEREIN.
- B. FURNISH AND INSTALL ALL STEEL SUPPORTING MEMBERS, HANGERS, BRACKETS OR OTHER SPECIAL DETAILS REQUIRED AND NECESSARY FOR THE PROPER INSTALLATION OF ELECTRIC EQUIPMENT.
- C. ALL CHANNELS, JOINERS, HANGERS AND CAPS, NUTS AND BOLTS AND ASSOCI-ATED PARTS SHALL BE PLATED ELECTROLYTICALLY WITH ZINC OR SHALL BE DIPPED GALVANIZED.
- D. SUPPORT LESS THAN 2" TRADE SIZE, VERTICALLY RUN CONDUIT AT INTERVALS NO GREATER THAN 8 FEET. SUPPORT SUCH CONDUITS 2" TRADE SIZE OR LARGER, AT INTERVALS NO GREATER THAN THE STORY HEIGHT, OR 15 FT. WHICHEVER IS SMALLER.
- E. WHERE THEY ARE NOT EMBEDDED IN CONCRETE, SUPPORT LESS THAN 1" TRADE SIZE, HORIZONTALLY RUN CONDUITS AT INTERVALS NO GREATER THAN 7 FT. SUPPORT SUCH CONDUITS, 1" TRADE SIZE OR LARGER, AT INTERVALS NO GREATER THAN 10 FT.
- F. INCLUDE SUPPORTING FRAMES OR RACKS EXTENDING FROM SLAB TO SLAB FOR WORK INDICATED AS BEING SUPPORTED FROM WALLS WHERE THE WALLS ARE INCAPABLE OF SUPPORTING THE WEIGHT.
- G. INCLUDE SUPPORTING FRAMES OR RACKS FOR EQUIPMENT, INTENDED FOR VERTICAL SURFACE MOUNTING, WHICH IS REQUIRED IN A FREE STANDING
- H. EXCEPT FOR BRANCH CIRCUITRY INSTALL ALL CONDUIT IN HUNG CEILING SPACE ON ACCEPTABLE HANGERS AND INSERTS. CONDUIT OR ARMORED CABLE FOR BRANCH CIRCUITRY SHALL BE SUPPORTED BY CLAMPS OR PIPE STRAPS SECURED TO THE CEILING SUPPORT SYSTEM (BLACK IRON) OR FROM STRUCTUR—AL MEMBERS OR FROM THE DECK.

2.11 INSULATING BUSHINGS

A. ALL METAL CONDUIT AND ELECTRIC METALLIC TUBING 3/4" AND LARGER TERMINATING IN CABINETS, PULL BOXES AND SIMILAR BOXES SHALL HAVE INSULATED BUSHINGS. TYPE "B" OR TYPE "BLDG" (FOR GROUNDING BUSHING) AS MANUFACTURED BY O.Z./GEDNEY CO.

2.12 GROUNDING:

- A. PROVIDE A GREEN GROUND CONDUCTOR IN CIRCUIT CONDUITS AS INDICATED.
- B. PROVIDE SUPPLEMENTARY GROUND BONDING WHERE METALLIC CONDUITS TERMI—
 NATE AT METAL CLAD EQUIPMENT (OR AT THE METAL PULL BOX OF EQUIPMENT)
 FOR WHICH A GROUND BUS IS SPECIFIED. ACCOMPLISH THIS BY EQUIPPING
 THE CONDUITS WITH A BUSHING OF THE GROUNDING TYPE CONNECTED INDIVID—
- C. ALL GROUND WIRES SHALL BE SUITABLY PROTECTED FROM MECHANICAL INJURY.

2.13 TEMPORARY LIGHTING AND POWER

UALLY TO GROUND BUS.

- A. FURNISH AND INSTALL WIRING FOR ADEQUATE LIGHT AND SMALL TOOLS POWER FOR THE PROJECT. THIS SHALL INCLUDE INSTALLING ALL LAMPS, BREAKERS, AND FUSING, AS IS NECESSARY.
- B. TEMPORARY MAINTENANCE FOR THE ABOVE SHALL BE BASED ON OPERATION 1/2 HOUR BEFORE START OF FIRST TRADE THROUGH 1/2 HOUR AFTER END OF LAST TRADE'S NORMAL WORK DAY.
- C. TEMPORARY LIGHT AND POWER SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CODES AND AUTHORITIES HAVING JURISDICTION.
- 2.14 FIRE ALARM SYSTEM (NOT USED)

2.15 LIGHT FIXTURES

- A. ALL LIGHT FIXTURE MOUNTING HARDWARE SHALL MATCH AND BE COORDINATED WITH THE NEW OR EXISTING CEILING SYSTEM TYPE.
- B. FLUORESCENT BALLASTS SHALL BE UL'S CLASS "P" AND SHALL CONFORM TO ANSI AND UL SPECIFICATION WITH LABELS OF APPROVAL BY UL AND CERTIFI— CATION BY C.B.M. BALLASTS SHALL COMPLY WITH THE NEW YORK STATE ENERGY CODE AND SHALL QUALIFY FOR ALL APPLICABLE CON EDISON REBATES. [SPECIFIER: CHANGE TO OTHER MUNICIPALITY AS REQUIRED.] BALLASTS FOR FLUORESCENT LAMPS SHALL BE OF THE ENERGY SAVING SUPER LOW HEAT DESIGN WITH HIGH POWER FACTOR (0.9 MINIMUM) AND A HIGH BALLAST FACTOR (0.95 MINIMUM), AS MANUFACTURED BY MOTOROLA, UNIVERSAL, OR
- C. ELECTRONIC BALLASTS SHALL BE HIGH-FREQUENCY, FULL OUTPUT TYPE FOR USE ON 265 MA RAPID START T-8 LAMPS. THEY SHALL HAVE A 'A' SOUND RATING OR BETTER. ALL ELECTRONIC BALLASTS SHALL HAVE LESS THAN 20 PERCENT TOTAL HARMONIC DISTORTION (THD). BALLASTS SHALL MEET OR EXCEED FCC REGULATIONS PART 18. ELECTRONIC BALLASTS FOR 1, 2, 3, OR 4 LAMP COMBINATIONS SHALL BE USED AS REQUIRED TO ACCOMMODATE THE FIXTURE DESCRIBED IN THE FIXTURE SCHEDULE.
- D. PROVIDE LAMPS SUITABLE FOR LIGHTING FIXTURES IN WHICH THEY ARE USED AND AS INDICATED ON THE DRAWINGS. FLUORESCENT LAMPS SHALL BE "RAPID START" AND SHALL DELIVER NOT LESS THAN 3150 LUMENS. COLOR SHALL BE WARM WHITE UNLESS OTHERWISE NOTED. INCANDESCENT LAMPS SHALL BE INSIDE FROSTED AND RATED AT 130 VOLTS UNLESS OTHERWISE SPECIFIED. LAMPS SHALL BE AS MANUFACTURED BY G.E., SYLVANIA, PHILIPS UNLESS OTHERWISE SPECIFIED ON DRAWINGS.
- E. REFER TO LIGHTING FIXTURE SCHEDULE FOR TYPES.

2.16 TRANSFORMERS (NOT USED)

PART 3 - EXECUTION

3.1 GENERAL

- A. ALL CONTROL WIRING ASSOCIATED WITH MECHANICAL EQUIPMENT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.
- B. ALL DATA/VOICE/COMMUNICATION WIRING SHALL BE INSTALLED BY OTHERS. COORDINATE WITH THE RESPECTIVE INSTALLER.
- C. OPENINGS AROUND ELECTRICAL PENETRATIONS THROUGH FIRE RESISTANCE RATED WALLS, PARTITIONS, FLOORS, OR CEILINGS SHALL BE FIRE STOPPED USING APPROVED METHODS. ALL SLEEVES SHALL HAVE BUSHINGS. SEALANT SHALL BE 3 HOUR.
- D. PREPARE "AS-BUILT" TRACINGS SHOWING ALL CHANGES IN WIRE SIZE, CIRCUIT NUMBERING, CIRCUIT ROUTING, EQUIPMENT LOCATIONS AND ELECTRI—CAL WORK AS ACTUALLY INSTALLED SUBMIT "AS-BUILTS" ALONG WITH THREE (3) COPIES OF ALL APPROPRIATE MAINTENANCE AND OPERATIONS MANUALS TO THE OWNER.
- E. ALL WORK SHALL BE GUARANTEED AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE INSTALLATION.
- F. FURNISH 480 VOLT DANGER SIGNS AT ALL 480/277 VOLT EQUIPMENT PER
- G. AT COMPLETION OF ELECTRICAL WORK ALL "IN SLAB" TRENCH DUCT COVERS SHALL BE REPLACED.
- H. COORDINATE WITH BUILDING MANAGER FOR ANY SERVICE INTERRUPTION OF EXISTING LIGHTING OR POWER PANELS AND GIVE NOTICE TWO (2) DAYS PRIOR TO ANY WORK. ELECTRICAL CONTRACTOR TO DO WORK ON PREMIUM TIME SO AS NOT TO DISTURB EXISTING TENANTS ON OTHER FLOORS.
- I. ALL PANELBOARD COVERS SHALL BE REPLACED AT THE COMPLETION OF EACH
- J. MAINTAIN GROUND CONTINUITY THROUGHOUT ALL SYSTEMS.
- K. THE CONTRACTOR SHALL REMOVE AND/OR RELOCATE ANY EXISTING ELECTRICAL WORK WHICH INTERFERES WITH THE NEW INSTALLATION. ALL EXPOSED ABANDONED CONDUIT AND WIRING SHALL BE REMOVED. THE CONTRACTOR SHALL CUT BACK ALL ABANDONED CONDUIT AND WIRING TO FLOOR, WALL, OR HUNG CEILING. THIS WORK MAY NOT BE REPRESENTED ON THE DRAWINGS, BUT SHOULD BE TAKEN INTO ACCOUNT BY THE CONTRACTOR IN HIS PROPOSAL.
- L. INSULATION RESISTANCE TESTS SHALL BE PERFORMED ON ALL EXISTING CONDUCTORS AND EQUIPMENT DESIGNATED TO REMAIN. MEASURED INSULATION RESISTANCE SHALL CONFORM TO REQUIREMENTS OF THE LATEST EDITION OF THE CODE
- M. ELECTRICAL CONTRACTOR SHALL MAINTAIN CONTINUITY OF CIRCUITRY FOR EXISTING EQUIPMENT AND DEVICES THAT ARE TO REMAIN. WHERE OUTLETS ARE REMOVED AND ARE NOT AT THE CIRCUIT DEAD END, EXTEND CIRCUITRY AS REQUIRED TO MAINTAIN INTEGRITY OF ORIGINAL CIRCUIT. WHERE A WIRING DEVICE IS TO BE REMOVED AND THAT WALL IS TO REMAIN THE ELECTRICAL CONTRACTOR SHALL REMOVE BRANCH CIRCUITRY FROM ITS SOURCE AND FILL—IN OUTLET BOX. BLANK PLATES WILL NOT BE PERMITTED.
- N. PRIOR TO ANY CHASING, CHOPPING, OR CORE DRILLING IS PERFORMED, THE CONTRACTOR SHALL FIELD INVESTIGATE CONDITIONS AND COORDINATE WITH ALL APPROPRIATE TRADES TO ENSURE THAT WORK WILL BE IN HARMONY WITH OTHER WORK AND NOT AFFECT ANY EXISTING BUILDING SYSTEMS. THIS WORK MUST BE APPROVED BY BUILDING MANAGEMENT PRIOR TO PROCEEDING.

3.2 SHOP DRAWINGS

- A. SUBMIT SIX (6) SETS OF SHOP DRAWINGS FOR THE FOLLOWING:
 - DEVICES.
 LIGHTING FIXTURES.

3.3 IDENTIFICATION OF EQUIPMENT

- A. ALL PANELBOARDS, CONTROL PANELS, AND CABINETS SPECIFIED HEREIN SHALL BE CLEARLY IDENTIFIED WITH THE EQUIPMENT DESIGNATION, VOLTAGE AND AMPERE RATING, EQUIPMENT SERVED AND ORIGIN OF THE INCOMING FEED. CONTROL PANELS SHALL BE IDENTIFIED WITH SYSTEM NAME. IDENTIFICATION SHALL BE BY WHITE ON BLACK PLASTIC NAMEPLATE WITH 1/2" MINIMUM LETTERING ATTACHED BY SCREWS.
- B. JUNCTION BOXES, SPLICE BOXES, ETC., SHALL BE IDENTIFIED WITH PANEL AND CIRCUIT NUMBERS, FOR CIRCUITS CONTAINED THEREIN. FACEPLATE OF SWITCHES FOR EQUIPMENT SUCH AS PANTRY EXHAUST FANS, MOTORIZED SCREENS, ETC., SHALL BE IDENTIFIED WITH THE NAME OF THE DEVICE CONTROLLED. IDENTIFICATION SHALL BE BY INDELIBLE MARKER IN CONCEALED LOCATIONS AND ADHESIVE ('P' TOUCH TYPE) LABELS IN EXPOSED LOCATIONS. EMERGENCY DEVICES SHALL BE IDENTIFIED IN RED AND UPS DEVICES IN BLUE.
- C. EMPTY CONDUITS SHALL BE IDENTIFIED WITH TAGS AT BOTH ENDS INDICATING THE LOCATION OF TERMINATION OF THE OPPOSITE END.
- D. FIRE ALARM SYSTEM JUNCTION BOXES SHALL BE PAINTED FIRE DEPARTMENT RED. APPROVED IDENTIFICATION CARDS SHALL BE FURNISHED ADJACENT TO ALL CONTROL PANELS AND MANUAL STATIONS.



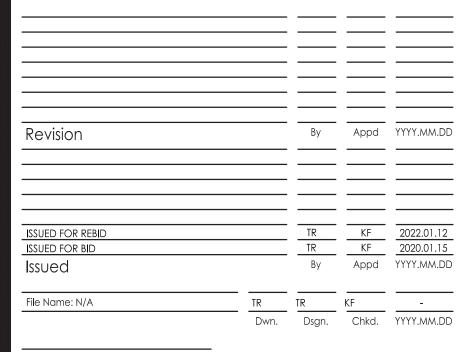
Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant



Permit/Seal



Client/Project Logo



Client/Project
NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

ELECTRICAL SPECIFICATIONS

Project No. 191506465

Revision

NONE
Drawing No.

Scale

E-502

STARTER / DISCONNECT SWITCH

STARTER

DISCONNECT

 \boxtimes

THERMOSTAT/SENSOR WIRING FROM SENSING DEVICE TO CONTROLLED DEVICE

MECHANICAL SYMBOLS - GENERAL

N	MECHANIC	CAL SYMBOLS - DUCTWORK	
18X12	18X12	DUCT SIZE (FIRST FIGURE INDICATES HORIZONTAL SIZE)	
, 18ø	18ø	ROUND DUCT DIAMETER	
$\boxtimes \mapsto$		SUPPLY DUCT UP	
=		SUPPLY DUCT DOWN	
\square	団	RETURN OR EXHAUST DUCT UP	
□		RETURN OR EXHAUST DUCT DOWN	
	<u> </u>	ACOUSTICAL LINING IN DUCT	
├		TRANSITION FROM RECTANGULAR TO ROUND OR OVAL DUCT	
S AD S	EZ	ACCESS DOOR IN DUCT	
→ R	TRI	SLOPING RISE IN DUCT IN DIRECTION OF ARROW	
▶ D		SLOPING DROP IN DUCT IN DIRECTION OF ARROW	
5	Ħ	MITERED ELBOW WITH TURNING VANES	
5	Ð	RADIUS ELBOW (INNER RADIUS = WIDTH)	
<u></u>	坛	DUCT SPLIT	
5		90° BRANCH TAP (USE 45° BOOT, OR CONICAL TAP FOR BRANCH SERVING A SINGLE DIFFUSER/REGISTER ONLY)	
7		45° BRANCH TAP	
├		SPLIT (SUPPLY) OR CONVERGENCE (RETURN/EXHAUST) RADIUS ELBOW TYPE	
├		SPLIT (SUPPLY) OR CONVERGENCE (RETURN/EXHAUST) MITERED ELBOW TYPE WITH TURNING VANES	
;—{·		SPLIT (SUPPLY) OR CONVERGENCE (RETURN/EXHAUST) BULLHEAD TYPE	
5		OFFSET (WITH RADIUS ELBOWS)	
⊢		SUPPLY REGISTER	
⊱		RETURN OR EXHAUST REGISTER	
S L VD	LVD T	VOLUME DAMPER	
FXC \$-IIII-\$	FXC T	FLEXIBLE CONNECTION	
*****		FLEXIBLE DUCT	
	₹ VD	BRANCH TAKEOFF TO CEILING DIFFUSER/REGISTER	
	SUPPLY CEILIN	G DIFFUSER (4-WAY BLOW)	
CD-B(500)	DIFFUSER TYPE	AND CFM (CUBIC FEET PER MINUTE). REFER TO SCHEDULE.	
	RETURN CEILIN	G GRILLE OR REGISTER	
_ 	DOOR LOUVER		

OUTLET)

TRANSFER OPENING IN WALL/PARTITION AND SQ. FT. OPENING SIZE

CEILING MOUNTED INLINE EXHAUST FAN (WITH FLEX CONNECTION AT INLET &

	>	DIRECTION OF FLOW IN PIPE		
—		PITCH PIPE DOWN IN DIRECTION OF ARROW		
← ○		ELBOW TURNED UP		
		ELBOW TURNED DOWN		
` Î		BOTTOM PIPE CONNECTION		
-		TOP PIPE CONNECTION		
` —••		BALL VALVE		
├	U	GATE VALVE		
├		GLOBE VALVE		
₩		AUTOMATIC THREE-WAY CONTROL VALVE		
₩	चl×ू13	AUTOMATIC TWO-WAY CONTROL VALVE		
├	a √	PRESSURE REDUCING VALVE		
-=	<u></u>	PIPE GUIDE		
	E	UNION		
		CAPPED PIPE		
	a de	"Y" TYPE STRAINER WITH BLOW DOWN VALVE		
<u></u>	-	PIPE SLEEVE		
СР	CONDENSATE F	PUMP (SEE SCHEDULES FOR TYPE)		
	CONDENSATE D	DRAIN LINE (GRAVITY)		
⊱——PD——	PUMPED DRAIN	LINE		
\$RD\$	REFRIGERANT [DISCHARGE		
\$	REFRIGERANT L	LIQUID		
├ ──RS── ┤	REFRIGERANT SUCTION			

+		├ ──RS ─ ─	REFRIGERANT SUCTION
	SUPPLY REGISTER		
	RETURN OR EXHAUST REGISTER		NEW YORK STATE CODES & STANDARDS
₩ VD	VOLUME DAMPER	•	2015 INTERNATIONAL BUILDING CODE 2015 INTERNATIONAL FIRE CODE 2015 INTERNATIONAL PLUMBING CODE
FXC	FLEXIBLE CONNECTION	•	2015 INTERNATIONAL MECHANICAL CODE 2015 INTERNATIONAL FUEL GAS CODE 2017 NYS UNIFORM CODE SUPPLEMENT LOCAL FIRE DEPARTMENT/FIRE MARSHAL
	FLEXIBLE DUCT	•	ALL OTHER LOCAL AUTHÓRITIES HAVING JURISDICTION
+ +			NEW YORK STATE ENERGY CODES
VD	BRANCH TAKEOFF TO CEILING DIFFUSER/REGISTER	•	2015 INTERNATIONAL ENERGY CONSERVATION CODE 2013 ASHRAE 90.1 2016 SUPPLEMENT TO THE NEW YORK STATE ENERGY CONSERVATION CODE (REVISED AUGUST 2016)
SUPPLY CEILING	G DIFFUSER (4-WAY BLOW)		LOCAL CODES
DIFFUSER TYPE	AND CFM (CUBIC FEET PER MINUTE). REFER TO SCHEDULE.		NEW ROCHELLE MUNICIPAL CODE
RETURN CEILING	G GRILLE OR REGISTER		REFERENCED STANDARDS
DOOR LOUVER			EFERENCE STANDARDS SHALL BE AS REFERENCED BY ALL STATE AND LOCAL CODES.
UNDERCUT DOC	DR .	THE LIST BEL STANDARDS.	OW IS FOR QUICK REFERENCE AND DOES NOT INCLUDE ALL APPLICABLE REFERENCE
CC=0	HEATING COIL COOLING COIL COIL =PREHEAT COIL	•	2013 NPFA 13 — STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS 2013 NFPA 14 — STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS 2013 NFPA 20 — STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION 2014 NFPA 70 — NATIONAL ELECTRICAL CODE 2013 NFPA 72 — NATIONAL FIRE ALARM AND SIGNALING CODE
TRANSFER GRIL SIZE	LES ON BOTH SIDES OF WALL/PARTITION AND SQ. FT. OPENING		

PROFESSIONAL STATEMENT

TO THE BEST OF OUR KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2016 SUPPLEMENT TO THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE.

AD	ACCESS DOOR
AHU	AIR HANDLING UNIT
ATC	AUTOMATIC TEMPERATURE CONTROL
B(500)	DIFFUSER TYPE - REFER TO SCHEDULE
BTU	BRITISH THERMAL UNIT
CFM	CUBIC FEET PER MINUTE
CG	CEILING GRILLE
СР	CONDENSATE PUMP
CR	CEILING REGISTER
CV	CONSTANT VOLUME
E	EXISTING
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EG	EXHAUST GRILLE
EWT	ENTER WATER TEMPERATURE
FXC	FLEXIBLE CONNECTION
FLA	FULL LOAD AMPS
GPM	GALLONS PER MINUTE
HP	HEAT PUMP
HZ	HERTZ
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
МВН	THOUSAND BTU PER HOUR
MCA	MINIMUM CIRCUIT AMPS
NIC	NOT IN CONTRACT
NK	NECK SIZE
NTS	NOT TO SCALE
OAI	OUTSIDE AIR INTAKE
PH	PHASE
PSI	POUND PER SQUARE INCH
RF	RETURN FAN
TX	TOILET EXHAUST
TYP	TYPICAL
VN	VENT
٧	VOLTS
VD	VOLUME DAMPER

MECHANICAL ABBREVIATIONS

N	MECHANICAL DRAWING LIST
SHEET NUMBER	SHEET TITLE
M-001	MECHANICAL COVER PAGE
M-002	MECHANICAL GENERAL NOTES
MD-101	MECHANICAL GROUND & FIRST FLOOR DEMOLITION PLANS
M-101	MECHANICAL GROUND & FIRST FLOOR PLANS
M-201	MECHANICAL DETAILS
M-301	MECHANICAL SCHEDULES
M-401	MECHANICAL SPECIFICATIONS
M-402	MECHANICAL SPECIFICATIONS
M-403	MECHANICAL SPECIFICATIONS

MECHANICAL SPECIFICATIONS



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

 JMR
 KF
 2022.01.12

 JMR
 KF
 2020.01.15

 By
 Appd
 YYYY.MM.DD
 ISSUED FOR REBID
ISSUED FOR BID Issued JMR JMR KF Dwn. Dsgn. Chkd. YYYY.MM.DD

Permit/Seal



Client/Project Logo



Client/Project NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

Scale

NONE

491 5TH AVE, NEW ROCHELLE, NY 10801

MECHANICAL COVER PAGE

Project No. 191506465 Revision

Drawing No.

ORIGINAL SHEET - ARCH D

- 2. THE DRAWINGS AND SPECIFICATIONS SHALL BE INTERPRETED SO AS TO REQUIRE THE MOST SUBSTANTIAL AND COMPREHENSIVE PERFORMANCE OF THE WORK, CONSISTENT WITH THE INTENT AND REQUIREMENTS OF THE CONTRACT DOCUMENTS, AND SUCH WORK SHALL BE PERFORMED BY THE CONTRACTOR WITHOUT EXTRA COST TO THE OWNER. IN THE CASE OF A DISCREPANCY WITHIN THE CONTRACT DOCUMENTS, THE WORST CASE OR HIGHEST COST SHALL APPLY FOR BIDDING PURPOSES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCY VIA RFI PRIOR TO PERFORMING THE ASSOCIATED WORK.
- 3. ANY MATERIAL, WORK, OR INCIDENTAL ACCESSORIES OR MINOR DETAILS NOT SHOWN BUT NECESSARY TO MAKE THE WORK COMPLETE IN ALL RESPECTS AND READY FOR OPERATION, EVEN IF NOT PARTICULARLY SHOWN ON THE DRAWINGS, SHALL BE PROVIDED BY THE CONTRACTOR WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
- 4. DUCT SIZES SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS. WHERE ACOUSTICALLY LINED DUCT IS SPECIFIED, OUTER DUCT DIMENSIONS SHALL BE INCREASED TO ACCOMMODATE LINING.
- 5. WHERE WORK IS INDICATED TO BE BY OTHER CONTRACTORS, FOR EXAMPLE: "BY GENERAL CONSTRUCTION CONTRACTOR", THIS WORK IS NOT IN THE HVAC/MECHANICAL CONTRACT. EACH CONTRACTOR WILL BE RESPONSIBLE FOR CLOSE COORDINATION WITH OTHER CONTRACTORS' WORK.
- 6. REFER TO APPROPRIATE SPECIFICATION SECTION FOR EQUIPMENT SELECTION PARAMETERS WHERE DRAWINGS DO NOT CONTAIN EQUIPMENT SCHEDULES.
- 7. FOR AIR SYSTEMS, THE MECHANICAL CONTRACTOR SHALL INCLUDE IN BID PRICING SUPPLYING AND INSTALLING BRANCH VOLUME DAMPERS FOR ALL SUPPLY, RETURN, AND EXHAUST BRANCH DUCTWORK, REGARDLESS IF VOLUME DAMPERS ARE NOT SHOWN IN CONTRACT DOCUMENTS. ALL VOLUME DAMPERS SHALL BE ADJUSTABLE HANDLE TYPE FOR LAY-IN ACCESSIBLE CEILING OR CABLE OPERATED FOR CONCEALED TYPE OF CEILING. ALL BRANCH DUCT VOLUME DAMPERS SERVING DIFFUSERS IN GYPSUM BOARD CEILINGS (OR OTHERWISE INACCESSIBLE) SHALL BE REMOTELY (CORD OR CABLE) OPERABLE THROUGH THE FACE OF THE DIFFUSER.
- 8. INSTALL THERMOSTATS, FAN SPEED CONTROLLERS, AND OTHER ROOM OCCUPANT ADJUSTABLE CONTROL DEVICES 4'-0" ABOVE FINISHED FLOOR OR AS DIRECTED OTHERWISE BY ARCHITECT. COORDINATE EXACT LOCATIONS WITH THE ARCHITECTURAL PLANS. DEVICE COLORS TO BE SELECTED BY THE ARCHITECT. MANUFACTURER'S LOGO SHALL NOT BE EXPOSED.
- 9. AC UNITS SHOWN ON DRAWINGS ARE SCHEMATIC. SEE AC UNIT DETAIL ON DETAIL SHEET FOR ACTUAL TYPICAL ARRANGEMENT REQUIRED.
- 10. WHERE PIPING CONNECTIONS FOR EQUIPMENT SUCH AS PUMPS, AC UNITS, COILS, ETC. DIFFER FROM THE LINE SIZE PIPING, IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO FURNISH AND INSTALL THE NECESSARY REDUCER/EXPANDER FITTINGS TO ENABLE CONNECTION BETWEEN THE PIPING SYSTEM AND THE EQUIPMENT.
- 11. SOME PRESSURE AND TEMPERATURE GAUGES ARE SCHEMATICALLY SHOWN ON THE PLANS AND DETAILS. REFER TO THE SPECIFICATIONS FOR EXACT TYPES AND LOCATIONS.
- 12. PROVIDE UL 555 COMPLIANT FIRE DAMPERS AT ALL DUCT PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS, REGARDLESS IF FIRE DAMPERS ARE NOT SHOWN IN CONTRACT DOCUMENTS. PROVIDE 1-1/2 HOUR RATED FIRE DAMPERS AT WALLS/FLOORS WITH 2 HOUR OR LESS RATING. PROVIDE 3 HOUR RATED FIRE DAMPERS AT WALLS/FLOORS WITH 3 HOUR OR MORE RATING. PROVIDE ACCESS DOORS IN DUCTWORK, 18"x18" UNLESS OTHERWISE NOTED. COORDINATE WITH GENERAL CONTRACTOR FOR LOCATIONS AND SIZES OF ACCESS DOORS IN GENERAL CONSTRUCTION.
- 13. PROVIDE COMBINATION FIRE/SMOKE DAMPERS AT ALL DUCT PENETRATIONS THROUGH FIRE AND SMOKE RATED WALLS AND FLOORS, REGARDLESS IF FIRE DAMPERS ARE NOT SHOWN IN CONTRACT DOCUMENTS. ALL COMBINATION FIRE/SMOKE DAMPERS SHALL BE PROVIDED WITH AN END SWITCH FOR STATUS SIGNAL TO THE BMS AND FIRE SMOKE CONTROL PANEL. PROVIDE ACCESS DOORS IN DUCTWORK, 18"x18" UNLESS OTHERWISE NOTED. COORDINATE WITH GENERAL CONTRACTOR FOR LOCATIONS AND SIZES OF ACCESS DOORS IN GENERAL CONSTRUCTION.
- 14. PROVIDE FIRESTOPPING FOR ALL DUCT AND PIPE PENETRATIONS THROUGH FIRE RATED PARTITIONS.
- 15. THE MECHANICAL CONTRACTOR SHALL INCLUDE IN BID PRICING SUPPLYING AND INSTALLING THERMOSTATS FOR ANY EQUIPMENT THAT REQUIRES CONTROL, SUCH AS VAV BOXES, FCU, FANS, HEATERS, FINNED TUBE RADIATION, RTU'S, ETC., REGARDLESS IF THERMOSTATS ARE NOT SHOWN IN CONTRACT DOCUMENTS. ALL THERMOSTATS SHALL BE DIRECT DIGITAL PROGRAMMABLE TYPE, UNLESS OTHERWISE NOTED. PROVIDE ONE THERMOSTAT FOR EACH FAN COIL UNIT, FAN UNIT, VAV, FPB, ENTRANCE HEATER, BASEBOARD RADIATION, ETC. THERMOSTAT LOCATIONS SHALL BE AS SHOWN ON PLANS AND/OR WHERE DIRECTED AND APPROVED BY THE ARCHITECT AND ENGINEER.
- 16. ALL DUCTWORK AND PIPING REQUIRING FIRE RATING AND WHERE SHOWN ON PLANS SHALL BE PROVIDED WITH A 2-HOUR FIRE RATED ENCLOSURE (PROVIDED UNDER ANOTHER SECTION OF THE SPECIFICATIONS).
- 17. BORDER TYPES AND METHOD OF ATTACHMENT FOR ALL DIFFUSERS, GRILLES, AND REGISTERS SHALL BE COORDINATED WITH THE ARCHITECTURAL CEILING DETAILS AND SPECIFICATIONS.
- 18. REFER TO SPECIFICATIONS FOR ACOUSTIC LINING REQUIREMENTS NOT SHOWN ON THE DRAWINGS.
- 19. PROVIDE ALL REQUIRED PIPE TAPPING FOR WATER TREATMENT SYSTEMS.
- 20. FOR WATER SYSTEMS: THE MECHANICAL CONTRACTOR SHALL INCLUDE IN BID PRICING SUPPLYING AND INSTALLING BALL TYPE SHUT-OFF VALVES AND

MECHANICAL GENERAL NOTES (CONTINUED)

SEPARATE BALANCING VALVE FOR ALL BRANCH PIPING REGARDLESS IF VALVES ARE NOT SHOWN IN CONTRACT DOCUMENTS. ALL SHUT-OFF VALVES SHALL BE FULL PORT AND PRESSURE RATED FOR SYSTEM PRESSURE. THE BALANCING VALVE SHALL BE SIMILAR TO B&G CIRCUIT SETTER PLUS CALIBRATED BALANCE VALVE, UNLESS OTHERWISE NOTED.

- 21. THE MECHANICAL CONTRACTOR SHALL INCLUDE IN BID PRICING SUPPLYING AND INSTALLING SECONDARY DRAIN PANS FOR ALL AIR CONDITIONING CEILING HUNG EQUIPMENT REGARDLESS IF DRAIN PANS ARE NOT SHOWN IN CONTRACT DOCUMENTS. REFER TO DETAIL FOR INSTALLATION OF DRAIN PANS. IF NO DETAIL IS SHOWN, CONTRACTOR MUST REQUEST DRAIN PAN DETAIL THRU RFI PROCESS DURING BIDDING.
- 22. THE MECHANICAL CONTRACTOR SHALL INCLUDE IN BID PRICING SUPPLYING AND INSTALLING CONDENSATE PIPING FOR ALL COOLING TYPE EQUIPMENT REGARDLESS IF CONDENSATE PIPING IS NOT SHOWN IN CONTRACT DOCUMENTS. ALL CONDENSATE PIPING SHALL BE INSULATED AND ROUTED TO NEAREST DRAIN OR JANITORS CLOSET. IF NO CONDENSATE PIPING IS SHOWN, CONTRACTOR MUST REQUEST CONDENSATE PIPING ROUTING THRU RFI PROCESS DURING BIDDING.
- 23. GENERAL NOTES, SYMBOLS, ABBREVIATIONS, AND DETAILS ARE APPLICABLE TO ALL HVAC/MECHANICAL DRAWINGS.
- 24. RELOCATE EXISTING WORK THAT INTERFERES WITH WORK OF THIS CONTRACT.
- 25. COORDINATE THIS WORK WITH THAT OF OTHER TRADES.
- 26. DIMENSIONS SHOWN ON PLAN ARE HORIZONTAL. DIMENSIONS SHOWN IN ELEVATION ARE VERTICAL, EXCEPT IN WAY OF STRUCTURAL STEEL, DIMENSIONS ARE MEASURED PERPENDICULAR TO FLANGE.
- 27. PRODUCT INSTALLATION SHALL ADHERE TO MANUFACTURERS' RECOMMENDATIONS.
- 28. PROVIDE ACCESS PANELS IN DUCTWORK IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS FOR ALL CONCEALED EQUIPMENT THAT REQUIRES PERIODIC SERVICE, INCLUDING AIR CONDITIONING UNITS, FANS, CONDENSATE PUMPS, FIRE DAMPERS, COMBINATION FIRE/SMOKE DAMPERS, AND DUCT MOUNTED SMOKE DETECTORS. COORDINATE WITH GENERAL CONTRACTOR FOR LOCATIONS AND SIZES OF ACCESS DOORS IN GENERAL CONSTRUCTION.
- 29. PROVIDE HANGERS, INSERTS, ANCHORS, SUPPLEMENTAL STEEL & SUPPORTS AS REQUIRED TO SUPPORT DUCTWORK, PIPING AND EQUIPMENT FROM STRUCTURE.
- 30. SCHEDULE WORK OF THIS SECTION TO AVOID INTERFERING WITH EXISTING OPERATIONS IN THE FACILITY.
- 31. COORDINATE ALL ROOF PENETRATIONS WITH THE WORK OF OTHER SECTIONS AND WITH FLASHING REQUIREMENTS. COORDINATE ALL ROOF PENETRATION LOCATIONS WITH THE OWNER/LANDLORD. NOTIFY THE OWNER/LANDLORD PRIOR TO STARTING WORK AND VERIFY COMPLIANCE WITH BOND AND WARRANTY OF THE ROOF.
- 32. RUN DUCTS AND PIPING CONCEALED, UNLESS OTHERWISE SPECIFIED, AND CLEAR OF CEILING INSERTS.
- 33. PROVIDE CLEARANCE IN FRONT OF ALL ELECTRIC CONTROL PANELS PER N.E.C. AND EQUIPMENT MANUFACTURERS' REQUIREMENTS.
- 34. ALL MOTOR STARTERS FOR HVAC EQUIPMENT SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR AND INSTALLED/WIRED BY THE ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED.
- 35. ALL DISCONNECT SWITCHES FOR HVAC EQUIPMENT SHALL BE FURNISHED, INSTALLED, AND WIRED BY THE ELECTRICAL CONTRACTOR, UNLESS INTEGRAL TO HVAC EQUIPMENT OR OTHERWISE NOTED.
- 36. USE FLAT TRANSVERSE SEAM FOR DUCTWORK WHERE SPACE AVAILABLE DICTATES.
- 37. BRANCH DUCTS TO INDIVIDUAL DIFFUSERS AND REGISTERS SHALL BE THE SAME SIZE AS THE DIFFUSER OR REGISTER NECK, UNLESS OTHERWISE NOTED.

38. ALL DUCTWORK AND PIPING SHALL BE INSTALLED TIGHT TO BOTTOM OF

- STRUCTURAL MEMBERS UNLESS OTHERWISE NOTED OR ABSOLUTELY REQUIRED BY FIELD CONDITIONS.
- 39. DO NOT INSTALL DUCTWORK OR PIPING DIRECTLY UNDER AND PARALLEL TO THE WEB OF STRUCTURAL MEMBERS. OFFSET IN ORDER TO ALLOW FUTURE DUCTWORK AND PIPING TO CROSS OVER IN BETWEEN STRUCTURAL MEMBERS.
- 40. BRANCH DUCTS TO INDIVIDUAL DIFFUSERS AND REGISTERS SHALL BE PROVIDED WITH VOLUME DAMPERS, WHETHER OR NOT THE VOLUME DAMPERS ARE SHOWN ON PLAN.
- 41. VOLUME DAMPERS LOCATED ABOVE INACCESSIBLE CEILINGS SHALL BE CABLE OPERATED TYPE, WITH CABLE OPERATORS LOCATED IN ACCESSIBLE LOCATIONS AND CLEARLY LABELED FOR DIFFUSER OR REGISTER SERVED.
- 42. UNLESS OTHERWISE NOTED, ALL EXPOSED DUCTWORK IN FINISHED SPACES SHALL BE SPIRAL ROUND OR FLAT OVAL TYPE, WITH SOLID OUTER WALL, PERFORATED INNER WALL, AND 1 INCH THICK INTERSTITIAL ACOUSTICAL LINING.
- 43. CONDENSATE DRAIN (CD) AND CONDENSATE PUMP DISCHARGE (PD) PIPING SHALL BE RIGID COPPER, TYPE L, MINIMUM 3/4" NOMINAL PIPE SIZE, BRAZED OR SOLDERED, WITH 1" INSULATION, UNLESS OTHERWISE NOTED ON DRAWINGS.
- 44. NEW AND EXISTING PERMANENT HVAC AIR EQUIPMENT MAY BE USED BY CONTRACTORS DURING CONSTRUCTION FOR TEMPORARY HEATING, COOLING, AND VENTILATION, ONLY UNDER THE FOLLOWING CONDITIONS:

 44.1. CONTRACTOR TO PROVIDE TEMPORARY FILTERS IN EACH UNIT DURING CONSTRUCTION, WHICH SHALL BE REPLACED WITH NEW CLEAN FILTERS
 - AFTER GENERAL CONSTRUCTION IS COMPLETED.

 44.2. CONTRACTOR TO PROVIDE FILTER FABRIC AT ALL RETURN AND EXHAUST REGISTERS, GRILLES, AND OPENINGS DURING CONSTRUCTION.
 - 44.3. THE WARRANTY PERIOD FOR ALL EQUIPMENT SHALL NOT BEGIN UNTIL CONSTRUCTION IS COMPLETED. IF THE EQUIPMENT MANUFACTURER'S WARRANTY PERIOD BEGINS WHILE THE UNIT USED DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH EXTENDING THE WARRANTY TO PROVIDE THE
- FULL PERIOD OF COVERAGE TO THE OWNER.

 44.4. IF NEW PERMANENT HVAC AIR EQUIPMENT INSTALLED UNDER THIS PROJECT WILL NOT BE OPERATED BY THE CONTRACTOR DURING CONSTRUCTION, ALL OPEN OR INCOMPLETE DUCTWORK SHALL BE CAPPED AIRTIGHT WITH WITH HEAVY POLYETHYLENE PLASTIC. AFTER

MECHANICAL GENERAL NOTES (CONTINUED)

- THE INSTALLATION OF DUCTWORK, REGISTERS, GRILLES, AND DIFFUSERS, THE CONTRACTOR SHALL BLANK OFF ALL REGISTERS, GRILLES, AND DIFFUSERS WITH HEAVY POLYETHYLENE PLASTIC AND TAPE AIR TIGHT, IN AREAS THAT ARE UNDER CONSTRUCTION, UNTIL WORK IS COMPLETE IN
- 44.5. IF THE ABOVE CONDITIONS ARE NOT MET, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY NECESSARY TEMPORARY HEATING, COOLING, AND VENTILATION EQUIPMENT, DUCTWORK, CONTROLS, PIPING, AND POWER AT HIS OWN EXPENSE.
- 44.6. IF PERMANENT HVAC EQUIPMENT IS USED DURING CONSTRUCTION BUT NOT PROPERLY PROTECTED AS DESCRIBED ABOVE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING OUT DUST AND DEBRIS FROM DUCTWORK AND EQUIPMENT, AS WELL AS ANY NECESSARY REPAIR OR REPLACEMENT OF DAMAGED EQUIPMENT AT HIS OWN EXPENSE.
- 44.7. WHEN GENERAL CONSTRUCTION IS COMPLETE, VACUUM CLEAN ALL DIFFUSERS, REGISTERS, GRILLES, AND HVAC EQUIPMENT IN THE PROJECT AREA OR SERVING THE PROJECT AREA. REMOVE ANY CONSTRUCTION DEBRIS.

MECHANICAL DEMOLITION NOTES

- 1. DEMOLITION NOTES, SYMBOL LIST, AND DETAILS ARE APPLICABLE TO ALL HVAC/MECHANICAL DRAWINGS.
- 2. ALL PIPING IN WALLS AND FLOORS NOT TO BE REUSED WILL BE PLUGGED OR CAPPED, AND CUTTING AND PATCHING WILL BE PERFORMED TO RESTORE SURFACE TO ORIGINAL CONDITION BY THIS CONTRACTOR.
- 3. AFTER REMOVING PIPE THROUGH THE FLOOR SLABS, PACK OPENING WITH APPROVED FIRE—RATED PACKING.
- 4. THE CONTRACTOR SHALL INCLUDE IN HIS PRICE ALL COSTS ASSOCIATED WITH REMOVALS AND RELOCATIONS OF HVAC WORK AS DESCRIBED ON THE DRAWINGS AND IN THE SPECIFICATIONS WITH ALLOWANCES FOR EXPECTED OR UNFORESEEN DIFFICULTIES WHEN CONCEALED WORK HAS BEEN OPENED. NO CLAIMS FOR ADDITIONAL WORK ASSOCIATED WITH DEMOLITION WILL BE ACCEPTED, EXCEPT IN CERTAIN CASES CONSIDERED JUSTIFIABLE BY THE OWNER/ENGINEER.
- 5. THE CONTRACTOR SHALL PERFORM DEMOLITION AND REMOVAL WORK WITH MINIMUM INTERFERENCE WITH FUNCTIONING HVAC SYSTEMS. ALL AFFECTED SYSTEMS SHALL BE RECONNECTED AND RESTORED.
- 6. DEMOLITION AND REMOVAL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER. THE CONTRACTOR SHALL PATCH, REPAIR, OR OTHERWISE RESTORE ANY DAMAGED INTERIOR OR EXTERIOR BUILDING SURFACE TO ITS ORIGINAL CONDITION.
- 7. THE CONTRACTOR SHALL REMOVE ALL DUCT AND PIPING SUPPORTS, ETC. FROM PARTITIONS THAT ARE TO BE REMOVED. WHERE THE REMOVAL OF THESE ITEMS DISRUPTS EXISTING PIPING THAT IS TO REMAIN, THE CONTRACTOR SHALL INSTALL AND PROVIDE BYPASS CONNECTIONS NECESSARY.
- 8. ALL PIPING WHICH BECOMES EXPOSED DURING THE ALTERATION WORK SHALL BE REAVED AND REROUTED CONCEALED BEHIND FINISHED SURFACES.
- 9. PORTIONS OF PIPING AND DUCTWORK TO BE REMOVED OR ABANDONED AS A RESULT OF DEMOLITION WORK, BUT WHICH ARE REQUIRED TO REMAIN ACTIVE, SHALL BE CUT AT CONVENIENT LOCATIONS, REROUTED, AND RECONNECTED.
- 10. THE CONTRACTOR SHALL NOTIFY THE OWNER AT THE APPROPRIATE TIME OF THE PROJECTED DEMOLITION AND PHASING SCHEDULE, SO THAT REMOVAL OR RELOCATION OF AFFECTED UTILITIES MAY BE CARRIED OUT IN COORDINATION WITH THE PROJECT REQUIREMENTS.
- 11. ALL EXISTING MATERIAL AND EQUIPMENT IN USABLE CONDITION, WHICH IS TO BE REMOVED UNDER THIS CONTRACT, SHALL REMAIN THE PROPERTY OF THE OWNER OR SHALL BE DISPOSED OF BY THE HVAC CONTRACTOR, AS DIRECTED BY THE OWNER.
- 12. ARRANGE TO WORK CONTINUOUSLY, INCLUDING OVER TIME, IF REQUIRED, TO ASSURE THAT SYSTEMS WILL BE SHUT DOWN ONLY DURING THE TIME ACTUALLY REQUIRED TO MAKE THE NECESSARY CONNECTIONS TO THE EXISTING SYSTEMS.
- 13. THE SHUTDOWN OF EXISTING BUILDING HVAC SERVICES SHALL BE COORDINATED WITH WITH THE OWNER. MAKE ARRANGEMENTS AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO A SHUTDOWN.
- 14. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- 15. WHERE THE DEMOLITION OF EXISTING PNEUMATIC CONTROL EQUIPMENT, THERMOSTATS, OR TUBING IS INDICATED IN THE PLANS, THE CONTRACTOR SHALL CAP THE ENDS OF ALL EXISTING TO REMAIN PNEUMATIC LINES AIRTIGHT UNLESS OTHERWISE NOTED. IF ADDITIONAL PNEUMATIC LINES OR DEVICES ARE DISCOVERED BY THE CONTRACTOR INSIDE WALLS OR ABOVE CEILINGS DURING DEMOLITION, THE CONTRACTOR SHALL INFORM THE DESIGN TEAM PRIOR TO REMOVAL OF THESE LINES OR DEVICES.



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

Permit/Seal



Client/Project Logo



Client/Project
NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

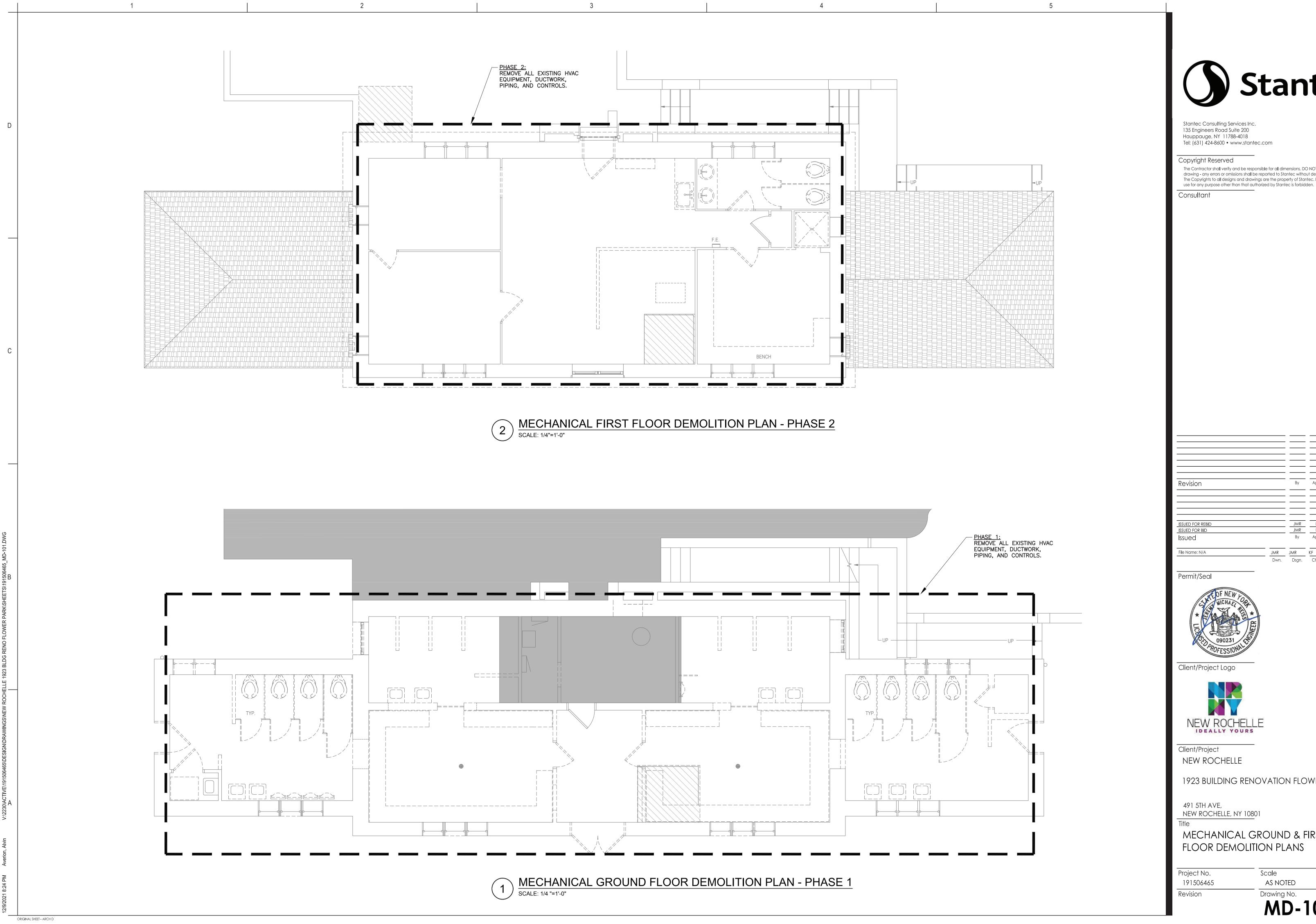
491 5TH AVE, NEW ROCHELLE, NY 10801

MECHANICAL GENERAL NOTES

Project No. Scale
191506465 NON

Revision

NONE
Drawing No.



The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or

JMR JMR KF Dwn. Dsgn. Chkd. YYYY.MM.DD

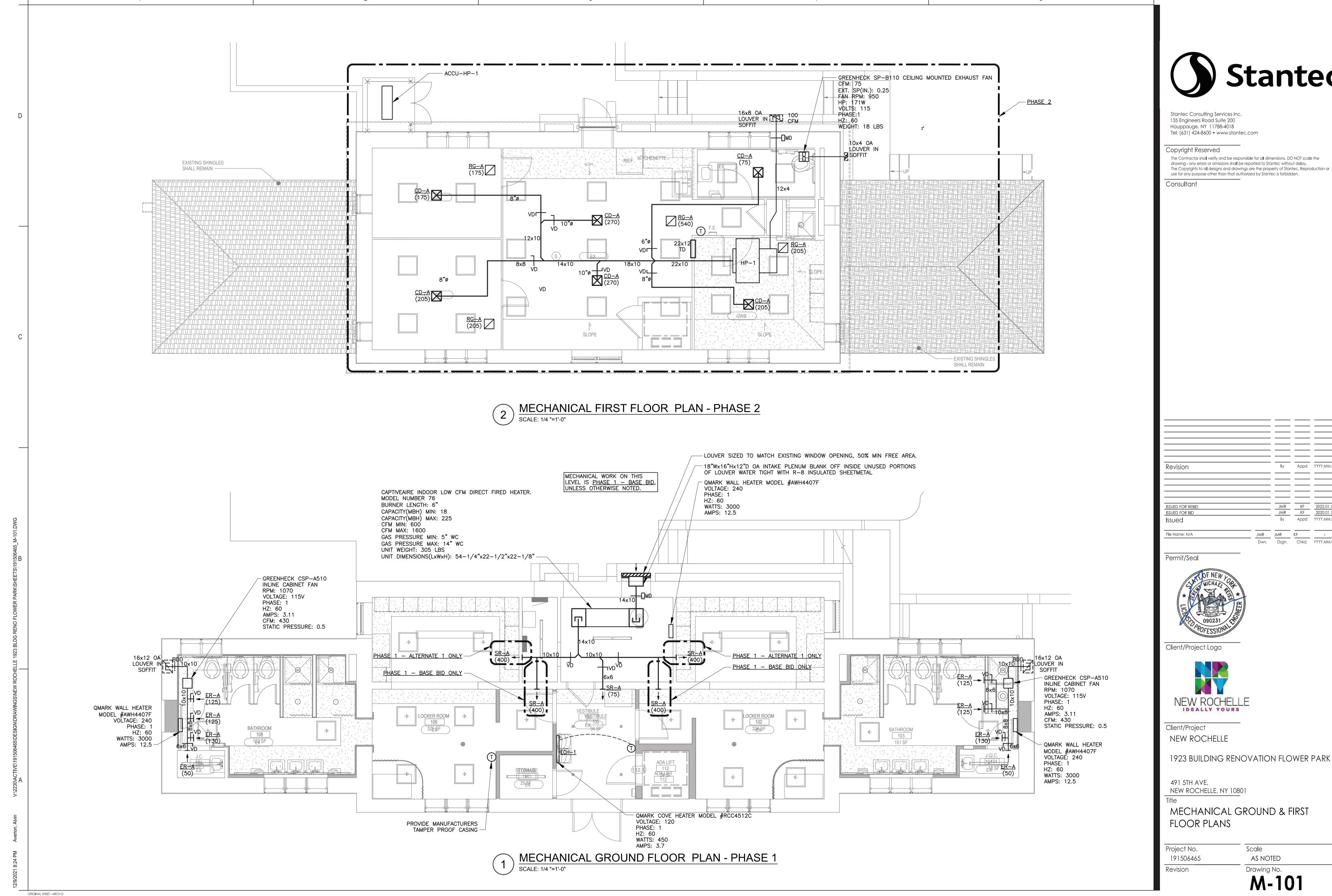
1923 BUILDING RENOVATION FLOWER PARK

MECHANICAL GROUND & FIRST FLOOR DEMOLITION PLANS

> Scale **AS NOTED**

Drawing No.

MD-101



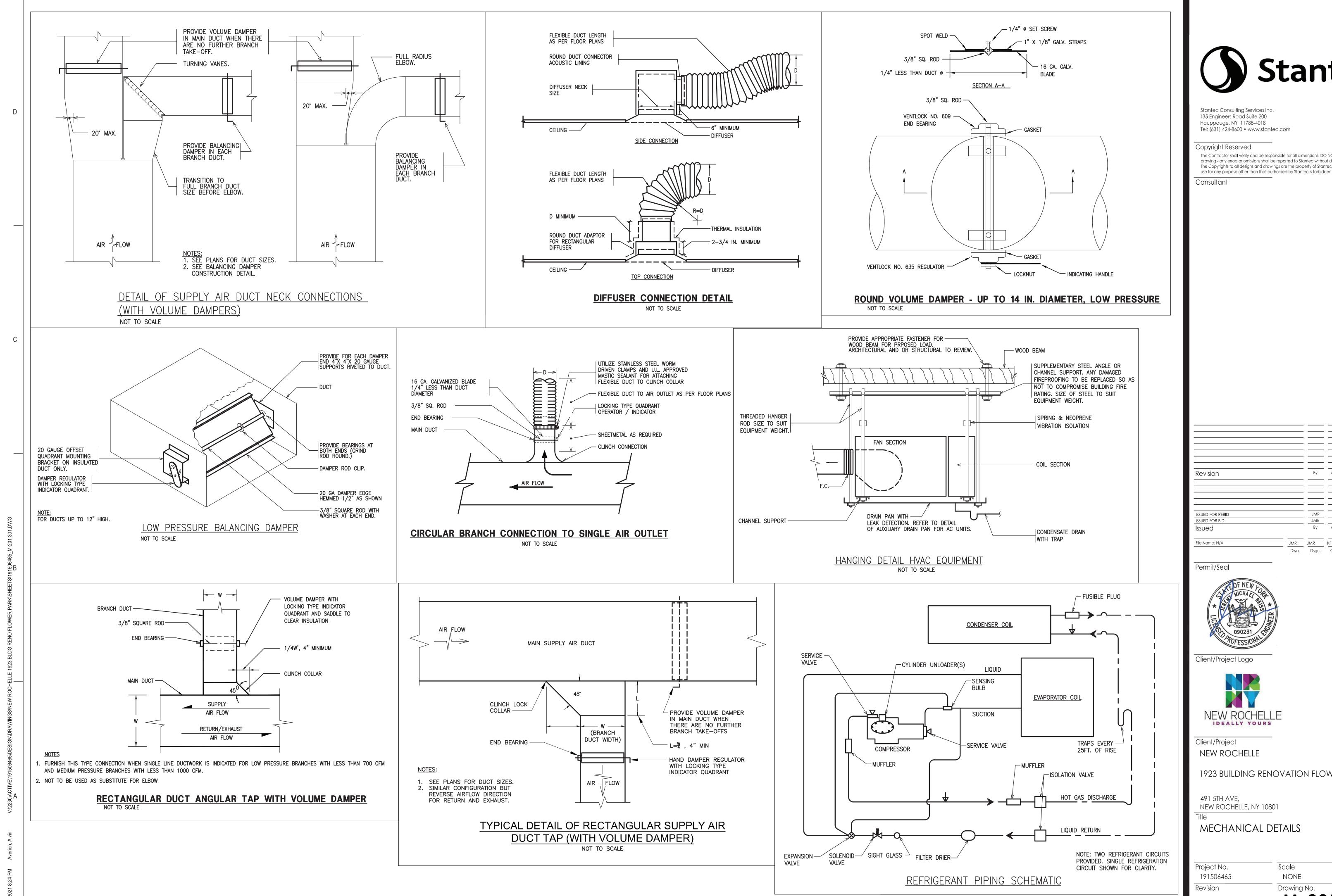


 JMR
 KF
 2022.01.12

 JMR
 KF
 2020.01.15

 By
 Appd
 YYYY.MM.DD
 JMR JMR KF Dwn. Dsgn. Chkd. YYYY.MM.DD

1923 BUILDING RENOVATION FLOWER PARK



ORIGINAL SHEET - ARCH D

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or

Appd YYYY.MM.DD JMR
Dwn.JMR
Dsgn.KF
Chkd.-
YYYY.MM.DD

1923 BUILDING RENOVATION FLOWER PARK

NOTES:	

1. PROVIDE REFRIGERANT PIPE SIZES AND ACCESSORIES PER MANUFACTURER'S RECOMMENDATIONS.

HP-1 | HORIZ. DISCHARGE | 3 | 36 | 115 | 0 | 19.1 | 95 |

2. PROVIDE MANUFACTURER'S LOW AMBIENT COOLING KIT.

						D	X SPL	.IT F	1E/	AT PUM	IP IND	OOR U	NIT S	CHI	EDL	JLE								
DESIGNATION	CONNECTED TO	CONFIGURATION REF	RIG. NOMINAL	NOMINAL	NOMINAL	AIR (CONDITION	IING		HEAT PUM	Р	SUPPLY FAN	DATA				El	LECTRICAL DATA			FILTERS	MANUFACTURER	MODEL	REMARKS
	CONDENSING		COOLING	COOLING	HEATING	DATA A	AT DESIGN (COND.		DATA AT	SUP	PLY OUTSII	DE ESP	VOLT	S PH	Hz MC	CA	MOCP	DISC. BY	EMER.				
	UNIT		CAPACITY	CAPACITY	CAPACITY	TOTAL	SENSIBLE	EAT I	EAT	DESIGN CON	ND. AIRF	LOWAIRFLO	W (IN WC)						E.C. OR	PWR.				
			(TONS)	(MBH)	(MBH)	COOLING	COOLING	DB \	WB I	HEATING EAT	T DB (CF	·M) (CFM)						MANUF.					
						(MBH)	(MBH)	(°F) ((°F)	(MBH) (°	°F)													
HP-1	ACCU-HP1	HORIZ. DUCTED CONCEALED R-4	10A 3	36	38	36	29	80	67	19 6	65 1,2	00 100	0.60	208	1	60 3.	.3 P	POWERED FROM ACCU	E.C.	N	MERV-8	MITUBISHI	PEAD-A36AA7	SEE NOTES BELOW
110 ==0														•										•

36 | 38 | 59 | -4 | 9.9 | 0 | -0.7 | 19 | R-410A | 1 | 1 | MODULATING | 1 | 208 | 1 | 60 | 25 | 31 | E.C. | N | 52.7 | 41.3 | 14 | 214 | 5/8 | 3/8 | MITSUBISHI | PUZ-A36NKA7-BS | SEE NOTES BELOW

DB (°F) DB (°F)

. PROVIDE REFRIGERANT PIPE SIZES AND ACCESSORIES PER MANUFACTURER'S RECOMMENDATIONS.

P. PROVIDE THE FOLLOWING FACTORY OPTIONS:

2.1. WALL-MOUNTED CONTROLLER WITH BUILT-IN TEMPERATURE SENSOR, MITSUBISHI TYPE PAR, HARD-WIRED, WITH INFARED OCCUPANCY SENSOR.

2.2. FILTER BOX ACCESSORY WITH FACTORY SUPPLIED MERV-8 FILTER.

3. PROVIDE THE FOLLOWING FIELD ACCESSORIES FOR CEILING CONCEALED UNITS:

3.1. GALVANIZED STEEL EXTERNAL DRIP PAN BELOW AC UNIT, EXTENDING 3" BEYOND EQUIPMENT ON ALL SIDES.

WB (°F) WB (°F)

3.2. LEAK DETECTOR IN DRIP PAN, HARDWIRED TO SHUT DOWN THE UNIT.

	REGISTER, GRILLE, AND DIFFUSER SCHEDULE SIGNATION SERVICE TYPE NOMINAL NECK CFM CONFIGURATION BORDER MATERIAL OF EQUALIZING OPPOSED FILTER FINISH MANUF. MODEL REMARKS														
DESIGNATION	SERVICE	TYPE	NOMINAL	NECK	CFM	CONFIGURATION	BORDER	MATERIAL OF	EQUALIZING	OPPOSED	FILTER	FINISH	MANUF.	MODEL	REMARKS
			OVERALL	SIZE	RANGE		TYPE	CONSTRUCTION	GRID IN NECK	BLADE	RACK	COLOR			
			DIMENSION	(IN)						DAMPER					
			(IN)							IN NECK					
				6"DIA	0-100										
				8"DIA	101-175	PLAQUE-STYLE,				NO	NO	WHITE	TITUS	OMNI	SEE
CD-A	SUPPLY	CEILING DIFFUSER	24x24	10"DIA	176-350	4-WAY THROW	LAY-IN	STEEL	YES						NOTES
				12"DIA	351-550										BELOW
				14"DIA	551-750										
						LOUVERED FACE,									SEE
RG-A	RETURN	CEILING GRILLE	24x24	24x24	0-2000	1/2" BLADE SPACING, 35°	LAY-IN	STEEL	NO	NO	NO	WHITE	TITUS	355RL	NOTES
110 /1			21%21												BELOW
						FIXED DEFLECTION									
ER-A	EXHAUST	CEILING/SIDEWALL	RE: PLAN	6x6	0-100	LOUVERED FACE,	LAY-IN OR	ALUMINUM	NO	NO	NO	WHITE	TITUS	355FL	SEE
		REGISTER		8x6	101-130	1/2" BLADE	SURFACE								NOTES
						INDIVIDUALLY	LAY-IN OR								SEE
SR-A	SUPPLY	CEILING/SIDEWALL	RE: PLAN	RF: PI AN	RE: PLAN	ADJUSTABLE BLADES,	SURFACE		NO	YES	NO	WHITE	TITUS	300RL	NOTES
		REGISTER	IXE. I EAN			3/4" BLADE SPACING,	MOUNTED			11.0		*******	11103	JOURL	BELOW
						DOUBLE DEFLECTION									

MANUF.

(IN)

1. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.

2. ALL FINISH COLORS ARE SUBJECT TO APPROVAL BY THE ARCHITECT. SUBMIT COLOR CHART FOR REVIEW.

3. COORDINATE BORDER TYPES WITH ARCHITECTURAL CEILING SPECIFICATIONS.

4.1. PROVIDE FACTORY FURNISHED LIGHT SHIELD FOR EACH GRILLE, MATTE BLACK FINISH FOR INTERNAL SURFACES.



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

ISSUED FOR REBID
ISSUED FOR BID Appd YYYY.MM.DD Issued JMRJMRKF-Dwn.Dsgn.Chkd.YYYY.MM.DD

Permit/Seal



Client/Project Logo



Client/Project NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

MECHANICAL SCHEDULES

Project No. 191506465

Drawing No.

ORIGINAL SHEET - ARCH D

Scale NONE Revision

1.01 GENERAL REQUIREMENTS

- A. INSTALL ALL NEW WORK IN A NEAT WORKMANLIKE MANNER READILY ACCESSIBLE FOR OPERATION, MAINTENANCE, AND REPAIR.
- B. CODES, PERMITS AND INSPECTIONS:
- 1. ALL REQUIREMENTS OF THE BUILDING DEPARTMENT, BUILDING MANAGEMENT, AND ALL AUTHORITIES HAVING JURISDICTION, AND ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES, LAWS AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK, SHALL BE INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS. CONTRACTOR IS TO INFORM ENGINEER OF ANY EXISTING WORK OR MATERIALS WHICH VIOLATE ANY OF THE ABOVE LAWS AND REGULATIONS. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATION SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE BY THIS CONTRACTOR AND AT NO EXPENSE TO THE OWNER.
- 2. THIS CONTRACTOR SHALL OBTAIN ALL EQUIPMENT APPROVALS AS REQUIRED BY STATE AND LOCAL AUTHORITIES. PERMITS SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.

C. SITE VERIFICATION:

1. PRIOR TO SUBMISSION OF THE BID, THIS CONTRACTOR SHALL VISIT THE JOB SITE TO ASCERTAIN THE ACTUAL FIELD CONDITIONS AS THEY RELATE TO THE WORK INDICATED ON THE DRAWINGS AND DESCRIBED HEREIN. DISCREPANCIES, IF ANY, SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO SUBMISSION OF THE BID, AND IF NOT RESOLVED TO SATISFACTION, SHALL BE SUBMITTED AS A WRITTEN QUALIFICATION OF THE BID. SUBMISSION OF A BID SHALL BE EVIDENCE THAT SITE VERIFICATION HAS BEEN PERFORMED AS DESCRIBED ABOVE.

D. CONTRACT DOCUMENTS:

- 1. PRIOR TO SUBMISSION OF A FORMAL BID, THIS CONTRACTOR SHALL REVIEW ALL DRAWINGS OF THE ENTIRE PROJECT INCLUDING GENERAL CONSTRUCTION, DEMOLITION, ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND SPRINKLER AND SHALL INCLUDE ANY WORK REQUIRED IN THE BID WHICH IS INDICATED OR IMPLIED TO BE PERFORMED BY THIS TRADE IN OTHER SECTIONS OF THE WORK.
- 2. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK AND APPROXIMATE LOCATION OF EQUIPMENT. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS AND COORDINATE FINAL LOCATIONS OF DIFFUSERS, GRILLES, REGISTERS, THERMOSTATS, SENSORS, SWITCHES AND ANY WALL MOUNTED DEVICES. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID CONFLICT.
- 3. IF A CONFLICT OCCURS IN THE SPECIFICATIONS AND/OR ON THE DRAWINGS, THE MORE STRINGENT SITUATION SHALL APPLY.

E. GUARANTEE:

- 1. ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF THIS WORK. FINAL ACCEPTANCE SHALL BE DEFINED AS THE TIME AT WHICH THE MECHANICAL WORK IS TAKEN OVER AND ACCEPTED BY THE OWNER, AND IS UNDER CARE, CUSTODY, AND CONTROL OF THE OWNER. ENGAGE THE SERVICES OF VARIOUS MANUFACTURERS SUPPLYING THE EQUIPMENT FOR THE PROPER STARTUP AND OPERATION OF ALL SYSTEMS INSTALLED. INSTRUCT THE OWNER'S PERSONNEL IN THE PROPER OPERATION AND SERVICING OF THE SYSTEM.
- 2. THE CONTRACTOR SHALL GUARANTEE TO REPLACE OR REPAIR PROMPTLY AND ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED FOR ANY WORKMANSHIP AND EQUIPMENT IN WHICH DEFECTS DEVELOP WITHIN THE GUARANTEE PERIOD. THIS WORK SHALL BE DONE AS DIRECTED BY THE OWNER. THIS GUARANTEE SHALL INCLUDE RESPONSIBILITY FOR ALL EXPENSES INCURRED IN REPAIRING AND REPLACING WORK OF OTHER TRADES AFFECTED BY DEFECTS, REPAIRS OR REPLACEMENTS IN EQUIPMENT SUPPLIED BY THIS CONTRACTOR
- 3. THIS CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE AND OPERATION OF ALL SYSTEMS UNTIL THE FINAL ACCEPTANCE OF THE WORK.
- 4. ALL AIR CONDITIONING UNIT COMPRESSORS AND REFRIGERATION COMPONENTS SHALL HAVE A 5-YEAR WARRANTY
- F. THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION AIA DOCUMENT A201, LATEST EDITION, OR AS REQUIRED BY THE ARCHITECT'S DOCUMENTS, AND/OR THE STRUCTURAL ENGINEER'S DOCUMENTS, AS APPLICABLE. ARE PART OF THIS CONTRACT.

G. DEFINITIONS:

- 1. MECHANICAL CONTRACTOR, "THIS CONTRACTOR" THE PARTY OR PARTIES HAVE BEEN DULY AWARDED THE CONTRACT FOR AND ARE THEREBY MADE RESPONSIBLE FOR THE MECHANICAL WORK AS DESCRIBED
- 2. "THIS CONTRACT", "THE CONTRACT" THE AGREEMENT COVERING THE WORK TO BE PERFORMED BY THIS CONTRACTOR.
- 3. "APPROVED", "EQUAL", "SATISFACTORY", "ACCEPTED", "ACCEPTABLE", "EQUIVALENT" SUITABLE FOR USE ON THE PROJECT, AS DETERMINED BY THE ENGINEER BASED ON DOCUMENTS PRESENTED FOR SUCH DETERMINATION.
- 4. "THESE SPECIFICATIONS", "THIS SECTION, PART, DIVISION" (OF THE SPECIFICATION) THE DOCUMENT SPECIFYING THE WORK TO BE PERFORMED BY "THIS CONTRACTOR".
- 5. "THE MECHANICAL WORK", "THIS WORK" ALL LABOR MATERIALS, EQUIPMENT, APPARATUS, CONTROLS, ACCESSORIES, AND OTHER ITEMS REQUIRED FOR A PROPER AND COMPLETE INSTALLATION BY THE MECHANICAL CONTRACTOR.
- 6. "ARCHITECT", "ENGINEER", "OWNER'S REPRESENTATIVE" THE PARTY OR PARTIES RESPONSIBLE FOR INTERPRETING, ACCEPTING AND OTHERWISE RULING ON THE PERFORMANCE UNDER THIS CONTRACT.
- 7. "FURNISH" PURCHASE AND DELIVER TO THE PROJECT SITE COMPLETE WITH EVERY NECESSARY APPURTENANCE AND SUPPORT, ALL AS PART OF THE MECHANICAL WORK.
- 8. "INSTALL" UNLOAD AT THE DELIVERY POINT AT THE SITE AND PERFORM EVERY OPERATION NECESSARY TO ESTABLISH SECURE MOUNTING INSTALLATION AND CORRECT OPERATION AT THE PROPER LOCATION IN THE PROJECT, ALL AS PART OF THE MECHANICAL WORK.
- 9. "PROVIDE" "FURNISH" AND "INSTALL".
- 10. "NEW" MANUFACTURED WITHIN THE PAST TWO YEARS AND NEVER BEFORE USED.
- 11. "RELOCATE" MOVE EXISTING EQUIPMENT AND ALL ACCESSORIES AS REQUIRED.
- 12. "REMOVE" DISMANTLE AND CART AWAY FROM SITE INCLUDING ALL RELATED ACCESSORIES. ALL ITEMS SHALL BE LEGALLY DISPOSED OF. ALL OTHER EQUIPMENT AND OPERATIONS IN ANY WAY AFFECTED BY THE REMOVAL IS TO REMAIN IN FULL OPERATION. PROVIDE ALL NECESSARY COMPONENTS TO MAINTAIN SUCH OPERATION.

1.02 SCOPE OF WORK

- A. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, AND CONTRACTOR'S SERVICES NECESSARY FOR COMPLETE, SAFE INSTALLATION OF ALL MECHANICAL WORK. THE SCOPE OF WORK SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
- 1. DEMOLITION AND REMOVAL OF ITEMS AS REQUIRED.
- 2. DUCTWORK AND DUCTWORK ACCESSORIES.
- 3. AIR DISTRIBUTION SYSTEM (AIR OUTLETS, ETC.).
- 4. PIPING AND PIPING ACCESSORIES INCLUDING ALL VALVING.

- 5. EQUIPMENT, INCLUDING BUT NOT LIMITED TO, PUMPS, AIR CONDITIONING UNITS, FANS, ETC.
- 6. INSULATION OF PIPING AND DUCTWORK.
- 7. SOUND LINING.
- 8. AUTOMATIC TEMPERATURE CONTROLS.
- 9. TESTING AND BALANCING.
- 10. CUTTING AND PATCHING.
- 11. SHOP DRAWINGS.
- 12. AS-BUILT DRAWINGS.
- 13. OPERATING AND MAINTENANCE MANUALS.
- 14. FULL COORDINATION WITH OTHER TRADES.
- 15. WARRANTY AND GUARANTY
- 16. PHASING AS REQUIRED BY OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR, OR BUILDING MANAGEMENT.
- 17. PREMIUM TIME FOR WORK TO BE PERFORMED AFTER-HOURS AS REQUIRED BY BUILDING MANAGEMENT AND/OR OWNER.
- 18. FILING AND PERMITS.
- 19. FULL TESTING AND STARTUP OF ALL SYSTEMS.
- 20. COMMISSIONING.
- B. SECURE CERTIFICATES, PAY ALL FEES AND CHARGES FOR ALL WORK INSTALLED, CERTIFYING COMPLIANCE WITH ALL AUTHORITIES. CONTRACTOR TO COORDINATE WITH OWNER FOR REQUIRED SPECIAL INSPECTIONS AND OBTAIN ALL APPROVALS. DELIVER CERTIFICATES TO OWNER FOR SIGNING BEFORE FILING.
- C. THE DRAWINGS AND SPECIFICATIONS SHALL BE INTERPRETED SO AS TO REQUIRE THE MOST SUBSTANTIAL AND COMPREHENSIVE PERFORMANCE OF THE WORK, CONSISTENT WITH THE INTENT AND REQUIREMENTS OF THE CONTRACT DOCUMENTS, AND SUCH WORK SHALL BE PERFORMED BY THE CONTRACTOR WITHOUT EXTRA COST TO THE OWNER. IN THE CASE OF A DISCREPANCY WITHIN THE CONTRACT DOCUMENTS, THE WORST CASE OR HIGHEST COST SHALL APPLY FOR BIDDING PURPOSES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCY VIA RFI PRIOR TO PERFORMING THE ASSOCIATED WORK.

1.03 COORDINATION WITH BUILDING MANAGEMENT

- A. THIS CONTRACTOR IS TO OBTAIN A COPY OF THE BUILDING RULES AND REGULATIONS PRIOR TO BID SUBMISSION TO DETERMINE THE REQUIREMENTS AND THE EXTENT OF PREMIUM TIME WORK REQUIRED BY THE
- B. THIS CONTRACTOR IS RESPONSIBLE FOR ADHERING TO THE BUILDING OWNER'S RULES AND REGULATIONS. ANY DISCREPANCIES BETWEEN THE CONTRACT DOCUMENTS AND THE BUILDING RULES AND REGULATIONS SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT/ENGINEER FOR REVIEW WITH BID SUBMISSION.
- D. COORDINATE WITH BUILDING OWNER FOR ANY SERVICE INTERRUPTION OF EXISTING SYSTEMS AND GIVE NOTICE AS REQUIRED BY BUILDING RULES AND REGULATIONS, OR CONTRACTOR TO PROVIDE A MINIMUM OF TWO (2) DAYS NOTICE PRIOR TO ANY WORK BEING PERFORMED, WHICHEVER IS THE MORE STRINGENT. CONTRACTOR IS TO PERFORM WORK ON PREMIUM TIME, IF SO DIRECTED BY BUILDING OWNER, SO AS NOT TO DISTURB EXISTING TENANTS ON OTHER FLOORS.

1.04 SHOP DRAWINGS

- A. SUBMIT SHOP DRAWINGS CERTIFIED BY ALL TRADES THAT COORDINATION HAS BEEN COMPLETED. SUBMIT ALL CERTIFIED EQUIPMENT CUTS WITH CONSTRUCTION WIRING DIAGRAMS AND AUTOMATIC TEMPERATURE CONTROL REQUIREMENTS. SHOP DRAWINGS SUBMISSION SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:
- 1. DUCTWORK PROVIDE DUCT SHOP STANDARDS AND LEAKAGE TEST CERTIFICATION, AS REQUIRED, AND 3/8 SCALE DUCT LAYOUT.
- 2. PIPING LAYOUT AND APPURTENANCES PROVIDE PIPING, VALVING, CHEMICAL TREATMENT, SHOP STANDARDS AND 3/8 SCALE PIPING LAYOUT WITH ALL VALVING.
- 3. INSULATION FOR DUCTWORK AND PIPING.
- 4. EQUIPMENT CATALOG CUTS FOR ALL ITEMS TO BE UTILIZED ON PROJECT (FANS, PUMPS, AC UNITS, ETC.).
- 5. AIR OUTLETS (DIFFUSERS, REGISTERS, GRILLES, ETC.).
- 6. AUTOMATIC TEMPERATURE CONTROL DIAGRAMS. DEVICES AND SEQUENCE OF OPERATION.
- 7. CERTIFIED AIR BALANCING REPORT.
- 8. AS-BUILT DRAWINGS AT PROJECT COMPLETION OF THE INSTALLED CONDITION OF WORK.
- B. ALL SHOP DRAWINGS SHALL BE SUBMITTED AS PDF FILES. SPECIFIC JOB REQUIREMENTS MAY BE MORE STRINGENT AND CONTRACTOR IS RESPONSIBLE TO OBTAIN REQUIREMENTS FROM OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR, OR ARCHITECT.
- C. THE CONTRACTOR SHALL INCLUDE IN THE BID SKETCHING TIME FOR ANY REVISIONS REQUIRED DUE TO THE ENGINEER'S REVIEW OF SHOP DRAWINGS FOR EQUIPMENT, DUCTWORK AND PIPING LAYOUTS.

1.05 MAINTENANCE MANUALS

- A. SUBMIT FOUR (4) LOOSE—LEAF BOUND OPERATING AND MAINTENANCE MANUALS WITH INDEX AND INDEX TABS. IN ADDITION, SUBMIT FOUR (4) PDF COPIES OF THE COMPLETE MANUALS ON CD'S. INCLUDE THE FOLLOWING:
- 1. OPERATING AND MAINTENANCE INSTRUCTIONS ON ALL SYSTEMS.
- 2. MANUFACTURERS' CATALOG CUTS ON ALL EQUIPMENT.
- 3. AUTOMATIC TEMPERATURE CONTROL SYSTEMS WITH SEQUENCE OF OPERATIONS, CATALOG CUTS OF ALL DEVICES AND POINT—TO—POINT WIRING DIAGRAMS.
- 4. CERTIFIED FINAL AIR AND WATER BALANCING REPORT.
- 5. DUCT AND PIPING AS-BUILT DRAWINGS WITH VALVE CHART AND KEY PLAN DRAWINGS INSERTED IN BINDER.
- 6. ALL ITEMS SUBMITTED FOR REVIEW IN SHOP DRAWING SECTION.

1.06 <u>AS-BUILT DRAWINGS</u>

- A. CONTRACTOR SHALL MAINTAIN RECORD DRAWING PRINTS ON JOB SITE AND RECORD, AT TIME OF OCCURRENCE, DEVIATIONS FROM CONTRACT DOCUMENTS DUE TO FIELD COORDINATION, BULLETINS, OR
- B. CONTRACTOR SHALL REVISE SHOP DRAWINGS TO CONFORM TO RECORD DRAWINGS AND SUBMIT AS—BUILT CONDITION (PIPING AND DUCTWORK) DRAWINGS UPON COMPLETION OF THE PROJECT. FINAL SUBMISSION OF REPRODUCIBLE AS—BUILT DRAWINGS ARE TO BE SIGNED AND CERTIFIED BY THE INSTALLING CONTRACTOR THAT THIS IS THE AS—BUILT CONDITION OF THE WORK.
- C. ALSO PROVIDE FOUR (4) COPIES OF ALL AS-BUILT DRAWINGS AS PDF AND AUTOCAD FILES ON CD'S.

1.07 SERVICE AND WARRANTY (MAINTENANCE CONTRACT)

A. THIS CONTRACTOR SHALL PROVIDE AS AN ADD ALTERNATE PRICE, A FULL ONE YEAR SERVICE AND WARRANTY

OF ALL MECHANICAL COMPONENTS AND SYSTEMS, WITH PRICES FOR YEARS 2, 3 AND 4 FOLLOWING THIS FIRST YEAR. AT THE TIME OF ACCEPTANCE OF PROJECT, THE TENANT OR OWNER'S REPRESENTATIVE WILL DECIDE TO ACCEPT WHICH ALTERNATE, IF ANY.

1.08 SUBSTITUTIONS

- A. NO SUBSTITUTE MATERIAL OR MANUFACTURER OF EQUIPMENT SHALL BE PERMITTED WITHOUT A FORMAL WRITTEN SUBMITTAL TO THE ENGINEER WHICH INCLUDES ALL DIMENSIONAL, PERFORMANCE AND MATERIAL SPECIFICATIONS. ANY CHANGES IN LAYOUT, ELECTRICAL CHARACTERISTICS, STRUCTURAL REQUIREMENTS, OR DESIGN DUE TO THE USE OF A SUBSTITUTION SHALL BE SUBMITTED TO THE ENGINEER AS PART OF THIS PROPOSAL. THE CONTRACTOR TAKES FULL RESPONSIBILITY FOR THE SUBSTITUTION AND ALL CHANGES RESULTING FROM SUBSTITUTION. ALL ITEMS SHALL BE SUBMITTED FOR REVIEW IN CONJUNCTION WITH THE SUBMITTAL OF THE SUBSTITUTION. ANY SUBSTITUTION MUST BE SUBMITTED WITH AN EXPLANATION AS TO WHY A SUBSTITUTION IS BEING UTILIZED. IF THE SUBSTITUTED ITEM DEVIATES FROM THE SPECIFIED ITEM, THOSE DEVIATIONS ARE TO BE IDENTIFIED ON A LINE—BY—LINE BASIS. IF THE SUBSTITUTE IS BEING UTILIZED FOR FINANCIAL REASONS, THE ASSOCIATED CREDIT MUST BE SIMULTANEOUSLY SUBMITTED.
- B. ALL SUBSTITUTED EQUIPMENT SHALL CONFORM TO SPACE REQUIREMENTS AND PERFORMANCE REQUIREMENTS SHOWN ON CONTRACT DOCUMENTS. CONTRACTOR SHALL REPLACE ANY EQUIPMENT THAT DOES NOT MEET THESE REQUIREMENTS AT HIS OWN EXPENSE. ANY MODIFICATIONS TO ASSOCIATED SYSTEMS OR ADDITIONAL COSTS ATTRIBUTED TO THIS SUBSTITUTION SHALL BE AT THIS CONTRACTOR'S EXPENSE.
- C. CONTRACTOR SHALL SUBMIT BID BASED ON SPECIFIED ITEMS AND SHALL SUPPLY AS AN ALTERNATE PRICE ANY SUBSTITUTIONS.

1.09 ACCESS DOORS IN GENERAL CONSTRUCTION

A. THIS CONTRACTOR SHALL SUBMIT TO THE ARCHITECT FOR APPROVAL A PLAN INDICATING THE SIZE AND LOCATION OF ALL ACCESS DOORS REQUIRED FOR OPERATION AND MAINTENANCE OF ALL CONCEALED EQUIPMENT, DEVICES, VALVES, DAMPERS AND CONTROLS. CONTRACTOR SHALL ARRANGE FOR FURNISHING AND INSTALLATION OF ALL ACCESS DOORS IN FINISHED CONSTRUCTION AND INCLUDE COSTS IN THE BID. ACCESS DOORS SHALL BE OF ADEQUATE SIZE TO PROVIDE ACCESS TO CONCEALED ITEMS FOR OPERATION AND MAINTENANCE, WITH A MINIMUM SIZE OF 18" X 18".

1.10 <u>DEMOLITION</u>, <u>REMOVAL AND RELOCATION</u>

- A. REMOVAL, TEMPORARY CONNECTIONS AND RELOCATION OF CERTAIN EXISTING WORK WILL BE NECESSARY FOR THE INSTALLATION OF THE NEW SYSTEMS. ALL EXISTING CONDITIONS ARE NOT TO BE COMPLETELY DETAILED ON THE DRAWINGS. THE CON—TRACTOR SHALL SURVEY THE SITE AND MAKE ALL NECESSARY CHANGES REQUIRED BASED ON EXISTING CONDITIONS FOR PROPER INSTALLATION OF NEW WORK.
- B. DISCONNECT, REMOVE AND/OR RELOCATE EXISTING MATERIAL, EQUIPMENT, AND OTHER WORK AS NOTED OR REQUIRED FOR PROPER INSTALLATION OF NEW SYSTEM.
- C. EQUIPMENT REQUIRED TO BE TEMPORARILY DISCONNECTED AND RELOCATED SHALL BE CAREFULLY REMOVED, STORED, CLEANED, REINSTALLED, RECONNECTED, AND MADE OPERATIONAL.
- D. ALL EXISTING WORK NOT INDICATED FOR DEMOLITION SHALL BE PROTECTED FROM DAMAGE. WHERE EXISTING WORK TO REMAIN IS DAMAGED OR DISTURBED, THE CONTRACTOR SHALL REPAIR OR REPLACE TO OWNER'S AND BUILDING MANAGER'S SATISFACTION AT NO COST TO THE OWNER OR BUILDING MANAGEMENT.
- E. GENERAL CONTRACTOR REMOVE ALL CEILING IN AREAS WHERE NEW DUCTWORK OR PIPING IS TO BE INSTALLED OR EXISTING IS ALTERED, AS PER ARCHITECT'S INSTRUCTIONS.
- F. ALL NECESSARY CUTTING AND PATCHING TO ACCOMMODATE THE NEW HVAC WORK SHALL BE PERFORMED BY THIS CONTRACTOR AND COORDINATED WITH BUILDING MANAGEMENT SO AS TO MINIMIZE DISRUPTION OF EXISTING TENANTS AND SERVICES. RESTORE ALL ITEMS TO MATCH EXISTING CONDITIONS.
- G. ALL EXISTING MATERIAL AND EQUIPMENT TO BE REMOVED UNDER THIS CONTRACT WILL REMAIN THE PROPERTY OF THE OWNER OR SHALL BE LEGALLY DISPOSED OF BY THIS CONTRACTOR AS DIRECTED BY THE ARCHITECT OR OWNER. REFRIGERATION CONTAINED IN EXISTING EQUIPMENT TO BE REMOVED SHALL BE RECLAIMED OR LEGALLY DISPOSED OF IN ACCORDANCE WITH EPA REQUIREMENTS AND ASHRAE.
- H. PROVIDE FOR LEGAL REMOVAL AND DISPOSAL OF ALL RUBBISH AND DEBRIS FROM THE BUILDING AND SITE. COORDINATE ALL DEMOLITION AND REMOVALS WITH BUILDING MANAGEMENT.

1.11 CONNECTION TO EXISTING WORK

- A. PLAN INSTALLATION OF NEW WORK AND CONNECTIONS TO EXISTING WORK TO INSURE MINIMUM INTERFERENCE WITH REGULAR OPERATION OF EXISTING FACILITIES. ALL SYSTEM SHUTDOWNS AFFECTING OTHER AREAS SHALL BE COORDINATED WITH BUILDING MANAGEMENT. INSTALL ISOLATION VALVES AT POINT OF CONNECTION TO THE EXISTING PIPING. INSTALL ISOLATION DAMPERS AT CONNECTION TO EXISTING DUCTWORK. PROVIDE TEMPORARY DUCTWORK AND PIPING CONNECTIONS AS REQUIRED TO MINIMIZE SHUTDOWN TIME.
- B. CONNECT NEW WORK TO EXISTING WORK IN A NEAT AND APPROVED MANNER. RESTORE EXISTING WORK DISTURBED WHILE INSTALLING NEW WORK TO ACCEPTABLE CONDITION AS DETERMINED BY ARCHITECT AND BUILDING MANAGER.
- C. MAINTAIN CONTINUOUS OPERATION OF EXISTING FACILITIES.

1.12 CHASING, CHOPPING OR CORE DRILLING

A. PRIOR TO ANY CHASING, CHOPPING, OR CORE DRILLING BEING PERFORMED, THIS CONTRACTOR SHALL FIELD INVESTIGATE EXISTING CONDITIONS AND COORDINATE WITH ALL APPROPRIATE TRADES AND BUILDING MANAGEMENT TO ENSURE THAT WORK WILL BE IN HARMONY WITH OTHER WORK AND NOT AFFECT ANY EXISTING BUILDING SYSTEMS. THIS WORK MUST BE APPROVED BY BUILDING MANAGEMENT PRIOR TO PROCEEDING.

1.13 SYSTEM STARTUP, TESTING, COMMISSIONING, DEMONSTRATION, AND TRAINING

- A. STARTUP, TESTING, AND COMMISSIONING OF THE SYSTEM BY THIS CONTRACTOR SHALL BE SCHEDULED BEFORE THE SPACE IS OCCUPIED LEAVING ENOUGH TIME TO CORRECT THE SYSTEM'S DEFICIENCIES AND AFTER SHOP DRAWING ACCEPTANCE.
- B. THIS TESTING SHALL TAKE PLACE AFTER HAVING SATISFACTORILY MET THE REQUIREMENTS OF SHOP DRAWING
- C. UPON SUCCESSFUL COMPLETION OF SYSTEM STARTUP, TESTING, AND COMMISSIONING, THE CONTRACTOR SHALL SUBMIT A STATEMENT STATING THAT THE FULL OPERATION OF ALL SYSTEMS, FUNCTIONS AND ALARMS HAS BEEN DEMONSTRATED AND ARE OPERATIONAL AS WELL AS A LISTING OF ALL SYSTEMS, ALARMS AND FUNCTIONS THAT HAVE BEEN COMMISSIONED.
- D. AFTER CONTRACTOR IS SATSFIED THAT THE SYSTEM IS FULLY OPERATIONAL, A COMPLETE DEMONSTRATION AND TESTING OF THE SYSTEM OPERATING FUNCTIONS AND ALARMS SHALL BE PERFORMED BY THIS CONTRACTOR IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE, ENGINEER, AND BUILDING ENGINEER.
- E. ALL ITEMS SHALL BE SUBMITTED FOR REVIEW AND ACCEPTANCE TO THE OWNER, OWNER'S REPRESENTATIVE AND ENGINEER BEFORE FINAL ACCEPTANCE CAN TAKE PLACE.
- F. AFTER FINAL ACCEPTANCE, THIS CONTRACTOR SHALL PROVIDE TRAINING TO THE OWNER'S AND/OR LANDLORD'S PERSONNEL FOR ALL MECHANCIAL SYSTEMS INSTALLED AND/OR MODIFIED UNDER THIS RPOJECT. IF CONTRACTOR'S PERSONNEL CANNOT PROVIDE COMPREHENSIVE TRAINING FOR SPECIFIC EQUIPMENT TYPES, CONTRACTOR SHALL HIRE QUALIFIED MANUFACTURER'S REPRESENTATIVES TO PERFORM THIS TRAINING AT NO ADDITIONAL COST TO THE OWNER. INCLUDE AN ALLOW FOR A MINIMUM OF (8) HOURS OF TRAINING AND (2) SEPARATE TRIPS.

PART 2 - PRODUCTS/APPLICATIONS

2.01 <u>DUCTWORK AND ACCESSORIES</u>

- A. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE, LATEST EDITION, SMACNA HVAC AIR DUCT LEAKAGE TEST MANUAL, LATEST EDITION, NFPA 90A LATEST EDITION, AND ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES. THE MOST STRINGENT REQUIREMENT OF ANY CODES SHALL APPLY.
- I. PROVIDE ALL SUPPORTING AND HANGING DEVICES IN ACCORDANCE WITH BUILDING CODE AND SMACNA.



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

nsultant

Permit/Seal



Client/Project Logo



Client/Project
NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

MECHANICAL SPECIFICATIONS

Project No.

191506465

Revision

Scale

NONE

Drawing No.

- J. PROVIDE FIRESTOPPING FOR ALL DUCT PENETRATIONS THROUGH FIRE-RATED PARTITIONS.
- D. DUCTWORK LAYOUT AND ROUTING IS SCHEMATIC AND THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL DUCT SIZE CHANGES AND RELOCATIONS TO ACCOMMODATE SPACE AND STRUCTURAL CONDITIONS. OFFSETS AND TRANSFORMATIONS SHALL PRESERVE THE FULL INSIDE CROSS—SECTIONAL AREA OF DUCTWORK SHOWN ON THE DRAWINGS.
- E. DUCTWORK (NEW AND EXISTING TO BE REUSED) SHALL HAVE PRESSURE CLASSIFICATION, SEALING REQUIREMENTS AND LEAKAGE TESTING IN ACCORDANCE WITH SMACNA AND AS LISTED BELOW UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE DRAWINGS.
- 1. 2" CLASS: ALL LOW PRESSURE DUCTWORK. SEAL CLASS C, LEAKAGE CLASS 24 (RECTANGULAR) OR CLASS 12 (ROUND).

F. MATERIALS:

- 1. GALVANIZED STEEL: UNLESS OTHERWISE SPECIFIED OR INDICATED, DUCTS SHALL BE CONSTRUCTED OF HOT-DIPPED GALVANIZED SHEETMETAL WITH 60 COMMERCIAL COATING ACCORDING TO ASTM 653 AND A924.
- 2. ALUMINUM: PROVIDE DUCTWORK OF ALUMINUM CONSTRUCTION, WHERE INDICATED. DUCTWORK SHALL BE ALLOY 3003—H14, OF THICKNESS REQUIRED BY THE SMACNA DUCT CONSTRUCTION STANDARDS. PROVIDE FOR ALL DUCTWORK EXPOSED TO WEATHER AND MOISTURE INCLUDING OUTSIDE AIR DUCTS WITHIN 10 FEET OF LOUVERS AND DISHWASHER EXHAUST.
- 3. FLEXIBLE CONNECTIONS AT FANS SHALL BE NEOPRENE COATED, FLAME RETARDANT GLASS FABRIC (COMPLYING WITH NFPA 90 AND 96), 30 OZ./SQ. YD. WITH SOWN AND CEMENTED SEAMS. FLEXIBLE CONNECTIONS MUST BE TESTED IN ACCORDANCE WITH UL 181, LISTED AND LABELED AS CLASS 0 OR CLASS 1 "FLEXIBLE AIR CONNECTORS".
- 4. FLEXIBLE DUCTWORK SHALL BE LIMITED TO THE LAST 6 FEET OF BRANCH DUCTWORK TO A SINGLE DIFFUSER OR REGISTER, UNLESS OTHERWISE NOTED. DO NOT INSTALL FLEXIBLE DUCTWORK IN LOCATIONS EXPOSED TO VIEW. FLEXIBLE DUCTS MUST BE TESTED IN ACCORDANCE WITH UL 181, LISTED AND LABELED AS CLASS 0 OR CLASS 1 "FLEXIBLE AIR DUCTS".

G. FABRICATION:

- 1. CONFORM TO SMACNA AND MECHANICAL CODE REQUIREMENTS FOR METAL THICKNESS, REINFORCING, JOINTS, AND SEALING FOR MAXIMUM STATIC PRESSURES INVOLVED. ALL SEAMS AND JOINTS SHALL BE SEALED AND TAPED.
- 2. ELBOWS SHALL CONFORM TO SMACNA REQUIREMENTS AND THE FOLLOWING:
- A) PROVIDE LONG RADIUS TYPE WITH CENTERLINE RADIUS MINIMUM 1.5 TIMES DUCT WIDTH. PROVIDE SHORT RADIUS OR SQUARE ELBOWS WHERE INDICATED OR WHERE REQUIRED TO FIT RESTRICTED SPACES. PROVIDE DOUBLE THICKNESS TURNING VANES ON ALL SHORT RADIUS AND MITERED ELBOWS. CONFORM TO SMACNA FOR THE NUMBER OF VANES FOR FITTINGS
- 3. BRANCH CONNECTIONS: PROVIDE 45 DEGREE ENTRY OR CONICAL TAPS. PROVIDE RADIUS TYPE FITTINGS

H. ACOUSTICALLY LINED DUCTWORK:

FOR DIVIDED FLOW BRANCHES.

1. PROVIDE MATTE-FACED GLASS DUCT LINER, 1-INCH THICK -2 LB/CF DENSITY. DUCT DIMENSIONS INDICATED ARE CLEAR (NET) INSIDE DIMENSIONS. FOR DUCT VELOCITIES GREATER THAN 2,000 FPM, FACE DUCT LINER WITH 24 GAUGE PERFORATED ALUMINUM OR GALVANIZED STEEL, FULLY COVERING DUCT LINER, AND SUPPORTED 12" ON CENTER. DO NOT EXTERNALLY INSULATE ACOUSTICALLY LINED DUCTWORK. CONFORM TO SMACNA REQUIREMENTS FOR INSTALLATION. PROVIDE ACOUSTICALLY LINED DUCT WHERE LISTED BELOW AND/OR SHOWN ON THE DRAWINGS:

A) ALL TRANSFER DUCTS.

- B) WITHIN A MINIMUM OF 20 FEET OF ALL AC UNIT DISCHARGES.
- C) WITHIN A MINIMUM OF 20 FEET OF FAN INLET AND DISCHARGES.
- D) WITHIN A MINIMUM OF 10 FEET DOWNSTREAM OF THE TERMINAL BOXES (VAV, DUAL DUCT, CAV OR FAN POWERED).

I. VOLUME DAMPERS:

- 1. GALVANIZED STEEL OR SAME AS DUCT CONSTRUCTION. CONFORM TO SMACNA HVAC DUCT CONSTRUCTION STANDARDS, 1995 OR LATEST EDITION, OPPOSED BLADE TYPE. PROVIDE BEARING AT BOTH ENDS OF DAMPER ROD AND QUADRANT, WITH LEVER AND LOCKSCREW, AT ONE END. INSTALL WITH LEVERS ACCESSIBLE THROUGH INSULATION. SPLITTER DAMPER OR AIR EXTRACTORS SHALL NOT BE USED ON THIS PROJECT.
- 2. PROVIDE MANUAL BALANCING VOLUME DAMPERS AS REQUIRED TO PROPERLY BALANCE THE AIR DISTRIBUTION SYSTEM. IF THE LOCATION OF BALANCING DAMPERS ARE NOT DEFINED ON THE DRAWINGS, THE FOLLOWING MINIMUM STANDARDS SHALL GOVERN:
- A) LOW PRESSURE: ALL SUPPLY AIR MAIN BRANCHES FROM TRUNK, EACH SPLIT, AND ALL SUB-BRANCHES FROM MAINS SHALL BE PROVIDED WITH BALANCING DAMPERS.
- B) LOW PRESSURE: ALL EXHAUST AND RETURN BRANCHES FROM TRUNK, EACH SPLIT AND ALL SUB-BRANCHES FROM MAINS SHALL BE PROVIDED WITH BALANCING DAMPERS.
- C) AS NOTED ON PLANS.

J. DUCT ACCESS DOORS:

- CONFORM TO SMACNA WITH PIANO HINGES, TWO SASH LOCKS AND DOOR GASKETS. SCREWED ACCESS PANELS ARE NOT PERMITTED. PROVIDE REMOVABLE ACCESS DOORS WHERE DOOR SWING CANNOT BE ACCOMMODATED.
- 2. SIZE: MINIMUM 20"X14" EXCEPT DUCTS LESS THAN 16", ONE DIMENSION 20" AND THE OTHER DIMENSION, 2" LESS THAN THE DUCT WIDTH.
- 3. PROVIDE ACCESS DOORS: AT ENTERING AND LEAVING SIDES OF COILS IN DUCTS; AUTOMATIC DAMPERS ON LINKAGE SIDE, MANUAL VOLUME DAMPERS 2 SQ. FT. AND LARGER, FIRE DAMPERS, SMOKE DAMPERS, COMBINATION FIRE/SMOKE DAMPERS, SMOKE DETECTION HEADS, FAN BEARINGS ENCLOSED IN DUCTS, SUCTION AND DISCHARGE SIDES OF CEILING MOUNTED FANS, FILTERS, REHEAT COILS, AT ALL EQUIPMENT REQUIRING ACCESS AND AS INDICATED ON DRAWINGS.

K. FIRE DAMPERS:

- 1. DYNAMIC FIRE DAMPERS:
- A) FUSIBLE LINK DYNAMIC RATED FIRE DAMPERS SHALL BE FURNISHED AND INSTALLED WHERE SHOWN ON PLANS AND/OR AS DESCRIBED ON SCHEDULES. DAMPERS SHALL MEET THE REQUIREMENTS OF NFPA 80, 90A & 101 AND FURTHER SHALL BE TESTED, RATED AND LABELED IN ACCORDANCE WITH THE LATEST EDITION OF UL STANDARD 555. DAMPERS SHALL HAVE A UL555 FIRE RATING OF 1 1/2 HOURS OR 3 HOURS.
- B) DAMPERS SHALL BE CONSTRUCTED WITH A GALVANIZED STEEL FRAME, GALVANIZED CURTAIN STYLE BLADES IN GAUGES REQUIRED BY UL LISTING R13317. EACH FIRE DAMPER SHALL BE SUPPLIED AS A SINGLE ASSEMBLY WITH A FACTORY SLEEVE. EACH FIRE DAMPERS SHALL BE EQUIPPED WITH A FACTORY INSTALLED HEAT RESPONSIVE DEVICE, FUSIBLE LINK (REPLACEABLE), RATED TO CLOSE THE DAMPER WHEN TEMPERATURE AT THE DAMPERS REACHES 165°F.
- C) DAMPERS SHALL HAVE A MINIMUM UL555 DIFFERENTIAL PRESSURE RATING OF 4IN. WG. DAMPERS SHALL ALSO A MINIMUM UL555 VELOCITY RATING OF 2,000 FPM.
- D) EACH DAMPER SHALL BE SUPPLIED WITH FACTORY RETAINING ANLES SIZED TO PROVIDE INSTALLATION OVERLAP IN ACCORDANCE WITH THE MANUFACTURER'S UL LISTING.

- E) FIRE DAMPERS SHALL BE TYPE B WITH SHUTTER OUT OF AIRSTREAM. DO NOT USE TYPE A WITH SHUTTER IN AIRSTREAM.
- F) FIRE DAMPER SHALL BE MANUFACTURED BY POTTORFF MODEL DFD-10D (1-1/2 HR. RATED) OR MODEL DFD-30D (3-HOUR RATED), OR APPROVED EQUAL.
- L. SEAL OPENINGS AROUND DUCTS THROUGH WALLS WITH MINERAL WOOL OR OTHER NON-COMBUSTIBLE MATERIAL. SEAL ALL DUCT PENETRATIONS THROUGH WALLS AIRTIGHT.
- M. ALL DUCTS EXPOSED TO MOISTURE SHALL BE ALUMINUM, SLOPED AND DRAINED AND SHALL NOT BE INTERNALLY LINED.

N. AUTOMATIC CONTROL DAMPERS:

- 1. PROVIDE DAMPERS WITH PARALLEL BLADES FOR 2-POSITION CONTROL, OR OPPOSED BLADES FOR MODULATING CONTROL OF CONSTANT OR VARIABLE VOLUME SYSTEM.
- 2. AUTOMATIC DAMPERS TO BE VERY LOW LEAKING TYPE WITH JAMB AND BLADE SEALS RATED FOR SMOKE DAMPER APPLICATION. CONSTRUCT BLADES OF 16 GAUGE GALVANIZED STEEL. PROVIDE HEAVY-DUTY MOLDED SELF-LUBRICATING NYLON BEARINGS, 1/2" DIAMETER STEEL AXLES SPACED ON 9" CENTERS, BLADES TO BE MAXIMUM 10" HIGH. FRAME SHALL BE CONSTRUCTED OF 16 GAUGE X 4-3/8" GALVANIZED HAT SHAPED STEEL PROPERLY BRACED WITH GALVANIZED STEEL FINISH AND ALUMINUM TOLICH-UP
- 3. AUTOMATIC DAMPERS SHALL HAVE A MAXIMUM LEAKAGE RATE OF 4 CFM/FT2 AT 1.0 INCHES W.G. WHEN TESTED IN ACCORDANCE WITH AMCA 500D.
- 4. DAMPERS INSTALLED IN ALUMINUM DUCTS SHALL BE ALUMINUM WITH WEATHERPROOF COMPONENTS.
- 5. DAMPERS TO BE MANUFACTURED BY IMPERIAL OR APPROVED EQUAL.

O. EXPOSED DUCTWORK:

- 1. WHERE DUCTWORK IS INDICATED TO BE EXPOSED TO VIEW IN OCCUPIED SPACES, PROVIDE MATERIALS WHICH ARE FREE FROM VISUAL IMPERFECTIONS, INCLUDING PITTINGS, SEAM MARKS, STAINS, DISCOLORATIONS, AND OTHER IMPERFECTIONS.
- 2. PROVIDE FINISHES WHICH WILL ALLOW PAINTING. CLEAN SURFACES OF ALL DUST, GREASE, AND DEBRIS PRIOR TO PAINTING BY THE GENERAL CONTRACTOR.
- PROVIDE FLAT TYPE SEAMS AND JOINTS FOR ALL EXPOSED DUCT CONSTRUCTION.
 UNLESS OTHERWISE NOTED, ALL EXPOSED SUPPLY DUCTWORK IN FINISHED SPACES SHALL BE RECTANGULAR WITH FLAT SEAMS AND 1 INCH THICK INTERNAL ACOUSTICAL LINING, NO EXTERNAL DUCT
- 5. UNLESS OTHERWISE NOTED, ALL EXPOSED OUTSIDE AIR INTAKE DUCTWORK IN FINISHED SPACES SHALL BE RECTANGULAR WITH FLAT SEAMS AND 2 INCH THICK INTERNAL ACOUSTICAL LINING, NO EXTERNAL DUCT
- 6. UNLESS OTHERWISE NOTED, ALL EXPOSED RETURN AND EXHAUST DUCTWORK IN FINISHED SPACES SHALL BE RECTANGULAR WITH FLAT SEAMS, NO EXTERNAL DUCT INSULATION, INTERNAL ACOUSTICAL LINING ONLY WHERE SPECIFIED IN SECTION 2.01-N.

2.02 PIPING AND ACCESSORIES

- A. PROVIDE ALL PIPING, FITTINGS, VALVES, SPECIALTIES, THERMOMETERS, AND PRESSURE GAUGES REQUIRED FOR THE OPERATING AND MAXIMUM PRESSURE AND TEMPERATURE OF THE PIPING SYSTEMS.
- B. PROVIDE FIRESTOPPING FOR ALL DUCT PENETRATIONS THROUGH FIRE-RATED PARTITIONS.
- C. ALL PIPING SHALL BE NEW, STANDARD SIZE, FREE FROM SCALE OR RUST WITH ENDS CAPPED FOR DELIVERY AND STORAGE. EACH LENGTH OF PIPING SHALL BE PROPERLY MARKED AT THE MILL FOR PROPER IDENTIFICATION WITH NAME OR SYMBOL OF MANUFACTURER.
- D. ALL HORIZONTAL CONDENSATE PIPING SHALL BE PITCHED A MINIMUM OF 1/8" PER FOOT OF LENGTH. CONDENSATE PIPING SHALL NOT BE LESS THAN 3/4" DIAMETER.
- E. PIPE APPLICATION SCHEDULE:

SERVICE	SIZE	MATERIAL	WEIGHT	STANDARD	JOINT TYPE
COLD CONDEN— SATE DRAINS MISCELLANEOUS DRAINS AND OVERFLOWS	ALL	HARD COPPER	TYPE L	ASTM A88	BRAZE OR SILVER SOLDER
REFRIGERANT (AIR COOLED AND COMMERCIAL REFRIGERATION)	ALL	HARD COPPER	TYPE ACR REFRIGER- ANT OR TYPE L	ASTM B280 OR ASTM B-88	BRAZE OR SOLDER

D. FITTING MATERIALS AND APPLICATION SCHEDULE:

- 1. ALL FITTING JOINT TYPE SHALL BE THE SAME AS THE PIPING JOINT TYPE REQUIRED FOR SERVICE, BASED ON THE PIPING APPLICATION SCHEDULE.
- 2. FITTING CLASS SHALL MEET THE PRESSURE AND TEMPERATURE REQUIREMENT OF THE PIPING SYSTEM BASED ON ITS MAXIMUM OPERATING PRESSURE AND TEMPERATURE OR TEST PRESSURE, WHICHEVER IF MORE STRINGENT. PRESSURE AND TEMPERATURE RATINGS OF A FITTING SHALL BE DETERMINED BY ITS CLASS AND THE CORRESPONDING ANSI STANDARD.
- 3. FITTING APPLICATION TABLE:

PIPE MATERIAL	PIPE SIZE (INCHES)	JOINT TYPE	FITTING <u>MATERIAL</u>	FITTINGS <u>CLASS</u>
COPPER TUBING HARD DRAWN	4" & SMALLER	SOLDER 95-5 TINANTIMONY ASTM B32 GR 95 TA	WROUGHT COPPER OR CAST COPPER	300 PSIG AT 100EF, 150 PSIG @ 250EF
		SILVER SOLDER ASTM B32 GR 95TS		
		BRAZING	WROUGHT COPPER	450 PSIG AT 100EF TO 200EF, 150 PSIG @ 250EF
COPPER TUBING HARD DRAWN REFRIGERANT SYSTEMS TYPE ACR	4" & SMALLER	SOLDER 15-5-80 SILVER PHOSPHOROUS COPPER AWS A5.8 OR BRAZING	WROUGHT COPPER	STANDARD

PROVIDE DIELECTRIC FITTING AT ALL PIPING CONNECTIONS JOINING DISSIMILAR METALS, SUCH AS STEEL AND

COPPER. E. VALVES

1. VALVES SHALL HAVE NAME OF MANUFACTURER AND GUARANTEED WORKING PRESSURE CAST OR STAMPED ON BODIES. VALVES OF SIMILAR TYPE SHALL BE BY A SINGLE MANUFACTURER. VALVES LOCATED 7 FEET OR MORE ABOVE OPERATING FLOOR OR PLATFORM SHALL BE PROVIDED WITH CHAIN OPERATED HANDWHEELS, RUSTPROOF CHAIN AND CHAIN GUIDE. GASKETS AND PACKINGS SHALL NOT CONTAIN

ASBESTO:

- 2. ALL VALVING AND VALVE MATERIALS SHALL BE SUITABLE FOR THE OPERATING TEST AND MAXIMUM PRESSURE AND TEMPERATURE REQUIREMENTS OF THE PIPING SYSTEM FOR WHICH THEY ARE BEING UTILIZED.
- 3. VALVING SHALL BE AS SHOWN ON THE DRAWINGS AND INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
- A) BALL VALVES (APOLLO)
 SWING CHECK VALVES (STOCKHAM)
- B) ALL VALVE MANUFACTURERS SHALL BE AS LISTED OR APPROVED EQUAL BY THE ENGINEER.
- F. REFRIGERANT SYSTEMS:
- 1. PROVIDE ALL REFRIGERANT PIPING REQUIRED FOR A COMPLETE REFRIGERATION SYSTEM, WITH ALL VALVES, FITTINGS AND SPECIALTIES NECESSARY FOR SATISFACTORY OPERATION IN ACCORDANCE WITH ASHRAE STANDARD 15-1994 OR LATEST EDITION AND ALL AUTHORITIES HAVING JURISDICTION. REFRIGERATION SYSTEM SHALL INCLUDE ALL REQUIRED ITEMS FOR CHARGING, DRAINING AND PURGING THE SYSTEM.
- 2. JOINTS IN REFRIGERATION PIPING SHALL BE BRAZED. REFRIGERANT PIPING SHALL BE OF THE SIZE RECOMMENDED BY THE MANUFACTURER AND AS APPROVED BY THE ENGINEER.
- 3. HORIZONTAL PIPING OF THE COMPRESSOR SUCTION AND DISCHARGE LINES AND THE CONDENSER DISCHARGE LINES SHALL BE PITCHED A MINIMUM OF 1/2" IN 10', IN THE DIRECTION OF REFRIGERANT FLOW. EACH SUCTION GAS VERTICAL RISER SHALL BE TRAPPED AT ITS EVAPORATOR WITH A TRAP AS RECOMMENDED BY THE COMPRESSOR MANUFACTURER.
- 4. INSTALL REFRIGERANT PIPING TO PREVENT EXCESSIVE OIL FROM BEING TRAPPED IN THE SYSTEM. ANY ADDITIONAL RISERS OR EQUALIZER LINES REQUIRED BY THE MANUFACTURER OF EQUIPMENT FOR THE PROPER SYSTEM OPERATION SHALL BE INSTALLED AS PART OF THIS CONTRACT. PROVIDE A FULLY PIPED OIL SEPARATOR FOR EACH REFRIGERANT SYSTEM AS PER MANUFACTURER=S RECOMMENDATIONS.
- 5. VALVES SHALL BE DESIGNED FOR REFRIGERANT SERVICE. SHUTOFF VALVES SHALL BE BRASS PACKLESS TYPE. UNIONS, FLANGED VALVES OR FITTINGS SHALL BE PROVIDED FOR DISCONNECTING EQUIPMENT, CONTROLS, ETC., FOR MAKING REPAIRS. PIPING SHALL BE RUN IN A SINGLE LAYER, WITH EACH LINE ISOLATED FROM ANOTHER TO PREVENT RUBBING. PROVISION SHALL BE MADE FOR EXPANSION AND CONTRACTION OF PIPING. ALL PIPING PASSING THROUGH WALLS, PARTITIONS, ETC. SHALL BE FURNISHED WITH SLEEVES AS REQUIRED.
- 6. REFRIGERANT PIPING PASSING THROUGH RATED FLOORS OR DEMISING WALLS SHALL BE ENCLOSED IN A RIGID AND GAS—TIGHT CONTINUOUS FIRE—RESISTING PIPE DUCT OR SHAFT VENTED TO THE OUTSIDE, IN ACCORDANCE WITH ASHRAE STANDARD 15—1994 OR LATEST EDITION. PIPE CONDUIT SHALL BE COPPER TUBE TYPE L WITH SOLDERED FITTINGS.
- G. PROVIDE CORE DRILLED OPENINGS WITH PIPE SLEEVES AT ALL SLAB AND SHAFT PENETRATIONS. PROVIDE FIREPROOFING AS REQUIRED TO MAINTAIN WALL, SHAFT AND SLAB FIRE RATINGS.
- H. PROVIDE WATERPROOF SLEEVES (LINK SEAL (LS TYPE) AT ALL EXTERIOR WALL AND FLOOR PENETRATIONS, AND AS REQUIRED OR AS NOTED ON PLANS.
- . PROVIDE LABELING OF ALL PIPING (BOTH EXPOSED AND CONCEALED) IN ACCORDANCE WITH ANSI STANDARDS AND COLOR CODED AS PER BUILDING MANAGEMENT STANDARDS. LABELS TO BE SECURELY FASTENED TO PIPING WITH LETTERING OF SUFFICIENT SIZE FOR EASY IDENTIFICATION BY OPERATING PERSONNEL.
- J. ALL PIPING TO BE MAINTAINED AT THE HIGHEST ELEVATIONS POSSIBLE SO AS NOT TO INTERFERE WITH EXISTING OPERATIONS AND SERVICE/MAINTENANCE REQUIREMENTS.
- K. HANGERS AND SUPPORTS:
- 1. PROVIDE ALL PIPE HANGERS, HANGAR RODS SUPPORTS, INSERTS, ATTACHMENTS, CLAMPS, GUIDES, SUPPLEMENTAL STEEL AND ANCHORS AS REQUIRED TO INSTALL PIPING SYSTEM SIZED TO ACCOMMODATE THE SYSTEM LOADS. HANGERS AND SUPPORTS ARE TO BE IN ACCORDANCE WITH MSS RECOMMENDATIONS AND TO BE MANUFACTURED BY GRINNELL OR APPROVED EQUAL.
- 2. PROVIDE INSULATED PROTECTIVE SADDLES FOR INSULATED PIPING
- 3. PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH RECOMMENDATIONS OF MSS SP-69 AND ALL APPLICABLE CODES. ALL THREADED ROD IS TO BE GALVANIZED. PROVIDE 2" VERTICAL ADJUSTMENT FOR ALL HANGERS. PROVIDE ADDITIONAL SUPPORTS AT CHANGES IN DIRECTION, BRANCH PIPING OVER 5 FEET, AND CONCENTRATED LOADS DUE TO VALVES, STRAINERS AND OTHER ACCESSORIES.
- L. EXPANSION COMPENSATION:
- 1. ALL PIPING SHALL BE INSTALLED TO COMPENSATE FOR EXPANSION TO PROTECT THE BUILDING, EQUIPMENT AND PIPING SYSTEMS. PROVIDE ALL GUIDES, ANCHORS, EXPANSION LOOPS, SUPPLEMENTAL STEEL AND APPROVED TYPE EXPANSION JOINTS AS INDICATED OR REQUIRED FOR CONTROL OF EXPANSION.
- M. TESTING:

1. GENERAL

- A) TESTS SHALL BE CONDUCTED AFTER COMPLETION AND ASSEMBLY OF PIPING SYSTEM, BEFORE ANY INSULATION OR PAINT IS APPLIED TO JOINTS, INCLUDING WELDS AND PRIOR TO MAKING THE SYSTEM OPERABLE. INSULATION MATERIALS INSTALLED PRIOR TO THE TESTS SHALL BE REMOVED.
- B) THE MECHANICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY PIPING CONNECTIONS, TEES, VALVES, EQUIPMENT, AND LABOR TO PRESSURE TEST PIPING AND EQUIPMENT.
- C) EQUIPMENT THAT IS NOT SUBJECTED TO THE PRESSURE TEST SHALL BE EITHER DISCONNECTED FROM THE SYSTEM OR ISOLATED BY A BLANK OR SIMILAR MEANS. VALVES MAY BE USED FOR THIS PURPOSE PROVIDED THAT VALVE CLOSURE IS SUITABLE FOR THE PROPOSED TEST PRESSURE.
- D) SUBMIT TO THE ENGINEER AND OWNER REPRESENTATIVE A RECORD OF TEST PRESSURE APPLIED TO EACH PIPING SYSTEM.
- 2. REFRIGERANT PIPING
- A) THE REFRIGERANT PIPING FOR TIGHTNESS AND LEAKS UNDER PRESSURE OR VACUUM. THE DURATION OF EACH TEST SHALL BE TWENTY-FOUR (24) HOURS
- B) TEST JOINTS IN ACCORDANCE WITH ASHRAE 15-1994. THERE SHALL BE NO OBSERVABLE LEAKS OR CHANGES IN PRESSURE. IF EITHER IS OBSERVED, SEAL LEAKS, AND REPEAT TEST PROCEDURES.

N. PIPE CLEANING:

- 1. NEW PIPING SYSTEMS SHALL BE ISOLATED, CLEANED AND CHEMICALLY TREATED WHEN THE INSTALLATION IS COMPLETED TO REMOVE ANY CONSTRUCTION DEBRIS AND PROVIDE CORROSION PROTECTION.
- 2. PROVIDE THE NECESSARY APPARATUS, COMPLETE WITH RELIEF VALVES, ISOLATING VALVES, CHECK VALVES, PIPING, POWER, WIRING, CHEMICALS, FEED TANKS, AND SERVICE TO PROVIDE PROPER WATER TREATMENT FOR THE CONTROL OF SCALE, CORROSION AND MICROBIOLOGICAL GROWTHS IN THE PIPING SYSTEMS. ALL CHEMICALS USED SHALL COMPLY WITH POLLUTION CONTROLS ESTABLISHED BY ALL AUTHORITIES HAVING JURISDICTION. CHLORATES SHALL NOT BE USED.

2.03 INSULATION

- A. ALL INSULATION SHALL MEET THE REQUIREMENTS OF ASTM, NFPA, THE ENERGY CODE AND ALL AUTHORITIES HAVING JURISDICTION. ALL MECHANICAL INSULATION (JACKETING, COVERINGS, ADHESIVES, MASTICS, FACINGS, TAPES, ETC.), SHALL HAVE RATINGS NOT EXCEEDING A FLAME SPREAD OF 25 OR LESS AND SMOKE DEVELOPED INDEX OF 50 OR LESS.
- B. BEFORE APPLYING INSULATION, ALL PRESSURE AND LEAK TESTS SHALL BE COMPLETED AND APPROVED. FURNISH AND INSTALL AS PER MANUFACTURER'S REQUIREMENTS.
- C. INSULATION FOR FITTINGS OR ACCESSORIES REQUIRING SERVICING OR INSPECTION SHALL HAVE INSULATION



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

Permit/Seal



Client/Project Logo



Client/Project
NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

MECHANICAL SPECIFICATIONS

Project No. Scale

191506465 NONE

Revision Drawing No.

D. PIPE INSULATION:

- 1. FIBERGLASS PIPE INSULATION: ONE—PIECE MOLDED SECTIONAL FIBERGLASS INSULATION, CONFORMING TO ASTM C-547, CLASS 1, 2, 3 TO 850EF WITH 4 LB./CU. FT. DENSITY WITH A THERMAL CONDUCTIVITY OF NOT OVER 0.23 AT 75EF MEAN. PROVIDE WITH FACTORY—APPLIED ALL SERVICE JACKET AND DOUBLE ADHESIVE SELF—SEALING LAP. COLD WATER PIPE INSULATION JACKET SHALL BE OF THE CONTINUOUS VAPOR BARRIER TYPE. THE INSULATION SHALL BE SIMILAR TO OWENS—CORNING FIBERGLASS ASJ/SSL—II PIPE INSULATION
- 2. CALCIUM SILICATE PIPE INSULATION: MOLDED CALCIUM SILICATE PIPE INSULATION, CONFORMING TO ASTM C-335, 1200EF MAXIMUM TEMPERATURE, ASBESTOS FREE, SHALL HAVE A NOMINAL 14 LB./CU. FT. DENSITY WITH A THERMAL CONDUCTIVITY OF NOT OVER 0.44 AT 300EF MAIN TEMPERATURE. WIRE ON PRE-MOLDED SECTION OF CALCIUM SILICATE AND APPLY SKIM COAT OF FINISHING CEMENT TO SMOOTH OUT SURFACE OF INSULATION. THE INSULATION SHALL BE SIMILAR TO OWENS-CORNING KAYLO.
- 3. INSULATION FOR FITTINGS, FLANGES, AND VALVES: PROVIDE INSULATION FOR FITTINGS, FLANGES, AND VALVES PREMOLDED, PRECUT, OR JOB FABRICATED OF THE SAME THICKNESS AND CONDUCTIVITY AS USED ON ADJACENT PIPING.
- 4. INSULATION THICKNESS FOR PIPING, FITTINGS, FLANGES AND VALVES SHALL BE AS FOLLOWS, BASED ON INSULATION HAVING A CONDUCTIVITY (K) NOT EXCEEDING 0.27 BTU/H PER INCH/H*FT2*DEGF AT A MEAN TEMPERATURE OF 75 DEGF. ADJUST THICKNESS FOR DIFFERENT CONDUCTIVITY.
- a. FOR REFRIGERANT PIPING, INSULATION THICKNESS SHALL BE 1-1/2 INCHES.
- b. FOR COLD CONDENSATE DRAIN AND COLD CONDENSATE PUMP DISCHARGE PIPING, INSULATION THICKNESS SHALL BE 1 INCH.
- 5. INDOOR PIPING EXPOSED IN FINISHED SPACES
- A) PROVIDE PVC JACKET, ZESTON 2000 OR EQUAL. PROVIDE A MOISTURE BARRIER LINING.

E. DUCT INSULATION:

GENERAL

A) INSULATION SHALL BE APPLIED WITH MASTICS, ADHESIVES, AND COATINGS, WITH COVERS, WEATHER-PROTECTION AND OTHER WORK AS REQUIRED BY MANUFACTURER'S RECOMMENDATIONS. MATERIALS SHALL MEET REQUIREMENTS OF ADHESIVE AND SEALANT COUNCIL STANDARDS AND SMACNA.

2. INDOOR DUCTWORK

- A) ALL SUPPLY AIR, RETURN AIR, OUTSIDE AIR INTAKE, AND EXHAUST/SPILL/RELIEF AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH A MINIMUM OF R-6 INSULATION WHEN LOCATED WITHIN THE BUILDING ENVELOPE ASSEMBLY, UNLESS OTHERWISE INDICATED. WHEN LOCATED WITHIN THE BUILDING ENVELOPE ASSEMBLY, THE DUCT OR PLENUM MUST BE SEPARATED FROM THE BUILDING EXTERIOR OR UNCONDITIONED OR EXEMPT SPACES BY A MINIMUM OF R-8 INSULATION.
- B) CONCEALED DUCTWORK: INSULATE SUPPLY AND FRESH AIR DUCTS AND PLENUMS IN CONCEALED SPACES AND RETURN DUCT NOT IN CEILING PLENUM WITH AT LEAST 1-1/2" THICK FIBROUS GLASS DUCT WRAP, WITH A MINIMUM R-VALUE OF R-6 AND FOIL-KRAFT FLAME RESISTANT VAPOR BARRIER.
- C) EXPOSED DUCTWORK: INSULATE EXPOSED SUPPLY, RETURN AND FRESH AIR DUCTS AND EXPOSED PLENUMS WITH AT LEAST 2" THICK, SEMI-RIGID FIBROUS GLASS BOARDS WITH A MINIMUM R-VALUE OF R-6 AND A FACTORY APPLIED FIRE RETARDANT FOIL REINFORCED KRAFT VAPOR BARRIER FACING. PROVIDE WELD PINS AND VAPOR SEAL ALL JOINTS WITH TAPE. (THIS REQUIREMENT DOES NOT APPLY TO INTERNALLY LINED DUCTWORK LOCATED IN FINISHED SPACES.)
- D) RETURN DUCTS AND PLENUMS LOCATED IN CONDITIONED SPACES OR CEILING PLENUMS SHALL NOT REQUIRE INSULATION.
- E) EXHAUST/SPILL/RELIEF AIR DUCTS AND PLENUMS LOCATED UPSTREAM OF MOTORIZED OR BAROMETRIC ISOLATION DAMPERS SHALL NOT REQUIRE INSULATION. PORTIONS AFTER ISOLATION DAMPERS MUST BE INSULATED FROM THE DAMPER TO THE WALL/ROOF PENETRATION.
- F) WHERE INDOOR DUCTWORK IS INTERNALLY ACOUSTICALLY LINED, EXTERNAL INSULATION THICKNESS MAY BE REDUCED SUBJECT TO MAINTAINING THE R-VALUES SPECIFIED HEREIN.

3. OUTDOOR DUCTWORK

- A) ALL SUPPLY AIR, RETURN AIR, OUTSIDE AIR INTAKE, AND EXHAUST/SPILL/RELIEF AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH A MINIMUM OF R-8 INSULATION WHEN LOCATED OUTDOORS OR OUTSIDE THE BUILDING ENVELOPE ASSEMBLY.
- B) INSULATE OUTDOOR DUCTWORK AND PLENUMS WITH AT LEAST 2" THICK, SEMI-RIGID FIBROUS GLASS BOARDS WITH A MINIMUM R VALUE OF R-8 AND A FACTORY APPLIED FIRE RETARDANT FOIL REINFORCED KRAFT VAPOR BARRIER FACING. PROVIDE WELD PINS AND VAPOR SEAL ALL JOINTS WITH
- C) IN ADDITION, APPLY TWO (2) COATS OF WEATHERPROOF MASTIC AND EMBED INTO WET COAT TWO (2) LAYERS OF GLASS CLOTH OVER INSULATION JACKET. SMOOTH MEMBRANE TO AVOID WRINKLES AND OVERLAP ALL SEAMS AT LEAST 3". APPLY A SECOND COAT OF THE SAME COATING TO THE ENTIRE SURFACE. TOP CENTER OF RECTANGULAR DUCT SHALL PITCH TO EACH SIDE TO AVOID TRAPPING OF WATER IN THE CENTER.

2.04 ELECTRICAL WORK

A. GENERAL

- 1. ELECTRICAL POWER WIRING SHALL BE PROVIDED BY THE ELECTRICAL CONTRACT; CONTROL WIRING SHALL BE BY THE HVAC CONTRACT. CONTROL WIRING SHALL BE DEFINED AS ANY 12V, 24V, OR 120V WIRING INSTALLED FOR PURPOSES OTHER THAN PROVIDING PRIMARY ELECTRICAL POWER TO EQUIPMENT.
- 2. MOTOR STARTERS AND VARIABLE FREQUENCY DRIVES (VFD) SHALL BE FURNISHED BY THE HVAC CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. REFER TO THE EQUIPMENT SECTION FOR VARIABLE FREQUENCY DRIVE SPECIFICATIONS.
- 3. DUCT MOUNTED SMOKE DETECTORS, WHERE REQUIRED, SHALL BE PROVIDED BY AD WIRED BY THE ELECTRICAL CONTRACTOR, AND MOUNTED BY THE HVAC CONTRACTOR.
- 4. ALL ELECTRICAL CONTROL WIRING SHALL COMPLY WITH LOCAL ELECTRICAL CODE, ALL AUTHORITIES HAVING JURISDICTION AND THE PROJECT ELECTRICAL SPECIFICATIONS.
- 5. MECHANICAL CONTRACTOR TO OBTAIN QUANTITY OF CONTROLLERS REQUIRED AND COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ALL OPERATING REQUIREMENTS, INTERLOCKS AND CONNECTIONS FOR
- 6. THE MECHANICAL CONTRACTOR SHALL PREPARE AND SUBMIT FOR APPROVAL POINT—TO—POINT, COMPLETELY COORDINATED WIRING DIAGRAMS AND INDICATE ALL SOURCE POWER REQUIREMENTS AND ALL FIELD WIRING TO BE PERFORMED BY THE ELECTRICAL CONTRACTOR.
- 7. WHERE EXISTING STARTERS ARE TO BE REUSED, THIS CONTRACTOR SHALL MAINTAIN ALL EXISTING CONTROL CONNECTIONS. WHERE NEW STARTERS ARE TO BE PROVIDED TO REPLACE EXISTING, THIS CONTRACTOR SHALL SURVEY THE EXISTING CONTROL CONNECTIONS AND PREPARE AN EXISTING CONTROL WIRING DIAGRAM PRIOR TO DEMOLITION FOR SUBMITTAL TO THE ENGINEER. THE NEW STARTERS SHALL BE PROVIDED WITH THE NECESSARY CONTACTS AND RELAYS REQUIRED TO RECONNECT THE EXISTING CONTROLS. PROVIDE ALL REQUIRED CONTACTS FOR UNIT START/STOP AND FIRE ALARM.

B. MOTORS:

1. MOTORS SHALL HAVE THE ELECTRICAL CHARACTERISTICS AS LISTED ON THE DRAWINGS. COORDINATE ALL REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR. ALL MOTORS SHALL COMPLY WITH NEMA MG-1 STANDARD AND SHALL BE OF THE HIGH EFFICIENCY TYPE AND MEET THE 1992 EPA ENERGY EFFICIENCY

ACT AND UTILITY COMPANY REBATE REQUIREMENTS.

- 2. MOTORS FOR VARIABLE FREQUENCY DRIVES (VFD) SHALL BE INVERTED DUTY RATED, SUITABLE FOR USE WITH VARIABLE FREQUENCY DRIVES, AND SHALL COMPLY WITH NEMA MG-1 PART 31.40.4.2. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIREMENTS OF THE MOTOR AND VFD MANUFACTURER. PROVIDE A SHAFT GROUNDING RING FOR EACH MOTOR CONNECTED TO A VFD TO PROTECT BEARINGS FROM DAMAGE, AEGIS TYP AGR OR APPROVED EQUAL.
- 3. IF CONTRACTOR ELECTS TO SUBSTITUTE OR INCREASE MOTOR HORSEPOWER OVER THAT WHICH IS SPECIFIED, THE COST OF MOTOR AND ELECTRICAL CHANGES SHALL BE BORNE BY THIS CONTRACTOR.

STARTERS.

- 1. EACH MOTOR EXCEPT AS NOTED, SHALL BE PROVIDED WITH A COMBINATION FUSED DISCONNECT AND ACROSS—THE—LINE MAGNETIC STARTER WITH PUSHBUTTON STATIONS MOUNTED ON THE COVER. COORDINATE REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR. FOR AUTOMATICALLY OR REMOTELY CONTROLLED MOTORS, FURNISH HAND OFF AUTO (HOA) SELECTOR SWITCHES IN PLACE OF THE PUSH BUTTONS.
- 2. FURNISH MANUALLY OPERATED MOTOR STARTERS OF THE PROPER SIZE FOR ALL MOTORS LESS THAN 1/2 HP WHICH ARE NOT AUTOMATICALLY CONTROLLED. STARTERS FOR MOTORS 175 WATTS OR LESS SHALL CONSIST OF A SNAP SWITCH WITH THERMAL OVERLOAD PROTECTION WHERE SUCH PROTECTION IS NOT AN INTEGRAL PART OF THE MOTOR.
- 3. COMBINATION MAGNETIC STARTERS FOR ALL MOTORS SHALL HAVE THERMAL OVERLOAD, PILOT LIGHT, LOW VOLTAGE PROTECTION IN ALL THREE PHASES. INCLUDE A CONTROL TRANSFORMER FOR EACH MAGNETIC STARTER TO PROVIDE 120 VOLT CONTROL POWER WITH THREE (3) SETS OF SPARE NORMALLY CLOSED OR NORMALLY OPEN CONTACTS.
- 4. ALL STARTERS SHALL BE ASSEMBLED AND INTERNALLY WIRED WITH ALL DEVICES IN CONFORMANCE WITH NEMA STANDARDS.
- 5. DISCONNECT SWITCHES ARE PROVIDED BY THE ELECTRICAL CONTRACTOR IF NOT INTEGRAL WITH EQUIPMENT.

G. ENCLOSURES:

1. PROVIDE ENCLOSURES FOR STARTERS AND VFD'S SUITABLE FOR OPERATING ENVIRONMENT. ENCLOSURES SHALL BE NEMA 1 VENTILATED SHEETMETAL FOR INDOOR APPLICATION, NEMA 3R WITH ADDITIONAL GASKETING WEATHERPROOF RAINTIGHT ENCLOSURE OR EXPOSED OUTDOOR SERVICE OR INDOOR SERVICE EXPOSED TO MOISTURE. PROVIDE DISCONNECT SWITCH ON ENCLOSURE AS REQUIRED FOR SERVICE.

2.05 VIBRATION ISOLATION PRODUCTS

- A. FURNISH AND INSTALL ALL NECESSARY VIBRATION ISOLATORS, VIBRATION HANGERS, MOUNTING PADS, RAILS, ETC., TO ISOLATE VIBRATION AND SOUND FROM BEING TRANSMITTED TO THE BUILDING CONSTRUCTION. ALL VIBRATION ISOLATION PRODUCTS SHALL BE SPECIFICALLY DESIGNED FOR THEIR INTENDED USE.
- B. MANUFACTURER OF VIBRATION ISOLATION EQUIPMENT SHALL HAVE THE FOLLOWING RESPONSIBILITIES:
- 1. DETERMINE VIBRATION ISOLATOR SIZES AND LOCATIONS.
- 2. PROVIDE SUITABLE PIPING AND EQUIPMENT VIBRATION ISOLATION SYSTEMS.
- 3. GUARANTEE SPECIFIED ISOLATION SYSTEM ATTENUATION AND DEFLECTION.
- 4. PROVIDE INSTALLATION INSTRUCTIONS, DRAWINGS AND FIELD SUPERVISION TO ASSURE PROPER INSTALLATION
- AND PERFORMANCE.

C. ISOLATION SYSTEMS SHALL BE MANUFACTURED BY MASON INDUSTRIES OR APPROVED EQUAL BY THE ENGINEER.

D. MOUNTING TYPES:

- 1. STATIC DEFLECTION OF ISOLATORS SHALL BE A MINIMUM OF 90% EFFICIENCY. PROVIDE CORROSION PROTECTION FOR EQUIPMENT MOUNTED OUTDOORS.
- FLOOR AND ROOF MOUNTING OF FACTORY ASSEMBLED AIR HANDLING UNITS, AIR CONDITIONING UNITS, HEAT EXCHANGERS AND CONDENSING UNITS — SPRING ISOLATORS (ROOF EQUIPMENT TYPE SLR), OR (INDOOR EQUIPMENT TYPE SLF).
- 3. MOUNTING OF CEILING-SUPPORTED FANS, IN-LINE PUMPS, HEAT EXCHANGERS, AND AIR HANDLING UNITS SPRING ISOLATORS (TYPE DNHS).
- 4. ROOFTOP AC UNITS SPRING ROOF CURB TYPE RSC.
- 5. PROVIDE FLEXIBLE CONNECTIONS BETWEEN ALL FANS AND DUCTWORK (REFER TO DUCTWORK SECTION FOR

2.07 TESTING AND BALANCING

A. GENERAL:

- 1. TESTING AND BALANCING WORK SHALL BE PERFORMED BY AN INDEPENDENT COMPANY (NOT ASSOCIATED WITH THE HVAC CONTRACTOR), AABC CERTIFIED OR AS APPROVED BY THE ENGINEER BEFORE COMMENCEMENT OF WORK. APPROVED COMPANIES INCLUDE MERENDINO ASSOCIATES, R.H. MCDERMOTT, INTERNATIONAL TESTING AND BALANCING OR AS APPROVED BY THE ENGINEER AND BUILDING MANAGEMENT.
- 2. AFTER ALL PROJECT HVAC WORK IS COMPLETE, TESTED, AND IN FULL WORKING ORDER, THE AGENCY SHALL PERFORM THE BALANCING AND TESTING OF THE PROJECT HEATING, VENTILATING AND AIR CONDITIONING SYSTEMS.
- 3. UPON THE COMPLETION OF THE AIR CONDITIONING SYSTEM, THE BALANCING AGENCY SHALL PERFORM TESTING AND BALANCING AND COMPILE ALL TEST DATA IN A CERTIFIED REPORT AND SUBMIT FOUR (4) COPIES FOR REVIEW AND APPROVAL TO THE ENGINEER.
- 4. THE REPORT SHALL INCLUDE DESIGN AND ACTUAL READINGS FOR ALL EQUIPMENT AND LOCATION PLAN INDICATING WHERE ALL WORK HAS BEEN PERFORMED, AND METHODS OF BALANCING AND DETAILS OF INSTRUMENTS USED.
- 5. IF DISCREPANCIES EXIST IN THE REPORT THAT REQUIRE FIELD VERIFICATION, THE TESTING AND BALANCING COMPANY IN THE PRESENCE OF THE ENGINEER SHALL VISIT THE JOBSITE FOR FIELD VERIFICATION OF THE REPORT.
- 6. AFTER SUBMISSION OF THE FIELD VERIFIED BALANCING REPORT, THE AIR BALANCING COMPANY SHALL RETURN TO THE JOB SITE TO PERFORM TWO (2) OCCUPANT COMFORT BALANCES AS DIRECTED BY THE OWNER OR ENGINEER.
- 7. THE FINAL REPORT AFTER THE COMFORT BALANCE IS TO BE INCLUDED IN PROJECT OPERATING AND MAINTENANCE MANUAL.
- 8. THE TESTING AND BALANCING AGENCY SHALL INCLUDE AS PART OF THEIR WORK AN EXTENDED WARRANTY OF 90 DAYS AFTER COMPLETION OF TEST AND BALANCE WORK. THE ENGINEER AT HIS DISCRETION DURING THE WARRANTY PERIOD MAY REQUEST A RECHECK OR RESETTING OF ANY EQUIPMENT. THE MECHANICAL CONTRACTOR AND THE BALANCING CONTRACTOR SHALL PROVIDE THE NECESSARY TECHNICIANS TO FACILITATE THIS WORK.
- 9. THE BALANCING AGENCY SHALL PERMANENTLY MARK ALL ADJUSTMENT DEVICES (VALVES, DAMPERS, ETC.) TO ENABLE THE SETTING TO BE RESTORED.
- 10. HVAC CONTRACTOR SHALL ARRANGE FOR THE AUTOMATIC CONTROLS SUBCONTRACTOR TO BE ONSITE DURING BALANCING TO ADJUST, MONITOR, AND CALIBRATE SYSTEM OPERATION AS NEEDED TO FACILITATE BALANCING.
- 11. BALANCER SHALL IMMEDIATELY NOTIFY HVAC CONTRACTOR IF BALANCING SCOPE CANNOT BE COMPLETED DUE TO MALFUNCTIONING EQUIPMENT OR INCOMPLETE INSTALLATIONS. HVAC CONTRACTOR SHALL PERFORM CORRECTIVE WORK SO THAT THE BALANCER CAN COMPLETE BALANCING SCOPE AND SUBMIT A COMPLETE REPORT. IF CORRECTIVE WORK CANNOT BE COMPLETED, HVAC CONTRACTOR SHALL NOTIFY THE GENERAL

CONTRACTOR VIA RFI FOR DISTRIBUTION TO ENGINEER.

- 12. AS PART OF THE BALANCING REPORT, PROVIDE FLOOR PLANS WITH A UNIQUE TAG FOR EACH DEVICE FOR WHICH AIRFLOW OR WATER FLOW WAS MEASURED. THESE TAGS SHALL USED IN THE REPORT FOR IDENTIFICATION.
- 13. AS PART OF THE BALANCING REPORT, PROVIDE A COVER LETTER IDENTIFYING ALL SYSTEMS THAT COULD NOT BE BALANCED TO DESIGN FLOWS, AND REASONS THAT FLOWS COULD NOT BE ACHIEVED.

AIR BALANCING

- 1. HVAC CONTRACTOR SHALL ENSURE THAT A FIRST SET OF AIR FILTERS ARE IN PLACE, WHENEVER FANS ARE RUNNING AND REPLACED WITH A NEW CLEAN SET OF FILTERS BEFORE TESTING IS COMMENCED.
- 2. TEST, ADJUST, REPLACE SHEAVES, REPLACE BELTS, AND BALANCE ALL EQUIPMENT AND AIR DISTRIBUTION SYSTEMS TO PROVIDE AIR QUANTITIES INDICATED ON PLANS WITHIN PLUS OR MINUS (10) PERCENT FOR INDIVIDUAL AIR INLETS AND OUTLETS AND (5) PERCENT FOR EQUIPMENT AND SYSTEMS.
- 3. TEST REPORT SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
- A) FLOW, LEAKAGE CLASS, TEMPERATURE, STATIC PRESSURE OF AIR AT ALL TRUNK DUCTS SERVING AREAS
- B) TEMPERATURE OF AIR LEAVING OUTLETS AT TWO (2) TYPICAL AIR OUTLETS FOR EACH SYSTEM.
- C) QUANTITY OF AIR AT EACH AIR INLET AND OUTLET AFTER BALANCING.
- D) PROVIDE FOR ALL FANS: FAN MOTOR HP, AMPS, VOLTS, FAN RPM, CFM, INLET AND DISCHARGE STATIC PRESSURE, SHEAVE POSITION. TOTAL AIRFLOWS SHALL BE DETERMINED BY DUCT TRAVERSE, NOT SUM OF CONNECTED AIR INLETS OR OUTLETS. INCLUDE A FLOW DIAGRAM FOR EACH FAN IN THE REPORT.
- E) PROVIDE FOR ALL AIR CONDITIONING UNITS AND AIR HANDLING UNITS: SUPPLY AIR CFM, OUTSIDE AIR CFM, RETURN AIR CFM, AND SPILL AIR CFM. TOTAL AIRFLOWS SHALL BE DETERMINED BY DUCT TRAVERSE, NOT SUM OF CONNECTED AIR INLETS OR OUTLETS. INCLUDE A FLOW DIAGRAM FOR EACH AIR SYSTEM IN THE REPORT. PLACE UNITS INTO OCCUPIED MODE (WITH AIRSIDE ECONOMIZER AND DEMAND CONTROLLED VENTILATION DISABLED) FOR AIRFLOW TESTING. PROVIDE OUTSIDE AIR, MIXED AIR, RETURN AIR, AND SUPPLY AIR TEMPERATURES (DRY BULB COOLING AND HEATING, WET—BULB—COOLING). FOR UNITS WITH AIRSIDE ECONOMIZER, REPEAT AIRFLOW TESTING WITH UNIT PLACED INTO 100% AIRSIDE ECONOMIZER MODE.
- F) CALIBRATE ALL NEW AND EXISTING TO BE REUSED TERMINAL BOXES (VAV, FAN POWERED, OR DUAL DUCT) AS REQUIRED TO MEET SPECIFIED MINIMUM/MAXIMUM CFM.
- G) LIST DESIGN AND ACTUAL READINGS AS WELL AS ALL MANUFACTURER'S DATA FOR EQUIPMENT.

2.08 EQUIPMENT

- A. PROVIDE ALL EQUIPMENT AND ACCESSORIES OF THE SIZES AND CAPACITIES AS SCHEDULED AND AS INDICATED ON THE DRAWINGS.
- B. INSTALL EQUIPMENT IN ACCORDANCE WITH APPROVED SHOP DRAWINGS, MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS, AND ALL AUTHORITIES HAVING JURISDICTION.
- C. PROVIDE EQUIPMENT SUPPORTS AND/OR MOUNTINGS AS INDICATED ON THE DRAWING, IN VIBRATION SPECIFICATION AND AS FOLLOWS:
- 1. ROOF MOUNTED EQUIPMENT PROVIDE PRE-FABRICATED ISOLATED ROOF CURB WITH INTEGRAL VIBRATION ISOLATORS.
- 2. CEILING MOUNTED EQUIPMENT PROVIDE SUPPORTS WITH APPROVED SUITABLE ANCHORS SUSPENDED
- 3. PROVIDE SUPPLEMENTAL STEEL AS REQUIRED TO ADEQUATELY SUPPORT THE EQUIPMENT LOAD.
- D. EQUIPMENT SHALL BE INSTALLED WITH VIBRATION ISOLATION, REFER TO VIBRATION ISOLATION SECTION.
- E. DIFFUSERS, GRILLES AND REGISTERS

DIRECTLY FROM BUILDING STEEL STRUCTURE.

1. GENERAL

- A) GRILLES, REGISTERS AND DIFFUSERS SHALL BE TESTED IN ACCORDANCE WITH ASHRAE STANDARD 70-1991 OR LATEST EDITION. THE MANUFACTURER SHALL PROVIDE PUBLISHED PERFORMANCE DATA FOR ALL AIR INLETS AND OUTLETS TO BE USED ON PROJECT AS PART OF THE SUBMISSION.
- B) THE MECHANICAL CONTRACTOR TO COORDINATE THE LOCATION OF DIFFUSERS, GRILLES AND REGISTERS WITH OTHER TRADES AND WITH CEILING AND WALL CONSTRUCTION. THE MECHANICAL CONTRACTOR IS TO VERIFY THAT ALL DIFFUSERS, GRILLES AND REGISTERS ARE COMPATIBLE WITH CEILING CONSTRUCTION TO WHICH THEY ARE TO BE INSTALLED.
- C) COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR AND REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION, LENGTHS AND FOR FRAMING AND MITERING ARRANGEMENTS THAT MAY DIFFER FROM THOSE SHOWN ON HVAC DRAWINGS. PROVIDE ALL REQUIRED GENERAL CONSTRUCTION, FRAMING, BLOCKING, PLASTERING AND SUPPORTS TO MATCH CEILING, SOFFIT OR WALL CONSTRUCTION AS PART OF THE PROJECT.
- D) INLETS AND OUTLETS SHALL HANDLE AIR QUANTITIES INDICATED AT OPERATING VELOCITIES WITH SOUND PRESSURE LEVEL NOT TO EXCEED NC-30, UNLESS NOTED OTHERWISE.
- E) DIFFUSERS, GRILLES AND REGISTERS SHALL BE INSTALLED WITH FACES SET LEVEL AND PLUM AND MOUNTED TIGHTLY AGAINST MOUNTING SERVICE.
- F) ALL AIR INLETS AND OUTLETS SHALL BE STEEL OR ALUMINUM CONSTRUCTION. USE ALUMINUM FOR APPLICATIONS EXPOSED TO MOISTURE. FINISHES TO BE SELECTED BY THE ARCHITECT.
- G) DIFFUSERS, GRILLES AND REGISTERS SHALL BE MANUFACTURED BY TITUS, PRICE, ANEMOSTAT OR APPROVED EQUAL.
- H) SUBMIT FOR APPROVAL A COMPLETE SCHEDULE OF ALL AIR INLETS AND OUTLETS TO BE USED ON PROJECT INCLUDING MANUFACTURER'S MODELS, SIZES, PERFORMANCES, ACCESSORIES, ACOUSTIC INFORMATION, FINISHES, ETC., BEFORE RELEASE FOR FABRICATION. NOTE ANY DEVIATIONS FROM SPECIFICATIONS AND SCHEDULES SHALL BE INDICATED ON SUBMITTAL.

2. AIR INLET AND OUTLET DEVICES:

- A) PROVIDE DIFFUSERS, GRILLES AND REGISTERS FOR SUPPLY, RETURN AND EXHAUST INLETS AND OUTLETS, OF THE SIZE, TYPE AND DESIGN INDICATED ON DRAWINGS.
- B) ALL CEILING DIFFUSERS SHALL BE PROVIDED WITH EQUALIZING GRIDS.
- C) ALL SUPPLY, RETURN, AND EXHAUST AIR REGISTERS SHALL BE PROVIDED WITH AN OPPOSED BLADE DAMPER.
- D) SUPPLY REGISTERS SHALL HAVE TWO SETS OF DIRECTIONAL CONTROL BLADES.
- E) ONLY 4-WAY DIFFUSERS SHALL BE USED. PROVIDE BLANK-OFF SHEETMETAL BAFFLE FOR ALL 1-WAY, 2-WAY AND 3-WAY DIFFUSERS.
- F) ALL LINEAR DIFFUSERS SHALL BE PROVIDED WITH CABLE OPERATED OPPOSED BLADE DAMPER ADJUSTABLE THROUGH THE FACE OF THE DIFFUSER. DAMPERS AND PLENUM TAPS SHALL BE SPACED AT A MAXIMUM OF 4 FEET ON CENTER. PROVIDE DIFFUSERS WITH ADJUSTABLE AIR PATTERN CONTROL

2.09 <u>AUTOMATIC TEMPERATURE CONTROLS</u>

VALVES.

A. GENERAL:

Stantec

Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

onsultant

Permit/Seal



Client/Project Logo



Client/Project
NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

MECHANICAL SPECIFICATIONS

Project No.

191506465

Revision

Scale

NONE

Drawing No.

- 1. FURNISH AND INSTALL AS HEREIN SPECIFIED, A COMPLETE AUTOMATIC TEMPERATURE CONTROL SYSTEM OF THE DIGITAL STANDALONE TYPE.
- 2. ALL TEMPERATURE CONTROL SYSTEMS AND COMPONENTS UNDER THIS SUBCONTRACT ARE TO BE FULLY MODULATING TYPE, EXCEPT WHERE NOTED OTHERWISE. THE SYSTEM SHALL BE COMPLETE IN ALL RESPECTS INCLUDING ALL ASSOCIATED CONTROL EQUIPMENT, THERMOSTATS, CONTROL VALVES, VALVE ACTUATORS, DAMPER OPERATORS, RELAYS, PILOT POSITIONERS, CONTROL WIRING, CONTROL AIR PIPING, SWITCHES, INTERLOCK WIRING, ELECTRICAL OR PNEUMATIC CONTROL COMPONENTS AND ASSOCIATED PIPING OR WIRING, APPURTENANCES, ETC., TO PROVIDE THE FUNCTIONS DESCRIBED IN THESE SPECIFICATIONS AND PLANS, REGARDLESS OF WHETHER OR NOT SAID DEVICE RELAY, ETC. IS SPECIFICALLY MENTIONED HEREAFTER.
- 3. THE SYSTEM SHALL BE SUPERVISED AND CHECKED OUT COMPLETELY IN ALL RESPECTS BY COMPETENT MECHANICS, REGULARLY EMPLOYED BY THE MANUFACTURER.
- 4. ALL CONTROLS MUST BE THE PRODUCT OF ONE MANUFACTURER. ALL AUTOMATIC CONTROL VALVES, SENSORS AND DAMPER OPERATORS SHALL BE MANUFACTURED BY THE TEMPERATURE CONTROL MANUFACTURER.
- 5. THE CONTROL SYSTEMS SHALL BE IN ACCORDANCE WITH THE FOLLOWING DESCRIPTION OF SYSTEM OPERATIONS AND/OR DETAIL INFORMATION SHOWN ON THE PLANS AND AS DESCRIBED HEREIN.
- A) THE MANUFACTURER OF THE AUTOMATIC CONTROL EQUIPMENT SHALL SUBMIT THE FOLLOWING FOR APPROVAL: A SCHEMATIC DIAGRAM OF EACH CONTROL SYSTEM WHICH SHALL INDICATE THE PROPER SEQUENCE OF OPERATION AND RANGE OF THE CONTROLS FOR ALL CYCLES. PROVIDE A COMPLETE DESCRIPTION OF THE AUTOMATIC OPERATION OF EACH SYSTEM. THE DESCRIPTION SHOULD INCLUDE THE DUTY OF EACH THERMOSTAT, VALVE, SWITCH, ETC., INCORPORATED IN THE CONTROL SYSTEM WITH A SCHEDULE AND ILLUSTRATION OF ALL CONTROL INSTRUMENTS AND EQUIPMENT INCLUDING CONTROL PANELS AND DEVICES FOR EACH SYSTEM.

B. ELECTRIC WIRING:

- 1. ALL ELECTRICAL WORK (EXCEPT FOR MOTOR FEEDERS, WIRING BETWEEN MOTORS, MOTOR CONTROLLERS, FEEDER PANELS, FUSES, CIRCUIT BREAKERS AND BUS BARS) REQUIRED FOR THE AUTOMATIC TEMPERATURE CONTROL SYSTEM SHALL BE PROVIDED BY THIS CONTRACTOR. WORK SHALL INCLUDE BUT NOT BE LIMITED TO TIME SWITCHES, DAMPER MOTORS, DAMPER SWITCHES, ELECTRIC THERMOSTATS, ELECTRIC RELAYS, E/P SWITCHES, INTERLOCKING WIRING, WIRE, CONDUIT, ETC.
- 2. ALL 115 VOLT POWER REQUIRED FOR CONTROL PURPOSES SHALL BE PROVIDED BY THE CONTROL CONTRACTOR FROM A SOURCE ESTABLISHED BY THE ELECTRICAL CONTRACTOR.
- 3. THE CONTROL MANUFACTURER SHALL INCLUDE WIRING DIAGRAMS IN HIS SHOP DRAWINGS SUBMITTALS FULLY COORDINATED WITH THE ELECTRICAL CONTRACTOR'S WORK. IT SHALL BE THE AUTOMATIC TEMPERATURE CONTROL CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL WIRING AND CONDUIT AS REQUIRED TO ACHIEVE THE FUNCTION CALLED FOR IN THESE SPECIFICATIONS, CONFORMING WITH LOCAL CODES FOR MATERIAL AND INSTALLATION. THE ELECTRICAL SPECIFICATION FOR THE PROJECT'S ELECTRICAL WORK IS TO BE FOLLOWED.
- 4. FURNISH A CERTIFICATE INDICATING THE METHOD OF WIRING COMPLIANCE WITH LOCAL CODES AS PART OF THE FIRST SHOP DRAWING SUBMITTAL.
- D. ROOM THERMOSTAT AND SWITCH LOCATIONS:
 - 1. ALL ROOM THERMOSTATS AND SWITCH LOCATIONS (WHETHER SHOWN ON PLANS OR NOT) SHALL BE SELECTED AND SUBMITTED BY THE TEMPERATURE CONTROL MANUFACTURER FOR APPROVAL BY THE ARCHITECT AND ENGINEER PRIOR TO ACTUAL INSTALLATION.
- 2. EACH PROGRAMMABLE THERMOSTAT SHALL BE CAPABLE OF STARTING AND STOPPING THE SYSTEM FOR SEVEN DIFFERENT DAILY SCHEDULES PER WEEK AND RETAINING THEIR PROGRAMMING AND TIME SETTING DURING LOSS OF POWER FOR AT LEAST 10 HOURS.
- 3. THE PROGRAMMABLE THERMOSTAT SHALL BE CAPABLE OF MANUAL OVERRIDE THAT ALLOWS TEMPORARY OPERATION OF THE SYSTEM FOR UP TO 2-HOURS.
- 4. EACH PROGRAMMABLE THERMOSTAT SHALL INCLUDE MANUAL SET POINT ADJUSTMENT BY THE ROOM
- 5. HEATING AND COOLING THERMOSTATS SHALL BE PROVIDED WITH A TEMPERATURE RANGE OR DEADBAND OF AT LEAST 3°F.
- 6. COLOR SHALL BE WHITE, UNLESS OTHERWISE NOTED.
- 7. LABEL EACH THERMOSTAT AND SWITCH WITH THE BMS DESGINATION FOR THE EQUIPMENT SERVED (I.E. VAV-3-7).
- E. AUTOMATIC DAMPERS:
- 1. PROVIDE CONTROLS FOR ALL THE AUTOMATIC DAMPERS, AS SPECIFIED IN THE DUCTWORK SECTION, AND SHOWN ON THE DRAWINGS.
- 2. CONTROL MOTORS OR ACTUATORS SHALL BE OF THE ELECTRONIC OR PNEUMATIC TYPE, UNLESS OTHERWISE NOTED, OF APPROPRIATE SIZES AND QUANTITIES TO PROVIDE TWO—POSITION OR PROPORTIONING CONTROL ACTION AS SPECIFIED. PROPORTIONING TYPE SHALL BE EQUIPPED WITH PILOT TYPE POSITIONERS. PILOT POSITIONERS SHALL BE SELECTED FOR VARIED SPRING RANGES AND ADJUSTABLE WITHOUT DISMANTLING POSITIONER AND CONTROL MOTOR.
- 3. AUTOMATIC DAMPERS EXPOSED TO THE ELEMENTS SHALL HAVE ELECTRIC ACTUATORS WITH ALL REQUIRED ACCESSORIES.
- F. SEQUENCE OF OPERATIONS:
- 1. GENERAL
- A) ALL SAFETY DEVICES SHALL BE HARDWIRED TO THE MOTOR CONTROLLER.
- B) ALARMING DEVICES SHALL BE WIRED SO THAT CONTACTS ARE OPEN IN THE ALARM CONDITION.
- C) ALL CONTROL DEVICES EXPOSED TO OUTDOOR AIR CONDITIONS SHALL BE SPECIFICALLY DESIGNED BY MANUFACTURER FOR OUTSIDE AIR CONDITIONS, INCLUDING BUT NOT LIMITED TO WEATHERPROOF NEMA 3R ENCLOSURES.
- D) WHEN A MOTOR CONTROLLER IS EQUIPPED WITH A HAND-OFF-AUTO (HOA) SWITCH, THE MOTOR SHALL ONLY BE CONTROLLED BY EXTERNAL SIGNAL WHEN THE SWITCH IS IN THE "AUTO" POSITION.
- E) PRESSURE SAFETIES, INTERLOCKED DAMPERS, FREEZESTATS, FIRE ALARM SYSTEM DEVICES, ETC. SHALL BE HARDWIRED TO THE MOTOR CONTROLLER TO SHUT DOWN MOTORS WHEN THE HOA IS IN "HAND" AND "AUTO" POSITIONS. OVERRIDE OF SAFETIES SHALL NOT BE POSSIBLE, EXCEPT FOR FIRE ALARM SYSTEM OVERRIDE OF FREEZESTATS FOR SMOKE CONTROL FUNCTIONS.
- F) WHERE FANS AND DAMPERS ARE TO BE HARDWIRE INTERLOCKED, PROVIDE CONTROL WIRING BETWEEN THE FAN MOTOR TERMINAL STRIP AND DAMPER, SUCH THAT THE DAMPER MUST BE OPEN, AS DETECTED BY AN END SWITCH, BEFORE THE MOTOR IS ENERGIZED. HARDWIRE INTERLOCK SHALL FUNCTION WHEN THE MOTOR CONTROLLER HOA SWITCH IS IN "HAND" AND "AUTO" POSITIONS.
- G) THE AUTOMATIC TEMPERATURE CONTROLS CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL POINTS, DEVICES, SENSORS, AND CONTROL WIRING NECESSARY TO ACCOMPLISH THE SPECIFIED SEQUENCES OF OPERATIONS. ALL POINTS REQUIRED TO PROVIDE THE SEQUENCE OF OPERATIONS SHALL BE INCLUDED IN THE AUTOMATIC TEMPERATURE CONTROLS CONTRACTOR 'S BID AS IF LISTED.
- H) IN THE CASE OF A DISCREPANCY, THE WORST CASE OR HIGHEST COST SHALL APPLY FOR BIDDING PURPOSES. THE AUTOMATIC TEMPERATURE CONTROLS CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCY VIA RFI PRIOR TO PERFORMING THE ASSOCIATED WORK.
- 2. DX SPLIT SYSTEM HEAT PUMPS AND AIR CONDITIONING UNITS

- A) THE AUTOMATIC TEMPERATURE CONTROLS CONTRACTOR SHALL MOUNT AND WIRE ALL CONTROL COMPONENTS THAT ARE SHIPPED WITH THE UNIT THAT ARE NOT FACTORY INSTALLED. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, THE MANUFACTURER—SUPPLIED WALL MOUNTED TEMPERATURE SENSOR, WALL—MOUNTED CONTROLLER, ETC.
- B) THE AUTOMATIC TEMPERATURE CONTROLS CONTRACTOR SHALL FURNISH, MOUNT, AND WIRE ANY ADDITIONAL COMPONENTS NOT PROVIDED BY THE UNIT MANUFACTURER TO ACHIEVE A COMPLETELY OPERATIONAL SYSTEM. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, ANY DEVICES REQUIRED TO INTERFACE TO THE UNIT.
- C) THE AUTOMATIC TEMPERATURE CONTROLS CONTRACTOR SHALL PROVIDE A LEAK DETECTOR IN THE EXTERNAL DRIP PAN BELOW EACH UNIT.
- 1) LEAK DETECTOR SHALL BE HARDWIRE INTERLOCKED TO SHUT DOWN THE AC UNIT COMPRESSOR.
- D) A "COMMON ALARM" DRY CONTACT OUTPUT AT THE UNIT SHALL BE HARDWIRED BY AUTOMATIC TEMPERATURE CONTROLS CONTRACTOR TO A DRY CONTACT AT THE TENANT'S SECURITY PANEL. COORDINATE SPECIFIC DRY CONTACT WITH THE SECURITY CONTRACTOR.
- E) THE UNIT SHALL OPERATE AS PER THE MANUFACTURER PROVIDED CONTROLS AND SEQUENCE OF OPERATION DESCRIBED BELOW. PROVIDE ALL NECESSARY PROGRAMMING FOR THE MANUFACTURER'S PACKAGED CONTROLS, INCLUDING SPACE TEMPERATURE HEATING/COOLING OCCUPIED/UNOCCUPIED SETPOINTS IN AND OCCUPANCY SCHEDULES.
- F) DURING OCCUPIED HOURS, THE SUPPLY FAN SHALL RUN CONTINUOUSLY, COOLING SETPOINT SHALL BE 75°F (ADJ), AND HEATING SETPOINT SHALL BE 75°F (ADJ).
- G) DURING UNOCCUPIED HOURS, THE SUPPLY FAN SHALL CYCLE UPON CALL FOR COOLING OR HEATING BUT OTHERWISE BE OFF, COOLING SETPOINT SHALL BE 85°F (ADJ), AND HEATING SETPOINT SHALL BE 65°F (ADJ).
- H) FOR ANY HEAT PUMPS AND AIR CONDITIONING UNITS WITH OUTSIDE AIR INTAKE DUCTWORK, PROVIDE A MOTORIZED DAMPER IN THE OUTSIDE AIR DUCT, HARDWIRE INTERLOCKED TO OPEN WHEN THE SUPPLY FAN IS RUNNING AND OTHERWISE CLOSE. THE ACTUATOR TYPE SHALL BE POWERED OPEN, FAIL CLOSED.
- 3. TOILET EXHAUST FANS
- A) UNIT SHALL BE PROVIDED WITH PROGRAMMABLE TIME CLOCK
- 4. FIRST FLOOR LOCKER EXHAUST FAN
- A) UNIT SHALL BE PROVIDED WITH PROGRAMMABLE TIME CLOCK
- 5. INLINE DIRECT FIRED HEATER
- A) UNITS SHALL BE PROVIDED WITH PROGRAMMABLE TIME CLOCK



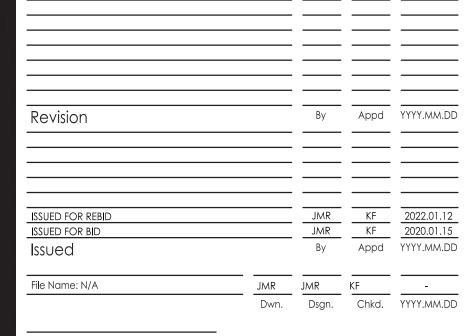
Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant



Permit/Seal



Client/Project Logo



Client/Project
NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

MECHANICAL SPECIFICATIONS

Project No. 191506465

Revision

NONE
Drawing No.

Scale

WALL HYDRANT

SYMBOL LIST										
(NOT ALL SYMBOLS	S SHOWN ARE NECESSARILY USED ON THIS PROJECT)									
s	SANITARY/SOIL PIPING									
W	WASTE PIPING									
IW	INDIRECT WASTE PIPING									
ED	EJECTOR PUMP DISCHARGE PIPING									
SD	SUMP PUMP DISCHARGE PIPING									
ST	STORM WATER PIPING									
	VENT PIPING									
	DOMESTIC COLD WATER PIPING									
	DOMESTIC COLD WATER PIPING DOMESTIC HOT WATER PIPING									
	DOMESTIC HOT WATER PIPING DOMESTIC HOT WATER RECIRCULATION PIPING									
	NATURAL GAS PIPING									
5	ARROW REPRESENTS DIRECTION OF FLOW									
	PIPING WITH FREEZE PROTECTION CABLE UNDER INSULATION									
	BURIED SANITARY/SOIL, WASTE, VENT, OR STORM PIPING									
— X— X— X— X— X— —	PIPING TO BE DEMOLISHED									
	PIPE BREAK									
	CAPPED OUTLET									
	CLEANOUT / PLUGGED OUTLET									
	FRESH AIR INLET									
<u></u> ⊚	CLEANOUT DECK PLATE									
	P-TRAP									
	HOSE BIBB									
<u></u>	PIPE DROP / DOWN									
	PIPE RISE / UP									
	PIPE BOTTOM CONNECTION									
<u> </u>	PIPE BOTTOM CONNECTION PIPE TOP CONNECTION									
<u> </u>	PIPE TOP CONNECTION PIPE SIDE CONNECTION									
Ψ	VACUUM BREAKER									
٠ ٠										
	SHOCK ARRESTOR									
	DRAIN									
©	HOUSE TRAP									
	PUMP									
JL	VENT THROUGH ROOF									
<u> </u>	WATER METER									
÷	WATERPROOF SLEEVE									
ų.	UNION									
φ	PRESSURE GAUGE									
Q	TEMPERATURE GAUGE									
Π	TAMPER SWITCH									
F	FLOW SWITCH									
P	PRESSURE SWITCH									
M	CHECK VALVE									
•	BALL VALVE									
•	GATE VALVE									
¥	PLUG VALVE									
₩	MIXING VALVE									
為	OUTSIDE SCREW & YOKE VALVE									
A A	PRESSURE REDUCING VALVE									
· · · · · · · · · · · · · · · · · · ·	SOLENOID VALVE									
<u> </u>	GAS PRESSURE REGULATOR									
=	WALL HYDRANT									
<u> </u>	POINT OF DISCONNECTION FROM EXISTING PIPING									
S	POINT OF CONNECTION TO EXISTING PIPING									
	PLUMBING RISER DESIGNATION RISER NUMBER									
	RISER NUMBER									
L W	STORM RISER DESIGNATION RISER NUMBER									

GENERAL NOTES

(NOT ALL NOTES SHOWN ARE NECESSARILY APPLICABLE TO THIS PROJECT)

- ALL REFERENCES HEREIN TO THE CONTRACTOR SHALL REFER TO THE PLUMBING CONTRACTOR
 UNLESS OTHERWISE NOTED.
- 2. THE ENTIRE INSTALLATION SHALL BE COORDINATED WITH THE WORK OF ALL OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATION. THE CONTRACTOR SHALL VERIFY, IN THE FIELD, THE EXACT LOCATION OF ALL EXISTING PLUMBING SYSTEMS PRIOR TO MAKING NEW CONNECTIONS TO EXISTING LINES. THE CONTRACTOR SHALL PROVIDE ALL FITTINGS, OFFSETS, AND TRANSITIONS REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
- 3. DO NOT SCALE FROM THESE DRAWINGS.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK WITHIN A DISTANCE OF FIVE FEET FROM THE BUILDING PERIMETER.
- 5. DO NOT MAKE ANY CHANGES OR SUBSTITUTIONS WITHOUT SPECIFIC WRITTEN APPROVAL FROM THE ARCHITECT OR ENGINEER.
- 6. THE CONTRACTOR SHALL REFER TO WRITTEN SPECIFICATION IN CONJUNCTION WITH THESE DRAWINGS FOR FULL PROJECT SCOPE.
- 7. THE CONTRACTOR SHALL PERFORM A HYDRANT FLOW TEST TO VERIFY THE AVAILABLE WATER SUPPLY PRESSURE PRIOR TO ANY PURCHASING OF EQUIPMENT, FABRICATION OR INSTALLATION.
- 8. ANY DISCREPANCIES OR INADEQUACIES WITHIN BID DOCUMENTS, BETWEEN THESE BID DOCUMENTS AND RELATED HVAC, FIRE PROTECTION, ELECTRICAL, STRUCTURAL, ARCHITECTURAL, INTERIOR DECORAND STRUCTURAL BID DOCUMENTS, OR BETWEEN THESE BID DOCUMENTS AND FIELD CONDITIONS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER PRIOR TO BID
- 9. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF RECORD "AS BUILT" DRAWINGS INDICATING THE PRECISE LOCATION OF ALL SYSTEMS, EQUIPMENT, CONCEALED OR EMBEDDED PIPING, EXPOSED PIPING, PIPING CONNECTIONS, AND ACCESS PANELS/DOORS. THESE DRAWINGS SHALL INCLUDE ALL CHANGES AND DEVIATIONS FROM CONSTRUCTION DOCUMENTS.
- 10. THE CONTRACTOR SHALL SCHEDULE ALL WORK TO AVOID INTERFERENCE WITH FIRE PROOFING
- 11. PLATFORMS, CURBS, SUMP/EJECTOR PITS, HOUSE TRAP PITS, AND GREASE INTERCEPTOR PITS FOR PLUMBING EQUIPMENT SHALL BE AS INDICATED ON THE STRUCTURAL AND ARCHITECTURAL DRAWINGS UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL COORDINATE EXACT SIZES AND LOCATIONS OF REQUIRED OPENINGS AND SUPPORTS FOR FURNISHED EQUIPMENT.
- 12. THE CONTRACTOR SHALL COORDINATE ALL UNDERGROUND PIPING LOCATIONS AND INVERTS WITH ALL UTILITIES.
- 13. THE CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS OF ALL PLUMBING EQUIPMENT WITH THE ELECTRICAL DRAWINGS AND ELECTRICAL CONTRACTOR. THE CONTRACTOR SHALL FURNISH PLUMBING EQUIPMENT WIRED FOR THE VOLTAGES SHOWN IN CONTRACT DOCUMENTS AND COORDINATED WITH ELECTRICAL CONTRACTOR.
- 14. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND ALL APPLICABLE CODES. THE CONTRACTOR SHALL PROVIDE ALL FITTINGS, TRANSITIONS, VALVES, AND OTHER DEVICES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
- 15. THE CONTRACTOR SHALL SUBMIT, PRIOR TO ANY FABRICATION OR INSTALLATION, ALL NECESSARY DRAWINGS, EQUIPMENT/MATERIAL PRODUCT DATA, DOCUMENTATION, AND CALCULATIONS REQUIRED TO COMPLETE THE WORK OUTLINED IN THE CONTRACT DOCUMENTS.
- 16. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION PRIOR TO ANY FABRICATION OR INSTALLATION. ALL FEES FOR PERMITS AND INSPECTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 17. ALL ABOVE GRADE PIPING SHALL BE PROPERLY SUPPORTED FROM THE BUILDING STRUCTURE. NO PIPING SHALL REST ON CEILING TILES OR CEILING STRUCTURE.
- 18. ALL EXPOSED HORIZONTAL AND VERTICAL PIPING SHALL BE INSTALLED IN A NEAT ARRANGEMENT AND IN THE MOST INCONSPICUOUS LOCATION POSSIBLE. VERTICAL DROPS SHOULD BE KEPT TO A MINIMUM AND SHOULD BE LOCATED WITHIN CHASES, WALLS, AND SOFFITS WITH OTHER MECHANICAL PIPING AND ELECTRICAL CONDUITS WHEN POSSIBLE. ALL SUCH LOCATION ARE TO BE REVIEWED
- 19. WATER METER SHALL BE IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS AND SHALL BE PROVIDED WITH REMOTE READING.
- 20. THE CONTRACTOR SHALL PROVIDE ALL CLAMPS, OFFSETS, EXPANSION JOINTS, ANCHORS, AND GUIDES AS NECESSARY TO PREVENT STRESS ON PIPING.

WITH THE ARCHITECT PRIOR TO INSTALLATION.

REQUIREMENTS WITH OTHER TRADES.

- 21. THE CONTRACTOR SHALL COORDINATE ALL ROOF PENETRATIONS AND ASSOCIATED FLASHING
- 22. THE CONTRACTOR SHALL PROVIDE INSULATION ON ALL COLD WATER, HOT WATER, AND HOT WATER RECIRCULATION PIPING. THE CONTRACTOR SHALL PROVIDE INSULATION ON ALL HORIZONTAL STORM
- 23. ALL PLUMBING FIXTURES/APPLIANCES SHALL HAVE THEIR OWN SHUTOFF VALVES INSTALLED IN AN EASILY ACCESSIBLE AND CONVENIENT LOCATION.
- 24. THE CONTRACTOR SHALL PROVIDE ACCESS PANELS/DOORS FOR ALL CLEANOUTS, VALVES, AND ANY OTHER EQUIPMENT LOCATED WITHIN WALLS, PARTITIONS, OR CEILINGS THAT REQUIRE ACCESS FOR MAINTENANCE AND/OR OPERATION.
- 25. THE CONTRACTOR SHALL INSTALL TRAP SEAL PRIMERS ON ALL FLOOR UNLESS OTHERWISE NOTED.
 THE CONTRACTOR SHALL PROVIDE NECESSARY COLD WATER CONNECTION TO ALL TRAP SEAL
- 26. THE CONTRACTOR SHALL PROVIDE CLEANOUTS AT THE BASE OF ALL SANITARY, WASTE, STORM, AND VENT STACKS. CLEANOUT DECK PLATES PLATES MUST ALSO BE PROVIDED ON ALL BURIED SANITARY, WASTE, AND STORM PIPING AT INTERVALS OUTLINED IN APPLICABLE CODE.
- 27. SUDS PRESSURE ZONE REQUIREMENTS SHALL BE MEET IN THE DESIGN OF THE SANITARY, WASTE, AND VENT SYSTEMS. NO CONNECTION SHALL BE MADE TO THE VERTICAL PORTION OF A SANITARY OR WASTE STACK WITHIN FORTY STACK DIAMETERS OF THE BASE FITTING. NO CONNECTION SHALL BE MADE TO THE HORIZONTAL OFFSET PORTION OF A SANITARY OR WASTE STACK WITHIN TEN
- OR WASTE STACK WITHIN FORTY STACK DIAMETERS OF THE BASE FITTING. NO CONNECTION SHALL BE MADE TO THE HORIZONTAL OFFSET PORTION OF A SANITARY OR WASTE STACK WITHIN TEN STACK DIAMETERS OF THE BASE FITTINGS.
- 28. NO DRAINAGE BRANCH SHALL BE CONNECTED TO A SANITARY OR WASTE STACK WITHIN TWO FEET ABOVE OR BELOW A HORIZONTAL OFFSET EXCEPT WHERE NO OTHER DRAINAGE BRANCH IS CONNECTED TO THE STACK AT A HIGHER STORY.
- 29. THE CONTRACTOR SHALL PROVIDE REDUCING FITTING AT ALL CHANGES IN DIAMETER OF SANITARY, WASTE, AND STORM PIPING.
- 30. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SERVICE CONNECTIONS TO ALL EQUIPMENT AND FIXTURE INDICATED ON THE ARCHITECTURAL AND PLUMBING DRAWINGS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SERVICE CONNECTIONS TO HVAC AND FIRE PROTECTION EQUIPMENT.
- 31. GAS METER ASSEMBLIES INCLUDING VALVES, PIPING, VENTS, AND ALL APPURTENANCES SHALL BE IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS.
- 32. THE CONTRACTOR SHALL PROVIDE NOT LESS THAN A TWO ELBOW SWING ON ALL BRANCH PIPE CONNECTIONS TO A GAS RISER. BRANCH PIPE CONNECTIONS TO A HORIZONTAL GAS LINE SHALL BE MADE FROM THE TOP OR SIDES AND NOT FROM THE BOTTOM.
- 33. ALL GAS RISER SHUTOFF VALVES SHALL BE LOCKSHEILD TYPE WITH 1/8" TEST CONNECTION DOWNSTREAM OF VALVE.
- 34. ALL GAS SHUTOFF VALVES ARE TO BE LOCATED IN NONCONCEALED SPACES.
- 35. THE CONTRACTOR SHALL MAKE THE FINAL CONNECTION TO ALL GAS FIRED EQUIPMENT/APPLIANCES, REGARDLESS OF WHO PROVIDED THE EQUIPMENT/APPLIANCE. THIS SHALL INCLUDE BUT NOT BE LIMITED TO HVAC EQUIPMENT, COOKING EQUIPMENT/APPLIANCES, EMERGENCY GENERATORS, AND DOMESTIC HOT WATER HEATERS. EACH PIECE OF EQUIPMENT/APPLIANCE SHALL BE PROVIDED WITH A DIRT LEG, LUBRICATED PLUG VALVE, UNION, AND PRESSURE REGULATOR (WHERE REQUIRED).

DEMOLITION NOTES

(NOT ALL NOTES SHOWN ARE NECESSARILY APPLICABLE TO THIS PROJECT)

- 1. THE CONTRACTOR SHALL INCLUDE IN THEIR PRICE ALL COSTS ASSOCIATED WITH REMOVALS AND RELOCATIONS OF PLUMBING WORK AS DESCRIBED ON THE DRAWINGS AND IN THE SPECIFICATIONS WITH ALLOWANCES FOR EXPECTED OR UNFORESEEN DIFFICULTIES WHEN CONCEALED WORK HAS BEEN OPENED. NO CLAIMS FOR ADDITIONAL WORK ASSOCIATED WITH DEMOLITION WILL BE ACCEPTED, EXCEPT IN CERTAIN CASES CONSIDERED JUSTIFIABLE BY THE ARCHITECT.
- 2. THE CONTRACTOR SHALL REMOVE AND/OR RELOCATE ALL EXISTING PLUMBING WORK WHICH INTERFERES WITH THE NEW ARCHITECTURAL LAYOUTS. ALL SYSTEMS WHICH ARE NO LONGER REQUIRED TO FUNCTION SHALL BE REMOVED BACK TO ACTIVE LINES.
- 3. THE CONTRACTOR SHALL PERFORM DEMOLITION AND REMOVAL WORK WITH MINIMUM INTERFERENCE TO FUNCTIONING PLUMBING SYSTEMS. ALL AFFECTED SYSTEMS SHALL BE RECONNECTED AND RESTORED.
- 4. DEMOLITION AND REMOVAL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER. THE CONTRACTOR SHALL PATCH, REPAIR OR OTHERWISE RESTORE ANY DAMAGED INTERIOR OR EXTERIOR BUILDING SURFACE TO ITS ORIGINAL CONDITION.
- 5. THE CONTRACTOR SHALL REMOVE ALL PIPING SUPPORTS, ETC. FROM PARTITIONS THAT ARE TO BE REMOVED. WHERE THE REMOVAL OF THESE ITEMS DISRUPTS EXISTING PIPING THAT IS TO REMAIN, THE CONTRACTOR SHALL INSTALL AND PROVIDE BYPASS CONNECTIONS AS NECESSARY.
- 6. ALL PIPING WHICH BECOMES EXPOSED DURING THE ALTERATION WORK SHALL BE REMOVED AND REROUTED CONCEALED BEHIND FINISHED SURFACES.
- 7. PORTIONS OF MAINS TO BE REMOVED OR ABANDONED AS A RESULT OF DEMOLITION WORK, BUT WHICH ARE REQUIRED TO REMAIN ACTIVE, SHALL BE CUT AT CONVENIENT LOCATIONS, REROUTED AND RECONNECTED.
- 8. THE CONTRACTOR SHALL NOTIFY THE OWNER AT THE APPROPRIATE TIME OF THE PROJECTED DEMOLITION AND PHASING SCHEDULE SO THAT REMOVAL OR RELOCATION OF AFFECTED UTILITIES MAY BE CARRIED OUT IN COORDINATION WITH THE PROJECT REQUIREMENTS.
- 9. ALL EXISTING MATERIAL AND EQUIPMENT IN USABLE CONDITION, WHICH IS TO BE REMOVED UNDER THIS CONTRACT, SHALL REMAIN THE PROPERTY OF THE OWNER OR SHALL BE DISPOSED OF BY THE PLUMBING CONTRACTOR, AS DIRECTED BY THE OWNER.
- 10. ARRANGE TO WORK CONTINUOUSLY, INCLUDING OVER TIME, IF REQUIRED, TO ASSURE THAT SYSTEMS WILL BE SHUT DOWN ONLY DURING THE TIME ACTUALLY REQUIRED TO MAKE THE NECESSARY CONNECTIONS TO THE EXISTING SYSTEMS.
- 11. THE SHUTDOWN OF EXISTING BUILDING PLUMBING SERVICES SHALL BE COORDINATED WITH THE

OWNER. MAKE ARRANGEMENTS AT LEAST 5 BUSINESS DAYS PRIOR TO A SHUTDOWN.

	PLUMBING DRAWING LIST											
Sheet Number	Sheet Title											
P-001	PLUMBING COVER PAGE											
P-002	PLUMBING SCHEDULES											
PD-101	PLUMBING GROUND & FIRST FLOOR DEMOLITION PLANS											
P-101	PLUMBING GROUND & FIRST FLOOR PLANS											
P-401	PLUMBING DETAILS											
P-402	PLUMBING DETAILS & SPECIFICATIONS											

NEW YORK STATE CODES & STANDARDS

- 2015 INTERNATIONAL BUILDING CODE
- 2015 INTERNATIONAL FIRE CODE
- 2015 INTERNATIONAL PLUMBING CODE2015 INTERNATIONAL MECHANICAL CODE
- 2015 INTERNATIONAL FUEL GAS CODE
 2017 NYS UNIFORM CODE SUPPLEMENT
- LOCAL FIRE DEPARTMENT/FIRE MARSHAL
 ALL OTHER LOCAL AUTHORITIES HAVING JURISDICTION

NEW YORK STATE ENERGY CODES

- 2015 INTERNATIONAL ENERGY CONSERVATION CODE
 2013 ASHRAE 90.1
- 2016 SUPPLEMENT TO THE NEW YORK STATE ENERGY CONSERVATION CODE (REVISED AUGUST 2016)

LOCAL CODES

NEW ROCHELLE MUNICIPAL CODE

REFERENCED STANDARDS

APPLICABLE REFERENCE STANDARDS SHALL BE AS REFERENCED BY ALL STATE AND LOCAL CODES. THE LIST BELOW IS FOR QUICK REFERENCE AND DOES NOT INCLUDE ALL APPLICABLE REFERENCE STANDARDS.

- 2013 NPFA 13 STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS
- 2013 NFPA 14 STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS
 2013 NFPA 20 STANDARD FOR THE INSTALLATION OF STATIONARY PLIMPS FOR FIRE PROTECTION.
- 2013 NFPA 20 STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
 2014 NFPA 70 NATIONAL ELECTRICAL CODE
- 2014 NFPA 70 NATIONAL ELECTRICAL CODE
 2013 NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

Permit/Seal



Client/Project Logo



Client/Project
NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

PLUMBING COVER PAGE

Project No. 191506465

Revision

Scale
NONE
Drawing No.

P-001

- 1. ALL FLOOR DRAINS IN FINISHED AREAS AND ALL ROOF DRAINS SHALL BE LOCATED AS PER THE ARCHITECTURAL DRAWINGS.
- 2. ALL FLOOR DRAINS IN MECHANICAL EQUIPMENT ROOMS, BOILER ROOMS, FAN ROOMS ETC., SHALL BE LOCATED IN COORDINATION WITH THE MECHANICAL CONTRACTOR.
- 3. THE CONTRACTOR SHALL VERIFY THE COMPATIBILITY OF THE DRAINS WITH THE APPROVED ROOFING AND/OR WATER PROOFING SYSTEMS PRIOR TO SUBMITTING SHOP DRAWINGS.
- 4. THE TOP OF ALL FLOOR DRAINS SHALL BE FLUSH WITH THE ADJACENT FINISHED FLOOR.
- 5. PROVIDE TRAP PRIMER MOD# M-500 AS MANUFACTURED BY MIFAB ON ALL FLOOR DRAINS UNLESS OTHERWISE NOTED. PROVIDE DISTRIBUTION UNIT MI-DU WHEN APPLICABLE. PROVIDE 1/2" CW CONNECTION TO ALL TRAP PRIMERS.

	PIPE, FITTING, AND JOINT MATERIAL SCHEDULE													
		(1)	NOT ALL PIPE, FITTING, AND JOINT MATERIALS SHOWN	ARE NECESSARILY USED ON THIS PROJECT)										
PIPING SYSTEM	PIPING LOCATION	PIPING SIZE	PIPING SPECIFICATION	FITTING SPECIFICATION	JOINT SPECIFICATION									
CANITARY / WACTE	BELOW GROUND	ALL	SERVICE WEIGHT HUB & SPIGOT CAST IRON	SERVICE WEIGHT HUB & SPIGOT CAST IRON	HIGH QUALITY NEOPRENE RUBBER COMPRESSION GASKET									
SANITARY / WASTE	ABOVE GROUND	ALL	HUBLESS SERVICE WEIGHT CAST IRON	HUBLESS SERVICE WEIGHT CAST IRON	NEOPRENE RUBBER SEALING SLEEVE AND HEAVY DUTY STAINLESS STEEL CORRUGATED SHIELDS WITH A MINIMUM OF FOUR HEAVY DUTY BANDS									
VENT	BELOW GROUND	ALL	SERVICE WEIGHT HUB & SPIGOT CAST IRON	SERVICE WEIGHT HUB & SPIGOT CAST IRON	HIGH QUALITY NEOPRENE RUBBER COMPRESSION GASKET									
VENT	ABOVE GROUND	ALL	HUBLESS SERVICE WEIGHT CAST IRON	HUBLESS SERVICE WEIGHT CAST IRON	NEOPRENE RUBBER SEALING SLEEVE AND HEAVY DUTY STAINLESS STEEL CORRUGATED SHIELDS WITH A MINIMUM OF FOUR HEAVY DUTY BANDS									
- INDIRECT WASTE	ABOVE GROUND	ALL	TYPE DWV COPPER TUBING	WROUGHT COPPER WITH SOLDER ENDS	95.5 TIN / 4.0 COPPER / 0.5 SILVER SOLDER									
INDIRECT WASTE	ABOVE GROUND	ALL	CHLORINATED POLYVINYL CHLORIDE (CPVC)	CHLORINATED POLYVINYL CHLORIDE (CPVC) WITH SOLVENT CEMENT WELD ENDS	SOLVENT CEMENT WELDED									
COLD WATER HOT WATER	BELOW GROUND	ALL	CEMENT LINED DUCTILE IRON	CEMENT LINED DUCTILE IRON WITH MECHANICAL JOINT ENDS	BOLT-ON MECHANICAL JOINT WITH HIGH QUALITY NEOPRENE RUBBER COMPRESSION GASKET									
HOT WATER RECIRCULATION	ABOVE GROUND MAIN BUILDING DISTRIBUTION	ALL	TYPE L HARD DRAWN COPPER TUBING	WROUGHT COPPER WITH SOLDER ENDS	95.5 TIN / 4.0 COPPER / 0.5 SILVER SOLDER									
GAS	ABOVE GROUND	4" & SMALLER	SCHEDULE 40 BLACK STEEL	MALLEABLE IRON WITH THREADED ENDS	THREADED									
JA3	INSIDE BUILDING	5" & LARGER	SCHEDULE 40 BLACK STEEL	SCHEDULE 40 BLACK STEEL WITH BUTT JOINT ENDS	WELDED									

	PUMP SCHEDULE														
OEDWOE	DECIONATION	SIMPLEX SYSTEM	DUPLEX SYSTEM	TRIPLEX SYSTEM	EMERGENCY POWER	CAPACITY (EA	ELECTRICAL DATA (EACH PUMP)						SPECIFICATION	DEMARKO	
SERVICE	DESIGNATION					FLOW RATE	HEAD	HP	RPM	V	PH	HZ	MANUFACTURER	MODEL NUMBER	REMARKS
HOT WATER RECIRCULATION PUMP	HWP-1	•				2 GPM	2.5 FT	_	_	115	1	60	BELL & GOSSETT	ECOCIRC 19-16	

FIXTURE CONNECTION SCHEDULE									
(NOT ALL FIXTURES SHOWN ARE NECESSARILY USED ON THIS PROJECT)									
FIXTURE	S	W	IW	٧	CW	HW			
WATER CLOSET (FLUSH VALVE)	4"			2"	11/2"				
WATER CLOSET (FLUSH TANK)	4"			2"	1/2"				
LAVATORY		11/2"		11/2"	1/2"	1/2"			
TUB / SHOWER		11/2"		11/2"	1/2"	1/2"			
SHOWER		2"		11/2"	1/2"	1/2"			
SINK		2"		11/2"	1/2"	1/2"			
LAUNDRY BOX		2"		11/2"	1/2"	1/2"			
ICE MACHINE					1/2"				
DRINKING FOUNTAIN		11/2"		11/2"	1/2"				
JANITOR'S SINK		3"		2"	3/4"	3/4"			

			FIX	KTUR	E SCH	HEDU	LE			
	FIXTURE SPECIFICATION			SERVICE CONNECTIONS						
DESIGNATION	COMPONENT	MANUFACTURER	MODEL NUMBER	S	w	٧	CW	HW	ADDITIONAL COMMENTS	
WC-1 (ADA)	WATER CLOSET	ACORNS	1695-T-3-1.28-FVBO-ADA	477		2"	1½"			
	FLUSH VALVE	SLOAN	8113-1.28						 ADA COMPLIANT, FLOOR MOUNTED, ELONGATED BOWL, HIGH EFFICIENCY FLUSH VALVE TOILET. 	
	SEAT	KOHLER	K-4731-GC-0	4"					 PROVIDE 1.28 GPF DC FLUSH VALVE. PROVIDE OPEN FRONT SOFT CLOSE SEAT LESS COVER. 	
	CARRIER	JAY R. SMITH	400 SERIES							
WC -	WATER CLOSET	ACORNS	1695-T-3-1.28-FVB0	4"		2"	1½"			
	FLUSH VALVE	SLOAN	8113-1.6						 FLOOR MOUNTED, ELONGATED BOWL, HIGH EFFICIENCY FLUSH VALVE TOILET. PROVIDE 1.28 GPF DC FLUSH VALVE. PROVIDE OPEN FRONT SOFT CLOSE SEAT LESS COVER. 	
	SEAT	KOHLER	K-4731-GC-0							
	CARRIER	JAY R. SMITH	400 SERIES							
	LAVATORY	ACORNS	1950-1-9-H24	-	1½"	1½"	1/2"		 ADA COMPLIANT, WALL HUNG. RECTANGULAR LAVATORY BASIN. PROVIDE CHROME PLATED BRASS LAVATORY GRID DRAIN ASSEMBLY FOR ALL TOILET ROOM LOCATION. GOOSENECK FAUCET W/ 4" WRIST BLADE HANDLES. 0.50 GPM NON AERATED FLOW RESTRICTOR 4" FAUCET HOLD CTRS 	
	FAUCET	CHICAGO	895-317-E2805-5ABCP							
LAV (ADA)	DRAIN	MCGUIRE MANUFACTURING	PW155WC					1/2"		
	P-TRAP	MCGUIRE MANUFACTURING	PW2125							
	SUPPLY	MCGUIRE MANUFACTURING	H170-LK							
	SHOWER STALL	AQUARIUS	G-3698-BF	-	3"	1½"	1/2"	1/2"	 ADA COMPLIANT, ONE PIECE, SHOWER MODULE, OPEN TOP, 3'x3 CURTAIN ROD, GRID STRAINER DRAIN, GRAB BARS & REMOVABLI 	
SH (ADA)	SHOWER HEAD	SYMMONS	ALLURA 4701-VP						FOLD UP SEAT - PROVIDE PRESSURE BALANCE MIXING VALVE W/ LEVEL HANDLE, INTERGRAL SERVICE STOPS & ADJUSTABLE STOP SCREW TO LIMIT HANDLE TURN. - PROVIDE COLLAPSEABLE NEOPRINE WATER DAMN W/ END CAPS & SELF ADHISEVIVE BACK: AQARIOUS MODEL NO: 1THR132.	
	DRAIN	MCGUIRE MANUFACTURING	PW155WC							
	P-TRAP	MCGUIRE MANUFACTURING	PW8902							
SK (ADA)	SINK	ELKAY	CR3122		1½"	11/2"	1/2"	1/2"	 ADA COMPLIANT, STAINLESS STEEL DROP—IN SINK. PROVIDE FAUCET DRAIN ASSEMBLY TAILPIECE, SUPPLIES, STOPS ESCUTCHEN COVER. PROVIDE BASKET STRAINER, DRAIN BOWL ASSEMBLY. FOR USE WITH ELKAY MOD LKAD35. 	
	FAUCET	CHICAGO	895-317-E2805-5ABCP							
	DRAIN	MCGUIRE MANUFACTURING	PW155WC						- GOOSENECK FAUCET W/ 4" WRIST BLADE HANDLES 0.50 GPM NON AERATED FLOW RESTRICTOR - 4" FAUCET HOLE CTRS	
	P-TRAP	MCGUIRE MANUFACTURING	PW2125							
JS	MOP BASIN	ADVANCE TABCO	9-OP-20		3"	2"	1/2"			
	FAUCET	CHICAGO	897-RCF					1/2"	- STAINLESS STEEL MOP SINK W/ FACTORY INSTALLED STAINLESS STEEL DRAIN.	
	P-TRAP	MCGUIRE MANUFACTURING	PW8912							
	WATER COOLER	ELKAY	EDFP214C					1/2"	ADA COMPLIANT, STAINLESS STEEL UNDERMOUNT SINK. PROVIDE FAUCET DRAIN ASSEMBLY TAILPIECE, SUPPLUIES, STOPS ESCUTCHEN COVER. PROVIDE BASKET STRAINER, PROVIDE BASKET STRAINER,	
EWC	P-TRAP	MCGUIRE MANUFACTURING	PW8912		4417	4449	4, "			
	SUPPLY	MCGUIRE MANUFACTURING	H170-LK		11/2"	11/2"	1/2"		DRAIN BOWL ASSEMBLY. FOR USE WITH ELAKAY MOD LKAD35.	

- REFER TO ARCHITECTUAL DRAWINGS FOR STANDARD AND ADA FIXTURE LOCATIONS, MOUNTING HEIGHTS, ELEVATIONS AND DETAILS.
- 2. INSTALL PRE-FORMED INSULATION COVER FOR ALL EXPOSED SUPPLY AND DRAINAGE PIPING SERVING ADA COMPLIANT LAVATORIES AND SINKS MANUFACTURED BY TRUEBRO, PLUMBEREX, HANDYSHIELD.
- 3. PLUMBING FIXTURE SHALL HAVE CHROME PLATED BRASS SUPPLIES, STOPS, ESCUTCHEON COVERS, P-TRAP, GRID DRAIN, POP-UP DRAINS W/ PUSH ROD, OFFSET DRAIN, CONTINUOUS DRAINS CONNECTION, SHOWER/TUB DRAIN & TAILPIECE ASSEBLIES SHALL BE CHROME PLATED BRASS, (IN LOCATIONS WHERE PIPING IS TO BE COVERED W/ INSULATION, BRASS FINISHES ONLY SHOULD ONLY BE SUBSTITUTED.)
- 4. GRID STRAINER/BASKET STRAINER & TAILPIECE SHALL BE STAINLESS STEEL WHERE SERVING STAINLESS STEEL FIXTURES
- 5. LAVATORY FAUCETS SHALL 0.5 GPM AERATORS.
- 6. SERVICE SINK FAUCETS SHALL HAVE VACUUM BREAKER & CHECK VALVES ON HW&CW SUPPLIES EITHER INTEGRAL TO FAUCET OR PROVIDE ON HW&CW PIPES FEEDING THE
- WATER CLOSET/TOILET SEATS SHALL BE OF SMOOTH NON ABSORBENT MATERIAL: ALL SEATS TO BE HINGED OPEN FRONT TYPE W/ STAINLESS STEEL HINGE & HARDWARE. (COORDINATE SEAT COLOR WITH ARCHITECT)
- 8. PROVIDE FIXTURES WITH COMPATIBLE CARRIER AND/OR FACTORY FURNISHED WALL HANGER/SUPPORT BRACKET ASSEMBLY UNLESS OTHERWISE INDICATION.
- 9. PLUMBING FIXTURES (VITREOUS CHINA & SOLID SURFACE) SHALL BE WHITE IN COLOR UNLESS OTHERWISE INDICATED.

OPENING / SLEEVE SCHEDULE								
INSULATED DOMESTIC COLD WATER, HOT WATER, AND HOT WATER RECIRCULATION PIPING			UNINSULATED SANITARY,	UNINSULATED SANITARY, WASTE, VENT, STORM, AND GAS PIPING				
PIPE DIAMETER	WALL / FLOOR SLEEVE DIAMETER	BEAM OPENING DIAMETER	PIPE DIAMETER	WALL / FLOOR SLEEVE DIAMETER	BEAM OPENING DIAMETER			
1/2" & 3/4"	3"	4"	11/2"	3"	3"			
1"	4"	4½"	2"	4"	3½"			
11/4"	4"	5"	21/2"	4"	4"			
11/2"	4"	5"	3"	5"	4½"			
2" & 21/2"	5 "	6"	4"	6"	5½"			
3"	6"	61/2"	5"	8"	6½"			
4"	8"	71/2"	6"	8"	7½"			
5"	8"	8½"	8"	10"	91/2"			
6"	10"	9½"	10"	12"	11½"			
			12"	15"	131⁄2"			
			15"	18"	161⁄2"			

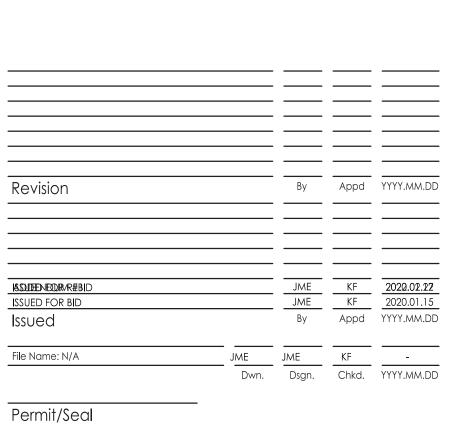


Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant





Client/Project Logo



Client/Project NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

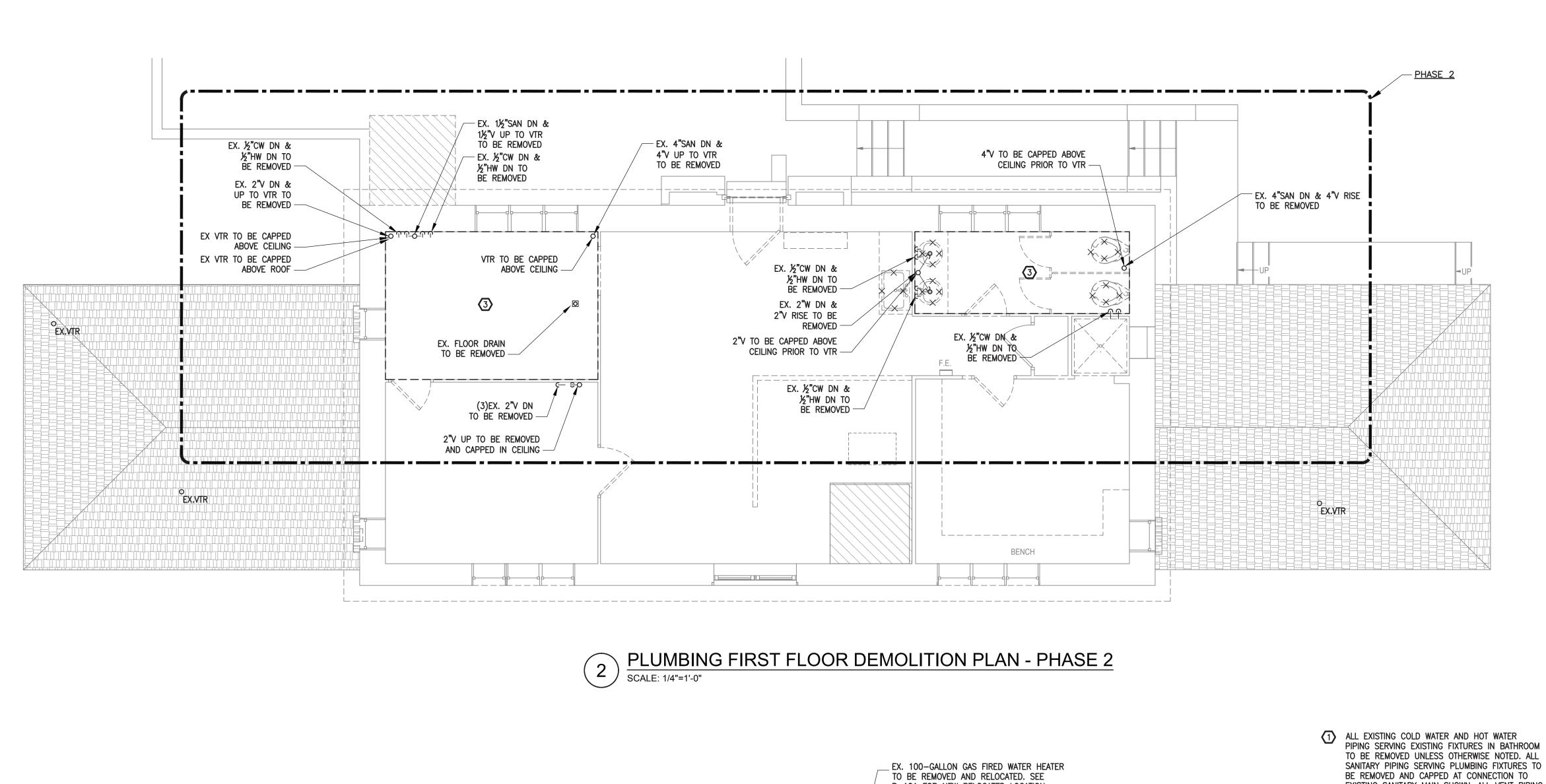
491 5TH AVE, NEW ROCHELLE, NY 10801

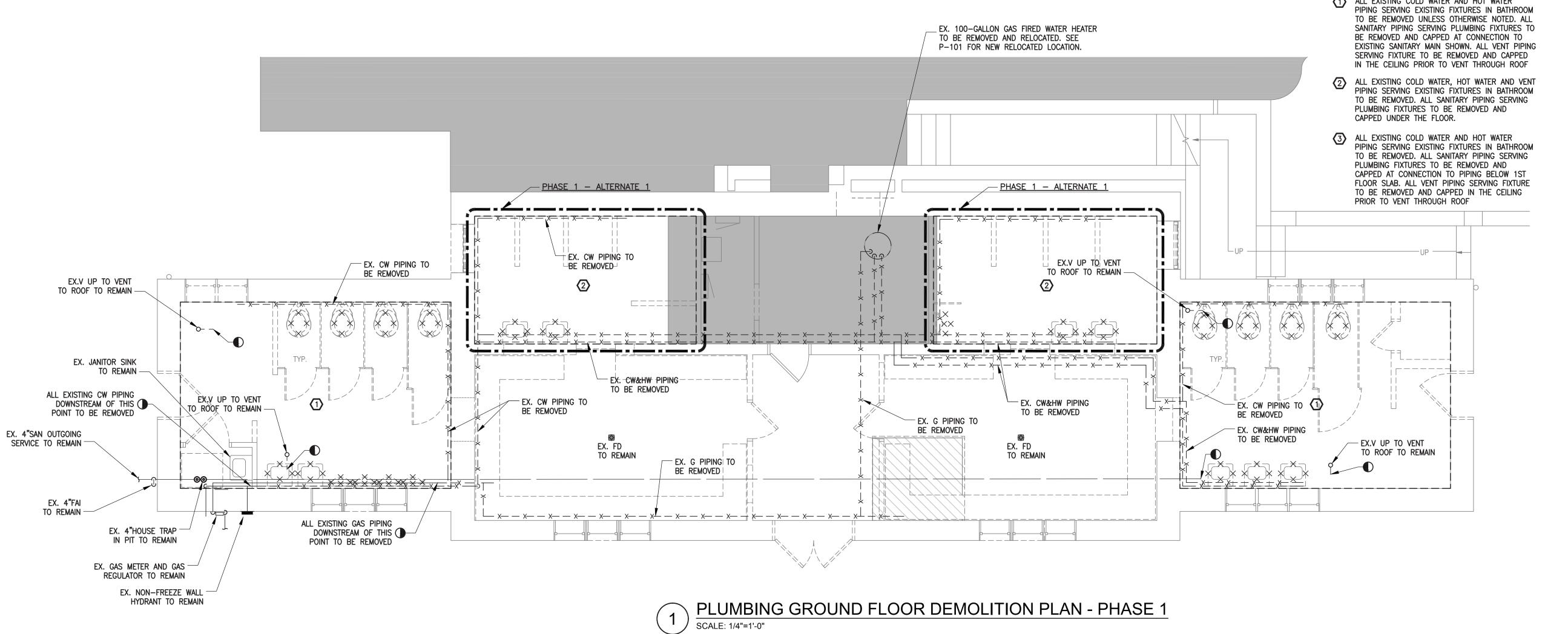
PLUMBING SCHEDULES

Project No. 191506465

Revision

Scale NONE Drawing No.





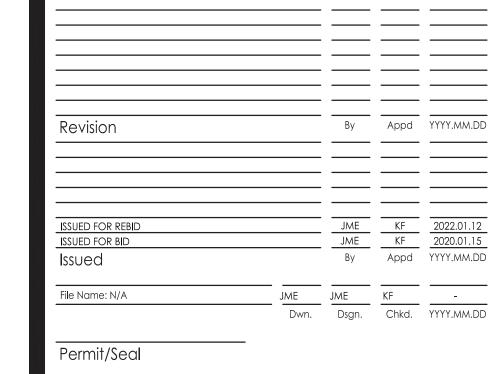


Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant



LICEN MER

Client/Project Logo



Client/Project
NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

PLUMBING GROUND & FIRST FLOOR DEMOLITION PLANS

Project No. 191506465

Revision

Scale
AS NOTED

Drawing No.

PD_101

PROVIDE %"CW CONN WITH VALVE, SHOCK ABSORBER, & FILTER (MOD# AP200 MB AQUA-PURE) TO REFRIGERATOR. PROVIDE - <u>PHASE 2</u> 8 FT COIL OF SOFT COPPER TUBING. NEW 11/4"CW DN NEW 1½"V TO CONNECT WC O - NEW ¾"CW EXISTING SHINGLES REF & ¾"HW DN SHALL REMAIN — ADA RESTROOM NEW 2"V2TO CONNECT TOSEXISTING VTR -NEW 2"V DN 🛛 🔻 NEW ¾"CW DN NEW 2"V DN — OFFICE 204 125 SF ¾"HW DN 2"W DN 1½"V RISE EX.VTR EX.VTR -EXISTING SHINGLES SHALL REMAIN PLUMBING FIRST FLOOR PLAN - PHASE 2 - PHASE 2 PLUMBING WORK ON THIS LEVEL IS PHASE 1 - BASE BID, UNLESS OTHERWISE NOTED. SAN PIPING TO BE RUN IN CEILING SOFFIT. COORIDNATE WITH ARCHITECT DRAWINGS. - CW, HW & SAN PIPING TO BE RUN | NEW 34"CW, 34"HW NEW 4"SAN UP IN CEILING SOFFIT. COORIDNATE & 2"W UP NEW 11/4"CW UP WITH ARCHITECT DRAWINGS. NEW 2"V UP − NEW ¾"CW - CW PIPING TO BE RUN ALONG & 34"HW UP/ WALL BELOW WINDOW TO WC NEW ¾"CW & NEW 1¼"CW DROP — NEW 1¼"CW ¾"HW DROP -– NEW | ¾"¢W & NEW 11/4"CW √ NEW 1¼"CW NEW HOT WATER DROP ¾"HW DROP DROP RECIRCULATION PUMP **EXISTING RELOCATED** GAS WATER HEATER NEW 34"G TO WATER CW, HW, HWR, VENT & GAS HEATER (75 CFH) PIPING TO BE RUN IN - NEW ½"CW DROP NEW 2"V UP CEILING SOFFIT. COORIDNATE NEW ¾"G TO HVAC HVAC WITH ARCHITECT DRAWINGS.-UNIT (27.5 CFH) -TO ICE MACHINE HW AND HWR PIPING TO RUN IN CEILING SOFFIT. COORDINATE 2"CW TO DROP WITH ARCHITECT DRAWINGS - ot BELOW WINDOW AND NEW 4"SAN DN - NEW ½"CW DROP 2"V TO DROP BELOW - NEW ¾"CW & RUN ALONG WALL TO TRAP PRIMER 2"CW WINDOW AND RUN ALONG TO WC'S ¾"HW DROP 3"FD-1 1¼"HW 1¼"HW WALL TO LAV'S -NEW 3"V DN — 2"V TO DROP BELOW WINDOW AND RUN ALONGOOM ¾"HWR — ¾"HWR − 94 SF 34"HWR-NEW ¾"CW&HW WALL TO LAVIS — EX. FD DROP TO JC — 1"CW&1"HW TO DROP 1"CW&HW BELOW WINDOW AND RUN EX. FD ¾"HWR-EX. 4"SAN OUTGOING 2"V RISE SERVICE TO REMAIN 34"CW DROP ¾"HW DROP FOR JS 111 25 SF EX. 4"FAI TO REMAIN --NEW ½"CW DROP └ CW,V&GAS PIPING TO BE RUN NEW ¾"CW DROP 1½"W DN IN CEILING SOFFIT. COORIDNATE EX. 4"HOUSE TRAP ¾"HW DROP NEW ¾"CW DROP WITH ARCHITECT DRAWINGS. 1½"V RISE IN PIT TO REMAIN 2"W DN ¾"HW DROP 1"CW&1"HW TO DROP — CW, HW & HWR PIPING - CW&HW PIPING TO BE RUN 1½"V RISE 2"SAN DN BELOW WINDOW AND RUN TO BE RUN IN CEILING ALONG WALL TO LAVS - CW, HW & VENT PIPING TO 1½"V RISE — SOFFIT. COORIDNATE WITH ALONG WALL TO LAV'S - NEW ¾"CW DROP BE RUN ALONG WALL TO LAVS ARCHITECT DRAWINGS. -VENT PIPING TO BE RUN NEW ¾"CW DROP ¾"HW DROP ALONG WALL TO LAVS -2"SAN DN ¾"HW DROP 1½"V RISE 2"SAN DN PLUMBING GROUND FLOOR PLAN - PHASE 1 1½"V RISE — SCALE: 1/4 "=1'-0" ORIGINAL SHEET - ARCH D



Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

Revision

By Appd YYYY.MM.DD

ISSUED FOR REBID
ISSUED FOR BID
ISSU

Permit/Seal



Client/Project Logo



Client/Project
NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

PLUMBING GROUND & FIRST FLOOR PLANS

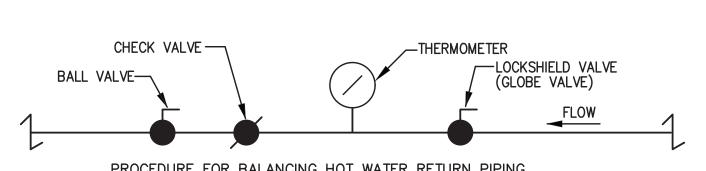
Project No. 191506465 Revision

AS NOTED

Drawing No.

Scale

P-101



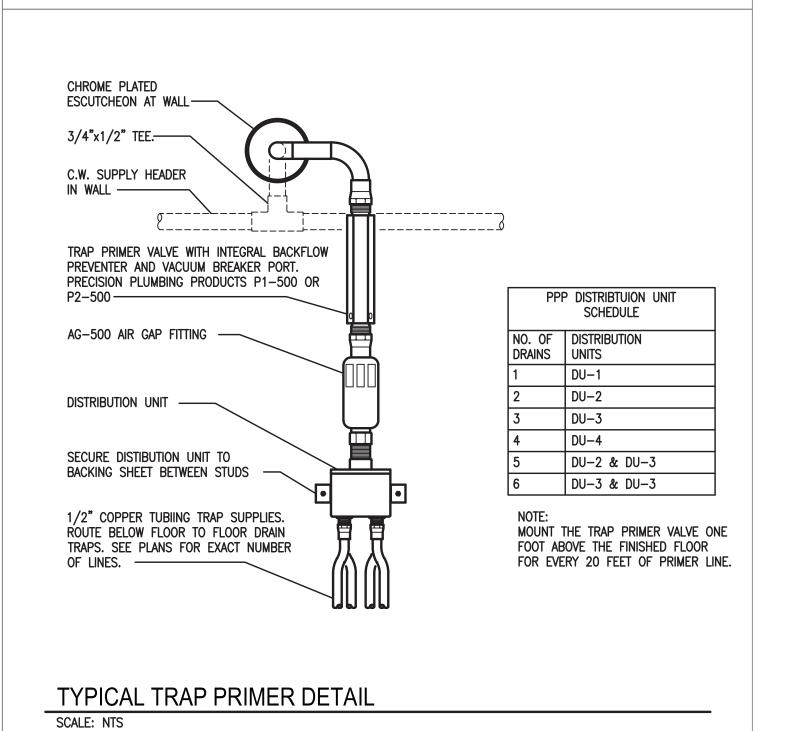
PROCEDURE FOR BALANCING HOT WATER RETURN PIPING

1. IN ORDER TO BALANCE HOT WATER RETURN TEMPERATURES IN THE RETURN PIPING THIS IS THE PROCEDURE TO BE FOLLOWED: BEFORE A RETURN CIRCULATION SYSTEM IS PUT INTO SERVICE, IT SHOULD BE ADJUSTED FOR RETURN LINE TEMPERATURE BALANCE UNDER CONDI— TIONS WHEREBY NO WATER IS DRAWN AT FIXTURE OUTLETS. THE ADJUST-MENT PROCEDURE IS SIMPLE AND MAY BE ACCURATELY DONE USING THER-MOMETERS. FIRST, CLOSE ALL BALANCING VALVES SO THAT ALL CIRCULA-TION GOES THROUGH BRANCH 1. THEN, OPEN THE BALANCING VALVE ON BRANCH 2 TO THE DEGREE NECESSARY SO THAT IT RETURNS WATER CON-STANTLY AT THE SAME TEMPERATURE AS BRANCH 1. SIMILARLY, ADJUST-MENT MAY BE MADE WITH BALANCING VALVE ON ANY OTHER RISERS OR BRANCHES SO THAT ALL RETURN WATER IS AT THE SAME TEMPERATURE.

2. CONTRACTOR, AT THE END OF THE PROJECT, TO SUBMIT A REPORT FOR RECORD TO THE ENGINEER THAT THE HOT WATER RETURN CIRCULATION SYSTEM HAS BEEN BALANCED PROPERLY.

HOT WATER CIRCULATING LINE BALANCING VALVE ASSEMBLY DETAIL

SCALE: NTS



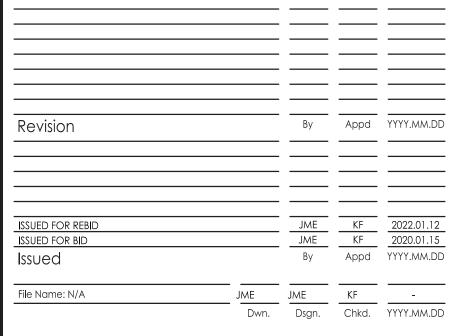


Stantec Consulting Services Inc. 135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant



Permit/Seal



Client/Project Logo



Client/Project NEW ROCHELLE

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE, NEW ROCHELLE, NY 10801

PLUMBING DETAILS

Project No. 191506465

Revision

NONE

Scale

Drawing No.
P-401

- C. THE ARCHITECT'S SPECIFICATIONS AS APPLICABLE ARE PART OF THIS CONTRACT.
- D. THE CONTRACTOR IS ADVISED TO CLOSELY COORDINATE HIS WORK WITH THE BUILDING ENGINEER, SO THAT THE 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. CONTRACTOR SHALL NOT INTERRUPT THE SERVICES WITHOUT EXPRESS WRITTEN PERMISSION OF THE

1.02 <u>VERIFYING CONDITIONS</u>

- A. EXAMINE ALL DRAWINGS COVERING THE WORK OF THIS SECTION AND REFER TO ALL OTHER DRAWINGS, INCLUDING ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS, WHICH MAY AFFECT THE WORK OF THIS SECTION OR REQUIRE COORDINATION BY SAME.
- B. BEFORE STARTING ANY WORK, EXAMINE EXISTING CONDITIONS, AND THOROUGHLY CHECK DRAWINGS, DIMENSIONS, SPECIFICATIONS, AND ADJOINING OR UNDERLYING CONDITIONS IN WHICH THE WORK OF THIS SECTION IS TO BE PERFORMED.
- 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 CONSTRUED 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 DESCRIBE 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.

1.03 AS-BUILT DRAWINGS

A. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF RECORD "AS-BUILT" DRAWINGS INDICATING THE PRECISE LOCATION OF ALL SYSTEMS, EQUIPMENT, CONCEALED OR EMBEDDED PIPING, EXPOSED PIPING, PIPING CONNECTIONS, AND ACCESS PANELS/DOORS. THESE DRAWINGS SHALL INCLUDE ALL CHANGES AND DEVIATIONS FROM CONSTRUCTION DOCUMENTS. THESE DOCUMENT SHALL ALSO BE PROVIDED TO THE OWNER IN AN APPROVED AUTOCAD FORMAT.

1.04 <u>TESTS</u>

A. THE PLUMBING SYSTEMS SHALL BE INSPECTED AND TESTED IN ACCORDANCE WITH REQUIREMENTS OF THE NEW YORK STATE BUILDING CODE.

1.05 <u>CLEANING</u>

- A. ALL PIPING, FIXTURES, EQUIPMENT, ETC., INSTALLED UNDER THIS CONTRACT SHALL BE THOROUGHLY CLEANED AND PROTECTED DURING CONSTRUCTION AND PUT INTO FIRST-CLASS OPERATING CONDITION BEFORE BEING OFFERED FOR ACCEPTANCE.
- B. UPON COMPLETION OF ALL WORK, THE PLUMBING CONTRACTOR SHALL THOROUGHLY CLEAN ALL PLUMBING FIXTURES, SINKS AND TRIM AND LEAVE ALL ITEMS READY FOR USE BY THE OWNER, ALL FLOOR DRAINS SHALL BE CLEANED AND MANUFACTURERS PROTECTIVE COVERINGS SHALL BE REMOVED.

1.06 LAWS, ORDINANCES, ETC.

A. THE WORK OF THIS CONTRACTOR MUST COMPLY WITH ALL LOCAL LAWS, ORDINANCES AND RULES. THIS CONTRACTOR MUST HAVE THE NECESSARY INSPECTIONS MADE BY THESE AUTHORITIES, PAY ALL THE REQUIRED FEES, AND FURNISH THE OWNER WITH CERTIFICATES OF APPROVAL BEFORE FINAL PAYMENT ON THIS CONTRACT IS MADE. HE SHALL APPLY, PAY FOR, AND OBTAIN ALL PERMITS.

1.07 <u>SUPERVISION</u>

A. THIS CONTRACTOR SHALL HAVE A COMPETENT FOREMAN IN RESPONSIBLE CHARGE OF THE WORK WHO SHALL BE ON THE SITE DURING THE INSTALLATION OF THE MATERIAL FURNISHED UNDER THIS SPECIFICATION UNTIL SAME HAS BEEN PUT IN COMPLETE OPERATIVE CONDITION AND ACCEPTED BY THE OWNER.

1.08 <u>CUTTING AND PATCHING</u>

A. THIS CONTRACTOR SHALL DO ALL CUTTING AND PATCHING FOR PLUMBING WORK AND SHALL COORDINATE SAME WITH ALL OTHER TRADES. ALL CUTTING SHALL BE SUBJECT TO TRADE REGULATIONS. NO CUTTING OF STRUCTURAL MEMBERS SHALL BE DONE WITHOUT THE APPROVAL OF THE ARCHITECT.

PART 2 - MATERIAL

2.01 GENERAL

- A. THE PLUMBING SYSTEMS SHALL BE COMPLETE WITH ALL PIPES, FITTINGS, TRAPS, SUPPLIES, VALVES, HANGERS AND SUPPORTS, INSULATION, ETC. AND ALL OTHER ITEMS NECESSARY FOR COMPLETE, SATISFACTORY OPERATING AND APPROVED TYPE SYSTEM.
- B. ALL PIPE FITTINGS, VALVES, FIXTURES, HANGERS, SUPPORTS, INSULATION, ETC. SHALL CONFORM TO THE REQUIREMENTS OF THE NEW YORK STATE BUILDING CODE.

2.02 SOIL, WASTE, AND VENT PIPE AND FITTINGS

- A. ALL ABOVE GROUND SOIL, WASTE, AND VENT PIPING SHALL BE "NO-HUB" CAST IRON PIPE AND FITTINGS EXCEPT AS NOTED OTHERWISE.
- B. ALL JOINTS AND CONNECTIONS SHALL BE ASSEMBLED BY MEANS OF SEALING SLEEVES AND STAINLESS STEEL CLAMPS AND SHIELD ASSEMBLIES.
- C. PIPE AND FITTINGS SHALL BE CENTRAL FOUNDRY COMPANY, TYLER PIPE COMPANY, EAST PENN FOUNDRY OR APPROVED EQUAL.

2.03 <u>EJECTOR PUMP DISCHARGE PIPE AND FITTINGS</u>

A. ALL EJECTOR PUMP DISCHARGE PIPING SHALL BE TYPE COPPER TUBING HARD TEMPERED WITH DWV DRAINAGE FITTINGS AND 95/5 TIN/ANTIMONY SOLDERED JOINTS.

2.04 <u>COLD WATER AND HOT WATER PIPE AND FITTINGS</u>

- A. DOMESTIC COLD WATER, HOT WATER AND HOT WATER CIRCULATION PIPE SHALL BE TYPE "L", HARD DRAWN, COPPER TUBING WITH WROUGHT BRONZE FITTINGS FOR 150 POUND WATER WORKING PRESSURE AND WITH JOINTS OF 95-5 (TIN-ANTIMONY) SOLDER. NO SOLDER CONTAINING LEAD IS PERMITTED.
- B. ALL SUPPLIES THROUGH WALLS TO FIXTURES SHALL BE 85% RED BRASS WITH THREADED BRASS FITTINGS. ALL EXPOSED PIPING IN FINISHED SPACES SHALL BE CHROME PLATED 85% RED BRASS.

2.05 HANGERS AND SUPPORTS

- A. FURNISH ALL NECESSARY HANGERS, SUPPORTS, INSERTS, CLAMPS, ETC. AS REQUIRED, ALL HANGERS AND SUPPORTS SHALL BE OF HEAVY CONSTRUCTION AND SUITABLE FOR THE SIZE OF PIPE TO BE SUPPORTED. ALL INSERTS AND HANGERS SHALL BE INSTALLED TO CLEAR WORK OF OTHER TRADES.
- C. WHERE PIPES ARE TO BE INSULATED, THE HANGERS SHALL BE OF AMPLE SIZE TO PROVIDE FOR THE COVERING SPECIFIED AND BE PROVIDED WITH GALVANIZED STEEL INSULATION SHIELDS.
- D. ALL HANGERS, RODS, BEAM CLAMPS, ETC. SHALL BE SHOP ZINC COATED.
- E. ALL HORIZONTAL COPPER TUBING SHALL BE SUPPORTED BY HANGERS NOT OVER SIX (6) FEET APART FOR PIPING 1-1/4 INCH AND SMALLER AND NOT OVER TEN (10) FEET APART FOR PIPING 1-1/2 INCH AND LARGER. ALL BRANCHES SHALL HAVE SEPARATE HANGERS. HANGERS SHALL BE CLEVIS TYPE WITH COPPER BOTTOM SUPPORT. IF CHANNEL OR ANGLE IRON TRAPEZE HANGERS ARE USED. THE SPACE ON HANGERS FOR THE COPPER TUBING SHALL BE WRAPPED WITH LEAD SHIELDS TO ISOLATE TUBING.
- F. IN AREAS OF STEEL CONSTRUCTION, PIPE HANGERS SHALL BE SUPPORTED BY BEAM CLAMPS. COORDINATE WITH ENGINEER FOR MAXIMUM LOADING. BEAM CLAMPS SHALL BE STEEL WITH BOLT, NUT AND SOCKET THREADED FOR ROD CONNECTION AND SHALL BE F & S MANUFACTURING COMPANY FIG. #45, CENTRAL IRON, GRINNELL COMPANY, OR APPROVED EQUAL.

2.06 <u>INSULATION</u>

A. COVER ALL COLD WATER, HOT WATER AND HOT WATER RECIRCULATION PIPE WITH MANVILLE MICRO-LOK AP-T PLUS FIBERGLASS INSULATION. INSULATION THICKNESS SHALL COMPLY COMPLY WITH THE TABLE C403.2.1 OF THE INTERNATIONAL ENERGY CONSERVATION CODE. FITTINGS AND VALVES SHALL BE INSULATED WITH MANVILLE ZESTON 2000 PVC INSULATED FITTING COVERS. INSTALL ALL INSULATION AS PER MANUFAC-TURERS RECOMMENDATIONS. ALL INSULATION MATERIAL SHALL COMPLY WITH NEW YORK STATE BUILDING CODE REQUIREMENT OF A FLAME SPREAD RATING NOT TO EXCEED 25 AND A SMOKE DEVELOPED RATING NOT TO EXCEED 50.

2.07 VALVES

A. STOP VALVES, EXCEPT FIXTURE STOPS, ON HOT AND COLD WATER LINES 2 IN. AND SMALLER SHALL BE FULL PORT 400 LB. NON-SHOCK BRONZE BALL VALVES, NIBCO T-595-Y FOR THREADED CONNECTIONS, AND NIBCO S-595-Y FOR COPPER TO COPPER, OR APPROVED OTHER.

2.08 DRAINS

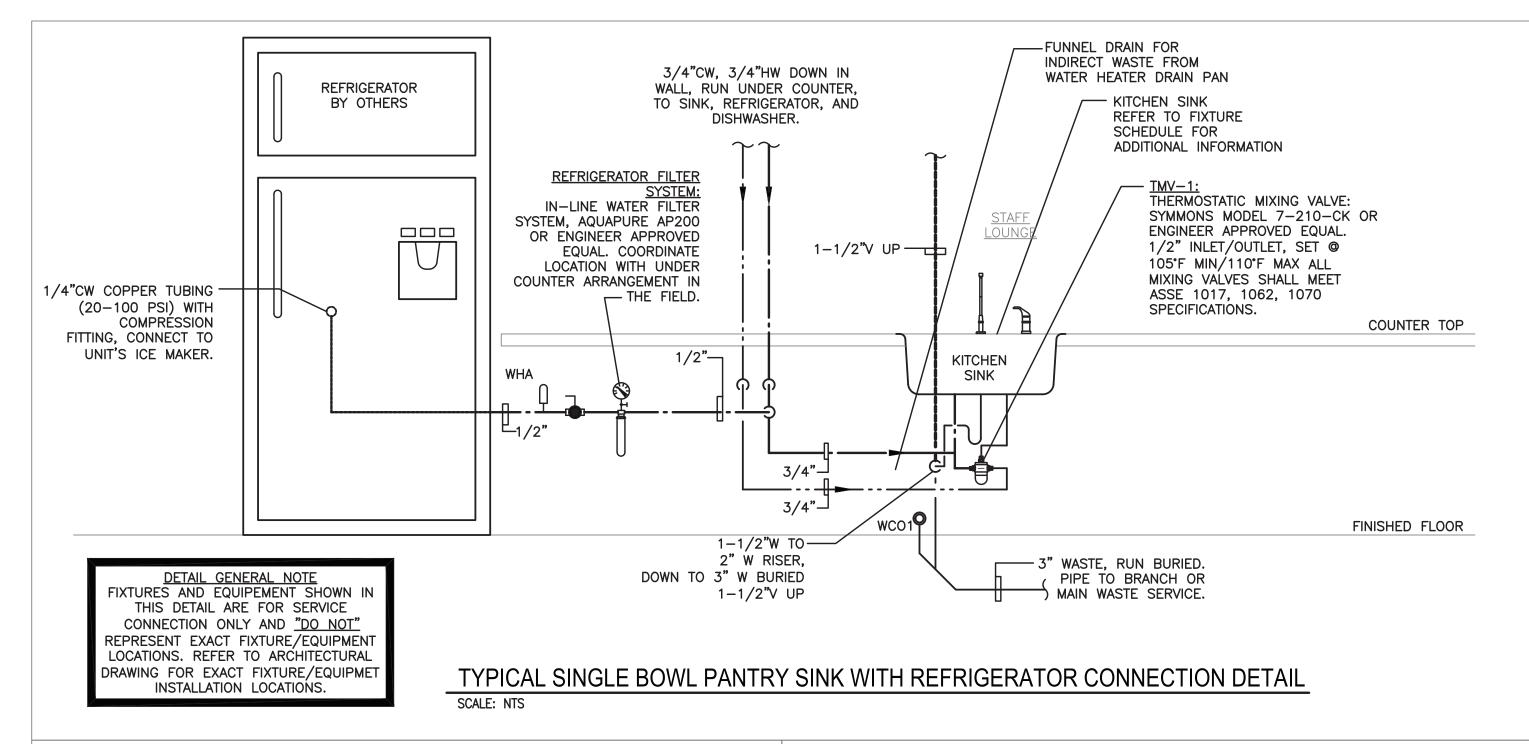
A. ALL DRAINS SHALL BE AS PER DRAIN SCHEDULE LOCATED ON COVER DRAWING.

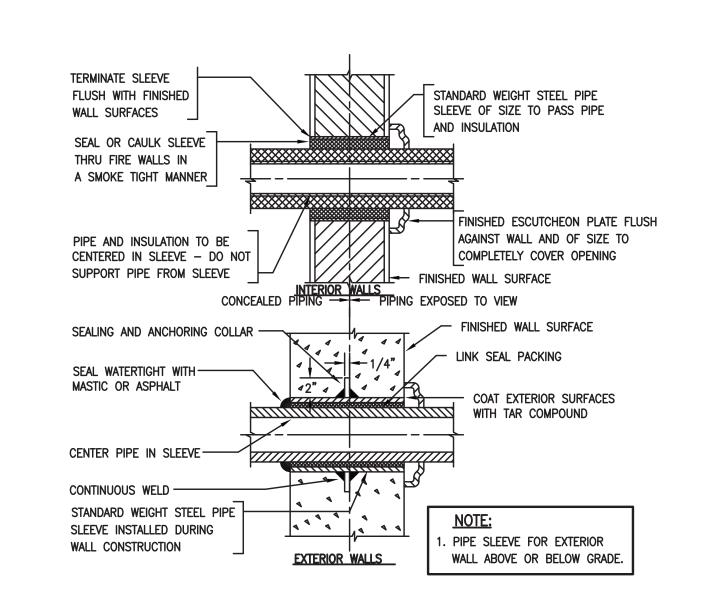
2.09 **GUARANTEE**

- A. THIS CONTRACTOR SHALL GUARANTEE FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE BY THE OWNERS, ALL MATERIALS, APPARATUS AND WORKMANSHIP WHETHER FURNISHED BY HIMSELF OR BY HIS SUBCONTRACTORS AND HE SHALL REPLACE OR REPAIR IN A MANNER APPROVED BY THE ARCHITECTS, WITHOUT COST TO THE OWNER, ANY PARTS OR PARTS OF THE WORK WHICH MAY PROVE DEFECTIVE OR UNSATISFACTORY WITHIN THE PERIOD OF THE GUARANTEE.
- B. WHERE SPECIAL GUARANTEES COVERING INSTALLATION, OPERATION OR PERFORMANCE OF ANY SYSTEMS OR APPLIANCES FURNISHED UNDER THIS CONTRACTOR ARE REQUIRED, THE FULL RESPONSIBILITY FOR THE FULFILLMENT OF SUCH GUARANTEES MUST BE ASSUMED BY THE CONTRACTOR, WHO SHALL OBTAIN WRITTEN GUARANTEES, IN TRIPLICATE, WHICH SHALL BE FILED WITH THE ARCHITECT BEFORE FINAL ACCEPTANCE.
- C. CONTRACTOR WILL BE RESPONSIBLE FOR ALL LEAKS IN ALL PIPES FOR A PERIOD OF ONE YEAR FROM THE DATE OF COMPLETION OF WORK UNDER THIS CONTRACT. CONTRACTOR SHALL REPAIR AT NO COST TO THE OWNER, ALL SUCH LEAKS WHICH OCCUR AFTER COMPLETION OF THIS CONTRACT UPON 24 HOURS NOTICE THEREOF BY THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR. LEAKS WHICH OCCUR PRIOR TO THE COMPLETION OF THIS CONTRACT SHALL BE REPAIRED AT ONCE. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED BY SUCH LEAKS AND THE REPAIR THEREOF AND WILL REIMBURSE THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR FOR ALL EXPENSE INCURRED THEREBY.

D. DISINFECTION

THE POTABLE WATER SYSTEM SHALL BE DISINFECTED PRIOR TO USE BY A METHOD OF DISINFECTION IN ACCORDANCE WITH THE NEW YORK STATE BUILDING

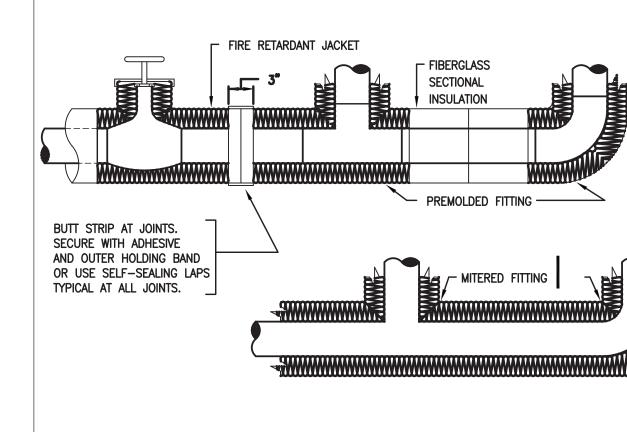




PIPE SLEEVES THRU WALL DETAIL

SCALE: NTS

SCALE: NTS



CONCEALED VALVES AND FITTINGS

· VAPOR SEAL COLD WATER, CHILLED WATER

REQUIRED PIPE INSULATION THICKNESS.

· SECURE WITH WIRE OR TAPE.

AND STORM WATER PIPING.

· WRAP WITH 1 INCH THICK, 1 POUND DENSITY TO

EXPOSED VALVES AND FITTINGS

SKIM COAT OF INSULATION CEMENT.

PIPE INSULATION.

COAT OF MASTIC

FINISH COAT OF MASTIC

PREMOLDED FIBERGLASS OR RADIAL MITERED

WRAP WITH FIBERGLASS REINFORCING CLOTH.

SEALING LAP.

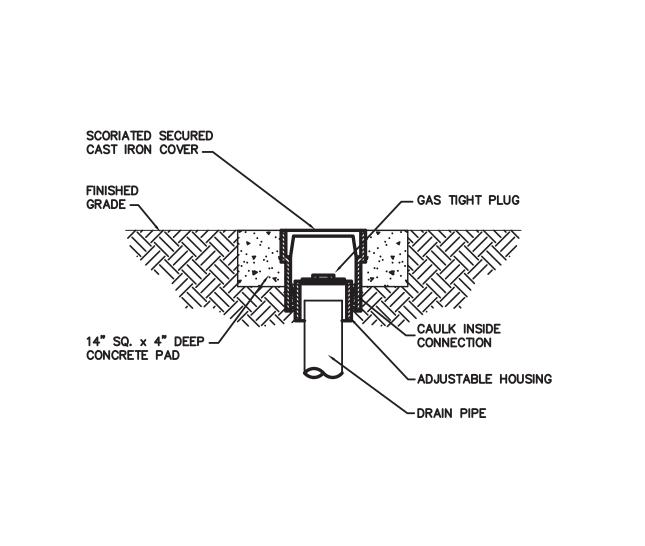
AT TOP.

SECURE WITH ADHESIVE

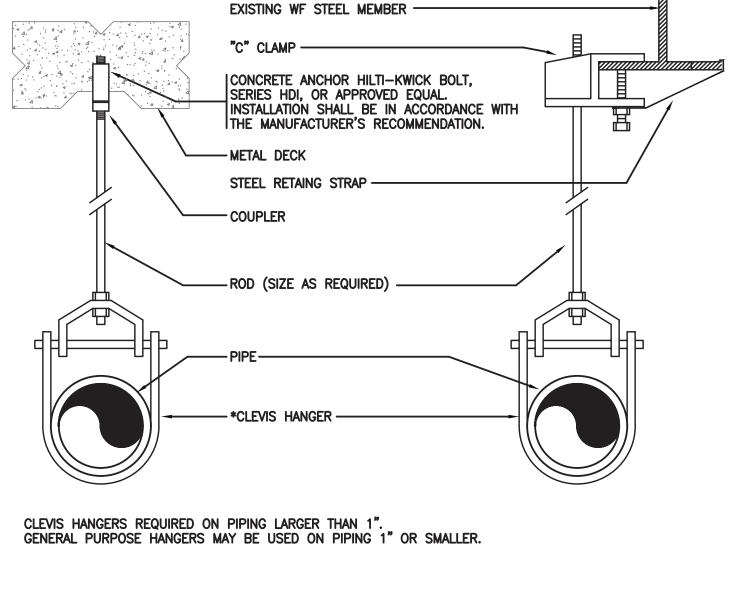
ALL SEALS AND LAPS

OVERLAP 2 INCHES ON PIPE INSULATION.

INSULATION OF PIPING, VALVES AND FITTINGS FOR EXPOSED AND CONCEALED LOCATIONS SCALE: NTS



CLEANOUT DECK PLATE SET IN CONCRETE DETAIL



TYPICAL HANGER DETAIL SCALE: NTS

191506465 Revision

Project No.

Stantec Consulting Services Inc.

135 Engineers Road Suite 200 Hauppauge, NY 11788-4018 Tel: (631) 424-8600 • www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultant

JME KF ISSUED FOR REBID ISSUED FOR BID ssued Appd YYYY.MM.DD JME JME KF File Name: N/A Dwn. Dsgn. Chkd. YYYY.MM.DD

Permit/Seal



Client/Project Logo



Client/Project **NEW ROCHELLE**

1923 BUILDING RENOVATION FLOWER PARK

491 5TH AVE. NEW ROCHELLE, NY 10801

PLUMBING DETAILS & SPECIFICATIONS

Scale NONE Drawing No.