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### **NOTICE TO ALL FIRMS**

Date: April 9, 2024

To: All Prospective Bidders

From: Sam Li

Interim Director of Procurement Services

Re: Addendum Number 1

IFB # C1624 – COED Residence Hall Horizontal Sanitary Line Replacement (10th Floor)

### **Note**

The bid package that was sent out on April 8, 2024 contained the wrong prevailing wage schedule, specification set, and drawings set. Please find the corrected bid package below.

THIS ADDENDUM IS PART OF THE CONTRACT DOCUMENT AND SHALL BE INCLUDED WITH YOUR REQUEST FOR PROPOSAL SUBMITTAL. YOUR SIGNATURE BELOW WARRANTS THAT YOU UNDERSTAND THIS ADDENDUM AND THAT YOU HAVE MADE THE APPRORIATE ADJUSTMENTS IN YOUR PROPOSAL AND CALCULATIONS.

Signature
Print Name and Title of Authorized Representative
Print Name of Company/Partnership/Individual
This rails of Company/ artifolomp/mai/rada
Date

### FASHION INSTITUTE OF TECHNOLOGY & F.I.T STUDENT HOUSING CORPORATION PROJECT COED RESIDENCE HALL HORIZONTAL SANITARY LINE REPLACEMENT (10th Floor)

**INVITATION FOR BID NUMBER C1624** 

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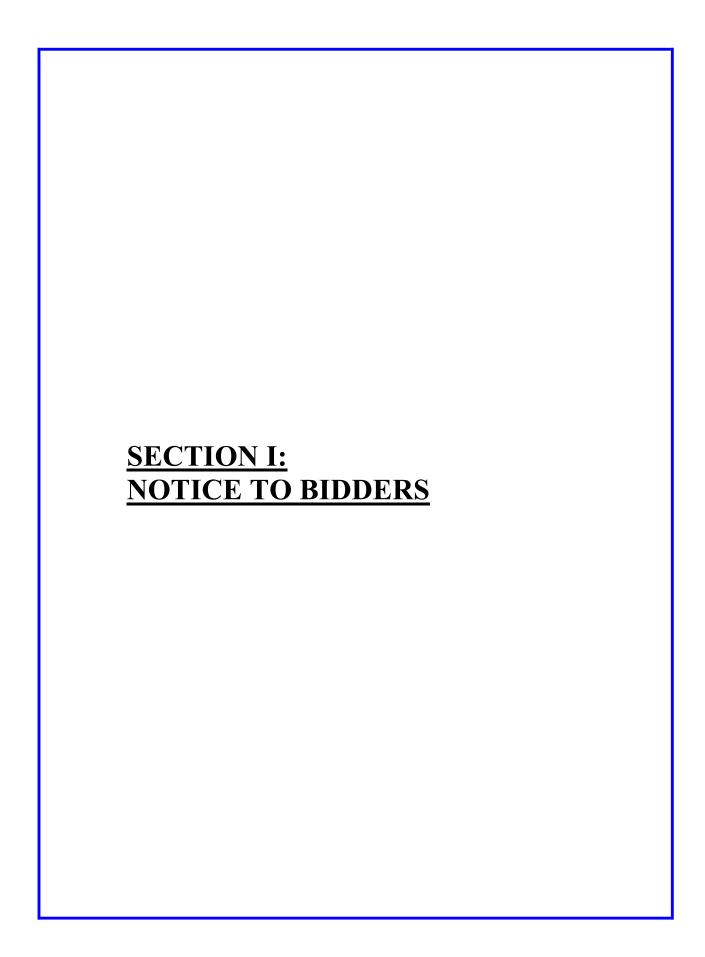
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### SECTION I: NOTICE TO BIDDERS

### FASHION INSTITUTE OF TECHNOLOGY & F.I.T STUDENT HOUSING CORPORATION PROJECT COED RESIDENCE HALL HORIZONTAL SANITARY LINE REPLACEMENT (10th Floor) INVITATION FOR BID NUMBER C1624

For the purposes of this project (the "Project") the Fashion Institute of Technology and its auxiliary dormitory organization, the F.I.T. Student Housing Corporation, shall hereinafter be collectively referred to as "FIT" unless otherwise distinguished herein. Neither the Fashion Institute of Technology nor F.I.T. Student Housing Corporation will be responsible for receipt of any Bid which does not comply with the instructions as set forth further in this document.

FIT is <u>ONLY</u> accepting electronic scanned bids for the subject project. You must email your bid to <u>purchasingbids@fitnyc.edu</u> in PDF format and it should include all the requested documents (See Attachment A – Bid Checklist) including a scanned image of your bid security (Certified Check of 2 percent or Bid Bond of 10 percent of your total bid price), we'll also need you to mail us the original copy of the bid security to have on file. The bid security must either be mailed to 227 W 27th Street, New York, NY 10001 or dropped off at 333 7th Avenue (16th Floor), New York, NY 10001. Bids must be received by **Wednesday, May 1, 2024, on or before 12:00 P.M**. All bidders will be notified of the bid results by the end of the bid due date. Bid results are not official until each package has been fully reviewed.

### ATTACHMENT A - BID CHECKLIST

## FASHION INSTITUTE OF TECHNOLOGY & F.I.T STUDENT HOUSING CORPORATION PROJECT COED RESIDENCE HALL HORIZONTAL SANITARY LINE REPLACEMENT (10th Floor) INVITATION FOR BID NUMBER C1624

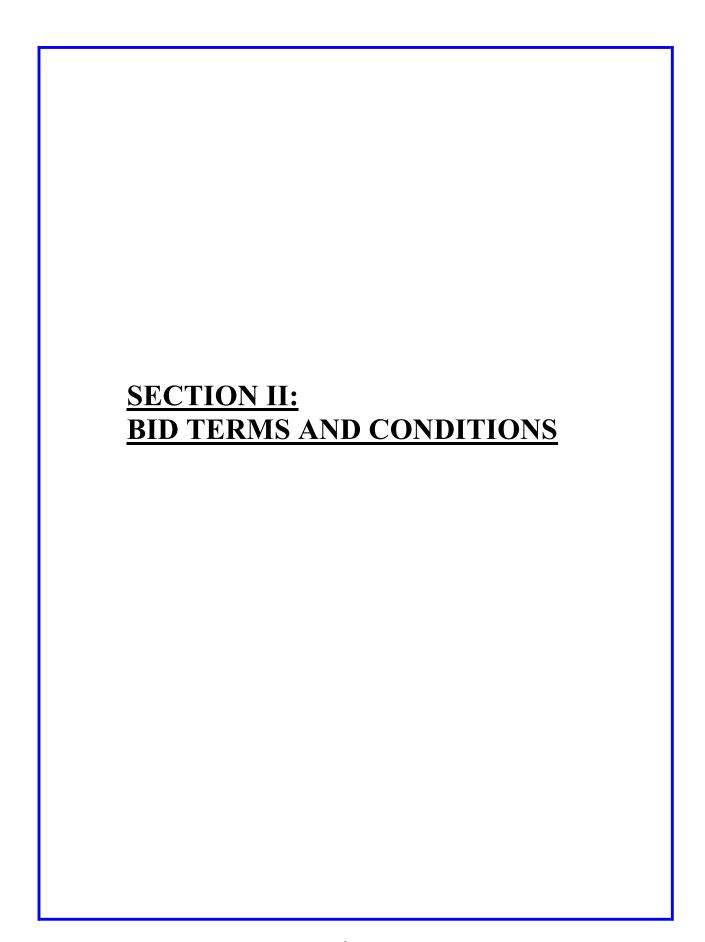
Bidder shall meet the following requirements and submit necessary information with the Bid. Failure to comply with these requirements shall be grounds for rejection of your Bid. Did you attend the **mandatory** site inspection? Did you include all required documentation? (As per Bidder Requirements – i.e. proof of being in business, permits, licenses, certifications, etc.) Did you include the Form of Bid? (See Section VIII.) Did you include the Non-Collusive Bidding Certification? (See Section IX.) Did you complete in full the Bid Analysis Form, (See Attachment C) Did you sign for each Addendum to this project, if any were published? (It is the contractor's responsibility to check FIT's "Current Bid Opportunities" webpage for addendums prior to submitting their bid.) https://www.fitnyc.edu/about/administration/finance/purchasing/current-bids.php Did you complete the Contractor Reference Sheet? Do not list FIT as your projects of similar size and scope. (See Attachment B) Can you provide the required levels of insurance coverage? See: General Conditions – Article 15 Did you include the Bid Security? Can the bidder provide references to at least three (3) different prior contracts that have been completed within the past five (5) years that are similar in size and scope to the project indicated for this Contract? Did you provide proof of years in business/date of incorporation? Sub-contracting percentage shall **not exceed 30%** of the project cost. Did you include an audited or reviewed financial report for the last two (2) years with your bid?

### <u>ATTACHMENT B - CONTRACTOR REFERENCE SHEET</u>

## FASHION INSTITUTE OF TECHNOLOGY & F.I.T STUDENT HOUSING CORPORATION PROJECT COED RESIDENCE HALL HORIZONTAL SANITARY LINE REPLACEMENT (10th Floor) INVITATION FOR BID NUMBER C1624

FIT requests a minimum of three references for <u>completed</u> projects of similar size and scope. Please complete the following information for each reference: (**Do not list FIT as your projects of similar size and scope.**)

Contact Name/Title:			
Company Name/Address:			
Phone Number:			
Project Name:			
D ' (C )			
Project Start/End Date:			
For FIT Use Only - Reference Respons			
Quality of Work: Cooperation:	Site Maintenance:		
Scheduling: Cooperation:	Safety Standards: _		
Permits:	Report Submittals:	Payn	nents:
Other Relevant Factors:			
Overall Performance Rating: Excellent	Satisfactory	Marginal	_Unsatisfactory
Contact Name/Title:			
Company Name/Address:			
Phone Number:			
Project Name:			
Project Cost:			
Project Start/End Date:			
For FIT Use Only – Reference Respons	es		
Quality of Work:			
Scheduling: Cooperation:	Safety Standards:		
Permits:	Report Submittals:	Payn	nents:
Other Relevant Factors:			
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Project Cost:			
Project Start/End Date:			
For FIT Use Only – Reference Respons	es		
Quality of Work: Scheduling: Cooperation:	Site Maintenance:		
Scheduling: Cooperation:	Safety Standards:		
Permits:	Report Submittals:	Payn	nents:
Other Relevant Factors:			
Overall Performance Rating: Excellent	Satisfactory	Marginal	Unsatisfactory_
FIT			
Interviewer: S	ignature:		Date:



### SECTION II. BID TERMS AND CONDITIONS

# SPECIFICATIONS FOR FASHION INSTITUTE OF TECHNOLOGY & F.I.T STUDENT HOUSING CORPORATION PROJECT COED RESIDENCE HALL HORIZONTAL SANITARY LINE REPLACEMENT (10th Floor) INVITATION FOR BID NUMBER C1624

### I. <u>INTRODUCTION</u>

The Fashion Institute of Technology, a community college of art and design, business and technology of the State University of New York, currently has an enrollment of approximately 10,000 full and part-time students. Located in the Chelsea area of Manhattan, FIT's facilities are composed of a twelve-building complex containing administrative/academic offices, classrooms, computer labs, and studios. There are three (3) residence halls located on West 27<sup>th</sup> Street that currently house approximately 1,250 students and one (1) residence hall located at 406 West 31st Street that houses approximately 1,100 students. F.I.T. Student Housing Corporation is a separate, not-for-profit corporation that was established pursuant to the laws of the State of New York to own and operate these residence halls for the benefit of the College and its students. For purposes of this project all references to FIT shall be recognized to refer to the Fashion Institute of Technology (hereafter, "FIT" or the "College") and the F.I.T. Student Housing Corporation together, unless specifically designated otherwise. The successful responsive and responsible bidder (hereinafter "Contractor") shall be required to enter into a contract with FIT based on the Contract Documents, (including Notice to Bidders, Bid Terms and Conditions, Contract Terms and Conditions, General Requirements, General Conditions, Labor & Material Payment Bond, Performance Bond, Form of Bid, Non-Collusive Bidding Certification, Substitution Form Request, Contract, Affirmative Action Form, Change Order, Form, Contractor's Trade Payment Breakdown, Safety EHS Plan, Prevailing Wage Schedule, Specifications, and Drawings), attached hereto and incorporated herein.

### II. SUMMARY OF SCOPE OF WORK

The Work of the Project is defined by the following Project Description herein below and by the Contract Documents.

<u>Project Description</u>: The project is located on the 10<sup>th</sup> floor of the Coed Residence Hall. It is the installation of new horizontal sanitary lines. Work scope includes demolition and of portions of the ceiling and installation of new. Portions of the closets inside of the dormitory rooms will require demolition and rebuilding. Existing lighting fixtures are to be removed, protected and reinstalled, as are smoke detectors. The new ceiling is to be painted. New piping is required to be connected to existing piping. Coring, drilling and firestopping is required. Any furniture in the dormitory rooms must be pushed to one side out of the line of work and protected throughout the project. Furniture may not be removed and stored outside of the room. When work is completed, all furniture to be put back in a similar location as found. No stacking of furniture is allowed when project is completed.

Provide labor, materials, tests, tools and equipment to complete the sanitary line replacement in Coed Hall. Contractor may begin procurement of materials and survey of existing conditions following award.

### III. <u>BIDDER REQUIREMENTS</u>

Bidder shall meet the following requirements and submit necessary information with the Bid. Failure to comply with these requirements shall be grounds for rejection of your Bid. FIT reserves the right to reject bids with incomplete information or bid security, or contain conditions not specified in the Bid Terms and Condition herein, or which are presented on a different form other than that provided to bidders. FIT reserves the right to determine whether a Bidder has substantially met all the Bid requirements and to ask for additional information prior to making such a determination.

- A. Bidder shall have been primarily a Plumbing Contractor with the ability to subcontract general construction. The Plumbing Contractor must be in business for a minimum of five (5) years as of the Bid Opening Date. Proof shall be submitted with the Bid.
- B. Bidder shall have satisfactorily performed work of the size, scope and nature to be performed under this Contract, as evidenced by references from at least three (3) different successfully completed contracts in an installation similar to those indicated for this Contract in the past five (5) years. Bidder shall include for each reference: project location, dollar value of contract; initiation and completion date, name, title, address and telephone number of contact person. References cannot be members of FIT staff or FIT consultants.
- C. <u>Bidder shall attend the mandatory pre-bid meeting and site inspection. Failure to comply with this requirement shall be grounds for rejection of the Bid.</u>
- D. Bidder is responsible for all necessary field measurements, all necessary data on the existing conditions and verification of all quantities and dimensions listed in the Project Specifications and Drawings, if applicable.
- E. By submitting a Bid, Bidder agrees that s/he has examined the Contract Documents, visited the site, noted all conditions and limitations affecting the Work, and fully understands the nature of the Work. Bidder is required to inform FIT in writing immediately of any instance where changed conditions are encountered.
- F. Bidder shall submit documentation of financial viability, including balance sheets and profit and loss statement for the prior two (2) years, with the Bid.
- G. Bidder, upon request, shall submit copies of current licenses and certifications applicable to the work, including, but not limited to, licenses issued by the Commissioner of Buildings of the City of New York. Proof of the following

certificates will also be required: 10 Hour OSHA Outreach Training Program; Asbestos Awareness Training, FDNY Certificate of Fitness, with the Bid.

### IV. APPROVAL OF SUBCONTRACTORS

Subcontracting shall be permitted <u>not to exceed 30%</u> of the work of the Project as determined by FIT. The ratio of the contractors and subcontractors work must be included with your bid submission. All subcontractors are required to gain prior written approval by FIT's Facilities Director. The General Contractor will be the Prime Contractor (hereinafter "Contractor) and shall not be permitted to Subcontract the following types of Services:

- EHS Plan
- Painters
- General Construction

The Contractor will require that the terms of this Contract apply to the sub-contractors and shall cause all sub-contractors to comply with the terms of this contract.

### V. <u>BID SECURITY</u>

Failure to provide Bid Security in the prescribed manner shall result in the rejection of the Bid.

Bidder shall provide Bid Security in the form of either a bid deposit or a bid bond, at Bidders option. The bid deposit shall be in the form of a certified check made payable to "Fashion Institute of Technology" in an amount no less than two percent (2%) of the total bid price. The bid bond shall be in an amount no less than ten percent (10%) of the total bid price.

### VI. PRE-BID SITE INSPECTION AND QUESTIONS

A mandatory Pre-Bid Site Inspection for prospective Bidders will be held on Friday, April 12, 2024 at 1:30 P.M. at the Fashion Institute of Technology, Feldman "C Building" Lobby, located at 227 West 27<sup>th</sup> Street (between 7<sup>th</sup> and 8<sup>th</sup> Avenue). We highly encourage the Bidder to invite their sub-contractors as this will be the one and only site visit prior to awarding the project Failure to attend shall be grounds for rejection of your Bid. Please also bring a business card.

Bidder shall examine the Bid documents carefully. Before bidding, Bidder shall make any requests for interpretation of Bid documents or clarification of any ambiguity therein that should have been detected by a reasonably prudent Bidder. Questions shall be submitted in writing to the attention of Purchasing Department via email: <a href="mailto:purchasingbids@fitnyc.edu">purchasingbids@fitnyc.edu</a>, no later than Monday April 22, 2024 on or before 3:00 P.M. Answers shall be provided in the form of and Addendum and be posted on the FIT purchasing department website. Reference Bid number C1624.

### VII. <u>BID DESIGNATION</u>

- A. FIT is <u>ONLY</u> accepting electronic scanned bids for the subject project. You must email your bid to <u>purchasingbids@fitnyc.edu</u> in PDF format and it should include all the requested documents (See Attachment A Bid Checklist) including a scanned image of your bid security (Certified Check of 2 percent or Bid Bond of 10 percent of your total bid price), we'll also need you to mail us the original copy of the bid security to have on file. The bid security must either be mailed to 227 W 27th Street, New York, NY 10001 or dropped off at 333 7th Avenue (16th Floor), New York, NY 10001. Bids must be received by **Wednesday May 1, 2024, on or before 12:00 P.M**. All bidders will be notified of the bid results within the hour. Bid results are not official until each package has been fully reviewed.
- B. Bids received late will not be considered.

### VIII. PREPARATION OF THE BIDS

- A. Bids must be submitted on the forms supplied by FIT in the Bidder's full legal name or the Bidder's full legal name plus a registered assumed name. All blank spaces for bid prices must be filled in, using both words and figures, words to take precedence over figures. Conditional bids shall not be accepted. Bids shall not contain any recapitulation of the Work to be done. Bidder exclusions shall be grounds for bid rejection. Do not modify the bid forms supplied by FIT
- B. Bids that are illegible or that contain omission, alterations, additions or items not called for in the bidding documents may be rejected as not responsive. Any bid which modifies, limits, or restricts all or any part of such bid, other than as expressly provided for in the Notice to Bidders, Bid Terms and Conditions, and Contract Terms and Conditions, may be rejected as not responsive.
- C. FIT may reject any bid not prepared and submitted in accordance with the provisions of the Notice to Bidders, Bid Terms and Conditions, and Contract Terms and Conditions. Neither FIT nor the FIT Student Housing Corporation will be responsible for receipt of any Bid which does not comply with these instructions. Only those Bids emailed to the FIT Purchasing Dept. inbox (<a href="mailto:purchasingbids@fitnyc.edu">purchasingbids@fitnyc.edu</a>) on or before Wednesday May 1, 2024, on or before 12:00 P.M will be considered.
- D. Any bid may be withdrawn prior to the scheduled time for the opening of bids or authorized postponement thereof and any bid received after such time and date shall not be considered.
- E. No Bidder may withdraw a bid within ninety (90) days after the actual date of the opening thereof.

### IX. AWARD OF CONTRACT

A. The award of the Contract shall be made to the Bidder submitting the lowest responsible bid if, in the opinion of FIT, the bid is responsive to the bid solicitation,

and such Bidder is responsible and qualified to perform the work involved in the sole discretion of FIT. The lowest bidder will be considered the contractor with the lowest bid for the base bid.

- B. FIT reserves the right to reject any bid or all bids, to waive any informalities or irregularities or omissions in any bid received.
- C. During the term of the Contract, the Contractor shall promptly notify FIT of any change in the ownership of the Contractor. Failure to notify FIT may result in termination of the Contract.
- D. FIT reserves the right, exercisable in its sole discretion, to cancel and withdraw from the Project at any time in advance of the award.
- E. Prior to the opening of the bids, Bidder shall promptly notify FIT of Change in ownership of the Bidder. Failure to notify with this bid shall be grounds for rejection of the Bid.

### X. <u>DAMAGES FOR FAILURE TO ENTER INTO CONTRACT</u>

The successful Bidder, upon failure or refusal to execute and deliver the Contract and bond required within ten (10) days after such Bidder has received notice of the acceptance of such bid, shall forfeit to FIT as damages for such failure or refusal, the security deposited with the Bid or the sum of the difference between the total bid of the successful Bidder and the total bid of the Bidder submitting the next lowest bid, whichever sum shall be higher.

### XI. PREVAILING WAGE

This contract is subject to New York State Labor Law 220, Article 8 Prevailing Wage Schedules. The Contractor shall submit with, each invoice, certified payrolls for all labor. Submission of a Certified Payroll with invoice in full compliance with labor laws is a condition of payment.

Contractor and its subcontractors shall pay at least the prevailing wage rate and pay or provided the prevailing supplements in accordance with the Labor Law.

A copy of the prevailing wage schedule, for New York County, can be found at the New York State Department of Labor website. (PRC# 2024004147)

### www.labor.ny.gov

Bidder must also comply with all applicable federal, state, and local laws rules, regulations, requirements, and codes, including but not limited to, the statues regulations, laws, rules and requirements specifically referenced in the documents annexed hereto.

### XII. M/WBE AND SDVOB

FIT encourages minority and women business enterprise participation in this project by contractors, subcontractors and suppliers, and all bidders are expected to cooperate with that commitment. Also, bidders are encouraged to use Service-Disabled Veteran-Owned Businesses (SDVOB). A directory of New York State Certified Minority and Women's Business Enterprises is available from: Empire State Development Corporation, Minority and Women's Business Development Division at: <a href="http://www.esd.ny.gov/mwbe.html">http://www.esd.ny.gov/mwbe.html</a> to assist potential bidders in locating sources of M/WBE subcontractors and reaching these goals. SDVOBs can be readily identified on the directory of certified businesses at: <a href="https://online.ogs.ny.gov/SDVOB/search.">https://online.ogs.ny.gov/SDVOB/search.</a>"

### XIII. MISCELLANEOUS

- A. FIT reserves the right to request clarifications from bidders for purposes of assuring a full understanding of responsiveness and further reserves the right to permit revisions from all bidders who might be, in FIT's sole discretion determined to be viable bidders for contract award, prior to the award.
- B. FIT reserves the right to reject separable portions of any offer, to negotiate terms and conditions consistent with the bid, and to make an award for any or all remaining portions.
- C. FIT reserves the right to eliminate mandatory requirements unmet by all bidders.
- D. Any additional vendor terms which are attached or referenced with a submission shall not be considered part of the bid or proposal, but shall be deemed included for informational purposes only.
- E. Unless otherwise specifically stated in the Bid Terms and Conditions, all specifications and requirements constitute minimum requirements. All bids must meet or exceed stated specifications and requirements.
- F. FIT reserves the right to make an award to the responsive and responsible bidder whose product or service meets the terms, conditions, and specifications of the Bid and whose bid is considered to best serve FIT's interest. In determining the responsiveness and responsibility of the bidder, FIT may consider the following factors, including but not limited to: the ability, capacity, and skill of the bidder to perform as required; whether the bidder can perform promptly, or within the time specified without delay or interference; the character, integrity, reputation, judgment, experience and efficiency of the bidder; the quality of past performance by the bidder; the previous and existing compliance by the bidder with relevant laws and regulations; the sufficiency of the bidder's financial resources; the availability, quality, and adaptability of the bidder to provide future maintenance, service, and parts.

CONTRACT TERMS AND CONDITIONS
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### SECTION III. CONTRACT TERMS AND CONDITIONS

### I. <u>COMPLIANCE REQUIREMENTS</u>

All work hereunder, including but not limited to material and installations, shall be in compliance with the Contract Documents including both specifications and drawings, as well as all applicable state and local building codes (such as the New York City Building Code) and the rules, regulations of governmental agencies and utility companies having jurisdiction over the work.

The following additional notes shall be considered as part of the officially filed drawings:

N/A

### THE WORK:

Unless modified by the Contract Documents, the work of each section of the specifications shall include all labor, materials, testing, tools and equipment necessary and reasonably incidental to removing old and installing new sanitary lines on the 10<sup>th</sup> floor of Coed Hall.

### **WORKMANSHIP:**

All work shall be performed by persons skilled in the work. Work shall be installed true to dimension, plumb and level with neat, accurate cutting and fitting of all materials in accordance with recognized standards of workmanship.

### **ON-SITE VERIFICATION:**

The Contractor shall verify all dimensions and site conditions prior to commencing the work. Dimensions may not be scaled from drawings. Should there be a discrepancy, Contractor is to notify FIT Facilities Director and Architect immediately for clarification.

### **COORDINATION OF THE WORK:**

The Contractor shall be responsible for the coordination of the work and the means and methods of construction and provide FIT with the resume of Contractor's project manager ("Project Manager"). FIT's Facilities Director shall approve the Project Manager and reserves the right to request a replacement Project Manager upon reasonable notice.

### **WORK HOURS:**

Regular work hours are from 7:00 am to 6:00 pm Monday through Saturday unless otherwise specified in the Contract Documents. Contractor will have reasonable access to the site in order to complete the work in the given time frame. Contractor shall comply with FIT's additional work rules related to such extended access. All labor costs required to meet this deadline are the sole responsibility of the Contractor and shall be included in the contract price. FIT reserves the right to put the work on hold on three (3) occasions during the course of construction for any length of time and for any reason.

### PERFORMANCE AND PAYMENT BONDS

In addition to the insurance and bond requirements specified in the General Conditions, Performance and Payment Bonds shall be required for the Work of this Contract.

- A. Concurrently with the delivery of the executed Contract, Contractor shall furnish to FIT and maintain, at its own cost and expense a Performance Bond in an amount at least equal to one hundred percent (100%) of the contract price as security for faithful performance of the Contract and also a Labor and Material Payment Bond in an amount at least equal to one hundred percent (100%) of the Contract price for the payment of all persons performing labor on the project under the contract or furnishing materials in connection with the Contract. The surety on such bonds shall be a surety company rated B+ or better by A.M. Best Company, shall be licensed to do business in the State of New York, and shall hold a certificate of authority as an acceptable surety on federal bonds or otherwise satisfactory to FIT.
- B. Attorneys-in-fact who sign said bonds on behalf of a surety must affix to each bond a certified and effectively dated copy of their power of appointment.

### **CONFLICTS, ERRORS AND OMISSIONS:**

- 1. The Contract Documents and typical details apply throughout the work unless noted otherwise.
- 2. In the event that certain features of the work are not fully shown on the drawings, Contractor must obtain clarification from the FIT Facilities Director and Architect through the use of an AIA Standard RFI form (copies can be obtained from the Architect) before proceeding with the work.
- 3. In the event of conflicts with the drawings and/or specifications, the Contractor must promptly notify the FIT Facilities Director and Architect. The Architect will determine which shall govern.

### MANUFACTURER'S PRODUCTS AND FABRICATIONS:

- 1. All manufacturers and fabricators printed warnings for handling of their products must be strictly observed.
- 2. All products and materials must be provided and installed in strict accordance with the requirements and recommendations of the manufacturer. In the event of conflict between the drawings or the specifications and the manufacturer's requirements and recommendations, Contractor must notify FIT Facilities Director and Architect to obtain clarification before proceeding with the work.
- 3. Contractor must verify all materials and manufactured items to be in conformance with applicable codes and regulations.

### **DELIVERY AND STORAGE OF MATERIALS:**

- 1. All materials shall be new and delivered to the site in original, unbroken containers.
- 2. All materials shall be inspected by the Contractor at time of delivery and Contractor shall reject material evidencing damage or other defects.
- 3. Contractor shall provide secure and environmentally compatible storage facilities for all materials in accordance with the recommendations of the manufacturer.

### **PROJECT SCHEDULE:**

- 1. Contractor shall attend a Project Initiation Conference, prior to the commencement of work at the site. Attending this Conference on behalf of the Contractor shall be an officer of the Contractor and the Project Manager assigned to the project. Contractor shall submit at this Conference a detailed timeline indicating the important milestones of the project and establishing an estimated date of substantial completion in accordance with Contract Documents. He/she shall also present all submittals required by the Contract Documents, such as Insurance Certificates, product tear sheets (not at the initial conference), copy of the General Liability insurance policy (amended to reflect required additional insureds), etc. Project access, storage locations, required crew size and other relevant issues shall also be addressed at this Conference.
- 2. Time is of the essence. Contractor shall be required to commence work of the Coed Hall Sanitary Line Replacement project within five (5) working days of receipt of a Notice to Proceed from FIT. The shop drawings process and ordering need to proceed first. All work on site may begin no sooner than Tuesday, May 28. 2024. Contractor must be demobilized and leave the job site on Saturday, July 27, 2024. Only close-out and administrative tasks may continue beyond the closing date. Unless otherwise specified, the work is to be performed solely between the hours of 7:00 A.M. to 6:00 P.M. Monday through Saturday, legal and union holidays excluded. All labor costs encountered to meet this deadline are the sole responsibility of the Contractor and shall be included in the Bid Price. FIT reserves the right, at no financial liability associated with the same, to put the Project work on hold on as many as three (3) separate occasions during the course of the Project for any length of time and for any reason.
- 3. On Monday of each week during the construction period, the Contractor shall email to FIT's Facility Director (or such other individual as FIT may designate at its sole discretion) a written report outlining the work completed during the preceding week and the work planned for the upcoming week. Included will be any unforeseen or anticipated problems regarding implementation of the work, in addition to Change Order requests, submission data, etc. Daily reports **MUST** be submitted to the CM and or the Facilities Department Designee.
- 4. Job meetings will be held at the site on dates to be determined by Architect and FIT. These meetings shall be attended by an officer of the Contractor, the Project Manager,

FIT's representative, and the Architect. The purpose of these meetings will be to review the status of the project, discuss any potential changes to the project scope, and resolve any problems relating to successful completion of the work.

5. Owner's meetings will be held weekly via zoom and in person when needed. The dates to be determined by the Architect and FIT. These meetings shall be attended by the Contractors Project Manager, FIT, and the Architect. The purpose of these meetings is to keep the Owners informed of the process and to discuss any issues relating to the successful completion of the work.

### 6. Project Schedule and Milestone Completion Dates:

- Friday, April 12, 2024: Pre-Bid Site Inspection
- Monday, April 22, 2024: GC Bid Questions due
- Wednesday, May 1, 2024: GC Bid Designation due
- Wednesday, May 8, 2024: FIT to award contract to GC
- Tuesday, May 28, 2024: GC may begin demolition and all other disruptive work on site
- Saturday, July 27, 2024: Final Completion & Demobilization

### **PAYMENT:**

In accordance with, and in addition to, the payment requirements of the Contract Documents, the Contractor shall provide sufficient and appropriate documentation for all invoices to FIT including submittal of invoices for actual cost of materials, labor rates, and certified payrolls. Filing of such payrolls shall comply with the New York State Labor Law and is a condition precedent to payment. FIT reserves the right to request additional information and/or documentation at any time.

Contractor is required to submit Monthly Contractor's Compliance Form (as attached in Section XII. Affirmative Action Form) with each Payment Requisition.

Contractor is required to submit a Certificate of Monthly Payment/Lien Waiver signed by each Sub-contractor with each Payment Requisition.

Contractor is required to submit Waste Management Form with each Payment Requisition.

### **LABOR HARMONY:**

- A. Contractor is advised that he/she must maintain labor harmony throughout the duration of the Contract. All labor disputes, slowdowns, strikes and/or sympathy actions will be the sole responsibility of the Contractor to resolve in order to maintain harmony.
- B. All costs, delays and scheduling impacts associated with any labor dispute that arises from such action or inaction will be borne by the Contractor.

- C. Contractor will also be responsible for all costs, damages and scheduling impacts which affect and disrupt any other workers on site as well as FIT employees.
- D. It will be the Contractor's responsibility to resolve all labor disputes immediately.

Contractor is further advised that FIT has a large union presence on the campus. All work performed by the Contractor must provide the required labor harmony to perform work without labor incident or dispute which can delay, obstruct or effect the work and project schedule, or interfere with FIT's ability to operate.

### II. GENERAL NOTES

In accordance with, and in addition to, the requirements of the Contract Documents:

- 1. All work listed on the construction notes and shown or implied on all drawings shall be supplied and installed by the Contractor unless otherwise noted on drawings and/or in specifications.
- 2. Contractor to determine coordination of trades.
- 3. Contractor shall verify all dimensions and conditions shown on drawings and shall notify FIT Facilities Director and Architect of any discrepancies, omissions, and/or conflicts before proceeding with the work.
- 4. Contractor must comply with the rules and regulations of agencies having jurisdiction and shall conform to all construction and safety codes, statutes and ordinances. All fees, taxes, permits and applications to be obtained through governmental agencies shall be the responsibility of the Contractor.
- 5. Contractor shall comply with the rules and regulations of the building as to hours of availability of loading docks and elevators for the purposes of delivery, waste removal and other needs related to the work. Coordination with FIT Facilities Department is required for the handling materials, movement in and out of building, equipment and debris to avoid conflict and interference with normal building operations.
- 6. All drawings and construction notes are complementary and what is called for by any will be binding as if called for by all.
- 7. Contractor shall maintain a current and complete set of construction documents on the construction site during all phases of construction.
- 8. Do not scale drawings; dimensions shown govern. Larger scale drawings shall govern over smaller scale.
- 9. Contractor shall maintain a current and complete set of shop drawings on the construction site.

- 10. Contractor shall maintain a current and complete RFI (Request for Information) log on the construction site.
- 11. Contractor shall submit for approval, prior to commencing work, a list of all sub-contractors to FIT's Facilities Director, with the name, address and phone number of the principal contact of each sub-contractor. In addition, he will file with the owner the emergency numbers available for 24-hour contact.
- 12. All work shall be performed by skilled and qualified workmen in accordance with the best practices of the trades involved and in compliance with building regulations and/or governmental laws, statutes, or ordinances.
- 13. All materials shall be new, unused and of professional quality, unless otherwise noted, installed as per manufacturer's recommendations and instructions.
- 14. For purposes of the Specifications and Drawings sections in the Contract, the use of the words "Supplied By" or "Provided" in connection with any item specified is intended to mean that such item shall be furnished, installed and connected where so required.
- 15. All approvals of submittals shall be for design intent only. Contractor shall be responsible for quantities, dimensions and compliance with Contract Documents and for information pertaining to fabrication processes or techniques of first-class construction and for coordination with other trades.
- 16. All work shall be erected and installed plumb, level, square, true and in proper alignment.
- 17. Contractor shall be responsible for cutting, patching and restoration required for this work.
- 18. If, during the course of construction, Contractor believes materials that might contain asbestos may be disturbed during performance of the work, Contractor shall immediately notify FIT of the area(s) of concern, and stop work if that area would be disturbed by the continuing work.
- 19. All correspondence to FIT shall be directed to the attention of the FIT Facilities Director with a copy of the same forwarded to the Architect.
- 20. Contractor shall at all times keep the premises free of accumulation of waste materials and rubbish; premises to be broom swept clean daily. At the completion of the work, Contractor shall leave the job site free of construction debris and materials, and "broom clean" including thorough cleaning of toilets, bathrooms, electrical closets, stairwells, and all areas of work or staging, etc.
- 21. Contractor shall provide all necessary protection against dirt and damage within the premises, as well as public areas, and shall be responsible for keeping these areas clean and free of materials at all times.

- 22. Contractor shall verify location of existing utilities and coordinate with location shown on drawings.
- 23. During construction, security and fire exit doors must remain unobstructed at all times.
- 24. Contractor shall take every precaution to properly protect all existing construction to remain. Contractor shall be responsible for all damaged areas to be returned to original condition.
- 25. Contractor shall schedule construction in such a manner so as not to disturb areas outside of the area under construction during normal operating hours. The Contractor shall coordinate with FIT Facilities Director minimum of 24 hours prior to any disruption of services to those areas not under construction even if such a disruption occurs during or after normal operating hours.
- 26. Contractor shall staff the project with a Project Manager with at least 5 years' experience in this type of project scope, with similar complexity and schedule requirements.
- 27. The acceptance of shop drawings containing deviations not specifically brought to the attention of FIT, or containing errors or omissions of any sort, shall not relieve Contractor of the responsibility for executing the Work in accordance with the Contract Documents and Contract Terms and Condition.

### III. <u>DEMOLITION NOTES</u>

In accordance with, and in addition to, the requirements of the Contract Documents. It shall be Contractor's responsibility to perform the following:

- 1. Prior to commencement of selective removals and demolition work, inspect the areas in which the work will be performed.
- 2. Any asbestos contaminated material will be removed by General Contractors' certified asbestos abatement contractor as defined in the scope of work.
- 3. Provide temporary barricades and other forms of protection required to protect all FIT personnel, inclusive of its faculty, staff and students as well as the general public from injury due to selective removals and demolition work.
- 4. Remove and dispose of exposed bolts, supports, brackets, cleats, grounds, and other items, that are no longer required for the purpose for which they were originally installed.
- 5. Where existing work is required to be removed and replaced but found to be defective in any way, it shall be reported to the FIT Facilities Director and Architect before it is disturbed.
- 6. All existing work damaged or lost as a result of performing the required new work, shall be patched, repaired or replaced with new, and finished to match the existing work, or as the individual case requires at the Contractor's expense.

- 7. Perform cutting, drilling and removals in a manner which will prevent damage to construction which is to remain.
- 8. Promptly repair any and all damages to all property and finishes caused by the removals and demolition work; to FIT's satisfaction and at no extra cost to FIT.
- 9. Cut, patch, paint and finish existing walls, ceiling and/or floor disturbed to match existing.
- 10. Perform patching around items penetrating existing construction in a manner that will maintain the water and fire resistive capability of existing construction. Should either of these be compromised, it is the responsibility of the Contractor to repair prior to completion.
- 11. Remove debris, rubbish and other materials resulting from the removals and demolitions from the building immediately; transport and legally dispose of materials off-site. Disposal method shall be in accordance with city, state and federal statues regulations, and ordinances.
- 12. Work of this section shall conform to all requirements of the New York City Building Code and all applicable regulations and guidelines of all governmental authorities having jurisdiction, including, but not limited to, Safety, Health and Anti-Pollution regulations.
- 13. Work is to conform to OSHA requirements.

### IV. ADDITIONAL CONTRACTOR'S RESPONSIBILITIES

In accordance with, and in addition to, the requirements of the Contract Documents:

- 1. Contractor shall coordinate all work with FIT Facilities Department and Director.
- 2. Contractor to provide daily crew manpower log/count to FIT.
- 3. Contractor shall perform work in a neat workmanlike manner in accordance with accepted industry standards.
- 4. FIT Facilities Department shall notify Contractor before commencing work which floors are accessible by Contractor.
- 5. Contractor shall mask all signs, window frames, door frames, etc. when painting around them.
- 6. <u>Employee Identification and Building Access</u>: All Managers and their crew must wear at all times company identification. All Managers and their crew must sign in and out, upon entering and leaving the facility, at the FIT front security desk.
- 7. After Bid opening, FIT will evaluate and review submissions and notify the

lowest Bidder, who is deemed most responsive and responsible. Within five (5) business days of such written notification, such Bidder shall submit the following information. Failure to comply with these requirements in whole or part shall constitute grounds for rejection of the Bid. FIT reserves the right to determine whether a Bidder has substantially met these requirements and to ask for additional information. Documentation of the following:

- a. Health and safety training program and procedures for employees and onsite EHS Coordinator.
- b. Copies of current licenses and certifications applicable to the Work, including but not limited to licenses issued by the Fire Department of New York, Department of Buildings of the City of New York, must be provided to FIT Facilities.
- 8. Contractor shall complete the attached Outline for Preparing Work-Specific Environment, Health and Safety Plan ("EHS Plan") which will be reviewed and approved by FIT's EHS Compliance Director prior to commencement of work. Contractor shall include the costs of completing the EHS Plan in the Bid price. Proof of the 10 Hour OSHA Outreach Training Program for Construction certificate will be required.
- 9. Contractor shall provide as described in the FIT Safety EHS Plan, legible copies of SDS sheets and estimates of anticipated amounts of chemicals Contractor intends to store on site to the FIT's Director of EHS Compliance for review and approval at least ten (10) days before Contractor allows on-site storage.
- 10. Contractor shall ensure that legible copies of all SDS are available at the location of chemical storage and available for review at all times. Contractor shall take all necessary precautions necessary to prevent vapors, fumes, or dust from leaving the work area. This includes but is not limited to the construction of negatively ventilated containments as controls.
- 11. Contractor shall provide as described in the FIT Safety EHS Plan a written statement of the types of project waste disposed, including the amounts and the name of the waste disposal facility for each type of waste disposed. Contractor shall provide the statement with each Payment Application. Contractor shall provide a separate copy of the statement to FIT's Director of EHS Compliance.
- 12. Contractor may not store Hazardous Waste on site at any time. Contractor may not generate or accumulate Hazardous Waste on site without the written approval of FIT's Director of EHS Compliance. Contractor shall obtain FIT's Director of EHS Compliance approval at least ten (10) days before the Contractor generates or accumulates Hazardous Waste on site beginning with demolition work.

- 13. Off-site shipments of Universal or Hazardous Waste. The Contractor may not allow the off-site removal of Universal or Hazardous Waste without the written approval of the FIT Director of EHS Compliance. Contractor will ensure that the FIT Director of EHS Compliance alone signs any shipping papers for the off-site removal of Universal or Hazardous Waste.
- 14. Contractor's personnel must report daily to the FIT Security area in the Lobby of Building "C", the Feldman Center before entering FIT's site. All Contractor's personnel must obtain temporary FIT identification that shall be displayed at all times while on the FIT site. While on FIT property, all Contractor's personnel shall be subject to all FIT campus policies and procedures, including, but not limited to, prohibitions related to tobacco, drug, and alcohol use, and policies and procedures regarding appropriate and civil conduct. Contractor's personnel shall not fraternize with FIT students and employees beyond what is necessary to complete their work or any assigned Projects. FIT policies may be found at <a href="https://www.fitnyc.edu/policies/">https://www.fitnyc.edu/policies/</a>. FIT reserves the right, in its sole determination, to eject from the campus, any Contractor personnel violating such policies, in addition to any other rights and remedies.

### V. PERMITS

Contractor shall be responsible for obtaining all required Permits and paying all costs and fees associated therewith. New York City Department of Buildings (DOB) Work Permit will be required for this project. Contractor will also be required to perform the following functions as it relates to this project:

- A. Contractor shall submit to FIT and Architect appropriate Workman's Compensation and New York State Disability insurance certificates for use in securing the required Work Permits to be posted at the site. The Contractor shall provide FIT's Facility Director with the appropriate insurance tracking numbers assigned to their firm by the NYC Department of Buildings.
- B. The Contractor shall submit to FIT and Architect a copy of all Licenses as issued by the NYC Department of Buildings.
- C. Permits for the work shall be posted by the Contractor in a conspicuous location at the site at all times. No work shall begin until the necessary DOB work permits have been obtained by the Contractor.
- D. The Contractor shall be responsible for obtaining any other governmental permits and approvals required to undertake the work, and shall pay any and all fees associated therewith, including but not limited to fees to the MTA for setting up a crane, if applicable.

### VI. PROJECT MANAGER

- 1. The Contractor shall provide the services of an experienced Project Manager, who shall be in continual responsible charge of the work and shall have a valid Certificate of Fitness by the New York City Department of Buildings.
- 2. The Project Manager shall be on site at all times, shall speak fluent English, shall maintain on the site a complete set of these specifications (including any addenda and/or change orders, as well as all project drawings and all applicable manufacturers' instruction sheets), and shall have full authorization to make all field changes as directed by FIT's Facility Director and Architect.
- 3. The Project Manager shall be required to maintain a daily log at the site indicating the following:
  - -the date
  - -the number of workers at the site on said date
  - -the specific portions and locations of the Work completed on said date
- 4. The Project Manager (or another authorized representative of the Contractor) shall telephone FIT's Facility Director at least once daily throughout the construction period, to report on the day's activities and the work planned for the following day.
- 5. The name of the Project Manager shall be submitted to FIT's Facility Director prior to initiation of the project. This Manager shall remain in charge of the project for its entire length, at FIT's discretion, unless said Manager no longer remains in the employ of the Contractor. In such case, a capable and experienced replacement shall be immediately assigned subject to approval by FIT's Facilities Director.
- 6. No telephone service is available at the site for use by the Contractor; therefore, the Contractor shall equip the Project Manager with a cellular telephone at the site for the duration of the Project. The Contractor shall provide FIT and Architect with the appropriate contact numbers at the initiation of the Project.

### VII. SUBMISSIONS AND SUBSTITUTIONS

- 1. All submissions called for in the Contract Documents shall be submitted at least twenty (20) working days prior to proposed initiation of any related work.
- 2. FIT and FIT's Architect and Engineer will review and accept or take other appropriate action regarding Contractor submittals such as Shop Drawings,

Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. FIT's review of all shop drawings submitted by the Contractor shall be for concept only and does not remove the Contractor's responsibility for insuring that all specific details of the installation shall be performed in such a way so as to achieve satisfactory results. Acceptance by FIT and the Architect of Contractor submittals does not relieve the Contractor from responsibility for errors which may exist in the submitted data.

- 3. Where the phrase "or approved equal" or "equal as approved by FIT" occurs in the Contract Documents, the Contractor may not assume that the materials, equipment, or methods will be approved as equal unless the item has been specifically approved by FIT and the Architect.
- 4. Any proposed substitute products or procedures are to be submitted to FIT's assigned Architect/Engineer for prior approval with any proposed price adjustments to the contract within 14 days of the signing of the agreement between FIT and the Contractor, so that FIT and the Architect are permitted adequate time for review.

### VIII. PROGRESS PAYMENTS

- 1. All submissions called for in the Contract Documents shall be submitted at least twenty (20) working days prior to proposed initiation of any related work.
- 2. Progress payments will be made to the Contractor based solely on actual work completed. Furthermore, payment will not be made for the purchase of materials, nor for their transfer onto the site, nor for any costs associated with mobilization.
- 3. Payment requests shall be submitted to FIT's Facilities Director on AIA Documents G702 and G703.
- 4. Payments will be authorized based upon FIT's field visits and review of work. All FIT's decisions regarding progress payments shall be final.
- 5. The values quoted on the bid form shall constitute the Schedule of Values for AIA Document G703. Additional breakdown of the bid form shall be provided on the Schedule of Values and will be used for progress payments.
- 6. No progress payments will be processed without submission by the Contractor of properly executed Affidavit of Payment and Release of Liens (AIA Documents G706 and G706A or equivalent forms as may be requested by FIT), up-to-date weekly written reports and timeline in bar chart form, and all submittals, certificates, permits, etc. required pursuant to the terms of the contract.
- 7. A 10% retainage shall be deducted from all progress payments made by FIT.

- 8. Payment requests shall be submitted to FIT not more than once per month.
- 9. Contractor shall provide sufficient and appropriate documentation for all invoices to FIT including submittal of invoices for actual cost of materials, labor rates and certified payrolls. Filing of such payrolls shall comply with the Labor Law and is a condition precedent to payment. FIT reserves the right to request additional information at any time. Contractor required to submit Monthly Contractor's Compliance Form with each Payment Requisition.
- 10. Contractor required to submit a Certificate of Monthly Payment signed by each Sub- contractor with each Payment Requisition.
- 11. Contractor shall be required to submit a detailed Trade Payment Breakdown.

### IX. <u>SITE VISITS BY ARCHITECT/ENGINEER</u>

- 1. Failure by Architect/Engineer to detect and/or notify the Contractor of any aspect of the Contractor's actions or materials that are not in conformance with the Contract Documents shall not remove the Contractor's responsibility to adhere to the Contract Documents in all instances, including but not limited to the Contractor's responsibility to expeditiously correct and/or replace all defective work.
- 2. Architect/Engineer will be the final judge as to whether the work is satisfactorily performed, and shall have the authority to order that any work deemed unacceptable or not in conformance with the Contract Documents be redone by the Contractor at no cost to FIT.
- 3. Architect/Engineer shall have no responsibility for the presence, discovery, identification, handling, removal or disposal of, or exposure of persons to hazardous materials in any form at the Project site.

### X. CHANGE ORDERS

- 1. FIT may order changes in the work of any quantity and without invalidating the Agreement so long as the Contract Sum and/or Contract Time of Completion are adjusted accordingly. All such changes in the work shall be authorized by written Change Order. All Change Orders shall be reviewed by Architect and authorized by a representative of FIT.
- 2. No work shall be performed by the Contractor unless it is specifically included in the Contract Scope of Work or authorized in advance by a bulletin issued by the Architect which will serve as the backup paperwork for a change order. The contractor needs to submit a Change Order. All work to proceed prior to

- approval of change orders. Change Orders will be negotiated fairly in separate meetings. All written Change Orders are to be signed by all parties.
- 3. Any sums to be paid to Contractor as a result of any Change Order or any sums to be credited to FIT as a result of any Change Order shall be computed by one of the following methods:
  - (1) As agreed upon between the parties to the contract in writing prior to commencement of the work required by the Change Order, or;
  - (2) By Unit Prices detailed in the Contract Documents or subsequently agreed upon.

### XI. GUARANTEES

- 1. All work on this project shall be guaranteed by the Contractor for a period of not less than one (1) year, or longer where covered by manufacturer warranty. Warranty to start on the day of the final signoff by FIT.
- 2. If within the guarantee period any of the work is found to be defective or not in conformance with the Contract Documents, the Contractor shall correct it promptly at his own expense after receipt of written notice from FIT.

### XII. FINAL PAYMENT

- 1. Final payment (retainage) shall be released to the Contractor thirty (30) days after the project has been signed off by FIT and Architect/Engineer and the Contractor has satisfied all requirements of the Contract Documents.
- 2. In addition to any other requirements of the Contract Documents final payment shall not become due until the Contractor has delivered to FIT and Architect a fully executed 1-year guarantee for all work performed under this project, as well as a complete release of all liens arising out of this Contract, or receipts in full covering all labor, materials, equipment, applicable finance charges, and fines for which a lien could be filed. If such lien remains unsatisfied after payments are made, the Contractor shall refund to FIT all money that FIT may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.
- 3. A Performance Bond and a Labor & Material Payment Bond, a copy of the "Contractor's Affidavit of Payment of Debts and Claims (AIA Document G706)" and "Consent of Surety to Final Payment (AIA Document G707)" shall be submitted by the Contractor prior to the release of final payment.
- 4. One (1) set each of record drawings (measuring 24 inches by 36 inches)

- indicating the "As-Built" manner of installation of all work, shall be submitted to FIT prior to the release of final payment.
- 5. Once the project has reached substantial completion, FIT and Architect will prepare a "Certificate of Substantial Completion". This certificate must be signed by all parties (Engineer, FIT and Contractor), to acknowledge the date the project has reached substantial completion, and confirm agreement on a final punch-list of work to be performed. The Contractor shall be responsible for completing all punch-list items prior to release of final payment.

### XIII. SUPPLEMENTAL CONDITIONS

**Project Schedule.** Contractor shall complete all work as specified within the time period specified in the Contract Documents, inclusive of rain days, but excluding any shutdowns authorized by FIT.

### XIV. PREVENTIVE MAINTENANCE SCHEDULE

Prior to final payment, the contractor shall provide a recommended maintenance schedule from the manufacturer for quarterly, semi-annual and yearly requirements, including part numbers where applicable, upon completion of the job.

BID ANALYSIS FORM FOLLOWS

### ATTACHMENT C – BID ANALYSIS FORM

## FASHION INSTITUTE OF TECHNOLOGY & F.I.T STUDENT HOUSING CORPORATION PROJECT COED RESIDENCE HALL HORIZONTAL SANITARY LINE REPLACEMENT (10th Floor) INVITATION FOR BID NUMBER C1624 NYS PREVAILING WAGE SCHEDULE PRC# 2024004147

### **BID BREAKDOWN**

Line	Description	Total LaborCost	Total Materials, Tools & Equipment	Line Total
1	SELECTIVE DEMOLITION	\$	\$	\$
2	PAINTING	\$	\$	\$
3	CARPENTRY	\$	\$	\$
4	GWB CEILINGS	\$	\$	\$
5	PLUMBING	\$	\$	\$
6	ELECTRICAL	\$	\$	\$
7	GENERAL REQUIREMENTS	\$	\$	\$
8	GENERAL CONDITIONS	\$	\$	\$

### TOTAL BID PRICE (1-8)

As stated in Section IV of the front end documents: Subcontracting shall be permitted not to exceed 30% of the work of the project. Please provide the ratio of the contractors and subcontractors work that will be used on this project.

Contractor	%,	Subcontractor(s)	· %
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For Bidding Purposes: the following sections pricing should cover the following items:

General Requirements: permits & licenses; project meetings; administrative overhead for submissions and shop drawings; progress photos; temporary facilities & controls; storage & protection of materials; project closeout; and project record documents.

**General Conditions:** supervision of work; all testing; coordination drawings; safety programs; insurance and performance & payment bonds.

The undersigned, having carefully examined all Contract Documents, including Notice to Bidders, Bid Terms and Conditions, Contract Terms and Conditions, General Requirements, General Conditions, Labor & Material Payment Bond, Performance Bond, Form of Bid, Non-Collusive Bidding Certification, Substitution Form Request, Contract, Affirmative Action Form, Change Order, Form, Contractor's Trade Payment Breakdown,

Safety EHS Plan, Prevailing Wage Schedule, Specifications, and Drawings and having examined the existing conditions by on-site visit(s), hereby submits this Bid Analysis, covering all labor, materials, equipment, tools, machinery, licensing, insurance, taxes, and fees required to perform the specified work at the above-referenced site, in accordance with the Contract Documents. **No exclusions & no exceptions**.

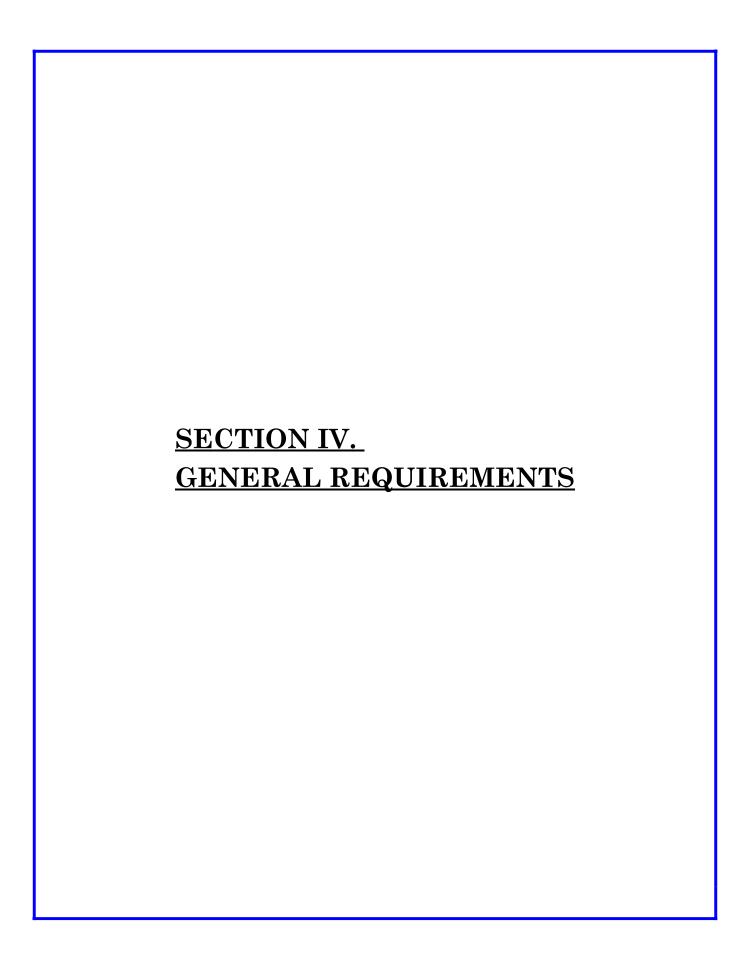
Company Name and Address of Bidder:	
Signature of Bidder	Date
Printed Name and Title of Representative:	
Email Address:	
Telephone:	
EIN#:	

### **IMPORTANT:**

This bid analysis form is the <u>only</u> pricing format acceptable. Bidders <u>must</u> submit pricing using this form. <u>FIT will not accept bid responses on any other form.</u>

### NOTE:

FIT will not sign any bidder generated contract, agreement or scope of work. FIT Bid and Terms and Conditions apply. Bidder requirement for FIT to sign any document will be grounds for rejection. Bidder inclusion of any conditions, clarifications, exceptions or changes which are not in compliance with FIT Bid and Terms and Conditions will be grounds for rejection.



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### 01010 -- SUMMARY OF THE WORK

### .01 - Work Under The Contract

The Work shall be as described in the Contract Documents.

### .02 - Work by Others

Should any other contractor be engaged by the Owner to perform work on the Site or in areas adjoining or adjacent to the Site, the Contractor and such other contractor shall coordinate the work of the Contractor and such other contractor.

### .03 - Items Not Included

The following items shown on the drawings are not included in the Work:

- A. Items indicated "By Others".
- B. Items indicated "N.I.C." (Not in Contract)
- C. Existing construction not indicated or specified to be removed, replaced or altered.

### .04 - Openings and Chases

- A. The Contractor shall build openings, including but not limited to channels, chases and flues as required to complete the Work as set forth in the Contract and as directed by the Owner before any work is installed.
- B. After the installation and completion of any work for which openings, including but not limited to, channels, chases and flues, have been provided for the Contractor, the Contractor shall build in, over, around and finish all such openings as required to complete the Work.
- C. If a contractor fails to furnish drawings and information required in connection with such openings before the General Construction Contractor performs any Work affected thereby, said contractor who so fails to furnish such drawings and information shall bear the cost of all cutting and refinishing including that part of the General Construction Contractor's Work affected.
- D. The Contractor shall Furnish and Install all sleeves, inserts, hangers and supports required for the execution of the Work.
- E. Specific instructions shall be obtained from the Owner or the Owner's Representative before cutting beams or other structural members, arches or lintels.
- F. The Contractor shall not endanger the Work and shall not cut or alter the Work unless prior approval and instructions are received from the Owner or the Owner's Representative.

### .05 - Surveys and Layout

- A. If, for any reason, stakes, batter boards or monuments are disturbed, it shall be the responsibility of the Contractor to reestablish them.
- B. The Owner or the Owner's Representative may order construction work suspended at any time when location of monuments, stakes, bench marks and other layout markings established by the Contractor are not adequate to permit checking the Work.
- C. The Contractor shall Provide and shall maintain axis lines on each floor and shall establish and shall maintain grade marks 4' 0" above the finished floor on each floor level.
- D. The Contractor shall Furnish such stakes and other required equipment, tools and materials, and all labor as may be required in laying out any part of the Work.

### .06 - Scheduling

- A. The Contractor shall deliver to the Owner schedules and forms in accordance with the Contract.
- B. The Owner or the Owner's Representative may require the Contractor to modify schedules which the Contractor has submitted either before or after such schedules are approved so that:
  - 1. The Work shall not be delayed.
  - 2. Changes in the Work are reflected in the schedules of the Contractor.

### .07 - Contractor Use of Premises

While performing the Work, the Contractor shall take every precaution against injuries to persons and damage to property.

### 01080 -- PERMITS AND COMPLIANCE

### .01 - Permits and Licenses

The Contractor shall obtain, maintain and pay for all permits and licenses necessary for the execution of the Work and for the use of such Work when completed.

Prior to final payment the Contractor shall deliver to the Owner's Representative all permits and certificates of approval issued by any agency having jurisdiction.

### .02 - Compliance

The Contractor shall give all notices, pay all fees and comply with all laws, rules and regulations applicable to the Work.

# .03 - Additional Compliance

The Contractor, Subcontractors, and the employees of the Contractor and Subcontractors, shall comply with all regulations governing conduct, access to the premises, operation of equipment and systems and conduct while in or near the premises and shall perform the Work in such a manner as not to unreasonably interrupt or interfere with the conduct of business of the Institution.

# .04 - Royalties and Patents

It is the sole responsibility of the Contractor to determine what, if any, patents are applicable to the Project. The Contractor shall pay all royalties and/or license fees. The Contractor shall defend all suits or claims for infringement of any patent rights and save the Owner, Architect, Engineer, Environmental Consultant and Construction Manager harmless from loss, including attorney's fees, on account thereof.

# 01200 -- PROJECT MEETINGS

# .01 - Project meetings shall be held to accomplish the following:

- A. Coordinate the Work.
- B. Establish a sound working procedure and relationship between all contractors, the Owner and the Owner's Representative.
- C. Review requisitions, proposals and change orders.
- D. Review the progress of the Work, review quality of work in place and review approval required by the Work and review delivery of materials.
- E. Expedite the Work to completion within the scheduled time limit.
- F. Review progress payments.

# .02 - Initial Job Meeting (Orientation Meeting)

The Owner or the Owner's Representative shall call an initial job meeting which the Contractor shall attend. This meeting shall be called prior to the start of construction.

# .03 - Job Progress Meetings

A. Job progress meetings shall be scheduled by the Owner or the Owner's Representative during the course of construction. The Contractor or the Contractor's duly authorized representative and such Subcontractors as required by the Contractor or the Owner or the Owner's Representative shall be present at all job progress meetings. The Contractors and Subcontractors shall answer questions on progress, workmanship, approvals required, delivery of material and other subjects concerning the Work. The purpose of such meetings is to coordinate the efforts of all

- concerned so that the Work proceeds without delay to completion as required by the Contract.
- B. The Owner or the Owner's Representative may require any schedule to be modified so that changes in the Work, delays or acceleration of any segment of the Work shall be reflected in such schedule. The Contractor shall cooperate with the Owner or the Owner's Representative in providing data for such changes in or modifications of schedules.

# 01300 -- SUBMITTALS

# .01 - Schedules & Records

- A. Within the time set forth in the Contract, the Contractor is required to complete and submit to the Owner or the Owner's Representative the following forms:
  - 1. Submit construction progress schedule to the Owner or the Owner's Representative no later than thirty (30) calendar days after receipt by the Contractor of notice to proceed.
  - 2. Submit names and addresses of all Subcontractors to the Owner or the Owner's Representative within thirty (30) calendar days of approval of the construction progress schedule.
  - 3. Submit to the Owner or the Owner's Representative the date on which the Contractor proposes to award each subcontract a minimum of ten (10) days prior to such proposed award.
  - 4. Submit Shop Drawings and material sample schedule to the Owner or the Owner's Representative no later than thirty (30) days after approval of the construction progress schedule. Such schedule shall include the date of all Shop Drawings, samples and materials shall be submitted and the date approval is required.
  - 5. Submit to the Owner or the Owner's Representative on a form approved by the Owner, a schedule of anticipated monthly requisition amounts. Such schedule shall be submitted from time to time as directed by the Owner, the first such submission being required to be made by the Contractor within ten (10) days of receipt by the Contractor of a written order to proceed issued by the Owner. The amounts employed in preparing such schedules in no way shall be binding upon the Owner.
- B. Sample forms shall be provided by the Owner or the Owner's Representative for the above mentioned schedules and records.

# 01311 - PROJECT ANALYSIS

# .01 - Project Control and Progress Meetings

- A. The Contractor shall attend all scheduling meetings as directed by the Owner or the Owner's Representative.
- B. In addition to the Owner or the Owner's Representative and the Contractor's Superintendent and Scheduling Coordinator, such meetings shall also be attended by representatives of such subcontractors as the Contractor, the Owner or the Owner's Representative may deem advisable. The agenda for such meetings shall include the progress and current status of the Work, proposed solutions for problem areas and a review of schedules for future Work in order to meet the Contractor's objectives and his obligations under the Contract. Consideration shall be given to establishing actual start dates, actual completion dates, planned starts and finishes, quantities installed, man hours worked, as well as other data relevant to the performance of the Contract.
- C. At least one week before each meeting described in subsection .01A of this Division 01311, the Contractor shall furnish progress data in the form required by the Owner or the Owner's Representative as follows:
  - 1. The status of all activities as of date determined by the Owner or the Owner's Representative.
  - 2. A list of actual start and completion dates for all activities.
  - 3. Projected durations of completion of those activities in progress.
  - 4. Relevant data of submittals in progress including equipment releases and equipment in fabrication.
  - 5. All other information which in the discretion of the Owner or its Representative, may be required to complete the Project Schedule Update.

# .02 – Payment

The Contractor's Payment Breakdown and Monthly Requisition as called for by Section 17.01 of the General Conditions of the Contract shall be the basis by which the Contractor is to be paid.

# .03 - Time of Completion

It is the sole responsibility of the Contractor to complete the Work within the time of completion required by the Contract.

# 01340 -- SHOP DRAWINGS AND SAMPLES

#### .01 - Contractor Submittal

- A. The Contractor shall submit the Shop Drawings and samples required by the Architect and the Contractor shall adhere to all submittal and scheduling requirements for Shop Drawings and samples. After examination of such Shop Drawings and samples by the Architect and the return of such items by the Architect to the Contractor, the Contractor shall make corrections indicated and shall furnish to the Architect the required number of corrected copies of Shop Drawings or samples.
- B. Shop Drawings shall be accompanied by a letter of transmittal to the Owner or the Owner's Representative requesting approval and date approval is desired.
- C. Each Shop Drawings and letter of transmittal shall be identified with the following information:
  - 1. Project title
  - 2. Contract name
  - 3. Date of the drawing, including dates of any revisions
  - 4. Name of Contractor, name of Subcontractor, material supplier and manufacturer, as applicable
  - 5. Name of person or firm preparing Shop Drawings
  - 6. Contract drawing numbers and specifications, section division and paragraph numbers used as references in preparing Shop Drawings, and titles of items to which the Shop Drawing refers.
- D. Shop Drawings shall show the design, dimensions, connections and other details necessary to insure that the Shop Drawings accurately interpret the Contract Documents and shall also show adjoining Work in such Detail as required to provide proper connections with said adjoining Work. Where adjoining connected Work requires Shop Drawings, such Shop Drawings shall be submitted to the Owner or the Owner's Representative for approval at the same time so that connections can be checked.
- E. The Contractor shall verify all field measurements. Measurements available prior to submittal of Shop Drawings shall be shown and so noted on the Shop Drawings. Measurements not available prior to submission of Shop Drawings shall be noted on the Shop Drawings as not available and such measurements shall be obtained prior to fabrication.

- F. The Contractor shall submit manufacturer's drawings and specifications when necessary to fully explain apparatus or equipment required by the Work. These manufacturer's drawings and specifications shall be treated as Shop Drawings. Manufacturer's catalog numbers alone are not acceptable as sufficient information for compliance with this requirement.
- G. Samples shall be accompanied by a letter of transmittal to the Owner or the Owner's Representative requesting approval, and date approval is desired.
- H. Each sample shall be labeled with the following information:
  - 1. Project title
  - 2. Contract name
  - 3. Date of submission
  - 4. Name and quality of the material
  - 5. Name of Contractor, name of Subcontractor, material supplier and manufacturer, as applicable
  - 6. Contract drawing numbers and specification section, division and paragraph numbers used as reference in preparing samples.
- I. Samples shall be of sufficient size and number to show the quality, type, color, finish and texture of the material required to be furnished by the Contractor pursuant to the Contract.

#### .02 - Contractor Review

The Contractor shall review, verify and determine all field measurements, field construction criteria, materials, catalog numbers and similar data, shall coordinate each Shop Drawing and sample with the requirements of the Contract and shall determine whether or not such Shop Drawings are in conformity with the provisions of the Contract before submitting the Shop Drawings to the Architect for approval.

# .03 - Contractor Responsibility

The Architect's approval of Shop Drawings and samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract. The Contractor shall be responsible for the accuracy of the Shop Drawings and samples and for the conformity of Shop Drawings and samples with the Contract unless the Contractor has notified the Architect of the deviation in writing at the time of submission and has received from the Architect written approval of the specified deviations. The Architect's approval shall not relieve the Contractor of responsibility for errors or omissions in the Shop Drawings or samples.

#### .04 - Commencement of Work

No portion of the Work shall be commenced until required Shop Drawings or samples are approved by the Architect.

# 01380 -- PROGRESS PHOTOGRAPHS

#### .01 - Contractor Submission

- A. The Contractor shall furnish to the Owner, progress photographs of the Work as follows: three (3) 8" x 10" glossy prints of each of the following views:
  - 1. Two (2) different views of the area in which the building or buildings are to be located, taken before excavation starts.
  - 2. Two (2) different views for each building when footings are in place and forms completed.
  - 3. Four (4) different views for each building when foundations are completed.
  - 4. Four (4) different views for each building when exterior wall is fifty per cent (50%) completed.
  - 5. Four (4) different views for each building when the structure is ready for roofing.
  - 6. Four (4) different exterior views in color for each building at completion.
  - 7. Six (6) interior views in color for each building as directed upon completion.
- B. A title identifying the view shown by each photograph and date taken shall appear on the back of each print.

# 01500 -- TEMPORARY FACILITIES AND CONTROLS

# .01 - Requirements

The Contractor shall Provide the temporary facilities and controls as hereinafter specified and as required by law.

# .02 - Temporary Lighting and Electric Service

The Contractor shall Provide and maintain all temporary lighting and power required in connection with the Contractor's operations from the commencement of the Work until the completion of each structure or for such other time as

directed by the Owner or the Owner's Representative. When the use of such temporary lighting and power is no longer required, all temporary wiring and equipment shall be completely removed by the Contractor. The Contractor shall make the necessary application to the lighting company and pay for all charges, costs and expenses incidental to the installation and maintenance of temporary lighting and power as required in connection with the Contractor's operations, and the Contractor shall pay for all power used. The minimum temporary lighting to be provided is at the rate of one-quarter watt per square foot and is to be maintained in each room and changed as required when interior walls are being erected. The required temporary lighting must be maintained for twenty-four (24) hours a day and seven (7) days a week at all stair levels and in all corridors below ground; in all other spaces temporary lighting is to be maintained only during working hours. All temporary wiring and equipment shall be in conformity with the National Electric Code. Three-phase temporary power circuits shall be installed as required to operate construction equipment of the various trades and to Install and test equipment such as pumps and elevators. The Contractor shall Install and maintain temporary or permanent service for the permanently installed building equipment such as sump pumps, boilers, boiler controls, fans, pumps, so that such equipment may be operated when required and so ordered by the Owner or the Owner's Representative for drainage or for temporary heat.

#### .03 - Material Hoists

#### A. General

- 1. Material hoists shall be operated by diesel, gasoline or steam engines and shall be complete with all equipment necessary for operation. Such hoists shall run from grade to roof, shall be installed immediately following the structural framing, centering or form work, and centering or form work unless otherwise approved by the Owner or the Owner's Representative. Electrically operated hoists shall not be used except as otherwise allowed by the Contract.
- 2. Material hoists shall meet any and all requirements of law, rule or regulation.
- 3. Hoist cars shall be of required size and design for the hoisting of all normal size building materials.

#### B. The Contractor shall:

- 1. Furnish, install, maintain and operate at the Contractor's expense, all hoisting equipment required for the Work.
- 2. Furnish all labor required for the Work.

# .04 - Temporary Use of Permanent Elevator as Equipment Material Hoist

- A. The Contractor shall:
  - 1. Use the temporary hoists until a building is completed, or until the Contractor may, with the Owner's permission, use the equipment of one (1) elevator in a building for temporary service after the permanent elevator equipment and the permanent electric service have been installed.
  - 2. If the Contractor elects to use such permanent elevator equipment, the Contractor shall:
    - a. Provide adequate protection for such equipment and shall operate such equipment within a capacity not to exceed that allowed by law, rule or regulation.
    - b. Provide for the maintenance of the elevator equipment as approved by the Owner or the Owner's Representative.
    - c. Leave such equipment in perfect condition.
- B. The permanent elevator equipment shall be ready for use when required by the Work and shall permit any use approved by the Owner or the Owner's Representative.

# .05- Temporary Enclosures

The Contractor shall:

- A. Provide, install and maintain any temporary weather resistant enclosures for all openings in exterior walls and roof that are not enclosed.
- B. After building is enclosed, maintain proper temperatures required by the Contract.

# .06 - Temporary Fence Enclosures

The Contractor shall Provide, Install and maintain any temporary fence enclosures required by the Contract.

# .07 - Maintenance of Permanent Roadways

The Contractor shall immediately remove dirt and debris which may collect on permanent roadways due to the Work.

#### .08 – Traffic Control

- A. Routes to and from the location of the Work shall be as indicated in the Contract or as directed by the Owner or the Owner's Representative.
- B. Parking areas for the use of those engaged in the Work shall be as indicated in the Contract or as directed by the Owner or the Owner's Representative.

#### .09 - Fire Prevention Control

#### The Contractor Shall:

- A. Provide private unlisted telephone service reserved for fire calls at a location or locations approved by the Owner or the Owner's Representative. Such service shall be in addition to any other telephone service. The Contractor shall pay all costs thereof until completion and acceptance of the Work or as otherwise directed by the Owner or the Owner's Representative.
- B. Comply with the safety provisions of the National Fire Protection Association's "National Fire Codes" pertaining to the Work and, particularly, in connection with any cutting or welding performed as part of the Work.

#### .10 - Pollution Control

#### The Contractor shall:

- A. Comply with all laws, rules and regulations governing pollution control, including but not limited to those of the Department of Environmental Conservation of the State of New York.
- B. Take all necessary precautions including, but not limited to digging and maintaining settling basins and dams; diverting streams, and taking all other actions that may be necessary to prevent silt, and waste of any kind from being deposited, silting and reduction of quality of streams below the construction area and downstream properties as a result of the Work.
- C. Refrain from the disposal of volatile fluid wastes into storm or sanitary sewer systems, approved sewage disposal systems or any waterway.
- D. Refrain from burning trash or waste materials.

# .11 - Temporary Field Office

- A. The Contractor may Provide a temporary office structure, for the Contractor's use during the course of the Work.
  - 1. The Contractor must receive prior written approval from the Owner or the Owner's Representative for such temporary office structure in relation to location, type of structure, and included facilities.
  - 2. All toilet and sink facilities in any such office structure shall be connected to an approved sewage disposal system.
  - 3. The Contractor shall remove the temporary office structure from the Site and shall repair the Site and finish the area as directed by the Owner or the Owner's Representative.

#### B. The Contractor shall:

- 1. Provide a temporary office structure completely separate from any other office structures at a location approved by the Owner or the Owner's Representative until the Work is completed and is accepted.
- 2. Provide such office structure for the exclusive use of the Owner.
- 3. Bear all costs in relation to the furnishing, construction and removal of such office structure.
- 4. Repair and refinish the area as directed by the Owner or the Owner's Representative.
- 5. Construct such office structure and furnish such office structure as required by the Contract.
- 6. Maintain such office structure in a sanitary condition and in proper repair, properly heat the structure, furnish the fuel and furnish all utilities and pay all utility charges.
- 7. Install a telephone for the sole use of the Owner or the Owner's Representative and pay all service and local toll charges incurred as a result of the use of such telephone service.
- C. With the prior written approval of the Owner or the Owner's Representative any other Contractor may erect a substantial office structure at the Site for the use of such Contractor in relation to the Work.
  - 1. All toilet and sink facilities in any such office structure shall be connected to an approved sewage disposal system.

- 2. Such Contractor shall remove the temporary office structure from the Site and shall repair the Site and finish the area as directed by the Owner or the Owner's Representative.
- D. When adequate space is available in a building, the Contractor may transfer such office to available space with the prior written permission of the Owner or the Owner's Representative.
- E. Trailers providing comparable facilities may be accepted at the discretion of the Owner or the Owner's Representative.

#### .12 - Rubbish Removal

- A. The Contractor shall:
  - 1. Keep the Work free from rubbish at all times.
  - 2. Clean all enclosed structures daily.
  - 3. Remove rubbish from the Site at least once a week.
- B. The Contractor shall conform with the following:
  - 1. Burning of rubbish shall not be permitted.
  - 2. All rubbish shall be lowered by way of chutes, taken down by hoists, or lowered in receptacles. Under no circumstances shall any rubbish be dropped or thrown from one (1) level to another inside or outside any building.

# .13 - Discontinuance, Changes and Removal

#### The Contractor shall:

- A. Discontinue all temporary services required by the Contract when so directed by the Owner or the Owner's Representative. The discontinuance of any such temporary service prior to the completion of the Work shall not render the Owner liable for any additional cost entailed thereby.
- B. Remove and relocate such temporary facilities as directed by the Owner or the Owner's Representative without additional cost to the Owner, and shall restore the Site and the work to a condition satisfactory to the Owner.

# .14 - Project Identification

A. No signs or advertisements shall be displayed on the site except as required by the Contract.

B. The Contractor shall Furnish, erect and maintain the Site, the exact location thereof to be designated by the Owner or the Owner's Representative, a construction sign, in the form provided by the Contract.

#### .15 - Moisture and Condensation Control

The Contractor shall provide for ventilation of all structures until Physical Completion and acceptance of the Work and shall control such ventilation to avoid excessive rates of drying of construction materials, including but not limited to concrete and to plaster, and to prevent condensation on sensitive surfaces.

# .16 - Protective Services

The Contractor shall provide security services required by the Contract.

# 01600 -- MATERIAL AND EQUIPMENT

# .01 - Storage and Protection

- A. Materials stored on the Site shall be neatly piled and protected, and shall be stored in an orderly fashion in locations that shall not interfere with the progress of the Work or with the daily functioning of the Institution.
- B. Should it become necessary during the course of the Work to move materials or equipment stored on the Site, the Contractor, at the direction of the Owner or the Owner's Representative, shall move such material or equipment.

# 01700 -- PROJECT CLOSE OUT

# .01 - Final Cleanup

- A. The Contractor shall leave the Work ready for use and occupancy without the need of further cleaning of any kind.
- B. The Contractor shall remove all tools, appliances, projects signs, material and equipment from the premises as soon as possible upon completion of the Work.
- C. The Work is to be turned over to the Owner in new condition, in proper repair and in perfect adjustment.

# .02 - Required Close Out Documentation

A. Prior to final payment the Owner shall receive the following documents as required by the Contract:

- 1. The Contractor's general guarantee.
- 2. Specific guarantees, material, equipment and other items of work.
- 3. All certificates obtained in connection with the Work.
- 4. All final photographs of the Work.
- B. The Owner shall also receive from the Contractor prior to final payment:
  - 1. A complete listing of all Subcontractors, business addresses and items supplied by each such Subcontractor.
  - 2. A listing of manufacturer's of major materials, equipment and systems installed in the Work.
  - 3. A copy of all test data taken in connection with the Work.
  - 4. Three (3) copies of all operation and maintenance manuals.
  - 5. All keys, tools, screens, spare construction material, finishing material and equipment required to be furnish to the Owner as part of the Work.

#### .03 - Orientation Instruction

Prior to final payment appropriate maintenance personnel of the Owner shall be oriented and instructed by the Contractor in the operation of all systems and equipment as required by the Contract.

# .04 - Project Close Out Inspections

- A. When the Work has reached such a point of completion that the building or buildings, equipment or apparatus or any part thereof required by the Owner for occupancy or use can be so occupied and used for the purpose intended, the Owner or the Owner's Representative shall make a detailed inspection of the Work to insure that all requirements of the Contract have been met and that the Work is complete and is acceptable.
- B. A copy of the report of the inspection shall be furnished to the Contractor as the inspection progresses so that the Contractor may proceed without delay with any part of the Work found to be incomplete or defective.
- C. When the items appearing on the report of inspection have been completed or corrected, the Contractor shall so advise the Owner and the Owner's Representative. After receipt of the notification, the Owner or the Owner's Representative shall inform the Contractor of the date and time of final inspection. A copy of the report of the final inspection containing all

- remaining contract exceptions, omissions and incompletions shall be furnished to the Contractor.
- D. After receipt of notification of completion and all remaining contract exceptions, omissions and incompletions from the Contractor, the Owner and the Owner's Representative shall make an inspection to verify completion of the exception items appearing on the report of final inspection.

# 01720 -- PROJECT RECORD DOCUMENTS

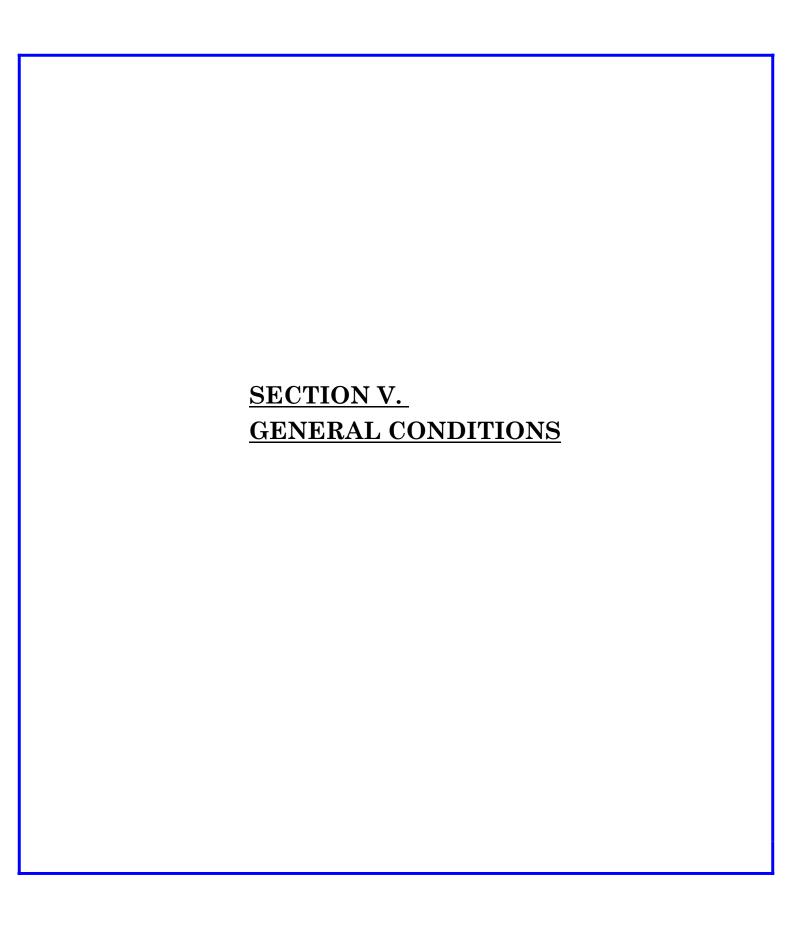
# .01 - Project Record Drawings

- A. The purpose of the project drawings is to record the actual location of the Work in place including but not limited to underground lines, concealed piping within buildings, concealed valves and control equipment, and to record changes in the Work.
- B. In addition to the sets of contract drawings that are required by the Contractor on the Site to perform the Work, the Contractor shall maintain, at the Site, one (1) copy of all drawings, specifications and addenda that are part of the Contract as awarded. Each of these documents should be clearly marked "Project Record Copy", maintained in a clean and neat condition available at all times for inspection by the Owner or the Owner's Representative, and shall not be used for any other purpose during the progress of the Work.
- C. Project Record Requirements
  - 1. The Contractor shall mark-up the "Project Record Copy" to show:
    - (a) Approved changes in the Work.
    - (b) Location of underground Work and concealed Work.
    - (c) Details not shown in the original Contract Documents.
    - (d) Any relocation of Work.
    - (e) All changed in dimensions.
    - (f) All access doors.
    - (g) Location of all plumbing, heating, ventilating, air conditioning or electrical assemblies.
  - 2. Such information shall include, but shall not be limited to:

- (a) Footing depth in relation to finished grade elevations.
- (b) Any change in floor elevations.
- (c) Any structural changes.
- (d) Any substitutions.
- (e) Elevations and locations of all underground utilities, services, or structures referenced to permanent aboveground structures or monuments.
- (f) Designation of all utilities as to the size and use of such utilities.
- (g) All invert elevations of manholes.
- (h) The location of all utilities, services and appurtenances concealed in building structures that have been installed different from that required by the Contract.
- (i) Any approved change order.
- D. The Contractor shall keep the Project Record Documents up-to-date from day to day as the Work progresses. Appropriate documents are to be updated promptly and accurately; no Work is to be permanently concealed until all required information has been recorded.
- E. The project record drawings are to be submitted by the Contractor to the Owner or the Owner's Representative when all the Work is completed and is approved by the Owner and the Owner's Representative before the Contractor may request final payment.

# 01740 -- WARRANTIES, GUARANTEES, AND BONDS

See the Contract Documents for details.



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# **ARTICLE 1 -- DEFINITIONS**

# <u>Section 1.01 - The following terms as used in the Contract Documents shall be defined</u> as follows:

**Beneficial Occupancy** - The use, occupancy or operation by the Owner of the Work, or any part thereof, as evidenced by a notification of Beneficial Occupancy executed by the Owner.

**Construction Completion** - Acceptance by the Owner of the Work as evidenced by a Notification of Construction Completion executed by the Architect.

**Construction Manager** - A person, persons, firm, partnership or corporation, regularly engaged in the management of construction projects, and so designated by the Owner.

**Consultant** - A person, persons, firm, partnership or corporation providing Architectural, Engineering or other professional services, and so designated by the Owner.

*Contract* - The agreement between the Owner and the Contractor consisting of the Contract Documents including all amendments and supplements thereto.

Contract Documents - The Contract, Notice to Bidders, Bid Checklist, Bid Terms and Conditions, Contractor Reference Sheet, Contract Terms and Conditions, Bid Analysis Form, Affirmative Action Form, Change Order Form, Contractors Trade Payment Breakdown, Safety EHS Plan, Prevailing Wage Schedule, Information for Bidders, Form of Bid, General Conditions, General Requirements, Bonds, Drawings, Specifications, Addenda, Change Orders and any supplementary data together with all provisions of law deemed to be inserted in the Contract or incorporated by reference.

**Contractor** - A person, persons, firm, partnership or corporation with whom the Contract is entered into by the Owner to perform the Work.

*Extra Work* - Any work in addition to the Work initially required to be performed by the Contractor pursuant to the Contract.

*Furnish* - To deliver to the site ready for installation.

*Install* - To unload at the delivery point at the Site and perform every operation necessary to establish secure mounting and correct operation at the proper location.

*Owner* – The Fashion Institute of Technology and/or its auxiliary corporations, as applicable.

*Owner's Representative* - A person, persons, firm, partnership or corporation so designated by the Owner.

**Project** - Work at the Site(s) carried out pursuant to one or more sets of Contract Documents.

**Provide** - To Furnish and Install complete in place and ready for operation and use.

**Shop Drawings** - Diagrams, fabrication drawings, illustration, schedules, test data, performance charts, cuts brochures and other data which are submitted by the Contractor to the Architect and illustrate any portion of the Work. These drawings and data are reviewed and acted upon by the architect.

Site - The area within the Contract limit, as indicated by the Contract.

**Subcontract** - An agreement between the Contractor and Subcontractor for work on the Site.

**Subcontractor** - A person, persons, firm, partnership or corporation under contract with the Contractor, or under contract with any subcontractor, to provide labor and material at the Site.

**Substantial Completion** - Stage of construction at which the Architect determines there is a minimal amount of the Work to be completed, or Work to be corrected.

*Work* - The performance of all obligations imposed upon the Contractor by the Contract.

# <u>ARTICLE 2 -- CONTRACT DOCUMENTS</u>

# Section 2.01 - Captions

The table of contents, titles, captions, headings, running headlines and marginal notes contained herein and in said documents are solely to facilitate reference to various provisions of the Contract Documents and in no way affect the interpretation of the provisions to which they refer.

# **Section 2.02 - Conflicting Conditions**

Should any provision in any of the Contract Documents be in conflict or inconsistent with any of the General Conditions or Supplements thereto, the General Conditions or Supplements thereto shall govern.

#### Section 2.03 - Notice and Service Thereof

Any notice to the Contractor from the Owner relative to any part of the Contract shall be in writing and service considered complete when said notice is mailed to the Contractor at the last address given by the Contractor, or when delivered in person to said Contractor or the Contractor's authorized representative.

#### Section 2.04 - Nomenclature

Materials, equipment or other Work described in words which have a generally accepted technical or trade meaning shall be interpreted as having said meaning in connection with the Contract.

#### Section 2.05 - Invalid Provisions

If any term or provision of the Contract Documents or the application thereof to any person, firm or corporation or circumstance shall, to any extent, be determined to be invalid or unenforceable, the remainder of the Contract Documents, or the application of such terms or provisions to persons, firms or corporations or circumstances other than those to which it is held invalid or unenforceable, shall not be affected thereby and each term or provision of the Contract Documents shall be valid and be enforced to the fullest extent permitted by law.

# **ARTICLE 3 -- INTERPRETATION OF CONTRACT DOCUMENTS**

# Section 3.01 - Owner/Architect

- A. The Owner's representative/Architect shall give all orders and directions contemplated under the Contract relative to the execution of the Work. The Architect shall determine the amount, quality, acceptability of the Work and shall decide all questions which may arise in relation to said Work. The Owner's estimates and decisions shall be final except as otherwise expressly provided. In the event that any question arises between the Owner and Contractor concerning the Contract, the decision of the Owner shall be a condition precedent to the right of the Contractor to receive any money or payment under the Contract.
- B. Any differences or conflicts concerning performance which may arise between the Contractor and other contractors performing Work for the Owner shall be adjusted and determined by the Owner's representative.
- C. The Owner may act through a representative designated by the Owner.

# **Section 3.02 - Meaning and Intent of Contract Documents**

The meaning and intent of all Contract Documents shall be as interpreted by the Architect.

#### Section 3.03 - Order of Preference

- A. Figured dimensions shall take precedence over scaled dimensions. Larger scale drawings shall take precedence over smaller scale drawings. Latest addenda shall take precedence over previous addenda and earlier dated drawings and specifications.
- B. Should a conflict occur in or between or among any parts of the Contract Documents that are entitled to equal preference, the better quality or greater quantity of material, of the more specific compared to the general, shall govern, unless the Architect/Owner's representative directs otherwise.
- C. Drawings and specifications are complementary. Anything shown on the drawings and not mentioned in the specifications, or mentioned in the specifications and not shown on the drawings, shall have the same effect as if shown or mentioned in both.

# **ARTICLE 4 -- MATERIALS AND LABOR**

# **Section 4.01 - Contractor's Obligations**

- A. The Contractor shall, in a good workmanlike manner, perform all the Work required by the Contract Documents within the time specified in the Contract.
- B. The Contractor shall Furnish, erect, maintain, and remove such construction plant and such temporary Work as may be required for the performance of its work. The Contractor shall be responsible for the safety, efficiency and adequacy of the Contractor's plant, appliances and methods, and for damage which may result from failure or improper construction, maintenance or operation of said plant, appliances and methods. The Contractor shall comply with all terms of the Contract, and shall, carry on and complete the entire Work to the satisfaction of the Owner.
- C. Any labor, materials or means whose employment or utilization during the course of this Contract may tend to or in any way cause or result in strike, work stoppages, delays, suspension of Work or similar troubles by workmen employed by the Contractor, its subcontractors or material suppliers, or by any of the trades working in or about the buildings and premises where Work is being performed under this Contract, or by other contractors, their subcontractors or material suppliers pursuant to other contracts shall not be allowed. Any violation by the Contractor of this requirement may in the sole judgment of the Owner be considered as proper and sufficient cause for declaring the Contractor to be in default, and for the Owner to take action against the Contractor as set forth in the General Conditions Article entitled "Termination" or such other action as the Owner may deem proper.

# **Section 4.02 - Contractor's Title to Materials**

- A. No materials or supplies for the Work shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by any other party. The Contractor warrants that the Contractor has full, good and clear title to all materials and supplies used by the Contractor in the Work, or resold to the Owner pursuant to the Contract free from all liens, claims or encumbrances.
- B. All materials, equipment and articles which become the property of the Owner shall be new unless specifically stated otherwise.

# Section 4.03 - "Or Equal" Clause

- A. Whenever a material, article or piece of equipment is identified on the plans or in the specifications by reference to manufacturers' or vendors' names, trade names, catalogue number or make, said identification is intended to establish a standard. Any material, article or equipment of other manufacturers and vendors which performs satisfactorily the duties imposed by the general design may be considered equally acceptable provided that, in the opinion of the Architect/Engineer, the material, article or equipment so proposed is of equal quality, substance and function and the Contractor shall not Provide, Furnish or Install any said proposed material, article or equipment without the prior written approval of the Architect/Engineer. The burden of proof and all costs related thereto concerning the "or equal" nature of the substitute item, whether approved or disapproved, shall be borne by the Contractor.
- B. Where the Architect/Engineer, pursuant to the provisions of this Section, approves a product proposed by the Contractor and said proposed product requires a revision of the Work covered by this Contract, or the Work covered by other contracts, all changes to the Work of all contracts, revision or redesign, and all new drawings and details required therefore shall be provided by the Contractor at the cost of the Contractor and shall be subject to the approval of the Consultant.
- C. No substitution will be permitted which may result in a delay to the Project.

# Section 4.04 - Quality, Quantity and Labeling

- A. The Contractor shall Furnish materials and equipment of the quality and quantity specified in the Contract.
- B. When materials are specified to conform to any standard, the materials delivered to the Site shall bear manufacturer's labels stating that the materials meet said standards.

- C. The above requirements shall not restrict or affect the Owner's right to test materials as provided in the Contract.
- D. The Contractor shall develop and implement quality control plans to assure itself and the Owner that all Work performed by the Contractor and its Subcontractors complies fully with all Contract requirements, and shall submit the plans to the Owner as required by the Contract. See Submittals Section of the General Requirements. The Contractor's quality control plans shall be independent of any testing or inspection performed by or on behalf of the Owner.

# **ARTICLE 5 -- CONTRACTOR**

# **Section 5.01 - Supervision by Contractor**

- A. The Contractor shall provide full-time competent supervision for the duration of the Contract; during the course of on-site work the Contractor shall provide a full-time on-site superintendent who shall have full authority to act for the Contractor at all times. The Superintendent shall be able to read, write and speak English fluently, as well as communicate with the workers.
- B. If at any time the supervisory staff is not satisfactory to the Owner, the Contractor shall, if directed by the Owner, immediately replace such supervisory staff with other staff satisfactory to the Owner.
- C. The Contractor shall remove from the Work any employee of the Contractor or of any Subcontractor when so directed by the Owner.

# **Section 5.02 - Representations of Contractor**

The Contractor represents and warrants:

- A. That it is financially solvent and is experienced in and competent to perform the Work, and has the staff, equipment, subcontractors and suppliers available to complete the Work within the time specified for the Contract price.
- B. That it is familiar with all Federal, State or other laws, ordinances, orders, rules and regulations that may in any way affect the Work.
- C. That any temporary and permanent Work required by the Contract can be satisfactorily constructed, and that said construction will not injure any person or damage any property.
- D. That it has carefully examined the Contract and the Site of the Work and that, from the Contractor's own investigations and through the bid process and requirements is satisfied as to the nature and materials likely to be encountered, the character of equipment and other facilities needed

- for the performance of the Work, the general and local conditions and all other materials or items which may affect the Work.
- E. That it is satisfied that the Work can be performed and completed as required in the Contract, and warrants that it has not been influenced by any oral statement or promise of the Owner or the Consultant.

# SECTION 5.03 – COPIES OF CONTRACT DOCUMENTS FOR CONTRACTORS

- A. The Owner shall furnish to the Contractor, without charge, up to five (5) copies of Contract Documents.
- B. Any sets in excess of the number mentioned above may be furnished to the Contractor at the cost of reproduction and mailing or delivery.

# **SECTION 5.04 - MEETINGS**

The Contractor shall attend all meetings as directed by the Owner or the Owner's Representative.

# SECTION 5.05 – RELATED WORK

To ascertain the relationship of its work to all Work required by the Contract Documents, the Contractor shall examine the Contract Documents for Work of its Contract and any related work of other contracts.

# **SECTION 5.06 – ERRORS OR DISCREPANCIES**

The Contractor shall examine the Contract thoroughly before commencing the Work and report in writing any errors or discrepancies to the Owner or the Owner's Representative within five (5) days of discovery.

# **ARTICLE 6 -- SITE CONDITIONS**

# SECTION 6.01 – SUBSURFACE OR SITE CONDITIONS FOUND DIFFERENT

A. The Contractor acknowledges that the Contract amount set forth in its bid includes such provisions which the Contractor deems proper for all Site

conditions the Contractor could reasonably anticipate encountering as indicated in the Contract or from the Contractor's inspection and examination of the Site prior to submission of bids.

# **SECTION 6.02 – VERIFYING DIMENSIONS AND CONDITIONS**

- A. The Contractor shall take all measurements and verify all dimensions and conditions at the Site before proceeding with the Work. If said dimensions or conditions are found to be in conflict with the Contract, the Contractor immediately shall refer said conflict to the Architect in writing. The Contractor shall comply with any revised Contract Documents.
- B. During the progress of Work, the Contractor shall verify all field measurements prior to fabrication of building components or equipment and proceed with the fabrication to meet field conditions.
- C. The Contractor shall consult all Contract Documents to determine exact location of all Work and verify spatial relationships of all Work. Any question concerning said location or spatial relationships may be submitted in a manner approved by the Architect.
- D. Special locations for equipment, pipelines, ductwork and other such items of Work, where not dimensioned on plans, shall be determined in consultation with other affected contractors.
- E. The Contractor shall be responsible for the proper fitting of the Work in place.

# **SECTION 6.03 - SURVEYS**

Unless otherwise expressly provided in the Contract, the Owner shall furnish the Contractor all surveys of the property necessary for the Work, but the Contractor shall lay out the Work.

# ARTICLE 7 -- INSPECTION AND ACCEPTANCE

#### SECTION 7.01 – ACCESS TO THE WORK

The Owner, the Owner's Representative, and the architect shall at all times have access to the Work and the Contractor shall provide proper facilities for said access.

# SECTION 7.02 – NOTICE FOR TESTING

If the Contract Documents, the Owner's instructions, laws, rules, ordinances or regulations require that any Work be inspected or tested, the Contractor shall give the Architect and/or Owner's representative a minimum of three (3) work days written notice of readiness of the Work for inspection or testing and the date fixed for said inspections or testing.

# **SECTION 7.03 – REEXAMINATION OF WORK**

Reexamination of any part of the Work may be ordered by the Owner, and if so ordered, the Work must be uncovered by the Contractor. If said Work is found to be in accordance with the Contract, the Owner shall pay the cost of reexamination. If said Work is not found to be in accordance with the Contract, the Contractor shall pay the cost of reexamination and replacement.

#### SECTION 7.04 – INSPECTION OF WORK

All Work, all materials whether or not incorporated in the Work, all processes of manufacture and all methods of construction shall be, at all times and places, subject to the inspection of the Owner or the Owner's Representative or the architect, and the Architect shall be the final judge of the quality and suitability of the Work, materials, processes of manufacture and methods of construction for the purposes for which said Work, materials, processes of manufacture and methods of construction are used. Any Work not approved by the Architect shall be reconstructed, made good, replaced or corrected immediately by the Contractor including all Work of other contractors destroyed or damaged by said removal or replacement. Rejected material shall be removed immediately from the Site. Acceptance of material and workmanship by the Owner shall not relieve the Contractor from the Contractor's obligation to replace all Work which is not in compliance with the Contract.

# SECTION 7.05 – DEFECTIVE OR DAMAGED WORK

If, in the opinion of the Owner, it is undesirable to replace any defective or damaged materials or to reconstruct or correct any portion of the Work damaged or not performed in accordance with the Contract, the compensation to be paid to the Contractor shall be reduced by an amount which, in the judgment of the Owner, shall be deemed to be equitable.

# **SECTION 7.06 - TESTING**

All materials and equipment used in the Work shall be subject to inspection and testing in accordance with accepted standards to establish conformance with specifications and suitability for uses intended, unless otherwise specified in the Contract. If any Work shall be covered or concealed without the approval or consent of the Architect, said Work shall, if required by the Architect, be uncovered for examination. Any inspection by the Architect or by a testing laboratory on behalf of the Owner does not relieve the Contractor of the responsibility to maintain quality control of materials, equipment and installation to conform to the requirements of the Contract. If any test results are below specified minimums, the Architect may order additional testing. The cost of said additional testing, any additional professional services required, and any other expenses incurred by the Owner as a result of said additional testing shall be at the Contractor's expense. The Owner may deduct such costs from moneys due the Contractor.

# **SECTION 7.07 - ACCEPTANCE**

No previous inspection shall relieve the Contractor of the obligation to perform the Work in accordance with the Contract. No payment, either partial or full, by the Owner to the Contractor shall excuse any failure by the Contractor to comply fully with the Contract Documents. The Contractor shall remedy all defects and deficiencies, paying the cost of any damage to other Work resulting therefrom.

# **ARTICLE 8 -- CHANGES IN THE WORK**

# **SECTION 8.01 - CHANGES**

A. Without invalidating the Contract, the Owner/Architect may order Extra Work or make changes by altering, adding to, or deducting from the Work, the Contract consideration being adjusted accordingly. No claims for Extra Work shall be allowed unless such Extra Work is ordered in writing by the Owner/Architect. No changes in the Work shall be made unless such Work is ordered in writing by the Owner/Architect or Owner's Representative. If the time for completion is affected by this change, the revised time for completion shall be included in the change order. The Owner may order the Contractor to perform the Extra Work and proceed under the Dispute Article.

- B. The amount by which the Contract consideration is to be increased or decreased by any change order may be determined by the Owner by one or more of the following methods:
  - 1. By applying the applicable unit price or prices contained in the Contract.
  - 2. By estimating the fair and reasonable cost of the Extra Work:
    - a. Labor, including all wages, required wage supplements and insurance required by law, paid to employees below the rank of superintendent directly employed at the Site. Wages are the prevailing rate of wages defined in the Contract Documents and supplemental updates.
    - b. Premiums or taxes paid by the Contractor for worker's compensation insurance, unemployment insurance, FICA tax and other payroll taxes as required by law, net of actual and anticipated refunds and rebates.
    - c. Materials
    - d. Equipment, excluding hand tools, which in the judgment of the Owner, would have been or will be employed in the Work. It is the duty of the Contractor to utilize either rented or self-owned equipment that is of a nature and size appropriate for the Work to be performed. The Owner reserves the right to determine reasonable and appropriate equipment sizing, and at the Owner's discretion, to adjust the costs allowed to reflect a smaller or less elaborate piece of equipment more suitable for performance of the Extra Work.
  - 3. By determining the actual cost of the Extra Work in the same manner as in Article 8, Section 8.01, Subsection B. 2. except that the actual costs of the Contractor shall be used in lieu of estimated costs.
- C. The Owner shall have the option of determining by which method the Contractor shall proceed with said Extra Work. Wages are the prevailing rate of wages defined in the Contract Documents and supplemental updates. The Contractor shall submit a signed and notarized Labor Rate Worksheet(s) to the Owner to be used to determine hourly rates for various classifications of workers. The Contractor agrees to provide documentation verifying costs and calculations at the Owner's request.

- D. Regardless of the method used by the Owner in determining the value of a change order, the Contractor shall, within the time-frame given by the Owner, submit to the Owner or Owner's Representative a detailed breakdown of the Contractor's estimate of the value of the omitted or Extra Work.
- E. Unless otherwise specifically provided for in a change order, the compensation specified therein for Extra Work includes full payment for the Extra Work covered thereby, and the Contractor waives all rights to any other compensation for said Extra Work, damage or expense.
- F. The Contractor shall furnish satisfactory bills, payrolls and vouchers covering all items of cost and when requested by the Owner shall give the Owner access to all accounts and records relating thereto, including records of subcontractors and material suppliers.
- G. Increased bonding costs for the Work which may result from Owner issued Changes in the Work will be addressed by the Owner at the completion of the Project Work upon submission of satisfactory proof of Contractor's increased cost.
- H. Increased contractual liability insurance premium costs which may result from changes in the Work will be addressed by the Owner at the completion of the Work upon submission of satisfactory proof of Contractor's increased cost.

# **SECTION 8.02 – OVERHEAD AND PROFIT ALLOWANCE**

A. See Example A for changes in the Work performed directly by the Contractor, whether a base cost is arrived at by estimated cost or actual cost method; add to base cost a sum equal to twenty percent. See Exceptions - Paragraphs "D" and "E".

#### Example A:

Contractor base cost	\$1,000
20% overhead and profit	200
Total	\$1,200

B. See Example B for changes in the Work performed by a Subcontractor under contract with the Contractor, where estimated or actual cost is Ten Thousand Dollars (\$10,000.00) or less; add to the base cost a sum equal to twenty percent of cost, for the benefit of the Subcontractor. For the benefit of the Contractor; add an additional sum equal to ten percent of the Subcontractor's base cost.

# **Example B:**

•	
Subcontractor base cost	\$1,000
20% Subcontractor overhead and profit	<u>200</u>
Subcontractor Total	\$1,200
10% Contractor overhead and profit on base cost	<u>100</u>
Total	\$1,300

C. See Example C for changes in the Work performed by a Subcontractor, under contract with the Contractor, which exceeds a base cost of Ten Thousand Dollars (\$10,000) in estimated or actual cost; add to the base cost a sum equal to twenty percent of cost for the benefit of the Subcontractor. For the benefit of the Contractor; add an additional sum equal to ten percent of the first Ten Thousand Dollars (\$10,000) of the Subcontractor's base cost, plus five percent of the next Ninety Thousand Dollars (\$90,000) of the Subcontractor's base cost, plus three percent of any sum in excess of One Hundred Thousand Dollars (\$100,000) of the Subcontractor's base cost.

# **Example C:**

Subcontractor base cost	\$200,000
20% Subcontractor overhead and profit	40,000
Subcontractor Total	\$240,000
10% Contractor overhead and profit on first \$10,000 base cost	1,000
5% on next \$90,000 base cost	4,500
3% on base cost over \$100,000	<u>3,000</u>
Total	\$248,500

D. See Example D for overhead and profit on major equipment such as: switchgear, transformers, air handling units, boilers, etc. For extra equipment purchases by the Contractor or Subcontractors which exceeds a base cost of Ten Thousand dollars (\$10,000) in estimated or actual cost; add to the base cost for the benefit of the Contractor a sum equal to ten percent of the first Ten Thousand dollars (\$10,000) of the vendor's base cost plus five percent of the next Ninety Thousand dollars (\$90,000) of the vendor's base cost, plus three percent of any sum in excess of One Hundred Thousand dollars (\$100,000) of the vendor's base cost. If the equipment is supplied by the Subcontractor, the Contractor is entitled to a maximum of ten (10) percent of the first Ten Thousand dollars (\$10,000) of the base cost.

# Example D:

Vendor base cost	\$200,000
10% Contractor or Subcontractor overhead and profit on first \$10,000 base cost	1,000
5% on next \$90,000 base cost	4,500
3% on base cost over \$100,000	3,000
Contractor or Subcontractor Total	\$208,500
10% Contractor overhead and profit on first \$10,000 base cost when equipment	
is supplied by the Subcontractor, no other mark-up allowed	<u>1,000</u>
Total	\$209,500

E. See Example E for overhead and profit on a material only Change Order. For increased material purchases by the Contractor or Subcontractors which exceed a base cost of Ten Thousand dollars (\$10,000) in estimated or actual costs; add to the base cost for the benefit of the Contractor a sum equal to ten percent of the first Ten Thousand dollars (\$10,000) of the supplier's cost plus five percent of the next Ninety Thousand dollars (\$90,000) of the supplier's cost, plus three percent of any sum in excess of One Hundred Thousand dollars (\$100,000) of the supplier's cost. If the material is supplied by the Subcontractor, the Contractor is entitled to a maximum of ten (10) percent of the first Ten Thousand dollars (\$10,000) of the base cost.

#### **Example E:**

Material cost (net difference between original contract and revised)	\$200,000
10% Contractor or Subcontractor overhead and profit on first \$10,000 base cost	1,000
5% on next \$90,000 base cost	4,500
3% on base cost over \$100,000	3,000
Contractor or Subcontractor Total	\$208,500
10% Contractor overhead and profit on first \$10,000 base cost when material	
is supplied by the Subcontractor, no other mark-up allowed	1,000
Total	\$209,500

- F. Other than the overhead and profit described in General Conditions Section 7.02A, no further overhead and profit will be allowed for changes to the Work performed by a Subcontractor under Subcontract with the Contactor or for major equipment or material supplier determined to be an affiliate of or controlled by the Contractor. An affiliate is considered any firm or entity in which the Contractor or any individual listed on the Contractor's NYS Vendor Responsibility Questionnaire either owns 5% or more of the shares of, or is one of the five largest shareholders, a director, officer, member, partner or proprietor of said Subcontractor, major equipment or material supplier; a controlled firm is any firm or entity which, in the opinion of the Owner, is controlled by the Contractor or any individual listed on the Contractor's NYS Vendor Responsibility Questionnaire.
- 1. The Owner, in its sole and exclusive discretion, will determine if a firm or entity is an affiliate of or controlled by the Contractor.
- G. No overhead and profit shall be paid for changes in the Work performed by a Subcontractor not under Subcontract with the Contractor. No overhead and profit shall be paid on the premium portion of overtime pay. Where the changes in the Work involve both an increase and a reduction in similar or related Work, the overhead and profit allowance shall be applied only to the cost of the increase that exceeds the cost of the reduction.

#### SECTION 8.02A – DEDUCT CHANGE ORDER

The amount of credit to be allowed by the Contractor to the Owner for a deletion or change which results in a decrease in the Contract amount shall be as determined by the Owner. The credit shall include the overhead and profit allocable to the deleted or changed Work unless the Owner, in its sole and exclusive discretion, determines otherwise.

# **SECTION 8.03 – FORM OF CHANGE ORDERS**

All Change Orders shall be processed, executed and approved on AIA document G701, which is included herein and made part of the Contract Documents. No alteration to this form shall be acceptable to the Owner and no payment for Extra Work shall be due the Contractor unless it executes a Change Order on said form.

# **ARTICLE 9 -- TIME OF COMPLETION**

# SECTION 9.01 – TIME OF COMPLETION

- A. The Work shall be commenced at the time stated in the Owner's written notice to proceed, and shall be completed no later than the time of completion specified in the Contract Documents. Notwithstanding anything to the contrary, a schedule submitted by the Contractor showing a time of completion earlier than that specified in the Contract shall not entitle the Contractor to any additional compensation in the event the earlier time of completion is not realized.
- B. It is hereby understood and mutually agreed, by and between the Contractor and the Owner, that the time for completion of the Work, as specified in the Contract Documents, is an essential and material condition of the Contract.
- C. The Contractor agrees that the Work shall be prosecuted regularly, diligently and uninterruptedly at such rate of progress as shall insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the Owner, that the time for completion of the Work described herein is a reasonable time for completion of the same.
- D. If the Contractor shall neglect, fail or refuse to complete the Work within the time specified, or any proper extension thereof granted by the Owner, the Contractor agrees to pay to the Owner for loss of beneficial use of the structure an amount specified in the Contract, not as a penalty, but as liquidated damages, for each and every calendar day that the Contractor is in default. Default shall include abandonment of the Work by the Contractor.
- E. Said amount of liquidated damages is agreed upon by and between the Contractor and the Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages which the Owner would sustain for loss of beneficial use of the structure in the event of delay in completion, and said amount is agreed to be the amount of damages sustained by the Owner and said amount may be retained from time to time by the Owner.

- F. It is further agreed that time is of the essence for each and every portion of the Work. In any instance in which additional time is allowed for the completion of any Work, the new time of completion established by said extension shall be of the essence. The Contractor shall not be charged with liquidated damages or any excess cost if the Owner determines that the Contractor is without fault and that the delay in completion of the Work is due:
  - 1. to an unforeseeable cause beyond the control and without the fault of, or negligence of the Contractor, and approved by the Owner, including, but not limited to, acts of God or of public enemy, acts of the Owner, fires, epidemics, quarantine, restrictions, strikes, freight embargoes and unusually severe weather; and
  - 2. to any delays of Subcontractors or suppliers occasioned by any of the causes specified in Subsections 1. of this paragraph.

The Contractor shall, within ten (10) days from the beginning of any such delay, notify the Owner, in writing, of the causes of the delay.

- G. The time for completion can be extended only by Change Order approved by the Owner and may be extended for:
  - 1. all of the Work, or
  - 2. only that portion of the Work altered by the Change Order.
- H. The foregoing liquidated damages are intended to compensate the Owner only for the loss of beneficial use of the structure. In addition, the Contractor shall be liable to the Owner for whatever actual damages (other than actual loss of beneficial use) the Owner may incur as a result of any actions or inactions of the Contractor or its Subcontractors including, without limitation, interest expense and carrying costs, liabilities to other Contractors working on the project or other third parties, job extension costs and other losses incurred by the Owner. The provisions of this paragraph are for the exclusive use of the Owner, and shall not accrue to other contractors or third parties.

# ARTICLE 10 -- TERMINATION OR SUSPENSION

# **SECTION 10.01 – TERMINATION FOR CAUSE**

In the event that any provision of the Contract is violated by the Contractor or by any Subcontractor, the Owner may serve written notice upon the Contractor and upon the Contractor's surety, if any, of the Owner's intention to terminate the Contract; such notice shall contain the reasons for the intention to terminate the Contract upon a date specified by the Owner. If the violation or delay shall not cease or arrangements satisfactory to the Owner shall not be made, the Contract shall terminate upon the date so specified by the Owner. In the event of any such termination, the Owner may take over the Work and prosecute same to completion by Contract or otherwise for the account and at the expense of the Contractor, and the Contractor and Contractor's surety shall be liable to the Owner for all costs occasioned the Owner thereby. In the event of such termination the Owner may take possession of and may utilize such materials, appliances and plant as may be on the Site and necessary or useful in completing the Work.

# SECTION 10.02 – TERMINATION FOR CONVENIENCE OF OWNER

The Owner, at any time, may terminate the Contract in whole or in part. Any such termination shall be effected by delivering to the Contractor a notice of termination specifying the extent to which performance of Work under the Contract is terminated and the date upon which the termination becomes effective. Upon receipt of the notice of termination, the Contractor shall act promptly to minimize the expenses resulting from the termination. The Owner shall pay the Contractor for Work of the Contract performed by the Contractor and accepted by the Owner for the period extending from the date of the last approved Application for Payment up to the effective date of the termination, including retainage. In no event shall the Contractor be entitled to compensation in excess of the total consideration of the Contract. In the event of such termination the Owner may take over the Work and prosecute the Contract to completion and may take possession of and may utilize such materials, appliances, and equipment as may be on the Site and necessary or useful in completing the Work.

# SECTION 10.03 – OWNER'S RIGHT TO DO WORK

The Owner may, after notice to the Contractor, without terminating the Contract and without prejudice to any other right or remedy the Owner may have, perform or have performed by others all of the Work or any part thereof and may deduct the cost thereof from any moneys due or to become due the Contractor.

#### SECTION 10.04 – SUSPENSION OF WORK

- A. The Owner may order the Contractor in writing to suspend, delay or interrupt performance of all or any part of the Work for a reasonable period of time as the Owner may determine. The order shall contain the reason or reasons for issuance which may include but shall not be limited to the following: latent field conditions, substantial program revisions, acquisition of rights of way or real property, financial crisis, labor disputes, civil unrest or acts of God.
- B. Upon receipt of a suspension order, the Contractor shall, as soon as practicable, cease performance of the Work as ordered and take immediate affirmative measures to protect such Work from loss or damage.
- C. The Contractor specifically agrees that such suspension, interruption or delay of the performance of the Work pursuant to this Article shall not increase the cost of performance of the Work of this Contract.
- D. Time for completion of the Work may be extended to such time as the Owner determines shall compensate for the time lost by the suspension, interruption or delay, such determination to be set forth in writing.

#### **ARTICLE 11 -- DISPUTES**

#### SECTION 11.01 – CLAIMS FOR EXTRA WORK

- A. If the Contractor claims that any Work which the Contractor has been ordered to perform will be Extra Work, or that any action or omission of the Owner is contrary to the terms and provisions of the Contract and will require the Contractor to perform Extra Work the Contractor shall:
  - 1. Promptly comply with said order.
  - 2. File with the Owner and the architect within fifteen (15) working days after being ordered to perform the Work claimed by the Contractor to be Extra Work or within fifteen (15) working days after commencing performance of the Work, whichever date shall be earlier, or within fifteen (15) working days after the said action or omission on the part of the Owner occurred, a written notice of the basis of the Contractor's claim, including estimated cost, and request for a determination thereof.

- 3. Proceed diligently, pending and subsequent to the determination of the Owner with respect to any said disputed matter, with the performance of the Work in accordance with all instructions of the Owner.
- B. No claim for Extra Work shall be allowed unless the same was done pursuant to a written order of the Owner. The Contractor's failure to comply with any or all parts of this Article shall be deemed to be:
  - 1. a conclusive and binding determination on the part of the Contractor that said order, Work, action or omission does not involve Extra Work and is not contrary to the terms and provisions of the Contract,
  - 2. a waiver by the Contractor of all claims for additional compensation or damages as a result of said order, Work, action or omission.
- C. The value of claims for Extra Work, if allowed, shall be determined by the methods described in the Contract.

#### SECTION 11.02 - CLAIMS FOR DELAY

No claims for increased costs, charges, expenses or damages of any kind shall be made by the Contractor against the Owner for any delays or hindrances from any cause whatsoever; provided that the Owner, in the Owner's discretion, may compensate the Contractor for any said delays by extending the time for completion of the Work as specified in the Contract.

#### **SECTION 11.03 – FINALITY OF DECISIONS**

- A. Any decision or determination of the Architect, Owner or the Owner's Representative shall be final, binding and conclusive on the Contractor unless the Contractor shall, within ten (10) working days after said decision, make and deliver to the Owner a verified written statement of the Contractor's contention that said decision is contrary to a provision of the Contract. The Owner shall determine the validity of the Contractor's contention. Pending the decision of the Owner, the Contractor shall proceed in accordance with the original decision.
- B. Wherever it is required in the Contract that an application must be made to the Owner or a determination made by the Owner, the decision of the Owner on said application or the determination of the Owner under the Contract shall be final, conclusive and binding upon the Contractor unless the Contractor, within ten (10) working days after receiving notice of the Owner's decision or determination, files a written statement with the Owner that the Contractor reserves the Contractor's rights in connection with the matters covered by said decision or determination.

#### **ARTICLE 12 -- SUBCONTRACTS**

#### SECTION 12.01 – SUBCONTRACTING

- A. The Contractor may utilize the services of Subcontractors subject to the bid terms and conditions.
- B. The Contractor shall submit to the Owner, in writing, the name of each proposed Subcontractor as required by the Contract or earlier when requested. The Owner reserves the right to disapprove any proposed Subcontractor. Such disapproval shall not result in additional cost to the Owner.
- C. The Contractor shall be fully responsible for the Work, acts and omissions of Subcontractors, and of persons either directly or indirectly employed by Subcontractors.
- D. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind Subcontractors to the Contractor by the terms of the Contract Documents insofar as applicable to the work of Subcontractors.
- E. The Contractor's use of Subcontractors shall not diminish the Contractor's obligation to complete the Work in accordance with the Contract Documents. The Contractor shall control and coordinate the work of Subcontractors.
- F. Nothing contained in the Contract or any subcontract shall create any contractual relationship between Subcontractors and the Owner.

#### ARTICLE 13 -- CONTRACT COORDINATION AND COOPERATION

# SECTION 13.01 – COOPERATION WITH OTHER CONTRACTORS

- A. During the progress of the Work, other contractors may be engaged in performing work. The Contractor shall coordinate the Contractor's Work with the work of said other contractors in such a manner as the Owner may direct.
- B. If the Owner shall determine that the Contractor is failing to coordinate the Work with the work of other contractors as the Owner has directed:
  - 1. the Owner shall have the right to withhold any payments due under the Contract until the Owner's directions are complied with by the Contractor; and
  - the Contractor shall assume the defense and pay on behalf of the Owner any and all claims or judgments or damages and from any costs or damages to which the Owner may be subjected or which the Owner may suffer or incur by reason of the Contractor's failure to promptly comply with the Owner's directions.
- C. If the Contractor notifies the Owner, in writing, that another contractor on the Site is failing to coordinate the work of said contractor with the Work, the Owner shall investigate the charge. If the Owner finds it to be true, the Owner shall promptly issue such directions to the other contractor with respect thereto as the situation may require. The Owner shall not be liable for any damages suffered by the Contractor by reason of the other contractor's failure to promptly comply with the directions so issued by the Owner, or by reason of another contractor's default in performance.
- D. Should the Contractor sustain any damage through any act or omission of any other contractor having a contract with the Owner or through any act or omission of any Subcontractor of said other contractor, the Contractor shall have no claim against the Owner for said damage.
- E. Should any other contractor having or which shall have a contract with the Owner sustain damage through any act or omission of the Contractor or through any act or omission of a Subcontractor, the Contractor shall reimburse said other contractor for all said damages and shall indemnify and hold the Owner harmless from all said claims.

F. The Owner cannot guarantee the responsibility, efficiency, unimpeded operations or performance of any Contractor. The Contractor acknowledges these conditions and shall bear the risk of all delays including, but not limited to, delays caused by the presence or operations of other contractors and delays attendant upon any construction schedule approved by the Owner and the Owner shall not incur any liability by reason of any delay.

#### **SECTION 13.02 – SEPARATE CONTRACTS**

- A. The Owner may award other contracts, work under which may proceed simultaneously with the execution of the Work. The Contractor shall coordinate the Contractor's operations with those of other contractors as directed by the Owner. Cooperation shall be required in the arrangements for access, the storage of material and in the detailed execution of the Work.
- B. The Contractor shall keep informed of the progress and workmanship of other contractors and any Subcontractors and shall notify the Owner in writing immediately of lack of progress or defective workmanship on the part of other contractors or subcontractors, where said delay or defective workmanship may interfere with the Contractor's operations.
- C. Failure of a Contractor to keep so informed and failure to give notice of lack of progress or defective workmanship by others shall be construed as acceptance by the Contractor of said progress and workmanship as being satisfactory for proper coordination with the Work.
- D. Where the Contractor shall perform Work in close proximity to work of other contractors or subcontractors, or where there is evidence that Work of the Contractor may interfere with work of other contractors or subcontractors, the Contractor shall assist in arranging space conditions to make satisfactory adjustment for the performance of said work and the Work. If the Contractor performs work in a manner which causes interference with the work of other contractors or subcontractors, the Contractor shall make changes necessary to correct the condition.

#### SECTION 13.03 – COORDINATED COMPOSITE DRAWINGS

The Contractor shall prepare coordinated composite scale reproducible drawings and sections, on reproducible paper, clearly showing how the Work of the Contractor is to be performed in relation to work of other contractors or subcontractors.

# ARTICLE 14 -- PROTECTION OF RIGHTS, PERSONS AND PROPERTY

#### SECTION 14.01 – ACCIDENT PREVENTION

The Contractor shall, at all times, take every precaution against injuries to persons or damage to property and for the safety of persons on or about the Site or engaged in the performance of the Work.

#### **SECTION 14.02 – SAFETY PROGRAMS**

The Contractor shall be responsible for the initiation, maintenance and supervision of safety precautions and programs in connection with the Work.

#### SECTION 14.03 – PROTECTION OF WORK AND PROPERTY

- A. The Contractor shall, at all times, guard the Owner's property from injury or loss in connection with the Work. The Contractor shall, at all times, guard and protect the Contractor's Work, and adjacent property. The Contractor shall replace or make good any said loss or injury unless said loss or injury is caused directly by the Owner.
- B. The Contractor shall have full responsibility to protect and maintain all materials and supplies on and off site in proper condition and forthwith repair, replace and make good any damage thereto until construction completion. The Contractor shall maintain an inventory of all materials and supplies for the Project that are delivered to the Site or approved for off-site storage facilities.
- C. The Contractor shall report any loss, theft, burglary, vandalism or damage of materials or installed work to the Owner by phone and fax as soon as it is discovered. If vandalism, theft, or burglary are suspected as the cause of the loss, the Contractor shall notify site security personnel and the municipal police. The Contractor shall also protect the place of the loss until released from protection by the Owner or the Owner's Representative. The Contractor shall insure that no potential evidence relating to the loss is removed from the place of the loss.

#### **SECTION 14.04 – ADJOINING PROPERTY**

The Contractor shall protect all adjoining property and shall repair or replace any said property damaged or destroyed during the progress of the Work.

#### SECTION 14.05 – RISKS ASSUMED BY THE CONTRACTOR

- A. The Contractor solely assumes the following distinct and several risks whether said risks arise from acts or omissions, whether supervisory or otherwise, of the Owner, of any Subcontractor, of third persons or from any other cause, including unforeseen obstacles and difficulties which may be encountered in the execution of the Work, whether said risks are within or beyond the control of the Contractor and whether said risks involve any legal duty, primary or otherwise, imposed upon the Owner, excepting only risks which arise from faulty designs as shown by the plans and specifications or from the negligence of the Owner or the Owner's members, officers, representatives or employees that caused the loss, damage or injuries hereinafter set forth:
  - 1. The risk of loss or damage, includes direct or indirect damage or loss, of whatever nature to the Work or to any plant, equipment, tools, materials or property furnished, used, installed or received by the Owner, the Construction Manager, the Contractor or any Subcontractor, material or workmen performing services or furnishing materials for the Work. The Contractor shall bear said risk of loss or damage until construction completion or until completion or removal of said plant, equipment, tools, materials or property from the Site and the vicinity thereof, whichever event occurs last. In the event of said loss or damage, the Contractor immediately shall repair, replace or make good any said loss or damage.
  - 2. The risk of claims, just or unjust, by third persons against the Contractor or the Owner and the Construction Manager on account of wrongful death, bodily injuries and property damage, direct or consequential, loss or damage of any kind whatsoever arising or alleged to arise out of or as a result of or in connection with the performance by the Contractor of the Work, whether actually caused by or resulting from the performance of the Work, or out of or in connection with the Contractor's operations or presence at or in the vicinity of the Site. The Contractor shall bear the risk for all deaths, injuries, damages or losses sustained or alleged to have been sustained prior to the construction completion of the Work. The Contractor shall bear the risk for all deaths, injuries, damages or losses sustained or alleged to have been sustained resulting from the Contractor's negligence or alleged negligence which is discovered, appears or is manifested after acceptance by the Owner.

- 3. The Contractor assumes entire responsibility and liability for any and all damage or injury of any kind or nature whatsoever, including death resulting therefrom, to all persons, whether employees of the Contractor or otherwise, and to all property, caused by, resulting from, arising out of or occurring in connection with the execution of the Work. If any person shall make said claim for any damage or injury, including death resulting therefrom, or any alleged breach of any statutory duty or obligation on the part of the Owner, the Owner's Representative, Construction Manager, servants and employees, the Contractor shall assume the defense and pay on behalf of the Owner, the Owner's Representative, the Construction Manager, servants and employees, any and all loss, expense, damage or injury that the Owner, the Owner's Representative, Construction Manager, servants and employees, may sustain as the result of any claim, provided however, the Contractor shall not be obligated to indemnify the Owner, the Owner's Representative, Construction Manager, servants and employees for their own negligence, if any. The Contractor agrees to assume, and pay on behalf of the Owner and the Owner's Representative, Construction Manager, servants and employees, the defense of any action at law or equity which may be brought against the Owner and the Owner's Representative, Construction Manager, servants and employees. The assumption of defense and liability by the Contractor includes, but is not limited to the amount of any legal fees associated with defending, all costs of investigation, expert evaluation and any other costs including any judgment or interest or penalty that may be entered against the Owner and the Owner's Representative, Construction Manager, servants and employees, in any said action.
- 4. The Contractor is advised that the Work required under this Contract may impose certain obligations and requirements mandated by the U.S. Department of Labor Occupational Safety and Health Administration regulations, Title 29 CFR Part 1926.62 Lead Exposure in Construction, relative to the potential exposure to lead by its employees. The Contractor assumes entire responsibility and liability for complying fully in all respects with these regulations.
- B. The Contractor's obligations under this Article shall not be deemed waived, limited or discharged by the enumeration or procurement of any insurance for liability for damages. The Contractor shall notify its insurance carrier within twenty four (24) hours after receiving a notice of loss or damage or claim from the Owner.

The Contractor shall make a claim on its insurer specifically under the provisions of the contractual liability coverages and any other coverages afforded the Owner including those of being an additional insured where applicable.

C. Neither Final Acceptance of the Work nor making any payment shall release the Contractor from the Contractor's obligations under this Article. The enumeration elsewhere in the Contract of particular risks assumed by the Contractor or of particular claims for which the Contractor is responsible shall not be deemed to limit the effect of the provisions of this Article or to imply that the Contractor assumes or is responsible for only risks or claims of the type enumerated; and neither the enumeration in this Article nor the enumeration elsewhere in the Contract of particular risks assumed by the Contractor of particular claims for which the Contractor is responsible shall be deemed to limit the risks which the Contractor would assume or the claims for which the Contractor would be responsible in the absence of said enumerations.

Upon the conclusion of any action, proceeding or lawsuit, should a final binding determination of responsibility be made which allocates responsibility to the Owner, or the Owner's members, officers, employees or representatives, the Owner agrees that the obligation to indemnify and hold harmless shall not be applicable to the portion of any uninsured money judgment for which the Owner is responsible, and the Owner agrees to pay the Contractor the percentage of uninsured defense costs which the Contractor incurred based upon an apportionment of the Owner's allocated responsibility.

The Contractor agrees that any claim or costs of the Owner and/or Construction Manager arising from obligations in this Article and/or Article 15 shall be set off or deducted from payments due the Contractor.

### **ARTICLE 15--INSURANCE AND CONTRACT SECURITY**

### SECTION 15.01 - INSURANCE PROVIDED BY CONTRACTOR

A. The Contractor shall procure and maintain all of the insurance required under this Article until all Work, including punch list items, is complete.

The Contractor shall provide insurance as follows:

- 1. Workers' Compensation and Employers Liability Insurance
  - a. Statutory Workers' Compensation (including occupational disease)

- b. Employers Liability (with a minimum limit of \$1,000,000) New York Statutory Endorsement
- 2. Commercial General Liability (CGL) with a combined single limit for Bodily Injury, Personal Injury and Property Damage of at least \$2,000,000 per occurrence & aggregate. The limit may be provided through a combination of primary and umbrella/excess liability policies.

Coverage shall provide and encompass the following:

- a. Written on an occurrence form;
- b. Endorsement naming the following as additional insureds: The Fashion Institute of Technology, its auxiliary corporations, the State University of New York, the New York City Department of Education and the City and State of New York, the Construction Manager (if applicable) and other entities specified.
- c. Policy or policies must be endorsed to be primary as respects the coverage afforded the Additional Insureds and such policy shall be primary to any other insurance maintained by the Owner. Any other insurance maintained by the Owner shall be excess of and shall not contribute with the Contractor's or Subcontractor's insurance, regardless of the "other insurance" clause contained in the Owner's own policy of insurance.
- 3. Commercial Automobile Liability and Property Damage Insurance covering all owned, leased, hired and non-owned vehicles used in connection with the Work with a combined single limit for Bodily Injury and Property Damage of at least \$1,000,000 per occurrence. The limit may be provided through a combination of primary and umbrella/excess liability policies.
- 4. Umbrella/excess liability insurance with limits of:

\$5,000,000 per occurrence \$5,000,000 general aggregate

B. Before commencement of Work, the Contractor shall submit to the Owner for approval two (2) Certificates of Insurance, indicating the Project. Certificates shall provide thirty (30) days' written notice prior to the cancellation, non-renewal, or material modification of any policy. Upon request, the Contractor shall furnish the Owner and the Construction Manager with certified copies of each policy. In addition, where applicable, the Contractor shall provide copies of Certificates of Insurance to the Construction Manager.

Certificates shall be forwarded to Owner in care of:

Sam Li Purchasing Deputy Director FIT Purchasing 333 Seventh Avenue, 15<sup>th</sup> Floor New York, NY 10001

Certificate(s) of Insurance, when submitted to the Owner, constitutes a warranty by the Contractor that the insurance coverage described is in effect for the policy term shown.

Should the Contractor engage a Subcontractor, the same conditions as are applicable to the Contractor under these insurance requirements shall apply to each Subcontractor of every tier. Proof thereof shall be supplied to the Owner at the address listed above.

- C. All insurance required to be procured and maintained must be procured from insurance companies licensed to do business in the State of New York and rated at least B+ by A.M. Best and Company, or meet such other requirements as are acceptable to the Owner.
- D. Should the Contractor fail to provide or maintain any insurance required by this Contract, the Owner may, after providing written notice to the Contractor, purchase insurance complying with the requirements of this Article and charge back such purchase to the Contractor.
- E. At any time that the coverage provisions and limits on the policies required herein do not meet the provisions and limits set forth above, the Contractor shall immediately cease Work on the Project. The Contractor shall not resume Work on the Project until authorized to do so by the Owner. Any delay or time lost as a result of the Contractor not having insurance required by this Article shall not give rise to a delay claim or any other claim against the Owner or the Client.
- F. Notwithstanding any other provision in this Article, the Owner may require the Contractor to provide, at the expense of the Owner, any other form or limit of insurance necessary to secure the interests of the Owner.
- G. The Contractor shall secure, pay for, and maintain Property Insurance necessary for protection against the loss of owned, borrowed or rented capital equipment and tools, including any tools owned by employees, and any tools or equipment, staging towers, and forms owned, borrowed or rented by the Contractor. The requirement to secure and maintain such insurance is solely for the benefit of the Contractor. Failure of the Contractor to secure such insurance or to maintain adequate levels of coverage shall not render the Additional Insureds or their

- agents and employees responsible for any losses; and the Additional Insureds, their agents and employees shall have no such liability.
- H. Neither the procurement nor the maintenance of any type of insurance by the Owner, the Contractor or the Construction Manager shall in any way be construed or deemed to limit, discharge, waive or release the Contractor from any of the obligations or risks accepted by the Contractor or to be a limitation on the nature or extent of said obligations and risks.

## SECTION 15.01A – OTHER INSURANCE PROVIDED BY CONTRACTOR

Railroad Protective Liability insurance: If any Work of the Contract is to be performed on or within fifty (50) feet of a railroad property or railroad right of way or will require entrance upon railroad property or right of way or will require assignment of a railroad employee, the Contractor shall provide and maintain a Railroad Protective Liability policy with the policy limits required by the owner(s) of the railroad, including the MTA. For purposes of this paragraph, a subway is a railroad. The policy form shall be ISO-RIMA or an equivalent form approved by the owner(s) of the railroad. The railroad owner(s) shall be the named insured on the policy and the definition of "physical damage to property" shall mean direct and accidental loss of or damage to all property of any named insured and all property in any named insured's care, custody, or control. If the Contractor shall provide a Railroad Protective Liability insurance policy, the Contractor and any Subcontractor performing on or within fifty (50) feet of railroad property or railroad right of way or entering railroad property or right of way or requiring assignment of a railroad employee shall have their CGL insurance policy endorsed to delete the exclusion of coverage for Work within fifty (50) feet of railroad property.

#### **SECTION 15.02 – GENERAL CONFORMANCE**

The Contractor and Subcontractors shall not violate, or be permitted to violate, any term or condition of their insurance policies, and shall at all times satisfy the safety requirements of the Owner and of the insurance companies issuing such policies.

#### **SECTION 15.03 – CONTRACT SECURITY**

The Contractor shall furnish a surety bond in an amount at least equal to one hundred (100%) of the Contract price as security for the faithful performance of the Contract and also labor and material bond in the form set forth in the Contract in an amount at least equal to one hundred (100%) of the Contract price for the payment of all persons performing labor or providing materials in connection with the Work. The surety on said bond shall be a surety company authorized to do business in the State of New York and shall be rated at least B+ by A.M. Best and Company, or meet such other requirements as are acceptable to the Owner.

#### SECTION 15.04 – ADDITIONAL OR SUBSTITUTE BOND

If at any time the Owner shall become dissatisfied with any surety or sureties upon the performance bond, or the labor and material payment bond, or if for any other reason said bonds shall cease to be adequate security to the Owner, the Contractor shall, within five (5) days after notice from the Owner to do so, substitute an acceptable bond or bonds in such form and sum and signed by such other surety or sureties as may be satisfactory to the Owner. The premiums on said bond or bonds shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable bond or bonds to the Owner.

# SECTION 15.05 – FAILURE TO COMPLY WITH PROVISIONS OF ARTICLE 15

The Contract may, at the sole option of the Owner, be declared void and of no effect if the Contractor fails to comply with the provisions of Article 15.

# ARTICLE 16 -- USE OR OCCUPANCY PRIOR TO ACCEPTANCE BY OWNER

#### SECTION 16.01 – OCCUPANCY PRIOR TO ACCEPTANCE

NOT APPLICABLE

#### **ARTICLE 17 -- PAYMENT**

#### **SECTION 17.01 – PROVISION FOR PAYMENT**

A. The Owner may make a partial payment to the Contractor on the basis of an approved estimate of the Work performed during each preceding business month. The Owner shall retain ten percent (10%) of the amount of each said estimate.

The Contractor shall submit a detailed Contract Payment Breakdown prior to the Contractor's first application for payment. The model contract payment breakdown included in the Contract Documents shall establish the minimum level of detail required for the Contractor's payment breakdown. It is understood and the Contractor acknowledges that this model is included as an administrative tool for

the purpose of illustrating a format and minimum level of detail required for the Contract Payment Breakdown and shall not be considered as delineating the Contractor's Scope of Work. The Owner may request further and more detailed Contract Payment Breakdown. Further, the Owner reserves the right to accept only those cost distributions which, in the Owner's opinion, are reasonable, equitably balanced and correspond to the estimated quantities in the Contract Documents.

No payment shall be made by the Owner until the Contract Payment Breakdown is approved by the Owner.

Each monthly partial payment requisition must include Affirmative Action Form AAP 7.0, Contractor's Compliance Report, properly executed, as a condition precedent to requisition payment by the Owner.

B. In preparing estimates for partial payment, material delivered to the Site and properly stored and secured at the Site, and Material approved to be stored off-site under such conditions as the Owner shall prescribe may be taken into consideration. All costs related to the storage of materials are the sole responsibility of the Contractor.

The Owner will provide an Agreement for Materials Stored Off-Site and specific forms which the Contractor must complete and submit with any request for approval of partial payment for such material. Required information includes but is not limited to: a general description of the material; a detailed list of the materials; a pre-approved storage area; segregation and identification of the material; insurance covering full value against all risks of loss or damage, with non-cancellation provision; immediate replacement agreement in event of loss or damage; agreement to pay the expense of all inspections of the material; ownership provisions; delivery guarantee; project completion statement; bill of sale, releases, and inventory.

- C. Any partial payment made shall not be construed as a waiver of the right of the Owner to require the fulfillment of all the terms of the Contract.
- D. After the Owner has determined Substantial Completion of the Work, the Contractor shall submit to the Owner, for the Owner's approval, a detailed estimate of the value of the known remaining items of Work as set forth by the Owner and a schedule of completion for said items of Work. The Owner shall review that estimate and make the final determination.

The Owner, when all the Work is substantially complete, shall pay to the Contractor the balance due the Contractor pursuant to the Contract, less:

- 1. two (2) times the value of any remaining items of Work to be completed or corrected; and
- 2. an amount necessary to satisfy any and all claims, liens or judgments against the Contractor.

As the remaining items of Work are completed and accepted by the Owner, the

Owner shall pay the appropriate amount pursuant to the duly completed and submitted monthly requisitions.

The list of remaining Work items may be expanded to include additional items of corrective or completion Work until final acceptance as certified by the Owner's execution of "Notification of Construction Completion". Appropriate payments may be withheld to cover the value of these items pursuant to this Section.

E. All Monthly Requisitions submitted by the Contractor shall be on AIA documents G702 and G703. The Contractor shall furnish such affidavits, vouchers and receipts as to delivery and payment for materials as required by the Owner to substantiate each and every payment requested. The Contractor and its Subcontractors will submit with all applications for payment copies of the certified payrolls and certification of payment of wage supplements in a form satisfactory to the Owner. The submission of Contractor and Subcontractor certified payrolls is required at least monthly. No progress payments will be processed without submission by the Contractor of properly executed Affidavit of Payment and Release of Liens (AIA Documents G706 and G706A)."

### Section 17.02 - Acceptance of the First Payment Pursuant to Section 17.01 D. of the Contract Constitutes Release

The acceptance by the Contractor of the first payment pursuant to Section 17.01 D. shall be and shall operate as a release to the Owner of all claims by and all liability to the Contractor for all things in connection with the Work and for every act and neglect of the Owner and others relating to or arising out of the Work. No payment, final or otherwise, shall operate to release the Contractor or the Contractor's sureties from any obligations under this Contract or the performance or labor and material payment bonds.

#### SECTION 17.03 – RELEASE AND CONSENT OF SURETY

Notwithstanding any other provision of the Contract Documents to the contrary, the first payment pursuant to Section 17.01 D. shall not become due until the Contractor submits to the Owner a General Release and a Consent of Surety to said payment pursuant to Section 17.01 D., both in form and content acceptable to the Owner.

#### **SECTION 17.04 - LIENS**

Upon the Owner's receipt of a lien, a sum which shall be one and one-half (1 1/2) times the amount stated to be due in the notice of lien shall be deducted from the current payment due the Contractor. This sum shall be withheld until the lien is discharged.

#### **SECTION 17.05 – WITHHOLDING OF PAYMENTS**

- A. The Owner may withhold from the Contractor any part of any payment as may, in the judgment of the Owner, be necessary:
  - 1. to assure payment of just claims of any persons supplying labor or materials for the Work;
  - 2. to protect the Owner from loss due to defective Work not remedied; or
  - 3. to protect the Owner, Construction Manager or Consultant from loss due to failure to defend, loss due to injury to persons or damage to the Work or property of other contractors, Subcontractors or others caused by the act or neglect of the Contractor or Subcontractors.
  - 4. to assure payment of fines and penalties which may be imposed on the Contractor pursuant to the provisions of this Contract.
- B. The Owner shall have the right to apply any such amounts so withheld, in such manner as the Owner may deem proper to satisfy said claims, fines and penalties or to secure said protection. Said application of the money shall be deemed payments for the account of the Contractor.
- C. The provisions of this Article 17 are solely for the benefit of the Owner, and any action or non-action hereunder by the Owner shall not give rise to any liability on the part of the Owner.

# SECTION 17.06 – OWNER'S RIGHT TO AUDIT AND INSPECTION OF RECORDS

The Contractor shall maintain and keep, for a period of at least six (6) years after the date of final payment, all records and other data relating to the Work, including records of Subcontractors and material suppliers. The Owner or the Owner's Representative shall have the right to inspect and audit all records and other data of the Contractor, Subcontractors and material suppliers relating to the Work.

#### SECTION 17.07 - FALSE STATEMENTS/INFORMATION

- A. False statements, information or data submitted on or with applications for payment may result in one or more of the following actions:
  - 1. Termination of the Contract for cause;
  - 2. Disapproval of future bids or contracts and sub-contracts;
  - 3. Withholding of final payment on the Contract; and
  - 4. Civil and/or criminal prosecution.

B. These provisions are solely for the benefit of the Owner, and any action or non-action hereunder by the Owner shall not give rise to any liability on the part of the Owner.

#### **ARTICLE 18 -- TAX EXEMPTION**

#### SECTION 18.01 – TAX EXEMPTION

- A. The Owner is exempt from payment of Federal, State, local taxes and sales and compensating use taxes of the State of New York and of cities and counties on all materials and supplies incorporated into the completed Work. These taxes are not to be included in bids. This exception does not apply to tools, machinery, equipment or other property leased by or to the Contractor or a Subcontractor, or to supplies and materials which, even though they are consumed, are not incorporated into the completed Work, and the Contractor and Subcontractors shall be responsible for and pay any and all applicable taxes, including sales and compensating use taxes, on said leased tools, machinery, equipment or other property and upon all said unincorporated supplies and materials.
- B. The Contractor and Subcontractors shall obtain any and all necessary certificates or other documentation from the appropriate governmental agency or agencies, and use said certificates or other documentation as required by law, rule or regulation.

#### ARTICLE 19 -- GUARANTEE

#### **SECTION 19.01 - GUARANTEE**

The Contractor shall in all respects guarantee the Work to the Owner and be responsible for all material, equipment and workmanship of the Work. The Contractor shall forthwith repair, replace or remedy in a manner approved by the Owner, any said material, equipment, workmanship, or other part of the Work found by the Owner to be defective or otherwise faulty and not acceptable to the Owner, which defect or fault appears during the minimum period of one (1) year, or such longer period as may be prescribed by the Contract, from the date of Construction Completion or any part thereof, by the Owner. The Contractor shall also pay for any damage to the Work resulting from said defect or fault.

#### **ARTICLE 20 -- STANDARD PROVISIONS**

#### SECTION 20.01 – PROVISIONS REQUIRED BY LAW DEEMED INSERTED

Each and every provision of law and clause required by law to be inserted in the Contract shall be deemed to be inserted therein and the Contract shall read and shall be enforced as though so included therein.

# SECTION 20.02 – COMPLIANCE WITH LAWS, RULES AND REGULATIONS

The Contractor shall comply fully with all applicable laws, rules and regulations.

#### SECTION 20.03 – LAW GOVERNING THE CONTRACT

The Contract shall be governed by the laws of the state of New York.

#### SECTION 20.04 - ASSIGNMENT

The Contractor shall not assign the Contract in whole or in part without prior written consent of the Owner. If the Contractor assigns all or part of any moneys due or to become due under the Contract, the instrument of assignment shall contain a clause substantially to the effect that the Contractor and assignee agree that the assignee's right in and to any moneys due or to become due to the Contractor shall be subject to all prior claims for services rendered or materials supplied in connection with the performance of the Work.

#### SECTION 20.05 – NO THIRD PARTY RIGHTS

Nothing in the Contract shall create or shall give to third parties any claim or right of action against the Owner, the Fashion Institute of Technology, the State University of New York, Board of Education of the City of New York, the City or State of New York and the Construction Manager beyond such as may legally exist irrespective of the Contract.

#### SECTION 20.06 – CONTRACT DEEMED EXECUTORY

The Contractor agrees that the Contract shall be deemed executory to the extent of moneys available and that no liability shall be incurred by the Owner beyond the moneys available therefore.

#### **SECTION 20.07 – ANTI-RIOT PROVISIONS**

- A. The Contractor agrees that no part of the Contract funds shall be used to make payments, give assistance, or supply services, in any form, to any individual convicted in any Federal, State or local court of competent jurisdiction for inciting, promoting, or carrying on a riot or engaging in any group activity resulting in material damage to property or injury to persons found to be in violation of Federal, State or local laws designed to protect persons or property.
- B. The Contractor and each Subcontractor shall notify their employees of all rules and

regulations adopted pursuant to Article 129-A of the Education Law of the State of New York. Notices containing the text of the aforementioned rules and regulations shall be posted by the Contractor at the Site.

#### SECTION 20.08 – DOMESTIC STEEL

The Contractor agrees, that if the value of this contract exceeds \$100,000 all structural steel, reinforcing steel and other major steel items to be incorporated in the Work of this Contract shall be produced and made in whole or substantial part in the United States, its territories or possessions.

#### **SECTION 20.09 – PROTECTION OF LIVES AND HEALTH**

- A. Each Contractor and Subcontractor shall comply with all applicable provisions of the laws of the State of New York, the United States of America and with all applicable rules and regulations adopted or promulgated by agencies or municipalities of the State of New York or the United States of America. The Contractor's and Subcontractor's attention is specifically called to the applicable rules and regulations, codes and bulletins of the New York State Department of Labor and to the standards imposed under the Federal Occupational Safety and Health Act of 1970, as amended.
- B. The Contractor shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment of Work under the Contract, and shall immediately notify the Owner in writing of any injury which results in hospitalization or death. The Contractor shall provide to the Owner a copy of Form C-2, Employers Report of Injury/Illness within twenty- four (24) hours of any job related injury on the Owner's job site. Further, a copy of the OSHA Log of Injury and Illness shall also be provided to the Owner for any reporting period in which a job related injury or illness is recorded. The Contractor shall also provide a list of witnesses to the Owner. The list shall include at least the full name, home address, occupation and telephone number of each person who saw or has knowledge of the incident which caused the injury or illness.
- C. The Contractor alone shall be responsible for the safety, efficiency and adequacy of the Contractor's Work, plant, appliances and methods, and for any damage which may result from the failure or the improper construction, maintenance or operation of such Work, plant, appliances and methods.
- D. If, in the performance of the Work, a harmful hazard is created for which appliances or methods of elimination have been approved by regulatory authorities, the Contractor shall install, maintain and operate said appliances or methods.
- E. The Owner may impose a payment penalty on the Contractor for any act of noncompliance with this section. The payment penalty shall not exceed one twentieth

- (1/20) of the Contract price or a maximum of One Thousand Dollars (\$1,000.00) for each time the Contractor fails to perform or to provide the information, reports or forms required in this section. This payment penalty is not exclusive, the Owner may avail itself of any other contractual remedy available.
- F. The Owner, Owner's Representative, or Architect may inspect the Site at any time without notice to the Contractor. If the Owner or its representatives find that the Contractor is not complying with Section 20.10 A or any other provision of Section 20.10, the Owner may send written notice to the Contractor to correct any deficiency. Upon re-inspection, if the Owner finds the deficiencies have not been corrected, or in instances where a safety violation (s) must be corrected before Work continues and the Contractor is given three (3) hours to make correction (s) and they are not made, the Owner may let a separate contract to correct any deficiencies and back charge the cost of the separate contract to the Contractor at a premium rate. The Contractor cannot pass these additional charges on to the Owner. No action taken under this section shall be deemed as a basis for any delay claim or any other claim against the Owner by the Contractor.
- G. The Contractor shall preserve and safeguard the scene of an accident involving a ladder, scaffold, mobile machinery, equipment, safety railing or uncovered floor opening or any other incident where the injured person required emergency medical treatment. The Contractor shall "tape off" the area, and not allow any material object or property to be altered, changed, moved or removed from the accident site. In addition to "taping off" the accident site, the Contractor shall telephone and send a facsimile or email to Owner immediately, and post a person at the accident site to protect it. Safeguarding and protecting the accident site shall only be abandoned by the Contractor upon release by the Owner or the Owner's Representative. Failure of the Contractor to comply with the provisions of this paragraph shall be deemed a breach of this Contract. In addition to any other contractual remedies available, the Owner may satisfy the breach by imposing the penalties set out in paragraph 20.10 E or void the entire Contract and retain any or all amounts due the Contractor under this Contract.

#### SECTION 20.10 - PROHIBITED INTERESTS / ETHICAL CONDUCT

- A. No officer, employee, architect, attorney, engineer, inspector or consultant of or for the Owner authorized on behalf of the Owner to exercise any legislative, executive, administrative, supervisory or other similar functions in connection with the Contract or the Work, shall become personally interested, directly or indirectly, in the Contract, material supply contract, subcontract, insurance contract, or any other contract pertaining to the Work.
- B. The Owner strongly discourages the Contractor from offering or giving anything of value to employees of the Owner under circumstances which may constitute, or even suggest, impropriety. Contractor, or its agents, shall not directly or indirectly offer or give any gift whether in the form of money, service, loan, travel, lodging, meals, refreshments, entertainment, discount, forbearance or promise, or in any other form, to an employee or any representatives of the Owner.
- C. To promote a working relationship with the Owner based on ethical business practices, the Contractor shall:
  - furnish all goods, materials and services to the Owner as contractually required and specified,
  - submit complete and accurate reports to the Owner and its representatives as required,
  - not seek, solicit, demand or accept any information, verbal or written, from the Owner or its representatives that provides an unfair advantage over a competitor,
  - not engage in any activity or course of conduct that restricts open and fair competition on Owner-related projects and transactions,
  - not engage in any course of conduct with Owner employees or its representatives that constitutes a conflict of interest, in fact or in appearance, and
  - not offer or give any unlawful gifts or gratuities, or engage in bribery or other criminal activity.
- D. The Owner encourages the Contractor to advance and support ethical business conduct and practices among its directors, officers and employees, through the adoption of corporate ethics awareness training programs and written codes of conduct.
- E. Although the Contractor may employ relatives of Owner's employees, the Owner must be made aware of such circumstances as soon as possible, in writing, to ensure a conflict of interest situation does not arise. The Owner reserves the right to request that the Contractor modify the work assignment of a relative of an Owner's

- employee or representative where a conflict of interest, or the appearance thereof, is deemed to exist.
- F. The Contractor may hire former employees of the Owner. However, as a general rule, former employees of the Owner may neither appear nor practice before the Owner, nor receive compensation for services rendered on a matter before the Owner, for a period of *two (2) years* following their separation from service with the Owner. In addition, former employees of the Owner are subject to a "*lifetime bar*" from appearing before the Owner or receiving compensation for services regarding any transaction in which they personally participated or which was under their active consideration during their tenure with the Owner.
- G. The Contractor agrees to notify Stephen Tuttle, Esq., the Owner's attorney, at (212) 217-4030 of any activity by an employee of the Owner that is inconsistent with the contents of this Section.
- H. Any violation of these provisions shall justify termination of this Contract and may result in Owner's rejection of the Contractor's bids or proposals for future contracts.

#### SECTION 20.11 – STATE AND FEDERAL LABOR LAW PROVISIONS

- A. Although the Work of this Contract is not public work, the Owner intends that all applicable provisions of the Labor Law of the State of New York shall be carried out in the performance of the Work.
- B. The Contractor specifically agrees to comply with Labor Law, Sections 220 and 220-d as amended, that:
  - 1. no laborer, workman or mechanic, in the employ of the Contractor, Subcontractor or other person doing or contracting to do the whole or any part of the Work contemplated by the Contract shall be permitted or required to work more than eight (8) hours in any one (1) calendar day and more than five (5) days in any one week, except in the extraordinary emergencies set forth in the Labor Law;
  - 2. the wages paid for a legal day's work shall be not less than the prevailing rate of wages as defined by law;
  - 3. the minimum hourly rate of wage to be paid and supplement provided shall be not less than that stated in the Contract and as shall be designated by the Industrial Commissioner of the State of New York; and
  - 4. the Contractor and every Subcontractor shall post in a prominent and accessible place on the Site, a legible statement of all minimum wage rates and supplements to be paid or provided for the various classes of laborers and mechanics to be engaged in the Work and all deductions, if any,

required by law to be made from unpaid wages actually earned by the laborers and mechanics so engaged.

- C. The minimum wage rates, if any, herein specified for apprentices shall apply only to persons working with the tools of the trade which such persons are learning under the direct supervision of journeyman mechanics. Except as otherwise required by law, the number of apprentices in each trade or occupation employed by the Contractor or any Subcontractor shall not exceed the number permitted by the applicable standards of the New York State Department of Labor, or, in the absence of such standards, the number permitted under the usual practice prevailing between the unions and the employers' association of the respective trades or occupations.
- D. All employees of the Contractor and each Subcontractor shall be paid in accordance with the provisions of the Labor Law. Certified payroll copies shall be provided to the Owner as specified in these General Conditions and otherwise upon request.
- E. The Contractor agrees that, in case of underpayment of wages to any worker engaged in the Work by the Contractor or any Subcontractor, the Owner shall withhold from the Contractor out of payments due an amount sufficient to pay such worker the difference between the wages required to be paid under the Contract and the wages actually paid such worker for the total number of hours worked, and that the Owner may disburse such amount so withheld by the Owner for and on account of the Contractor to the employee to whom such amount is due. The Contractor further agrees that the amount to be withheld pursuant to this paragraph may be in addition to the percentages to be retained by the Owner pursuant to other provisions of the Contract.
- F. Pursuant to subdivision 3 of section 220 and section 220-d of the Labor Law the Contract shall be forfeited and no sum paid for any Work done thereunder upon a Contractor's or Subcontractor's second conviction for willfully paying or providing less than:
  - 1. the stipulated wage scale or supplement as established by the fiscal officer, or
  - 2. less than the stipulated minimum hourly wage scale as designated by the Industrial Commissioner.
- G. Pursuant Labor Law, Section 220-e, the Contractor specifically agrees:
  - 1. That in the hiring of employees for the performance of Work under the Contract or any subcontract hereunder, or for the manufacture, sale or distribution of materials, equipment or supplies hereunder, but limited to operation performed within the territorial limits of the State of New York, no Contractor, Subcontractor, nor any person acting on behalf of such Contractor or Subcontractor, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the Work to which the employment relates;

- 2. That no Contractor, Subcontractor, nor any person on behalf of such Contractor or Subcontractor shall, in any manner, discriminate against or intimidate any employee hired for the performance of work under the Contract on account of race, creed, color, disability, sex or national origin;
- 3. That there may be deducted from the amount payable to the Contractor, by the Owner under the Contract, a penalty of fifty dollars (\$50.00) for each person for each calendar day during which such person was discriminated against or intimidated in violation of the terms of the Contract; and
- 4. That the Contract may be canceled or terminated by the Owner and all moneys due or to become due hereunder may be forfeited for a second or any subsequent violation of the terms or conditions of this section of the Contract, or when one final determination involves the falsification of payroll records or the kickback of wages and/or supplements.

#### H. The Contractor specifically agrees:

- 1. That the Contractor shall certify its payrolls and keep these certified records on site and available, and provide copies to the Owner upon request.
- 2. That the Contractor shall provide each worker with a written notice informing the worker of the prevailing wage requirements for the job. The notice shall contain a simple statement or declaration for the worker's

#### **SECTION 20.12 - NONDISCRIMINATION**

During the performance of the Work, the Contractor agrees as follows:

- A. The Contractor will not discriminate against any employee or applicant for employment because of race, religion/creed, color, sex, sexual orientation, gender, gender identity/expression, national origin, age, disability, marital status, or any other protected category.
- В. If directed to do so by the Commissioner of Human Rights, the Contractor will send to each labor union or representative of workers with which the Contractor has or is bound by a collective bargaining or other agreement or understanding, a notice, to be provided by the State Commissioner of Human Rights, advising such labor union or representative of the Contractor's agreement under clauses A through G (hereinafter called "non-discrimination clauses"). If the Contractor was directed to do so by the Owner as part of the bid or negotiation of this Contract, the Contractor shall request such labor union or representative to furnish a written statement that such labor union or representative will not discriminate because of race, creed, color, sex, national origin, age, disability or marital status, and that such labor union or representative will cooperate, within the limits of its legal and contractual authority, in the implementation of the policy and provisions of these nondiscrimination clauses and that it consents and agrees that recruitment, employment and the terms and conditions of employment under this Contract shall be in accordance with the purposes and provisions of these nondiscrimination clauses. If such labor union or representative fails or refuses to comply with such a request that it furnish such a statement, the Contractor shall promptly notify the State Commissioner of Human Rights of such failure or refusal.
- C. If directed to do so by the Commissioner of Human Rights, the Contractor shall post and keep posted in conspicuous places, available to employees and applicants for employment, notices to be provided by the State Commissioner of Human Rights setting forth the substance of the provisions of clauses A and B and such provisions of the State's laws against discrimination as the State Commissioner of Human Rights shall determine.
- D. The Contractor shall state, in all solicitations or advertisement for employees placed by or on behalf of the Contractor, that all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, sex, national origin, age, disability or marital status.
- E. The Contractor shall comply with the provisions of Section 290-299 of the Executive Law and with the Civil Rights Law, will furnish all information and reports deemed necessary by the State Commissioner of Human Rights under these nondiscriminatory clauses and such sections of the Executive Law, and will permit access to the Contractor's books, records and accounts by the State Commissioner for the purposes of investigation to ascertain compliance with these nondiscrimination clauses and such sections of the Executive Law and Civil Rights Law.

- F. This Contract may be forthwith canceled, terminated or suspended, in whole or in part, by the Owner upon the basis of a finding made by the State Commissioner of Human Rights that the Contractor has not complied with these nondiscrimination clauses, and the Contractor may be declared ineligible for future contracts made by or on behalf of the State or a public authority or agency of the State, until the Contractor satisfies the State Commissioner of Human Rights that the Contractor has established and is carrying out a program in conformity with the provisions of these nondiscrimination clauses. Such finding shall be made by the State Commissioner of Human Rights after conciliation efforts by the Commissioner have failed to achieve compliance with these nondiscrimination clauses and after a verified complaint has been filed with the Commissioner, notice thereof has been given to the Contractor and an opportunity has been afforded the Contractor to be heard publicly in accordance with the Executive Law. Such sanctions may be imposed and remedies invoked independently of or in addition to sanctions and remedies otherwise provided by law.
- G. The Contractor shall include the provisions of clauses A through F above in every subcontractor purchase order in such a manner that such provisions will be binding upon each Subcontractor or vendor as to operation to be performed within the State of New York. The Contractor shall take such action in enforcing such provisions of such Subcontract or purchase order as the State Commissioner of Human Rights or the Owner may direct, including sanctions or remedies for noncompliance. If the Contractor becomes involved in or is threatened with litigation with a Subcontractor or vendor as a result of such direction by the State Commissioner of Human Rights or the Owner, the Contractor shall promptly so notify the Attorney General, requesting the Attorney General to intervene and to protect the interests of the State of New York.

#### **SECTION 20.13 – LIMITATION ON ACTIONS**

No action or proceeding shall lie in favor of or shall be maintained by the Contractor against the Owner unless such action shall be commenced within six (6) months after receipt by the Owner of the Contractor's final requisition or, if the Contract is terminated by the Owner, unless such action is commenced within six (6) months after the date of such termination.

#### **SECTION 20.14 – WAIVER OF REMEDIES**

Inasmuch as the Contractor can be compensated adequately by money damages for any breach of the Contract which may be committed by the Owner, the Contractor agrees that no default, act or omission of the Owner shall constitute a material breach of Contract entitling the Contractor to cancel or rescind the same or to suspend or abandon performance thereof; and the Contractor hereby waives any and all rights and remedies to which the Contractor might otherwise be or become entitled to because of any wrongful act or omission of the Owner saving only the Contractor's right to money damages.

#### SECTION 20.15 – WAIVER OF CERTAIN CAUSES OF ACTION

No action or proceeding shall lie or shall be maintained by the Contractor, nor anyone claiming under or through the Contractor, against the Owner upon any claim arising out of or based upon the Contract, relating to the giving of notices or information.

#### **SECTION 20.16 – CONTRACTOR RELATIONSHIP**

The relationship created by the Contract between the Owner and the Contractor is one of an independent contractor and it is no way to be construed as creating an agency relationship between the Owner and the Contractor nor is it to be construed as, in any way or under any circumstances, creating or appointing the Contractor as an agent of the Owner for any purpose whatsoever.

#### SECTION 20.17 - FAILURE TO COMPLY WITH THIS ARTICLE

The Contract shall be void and of no effect unless the Contractor complies with the provisions of this Article 20.

**SECTION 20.18 – YEAR 2000 WARRANTY** 

SECTION DELETED

#### SECTION 20.19 – FALSE RECORDS/KICKBACKS

The Contractor agrees that this Contract may be canceled or terminated for cause by the Owner and all moneys due or to become due hereunder may be forfeited upon the Owner's determination that the Contractor has submitted false records to the Owner and/or that the Contractor has participated in the kickback of wages. Said determination by the Owner must first allow the Contractor an opportunity to show why its Contract should not be canceled or terminated for cause for said actions.

#### **ARTICLE 21- COOPERATION WITH INVESTIGATIONS**

The Contractor agrees to cooperate fully and faithfully with any investigation, audit or inquiry conducted by the Owner or any other duly authorized representative of the Owner ("Representative").

The Contractor shall grant the Owner or the Representative the right to examine all books, records, files, accounts, computer records, documents and correspondence, including electronically-stored information, in the possession or control of the Contractor, its subsidiaries and affiliated companies and any other company directly or indirectly controlled by the Contractor, relating to the Contract. These shall include, but not be limited to: Subcontracts; bid files; payroll and personnel records; cancelled checks; correspondence; memoranda; reports; audits; vendor qualification records; original estimate files; change order/amendment estimate files; detailed worksheets; Subcontractor, consultant and supplier proposals for both successful and unsuccessful bids; back-charge logs; any records detailing cash, trade, or volume discounts earned; insurance proceeds, rebates or dividends received; payroll and personnel records; tax returns, and the supporting documentation for the aforesaid books and records.

At the Owner's or the Representative's request, said materials shall be provided in a computer readable format, where available. At the request of the Owner or the Representative, the Contractor shall execute such documents, if any, as are necessary to give the Owner or the Representative access to Contract-related books, documents or records which are, in whole or part, under control of the Contractor but not currently in the Contractor's physical possession. The Contractor shall not enter into any agreement with a Subcontractor, consultant or supplier, in connection with the Contract, that does not contain a right to audit clause in favor of the Owner. The Contractor shall assist the Owner or the Representative in obtaining access to past and present Subcontractor, consultant and supplier amendment/change order files (including detailed documentation covering negotiated settlements), accounts, computer records, documents, correspondence, and any other books and records in the possession of Subcontractors, consultants and suppliers pertaining to the Contract, and, if appropriate, enforce the right-to-audit provisions of such agreements.

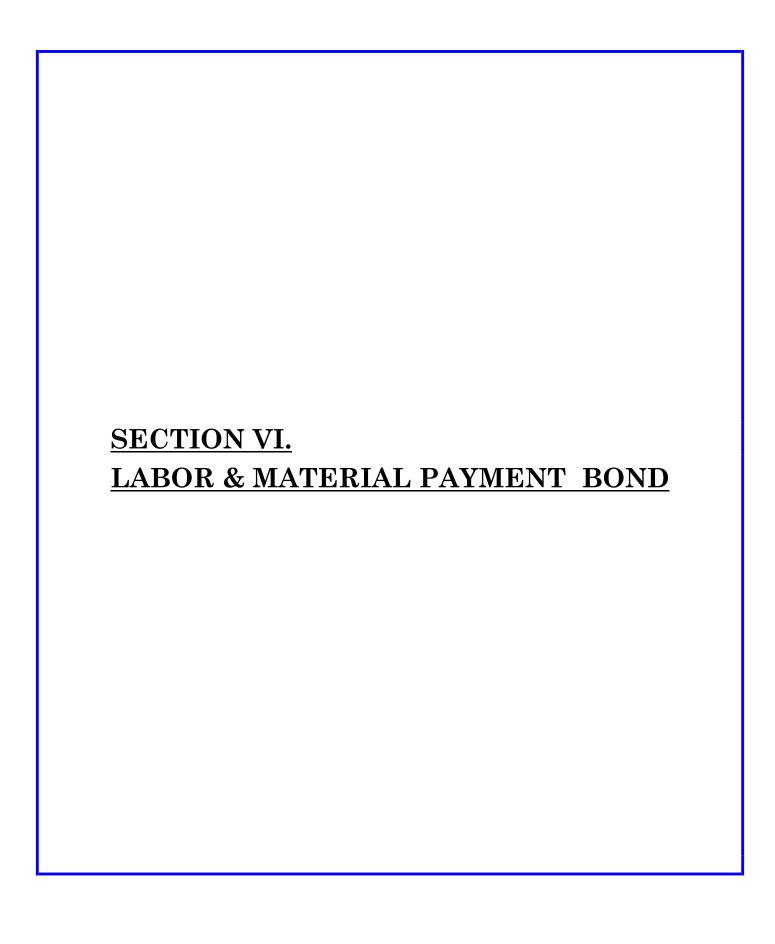
The Contractor shall assist the Owner or the Representative in obtaining access to, interviews with, and information from all former and current persons employed and/or retained by the Contractor, for purposes of the Contract.

The Contractor shall require each Subcontractor to include in all agreements that the

Subcontractor may hereinafter enter into with any and all Subcontractors, consultants and suppliers, in connection with the Contract, a right-to-audit clause in favor of the Owner conferring rights and powers of the type outlined in this section. The Contractor shall not enter into any Subcontract with a Subcontractor in connection with the Contract that does not contain such a provision.

The Contractor shall not make any payments to a Subcontractor, consultant or supplier from whom the Contractor has failed to obtain and supply to the Owner or the Representative complete, accurate and truthful information in compliance with a request from the Owner or the Representative to the Contractor.

Any violation of the provisions of this Article shall justify termination of this Contract and may result in the Owner's rejection of the Contractor's bids or proposals for future contracts.



#### LABOR & MATERIAL PAYMENT BOND

#### **KNOW ALL BY THESE PRESENTS:**

That
(Here insert the name and address or legal title of the Contractor)
as Principal, hereinafter called Principal, and
(Here insert the legal title of Surety)
(Address)
as Surety, hereinafter called Surety, are held and firmly bound unto The Fashion Institute of Technology, as applicable, as Obligee, hereinafter called Owner, for the use and benefit of the claimants as hereinbelow defined, in the amount of
and /100 Dollars (\$)
WHEREAS, Principal has by written agreement dated
entered into a Contract with Owner for

in accordance with the Contract Documents and any changes thereto, which are made a part hereof, and are hereinafter referred to as the Contract.

**NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION** is such that if the Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise such obligation shall remain in full force and effect, subject, however, to the following conditions:

- 1. A claimant is defined as one having a direct Contract with the Principal or with a Subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.
- 2. The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full

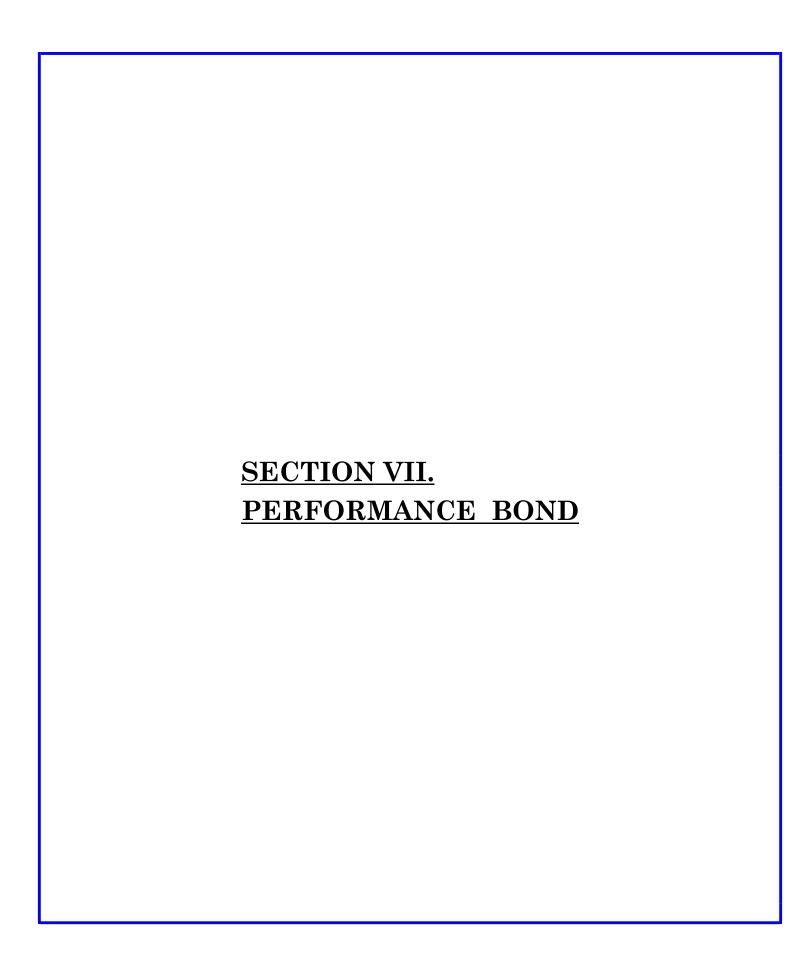
before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.

- 3. No suit or action shall be commenced hereunder by any claimant:
  - a. Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two (2) of the following: 1) the Principal, 2) the Owner, or 3) the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner, or Surety, at any place where an office is regularly maintained by said Principal, Owner, or Surety for the transaction of business, or served in any manner in which legal process may be served in the State in which the aforesaid project is located, save that such service need not be made by a public officer.
  - b. After the expiration of one (1) year following the date on which Principal ceased work of said Contract, however, if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
  - c. Other than in a State court of competent jurisdiction in and for the county or other political subdivision of the State in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere.
- 4. The penal sum of this Bond is in addition to any other Bond furnished by the Contractor and in no way shall be impaired or affected by any other Bond.
- 5. The amount of this Bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of Mechanics' Liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this Bond.

Signed this	day of	20
IN THE PRESE	NCE OF:	
(Principal)		(Surety)
(Signature)		(Signature)
(Print Name and	Title)	(Print Name and Title)
(Address)		(Address)
(City, State, Zip)		(City, State, Zip)
Telephone (	)	_
Fax No.		_
ACKN	NOWLEDGEMENT OF	PRINCIPAL, IF A CORPORATION
STATE OF	) ss:	
COUNTY OF	)	
On the	day of	in the year 20, before me personally
		me known, who, being by me duly sworn, did
depose and say th	nat (s)he resides at	that (s)he is the
		, the corporation
described in and	which executed the above	ve instrument; and that (s)he signed her/his name
thereto by order of	of the Board of Directors of	of said corporation.
		Notary Public

### ACKNOWLEDGEMENT OF PRINCIPAL, IF A PARTNERSHIP

STATE OF)ss	:
COUNTY OF)	
On the day of	in the year 20, before me personally came
the firm_ executed the foregoing instrument,	to me known and known to me to be a member of described in and who and (s)he duly acknowledged to me that (s)he executed the
	for the uses and purpose mentioned therein.
	Notary Public
ACKNOWLEDGEM	ENT OF PRINCIPAL, IF AN INDIVIDUAL
STATE OF) ss:	
COUNTY OF)	
On theday of	in the year 20, before me personally came, to me known and known to me to be the person
described in and who executed the (s)he executed the same.	, to me known and known to me to be the person e foregoing instrument and (s)he duly acknowledged that
	Notary Public
ACKNO	WLEDGEMENT OF SURETY
STATE OF NEW YORK )	
COUNTY OF) ss:	
On theday of	in the year 20, before me personally came to me known, who, being by me duly sworn, did
depose and say that (s)he resides a	1 ()1 . 1
0	
corporation described in and whi	ch executed the above instrument; and that (s)he signed e Board of Directors of said corporation.
	Notary Public



### PERFORMANCE BOND

### KNOW ALL BY THESE PRESENTS:

right to complete the Contract.

That	
	(Here insert the name and address or legal title of the Contractor)
as Pr	incipal, hereinafter called Principal, and
	(Here insert the legal title of Surety)
	(Address)
as S	arety, hereinafter called Surety, are held and firmly bound unto The Fashion Institute of
Tech	nology, as applicable, as Obligee, hereinafter called Owner, in the amount of
	and/100 Dollars (\$) for
_	ayment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, essors and assigns, jointly and severally, firmly by these presents.
WH	EREAS, CONTRACTOR has by written agreement dated
enter	ed into a Contract with Owner for
	cordance with the Contract Documents and any changes thereto, which are made a part of, and are hereinafter referred to as the Contract.
1.	If the Contractor performs the Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 2.1.
2.	If there is no Owner default, the Surety's obligation under this Bond shall arise after:
2.1	The Owner has notified the Contractor, the Surety at its address described in Paragraph 8. below that the Owner is considering declaring a Contractor in default.
2.2	The Owner has declared a Contractor in default and formally terminated the Contractor's

- 2.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Contract or to a Contractor selected to perform the Contract in accordance with the terms of the Contract with the Owner.
- 3. When the Owner has satisfied the conditions of Paragraph 2 herein., the Surety shall, at the Owner's option, promptly and at the Surety's expense take on the following actions:
- 3.1 Arrange for the Contractor, with consent of the Owner, to perform and complete the Contract; or
- 3.2 Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
- 3.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by the Owner and the Contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified Surety equivalent to the bonds issued on the Contract, and pay to the Owner the amount of damages as described in Paragraph 5. in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor default.
- 4. If the Surety does not proceed with reasonable promptness, the Surety shall be deemed to be in default on this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner.
- 5. After the Owner has terminated the Contractor's right to complete the Contract, and if the Surety elects to act under Subparagraph 3.1, 3.2, or 3.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Contract, the Surety is obligated without duplication for:
- 5.1 The responsibilities of the Contractor for correction of defective work and completion of the Contract;
- 5.2 Additional legal, design, professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 3.; and
- 5.3 Liquidated Damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of the Contractor. 3
- 6. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators or successors.
- 7. The Surety hereby waives notice of any change, including changes of time, to the Contract

or to related subcontracts, purchase orders, and other obligations.

- 8. Notice of the Surety and the Contractor shall be mailed or delivered to the address shown on the signature page. Notice to the Owner shall be mailed or delivered to the address shown in the preamble.
- 9. Definitions:

Signed this

day of

- 9.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Contract.
- 9.2 Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
- 9.3 Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.
- 9.4 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

The penal sum of this Bond is in addition to any other Bond furnished by the Contractor and in no way shall be impaired or affected by any other Bond.

Any suit under this Bond must be instituted before the expiration of two (2) years from the date on which Final Payment is made under this Contract.

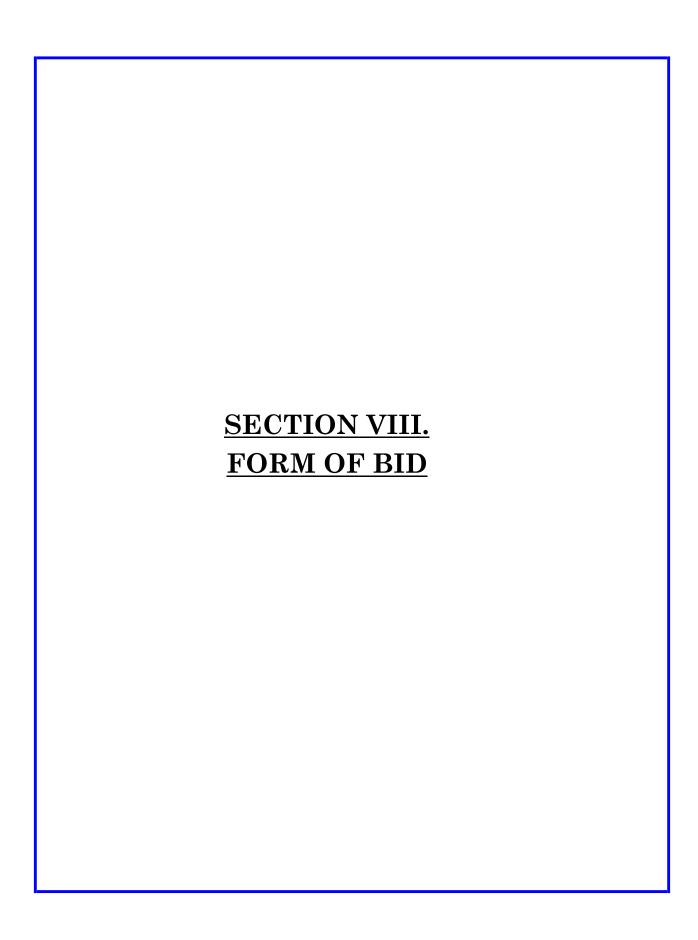
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51gii•4 uiis	aay 01		
IN THE PRESENCE	OF:		
(Principal)		(Surety)	
(Signature)		(Signature)	
(Print Name and Title)		(Print Name and Title)	

(Address)	(Address)
(City, State, Zip)	(City, State, Zip)
Telephone ()	
Fax No.	
ACKNOWLEDGEM	ENT OF PRINCIPAL, IF A CORPORATION
STATE OF	) ss:
COUNTY OF	
On the day of	in the year 20, before me personally came
that (s)he resides atto the above instrument; and that (s)he of said corporation.	me known, who, being by me duly sworn, did depose and say, that (s)he is the of, the corporation described in and which executed signed her/his name thereto by order of the Board of Directors
	Notary Public
ACKNOWLEDGEM	IENT OF PRINCIPAL, IF A PARTNERSHIP
STATE OF)ss:	
COUNTY OF)	
On the day of	in the year 20, before me personally came
firmforegoing instrument, and (s)he duly behalf of said firm for the uses and p	, to me known and known to me to be a member of the, described in and who executed the acknowledged to me that (s)he executed the same for and in ourpose mentioned therein.
	Notary Public

## ACKNOWLEDGEMENT OF PRINCIPAL, IF AN INDIVIDUAL

STATE OF) ss:	
COUNTY OF)	
On the day of	in the year 20, before me personally
camedescribed in and who executed the fore executed the same.	, to me known and known to me to be the person egoing instrument and (s)he duly acknowledged that (s)he
	Notary Public
ACKNOW STATE OF NEW YORK )	LEDGEMENT OF SURETY
COUNTY OF) ss:	
On the day of	in the year 20_, before me personally came
and say that (s)he resides at of	to me known, who, being by me duly sworn, did deposed to the the the total tot
	Notary Public



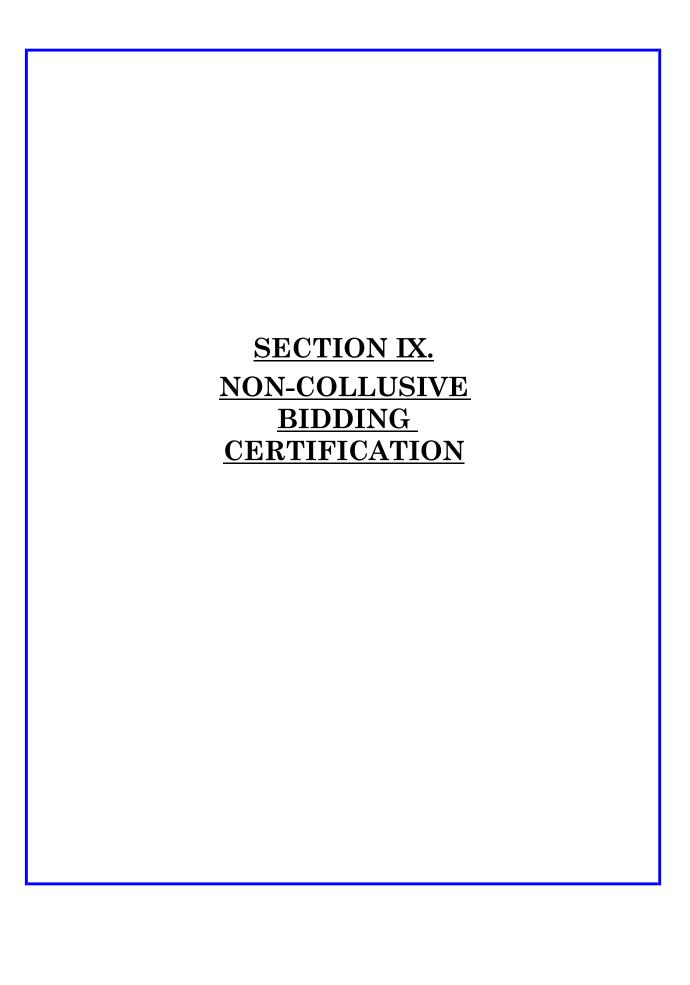
### FORM OF BID

## (Contract for Total of All Materials and Labor)

# The Fashion Institute of Technology (Owner)

н	n	r	•
т.	v		•

The Fashion Institute of Technology is requesting Bids for the Work described in Section II. Bid Terms and Conditions, II. Summary of Scope of Work and as shown and described on the drawings and specifications provided with this document at the Fashion Institute of Technology's "located on 27 <sup>th</sup> street
campus. To be known from this point forward as the "" located on 27 <sup>th</sup> street
Pursuant to and in compliance with the Owner's advertisement for bids dated
Dollars
(\$).
The Bid may be withdrawn at any time prior to the scheduled time for the opening of bids or any authorized postponement thereof.
If written notice of the acceptance of the Bid is sent to the undersigned by certified or registered mail or by facsimile transmission or delivered to the undersigned within ninety (90) days after the date of opening of the bids, or any time thereafter before the Bid is withdrawn, the undersigned shall, within eight (8) days after the date of such mailing, facsimile transmission, or delivery of such notice, execute and deliver a Contract in the Form of Contract included in the Contract Documents.
The undersigned hereby designates as the undersigned's office to which such notice of acceptance may be mailed, transmitted, or delivered as



#### **Non-collusive Bidding Certification**

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and, in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief:

- 1. The prices in the bid have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
- 2. Unless otherwise required by law, the prices which have been quoted in the bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and
- 3. No attempt has been made or will be made by the bidder to induce any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition.

Firm Name	
Address	
Dated:	
	_Fax No. ()
(Taxpayer ID or Social Security Nur	
ACKNOWLEDGEN	MENT OF BIDDER, IF A CORPORATION
STATE OF NEW YORK COUNTY OF	) _) ss:
On theday of, 2	0_, before me personally came
to me known, who, being by me dul	y sworn, did depose and say that (s)he resides at
, that (s)he is the	of
, the corpora	ation described in and which executed the above instrument;
	nereto by order of the Board of Directors of said corporation.

Notary Public

## ACKNOWLEDGEMENT OF BIDDER, IF A PARTNERSHIP

STATE OF NEW YORK	)
COUNTY OF	<u>)</u> ss:
On theday of	, 20, before me personally came
to me known and known to me	to be a member of the firm
, descr	ibed in and who executed the foregoing instrument, and (s)he duly
acknowledged to me that (s)he	executed the same for and in behalf of said firm for the uses and
purposes mentioned therein.	
	Notary Public
	1.00029 1.00020
ACKNOWLE	DGEMENT OF BIDDER, IF AN INDIVIDUAL
STATE OF NEW YORK	,
COUNTY OF	<u>)</u> ss:
On theday of	, 20, before me personally came
to me known and known to me	to be the person described in and who executed the foregoing
instrument, and (s)he duly ack	nowledged that (s)he executed the same.
	Notary Public

SECTION X: SUBSTITUTION FORM REQUEST	

#### **FASHION INSTITUTE OF TECHNOLOGY**

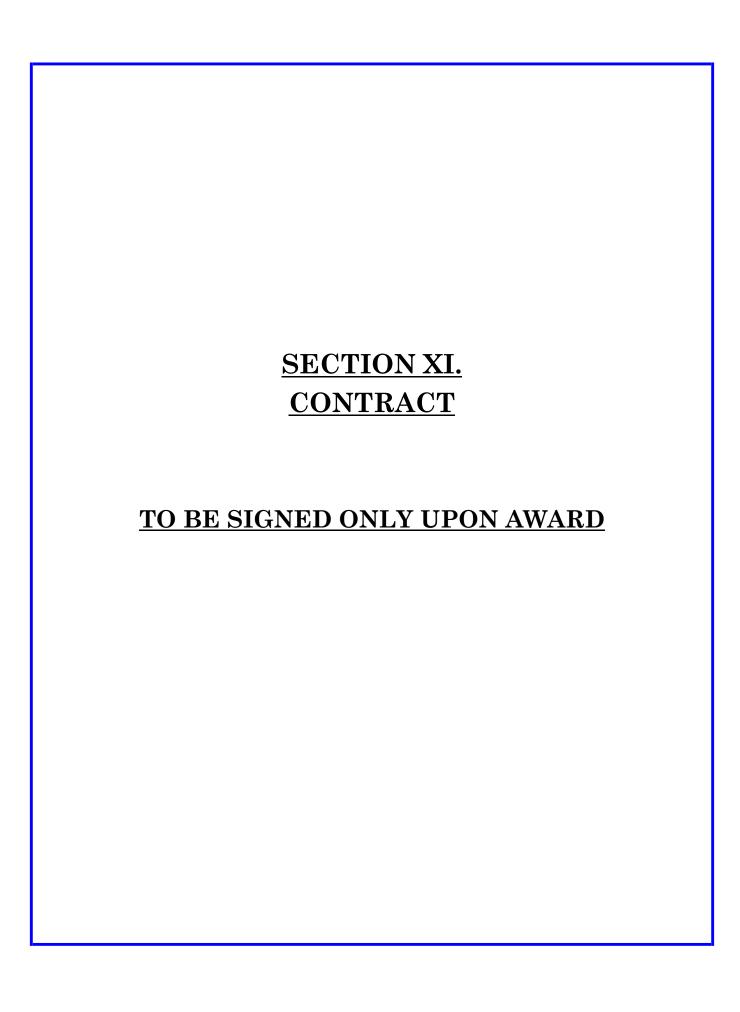
#### **SUBSTITUTION REQUEST FORM**

#### 1.1 CONDITIONS OF SUBSTITUTIONS

- A. Substitution indicated on this Form is a proposed substitute to requirements indicated in the Contract Documents. Substitution listed has not been included in an Addendum. Submit one Form for each proposed substitution.
- B. For each proposed Substitution, state difference in price or "No Change" where Substitution is offered.
- C. Attach complete technical data, specifications, and description of substitutions.
- D. Architect reserves the right to accept or reject any or all proposed substitutions.

#### 1.2 SUBSTITUTION REQUEST

The following information is hereby submitted for a substitution to the specif	ied item.	
Specification Section and Title:		
Paragraph Page Specified Item		
Proposed Substitution:		
Manufacturer: Address:	Phone:	
Trade Name:	Model No:	
Price Difference:or No Change		
<ul> <li>The Undersigned certifies:</li> <li>A. Proposed substitution has been fully investigated and determined to product.</li> <li>B. Same warranty will be furnished for proposed substitution as for s.</li> <li>C. Same maintenance service and source of replacement parts, as app.</li> <li>D. Proposed substitution will have no adverse effect on other trades at.</li> <li>E. Proposed substitution does not affect dimensions and functional cle.</li> <li>F. Payment will be made for changes to the building design, including caused by the substitution.</li> </ul>	pecified product. licable is available. nd will not affect or delay progress schedule. earances.	
Submitted by:		
Signed by:		
Firm:		
Address:		
Telephone: FAX:		
ARCHITECT'S REVIEW AND ACTION		
□ Substitution Approved – Make submittals in accordance with Gene Substitution Approved As Noted – Make submittals in accordance Substitution Rejected – Use specified materials. □ Substitution Request Received Too Late. Use specified materials. Signed by:		
	amples   Tests	

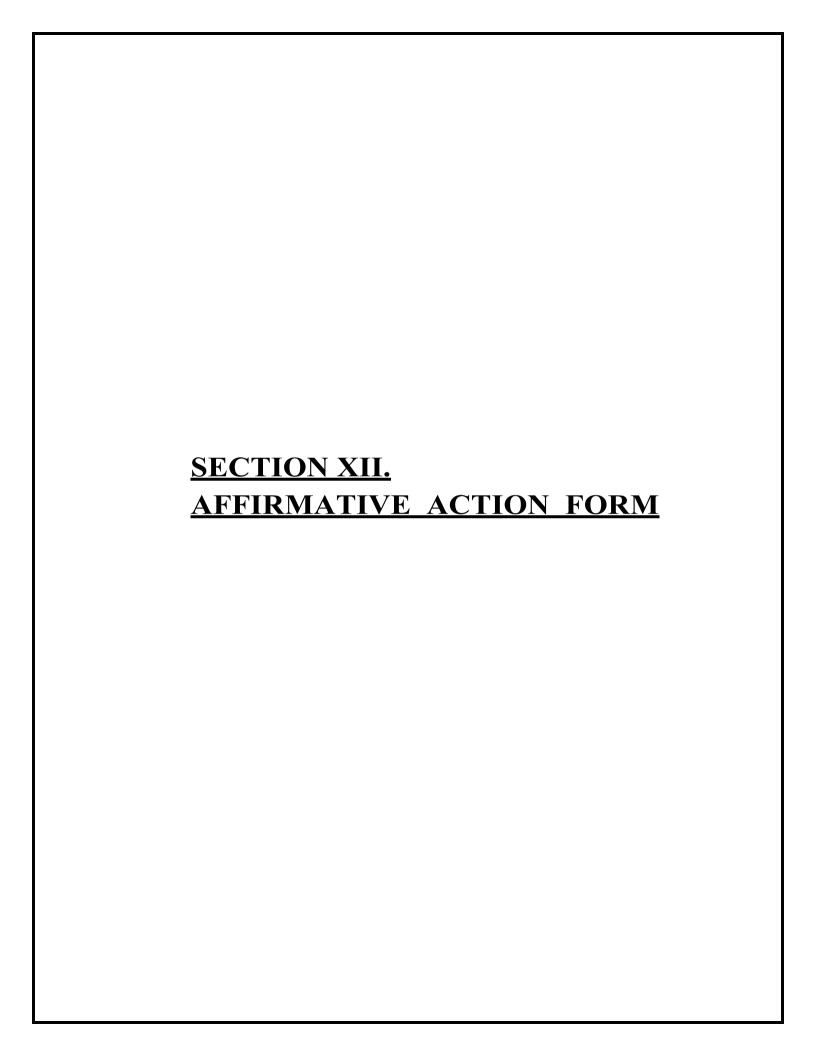


# **CONTRACT**

This A	greement made as of theday	
		, hereinafter referred to as the "OWNER" and hereinafter referred to
as the	"Contractor", for Work at	
	TESSETH: That the OWNER and as follows:	I the Contractor for the consideration named
1.		shall perform all Work of every kind or nature things necessary to complete in a proper and
	Conditions (and of which a listing hereto) and in strict accordance v	the Contract Documents as defined in the General and of specifications and drawings are attached with such changes as are ordered and approved I perform all other obligations imposed on such
2.	for, or incidental to the Work, and necessary, proper for, or incidental .00), which sum sh	and 00/100 Dollars (\$all be deemed to be in full consideration for the
	under the Contract.	all the duties and obligations of such Contractor
3.	The Contractor shall commence Work on the Contract at a time to be specified in written notice to proceed issued by the OWNER and complete the project no late than	
	TNESS WHEREOF, the parties h rst above written.	ereto have executed this Contract the day and
F.I.T	. Student Housing Corp.	
		(Name of Contractor)
<u></u>	D 11 T	By
Sherry	Brabham, Treasurer	(Signature)
		(Print Name and Title)

# ACKNOWLEDGEMENT OF CONTRACTOR, IF A CORPORATION

STATE OF	)	
COUNTY OF_	) ss:	
On the	day of	in the year 20, before me personally came to me known, who, being by me duly sworn, did
depose and sav	that (s)he resides at	that
(s)he is the	1 '1 1' 1	of,
signed her/his r	name thereto by ord	hich executed the above instrument; and that (s)he er of the Board of Directors of said corporation.
		Notary Public
ACKN	OWLEDGEMEN	NT OF CONTRACTOR, IF A PARTNERSHIP
STATE OF	)	
COUNTY OF_	) ) ss:	
On the	day of	in the year 20_, before me personally came
		to me known and known to me to be a
executed the fo	regoing instrument,	
		Notary Public
ACKN	OWLEDGEME	NT OF CONTRACTOR, IF AN INDIVIDUAL
STATE OF COUNTY OF_	) ss:	
On the	day of	in the year 20, before me personally, to me known and known to me to be the executed the foregoing instrument and (s)he duly
person describ acknowledged	bed in and who that (s)he executed	executed the foregoing instrument and (s)he duly the same.
		Notary Public



#### MONTHLY CONTRACTOR'S COMPLIANCE REPORT FORM AAP 7.0

#### **INSTRUCTION SHEET**

ALL PAYMENT REQUISITION, CONTRACTOR AND PROJECT INFORMATION ON THE TOP PORTION OF THE FORM MUST BE COMOPLETELY FILLED OUT. PLEASE NOTE:

False statements, information or data submitted on or with application for payment may result in one or more of the following actions: Termination of Contract for cause; Disapproval of future bids, or contracts or subcontracts; Withholding of final payments on the contract; and Civil and/or criminal prosecution.

#### PART B- PAYMENTS TO SUBCONTRACTORS AND SUPPLIERS

- 1) ALL FIRMS THAT YOU ARE UTILIZING ON THE JOB MUST BE LISTED EACH TIME <u>REGARDLESS</u> IF THEY ARE SCHEDULED TO RECEIVE PAYMENTS OUT OF THE PROCEEDS OF THE REQUISITION FOR PAYMENT.
- 2) All relevant information for each subcontractor and/or supplier must be filled in. This includes firm's complete name, address, phone number and Federal ID #. In addition, if the firm is a NYS CERTIFIED MBEIWBE, please indicate as such in the appropriate box.
  - AS A REMINDER, ONLY THOSE FIRMS THAT HAVE NYS CERTIFICATION BY THE EMPIRE STATE DEVELOPMENT CORPORATION CAN BE COUNTED TOWARDS THE MBE/WBE GOAL ACHIEVEMENT FOR THE PROJECT.
- 3) The percentage of the job or purchases completed must be filled in and in addition, please indicate the number of change orders issued on any subcontract agreement or the number of purchase orders issued to date if purchasing supplies.
- 4) A description of the work being performed by a subcontractor or the type of supplies being purchased must be filled in.

#### **DEFINITIONS**

**INTENDED PAYMENT:** This is the amount of money that you intend to pay to each firm with the money that you will receive from the accompanying requisition. **This is not** the amount that you intend to pay over the life of the contract.

AMOUNT PAID TO DATE: This is the amount of money that has ACTUALLY been paid to date from previous requisitions submitted. It does not include the amount that you intend to pay from this requisition. THIS AMOUNT WILL BE VERIFIED BY OUR OFFICE PRIOR TO CLOSE OUT OF THE JOB BY THE RECEIPT OF COPIES OF CANCELED CHECKS OR PAID INVOICES.

**CURRENT VALUE OF SUBCONTRACT:** This is the total value to date of any subcontract agreement that has been issued to the firm by your company. It should be inclusive of any change orders issued to the original contract. **NOTE:** THIS LINE IS FOR SUBCONTRACTOR INFORMATION ONLY. IF THE FIRM LISTED IS A SUPPLIER THAT YOU ARE PURCHASING SUPPLIES OR MATERIAL FROM, LEAVE BLANK AND GO TO THE NEXT LINE.

**TOTAL VALUE OF ALL PURCHASE ORDERS:** This is the total amount of **all** purchase orders that will be issued to the firm for the entire job. The number of purchase orders issued to date should be reflected in the area indicated to the left. **NOTE:** THIS LINE IS FOR SUPPLIER INFORMATION ONLY. IF THE FIRM IS A SUBCONTRACTOR, LEAVE THIS AREA BLANK. A SUBCONTRACTOR AGREEMENT SHOULD BE ISSUED WHICH WOULD BE REFLECTED ON THE PREVIOUS LINE.

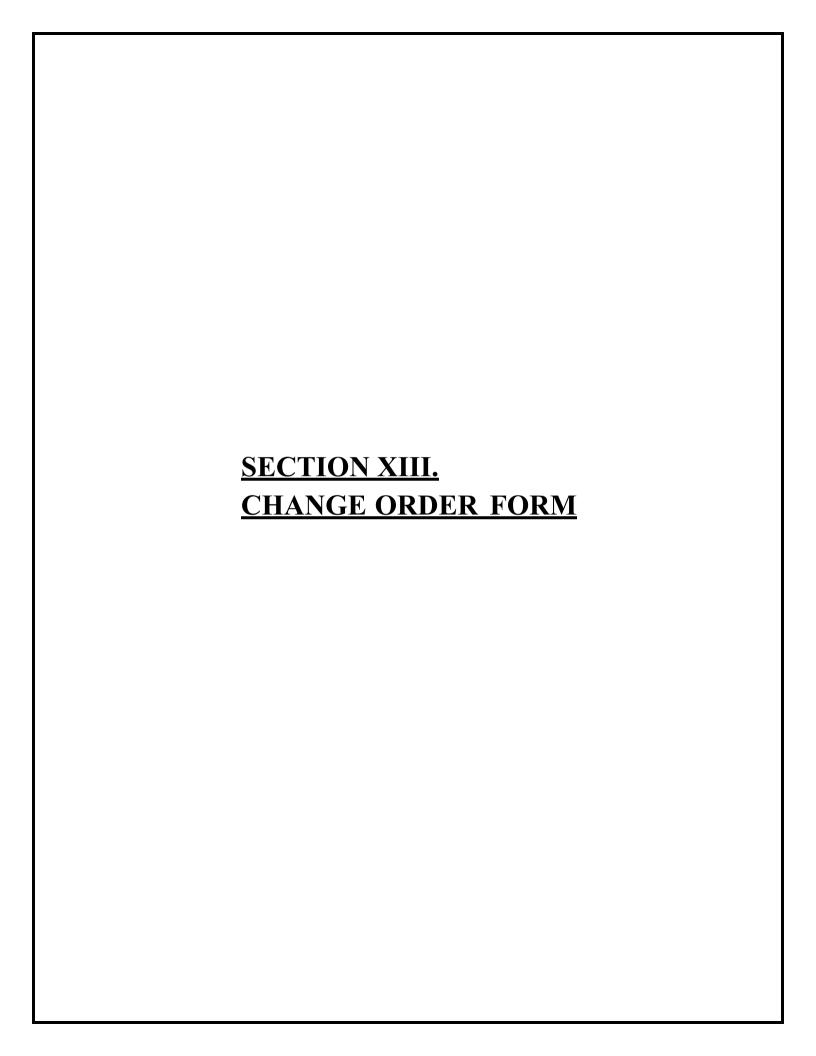
The current form that you should be utilizing is form: AAP 7.0 Revised 1/9/08. This form must be included with each payment requisition submitted or the payment will not be processed.

If the form is not filled out according to the above instructions, your next payment requisition may be held until corrections are made. In addition, each report submitted must have an original signature and date.

### MONTHLY CONTRACTOR'S COMPLIANCE REPORT

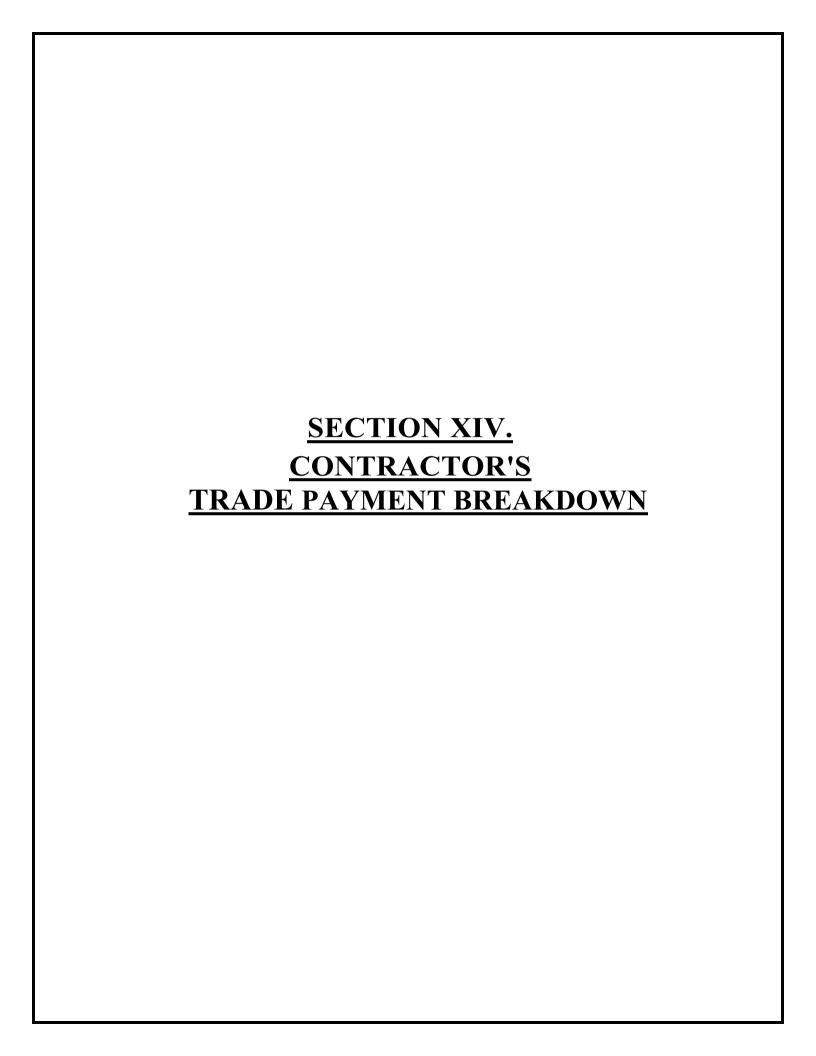
Page 1 of

	Payment Requisition Date Payment Requisition Amount \$	
	FIT Contract Number	
CONTRACTOR INFORMATION		
Name_	Federal ID No	
Address		
	Telephone Number	
PROJECT INFORMATION		
Institution_	City and Zip Code	
the firms federal identification number; amou percent complete, amount paid to date; the r change orders) or cumulative value of purc suppliers with whom you have an agreement	MBE or WBE or Other. In addition, for each firm listed below you must also include: int of intended payment to be made from proceeds of the accompanying requisition; number of change orders or purchase orders; current value of subcontract (including chase orders; and a brief description of the work or service. All subcontractors or t should be listed below, even if they are not scheduled to receive a payment out of payment. For further details, see Instruction Sheet	
Firm	MBE WBE Other Fed. ID#	
Address	Phone#Intended Payment\$	
Address	Percent CompleteAmount Paid to Date\$	
No. of Change Orders	Current Value of Subcontract \$	
No. of Purchase Orders Issued	Total Value of Purchase Orders \$	
Work Description		
Firm		
	Phone #Intended Payment\$	
	Percent CompleteAmount Paidto Date\$	
	Current Value of Subcontract \$	
	Total Value of Purchase Orders \$	
Work Description		
False statements, information or data submitt	ted on or with application for payment may result in one or more of the	
following actions: Termination of Contract for	cause; Disapproval of future bids, or contracts or subcontracts; Withholding	
of final payments on the contract; and Civil ar	nd/or criminal prosecution.	
Name of Principalor Officer (Type or Print)	Title of Principal or Officer {Type or Print)	
Signature of Principal or Officer	 Date	



## **CHANGE ORDER**

то:		
Contractor:	Contract No	
Street:	Contract Date:	
City, State, Zip:	Original ContractAm	nount: \$
Phone No.	Total Approved Cha	inge Orders:
	Current Contract An	nount: \$
You are hereby directed to perform all labor and to below:	to provide all materials neces	sary to carry out the Work described
Full consideration for this change order shall be		of the original contract amount by: _Dollars.
Labor =		
Materials =		
INCREASE/DECREASE of the original schedule Contractor, its heirs, executors, administrators, so Owner, its successors, and assigns from any and law or in equity which the Contractor ever had, no this change.  Recommended by: CONSTRUCTION MANAGER OR ARCHITECT  Name:	uccessors, and assigns here d all actions, causes of action ow has, or may have agains  Accepted by: CONTRACTOR  Name:	by release and forever discharge the claims and demands whatsoever the Owner in any way arising out
	ву:	Date:
By: Date: Approved by:	OWNER	
Name:	Name:	
By: Date:	Ву:	Date:



### TRADE PAYMENT BREAKDOWN

PROJECT:	CONTRACT # C
CONTRACTOR:	

		CONTRACT			AMOUNT	
ITEM no.	DESCRIPTION	UNIT MEAS.	QUANTITY	LABOR	MATERIAL	TOTAL
1	Mobilization	LS				
2	Bonds	LS				
3	Insurance	LS				
4	Safety Program	MTLY				
5	Supervision	MTLY				
6	Permits/Licenses	LS				
7	CPM Schedules	LS				
8	Samples - Submittals	LS				
9	Data Submittals	LS				
10	Field Coordination	MTLY				
11	Coordinate with HVAC, Electrical	MTLY				
12	Coordinate with Plumbing/Fire Prevention	MTLY				
13	Coordinate with Kitchen Equipment Contractor	MTLY				
14	Temporary Electric	LS				
15	Temporary Light	LS				
16	Temporary Facilities	MTLY				
17	Fire Prevention	LS				
18	Temporary Field Office	MTLY				
19	Material Hoisting	LS				
20	Hoisting Operations	LS				
21	Storage	LS				
22	Warranties, Etc.	LS				

# **EXHIBIT A: SAFETY EHS PLAN**

#### EXHIBIT A. SAFTEY EHS PLAN

#### FASHION INSTITUTE OF TECHNOLOGY

#### OUTLINE FOR PREPARING WORK-SPECIFIC ENVIROMENT, HEALTH AND SAFETY (EHS) PLAN

Before commencing work on site at FIT, Contractor shall prepare a work-specific EHS Plan and submit the EHS Plan to both the Facilities Management and EHS Departments for review and approval. Such approval shall be given in a timely manner.

#### I) A work-specific EHS Plan is required in the following instances:

- A) When proposed work will:
  - 1) use regulated hazardous chemicals;
  - 2) have the potential to generate fumes, vapors or dusts;
  - 3) involve cutting torches or other spark-generating equipment ("hot" work);
  - 4) generate any waste;
  - 5) involve high-energy systems or
  - 6) require any type of air monitoring.
- B) When work involves the removal of less than 25 liner feet, or 10 square feet, of asbestos-containing material (that is greater than 1% asbestos). For work involving more than these amounts of asbestos, Contractor must consult with the EHS Department for additional guidelines.
- C) When work involves the use of tools and equipment in areas where FIT employees or students are present.
- D) When work involves construction, other than minor repairs or alterations to on-campus facilities.
- E) When work involves dangerous environments, such as confined spaces, hazardous energy, use scaffolds greater than 10 feet high, or vehicle-mounted articulated booms.
- **II**) Use the outline below to develop the work-specific EHS Plan. Contractor shall amend the work-specific EHS Plan as needed to accommodate work on-campus as it proceeds.

#### DESCRIPTION OF CONTENTS OF WORK-SPECIFIC EHS PLAN

#### III) GENERAL INFORMATION – PROJECT PLANNING

A) List primary information about Contractor's firm and that of sub-

- contractors, if any, Project Name, FIT Bid Number and Contractor's safety-related performance measurements on Table 1.
- B) Describe the scope of work and list a breakdown of its specific tasks.
- C) Provide a project schedule that, at a minimum, shows the anticipated start date of the work, the duration of each phase of the work, the anticipated date of completion of each phase, and the project completion date.
- D) List name of Contractor's on-site EHS Coordinator and the names of all OSHA- competent persons needed to carry out the scope of work on Table 2. The EHS Coordinator shall serve as the primary contact with FIT's Director of EHS Compliance during all work.

#### IV) WORK-SPECIFIC HAZARD ANALYSIS/RISK ASSESSMENT

- A) Describe each task associated with the work of the project.
- B) List the potential hazards, if any, associated with each task.
- C) Provide copies of Contractor's EH&S program applicable to scope of work.
- D) List the types of protective work practices or personal protective equipment (PPE) Contractor will employ to carry-out each task.
- E) Describe the types of exposure assessments that are needed to address potential hazardous exposures related to the work of the project. These include:
  - 1) Work practices and engineering controls Contractor will use to prevent exposure of Contractor's employees to hazardous chemicals or hazardous energy;
  - 2) Work practices and engineering controls Contractor will use to prevent exposure of FIT students and staff to any detectable chemical exposure;
  - 3) Contractor's use of respiratory protection and other protective equipment (PPE) and
  - 4) Qualitative or quantitative monitoring protocols, personal and area monitoring equipment, and contaminant action levels.
- F) Attach copies of certified documentation of "Hazard Assessment and Equipment Selection" required by 29 CFR 1910.132 (d)(2) that complies with 1910 Subpart I Appendix B for all tasks in the work-specific EHS Plan.
- G) Attach a copy of Contractor's written Hazard Communication Program that OSHA requires for the work-specific EHS Plan.

# V) WORK-SPECIFIC ENVIRONMENTAL, HEALTH AND SAFETY ELEMENTS

- A) To address health and safety issues, the work-specific EHS Plan shall:
  - 1) Describe criteria for upgrading or downgrading personal protective equipment (PPE) or modifying work practices to control hazardous exposures during the work;
  - 2) Describe criteria Contractor will use to set up exclusion zones, including physical barriers and decontamination zones, as needed to prevent spread of debris and restrict access of unauthorized persons to work areas;
  - 3) List equipment Contractor will use for routine and emergency on-site communication;
  - 4) Describe utility clearance and marking procedures to prevent damage to buried utilities, or to lines, piping, or cables located inside of walls and ceilings, if applicable;
  - Describe decontamination and cleaning procedures for Contractor's employees and equipment to prevent the spread of debris. This includes procedures during work, at the end of each work day, and at the completion of the project before FIT's final inspection of the work area;
  - 6) Identify measures to manage dangerous environments, such as confined spaces, scaffold work greater than 10 feet, or articulated booms;
  - 7) List "Hot Work" procedures involved in the work of the project. This may include, but not be limited to, work such as welding, burning, open flames, tar melting or other type of melting pots, grinding that throws sparks. (See Appendix 1 "Daily Safety Management Work Permit");
  - 8) Identify the need for air monitoring or special testing to carry out the work. Include a listing of monitoring equipment or special tests and the Action Levels that Contractor will apply to project work;
  - 9) Describe safety procedures for excavations more than four 4 feet deep and sloping or shoring procedures where excavations will exceed 5 feet deep;
  - 10) Describe fire protection and explosive hazard review;
  - 11) List the name and address of Contractor's on-contract Confined Space rescue team;
  - 12) Describe spill control procedures for chemical products Contractor will have on-campus during work. Include a listing of spill control or containment supplies that Contractor will have on-hand in case of a spill;
  - 13) Describe the need for site coordination with FIT employees, other contractors on-site and other adjacent work groups. This includes identification of hazardous energy Lock Out and Tag Out

requirements to make to work area safe and

- Provide a listing of other safety equipment that Contractor will have on site during the work of the project.
- B) To address oil, chemical and waste management issues, the work-specific EHS Plan shall:
  - 1) Provide estimates of the types and amounts of waste (both hazardous and non-hazardous) that Contractor anticipates the work will generate. As applicable, provide a copy of a waste analysis plan that lists the types of analysis required, the USEPA SW-846 method number and the method detection limits;
  - 2) Provide facility name, USEPA ID number, and a contact name for each facility that will transport and dispose of each of the waste streams identified above. Provide this information for any facility that will dispose of residuals from the treatment of project waste, as applicable;
  - 3) On a copy of a drawing that will be provided by FIT, identify location where Contractor proposes to accumulate waste during work, to set-up exclusion zones and to provide employee decontamination areas;
  - 4) Provide a statement that describes the methods that Contractor will use to minimize the amount of waste generated from the work of the project;
  - Provide a tabular listing, along with copies of Safety Data Sheets (SDS), for any chemical products that Contractor intends to store or use on-site during the work. The listing shall include the product name, manufacturer's name, type, amounts, intended storage location on FIT site, the specific use of the chemical and identification of any NYCDEP/USEPA regulated hazardous substances that Contractor intends to store or use on-site during the work. In all cases, Contractor must submit the listing before chemical products are delivered to the FIT campus;
  - 6) On a copy of a drawing that will be provided by FIT, identify location where Contractor proposes to store chemical products on-site during work;
  - 7) Identify the need, if any, to amend existing FIT emergency contingency planning documents. Such documents include, but are not limited to: Spill Prevention Control and Countermeasure Plan, Spill Prevention Report, Right-to-Know Survey and
  - 8) List permits and Certificates of Fitness (NYCDEP, NYSDEC, USEPA, FDNY) needed to carry-out the scope of work and have copies on-site of permits and Certificates to carry-out project work.

#### VI) ON-SITE DOCUMENTATION

A) Contractor shall record initial and daily safety-related procedures on Table 3. These shall include:

- 1) Before start of the work, FIT's Project Manager will conduct a FIT Hazard Communication briefing for Contractor's employees;
- 2) Before start of the work, FIT's Project Manager and Contractor's on-site EHS Coordinator shall conduct a briefing for FIT employees in areas adjacent to work areas about proposed work;
- 3) Review of FIT Emergency Evacuation Procedures;
- 4) Listing of initial and ongoing project status meetings on-site with FIT Project Manager to address EHS concerns safety and health and
- 5) Scheduled and unscheduled employee safety briefings, toolbox talks.
- B) Contractor shall provide a summary of the on-site EHS Coordinator's EHS-related training and experience relevant to the work of the project.
- C) Contractor's employees shall sign-in daily with FIT Security in the A-Building Lobby.
- D) For each work shift necessary to complete the project, Contractor's on-site EHS Coordinator shall open and fill out the "Daily Safety Management Work Permit" (See Appendix 1) at the start of each work shift and close the Permit at the end of each work shift.

#### VII) EMERGENCY RESPONSE PLANNING

Contractor shall review the summary of the Emergency Response Contact Names listed on Table 4 and provide the information as follows:

- A) On a site map that will be provided by FIT, identify the primary and secondary routes for the evacuation of Contractor's employees, including the "rally point" where Contractor's employees will assemble and carry-out an accountability check in case of an evacuation;
- B) List emergency response contacts with titles and telephone numbers. Contractor shall immediately call FIT Security and the FIT Project Manager in the event of a spill of oil, chemicals, waste water, or hazardous materials;
- C) Identify the name, address and route to nearest hospital or Contractor's wellness center and
- D) Provide a listing of emergency equipment for first aid, personal protection, spill response, fire protection and rescue.

#### TABLE 1 **Project** Name: Bid **Number:** CONTACTOR ORGANIZATION CHART AND SAFETY DATA Name: **COMPANY** Address: Phone: Name: President Phone: Vice President - Operations Name: Phone: Director of Environmental, Health, and Name: Safety Phone: Name: Contractor EHS Program Development Phone: OSHA Total Case Recordable Rate (TCRR) Days Away from work, or Restricted work or job Transfer (DART)

Listing of On-site Subcontractors for project work, as applicable -

Experience Modification Rate (EMR)

ADDRESS	PHONE NUMBER	TASKS
	ADDRESS	ADDRESS PHONE NUMBER

# TABLE 2

# ON-SITE SUPERVISORY PERSONNEL of 2

Page 1

of 2	Y/1167(0) / 5 TO 01 0
TITLE	: NAME(S) AND ON-SITE PHONE NUMBER
On-site EHS Coordinator	:
Contractor Project Managers	:
FIT's Project Manager(s)	:
Contractor's Competent Persons	List all that Apply – Indicate not applicable areas for department /project work as "NA" For subcontractor employees, place subcontractor firm name in parenthesis after the employee's name
Confined Spaces	:
Excavations	:
Industrial Hygiene	:
ElectricalLock Out/Tag Out	:
PPE, Respiratory Protection	:
Hazard Communication (Required for each department and project. Identify responsible employee for each subcontractor)	:
Fall Protection	:
Scaffolds	:
Cranes & Derricks	:
Blasting & Use of Explosives	:

ITE SUPERVISORY PERSONNEL	Page 2 of 2
Asbestos (Attach copies of Company license, supervisor and handler certificates for all employee that will perform work)	
Lead	
Silica	
Hot Work (Complete and submit permits daily - see Appendix 1)	
FDNY Certificate of Fitness-Torch Operations	
FDNY Certificate of Fitness-Fire Guard	
FDNY Certificate of Fitness-Fire proofing	
FDNY Certificate of Fitness-Powder Activated Tools	
FDNY Certificate of Fitness-Air Compressors	
FDNY Certificate of Fitness-Use of LPG and Use in Tar Kettles	
FDNY REFRIGERATING SYSTEM OPERATING ENGINEER	
FDNY Certificate of Fitness-Other	
FDNY Certificate of Fitness-Other	

# TABLE 3

## LISTING OF REQUIRED EMPLOYEE/SUPERVISORY BRIEFINGS

Page 1 of 1

Page 1 of 1				
DATE	ТОРІС	Comments	TYPE (Monthly Supervisor/Bi- weekly Employee/Supervisor	Comments
	FIT Haz Com Briefing	At start of Work		
	Briefing for FIT Employees in work area(s)	FIT briefing for all FIT Department Supervisors in areas where work may potentially affect FIT employees or students at start of work. Record name of FIT employee(s) briefed	Complete Daily Safety Management Work Permit (See Appendix 1)	
	Review of FIT Emergency Evacuation Procedures	At start of Work		

## **TABLE 4**

## EMERGENCY CONTACT NAMES & TELEPHONE NUMBERS

Page 1 of

TITLE	CONTACT NAME	EMERGENCY PHONE NUMBERS
Contractor: MAIN OFFICE		
Contractor President:		
On-site EHS Coordinator		
FIT Facilities Management	Executive Director: George Jefremow Assoc. Executive Director: Allen King	Phone: 212-217-4423 Phone: 212-217-4424
FIT Environmental, Health and Safety Department	Director: Paul DeBiase paul_debiase@fitnyc.edu  Acting Coordinator: Kathy Espinoza-Caraba kathy_espinozacaraba@fitnyc.edu	Phone: 212-217-3752  Phone: 212-217-3754
Contractor Project Manager(s)		
FIT Public Safety	Central Control	212-217-7777, or Use Red Phone
Occupational Safety And Health Administration, – Area Director	Provide Zip Code for the location of Accident	800-321-6742
Location of nearest hospital and/or contractor's wellness center		
Rally Point and Accountability Check Location	In case of Building Evacuation Alarm	

Note: Call FIT Central Control at 212-217-7777 in case or any emergency such as fire, chemical spills, injury requiring medical treatment, or exposure of contractor or FIT personnel to fumes, vapors, or dusts.

# **EXHIBIT B: PREVAILING WAGE SCHEDULE**



Kathy Hochul, Governor

Fashion Institute of Technolog Sam Li, InterminDirector of Purchasing 227 W 27th St New York NY 10001 Schedule Year
Date Requested
PRC#

2023 through 2024 04/08/2024 2024004147

Roberta Reardon, Commissioner

Location fa Project ID# C1624

Project Type The project is located on the 10th floor of the Coed Residence Hall. It is the installation of new horizontal

sanitary lines. Work scope includes demolition and of portions of the ceiling and

#### PREVAILING WAGE SCHEDULE FOR ARTICLE 8 PUBLIC WORK PROJECT

Attached is the current schedule(s) of the prevailing wage rates and prevailing hourly supplements for the project referenced above. A unique Prevailing Wage Case Number (PRC#) has been assigned to the schedule(s) for your project.

The schedule is effective from July 2023 through June 2024. All updates, corrections, posted on the 1st business day of each month, and future copies of the annual determination are available on the Department's website <a href="www.labor.ny.gov">www.labor.ny.gov</a>. Updated PDF copies of your schedule can be accessed by entering your assigned PRC# at the proper location on the website.

It is the responsibility of the contracting agency or its agent to annex and make part, the attached schedule, to the specifications for this project, when it is advertised for bids and /or to forward said schedules to the successful bidder(s), immediately upon receipt, in order to insure the proper payment of wages.

Please refer to the "General Provisions of Laws Covering Workers on Public Work Contracts" provided with this schedule, for the specific details relating to other responsibilities of the Department of Jurisdiction.

Upon completion or cancellation of this project, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

NOTICE OF COMPLETION / CANCELLATION OF PROJECT			
Date Completed:	Date Cancelled:		
Name & Title of Representative:			

Phone: (518) 457-5589 Fax: (518) 485-1870 W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12226

#### General Provisions of Laws Covering Workers on Article 8 Public Work Contracts

#### Introduction

The Labor Law requires public work contractors and subcontractors to pay laborers, workers, or mechanics employed in the performance of a public work contract not less than the prevailing rate of wage and supplements (fringe benefits) in the locality where the work is performed.

#### Responsibilities of the Department of Jurisdiction

A Department of Jurisdiction (Contracting Agency) includes a state department, agency, board or commission: a county, city, town or village; a school district, board of education or board of cooperative educational services; a sewer, water, fire, improvement and other district corporation; a public benefit corporation; and a public authority awarding a public work contract.

The Department of Jurisdiction (Contracting Agency) awarding a public work contract MUST obtain a Prevailing Rate Schedule listing the hourly rates of wages and supplements due the workers to be employed on a public work project. This schedule may be obtained by completing and forwarding a "Request for wage and Supplement Information" form (PW 39) to the Bureau of Public Work. The Prevailing Rate Schedule MUST be included in the specifications for the contract to be awarded and is deemed part of the public work contract.

Upon the awarding of the contract, the law requires that the Department of Jurisdiction (Contracting Agency) furnish the following information to the Bureau: the name and address of the contractor, the date the contract was let and the approximate dollar value of the contract. To facilitate compliance with this provision of the Labor Law, a copy of the Department's "Notice of Contract Award" form (PW 16) is provided with the original Prevailing Rate Schedule.

The Department of Jurisdiction (Contracting Agency) is required to notify the Bureau of the completion or cancellation of any public work project. The Department's PW 200 form is provided for that purpose.

Both the PW 16 and PW 200 forms are available for completion online.

#### Hours

No laborer, worker, or mechanic in the employ of a contractor or subcontractor engaged in the performance of any public work project shall be permitted to work more than eight hours in any day or more than five days in any week, except in cases of extraordinary emergency. The contractor and the Department of Jurisdiction (Contracting Agency) may apply to the Bureau of Public Work for a dispensation permitting workers to work additional hours or days per week on a particular public work project.

#### Wages and Supplements

The wages and supplements to be paid and/or provided to laborers, workers, and mechanics employed on a public work project shall be not less than those listed in the current Prevailing Rate Schedule for the locality where the work is performed. If a prime contractor on a public work project has not been provided with a Prevailing Rate Schedule, the contractor must notify the Department of Jurisdiction (Contracting Agency) who in turn must request an original Prevailing Rate Schedule form the Bureau of Public Work. Requests may be submitted by: mail to NYSDOL, Bureau of Public Work, State Office Bldg. Campus, Bldg. 12, Rm. 130, Albany, NY 12226; Fax to Bureau of Public Work (518) 485-1870; or electronically at the NYSDOL website <a href="https://www.labor.ny.gov">www.labor.ny.gov</a>.

Upon receiving the original schedule, the Department of Jurisdiction (Contracting Agency) is REQUIRED to provide complete copies to all prime contractors who in turn MUST, by law, provide copies of all applicable county schedules to each subcontractor and obtain from each subcontractor, an affidavit certifying such schedules were received. If the original schedule expired, the contractor may obtain a copy of the new annual determination from the NYSDOL website www.labor.ny.gov.

The Commissioner of Labor makes an annual determination of the prevailing rates. This determination is in effect from July 1st through June 30th of the following year. The annual determination is available on the NYSDOL website www.labor.ny.gov.

#### **Payrolls and Payroll Records**

Every contractor and subcontractor MUST keep original payrolls or transcripts subscribed and affirmed as true under penalty of perjury. As per Article 6 of the Labor law, contractors and subcontractors are required to establish, maintain, and preserve for not less than six (6) years, contemperaneous, true, and accurate payroll records. At a minimum, payrolls must show the following information for each person employed on a public work project: Name, Address, Last 4 Digits of Social Security Number, Classification(s) in which the worker was employed, Hourly wage rate(s) paid, Supplements paid or provided, and Daily and weekly number of hours worked in each classification.

The filing of payrolls to the Department of Jurisdiction is a condition of payment. Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury. The Department of Jurisdiction (Contracting Agency) shall collect, review for facial validity, and maintain such payrolls.

In addition, the Commissioner of Labor may require contractors to furnish, with ten (10) days of a request, payroll records sworn to as their validity and accuracy for public work and private work. Payroll records include, but are not limited to time cards, work description sheets, proof that supplements were provided, cancelled payroll checks and payrolls. Failure to provide the requested information within the allotted ten (10) days will result in the withholding of up to 25% of the contract, not to exceed \$100,000.00. If the contractor or subcontractor does not maintain a place of business in New York State and the amount of the contract exceeds \$25,000.00, payroll records and certifications must be kept on the project worksite.

The prime contractor is responsible for any underpayments of prevailing wages or supplements by any subcontractor.

All contractors or their subcontractors shall provide to their subcontractors a copy of the Prevailing Rate Schedule specified in the public work contract as well as any subsequently issued schedules. A failure to provide these schedules by a contractor or subcontractor is a violation of Article 8, Section 220-a of the Labor Law.

All subcontractors engaged by a public work project contractor or its subcontractor, upon receipt of the original schedule and any subsequently issued schedules, shall provide to such contractor a verified statement attesting that the subcontractor has received the Prevailing Rate Schedule and will pay or provide the applicable rates of wages and supplements specified therein. (See NYS Labor Laws, Article 8. Section 220-a).

#### Determination of Prevailing Wage and Supplement Rate Updates Applicable to All Counties

The wages and supplements contained in the annual determination become effective July 1st whether or not the new determination has been received by a given contractor. Care should be taken to review the rates for obvious errors. Any corrections should be brought to the Department's attention immediately. It is the responsibility of the public work contractor to use the proper rates. If there is a question on the proper classification to be used, please call the district office located nearest the project. Any errors in the annual determination will be corrected and posted to the NYSDOL website on the first business day of each month. Contractors are responsible for paying these updated rates as well, retroactive to July 1st.

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. To the extent possible, the Department posts rates in its possession that cover periods of time beyond the July 1st to June 30th time frame covered by a particular annual determination. Rates that extend beyond that instant time period are informational ONLY and may be updated in future annual determinations that actually cover the then appropriate July 1st to June 30th time period.

#### Withholding of Payments

When a complaint is filed with the Commissioner of Labor alleging the failure of a contractor or subcontractor to pay or provide the prevailing wages or supplements, or when the Commissioner of Labor believes that unpaid wages or supplements may be due, payments on the public work contract shall be withheld from the prime contractor in a sufficient amount to satisfy the alleged unpaid wages and supplements, including interest and civil penalty, pending a final determination.

When the Bureau of Public Work finds that a contractor or subcontractor on a public work project failed to pay or provide the requisite prevailing wages or supplements, the Bureau is authorized by Sections 220-b and 235.2 of the Labor Law to so notify the financial officer of the Department of Jurisdiction (Contracting Agency) that awarded the public work contract. Such officer MUST then withhold or cause to be withheld from any payment due the prime contractor on account of such contract the amount indicated by the Bureau as sufficient to satisfy the unpaid wages and supplements, including interest and any civil penalty that may be assessed by the Commissioner of Labor. The withholding continues until there is a final determination of the underpayment by the Commissioner of Labor or by the court in the event a legal proceeding is instituted for review of the determination of the Commissioner of Labor.

The Department of Jurisdiction (Contracting Agency) shall comply with this order of the Commissioner of Labor or of the court with respect to the release of the funds so withheld.

#### **Summary of Notice Posting Requirements**

The current Prevailing Rate Schedule must be posted in a prominent and accessible place on the site of the public work project. The prevailing wage schedule must be encased in, or constructed of, materials capable of withstanding adverse weather conditions and be titled "PREVAILING RATE OF WAGES" in letters no smaller than two (2) inches by two (2) inches.

The "Public Work Project" notice must be posted at the beginning of the performance of every public work contract, on each job site.

Every employer providing workers. compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers. Compensation Board in a conspicuous place on the jobsite.

Every employer subject to the NYS Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers, notices furnished by the State Division of Human Rights.

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the NYS Department of Labor.

#### **Apprentices**

Employees cannot be paid apprentice rates unless they are individually registered in a program registered with the NYS Commissioner of Labor. The allowable ratio of apprentices to journeyworkers in any craft classification can be no greater than the statewide building trade ratios promulgated by the Department of Labor and included with the Prevailing Rate Schedule. An employee listed on a payroll as an apprentice who is not registered as above or is performing work outside the classification of work for which the apprentice is indentured, must be paid the prevailing journeyworker's wage rate for the classification of work the employee is actually performing.

NYSDOL Labor Law, Article 8, Section 220-3, require that only apprentices individually registered with the NYS Department of Labor may be paid apprenticeship rates on a public work project. No other Federal or State Agency of office registers apprentices in New York State.

Persons wishing to verify the apprentice registration of any person must do so in writing by mail, to the NYSDOL Office of Employability Development / Apprenticeship Training, State Office Bldg. Campus, Bldg. 12, Albany, NY 12226 or by Fax to NYSDOL Apprenticeship Training (518) 457-7154. All requests for verification must include the name and social security number of the person for whom the information is requested.

The only conclusive proof of individual apprentice registration is written verification from the NYSDOL Apprenticeship Training Albany Central office. Neither Federal nor State Apprenticeship Training offices outside of Albany can provide conclusive registration information.

It should be noted that the existence of a registered apprenticeship program is not conclusive proof that any person is registered in that program. Furthermore, the existence or possession of wallet cards, identification cards, or copies of state forms is not conclusive proof of the registration of any person as an apprentice.

#### **Interest and Penalties**

In the event that an underpayment of wages and/or supplements is found:

- Interest shall be assessed at the rate then in effect as prescribed by the Superintendent of Banks pursuant to section 14-a of the Banking Law, per annum from the date of underpayment to the date restitution is made.
- A Civil Penalty may also be assessed, not to exceed 25% of the total of wages, supplements, and interest due.

#### **Debarment**

Any contractor or subcontractor and/or its successor shall be ineligible to submit a bid on or be awarded any public work contract or subcontract with any state, municipal corporation or public body for a period of five (5) years when:

- Two (2) willful determinations have been rendered against that contractor or subcontractor and/or its successor within any consecutive six (6) year period.
- There is any willful determination that involves the falsification of payroll records or the kickback of wages or supplements.

#### **Criminal Sanctions**

Willful violations of the Prevailing Wage Law (Article 8 of the Labor Law) may be a felony punishable by fine or imprisonment of up to 15 years, or both.

#### Discrimination

No employee or applicant for employment may be discriminated against on account of age, race, creed, color, national origin, sex, disability or marital status.

No contractor, subcontractor nor any person acting on its behalf, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates (NYS Labor Law, Article 8, Section 220-e(a)).

No contractor, subcontractor, nor any person acting on its behalf, shall in any manner, discriminate against or intimidate any employee on account of race, creed, color, disability, sex, or national origin (NYS Labor Law, Article 8, Section 220-e(b)).

The Human Rights Law also prohibits discrimination in employment because of age, marital status, or religion.

There may be deducted from the amount payable to the contractor under the contract a penalty of \$50.00 for each calendar day during which such person was discriminated against or intimidated in violation of the provision of the contract (NYS Labor Law, Article 8, Section 220-e(c)).

The contract may be cancelled or terminated by the State or municipality. All monies due or to become due thereunder may be forfeited for a second or any subsequent violation of the terms or conditions of the anti-discrimination sections of the contract (NYS Labor Law, Article 8, Section 220-e(d)).

Every employer subject to the New York State Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers notices furnished by the State Division of Human Rights.

#### **Workers' Compensation**

In accordance with Section 142 of the State Finance Law, the contractor shall maintain coverage during the life of the contract for the benefit of such employees as required by the provisions of the New York State Workers' Compensation Law.

A contractor who is awarded a public work contract must provide proof of workers' compensation coverage prior to being allowed to begin work.

The insurance policy must be issued by a company authorized to provide workers' compensation coverage in New York State. Proof of coverage must be on form C-105.2 (Certificate of Workers' Compensation Insurance) and must name this agency as a certificate holder.

If New York State coverage is added to an existing out-of-state policy, it can only be added to a policy from a company authorized to write workers' compensation coverage in this state. The coverage must be listed under item 3A of the information page.

The contractor must maintain proof that subcontractors doing work covered under this contract secured and maintained a workers' compensation policy for all employees working in New York State.

Every employer providing worker's compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

#### **Unemployment Insurance**

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the New York State Department of Labor.

Kathy Hochul, Governor

Fashion Institute of Technolog Sam Li, InterminDirector of Purchasing 227 W 27th St New York NY 10001 Schedule Year Date Requested PRC#

2023 through 2024 04/08/2024 2024004147

Roberta Reardon, Commissioner

Location fa Project ID# C1624

Project Type The project is located on the 10th floor of the Coed Residence Hall. It is the installation of new horizontal

sanitary lines. Work scope includes demolition and of portions of the ceiling and

#### **Notice of Contract Award**

New York State Labor Law, Article 8, Section 220.3a requires that certain information regarding the awarding of public work contracts, be furnished to the Commissioner of Labor. One "Notice of Contract Award" (PW 16, which may be photocopied), **MUST** be completed for **EACH** prime contractor on the above referenced project.

Upon notifying the successful bidder(s) of this contract, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

# **Contractor Information**All information must be supplied

Federal Employer Identification N	lumber:	
Name:		
City:  Amount of Contract:  Approximate Starting Date:  Approximate Completion Date:	State:	Zip:  Contract Type:  [ ] (01) General Construction  [ ] (02) Heating/Ventilation  [ ] (03) Electrical  [ ] (04) Plumbing  [ ] (05) Other :

Phone: (518) 457-5589 Fax: (518) 485-1870 W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12226

#### **Social Security Numbers on Certified Payrolls:**

The Department of Labor is cognizant of the concerns of the potential for misuse or inadvertent disclosure of social security numbers. Identity theft is a growing problem and we are sympathetic to contractors' concern regarding inclusion of this information on payrolls if another identifier will suffice.

For these reasons, the substitution of the use of the last four digits of the social security number on certified payrolls submitted to contracting agencies on public work projects is now acceptable to the Department of Labor. This change does not affect the Department's ability to request and receive the entire social security number from employers during its public work/ prevailing wage investigations.

#### Construction Industry Fair Play Act: Required Posting for Labor Law Article 25-B § 861-d

Construction industry employers must post the "Construction Industry Fair Play Act" notice in a prominent and accessible place on the job site. Failure to post the notice can result in penalties of up to \$1,500 for a first offense and up to \$5,000 for a second offense. The posting is included as part of this wage schedule. Additional copies may be obtained from the NYS DOL website, <a href="https://dol.ny.gov/public-work-and-prevailing-wage">https://dol.ny.gov/public-work-and-prevailing-wage</a>

If you have any questions concerning the Fair Play Act, please call the State Labor Department toll-free at 1-866-435-1499 or email us at: <a href="mailto:dol.misclassified@labor.ny.gov">dol.misclassified@labor.ny.gov</a>.

**Worker Notification:** (Labor Law §220, paragraph a of subdivision 3-a)

#### Effective June 23, 2020

This provision is an addition to the existing wage rate law, Labor Law §220, paragraph a of subdivision 3-a. It requires contractors and subcontractors to provide written notice to all laborers, workers or mechanics of the *prevailing wage and supplement rate* for their particular job classification *on each pay stub\**. It also requires contractors and subcontractors to *post a notice* at the beginning of the performance of every public work contract *on each job site* that includes the telephone number and address for the Department of Labor and a statement informing laborers, workers or mechanics of their right to contact the Department of Labor if he/she is not receiving the proper prevailing rate of wages and/or supplements for his/her job classification. The required notification will be provided with each wage schedule, may be downloaded from our website *www.labor.ny.gov* or be made available upon request by contacting the Bureau of Public Work at 518-457-5589. \*In the event the required information will not fit on the pay stub, an accompanying sheet or attachment of the information will suffice.

(12.20)

# To all State Departments, Agency Heads and Public Benefit Corporations IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND

## **Budget Policy & Reporting Manual**

# **B-610**

#### **Public Work Enforcement Fund**

effective date December 7, 2005

### 1. Purpose and Scope:

This Item describes the Public Work Enforcement Fund (the Fund, PWEF) and its relevance to State agencies and public benefit corporations engaged in construction or reconstruction contracts, maintenance and repair, and announces the recently-enacted increase to the percentage of the dollar value of such contracts that must be deposited into the Fund. This item also describes the roles of the following entities with respect to the Fund:

- New York State Department of Labor (DOL),
- The Office of the State of Comptroller (OSC), and
- State agencies and public benefit corporations.

# 2. Background and Statutory References:

DOL uses the Fund to enforce the State's Labor Law as it relates to contracts for construction or reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law. State agencies and public benefit corporations participating in such contracts are required to make payments to the Fund.

Chapter 511 of the Laws of 1995 (as amended by Chapter 513 of the Laws of 1997, Chapter 655 of the Laws of 1999, Chapter 376 of the Laws of 2003 and Chapter 407 of the Laws of 2005) established the Fund.

# 3. Procedures and Agency Responsibilities:

The Fund is supported by transfers and deposits based on the value of contracts for construction and reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law, into which all State agencies and public benefit corporations enter.

Chapter 407 of the Laws of 2005 increased the amount required to be provided to this fund to .10 of one-percent of the total cost of each such contract, to be calculated at the time agencies or public benefit corporations enter into a new contract or if a contract is amended. The provisions of this bill became effective August 2, 2005.

# To all State Departments, Agency Heads and Public Benefit Corporations IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND

OSC will report to DOL on all construction-related ("D") contracts approved during the month, including contract amendments, and then DOL will bill agencies the appropriate assessment monthly. An agency may then make a determination if any of the billed contracts are exempt and so note on the bill submitted back to DOL. For any instance where an agency is unsure if a contract is or is not exempt, they can call the Bureau of Public Work at the number noted below for a determination. Payment by check or journal voucher is due to DOL within thirty days from the date of the billing. DOL will verify the amounts and forward them to OSC for processing.

For those contracts which are not approved or administered by the Comptroller, monthly reports and payments for deposit into the Public Work Enforcement Fund must be provided to the Administrative Finance Bureau at the DOL within 30 days of the end of each month or on a payment schedule mutually agreed upon with DOL.

Reports should contain the following information:

- Name and billing address of State agency or public benefit corporation;
- State agency or public benefit corporation contact and phone number;
- Name and address of contractor receiving the award;
- Contract number and effective dates;
- Contract amount and PWEF assessment charge (if contract amount has been amended, reflect increase or decrease to original contract and the adjustment in the PWEF charge); and
- Brief description of the work to be performed under each contract.

Checks and Journal Vouchers, payable to the "New York State Department of Labor" should be sent to:

Department of Labor Administrative Finance Bureau-PWEF Unit Building 12, Room 464 State Office Campus Albany, NY 12226

Any questions regarding billing should be directed to NYSDOL's Administrative Finance Bureau-PWEF Unit at (518) 457-3624 and any questions regarding Public Work Contracts should be directed to the Bureau of Public Work at (518) 457-5589.



Required Notice under Article 25-B of the Labor Law

# Attention All Employees, Contractors and Subcontractors: You are Covered by the Construction Industry Fair Play Act

#### The law says that you are an employee unless:

- You are free from direction and control in performing your job, and
- You perform work that is not part of the usual work done by the business that hired you, and
- You have an independently established business.

Your employer cannot consider you to be an independent contractor unless all three of these facts apply to your work.

It is against the law for an employer to misclassify employees as independent contractors or pay employees off the books.

**Employee Rights:** If you are an employee, you are entitled to state and federal worker protections. These include:

- Unemployment Insurance benefits, if you are unemployed through no fault of your own, able to work, and otherwise qualified,
- Workers' compensation benefits for on-the-job injuries,
- Payment for wages earned, minimum wage, and overtime (under certain conditions),
- Prevailing wages on public work projects,
- The provisions of the National Labor Relations Act, and
- A safe work environment.

It is a violation of this law for employers to retaliate against anyone who asserts their rights under the law. Retaliation subjects an employer to civil penalties, a private lawsuit or both.

Independent Contractors: If you are an independent contractor, you must pay all taxes and Unemployment Insurance contributions required by New York State and Federal Law.

**Penalties** for paying workers off the books or improperly treating employees as independent contractors:

• **Civil Penalty** First offense: Up to \$2,500 per employee

Subsequent offense(s): Up to \$5,000 per employee

• Criminal Penalty First offense: Misdemeanor - up to 30 days in jail, up to a \$25,000 fine

and debarment from performing public work for up to one year.

Subsequent offense(s): Misdemeanor - up to 60 days in jail or up to a \$50,000 fine and debarment from performing public work for up to 5

years.

If you have questions about your employment status or believe that your employer may have violated your rights and you want to file a complaint, call the Department of Labor at (866) 435-1499 or send an email to <a href="mailto:dol.misclassified@labor.ny.gov">dol.misclassified@labor.ny.gov</a>. All complaints of fraud and violations are taken seriously. You can remain anonymous.

#### **Employer Name:**

# Attention Employees

# THIS IS A: PUBLIC WORK PROJECT

If you are employed on this project as a worker, laborer, or mechanic you are entitled to receive the prevailing wage and supplements rate for the classification at which you are working.

Your pay stub and wage notice received upon hire must clearly state your wage rate and supplement rate.

Chapter 629 of the Labor Laws of 2007: These wages are set by law and must be posted at the work site. They can also be found at: https://dol.ny.gov/bureau-public-work



If you feel that you have not received proper wages or benefits, please call our nearest office.\*

Albany	(518) 457-2744	Patchogue	(631) 687-4882
Binghamton	(607) 721-8005	Rochester	(585) 258-4505
Buffalo	(716) 847-7159	Syracuse	(315) 428-4056
Garden City	(516) 228-3915	Utica	(315) 793-2314
New York City	(212) 932-2419	White Plains	(914) 997-9507
Newburgh	(845) 568-5287		, ,

\* For New York City government agency construction projects, please contact the Office of the NYC Comptroller at (212) 669-4443, or <a href="https://www.comptroller.nyc.gov">www.comptroller.nyc.gov</a> – click on Bureau of Labor Law.

Contractor Name:	
Project Location:	

#### **Requirements for OSHA 10 Compliance**

Article 8 §220-h requires that when the advertised specifications, for every contract for public work, is \$250,000.00 or more the contract must contain a provision requiring that every worker employed in the performance of a public work contract shall be certified as having completed an OSHA 10 safety training course. The clear intent of this provision is to require that all employees of public work contractors, required to be paid prevailing rates, receive such training "prior to the performing any work on the project."

#### The Bureau will enforce the statute as follows:

All contractors and sub contractors must attach a copy of proof of completion of the OSHA 10 course to the first certified payroll submitted to the contracting agency and on each succeeding payroll where any new or additional employee is first listed.

Proof of completion may include but is not limited to:

- Copies of bona fide course completion card (Note: Completion cards do not have an expiration date.)
- Training roster, attendance record of other documentation from the certified trainer pending the issuance of the card.
- · Other valid proof

\*\*A certification by the employer attesting that all employees have completed such a course is not sufficient proof that the course has been completed.

Any questions regarding this statute may be directed to the New York State Department of Labor, Bureau of Public Work at 518-457-5589.

#### **WICKS**

Public work projects are subject to the Wicks Law requiring separate specifications and bidding for the plumbing, heating and electrical work, when the total project's threshold is \$3 million in Bronx, Kings, New York, Queens and, Richmond counties; \$1.5 million in Nassau, Suffolk and Westchester counties; and \$500,000 in all other counties.

For projects below the monetary threshold, bidders must submit a sealed list naming each subcontractor for the plumbing, HVAC and electrical and the amount to be paid to each. The list may not be changed unless the public owner finds a legitimate construction need, including a change in specifications or costs or the use of a Project Labor Agreement (PLA), and must be open to public inspection.

Allows the state and local agencies and authorities to waive the Wicks Law and use a PLA if it will provide the best work at the lowest possible price. If a PLA is used, all contractors shall participate in apprentice training programs in the trades of work it employs that have been approved by the Department of Labor (DOL) for not less than three years. They shall also have at least one graduate in the last three years and use affirmative efforts to retain minority apprentices. PLA's would be exempt from Wicks, but deemed to be public work subject to prevailing wage enforcement.

The Commissioner of Labor shall have the power to enforce separate specification requirement s on projects, and may issue stop-bid orders against public owners for non-compliance.

Other new monetary thresholds, and similar sealed bidding for non-Wicks projects, would apply to certain public authorities including municipal housing authorities, NYC Construction Fund, Yonkers Educational Construction Fund, NYC Municipal Water Finance Authority, Buffalo Municipal Water Finance Authority, Westchester County Health Care Association, Nassau County Health Care Corp., Clifton-Fine Health Care Corp., Erie County Medical Center Corp., NYC Solid Waste Management Facilities, and the Dormitory Authority.

Contractors must pay subcontractors within a 7 days period.

(07.19)

#### Introduction to the Prevailing Rate Schedule

#### Information About Prevailing Rate Schedule

This information is provided to assist you in the interpretation of particular requirements for each classification of worker contained in the attached Schedule of Prevailing Rates.

#### Classification

It is the duty of the Commissioner of Labor to make the proper classification of workers taking into account whether the work is heavy and highway, building, sewer and water, tunnel work, or residential, and to make a determination of wages and supplements to be paid or provided. It is the responsibility of the public work contractor to use the proper rate. If there is a question on the proper classification to be used, please call the district office located nearest the project. District office locations and phone numbers are listed below.

Prevailing Wage Schedules are issued separately for "General Construction Projects" and "Residential Construction Projects" on a county-by-county basis.

General Construction Rates apply to projects such as: Buildings, Heavy & Highway, and Tunnel and Water & Sewer rates.

Residential Construction Rates generally apply to construction, reconstruction, repair, alteration, or demolition of one family, two family, row housing, or rental type units intended for residential use.

Some rates listed in the Residential Construction Rate Schedule have a very limited applicability listed along with the rate. Rates for occupations or locations not shown on the residential schedule must be obtained from the General Construction Rate Schedule. Please contact the local Bureau of Public Work office before using Residential Rate Schedules, to ensure that the project meets the required criteria.

#### Payrolls and Payroll Records

Contractors and subcontractors are required to establish, maintain, and preserve for not less that six (6) years, contemporaneous, true, and accurate payroll records.

Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury.

#### **Paid Holidays**

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

#### **Overtime**

At a minimum, all work performed on a public work project in excess of eight hours in any one day or more than five days in any workweek is overtime. However, the specific overtime requirements for each trade or occupation on a public work project may differ. Specific overtime requirements for each trade or occupation are contained in the prevailing rate schedules.

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays.

The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

#### **Supplemental Benefits**

Particular attention should be given to the supplemental benefit requirements. Although in most cases the payment or provision of supplements is straight time for all hours worked, some classifications require the payment or provision of supplements, or a portion of the supplements, to be paid or provided at a premium rate for premium hours worked. Supplements may also be required to be paid or provided on paid holidays, regardless of whether the day is worked. The Overtime Codes and Notes listed on the particular wage classification will indicate these conditions as required.

#### **Effective Dates**

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. The rate listed is valid until the next effective rate change or until the new annual determination which takes effect on July 1 of each year. All contractors and subcontractors are required to pay the current prevailing rates of wages and supplements. If you have any questions please contact the Bureau of Public Work or visit the New York State Department of Labor website (www.labor.ny.gov) for current wage rate information.

#### **Apprentice Training Ratios**

The following are the allowable ratios of registered Apprentices to Journey-workers.

For example, the ratio 1:1,1:3 indicates the allowable initial ratio is one Apprentice to one Journeyworker. The Journeyworker must be in place on the project before an Apprentice is allowed. Then three additional Journeyworkers are needed before a second Apprentice is allowed. The last ratio repeats indefinitely. Therefore, three more Journeyworkers must be present before a third Apprentice can be hired, and so on.

Please call Apprentice Training Central Office at (518) 457-6820 if you have any questions.

Title (Trade)	Ratio
Boilermaker (Construction)	1:1,1:4
Boilermaker (Shop)	1:1,1:3
Carpenter (Bldg.,H&H, Pile Driver/Dockbuilder)	1:1,1:4
Carpenter (Residential)	1:1,1:3
Electrical (Outside) Lineman	1:1,1:2
Electrician (Inside)	1:1,1:3
Elevator/Escalator Construction & Modernizer	1:1,1:2
Glazier	1:1,1:3
Insulation & Asbestos Worker	1:1,1:3
Iron Worker	1:1,1:4
Laborer	1:1,1:3
Mason	1:1,1:4
Millwright	1:1,1:4
Op Engineer	1:1,1:5
Painter	1:1,1:3
Plumber & Steamfitter	1:1,1:3
Roofer	1:1,1:2
Sheet Metal Worker	1:1,1:3
Sprinkler Fitter	1:1,1:2

If you have any questions concerning the attached schedule or would like additional information, please contact the nearest BUREAU of PUBLIC WORK District Office or write to:

New York State Department of Labor Bureau of Public Work State Office Campus, Bldg. 12 Albany, NY 12226

District Office Locations:	Telephone #	FAX#
Bureau of Public Work - Albany	518-457-2744	518-485-0240
Bureau of Public Work - Binghamton	607-721-8005	607-721-8004
Bureau of Public Work - Buffalo	716-847-7159	716-847-7650
Bureau of Public Work - Garden City	516-228-3915	516-794-3518
Bureau of Public Work - Newburgh	845-568-5287	845-568-5332
Bureau of Public Work - New York City	212-932-2419	212-775-3579
Bureau of Public Work - Patchogue	631-687-4882	631-687-4902
Bureau of Public Work - Rochester	585-258-4505	585-258-4708
Bureau of Public Work - Syracuse	315-428-4056	315-428-4671
Bureau of Public Work - Utica	315-793-2314	315-793-2514
Bureau of Public Work - White Plains	914-997-9507	914-997-9523
Bureau of Public Work - Central Office	518-457-5589	518-485-1870

#### **New York County General Construction**

Asbestos Worker 04/01/2024

JOB DESCRIPTION Asbestos Worker DISTRICT 4

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2023

Asbestos Worker \$ 46.75

Removal & Abatement Only\*

NOTE: \*On Mechanical Systems that are NOT to be SCRAPPED.

SUPPLEMENTAL BENEFITS

Per Hour:

Asbestos Worker \$ 12.65

Removal & Abatement Only

**OVERTIME PAY** 

See (B, B2, \*E, J) on OVERTIME PAGE

\*Hours worked on Saturdays are paid at time and one half only if forty hours have been worked during the week.

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6, 8) on HOLIDAY PAGE

**REGISTERED APPRENTICES** 

Apprentice Removal & Abatement Only:

1000 hour terms at the following percentage of Journeyman's rates.

1st 2nd 3rd 4th 78% 80% 83% 89%

SUPPLEMENTAL BENEFIT

Per Hour:

Apprentice

Removal & Abatement \$ 12.65

4-12a - Removal Only

Boilermaker 04/01/2024

JOB DESCRIPTION Boilermaker DISTRICT 4

**ENTIRE COUNTIES** 

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

**WAGES** 

Per Hour: 07/01/2023 01/01/2024

 Boilermaker
 \$ 65.88
 \$ 67.38

 Repairs & Renovations
 65.88
 67.38

Repairs & Renovation: Includes Repairing, Renovating replacement of parts to an existing unit(s).

SUPPLEMENTAL BENEFITS

Per Hour:

NOTE: "Hourly Wage Paid" shall include any and all premium(s) pay.

Repairs & Renovation Includes replacement of parts and repairs & renovation of existing unit.

OVERTIME PAY

See (\*B, O, \*\*U) on OVERTIME PAGE

Note:\* Includes 9th & 10th hours, double for 11th or more.

\*\* Labor Day ONLY, if worked.

Repairs & Renovation see (B,E,Q) on OT Page

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 12, 15, 25, 26, 29) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:

(1/2) Year Terms at the following percentage of Boilermaker's Wage

1st 2nd 3rd 4th 5th 6th 7th 65% 70% 75% 80% 85% 90% 95%

Supplemental Benefits Per Hour:

Apprentice(s)	33.5% of Hourly Wage Paid Plus Amount Below	33.5% of Hourly Wage Paid Plus Amount Below
1st Term	\$ 20.12	\$ 20.36
2nd Term	21.03	21.28
3rd Term	21.95	22.22
4th Term	22.83	23.12
5th Term	23.76	24.07
6th Term	24.67	25.00
7th Term	25.58	25.93

NOTE: "Hourly Wage Paid" shall include any and all premium(s)

4-5

Broadband 04/01/2024

JOB DESCRIPTION Broadband DISTRICT 4

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES** 

Per Hour: 7/01/2023 06/30/2024 Additional Field Tech \$ 50.87 3% \*

Install/Repair

(\*)To be allocated at a later date.

For outside work (excluding installation on building construction/alteration/renovation projects), stopping at first point of attachment (demarcation), installing/maintaining/repairing broadband internet service.

#### **SUPPLEMENTAL BENEFITS**

Per Hour:

\$ 23.24

**OVERTIME PAY** 

See (B, K, \*R) on OVERTIME PAGE

Note: \*Two and one half times the hourly rate after the 8th hour

**HOLIDAY** 

Paid: See (5, 6, 7, 11, 12) on HOLIDAY PAGE

4-CWA-Dist1

**DISTRICT** 8

Carpenter 04/01/2024

JOB DESCRIPTION Carpenter

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

**WAGES** 

Per hour: 07/01/2023

Piledriver \$ 59.16

+ 9.79\*

**DISTRICT** 8

Dockbuilder \$ 59.16

+ 9.79\*

\*This portion is not subject to overtime premiums

#### **SUPPLEMENTAL BENEFITS**

Per hour:

Journeyworker \$45.34

**OVERTIME PAY** 

See (B, E2, O) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.

Apprentices See (5,6,11,13,25)

Overtime: See (5,6,11,13,25) on HOLIDAY PAGE.

#### **REGISTERED APPRENTICES**

Wages per hour (1)year terms:

1st 2nd 3rd 4th \$25.60 \$31.20 \$39.58 \$47.97 +5.30\* +5.30\* +5.30\* +5.30\*

Supplemental benefits per hour:

All Terms: \$ 31.83

8-1556 Db

Carpenter 04/01/2024

JOB DESCRIPTION Carpenter

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Suffolk, Westchester

**WAGES** 

Per hour: 07/01/2023

Carpet/Resilient

Floor Coverer \$ 55.05 + 8.25\*

INCLUDES HANDLING & INSTALLATION OF ARTIFICIAL TURF AND SIMILAR TURF INDOORS/OUTDOORS.

#### SUPPLEMENTAL BENEFITS

Per hour:

\$ 39.45

**OVERTIME PAY** 

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (18, 19) on HOLIDAY PAGE.

Paid for 1st & 2nd yr.

Apprentices See (5,6,11,13,16,18,19,25)

Overtime: See (5,6,11,13,16,18,19,25) on HOLIDAY PAGE.

#### **REGISTERED APPRENTICES**

Wage per hour - (1) year terms:

1st 2nd 3rd 4th \$25.20 \$28.20 \$32.45 \$40.33 +1.85\* +2.35\* +2.85\* +3.85\*

<sup>\*</sup>This portion is not subject to overtime premiums

<sup>\*</sup>This portion is not subject to overtime premiums

<sup>\*</sup>This portion is not subject to overtime premiums

Supplemental benefits per hour:

1st 2nd 3rd 4th \$ 15.22 \$ 16.22 \$ 19.32 \$ 20.32

8-2287

Carpenter 04/01/2024

JOB DESCRIPTION Carpenter

**DISTRICT** 8

**ENTIRE COUNTIES** 

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

WAGES

Per Hour: 07/01/2023

Marine Construction:

Marine Diver \$ 74.03 + 9.79\*

Marine Tender \$ 53.57 + 9.79\*

\*This portion is not subject to overtime premiums

#### SUPPLEMENTAL BENEFITS

Per Hour:

Journeyworker \$ 45.34

**OVERTIME PAY** 

See (B, E, E2, Q) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (18, 19) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 13, 16, 18, 19, 25) on HOLIDAY PAGE

#### **REGISTERED APPRENTICES**

Wages per hour: One (1) year terms.

1st year \$ 25.60 + 5.30\* 2nd year 31.20 + 5.30\* 3rd year 39.58 + 5.30\* 4th year 47.97 + 5.05\*

Supplemental Benefits

Per Hour:

All terms \$ 31.83

8-1456MC

 Carpenter
 04/01/2024

JOB DESCRIPTION Carpenter

**DISTRICT** 8

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Rockland, Suffolk, Westchester

**WAGES** 

Per hour: 07/01/2023

Building

Millwright \$58.70

+ 12.62\*

<sup>\*</sup>This portion is not subject to overtime premiums

\*This portion is not subject to overtime premiums

#### SUPPLEMENTAL BENEFITS

Per hour:

Millwright \$44.31

**OVERTIME PAY** 

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (18,19) on HOLIDAY PAGE.

Overtime See (5,6,8,11,13,18,19,25) on HOLIDAY PAGE.

#### **REGISTERED APPRENTICES**

Wages per hour: One (1) year terms:

> 1st. 2nd. 3rd. 4th. \$31.74 \$37.19 \$42.64 \$53.54 +6.75\* +7.92\* +9.09\* +11.43\*

Supplemental benefits per hour:

One (1) year terms:

1st. 2nd. 3rd. 4th. \$29.81 \$32.34 \$35.52 \$39.94

8-740.1

Carpenter 04/01/2024

JOB DESCRIPTION Carpenter DISTRICT 8

#### ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES** 

Per Hour:

07/01/2023

Timberman \$ 54.05 + 10.26\*

#### **SUPPLEMENTAL BENEFITS**

Per Hour:

07/01/2023

\$ 44.55

**OVERTIME PAY** 

See (B, E, E2, Q) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE.

Paid: for 1st & 2nd yr.

Apprentices See (5,6,11,13,25)

Overtime: See (5,6,11,13,25) on HOLIDAY PAGE.

#### REGISTERED APPRENTICES

Wages per hour: One (1) year terms:

> 1st 2nd 3rd 4th \$23.42 \$28.53 \$36.18 \$43.84 + 5.55\* + 5.55\* + 5.55\* + 5.55\*

<sup>\*</sup>This portion is not subject to overtime premiums

<sup>\*</sup>This portion not subject to overtime premiums

<sup>\*</sup>This portion is not subject to overtime premiums

Supplemental benefits per hour:

All terms \$ 31.54

8-1556 Tm

Carpenter 04/01/2024

JOB DESCRIPTION Carpenter

**DISTRICT** 8

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Westchester

**PARTIAL COUNTIES** 

Orange: South of but including the following, Waterloo Mills, Slate Hill, New Hampton, Goshen, Blooming Grove, Mountainville, east to the Hudson River.

Putnam: South of but including the following, Cold Spring, TompkinsCorner, Mahopac, Croton Falls, east to Connecticut border.

Suffolk: West of Port Jefferson and Patchogue Road to Route 112 to the Atlantic Ocean.

**WAGES** 

07/01/2023 Per hour:

Core Drilling:

Driller \$ 43.88

+ 2.50\*

Driller Helper \$ 34.47

+ 2.50\*

Note: Hazardous Waste Pay Differential:

For Level C, an additional 15% above wage rate per hour For Level B, an additional 15% above wage rate per hour For Level A, an additional 15% above wage rate per hour

Note: When required to work on water: an additional \$ 3.00 per hour.

#### SUPPLEMENTAL BENEFITS

Per hour:

Driller and Helper \$ 28.85

OVERTIME PAY

See (B, G, P) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (5, 6) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

8-1536-CoreDriller

04/01/2024 Carpenter

JOB DESCRIPTION Carpenter

**DISTRICT** 8

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Putnam, Queens, Richmond

**PARTIAL COUNTIES** 

Nassau: That portion of the county that lies west of Seaford Creekand south of the Southern State Parkway.

**WAGES** 

Per hour: 07/01/2023

Show Exhibit \$55.75

+ 9.50\*\*

Bldg. Carpenter\* \$55.05

+ 8.25\*\*

#### SUPPLEMENTAL BENEFITS

Per hour worked:

Show Exhibit \$ 44.50 Bldg. Carpenter 39.45

<sup>\*</sup>This portion is not subject to overtime premiums

<sup>\*</sup> Not applicable in Putnam County

<sup>\*\*</sup>This portion is not subject to overtime premiums

**OVERTIME PAY** 

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (18,19) on HOLIDAY PAGE.

Paid:for 1st & 2nd yr.

Apprentices See (5,6,11,13,16,18,19,25)

Overtime: See (5,6,11,13,16,18,19,25) on HOLIDAY PAGE.

**REGISTERED APPRENTICES** 

Wages per hour: Show Exhibit

(1) year terms:

1st. 2nd. 3rd. 4th. \$22.30 \$27.88 \$36.24 \$44.60 + 4.75\* + 4.75\* + 4.75\* + 4.75\*

\*This portion is not subject to overtime premiums

Supplemental benefits per hour:

All terms \$30.25

Wages per hour: Bldg. Carpenter

(1) year terms:

1st 2nd 3rd 4th \$20.20 \$23.20 \$27.45 \$35.33 + 1.85\* + 2.30\* + 2.80\* + 3.80\*

\*This portion is not subject to overtime premiums.

Supplemental benefits per hour:

1st 2nd 3rd 4th \$15.22 \$16.27 \$19.37 \$20.37

8-EXHIB

#### Carpenter - Heavy&Highway

04/01/2024

**DISTRICT** 8

JOB DESCRIPTION Carpenter - Heavy&Highway

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

**PARTIAL COUNTIES** 

Nassau: That portion of the county that lies West of Seaford Creek and South of the Southern State Parkway.

**WAGES** 

Per hour:

07/01/2023

Heavy & Highway

Carpenter \$ 59.16 + 9.79\*

\*This portion is not subject to overtime premiums

SUPPLEMENTAL BENEFITS

Per hour worked:

Heavy & Highway

Carpenter \$45.34

**OVERTIME PAY** 

See (B, E2, Q) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 13, 25) on HOLIDAY PAGE

Paid: for 1st & 2nd yr

Apprentices See (5, 6, 11, 13, 25)

**REGISTERED APPRENTICES** 

Wage per hour: One (1) year terms:

	1st	2nd	3rd	4th
Heavy & Highway	\$ 25.60	\$ 31.20	\$ 39.58	\$ 47.97
	+ 5.30*	+ 5.30*	+ 5.30*	+ 5.30*

<sup>\*</sup>This portion is not subject to overtime premiums

Supplemental Benefits:

Per Hour:

All terms \$ 31.83

8-NYC H/H

Electrician 04/01/2024

JOB DESCRIPTION Electrician DISTRICT 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour: 07/01/2023 01/01/2024

 Tree Trimmer
 \$ 34.21
 \$ 35.24

 Ground Person
 20.69
 20.69

Applies to line clearance, tree work, and right-of-way preparation on all new or existing overhead, electrical, telephone, and CATV lines.

#### SUPPLEMENTAL BENEFITS

Per hour:

 Tree Trimmer
 \$ 12.81
 \$ 13.20

 Ground Person
 7.75
 7.75

#### **OVERTIME PAY**

See (B, \*H, Q) on OVERTIME PAGE

\*Worked performed on Sundays & Holidays outside of 7.00am - 4.00pm shall be paid at double time, in addition to the holiday pay if applicable.

# HOLIDAY

HOLIDAY:

Paid: See (5,6,10,11,15,16,26) on HOLIDAY PAGE.

(An additional floating holiday after four years service)

Overtime: See (5,6,10,11,15,16,26) on HOLIDAY PAGE.

9-3T

Electrician 04/01/2024

JOB DESCRIPTION Electrician DISTRICT 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

**WAGES** 

Per hour: 07/01/2023 04/11/2024

Electrician \$ 31.25 \$ 32.00 Telephone 31.25 32.00

Maintenance and Jobbing-Electrical and teledata work of limited duration and scope, consisting of repairs and/or replacement of electrical and teledata equipment.

- Includes all work necessary to retrofit, service, maintain and repair all kinds of lighting fixtures and local lighting controls and washing and cleaning of foregoing fixtures.

#### SUPPLEMENTAL BENEFITS

Journeyworker:

07/01/2023 04/11/2024 \$ 26.55 \$ 27.21 28.53\* 29.23\*

\* Applies to overtime hours

**OVERTIME PAY** 

See (B, H) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

9-3m

Electrician 04/01/2024

JOB DESCRIPTION Electrician DISTRICT 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond, Westchester

WAGES

Per hour: 07/01/2023 03/07/2024

Service Technician \$36.40 \$37.40

Service and Maintenance on Alarm and Security Systems.

Maintenance, repair and /or replacement of defective (or damaged) equipment on, but not limited to, Burglar - Fire - Security - CCTV - Card Access - Life Safety Systems and associated devices. (Whether by service contract of T&M by customer request.)

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker: \$ 21.07 \$ 21.85

**OVERTIME PAY** 

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (5, 6, 11, 15, 16, 17, 25, 26) on HOLIDAY PAGE Overtime: See (5, 6, 11, 15, 16, 17, 25, 26) on HOLIDAY PAGE

\_\_\_\_\_

9-3H

Electrician 04/01/2024

JOB DESCRIPTION Electrician DISTRICT 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

**WAGES** 

Per Hour: 07/01/2023 04/11/2024

Electrician

Audio/Sound and \$ 61.00 \$ 62.00

Temporary Light/

Power

Evening (Swing Shift):

Electrician

Audio/Sound and

Temporary Light/

Power 71.58 72.75

Night (Graveyard Shift):

Electrician

Audio/Sound and

Temporary Light 80.17 81.49

Solar-Photovoltaic Systems

Group 1 61.00 62.00

All tasks not listed in Group 2

Group 2 31.25 32.00

D.C portion and associated mechanical equipment related to solar systems,

(excluding battery storage and its associated equipment) including work related to

Weather Stations and Data Acquisitions/Monitoring Systems on solar photovoltaic systems.

Mounting of PV modules.

Mounting of DC optimizers to back of modules if the installation calls for this equipment.

Mounting of microinverters to back of modules and install trunk cabling on racking if called for.

Module to module connection of PV modules to adjacent modules. If racking manufacturer provides integrated inter-row cable management, install string jumper to complete the string in full in same sub-array.

If racking manufacturer does not provide integrated inter-row cable management, run conduit between rows, bond it and run string jumper to complete string in full in same sub-array.

Installation of weather stations and other weather station relevant sensors as specified.

Installation of data acquisition system (DAS) for PV system monitoring.

#### **SUPPLEMENTAL BENEFITS**

Per Hour:

Electrician	\$ 63.84 67.69*	\$ 66.00 69.91*
Swing Shift:	72.58 77.10*	74.96 79.56*
Graveyard Shift:	79.96 85.02*	82.54 87.69*
Temporary Light/Power:	28.56 31.81*	30.33 33.64*
Group 1:	63.84 67.69*	66.00 69.91*
Group 2:	26.55 28.52*	27.20 29.23*

<sup>\*</sup> Applies when premium (OT) wages are paid.

Temporary Light and Power benefit rate applies for three or less workers.

Reduce benefit rate by 6.2% for any employee who has accumulated wages of \$137,700 for the same employer.

#### **OVERTIME PAY**

See (A, H) on OVERTIME PAGE

See (B) for Temporary Light and Power

#### **HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

#### **REGISTERED APPRENTICES**

Wages Per Hour:

One (1) year terms

0.10 (1) 3001 1011110		
First term:	07/01/2023	04/11/2024
0-6 mos.	\$ 18.00	\$ 18.00
7-12 mos.	18.50	18.50
Second term:		
0-6 mos.	19.50	19.50
7-12 mos.	20.50	20.50
Third term:		
0-6 mos.	21.50	21.50
7-12 mos.	22.50	22.50
Fourth term:		
0-6 mos.	23.50	23.50
7-12 mos.	25.50	25.50
Fifth term/MIJ:		
0-12 mos.	26.75	27.50

13-18 mos.	31.25	32.00

Supplemental Benefits per hour:

One (1) year terms:

First Term: 0-6 mos.	Regular \$ 16.43	Overtime \$ 17.63	Regular \$ 17.18	Overtime \$ 18.38
7-12 mos.	16.69	17.92	17.44	18.67
Second Term:	10.09	17.92	17.44	10.07
0-6 mos.	17.21	18.51	17.97	19.26
7-12 mos.	17.74	19.10	18.49	19.85
Third Term:				
0-6 mos.	18.27	19.70	19.02	20.44
7-12 mos.	18.79	20.28	19.54	21.03
Fourth Term:				
0-6 mos.	19.31	20.87	20.06	21.62
7-12 mos.	20.36	22.05	21.11	22.80
Fifth Term/MIJ:				
1-12 mos.	24.13	25.82	24.79	26.52
13-18 mos.	26.55	28.52	27.21	29.23

**Electrician - Highway and Street Lighting, Traffic Signals** and Controls

04/01/2024

9-3

JOB DESCRIPTION Electrician - Highway and Street Lighting, Traffic Signals and Controls **DISTRICT** 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

#### **WAGES**

Per hour:

	07/01/2023	04/18/2024
Electro Pole Electrician	\$ 61.00	\$ 62.00
Electro Pole Foundation Installer	46.66	47.66
Electro Pole Maintainer  SUPPLEMENTAL BENEFITS  Per Hour:	40.61	41.61
i di ribui:	07/01/2023	04/18/2024
Electro Pole Electrician	\$ 65.91 69.77*	\$ 68.20 72.12*
Electro Pole Foundation		
Installer	50.05 53.00*	51.68 54.69*
Electro Pole Maintainer	45.40 47.97*	47.03 49.66*

<sup>\*</sup>Applies when premium wages are paid

Note: Reduce benefit rate by 6.2% for any employee who has accumulated wages in \$137,700 for the same employer.

#### **OVERTIME PAY**

See (A, B, E4, F, K) on OVERTIME PAGE B - Applies to Electro Pole Foundation Installer E4 - Applies to Electro Pole Maintainer

**HOLIDAY** 

Paid:

See (1) on HOLIDAY PAGE See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE Overtime:

9-3J

#### **Elevator Constructor** 04/01/2024

#### JOB DESCRIPTION Elevator Constructor

**DISTRICT** 4

#### **ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

#### **PARTIAL COUNTIES**

Rockland: Entire County except for the Township of Stony Point Westchester: Entire County except for the Townships of Bedford, Lewisboro, Cortland, Mt. Kisco, North Salem, Pound Ridge, Somers and

Yorktown.

**WAGES** Per hour:

07/01/2023

**Elevator Constructor** \$77.49

Modernization &

Service/Repair \$60.89

NOTE - The 'Employer Registration' (30.1) use of a '4 Day/10 Hour Work schedules' will no longer be accepted or processed. All registered projects prior to June 30,2023 will expire within the granted time frame.

For Pre-Registered Projects Four (4), Ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day. For further clarification contact your local Bureau Office.

#### SUPPLEMENTAL BENEFITS

Per Hour:

**Elevator Constructor** \$ 45.574

Modernization & 44.412

Service/Repairs

#### **OVERTIME PAY**

Constructor See ( D, M, T ) on OVERTIME PAGE.

Modern/Service See (B, F, S) on OVERTIME PAGE.

#### **HOLIDAY**

See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE Paid: Overtime:

#### **REGISTERED APPRENTICES**

WAGES PER HOUR:

\*Note:1st, 2nd, 3rd Terms are based on Average wage of Constructor & Modernization.

Terms 4 thru 9 Based on Journeyman's wage of classification Working in.

#### 6 MONTH TERMS:

1st Term* 50%	2nd & 3rd Term* 50%	4th & 5th Term 55%	6th & 7th Term 65%	8th & 9th Term 75%
SUPPLEMENTAL BENEF Elevator Constructor 1st Term 2nd & 3rd Term 4th & 5th Term 6th & 7th Term 8th & 9th Term	\$ 0.00 36.024 36.943 38.448 39.953			
Modernization & Service/Repair 1st Term 2nd & 3rd Term 4th & 5th Term 6th & 7th Term 8th & 9th Term	\$ 0.00 35.694 36.525 37.948 39.38			

Glazier 04/01/2024

#### JOB DESCRIPTION Glazier

#### **DISTRICT** 8

**ENTIRE COUNTIES** 

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

WAGES

Per hour: 7/01/2023

Glazier & Glass Tinting \$ 61.64 \*Scaffolding 65.64

Window Film

\*\*Repair & Maintenance 30.76

#### **SUPPLEMENTAL BENEFITS**

Per hour: 7/01/2023

Glazier & Glass Tinting \$40.20

Window Film

Repair & Maintenance 23.19

#### **OVERTIME PAY**

See (B, E, Q, V) on OVERTIME PAGE

For 'Repair & Maintenance' see (B, B2, I, S) on overtime page.

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (4, 6, 16, 25) on HOLIDAY PAGE

For 'Repair & Maintenance' Paid: See(5, 6, 16, 25) Overtime: See(5, 6, 16, 25)

#### **REGISTERED APPRENTICES**

Wage per hour:

(1) year terms at the following wage rates:

7/01	/2023
7/01	12023

\$ 21.93
30.05
39.95
48.97

Supplemental Benefits:

(Per hour)

 1st term
 \$ 18.25

 2nd term
 25.97

 3rd term
 31.27

 4th term
 34.32

8-1087 (DC9 NYC)

**DISTRICT** 4

# Insulator - Heat & Frost 04/01/2024

JOB DESCRIPTION Insulator - Heat & Frost ENTIRE COUNTIES

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES** 

Per Hour: 07/01/2023

Insulators

Heat & Frost \$70.51

#### SUPPLEMENTAL BENEFITS

Per Hour:

<sup>\*</sup>Scaffolding includes swing scaffold, mechanical equipment, scissor jacks, man lifts, booms & buckets 30' or more, but not pipe scaffolding.

<sup>\*\*</sup>Repair & Maintenance- All repair & maintenance work on a particular building whenever performed, where the total cumulative Repair & Maintenance contract value is under \$184,000.

Insulators \$35.76

Heat & Frost

**OVERTIME PAY** 

See (B, E, \*Q, V) on OVERTIME PAGE \* Triple time for Labor Day (If worked)

HOLIDAY

See (1) on HOLIDAY PAGE Paid:

Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

**REGISTERED APPRENTICES** 

Wages: 1 year terms. Wages Per Hour:

> 2nd 3rd 4th 1st \$ 28.20 \$ 35.26 \$ 42.31 \$49.36

Supplemental Benefits:

\$ 14.30 \$ 17.88 \$ 21.46 \$ 25.03

4-12

04/01/2024 Ironworker

JOB DESCRIPTION Ironworker **DISTRICT** 9

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES** 

01/01/2024 Per Hour: 07/01/2023 Additional

\$ 72.90 Stone Derrickmen Rigger + \$ 1.64

Stone Handset

Derrickman 70.47 + \$ 1.11

SUPPLEMENTAL BENEFITS

Per hour:

Stone Derrickmen Rigger \$43.10

Stone Handset 42.84

Derrickman

**OVERTIME PAY**See (B, D1, \*E, Q, \*\*V) on OVERTIME PAGE

\*Time and one-half shall be paid for all work on Saturday up to eight (8) hours and double time shall be paid for all work thereafter.

\*\* Benefits same premium as wages on Holidays only

**HOLIDAY** 

See (18) on HOLIDAY PAGE Paid: Overtime: See (5, 6, 8, 25) on HOLIDAY PAGE

Work stops at schedule lunch break with full day's pay.

REGISTERED APPRENTICES

Wage per hour:

Stone Derrickmen Rigger:

1st 2nd 3rd 4th 07/01/2023 \$ 35.90 \$51.53 \$ 57.32 \$63.11

Supplemental Benefits:

Per hour:

07/01/2023

07/01/2023 22.11 32.58 32.58 32.58

Stone Handset:

1/2 year terms at the following hourly wage rate:

3rd 1st 2nd 4th 34.56 49.75 55.33 60.90

Supplemental Benefits:

Per hour:

07/01/2023 22.10 32.46 32.46 32.46

9-197D/R

04/01/2024 Ironworker

JOB DESCRIPTION Ironworker **DISTRICT** 4

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES** 

Per Hour: 07/01/2023

Ornamental \$46.90 46.90 Chain Link Fence 46.90 Guide Rail

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker: \$63.04

OVERTIME PAY

See (B, B1, Q, V) on OVERTIME PAGE

**HOLIDAY** 

See (1) on HOLIDAY PAGE Paid: See (5, 6, 25) on HOLIDAY PAGE Overtime:

**REGISTERED APPRENTICES** 

Apprentices Hired after 9/1/18:

1 year terms

07/01/2023 1st Term \$21.13 2nd Term 24.77 3rd Term 28.40 4th Term 32.06

Supplemental Benefits per hour:

1st Term \$ 17.90 2nd Term 19.15 3rd Term 20.41 4th Term 21.67

4-580-Or

Ironworker 04/01/2024

JOB DESCRIPTION Ironworker **DISTRICT** 4

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES** 

PER HOUR:

07/01/2023 01/01/2024 07/01/2024 Ironworker:

Additional

Structural \$ 57.20 \$ 57.70 \$ 1.75/Hr.\*

**Bridges** 

Machinery

(\*)To be allocated at a later date.

**SUPPLEMENTAL BENEFITS** 

PER HOUR PAID:

\$88.60 Journeyman \$87.35

**OVERTIME PAY** 

See (B, B1, Q, \*V) on OVERTIME PAGE

\*NOTE: Benefits are calculated for every hour paid

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 18, 19) on HOLIDAY PAGE

#### **REGISTERED APPRENTICES**

WAGES PER HOUR:

6 month terms at the following rate:

1st \$ 29.73 \$29.98 2nd 30.33 30.58 3rd - 6th 30.94 31.19

Supplemental Benefits

PER HOUR PAID:

\$60.69 All Terms \$61.59

4-40/361-Str

Ironworker 04/01/2024

#### JOB DESCRIPTION Ironworker

**DISTRICT** 4

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**PARTIAL COUNTIES** 

Rockland: Southern section - south of Convent Road and east of Blue Hills Road.

**WAGES** 

Per hour: 07/01/2023

Reinforcing &

\$ 56.95 Metal Lathing

"Base" Wage \$55.20

plus \$ 1.75

"Base" Wage is used to calculate overtime hours only.

#### SUPPLEMENTAL BENEFITS

Per hour:

Reinforcing & \$ 42.72

Metal Lathing

**OVERTIME PAY** 

See (B, E, Q, \*X) on OVERTIME PAGE \*Only \$23.50 per Hour for non worked hours

Supplemental Benefit Premiums for Overtime Hours worked:

Time & One Half \$49.47 Double Time \$56.22

**HOLIDAY** 

Paid:

See (1) on HOLIDAY PAGE See (5, 6, 11, 13, \*18, \*\*19, 25) on HOLIDAY PAGE Overtime:

\*Note: Work performed after first 4 Hours.

#### **REGISTERED APPRENTICES**

(1) year terms at the following wage rates:

1st term	2nd term	3rd term	4th Term
Wage Per Hour:			
\$ 22.55	\$ 28.38	\$ 34.68	\$ 37.18
"Base" Wage			
\$ 21.00	\$ 26.80	\$ 33.10	\$ 35.60
plus \$1.55	plus \$1.58	plus \$1.58	plus \$1.58

"Base" Wage is used to calculate overtime hours ONLY.

SUPPLEMENTAL BENIFITS

Per Hour:

 1st term
 2nd term
 3rd term
 4th Term

 \$ 18.17
 \$ 21.34
 \$ 22.00
 \$ 22.50

4-46Reinf

Laborer 04/01/2024

JOB DESCRIPTION Laborer DISTRICT 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

**WAGES** 

Per hour:

 Striper (Highway/streets):
 07/01/2023
 07/01/2024

 Additional
 Striping-Machine Operator
 \$ 40.00
 \$ 3.00

Striping Thermoplastic 44.00

Flagger - Traffic Safety\* 38.00

Note: \* Includes but is not limited to: Positioning of cones and directing of traffic using handheld devices. Excludes the Driver/Operator of equipment used in protection of traffic safety.

#### **SUPPLEMENTAL BENEFITS**

Per hour paid:

Journeyworker \$ 17.27

**OVERTIME PAY** 

See (B, H) on OVERTIME PAGE

**HOLIDAY** 

 Paid:
 See (5, 6, 8, 13) on HOLIDAY PAGE

 Overtime:
 See (5, 6, 8, 13) on HOLIDAY PAGE

**REGISTERED APPRENTICES** 

Wages per hour:

1st Term (1-2000 hours) \$ 30.86 2nd Term (2001-4000 hours) 32.50

Supplemental Benefits per hour:

All Terms 17.27

9-1010-LS

Laborer 04/01/2024

JOB DESCRIPTION Laborer DISTRICT 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour: 07/01/2023 07/01/2024

Laborer/Excavation Additional \*\*Asbestos and Lead Abatement & \$ 2.30

Removal, Hazardous Waste Removal

 (including soil)
 \$ 44.50

 Basic
 44.50

 Flagman
 44.50

 Pipelayer
 44.50

 \*Tree Work, \*Landscape
 44.50

#### SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker \$ 52.23

Note: No payment of Supplemental Benefits is required on paid holidays, when employees do not work.

<sup>\*</sup>Includes trimming, cutting, planting and/or removal of trees.

<sup>\*\*</sup> Applies to Heavy & Highway projects

**DISTRICT** 9

#### **OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

When an observed holiday falls on a Saturday, work done shall be paid at double time.

**HOLIDAY** 

Paid:

See (2, 20) on HOLIDAY PAGE See (2, 5, 6, 11, 20) on HOLIDAY PAGE Overtime:

**REGISTERED APPRENTICES** 

Wage per hour:

1000 hour terms at the following hourly wage rate.

07/01/2023 1st 0 - 1000 \$ 22.25 2nd 1001-2000 26.70 3rd 2001-3000 33.38 4th 3001-4000 40.05

Supplemental Benefits per hour:

52.23 All Apprentices

9-731Ex

04/01/2024 Laborer

JOB DESCRIPTION Laborer

Bronx, Kings, New York, Queens, Richmond

**WAGES** 

Per hour:

GROUP 14: Blasters.

**ENTIRE COUNTIES** 

GROUP 16: Tunnel workers - including Miners, Drill Runners, Iron Men, Maintenance Men, Conveyor Men, Safety Miners, Riggers, Block Layers, Cement Finishers, Rod Men, Caulkers, Powder Carriers, Miners' Helpers, Chuck Tenders, Track Men, Nippers, Brake Men, Derail Men, Form Men, Bottom Bell, Top Bell or Signal men, Form Workers, Movers, Concrete Workers, Shaft Men, Tunnel Laborers and Caulkers' Helpers.

GROUP 17: All others including: Powder Watchmen, Top Laborers and Changehouse Attendants.

Wages: (per hour) 07/01/2023

Laborer (Tunnel)-FREE AIR:

Group 14 \$ 75.40 Group 16 72.10 Group 17\* 66.65

Small Bore Micro

**Tunnel Machines** 80% of rates above

For Repairs on Existing

Water Tunnels 90% of rates above

For Repairs of Sewer &

Drainage Tunnels 85% of rates above

For Repair & Maintenance

of all Subway & 80% of rates above

Vehicular Tunnels

Note: Employer shall pay \$10.00 per day for each half mile starting at a point 500 feet from the bottom of the shaft.

#### SUPPLEMENTAL BENEFITS

Per hour:

**GROUP 14** \$53.97

<sup>\*</sup>An additional \$3.00 per day when using an air spade, jack hammer or pavement breaker.

GROUP 16 51.76 GROUP 17 47.91

Small Bore Micro

Tunnel Machines 80% of rates above

For Repairs on Existing

Water Tunnels 90% of rates above

For Repairs of Sewer &

Drainage Tunnels 85% of rates above

For Repair & Maintenance

of all Subway& 80% of rates above

Vehicular Tunnels

**OVERTIME PAY** 

OVERTIME: For Laborer (Free Air) See ( D, M, R\* ) on OVERTIME PAGE.

For Repair Categories See (B, F, R\*) on OVERTIME PAGE.

& Micro Tunneling

\* Straight time first 8 hours, double time after 8 hours.

**HOLIDAY** 

Paid: See (5, 6, 9, 11, 12, 15, 16, 25) on HOLIDAY PAGE Overtime: See (5, 6, 9, 11, 12, 15, 16, 25) on HOLIDAY PAGE

Good Friday may be exchanged for one of the holidays listed.

9-147Tnl/Free

Laborer - Building 04/01/2024

JOB DESCRIPTION Laborer - Building DISTRICT 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

**WAGES** 

Per hour: 07/01/2023 01/01/2024

Basic Laborer and

Mason Tender \$ 43.80\* \$ 44.70\*\*

\*Before calculating premium wage deduct \$3.00
\*\*Before calculating premium Wage deduct \$3.25

SUPPLEMENTAL BENEFITS

Per hour:

Basic Laborer and

Mason Tender \$ 29.39 \$ 29.99

**OVERTIME PAY** 

See (B, B2, E, E2, Q, R) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES** 

Wage per hour:

1000 hour terms at the following wage rate:

Term: 1st 2nd 3rd 4th

Basic Laborer and

Mason Tender

07/01/2023 \$ 21.80\* \$ 23.55\* \$ 25.05\* \$ 27.55\* 01/01/2024 \$ 22.05\* \$ 23.80\* \$ 25.30\* \$ 27.80\*

\*Before calculating premium wage deduct \$0.50

Supplemental Benefits per hour:

All Terms

07/01/2023 \$ 10.47 01/01/2024 \$ 10.77

9-MTDC(79)

Laborer - Building 04/01/2024

JOB DESCRIPTION Laborer - Building DISTRICT 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

**WAGES** 

Per hour:

07/01/2023

Skilled Interior Demolition Laborer: \$39.70\* General Interior Demolition Laborer: 28.89\*\*

#### SUPPLEMENTAL BENEFITS

Per Hour:

Skilled Interior Demolition Laborer: 24.84
General Interior Demolition Laborer: 19.16

**OVERTIME PAY** 

See (B, B2, I, R) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES** 

Wage Per Hour:

1000 hour terms at the following wage rate:

1st 2nd 3rd 4th \$ 21.80\* \$ 23.55\* \$ 25.05\* \$ 27.55\*

\* Before calculating overtime wages deduct \$0.50

Supplemental Benefits Per Hour:

All Terms: 10.47

9-MTDC (79-ID)

Laborer - Building 04/01/2024

JOB DESCRIPTION Laborer - Building DISTRICT 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour: 07/01/2023

Laborer:

Laborer-Concrete

(including flag person) \$ 42.53 + \$7.75\*

\* This portion is not subjected to overtime premiums.

SUPPLEMENTAL BENEFITS

Per Hour

\$ 19.70 + \$8.00\*\*

<sup>\*</sup> Before calculating overtime wages deduct \$1.70

<sup>\*\*</sup>General Demolition Laborer performs manual work and work incidental to demolition, such as loading and carting of debris from work site to an area where it can be loaded into trucks for removal. Also performs clean-up of the site when demolition is complete.

<sup>\*\*</sup> This portion subjected to overtime premiums only on codes (E,Q)

**OVERTIME PAY** 

OVERTIME: See (A,E,Q) on OVERTIME PAGE attached.

See (B,E,Q,) for work below street level to top of foundation.

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 13, 25) on HOLIDAY PAGE

### REGISTERED APPRENTICES

Wages per hour:

Terms based on hours listed:

1st	2nd	3rd
0-1334	1334-2668	2669-4000
\$ 18.57	\$ 19.95	\$ 25.68
+\$1.99*	+\$6.82*	+\$7.30*

<sup>\*</sup> This portion is not subjected to overtime premiums.

Supplemental Benefits:

Per hour:

Journeyworker rate applies after 4000 hours

9-6A/18A/20-C

Laborer - Building 04/01/2024

JOB DESCRIPTION Laborer - Building DISTRICT 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour: 07/01/2023 01/01/2024

Building: Plasterer Tender and

Spray Fireproofing Tender \$43.80\* \$44.70\*\*

\* Before calculating overtime wages deduct \$3.00
\*\* Before calculating overtime wages deduct \$3.25

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker \$ 29.39 \$ 29.99

**OVERTIME PAY** 

See (B, B2, E, E2, Q, R) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage per hour:

1000 hours terms at the following wage.

	1st	2nd	3rd	4th
07/01/2023	\$21.80*	\$23.55*	\$25.05*	\$27.55*
01/01/2024	\$22.05*	\$23.80*	\$25.30*	\$27.80*

<sup>\*</sup> Before calculating overtime wages deduct \$ 0.50

Supplemental Benefits per hour:

All Terms:

07/01/2023 \$ 10.47 01/01/2024 \$ 10.77

9-30 (79)

<sup>\*</sup>This portion subjected to same premium as wages.

Laborer - Building 04/01/2024

JOB DESCRIPTION Laborer - Building

**DISTRICT** 4

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2023 01/02/2024

Additional

Asbestos, Lead \$39.50\* \$1.50/Hr. and Hazardous to be allocated

Material Abatement

Laborer

(Re-Roofing Removal See Roofer)

NOTE: Asbestos removed from Mechanical Systems not to be scrapped

See Asbestos Worker

### SUPPLEMENTAL BENEFITS

Per Hour:

Laborer \$ 19.65

**OVERTIME PAY** 

See (B, B2, I) on OVERTIME PAGE

\*Calculate at \$39.50 per hour then add \$0.95

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 28) on HOLIDAY PAGE

### REGISTERED APPRENTICES

1000 hour terms at the following;

Per Hour:

 1st term
 \$ 20.50\*

 2nd Term
 21.50\*\*

 3rd Term
 24.50\*\*\*

 4th Term
 26.50\*\*\*\*

SUPPLEMENTAL BENEFIT

Per Hour:

All Terms \$ 14.25

### OVERTIME PAY:

- \*Calculate at \$20.00 per hour then add \$0.50
- \*\*Calculate at \$21.00 per hour then add \$0.50
- \*\*\*Calculate at \$24.00 per hour then add \$0.50
- \*\*\*\*\*Calculate at \$26.00 per hour then add \$0.50

4-NYDC(78)

Laborer - Building 04/01/2024

JOB DESCRIPTION Laborer - Building DISTRICT 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

**WAGES** 

Per hour: 07/01/2023 01/01/2024

Skilled Demolition Laborer: \$41.93\* \$42.23\* General Demolition Laborer: 30.51\*\* 30.81\*\*

<sup>\*</sup>Before calculating overtime wages deduct \$3.00

<sup>\*\*</sup>Before calculating overtime wages deduct \$2.35

<sup>\*\*</sup>General Demolition Laborer performs manual work and work incidental to demolition, such as loading and carting of debris from work site to an area where it can be loaded into trucks for removal. Also performs clean-up of the site when demolition is complete.

NOTE: Total Demolition Only: Demolition shall be the complete demolition (wrecking) or dismantling of entire buildings or structures. Also may include the removal of all or any portion of a roof in which structural change is to occur. Structural change is defined as the removal of structural slabs, steel members, concrete members and penetration through the structural slab.

### SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker:

Skilled Demolition Laborer: \$28.27 \$28.57 General Demolition Laborer: 21.33 21.63

OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES** 

Wage per hour:

year terms at the following wage.

 07/01/2023
 1st
 2nd
 3rd
 4th

 \$ 21.80\*
 \$ 23.55\*
 \$ 25.05\*
 \$ 27.55\*

 01/01/2024
 \$ 22.05\*
 \$ 23.80\*
 \$ 25.30\*
 \$ 27.80\*

\*Before calculating overtime wages deduct \$0.50

Supplemental Benefits per hour:

All Terms:

07/01/2023 \$ 10.47 01/01/2024 \$ 10.77

9-79/95

### **Laborer - Concrete & Asphalt Paving**

04/01/2024

**DISTRICT** 9

### JOB DESCRIPTION Laborer - Concrete & Asphalt Paving

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

### WAGES

Group 1: Slurry Seal Coater, Maintenance Safety Surface, Small Power Tool Operator, Play Equipment Installer, Temporary Fence Installer & Repairs, Laborer.

Group 2: Production Paving Work: Shoveler, small equipment operator.

Per hour: 07/01/2023

 Concrete Formsetter
 \$ 48.85 + \$ 7.25\*

 Asphalt Screeperson/Micro Paver
 49.95 + \$ 7.25\*

 Asphalt Raker
 58.85 + \$ 7.25\*

 Group 1
 44.98 + \$ 7.25\*

 Group 2
 44.98 + \$ 7.25\*

# SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker \$44.62

Note: No payment of supplemental benefits is required on paid holidays, when employees do not work.

### **OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

Note: Saturday premium rate applies from 7:00 am on Saturday to 6:59 am Sunday Note: Sunday premium rate applies from Sunday 7:00 am to Monday 6:59 am.

### **HOLIDAY**

Paid: See (5, \*11, 20) on HOLIDAY PAGE

HOLIDAY:

<sup>\*</sup> This portion is not subjected to overtime premiums.

Overtime:

See (21,22)\*\* on HOLIDAY PAGE.

Note: See (5,20) Holiday pay -at the single time pay rate-shall be prorated based on 25% of a day's wages and benefits for each day worked during that calendar week.

\*\*New Year's Day and Christmas Day: If an employee is performing work on these (2) days the employee will receive the single rate plus 25%.

\* Columbus Day shall be an unpaid holiday. In the event work is performed on Columbus Day, wages shall be paid on a double time basis.

Note-When Independence day falls on Saturday, it will be observed on that Saturday, however, when it occurs on a Sunday, it will be observed on the Monday.

### **REGISTERED APPRENTICES**

Wage per hour:

2000 hours term:

1st term 2nd term 1-1999 2000-4000 \$ 30.86 + \$ 7.25\* \$ 32.50 + \$ 7.25\*

Supplemental Benefits per hour:

2000 hours term:

 1st term
 2nd term

 1-1999
 2000-4000

\$ 17.15

9-1010H/H

Laborer - Trac Drill 04/01/2024

### JOB DESCRIPTION Laborer - Trac Drill

**DISTRICT** 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

### WAGES

Group 1:Chipper/Jackhammer, Powder Carrier, Hydraulic Chuck tender, Chuck Tender and Nipper, Magazine Keeper

Group 2: Hydraulic Trac Drill

Group 3: Air Trac, Wagon and Quarry bar

Group 4: Blaster

 Per Hour:
 07/01/2023

 Group 1
 \$ 44.50

 Group 2
 51.85

 Group 3
 51.02

 Group 4
 57.71

# SUPPLEMENTAL BENEFITS

Per Hour:

All Classifications 52.23

### **OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

When an observed holiday falls on a Saturday, work done shall be paid at double time.

### **HOLIDAY**

Paid: See (2, 20) on HOLIDAY PAGE

Overtime: See (2, 5, 6, 11, 20) on HOLIDAY PAGE

# **REGISTERED APPRENTICES**

Wage per hour:

1000 hour terms at the following hourly wage rate.

07/01/2023

<sup>\*</sup> This portion is not subjected to overtime premiums.

1st	0 - 1000	\$ 22.25
2nd	1001-2000	26.70
3rd	2001-3000	33.38
4th	3001-4000	40.05

Supplemental Benefits per hour:

All Apprentices 52.23

9-731/29

# <u>Laborer - Tunnel</u> 04/01/2024

### JOB DESCRIPTION Laborer - Tunnel

**DISTRICT** 9

# **ENTIRE COUNTIES**

Bronx, Kings, New York, Queens, Richmond

### WAGES

**GROUP 5: Blasters and Mucking Machine Operators** 

GROUP 6: Tunnel Workers\* \* (including Miners, Drill Runners, Iron Men, Maintenance Men, Inside Muck Lock Tender, Pumpmen, Electricians, Cement Finishers, Rod Men, Caulkers, Carpenters, Hydraulic Men, Shield Drivers, Monorail Operators, Motor Men, Conveyor Men, Safety Miners, Powder Carriers, Pan Men, Riggers, Miner's Helpers, Chuck Tenders, Track Men, Nippers, Brake Men, Form Workers, Concrete Workers, Tunnel Laborers, Caulker's Helpers), Hose Men, Grout Men, Gravel Men, Derail Men and Cable Men.

**GROUP 7: Top Nipper** 

GROUP 8,9: Outside Man Lock Tender, Outside Muck Lock Tender, Shaft Men, Gauge Tender and Signal Men.

GROUP 10: Powder Watchmen, Top Laborers and Changehouse Attendants.

WAGES: (per hour)

07/01/2023

Laborer (Compressed Air):

GROUP 5	\$ 79.02
GROUP 6	76.21
GROUP 7	74.94
GROUP 8,9	73.43
GROUP 10	64.66

Note: For jobs bid before July I, 2010 employer shall pay \$6.00 per day for each one half (1/2) mile or fraction starting from a point 500 feet from the shaft. For all jobs bid after July 1, 2010, said premium shall be \$10.00 per day.

# SUPPLEMENTAL BENEFITS

SUPPLEMENTAL BENEFITS:

per hour:

GROUP 5	\$ 56.19
GROUP 6	54.44
GROUP 7	53.34
GROUP 8,9	52.51
GROUP 10	49.65

# **OVERTIME PAY**

See (D, M, \*R) on OVERTIME PAGE

NOTE: Time and one-half to be paid for all overtime repair-maintenance work on existing equipment and facilities.

# **HOLIDAY**

Paid: See (5, 6, 9, 11, 12, 15, 16, 25) on HOLIDAY PAGE Overtime: See (5, 6, 9, 11, 12, 15, 16, 25) on HOLIDAY PAGE

Good Friday may be exchanged for one of the holidays listed.

9-147Tnl/Comp Air

<sup>\*</sup> Straight time first 8 hours, double time after 8 hours.

Mason 04/01/2024

JOB DESCRIPTION Mason DISTRICT 4

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2023

Brick/Block Layer \$ 65.39

Base Wage for OT Calculation 55.24

**SUPPLEMENTAL BENEFITS** 

Per Hour:

Brick/Block Layer \$ 32.60

**OVERTIME PAY** 

See (A, E, E2, Q) on OVERTIME PAGE

Note: OT Calculated on Base Wage plus \$ 10.15/hr.

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES** 

(800 hour) Terms at the following Percentage of Journey workers "Base Wage" plus \$ 5.40/hr.:

1st 2nd 3rd 4th 5th 50% 60% 70% 80% 90%

Supplemental Benefits per hour:

All Apprentices \$ 23.60

4-1Brk

Mason - Building 04/01/2024

01/01/2024

JOB DESCRIPTION Mason - Building DISTRICT 9

07/01/2023

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES** 

Building

Wages per hour:

 Mosaic & Terrazzo Mechanic
 \$ 60.65
 \$ 60.57

 Mosaic & Terrazzo Finisher
 59.04
 58.96

SUPPLEMENTAL BENEFITS

Per hour:

Mosaic & Terrazzo Mechanic \$ 30.26\* \$ 31.36\* + \$9.16 + \$9.17

Mosaic & Terrazzo Finisher \$ 30.26\* \$ 31.36\* + \$9.15 + \$9.16

**OVERTIME PAY** 

See (A, E, Q) on OVERTIME PAGE

07/01/2023- Deduct \$7.25 from hourly wages before calculating overtime. 01/01/2024- Deduct \$7.00 from hourly wages before calculating overtime.

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

<sup>\*</sup>This portion of benefits subject to same premium rate as shown for overtime wages.

Easter Sunday is an observed holiday. Holidays falling on a Saturday will be observed on that Saturday. Holidays falling on a Sunday will be celebrated on the Monday.

### **REGISTERED APPRENTICES**

Wages	Per	hour:
-------	-----	-------

1st	2nd	3rd	4th	5th	6th
0-	1501-	3001-	3751-	4501-	5251-
1500	3000	3750	4500	5250	6000
\$ 25.82	\$ 32.19	\$ 36.39	\$ 40.38	\$ 48.52	\$ 54.59
\$ 25.05	\$ 32.21	\$ 37.93	\$ 38.99	\$ 47.18	\$ 55.38
our:					
\$6.00*	\$7.72*	\$18.16*	\$23.27*	\$24.21*	\$27.24*
+\$3.21	+\$4.12	+\$5.50	+\$6.41	+\$7.33	+\$8.29
\$7.12*	\$9.16*	\$17.22*	\$25.36*	\$26.36*	\$27.36*
+\$3.21	+\$4.12	+\$5.51	+\$6.42	+\$7.34	+\$8.25
	0- 1500 \$ 25.82 \$ 25.05 nour: \$6.00* +\$3.21 \$7.12*	0- 1500 3000 \$ 25.82 \$ 32.19 \$ 25.05 \$ 32.21 hour: \$6.00* \$7.72* +\$3.21 +\$4.12 \$7.12* \$9.16*	0- 1501- 3001- 1500 3000 3750 \$ 25.82 \$ 32.19 \$ 36.39 \$ 25.05 \$ 32.21 \$ 37.93 hour: \$6.00* \$7.72* \$18.16* +\$3.21 +\$4.12 +\$5.50 \$7.12* \$9.16* \$17.22*	0- 1501- 3001- 3751- 1500 3000 3750 4500  \$ 25.82 \$ 32.19 \$ 36.39 \$ 40.38 \$ 25.05 \$ 32.21 \$ 37.93 \$ 38.99  nour:  \$ 6.00* \$ 7.72* \$ 18.16* \$ 23.27* +\$ 4.12 +\$ 5.50 +\$ 6.41  \$ 7.12* \$ 9.16* \$ 17.22* \$ 25.36*	0- 1501- 3001- 3751- 4501- 1500 3000 3750 4500 5250  \$ 25.82 \$ 32.19 \$ 36.39 \$ 40.38 \$ 48.52 \$ 25.05 \$ 32.21 \$ 37.93 \$ 38.99 \$ 47.18  nour:  \$ 6.00* \$ 7.72* \$ 18.16* \$ 23.27* \$ 24.21* +\$ 4.12 +\$ 5.50 +\$ 6.41 +\$ 7.33 \$ 77.12* \$ 9.16* \$ 17.22* \$ 25.36* \$ 26.36*

<sup>\*</sup>This portion of benefits subject to same premium rate as shown for overtime wages.

9-7/3

Mason - Building 04/01/2024

JOB DESCRIPTION Mason - Building

**DISTRICT** 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

**WAGES** 

07/01/2023 12/04/2023 06/03/2024 Per hour: Additional Tile Setters \$63.46 \$63.98 \$ 0.73

SUPPLEMENTAL BENEFITS

Per Hour:

\$ 26.46\* \$ 26.66\* + 10.05 + 10.06

# OVERTIME PAY

See (B, \*E, Q, V) on OVERTIME PAGE

Work beyond 10 hours on Saturday shall be paid at double the hourly wage rate.

HOLIDAY

Paid:

See (1) on HOLIDAY PAGE See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE Overtime:

### REGISTERED APPRENTICES

Wage per hour:

750 hour terms at the following wage rate:

1st 1- 750	2nd 751- 1500	3rd 1501- 2250	4th 2251- 3000	5th 3001- 3750	6th 3751- 4500	7th 4501- 5250	8th 5251- 6000	9th 6001- 6750	10th 6501- 7000
07/01/2023 \$21.70	\$26.66	\$33.75	\$38.69	\$42.25	\$45.70	\$49.29	\$54.23	\$57.09	\$61.25
12/04/2023 \$21.96	\$26.95	\$34.10	\$39.08	\$42.68	\$46.16	\$49.79	\$54.77	\$56.66	\$61.90

Supplemental Benefits per hour:

3rd 4th 5th 6th 7th 8th 9th 10th 1st 2nd

07/01/2023

<sup>\*</sup>This portion of benefits subject to same premium rate as shown for overtime wages.

\$12.55* + \$.73	\$12.55* + \$.78	\$15.36* + \$.88	\$15.36* + \$.88	\$16.36* +\$1.37	\$17.86* +\$1.42	\$18.86* +\$1.83	\$18.86* +\$1.88	\$16.86* +\$6.03	\$22.11* +\$6.61
12/04/2023	Ψ.70	Ψ.00	ν ψ.οσ	Ψ1.07	Ψ1.12	Ψ1.00	Ψ1.00	- φσ.σσ	. φσ.σ ι
\$12.55*	\$12.55*	\$15.36*	\$15.36*	\$16.36*	\$17.86*	\$18.86*	\$18.86*	\$16.86*	\$22.11*
+ \$0.73	+ \$0.78	+ \$0.89	+ \$0.94	+ \$1.38	+ \$1.43	+ \$1.84	+ \$1.89	+ \$6.04	+ \$6.62

<sup>\*</sup>This portion of benefits subject to same premium rate as shown for overtime wages.

9-7/52

Mason - Building	04/01/2024
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JOB DESCRIPTION Mason - Building DISTRICT 9

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES** 

Per hour: 07/01/2023 07/03/2023

Building-Marble Restoration:

Marble, Stone & \$ 47.22 \$ 47.44

Terrazzo Polisher

**SUPPLEMENTAL BENEFITS** 

Per Hour: Journeyworker:

Building-Marble Restoration:

Marble, Stone &

Polisher \$ 30.29 \$ 30.64

**OVERTIME PAY** 

See (B, \*E, Q, V) on OVERTIME PAGE

\*ON SATURDAYS, 8TH HOUR AND SUCCESSIVE HOURS PAID AT DOUBLE HOURLY RATE.

2nd

901-

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 15, 25) on HOLIDAY PAGE 1ST TERM APPRENTICE GETS PAID FOR ALL OBSERVED HOLIDAYS.

**REGISTERED APPRENTICES** 

WAGES per hour:

900 hour term at the following wage:

1st

1\_

90	0 18		
\$ 33.	04 \$ 37	78 \$ 42.4	9 \$47.22
Supplemental Benefit 27		52 29.4	30.29
07/03/2023 900 hour term at the f	following wage:		
15	st 2r	d 3rd	4th
1	- 90	1- 180 <sup>-</sup>	I- 2701
90	0 18	00 270	)
\$ 33.	19 \$ 37	95 \$ 42.6	\$ 47.44
Supplemental Benefit	s Per Hour:		
27.	99 28	86 29.7	6 30.64

9-7/24-MP

Mason - Building 04/01/2024

3rd

1801-

4th

2701

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Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Westchester

**WAGES** 

Per Hour:

07/01/2023 7/03/2023

Marble Cutters & Setters \$62.82 \$ 63.12

SUPPLEMENTAL BENEFITS

Per Hour:

\$ 39.03 \$ 39.34 Journeyworker

**OVERTIME PAY** 

See (B, E, Q, V) on OVERTIME PAGE

**HOLIDAY** 

Paid:

See (1) on HOLIDAY PAGE See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE Overtime:

\$ 42.91

REGISTERED APPRENTICES

Wage Per Hour: 07/01/2023

750 hour terms at the following wage

1st	2nd	3rd	4th	5th	6th	7th	8th
0-	3001-	3751-	4501-	5251-	6001-	6751-	7500+
3000	3750	4500	5250	6000	6750	7500	

\$49.52

\$53.38

\$ 59.67

\$ 62.82

**DISTRICT** 9

\$46.22

Supplemental Benefits per hour:

\$39.62

07/01/2023

\$ 26.42

1st 3rd 4th 6th 7th 8th 2nd 5th \$ 25.38 \$ 28.86 \$ 29.74 \$ 30.60 \$ 36.44 \$ 38.17 \$ 39.03 \$31.48

07/03/2023

Wage Per Hour:

750 hour terms at the following wage

750 hour teri 1st	ms at the follow	wing wage. 3rd	4th	5th	6th	7th	8th
0- 3000	3001- 3750	3751- 4500	4501- 5250	5251- 6000	6001- 6750	6751- 7500	7500+
\$ 26.60	\$ 39.82	\$ 43.13	\$ 46.45	\$ 49.78	\$ 53.64	\$ 59.95	\$ 63.12
Supplemental Benefits Per Hour:							

7th 4th 5th 6th 8th 1st 2nd 3rd \$ 25.54 \$ 30.84 \$31.72 \$36.73 \$ 38.48 \$39.34 \$ 29.09 \$ 29.97

9-7/4

Mason - Building 04/01/2024

JOB DESCRIPTION Mason - Building

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

WAGES

06/03/2024 Per hour: 07/01/2023 12/04/2023 Additional Tile Finisher \$48.78 \$49.16 \$ 0.60

**SUPPLEMENTAL BENEFITS** 

Per Hour:

\$ 23.31\* \$ 23.15\* + \$9.88 + \$9.87

Page 48

\* This portion of benefits is subject to same premium rate as shown for overtime wages.

### **OVERTIME PAY**

See (A, \*E, Q) on OVERTIME PAGE

Double time rate after 10 hours on Saturdays

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE

9-7/88-tf

Mason - Building 04/01/2024

JOB DESCRIPTION Mason - Building DISTRICT 9

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

WAGES

Per hour: 07/01/2023 07/03/2023

Marble, Stone,

Maintenance Finishers: \$ 27.26 \$ 27.44

Note 1: An additional \$2.00 per hour for time spent grinding floor using

"60 grit" and below.

Note 2: Flaming equipment operator shall be paid an additional \$25.00 per day.

### **SUPPLEMENTAL BENEFITS**

Per Hour:

Marble, Stone

Maintenance Finishers: \$ 14.97 \$ 15.20

**OVERTIME PAY** 

See (B, \*E, Q, V) on OVERTIME PAGE \*Double hourly rate after 8 hours on Saturday

**HOLIDAY** 

Paid: See (5, 6, 8, 11, 15, 25) on HOLIDAY PAGE
Overtime: See (5, 6, 8, 11, 15, 25) on HOLIDAY PAGE

1st term apprentice gets paid for all observed holidays.

# **REGISTERED APPRENTICES**

WAGES per hour:

0170172020	0170072020
\$ 21.89	\$ 22.04
22.60	\$ 22.75
23.32	\$ 23.48
24.04	\$ 24.20
25.11	\$ 25.27
26.54	\$ 26.72
27.26	\$ 27.44
12.03	\$ 12.24
12.43	\$ 12.64
12.82	\$ 13.03
13.21	\$ 13.42
13.80	\$ 14.02
14.58	\$ 14.80
14.97	\$ 15.20
	22.60 23.32 24.04 25.11 26.54 27.26 12.03 12.43 12.82 13.21 13.80 14.58

07/01/2023

9-7/24M-MF

Mason - Building / Heavy&Highway

04/01/2024

JOB DESCRIPTION Mason - Building / Heavy&Highway ENTIRE COUNTIES

**DISTRICT** 9

07/03/2023

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk, Westchester

**WAGES** 

Per hour: 07/01/2023 07/03/2023 01/01/2024

Marble-Finisher \$ 49.32 \$ 49.65 \$ 49.92

SUPPLEMENTAL BENEFITS

Journeyworker:

Per hour

Marble- Finisher \$ 36.62 \$ 36.67 \$ 36.93

**OVERTIME PAY** 

See (B, E, Q, V) on OVERTIME PAGE

Work beyond 8 hours on a Saturday shall be paid at double the rate.

**HOLIDAY** 

Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE When an observed holiday falls on a Sunday, it will be observed the next day.

9-7/20-MF

Mason - Building / Heavy&Highway

04/01/2024

JOB DESCRIPTION Mason - Building / Heavy&Highway DISTRICT 4

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

Per Hour: 07/01/2023

Cement Mason \$ 53.77

**SUPPLEMENTAL BENEFITS** 

Per Hour:

 Cement Mason
 \$ 34.16

 1.5 X overtime rate
 \$ 61.70

 2 X overtime rate
 \$ 68.32

**OVERTIME PAY** 

See (B1, Q) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 11, 13, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) year terms at the following Percentage of Journeyworkers Wage.

 1st Term
 \$ 19.92

 2nd Term
 \$ 24.82

 3rd Term
 \$ 30.22

Supplement Benefits per hour paid:

Mason - Building / Heavy&Highway

1.5X OT 2X OT
1st Term \$ 14.36 \$ 21.55 \$ 28.72
2nd Term \$ 14.66 \$ 22.00 \$ 29.32
3rd Term \$ 14.77 \$ 22.16 \$ 29.54

4-780

04/01/2024

JOB DESCRIPTION Mason - Building / Heavy&Highway

**DISTRICT** 4

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

WAGES

NOTE: Shall include but not limited to Precast concrete slabs (London Walks) Marble and Granite pavers 2'x 2' or larger.

Per Hour:

07/01/2023 05/01/2024

Additional \$ 3.32\*

Stone Setter \$ 68.45

Base Rate 52.76

**DISTRICT** 4

Stone Tender 51.82 Base Rate 44.54

(\*)To be allocated at a later date.

# **SUPPLEMENTAL BENEFITS**

Per Hour:

Stone Setter \$40.78

Stone Tender 23.15

**OVERTIME PAY** 

See (\*C, \*\*E, Q) on OVERTIME PAGE

Base Rates are use to Calculate Overtime Premiums then adding in:

\$15.69/Hr. for Stone Setter and \$7.28/Hr. for Stone Tender

- \* On weekdays the eighth (8th) and ninth (9th) hours are time and one-half all work thereafter is paid at double the hourly rate.
- \*\* The first nine (9) hours on Saturday is paid at time and one-half all work thereafter is paid at double the hourly rate.

**HOLIDAY** 

Paid: See (\*18) on HOLIDAY PAGE
Overtime: See (5, 6, 10) on HOLIDAY PAGE

Paid: \*Must work first 1/2 of day

**REGISTERED APPRENTICES** 

Per Hour:

Stone Setter(800 hour) terms at the following Percentage of Stone Setters Base wage rate per hour plus \$7.33:

1st 2nd 3rd 4th 5th 6th

50% 60% 70% 80% 90% 100%

Supplemental Benefits:

All Apprentices \$ 25.50

4-1Stn

# Mason - Heavy&Highway 04/01/2024

### JOB DESCRIPTION Mason - Heavy&Highway

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES** 

Per Hour: 07/01/2023

Pointer, Caulkers & \$62.19

Cleaners

SUPPLEMENTAL BENEFITS

Per Hour:

Pointer, Cleaners & \$30.65

Caulkers

**OVERTIME PAY** 

See (B, E2, H) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

One (1) year terms at the following wage rates.

1st 2nd 3rd 4th \$ 31.48 \$ 35.54 \$ 41.14 \$ 49.50

Apprentices Supplemental Benefits:

(per hour paid)

\$ 15.30 \$ 20.00 \$ 23.75 \$ 24.75

**DISTRICT** 9

# **Operating Engineer - Building**

04/01/2024

9-15Db

## JOB DESCRIPTION Operating Engineer - Building

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Putnam, Queens, Richmond, Westchester

**PARTIAL COUNTIES** 

Dutchess: that part of Dutchess County lying south of the North City Line of the City of Poughkeepsie.

**WAGES** 

NOTE: Construction surveying

Party Chief--One who directs a survey party

Instrument Man--One who runs the instrument and assists Party Chief.

Rodman--One who holds the rod and assists the Survey Crew

Wages:(Per Hour) 07/01/2023

**Building Construction:** 

Party Chief \$ 77.39 Instrument Man 61.25 Rodman 41.39

Steel Erection:

Party Chief 80.16 Instrument Man 63.60

Rodman 44.23

Heavy Construction-NYC counties only:

(Foundation, Excavation.)

 Party Chief
 85.74

 Instrument man
 64.40

 Rodman
 54.90

**SUPPLEMENTAL BENEFITS** 

Per Hour: 07/01/2023

Building Construction \$ 28.04\* +\$ 7.65

Steel Erection 28.64\* +\$ 7.65

Heavy Construction 28.85\* +\$ 7.64

Non-Worked Holiday Supplemental Benefit:

21.19

**OVERTIME PAY** 

See (A, B, E, Q) on OVERTIME PAGE

Code "A" applies to Building Construction and has double the rate after 7 hours on Saturdays.

Code "B" applies to Heavy Construction and Steel Erection and had double the rate after 8 hours on Saturdays.

**HOLIDAY** 

Paid: See (5, 6, 9, 11, 15, 16, 25) on HOLIDAY PAGE Overtime: See (5, 6, 9, 11, 15, 16, 25) on HOLIDAY PAGE

Operating Engineer - Building, Maintenance, Steel Erection & Heavy Construction 04/01/2024

JOB DESCRIPTION Operating Engineer - Building, Maintenance, Steel Erection & Heavy DISTRICT 9

Construction

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

WAGES

<sup>\*</sup> This portion subject to same premium as wages

### STEEL ERECTION:

Group 1: Derrick, travelers, tower, crawler tower & climbing cranes

Group 2: Oiler (Truck Crane)

Group 3: Oiler (Crawler Crane)

### **BUILDING CONSTRUCTION:**

Group 1: Installing, repairing, maintaining, dismantling of all equipment including Steel cutting& bending machines, mechanical heaters, mine hoists, climbing cranes, tower cranes, Linden Peine, Lorain, Liebherr, Mannes and machines of a similar nature; Well Point system, Deep Well pumps, Concrete mixers with loading devices, Concrete plants, motor generators (When used for temporary power and lights(Driving maintenance trucks and mounted-welded machines)-All Pumps(excluding River Cofferdam Pumps and Well Point Pumps), Motorized Concrete Buggies( When three or more are on job site), Skid-Steer and similar machines

Group 2:Maintenance of: Pumps, Generators, Mixers, Heaters

Group 3: Oilers of all gasoline, electric, diesel or air operated Gradalls; Concrete Pumps, Overhead Cranes in Power Houses, Assist in oiling, greasing and repairing of all machines, including: Driving Truck Cranes, Driving and operating Fuel and Grease Trucks, Cherry Pickers(Hydraulic Cranes) over 70,000 GVW and machines of a similar nature

Group 4: Oiler on Crawler Cranes, Backhoes, Trenching Machines, Gunite Machines, Compressors(3 or more in battery)

Group 5: Maintenance on Radiant Mechanical Heaters

HEAVY CONSTRUCTION (Excavation, Foundations, etc)

Group 1:Maintenance of: Generators, Light Towers

Group 2: Maintenance of: Pumps, Mixers including mudsucking

**Group 3: Base Mounted Tower Cranes** 

Group 4: Installing, repairing, maintaining, dismantling(of all equipment including Steel cutting & Bending machines, Fusion Coupling Machines, Vermeer Trenching machines, on-site crushing plant, mechanical heaters(1 through 7), Mine hoists, Tower Cranes, Linden Peine, Lorrain, Lebherr, Mannes or machines of a similar nature, Wellpoints)-Driving maintenance trucks and truck mounted welding machines, burning, welding-operating of accumilator for shield-driven tunnels, in addition to the performance of other duties: Handling, installation, jointing, coupling of all permanent steel and plastic pipe. RIDE UPON MOLES-tunnel boring machines-MICRO TUNNELING SYSTEMS, All temporary pipefitting; When three or more motorized concrete buggies (Ride type) are utilized on the jobsite they shall be serviced, maintained and repaired by the maintenance engineer. The Operating Engineer on autogrades (C.M.I.) is to be assisted by the maintenance engineer who shall in addition perform other duties.

### WAGES:

Per hour:	07/01/2023
Steel Erection:	
Group 1	\$ 78.26
Group 2	74.05
Group 3	57.92
Building Construction:	
Group 1	\$ 73.54
Group 2	58.49
Group 3	70.22
Group 4	53.75
Group 5	47.20
Heavy Construction:	
Group 1	\$ 56.10
Group 2	57.38
Group 3	105.22
Group 4	81.67

### SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2023

Building Construction \$ 29.40\* plus \$7.40 Steel Erection & Heavy 29.90\* plus \$7.40 \* This portion of benefits subject to same premium as wages.

Non-Worked Holiday Supplemental Benefits:

23.47

**OVERTIME PAY** 

See (D, O) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 9, 11, 15, 16, 25) on HOLIDAY PAGE Overtime: See (5, 6, 9, 11, 15, 16, 25) on HOLIDAY PAGE

### **REGISTERED APPRENTICES**

Wages Per Hour:

(1) year terms at the following wage rates:

1st 2nd 3rd 4th. \$ 37.28 \$ 44.23 \$ 47.70 \$ 51.17

Supplemental Benefits:

Per Hour:

All Terms \$ 15.65\* Plus 7.40

9-15Ab

# Operating Engineer - Building / Heavy&Highway

04/01/2024

JOB DESCRIPTION Operating Engineer - Building / Heavy&Highway

**DISTRICT** 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

### **WAGES**

EQUIPMENT COVERED: Jet-Rodder/Vacuum Truck, Flusher, Sewer Rodder, Stetco Hoist and similar, Sewer Winch/Tugger Hoist and similar, Vacall/Vactor, Closed Circuit Television Inspection Equipment, Chemical Grouting Equipment and similar, John Beame, Meyers and similar.

Per Hour: 07/01/2023

Maintenance Engineer \$81.67

(Sewer Systems)

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2023

Journeyman 29.90\* plus \$ 7.40

\*This portion of benefits subject to same premium as wages.

Non-Worked Holiday Supplemental Benefits:

23.94

**OVERTIME PAY** 

See (D, O) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (5, 6, 7, 11, 16) on HOLIDAY PAGE
Overtime: See (5, 6, 7, 11, 16) on HOLIDAY PAGE

# **REGISTERED APPRENTICES**

Per Hour:

(1) year terms at the following wage rates.

1st 2nd 3rd 4th \$37.28 \$44.23 \$47.70 \$51.17

Supplemental Benefits:

Per Hour:

All Apprentices: \$ 15.65\* plus \$ 7.40

9-15Sewer

<sup>\*</sup> This portion of benefits subject to same OT premium as wages.

<sup>\*</sup> This portion of benefits subject to the same premium as overtime wages

**DISTRICT** 4

# Operating Engineer - Building / Heavy&Highway

04/01/2024

JOB DESCRIPTION Operating Engineer - Building / Heavy&Highway

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

07/01/2023 08/01/2023 Per Hour:

Well Driller \$40.63 \$41.85

Well Driller

Helper 34.17 \$ 36.26

Hazardous Waste Differential Added to Hourly Wage:

Level A

\$ 3.00 Level B 2.00 Level C 1.00

Monitoring Well Work Add to Hourly Wage:

Level A \$ 3.00 Level B 2.00

**SUPPLEMENTAL BENEFITS** 

Per Hour:

Well Driller 10% of straight & Helper time rate plus \$ 13.50

Additional \$ 4.25/Hr. for Premium Time Hours Worked

**OVERTIME PAY** 

See (B2, P, S) on OVERTIME PAGE

**HOLIDAY** 

See (5, 6, 16, 23) on HOLIDAY PAGE See (5, 6, 16, 23) on HOLIDAY PAGE Paid: Overtime:

**REGISTERED APPRENTICES** Apprentices at 12 Month Terms

Wages Per Hour:

\$ 28.00 1st Term 2nd Term 29.00 3rd Term 30.00

SUPPLEMENTAL BENEFITS

Per Hour:

All Terms 10% of Wage + \$ 13.50

Additional \$4.25/Hr. for premium time hours worked.

4-138well

# **Operating Engineer - Building & Steel Erection**

04/01/2024

**DISTRICT** 9

JOB DESCRIPTION Operating Engineer - Building & Steel Erection

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

**WAGES** 

Per Hour: 07/01/2023

STEEL ERECTION:

Three Drum Derricks \$ 104.60

Cranes, Two Drum Derricks, Hydraulic Cranes & Fork Lifts,

100.81 **Boom Trucks** Compressors, Welding Machines 63.21 Compressors 60.56

(not combined with welding machines)

**BUILDING CONSTRUCTION:** 

Cranes, Stone Derrick, Boom Trucks, Hydraulic Cranes,

101.22

Double Drum 96.01

4 Pole Hoists and Single

87.63 **Drum Hoists** 

Fork Lifts, Plaster(Platform Machine)Plaster Bucket, Concrete

Pumps and all other equipment used for hoisting

80.39

\*House Cars and Rack & Pinion 71.20 \*House Cars (New Projects) 58.32 **Erecting and dismantling Cranes** 88.49

Compressors, Welding Machines (Cutting Concrete-Tank Work), Paint Spraying, Sand Blasting, Pumps(With the exclusion of concrete pumps), House Car (Settlement basis only), All Engines irrespective of power(Power-Vac)used to drive auxiliary equipment Air, Hydraulic, etc., Boilers, Jacking System

### APPLICABLE TO ALL CATEGORIES:

**CRANES: Crawler Or Truck** 

In Addition To Above Crane Rates

100' to 149' Boom \$ 1.75/hr 150' to 249' ' \$ 2.00/hr 250' to 349' " \$ 2.25/hr 350' to 450' " \$ 2.75/hr \$ 2.00/hr **Tower Crane** 

### SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2023

All Operator Classes \$ 25.40\* plus \$ 6.20

**OVERTIME PAY**See (\*B, \*\*C, \*\*\*D, O) on OVERTIME PAGE

\*Applies to House Cars and Rack & Pinion after 8 hours worked in a day, Saturday, Sunday and Holidays

# **HOLIDAY**

See (5, 6, 7, 8, 11, 12, 16, 26) on HOLIDAY PAGE See (5, 6, 7, 8, 11, 12, 16, 26) on HOLIDAY PAGE Paid: Overtime:

Codes 8 and 12 apply ONLY to Steel Erection Code 16 applies ONLY to Building Construction

# **REGISTERED APPRENTICES**

Wage Per Hour:

Straight Time

Apprentices (1) year terms at the following rates:

1st 2nd 3rd \$ 53.21 07/01/2023 \$ 43.95 \$ 62.47

Supplemental Benefits Per Hour:

07/01/2023 \$ 14.90\* plus \$ 6.20

9-14 B&S

<sup>\*</sup> This portion of the benefits is subject to the same premium as shown for overtime wages.

<sup>\*\*</sup>Applies to Building Construction category

<sup>\*\*\*</sup>Applies to Steel Erection

<sup>\*</sup> This portion of benefits subject to the same premium as shown for overtime wages.

**DISTRICT** 9

# JOB DESCRIPTION Operating Engineer - Heavy Construction 1

### **ENTIRE COUNTIES**

Bronx, Kings, New York, Queens, Richmond

### WAGES

(For Groups 23 - 28, see Operating Engineer - Heavy Construction 2)

- Group 1: Tower Crane/Climbing Crane
- Group 2: Backhoes (Including all track and rubber tire backhoes over 37,000 lbs), Power Shovels, Steel Erection: Hydraulic Clam Shells, Moles and machines of a similar nature
- Group 3: Mine Hoists, Cranes, etc, used as Mine Hoists
- Group 4: Gradalls, Keystones, Cranes (With digging buckets), Bridge Cranes, Trenching Machines, Vermeer Cutter and machines of a similar nature
- Group 5: Pile Drivers and Rigs (Employing Dock-Builders Foreman), Derrick Boats, Tunnel Shovels,
- Group 6: All Drills and machines of a similar nature
- Group 7: Back-Filling Machines and Cranes, Mucking Machines, Dual Drum Pavers
- Group 8: Mixers (Concrete with loading attachment), Concrete Pavers, Cableways, Land Derricks, Power House (Low pressure units)
- Group 9: Concrete Pumps, Concrete Plant, Stone Crushers, Double Drum Hoists, Power Houses (Other than above)
- Group 10: Concrete Mixer
- Group 11: Elevators
- Group 12: Concrete Breaking Machines, Single Drum Hoists, Load Masters, Locomotives and Dinkies (Over 10 tons), Hydraulic Crane-Second Engineer
- Group 13: On-Site Concrete Plant Engineers, On-Site Asphalt Plant Engineer and Vibratory Console

07/01/2023

- Group 14: Barrier Mover, Barrier Transport and machines of a similar nature
- Group 15: Compressors (Portable, 3 or more), Truck Compressor (Engineer Driver), Tugger Machines, Well Point Pumps, Chum Drill
- Group 16: Boilers(High pressure), Compressors, Pumps(River Cofferdam) and Welding Machines(except where arc is operated by another Operating Engineer) Push Button Machines, All Engines, irrespective of power(Power Pac) used to drive auxiliary equipment, Air, Hydraulic,
- Group 17: Utility-Horizontal Boring Rig
- Group 18: Utility Compressors
- Group 19: Paving-Asphalt Spreader, Autogrades (C.M.I.), Roto-Mill
- Group 20: Paving-Asphalt Roller
- Group 21 Paving-Asphalt Plant

WAGES:(ner hour)

Group 22: Roller (non paving, all sizes)

WAGES.(per nour)	07/01/2023
Group 1	\$ 120.29
Group 2	100.67
Group 3	103.65
Group 4	101.34
Group 5	99.50
Group 6	95.86
Group 7	97.51
Group 8	94.93
Group 9	93.11
Group 10	89.36
Group 11	84.03
Group 12	85.71
Group 13	86.28
Group 14	78.25
Group 15	67.08
Group 16	62.93
Group 17	90.70
Group 18	62.57
Group 19	94.93
Group 20	92.71
Group 21	79.64
Group 22	92.71

Cranes: Crawler or Truck

100' to 149'\$0.50 per hour additional to above Crane Rates150' to 249'\$0.75 per hour additional to above Crane Rates250' to 349'\$1.00 per hour additional to above crane Rates350' to 450'\$1.50 per hour additional to above crane Rates

# SUPPLEMENTAL BENEFITS

Per Hour: Groups 1-22 Regular Time

\$ 25.40\* plus \$ 6.20

\* This portion of benefits subject to the same premium as shown for wages.

Non-Worked Holiday Supplemental Benefits:

\$ 19.95

### **OVERTIME PAY**

See (D, O) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 7, 11, 16) on HOLIDAY PAGE Overtime: See (5, 6, 7, 11, 16) on HOLIDAY PAGE

### REGISTERED APPRENTICES

Per Hour:

(1) year terms at the following wage rates:

Groups 1-22 1st 2nd 3rd 43.95 53.21 62.47

Supplemental Benefits:

Groups 1-22

Regular Time \$ 14.90\* plus \$ 6.20

9-14 HC

### **Operating Engineer - Heavy Construction 2**

04/01/2024

JOB DESCRIPTION Operating Engineer - Heavy Construction 2

**DISTRICT** 9

# **ENTIRE COUNTIES**

Bronx, Kings, New York, Queens, Richmond

### **WAGES**

(For Groups 1 - 22, see Operating Engineer - Heavy Construction 1)

Group 23: Cherry Picker (Over 20 tons), Loader (Over 6 yards)

Group 24: Backhoes and Loaders (Up to 37,000lbs), Bulldozers, Scrapers, Turn-A-Pulls, Tugger Hoists, Tractors, Hysters, Roustabout Cranes, Conveyors, Ballast Regulators (Ride On), Track Removal Machine or similar, Motor Graders, Locomotives (10 tons and under), Curb & Gutter Pavers and machines of a similar nature

Group 25: Post Hole Digger, Ditch Winch, Road Finishing Machines, Rollers (5 tons and under, Dual Purpose Trucks, Forklifts, Dempsey Dumpsters, Fireman

Group 26: Service Engineer (Gradalls, Concrete Pumps, Cold Planers Grader)

Group 27: Service Mechanic (Shovels, Draglines, Crawler Cranes, Backhoes, Trenching Machines, Compressors (3 or more in battery)

Group 28: Steam Equipment Operator (Water rigs, steam shovels, power boilers, derrick boats)

WAGES:(per hour) 07/01/2023

Group 23 \$84.34

Group 24 82.03

Group 25 78.16

Group 26 74.26

Group 27 53.38

Group 28 78.16

Cranes: Crawler or Truck

100' to 149' \$0.50 per hour additional to above Crane Rates 150' to 249' \$0.75 per hour additional to above Crane Rates 250' to 349' \$1.00 per hour additional to above crane Rates 350' to 450' \$1.50 per hour additional to above crane Rates

### SUPPLEMENTAL BENEFITS

Per Hour

<sup>\*</sup> This portion of benefits is subject to the SAME PREMIUM as shown for overtime wages

Groups 23-28

Regular Time 29.90\* plus \$7.40

\* This portion of benefits subject to the same premium as shown for wages.

Non-Worked Holiday Supplemental Benefits:

23.47

**OVERTIME PAY** 

See (D, O) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (5, 6, 7, 11, 16) on HOLIDAY PAGE
Overtime: See (5, 6, 7, 11, 16) on HOLIDAY PAGE

**REGISTERED APPRENTICES** 

Per Hour:

(1) year terms at the following wage rates:

1st 2nd 3rd 4th Groups 23-28 \$37.28 \$44.23 \$47.70 \$51.17

Supplemental Benefits:

Regular Time \$ 15.65\* plus \$ 7.40

9-15 HC

### **Operating Engineer - Marine Dredging**

04/01/2024

# JOB DESCRIPTION Operating Engineer - Marine Dredging

**DISTRICT** 4

40/04/0000

# **ENTIRE COUNTIES**

Albany, Bronx, Cayuga, Clinton, Columbia, Dutchess, Essex, Franklin, Greene, Jefferson, Kings, Monroe, Nassau, New York, Orange, Oswego, Putnam, Queens, Rensselaer, Richmond, Rockland, St. Lawrence, Suffolk, Ulster, Washington, Wayne, Westchester

### **WAGES**

D - - 1 1 - - - -

These wages do not apply to Operating Engineers on land based construction projects. For those projects, please see the Operating Engineer Heavy/Highway Rates. The wage rates below for all equipment and operators are only for marine dredging work in navigable waters found in the counties listed above.

Per Hour:	07/01/2023	10/01/2023
CLASS A1 Deck Captain, Leverman Mechanical Dredge Operator Licensed Tug Operator 1000HP or more.	\$ 43.94	\$ 45.26
CLASS A2 Crane Operator (360 swing)	39.16	40.33
CLASS B Dozer, Front Loader Operator on Land	To conform to Operating Engineer Prevailing Wage in locality where work is being performed including benefits.	
CLASS B1 Derrick Operator (180 swing) Spider/Spill Barge Operator Operator II, Fill Placer, Engineer, Chief Mate, Electrician, Chief Welder, Maintenance Engineer Licensed Boat, Crew Boat Operator	38.00	39.14
CLASS B2 Certified Welder	35.77	36.84
CLASS C1 Drag Barge Operator, Steward, Mate, Assistant Fill Placer	34.79	35.83

07/04/0000

<sup>\*</sup> This portion of benefits subject to same OT premium as wages.

CLASS C2 33.67 34.68

**Boat Operator** 

CLASS D 27.97 28.81

Shoreman, Deckhand, Oiler, Rodman, Scowman, Cook, Messman, Porter/Janitor

### SUPPLEMENTAL BENEFITS

Per Hour:

THE FOLLOWING SUPPLEMENTAL BENEFITS APPLY TO ALL CATEGORIES

All Classes A & B \$11.85 plus 6% \$12.00 plus 6%

of straight time of straight time wage, Overtime hours wage, Overtime hours

add \$ 0.63 add \$ 0.63

All Class C \$ 11.60 plus 6% \$ 11.75 plus 6%

of straight time of straight time wage, Overtime hours wage, Overtime hours

add \$ 0.50 add \$ 0.50

All Class D \$11.35 plus 6% \$11.60 plus 6% of straight time of straight time

of straight time of straight time wage, Overtime hours wage, Overtime hours

add \$ 0.38 add \$ 0.50

**OVERTIME PAY** 

See (B2, F, R) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 15, 26) on HOLIDAY PAGE

4-25a-MarDredge

# **Operating Engineer - Survey Crew - Consulting Engineer**

04/01/2024

JOB DESCRIPTION Operating Engineer - Survey Crew - Consulting Engineer DISTRICT 9

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Suffolk, Westchester

**PARTIAL COUNTIES** 

Dutchess: That part in Duchess County lying South of the North City line of Poughkeepsie.

**WAGES** 

Feasibility and preliminary design surveying, any line and grade surveying for inspection or supervision of construction.

Per hour: 07/01/2023

Survey Classifications

Party Chief \$ 47.15 Instrument Man 39.30 Rodman 34.35

### **SUPPLEMENTAL BENEFITS**

Per Hour:

All Crew Members: \$23.15

**OVERTIME PAY** 

OVERTIME:.... See (B, E\*, Q, V) ON OVERTIME PAGE.
\*Double-time paid on the 9th hour on Saturday.

**HOLIDAY** 

Paid: See (5, 6, 7, 11, 16) on HOLIDAY PAGE Overtime: See (5, 6, 7, 11, 16) on HOLIDAY PAGE

Painter 04/01/2024

# JOB DESCRIPTION Painter DISTRICT 8

### **ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Putnam, Queens, Richmond, Suffolk, Westchester

WAGES

Per hour: 07/01/2023

Brush \$ 51.70\*

Abatement/Removal of lead based 51.70\*

or lead containing paint on materials to be repainted.

Spray & Scaffold \$ 54.70\* Fire Escape 54.70\* Decorator 54.70\* Paperhanger/Wall Coverer 54.48\*

### SUPPLEMENTAL BENEFITS

Per hour:

 Paperhanger
 \$ 34.60

 All others
 32.73

 Premium
 36.70\*\*

# **OVERTIME PAY**

See (A, H) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 16, 25) on HOLIDAY PAGE

### **REGISTERED APPRENTICES**

One (1) year terms at the following wage rate.

Per hour:	07/01/2023
Appr 1st term	\$ 19.95*
Appr 2nd term	25.56*
Appr 3rd term	31.05*
Appr 4th term	41.62*

<sup>\*</sup>Subtract \$ 0.10 to calculate premium rate.

Supplemental benefits:

Per Hour:

 Appr 1st term...
 \$ 16.06

 Appr 2nd term...
 19.95

 Appr 3rd term...
 23.02

 Appr 4th term...
 29.16

8-NYDC9-B/S

**DISTRICT** 8

Painter 04/01/2024

# JOB DESCRIPTION Painter

# **ENTIRE COUNTIES**

Bronx, Kings, New York, Queens, Richmond

### **PARTIAL COUNTIES**

Nassau: Atlantic Beach, Ceaderhurst, East Rockaway, Hewlett, Hewlett Bay, Hewlett Neck, Hewlett Park, Inwood, Lawrence, Lido Beach, Long Beach, parts of Lynbrook, parts of Oceanside, parts of Valley Stream, and Woodmere. Starting on South side of Sunrise Hwy in Valley Stream running east to Windsor and Rockaway Ave, Rockville is the boundary line up to Lawson Blvd, turning right going west all the above territory. Starting at Union Turnpike & Lakeville Rd going north to northern Blvd. the west side of Lakeville Rd to Northern Blvd. At Northern Blvd doing east the district north of Northern blvd to Port Washington blvd. West of Port Washington blvd to St. Francis Hospital then north of first traffic light to Port Washington & Sands Point, Manor Haven, & Harbour Acres.

# **WAGES**

Per hour: 07/01/2023

<sup>\*</sup>Subtract \$ 0.10 to calculate premium rate.

<sup>\*\*</sup>Applies only to "All others" category, not paperhanger journeyworker.

Drywall Taper \$ 55.10

# **SUPPLEMENTAL BENEFITS**

Per Hour:

Journeyworker: \$ 23.88

### **OVERTIME PAY**

See (A, H) on OVERTIME PAGE

### **HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (4, 6, 8, 11, 18, 19, 25, 26) on HOLIDAY PAGE

### **REGISTERED APPRENTICES**

Wage per hour:

 1st term
 \$ 21.29

 2nd term
 27.84

 3rd term
 33.29

 4th term
 44.20

### Supplemental Benefits per hour:

1st term	\$ 14.43
2nd term	18.16
3rd term	19.30
4th term	21.59

8-NYC9-1974-DWT

### Painter - Bridge & Structural Steel

04/01/2024

# JOB DESCRIPTION Painter - Bridge & Structural Steel

### **DISTRICT** 8

### **ENTIRE COUNTIES**

Albany, Bronx, Clinton, Columbia, Dutchess, Essex, Franklin, Fulton, Greene, Hamilton, Kings, Montgomery, Nassau, New York, Orange, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Suffolk, Sullivan, Ulster, Warren, Washington, Westchester

### **WAGES**

Per Hour: STEEL:

Bridge Painting: 07/01/2023 10/01/2023 \$ 54.50 \$ 56.00 + 10.10\* + 10.35\*

ADDITIONAL \$6.50 per hour for POWER TOOL/SPRAY, whether straight time or overtime.

NOTE: All premium wages are to be calculated on base rate per hour only.

\* For the period of May 1st to November 15th, this amount is payable up to 40 hours. For the period of Nov 16th to April 30th, this amount is payable up to 50 hours. EXCEPTION: First and last week of employment, and for the weeks of Memorial Day, Independence Day and Labor Day, where the amount is paid for the actual number of hours worked (no cap).

NOTE: Generally, for Bridge Painting Contracts, ALL WORKERS on and off the bridge (including Flagmen) are to be paid Painter's Rate; the contract must be ONLY for Bridge Painting.

### SHIFT WORK:

When directly specified in public agency or authority contract documents for an employer to work a second shift and works the second shift with employees other than from the first shift, all employees who work the second shift will be paid 10% of the base wage shift differential in lieu of overtime for the first eight (8) hours worked after which the employees shall be paid at time and one half of the regular wage rate. When a single irregular work shift is mandated in the job specifications or by the contracting agency, wages shall be paid at time and one half for single shifts between the hours of 3pm-11pm or 11pm-7am.

# SUPPLEMENTAL BENEFITS

Per Hour:

Journeyworker:

<sup>\*</sup> For the period of May 1st to November 15th, this amount is payable up to 40 hours. For the period of Nov 16th to April 30th, this amount is payable up to 50 hours. EXCEPTION: First and last week of employment, and for the weeks of Memorial Day, Independence Day and Labor Day, where the amount is paid for the actual number of hours worked (no cap).

# **OVERTIME PAY**

See (B, F, R) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE Overtime: See (4, 6) on HOLIDAY PAGE

# **REGISTERED APPRENTICES**

Wage - Per hour:

Apprentices: (1) year terms.

1st year	\$ 21.80 + 4.04	\$ 22.40 + 4.14
2nd year	\$ 32.70 + 6.06	\$ 33.60 + 6.21
3rd year Supplemental Benefits - Per hour:	\$ 43.60 + 8.08	\$ 44.80 + 8.28
1st year	\$ .90 + 12.34	\$ 1.16 + 12.62
2nd year	\$ 7.07 + 18.51	\$ 7.46 + 18.93
3rd year	\$ 9.42 + 24.68	\$ 9.94 + 25.24

NOTE: All premium wages are to be calculated on base rate per hour only.

8-DC-9/806/155-BrSS

# Painter - Metal Polisher 04/01/2024

### JOB DESCRIPTION Painter - Metal Polisher

### **DISTRICT** 8

### **ENTIRE COUNTIES**

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

# **WAGES**

	07/01/2023
Metal Polisher	\$ 38.18
Metal Polisher*	39.28
Metal Polisher**	42.18

<sup>\*</sup>Note: Applies on New Construction & complete renovation

### SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2023

Journeyworker:

All classification \$ 12.34

### **OVERTIME PAY**

See (B, E, P, T) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

### REGISTERED APPRENTICES

Wages per hour:

One (1) year term at the following wage rates:

07/01/2023

1st year \$ 16.00 2nd year \$ 17.00

<sup>\*\*</sup> Note: Applies when working on scaffolds over 34 feet.

3rd year	18.00
1st year*	\$ 16.39
2nd year*	17.44
3rd year*	18.54
1st year**	\$ 18.50
2nd year**	19.50
3rd year**	20.50

<sup>\*</sup>Note: Applies on New Construction & complete renovation

Supplemental benefits:

Per hour:

 1st year
 \$ 8.69

 2nd year
 8.69

 3rd year
 8.69

8-8A/28A-MP

9-262

Plasterer 04/01/2024

JOB DESCRIPTION Plasterer DISTRICT 9

### **ENTIRE COUNTIES**

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

### WAGES

Per hour:

	07/01/2023	08/01/2023
Building:		
Plasterer/Traditional &	\$ 46.00	\$ 47.72
Spraying Fireproofing	+ \$5.00*	+ \$5.00*
SUPPLEMENTAL BENEFITS		

Per hour:

. ei noui

Journeyworker \$ 23.15 \$ 25.35

# **OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

\*This portion is not subjected to OT premiums.

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 25) on HOLIDAY PAGE

# **REGISTERED APPRENTICES**

Wages: 07/01/2023 08/01/2023

(per hour)

800 hours term:

1st term	\$ 25.44 + 2.75*	\$ 19.30+ 0.68*
2nd term	27.49 + 2.51*	\$ 22.53+ 0.81*
3rd term	32.38 + 3.50*	\$ 25.79+ 0.95*
4th term	34.68 + 3.75*	

<sup>\*</sup>This portion is not subjected to OT premiums.

Supplemental Benefits:

(per hour): (800) hours term:

1st term	\$ 14.70	\$ 11.59
2nd term	15.60	\$ 12.02
3rd term	17.43	\$ 12.52
4th term	18.35	

Plumber 04/01/2024

<sup>\*\*</sup> Note: Applies when working on scaffolds over 34 feet.

# **ENTIRE COUNTIES**

Bronx, Kings, New York, Queens, Richmond

**WAGES** 

Per hour:

07/01/2023

Plumber \$ 72.50

Temporary

Service\*\* \$ 58.08

On tower work, bridges, elevated highway, or buildings, where pipe is being installed, fifty (50) or more feet vertically in a free drop from its base, an additional \$1.00 per hour.

### SHIFT WORK:

Shift work, when directly specified in public agency or authority contract documents, and continues for a period of not less than ten (10) consecutive work days. A shift shall consist of seven(7) hours with one-half (1/2) hour for lunch after the first four (4) hours of each shift. A premium of thirty percent (30%) for wages and supplemental benefits on shift work performed Monday through Friday on the 4 P.M. and midnight shifts.

For shift work performed on weekends the shift premium shall be fifty percent (50%) of wages and supplemental benefits. For shift work performed on holidays designated below, double time wages and supplemental benefits shall be paid. Also noted that the normal workday Monday through Friday 8:00 A.M. to 3:00 P.M. is not considered shift work, and therefore not subject to shift premium.

# **SUPPLEMENTAL BENEFITS**

Per hour:

Plumber \$ 41.45

Temporary

Service \$33.08

**OVERTIME PAY** 

Plumber See ( C, O, V ) on OVERTIME PAGE.

**HOLIDAY** 

Plumber

Overtime: See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE.

Repairs & Maintenance

Paid: See (1) on HOLIDAY PAGE.

Overtime: See (5, 6, 25) on HOLIDAY PAGE.

**REGISTERED APPRENTICES** 

Wages per hour:

(1/2) year terms at the following wage:

1st 2nd 3rd&4th 5th&6th 7th&8th 9th 10th \$16.78 \$19.78 \$28.99 \$31.09 \$33.94 \$35.34 \$47.41

Supplemental Benefits:

(1/2) year term at the following dollar amount:

1st 2nd 3rd-10th \$5.43 \$6.43 \$21.95

9-1 Const

Plumber - Pump & Tank: Oil Trades Installation & Maintenance

04/01/2024

**DISTRICT** 9

JOB DESCRIPTION Plumber - Pump & Tank: Oil Trades Installation & Maintenance

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

**WAGES** 

Per hour:

<sup>\*\*</sup> Temporary Service- Includes Maintenance of cooling & heating apparatus, maintenance work on pneumatic systems during the construction period, and work on temporary heat. All hours paid at straight time, including holidays.

<sup>\*\*</sup>THERE ARE NO HELPERS UNDER THIS CLASSIFICATION.

07/01/2023

Pump & Tank \$ 69.31

### SUPPLEMENTAL BENEFITS

Per hour:

Plumber \$ 26.33

**OVERTIME PAY** 

Pump & Tank See (B, F, H) on OVERTIME PAGE.

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE.

Overtime: See ( 5, 6, 10, 11, 12, 16, 25 ) on HOLIDAY PAGE.

9-1-P&T

### **Plumber - Repairs & Maintenance**

04/01/2024

JOB DESCRIPTION Plumber - Repairs & Maintenance

**DISTRICT** 9

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

**WAGES** 

Per hour:

Repairs & 07/01/2023 Maintenance \$ 47.50

\*Repair & Maintenance work is any repair and/or replacement of present plumbing system that does not change existing roughing or water supply lines. Projects regardless of work type which have approved plans and specifications wherein the plumbing exceeds \$725,000 are excluded.

### SUPPLEMENTAL BENEFITS

Per hour:

Repair \$ 19.06

Maintenance

**OVERTIME PAY** 

Repairs &

Maintenance See (B, H) on OVERTIME PAGE.

**HOLIDAY** 

Repairs & Maintenance

Paid: See (1) on HOLIDAY PAGE.
Overtime: See (5, 6, 25) on HOLIDAY PAGE.

**REGISTERED APPRENTICES** 

Note: The Repairs & Maintenance Category has NO Apprentices.

9-1 R&M

Roofer 04/01/2024

JOB DESCRIPTION Roofer DISTRICT 9

**ENTIRE COUNTIES** 

Roofer/Waterproofer

Bronx, Dutchess, Kings, New York, Orange, Putnam, Queens, Richmond, Rockland, Sullivan, Ulster, Westchester

WAGES

Per Hour: 07/01/2023 05/01/2024 Additional

\$ 46.50 \$2.50

+ \$7.00\*

Note: Abatement/Removal of Asbestos containing roofs and roofing material is classified as Roofer.

SUPPLEMENTAL BENEFITS

Per Hour: \$ 31.37

**OVERTIME PAY** 

See (B, H) on OVERTIME PAGE

Note: An observed holiday that falls on a Sunday will be observed the following Monday.

<sup>\*</sup> This portion is not subjected to overtime premiums.

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

(1) year term apprentices indentured prior to 01/01/2023

1st 2nd 3rd 4th \$ 16.28 \$ 23.25 \$ 27.90 \$ 34.88 + 3.50\* + 4.20\* + 5.26\*

Supplements:

1st 2nd 3rd 4th \$ 4.03 \$ 15.85 \$ 18.95 \$ 23.61

(1) year term apprentices indentured after 01/01/2023

	1st	2nd	3rd	4th	5th
	\$ 17.67	\$ 20.93	\$ 23.25	\$ 27.90	\$ 34.88
		+ 3.16*	+ 3.50*	+ 4.20*	+ 5.26
Supplements:					
	1st	2nd	3rd	4th	5th
	\$ 7.61	\$ 14.29	\$ 15.85	\$ 18.95	\$ 23.61

<sup>\*</sup> This portion is not subjected to overtime premiums.

9-8R

Sheetmetal Worker 04/01/2024

JOB DESCRIPTION Sheetmetal Worker

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Suffolk, Westchester

**WAGES** 

Per Hour: 07/01/2023

Sign Erector \$ 56.00

NOTE: Structurally Supported Overhead Highway Signs(See STRUCTURAL IRON WORKER CLASS)

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2023

Sign Erector \$ 55.66

**OVERTIME PAY** 

See (A, F, S) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 10, 11, 12, 16, 25) on HOLIDAY PAGE Overtime: See (5, 6, 10, 11, 12, 16, 25) on HOLIDAY PAGE

**REGISTERED APPRENTICES** 

Per Hour:

6 month Terms at the following percentage of Sign Erectors wage rate:

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 35% 40% 45% 50% 55% 60% 65% 70% 75% 80%

SUPPLEMENTAL BENEFITS

Per Hour:

07/01/2023

5th 6th 7th 8th 9th 10th 1st 2nd 3rd 4th \$ 31.05 \$ 36.05 \$ 14.95 \$ 16.95 \$ 18.93 \$20.93 \$ 28.56 \$ 33.57 \$ 38.56 \$ 41.05

4-137-SE

Sheetmetal Worker 04/01/2024

JOB DESCRIPTION Sheetmetal Worker

**ENTIRE COUNTIES** 

**DISTRICT** 4

**DISTRICT** 4

<sup>\*</sup> This portion is not subjected to overtime premiums.

**DISTRICT** 4

4-28

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES** 

 Per Hour:
 7/01/2023
 11/01/2023

 Sheetmetal Worker
 \$ 59.94
 \$ 61.09

 Maintenance of Fans Temporary Operation
 \$ 47.95
 \$ 48.87

SUPPLEMENTAL BENEFITS

Per Hour:

Sheetmetal Worker \$ 51.16 \$ 53.25

Maintenance Worker \$ 51.16 \$ 53.25

**OVERTIME PAY** 

See (B, E, E2, Q, V) on OVERTIME PAGE For Maintenance See Codes B,E, Q & V

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Per Hour:Wages

Six(6) Month Terms As Follows:

 1st & 2nd Term
 \$ 20.85
 \$ 21.26

 3rd & 4th Term
 26.87
 27.39

 5th & 6th Term
 32.89
 33.52

 7th & 8th Term
 41.94
 42.75

 9th Term
 47.53
 48.55

Per Hour: Supplemental Benefits

 1st & 2nd Term
 \$ 19.02
 \$ 19.66

 3rd & 4th Term
 25.90
 26.73

 5th & 6th Term
 30.55
 31.57

 7th & 8th Term
 37.49
 38.78

 9th Term
 42.14
 43.62

Steamfitter 04/01/2024

ENTIRE COUNTIES

JOB DESCRIPTION Steamfitter

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES** 

Per Hour: 07/01/2023 01/01/2024 07/01/2024 Additional Additional

AC Service/Heat Service \$ 44.85

& Refrigeration \$1.25/Hr.\* \$1.25/Hr.\*

(\*)To be allocated at a later date.

Refrigeration, A/C, Oil Burner and Stoker Service and Repair.

NOTE: Refrigeration Compressor installation. (Not to exceed 5 Hp combined on any one project).

NOTE: Air Condition / Heating Compressor installation. (Not to exceed 15 tons combined on any one project).

SUPPLEMENTAL BENEFITS

Per Hour Worked:

AC Service/Heat Service \$ 20.71 Per Hour Paid: 17.65

**OVERTIME PAY** 

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (5, 6, 11, 15, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

1 year terms Wages per hour:

 1st Term
 \$ 21.71

 2nd Term
 26.21

 3rd Term
 30.53

 4th Term
 36.87

Benefits per hour Worked:

 Per Hour Paid:
 Per Hour Paid:

 1st Term
 \$ 14.20
 \$ 11.14

 2nd Term
 14.57
 12.48

 3rd Term
 15.91
 13.38

 4th Term
 17.72
 15.77

4-638B-StmFtrRef

Steamfitter 04/01/2024

JOB DESCRIPTION Steamfitter DISTRICT 4

**ENTIRE COUNTIES** 

Bronx, Kings, Nassau, New York, Queens, Richmond, Suffolk

**WAGES** 

Per Hour: 07/01/2023

Sprinkler/Steam \$ 69.11

AC/Heat Fitter

Temporary 52.54

Heat & AC Fitter

Note: Add 15% to Hourly Wage for "Contracting Agency" Mandated Off Shift Work.

SUPPLEMENTAL BENEFITS

Per Hour:

Sprinkler/Steam \$53.24

Fitter

Temporary 43.67

Heat & AC Fitter

Note: Add 15% to Hourly Benefit for "Contracting Agency" Mandated Off Shift Work.

**OVERTIME PAY** 

Note: The posted overtime rates are applicable after 8 hours plus Saturday, Sunday and Holidays on Fire Protection/Sprinkler contracts under \$3,000,000.00 and HVAC/Mechanical contracts under \$30,000,000.00:

 Sprinkler/Steam
 Wages \$ 138.22
 Benefit \$ 106.48

 Temp Heat/AC
 Wages \$ 105.08
 Benefit \$ 87.34

**HOLIDAY** 

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 11, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

1 year Terms at the Following:

WAGES per hour:

 1st Term
 2nd Term
 3rd Term
 4th Term
 5th Term

 \$ 27.68
 \$ 34.59
 \$ 41.49
 \$ 48.40
 \$ 55.30

SUPPLEMENTAL BENEFIT per hour:

 1st Term
 2nd Term
 3rd Term
 4th Term
 5th Term

 \$ 21.80
 \$ 27.05
 \$ 32.28
 \$ 37.53
 \$ 42.76

Premium Time Amounts:

43.60 54.10 64.56 75.06 85.52

4-638A-StmSpFtr

**Teamster - Heavy Construction** 

04/01/2024

JOB DESCRIPTION Teamster - Heavy Construction

DISTRICT 4

**ENTIRE COUNTIES** 

Bronx, Kings, New York, Queens, Richmond

WAGES

Per Hour:

Dump Trucks/Drivers (Debris Removal, Street Level and below)

	07/01/2023	07/01/2024
		Additional
Dump Trucks	\$ 43.835	\$ 7.93
Tractor Trailers	46.115	6.60
Euclid/Turnapull	46.68	6.60

**SUPPLEMENTAL BENEFITS** 

Per Hour:

**Dump Trucks** 

Up to 40 Hours Worked \$51.5525

**ALL OTHERS** 

Up to 40 Hours Worked 51.5025

**OVERTIME PAY** 

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY** 

Paid: See (5, 6, 11, 15, 16, 25) on HOLIDAY PAGE

Note: Employees receive 2 hours of Holiday Pay for each day worked in holiday week (not to exceed 8 hours) Note: Employees receive 5 1/3 hours of Holiday Pay for each day worked in Thanksgiving Holiday Week.

4-282

Welder 04/01/2024

### JOB DESCRIPTION Welder

### **DISTRICT** 1

### **ENTIRE COUNTIES**

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

**WAGES** 

Per hour 07/01/2023

Welder: To be paid the same rate of the mechanic performing the work.\*

\*EXCEPTION: If a specific welder certification is required, then the 'Certified Welder' rate in that trade tag will be paid.

**OVERTIME PAY** 

**HOLIDAY** 

1-As Per Trade

# **Overtime Codes**

Following is an explanation of the code(s) listed in the OVERTIME section of each classification contained in the attached schedule. Additional requirements may also be listed in the HOLIDAY section.

NOTE: Supplemental Benefits are 'Per hour worked' (for each hour worked) unless otherwise noted

( AA )	Time and one half of the hourly rate after 7 and one half hours per day
(A)	Time and one half of the hourly rate after 7 hours per day
(B)	Time and one half of the hourly rate after 8 hours per day
(B1)	Time and one half of the hourly rate for the 9th & 10th hours week days and the 1st 8 hours on Saturday. Double the hourly rate for all additional hours
(B2)	Time and one half of the hourly rate after 40 hours per week
(C)	Double the hourly rate after 7 hours per day
(C1)	Double the hourly rate after 7 and one half hours per day
(D)	Double the hourly rate after 8 hours per day
(D1)	Double the hourly rate after 9 hours per day
(E)	Time and one half of the hourly rate on Saturday
(E1)	Time and one half 1st 4 hours on Saturday; Double the hourly rate all additional Saturday hours
(E2)	Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
(E3)	Between November 1st and March 3rd Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather, provided a given employee has worked between 16 and 32 hours that week
(E4)	Saturday and Sunday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
(E5)	Double time after 8 hours on Saturdays
(F)	Time and one half of the hourly rate on Saturday and Sunday
(G)	Time and one half of the hourly rate on Saturday and Holidays
(H)	Time and one half of the hourly rate on Saturday, Sunday, and Holidays
(1)	Time and one half of the hourly rate on Sunday
(J)	Time and one half of the hourly rate on Sunday and Holidays
(K)	Time and one half of the hourly rate on Holidays
(L)	Double the hourly rate on Saturday
(M)	Double the hourly rate on Saturday and Sunday
(N)	Double the hourly rate on Saturday and Holidays
(O)	Double the hourly rate on Saturday, Sunday, and Holidays
(P)	Double the hourly rate on Sunday
(Q)	Double the hourly rate on Sunday and Holidays
(R)	Double the hourly rate on Holidays
(S)	Two and one half times the hourly rate for Holidays

- (S1) Two and one half times the hourly rate the first 8 hours on Sunday or Holidays One and one half times the hourly rate all additional hours.
- (T) Triple the hourly rate for Holidays
- ( U ) Four times the hourly rate for Holidays
- ( V ) Including benefits at SAME PREMIUM as shown for overtime
- ( W ) Time and one half for benefits on all overtime hours.
- ( X ) Benefits payable on Paid Holiday at straight time. If worked, additional benefit amount will be required for worked hours. (Refer to other codes listed.)

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# Holiday Codes

### PAID Holidays:

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

### **OVERTIME Holiday Pay:**

(28)

Easter Sunday

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays. The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Following is an explanation of the code(s) listed in the HOLIDAY section of each classification contained in the attached schedule. The Holidays as listed below are to be paid at the wage rates at which the employee is normally classified.

(1)	None
(2)	Labor Day
(3)	Memorial Day and Labor Day
(4)	Memorial Day and July 4th
(5)	Memorial Day, July 4th, and Labor Day
(6)	New Year's, Thanksgiving, and Christmas
(7)	Lincoln's Birthday, Washington's Birthday, and Veterans Day
(8)	Good Friday
(9)	Lincoln's Birthday
(10)	Washington's Birthday
(11)	Columbus Day
(12)	Election Day
(13)	Presidential Election Day
(14)	1/2 Day on Presidential Election Day
(15)	Veterans Day
(16)	Day after Thanksgiving
(17)	July 4th
(18)	1/2 Day before Christmas
(19)	1/2 Day before New Years
(20)	Thanksgiving
(21)	New Year's Day
(22)	Christmas
(23)	Day before Christmas
(24)	Day before New Year's
(25)	Presidents' Day
(26)	Martin Luther King, Jr. Day
(27)	Memorial Day
( 20 )	Factor Cunday

(29) Juneteenth

# New York State Department of Labor - Bureau of Public Work State Office Building Campus Building 12 - Room 130 Albany, New York 12226

# REQUEST FOR WAGE AND SUPPLEMENT INFORMATION

As Required by Articles 8 and 9 of the NYS Labor Law

Fax (518) 485-1870 or mail this form for new schedules or for determination for additional occupations.

### This Form Must Be Typed Submitted By: Contracting Agency Architect or Engineering Firm Public Work District Office Date: (Check Only One) A. Public Work Contract to be let by: (Enter Data Pertaining to Contracting/Public Agency) 1. Name and complete address (Check if new or change) 2. NY State Units (see Item 5). 07 City 01 DOT 08 Local School District 02 OGS 09 Special Local District, i.e., Fire, Sewer, Water District 03 Dormitory Authority 10 Village 04 State University 11 Town Construction Fund 12 County 05 Mental Hygiene Telephone Fax Facilities Corp. 13 Other Non-N.Y. State (Describe) 06 OTHER N.Y. STATE UNIT E-Mail: 3. SEND REPLY TO (check if new or change) 4. SERVICE REQUIRED. Check appropriate box and provide project information. Name and complete address: New Schedule of Wages and Supplements. APPROXIMATE BID DATE: Additional Occupation and/or Redetermination Telephone Fax PRC NUMBER ISSUED PREVIOUSLY FOR OFFICE USE ONLY THIS PROJECT: F-Mail: **B. PROJECT PARTICULARS** Location of Project: 5. Project Title Location on Site Description of Work Route No/Street Address \_\_\_\_\_ Village or City \_\_\_\_\_ Contract Identification Number Town Note: For NYS units, the OSC Contract No. County\_ 7. Nature of Project - Check One: OCCUPATION FOR PROJECT: **Fuel Delivery** 1. New Building Guards, Watchmen Construction (Building, Heavy 2. Addition to Existing Structure Highway/Sewer/Water) Janitors, Porters, Cleaners, 3. Heavy and Highway Construction (New and Repair) **Elevator Operators** Tunnel 4. New Sewer or Waterline Residential Moving furniture and 5. Other New Construction (Explain) equipment Landscape Maintenance 6. Other Reconstruction, Maintenance, Repair or Alteration Elevator maintenance Trash and refuse removal 7. Demolition Window cleaners Exterminators, Fumigators 8. Building Service Contract Other (Describe) Fire Safety Director, NYC Only 9. Does this project comply with the Wicks Law involving separate bidding? YES | | NO |

Signature

10. Name and Title of Requester



## NEW YORK STATE DEPARTMENT OF LABOR Bureau of Public Work - Debarment List

## LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Under Article 8 and Article 9 of the NYS Labor Law, a contractor, sub-contractor and/or its successor shall be debarred and ineligible to submit a bid on or be awarded any public work or public building service contract/sub-contract with the state, any municipal corporation or public body for a period of five (5) years from the date of debarment when:

- Two (2) final determinations have been rendered within any consecutive six-year (6) period determining that such contractor, sub-contractor and/or its successor has WILLFULLY failed to pay the prevailing wage and/or supplements;
- One (1) final determination involves falsification of payroll records or the kickback of wages and/or supplements.

The agency issuing the determination and providing the information, is denoted under the heading 'Fiscal Officer'. DOL = New York State Department of Labor; NYC = New York City Comptroller's Office; AG = New York State Attorney General's Office; DA = County District Attorney's Office.

<u>Debarment Database:</u> To search for contractors, sub-contractors and/or their successors debarred from bidding or being awarded any public work contract or subcontract under NYS Labor Law Articles 8 and 9, <u>or</u> under NYS Workers' Compensation Law Section 141-b, access the database at this link: <a href="https://apps.labor.ny.gov/EDList/searchPage.do">https://apps.labor.ny.gov/EDList/searchPage.do</a>

For inquiries where WCB is listed as the "Agency", please call 1-866-546-9322

AGENCY	Fiscal Officer	FEIN	EMPLOYER NAME	EMPLOYER DBA NAME	ADDRESS	DEBARMENT START DATE	DEBARMENT END DATE
DOL	DOL	****5754	0369 CONTRACTORS, LLC		515 WEST AVE UNIT PH 13NORWALK CT 06850	05/12/2021	05/12/2026
DOL	DOL	****5784	A.J.M. TRUCKING, INC.		PO BOX 2064 MONROE NY 10950	02/12/2024	02/12/2029
DOL	AG	****1812	ADVANCED BUILDERS & LAND DEVELOPMENT, INC.		400 OSER AVE #2300HAUPPAUGE NY 11788	09/11/2019	09/11/2024
DOL	DOL	*****1687	ADVANCED SAFETY SPRINKLER INC		261 MILL ROAD P.O BOX 296EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	NYC		ALL COUNTY SEWER & DRAIN, INC.		7 GREENFIELD DR WARWICK NY 10990	03/25/2022	03/25/2027
DOL	NYC		AMJED PARVEZ		401 HANOVER AVENUE STATEN ISLAND NY 10304	01/11/2021	01/11/2026
DOL	DOL		ANGELO F COKER		2610 SOUTH SALINA STREET SUITE 14SYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL		ANGELO GARCIA		515 WEST AVE UNIT PH 13NORWALK CT 06850	05/12/2021	05/12/2026
DOL	DOL		ANGELO TONDO		449 WEST MOMBSHA ROAD MONROE NY 10950	06/06/2022	06/06/2027
DOL	DOL	****4231	ANKER'S ELECTRIC SERVICE, INC.		10 SOUTH 5TH ST LOCUST VALLEY NY 11560	09/26/2022	09/26/2027
DOL	DOL		ANTHONY MONGELLI		PO BOX 2064 MONROE NY 10950	02/12/2024	02/12/2029
DOL	NYC		ARADCO CONSTRUCTION CORP		115-46 132RD ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	DOL		ARNOLD A. PAOLINI		1250 BROADWAY ST BUFFALO NY 14212	02/03/2020	02/03/2025
DOL	NYC		ARSHAD MEHMOOD		168-42 88TH AVENUE JAMAICA NY 11432	11/20/2019	11/20/2024
DOL	NYC		AVM CONSTRUCTION CORP		117-72 123RD ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	NYC		AZIDABEGUM		524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	DOL	*****8421	B & B DRYWALL, INC		206 WARREN AVE APT 1WHITE PLAINS NY 10603	12/14/2021	12/14/2026
DOL	DOL		B&L RENOVATION CO.		618 OCEAN PARKWAY APT A6BROOKLYN NY 11230	09/17/2020	09/17/2025
DOL	DOL		BERNARD BEGLEY		38 LONG RIDGE ROAD BEDFORD NY 10506	12/18/2019	12/18/2024
DOL	NYC	****2113	BHW CONTRACTING, INC.		401 HANOVER AVENUE STATEN ISLAND NY 10304	01/11/2021	01/11/2026
DOL	DOL	****3627	BJB CONSTRUCTION CORP.		38 LONG RIDGE ROAD BEDFORD NY 10506	12/18/2019	12/18/2024
DOL	DOL	****5078	BLACK RIVER TREE REMOVAL, LLC		29807 ANDREWS ROAD BLACK RIVER NY 13032	10/17/2023	10/17/2028
DOL	DOL	****4512	BOB BRUNO EXCAVATING, INC		5 MORNINGSIDE DR AUBURN NY 13021	05/28/2019	05/28/2024
DOL	DOL		BRADLEY J SCHUKA		4 BROTHERS ROAD WAPPINGERS FALLS NY 12590	10/20/2020	10/20/2025
DOL	DOL	****9383	C.C. PAVING AND EXCAVATING, INC.		2610 SOUTH SALINA ST SUITE 12SYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL	****4083	C.P.D. ENTERPRISES, INC		P.O BOX 281 WALDEN NY 12586	03/03/2020	03/03/2025
DOL	DOL	****5161	CALADRI DEVELOPMENT CORP.		1223 PARK ST. PEEKSKILL NY 10566	05/17/2021	05/17/2026
DOL	DOL	*****3391	CALI ENTERPRISES, INC.		1223 PARK STREET PEEKSKILL NY 10566	05/17/2021	05/17/2026
DOL	NYC		CALVIN WALTERS		465 EAST THIRD ST MT. VERNON NY 10550	09/09/2019	09/09/2024
DOL	DOL	*****4155	CASA BUILDERS, INC.	FRIEDLANDER CONSTRUCTI ON	64 N PUTT CONNERS ROAD NEW PALTZ NY 12561	05/10/2023	05/10/2028
DOL	AG	****7247	CENTURY CONCRETE CORP		2375 RAYNOR ST RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	DOL	*****0026	CHANTICLEER CONSTRUCTION LLC		4 BROTHERS ROAD WAPPINGERS FALLS NY 12590	10/20/2020	10/20/2025
DOL	NYC	****2117	CHARAN ELECTRICAL ENTERPRISES		9-11 40TH AVENUE LONG ISLAND CITY NY 11101	09/26/2023	09/26/2028
DOL	NYC		CHARLES ZAHRADKA		863 WASHINGTON STREET FRANKLIN SQUARE NY 11010	03/10/2020	03/10/2025

DOL	DOL		CHRISTOPHER GRECO		26 NORTH MYRTLE AVENUE SPRING VALLEY NY 10956	02/18/2021	02/18/2026
DOL	DOL		CHRISTOPHER PAPASTEFANOU A/K/A CHRIS PAPASTEFANOU		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL		CRAIG JOHANSEN		10 SOUTH 5TH ST LOCUST VALLEY NY 11560	09/26/2022	09/26/2027
DOL	DOL	*****3228	CROSS-COUNTY LANDSCAPING AND TREE SERVICE, INC.	ROCKLAND TREE SERVICE	26 NORTH MYRTLE AVENUE SPRING VALLEY NY 10956	02/18/2021	02/18/2026
DOL	DOL	****7619	DANCO CONSTRUCTION UNLIMITED INC.		485 RAFT AVENUE HOLBROOK NY 11741	10/19/2021	10/19/2026
DOL	DOL		DANIEL ROBERT MCNALLY		7 GREENFIELD DRIVE WARWICK NY 10990	03/25/2022	03/25/2027
DOL	DOL		DARIAN L COKER		2610 SOUTH SALINA ST SUITE 2CSYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL		DAVID FRIEDLANDER		64 NORTH PUTT CORNERS RD NEW PALTZ NY 12561	05/10/2023	05/10/2028
DOL	NYC		DAVID WEINER		14 NEW DROP LANE 2ND FLOORSTATEN ISLAND NY 10306	11/14/2019	11/14/2024
DOL	DOL		DELPHI PAINTING & DECORATING CO INC		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL		DINA TAYLOR		64 N PUTT CONNERS RD NEW PALTZ NY 12561	05/10/2023	05/10/2028
DOL	DOL	****5175	EAGLE MECHANICAL AND GENERAL CONSTRUCTION LLC		11371 RIDGE RD WOLCOTT NY 14590	02/03/2020	02/03/2025
DOL	AG		EDWIN HUTZLER		23 NORTH HOWELLS RD BELLPORT NY 11713	08/04/2021	08/04/2026
DOL	DA		EDWIN HUTZLER		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	DOL	****0780	EMES HEATING & PLUMBING CONTR		5 EMES LANE MONSEY NY 10952	01/20/2002	01/20/3002
DOL	NYC	****5917	EPOCH ELECTRICAL, INC		97-18 50TH AVE CORONA NY 11368	04/19/2018	04/19/2024
DOL	DOL		EUGENIUSZ "GINO" KUCHAR		195 KINGSLAND AVE BROOKLYN NY 11222	12/22/2023	12/22/2028
DOL	DA		FREDERICK HUTZLER		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	NYC	****6616	G & G MECHANICAL ENTERPRISES, LLC.		1936 HEMPSTEAD TURNPIKE EAST MEDOW NY 11554	11/29/2019	11/29/2024
DOL	DOL	****2998	G.E.M. AMERICAN CONSTRUCTION CORP.		195 KINGSLAND AVE BROOKLYN NY 11222	12/22/2023	12/22/2028
DOL	DOL		GABRIEL FRASSETTI			04/10/2019	04/10/2024
DOL	NYC		GAYATRI MANGRU		21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025
DOL	DA		GEORGE LUCEY		150 KINGS STREET BROOKLYN NY 11231	01/19/1998	01/19/2998
DOL	DOL		GIGI SCHNECKENBURGER		261 MILL RD EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	DA		GIOVANNA TRAVALJA		3735 9TH ST LONG ISLAND CITY NY 11101	01/05/2023	01/05/2028
DOL	DA	*****0213	GORILLA CONTRACTING GROUP, LLC		505 MANHATTAN AVE WEST BABYLON NY 11704	10/05/2023	10/05/2028
DOL	DOL		HANS RATH		24 ELDOR AVENUE NEW CITY NY 10956	02/03/2020	02/03/2025
DOL	DOL		HERBERT CLEMEN		42 FOWLER AVENUE CORTLAND MANOR NY 10567	01/24/2023	01/24/2028
DOL	DOL		HERBERT CLEMEN		42 FOWLER AVENUE CORTLAND MANOR NY 10567	10/25/2022	10/25/2027
DOL	DOL		IRENE KASELIS		32 PENNINGTON AVE WALDWICK NJ 07463	05/30/2019	05/30/2024
DOL	DOL	****9211	J. WASE CONSTRUCTION CORP.		8545 RT 9W ATHENS NY 12015	03/09/2021	03/09/2026
DOL	DOL		J.M.J CONSTRUCTION		151 OSTRANDER AVENUE SYRACUSE NY 13205	11/21/2022	11/21/2027
DOL	DOL		J.R. NELSON CONSTRUCTION		531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		J.R. NELSON CONSTRUCTION		531 THIRD STREET ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL		J.R. NELSON CONSTRUCTION		531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027

DOL	DOL		J.R. NELSON, LLC		531 THIRD STREET ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL		J.R. NELSON, LLC		531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		J.R. NELSON, LLC		531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL		J.R.N COMPANIES, LLC		531 THIRD STREET ALBANY NY 12206	12/12/2022	12/12/2027
DOL	DOL		J.R.N COMPANIES, LLC		531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		J.R.N COMPANIES, LLC		531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL	****1147	J.R.N. CONSTRUCTION, LLC		531 THIRD ST ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL	****1147	J.R.N. CONSTRUCTION, LLC		531 THIRD ST ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL	****1147	J.R.N. CONSTRUCTION, LLC		531 THIRD ST ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL		JAMES J. BAKER		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	11/15/2022	11/15/2027
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL	****7993	JBS DIRT, INC.		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026
DOL	DOL	****2435	JEFFEL D. JOHNSON	JMJ7 AND SON	5553 CAIRNSTRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	DOL		JEFFEL JOHNSON ELITE CARPENTER REMODEL AND CONSTRUCTION		C2 EVERGREEN CIRCLE LIVERPOOL NY 13090	11/21/2022	11/21/2027
DOL	DOL	****2435	JEFFREY M. JOHNSON	JMJ7 AND SON	5553 CAIRNS TRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	NYC		JENNIFER GUERRERO		1936 HEMPSTEAD TURNPIKE EAST MEADOW NY 11554	11/29/2019	11/29/2024
DOL	DOL		JIM PLAUGHER		17613 SANTE FE LINE ROAD WAYNEFIELD OH 45896	07/16/2021	07/16/2026
DOL	DOL		JMJ7 & SON CONSTRUCTION, LLC		5553 CAIRNS TRAIL LIVERPOOL NY 13041	11/21/2022	11/21/2027
DOL	DOL		JMJ7 AND SONS CONTRACTORS		5553 CAIRNS TRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	DOL		JMJ7 CONTRACTORS		7014 13TH AVENUE BROOKLYN NY 11228	11/21/2022	11/21/2027
DOL	DOL		JMJ7 CONTRACTORS AND SONS		5553 CAIRNS TRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	DOL		JMJ7 CONTRACTORS, LLC		5553 CAIRNS TRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	DOL		JOHN GOCEK		14B COMMERCIAL AVE ALBANY NY 12065	11/14/2019	11/14/2024
DOL	DOL		JOHN MARKOVIC		47 MANDON TERRACE HAWTHORN NJ 07506	03/29/2021	03/29/2026
DOL	DOL		JOHN WASE		8545 RT 9W ATHENS NY 12015	03/09/2021	03/09/2026
DOL	DOL		JON E DEYOUNG		261 MILL RD P.O BOX 296EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	DOL		JORGE RAMOS		8970 MIKE GARCIA DR MANASSAS VA 20109	07/16/2021	07/16/2026
DOL	DOL		JOSEPH K. SALERNO		1010 TILDEN AVE UTICA NY 13501	07/24/2023	07/24/2028
DOL	DOL		JOSEPH K. SALERNO II		1010 TILDEN AVE UTICA NY 13501	07/24/2023	07/24/2028
DOL	DOL	****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL	****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	11/15/2022	11/15/2027
DOL	DOL	****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026
DOL	DOL	****5116	JP RACE PAINTING, INC. T/A		3469 STATE RT. 69	03/01/2022	03/01/2027

DOL	DOL	****5116	JP RACE PAINTING, INC. T/A RACE PAINTING	3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL		JRN CONSTRUCTION CO, LLC	1024 BROADWAY ALBANY NY 12204	11/07/2023	11/07/2028
DOL	DOL	****1147	JRN CONSTRUCTION, LLC	531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL	****1147	JRN CONSTRUCTION, LLC	531 THIRD STREET ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL	****1147	JRN CONSTRUCTION, LLC	531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		JRN PAVING, LLC	531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL		JRN PAVING, LLC	531 THIRD STREET ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL		JRN PAVING, LLC	531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		JULIUS AND GITA BEHREND	5 EMES LANE MONSEY NY 10952	11/20/2002	11/20/3002
DOL	DOL		KARIN MANGIN	796 PHELPS ROAD FRANKLIN LAKES NJ 07417	12/01/2020	12/01/202
DOL	DOL		KATE E. CONNOR	7088 INTERSTATE ISLAND RD SYRACUSE NY 13209	03/31/2021	03/31/2026
DOL	DOL		KEAN INDUSTRIES, LLC	2345 RT. 52 SUITE 2NHOPEWELL JUNCTION NY 12533	12/18/2023	12/18/2028
DOL	DOL	****2959	KELC DEVELOPMENT, INC	7088 INTERSTATE ISLAND RD SYRACUSE NY 13209	03/31/2021	03/31/2020
DOL	DOL		KIMBERLY F. BAKER	7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2020
DOL	DOL		KMA GROUP II, INC.	29-10 38TH AVENUE LONG ISLAND CITY NY 11101	10/11/2023	10/11/202
DOL	DOL	****1833	KMA GROUP INC.	29-10 38TH AVENUE LONG ISLAND CITY NY 11101	10/11/2023	10/11/202
DOL	DOL		KMA INSULATION, INC.	29-10 38TH AVENUE LONG ISLAND CITY NY 11101	10/11/2023	10/11/202
DOL	DOL		KRIN HEINEMANN	2345 ROUTE 52, SUITE 2N HOPEWELL JUNCTION NY 12533	12/18/2023	12/18/202
DOL	NYC		KULWANT S. DEOL	9-11 40TH AVENUE LONG ISLAND CITY NY 11101	09/26/2023	09/26/202
DOL	DA	*****8816	LAKE CONSTRUCTION AND DEVELOPMENT CORPORATION	150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/299
DOL	DOL		LEROY E. NELSON JR	531 THIRD ST ALBANY NY 12206	10/25/2022	10/25/202
DOL	DOL		LEROY E. NELSON JR	531 THIRD ST ALBANY NY 12206	12/22/2022	12/22/202
DOL	DOL		LEROY E. NELSON JR	531 THIRD ST ALBANY NY 12206	11/07/2023	11/07/202
DOL	AG	****3291	LINTECH ELECTRIC, INC.	3006 TILDEN AVE BROOKLYN NY 11226	02/16/2022	02/16/202
DOL	DOL		LOUIS A. CALICCHIA	1223 PARK ST. PEEKSKILL NY 10566	05/17/2021	05/17/202
DOL	NYC		LUBOMIR PETER SVOBODA	27 HOUSMAN AVE STATEN ISLAND NY 10303	12/26/2019	12/26/202
DOL	NYC		M & L STEEL & ORNAMENTAL IRON CORP.	27 HOUSMAN AVE STATEN ISLAND NY 10303	12/26/2019	12/26/202
DOL	DOL	****2196	MAINSTREAM SPECIALTIES, INC.	11 OLD TOWN RD SELKIRK NY 12158	02/02/2021	02/02/202
DOL	DA		MANUEL P TOBIO	150 KINGS STREET BROOKLYN NY 14444	08/19/1998	08/19/299
DOL	DA		MANUEL TOBIO	150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/299
DOL	DOL		MAQSOOD AHMAD	618 OCEAN PKWY BROOKLYN NY 11230	09/17/2020	09/17/202
DOL	NYC		MARIA NUBILE	84-22 GRAND AVENUE ELMHURST NY 11373	03/10/2020	03/10/202
DOL	DOL	****4829	MILESTONE ENVIRONMENTAL CORPORATION	704 GINESI DRIVE SUITE 29MORGANVILLE NJ 07751	04/10/2019	04/10/202
DOL	NYC	****9926	MILLENNIUM FIRE PROTECTION, LLC	325 W. 38TH STREET SUITE 204NEW YORK NY 10018	11/14/2019	11/14/202
DOL	NYC	****0627	MILLENNIUM FIRE SERVICES, LLC	14 NEW DROP LNE 2ND FLOORSTATEN ISLAND NY 10306	11/14/2019	11/14/202

DOL	DOL	*****1320	MJC MASON CONTRACTING, INC.		42 FOWLER AVENUE CORTLAND MANOR NY 10567	10/25/2022	10/25/2027
DOL	DOL	*****1320	MJC MASON CONTRACTING, INC.		42 FOWLER AVENUE CORTLAND MANOR NY 10567	01/24/2023	01/24/2028
DOL	NYC		MUHAMMED A. HASHEM		524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	NYC		NAMOW, INC.		84-22 GRAND AVENUE ELMHURST NY 11373	03/10/2020	03/10/2025
DOL	DOL	****7790	NATIONAL BUILDING & RESTORATION CORP		1010 TILDEN AVE UTICA NY 13501	07/24/2023	07/24/2028
DOL	DOL	****1797	NATIONAL CONSTRUCTION SERVICES, INC		1010 TILDEN AVE UTICA NY 13501	07/24/2023	07/24/2028
DOL	NYC		NAVIT SINGH		402 JERICHO TURNPIKE NEW HYDE PARK NY 11040	08/10/2022	08/10/2027
DOL	DOL		NELCO CONTRACTING, LLC		1024 BROADWAY ALBANY NY 12204	11/07/2023	11/07/2028
DOL	DA		NICHOLAS T. ANALITIS		505 MANHATTAN AVE WEST BABYLON NY 11704	10/05/2023	10/05/2028
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	11/15/2022	11/15/2027
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL	****7429	NICOLAE I. BARBIR	BESTUCCO CONSTRUCTI ON, INC.	444 SCHANTZ ROAD ALLENTOWN PA 18104	09/17/2020	09/17/2025
DOL	NYC	****5643	NYC LINE CONTRACTORS, INC.		402 JERICHO TURNPIKE NEW HYDE PARK NY 11040	08/10/2022	08/10/2027
DOL	DOL		PATRICK PENNACCHIO		2345 RT. 52 SUITE 2NHOPEWELL JUNCTION NY 12533	12/18/2023	12/18/2028
DOL	DOL		PATRICK PENNACCHIO		2345 RT. 52 SUITE 2NHOPEWELL JUNCTION NY 12533	12/18/2023	12/18/2028
DOL	DOL		PAULINE CHAHALES		935 S LAKE BLVD MAHOPAC NY 10541	03/02/2021	03/02/2026
DOL	DOL		PETER STEVENS		11 OLD TOWN ROAD SELKIRK NY 12158	02/02/2021	02/02/2026
DOL	DOL		PETER STEVENS		8269 21ST ST BELLEROSE NY 11426	12/22/2022	12/22/2027
DOL	DOL	*****0466	PRECISION BUILT FENCES, INC.		1617 MAIN ST PEEKSKILL NY 10566	03/03/2020	03/03/2025
DOL	NYC		RASHEL CONSTRUCTION CORP		524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	DOL	*****1068	RATH MECHANICAL CONTRACTORS, INC.		24 ELDOR AVENUE NEW CITY NY 10956	02/03/2020	02/03/2025
DOL	DOL	*****2633	RAW POWER ELECTRIC CORP.		3 PARK CIRCLE MIDDLETOWN NY 10940	07/11/2022	07/11/2027
DOL	DA	*****7559	REGAL CONTRACTING INC.		24 WOODBINE AVE NORTHPORT NY 11768	10/01/2020	10/01/2025
DOL	DOL		RICHARD REGGIO		1617 MAIN ST PEEKSKILL NY 10566	03/03/2020	03/03/2025
DOL	DOL		ROBBYE BISSESAR		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	01/11/2003	01/11/3003
DOL	DOL		ROBERT A. VALERINO		3841 LANYARD COURT NEW PORT RICHEY FL 34652	07/09/2019	07/09/2024
DOL	DOL		ROBERT BRUNO		5 MORNINGSIDE DRIVE AUBURN NY 13021	05/28/2019	05/28/2024
DOL	DOL		ROMEO WARREN		161 ROBYN RD MONROE NY 10950	07/11/2022	07/11/2027
DOL	DOL		RONALD MESSEN		14B COMMERCIAL AVE ALBANY NY 12065	11/14/2019	11/14/2024
DOL	DOL	****7172	RZ & AL INC.		198 RIDGE AVENUE VALLEY STREAM NY 11581	06/06/2022	06/06/2027
DOL	DOL		SAL FRESINA MASONRY CONTRACTORS, INC.		1935 TEALL AVENUE SYRACUSE NY 13206	07/16/2021	07/16/2026
DOL	DOL		SAL MASONRY CONTRACTORS, INC.		(SEE COMMENTS) SYRACUSE NY 13202	07/16/2021	07/16/2026
DOL	DOL	****9874	SALFREE ENTERPRISES INC		P.O BOX 14 2821 GARDNER RDPOMPEI NY 13138	07/16/2021	07/16/2026

DOL	DOL		SALVATORE A FRESINA A/K/A SAM FRESINA		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13218	07/16/2021	07/16/2026
DOL	DOL		SAM FRESINA		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13218	07/16/2021	07/16/2026
DOL	NYC	****0349	SAM WATERPROOFING INC		168-42 88TH AVENUE APT.1 AJAMAICA NY 11432	11/20/2019	11/20/2024
DOL	DA	****0476	SAMCO ELECTRIC CORP.		3735 9TH ST LONG ISLAND CITY NY 11101	01/05/2023	01/05/2028
DOL	NYC	****1130	SCANA CONSTRUCTION CORP.		863 WASHINGTON STREET FRANKLIN SQUARE NY 11010	03/10/2020	03/10/2025
DOL	DOL	****2045	SCOTT DUFFIE	DUFFIE'S ELECTRIC, INC.	P.O BOX 111 CORNWALL NY 12518	03/03/2020	03/03/2025
DOL	DOL		SCOTT DUFFIE		P.O BOX 111 CORNWALL NY 12518	03/03/2020	03/03/2025
DOL	DA		SILVANO TRAVALJA		3735 9TH ST LONG ISLAND CITY NY 11101	01/05/2023	01/05/2028
DOL	DOL	****0440	SOLAR GUYS INC.		8970 MIKE GARCIA DR MANASSAS VA 20109	07/16/2021	07/16/2026
DOL	NYC		SOMATIE RAMSUNAHAI		115-46 132ND ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	DOL	****2221	SOUTH BUFFALO ELECTRIC, INC.		1250 BROADWAY ST BUFFALO NY 14212	02/03/2020	02/03/2025
DOL	NYC	****3661	SPANIER BUILDING MAINTENANCE CORP		200 OAK DRIVE SYOSSET NY 11791	03/14/2022	03/14/2027
DOL	DOL		STANADOS KALOGELAS		485 RAFT AVENUE HOLBROOK NY 11741	10/19/2021	10/19/2026
DOL	DOL	****3496	STAR INTERNATIONAL INC		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	08/11/2003	08/11/3003
DOL	DOL	****6844	STEAM PLANT AND CHX SYSTEMS INC.		14B COMMERCIAL AVENUE ALBANY NY 12065	11/14/2019	11/14/2024
DOL	DOL	****9933	STEED GENERAL CONTRACTORS, INC.		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL	****9528	STEEL-IT, LLC.		17613 SANTE FE LINE ROAD WAYNESFIELD OH 45896	07/16/2021	07/16/2026
DOL	DOL		STEFANOS PAPASTEFANOU, JR. A/K/A STEVE PAPASTEFANOU, JR.		256 WEST SADDLE RIVER RD UPPER SADDLE RIVER NJ 07458	05/30/2019	05/30/2024
DOL	DOL	*****3800	SUBURBAN RESTORATION CO. INC.		5-10 BANTA PLACE FAIR LAWN PLACE NJ 07410	03/29/2021	03/29/2026
DOL	DOL	*****9150	SURGE INC.		8269 21ST STREET BELLEROSE NY 11426	12/22/2022	12/22/2027
DOL	DOL		SYED RAZA		198 RIDGE AVENUE NY 11581	06/06/2022	06/06/2027
DOL	DOL		TERRY THOMPSON		11371 RIDGE RD WOLCOTT NY 14590	02/03/2020	02/03/2025
DOL	DOL	****9733	TERSAL CONSTRUCTION SERVICES INC		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13208	07/16/2021	07/16/2026
DOL	DOL		TERSAL CONTRACTORS, INC.		221 GARDNER RD P.O BOX 14POMPEI NY 13138	07/16/2021	07/16/2026
DOL	DOL		TERSAL DEVELOPMENT CORP.		1935 TEALL AVENUE SYRACUSE NY 13206	07/16/2021	07/16/2026
DOL	DOL	****5766	THE COKER CORPORATION	COKER CORPORATIO N	2610 SOUTH SALINA ST SUITE 14SYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL		TIMOTHY PERCY		29807 ANDREWS ROAD BLACK RIVER NY 13612	10/17/2023	10/17/2028
DOL	DA	****1050	TRI STATE CONSTRUCTION OF NY CORP.		50-39 175TH PLACE FRESH MEADOWS NY 11365	03/28/2022	03/28/2027
DOL	DA	****4106	TRIPLE H CONCRETE CORP		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	DOL	****8210	UPSTATE CONCRETE & MASONRY CONTRACTING CO INC		449 WEST MOMBSHA ROAD MONROE NY 10950	06/06/2022	06/06/2027
DOL	DOL	****6418	VALHALLA CONSTRUCTION, LLC.		796 PHLEPS ROAD FRANKLIN LAKES NJ 07417	12/01/2020	12/01/2025
DOL	NYC	****2426	VICKRAM MANGRU	VICK CONSTRUCTI ON	21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025
DOL	NYC		VICKRAM MANGRU		21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025

DOL	DOL		VIKTORIA RATH		24 ELDOR AVENUE NEW CITY NY 10956	02/03/2020	02/03/2025
DOL	NYC	****3673	WALTERS AND WALTERS, INC.		465 EAST AND THIRD ST MT. VERNON NY 10550	09/09/2019	09/09/2024
DOL	DOL	****3296	WESTERN NEW YORK CONTRACTORS, INC.		3841 LAYNARD COURT NEW PORT RICHEY FL 34652	07/09/2019	07/09/2024
DOL	DOL	*****8266	WILLIAM CHRIS MCCLENDON	MCCLENDON ASPHALT PAVING	1646 FALLS STREET NIAGARA FALLS NY 14303	05/01/2023	05/01/2028
DOL	DOL		WILLIAM CHRIS MCCLENDON		1646 FALLS STREET NIAGARA FALLS NY 14303	05/01/2023	05/01/2028
DOL	DOL		WILLIAM G. PROERFRIEDT		85 SPRUCEWOOD ROAD WEST BABYLON NY 11704	01/19/2021	01/19/2026
DOL	DOL	****5924	WILLIAM G. PROPHY, LLC	WGP CONTRACTIN G, INC.	54 PENTAQUIT AVE BAYSHORE NY 11706	01/19/2021	01/19/2026
DOL	DOL		XENOFON EFTHIMIADIS		29-10 38TH AVENUE LONG ISLAND CITY NY 11101	10/11/2023	10/11/2028

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T-000.00	COVER SHEET
G-001.00	GENERAL NOTES, LEGEND, SYMBOLS & DRAWING LIST
DM-100.00	PARTIAL 10 <sup>TH</sup> FLOR RCP DEMOLITION PLAN
A-100.00	PARTIAL 10 <sup>TH</sup> FLOOR RCP PLAN
A-800.00	10 <sup>TH</sup> FLOOR FINISH PLAN & LEGEND

## **PLUMBING**

P-001.00	PLUMBING SYMBOLS, ABBREVIATIONS, NOTES SCHEDULES,
	AND DETAILS
P-101.00	10 <sup>TH</sup> FLOOR PLUMBING PLAN
P-901.00	10 <sup>TH</sup> FLOOR PLUMBING DEMOLITION PLAN

## **END OF TABLE OF CONTENTS**

#### SECTION 01 10 00 - SUMMARY OF WORK

## PART 1 GENERAL

#### 1.01 WORK COVERED BY CONTRACT DOCUMENTS

- A. The work to be done under the Contract, in accordance with the Contract Documents, consists of performing, installing, furnishing and supplying all materials, equipment, labor and incidentals necessary or convenient for the construction of the referenced project at the Fashion Institute of Technology and carrying out all of the duties and obligations imposed upon the Contractor by the Contract Documents.
- B. The main features of the work as indicated in plans shall include, but not be limited to the following:
  - I. Selective removals to be protected and reinstalled / demolition
    - 1. Existing walls and ceilings as indicated on plans (GWB). If mold is detected upon opening walls, FIT will be responsible for full abatement using its on-call abatement contractor.
    - 2. Piping indicated on engineering plans
    - 3. Lighting fixtures and electrical wires to be removed and reinstalled

## II. New Work:

- A. Construction of new ceilings and/or patch and repair
  - 1. New sanitary pipes and associated plumbing connections
  - 2. New ceiling GWB throughout
  - 3. New paint
  - 4. New support hangers on existing sprinkler line as needed

## 1.02 RELATED SECTIONS

All sections within these Specifications

#### 1.03 PHYSICAL COMPLETION DATE

- A. Physically complete the Work within the FIT established calendar after the Agreement is approved by the College.
  - 1. The time allocated for the performance of work under this contract includes 10 days for notification to the Contractor of the College's approval of the Agreement.
  - 2. The approval of the Agreement by the College constitutes the filing of the Contract Documents as a public record and notice to the Contractor that a fully executed contract exists between the Contractor and the College.

#### 1.04 ITEMS NOT INCLUDED

- A. The following items shown on the drawings are not included in this Contract:
  - 1. Items indicated "NIC" (Not in Contract).
  - 2. Existing construction, except where such construction is to be removed, replaced, or altered.

## 1.05 EXAMINATION OF PREMISES

- A. Verification of Existing Conditions after Award
  - Various existing conditions at locations of the Work which cannot be determined until removals are under way cannot be indicated on the Drawings or described in the Specifications.
  - 2. Perform all such removals as required to verify all existing conditions before fabricating the work.
  - 3. Open walls ASAP to determine if mold is present. Notify Architect regarding date of opening walls so that he/she may be present.
  - 4. Where applicable, before disturbing any structural work, make all possible preliminary investigations to verify the existing conditions threat.
  - 5. Where removals or preliminary investigations reveal existing conditions that differ materially from what is indicated or specified, or that may require changes, immediately notify the Architect in writing and await instructions before proceeding further with that part of the Work.

## B. Discrepancies in Existing Conditions

During the process of the Work, should conditions be encountered that materially differ from those shown on the Drawings or indicated in the Specifications, or conditions which could not reasonably have been anticipated, which conditions will materially affect the cost of the Work, such conditions shall immediately be called to the attention of the Architect, before they are further disturbed. The Architect will promptly investigate the conditions and if it is found that they do so materially differ, shall issue a clarification.

## 1.06 CONNECTION TO ELECTRICAL EQUIPMENT OR SYSTEMS

- A. Contractor will not be allowed to tie into electrical equipment or systems until the F.I.T. Facilities Management Department has reviewed and approved the connection.
  - 1. Submit written procedures to the F.I.T. Facilities Management Department, detailing how the connection Work is proposed to be performed.
  - 2. After procedures have been approved, notify the F.I.T. Representative at least 3 working days prior to the connection Work so that arrangements can be made to have a F.I.T. Facilities Management Department Representative witness the Work.

## 1.07 CONTRACTOR USE OF PREMISES

- A. Comply with the Facility's Visitor Identification Policy. A copy of the current policy will be distributed at the initial job meeting.
- B. Work hours shall be as established by the Facilities authorities.
- C. Check in with the Facility Representative, as directed, at the beginning of each work day. Furnish information regarding where employees will be working during the day.
- D. Comply with applicable Federal and State of New York Right-to-Know Law provisions and supply copies of the appropriate Material Safety Data Sheets (MSDS) to the F.I.T. Facility's Right-to-Know Information Officer.
- E. Do not diminish the level of life safety during performance of the Work.

## 1.08 REFERENCE SPECIFICATIONS AND STANDARDS

A. Comply with the requirements of the various specifications and standards referred to in these specifications, except where they conflict with the requirements of these specifications. Such reference specifications and standards shall be the date of latest revision in effect at the time of receiving bids, unless the date is given.

## 1.09 LAYING - OUT

- A. Examine the Contract Documents thoroughly and promptly report any errors or discrepancies to the Architect before commencing the Work.
- B. Lay out the Work in accordance with the Contract Documents.

## 1.10 CLEANING - UP

- A. Clean—up and containerize the rubbish (refuse, debris, waste materials, and removed materials and equipment) resulting from the Work at the end of each work day and leave work areas broom clean. Locate containerized rubbish where directed.
- B. Remove piled rubbish from property at least once a week or more often if the rubbish presents a hazard. Properly dispose of rubbish. Burning of rubbish will not be permitted.

## 1.11 SUSTAINABILITY REQUIREMENTS

A. The Contractor shall meet sustainability performance and documentation requirements to comply with New York City Local Law 86 of 2005, and to achieve

the following objectives: sustainable site use, water use reduction, conservation of energy and resources and improvement of indoor environmental quality.

- B. Sustainability performance requirements include, but are not limited to: water use reduction, energy conservation, construction waste management, and indoor air quality controls during construction and prior to occupancy.
- C. Sustainability documentation requirements include, but are not limited to, Contractor's Certification Form, cost information, documentation on VOC content, urea-formaldehyde content and recycled and regional content.

#### 1.12 NEW YORK CITY CODE OF 2008 IMPLEMENTATION

- A. Chapters 17 and 33 of the New York City Building Code went into effect in 2008 and supersedes the Controlled Inspections requirements contained in the 1968 Building Code, and Chapter 19 of the 1968 Building Code that deals with protection of the public.
  - 1. References to "Controlled Inspections" and applicable code sections and "Controlled Inspector" referenced in the Contract Documents shall mean the equivalent "Special Inspection" and "Special Inspector" in accordance with the 2008 NYC Building Code. It shall be noted that some individual "Controlled Inspection" items have been combined into one "Special Inspection" category.
  - 2. References to public protectives and code sections included in Chapter 19 of the 1968 code referenced in the Contract Documents shall mean those equivalent Sections contained in Chapter 33 of the NYC Building Code. The Contractor shall be responsible for complying with all provisions of Chapter 33 of the NYC Building Code.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 10 00

#### SECTION 01 33 00 - SUBMITTALS

## **PART 1 - GENERAL**

#### 1.1 **DEFINITIONS**

A. Deviation: Changes in products, materials, equipment and methods of construction from those required by the Contract Documents and proposed by the Contractor.

## 1.2 DEVIATIONS FROM REQUIREMENTS OF THE CONTRACT DOCUMENTS

A. Deviations from the requirements of the Contract Documents will not be allowed unless a request for deviation is made in writing prior to or at the time of submission and the specific deviation is approved by the Owner or Architect. The submission of a deviation shall be done in a timely manner according to the schedule of submittals to allow the Architect sufficient time for review.

## 1.3 "OR EQUAL" TO BRAND NAME PRODUCTS

- A. Whenever a product is specified by brand name, a comparable brand, equal to that named, may be submitted for approval subject to:
  - 1. The contractor shall bear the burden of proving that the proposed product is equal to the specified product. The submission of an "or equal" shall be done in a timely manner to allow sufficient time to review the proposed product by the Architect.
  - 2. Whenever a color or pattern is indicated by a specific manufacturer's name or number, the intent is to communicate the required color or pattern of the material. Other manufacturers' comparable colors or patterns may be submitted for approval as equal.

## 1.4 ADMINISTRATIVE REQUIREMENTS

- A. Identify all submittals by project title and number. Include Contractor's name, date, and revision date. On shop drawings, product data and samples, also include the name of the supplier and subcontractor (if any), and applicable specification section number. Stamp each submittal and initial or sign the stamp to certify review, approval or rejection of submittal.
- B. Assemble submittals in accordance with the requirements in the individual sections of the Specifications and as required by this section. It is the Contractor's responsibility to review and verify that all information

required for each submittal is included in the submittal package. Errors or omissions found by the Contractor are to be corrected prior to the submission of the submittal package for approval. Incomplete submittal packages that have been submitted for review and approval will be returned.

- 1. It is the Contractor's responsibility to verify that portions of the submittal package to be provided by a subcontractor (or supplier) are complete, as well as portions of the submittal package being provided directly by the Contractor.
- 2. Do not combine the submittals of more than one specification section with submittals required by other specification sections unless specifically stated in the contract specifications.
- C. If a submittal is based on, or the result of, a change order or field order to the Contract documents, include copies of the applicable change order or field order with the submittal.

#### 1.5 COORDINATION DRAWINGS

A. Provide coordination drawings showing scope of all work. Coordination drawings to indicate any conflicts between services or ceiling heights as indicated on Architectural Drawings or otherwise specified.

#### 1.6 SHOP DRAWINGS

- A. Provide shop drawings in the format required by the specifications. Show the information, dimensions, connections and other details necessary to insure that the shop drawings accurately interpret the Contract Documents. Show adjoining construction in such detail as required indicating proper connections. Where adjoining connected construction requires shop drawings or product data, submit such information for approval at the same time so that connections can be accurately checked.
  - 1. Submit 1 copy of each shop drawing required by the Specifications.
  - 2. If shop drawing is unavailable in electronic format submit four hard copies.
- B. Have shop drawings prepared by a qualified detailer. Shop drawings shall be neatly drawn and clearly legible. Machine duplicated copies of Construction Drawings will not be accepted as shop drawings, nor are the Architect's CAD files available for use.
  - 1. Where shop drawings are indicated to be drawn to scale:
    - a. Use scale normally found on an "Architect" scale.
    - b. Written Scale: Clearly label scales being used on each drawing and/or on each detail on the drawing.
      - 1) Examples: 1/8" = 1'-0"

- c. Graphic Scale: Adjacent to each Written Scale, provide a graphic scale delineating the scale being used. Graphic scale shall be divided into measuring units relating to the accuracy required for the drawing or details.
- d. Clearly dimension key elements of the drawing or detail.
- 2. When the drawing sheet is printed full size, the minimum text size shall be 1/8" (3.2 mm) for hand drafting and 3/32" (2.5 mm) for CAD drawings.
- C. The shop drawings will be reviewed and 1 stamped copy returned electronically. If returned copies are stamped "REJECTED" or "REVISE AND RESUBMIT", promptly resubmit 1 copy of shop drawings meeting Contract requirements.
- D. Contractor is responsible for keeping one record set of all shop drawings on the job site, no matter the stamp.

## 1.7 PRODUCT DATA

- A. Provide product data in the format required by the specifications. Modify product data by deleting information that is not applicable to the project or by marking the product data to identify pertinent products. Supplement standard information, if necessary, to provide additional information applicable to project.
  - 1. Submit 1 copy of product data electronically as required by the Specifications.
- B. The product data will be reviewed and 3 stamped copies returned. If returned copies are stamped "REJECTED" or "REVISE AND RESUBMIT", promptly resubmit 1 copy of product data meeting Contract requirements.
- C. Contractor is responsible for keeping one record set of product data on the job site, no matter the stamp.

## 1.8 QUALITY ASSURANCE

- A. Provide quality assurance information in the format required by the specifications, including supporting documentation as required.
  - 1. Submit 1 copy of quality assurance information as required by the Specifications.
- B. The quality assurance information will be reviewed and a stamped copy returned. If returned copies are stamped "REJECTED" or "REVISE AND RESUBMIT", promptly resubmit 1 copy of quality assurance information meeting Contract requirements.

## 1.9 SAMPLES

- A. Submit 2 (unless a different number is specified) of each sample required by the Specifications.
- B. One sample will become the property of the Owner when submitted and will not be incorporated in the Work unless specifically stated otherwise. One sample will be returned approved or rejected to the contractor.

## 1.10 REVIEW OF SUBMITTALS

- A. Items submitted for review will be reviewed for compliance with the contract documents, based upon the information submitted. The items will be acted upon with the following dispositions:
  - 1. Approved (or No Exception Taken): Where the submittal is marked "Approved", the work covered by the submittal may proceed provided it complies with the contract documents. Final acceptance will depend on that compliance.
  - 2. Approved as Noted (or Furnish as Noted): Where the submittal is marked "Approved as Noted", the work covered by the submittal may proceed provided it complies with the review comments noted on the submittal and the contract documents. Final acceptance will depend on that compliance.
  - 3. Revise and Resubmit: Where the submittal is marked "Revise and Resubmit", do not proceed with the work covered by the submittal, including purchasing, fabrication, delivery or other activity for the item submitted. Revise or prepare a new submittal according to the review comments noted on the submittal and meeting the contract documents.
  - 4. Disapproved (or Rejected): Where the submittal is marked "Disapproved", do not proceed with the work covered by the submittal, including purchasing, fabrication, delivery or other activity for the item submitted. Prepare a new submittal according to the review comments noted on the submittal and meeting the contract documents.

## 1.11 SCHEDULES AND RECORDS

- A. Submit the following Schedules and Records information not later than 7 days after approval of the Contract unless an earlier submission is required to properly schedule or progress the Work.
  - 1. SCHEDULE OF SUBMITTALS: On the Schedule of Submittals forms, indicate in the spaces following each item, the date the item will be submitted, the date approval is required, and the date delivery

of the material or equipment is necessary for timely completion of the Work in accordance with the Project Schedule. The date entered for submittal of each item is the last day a deviation will be considered. Deliver the SCHEDULE OF SUBMITTALS to the Architect and Owner.

B. Warrantees: Unless specified elsewhere contractor shall warrantee all work for (1) one year.

**END OF SECTION 01 33 00** 

## SECTION 01 73 29 - REMOVALS, CUTTING AND PATCHING

## PART 1 GENERAL

## 1.01 REMOVING, CUTTING, AND ALTERING

- A. Do not disturb any existing structure, piping, apparatus, or other construction unless required by the Contract.
- B. Remove existing construction where indicated on the Drawings and also as required to install and connect the Work to adjacent construction in an approved manner. Remove materials and equipment superseded by the Work unless specifically indicated otherwise.
- C. Cut and alter existing materials as required to perform the Work. Limit cutting to the smallest amount necessary. Core drill round holes and sawcut other openings where possible.
- D. Provide temporary shoring necessary to prevent settlement or other damage to existing construction which is to remain.
- E. Perform the cutting, drilling, and removals in a manner which will prevent damage to adjoining construction which is to remain.
- F. Prior to any cutting, drilling, or removals, investigate both sides of the surface involved.
- G. Determine the exact location of all structural members. Do not cut, drill, or remove structural members such as joists, beams, or columns supporting construction that is to remain unless expressly required by the Work. If unforeseen obstructions are encountered, take all precautions necessary to prevent damage and obtain instructions from the Architect before proceeding with the Work.

#### 1.02 PATCHING

- A. Patch existing construction and finishes defaced, damaged, or left incomplete due to alterations and removals. Patching, except as otherwise indicated, shall be limited to the areas which have been cut or altered.
- B. Prepare existing surfaces properly to receive and, where required, bond with the New Work.

- C. Unless otherwise indicated, provide new materials to match the appearance and performance of existing corresponding materials as closely as practicable.
- D. Paint patched areas and surfaces which will remain exposed by removals to match existing adjacent surfaces as closely as practicable using same type and color of paint. Painting, except as otherwise indicated, shall be limited to the areas which have been patched.

**PART 2 PRODUCTS (Not Used)** 

**PART 3 EXECUTION (Not Used)** 

END OF SECTION 01 73 29

#### SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT

## PART 1 GENERAL

#### 1.01 SUMMARY

- A. This Section includes requirements for Construction Waste Management (CWM), with criteria for recycling and/or salvaging demolition and construction waste generated during the project. A Construction Waste Management Plan shall be developed for approval by the Facilities Representative. The Plan shall be implemented throughout the duration of the project, and shall be documented in accordance with the SUBMITTALS Article below.
- B. Each contract shall supply the means for recycling job site waste.

  Locations for removal bins or dumpsters shall be coordinated with

  Facilities Representative. Following contract award, the Contractors may
  elect a single entity to act as the construction waste manager.

## 1.02 PERFORMANCE REQUIREMENTS

- A. The General Contractor shall prepare and submit a Construction Waste Management Plan (CWM) to the Facilities Representative for approval. The CWM Plan shall outline the provisions to be implemented to recycle and salvage demolition and construction waste generated during the project.
- B. Upon approval of the CWM Plan by the Facilites Representative, it shall be implemented throughout the duration of the project, and documented in accordance with the SUBMITTALS Article below.
- C. The Construction Waste Management Plan shall include, but not be limited to, the following components:
  - 1. Listing of Targeted Materials: Develop a list of the waste materials from the Project that will be targeted for reuse, salvage, or recycling. The following materials shall be accounted for (materials that will not be recycled shall be indicated as such):
    - a. Cardboard, paper, packaging.
    - b. Clean dimensional wood, palette wood.
    - c. Beverage containers.
    - d. Metals from banding, stud trim, ductwork, piping, rebar, windows, other trim, steel, iron, galvanized sheet steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze.
    - e. Gypsum board.

- f. Paint.
- g. Glass/Mirrors.
- h. Plastics.
- i. Woods.
- i. Tile
- 2. Landfill Information: Provide the name of the landfill(s) where trash will be disposed of and the applicable landfill tipping fee(s).
- 3. Sorting Method: Provide a description of the proposed means of sorting and transporting the recyclable materials (whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler and removed from the site for off-site sorting).
- 4. Packaging Waste: Provide an estimate of packaging materials generated, and note whether suppliers will eliminate or take back packaging.
- 5. Field Conditions: Include provisions in the Construction Waste Management Plan for addressing conditions in the field that do not adhere to the CWM Plan, including provisions to implement a stop work order, or to rectify non-compliant conditions.
- 6. Recycling facilities: Provide the name of the recycling facilities(s) where materials will be sent for recycling, how it will be recycled, and the applicable fee(s).
- 7. Additional Information: Include any additional information deemed relevant to describe the scope and intent of the CWM Plan to the Facilities Representative.
- 8. Re-Used materials/Equipment: Materials or equipment to be removed from the site or turned over to the College which are classified as recycled materials shall be documented.

  Documentation shall include the materials turned over, weight or quantity of materials/equipment and a letter on company letterhead indicating the intended use of items.
- 9. Subcontractor Requirements: Construction Waste Management and recycling requirements shall be incorporated into all Subcontractor's contracts.

## 1.03 SUBMITTALS

- A. Submittal Requirements:
  - 1. A copy of the Construction Waste Management Plan, as defined in the PERFORMANCE REQUIREMENTS Article above.
  - 2. In conjunction with payment applications, contractors shall submit a monthly Waste Management submission. This submission shall include waste receipts for the payment period and a completed Waste Management Form for the same payment period.

- 3. Calculations and supporting documentation to demonstrate end-of-project recycling rates meeting the requirements of the Construction Waste Management Plan. The process for recording and assembling documentation shall be as follows:
  - a. Record and document the total weight (in tons) of all demolition and construction waste materials sent to the landfill. Monthly Waste Management Reporting Forms (sample included at the end of this Section identified as Exhibit "A") shall be used as the basis for determining the total amount of waste landfilled for the project. The monthly reporting forms shall specify:
    - 1) The number of dumpsters or other containers sent to the landfill for that month.
    - 2) The volume (in cubic yards) of each dumpster or container sent to the landfill for that month.
    - 3) The type of waste contained in each dumpster or container.
    - 4) The weight of the waste in each dumpster or container. If the weight of the waste is not directly measured for each dumpster or container, the following Solid Waste Conversion Factors shall be used to convert the volume of waste to weight:

Solid Weight Conversion Factors					
Mixed Waste	350 lbs/cubic yard				
Wood	300 lbs/cubic yard				
Cardboard	100 lbs/cubic yard				
Gypsum Board	500 lbs/cubic yard				
Rubble	1,400 lbs/cubic yard				
Steel	1,000 lbs/cubic yard				

- 5) Identification of the landfill. In addition, provide the name of the landfill that will be accepting the materials. Receipts or other proof of facility reception of materials is required.
- b. Record and document the total weight (in tons) of all demolition and construction waste materials recycled or salvaged. Monthly Waste Management Reporting Forms shall be used as the basis for determining the total amount of waste recycled or salvaged for the project. The monthly reporting forms shall specify:
  - 1) The number of dumpsters or other containers of recycled or salvaged materials for that month.
  - 2) The volume (in cubic yards) of each dumpster or container of recycled or salvaged materials for that month.

- 3) The type of recycled or salvaged material contained in each dumpster or container.
- 4) The weight of the recycled or salvaged material in each dumpster or container. If the weight of the material is not directly measured for each dumpster or container, the Solid Waste Conversion Factors listed for landfill waste above shall be used, where applicable, to convert the volume of material to weight. For materials not contained in the Solid Waste Conversion Factors above propose a conversion factor for review by the Facilities Representative.
- 5) In addition, provide the name of the receiving facilities/companies that will be purchasing or accepting the recycled or salvaged materials. Receipts or other proof of facility reception of materials is required.
- 6) For materials separated for recycling off-site, establish a method for tracking the weight of the recycled material. The method shall be included in the CWM Plan for the Facilities Representative review and approval.
- c. Calculate the end-of-project recycling rate percentage by dividing the recycled and salvaged waste (in tons) by the total waste generated (recycled, salvaged, and landfilled waste also in tons), and multiplying by 100.
- d. For materials turned over to others for reuse, provide documentation on company letterhead indicating the material(s), the quantity (either by weight or units), the date and the intended reuse of the product.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

#### 3.01 IMPLEMENTATION

A. The General Contractor shall be responsible for the provision of containers and the removal of all waste, non-returned surplus materials, and rubbish from the site in accordance with the Waste Management Plan. The General Contractor shall oversee and document the results of the Plan.

The Sub-Contractors shall be responsible for collecting, sorting, and depositing in designated areas, their waste, non-returned surplus materials, and rubbish, as per the Waste Management Plan.

- B. Instruction. The General Contractor shall provide on-site instruction of appropriate separation, handling and recycling, salvage, reuse and return methods to be used by all parties in appropriate stages of the Project.
- C. Separation Facilities: The General Contractor shall lay out a specific area(s) to facilitate separation of materials for potential recycling, salvage, reuse and return. Each potential material shall be collected and stored to avoid being mixed with other materials. Recycling and waste bin areas are to be kept neat and clean, and clearly marked.

#### 3.02 MEETINGS

- A. Conduct Construction Waste Management meetings. Meetings shall include Subcontractors affected by the CWM Plan. At a minimum, waste management goals and issues shall be discussed at the following meetings:
  - 1. Pre-bid meeting.
  - 2. Pre-construction meeting.
  - 3. Regular job-site meetings.

## 3.03 MONTHLY WASTE MANAGEMENT REPORTING FORMS

A. Monthly Waste Management Reporting Forms, as required in the SUBMITTALS Article above, shall be submitted to the Facilities Representative and Architect for review throughout the duration of the project.

END OF SECTION 01 74 19

CONTRAC	ne) (Exhibit "A") FOR C&D WASTE MANAGEMENT FORM enerated On-Site
Company:	
Contact:	
Phone:	

Material Description (Include packaging waste if applicable)	Total Weight	% Reused on- site	% Recycled off-site	% Sent to landfill	Material Recipient

**Recycled Material**: Material that would otherwise be destined for landfill but is diverted from the waste stream, reintroduced as material feedstock and reprocessed into new end products.

Reused Material: Materials that can be reused in their original form without any reprocessing.

## **SECTION 02 41 13 - SELECTIVE DEMOLITION**

## **PART 1 - GENERAL**

## 1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01 73 29 Removals, Cutting and Patching
- B. Section 01 74 19 Construction Waste Management

#### 1.02 SUMMARY

- A. Work Included: Perform selective demolition in accordance with the Contract Documents. The Work of this Section shall include but not be limited to the following:
  - 1. Removal of interior partitions and finishes indicated.
  - 2. Removal of ceilings as indicated.
  - 3. Removal of interior finishes and other items, to accommodate new construction.
  - 4. Removal and reinstallation of Plumbing and Electrical devices as indicated.
  - 5. Removal and reinstallation of lighting fixtures as indicated.
  - 6. Removal and protection of existing items to remain. If any items which are to be reinstalled are damaged it is incumbent upon the Contractor to replace at no expense to the Owner.
  - 7. The maintenance of the College's operations during selective demolition operations.
  - 8. Protection of the cables and utilities serving other buildings at the College Campus during the demolition and construction activities. The above services shall be maintained in operation without any interruption at all times unless otherwise scheduled and authorized by the Campus.

## 1.03 **DEFINITIONS**

- A. Remove: Remove and legally dispose of items except those indicated to be reinstalled, salvaged, or to remain the College's property.
- B. Remove and Reinstall: Remove items indicated; clean, service, and otherwise prepare them for reuse; store and protect against damage. Reinstall items in the same locations or in locations indicated.
- C. Existing to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by the Architect, items may be removed to a suitable, protected storage location during

selective demolition and then cleaned and reinstalled in their original locations.

#### 1.04 SUBMITTALS

- A. Proposed schedule of operations including coordination for shutoff, capping, and continuation of utility services as required.
  - 1. Provide a detailed sequence of selective demolition and removal work to ensure uninterrupted progress of the College's on-site operations.
  - 2. Coordinate with the College's potential continuing occupation of portions of existing building.
  - 3. Include proposed methods for dust and noise control measures.
  - 4. Contractor to submit intermediate life safety plan demonstrating how required government regulations will be maintained for occupied portions of the building.

## 1.05 QUALITY ASSURANCE

- A. Demolition Firm Qualifications: Engage an experienced firm that has successfully completed selective demolition Work similar to that indicated for this Project.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before starting selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction. Fluorescent tubes shall be considered hazardous waste and shall be disposed of according to the regulations of the New York State EPA.
  - 1. All demolition work shall comply with requirements of the College's operational requirements and authorities having jurisdiction.
    - a. Coordinate with the College's Facilities Department.
- C. Contractor shall verify all conditions at site prior to the start of Work.
- D. Notify appropriate agencies of any hazardous materials unearthed at the site. Do not proceed with removal of said substances until so instructed.

## 1.06 JOB CONDITIONS

A. Condition of Structures: The College assumes no responsibility for actual condition of structures to be demolished.

- 1. Conditions existing at time of inspection for bidding purpose will be maintained by the College insofar as practicable.
- B. Explosives: Use of explosives will not be permitted. Explosives will not be permitted for any Work of the project.
- C. Traffic: Conduct selective demolition operations and removal of debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.
  - 1. Do not close or obstruct streets, walks, or other occupied or used facilities without permission from the College and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing authorities or regulations.
- D. Protections: Ensure safe passage of persons around area of demolition. Conduct operations to prevent damage to adjacent, buildings, structures, and other facilities and injury to persons.
  - 1. Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of structures to be demolished and adjacent facilities to remain.
- E. Damages: Promptly repair damages caused to adjacent areas and facilities by demolition operations.
- F. Flame Cutting: Do not use cutting torches for removal of material to be salvaged. Do not use cutting torches for demolition or removal until work area is cleared of flammable materials. Maintain portable fire suppression devices during flame-cutting operations.
- G. Utility Services: Maintain existing utilities indicated to stay in service and protect against damage during demolition operations.
  - 1. Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to governing authorities and/or the College.
- H. Utility Services: Do not start demolition work until utility disconnections have been completed and verified in writing.
- I. Environmental Controls: Use temporary enclosures, and other methods to limit dust and dirt migration. Comply with governing regulations pertaining to environmental protection.

1. Do not use water when it may create hazardous or objectionable conditions such as damage to finishes, flooding, and pollution.

## 1.07 SCHEDULING

A. Arrange selective demolition schedule so as not to interfere with the College's on-site operations.

#### **PART 2 - PRODUCTS**

#### 2.01 REPAIR MATERIALS

- A. Use repair materials identical to existing materials.
  - 1. Where identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible, and provide samples for architect's approval.
  - 2. Use materials whose installed performance equal or surpasses that of existing materials.

#### **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

- A. General: Prior to commencement of selective demolition operations, verify that existing utilities have been located, identified, disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with the intended function or design are encountered, investigate and measure the nature and extent of the conflict. Promptly submit a written report to the Architect.
- E. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

## 3.2 UTILITY SERVICES

A. Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

- 1. Do not interrupt existing utilities serving occupied or operating facilities, except when authorized in writing by the Architect and authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to the Architect and to governing authorities.
  - a. Provide not less than 72 hours notice to the College if shutdown of service is required during changeover.
- B. Utility Requirements: Do not start selective demolition work until utility disconnecting and sealing have been completed and verified in writing.

#### 3.03 PREPARATION

- A. General: Provide shoring, bracing, or support to prevent movement, settlement, or collapse of areas to be demolished and adjacent facilities to remain.
  - 1. Cover and protect equipment and fixtures from soilage or damage when selective demolition work is performed in areas where such items have not been removed.
  - 2. Erect and maintain dust-proof partitions and closures as required, to prevent spread of dust or fumes, to occupied portions of the building.
    - a. Where selective demolition occurs immediately adjacent to designated portions of the building, construct dust-proof partitions of minimum 3 5/8-inch studs at 16 inches on center, 5/8-inch drywall (joints taped) on occupied side, ½-inch fire-retardant plywood on demolition side. Fill partition cavity with sound-deadening insulation. Create dust-tight joints at edges and penetrations of dust-proof partitions.
  - 3. Locate, identify, stub off, and disconnect utility services that are not indicated to remain.
    - a. Provide bypass connections as necessary to maintain continuity of service to designated areas of building. Provide minimum of 72 hours advance notice to the College if shutdown of service is necessary during changeover.
- B. Pollution Controls: Use water sprinkling, temporary enclosures, and other suitable methods to limit dust and dirt rising and scattering in air. Comply with governing regulations pertaining to environmental protection.

- 1. Do not use water when it may create hazardous or objectionable conditions such as ice, flooding, and pollution.
- C. Clean adjacent structures and improvements of dust, dirt, and debris caused by demolition operations. Return adjacent areas to condition existing prior to start of work.
- D. Demolition, General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete Work within limitations of governing regulations and as follows:
  - 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition work above each floor or tier before disturbing supporting members on lower levels.
  - 2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. To minimize disturbance of adjacent surfaces, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
  - 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  - 4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
  - 5. Maintain adequate ventilation when using cutting torches.
  - 6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
  - 7. Dispose of demolished items and materials promptly. On-site storage or sale of removed items is prohibited.
  - 8. Return elements of construction and surfaces to remain to condition existing before start of selective demolition operations.
- E. If unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict. Submit report to the Architect in written, accurate detail. Pending receipt of directive from the Architect, rearrange selective demolition schedule as necessary to continue overall job progress without undue delay.

## 3.04 DISPOSAL OF DEMOLISHED MATERIALS

A. General: As a minimum, remove weekly from site accumulated debris, rubbish, and other materials resulting from demolition operations. However,

more frequent off site removal of accumulated debris is required as soon as the dumpster is full.

- 1. If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling, and protection against exposure or environmental pollution and notify the Architect immediately.
- 2. Burning of demolished materials will not be permitted on site.
- B. Removal: Transport materials removed from demolished structures and legally dispose off site.

#### 3.05 CLEAN-UP AND REPAIR

- A. General: Upon completion of demolition work, remove tools, equipment, and demolished materials from site.
  - 1. Repair demolition performed in excess of that required. Return elements of construction and surfaces to remain to condition existing prior to start of operations. Repair adjacent construction or surfaces soiled or damaged by demolition work.
  - 2. Clean adjacent areas, of all dust, dirt, and debris caused by selective demolition, cutting, and patching operations. Daily and final clean up shall be satisfactory to the Architect.
  - 3. Clean existing heating and cooling devices to remain.

**END OF SECTION 02 41 13** 

#### SECTION 05 50 00 - METAL FABRICATIONS

#### **PART 1 - GENERAL**

#### 1.1 WORK OF THIS SECTION INCLUDES:

All structural steel framing and framing to support various architectural components.

## 1.2 REFERENCES

- A. Except as shown or specified otherwise, the Work of this Section shall meet the requirements of the following:
  - 1. Design and Fabrication of Cold-Formed Shapes: "Specification for the Design of Cold-Formed Steel Structural Members", by the American Iron and Steel Institute (AISI Specification).
  - 2. Welding: "Structural Welding Code Steel, AWS D1.1", or "Structural Welding Code Sheet Steel, AWS D1.3", by the American Welding Society (AWS Codes).

# B. Organizations:

- 1. AISI: American Iron and Steel Institute, 1140 Connecticut Ave., NW, Suite 705, Washington, D.C. 20036, (202) 452-7100, www.steel.org.
- 2. AWS: American Welding Society, 550 N.W. LeJeune Rd., Miami, FL 33126, (800) 443-9353, www.aws.org.
- 3. ANSI: American National Standards Institute, 1819 L Street, NW, 6th Floor, Washington, DC 20036, (202) 293-8020, www.ansi.org.
- 4. ASME: ASME International, 3 Park Ave., New York, NY 10016-5990, (800) 843-2763, www.asme.org.
- 5. ASTM: ASTM International, 100 Barr Harbor Dr., PO Box C700, West Conshohocken, PA, 19428-2959, (610) 832-9500, www.astm.org.
- 6. MPI: The Master Painters Institute Inc., 2808 Ingleton Ave., Burnaby, BC, V5C 6G7, (888) 674-8937, www.specifypaint.com.
- 7. SSPC: The Society for Protective Coatings, 40 24th Street, 6th Floor, Pittsburgh PA 15222-4656, (877) 281-7772, www.sspc.org.

#### 1.3 SUBMITTALS

A. Shop Drawings: Show application to project. Furnish setting drawings and templates for installation of bolts and anchors in other Work. Indicate shop and field welds by standard AWS welding symbols in accordance with AWS A2.4.

B. Product Data: Catalog sheets, specifications, and installation instructions for each fabricated item specified, except submit data for fasteners only when directed.

#### 1.4 DELIVERY AND STORAGE

- A. Coordinate delivery of items to be built into other construction to avoid delay.
- B. Promptly cover and protect steel items delivered to the Site.

#### **PART 2 - PRODUCTS**

#### 2.1 MATERIALS

- A. Steel Shapes, Plates, and Bars: ASTM A 36.
- B. Steel Plates to be Cold-Formed: ASTM A 283, Grade C.
- C. Steel Bars and Bar-Size Shapes: ASTM A 675, Grade 70; or ASTM A 36.
- D. Cold-Finished Steel Bars: ASTM A 108, grade as selected by fabricator.
- E. Steel Tubing: Hot-formed, welded or seamless, structural tubing; ASTM A 501.
- F. Cold-Drawn Steel Tubing: ASTM A 512, buttwelded, cold-finished carbon steel tubing, sink drawn and stress relieved.
- G. Steel Pipe: ASTM A 53, type as selected, Grade A; black finish unless galvanizing is required; standard weight (Schedule 40), unless otherwise shown or specified.
- H. Anchors: Except where shown or specified, select anchors of type, size, style, grade, and class required for secure installation of metal fabrications. For exterior use and where built into exterior walls, anchors shall be galvanized or of corrosive-resistant materials.
  - 1. Expansion Anchors: Anchor bolt and sleeve assembly of material indicated below with capability to sustain, without failure, a load equal to six times the load imposed when installed in unit masonry and equal to four times the load imposed when installed in concrete, as determined by testing per ASTM E 488, conducted by a qualified independent test agency.
    - a. Carbon Steel: Zinc-Plated; ASTM B 633, Class Fe/Zn 5.

- b. Stainless Steel: Bolts, Alloy Group 1 or 2; ASTM F593, Nuts; ASTM F 594.
- I. Fasteners: Except where shown or specified, select fasteners of type, size, style, grade, and class required for secure installation of metal fabrications. For exterior use and where built into exterior walls, fasteners shall be galvanized.
  - 1. Standard Bolts and Nuts: ASTM A 307, Grade A, regular hexagon head
  - 2. Stainless Steel Fasteners: ASTM A 666; Type 302/304 for interior Work; Type 316 for exterior Work; Phillips flathead (countersunk) screws and bolts for exposed Work unless otherwise specified.
  - 3. Eyebolts: ASTM A 489.
  - 4. Machine Bolts: ASME B18.5 or ASME B18.9, Type, Class, and Form as required.
  - 5. Machine Screws: ASME B18.6.3.
  - 6. Lag Screws: ASME B18.2.1.
  - 7. Wood Screws: Flat head, ASME B18.6.1.
  - 8. Plain Washers: Round, ASME B18.22.1.
  - 9. Lock Washers: Helical, spring type, ASME B18.21.1.
  - 10. Toggle Bolts: Spring Wing Type; Wing AISI 1010, Trunion Nut AISI1010 or Zamac Alloy, Bolt Carbon Steel ANSI B18.6.3.

## 2.2 MISCELLANEOUS FRAMING AND SUPPORTS

A. Fabricate metal framing and supports to support related items required by the Work. Fabricate of welded construction unless otherwise indicated. Preassemble to largest extent possible, off site.

#### 2.3 MISCELLANEOUS STEEL TRIM

A. Fabricate trim of shapes, sizes, and profiles shown, with continuously welded joints and ground smooth exposed edges, unless otherwise indicated or approved. Use concealed field splices wherever possible. Furnish necessary cutouts, fittings, and anchorages.

#### 2.4 FABRICATION

A. Use materials of size and thickness indicated. If not indicated, use material of required size and thickness to produce adequate strength and durability for the intended use of the finished product. Furnish suitable, compatible anchors and fasteners to support assembly.

- B. Fabricate items to be exposed to view of material entirely free of surface blemish, including pitting, seam marks, roller marks, rolled trade names, and roughness. Remove surface blemishes by grinding or by welding and grinding prior to cleaning, treating, and finishing. Ease exposed edges to a radius of approximately 1/32 inch unless otherwise shown.
- C. Joints: Fabricate accurately for close fit. Weld exposed joints continuously unless otherwise indicated or approved. Dress exposed welds flush and smooth.
- D. Connections: Form exposed connections with flush, smooth, hairline joints. Use concealed fasteners wherever possible. Use Phillips flathead (countersunk) bolts or screws for exposed fasteners, unless otherwise shown or specified.
  - 1. Furnish flat washer under connections requiring raised bolt heads.
  - 2. Furnish lock washer under nuts when through-bolting occurs.
- E. Punch, reinforce, drill, and tap metal Work as required to receive hardware and other appurtenant items.

## F. Galvanizing:

- 1. Unless otherwise specified or noted, items indicated to be galvanized shall receive a zinc coating by the hot-dip process, after fabrication, complying with the following:
  - a. ASTM A 153 for iron and steel hardware.

## G. Shop Painting:

- 1. Cleaning Steel: Thoroughly clean all steel surfaces. Remove oil, grease, and similar contaminants in accordance with SSPC SP-1 "Solvent Cleaning". Remove loose mill scale, loose rust, weld slag and spatter, and other detrimental material in accordance with SSPC SP-2 "Hand Tool Cleaning", SSPC SP-3 "Power Tool Cleaning", or SSPC SP-7 "Brush-Off Blast Cleaning".
- 2. Apply one coat of shop paint to all steel surfaces except as follows:
  - a. Do not shop paint steel surfaces to be field welded.
  - b. Apply 2 coats of shop paint, before assembly, to steel surfaces inaccessible after assembly or erection. Paint color to be determined by Architects.
- 3. Apply paint and compound on dry surfaces in accordance with the manufacturer's printed instructions, and to the following minimum thickness per coat:
  - a. Shop Paint (General): 4.0 mils wet film.
  - b. Cold Galvanizing Compound: 2.0 mils dry film.

## **PART 3 - EXECUTION**

## 3.1 INSTALLATION

A. Fit and set fabricated metal Work accurately in location, alignment, and elevation. Securely fasten in place. Cut off exposed threaded portion of bolts flush with nut.

END OF SECTION 05 50 00

#### 06 10 00 - ROUGH CARPENTRY

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions shall apply to the Work of this section.

#### 1.2 DESCRIPTION OF WORK

- A. Provide rough carpentry Work as indicated on the Drawings, as required for the completed Work of this Contract, and as specified herein, including, but not limited to, the following:
  - 1. Wood Grounds, nailing strips, blocking, furring, nailers, and framing.
  - 2. Rough hardware, including nails, screws, anchors, brackets, braces, bolts, nuts, fittings, and other devices required for the proper fitting, connecting, and erecting of the Work.
  - 3. Fire-retardant treatment for wood.
  - 4. Miscellaneous Lumber and plywood.

#### 1.3 REFERENCES

- A. U.S. Department of Commerce.
- B. American Plywood Association (APA).
- C. Western Wood Product Association (WWPA).
- D. Southern Pine Inspection Bureau (SPIB).
- E. Redwood Inspection Service (RIS).
- F. American Wood Preservers' Association (AWPA).
- G. American Society for Testing and Materials (ASTM).
- H. Underwriters Laboratories, Inc. (UL).
- I. Federal Specifications (FS).
- J. American Lumber Standards Committee (ALSC).
- K. West Coast Lumber Inspection Bureau (WCLIB).
- L. American Wood Preservers Bureau (AWPB).
- M. National Fire Protection Association (NFPA).

## 1.4 SUBMITTALS

- A. Quality Control Submittals
  - 1. Certificates: Certification for the following wood treatments:

# FASHION INSTITUTE OF TECHNOLOGY STUDENT HOUSING CORPORATION COED RESIDENCE HALL

# HORIZONTAL SANITARY LINES REPLACEMENT 10<sup>TH</sup> FLOOR

- a. Dip Treatment: Certification by treating plant stating chemical solutions used, submersion period, and conformance with applicable standards.
- b. Pressure Treatment: Certification by treating plant stating chemicals and process used, net amount of chemical preservative retained, and conformance with specified standards.
- c. Waterborne Preservatives: Certified written statement that moisture content of treated materials was reduced to a maximum of 19 percent prior to shipment to Project site.
- d. Fire-Retardant Treatment: Certification by treating plant stating treated material complies with specified standards and treatment will not bleed through specified finishes.

# 1.5 QUALITY ASSURANCE

#### A. Mill and Producers Mark

Each piece of lumber and plywood shall be gradestamped indicating type, grade, mill, and grading agency certified by the Board of Review of the American Lumber Standards Committee. Mark shall appear on unfinished surface, or ends of pieces with finished surfaces.

1. Fire-Retardant Treated Material: Accredited testing agency mark on each piece of wood indicating compliance with the fire hazard classification.

#### B. Standards

Comply with the following unless otherwise specified or indicated on the Drawings:

- 1. Lumber: American Softwood Lumber Standard PS 20 by the U.S. Department of Commerce. Comply with applicable provisions by each indicated use.
- 2. Plywood: Product Standard PS 1 for Softwood Plywood, Construction and Industrial by the U.S. Department of Commerce.
- 3. Plywood Installation: APA Design/Construction Guide, by the American Plywood Association (APA), except as indicated otherwise.
- 4. Grading Rules:
  - a. Douglas Fir, Hem-Fir, Idaho White Pine, and other Western Woods: Western Wood Products Association (WWPA) or West Coast Lumber Inspection Bureau (WCLIB).
  - b. Southern Pine: Southern Pine Inspection Bureau (SPIB).
  - c. Redwood: Redwood Inspection Service (RIS).
- 5. Fire-Retardant Treatment: American Wood Preservers' Association (AWPA) Standards.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Keep materials dry during delivery. Store materials 6" minimum above ground surface. Protect against exposure to weather and contact with damp or wet surfaces. Stack lumber and plywood, and provide air circulation between stacks.
- B. Cover stored materials until ready for use for protection from moisture. Place and anchor covering in a manner which will assure good ventilation under the covering.

#### 1.7 PROJECT CONDITIONS

A. Correlate location of supporting members to allow proper attachment of other Work.

#### **PART 2 - PRODUCT**

#### 2.1 LUMBER

A. General:

Furnish seasoned dimensional lumber dressed to nominal sizes indicated with 19 percent maximum moisture content at time of dressing, marked "S-DRY". Comply with dry size requirements of PS 20.

- 1. Dress: Surfaced 4 sides (S4S) unless otherwise indicated.
- B. Miscellaneous Lumber:

Standard grade, No. 3 grade, or better grade of the following species unless otherwise indicated:

- 1. Nailers and Blocking: Douglas Fir, Hem-Fir, Idaho White Pine or Southern Pine.
- 2. Furring: Douglas Fir or Southern Pine.

#### 2.2 MISCELLANEOUS MATERIALS

A. Adhesive:

APA Specification AFG-01.

#### 2.3 FIRE-RETARDANT TREATMENT

- A. All lumber is to be fire-retardant treated, provide "FR-S" lumber, complying with AWPA Standards for pressure impregnation with fire-retardant chemicals to achieve a flamespread rating of 25 or less, when tested in accordance with UL Test 723, ASTM E84 or NFPA Test 255.
  - 1. Provide UL label or identifying mark on each piece of fire-retardant lumber.

- 2. Redry treated items to a maximum moisture content of 19 percent after treatment.
- B. Fire-retardant Treated Plywood: Comply with APA requirements.

#### **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

A. Verification of Conditions:

Examine substrate and supporting structure on which rough carpentry is to be installed for defects that will adversely affect the execution and quality of the Work. Do not proceed with installation until unsatisfactory conditions are corrected.

#### 3.2 INSTALLATION - GENERAL

- A. Do not use units of material with defects which impair the quality of the Work and units, which are too small to fabricate the Work with minimum joints or with optimum joint arrangement.
- B. Install Work accurately to required lines and levels with members plumb and true, accurately cut and fitted and securely fastened. Closely fit rough carpentry to other associated construction.
- C. Securely attach carpentry Work to substrates by anchoring and fastening as indicated, or, if not indicated, as required by the referenced standards. Select fasteners of size that will not penetrate through members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood; predrill as required. Set nail heads in exposed Work which is to be painted or stained and fill resulting holes.
- D. Fire-retardant Wood

Do not rip or mill; only end cuts, drilling holes and joining cuts shall be permitted.

## 3.3 WOOD NAILERS, BLOCKING, AND GROUNDS

- A. Install required items where indicated and where required for support, attachment or screeding of other Work. Form to shapes indicated or required. Coordinate locations and cut and shim as required to provide items at true and level planes to receive Work to be attached. Install closure strips to nailers at all edges.
  - 1. Attach to substrates as indicated; if not indicated, size and space fasteners as required to support applied loading. Maximum spacing of fasteners shall not exceed 16".

## 3.4 PLYWOOD APPLICATIONS

A. Comply with printed installation requirements of the APA Design Construction Guide for plywood application unless otherwise noted.

## 3.5 ROUGH HARDWARE

A. Furnish all rough hardware, such as nails, bolts, clips, and all other rough hardware required to secure the carpentry work in place, unless otherwise specified.

END OF SECTION 06 10 00

#### SECTION 06 10 53 - WOOD NAILERS AND BLOCKING

#### PART 1 GENERAL

#### 1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Section 09 22 13 - Non-Loading Bearing Framing and Furring

## 1.02 QUALITY ASSURANCE

- A. Mill and Producer's Stamp: Each piece of lumber shall bear a stamp indicating type, grade, mill, and grading agency.
  - 1. Pressure treated wood shall bear a stamp or tag indicating the name of the treating company, year treated, preservative used, the level of treatment, intended use (appropriate AWPA Standard), and logo of inspecting company.

#### 1.03 STORAGE

A. Store lumber a minimum of 6 inches off the ground, in a dry, well-ventilated place, protected from the weather.

#### PART 2 PRODUCTS

#### 2.01 MATERIALS

- A. Lumber: "Standard" Grade Douglas Fir, Hem-Fir, White Pine, Southern Pine, or Spruce-Pine-Fir pressure preservative treated in accordance with the American Wood Preservers Association (AWPA) Standard U1, Commodity Specification A for the requirements listed under Use Category UC2 and kiln dried to 19 percent moisture content after treatment.
  - 1. Use Category UCFA and UCFB: Wood nailers and blocking intended for fire protection and is used in either interior weather protected (UCFA) or exterior construction, exposed to weather (UCFB).
- B. Nails, Screws, and Bolts: ASTM A653 Class G185 hot dipped galvanized, zinc or cadmium plated, or silicon bronze.
  - 1. Screws and Bolts for fastening to Aluminum: Stainless steel, Type 304 or 316.

#### WOOD NAILERS AND BLOCKING 06 10 53 - 1

- C. Expansion Anchors: G185 Hot dipped galvanized steel wedge anchors, FS FF-S-325, Group II, Type 4, Class 1.
- D. Toggle Bolts: Cadmium or zinc plated tumble wing type; FS FF-B-588.
- E. Self Threading Masonry Screws: Zinc Plated; "Tapcon" by Elco Industries, Inc., 1111 Samuelson Rd., PO Box 7009, Rockford, IL 61125-7009, (815) 397-5151.
- F. Separation Membrane For Aluminum Metals: Self adhering, self sealing, rubberized asphalt sheet membrane.
  - 1. Physical Properties:
    - a. Thickness: 40 mils minimum ASTM D 3767 Method A.
    - b. Tensil strength: 250 psi ASTM D 412.
    - c. Elongation (ultimate failure of the rubberized asphalt) 250% ASTM D 412 Die C Modified).
    - d. Permeance: 0.05 Perms max.) ASTM E 96.
  - 2. "Ice And Water Shield" by W.R. Grace Co., 62 Whittemore Ave., Cambridge, MA 02140, (800) 354-5414; "Deck Guard" by Polyguard Products Inc., P.O. Box 755, Ennis, TX 75120, (800) 541-4994; "MetalSeal" by NEI Advanced Composite Technology, 50 Pine Road, Brentwood, NH, (800) 998-4634.

#### PART 3 EXECUTION

#### 3.01 INSTALLATION

- A. Install nailers and blocking true to line and plane within a tolerance of 1/8 inch in 10 feet.
- B. Fit joints neatly with no more than 1/16 inch space between abutting members.
- C. Do not install nailers or blocking across bonding expansion joints.
- D. Attach nailers and blocking securely as required to properly support the items that will be attached to them.
- E. Space fasteners equally at not more than 16 inches on center and 4 inches from each end of each member, unless noted otherwise. Secure the nailers and blocking with the following types of fasteners:
  - 1. To Cast-In-Place Concrete, Solid Concrete Masonry Units, and Brick: Use expansion anchors or self-threading masonry screws.
  - 2. To Faces of Hollow Concrete Masonry Units: Use toggle bolts.
  - 3. To Tops of Hollow Concrete Masonry Units: Use anchor bolts extending to course below, embedded in 3000 psi concrete filled cores.

- 4. To Wood: Use nails or screws.
- 5. To Metal: Use bolts or self-tapping screws.
- F. Countersink fasteners if they interfere with the proper installation of items to be attached to the nailers and blocking.

**END OF SECTION 06 10 53** 

#### SECTION 07 84 00 - FIRESTOPPING

#### PART 1 GENERAL

#### 1.01 REFERENCES

- A. UL 263 Fire Tests of Building Construction and Materials.
- B. UL 1479 Fire Tests of Through-Penetration Firestops.
- C. UL 2079 Standard for Safety Tests for Fire Resistance of Building Joint Systems.
- D. ASTM E 119 Methods of Fire Tests of Building Construction and Materials.
- E. ASTM E 814 Method of Fire Tests of Through-Penetration Fire Stops.

#### 1.02 **DEFINITIONS**

- A. UL Fire Resistance Directory: Product directory published yearly, with supplements, by Underwriters Laboratories Inc., containing listings and classifications in effect as of the published date for product categories covered by UL.
- B. Inchcape Directory of Listed Products: Product directory published yearly by Inchcape Testing Services containing listings which reflect certifications granted for materials, products, systems and equipment which have been tested by Inchcape Testing Services to recognized governing standards.
- C. Omega Point Laboratories Listings Directory: Product Directory published yearly by Omega Point Laboratories, Inc. containing listed building products, materials, and assemblies which have been tested by Omega Point Laboratories to recognized governing standards.
- D. Factory Mutual Approval Guide: Product directory published yearly, with supplements, by Factory Mutual Research Corp., containing listed building products, materials, and assemblies which have been tested by Factory Mutual Research Corp., to recognized governing standards.
- E. F Rating: Prohibits flame passage through the system and requires acceptable hose stream test performance.

- F. T Rating: Prohibits flame passage through the system and requires the maximum temperature rise on the unexposed surface of the wall or floor assembly, on the penetrating item and on the fill material not to exceed 325 degrees F above ambient, and requires acceptable hose stream test performance.
- G. Company Field Advisor: An employee of the Company which lists and markets the primary components of the system under their name who is certified in writing by the Company to be technically qualified in design, installation, and servicing of the required products or an employee of an organization certified by the foregoing Company to be technically qualified in design, installation and servicing of the required products. Personnel involved solely in sales do not qualify.

## 1.03 DESIGN REQUIREMENTS

- A. Devices and materials shall meet the hourly fire resistance ratings required by the Project as determined by UL 263, UL 1479, UL 2079, ASTM E 119 or ASTM E 814 and be listed and detailed in the UL Fire Resistance Directory, Inchcape Directory of Listed Products, Factory Mutual Approval Guide, or the Omega Point Laboratories Listings Directory.
  - 1. Exception: Where no listed designs exist that meet the requirements of a specific project condition, submit details and manufacturer's written recommendations for a design meeting the requirements. Include evidence of engineering judgment and extrapolation from listed designs.

## 1.04 SUBMITTALS

- A. Submittals Package: Submit the following items specified below the same time as a package:
  - 1. Product Data.
  - 2. Samples.
  - 3. Quality Control Submittals.
  - 4. Firestop Schedule.
- B. Product Data: Catalog sheets, specifications and installation instructions for each firestop device and material.
  - 1. Indicate design number for each firestop proposed to be used which is detailed in the UL Fire Resistance Directory, Inchcape Directory of Listed Products, Factory Mutual Approval Guide, or the Omega Point Laboratories Listings Directory.
  - 2. State the specific locations where each firestop system is proposed to be installed.

- C. Samples: One of each product if requested.
- D. Quality Control Submittals:
  - 1. Design Data: Show details and include engineering information and manufacturer's written recommendations required under Design Requirements Article for each proposed firestop if other than a design detailed in the UL Fire Resistance Directory, Inchcape Directory of Listed Products, Factory Mutual Approval Guide, or the Omega Point Laboratories Listings Directory.
    - a. State the specific locations where each firestop is proposed to be installed.
  - 2. Installer's Qualifications Data:
    - a. Name of each person who will be performing the Work and their employer's name, business address and telephone number.
    - b. Names and addresses of 3 similar projects that each person has worked on during the past 5 years.
  - 3. Company Field Advisor Data:
    - a. Name, business address and telephone number of Company Field Advisor secured for the required services.
    - b. Certified statement from the Company listing the qualifications of the Company Field Advisor, and listing of services and each product specifically listed for this Project for which Company Field Advisor is given authorization by the Company to render advice.
- E. Firestop Schedule: Submit schedule itemizing the following:
  - 1. Manufacturer's product reference numbers and/or drawing numbers.
  - 2. UL, Inchcape Testing Services, Factory Mutual Research Corp., or Omega Point Lab design number.
  - 3. Location of firestop material.
  - 4. Penetrating Item Description/Limits: Material, size, insulated or uninsulated, and combustibility.
  - 5. Maximum allowable annular space or maximum size opening.
  - 6. Wall type construction.
  - 7. Floor type construction.
  - 8. Hourly Fire resistance rating of wall or floor.
  - 9. Frating.
  - 10. T rating, if available.

**NOTE:** Firestop Schedule is for information only, and will not be acted on for approval. Refer to Sample Firestop Schedule bound in Appendix.

## 1.05 QUALITY ASSURANCE

- A. Installer Qualifications: The persons installing the firestopping and their supervisor shall be personally experienced in firestop work and shall have been regularly employed by a company installing firestopping for a minimum of 3 years.
- B. Pre-Installation Conference: Before the firestop work is scheduled to commence, a conference will be called by the Director's Representative at the Site for the purpose of reviewing the Contract Documents and discussing requirements for the Work. The conference shall be attended by related trade Contractors (if any), their qualified firestopping installers, and associated firestopping manufacturer's Company Field Advisors.
- C. Container/Package Labels: Include manufacturer's name and identifying product number, date of manufacturer, lot number, shelf life (if applicable), qualified testing and inspecting agency classification marking, curing time, and mixing instructions for multi-component materials.
- D. Company Field Advisor: Secure the services of a Company Field Advisor for the following:
  - 1. Render advice regarding suitability of firestopping materials and methods.
  - 2. Assist in completing firestop schedule.
  - 3. Attend pre-installation conference.
- E. Field-Constructed Sample Installations: Prior to installing firestopping, erect sample installations for each type through-penetration firestop system indicated in the Firestop Schedule to verify selections made and to establish standard of quality and performance by which the firestopping work will be judged.
  - 1. Build sample installations to comply with the following requirements, using materials indicated for final installations.
    - a. Locate sample installations on site at locations where directed.
    - b. Obtain Director's Representative's acceptance of sample installations before start of firestopping installation.
    - c. Retain and maintain sample installations during construction in an undisturbed condition.
    - d. Accepted sample installations in an undisturbed condition at time of substantial completion of Project may become part of completed firestopping work.

## 1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver firestopping materials to the Site in original, new unopened containers or packages bearing manufacturer's printed labels.
- B. Store and handle firestopping materials to prevent deterioration or damage due to moisture, temperature changes, contaminants, etc.

## 1.07 PROJECT CONDITIONS

- A. Environmental Requirements:
  - 1. Temperature: Do not install firestopping materials when ambient or substrate temperatures are outside limits permitted by manufacturer of firestopping materials.
  - 2. Humidity and Moisture: Do not install the Work of this Section under conditions that are detrimental to the application, curing, and performance of the materials.
  - 3. Ventilation: Provide sufficient ventilation wherever firestopping materials are installed in enclosed spaces. Follow manufacturer's recommendations

# 1.08 SEQUENCING AND SCHEDULING

A. Leave exposed those firestopping installations that are to be concealed behind other construction until the architect has examined each installation.

## PART 2 PRODUCTS

## 2.01 FIRESTOPPING-GENERAL

- A. Through-Penetration Firestop Devices, Forming Materials, And Fill, Void or Cavity Materials: As listed in the UL Fire Resistance Directory, Inchcape Directory of Listed Products, Factory Mutual Approval Guide, or the Omega Point Laboratories Listings Directory.
  - 1. For firestopping exposed to moisture, furnish products that do not deteriorate when exposed to this condition.
  - 2. For firestopping systems exposed to view, furnish products with flame-spread values of less than 25 and smoke developed values less than 50, as determined per ASTM E 84.
  - 3. For penetrations for piping services below ambient temperature, furnish moisture-resistant through-penetration firestop systems.
  - 4. For penetrations involving insulated piping, furnish throughpenetration firestop systems not requiring removal of insulation.

- B. Accessories: Components required to install fill materials as recommended by the firestopping manufacturer for particular approved fire rated system.
- C. Identification Labels:
  - 1. Furnished by fire stopping manufacturer of suitable material for permanent field identification of through-penetration firestops.
  - 2. Identify the following:
    - a. "WARNING FIRESTOP MATERIAL".
    - b. Company Name.
    - c. Product Catalog number.
    - d. Frating.
    - e. T rating, if available.
  - 3. Field fabricated labels are not acceptable.

#### PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Examine existing through-penetrations of floors, walls, partitions, ceilings and roofs in the Work areas.
- B. Examine existing junctures, control joints, and expansion joints in the Work areas.
- C. Where firestopping is missing or not intact, submit a written report to the Director's Representative describing the existing conditions.

## 3.02 PREPARATION

- A. Clean out openings immediately before installation of through-penetration firestopping. Comply with recommendations of firestopping manufacturer and the following requirements:
  - 1. Remove foreign materials from surfaces of openings, and from penetrating items that could interfere with adhesion of firestopping.
  - 2. Clean opening and penetrating items to produce clean, sound surfaces capable of developing optimum bond with firestopping. Remove loose particles remaining from cleaning operation.
  - 3. Remove laitance and form release agents from concrete.
- B. Clean out openings, and juncture, control, and expansion joints immediately before installation of firestopping. Comply with

recommendations of firestopping manufacturer and the following requirements:

- 1. Remove foreign materials from surfaces of openings and joint substrates, and from penetrating items that could interfere with adhesion of firestopping.
- 2. Clean opening joint substrates to produce clean, sound surfaces capable of developing optimum bond with firestopping. Remove loose particles remaining from cleaning operation.
- 3. Remove laitance and form release agents from concrete.

#### C. Protection:

 Protect surfaces adjacent to through-penetration firestops with nonstaining removable masking tape or other suitable covering to prevent firestopping from contacting adjoining surfaces that will remain exposed upon completion of Work and that would otherwise be permanently stained or damaged by such contact or that would be caused by cleaning methods used to remove smears from firestopping materials.

# D. Substrate Priming:

- 1. Prime substrates in accordance with the firestopping manufacturer's printed installation instructions using recommended products and methods.
- 2. Do not allow primer to spill or migrate onto adjoining exposed surfaces.

#### INSTALLATION OF THROUGH PENETRATION FIRESTOPS

A. Use through-penetration firestop devices, forming materials, and fill, void or cavity materials to form through-penetration firestops to prevent the passage of flame, and limit temperature rise of the unexposed surface as detailed in the UL

Fire Resistance Directory, Inchcape Directory of Listed Products, Factory Mutual Approval Guide, or the Omega Point Laboratories Listings Directory.

- 1. Where applicable design is not detailed in the Directories, use forming materials and fill, void or cavity material to form throughpenetration firestop in accordance with approved printed details and installation instructions from the company producing the forming materials and fill, void or cavity material.
- 2. If the construction type(s) of the building cannot be determined, provide firestopping with fire resistance ratings as specified in the

Building Code of New York State, Tables 720.1(1), 720.1(2), 720.1(3), and 302.3.2.

- B. Provide through-penetration firestop systems with F ratings that shall equal or exceed the fire resistance rating of the penetrated building construction.
- C. Provide through-penetration firestop systems with T ratings, in addition to F ratings, at floors where the following conditions exist:
  - 1. Where firestop systems protect penetrations located outside the wall cavities.
  - 2. Where firestop systems protect penetrations located outside fire resistive shaft enclosures.
  - 3. Through-penetration firestop systems protecting floor penetrations require a T-rating of at least 1 hour, but not less than the required floor fire-resistance rating.
- D. Firestop through-penetrations of floors, walls, partitions, ceilings, and roofs.
- E. Firestop through-penetrations associated with the new Work.
- F. Firestop through-penetration of partitions identified on the Construction Work Drawings as smoke partitions and fire rated assemblies.
- G. Firestop through-penetrations of floors, walls, partitions, ceilings, and roofs in accordance with the fire resistance rating assigned to the walls, partitions, floors, ceilings, and roofs on the Construction Work Drawings.
- H. In areas where through-penetration items have been installed before the construction work, firestop the through-penetration items after the construction work has been completed. Furnish drawings or written information to the Construction Work Contractor covering the provisions to be made in the construction work to enable firestopping of the through-penetration items.
- I. Permanently affix label at each firestop. Use adhesive compatible with surface construction at firestop location.

# 3.04 INSTALLATION OF JUNCTION, CONTROL, AND EXPANSION JOINT FIRESTOPS

A. Use joint treatment materials to form firestop to prevent the passage of flame and limit temperature rise of the unexposed surface, as detailed in the UL Fire Resistance Directory, Inchcape Directory of Listed Products,

Factory Mutual Approval Guide or the Omega Point Laboratories Listings Directory.

- 1. Where applicable design is not detailed in the Directories, use forming materials and fill, void or cavity material to form firestop in accordance with approved printed details and installation instructions from the company producing the forming materials and fill, void or cavity material.
- 2. If the construction type(s) of the building cannot be determined, provide firestopping with fire resistance ratings as specified in the Building Code of New York State, Tables 720.1(1), 720.1(2), 720.1(3), and 302.3.2.
- B. Firestop junctures, control joints, and expansion joints.
- C. Firestop junctures, control joints, and expansion joints associated with the new Work.
- D. Firestop junctures, control joints, and expansion joints associated with smoke partitions and fire rated construction.
- E. Permanently affix labels every 10 feet along each firestop. Use adhesive compatible with surface construction at firestop location.

## 3.05 CLEANING

- A. Clean off excess fill materials and sealants adjacent to penetrations by methods and cleaning materials recommended by manufacturers of firestopping products and of products in which penetrations occur.
- B. Remove masking tape as soon as practical so as not to disturb the firestopping's bond with substrate.
- C. Protect firestopping during and after curing period from contact with contaminating substances, or damage resulting from adjacent Work.
- D. Cut out and remove damaged or deteriorated firestopping immediately, and install new materials as specified in firestop schedule.

#### **END OF SECTION 07 84 00**

#### SECTION 09 21 16 - GYPSUM BOARD SYSTEMS

#### PART 1 GENERAL

#### 1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Section 09 22 13 - Non-Load Bearing Framing and Furring

#### 1.02 **DEFINITIONS**

- A. Sheet Steel Gages: US Standard.
- B. Gypsum Board Terminology: ASTM C 11 Standard Terminology Relating to Gypsum and Related Building Materials and Systems.

## 1.03 SUBMITTALS

- A. Product Data: Catalog sheets, specifications, and installation instructions for each item specified.
- B. Samples:
  - 1. Steel Framing: 12 inches long, each component specified.
  - 2. Gypsum Board: 12 inches square, each type specified.
  - 3. Shaft-Wall Gypsum Liner Panels: 12 inches square.
  - 4. Fasteners: 10 each type specified.
  - 5. Adhesive: 1 pint.

## 1.04 QUALITY ASSURANCE

- A. Sound Transmission Class (STC) Rated Applications: Provide materials and installation procedures identical to those tested in assembly indicated according to ASTM E 90 and classified according to ASTM E 413.
- B. Single Source Responsibility: Obtain components for gypsum board shaft-wall assemblies from a single manufacturer for each type of assembly required.

## 1.05 DELIVERY, STORAGE AND HANDLING

A. Deliver materials in original packages, containers, or bundles bearing brand name and identification of manufacturer.

B. Store materials inside under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic, and other causes. Stack gypsum panels flat to prevent sagging.

#### 1.06 PROJECT CONDITIONS

A. Environmental Requirements: Comply with gypsum board manufacturer's printed temperature and ventilation requirements during application and finishing. Ventilate installation areas to relieve excess moisture.

#### PART 2 PRODUCTS

#### 2.01 FRAMING

- A. Studs, Tracks, and Furring: ASTM C 645; 25 gage (minimum base metal thickness 0.0179 inch) galvanized steel, with additional framing members, reinforcing, accessories, and anchors necessary for the complete framing system.
  - 1. Deep-Leg Deflection Track: ASTM C 645 top runner with 2 inch deep flanges.
  - 2. Hat-Shaped, Rigid Furring Channels: ASTM C 645; 25 gage (minimum base metal thickness 0.0179 inch) galvanized steel.
  - 3. Resilient Furring Channels: Steel furring members designed to reduce sound transmission.

## 2.02 GYPSUM BOARD

- A. Standard Gypsum Board: ASTM C 1396; long edges as follows:
  - 1. Long Edges: Tapered.
- B. Moisture Resistant Gypsum Board: ASTM C 1396; long edges tapered.
- C. Gypsum Backing Board: ASTM C 1396; long edges square.
- D. Gypsum Sheathing Board: ASTM C 1396; long edges square.

## 2.03 FASTENERS

A. Steel Drill Screws: ASTM C 1002; gypsum board manufacturer's recommended types and sizes for substrates involved.

- B. Laminating Adhesive: Gypsum board manufacturer's recommended type for substrates involved.
- C. Expansion Anchors: ASTM F 1554, Grade 36, of dimensions indicated; with nuts, ASTM A 563; and, where indicated, flat washers.
- D. Toggle Bolts: Tumble wing type.
  - 1. Wing Body: AISI 1008-1010 or equivalent cold rolled steel.
  - 2. Trunnion Nut: 1/4 inch thru 3/8 inch AISI 1010 steel; 1/2 inch Zamac alloy.
  - 3. Screw: Carbon steel.
- E. Self Threading Masonry Screws: Zinc plated; Tapcon Fasteners by ITW Buildex 1349 West Bryn Mawr Ave. Itasca, IL 60143, (800) 284-5339.

#### 2.04 TRIM

- A. Interior Trim: ASTM C 1047.
  - 1. Material: Galvanized steel
  - 2. Shapes:
    - a. Cornerbead: Use at outside corners.
    - b. Bullnose Bead: Use where indicated.
    - c. L-Bead: L-shaped, exposed long leg receives joint compound. Use where gypsum board abuts or intersects dissimilar material.
    - d. Expansion (Control) Joint: Use where indicated.

## 2.05 ACCESSORIES

- A. Sound Attenuation Blankets: ASTM C 665, Type 1; semi-rigid, mineral fiber blankets without membrane covering. Furnish blankets of thickness, density, and type tested by the gypsum board manufacturer for the required rating.
- B. Acoustical Sealant for Exposed and Concealed Joints: Nonsag, paintable, nonstaining, latex sealant complying with ASTM C 834 that effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.
- C. Flattened Expanded Metal Mesh: ASTM F 1267, Type II, Class 1, grade as selected by fabricator; 13 gage, 1/2 inch carbon sheet steel, diamond style.

## 2.06 JOINT TREATMENT MATERIALS

- A. Joint Tapes: ASTM C 475; plain or perforated.
- B. Joint Compound: ASTM C 475; gypsum board manufacturer's recommended dry powder or ready-mixed, either of the following:
  - 1. One Compound Treatment: One compound for both bedding and finishing joints.
  - 2. Two Compound Treatment: Compatible joint compounds; one compound for bedding and the other compound for finishing joints.

#### PART 3 EXECUTION

#### 3.01 EXAMINATION

A. Examine substrates to which gypsum board system attaches or abuts, preset steel door frames, cast in anchors, and structural framing, with installer present for compliance with requirements for installation tolerances and other conditions affecting performance of gypsum board system construction. Do not proceed with installation until unsatisfactory conditions have been corrected.

## 3.02 CONSTRUCTION TOLERANCES

A. Do not exceed 1/8 inch in 8 feet variation from plumb or level in any exposed line or surface, except at joints between boards do not exceed 1/16 inch variation between planes or abutting edges or ends. Shim as required to comply with specified tolerances.

## 3.03 STEEL FRAMING INSTALLATION

- A. Installation Standards: ASTM C 754, and ASTM C 840 requirements that apply to framing installation.
- B. Install supplementary framing, blocking, and bracing at terminations in gypsum board system to support fixtures, equipment services, heavy trim, grab bars, toilet accessories, furnishings, or similar construction. Comply with details indicated and with gypsum board manufacturer's written recommendations.
- C. Isolate partitions from structural elements as indicated to prevent transfer of structural loads or movements to partitions.
- D. Isolate partitions from structural elements with slip or cushion-type joints between steel framing and structure as recommended by steel framing

manufacturer to prevent transfer of structural loads or movements to partitions.

# E. Partition Framing Installation:

- 1. Align tracks accurately at floor and ceiling. Secure tracks as recommended by the framing manufacturer for the floor and ceiling construction involved, except do not exceed 24 inches oc spacing for powder-driven fasteners, or 16 inches oc for other types of attachment. Provide fasteners approximately 2 inches from corners and ends of tracks.
- 2. Position studs vertically and engage both floor and ceiling tracks. Install studs so flanges point in the same direction and leading edge or end of each panel can be attached to open (unsupported) edge of stud flanges first. Space studs 16 inches on center, unless otherwise indicated on the Drawings. Fasten studs to track flanges with screws or by crimping.
- 3. Use full length studs between tracks wherever possible. If necessary, splice studs with a minimum 8 inch nested lap and fasten with two screws per stud flange.
- 4. Install additional studs to support inside corners at partition intersections and corners, and to support outside corners, terminations of partitions, and both sides of control joints (if any).
- 5. Extend partition framing full height to structural supports or substrates above suspended ceilings, except where partitions are indicated to terminate at suspended ceilings. Continue framing over frames for doors and openings and frame around ducts penetrating partitions above ceiling to provide support for gypsum board.
- 6. Brace chase wall framing horizontally to opposite studs with 12 inch wide gypsum board gussets or metal framing braces, spaced vertically not more than 4 feet on center.
  - a. Attach gypsum board gussets with a minimum 3 screws per stud flange.
  - b. Attach metal framing braces with a minimum 2 screws per stud flange.
- 7. Install rough framing at openings consisting of full-length studs adjacent to jambs and horizontal header and sill tracks. Cut horizontal tracks to length and split flanges and bend webs at ends for flange overlap and screw to jamb studs. Install intermediate studs between jamb studs at head and sill sections, at same spacing as full-length studs.
- 8. Where vertical control joints are shown at jamb lines, install additional vertical studs located on opening side of jambs and not less than 1/2 inch from jamb studs. Do not fasten the additional studs to tracks or jamb studs.

- F. Surface Mounted Rigid Steel Furring Installation:
  - 1. Install rigid steel furring where gypsum board is to be installed over masonry or concrete wall substrates, unless otherwise shown.
  - 2. Install steel furring at 24 inches oc maximum spacing and provide additional furring at openings, cutouts, and corners. Securely anchor with fasteners spaced 24 inches oc maximum and stagger on opposite flanges of hat-shaped channels.

## 3.04 SHAFT-WALL ASSEMBLY INSTALLATION

A. Install shaft-wall assemblies to comply with performance requirements indicated and with the manufacturer's published installation instructions.

#### 3.05 ACOUSTICAL ACCESSORIES INSTALLATION

- A. STC-Rated Assemblies: Comply with STC rating indicated.
  - 1. Multi-layer application.
    - a. Balanced Partitions: Two or more layers applied to each sides of supports.
    - b. Unbalanced Partitions: One layer applied to one face and 2 layers applied to other face.
- B. Sound Attenuation Blankets: Install in partitions tight within spaces, around cut openings, behind and around electrical and mechanical items within or behind partitions, and tight to items passing through partitions.
- C. Acoustical Sealant: ASTM C 919; install continuous bead of acoustical sealant at gypsum board perimeter. Seal wherever gypsum board abuts dissimilar materials. Seal spaces between gypsum board and all penetrating items. Seal sides and backs of electrical and mechanical items.

#### 3.06 GYPSUM BOARD INSTALLATION

- A. Install flattened expanded metal mesh in accordance with the manufacturer's printed instructions.
  - 1. Install flattened expanded metal mesh in the most economical direction, of maximum panel sizes to minimize joints and the use of small pieces.
  - 2. Use minimum number of fasteners required to hold panels in place until the gypsum board is installed.

- B. Install gypsum board in the most economical direction, of maximum lengths to minimize end butt joints. Where unavoidable, locate end butt joints as far from center of walls or ceilings as possible.
- C. Install gypsum board with face side out. Butt boards together at edges and ends over firm bearing with not more than 1/16 inch of open space between boards. Do not force into place.
- D. Fasteners: Fasten gypsum board to supports and furring with steel drill screws of required size and spacing as recommended by the gypsum board manufacturer.
  - 1. Multiple-layer Work:
    - a. Mechanically fasten both layers.
    - Multiple-layer Work: Laminate second layer to base layer with adhesive. Provide temporary nails for removal after drying or permanent screws for temporary support of second layer.
    - c. Stagger vertical joints in multiple layer Work. Offset joints not less than 10 inches.
- E. Provide additional framing and blocking required to support gypsum board at openings and cutouts.
- F. Form control joints in gypsum board where indicated. Allow 1/2 inch continuous opening between boards to allow for insertion of control joint trim.
- G. Wood Supports: Provide "floating" interior angle construction between gypsum board at interior corners.
- H. Reinforce joints formed by tapered edges, butt edges, and interior corners or angles with joint tape.

#### 3.07 TRIM INSTALLATION

- A. Coordinate installation of trim progressively with gypsum board installation where trim is of type required to be installed prior to, or progressively with installation of gypsum board.
- B. Securely fasten trim pieces in accordance with manufacturer's printed instructions.

- C. Install cornerbeads at external corners. Install L-Bead at unprotected (exposed) edges and where gypsum board abuts dissimilar materials. Use single unjointed lengths unless otherwise approved by the Director.
  - 1. Miter corners of semi-finishing type casing and trim beads.
- D. Install control joint trim in accordance with ASTM C 840, where indicated.
- E. Comply with joint compound manufacturer's recommended drying time for the relative humidity and temperature at time of application. Allow minimum of 24 hours drying time between applications of joint compound.
- F. Except Type X Gypsum Board: Joint compound treatment is not required on gypsum board surfaces installed above suspended ceiling lines.
- G. Type X Gypsum Board: Install joint and corner reinforcing and trim, and one coat of joint compound over joints, fastener heads, and metal flanges above suspended ceiling lines.

#### 3.08 LEVELS OF GYPSUM BOARD FINISH

- A. General: Finish panels to levels indicated below, in accordance with ASTM C 840, for locations indicated.
  - 1. Level 1 Finish: Joints and angles, provide tape embedded in joint compound. Surface shall be free of excess joint compound. Tool marks and ridges will be acceptable.
  - 2. Level 2 Finish: Joints and angles, provide tape embedded in joint compound and provide one separate coat of joint compound over the tape and fastener heads. Cover accessories with one coat of joint compound. Surface shall be free of excess joint compound. Tool marks and ridges will be acceptable. Joint compound applied over the body of the tape at the time of tape embedment will be considered a separate coat of joint compound and will satisfy the conditions of this level.
  - 3. Level 3 Finish: Joints and angles, provide tape embedded in joint compound and provide two separate applications of joint compound over all joints, angles, and fastener heads. Accessories shall be covered with two separate coats of joint compound. Joint compound to be smooth and free of tool marks and ridges. Cover the prepared surface with a drywall primer prior to the application of the final decoration.
  - 4. Level 4 Finish: Joints and angles, provide tape embedded in joint compound and provide three separate coats of joint compound over all joints, angles, and fastener heads. Accessories to be covered with three separate coats of joint compound. Joint compounds to

- be smooth and free of tool marks and ridges. Cover the prepared surface with a drywall primer prior to the application of the final decoration.
- 5. Level 5 Finish: Provide tape embedded in joint compound over joints and angles, and provide three separate coats of joint compound over all joints, angles, and fastener heads. Cover accessories with three separate coats of joint compound. Joint compounds to be smooth and free of tool marks and ridges. Apply a skim coat. Remove excess material; leave a film covering the paper. Cover the prepared surface with a drywall primer prior to application of the final decoration.

**END OF SECTION 09 21 16** 

#### SECTION 09 22 13 - NON-LOAD BEARING FRAMING AND FURRING

#### PART 1 GENERAL

#### 1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Section 09 21 16 - Gypsum Board Systems

#### 1.02 SUBMITTALS

- A. Product Data: Catalog sheets, specifications, and installation instructions for the following:
  - 1. Studs, Tracks, and Furring.
  - 2. Fasteners.
- B. Samples:
  - 1. Steel Framing and Furring: 12 inches long, each component.
  - 2. Fasteners: 10 each type.

## 1.03 QUALITY ASSURANCE

A. Fire Resistance Rated Applications: Provide UL listed or ASTM E 119 tested materials, accessories, and application procedures to comply with the rating indicated.

#### PART 2 PRODUCTS

#### 2.01 MATERIALS

- A. Studs, Tracks, and Furring: ASTM C 645; 25 gage galvanized steel, with additional framing members, reinforcing, accessories, and anchors necessary for the complete framing system.
- B. Fasteners: Except where shown or specified, select fasteners of type, size, style, grade, and class required for secure installation of framing and furring. Galvanize all fasteners and accessories.
  - 1. Standard Bolts and Nuts: ASTM A 307, Grade A, regular hexagon head.
  - 2. Lag Bolts: FS FF-B-561, square head.
  - 3. Machine Bolts: FS FF-B-584 head: FS FF-N-836 nuts.
  - 4. Machine Screws: FS FF-S-92, cadmium plated steel.
  - 5. Plain Washers: FS FF-W-92, round, general assembly grade, carbon steel.
  - 6. Lock Washers: FS FF-W-84, helical spring type, carbon steel.
  - 7. Toggle Bolts: Tumble-wing type; FSS FF-B-588, type, class and style as required to sustain load.

- 8. Self-Drilling Fasteners: No. 12-14 x 3/4 inch, hex washer head, self-drilling fastener with pilot point.
- C. Anchors: Steel framing manufacturer's recommended types and sizes for substrates involved.

#### PART 3 EXECUTION

#### 3.01 STEEL FRAMING AND FURRING INSTALLATION

- A. Install steel framing, furring and accessories in accordance with manufacturer's printed instructions, unless otherwise shown or specified.
- B. Framing Installation:
  - 1. Align tracks accurately at floor and ceiling. Secure tracks as recommended by the framing manufacturer for the upper and lower construction involved, except do not exceed 24 inches oc spacing for nail or powder-driven fasteners, or 16 inches oc for other types of attachment. Provide fasteners approximately 2 inches from corners and ends of tracks.
  - 2. Position studs vertically and engage both upper and lower tracks. Space studs 16 inches on center, unless otherwise indicated on the Drawings. Fasten studs to track flanges with screws or by crimping.
    - a. Use full length studs between tracks wherever possible. If necessary, splice studs with a minimum 8 inch nested lap and fasten with two screws per stud flange.
  - 3. Install additional studs to support inside corners at intersections and corners, and to support outside corners, terminations of partitions, and both sides of control joints (if any).
  - 4. Terminate partitions at finish ceiling line unless otherwise indicated on the Drawings.
  - 5. Brace chase wall framing horizontally to opposite studs with 12 inch wide gypsum board gussets or metal framing braces, spaced vertically not more than 4 feet on center.
    - a. Attach gypsum board gussets with a minimum 3 screws per stud flange.
    - b. Attach metal framing braces with a minimum 2 screws per stud flange.
- C. Steel Furring Installation: Install steel furring at 16 inches oc maximum spacing and provide additional furring at openings, cutouts, and corners. Securely anchor with fasteners spaced 24 inches oc maximum and stagger on opposite flanges of hat-shaped channels.
- D. Tolerances: Do not exceed 1/8 inch in 8 feet variation from plumb or level in any exposed line or surface, except at joints between boards do not

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exceed 1/16 inch variation between planes or abutting edges or ends. Shim as required to comply with specified tolerances.

END OF SECTION 09 22 13

## SECTION 09 25 00 - GYPSUM DRYWALL

#### PART 1 - GENERAL

## 1.01 GENERAL REQUIREMENTS

A. Work under this section shall be governed by the Contract Documents. Provide materials, labor, equipment and services necessary to furnish, deliver and install all work of this section as shown on the drawings, as specified herein, and/or as specified by job conditions.

#### 1.02 DESCRIPTION OF WORK

A. Provide materials, labor, equipment and services to complete all gypsum board installation including metal studs, regular, fire resistant, moisture resistant gypsum board, Durock Cement backer board and all accessories as indicated on the Drawings.

#### 1.03 RELATED SECTIONS

A. Section 09 21 16 - Gypsum Board Systems.

# 1.04 QUALITY ASSURANCES

- A. Codes and Regulations
  - 1. Work specified herein shall conform to all applicable State and Local codes and regulations having jurisdiction.
  - 2. Where fire resistive ratings are required for work of this section, the gypsum drywall assemblies shall be installed in strict accordance with the Underwriters Laboratory requirements.

#### 1.05 SUBMITTALS

- A. Product Literature
  - 1. Submit manufacturers' products literature, catalog cuts and data sheets for all products.

## 1.06 DELIVERY, STORAGE AND HANDLING

A. Deliver materials to the site, ready for use in the manufacturer's original and unopened containers and packaging, bearing labels as to type of material, brand

name and manufacturer's name. Delivered materials shall be identical to approved samples.

B. Store materials under cover in a dry and clean location, off the ground. Remove materials which are damaged or otherwise not suitable for installation from the job site and replace with acceptable materials.

# 1.07 ENVIRONMENTAL REQUIREMENTS

A. During joint finishing, maintain within the work area a uniform temperature between 55 and 70 degrees F.

### **PART 2 - PRODUCTS**

# 2.01 GYPSUM DRYWALL

- A. Gypsum drywall shall conform to Fed. Spec. SS-L=30c and ASTM C-36, with tapered edges, in thicknesses noted on the drawings. Gypsum backing board shall conform to ASTM C-442.
- B. Gypsum drywall shall by Type "X" and Type "XX" manufactured especially for fire resistance with a core formulated from special mineral materials, and shall conform to ASTM C-707.
- C. At toilet and bathroom walls, provide water-resistant drywall conforming to ASTM C-630.
- D. Also provide Durock Cement Board where shown for Ceramic and Stone Tile installation.

# 2.02 FURRED AND STUD WALL FRAMING MEMBERS

- A. Metal studs: as indicated on the drawings, non-load bearing channel type, formed from 25 gauge electro-galvanized steel, as per ASTM C-645 designed for screw attachment and provided with knockouts to accommodate pipe and/or conduit installations. Width and height of studs shall conform to partition types noted on the drawings.
- B. Ceiling and floor runners: channel type formed of 25 gauge electro-galvanized steel, designed to receive partition types and studs as required.
- C. Furring channels shall consist of 25 gauge electro-galvanized "Hi-hat" and "Z-type", manufactured of galvanized steel. "Z-type" used at masonry and concrete walls and "Hi-hat Type" used where indicated on the drawings.

D. Stud, runners and furring shall conform to ASTM C-645.

# 2.03 INSULATION

- A. Insulation within partitions: sound attenuation blankets consisting of a paperless, semi-rigid mineral fiber mat, or glass fiber conforming to thickness noted on the drawings, having a density of not less than 3 pounds per cu. ft.
- B. Insulation shall conform to Fed. Spec. HH-I-521e, Type 1, Class A and have a fire hazard classification in accordance with ASTM E-84 as follows: flame spread-25; fuel contributed-20; smoke developed-0.

### 2.04 MISCELLANEOUS ACCESSORIES

- A. Metal accessories shall consist of corner beads, stops, edge trim, casing beads and control joints and other accessories as required, conforming to proper profiles and sizes to accommodate drywall partition components encountered. Accessories: formed of 26 galvanized or cadmium plated steel after manufacture. Hot dip galvanized as per ASTM A-525.
  - 1. For terminations as indicated, provide USG Series 200 casing beads (J-molding not acceptable).
- B. Screws for securing drywall and accessories in place: self-drilling, self-tapping, Phillips head steel screws as recommended by the manufacturer of the partition system and by conditions encountered in the field. The use of nails for application will not be permitted. Screws shall conform to ASTM C-646.
- C. Joint and recess fastener treatment: a three (3) coat application as recommended by the approved gypsum drywall manufacturer. Materials shall conform to ASTM C-475.
- D. Laminating adhesives for multi-layered applications: as recommended by the approved drywall manufacturer for partition types noted and conditions encountered in the field.

### 2.05 ACOUSTICAL SEALANT

- A. Acoustical sealant: a highly elastic, non-bleeding and non-staining, pumpable type sealant which shall remain permanently flexible, formulated especially for this type of application and manufactured by one of the following:
  - 1. U.S. Gypsum
  - 2. Tremco, Inc.
  - 3. Miracle Adhesives

4. Or an acceptable equal.

# 2.06 ACCEPTABLE DRYWALL MANUFACTURERS

- A. U.S. Gypsum
- B. National Gypsum/Gold Bond
- C. Georgia Pacific
- D. Or an equal acceptable to Architect.

### **PART 3 - EXECUTION**

# 3.01 INSPECTION

- A. Study the contract drawings and specifications with regard to the work as shown and required under this section so as to insure its completeness.
- B. Examine the surfaces and conditions to which this work is to be attached or applied, and notify the Architect if conditions or surfaces exist which are detrimental to the proper and expeditious installation of the work. Starting on the work shall imply acceptance of the surfaces and conditions to perform corrective measures before the start of installation.
- C. Verify dimension taken at the job site, affecting the work. Bring field dimensions which are at variance to the attention of the Architect. Obtain decision regarding corrective measures before the start of installation.
- D. Cooperate in the coordination and scheduling of the work of this section with the work of other sections so as not to delay job progress.

# 3.02 WORKMANSHIP

- A. Install materials and partition systems specified herein and as indicated on the drawings in strict accordance with the printed directions and/or specifications of the approved manufacturer to attain fire ratings noted on the drawings.
- B. Apply drywall with the reverse side against the framing members, and with the separate panels in moderate contact. In no case shall the panels be forced into place. At interior and exterior corners, conceal the cut edges of the panels so that the corners of any four panels will not meet at the same point. Vertical joints shall not occur on the same stud on both sides of a partition. Apply panels in such lengths as will result in a minimum of joints.

- C. Build into drywall partitions reinforcing plates on not less than 3/16" thick to accommodate items which will be secured on and/or hung from the drywall partitions such as: toilet partitions, grab bars, handrails, wall mounted cabinetry, etc. (see drawings for location of accessories). Coordinate with other trade contractors as required.
- D. Unless otherwise indicated, provide continuous faces of gypsum drywall partitions, with control joints, spaced not over 30 feet o.c. Verify control joint locations with the Architect prior to installation.

# 3.03 FRAMING FOR PARTITIONS AND FURRING

- A. Floor and ceiling runners: accurately locate and align and install continuously at locations noted, and securely attached to adjacent construction using power driven anchors spaced 24" o.c. Anchor floor runners not over one (1) inch from runner ends.
- B. Position and anchor all studs vertically in the runners, spaced as recommended by the manufacturer but not more than 24" on center. Anchor studs which are located adjacent to door frames, partition intersections, furred wall, and at corners to floor and ceiling runner flanges with required screws.
- C. Install studs in all cases in one piece from noted floor location to underside of the encountered structure or to horizontal termination runner.
- D. When drywall panels are not scheduled to go on the underside of the structure, provide an additional horizontal stud member at the point above the ceiling line where the drywall panels are terminated. Brace to underside of slab above with every other stud plus diagonal bracing at same spacing.
- E. Locate double studs not more than 2" from all door frame jambs, abutting partitions, partition corners and other construction, and as indicated on the drawings.
- F. Provide double studs at jambs of door and window frames and head and sill runners as required to completely frame out these openings. Screw to runners at top and bottom and both sides. In addition, provide two (2) braces to slab above head runners.
- G. Over metal doors and borrowed lights, place a section of runner track horizontally with a web-flange bent at each end. Fasten with one positive attachment per flange.
- H. Provide additional studs and runners to conform to details noted and/or required by conditions encountered in the field.
- I. Furring

1. Attach wall furring channels to masonry or concrete surfaces either vertically or horizontally spaced not more than 4" from both the floor line and the ceiling line.

# J. Chase Walls

- 1. Provide a double row of floor and ceiling runners which shall be securely attached to adjacent construction 24" o.c. with power driven anchors and 2" from ends.
- 2. A double row of studs shall be positioned vertically in the runners, spaced no more than 24" o.c., so that the studs are opposite each other in pairs with flanges pointing in the same direction.
- 3. Screw attach studs to floor and ceiling runners through each stud flange and runner flange.
- 4. Cut cross bracing to be placed between rows of studs from gypsum panels, 12" high by chase wall width. Space braces 48" vertically and attach to stud webs with six 1" screws per brace. If larger braces are used, space screws 8" o.c. max. on each side.
- 5. Bracing of 2-1/2" steel studs may be used in place of gypsum panels. Anchors web at each end of steel brace to stud web with two 3/8" pan head screws. When chase wall studs are not opposite, install steel stud cross braces 24" o.c. horizontally and securely anchor each end to a continuous horizontal 2-1/2" runner screw-attached to chase wall studs within the cavity.

# 3.04 GYPSUM DRYWALL

- A. Apply drywall with long dimension (parallel) to framing members, with abutting ends and edges occurring over stud flanges. Use panels of the maximum practical length to minimize joints. Arrange joints on opposite sides of the partition to occur on different studs. Cut panels to fit outlets, switch boxes and all other items encountered which penetrate the drywall surfaces.
- B. For vertical single-layer drywall application, space 1" screws a maximum of 12" o.c. in the field of the panel and 8" o.c. staggered along the vertical abutting edges.
- C. For horizontal single-layer drywall application, space 1" screws a minimum of 12" o.c. in the field of the panel and 12" o.c. along the abutting edges.
- D. For two-layer job laminated construction, apply the base layer vertically with 1" screws spaced 12" o.c. in the field of the panel and 8" o.c. staggered at the vertical joints of the panel. Apply the face layer vertically with vertical joints, laminate and hold in place with supplemental fasteners until adhesive is dry.
- E. For two-layer construction with screw attachment of the face layer, apply the base

layer vertically with vertical joints staggered on opposite side of the partition and screw-attach with 1" screws spaced 16" o.c. in the field and vertical joints panel. Apply the face layer vertically with vertical joints offset 24" from base layer joints and staggered on opposite sides of the partition. Attach with 1-5/8" screws spaced 16" o.c. in the field and vertical joints of the board.

- F. Furr in all exposed piping, ducts and mechanical and electrical conduits in finished spaces with channel furring and 5/8" thick drywall panels as part of the work of this section.
- G. Stagger drywall joints above door openings and not opposite each other on the same stud at door heads. At door jambs, secure drywall panels to each stud of the double stud arrangement with screws spaced 8" on center into each stud.
- H. Horizontal drywall joints not permitted.
- I. If drywall panels are not scheduled to extend to underside of structure, then extend panels a minimum of 6 inches above the finished suspended ceilings as shown.

# 3.05 ACCESSORIES

- A. Install corner beads on all exterior corners in one length without joints an secure with fasteners spaces 9" o.c. on both sides. Corner beads: formed to an angle of 90 degrees with 1-1/4" fine mesh flanges.
- B. Wherever an end of drywall will remain exposed or cannot be taped, provide continuous casing beads over face layer and secure in place with fasteners spaced 9" o.c. "J" molding not acceptable.
- C. Provide control joints in the face layer at continuous walls exceeding 30'-0" and where indicated on the drawings, and staple in place in a secure and rigid manner.
- D. Drywall abutting dissimilar materials shall terminate in casing beads fastened to terminal stud only. "J" molding not acceptable.

### 3.06 INSULATION

- A. Install continuous, full height insulation blankets between channel studs. Secure insulation to the back to the drywall on one side leaving no voids.
- B. Install insulation behind furred locations where noted.

# 3.07 ACOUSTICAL SEALANT

- A. Apply caulking in continuous beads of 1/4" diameter. Each partition shall receive not less than four (4) beads at the bottom. Apply two (2) continuous beads between the floor runner channel and the floor slab, and two (2) continuous beads between the ceiling channel runner and abutting construction.
- B. Apply two (2) continuous beads between base layer of gypsum drywall, or single layer of gypsum drywall and the abutting ceiling and floor construction, on each side of every partition.
- C. Caulk around entire perimeters of outlet boxes, switch plate boxes and all other items which penetrate the gypsum drywall partitions to maintain the STC of the partition.

# 3.08 TREATMENT FOR JOINTS AND FASTENERS

- A. Completely fill all joints formed by the drywall panels and/or adjoining materials with a three (3) coat application of joint cement and tape. Joint treatment compound shall be mixed according to the approved manufacturer's directions.
- B. Drive fasteners in slightly below the surface of the board, with heads forming a slight depression below the surface of the drywall. Fasteners shall not be driven closer than 3/8" from edges and ends of boards. Drywall adjacent to the joint of fastening shall be held tightly against the framing members while driving fasteners. Dependence on fasteners to draw drywall against the framing will not be acceptable.
- C. All boards shall fit tightly against the supporting frame work before applying joint treatment and concealing screw depressions.
- D. Joint Compound and Taping:
  - 1. Mix joint compound in strict accordance with manufacturer's recommendations.
  - 2. Apply taping or embedding compound in a thin uniform layer of all joints and angles to be reinforced. Immediately apply reinforcing tape centered over joint and seated into compound. Sufficient compound approximately 1/64" to 1/32" must remain under the tape to provide proper bond. Follow immediately with a thin skim coat to embed tape, but not to function as a second coat. Fold and embed tape properly in all interior angles to provide a true angle. The tape or embedding coat must be thoroughly dry prior to application of second coat.
  - 3. Apply second coat of joint compound over embedding coat, filling panel taper flush with surface; cover tape and feather out slightly beyond first coat. On joints with no taper, cover the tape and feather out at least 4" on either side of tape. Allow second coat to dry thoroughly prior to application of

finish coat.

4. Spread finish coat evenly over and extend slightly beyond second coat on all joints and feather to a smooth, uniform finish. Over tapered edges, do not allow finished joint to protrude beyond plane of the surface. Apply a finish coat to cover tape and taping compound at all tapered angles and provide a true angle. Where necessary, sand between coats and following the final application of compound to provide a smooth surface ready for decoration.

# E. Finishing Fasteners

1. Apply a taping or all-purpose type compound to fasten depressions as the first coat. Follow with a minimum of two additional coats of topping or all-purpose compound, leaving all depressions level with the plane of the surface.

# F. Finishing Beads and Trims

- 1. Apply first coat to all bead and trim and properly feather out form ground to plane of surface. Compound must thoroughly dry prior to application of second coat.
- 2. Apply second coat in same manner as first coat, extending compound slightly beyond onto face of panel. Compound must be thoroughly dry prior to application of finish.
- 3. Apply finish coat to all bead and trim, extending compound slightly beyond the second coat and properly feathering from ground to plane or surface. Sand finish as necessary to provide a flat, smooth surface ready for decoration.

# 3.09 PREPARATION FOR FINISHES

- A. All exposed surfaces of gypsum drywall which have depressions, gouges, cuts and dimples shall be spackled and sanded to present a smooth level surface acceptable for painting and wall covering by other trades.
- B. Spackle openings around pipes, switches and all other framed openings.

# 3.10 CLEANING

- A. Promptly remove joint compound from doors, door frames, windows, floors and all other surfaces which are not scheduled to receive the joint compound.
- B. At the completion of installation, remove all rubbish, excess material, scaffolding,

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tools, and other equipment from the building and job site and leave surfaces clean and whole.

END OF SECTION 09 25 00

### SECTION 09 91 00 - PAINTING

# PART 1 GENERAL

### 1.01 RELATED WORK SPECIFIED ELSEWHERE

A. Section 09 25 00 - Gypsum Drywall

### 1.02 **DEFINITIONS**

- A. The word "paint" in this Section refers to substrate cleaners, fillers, sealers, primers, undercoats, enamels and other first, intermediate, last or finish coatings.
- B. The word "primer" in this Section refers to substrate cleaners, fillers, sealers, undercoats, and other first or intermediate coats beneath the last or finish coating.
- C. The words "finish paint" in this Section refers to the last or final coat and previous coats of the same material or product directly beneath the last or final coat.
- D. Finish Paint Systems: Finish paint and primers applied over the same substrate shall be considered a paint system of products manufactured or recommended by the finish coat manufacturer.
  - 1. Finish paint products shall meet or exceed specified minimum physical properties.

# 1.03 SUBMITTALS

- A. Painting Schedule: Cross-referenced Painting Schedule listing all interior substrates to be painted and specified finish paint type designation; product name and manufacturer, recommended primers and product numbers, and finish paint color designation for each substrate to be painted.
  - 1. Designate interior substrates by building name, floor number, room number, and surface to be painted.
- B. Product Data Sheets: Manufacturer's published product data sheets describing the following for each finish paint product to be applied:
  - 1. Percent solids by weight and volume, solvent, vehicle, weight per gallon, ASTM D 523 gloss/reflectance angle, recommended wet and dry film thickness, volatile organic compound (VOC) content in lbs/gallon, product use limitations and environmental restrictions, substrate surface preparation methods, directions and

precautions for mixing and thinning, recommended application methods, square foot area coverage per gallon, storage instructions, and shelf-life expiration date.

- 2. Manufacturer's recommended primer for each finish paint product and substrate to be painted.
- 3. Manufacturer's complete range of available colors for each finish paint product to be applied.
- C. Finish Paint Type Samples: Two finish paint samples applied over recommended primers for each substrate to be painted.
  - 1. Samples shall be in the designated color and specified ASTM D 523 reflectance as indicated on the drawings.
  - 2. Label each sample with the following information:
    - a. Project number and Painting Schedule designation describing substrates and locations represented by the sample.
    - b. Finish paint and primer manufacturer, product names and numbers, finish paint color and reflectance.
  - 3. Leave a 1 inch wide exposed strip of unpainted substrate and each coat of primer and finish paint.
  - 4. Sample Sizes:
    - a. Wall and Ceiling: 12 inch square panels.
    - b. Bar and Tubular Metals: 4 inch long bars or tubular stock.

# D. Quality Control Submittals:

- 1. Test Reports: Furnish certified test results from an independent testing laboratory, showing that products submitted comply with the specifications, when requested by the Facilities Representative
- 2. Certificates: Furnish certificates of compliance required under QUALITY ASSURANCE Article.

# 1.04 QUALITY ASSURANCE

- A. Volatile Organic Compounds (VOCs) Regulatory Requirements: Chapter III of Title 6 of the official compilation of Codes, Rules and Regulations of the State of New York (Title 6 NYCRR), Part 205 Architectural Surface Coatings.
  - 1. Certificate of Compliance: List of each paint product to be delivered and installed. List shall include written certification stating that each paint product listed complies with the VOC regulatory requirements in effect at the time of job site delivery and installation.
- B. Container Labels: Label each product container with paint manufacturer's name, product name and number, color name and number, thinning and

application instructions, date of manufacture, shelf-life expiration date, required surface preparations, recommended coverage per gallon, wet and dry film thickness, drying time, and clean up procedures.

# C. Field Examples:

- 1. Prior to on-site painting, at locations designated by the drawings, apply field examples of each paint type to be applied.
- 2. Field examples to be applied on actual substrates to be painted and shall duplicate earlier approved paint samples.
  - a. Interior field examples to be applied in rooms and spaces to be painted with the same products.
  - b. Field Example Minimum Wet and Dry Film Thickness: As indicated on approved product data sheet.
  - c. Application: Apply each coat in a smooth uniform wet mil thickness without brush marks, laps, holidays, runs, stains, cloudiness, discolorations, nail holes and other surface imperfections.
    - Leave a specified exposed width of each previous coat beneath each subsequent coat of finish paint and primer.
  - d. Use of Field Examples: Field examples shall serve as a quality control standard for acceptance or rejection of painting Work to be done under this Section.

# 3. Field Example Sizes:

- a. Floor, Wall, and Ceiling Examples: 1 square foot.
- b. Frame Examples: Frame with 6-inch-wide horizontal strips.
- c. Doors to be electrostatically painted in shop prior to delivery on site.
- d. See drawings for colors.
- 4. Do not begin applying paints represented by field examples until examples have been reviewed and approved by the Architect.
  - a. Protect and maintain approved field examples until all painting work represented by the example has been completed and approved.
- D. Compatibility of Paint Materials: Primers and intermediate paints shall be products manufactured or recommended by the finish paint manufacturer.

# 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to the Site in original, unopened containers and cartons bearing manufacturer's printed labels. Do not deliver products which have exceeded their shelf life, are in open or damaged containers or cartons, or are not properly labeled as specified.
- B. Storage and Handling: Store products in a dry, well ventilated area in accordance with manufacturer's published product data sheets. Storage location shall have an ambient air temperature between 45 degrees F and 90 degrees F.

# 1.06 PROJECT CONDITIONS

- A. Environmental Requirements:
  - 1. Ambient Air Temperature, Relative Humidity, Ventilation, and Surface Temperature: Comply with paint manufacturer's published product data sheet or other printed product instructions.
  - 2. If paint manufacturer does not provide environmental requirements, use the following:
    - a. Ambient Air Temperature: Between 45 degrees F and .75 degrees F.
    - b. Relative Humidity: Below 75 percent.
    - c. Ventilation: Maintain the painting environment free from fumes and odors throughout the Work of this Section.
    - d. Surface Temperature: At least 5 degrees F above the surface dewpoint temperature.
  - 3. Maintain environmental requirements throughout the drying period.
- B. The following items are not to be painted unless otherwise specified, noted or directed:
  - 1. Exposed stainless steel, chrome, copper, bronze, brass, and aluminum.
  - 2. Factory prefinished items, such as doors and radiator enclosures.
  - 3. Galvanized items not exposed in finished spaces.
  - 4. Any finished materials such as floors, lights, sinks, trim, tile, mirrors, wood benches, etc.
  - 5. Ceramic Tile

# 1.07 EXTRA MATERIALS

- A. Provide extra finish paint materials, from the same production run as paints to be applied (4 gallons each type):
  - 1. Four gallons each type of paint specified.

### PART 2 PRODUCTS

### 2.01 PAINT MANUFACTURERS

- A. Where noted, the following finish paint manufacturers produce the paint types specified.
  - 1. Benjamin Moore and Co., 51 Chestnut Ridge Rd., Montvale, NJ 07645, (201) 573-9600.
  - 2. PPG Architectural Finishes, One PPG Plaza, Pittsburgh, PA 15272, (800) 441-9695.
  - 3. Sherwin-Williams Co., Cleveland, OH 44101, (800) 321-8194.

### 2.02 MISCELLANEOUS PRODUCTS

- A. Bedding Compound: Water based pre-mixed gypsum wallboard joint compound.
- B. Cleaning Solvents: Low toxicity with flash point in excess of 100 degrees F.
- C. Color Pigments: Pure, nonfading, finely ground pigments with at least 99 percent passing a 325 mesh sieve.
- D. Galvanizing Compound, Cold: Single component compound with 93 percent pure zinc in the dried film and meeting the requirements of DOD-P-21035A (NAVY).
- E. Glazing Compound: ASTM C 669.
- F. Masking Tape: Removable paper or fiber tape, self-adhesive and nonstaining.
- G. Metal Filler: Polyester resin base autobody filler.
- H. Mineral Spirits: Low odor type recommended by finish paint manufacturer.
- I. Paint Stripper: As recommended by finish paint manufacturer.
- J. Spackling Compound: Water based pre-mixed plaster and gypsum wallboard finishing compound.

- K. Stain Blocker, Primer-Sealer: As recommended by finish paint manufacturer.
- L. Turpentine: ASTM D 13.

### 2.03 FINISH PAINT TYPES

- A. Physical Properties:
  - 1. Specified percent solids by weight and volume, pigment by weight, wet and dry film thickness per coat, and weight per gallon are minimum physical properties of acceptable materials.
    - a. Opaque Pigmented Paints: Physical properties specified are for white titanium dioxide base before color pigments are added.
    - b. Specified minimum wet and dry film thickness per coat are for determining acceptable finish paint products. Minimum wet and dry film thickness per coat to be applied shall comply with approved finish paint manufacturer's product data sheets.
  - 2. Gloss or Reflectance: The following ASTM D 523 specified light levels and angles of reflectance:
    - a. Flat: Below 15 at 85 degrees.
    - b. Eggshell: Between 5 and 20 at 60 degrees.
    - c. Satin: Between 15 and 35 at 60 degrees.
    - d. Semigloss: Between 30 and 65 at 60 degrees.
    - e. Gloss: Over 65 at 60 degrees.
- B. Interior Finish Paint Types:
  - 1. Paint Type IAL-3: Interior Acrylic Latex, Semigloss Enamel.
    - a. Solids by Weight: 49.0 percent.
    - b. Solids by Volume: 35.0 percent.
    - c. Solvent: Water.
    - d. Vehicle: Vinyl acrylic resin.
    - e. Weight Per Gallon: 10.0 lbs.
    - f. Wet Film Thickness: 3.8 mils.
    - g. Dry Film Thickness: 1.2 mils.
    - h. Manufacturers: Benjamin Moore, PPG, Sherwin-Williams.
- C. Colors: Provide paint colors either shown on contract drawings or to be selected by the Architect from finish paint manufacturers available color selections.

1. Approved finish paint manufacturers to match designated colors of other manufacturers where colors are shown on contract documents.

### PART 3 EXECUTION

### 3.01 EXAMINATION

- A. Examine surfaces to be prepared, primed, or painted for compliance with contract documents, required environmental conditions, manufacturer's product data sheets, product label instructions and other written requirements.
  - 1. Do not begin any phase of the work without first checking and verifying that surfaces and environmental conditions are acceptable for such work and that any earlier phase deficiencies and discrepancies have been properly corrected.
    - a. The commencement of new work shall be interpreted to mean acceptance of surfaces to be affected.

# 3.02 PREPARATION

- A. Protection: Cover and protect surfaces to be painted, adjacent surfaces not to be painted, and removed furnishings and equipment from existing paint removals, airborne sanding particles, cleaning fluids and paint spills using suitable drop cloths, barriers and other protective devices.
  - 1. Remove and replace removable hardware, lighting fixtures, telephone equipment, other devices and cover plates over concealed openings in substrates to be painted.
    - a. Cover and neatly mask permanently installed hardware, lighting fixtures, cover plates and other devices which cannot be removed and are not scheduled for painting.
  - 2. Schedule and coordinate surface preparations so as not to interfere with work of other trades or allow airborne sanding dust particle to fall on freshly painted surfaces.
  - 3. Provide adequate natural or mechanical ventilation to allow surfaces to be prepared and painted in accordance with product manufacturer's instructions and applicable regulations.
  - 4. Provide and maintain "Wet Paint" signs, temporary barriers and other protective devices necessary to protect prepared and freshly painted surfaces from damages until Work has been accepted.
- B. Clean and prepare surfaces to be painted in accordance with specifications, paint manufacturer's approved product data sheets and printed label instructions. In the event of conflicting instructions or directions, the more stringent requirements shall apply.

1. Cleaners: Use only approved products manufactured or recommended by finish paint manufacturer. Unless otherwise recommended by cleaner manufacturer, thoroughly rinse with clean water to remove surface contaminants and cleaner residue.

# C. Surfaces:

- 1. Steel Frames: Fill indentations and cracks with metal filler; sand smooth to match adjacent undamaged surfaces.
- 2. Gypsum Wallboard:
  - a. Fill cracks, holes, and other indentations smooth to adjacent surfaces using specified bedding, spackling, and finishing compounds.
  - b. Gypsum Wallboard: Fill and sand smooth minor bedding and finishing compound defects.
  - c. Vacuum and wipe surfaces free of all sanding residue and dust
- 3. Other Substrates: See finish paint manufacturer's recommendations.

# D. Painting Material Preparations:

- 1. Prepare painting materials in accordance with manufacturer's approved product data sheets and printed label instructions.
  - a. Stir materials before and during application for a consistent mixture of density. Remove container surface paint films before stirring and mixing.
  - b. Slightly tint first opaque finish coat where primer and finish coats are the same color.
  - c. Do not thin paints unless allowed and directed to do so in writing within limits stated on approved product data sheets.

# 3.03 APPLICATION

# A. Environmental Conditions:

- 1. Water-based Paints: Apply when surface temperatures will be 50 degrees Fahrenheit to 90 degrees Fahrenheit throughout the drying period.
- 2. Other Paints: Apply when surface temperatures will be 45 degrees Fahrenheit to 95 degrees Fahrenheit throughout the drying period.
- B. Install approved paints where specified, or shown on the drawings, and to match approved field examples.
  - 1. Paint Applicators: Brushes, rollers or spray equipment recommended by the paint manufacturer and appropriate for the location and surface area to be painted.

- a. Approved minimum wet and dry film thicknesses shall be the same for different application methods and substrates.
- C. Paint Type Coats To Be Applied: Unless specified otherwise by finish paint manufacturer's product data sheet, the number of coats to be applied for each paint type are as follows:
  - 1. Paint Types:
    - a. New Unpainted Surfaces: Apply 1 coat of primer and 2 coats of finish paint.
    - b. Existing Painted Surfaces:
      - 1) Apply 2 coats of finish paint when existing paint has a lower gloss.
      - 2) Apply one coat of primer and 2 finish coats when existing paint has a higher gloss.
    - c. Paint Types for Restrooms: Provide mildewcide additive for bathrooms, kitchens, janitor closets, laundry rooms, restrooms and other wet or damp areas.
- D. Surfaces: Unless otherwise specified or shown on the drawings, paint surfaces as follows:
  - 1. Unless otherwise noted, paint interior exposed wall and ceiling air supply and return grilles; electrical panel and fuse boxes, raceways and conduits; heating convector cabinets, radiators, radiator cabinets, unit heaters, and similar existing and installed devices and equipment by other trades.
    - a. Paint substrates to match adjacent wall or ceiling surfaces.
    - b. Paint exposed surfaces when any part of the surface is on or within 8 inches of ceiling or wall surface to be painted.
    - c. Paint visible interior surfaces behind grilles, guards and screens.
  - 2. Frames: Unless otherwise noted, paint doors and frames the same color in the next highest gloss as adjacent wall surfaces.
    - a. Where walls are not the same color on both sides of a door frame, change frame color at the inside corner of the frame stop.
    - b. Prime and finish paint door faces and edges before installation.
      - 1) Paint door edges the same paint type color as the exterior side of the door.
    - c. Do not paint door components which are clearly not intended to be painted such as non-ferrous hardware, frame mutes, and weather stripping.
    - d. Do not allow doors and frames to touch until paint is thoroughly dry on both surfaces.

# 3.04 ADJUSTING AND CLEANING

- A. Reinstall removed items after painting has been completed.
  - 1. Restore damaged items to a condition equal to or better than when removed. Replace damaged items that cannot be restored.
- B. Touch up and restore damaged finish paints. Touch up and restoration paint coats are in addition to the number of specified finish paint coats.
- C. Remove spilled, splashed, or spattered paint without marring, staining or damaging the surface. Restore damaged surfaces to the satisfaction of the Architect.
- D. Remove temporary barriers, masking tape, and other protective coverings upon completion of painting, cleaning and restoration work.

END OF SECTION 09 91 00

# SECTION 22 00 00 - GENERAL REQUIREMENTS FOR PLUMBING

### **PART 1 - GENERAL**

### 1.1 SUMMARY

- A. Division 22 of the specifications requires the furnishing and installing of all items, including every article, device or accessory reasonably necessary to facilitate each system's functioning as indicated by the design and the equipment specified. Elements of the work include, but are not limited to, materials, labor, supervision, supplies, equipment, transportation, rigging, storage, utilities, and all required permits and licenses.
- B. Before submittal of bid, examine all drawings, specifications, addenda, alternates, special conditions, and all other bidding documents of all sections of this project, verify all governing conditions at the site, and become fully informed as to the extent and character of the work required, as well as its relation to other work in the building. Submittal of a bid is an agreement to all requirements of the Contract Documents, and no consideration will be granted for any claimed misunderstanding thereof.
- C. Submittal of a bid is a representation by the bidder that it is qualified in all respects properly to perform the work for which it is bidding and has experience with similar work. Bidders are deemed to be aware, on the basis of their background and experience, materials which may be required in their responsibilities, even though unspecified.

# 1.2 ABBREVIATIONS

ADA Americans with Disabilities Act
AGA American Gas Association
AHJ Authority Having Jurisdiction

AISC American Institute of Steel Construction ANSI American National Standards Institute

AHRI Air-Conditioning, Heating, and Refrigeration Institute

ASA Acoustical Society of America

ASME American Society of Mechanical Engineers

ASHRAE American Society of Heating, Refrigerating and Air-Conditioning

Engineers, Inc.

ASPE American Society of Plumbing Engineers
ASSE American Society of Sanitary Engineering
ASTM American Society for Testing and Materials

AWS American Welding Society

AWWA American Water Works Association

BSA New York City Board of Standards and Appeals

CDA Copper Development Association
CISPI Cast Iron Soil Pipe Institute

ECCCNYS Energy Conservation Construction Code of New York State

EPA Environmental Protection Agency
ETL Electrical Testing Laboratory

FM Factory Mutual

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Institute of Electrical and Electronics Engineers **IEEE** 

IRI **Industrial Risk Insurers** Material Safety Data Sheet MSDS

**MSS** Manufacturers Standardization Society National Environmental Balancing Bureau **NEBB** National Electrical Code (NFPA 70) **NEC** 

National Electrical Manufacturers Association NEMA International Electrical Testing Association NETA

NFPA National Fire Protection Association

National Uniform Seismic Installation Guidelines NUSIG

NYCEC New York City Electrical Code New York City Mechanical Code **NYCMC** 

New York State Energy Research and Development Authority NYSERDA

New York State Green Building Tax Credit **NYSGBTC OSHA** Occupational Safety and Health Administration

New York City Office of Technical Certification and Research OTCR

Plumbing and Drainage Institute PDI

Tubular Exchanger Manufacturers Association, Inc. **TEMA** 

**Underwriters** Laboratories UL

### 1.3 **DEFINITIONS**

- A. For purposes of these specifications the following definitions apply:
  - 1. ARCHITECT: The Architect of record.
  - 2. ENGINEER: The Engineer of record.
  - 3. CONTRACTOR: The individual, partnership or corporation to whom has been awarded the contract for providing the plumbing work.
  - 4. SUBCONTRACTOR: The individual, partnership or corporation to whom has been awarded the contract for providing assistance to the Contractors work.
  - PROVIDE: To "furnish" and "install". 5.
  - INSTALL: To join, unite, fasten, link, attach, set up or otherwise connect 6. together; complete, tested and ready for normal satisfactory operation.
  - 7. To supply all materials, labor, equipment, testing apparatus, controls, tests, accessories, and all other items customarily required for the proper and complete application.
  - AS DIRECTED: As directed by the Architect or the Engineer. 8.
  - 9. CONCEALED: Embedded in masonry or other construction, installed behind wall furring or within double partitions, or installed within hung ceilings or accessible raised floor cavities.

- 10. SUBMIT: Submit to the Architect and/or the Engineer for review.
- 11. FINISHED SPACES: Spaces other than mechanical and electrical equipment rooms, furred spaces, pipe chases, unheated spaces immediately below roof, spaces above ceilings, unexcavated spaces, crawlspaces, and tunnels.
- 12. EXPOSED: Exposed to view.
- 13. SUPPLY: To purchase, procure, acquire, and deliver complete with related accessories.
- 14. WORK: Includes labor, materials, equipment, services, and all related accessories necessary for the proper and complete installation of complete systems.
- 15. PIPING: Includes pipe, tube, fittings, flanges, valves, controls, strainer, hangers, supports, unions, traps, drains, insulation, and all related accessories.
- 16. WIRING: Includes raceway, fittings, wire, boxes, and all related accessories.
- 17. INDICATED: As shown or noted on the drawings or specifications.

### 1.4 RELATED DOCUMENTS

- A. The General Conditions and Supplementary Conditions accompanying these specifications are hereby made a part of the requirements for the work under this section of the specifications.
- B. No General Conditions and/or Supplementary General Conditions clause referring to the work of this section shall be considered waived unless specifically stated herein.
- C. Refer to Owner's "Commissioning Requirements" for the scope of work related to systems furnished and installed under Division 22.

# 1.5 REFERENCE STANDARDS

- A. Comply with the currently enforced versions of all applicable laws, rules, regulations, codes and ordinances of New York City and shall be BSA approved or have an OTCR approval. Modifications required by the Authorities Having Jurisdiction shall be made without additional cost to the Owner.
  - 1. Secure and pay for necessary approvals, permits, inspections, carting, legal dumping, etc., and deliver the official records of the granting of permits to the Owner without additional cost to the Owner.
  - 2. The drawings have been filed. The contractor shall pay all fees to obtain release of approved plans and shall complete and file all forms, tabulations, plans, etc., required for Special Inspections.

- 3. Where so required by the Building Code of the City of New York, the Owner shall employ the services of a Special Inspector to perform inspections of materials, installations, fabrication, erection or placement of components and connections requiring special expertise to ensure compliance with approved construction documents and reference standards.
- B. All equipment, materials, and methods to be furnished and/or installed by this division shall comply with all applicable requirements of laws, codes, ordinances, legislation, standards, etc., of all federal, state, and local authorities, whether indicated on the Contract Documents or not.
- C. Where Contract Drawing and specification requirements are in excess of rules, regulations and code requirements, and are permitted under the code, the Contract Drawings and specifications shall govern. In the event of a conflict between the Contract Documents and the applicable laws, rules, regulations, codes, and ordinances of federal, state, and local Authorities Having Jurisdiction, the latter shall govern.
- D. Where alterations to and/or deviations from the Contract Drawings and specifications are required by the authorities listed above, report the requirements to the Architect and secure his written approval before starting the required modifications.

# 1.6 QUALITY ASSURANCE

- A. All materials and equipment shall be fabricated by companies whose primary business expertise is the manufacturing of commercial and industrial products of the type specified herein. The manufacturer shall have been in continuous operation in the manufacture of the products specified for a minimum of ten (10) years.
- B. Each submittal shall be provided with documentation certifying that all materials, products, components and test reports are in compliance with the design requirements for this project.
- C. Make every effort to furnish all equipment of any equipment type (such as pumps, hot water heaters, storage tanks, etc.) from one manufacturer.
- D. After completion of installation, but prior to Final Completion, this Contractor shall certify in writing in a format acceptable to the Owner that products and materials installed, and processes used, do not contain asbestos, or polychlorinated biphenyls (PCB's) or other hazardous materials as determined by the Owner. A "Materials Safety Data Sheet" (MSDS) equivalent to OSHA Form 20 shall be submitted for that proposed product or material prior to installation.
- E. All adhesives specified herein or utilized in the manufacture of equipment or components which are specified herein shall meet or exceed the volatile organic compound (VOC) limits of South Coast Air Quality Management District Rule No. 1168.
- F. All sealants specified herein or utilized in the manufacture of equipment or components which are specified herein shall meet or exceed Bay Area Resources Board Reg. 8, Rule

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- 51. Submit as part of the shop drawing process for review by the Engineer and/or Owner, supporting documentation which demonstrates conformance with these requirements.
- G. In the event that products, materials and/or processes are not available that do not contain asbestos, PCB's, VOC's formaldehyde formulations, hazardous materials or may result in hazardous out-gassing as determined by the manufacturer a "Materials Safety Data Sheet", as described above, shall be submitted as part of the shop drawing process for review by the Engineer and/or Owner.
- H. Furnish all equipment, materials and accessories new and free from defects.

# 1.7 ENGINEERING REFERENCE POINTS

- A. The Contractor shall provide benchmarks, monuments, and other reference points on the job required to perform the work.
- B. Maintain all existing benchmarks, monuments and other reference points and perform all field engineering required to ensure that work under this section shall conform with grades, elevations and lines required.

# 1.8 INDEMNIFICATION

- A. Covenant and agree that this Contractor and his Subcontractors and his and their agents, servants and employees will provide and maintain a safe place to work and that he and they will comply with all laws and regulations of any governmental Authority Having Jurisdiction thereof.
- B. This Contractor agrees to indemnify, defend and hold harmless the Owner, Owner's agents and Engineer from and against any liability, loss, damage or expense, including attorneys' fees, arising from a failure or alleged failure on the part of this Contractor, his Subcontractors and his and their agents, servants and employees to provide and maintain a safe place to work or to comply with all laws and regulations of any governmental Authority Having Jurisdiction thereof.
- C. This Contractor agrees to indemnify, defend and hold harmless the Owner, Owner's agents and Engineer from and against any liability, loss, damage or expense, including attorneys' fees, arising from a failure or alleged failure on the part of this Contractor, his Subcontractors and his and their agents, servants and employees to discharge the obligations assumed by him or them in the performance of the work, including any act or omission allegedly resulting in death or personal injury or property damage, or due to improper construction, construction techniques, or the use of improper or inappropriate material or tools.

# 1.9 COMPLETE PERFORMANCE OF WORK

- A. Work shall be executed in strict accordance with the best practice of the trades in a thorough, workmanlike manner by competent, skilled technicians and trade personnel.
- B. This Contractor shall provide a competent, experienced, full-time Superintendent who is authorized to make decisions on behalf of the Contractor.

- C. All labor, materials, apparatus, and appliances essential to the complete and proper functioning of the systems described and/or indicated herein, or which may be reasonably implied as essential, whether mentioned in the Contract Drawings and specifications or not, shall be provided by the Contractor. The entire installation shall be ready in every respect for the satisfactory and efficient operation when completed.
- D. In cases of doubt as to the work intended, or in the event of need for explanation thereof, request supplementary written instructions in the form of a Request for Information (RFI) from the Architect and/or Engineer.
- E. Coordinate the work specified herein and shown on the Contract Drawings with all other trades.
- F. Be responsible for material and workmanship until completion and final acceptance. Replace any of same which may be damaged, lost or stolen, without additional cost to Owner. Guard the building and its contents against damage by this Contractor, his employees or Subcontractors, and make good any damage free of charge.
- G. Where, due to union regulations or trade agreements, any of the work shown on the drawings or specified herein is not considered this trade's work, subcontract the work in question, but assume full responsibility for the complete installation. Except for such changes as may be specifically approved by the Consulting Engineers, in accordance with alternates or options stated hereinafter, all work must be in full accordance with the intent of the plans and specifications, complete in every way and ready for satisfactory and efficient operation when delivered to the Owner.
- H. Provide signs required by the Authorities Having Jurisdiction.
- I. Provide all rigging required for complete installation and furnish drawings showing necessary points of support, reactions and supplementary bracing. This shall be submitted for approval by the Owner. Should any shoring be required, provide same after Owner's approval.
- J. Become thoroughly acquainted with the work involved, obtain and verify at the building all measurements necessary for the proper installation of work. Furnish to other Contractors any information relating to work of this division necessary for the proper installation of their contracts. Coordinate with other Contractors for finish adjacent to work of this section and arrange to have visible portions of the work (such as access doors, escutcheons, etc.) fit in with the finish in a manner satisfactory to the Architects.
- K. Transmit to trades doing work of other sections all information required for work to be provided under their respective sections (such as fresh water connections, foundations, electric wiring, access doors, and the like) in ample time for installation.
- L. Wherever this Contractor's work interconnects with work of other Contractors, this Contractor shall coordinate his work with these Contractors to insure that all Contractors have the information necessary so that they may properly install all the necessary connections and equipment. Identify all work items (valves, dampers, pull boxes, etc.) in

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an approved manner in order that the other trades may know where to install such items such as access doors, panels, etc.

- M. Provide required supports and hangers for piping and equipment, so that loading will not exceed allowable loadings of structure. Submittal of a bid shall be deemed a representation that the Contractor submitting such bid has ascertained allowable loadings and has included in his estimates the costs associated with furnishing required supports.
- N. Field drilling, cutting and/or reinforcing of holes in structural metal deck required for work under this section shall be coordinated through the Contractor and approved by the Structural Engineer. All such drilling, cutting and reinforcing costs shall be borne by this Contractor.
- O. At the conclusion of each day's work, clean up and stockpile on site, at a location designated by the Contractor, all rubbish, debris and trash, which may have accumulated during the day as a result of work of this Contractor and of his presence on the job.
  - Sidewalks and streets adjoining the property shall be kept broom-clean and free
    of debris, rubbish, trash and obstructions of any kind caused by work of this
    Contractor, which will affect the condition and safety of streets, walks, utilities
    and property.
- P. Due to the nature of the alteration work, which requires the building to be kept operable at all times, except for those floors being actively altered, this Contractor shall coordinate his activities with the Contractor and the building Owner. Any interruption of building services must be done at the convenience of the building Owner. If temporary connections to maintain services are required or if the work must be performed after hours, this work shall be so arranged with all parties involved.
- Q. If this Contractor must perform work in occupied areas, he shall make arrangements with the Contractor and the Owner as to the time and method by which this work shall be performed. He shall arrange for all adjacent areas to be properly protected against damage, dirt and dust.

# 1.10 DESCRIPTION OF BID DOCUMENTS

- A. Specifications, in general, describe quality and type of materials and equipment.
- B. The drawings show the various systems schematically, no added compensation shall be permitted for variations due to field conditions.
- C. Where disagreements occur between the plans and the specifications or within either document itself, the item or arrangement of better quality, greater quantity or higher cost shall be included in the Base Bid.
- D. Work not shown on the drawings but called for in the specifications, or vice versa, shall be provided by the Contractor without additional expense to the Owner.
- E. Where a variance occurs between the drawings and specifications, or within either document itself, the Contractor shall request through the Contractor, clarification in

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writing from the Architect on which item and manner in which the work shall be installed.

- F. The commercially standard items of equipment and the specific names mentioned herein are intended to identify standards of quality and performance necessary for the proper functioning of the work.
- G. Equipment shown on the drawings with particular manufacturers identified has been coordinated for structural penetrations, electrical connection, operating and service (maintenance) requirements, and physical size with regard to the space where the equipment is shown. If they comply with the project specifications, these and the other specified manufacturers of this equipment will be acceptable contingent on the Contractor providing a complete installation and maintaining full responsibility to provide, at no additional cost, any modifications to the structure or electrical service that are required to properly install, operate, and service the equipment being used. These modifications shall not include additional area for equipment unless approved by the Architect.
  - 1. The Contractor shall note these changes on the equipment submittal and shall show all differences in equipment being supplied from that shown on the Drawings. Failure of the Contractor to provide this information with the submittal will indicate that the submitted equipment meets or exceeds the equipment shown on the Drawings in performance and is physically no larger in housing size.
    - a. Failure of the Contractor to comply with the above and any discrepancies found shall result in the Contractor providing equipment equal to that specified at the Contractor's expense.

### 1.11 SUBMITTALS

- A. No part of the work shall be started in the shop or in the field until the Architect and/or Engineer have reviewed the shop drawings and samples for that portion of the work. Thereafter, the work shall be executed in accordance with the Contract Documents and the indicated status of the reviewed shop drawing.
- B. All shop drawings and samples shall be identified as follows:
  - 1. Date of submittal.
  - 2. Title of project (including floor and room designations).
  - 3. Name of Contractor and date of his approval.
  - 4. Name of Subcontractor or supplier and date of submittal to Contractor.
  - 5. Number of submission.
  - 6. Any qualification(s), departure(s) or deviation(s) from the requirements of the Contract Documents.

- 7. Federal specification, FM Approval, OTCR number, BSA approval number, or ASTM number or any local listing or approval where required.
- 8. Such additional information as may be required by the specifications for the particular material being furnished.
- 9. When the submitted materials modify components, styles, etc., on the same drawing, or alternate or options available for the intended material, the material shall be appropriately annotated in a manner to avoid any misunderstanding of the submission.
- C. Shop drawings and samples shall be submitted for review sufficiently in advance of the scheduled start of the work in the shop or in the field to allow ample time, in consideration of the number and complexity of the drawings in the submittal, for the Architect and/or Engineer to make an orderly review. No extension of the time to complete the work shall be granted to the Contractor by reason of his failure in this respect.
- D. The Contractor shall carefully check shop drawings and samples, including those received by him from Subcontractors and manufacturers, for accuracy, completeness of required information, and conformance with the Contract Documents. Shop drawings found to be inaccurate, incomplete or not in conformance with the Contract Documents shall be corrected before being submitted to the Architect and/or Engineer for review.
- E. Within three (3) weeks after award of the Contract, the Contractor shall submit for the Architect's and/or Engineer's review, a list of the manufacturers and Subcontractors whose products and services he proposes to use for the work. Proposed substitutions for material and equipment required by the Contract Documents shall be submitted to the Architect and/or Engineer for review during this period. Submittals proposing or requesting substitutions shall be expressly identified as such in a letter of transmittal, with the reasons for requesting the substitution stated. Submittals for this purpose shall be complete in every respect, shall conform to all the information requirements for shop drawing and sample submittals, and shall include, at no cost to the Owner, the necessary revisions to other related work required by the Contract Documents. The judgment of the Architect and/or Engineer with respect to the adequacy and acceptability of a proposed substitution shall be final and binding on the Contractor, and shall not be subject to question in any other place. After the expiration of this period, substitutions for material or equipment shall not be proposed or requested in shop drawing and sample submittals, and the Contractor shall be required to execute the work in accordance with the provisions of the Contract Documents.
- F. Within six (6) weeks after award of the Contract, the Contractor shall submit a schedule listing all shop drawings and samples with the projected date that each item will be submitted to the Architect and/or Engineer for review.
- G. Prior to Final Acceptance, the following data shall be furnished in accordance with the Conditions of the Construction Contract, Section 01 31 46 Specifications, and this Division 22 of the Specifications, and shall include, but not be limited to:

1. Record drawings.

Floor, and Funnel Drains

- 2. Operating and maintenance books.
- 3. Contract or coordination drawings.

# 1.12 PRODUCT DATA

A. Submit names, sizes, catalog numbers and/or samples of the following materials for approval:

Fittings Pressure Gauges

Sleeves and Escutcheons

Hangers Strainers
Insulation Valve Tags
Pipe Valves

### 1.13 SHOP DRAWINGS

- A. The term "shop drawings" shall include layout, detail, and assembly drawings, diagrams, schedules, catalog sheets, printed descriptive matter, and tabular and graphical presentations of operating and performance data that describe work required by the Contract Documents. Catalogs and catalog sheets shall be clearly annotated indicating the specific items being proposed.
- B. In addition, during the installation period, submit detailed shop layout drawings for each floor of the project, including all the Mechanical Equipment Rooms, showing equipment and piping work and other distribution services described herein, including locations and sizes of all openings in cellular steel floor decks, walls and floors. Shop drawings with multiple parts shall be submitted as a package. Shop drawings will be 3/8 inch equal to 1 ft. 0 in. scale. Piping shop drawings shall also indicate the point loading and spacing of each hanger and the method of support. Drawings shall include full coordinated plans and sections for Mechanical Equipment Rooms, floor plans and risers. In addition, required detail drawings, such as anchor and guide details, etc., shall be submitted.
- C. Shop drawings for Equipment Rooms, and for piping and similar distribution services shall show by dimension the exact size and location of each element of the system in both the horizontal and vertical plane, as well as relationship to the building structure, architectural construction, equipment, and the work of other trades. Where new work is added to an existing structure, the shop drawings shall show the location of all existing services and equipment. Pads, foundations, anchorages, supports and attachments to the building structure where required for the installation of the work shall be shown in layout and detail with sizes, dimensions, materials and methods of construction noted. The work described in any shop drawing submission shall be carefully checked by this Contractor for all clearances field conditions, maintenance of architectural conditions and proper coordination with all trades on the job.

- D. Each submitted shop drawing shall include a certification by the Contractor that all related job conditions have been checked and that no conflict exists. No shop drawing submission shall be reviewed without such certification.
- E. The Contractor shall submit shop drawings of the following work for review:
  - 1. Underground and above ground piping services.
  - 2. Construction details for piping.
  - 3. All items of manufactured material and equipment.
  - 4. Other specific items of work as required by the provisions of the technical sections of the Contract Documents should be included in the Submittal Section.

### 1.14 CERTIFICATION

A. Any certifications required by the specifications, in addition to those required for shop drawings, product data, equipment and other items, shall be so certified by the Owner, a Partner, or a Corporate Officer of the firm required to provide the Certification, or by another person duly authorized to sign binding agreements for and in behalf of the Owner, Partner, or Corporation.

### 1.15 CONTRACTOR'S COORDINATION DRAWINGS

A. Contractor shall furnish in writing, with copies to the Architect and Construction Manager any information necessary to permit the work of all trades to be installed satisfactorily and with the least possible interference or delay.

### 1.16 ARCHITECT'S AND ENGINEER'S REVIEW

- A. The Engineer shall review shop drawings and samples for conformance with the design concept of the project and the information contained in the Contract Documents. The review of shop drawings and samples shall be only for the convenience of the Owner in following the work and shall not relieve the Contractor of responsibility for deviations from the requirements of the Contract Documents. The review shall not be construed as a complete or detailed check of the work submitted, nor shall it relieve the Contractor of responsibility for errors of any sort in the shop drawings and samples, or from the necessity of furnishing any work required by the Contract Documents which may have been omitted from the shop drawing submittals. The review of a separate item shall not indicate review of the complete assembly in which it functions. Nothing in the Architect's and/or Engineer's review of shop drawings and samples shall be considered as authorizing a departure from Contract Documents or specifications; additional cost to the Owner; or increased time for completion of the work.
- B. Engineer's review is for general compliance with the design concept and contract documents. Markings or comments shall not be construed as relieving the Contractor from compliance with the project plans and specifications, nor departing therefrom. The Contractor remains solely responsible for details and accuracy, for confirming and

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correlating all quantities and dimensions, for coordination with other work, whether new or existing and other trades, for selecting fabrication processes, for techniques of construction and for performing his work in a safe manner.

- C. The Architect and/or Engineer shall review shop drawings and samples with reasonable promptness and shall return them to the Contractor stamped to indicate the appropriate action as follows:
  - 1. "NO EXCEPTION TAKEN" means that fabrication, manufacture or construction may proceed, providing the submittal complies with the Contract Documents.
  - 2. "EXCEPTIONS AS NOTED" means that fabrication, manufacture or construction may proceed, providing the submittal complies with the Architect's and/or Engineer's notations and the Contract Documents. A copy of the corrected submittal shall be returned to the Architect and/or Engineer for record. If, for any reason, the Contractor cannot comply with the notations, the Contractor shall resubmit as described for submittals stamped "REVISE AND RESUBMIT".
  - 3. "REVISE AND RESUBMIT" means that the Contractor must comply with the Architect's and/or Engineer's notations and resubmit before fabrication, manufacture or construction may proceed. Submittals stamped in this manner shall not be permitted on the job site.
  - 4. "REJECTED" means that the submittal does not comply with the Contract Documents and that fabrication, manufacture or construction shall not proceed. Submittals stamped in this manner shall not be permitted on the job site.
- D. Each submitted shop drawing shall bear the Contractor's stamped and signed certification that the work has been checked for all related job conditions, for maintenance of architectural conditions, and has been coordinated with the shop drawings of other affected trades for interrelated work, as required for the proper and complete performance of the work. No shop drawing submittal shall be reviewed without this certification.
- E. Shop drawings for manufactured material and equipment shall include model numbers, dimension drawings, operating weights, material specifications, operating features and controls, wiring diagrams, performance characteristics, service procedures, including clearance requirements for maintenance work, and conformance to specified codes and code ratings. Note that in addition to these requirements, other specific submittal data, and forms of data submission, are required by the Contract Documents for particular items of equipment and material.
- F. Since manufacturing methods vary, reasonable minor variations are expected; however, performance and material requirements specified herein shall be the minimum standards acceptable. The Engineer shall retain the sole right to judge the equality of equipment that deviates from the Contract Documents, to reject any alternative submitted by the Contractor, and to require that the specified materials and equipment which conform to the requirements of the Contract Documents be furnished.

# 1.17 MANUFACTURER'S RECOMMENDATIONS

- A. With the exceptions as specified and/or indicated on the drawings or in the specifications, the Contractor shall apply, install, connect, erect, use, clean, commission and condition manufactured articles, materials, and equipment per manufacturer's current printed instructions and recommendations. Copies of such printed recommendations shall be kept at the project site and made available as required.
- B. Where the manufacturer's recommendations conflict with the Contract Documents, the conflict shall be brought to the Engineer's attention immediately.

# 1.18 SPACE LIMITATIONS

- A. The equipment selections used in the preparation of the Contract Documents shall fit into the physical spaces provided and indicated, allowing ample room for access, servicing, removal, and replacement of parts. Adequate space shall be allowed for clearance in accordance with code requirements, the requirements of the Local Authorities Having Jurisdiction, and the equipment manufacturer's recommendations.
- B. In the preparation of drawings, a reasonable effort to accommodate acceptable equipment manufacturer's space requirements has been made; however, since space requirements and equipment arrangement vary according to each manufacturer, the responsibility for initial access, maintenance access, code-required access, and proper fit rests with the Contractor.
- C. Physical dimensions and arrangements of equipment to be installed shall be subject to the Architect's and Engineer's review.
- D. Coordinate the installation of piping and equipment with lighting fixtures, special ceiling construction, air distribution equipment and the structure. Provide additional risers, drops and offsets as required. If, after installed, new piping or equipment is found to be in conflict with the architecture, structure, or other trade work which is either existing or shown on the Contract Documents, the piping or equipment shall be relocated without additional cost to the Owner.
- E. The Contractor shall follow the Drawings in laying out the Work and check drawings of all trades to verify spaces in which Work will be installed. Maintain maximum headroom and, where space conditions appear inadequate, the Engineer shall be notified before proceeding with the installation.

### 1.19 RECORD DRAWINGS

A. The Contractor shall maintain on a daily basis at the project site a complete set of "Record Drawings". The "Record Drawings" shall consist of a set of blue-line prints and AutoCAD files of the Contractor Coordination Drawings for this division. The prints shall include the updated AutoCAD files, which shall be periodically electronically updated to show the precise location of all buried or concealed work and equipment, including embedded piping and valves, and all changes and deviations in the mechanical work from that shown on the Contract Documents. This requirement shall not be

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construed as authorization for the Contractor to make changes in the layout or work without written definite instructions from the Architect or Engineer. Prior to commencing work, the Contractor shall obtain from the Architect or Engineer a set of AutoCAD format Architectural and Engineering Drawings on CD-ROM, to be used only to produce the Contractor's Coordination Drawings. The continuously updated coordination drawings shall be used to produce the final "Record Drawings" which shall be delivered to the Owner in AutoCAD electronic format upon project completion. The Contractor shall give to the Engineer a written release signed by a corporate officer of the Contractor prior to receipt of the Engineer's disks.

- B. Dimensions shall clearly and accurately delineate the work as installed; locations shall be suitably identified by at least two (2) dimensions to permanent structures.
- C. Upon completion of the work, the Contractor and his Subcontractors shall certify all "Record Drawings" on the front lower right-hand corner adjacent to the above marking with a rubber stamp impression or an AutoCAD image that states the Project name, the Contractor's name, the area covered, and the date.
- D. Prior to final acceptance of the work of this division, the Contractor shall submit properly certified "Record Drawings" to the Architect and Engineer for review and shall make changes, corrections, or additions as the Architect and/or Engineer may require to the "Record Drawings". Submit four (4) prints of each version until accepted.
- E. After the Architect's and Engineer's review, and any required Contractor revisions, the "Record Drawings" shall be delivered to the Contractor in AutoCAD format for the Owner's use. Upon acceptance, provide 3(#) prints, and 3 (#) electronic versions within sixty (60) days of Final Acceptance.

# 1.20 ELECTRICAL EQUIPMENT AND ELECTRICAL ROOM PRECAUTIONS

- A. In general, the Contractor shall not install piping or equipment in any switchboard, switchgear, transformer, elevator equipment, telephone, telecommunications, or electrical equipment rooms unless this piping or equipment serves only these rooms. Installation is strictly prohibited where it violates the requirements of the applicable Electrical Code.
- B. No piping or other equipment foreign to the electrical installation shall be installed within the dedicated zone above switchboards, panelboards, distribution boards, and motor control centers to a height of 6 ft. above the equipment or the structural ceiling, whichever is lower. The area above the dedicated space shall be permitted to contain foreign systems, provided protection is installed to avoid damage to the electrical equipment from condensation, leaks or breaks in such foreign systems.
- C. Caution workers both verbally and in writing as to the dangers involved in doing work within or adjacent to electrical equipment within electrical closets on various floors, the Mechanical Rooms and the Switchgear Rooms, Elevator Machine Rooms, due to dangers caused by the presence of high voltages and currents in these spaces.
- D. Provide all necessary personal protective equipment meeting OSHA requirements when working in areas within live electrical equipment.

# 1.21 EQUIPMENT PADS AND MOUNTING

- A. Concrete pads for various pieces of equipment will be furnished under another division. Pads shall be provided in all Equipment Rooms. This shall include floor-mounted equipment, equipment mounted on legs, and pipe support stands. Equipment pad shall generally conform to the shape of the piece of equipment it serves with a minimum 3 in. margin around the equipment and supports. Pads shall be a minimum of 3-1/2 in. high with all external corners bull-nosed to a tooled radius. Provide equipment pad layouts to the division furnishing the pads. Shop drawings stamped "REVIEWED" shall be used for dimensional guidance in sizing the pads, anchor bolt locations, etc.
- B. Furnish and install galvanized anchor bolts for all equipment placed on concrete equipment pads, inertia blocks, or on concrete slabs. Anchor bolts shall be located and of the size and number recommended by the manufacturer of the equipment and as required for seismic restraint. When equipment is placed on vibration isolators, the equipment shall be secured to the isolator and the isolator secured to the floor or pad, or supported as recommended by the vibration isolation manufacturer.
- C. Where allowed by this specification, equipment is mounted on gypsum board partitions, the mounting screws shall pass through the gypsum board and be securely attached to the partition studs or framework. At the Contractor's option, the mounting screws may pass through the gypsum board and be securely attached to 8 in. high, continuous length, 16 gauge galvanized metal backplates which are attached to a minimum of three (3) metal studs. Toggle bolts installed in gypsum board partitions shall not be acceptable.

# 1.22 CUTTING AND PATCHING

- A. In general, cutting and patching will be done under other divisions of the specifications.
- B. Furnish to the Contractor necessary information so that openings for this work can be built into the floors and walls in time. Such cooperation is required to keep cutting of walls and floors to a minimum.
- C. Set drains and sleeves for pipes accurately before concrete floors are poured, or set boxes on the forms to leave openings in the floors and subsequently set required sleeves in the openings.
- D. Should the Contractor neglect to perform preliminary work, and should cutting be required in order to install equipment, the expense of this cutting and restoring of surfaces to their original condition shall be borne by this Contractor.

# 1.23 UTILITY CONNECTIONS

- A. Arrange and pay costs for all specified utilities, including the following:
  - 1. Connection to municipal water mains and sewers.
  - 2. Payment of service charges.

- 3. Provisions for temporary utilities.
- 4. Connections to electric and other utility points of service interface.

# 1.24 PROTECTION OF EQUIPMENT AND MATERIALS

- A. Protect from damage, water, dust all material and equipment provided under this division, both in storage and installed in accordance with manufacturer's recommendations until Notice of Completion has been filed and accepted.
- B. Arrange with Owner for storage facilities for materials and equipment.
- C. All products stored off site and delivered to the site must be kept in factory packing with positioning devices in place until installation. Equipment which is subject to damage from moisture shall be stored indoors in a suitably controlled environment with factory covering in place.
- D. Material, equipment or apparatus damaged because of improper storage or protection shall be rejected.
- E. Protect equipment from damage due to moisture, water, spray-on fireproofing, and construction debris during construction.
- F. Cover and protect all openings left in floor for passage of pipes. Protect pipes with suitable coverings as soon as set. Close all open ends of pipes with a plug fitting and conduits with caps to prevent obstruction and damage.
- G. Protect the system against freezing in cold weather.
- H. Prior to starting equipment, remove all protective materials, shipping bars, retainers, positioning devices.

# 1.25 CONSTRUCTION REVIEW

- A. Work may be reviewed at any time by the Engineer.
- B. Advise the Engineer that work is ready for review at the following times:
  - 1. Prior to backfilling buried work.
  - 2. Prior to concealment of work in walls and above ceilings.
  - 3. Testing of systems and equipment.
  - 4. When all requirements of the Contract have been completed.

### **EQUIPMENT NOISE AND VIBRATION** 1.26

- Equipment and systems, as defined herein, shall be quiet and free of apparent vibration A. while in operation.
- B. Vibration shall not be apparent to the senses in occupied areas of the building. To this end, both the balancing of rotating machinery and the installation of vibration isolation at various locations are required.
- C. It shall be the responsibility of this Contractor to obtain equipment that is quiet in operation as compared to other available equipment of its size, capacity, and type; to install equipment so that a minimum amount of noise and/or vibration is transmitted to the building; and to fabricate the piping systems so that noises generated in the systems are held to an absolute minimum.
- D. Any additional precautions deemed necessary to provide a quiet installation shall be done as part of the work of this division, subject to review by the Engineer and without additional cost to the Owner. After the systems are in operation, it shall be the responsibility of the Contractor to make any changes to equipment or work installed that may be required to provide systems which are quiet in operation and comply with the acoustic requirements as specified herein.
- E. Except in various special areas listed herein, the system noise level, in occupied spaces, shall be equal to or less than the "lowest value in the range" of the noise criteria curves for the particular space in accordance with the current edition of Applications Volume of the ASHRAE Handbook. The noise criteria curves shall be based on ANSI Standard S1.6-1984 (R-1990) octave bands and a sound pressure level in decibels referenced to 0.002 microbars. Sound levels within the occupied spaces must meet the criteria described above and with all building, wall partition, floor, ceiling plenum depth, and ceiling construction in place as they exist for the individual spaces. The attenuation through boundary construction of Equipment Rooms must be considered in selecting equipment for acceptable noise level as described herein.
- F. The system noise level in the Tenant-occupied spaces of the project shall not exceed NC-35 (except as noted hereinbelow). This shall include all areas occupied by the Tenant, including areas directly under piping or any equipment.
- G. Areas that shall conform to noise criteria other than NC-35 shall include the following:

1.	Board Room, Auditorium and Conference Rooms	NC-30
2.	Lobby, Toilets, Corridors, General Offices and Cafeteri	a NC-40
3.	Laboratory Areas	NC-40
4.	Computer Room, Print Shop and Storage	NC-50

5. Technology Floors and Kitchens NC-55

#### 1.27 FINAL REVIEW

- A. At a time designated, the entire installation shall be reviewed for compliance with the Contract Drawings and specifications. The Contractor shall be available at all times during this Review.
- B. The Contractor shall demonstrate prior to the Final Review that all systems and all equipment have been properly balanced and adjusted and are in compliance with the requirements of the Contract Documents. After these demonstration tests are completed satisfactorily, but prior to the Final Review field visit by the Engineer, the Contractor shall submit to the Engineer a written certification that attests to Contract Document compliance for this Project.
- C. Certificates and documents required herein shall be in order and presented to the Architect and Engineer at least two (2) weeks prior to the Final Review.
- D. After the Final Review, any changes or corrections noted as necessary for the work to comply with these specifications and the drawings shall be accomplished without delay in order to secure final acceptance of the work.

#### 1.28 EARLY OCCUPANCY

- A. All Contractors and Subcontractors shall be responsible for completing those systems which are necessary to allow partial occupancy of the building(s) even if the systems in the unoccupied areas are incomplete. Partial or early occupancy schedules shall be developed by the Contractor. Specific attention is necessary for any areas involving special spaces such as Technology Areas which will require early operation to allow the final occupancy to be arranged on a schedule consistent with the needs of the project. The Contractor should refer to the construction schedule for this project for the schedule of completion dates assigned to the various portions of the project and schedule his work accordingly.
- B. Requirements for temporary occupancy shall be verified with the Authorities Having Jurisdiction.

## 1.29 DATE OF COMPLETION AND TESTING OF SYSTEMS

- A. The date for the final performance and acceptance testing shall comply with the project construction schedule and shall be sufficiently in advance of the Contract completion date to permit the execution of the testing by the Contractor prior to occupancy and the close-out of the Contract. Any adjustments and/or alterations which the final acceptance tests indicate as necessary for the proper and satisfactory functioning of all equipment and systems shall be completed prior to the close-out of the Contract. Re-tests shall not relieve the Contractor of completion date responsibility.
- B. The Contractor shall provide a detailed schedule of completion indicating when each system component and entire system is to be completed and outlining when tests will be performed. Completion schedule shall be submitted to the Architect, Engineer, and Owner for review at a time requested by the Contractor after the notice to proceed has

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been given by the Contractor to the respective Division 22 Subcontractors. This schedule shall be updated periodically by the Contractor as the project progresses. Each update shall be submitted to the Engineer and Owner for review.

## 1.30 OPERATING INSTRUCTIONS

- A. The Contractor shall provide the services of a factory-trained specialist to supervise the commissioning, startup, and operation of all equipment specified herein and to instruct the Owner's operators during a five (5) day operating instruction period at or near the project site. The operating instruction period shall be defined as straight-time working hours and shall not include nights, weekends, or travel time to and/or from the project and shall include a period for videotaping of the operating instructions. See individual sections of these specifications for additional instructions by manufacturer-trained specialists.
- B. The Owner shall be notified in writing at least two (2) weeks before each operating instruction period begins. The Contractor shall commence no instruction period until the Owner has issued his written acceptance of the starting time.

#### 1.31 WARRANTY PERIOD

- A. The warranty period shall be for the period from beneficial use by the Owner, in accordance with the construction schedule.
- B. During the warranty period, the Contractor shall guarantee the following in a form satisfactory to the Owner:
  - 1. All work installed will be free from any and all defects in workmanship and/or materials.
  - 2. All apparatus will develop capacities and performance characteristics specified.
  - 3. The systems shall operate without malfunction.
- C. The Contractor shall, without cost to the Owner, remedy any defects within a reasonable time to be specified in notice from the Architect. In default thereof, the Owner may have such work done and charge all costs to the Contractor.
- D. The start of the Contractor's warranty period, as defined in the General Conditions, shall commence on the issue of a "Certificate of Substantial Completion" by the Owner or the Owner's Representative for each item of material, equipment, or system.
- E. The Subcontractor shall confer with the Contractor prior to the bid date concerning the project schedule and determine if there is a need to operate any items of equipment or systems for temporary heating and/or cooling or other reasons prior to "Substantial Completion". All required extended warranty costs for equipment, materials, and systems shall be included in the Subcontractor's bid.
- F. Provide complete documentation of all component and system tests prior to Owner acceptance and turnover of components or systems. In addition, the Owner reserves the

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right to review all test objectives, test plans and test cases, and witness all preoperational tests. Provide the Owner with a comprehensive schedule detailing the preparation of testing documentation and the conduct of all component or system tests.

G. Warrant that all components, subsystems and systems will perform their specified functions from the date of turnover and commercial operation through the useful life of the system, as determined by the various equipment manufacturers and installing Contractor. In the event components fail for any reason, be responsible to repair/replace said components, and reimburse the Owner for all costs associated with the component, subsystem or system that failed to perform the specified function.

## 1.32 GUARANTEE

- A. Submit a single guarantee stating that all portions of the work are in accordance with Contract requirements. Guarantee all work against faulty and improper material and workmanship for a period of one year from date of final acceptance by the Owner; except that where guarantees or warranties for longer terms are specified herein, such longer term shall apply. At no additional cost to Owner, within 24 hours after notification, correct any deficiencies which occur during the guarantee period, all to the satisfaction of the Owner and Architect. Require similar guarantees from his Subcontractors.
- B. Guarantee that the materials and workmanship supplied under these specifications will be of the best grade, that the apparatus will be erected in a practical and first class manner, that it will be complete in operation, nothing being omitted in the way of labor and material required to make this so, although not specifically shown or mentioned herein and that it will be delivered in well working order, complete and perfect in every respect without additional cost whether or not shown in detail on the drawings or described in detail in this specification.
- C. Be responsible for all damage to or caused by the work performed under this division for a period of one (1) year from date of the acceptance of work under this Contract. Repair at no cost to Owner all such damage which occurs within 24 hours' notice thereof by the Owner. Damage which occurs prior to the completion of this work shall be repaired at once. Be responsible for any damage and repair thereof and reimburse Owner for all expense incurred thereby. Indemnify the Owner, the Consulting Engineers and the Contractor against loss, liability, damage or expense, including reasonable attorneys' fees, in connection with any claim resulting from such leaks which may be asserted by tenants or any other third person.

## 1.33 DELIVERY, STORAGE AND HANDLING

A. Include all delivery, hauling, hoisting, shoring, and placement in the building of equipment and materials specified herein, including any equipment pre-purchased by the Contractor for installation by this Contractor. The Contractor shall be responsible for the timely delivery and introduction of equipment to the Project as required by the construction schedule for this Project. If any item of equipment is received prior to the time it is required, the Contractor shall be responsible for its proper storage and protection until such time as it may be required. The Contractor shall pay for all costs of demurrage or storage in a bonded warehouse.

B. If any item of equipment is not delivered to or installed at the project site in a timely manner as required by the project construction schedule, the Contractor shall be solely responsible for disassembly, re-assembly, manufacturer's supervision, shoring, general construction modifications, delays, overtime costs, etc. No additional cost or delays shall be incurred by the Owner.

#### **PART 2 - PRODUCTS**

## 2.1 UNAUTHORIZED MATERIALS

A. Materials and products required for work of this section shall not contain asbestos, polychlorinated biphenyls (PCB's) or other hazardous materials identified by the Owner.

#### 2.2 GENERAL

A. Refer to specific specification sections for additional equipment and system piping requirements.

#### **PART 3 - EXECUTION**

#### 3.1 GENERAL

A. Installation shall be in accordance with the specification section pertaining to the individual equipment and system piping.

#### END OF SECTION 22 00 00

#### SECTION 22 05 00 - COMMON WORK RESULTS FOR PLUMBING

#### **PART 1 - GENERAL**

#### 1.1 SUMMARY

- A. This Contractor and his Subcontractors shall provide all labor, materials, tools, scaffolding, machinery, equipment, appliances, and services necessary to complete the plumbing work under this Contract. All systems and equipment shall be complete in every respect and all items of material, equipment and labor shall be furnished and installed for a fully operational system. This Contractor shall coordinate his work with the work of the other trades so as to resolve conflicts without impeding job progress or the project construction schedule. Provide notice with the bid proposal of any concrete work required by this division that is not indicated on the Structural or Architectural Drawings or Drawings of other trades.
- B. This Contractor shall examine all Contract Documents for all divisions of the specifications in order to determine the extent of work required to be completed under this division. Failure to examine all the Contract Documents for this project will not relieve this Contractor of the responsibility to perform all the work required for a complete, fully operational and satisfactory installation.
- C. Provide all miscellaneous common plumbing products required for a complete plumbing installation as indicated, in accordance with the requirements of the Contract Documents.
- D. Section includes:
  - 1. Sleeves.
  - 2. Access doors.
  - 3. Escutcheons.

## 1.2 RELATED SECTIONS

- A. Refer to Divisions 01, 05, 06, 07, and 09 for the scope of work furnished and installed under those divisions on which work in this division may be dependent.
- B. The following specification sections apply to all work herein:
  - 1. Section 22 00 00 General Requirements for Plumbing
  - 2. Section 22 05 29 Hangers and Supports for Plumbing Piping and Equipment
  - 3. and Equipment

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4.	Section 22 05 53	-	Identification	for	Plumbing	Piping	and
	Equipment						

5. Section 22 13 16 - Sanitary Waste and Vent Piping

6. Section 22 14 13 - Facility Storm Drains

#### 1.3 REFERENCES

- A. Each product required for the common plumbing work shall be designed, manufactured, tested and installed in accordance with the latest applicable codes and reference standards including, but not limited to, the following:
  - 1. Codes: Perform all work in accordance with the latest applicable codes and standards for City of New York.
    - a. New York City Building Code.

b.

- c. New York City Plumbing Code.
- 2. Reference Standards: Perform all work in accordance with, but not limited to, the following standards:
  - a. ASTM A653: Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvanized) by the Hot-Dip Process.
  - b. ISO 9000:2001: Quality Management.

#### 1.4 SUBMITTALS

- A. The following submittal data shall be furnished according to the Conditions of the Contract, Division 01, and Section 22 00 00 and shall include, but not be limited to:
  - 1. Product cut sheets and schedule of sleeves and mechanical sleeve seals used for the project. The schedule shall include the material, diameter, length, number of links, location and service the sleeve and sleeve seal will be provided.
  - 2. Product cut sheets and schedule of access doors used for the project. The schedule shall include the material, size, finish type, location and purpose of installation the access door will be provided.
  - 3. Product cut sheets of formed steel channel.

- 4. Product cut sheets of escutcheons. The cut sheets shall indicate the size, finish and location, which the escutcheons will be installed.
- B. Product Data: Submit manufacturer's literature including general assembly.
- C. Manufacturer's Installation Instructions: Submit support details, installation instructions and connection requirements for each product and system for which they are installed.
- D. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

#### 1.5 QUALITY ASSURANCE

- A. The quality assurance requirements of Division 01 and Section 22 00 00 shall apply to all work specified herein.
- B. All materials and equipment shall be fabricated by companies, whose primary business expertise is the manufacturing of commercial and industrial products of the type specified herein. The manufacturer shall have been in continuous operation in the manufacture of the products specified for a minimum of ten (10) years.
- C. Each submittal shall be provided with documentation certifying that all materials, products, components and test reports are in compliance with the design requirements for this project.
- D. Make every effort to furnish all materials of any type from one manufacturer.
- E. Furnish all equipment, materials and accessories new and free from defects.

#### 1.6 WORK INCLUDED

- A. The work includes, but is not limited to, the following systems, equipment and services:
  - 1. Sanitary waste piping.
  - 2. Storm drain piping.
  - 3. Vent piping.

4.

- 5. Provide all miscellaneous supports for Division 22 work and equipment.
- 6. Furnishing of shop drawings, product data and samples.
- 7. Furnishing of "Record Drawings".
- 8. Furnishing of Contractor "Coordination Drawings".

- 9. Miscellaneous items as required for complete and functioning systems as specified herein.
- 10. All systems, equipment, and services specified herein shall be furnished and installed complete and ready for use.
- 11. Provide all sleeves for the Plumbing work complete with seals and firestop as specified herein and as required by the Authority Having Jurisdiction.
- 12. Patching or replacement of all fireproofing if it is damaged or removed during the installation of the Division 22 work.
- 13. Instruments as required for operating and testing the various systems shall be furnished and installed complete as specified herein.
- 14. Hydrostatic testing, operational testing and adjusting of all systems.
- 15. Complete all tests required by all rules, regulations, etc., of all Authorities Having Jurisdiction and prepare, complete and file all forms, tabulations, plans, etc., pertinent thereto with the referenced authorities, and accomplish such work with personnel of proper caliber, in particular, Professional Engineers, where so required.
- 16. Participate in and provide all labor as required for "off-hour" testing of equipment and systems if required by job conditions or by Authorities Having Jurisdiction and as required to obtain the "Temporary Certificates of Occupancy (TCO)."

## 1.7 WORK OF OTHER DIVISIONS

- A. Painting, except touch up painting and as otherwise specified herein.
- B. Installing access doors in general construction.

#### 1.8 VERIFYING EXISTING CONDITIONS

A. Before commencing work, examine all adjoining work on which this work is in any way dependent for perfect workmanship according to the intent of this specification, and report to the Construction Manager any condition, which prevents performance of first-class work. No "waiver of responsibility" for incomplete, inadequate or defective adjoining work will be considered unless notice has been filed before submittal of a proposal.

#### 1.9 SUBCONTRACTS

A. Where Contract Documents require manufacturers' services, and wherever the staff of this Contractor performing the work of this section cannot adequately perform such services, this Contractor shall stipulate such performance in its contracts with its

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Subcontractors or Sub-Subcontractors, vendors, manufacturers, and the like, or else subsequently pay them any additional fees required therefor.

#### 1.10 FACTORY TESTING

A. All mechanical sleeve seals and access doors shall be fully assembled and factory tested for full functionality at the manufacturer's factory prior to shipment.

## 1.11 DELIVERY, STORAGE AND HANDLING

- A. Comply with the requirements of Division 01 and Section 22 00 00.
- B. Accept all material and equipment on site in factory packing. Inspect for damage. Comply with the manufacturer's installation instructions.
- C. Protect all components from physical damage, including effects of weather, water, and construction debris.

#### 1.12 COORDINATION

- A. Coordinate the installation of work in this section with the following:
  - 1. Division 05 Metals
  - 2. Division 09 Finishes

#### 1.13 UNIT PRICES

- A. The Contractor shall state in the proposal, unit prices in accordance with the following schedule and the requirements of Section 22 00 00.
  - 1. Sleeves \$\_\_\_\_/each

2.

3. Access Doors \$\_\_\_\_/each

## 1.14 WARRANTY

- A. Comply with the requirements of Division 01 and Section 22 00 00.
- B. Warranty period shall commence upon final acceptance by the Owner.
- C. Furnish a one (1) year manufacturer's warranty for each mechanical sleeve seal and access door.

#### **PART 2 - PRODUCTS**

#### 2.1 ACCEPTABLE MANUFACTURERS

- A. Being listed herein as an acceptable manufacturer does not permit the manufacturer to provide standard manufactured equipment that does not comply with the performance and/or physical characteristic requirements of the Contract Documents.
- B. All substitutions must be identified in the Base Bid as a voluntary Deduct Alternate, and must be accompanied by a Letter of Equivalency certifying the product's equivalency in all performance and physical characteristics to the products listed herein. The proposed substitutions shall be inclusive of all cost and physical implications throughout the project. Under no circumstances should the substitution result in added cost to the project. Should the substitution be approved neither the project specifications nor the Contract Documents will be revised to reflect the substitution.

#### C. Access Doors

- 1. Karp Associates, Inc.
- 2. Milcor.
- 3. Williams Brothers Corp.

#### D. Escutcheons

- 1. Chicago Specialty.
- 2. Producers Specialty.
- 3. Sanitary-Dash.

#### E. Sleeves

- 1. Calpico, Inc.
- 2. Metraflex Co.
- 3. Pipeline Seal & Insulator Inc. (Link-Seal).

## 2.2 GENERAL REQUIREMENTS

- A. All materials and equipment shall be new, in good condition and free from defect. The commercially standard items of equipment and the specific names mentioned herein are intended to identify standards of quality and performance necessary for the proper functioning of the work.
- B. Since manufacturing methods vary, reasonable minor variations are expected; however, performance and material requirements specified herein are the minimum standards

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acceptable. The Engineer retains the sole right to judge the equality of equipment that deviates from the Contract Documents, to reject any alternative submitted by the Contractor, and to require the specified materials and equipment which conform to the requirements of the Contract Documents be furnished.

C. Materials and equipment, which are found to have factory defects shall be replaced or repaired in a manner acceptable to the Owner and Engineer at no additional cost to the Owner. The Contractor shall be responsible for all costs associated with testing, replacement or repair, including but not limited to, all replacement or repair costs, preparations prior to testing, all testing costs, extended warranties, re-commissioning of the equipment, etc.

#### 2.3 SLEEVES

- A. Furnish sleeves for all pipes passing through floors, walls and concrete, or concrete fireproofed beams.
- B. Sleeves in concrete beams, through concrete walls, and exposed pipes penetrating floors: Schedule 40 steel pipe.
- C. Provide sleeves in foundation walls and in concrete pits with anchor flange.
- D. Sleeves within furred-out enclosures in floors, through partitions, steel beams and walls: 18 gauge (1.2 mm) thick galvanized steel.

## 2.4 ACCESS DOORS

- A. Provide access doors as required for all concealed valves, cleanouts and other elements requiring access above ceilings or behind walls or as indicated on the drawings. The installation of all doors will be performed under the work of another section. Coordinate the work and assume responsibility for the accessibility of all valves.
- B. Provide access doors factory made, completely flush, heavy metal access doors as manufactured by Karp Associates, Inc.
- C. Frames shall be a 14 gauge steel, welded with mitered corners ground smooth, anchors.
- D. Doors shall be 14 gauge steel, heavy hinges flush with frame, invisible when closed, wing-type airplane catches; no bolts, screws, nuts or other loose devices required for opening of door.
- E. All access doors and frames shall be given a prime coat of corrosion-resistant paint at the factory.
- F. Furnish the following access doors as manufactured by Karp Associates, Inc.
  - 1. In plaster ceilings, KARP DSC 210-PL.

- 2. In 3-hour masonry enclosures (pipe or duct shafts), KARP DSC-211-FRT with 1-1/2 inch vermiculite plaster fill. Metal lath lining for plaster shall be self-furring type, tack-welded to pan.
- 3. In non-rated masonry, KARP DSC-211.
- 4. In drywall construction, KARP DSC-214M.

## 2.5 ESCUTCHEONS

- A. Provide escutcheons as required to sufficiently enclose penetrations in fire and smoke rated walls and partitions in accordance with the Contract Documents.
- B. Where pipes penetrate fire or smoke rated walls provide metal escutcheons on both sides of the wall penetration.
- C. Escutcheons shall be either one-piece or two-piece construction, chrome-plated brass or stainless steel.

#### **PART 3 - EXECUTION**

## 3.1 EXAMINATION

A. Accept all materials and equipment in factory packaging and examine for visible damage. All damaged material and equipment shall be removed from the job site and returned to the manufacturer for replacement.

#### 3.2 INSTALLATION

- A. Installation shall be in accordance with the specification section pertaining to the individual equipment.
- B. The arrangement, positions and connections of pipes, fixtures, drains, valves, and the like, indicated on the drawings shall be followed as closely as possible, but the right is reserved by the Architect to change locations and elevations to accommodate conditions which may arise during the progress of the work, prior to installation, without additional compensation for such changes. The responsibility for accurately laying out the work and coordinating the installation with other trades rests with this Contractor. Should it be found that any work is laid out so that interferences will occur, report that to the Architect before commencing work.
- C. Carry fixture connections, concealed in building construction, to points above floor, break out close to the underside or adjacent to fixture and continue exposed to fixture.
- D. Piping Installation

- 1. Install pipes approximately as shown on the drawings and as directed during installation, as straight and direct as possible, forming right angles or parallel lines with building walls and other pipes, and neatly spaced. Erect pipe risers plumb and true, and parallel with walls and other pipes and neatly spaced.
- 2. Keep all horizontal runs of piping, except where concealed in partitions, as high as possible and close to walls. Maintain minimum 1/8 inch fall per foot on all soil, waste and leader lines.
- 3. Do not install pipes or other apparatus in a manner, which interferes with the full swing of the doors.
- 4. Ream all pipe smooth before installation. Do not bend, flatten, split or otherwise injure pipe.
- 5. Use reducing fittings, unless otherwise approved in special cases, in making reduction in size of pipe. Bushings shall not be allowed unless specifically approved.
- 6. Where chrome-plated piping is installed, cut and thread pipe so that no unplated pipe threads are visible when the work is completed.
- 7. Do not install exterior piping in water or when trench or weather conditions are unsuitable for the work, as decided by the Architect.

## E. Sleeves

- 1. Set sleeves in position in forms. Provide reinforcing around sleeves.
- 2. Size sleeves large enough to allow for movement due to expansion and contraction. Provide for continuous insulation wrapping.
- 3. Extend sleeves through floors {1 in. (25 mm)}{2 in. (50 mm)} above finished floor level. Caulk sleeves tight.
- 4. Where piping penetrates floor, ceiling or wall, close off space between pipe and adjacent work with firestopping and caulk airtight. Provide close-fitting metal collar or escutcheon covers at both sides of penetration.
- 5. Sleeves passing through fire-rated floors or walls shall be sealed with an intumescent formulation similar to Metraflex Metraseal 120 FireSeal or approved.
- 6. Sleeves passing through foundation walls or pit walls shall be sealed utilizing a mechanical seal similar to Link-Seal or approved.
- 7. Install chrome-plated steel escutcheons at finished surfaces.

- 8. Set sleeves as construction progresses and secure in place during pouring of concrete.
- 9. Fire stopping shall be installed as specified under Section 07 84 00.

#### F. Access Doors

- 1. Size access doors as required for the equipment being accessed, however access doors shall not be smaller than 16 inches by 16 inches. Install all valves to fit within the limit of the following size access doors; where two (2) or less valves are located with their bonnets within 12 inches of the face of the door and all portions of the valves are within the area defined by the opening in the door, 16 inch x 16 inch doors may be used. Where more than two (2) valves are served by a door and the bonnets are within 12 inches of the face of the door, the size of the door shall be increased so that all portions of the valves are within the area defined by the opening in the door. Where the bonnets of the valves are more than 12 inches from the face of the door, the doors shall be minimum of 20 inch x 20 inch clear opening.
- 2. Furnish buttons or tabs to Ceiling Contractor for setting, as approved by Architect, to indicate location of valves, cleanouts or other equipment located above removable-type ceilings where access doors are not furnished.

#### G. Escutcheons

- 1. Provide pipe escutcheons with inside diameter closely fitting pipe outside diameter, or outside of pipe insulation where pipe is insulated. Select outside diameter of escutcheon to completely cover pipe penetration hole in floors, walls, or ceilings, and pipe sleeve extensions, if any. Furnish pipe escutcheons with chrome finish for occupied areas, prime paint finish for unoccupied areas.
- 2. Escutcheons for waterproof floors, and areas where water and condensation can be expected to accumulate shall be stainless steel or chrome plated cast brass, solid or split hinged.
- 3. Escutcheons for dry areas shall be chrome plated cast brass or galvanized sheet steel, solid or split hinged.

## 3.3 CLEANING

- A. Before final connections are made and before operation of equipment and piping, thoroughly blow out, rod out, or wash out all piping at least twice, in a manner as directed and/or approved by the Architect, to remove all accumulation of dirt, chips or other deleterious material. Make all temporary connections and furnish all appliances required for the purpose of cleaning at no extra expense to the Owner.
- B. Clean up all equipment and leave in condition for finish painting before acceptance.

- C. Disinfect underground water mains after installation and test in accordance with AWWA Standard C-601 and requirements of the local Authorities Having Jurisdiction.
- D. Disinfect interior potable water distribution system in accordance with requirements of the local Authorities Having Jurisdiction. Provide the following procedure where no prescribed method exists:
  - 1. After the system is flushed, fill with either 50 ppm chlorine-water solution and let stand for 24 hours, or 200 ppm chlorine-water solution and let stand for 3 hours.
  - 2. Flush system with clean potable water until no excess chlorine remains in system.
  - 3. Repeat procedure if contamination persists after further test.

#### 3.4 PROTECTIVE PAINTING

- A. Painting, except as specified herein or indicated otherwise, shall be done under another division. This division shall cooperate with the other divisions to determine the size of equipment, sizes and lengths of pipes, etc., to be painted.
- B. Equipment and materials furnished under this section shall be factory-finished as specified. If the factory finish is damaged during shipment, storage, installation, etc., it shall be repainted by this Contractor subject to the Engineer's approval. Touch-up painting is acceptable only for minor finish damage.
- C. Paint products for identification of plumbing systems shall be exterior grade, alkyd-based products.
- D. Repair damaged and marred factory-painted finishes with materials and procedures to match original factory finish.

## 3.5 FIELD TESTS

- A. Test all systems in full accordance with applicable Underwriters' and Municipal requirements.
- B. Notify the Architects and Inspectors Having Jurisdiction at least 48 hours in advance of performing the required tests, so that arrangements may be made for their presence to witness the tests.
- C. Furnish and pay for all devices, materials, supplies, labor and power required in connection with tests. Make all tests in the presence and to the satisfaction of the Architects, plumbing and other inspectors of the city, applicable Insurance Association and Public Utilities Inspectors Having Jurisdiction.
- D. Repair or, if required by the Architects, replace defective work with new work without extra charge to the Owner. Repeat tests as directed, until all work is proven satisfactory.

- E. Restore to its original condition any work damaged or disturbed by tests, engaging the original trades to do the work of restoration.
- F. Test the systems before any paint or insulation is applied.
- G. Test equipment in service and demonstrate that the equipment performs the work intended for it and that it complies with the requirements of these specifications for such equipment.
- H. Test all fixtures for soundness, stability of support and satisfactory operation.

#### I. Performance Tests

1. Gravity Drainage Systems: Subject the sanitary and storm drains, waste, and vent piping inside the building to a standing water test. The standing water test shall include the entire system from the lowest to the highest point of the system. The system shall be tested to a hydrostatic pressure equivalent to at least a ten foot head of water. After filling, shut off water supply and allow it to stand two (2) consecutive hours, with no leakage.

## J. Final Acceptance

- 1. Prior to final acceptance the Contractor shall submit all performance test reports for each test performed. The reports shall be bound in a three ring binder and submitted to the Architect, Engineer and Owner for review.
- 2. Final acceptance testing shall comply with the project construction schedule and shall be sufficiently in advance of the Contract completion date to permit the execution of the testing by the Contractor prior to occupancy and the close-out of the Contract.
- 3. Any adjustments and/or alterations which the final acceptance tests indicate as necessary for the proper and satisfactory functioning of all equipment and systems shall be completed prior to the close-out of the Contract. Re-tests shall not relieve the Contractor of completion date responsibility.

#### END OF SECTION 22 05 00

# SECTION 22 05 29 - HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT

#### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Provide all hangers, supports and anchors required for piping and equipment as indicated on and in accordance with the requirements of the Contract Documents.
- B. The Division 22 Subcontractor shall assume complete responsibility for the anchoring of the equipment, piping systems, specified hereinafter to the concrete foundation pads, to the concrete inertia bases, and to the supporting structural steel and concrete beams.
- C. Section includes:
  - 1. Pipe hangers and supports.
  - 2. Attachments to structure.
  - 3. Formed steel channel supports and accessories.

## 1.2 RELATED SECTIONS

- A. Refer to Divisions 01, 05, 06, 07, and 9 for the scope of work furnished and installed under those divisions on which work in this division may be dependent.
- B. The following specification sections apply to all work herein:

1.	Section 22 00 00	-	General Requirements for Plumbing

- 2. Section 22 05 00 Common Work Results for Plumbing
- 3. Section 22 13 16 Sanitary Waste and Vent Piping
- 4. Section 22 14 13 Facility Storm Drainage Piping

#### 1.3 REFERENCES

- A. All hangers and supports, including all components shall be designed, manufactured, tested and installed in accordance with the latest applicable codes and reference standards including, but not limited to, the following:
  - 1. Codes: Perform all work in accordance with the latest applicable codes and standards for City of New York.
    - a. New York City Building Code.

## HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT 22 05 29 - 1

- b. New York City Plumbing Code.
- 2. Reference Standards: Perform all work in accordance with, but not limited to, the following standards:
  - a. American Society of Mechanical Engineers
    - 1) ASME B31.1: Power Piping.
    - 2) ASME B31.9: Building Services Piping.
  - b. ASTM International
    - 1) ASTM A 36: Standard Specification for Carbon Structural Steel.
    - 2) ASTM A 47: Standard Specification for Ferritic Malleable Iron Castings.
    - 3) ASTM A 48: Standard Specification for Gray Iron Castings.
    - 4) ASTM A 123: Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
    - 5) ASTM A 240: Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
    - 6) ASTM A 283: Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates.
    - 7) ASTM A 536: Standard Specification for Ductile Iron Castings.
    - 8) ASTM A 575: Standard Specification for Steel Bars, Carbon, Merchant Quality, M-Grades.
    - 9) ASTM A 668: Standard Specification for Steel Forgings, Carbon and Alloy, for General Industrial Use.
    - 10) ASTM A 1011: Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.
    - 11) ASTM B 633: Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel.
    - 12) ASTM E 84: Test Method for Surface Burning Characteristics of Building Materials.

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- 13) ASTM E 119: Method for Fire Tests of Building Construction and Materials.
- 14) ASTM E 814: Test Method of Fire Tests of Through Penetration Firestops.
- 15) ASTM F 708: Standard Practice for Design and Installation of Rigid Pipe Hangers.
- c. American Welding Society
  - 1) AWS D1.1: Structural Welding Code Steel.
- d. FM Global
  - 1) FM Approval Guide, A Guide to Equipment, Materials & Services Approved by Factory Mutual Research for Property Conservation.
- e. Manufacturers Standardization Society of the Valve and Fittings Industry
  - 1) MSS SP 58: Pipe Hangers and Supports Materials, Design and Manufacturer.
  - 2) MSS SP 77: Guidelines for Pipe Support Contractual Relationships.
  - 3) MSS SP 89: Pipe Hangers and Supports Fabrication and Installation Practices.
  - 4) MSS SP 90: Guidelines on Terminology for Pipe Hangers and Supports.

## 1.4 SUBMITTALS

- A. The following submittal data shall be furnished according to the Conditions of the Contract, Division 01, and Section 22 00 00 and shall include, but not be limited to:
  - 1. Provide shop drawings indicating system layout with location showing critical dimensions, sizes, pipe hanger and support locations and detail of trapeze hangers.
  - 2. Method of attachment to and load imposed on building structures by hangers, anchors, supports, guides and supplemental steel shall be submitted for review and approved by the project Architect and Structural Engineer.
  - 3. Shop drawings indicating support methods, point loadings to the building structure and hanger locations shall be submitted for review sufficiently in

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advance of concrete pouring schedules to permit evaluation, critique and any necessary changes to hanging and support methods.

- B. Product Data: Submit manufacturer's literature including general assembly,
  - 1. Hangers and Supports: Submit manufacturer's catalog data including load capacity and sizing schedules specific to this project.
  - 2. Inserts: Submit manufacturer's catalog data including load capacity.
- C. Design Data: Indicate load-carrying capacity of trapeze, multiple pipe, and riser support hangers. Indicate calculations used to determine load-carrying capacity of trapeze, multiple pipe, and riser support hangers. Submit sizing methods and calculations sealed by a Professional Engineer licensed in City of New York.
- D. Test Reports: Indicate procedures and results for specified factory and field acceptance testing and inspections.
- E. Manufacturer's Installation Instructions: Submit support details, installation instructions, connection requirements, for the system.
  - 1. Hangers and Supports: Submit special procedures and assembly of components.
- F. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

## 1.5 QUALITY ASSURANCE

- A. The quality assurance requirements of Division 01 and Section 22 00 00 shall apply to all work specified herein.
- B. All products and equipment specified herein shall be fabricated by companies whose primary business expertise is the manufacturing of commercial and industrial products and equipment with a minimum of ten (10) years documented experience.
- C. Each submittal shall be provided with documentation certifying that all materials, products, components, and test reports are in compliance with the design requirements for this project.
- D. Make every effort to furnish all equipment of any equipment type from one manufacturer.
- E. Furnish all equipment, materials and accessories new and free from defects.

## 1.6 FACTORY TESTING

A. All hangers, rods, supports and accessories shall be fully assembled and factory tested for full functionality at the manufacturer's factory prior to shipment.

## 1.7 DELIVERY, STORAGE AND HANDLING

- A. Comply with the requirements of Division 01 and Section 22 00 00.
- B. Accept all material and equipment on site in factory packing. Inspect for damage. Comply with the manufacturer's rigging and installation instructions.
- C. Protect all components from physical damage, including effects of weather, water, and construction debris.

## 1.8 COORDINATION

A. Coordinate with other trades to use common means of support. Submit for approval all pertinent design data relating to the support as well as verification of the responsibility for the support.

#### 1.9 WARRANTY

- A. Comply with the requirements of Division 01 and Section 22 00 00.
- B. Furnish a five (5) year manufacturer's warranty for all pipe hangers and supports.
- C. Warranty period shall commence upon final acceptance by the Owner.

## **PART 2 - PRODUCTS**

## 2.1 ACCEPTABLE MANUFACTURERS

- A. Being listed herein as an acceptable manufacturer does not permit the manufacturer to provide standard manufactured equipment that does not comply with the performance and/or physical characteristic requirements of the Contract Documents.
- B. All substitutions must be identified in the Base Bid as a voluntary Deduct Alternate and must be accompanied by a Letter of Equivalency certifying the product's equivalency in all performance and physical characteristics to the products listed herein. The proposed substitutions shall be inclusive of all cost and physical implications throughout the project. Under no circumstances should the substitution result in added cost to the project. Should the substitution be approved neither the project specifications nor the Contract Documents will be revised to reflect the substitution.
- C. Anchors and Inserts (Undercut Wedge Type)
  - 1. Hilti.
  - 2. MKT Fastening, LLC.
  - 3. Simpson StrongTie.

- D. Formed Steel Channel Supports
  - 1. Anvil International.
  - 2. Cooper B-Line.
  - 3. Carpenter & Patterson.
  - 4. Empire Industries, Inc.
  - 5. Erico Caddy.
  - 6. Hilti.
  - 7. National Pipe Hanger Corporation.
  - 8. PHS Industries, Inc.
  - 9. Piping Technology and Products.
  - 10. Thomas & Betts Kindorf.
  - 11. Tolco Inc.
- E. Pipe Hangers, Supports and Guides
  - 1. Anvil International.
  - 2. Cooper B-Line.
  - 3. Carpenter & Patterson.
  - 4. Empire Industries, Inc.
  - 5. Erico Caddy.
  - 6. Hilti.
  - 7. National Pipe Hanger Corporation.
  - 8. PHS Industries, Inc.
  - 9. Piping Technology and Products.
  - 10. Thomas & Betts Kindorf.
  - 11. Tolco Inc.
  - 12. Witch Co.

## 2.2 GENERAL REQUIREMENTS

- A. All materials and equipment shall be new, in good condition and free from defect. The commercially standard items of equipment and the specific names mentioned herein are intended to identify standards of quality and performance necessary for the proper functioning of the work.
- B. Since manufacturing methods vary, reasonable minor variations are expected; however, performance and material requirements specified herein are the minimum standards acceptable. The Engineer retains the sole right to judge the equality of equipment that deviates from the Contract Documents, to reject any alternative submitted by the Contractor, and to require the specified materials and equipment which conform to the requirements of the Contract Documents be furnished.
- C. Materials and equipment which are found to have factory defects shall be replaced or repaired in a manner acceptable to the Owner and Engineer at no additional cost to the Owner. The Contractor shall be responsible for all costs associated with testing, replacement or repair, including but not limited to, all replacement or repair costs, preparations prior to testing, all testing costs, extended warranties, re-commissioning of the equipment, etc.

#### 2.3 PIPE HANGERS AND SUPPORTS

- A. Provide suitable and substantial hangers and supports for all piping and equipment. Hangers and supports shall be of the type, size and spacing specified or as required by the Authority Having Jurisdiction.
- B. Comply with maximum load ratings with consideration for allowable stresses prescribed by ASME B31.1 or MSS SP-58.
- C. Pipe hangers, anchors, supports and guides shall be manufactured, selected, fabricated and installed in accordance with MSS SP-58, MSS SP-69 and MSS SP-89.
- D. Provide supports, guides and anchors that do not transmit unacceptable vibration to building structure.
- E. The support systems shall provide for, and control, the free or intended movement of the piping, including its movement in relation to that of connected equipment.
- F. Provide for vertical adjustments after installation of supported material and during commissioning, where feasible, to ensure pipe is at design elevation and slope.
- G. Select hangers and supports to perform under all conditions of operation, allowing free expansion and contraction, and to prevent excessive stresses being introduced into piping system and connected equipment.
- H. Anchorage shall be provided to restrain drainage piping from axial movement. Piping sizes greater than 4 in. (100 mm), restraints shall be provided for drain pipes at all

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changes in direction and at all changes in diameter greater than two (2) pipe sizes. Braces, blocks, rodding and other suitable methods as specified by the coupling manufacturer shall be utilized.

- I. Provide drawings indicating pipe loads, including method of suspension and hanger location, and submit them for approval prior to proceeding with installation. Provide all the supplementary steel required to support, guide and anchor piping within shafts, Mechanical Equipment Rooms and all the other floors.
- J. Particular care shall be taken to support all pipes in a manner approved by the Architect, including the providing of supplementary steel, if required.
- K. Support vertical risers from the building construction by means of pipe clamps at every floor. Provide channels of approved sizes where pipe clamps are too short to connect to the building construction.
- L. Provide rigid support sway bracing for all horizontal piping 4 in. (100 mm) and larger and piping which is supported greater than 2 ft. (610 mm) from the slab above, measured from the top of the pipe.
- M. Provide additional support for all sanitary and storm house drain offsets consisting of riser clamps and threaded rod to anchor all fittings in the horizontal offset. This method of anchoring and support shall be provided in addition to the sway bracing described in the paragraph above.

#### N. Finishes

- 1. Hangers and clamps for uninsulated copper pipes shall be coated with coppercolored epoxy paint and an additional PVC coating.
- 2. Hangers, anchors, inserts, supports and guides (swivel ring, split ring, roller, wrought pipe clamp, or adjustable wrought clevis-type hangers, roller supports, floor stands, wall brackets, etc.) installed within the building shall be hot dipped galvanized in accordance with ASTM A123 or stainless steel.
- 3. All hangers, supports, inserts, etc., utilized to support piping below the slab on grade or buried shall be stainless steel.
- 4. Strut channels installed indoors shall be pre-galvanized in accordance with ASTM A653 SS Grade 33 G90.
- 5. Hangers, anchors, supports, guides and strut located outdoors shall be hot dip galvanized after fabrication in accordance with ASTM A123 or stainless steel. All hanger hardware shall be hot-dip galvanized or stainless steel. Zinc-plated hardware shall not be acceptable for outdoor or corrosive use.

## O. Hangers

1. Pipes 2 in. (50 mm) and smaller shall be supported with one of the following:

- a. Adjustable steel swivel ring (band type) hanger.
- b. Malleable iron split ring hanger.
- c. Adjustable steel clevis hanger.
- 2. Pipes 2-1/2 in. (63.5 mm) and larger shall be supported with one of the following:
  - a. Adjustable steel swivel ring (band type) hanger.
  - b. Adjustable steel clevis hanger.

## P. Trapeze Hangers

- 1. Shall be constructed of one of the following:
  - a. 12 gauge roll-formed 1-5/8 in. (40 mm) by 1-5/8 in. (40 mm) minimum structural steel channel.
  - b. Two (2) structural steel channels secured together with 1/2 in. (12.5 mm) or 3/4 in. (20 mm) steel pipe sections.
- 2. Pipes shall be secured to trapeze by one of the following methods:
  - a. Uninsulated Pipe: 2-piece pipe straps with thermoplastic elastomeric liner sized for outside diameter of pipe.

#### Q. Floor Supports

- 1. Shall be one of the following:
  - a. Adjustable pipe saddles and nipples welded or screwed to steel base stands secured to floor.
  - b. Adjustable roller stands with base plates secured to floor.
- 2. Pipes shall be secured to supports by one of the following methods:
  - a. Uninsulated Pipe: 2-piece pipe straps with thermoplastic elastomeric liner sized for outside diameter of pipe.

## 2.4 ATTACHMENTS TO STRUCTURE

A. All piping shall be carried by pipe hangers and supports attached to building structure. All supports and restraints requiring connections to steel-plated building construction shall be welded to steel plating.

- B. Method of attachment to and load imposed on building structures by hangers, anchors, supports, guides and supplemental steel shall be submitted for review.
- C. In no case shall hangers be supported by means of vertical expansion bolts.
- D. Powder and power-actuated devices, grip nails, and/or expansion nails shall NOT be permitted.

## E. Structural Steel Attachments

- 1. Center-loaded beam clamps or welded beam attachments shall be used where piping is to be suspended from building steel. Clamp shall be forged steel or malleable iron with cross bolts sized as required to fit beams and selected on the basis of load configuration and load to be supported.
- 2. Where allowed by Structural Engineer, C-clamps with locknuts, cup point set screws and retaining straps shall be used. Top flange C-clamps shall be used when attaching a hanger rod to the top flange of structural shapes. Set screw torque shall be in accordance with manufacturer's recommendation.

#### F. Concrete Inserts

- 1. Cast-in-place continuous or spot concrete inserts shall be used where applicable.
- 2. Continuous inserts shall be made of 12 gauge, ASTM A1011 SS Grade 33 structural quality carbon steel, complete with styrofoam inserts and end caps with nail holes for attachment to forms. The continuous concrete insert shall have a load rating of 2,000 lbs./ft. in concrete.
- 3. Spot inserts shall be constructed of one of the following:
  - a. Malleable iron or pressed steel having a space for rods of all sizes. All inserts for pipes 3 in. (75 mm) and larger in size shall be installed with a reinforcing rod 5/8 in. (16 mm) in diameter, run through a slot in the insert specifically provided for this purpose.
  - b. Internally threaded machined steel insert with large, flanged heads suitable for installation on wood forms and/or formed metal decking.

#### G. Mechanical Anchors (After Sets)

- 1. If any pipe has to be hung in space where no inserts have been provided, drill a hole from below through concrete slabs, and provide a rod and hanger attached to an approved fishplate.
- 2. Mechanical anchors of the undercut type may be used in stone concrete slabs only. The carrying capacity and size of each mechanical anchor shall be

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calculated on the basis of the spacing indicated in the hanger spacing table hereinbelow.

- 3. Undercut wedge anchors for pipes 6 in. (150 mm) and smaller shall be Hilti "HDA" Undercut Anchor or Simpson StrongTie Strong-Bolt. For pipes 8 in. (200 mm) and over, provide two (2) undercut or wedge-type anchors with the corresponding rods and hangers fastened to the slab as specified above with a 2 in. x 2 in. (50 mm x 50 mm) angle or uni-strut to support the piping. Anchors shall not be smaller than 3/8 in. (10 mm.)
- 4. The rods on all hangers shall be of adequate size to support the load, which they carry. The minimum size shall be 3/8 in. (10 mm.)

## 2.5 FORMED STEEL CHANNEL SUPPORTS AND ACCESSORIES

- A. Formed steel channel supports shall be capable of withstanding the effects of loads and stresses within limits and under conditions specified in ANSI A14.3 and shall comply with NFPA 13 requirements.
- B. Channel shall be made of minimum 12-gauge ASTM A570 Grade 33 steel electro galvanized after fabrication. Channel sections may be formed by single or factory welded multiple sections of any of the following:
  - 1. 1-5/8 in. (41.25 mm) x 1-5/8 in. (41.25 mm) channel.
  - 2. 2-7/16 in. (62 mm) x 1-5/8 in. (41.25 mm) channel.
  - 3. 3-1/4 in. (82.5 mm) x 1-5/8 in. (41.25 mm) channel.
- C. Grip/Lock nuts shall be made of 3/8 in. (10 mm) thick case hardened mild steel bars electro galvanized after fabrication.
- D. All angle brackets connectors and washers shall be made of 1/4 in. (6.35 mm) steel plate electro galvanized after fabrication.

## **PART 3 - EXECUTION**

## 3.1 EXAMINATION

A. Accept all materials and equipment in factory packaging and examine for visible damage. All damaged material and equipment shall be removed from the job site and replaced by the manufacturer.

## 3.2 INSTALLATION

A. Hanger, rods, supports and accessories shall be installed in accordance with the manufacturer's recommendations and the Authorities Having Jurisdiction.

- B. Furnish and install all necessary supports for equipment furnished under this section. To meet the varying conditions in each case, these supports shall consist of pipestands, steel angle or strap hangers, saddles, brackets, as required for a complete installation.
- C. All such supports shall have substantial flanges bolted to floor construction; hangers shall be supported from the framing as described hereinabove. Supports shall be properly located with reference to any supporting pads, legs of the equipment carried and must be distributed as not to bring any undue strains to the equipment.
- D. All hanger and support details shall be submitted for review and approval.
- E. Guarantee that the work, as installed under this section of the specifications, will not result in the transmission of objectionable noise or vibration to any occupied parts of the building, and take full responsibility for any necessary modifications of this equipment, or of the foundations and supports for the same, necessary to secure this result.
- F. Follow manufacturer's recommended written instructions and torque values when tightening C-clamps to bottom beam flanges.
- G. Proper care and ventilation should be given when welding galvanized components.
- H. Clamps on Riser Piping
  - 1. Support independent of connected horizontal pipework using riser clamps and riser clamp lugs welded to riser.
  - 2. Bolt tightening torques shall be to industry standards.
  - 3. Cast Iron Pipes: Install clamp below joint.
  - 4. Steel Pipes: Clamp is fitted preferably below coupling or welded pipe lug.
  - 5. Clamps on riser piping shall maintain the insulation and vapor barrier as piping passes through the support.
- I. Support from Structural Members: Where structural bearing does not exist or inserts are not in suitable locations, provide supplementary structural steel members.
- J. Field welding of supports should be done by qualified welders using qualified welding procedures.
- K. Support cast iron bell and spigot and No-Hub pipe and fittings with a minimum of two (2) hangers per each length of pipe. The maximum hanger spacing shall be in accordance with the hanger spacing schedule herein below. Hangers shall be installed on each side of joint. Where an excessive number of fittings are installed between hangers, provide additional hangers, channel supports or reinforcing as required. Securely anchor fittings to the building construction at changes of direction to eliminate all horizontal movement.

L. Horizontal piping shall be supported in accordance with the following schedules:

SINGLE ROD SUPPORT - STEEL AND CAST IRON PIPE					
Pipe Size	Maximum Hanger Spacing	Rod Size			
1 to 2 inches (25 mm to 50 mm)	10 feet 0 inches (3,048 mm)	3/8 inch (10 mm)			
2-1/2 and 3 inches (63 mm to 75 mm)	12 feet 0 inches (3,658 mm)	1/2 inch (12.5 mm)			
4 to 5 inches (100 mm to 125 mm)	12 feet 0 inches (3,658 mm)	5/8 inch (16 mm)			
6 to 10 inches (150 mm to 250 mm)	12 feet 0 inches (3,658 mm)	3/4 inch (20 mm)			
DOUBLE ROD SUPPORT					
Pipe Size	Maximum Hanger Spacing	Rod Size			
6 to 8 inches (150 mm to 200 mm)	12 feet 0 inches (3,658 mm)	1/2 inch (12.5 mm)			
10 to 12 inches (250 mm to 300 mm)	12 feet 0 inches (3,658 mm)	5/8 inch (16 mm)			

SINGLE ROD SUPPORT - COPPER PIPE				
Pipe Size	Maximum Hanger Spacing	Rod Size		
1 to 1-1/4 inches (25 mm to 32 mm)	7 feet 0 inches (2,133 mm)	3/8 inch (10 mm)		
1-1/2 to 3 inches (37 mm to 75 mm)	8 feet 0 inches (2,438 mm)	1/2 inch (12.5 mm)		

- M. Maximum hanger spacing may not be exceeded; however, actual installed spacing will depend on location of structural framing and floor slab construction. Where building construction does not permit the above spacing, provide additional steel supports.
- N. Install lock nuts at the bottom of all hanger rods.
- O. Vertical pipe risers shall be supported independently of connected horizontal piping.
- P. Support vertical risers from the building construction by means of pipe clamps, Grinnell Model No. 261, at every story height;
- Q. Where hangers cannot be supported from building framing, they may be supported from concrete inserts, subject to the approval of the Structural Engineer. Furnish, locate and set such inserts and make sure that such inserts are in place when the concrete is poured.
- R. Set all inserts for all pipes in ample time to allow the work of the other trades to be performed on scheduled time.
- S. Smaller pipes may be suspended from cross-pieces of pipe or steel angles, which, in turn, shall be hung from building concrete construction by means of rods and inserts. The intention is to provide supports which, in each case, shall be amply strong and rigid for the load, but which shall not weaken or unduly stress the building construction.
- T. Provide approved roller supports, floor stands, wall brackets, etc., for all lines running near the floor or near walls, which can be properly supported or suspended by the floors

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or walls. Pipelines near walls may also be hung by hangers carried from approved wall brackets at a higher level than the pipe.

- U. No piping shall be hung from other piping or ductwork. In no case shall hangers be supported by means of vertical expansion bolts.
- V. Hangers for piping shall support the pipe without piercing the insulation. Pre-insulated pipe shields shall be used to protect the insulation on pipes. It is the intent that the insulation shields shall bear only on the insulation, which is of such density that the insulation will not be compressed, crushed or deformed.

#### 3.3 CLEANING

- A. Before final adjustments are made and before operation of equipment, clean and remove all accumulation of dirt, chips or other deleterious material. Leave all hangers and supports in condition suitable for finish painting, before final acceptance.
- B. Touch up, repair or replace damaged products before Substantial Completion.

## 3.4 INSPECTION AND STARTUP SERVICE

A. Inspect each hanger, rod and support for piping and equipment for proper installation according to the manufacturer's instructions.

#### 3.5 FIELD TESTS

A. Performance Test: All hanger and support devices and components shall be tested in accordance with the latest applicable industry standards.

## 3.6 ADJUSTING AND BALANCING

- A. Adjust all pipe hangers, miscellaneous supports and equipment supports to equalize load for the piping and equipment they carry and to ensure that rods are vertical under operating conditions.
- B. Hangers at equipment shall be adjusted to ensure that there are no loads imposed on the equipment by the piping connected to the equipment.
- C. Hangers and Supports
  - 1. Ensure that rod is vertical under operating conditions.
  - 2. Equalize loads for all piping and equipment supports.
- D. Adjustable Clevis
  - 1. Tighten hanger load nut securely to ensure proper hanger performance.
  - 2. Tighten upper nut after adjustment.

- E. Beam Clamps: Tighten all set screws and lock nuts.
- F. Riser Clamps
  - 1. Ensure all riser clamps are securely resting on the concrete slab or kindorf after system is tested and pressurized.
  - 2. Tighten riser clamp nuts after vertical adjustments are made.

**END OF SECTION 22 05 29** 

## SECTION 22 05 53 - IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT

#### PART 1 - GENERAL

## 1.1 SUMMARY

- A. Provide all identification nameplates and tags required for equipment and piping as indicated on and in accordance with the requirements of the Contract Documents.
- B. Section includes:
  - 1. Pipe identification.

#### 1.2 RELATED SECTIONS

- A. Refer to Divisions 01, 05, 06, 07, and 9 for the scope of work furnished and installed under those divisions on which work in this division may be dependent.
- B. The following specification sections apply to all work herein:

1.	Section 22 00 00	_	General Requirements t	for Plumbing

- 2. Section 22 05 00 Common Work Results for Plumbing
- 3. Section 22 13 16 Sanitary Waste and Vent Piping
- 4. Section 22 14 13 Facility Storm Drainage Piping

#### 1.3 REFERENCES

- A. All nameplates, signs and valve tags shall be designed, manufactured, tested and installed in accordance with the latest applicable codes and reference standards including, but not limited to, the following:
  - 1. Codes: Perform all work in accordance with the latest applicable codes and standards for City of New York.
    - a. New York City Building Code.
    - b. New York City Plumbing Code.
  - 2. Reference Standards: Perform all work in accordance with, but not limited to, the following standards:
    - a. American Society of Mechanical Engineers
      - 1) ASME A13.1: Scheme for the Identification of Piping Systems.
    - b. American National Standards Institute

## **IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT 22 05 53 - 1**

 ANSI Z535: Safety Color Code - Environmental Facility Safety Signs - Criteria for Safety Symbols - Product Safety Sign & Labels - Accident Prevention Tags.

## c. ASTM International

1) ASTM D 882: Standard Test Method for Tensile Properties of Thin Plastic Sheeting.

#### 1.4 SUBMITTALS

- A. The following submittal data shall be furnished according to the Conditions of the Contract, Division 01, and Section 22 00 00 and shall include, but not be limited to:
  - 1. Catalog cuts of pipe markers.
- B. Submit two (2) samples of each type of the following:
  - 1. Piping markers.
- C. Product Data: Submit manufacturer's literature for each product submitted.
- D. Manufacturer's Installation Instructions: Submit support details, installation instructions and connection requirements for the system.
- E. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

## 1.5 QUALITY ASSURANCE

- A. The quality assurance requirements of Division 01 and Section 22 00 00 shall apply to all work specified herein.
- B. All products and equipment specified herein shall be fabricated by companies whose primary business expertise is the manufacturing of commercial and industrial products and equipment with a minimum of ten (10) years documented experience.
- C. Each submittal shall be provided with documentation certifying that all materials, products, components and test reports are in compliance with the design requirements for this project.
- D. Furnish all equipment, materials and accessories new and free from defects.
- E. Conform to ASME A13.1 for color scheme for identification of piping systems and accessories and ANSI Z535 Safety Color Code Environmental Facility Safety Signs Criteria for Safety Symbols Product Safety Sign & Labels Accident Prevention Tags.

## 1.6 DELIVERY, STORAGE AND HANDLING

A. Comply with the requirements of Division 01 and Section 22 00 00.

IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT 22 05 53 - 2

- B. Accept all material and equipment on site in factory packing. Inspect for damage. Comply with the manufacturer's rigging and installation instructions.
- C. Protect all components from physical damage, including effects of weather, water, and construction debris.
- D. Store tapes, adhesives, mastics, and labeling materials in ambient conditions acceptable to and in accordance with the recommendations of the manufacturer.
- E. Labeling and markers which become damaged in the opinion of the Engineer may be rejected and shall be repaired or replaced by the Contractor at no additional expense to the Contract.

#### 1.7 WARRANTY

- A. Comply with the requirements of Division 01 and Section 22 00 00.
- B. Furnish a one (1) year manufacturer's warranty for all system tags and nameplates.
- C. Warranty period shall commence upon final acceptance by the Owner.

## **PART 2 - PRODUCTS**

## 2.1 ACCEPTABLE MANUFACTURERS

- A. Being listed herein as an acceptable manufacturer does not permit the manufacturer to provide standard manufactured equipment that does not comply with the performance and/or physical characteristic requirements of the Contract Documents.
- B. All substitutions must be identified in the Base Bid as a voluntary Deduct Alternate and must be accompanied by a Letter of Equivalency certifying the product's equivalency in all performance and physical characteristics to the products listed herein. The proposed substitutions shall be inclusive of all cost and physical implications throughout the project. Under no circumstances should the substitution result in added cost to the project. Should the substitution be approved neither the project specifications nor the Contract Documents will be revised to reflect the substitution.

## C. Pipe Identification

- 1. Brady Corporation.
- 2. Brimar Industries Incorporated.
- 3. Marking Services Incorporated.
- 4. Seton Nameplate Corp.

## 2.2 GENERAL REQUIREMENTS

- A. All materials and equipment shall be new, in good condition and free from defect. The commercially standard items of equipment and the specific names mentioned herein are intended to identify standards of quality and performance necessary for the proper functioning of the work.
- B. Since manufacturing methods vary, reasonable minor variations are expected; however, performance and material requirements specified herein are the minimum standards acceptable. The Engineer retains the sole right to judge the equality of equipment that deviates from the Contract Documents, to reject any alternative submitted by the Contractor, and to require the specified materials and equipment, which conform to the requirements of the Contract Documents be furnished.
- C. Materials and equipment, which are found to have factory defects shall be replaced or repaired in a manner acceptable to the Owner and Engineer at no additional cost to the Owner. The Contractor shall be responsible for all costs associated with testing, replacement or repair, including but not limited to, all replacement or repair costs, preparations prior to testing, all testing costs, extended warranties, re-commissioning of the equipment, etc.

#### 2.3 PIPING IDENTIFICATION

- A. All piping shall piping shall be identified as to type of use, service and direction of flow in accordance with ANSI A13.1.
- B. Pipe markers shall meet ANSI and OSHA requirements for identifying the service, direction of flow, system and zone, for the various piping systems.
- C. They shall be factory-fabricated, flexible, semi-rigid UV-resistant heavy-duty vinyl, preformed to fit around pipe or pipe covering. Larger sizes may have maximum sheet size with spring fastener.
- D. Each marker shall consist of one (1) label with direction-of-flow arrows and the name of the service printed in black letters not less than 1 in. (25 mm) high for pipe 2-1/2 in. (60 mm) and smaller, 2 in. (50 mm) high for 3 in. (75 mm) pipe and larger. Markers shall have backgrounds of different colors for the various service groups.

## **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

A. Accept all materials and equipment in factory packaging and examine for visible damage. All damaged material and equipment shall be removed from the job site and replaced by the manufacturer.

## 3.2 INSTALLATION

- A. Install nameplates with adhesive.
- B. Install valve tags with corrosion-resistant brass chain.

## 3.3 CLEANING

- A. Clean and remove all accumulation of dirt, chips or other deleterious material on equipment nameplates, valve tags and signage. Leave all valve tags and equipment nameplates in clean and legible condition before final acceptance.
- B. Touch up, repair or replace damaged tags and nameplates before final acceptance.

#### **END OF SECTION 22 05 53**

#### SECTION 22 13 16 - SANITARY WASTE AND VENT PIPING

#### **GENERAL**

#### 1.1 SUMMARY

Furnish and install all sanitary waste and vent piping required for the project as indicated on and in accordance with the requirements of the Contract Documents.

Section includes:

Material of piping systems.

Pipe joints and fittings.

Specialty pipe fittings.

#### 1.2 RELATED SECTIONS

Refer to Divisions 01, 05, 06, 07, and 9 for the scope of work furnished and installed under those divisions on which work in this division may be dependent.

The following specification sections apply to all work herein:

Section 22 00 00	-	General Requirements for Plumbing
Section 22 05 00	-	Common Work Results for Plumbing
Section 22 05 29	-	Hangers and Supports for Plumbing Piping and Equipment
Section 22 05 53	-	Identification for Plumbing Piping and Equipment

#### 1.3 REFERENCES

All sanitary waste, vent and indirect waste piping shall be designed, manufactured, tested and installed in accordance with the latest applicable codes and reference standards including, but not limited to, the following:

Codes: Perform all work in accordance with the latest applicable codes and standards for City of New York.

New York City Building Code.

New York City Plumbing Code.

Reference Standards: Perform all work in accordance with, but not limited to, the following standards:

American Society of Mechanical Engineers

#### SANITARY WASTE AND VENT PIPING 22 13 16 - 1

ASME A112.3.1: Stainless Steel Drainage Systems for Sanitary DWV, Storm and Vacuum Applications, Above and Below Ground.

ASME B16.1: Cast Iron Pipe Flanges and Flanged Fittings.

ASME B16.3: Malleable Iron Threaded Fittings.

ASME B16.4: Gray Iron Threaded Fittings.

ASME B16.5: Pipe Flanges and Flanged Fittings.

ASME B16.12: Cast Iron Threaded Drainage Fittings.

ASME B16.15: Cast Bronze Threaded Fittings.

ASME B31.9: Building Services Piping.

#### **ASTM** International

ASTM A53: Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.

ASTM A74: Standard Specification for Cast Iron Soil Pipe and Fittings.

ASTM A888: Standard Specification for Hubless Cast Iron Soil Pipe and Fittings for Sanitary, Storm Drain, Waste and Vent Piping Applications.

ASTM C564: Standard Specification for Rubber Gaskets for Joining Cast Iron Soil Pipe and Fittings.

ASTM C1277: Standard Specification for Shielded Couplings Joining Hubless Cast Iron Soil Pipe and Fittings.

ASTM C1540: Standard Specification for Heavy Duty Shielded Couplings Joining Hubless Cast Iron Soil Pipe and Fittings.

#### American Welding Society

AWS D1.1: Structural Welding Code - Steel.

#### Cast Iron Pipe Institute

CISPI 301: Standard Specification for Hubless Cast Iron Soil Pipe and Fittings for Sanitary, Storm Drain, Waste and Vent Piping Applications.

CISPI 310: Standard Specification for Couplings in use with Hubless Cast Iron Soil Pipe and Fittings for Sanitary, Storm Drain, Waste and Vent Piping Applications.

#### Manufacturers Standardization Society

MSS SP-6: Contact Faces of Pipe Flanges and Connecting-end Flanges of Valves and Fittings.

MSS SP-9: Spot Facing for Bronze, Iron and Steel Flanges.

MSS SP-44: Steel Pipe Line Flanges.

MSS SP-83: Steel Pipe Unions Socket-Welding and Threaded.

MSS SP-97: Forged Carbon Steel Branch Outlet Fittings-Socket Welding, Threaded and Butt-welding Ends.

#### **National Sanitation Foundation**

NSF Standard 61: Drinking Water System Components.

#### 1.4 SUBMITTALS

The following submittal data shall be furnished according to the Conditions of the Contract, Division 01, and Section 22 00 00 and shall include, but not be limited to:

Schedule of pipe and fitting materials, complete with typical mill reports.

Schedule of pipe and fitting materials identifying the system and location, which the products are intended to be used.

Cast iron pipe and fittings.

Heavy duty no-hub couplings and gaskets for cast iron soil pipe.

Cut or roll-grooved couplings and fittings.

Cast iron pipe flanges and gaskets.

Product Data: Submit manufacturer's literature including general assembly, for each type of product indicated. Include all piping, fittings, mechanical couplings, flanges, solder and dimensional characteristics.

Test Reports: Indicate procedures and results for specified factory and field acceptance testing and inspections.

Manufacturer's Installation Instructions: Submit support details, installation instructions and connection requirements for all products submitted.

#### SANITARY WASTE AND VENT PIPING 22 13 16 - 3

Manufacturer's Certificate: Certify products meet or exceed specified requirements.

#### 1.5 QUALITY ASSURANCE

The quality assurance requirements of Division 01 and Section 22 00 00 shall apply to all work specified herein.

All products and equipment specified herein shall be fabricated by companies whose primary business expertise is the manufacturing of commercial and industrial products and equipment with a minimum of ten (10) years documented experience.

Each submittal shall be provided with documentation certifying that all materials, products, components and test reports are in compliance with the design requirements for this project.

Make every effort to furnish all piping material from one manufacturer.

After completion of installation, but prior to Final Completion, this Contractor shall certify in writing in a format acceptable to the Owner that products and materials installed, and processes used, do not contain asbestos, or polychlorinated biphenyls (PCB's) or other hazardous materials as determined by the Owner. A Materials Safety Data Sheet (MSDS) equivalent to OSHA Form 20 shall be submitted for that proposed product or material prior to installation.

To ensure uniformity and compatibility of piping components in grooved in piping system all grooved products and grooving tools must be the products of a single manufacturer.

The manufacturer of grooved piping fittings shall provide on-site training for Contractor's field personnel by a factory trained representative in the proper use of grooving tools, application of groove, and product installation. In addition, the manufacturer's representative shall periodically visit the job site and inspect installation. Contractor shall remove and replace any improperly installed products.

Furnish all equipment, materials and accessories new and free from defects.

#### 1.6 FACTORY TESTING

All piping, fittings, flanges, couplings and accessories shall be fully assembled and factory tested for full functionality at the manufacturer's factory prior to shipment as specified herein:

All pipe, fittings, mechanical couplings, flanges and accessories shall be tested in accordance with the latest applicable industry standards before accepting delivery at the jobsite.

#### 1.7 DELIVERY, STORAGE AND HANDLING

Comply with the requirements of Division 01 and Section 22 00 00.

Accept all material and equipment on site in factory packing. Inspect for damage. Comply with the manufacturer's rigging and installation instructions.

Protect all components from physical damage, including effects of weather, water, and construction debris.

Store all products and materials off floors on raised platforms to protect from water damage.

Products and materials, which have been exposed to water damage shall be replaced by the Contractor at no additional expense to the Contract.

#### 1.8 COORDINATION

Certain materials will be furnished, installed, or furnished and installed, under other sections of the specifications. Examine the Construction Documents to ascertain these requirements.

Carefully check space requirements with other trades to ensure that all material can be installed in the spaces allotted thereto. Finished suspended ceiling elevations are indicated on the general construction drawings.

Transmit to trades doing work of other sections all information required for work to be provided under their respective sections (such as foundations, electric wiring, access doors, and the like) in ample time for installation.

Set all inserts for all pipes in ample time to allow the work of the other trades to be performed on scheduled time.

Furnish and set all sleeves for passage of pipes through structural masonry and concrete walls and floors and elsewhere as required for proper protection of each pipe passing through building surfaces. Coordinate this work with General Contractor in order to expedite and properly perform this work.

Field drilling, cutting and/or reinforcing of holes in structural metal deck required for work under this section shall be coordinated through the General Contractor and must be approved by the Structural Engineer.

Should the Contractor neglect to perform preliminary work and should cutting be required in order to install equipment, the expense of this cutting and restoring of surfaces to their original condition shall be borne by this Contractor.

Due to the type of the installation, a fixed sequence of operation is required to properly install the complete systems. It shall be the responsibility of this Contractor to

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coordinate, protect and schedule his work with other trades in accordance with the construction sequence.

Architectural drawings shall be checked for ceiling height requirements.

#### 1.9 UNIT PRICES

The Contractor shall state in the proposal, unit prices in accordance with the following schedule and the requirements of Section 22 00 00.

Cast Iron No-Hub (C.I.N.H.) 2 inch (50 mm) \$ /1.f. b. 3 inch (75 mm) \$\_\_\_\_/l.f. \$\_\_\_\_/l.f. 4 inch (100 mm) c. \$ /1.f. d. 6 inch (150 mm) Cast Iron Soil Pipe (C.I.S.P.) \$\_\_\_\_/1.f. 2 inch (50 mm) \$\_\_\_\_/1.f. b. 3 inch (75 mm) 4 inch (100 mm) \$\_\_\_\_/l.f. c. d. 6 inch (150 mm) \$\_\_\_\_/1.f. \$ /1.f. 8 inch (200 mm) e. 3. Steel (Galvanized, Schedule 40) 2 inch (50 mm) \$\_\_\_\_/1.f. a. \$\_\_\_\_/1.f. b. 2-1/2 inch (63 mm) \$\_\_\_\_/1.f. c. 3 inch (75 mm) 4 inch (100 mm) \$\_\_\_\_/1.f. d. \$ /1.f. 6 inch (150 mm) e.

#### 1.10 WARRANTY

Comply with the requirements of Division 01 and Section 22 00 00.

Furnish a one (1) year manufacturer's warranty for the entire sanitary waste, drainage and venting system.

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Warranty period shall commence upon final acceptance by the Owner.

#### **PRODUCTS**

#### 2.1 ACCEPTABLE MANUFACTURERS

Being listed herein as an acceptable manufacturer does not permit the manufacturer to provide standard manufactured equipment that does not comply with the performance and/or physical characteristic requirements of the Contract Documents.

All substitutions must be identified in the Base Bid as a voluntary Deduct Alternate and must be accompanied by a Letter of Equivalency certifying the product's equivalency in all performance and physical characteristics to the products listed herein. The proposed substitutions shall be inclusive of all cost and physical implications throughout the project. Under no circumstances should the substitution result in added cost to the project. Should the substitution be approved neither the project specifications nor the Contract Documents will be revised to reflect the substitution.

Cast Iron Pipe and Fittings

ABI Foundry Company. Charlotte Pipe & Foundry. Tyler Pipe & Foundry.

No-Hub Heavy Duty Couplings

Husky Heavy Duty Couplings. Mission Heavy Weight Couplings.

Steel Pipe and Fittings

Allied Pipe & Tube. Anvil International. U.S. Steel. Wheatland Pipe.

#### 2.2 GENERAL REQUIREMENTS

All materials and equipment shall be new, in good condition and free from defect. The commercially standard items of equipment and the specific names mentioned herein are intended to identify standards of quality and performance necessary for the proper functioning of the Work.

Since manufacturing methods vary, reasonable minor variations are expected; however, performance and material requirements specified herein are the minimum standards acceptable. The Engineer retains the sole right to judge the equality of equipment that deviates from the Contract Documents, to reject any alternative submitted by the

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Contractor, and to require the specified materials and equipment, which conform to the requirements of the Contract Documents be furnished.

Materials and equipment, which are found to have factory defects shall be replaced or repaired in a manner acceptable to the Owner and Engineer at no additional cost to the Owner. The Contractor shall be responsible for all costs associated with testing, replacement or repair, including but not limited to, all replacement or repair costs, preparations prior to testing, all testing costs, extended warranties, re-commissioning of the equipment, etc.

All pipe material shall be as specified herein and shall be installed as specified. The Contractor shall submit to the Engineer for review a list of the proposed manufacturers of pipe and fittings.

All piping materials, fittings and couplings shall be of Unites States origin and manufactured in accordance with the latest applicable standards for its intended use.

#### 2.3 MATERIALS OF PIPING SYSTEMS

Use the following materials in the various piping systems, in accordance with the Construction Documents.

Cast Iron No-Hub (C.I.N.H.)

Cast Iron Hubless Pipe shall be standard weight coated cast iron hubless pipe manufactured from gray cast iron with a tensile strength not less than 21,000 psi, in accordance with ASTM Specification A74 and CISPI 301.

Each length shall be marked with the size, weight per foot and manufacturer's name clearly cast or stamped on each length.

Pipe shall be manufactured by a member of the Cast Iron Soil Pipe Institute (CISPI).

Cast Iron Soil Pipe (C.I.S.P.)

Cast Iron Soil Pipe shall be service weight coated cast iron soil pipe, hub and spigot type manufactured from gray cast iron with a tensile strength not less than 21,000 psi, in accordance with ASTM Specification A74.

Each length shall be marked with the size, weight per foot and manufacturer's name clearly cast or stamped on each length.

Pipe shall be manufactured by a member of the Cast Iron Soil Pipe Institute (CISPI).

Galvanized Steel Pipe (G.S.P.)

Galvanized steel pipe shall be seamless or welded in accordance with the latest issue of ASTM Standard A53.

Pipe shall be Schedule 40, galvanized steel as scheduled.

Each length shall be hydrostatically tested at the mill and the producer's certification of said tests shall be furnished.

Pipe working pressures, test pressures and finish shall be as scheduled or as indicated on the construction documents.

#### 2.4 PIPE JOINTS AND FITTINGS

All fittings shall be of a type, which maintains full wall thickness at all points, ample radius and fillets, and proper bevels or shoulders at ends.

Use the following materials in the various piping systems, in accordance with construction documents.

Cast Iron No-Hub (C.I.N.H.)

Cast iron no-hub fittings shall be standard weight coated cast iron hubless drainage fittings manufactured from gray cast iron with a tensile strength not less than 21,000 psi, in accordance with ASTM Specification A74 and CISPI 301.

Cast iron no-hub fittings shall be joined with "Heavy Duty" no-hub couplings constructed of a shielded coupling.

Couplings shall be constructed of Type 304 stainless steel with 305 stainless steel worm drive screws and comply with ASTM Specification C1540.

The gasket material shall be neoprene and conform to ASTM Specification C564,

The coupling assembly shall be torqued to manufacturer's specified requirements.

Heavy duty no-hub couplings shall be Husky "Heavy Duty" SD4000 coupling.

Cast Iron Soil Pipe (C.I.S.P.)

Cast iron soil pipe fittings shall be service weight, coated cast iron bell and spigot type manufactured from gray cast iron with a tensile strength not less than 21,000 psi, in accordance with ASTM Specification A74.

Cast iron soil fittings shall be joined by elastomeric compression gaskets.

Gaskets shall be Tyler "TY-Seal" neoprene elastomeric compression type gaskets conforming to ASTM Standard C564.

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Galvanized Steel (G.S.P.)

Joints between lengths of galvanized steel piping shall be threaded, flanged, grooved or welded as scheduled herein below or on the Construction documents.

Make screwed joints without the use of lampwick or filler, except "utility compound" or Permacel Teflon tape applied to male threads only.

Fittings for use with Grooved Galvanized Steel Pipe (G.G.S.P.) shall be cast ductile iron scheduled to match the piping material the fittings will be connected to. All fittings shall be hot dip galvanized to ASTM Specification A153.

Mechanical couplings may be used in lieu of threaded galvanized steel fittings.

Mechanical couplings shall consist of two (2) pieces of hot dipped galvanized ductile iron housings conforming to ASTM Specification A536, grade 65-45-12, with angled pads.

Coupling gaskets shall be Grade "E" EPDM synthetic rubber.

Coupling bolts and nuts shall be heat-treated carbon steel, trackhead design conforming to physical properties of ASTM Specification A183.

All mechanical couplings for galvanized steel pipe shall be Zero-Flex Rigid Coupling Style 07 with galvanized finish as manufactured by Victaulic Company of America.

Installation of mechanical couplings shall be per manufacturer's latest recommendations.

Supply grooved full-flow standard radius fittings with roll-grooved ends.

#### Elbows

All elbows shall be of long radius pattern except where space conditions do not permit.

Welding elbows shall be 45 degree mill beveled or machine beveled.

Gaskets: Gaskets used in sanitary drainage systems shall be Grade "E" EPDM rated for a maximum temperature of 230°F (110°C) and maximum pressure of 400 psig (27.5 bar).

#### 2.5 SYSTEM MATERIAL SCHEDULE

Service	Size	Pipe Type	Weight	Fitting Type
Sanitary and Vent	2 in. (50 mm)	Cast Iron No-	Service	Heavy Duty No-Hub
Risers (Stacks)	through 10 in.	Hub	Weight	Couplings
Above 2nd Floor	(250 mm)	Cast Iron Soil	Schedule 40	Gasketed Bell &
		Pipe		Spigot
		Galvanized Steel		
Sanitary and Vent	2 in. (50 mm)	Cast Iron No-	Service	Heavy Duty No-Hub
Branch Piping	through 10 in.	Hub	Weight	Couplings
	(250 mm)	Cast Iron Soil	Schedule 40	Gasketed Bell &
		Pipe		Spigot
		Galvanized Steel		

#### 2.6 TRAPS

#### Sanitary Systems

Traps greater than 2 in. (50 mm) used in the sanitary system shall be cast brass, cast iron and/or galvanized cast iron, one-piece pattern, 3 in. (75 mm) minimum seal, of the same material and coating and/or finish as the piping system in which they are installed.

Traps less than 2 in. (50 mm), not buried in earth shall be cast brass.

Locate traps per code requirements.

Floor drain traps for use with pressurized waste discharge shall be cast iron and/or galvanized cast iron, one-piece pattern, 3 in. (75 mm) minimum seal, of the same material and coating and/or finish as the piping system in which they are installed. Each trap shall be provided with additional support consisting of unistrut or kindorf, two (2) hanger rods, and be supported from the slab above.

#### **EXECUTION**

#### 3.1 EXAMINATION

Accept all materials and equipment in factory packaging and examine for visible damage. All damaged material and equipment shall be removed from the job site and replaced by the manufacturer.

Verify existing conditions prior to starting work.

Carefully check space requirements with other trades to ensure that all material can be installed in the spaces allotted thereto.

Wherever this Contractor's work interconnects with work of other Contractors, this Contractor shall coordinate his work with these Contractors to ensure that all Contractors have the information necessary so that they may properly install all the necessary connections and equipment. Identify all work items in an approved manner in order that the Ceiling Trade may know where to install access doors and panels.

#### 3.2 INSTALLATION

All piping and materials shall be as specified herein and shall be installed in accordance with the latest industry standards, per the manufacturer's recommendations, and as indicated on the drawings.

Run and arrange piping approximately as indicated on the construction documents and as coordinated with other trades.

Install piping as neatly spaced, straight and direct as possible, forming right angles or parallel lines with building walls and other pipes.

Erect all risers plumb and true, parallel with walls and other pipes.

Ream all pipe smooth before installation. Do not bend, split, flatten nor otherwise injure pipe.

The Contractor shall provide all equipment and appurtenances necessary to complete the installation according to code requirements, whether indicated on the drawings or not.

Do not install pipes or other apparatus in a manner, which interferes with the full swing of the doors.

It is the responsibility of this Contractor for accurately laying out the work. Should it be found that any work is laid out so that interferences will occur, report that to the Architect before commencing work.

No piping shall pass over high voltage (440V) electrical bus duct or switchgear equipment. Where required, provide protective pans under or over individual pipes and construct the pans of 16 gauge stainless steel with a 6 in. (150 mm) lip, the corners being welded to make the pans watertight. Give each pan three (3) coats of Rust-O-Leum paint and support with pipe hangers and drain clear of the equipment below.

Route piping in an orderly manner parallel and perpendicular to walls maintaining gradient and headroom without interfering with use of space or taking more space than necessary. Whenever practical group piping at common elevations.

Furnish and install sleeves for pipe passing through roofs, partitions, walls and floors. Piping penetrating roofs must maintain integrity of roof assembly.

Protect piping systems from entry of foreign materials by temporary covers, completing sections of the work, and isolating parts of completed system.

All piping shall be carefully sloped so as to eliminate traps and pockets.

Piping exposed in all rooms shall be installed as nearly as possible parallel with or at right angles to the building walls. Install all pipe straight and true. Springing or forcing piping into place will not be permitted unless specifically called for. Install piping in such a manner as to prevent strain on equipment connections. Install piping in such a manner as to eliminate all static and dynamic conditions of loading on equipment connections.

Piping in finished portions of the building, except in mechanical equipment rooms or where otherwise indicated on the Drawings, shall be concealed.

All piping shall be of the sizes indicated and shall be routed as indicated on the Drawings, or as required, to serve all equipment and systems.

In each change of direction of soil and waste piping, provide a clean-out plug connected to same with Y fittings and 45° ell made flush with floor or wall.

In all horizontal straight runs more than 50 feet (15.25 m) of length, provide at least one clean-out for each 50 feet (15.25 m) of length.

All cleanouts shall be of the same size as the pipe up to and including pipe 4 inches in diameter.

Provide access doors in general construction for clean-outs installed in concealed locations.

All back vents shall be taken off as near traps as possible and permitted by code.

All drainage lines shall have at least the minimum slope toward the main sewer as required by the local plumbing code. Pipe must be so laid that the slope will be continuous. Permission shall be secured from the engineer before proceeding with any work where existing conditions prevent the installation at the minimum grade specified.

The sewage and drainage work shall be complete and ready for use including all reducers, increases, special flanges and fittings, where required between the piping work and fixtures.

All horizontal pipe throughout the building, including that in pipe spaces and attics, shall be thoroughly and substantially supported from the building construction by means of approved expansion ring hangers or clevis hangers at each joint. Hangers shall be spaced in accordance with Section 22 05 29 - Hangers and Supports for Plumbing Piping and Equipment.

All pipe shall be straight and have uniform fall.

All vertical pipes shall be substantially supported at each floor level with approved steel or iron riser clamps.

Provide sway bracing for all sanitary house drain piping which is supported greater than 2 ft. (0.6 m) from the slab above, measured from the top of the pipe.

Provide additional rod and banding at each joint for all sanitary house drain offsets consisting of riser clamps and threaded rod to anchor all fittings in the horizontal offset. This method of anchoring and support shall be provided in addition to the sway bracing described in the paragraph above.

#### Bell and Spigot Piping

Bell and spigot piping shall be joined with elastomeric compression gaskets as specified.

Joints shall be cleaned free from dirt, mud, sand, gravel or foreign materials.

The gasket shall be folded and inserted into the hub completely, with the flange of the gasket remaining outside of the hub.

Lubricate the joint and compress the piping into the joint so the spigot end of the pipe bottoms out in the hub.

#### **Hubless Cast Iron Piping**

Hubless cast iron piping shall be joined with heavy duty no-hub couplings as specified.

Joints shall be cleaned free from dirt, mud, sand, gravel or foreign materials.

The gasket shall be installed on one end of the pipe or fitting and the stainless steel clamp and shield on the other end.

Firmly seat the pipe or fitting ends against the center stop of the gasket and slide the shield into position over the gasket.

The stainless steel bands shall be tightened using a calibrated torque wrench set to the manufacturer's recommended settings. Bands shall be in sequence according to the manufacturer's recommendations.

#### 3.3 CLEANING

During construction, properly cap all lines, so as to prevent the entrance of sand, dirt, etc. Each system of piping shall be blown through after completion for as long a time as required to thoroughly clean the apparatus.

Before final adjustments are made and before operation of equipment, clean and remove all accumulation of dirt, chips or other deleterious material. Leave all sanitary piping and appurtenances in suitable condition, before final acceptance.

Cover and protect all openings left in floor for passage of pipes. Protect pipes with suitable coverings as soon as set. Close all open ends of pipes with a plug fitting to prevent obstruction and damage.

Protect the system against freezing in cold weather.

After each hydrostatic leak testing procedure is complete, drain the system until empty. Liquid for hydrostatic testing of sanitary systems shall be clean domestic water from the municipal water supply.

#### 3.4 INSPECTION AND STARTUP SERVICE

All inspections, examinations, and tests required by the authorities and/or agencies specified hereinbefore shall be arranged and paid for by this Subcontractor, as necessary to obtain complete and final acceptance of the system as installed.

The certificates of inspection shall be provided in quadruplicate and shall be delivered to the Architect for distribution.

Inspect all piping, hangers, rod and support for piping and equipment for proper installation according to the manufacturer's instructions.

Repair, or if required by the Architect replace, defective work with new work without extra charge to the Owner. Repeat tests as directed, until all work is proven satisfactory.

Restore to its original condition any work damaged or disturbed by tests, engaging the original trades to do the work of restoration.

Notify the Architect and Inspectors having jurisdiction at least 48 hours in advance of making the required tests, so that arrangements may be made for their presence to witness the tests.

Test equipment in service and demonstrate that the equipment performs the work intended for it and that it complies with the requirements of these Specifications for such equipment.

#### 3.5 FIELD QUALITY CONTROL

Quality control must comply with Division 01 - Quality Requirements and Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.

#### 3.6 FIELD TESTS

#### A. Performance Test

1. Allow sufficient time to perform all tests, adjustments, necessary to place the various systems in final operation condition, verify performance requirements and check all safety devices. Labor and instruments, required for various tests

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#### HORIZONTAL SANITARY LINES REPLACEMENT 10<sup>TH</sup> FLOOR

shall be provided. See that all manufacturers' representatives necessary to check and adjust various systems are present with sufficient labor to perform all this work without delay. All test data shall be recorded on suitable forms and submitted to the Owner for approval.

2. A qualified representative of the equipment manufacturer shall be present at the test. The Engineer may witness tests, if he so desires. The Contractor shall notify the Engineer and Owner in writing, at least two (2) weeks prior to the day of the test.

Test all systems before any paint is applied, piping is insulated, furred in or otherwise covered.

Furnish and pay for all devices, materials, supplies, labor and power required in connection with tests. Make all tests in the presence and to the satisfaction of the Architect, Insurance Underwriters and City Inspectors having jurisdiction.

Hubless Cast Iron and Bell and Spigot Cast Iron

Subject the drains, waste, and vent piping inside the building to a water test. The water test shall include the entire system from the lowest point to the highest pipe above the roof.

Water test shall be made in accordance with all local requirements.

The system shall be tested to a hydrostatic pressure equivalent to at least a 10 foot (3 m) head of water.

After filling, shut off water supply and allow it to stand two (2) hours, under test, during which time there shall be no loss or leakage.

#### B. Final Acceptance Test

- 1. The Owner and/or the Owner's representatives will make final check of all systems only after the Contractor has completed and returned to the Owner or Owner's representatives all recorded test data, together with letter that his work is to the best of his knowledge 100% complete. Field performance tests will be required by the Owner and/or the Owner's representatives at this time to verify performance and workmanship, and to make final system component adjustments.
- 2. Points and areas for recheck shall be selected by the Owner's representative.
- 3. Measurements and tests shall be same as the original test procedures.
- 4. After satisfactory passing of the field tests and after all necessary adjustments have been made, test the complete systems for a minimum of seven (7) days under regular operating conditions or as long as may be required to establish compliance with Contract Documents.

5. The Contractor shall demonstrate to the Engineer and the Owner, prior to acceptance by the Owner, that all systems and/or equipment has been balanced and adjusted properly, and that the system and/or equipment is in compliance with the Contract Documents.

Commissioning: Owner or Commissioning Agent shall witness all hydrostatic tests.

#### 3.7 ADJUSTING AND BALANCING

Upon completion of piping, hangers for piping and at equipment shall be adjusted to ensure that the loads are distributed evenly and that there are no loads imposed by the piping or the equipment that it is connected to.

Securely tighten clevis hanger load nuts first to ensure proper hanger performance. Tighten top nut after adjustment.

**END OF SECTION 22 13 16** 

#### SECTION 22 14 13 - FACILITY STORM DRAINAGE PIPING

#### PART 1 - GENERAL

#### 1.1 **SUMMARY**

- Furnish and install all storm drainage piping required for the project as indicated on and A. in accordance with the requirements of the Contract Documents.
- B. Section includes:
  - 1. Material of piping systems.
  - 2. Pipe joints and fittings.
  - 3. Specialty pipe fittings.
  - System material schedule. 4.

Section 22 05 53

Equipment

5. Traps.

#### 1.2 RELATED SECTIONS

4.

- A. Refer to Divisions 01, 05, 06, 07, and 9 for the scope of work furnished and installed under those divisions on which work in this division may be dependent.
- B. The following specification sections apply to all work herein:

1.	Section 22 00 00	-	General Requirements for Plumbing
2.	Section 22 05 00	-	Common Work Results for Plumbing
3.	Section 22 05 29 Equipment	-	Hangers and Supports for Plumbing Piping and

Identification for

Plumbing

Piping

and

#### 1.3 **REFERENCES**

- A. All storm drainage piping shall be designed, manufactured, tested and installed in accordance with the latest applicable codes and reference standards including, but not limited to, the following:
  - Codes: Perform all work in accordance with the latest applicable codes and 1. standards for City of New York.
    - New York City Building Code. a.

#### FACILITY STORM DRAINAGE PIPING 22 14 13 - 1

- b. New York City Plumbing Code.
- 2. Reference Standards: Perform all work in accordance with, but not limited to, the following standards:
  - a. American Society of Mechanical Engineers
    - 1) ASME B16.1: Cast Iron Pipe Flanges and Flanged Fittings.
    - 2) ASME B16.3: Malleable Iron Threaded Fittings.
    - 3) ASME B16.4: Gray Iron Threaded Fittings.
    - 4) ASME B16.5: Pipe Flanges and Flanged Fittings.
    - 5) ASME B16.12: Cast Iron Threaded Drainage Fittings.
    - 6) ASME B31.9: Building Services Piping.
  - b. ASTM International
    - 1) ASTM A 53: Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
    - 2) ASTM A74: Standard Specification for Cast Iron Soil Pipe and Fittings.
    - 3) ASTM A888: Standard Specification for Hubless Cast Iron Soil Pipe and Fittings for Sanitary, Storm Drain, Waste and Vent Piping Applications.
    - 4) ASTM C564: Standard Specification for Rubber Gaskets for Joining Cast Iron Soil Pipe and Fittings.
    - 5) ASTM C1277: Standard Specification for Shielded Couplings Joining Hubless Cast Iron Soil Pipe and Fittings.
    - 6) ASTM C1540: Standard Specification for Heavy Duty Shielded Couplings Joining Hubless Cast Iron Soil Pipe and Fittings.
  - c. American Welding Society
    - 1) AWS D1.1: Structural Welding Code Steel.
  - d. Cast Iron Pipe Institute
    - 1) CISPI 301: Standard Specification for Hubless Cast Iron Soil Pipe and Fittings for Sanitary, Storm Drain, Waste and Vent Piping Applications.

#### FACILITY STORM DRAINAGE PIPING 22 14 13 - 2

- 2) CISPI 310: Standard Specification for Couplings in use with Hubless Cast Iron Soil Pipe and Fittings for Sanitary, Storm Drain, Waste and Vent Piping Applications.
- e. Manufacturers Standardization Society
  - 1) MSS SP6: Contact Faces of Pipe Flanges and Connecting-end Flanges of Valves and Fittings.
  - 2) MSS SP43: Wrought Stainless Steel Butt-welding Fittings.
  - 3) MSS SP44: Steel Pipe Line Flanges.
  - 4) MSS SP-83: Steel Pipe Unions Socket-Welding and Threaded.
  - 5) MSS SP-97: Forged Carbon Steel Branch Outlet Fittings-Socket Welding, Threaded and Butt-welding Ends.

#### 1.4 SUBMITTALS

- A. The following submittal data shall be furnished according to the Conditions of the Contract, Division 01, and Section 22 00 00 and shall include, but not be limited to:
  - 1. Schedule of pipe and fitting materials, complete with typical mill reports.
  - 2. Schedule of pipe and fitting materials identifying the system and location, which the products are intended to be used.
  - 3. Cast iron pipe and fittings.
  - 4. Heavy duty no-hub couplings and gaskets for cast iron soil pipe.
  - 5. Cast iron pipe gaskets.
- B. Product Data: Submit manufacturer's literature including general assembly, for each type of product indicated. Include all piping, fittings, and dimensional characteristics.
- C. Test Reports: Indicate procedures and results for specified factory and field acceptance testing and inspections.
- D. Manufacturer's Installation Instructions: Submit support details, installation instructions, connection requirements, for all products submitted.
- E. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

#### 1.5 QUALITY ASSURANCE

A. The quality assurance requirements of Division 01 and Section 22 00 00 shall apply to all work specified herein.

#### FACILITY STORM DRAINAGE PIPING 22 14 13 - 3

All products and equipment specified herein shall be fabricated by companies whose primary business expertise is the manufacturing of commercial and industrial products and equipment with a minimum of ten (10) years documented experience.

- B. Each submittal shall be provided with documentation certifying that all materials, products, components and test reports are in compliance with the design requirements for this project.
- C. Make every effort to furnish all piping material from one manufacturer.
- D. After completion of installation, but prior to Final Completion, this Contractor shall certify in writing in a format acceptable to the Owner that products and materials installed, and processes used, do not contain asbestos, or polychlorinated biphenyls (PCB's) or other hazardous materials as determined by the Owner. A Materials Safety Data Sheet (MSDS) equivalent to OSHA Form 20 shall be submitted for that proposed product or material prior to installation.
- E. Furnish all equipment, materials and accessories new and free from defects.

#### 1.6 FACTORY TESTING

- A. All piping, fittings, flanges, couplings and accessories shall be fully assembled and factory tested for full functionality at the manufacturer's factory prior to shipment as specified herein:
  - 1. All pipe, fittings, mechanical couplings, flanges and accessories shall be tested in accordance with the latest applicable industry standards before accepting delivery at the jobsite.

#### 1.7 DELIVERY, STORAGE AND HANDLING

- A. Comply with the requirements of Division 01 and Section 22 00 00.
- B. Accept all material and equipment on site in factory packing. Inspect for damage. Comply with the manufacturer's rigging and installation instructions.
- C. Protect all components from physical damage, including effects of weather, water, and construction debris.
- D. Store all products and materials off floors on raised platforms to protect from water damage.
- E. Products and materials, which have been exposed to water damage shall be replaced by the Contractor at no additional expense to the Contract.

#### 1.8 COORDINATION

- A. Certain materials will be furnished, installed, or furnished and installed, under other sections of the specifications. Examine the Construction Documents to ascertain these requirements.
- B. Carefully check space requirements with other trades to ensure that all material can be installed in the spaces allotted thereto. Finished suspended ceiling elevations are indicated on the general construction drawings.
- C. Transmit to trades doing work of other sections all information required for work to be provided under their respective sections (such as foundations, electric wiring, access doors, and the like) in ample time for installation.
- D. Set all inserts for all pipes in ample time to allow the work of the other trades to be performed on scheduled time.
- E. Furnish and set all sleeves for passage of pipes through structural masonry and concrete walls and floors and elsewhere as required for proper protection of each pipe passing through building surfaces. Coordinate this work with General Contractor in order to expedite and properly perform this work.
- F. Field drilling, cutting and/or reinforcing of holes in structural metal deck required for work under this section shall be coordinated through the General Contractor and must be approved by the Structural Engineer.
- G. Should the Contractor neglect to perform preliminary work and should cutting be required in order to install equipment, the expense of this cutting and restoring of surfaces to their original condition shall be borne by this Contractor.
- H. Due to the type of the installation, a fixed sequence of operation is required to properly install the complete systems. It shall be the responsibility of this Contractor to coordinate, protect and schedule his work with other trades in accordance with the construction sequence.
- I. Architectural drawings shall be checked for ceiling height requirements.

#### 1.9 UNIT PRICES

The Contractor shall state in the proposal, unit prices in accordance with the following schedule and the requirements of Section 22 00 00.

-			,	
	a.	2 inch (50 mm)	\$	/l.f.
	b.	3 inch (75 mm)	\$	/1.f.

Cast Iron Soil Pipe (C.I.S.P.)

c.	4 inch (100 mm)	\$/l.f.	
d.	6 inch (150 mm)	\$/1.f.	
e.	8 inch (200 mm)	\$/1.f.	
Steel (Galvanized, Schedule 40)			
a.	2 inch (50 mm)	\$/l.f.	
b.	2-1/2 inch (63 mm)	\$/l.f.	

3 inch (75 mm)

d. 4 inch (100 mm) \$\_\_\_\_/l.f.

e. 6 inch (150 mm) \$\_\_\_\_/l.f.

f. 8 inch (200 mm) \$ /1.f.

#### 1.10 WARRANTY

2.

c.

- A. Comply with the requirements of Division 01 and Section 22 00 00.
- B. Furnish a one (1) year manufacturer's warranty for the entire storm water drainage system.

\$ /1.f.

C. Warranty period shall commence upon final acceptance by the Owner.

#### **PART 2 - PRODUCTS**

#### 2.1 ACCEPTABLE MANUFACTURERS

- A. Being listed herein as an acceptable manufacturer does not permit the manufacturer to provide standard manufactured equipment that does not comply with the performance and/or physical characteristic requirements of the Contract Documents.
- B. All substitutions must be identified in the Base Bid as a voluntary Deduct Alternate and must be accompanied by a Letter of Equivalency certifying the product's equivalency in all performance and physical characteristics to the products listed herein. The proposed substitutions shall be inclusive of all cost and physical implications throughout the project. Under no circumstances should the substitution result in added cost to the project. Should the substitution be approved neither the project specifications nor the Contract Documents will be revised to reflect the substitution.
- C. Cast Iron Pipe and Fittings
  - 1. ABI Foundry Company.

- 2. Charlotte Pipe & Foundry.
- 3. Tyler Pipe & Foundry.
- D. Steel Pipe and Fittings
  - 1. Allied Pipe & Tube.
  - 2. Anvil International.
  - 3. U.S. Steel
  - 4. Wheatland Pipe.

#### 2.2 GENERAL REQUIREMENTS

- A. All materials and equipment shall be new, in good condition and free from defect. The commercially standard items of equipment and the specific names mentioned herein are intended to identify standards of quality and performance necessary for the proper functioning of the work.
- B. Since manufacturing methods vary, reasonable minor variations are expected; however, performance and material requirements specified herein are the minimum standards acceptable. The Engineer retains the sole right to judge the equality of equipment that deviates from the Contract Documents, to reject any alternative submitted by the Contractor, and to require the specified materials and equipment, which conform to the requirements of the Contract Documents be furnished.
- C. Materials and equipment, which are found to have factory defects shall be replaced or repaired in a manner acceptable to the Owner and Engineer at no additional cost to the Owner. The Contractor shall be responsible for all costs associated with testing, replacement or repair, including but not limited to, all replacement or repair costs, preparations prior to testing, all testing costs, extended warranties, re-commissioning of the equipment, etc.
- D. All pipe material shall be as specified herein and shall be installed as specified. The Contractor shall submit to the Engineer for review a list of the proposed manufacturers of pipe and fittings.
- E. All piping materials, fittings and couplings shall be of Unites States origin and manufactured in accordance with the latest applicable standards for its intended use.

#### 2.3 MATERIALS OF PIPING SYSTEMS

- A. Use the following materials in the various piping systems, in accordance with the Construction Documents.
- B. Cast Iron Soil Pipe (C.I.S.P.)

- 1. Cast iron soil pipe shall be service weight coated cast iron soil pipe, hub and spigot type manufactured from gray cast iron with a tensile strength not less than 21,000 psi, in accordance with ASTM Specification A74.
- 2. Each length shall be marked with the size, weight per foot and manufacturer's name clearly cast or stamped on each length.
- 3. Pipe shall be manufactured by a member of the Cast Iron Soil Pipe Institute (CISPI).

#### C. Galvanized Steel Pipe (G.S.P.)

- 1. Galvanized steel pipe shall be seamless or welded in accordance with the latest issue of ASTM Standard A53.
- 2. Pipe shall be Schedule 40, galvanized steel as scheduled.
- 3. Each length shall be hydrostatically tested at the mill and the producer's certification of said tests shall be furnished.
- 4. Pipe working pressures, test pressures and finish shall be as scheduled or as indicated on the construction documents.

#### 2.4 PIPE JOINTS AND FITTINGS

- A. All fittings shall be of a type, which maintains full wall thickness at all points, ample radius and fillets, and proper bevels or shoulders at ends.
- B. Use the following materials in the various piping systems, in accordance with the construction documents.
- C. Cast Iron Soil Pipe (C.I.S.P.)
  - 1. Cast iron soil pipe fittings shall be service weight, coated cast iron bell and spigot type manufactured from gray cast iron with a tensile strength not less than 21,000 psi, in accordance with ASTM Specification A74.
  - 2. Cast iron soil fittings shall be joined by elastomeric compression gaskets.
  - 3. Gaskets shall be Tyler "TY-Seal" neoprene elastomeric compression type gaskets conforming to ASTM Standard C564.

#### D. Galvanized Steel (G.S.P.)

1. Joints between lengths of galvanized steel piping shall be threaded, flanged, grooved or welded as scheduled herein below or on the Construction Documents.

- 2. Make screwed joints without the use of lampwick or filler, except "utility compound" or Permacel Teflon tape applied to male threads only.
- 3. Fittings for use with Grooved Galvanized Steel Pipe (G.G.S.P.) shall be cast ductile iron scheduled to match the piping material the fittings will be connected to. All fittings shall be hot dip galvanized to ASTM Specification A153.
- 4. Mechanical couplings may be used in lieu of threaded galvanized steel fittings.
- 5. Mechanical couplings shall consist of two (2) pieces of hot dipped galvanized ductile iron housings conforming to ASTM Specification A536, Grade 65-45-12, with angled pads.
- 6. Coupling gaskets shall be Grade "E" EPDM synthetic rubber.
- 7. Coupling bolts and nuts shall be heat-treated carbon steel, trackhead design conforming to physical properties of ASTM Specification A183.
- 8. All mechanical couplings for galvanized steel pipe shall be Zero-Flex Rigid Coupling Style 07 with galvanized finish as manufactured by Victaulic Company of America.
- 9. Installation of mechanical couplings shall be per manufacturer's latest recommendations.
- 10. Supply grooved full-flow standard radius fittings with roll-grooved ends.

#### E. Elbows

- 1. All elbows shall be of long radius pattern except where space conditions do not permit.
- 2. Welding elbows shall be 45 degree mill beveled or machine beveled.
- F. Gaskets: Gaskets used in sanitary drainage systems shall be Grade "E" EPDM rated for a maximum temperature of 230°F (110°C) and maximum pressure of 400 psig (27.5 bar).

#### 2.5 SYSTEM MATERIAL SCHEDULE

Comvios	Circ	Dina Tyma	Weight	Eitting Tyma
Service	Size	Pipe Type	weight	Fitting Type
Storm Drainage	2 in. (50 mm)	Cast Iron Soil	Service	Gasketed Bell &
Risers (Stacks)	through 10 in.	Pipe	Weight	Spigot
Above 2nd Floor	(250 mm)	Galvanized Steel	Schedule 40	Threaded
Storm Drainage	2 in. (50 mm)	Cast Iron Soil	Service	Gasketed Bell &
Branch Piping	through 10 in.	Pipe	Weight	Spigot
	(250 mm)	Galvanized Steel	Schedule 40	Threaded

#### **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

- A. Accept all materials and equipment in factory packaging and examine for visible damage. All damaged material and equipment shall be removed from the job site and replaced by the manufacturer.
- B. Verify existing conditions prior to starting work.
- C. Carefully check space requirements with other trades to ensure that all material can be installed in the spaces allotted thereto.
- D. Wherever this Contractor's work interconnects with work of other Contractors, this Contractor shall coordinate his work with these Contractors to ensure that all Contractors have the information necessary so that they may properly install all the necessary connections and equipment. Identify all work items in an approved manner in order that the Ceiling Trade may know where to install access doors and panels.

#### 3.2 INSTALLATION

- A. All piping and materials shall be as specified herein and shall be installed in accordance with the latest industry standards, per the manufacturer's recommendations, and as indicated on the drawings.
- B. Run and arrange piping approximately as indicated on the Construction Documents and as coordinated with other trades.
- C. Install piping as neatly spaced, straight and direct as possible, forming right angles or parallel lines with building walls and other pipes.
- D. Erect all risers plumb and true, parallel with walls and other pipes.
- E. Ream all pipe smooth before installation. Do not bend, split, flatten nor otherwise injure pipe.
- F. The Contractor shall provide all equipment and appurtenances necessary to complete the installation according to code requirements, whether indicated on the drawings or not.
- G. Do not install pipes or other apparatus in a manner, which interferes with the full swing of the doors.
- H. It is the responsibility of this Contractor for accurately laying out the work. Should it be found that any work is laid out so that interferences will occur, report that to the Architect before commencing work.
- I. No piping shall pass over high voltage (440V) electrical bus duct or switchgear equipment. Where required, provide protective pans under or over individual pipes and

#### FASHION INSTITUTE OF TECHNOLOGY STUDENT HOUSING CORPORATION COED RESIDENCE HALL

#### HORIZONTAL SANITARY LINES REPLACEMENT 10<sup>TH</sup> FLOOR

construct the pans of 16 gauge stainless steel with a 6 in. (150 mm) lip, the corners being welded to make the pans watertight. Give each pan three (3) coats of Rust-O-Leum paint and support with pipe hangers and drain clear of the equipment below.

- J. Route piping in an orderly manner parallel and perpendicular to walls maintaining gradient and headroom without interfering with use of space or taking more space than necessary. Whenever practical group piping at common elevations.
- K. Furnish and install sleeves for pipe passing through roofs, partitions, walls and floors. Piping penetrating roofs must maintain integrity of roof assembly.
- L. Protect piping systems from entry of foreign materials by temporary covers, completing sections of the work, and isolating parts of completed system.
- M. All piping shall be carefully sloped so as to eliminate traps and pockets.
- N. Piping exposed in all rooms shall be installed as nearly as possible parallel with or at right angles to the building walls. Install all pipe straight and true. Springing or forcing piping into place will not be permitted unless specifically called for. Install piping in such a manner as to prevent strain on equipment connections. Install piping in such a manner as to eliminate all static and dynamic conditions of loading on equipment connections.
- O. Piping in finished portions of the building, except in mechanical equipment rooms or where otherwise indicated on the Drawings, shall be concealed.
- P. All piping shall be of the sizes indicated and shall be routed as indicated on the Drawings, or as required, to serve all equipment and systems.
- Q. In each change of direction of storm drainage piping, provide a clean-out plug connected to same with Y fittings and 45° ell made flush with floor or wall.
- R. In all horizontal straight runs more than 50 feet (15.25 m) of length, provide at least one clean-out for each 50 feet (15.25 m) of length.
- S. Where pipe is buried, cleanouts shall be brought up flush with floor or grade unless otherwise shown on the drawings. The locations of all clean-outs shall be verified with the Architect.
- T. All clean-outs shall be of the same size as the pipe up to and including pipe 4 inches in diameter.
- U. Provide access doors in general construction for clean-outs installed in concealed locations.
- V. All drainage lines shall have at least the minimum slope toward the main sewer as required by the local plumbing code. Pipe must be so laid that the slope will be continuous. Permission shall be secured from the engineer before proceeding with any work where existing conditions prevent the installation at the minimum grade specified.

- W. All horizontal pipe throughout the building, including that in pipe spaces and attics, shall be thoroughly and substantially supported from the building construction by means of approved expansion ring hangers or clevis hangers at each joint. Hangers shall be spaced in accordance with Section 22 05 29 Hangers and Supports for Plumbing Piping and Equipment.
- X. All pipe shall be straight and have uniform fall.
- Y. All vertical pipes shall be substantially supported at each floor level with approved steel or iron riser clamps.
- Z. Provide sway bracing for all storm house drain piping which is supported greater than 2 ft. (0.6 m) from the slab above, measured from the top of the pipe.
- AA. Provide additional rod and banding at each joint for all storm house drain offsets consisting of riser clamps and threaded rod to anchor all fittings in the horizontal offset. This method of anchoring and support shall be provided in addition to the sway bracing described in the paragraph above.

#### BB. Bell and Spigot Piping

- 1. Bell and spigot piping shall be joined with elastomeric compression gaskets as specified.
- 2. Joints shall be cleaned free from dirt, mud, sand, gravel or foreign materials.
- 3. The gasket shall be folded and inserted into the hub completely, with the flange of the gasket remaining outside of the hub.
- 4. Lubricate the joint and compress the piping into the joint so the spigot end of the pipe bottoms out in the hub.

#### 3.3 CLEANING

- A. During construction, properly cap all lines, so as to prevent the entrance of sand, dirt, etc. Each system of piping shall be blown through after completion for as long a time as required to thoroughly clean the apparatus.
- B. Before final adjustments are made and before operation of equipment, clean and remove all accumulation of dirt, chips or other deleterious material. Leave all storm piping and appurtenances in suitable condition, before final acceptance.
- C. Cover and protect all openings left in floor for passage of pipes. Protect pipes with suitable coverings as soon as set. Close all open ends of pipes with a plug fitting to prevent obstruction and damage.
- D. Protect the system against freezing in cold weather.

After each hydrostatic leak testing procedure is complete, drain the system until empty. Liquid for hydrostatic testing of storm systems shall be clean domestic water from the municipal water supply.

#### 3.4 INSPECTION AND START UP SERVICE

- A. All inspections, examinations, and tests required by the authorities and/or agencies specified hereinbefore shall be arranged and paid for by this Subcontractor, as necessary to obtain complete and final acceptance of the system as installed.
- B. The certificates of inspection shall be provided in quadruplicate and shall be delivered to the Architect for distribution.
- C. Inspect all piping, hangers, rod and support for piping and equipment for proper installation according to the manufacturer's instructions.
- D. Repair, or if required by the Architect replace, defective work with new work without extra charge to the Owner. Repeat tests as directed, until all work is proven satisfactory.
- E. Restore to its original condition any work damaged or disturbed by tests, engaging the original trades to do the work of restoration.
- F. Notify the Architect and Inspectors Having Jurisdiction at least 48 hours in advance of making the required tests, so that arrangements may be made for their presence to witness the tests.
- G. Test equipment in service and demonstrate that the equipment performs the work intended for it and that it complies with the requirements of these specifications for such equipment.

#### 3.5 FIELD QUALITY CONTROL

A. Quality control must comply with Division 01 - Quality Requirements and Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.

#### 3.6 FIELD TESTS

#### A. Performance Test

1. Allow sufficient time to perform all tests, adjustments, necessary to place the various systems in final operation condition, verify performance requirements and check all safety devices. Labor and instruments, required for various tests shall be provided. See that all manufacturers' representatives necessary to check and adjust various systems are present with sufficient labor to perform all this work without delay. All test data shall be recorded on suitable forms and submitted to the Owner for approval.

- 2. A qualified representative of the equipment manufacturer shall be present at the test. The Engineer may witness tests, if he so desires. The Contractor shall notify the Engineer and Owner in writing, at least two (2) weeks prior to the day of the test.
- 3. Test all systems before any paint is applied, piping is insulated, furred in or otherwise covered.
- 4. Furnish and pay for all devices, materials, supplies, labor and power required in connection with tests. Make all tests in the presence and to the satisfaction of the Architect, Insurance Underwriters and City Inspectors Having Jurisdiction.

#### 5. Bell and Spigot Cast Iron:

- a. Subject the drains and storm piping inside the building to a water test. The water test shall include the entire system from the lowest point to the highest pipe above the roof.
- b. Water test shall be made in accordance with all local requirements.
- c. The system shall be tested to a hydrostatic pressure equivalent to at least a 10 foot (3 m) head of water.
- d. After filling, shut off water supply and allow it to stand two (2) hours, under test, during which time there shall be no loss or leakage.

#### B. Final Acceptance Test

- 1. The Owner and/or the Owner's representatives will make final check of all systems only after the Contractor has completed and returned to the Owner or Owner's representatives all recorded test data, together with letter that his work is to the best of his knowledge 100% complete. Field performance tests will be required by the Owner and/or the Owner's representatives at this time to verify performance and workmanship, and to make final system component adjustments.
- 2. Points and areas for recheck shall be selected by the Owner's representative.
- 3. Measurements and tests shall be same as the original test procedures.
- 4. After satisfactory passing of the field tests and after all necessary adjustments have been made, test the complete systems for a minimum of seven (7) days under regular operating conditions or as long as may be required to establish compliance with Contract Documents.
- 5. The Contractor shall demonstrate to the Engineer and the Owner, prior to acceptance by the Owner, that all systems and/or equipment has been balanced

#### HORIZONTAL SANITARY LINES REPLACEMENT 10<sup>TH</sup> FLOOR

and adjusted properly, and that the system and/or equipment is in compliance with the Contract Documents.

6. Commissioning: Owner or Commissioning Agent shall witness all hydrostatic tests.

#### 3.7 ADJUSTING AND BALANCING

- A. Upon completion of insulation, hangers for piping and at equipment shall be adjusted to ensure that the loads are distributed evenly and that there are no loads imposed by the piping or the equipment that it is connected to.
- B. Securely tighten clevis hanger load nuts first to ensure proper hanger performance. Tighten top nut after adjustment.

#### **END OF SECTION 22 14 13**

# **EXHIBIT D: DRAWINGS**

# Fashion Institute of Technology State University of New York

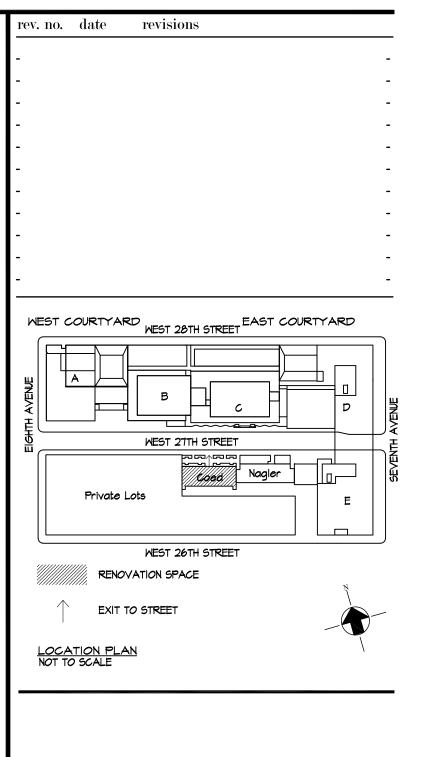
Student Housing Corporation
Coed Residence Hall Horizontal Sanitary Lines
Replacement 10th Floor

230 WEST 27TH ST New York, NY 10001

Architects/Planners (WBE/DBE)
David Smotrich & Partners LLP

443 Park Avenue South New York, NY 10016

**April 5, 2024** 



# MEP Consultant MGENGINEERING

116 West 32nd Street New York, NY 10001 / (212) 643-9898

# Fashion Institute of Technology Student Housing Corporation

230 West 272nd Street New York, NY 10001

# David Smotrich & Partners LLP Architects/Planners

443 Park Avenue South New York, NY 10016 212 889 4045

### PROJECT:

COED RESIDENCE HALL HORIZONTAL
SANITARY LINES REPLACEMENT IOTH FI
230 WEST 27TH ST
NEW YORK NY 10001

DRAWING TITLE:

COVER

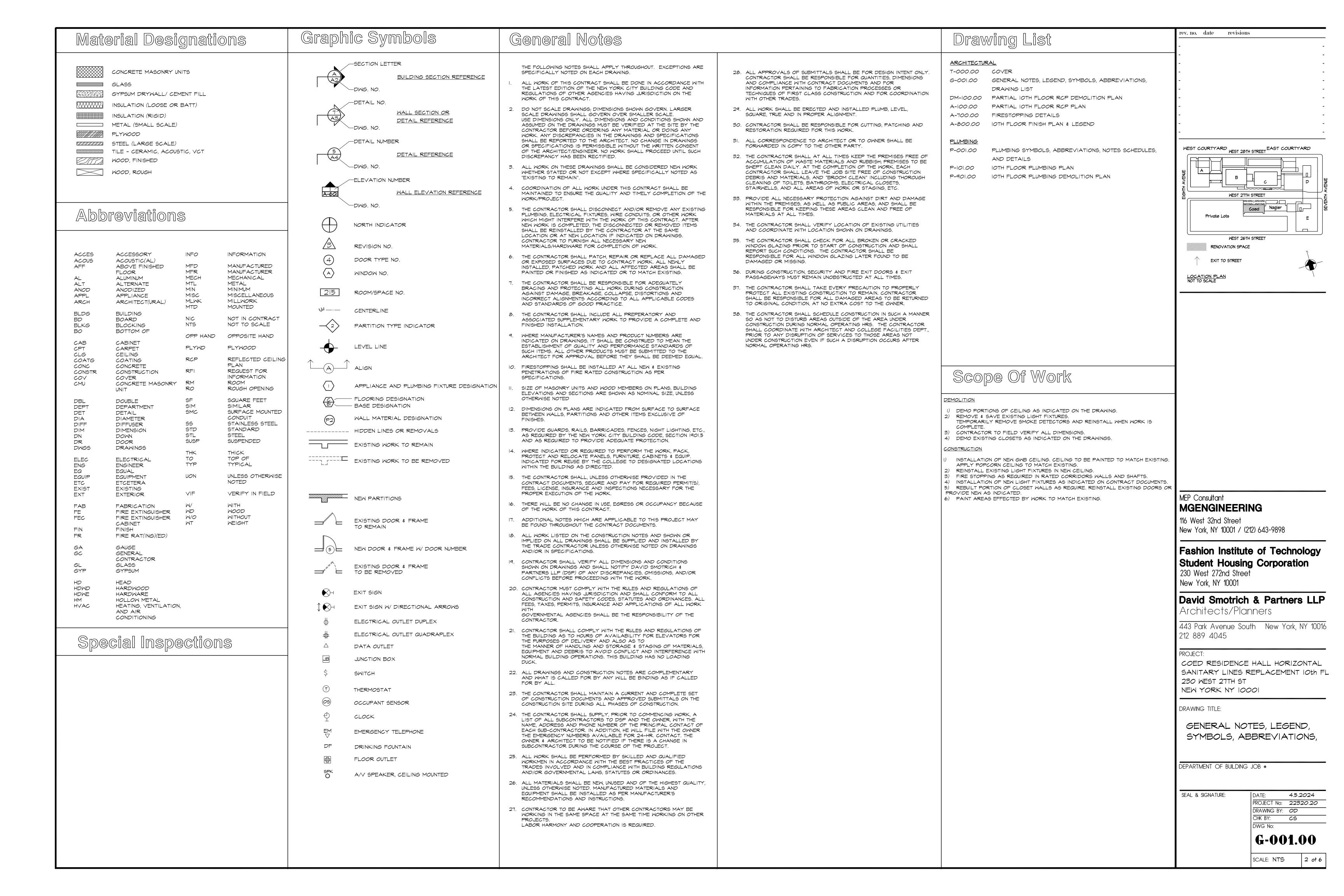
DEPARTMENT OF BUILDING JOB #

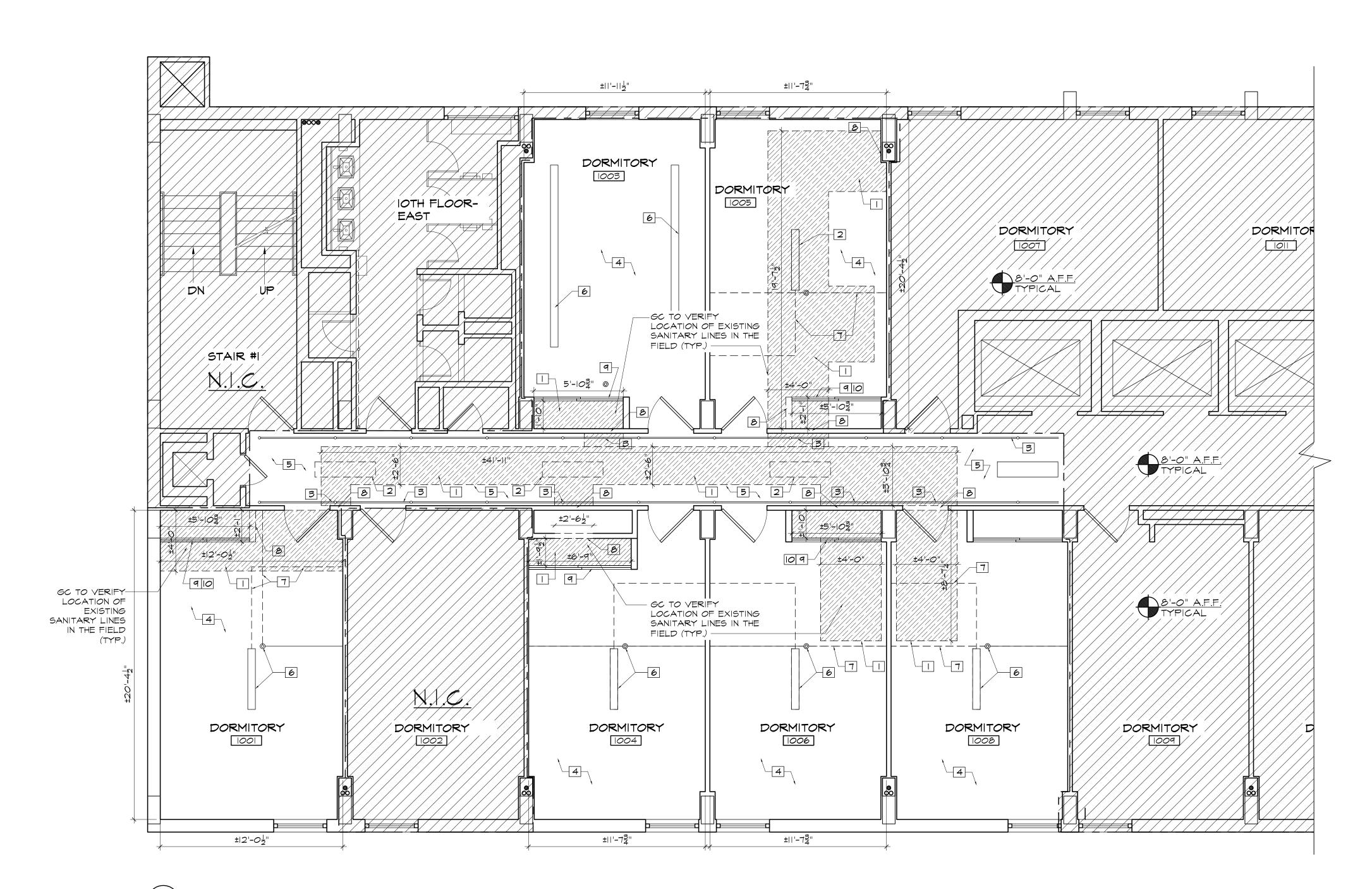
SEAL & SIGNATURE:

DATE: 4.5.2024
PROJECT No: 22320.20
DRAWING BY: OD
CHK BY: CS
DWG No:

T-000.00

SCALE: AS NOTED | of 6





PARTIAL IOTH FLOOR RCP DEMOLITION PLAN

DM-100 SCALE: 1/4" = 1'-0"

#### DEMOLITION NOTES

- PARTIALLY REMOVE GWB CEILING OR PLASTER CEILING, AND ASSOCIATED FRAMING AS REQUIRED TO REPLACE SANITARY PLUMBING PIPES. COORDINATE WITH PLUMBING DRAWINGS AND EXISTING CONDITIONS FOR LOCATION AND SIZE OF OPENINGS.
- 2 REMOVE AND SAVE FOR REINSTALLATION, EXISTING SURFACE MOUNTED LIGHT FIXTURES.
- 3 EXISTING SPRINKLER PIPING TO REMAIN. CONTRACTOR TO CAREFULLY REMOVE THE EXISTING CEILING ABOVE THE PIPE AND HEADS. GC TO PROTECT THE AREA NOT TO BE DISTURBED AS REQUIRED.
- 4 CONTRACTOR TO PROVIDE PROTECTION TO EXISTING FLOORING, WALLS AND CEILINGS IN DORMITORIES AS REQUIRED DURING DEMOLITION AND CONSTRUCTION.
- 5 CONTRACTOR TO PROVIDE PROTECTION TO EXISTING CARPET WALLS AND CEILINGS IN CORRIDOR AS REQUIRED DURING DEMOLITION AND CONSTRUCTION.
- 6 EXISTING LIGHT FIXTURES AND SMOKE HEADS TO REMAIN.
- TEMPORARILY REMOVE EXISTING SURFACE MOUNTED CONDUITS FOR LIGHT FIXTURES AND SMOKE DETECTORS AS REQUIRED.
- 8 REMOVE & OR PROVIDE OPENINGS ON EXISTING WALL FOR NEW PLUMBING WORK. COORDINATE WITH PLUMBING DRAWINGS AND EXISTING CONDITIONS FOR LOCATION AND SIZE OF OPENINGS.
- PREMOVE & SAVE FOR REINSTALLATION EXISTING CLOSET SLIDING DOORS AND TRACKS.
- REMOVE & OR PROVIDE OPENINGS ON EXISTING HEADER WALL ABOVE SLIDING DOORS FOR NEW PLUMBING WORK. COORDINATE WITH PLUMBING DRAWINGS AND EXISTING CONDITIONS FOR LOCATION AND SIZE OF OPENINGS.

GENERAL DEMOLITION NOTES:

I. GC TO COORDINATE IN THE FIELD OPENING OF EXISTING CEILINGS AND WALLS WITH LOCATION OF EXISTING SANITARY LINES (TYP.). GC TO COORDINATE WITH PLUMBING DRAWINGS.

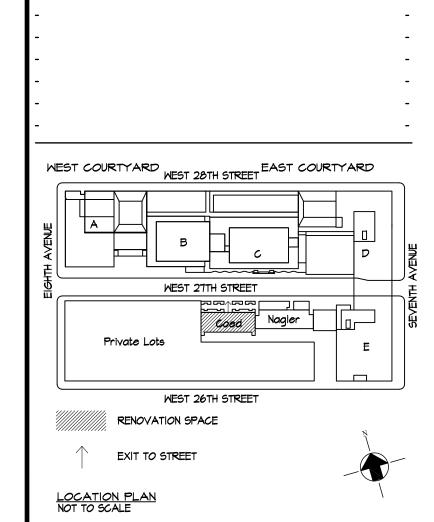
2. CONTRACTOR TO TEMPORARILY REMOVE ANY EXISTING SMOKE DETECTORS AS REQUIRED FOR NEW PLUMBING WORK. CONTRACTOR TO COORDINATE IN THE FIELD.

## LEGEND:

NIC NOT IN CONTRACT

NOT IN CONTRACT HATCH

GWB CEILING TO BE REMOVED



rev. no. date revisions

# MEP Consultant MGENGINEERING

116 West 32nd Street New York, NY 10001 / (212) 643-9898

# Fashion Institute of Technology Student Housing Corporation 230 West 272nd Street

230 West 272nd Stree New York, NY 10001

# David Smotrich & Partners LLP

Architects/Planners

443 Park Avenue South New York, NY 10016 212 889 4045

### PROJEC

COED RESIDENCE HALL HORIZONTAL
SANITARY LINES REPLACEMENT IOth FL
230 WEST 27TH ST
NEW YORK NY 10001

DRAWING TITLE:

PARTIAL IOTH FLOOR RCP DEMOLITION PLAN

DEPARTMENT OF BUILDING JOB #

SEAL & SIGNATURE:

DATE: 4.5.2024

PROJECT No: 22320.20

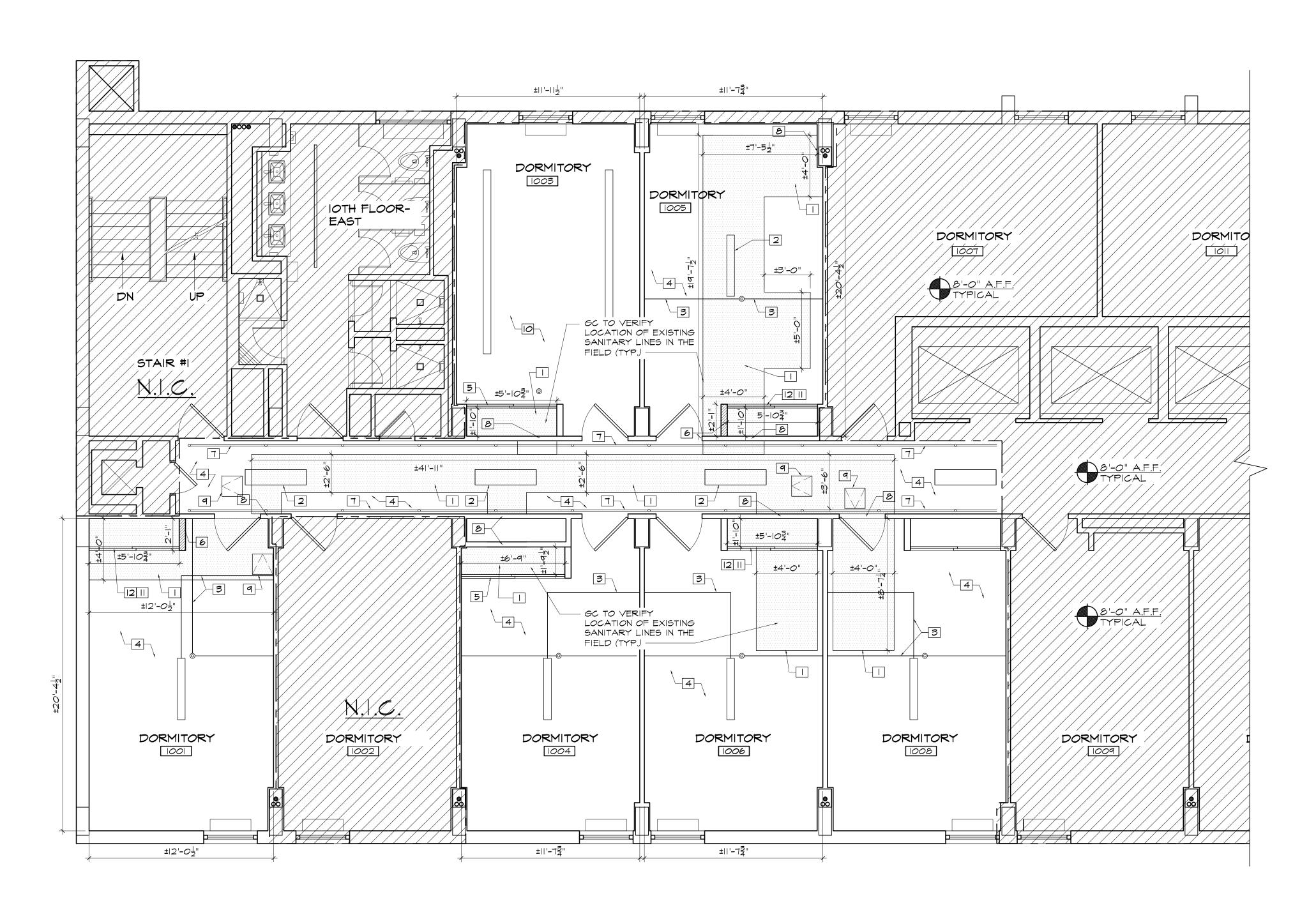
DRAWING BY: OD

CHK BY: CS

DWG No:

DM-100.00

SCALE: AS NOTED 3 of 6



PARTIAL IOTH FLOOR RCP LAN SCALE: 1/4" = 1'-0" CONSTRUCTION NOTES

- NEW GWB CEILING. INSTALL NEW POPCORN CEILING FINISH TO MATCH EXISTING. NEW CEILING TO BE PAINTED TO MATCH EXISTING.
- 2 REINSTALL EXISTING SURFACE MOUNTED LIGHT FIXTURES AFTER
- PLUMBING AND CEILING WORK IS COMPLETED.

3 REINSTALL SURFACE MOUNTED WIREMOLD AND RECONNECT FIXTURE.

- 4 PATCH AND PAINT EXISTING GWB CEILING DAMAGED BY DEMOLITION AND CONSTRUCTION. INSTALL NEW POPCORN FINISH TO MATCH EXISTING.
- FREINSTALL EXISTING CLOSET SLIDING DOORS AND HARDWARE.

  PROVIDE AND INSTALL NEW DOOR TRACK/HARDWARE. NEW HARDWARE

  TO BE TRADEMARK HARDWARE SKU:S\_9201506, OR EQUAL.
- | 6 NEW 3 & METAL STUD & & GWB WALL (CLOSET) TO MATCH EXISTING.
- NEW INSTALLATION OF SUPPORT HANGERS ON EXISTING SPRINKLER LINE IN THE CORRIDOR AS NEEDED.
- 8 CLOSE, PATCH AND PAINT OPENINGS IN EXISTING WALL. PROVIDE FIRESTOPPING.
- 9 NEW 16"X16" CEILING MOUNTED ACCESS PANEL. COORDINATE LOCATION THE FIELD.
- PATCH AND PAINT EXISTING GWB CEILING DAMAGED BY DEMOLITION AND CONSTRUCTION. PAINT TO MATCH EXISTING.
- III INSTALL NEW 3 & METAL STUD W/ & GWB HEADED WALL ABOVE CLOSET DOORS TO MATCH EXISTING.
- PROVIDE AND INSTALL NEW SOLID WOOD CLOSET SLIDING DOORS,
  TRACK AND HARDWARE. NEW TRACK & HARDWARE TO BE TRADEMARK
  HARDWARE SKU:S\_9201506, OR EQUAL.

#### GENERAL NOTES:

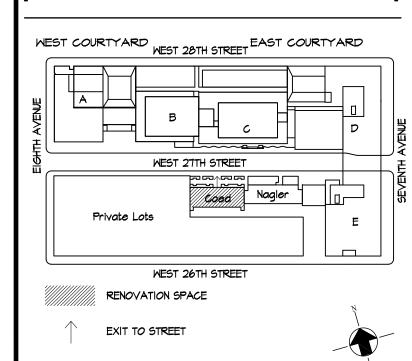
I. CONTRACTOR TO REINSTALL SMOKE DETECTORS. CONTRACTOR TO COORDINATE IN THE FIELD.

## LEGEND:

NIC NOT IN CONTRACT

NOT IN CONTRACT HATCH

NEW GWB CEILING W/ POPCORN FINISH



rev. no. date revisions

# MEP Consultant MGENGINEERING

LOCATION PLAN NOT TO SCALE

116 West 32nd Street New York, NY 10001 / (212) 643-9898

# Fashion Institute of Technology Student Housing Corporation 230 West 272nd Street

230 West 272nd Street New York, NY 10001

# David Smotrich & Partners LLP Architects/Planners

443 Park Avenue South New York, NY 10016 212 889 4045

### PROJ

COED RESIDENCE HALL HORIZONTAL
SANITARY LINES REPLACEMENT IOth FL
230 WEST 27TH ST
NEW YORK NY 10001

DRAWING TITLE:

PARTIAL IOTH FLOOR RCP PLAN

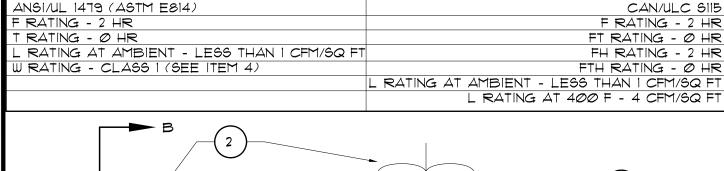
DEPARTMENT OF BUILDING JOB #

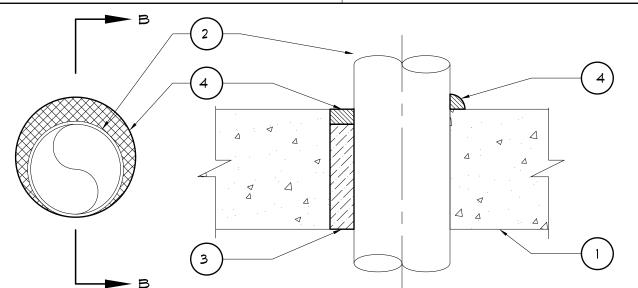
SEAL & SIGNATURE:

DATE: 4.5.2024
PROJECT No: 22320.20
DRAWING BY: OD
CHK BY: C5
DWG No:

A-100.00

SCALE: AS NOTED 4 of 6





- FLOOR OR WALL ASSEMBLY MIN 4-1/2 IN. (114 MM) THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF OR 1600-2400 KG/M3) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS \*. MAX DIAM OF OPENINGS IS 12 IN. (305MM). SEE CONCRETE BLOCKS (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
- THROUGH PENETRANTS ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED WITHIN THE FIRESTOP SYSTEM. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNULAR SPACE SHALL BE Ø IN. (POINT CONTACT) TO MAX 1-1/4 IN. (32 MM). THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:
- A. STEEL PIPE NOM 10 IN. (254 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE
- B. IRON PIPE NOM IØ IN. (254 MM) DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
- C. CONDUIT NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR STEEL CONDUIT
- D. COPPER TUBING NOM 4 IN. (102 MM) (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
- E. COPPER PIPE NOM 4 IN. (102 IN.) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE
- PACKING MATERIAL MIN 3 IN. (76 MM) THICKNESS OF MIN 4 PCF (64 KG/M3) MINERAL WOOL BATT INSULATION FOR NOM 4 IN. DIAM (AND SMALLER) PIPES, CONDUITS OR TUBINGS AND A MIN 4 IN. (102 MM) THICKNESS OF MIN 4 PCF (64 KG/M3) MINERAL WOOL BATT INSULATION FOR PIPE GREATER THAN NOM 4 IN. DIAM, FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL
- FILL, VOID OR CAVITY MATERIAL\* SEALANT- MIN ½ IN. (13 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH THE TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL. AT POINT CONTACT LOCATION BETWEEN PIPE AND CONCRETE, A MIN 1/2 IN. (13 MM) DIAM BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/PIPE INTERFACE ON THE TOP SURFACE OF FLOOR AND ON BOTH SURFACES OF WALL. W RATINGS APPLIES ONLY WHEN CFS-5 SIL GG, CFS-5 SIL SL (FLOORS ONLY), CP6015, CO604 SEALANT OR FS-ONE MAX INTUMESCENT SEALANT IS USED. FOR W RATING WHEN FS-ONE MAX IS USED, PACKING MATERIAL TO BE A MIN 4 IN. (102 MM) THICKNESS OF MIN 4 PCF (64KG/M3) MINERAL WOOL BATT INSULATION. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - CP6015, CP604, CFS-S SIL SL (FLOORS ONLY), CP606 OR FS-ONE SEALANT OR FS-ONE MAX INTUMESCENT SEALANT.

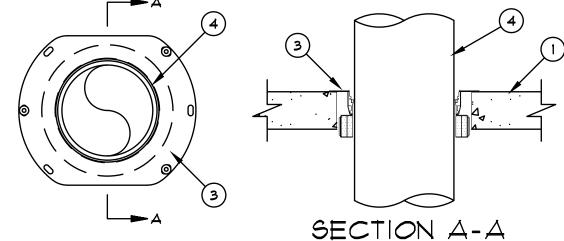
\*INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR

JURISDICTIONS EMPLOYING THE UL OR SUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY

FIRESTOPPING DETAIL - CONCRETE SLAB OR WALL	HILTI FIRE RATED
SCALE: 3" = 1'-0"	SYSTEM NO. C-JA-114

) FIRESTOPPING DETAIL - CONCRETE SLAB OR WALL ) SCALE: 3" = I'-0"		SYSTEM NO. C
J/UL 1479 (ASTM E814)	CAN/ULC SII5	
ATING - 2 # 3 HR (SEE ITEMS 1 # IA)	FRATING - 2 & 3 HR (SEE ITEMS 1 & IA)	
ATING - 0 #1/4 UP (SEE ITEM 2)	ET PATING - Ø \$ 1/4 UP (SEE ITEM 2)	

ILT RATING - Ø \$1/4 HR (SEE ITEM 2)	FT RATING - Ø & 1/4 HR (SEE ITEM 2
L RATING AT AMBIENT - LESS THAN I CFM/SQ FT	FH RATING - 2 & 3 HR (SEE ITEMS 1 & 1/4
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT	FTH RATING - Ø & 1/4 HR (SEE ITEM :
W RATING - CLASS 1 (SEE ITEM 3A)	L RATING AT AMBIENT - LESS THAN I CFM/SQ F
	L RATING AT 400 F - LESS THAN I CFM/SQ F
<b>A</b> (4)	4



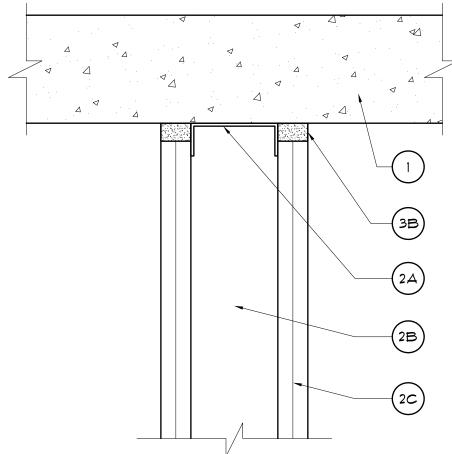
- I. FLOOR ASSEMBLY —MIN 2-1/2 IN. (64 MM) TO MAX 8 IN. (203 MM) THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF OR 1600-2400 KG/M³) CONCRETE. WHEN CONCRETE THICKNESS IS MIN 4-1/2 IN. (114 MM). THE F AND FH RATINGS ARE 3 HR.
- 1A. FLOOR ASSEMBLY (OPTIONAL, NOT SHOWN) THE FIRE RATED CONCRETE AND STEEL DECK FLOOR ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL DIDO, D800 OR D900 SERIES DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND AS SUMMARIZED BELOW: A. CONCRETE - MIN 2-1/2 IN. (64 MM) TO MAX 8 IN. (203 MM) THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF OR 1600-2400 KG/M³) CONCRETE, AS MEASURED OVER CREST OF FLUTED STEEL DECK, WHEN CONCRETE TOPPING THICKNESS IS MIN 4-1/2 IN. (114 MM), F AND FH RATINGS ARE 3 HR.
- B. STEEL FLOOR AND FORM UNITS: COMPOSITE OR NON-COMPOSITE MAX 3 IN. (76 MM) DEEP GALY STEEL FLUTED UNITS AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN.
- 2. METALLIC SLEEVE (OPTIONAL, NOT SHOWN) NOM 4, 5 OR 6 IN. (102, 127 OR 152 MM) DIAM SCHEDULE 10 (OR HEAVIER) STEEL SLEEVE CAST OR GROUTED INTO FLOOR ASSEMBLY, FLUSH WITH FLOOR SURFACES. WHEN METALLIC SLEEVE IS USED, THE T, FT AND FTH RATINGS ARE Ø HR. 2A. SHEET METAL SLEEVE - (OPTIONAL, NOT SHOWN) - NOM 4, 5, 6 OR 9 IN. (102, 127, 152 OR 229 MM) DIAM, MIN 26 GA GALV STEEL PROVIDED WITH A 26 GA GALV STEEL SQUARE FLANGE SPOT WELDED TO THE SLEEVE AT APPROX MID-HEIGHT, OR FLUSH WITH BOTTOM OF SLEEVE IN FLOORS, AND SIZED TO BE A MIN OF 2 IN. (51 MM)

LARGER THAN THE SLEEVE DIAM. THE SLEEVE IS TO BE CAST IN PLACE AND MAY EXTEND A MAX OF 4 IN. (102 MM) BELOW THE BOTTOM OF THE DECK AND FLUSH WITH

THE TOP SURFACE OF THE CONCRETE FLOOR, WHEN SHEET METAL SLEEVE IS USED, THE T, FT AND FTH RATINGS ARE Ø HR. 3. FIRESTOP DEVICE: - DROP-IN FIRESTOP DEVICE INSTALLED IN CORE-DRILLED OR SLEEVED OPENING IN CONCRETE FLOOR ASSEMBLY IN ACCORDANCE WITH ACCOMPANYING INSTALLATION INSTRUCTIONS. THE FIRESTOP DEVICE FLANGE SHOULD BE SECURED TO THE TOP SURFACE OF THE FLOOR WITH THREE 1/4 IN. (6 MM) DIAM BY MIN 1-1/4 IN. (32 MM) LONG STEEL EXPANSION BOLTS OR SCREW ANCHORS (INSTALLED IN A TRIANGULAR FASHION THROUGH HOLES PROVIDED). AS ALTERNATES TO THE ANCHORS SPECIFIED ABOVE, HILTI 1/4 IN. (6 MM) DIAM BY 1-1/4 IN. (32 MM) LONG KWIK-CON II+ CONCRETE SCREW ANCHOR, HILTI 1/4 IN. (6 MM) DIAM BY 1-3/4 IN. (45 MM) LONG KWIK-BOLT 3 STEEL EXPANSION ANCHOR OR HILTI 1/4 IN. (6 MM) BY 3/4 IN. (19 MM) LONG METAL HIT ANCHOR MAY BE USED. IN ADDITION, FOR NOM 2 IN. (51 MM), 3 IN. (16 MM) AND 4 IN. (102 MM) FIRESTOP DEVICES, FOUR 11/16 IN. (18 MM) LONG HILTI X-GH P18 MX STEEL FASTENERS MAY BE INSTALLED THROUGH THE STEEL FLANGE, TWO ON EACH SIDE. THE FIRESTOP DEVICES SHALL BE INSTALLED AS DETAILED IN THE FOLLOWING TABLE:

CORE HOLE OR SLEEVE DIAM.	FIRESTOP DEVICE	NOM. DIAM. OF THROUGH PENETRANT
4" (102 MM)	CFS-DID 2" MD	2" (51 MM) OR SMALLER
5" (127 MM)	CFS-DID 3"MD	3" (76 MM)
6" (152 MM)	CFS-DID 4"MD	4" (102 MM)
9" (229 MM)	CES-DID 6"MD	5" (152 MM)

- + FOR PIPE SMALLER THAN NOM 2 IN. (51 MM) DIAM, ADAPTER AND TOP SEAL PLUG IS REQUIRED TO BE USED.
- HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -CFS-DID 2"MD, CFS-DID 3"MD, CFS-DID 4"MD, CFS-DID 6"MD 3A. FIRESTOP DEVICE\* - WATER BARRIER MODULE - (OPTIONAL, NOT SHOWN) - USED IN COMBINATION WITH THE CFS-DID DEVICE AND SUPPLIED BY DEVICE
- MANUFACTURER, MODULE IS THREADED ONTO TOP OF DEVICE.
- W RATING AND L RATING APPLY ONLY WHEN WATER BARRIER MODULE IS USED HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -WATER BARRIER MODULE
- 4. THROUGH PENETRANT ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED WITHIN THE FIRESTOP DEVICE. PIPE, CONDUIT OR TUBING TO BE RIGIDLY
- SUPPORTED ON BOTH SIDES OF FLOOR ASSEMBLY. THE FOLLOWING TYPES OF PIPE, CONDUIT OR TUBING MAY BE USED:
- A. STEEL PIPE NOM 6 IN. (152 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE. B. IRON PIPE — NOM 6 IN. (152 MM) DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
- C. CONDUIT -NOM 6 IN. (152 MM) DIAM (OR SMALLER) RIGID STEEL CONDUIT. D. CONDUIT -NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING.
- E. COPPER TUBING -NOM 6 IN. (152 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING
- F. COPPER PIPE -NOM 6 IN. (152 MM) DIAM (OR SMALLER) REGULAR) OR HEAVIER COPPER PIPE.
- \*BEARING THE UL CLASSIFICATION MARK



- FLOOR ASSEMBLY MIN 4-1/2 IN. THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) STRUCTURAL CONCRETE
- WALL ASSEMBLY THE LOR 2 HOUR FIRE-RATED GYPSUM WALLBOARD / STEEL STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U400-SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
- A. STEEL FLOOR AND CEILING RUNNERS FLOOR RUNNERS OF WALL ASSEMBLY SHALL CONSIST OF GALVANIZED STEEL CHANNELS SIZED TO ACCOMMODATE STEEL STUDS (ITEM 2B). CEILING RUNNERS OF WALL ASSEMBLY SHALL CONSIST OF MIN NO. 26 GAUGE GALVANIZED STEEL CHANNELS SIZED TO ACCOMMODATE STEEL STUDS (ITEM 2B), CEILING RUNNERS TO BE PROVIDED WITH 2 IN. FLANGES. CEILING RUNNER SECURED TO LOWER SURFACE OF FLOOR WITH STEEL FASTENERS SPACED MAX 7 IN OC.
- B. STUDS STEEL STUDS TO BE MIN 2-1/2 IN. WIDE, STUDS CUT I IN. LESS IN LENGTH THAN ASSEMBLY HEIGHT WITH BOTTOM NESTING IN AND RESTING ON FLOOR RUNNER AND WITH TOP NESTING IN CEILING RUNNER WITHOUT ATTACHMENT. STUD SPACING NOT TO EXCEED 24 IN. OC.
- C. GYPSUM BOARD\* GYPSUM BOARD SHEETS INSTALLED TO A MIN. TOTAL THICKNESS OF 5/8 OR 1-1/4 IN. ON EACH SIDE OF WALL FOR A 1 OR 2 HOUR FIRE-RATED WALL, RESPECTIVELY. WALL TO BE CONSTRUCTED AS SPECIFIED IN THE INDIVIDUAL WALL AND PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY, EXCEPT THAT A MAX I IN. GAP SHALL BE MAINTAINED BETWEEN THE TOP OF THE GYPSUM BOARD AND THE LOWER SURFACE OF THE FLOOR. THE TOP ROW OF SCREWS SHALL BE INSTALLED INTO THE STUDS 4 IN. BELOW THE LOWER SURFACE OF THE FLOOR. THE HOURLY FIRE RATING OF THE JOINT SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL.
- 3. JOINT SYSTEM MAX SEPARATION BETWEEN BOTTOM OF FLOOR AND TOP OF WALL (AT TIME OF INSTALLATION OF JOINT SYSTEM) IS 1 IN. THE JOINT SYSTEM IS DESIGNED TO ACCOMMODATE A MAX. 25 PERCENT COMPRESSION FROM ITS INSTALLED WIDTH. THE JOINT SYSTEM CONSISTS OF A PACKING MATERIAL AND A FILL MATERIAL BETWEEN THE TOP OF THE WALLBOARD AND THE BOTTOM OF THE FLOOR, AS FOLLOWS:
  - A. PACKING MATERIAL (OPTIONAL, NOT SHOWN) FOR 2 HR RATED SYSTEM, TWO LAYERS OF NOM 1/8 IN. DIAMETER POLYURETHANE BACKER ROD FRICTION-FITTED ON TOP OF EACH OTHER INTO THE GAP BETWEEN THE TOP OF THE GYPSUM BOARD AND THE BOTTOM OF THE CONCRETE FLOOR ON BOTH SIDES OF THE WALL AND RECESSED FROM EACH SURFACE OF WALL TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL
  - B. FILL, YOID, OR CAYITY MATERIAL\* A MIN. 1/2 IN. THICKNESS OF FILL MATERIAL INSTALLED ON EACH SIDE OF THE WALL BETWEEN THE TOP OF THE GYPSUM BOARD AND BOTTOM OF THE CONCRETE FLOOR FOR I HR SYSTEMS OR IN 2 HR SYSTEMS WHERE PACKING MATERIAL (ITEM 3A) IS NOT USED, BOND BREAKER TAPE MAY BE APPLIED TO CEILING RUNNER ON EACH SIDE OF WALL. UNITED STATES GYPSUM CO - TYPE A

\*INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING: THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.

<u> FIRESTOPPING DETAIL - JOINT SYSTEM AT TOP OF WALL</u> (A-700/ SCALE: 3" = 1'-0"

UL FIRE RATED JOINT SYSTEM NO. HW-D-Ø158

ANSI/UL1479 (ASTM E814) CAN/ULC S115 F Ratings —1 and 2 Hr (See Items 1 and 3) F Ratings — 1 and 2 Hr (See Items 1 and 3 FT Rating — 0 H T Rating — 0 Hr L Rating (Without Movement) at Ambient — Less FH Ratings —1 and 2 Hr (See Items 1 and 3 Than 1 CFM/sq ft L Rating (Without Movement) at 400°F — Less FTH Rating — 0 H Than 1 CFM/sq ft M Rating (Movement) — See Table 1 FTH Rating — 0 Hr L Rating at Ambient — Less Than 5.1 L/s/m2

L Rating at 204°C — Less Than 5.1 L/s/m2

Sealant Depth

5/8 in.

5/8 in

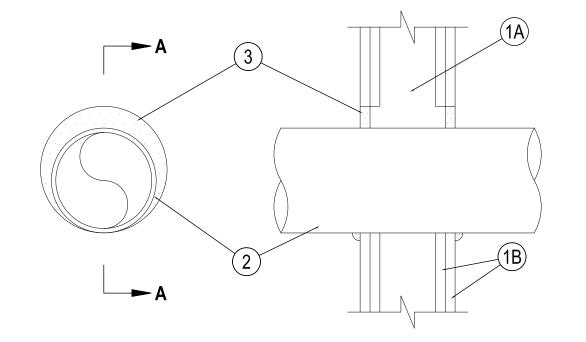
F-Rating

1 hr

1 hr

L Rating with Movement

N/A



Annular

Space

Max 2-1/4 in.

2-1/4 in.

Movement

5%

0.25 in.

Nominal Penetrant

Diameter

2 in.

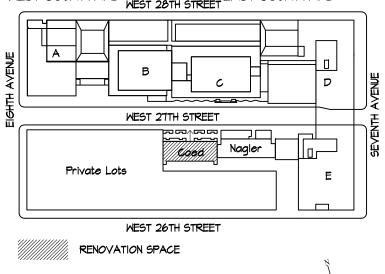
2 in.

- WALL ASSEMBLY THE I OR 2 HOUR FIRE-RATED GYPSUM WALLBOARD / STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400-SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
  - A. STUDS WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4" LUMBER SPACED 16" OC. STEEL STUDS TO BE MIN 2½". WIDE & SPACED MAX 24" OC. WHEN STEEL STUDS ARE USED AND THE DIA. OF OPENING EXCEEDS THE WIDTH OF STUD CAVITY, THE OPENING SHALL BE FRAMED ON ALL SIDES USING LENGTHS OF STEEL STUD INSTALLED BETWEEN THE VERTICAL STUDS & SCREW-ATTACHED TO THE STEEL STUDS AT EACH END. THE FRAMED OPENING IN THE WALL SHALL BE 4 TO 6" WIDER AND 4 TO 6" HIGHER THAN THE DIA. OF THE PENETRATING ITEM SUCH THAT, WHEN THE PENETRATING ITEM IS INSTALLED IN THE OPENING, A 2 TO 3" CLEARANCE IS PRESENT BETWEEN THE PENETRATING ITEM & THE FRAMING ON ALL FOUR SIDES.
  - B. GYPSUM BOARD: 3/4" THICK, 4 FT WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM BOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE 4 SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400-SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIA. OF OPENING IS 32-1/4" FOR STEEL STUD WALLS. MAX DIA. OF OPENING IS 14-1/2" FOR WOOD STUD WALLS. THE F & FH RATINGS OF THE FIRESTOP SYSTEM ARE EQUAL TO THE FIRE RATING OF THE WALL ASSEMBLY.
- THROUGH-PENETRANTS ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE SHALL BE MIN. O" TO MAX 2-1/4". PIPE MAY BE INSTALLED WITH CONTINUOUS POINT CONTACT. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES & SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:
- A. STEEL PIPE NOM 30" DIA. (OR SMALLER) SCHEDULE 10 (OR HEAVIER) COPPER TUBING.
- B. IRON PIPE NOM 30" DIA. (OR SMALLER) CAST OR DUCTILE IRON PIPE.
- C. CONDUIT NOM 4" DIA. (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR 6" DIA. STEEL CONDUIT.
- D. COPPER TUBING NOM 6" DIA. (OR SMALLER) TYPE L (OR HEAVIER) COPPER PIPE.
- E. COPPER PIPE NOM 6" DIA. (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.

3. FILL, YOID OR CAVITY MATERIAL\* - SEALANT MIN  $\frac{1}{2}$ " THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. AT THE POINT OR CONTINUOUS CONTACT LOCATIONS BETWEEN PIPE & WALL, A MIN. ½" DIA. BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE PIPE WALL INTERFACE ON BOTH SURFACES OF WALL.

\*INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.

rev. no. date revisions





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# Fashion Institute of Technology Student Housing Corporation

230 West 272nd Street New York, NY 10001

### David Smotrich & Partners LLP Architects/Planners

443 Park Avenue South New York, NY 10016 212 889 4045

ROJECT:

COED RESIDENCE HALL HORIZONTAL SANITARY LINES REPLACEMENT IOth FI 230 WEST 27TH ST NEW YORK NY 10001

DRAWING TITLE:

FIRESTOPPING DETAILS

DEPARTMENT OF BUILDING JOB #

SEAL & SIGNATURE:

4.5.2024 PROJECT No: 22320.20 DRAWING BY: OD CHK BY: CS

A-700.00

HILTI FIRE RATED 4 \ FIRESTOPPING DETAIL - JOINT SYSTEM AT TOP OF WALL SYSTEM NO. F-A-1128 (A-700) SCALE: 3" = 1'-0"

Movement

Direction

Penetrant

Item

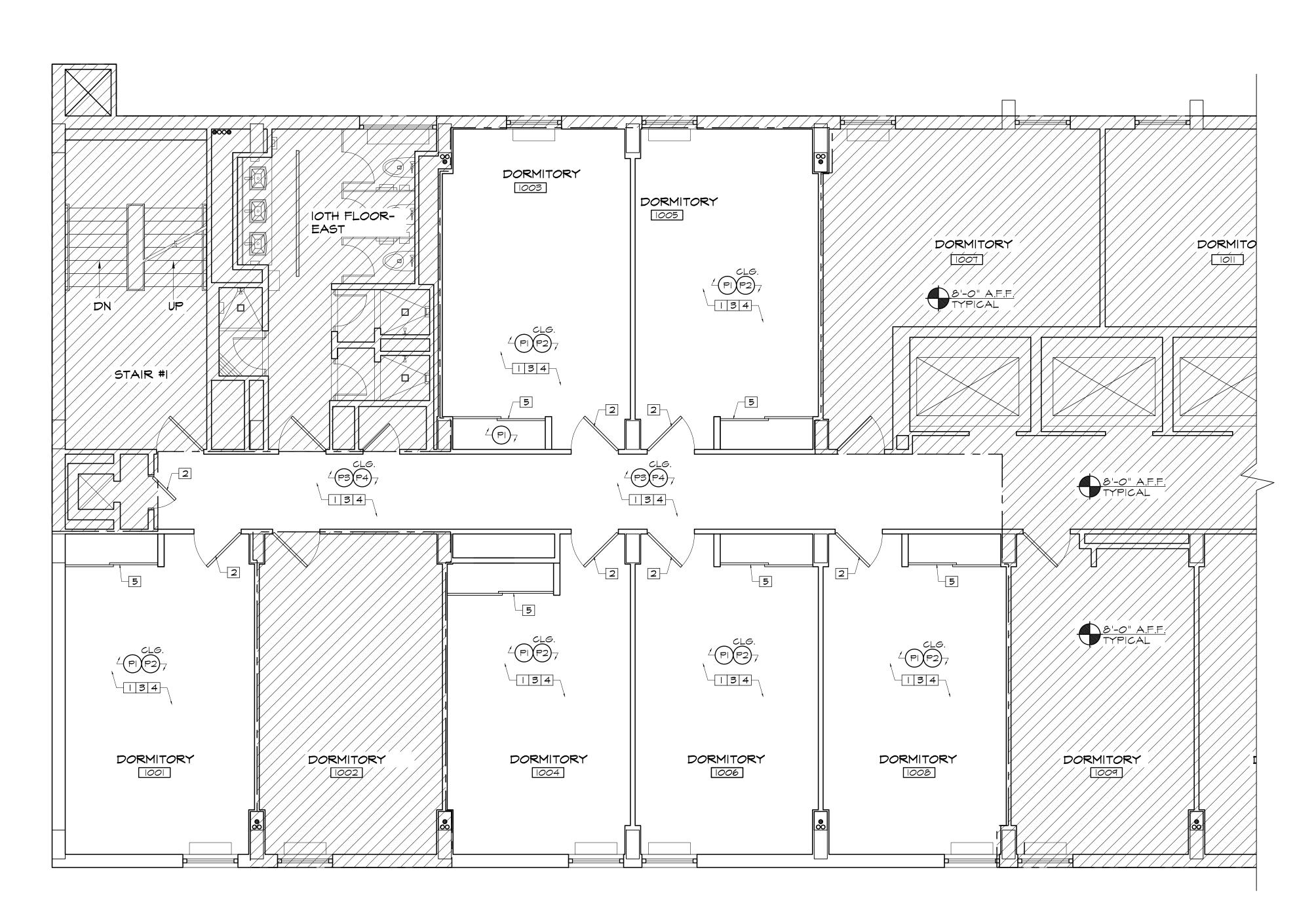
2A, 2C\*

2A, 2C\*

\ FIRESTOPPING DETAIL - SLAB -700/ SCALE: 3" = 1'-0"

UL FIRE RATED JOINT SYSTEM NO. W-L-1054

SCALE: AS NOTED 5 of 6



PARTIAL IOTH FLOOR FINISH FLOOR PLAN

A-800 SCALE: 1/4" = 1'-0"

#### FINISH NOTES

- MALLS AND CEILINGS DAMAGED BY DEMO AND CONSTRUCTION
  SHOULD BE PATCHED AND PAINTED TO MATCH EXISTING. INSTALL NEW
- POPCORN CEILING FINISH TO MATCH EXISTING.

  DAMAGED EXISTING DOORS SHOULD BE PAINTED TO MATCH EXISTING.
- 3 DAMAGED VCT FLOOR TILES IN DORMITORIES AND CARPET IN CORRIDOR SHOULD BE REPLACED TO MATCH EXISTING.
- 4 REPLACE ANY DAMAGED VINYL BASE TO MATCH EXISTING.
- DAMAGED EXISTING AND NEW CLOSET DOORS SHOULD BE PAINTED TO MATCH EXISTING.

## Finish Legend

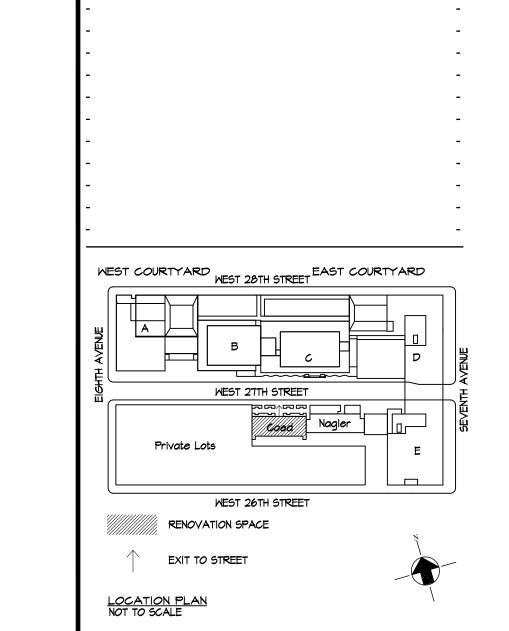
### PAII

P-) MFR: BENJAMIN MOORE NO: OC-64 SEMI GLOSS COLOR: PURE WHITE

MFR: BENJAMIN MOORE NO: OC-64 EGG SHELL COLOR: PURE WHITE

P-3 MFR: BENJAMIN MOORE NO: OC-64 SEMI GLOSS COLOR: PURE WHITE

MFR: BENJAMIN MOORE NO: OC-64 EGG SHELL COLOR: PURE WHITE



rev. no. date revisions

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### PROJEC

COED RESIDENCE HALL HORIZONTAL
SANITARY LINES REPLACEMENT IOTH FL
230 WEST 27TH ST
NEW YORK NY 10001

DRAWING TITLE:

IOTH FLOOR FINISH PLAN & LEGEND

DEPARTMENT OF BUILDING JOB #

SEAL & SIGNATURE:

DATE: 4.5.2024

PROJECT No: 22320.20

DRAWING BY: OD

CHK BY: C5

DWG No:

**A-800.00** 

SCALE: AS NOTED 6 of 6

PLUMBING SYMBOL	S AND ABBREVIATIONS
SYMBOL	DESCRIPTION
	EXISTING PIPING
s	SANITARY DRAINAGE PIPING (S)
	VENT PIPING (V)
- X - X - X - X - X - X - X - X -	EXISTING PIPING TO BE REMOVED
0	PIPE UP UNLESS OTHERWISE NOTED
<b>c</b>	PIPE DROP UNLESS OTHERWISE NOTED
——————————————————————————————————————	CLEANOUT (CO)
<b>c</b> -	TRAP
<u>P</u>	EXISTING PLUMBING RISER
•	CONNECT TO EXISTING
(CC)	CUT AND CAP EXISTING PIPING
Ι	NEW CONNECTION TO EXISTING
<b>→</b>	SHUT-OFF VALVE
.///,	PLBG. FIXTURE TO BE REMOVED
АР	ACCESS PANEL
CLG	CEILING
CONN	CONNECT, CONNECTION
DN	DOWN
DWG	DRAWING
N.I.C.	NOT IN CONTRACT
NTS	NOT TO SCALE

## GENERAL DEMOLITION NOTES

- 1. DEMOLITION OF PLUMBING ITEMS SHALL BE PERFORMED UNDER THE PLUMBING CONTRACT.
- 2. LOCATION OF THE EXISTING PIPING AS SHOWN ON DRAWINGS IS APPROXIMATE.
- 3. PROVIDE TEMPORARY SUPPORTS WHERE REQUIRED.

DISTURBANCE AS POSSIBLE.

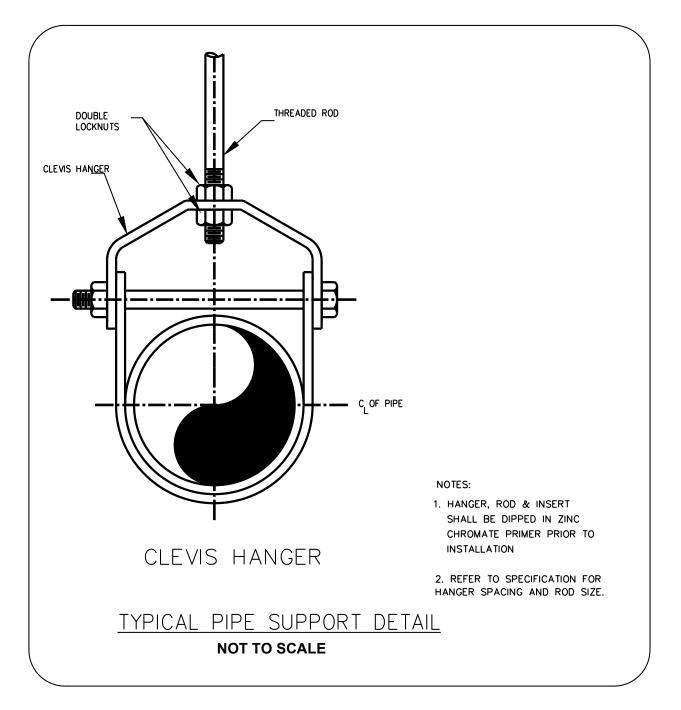
- 4. DURING DEMOLITION, PROPERLY CAP AND PROTECT ALL PIPING THAT WILL REMAIN IN OPERATION.
- 5. WHERE EXISTING INSULATION TO REMAIN IS DAMAGED BY THE REQUIREMENTS OF THE WORK, REPLACE ANY DAMAGED INSULATION TO MATCH EXISTING.
- 6. DEMOLITION WORK SHALL BE PERFORMED BY WORKMEN EXPERIENCED IN THIS TYPE OF WORK AND SHALL BE CARRIED THROUGH TO COMPLETION WITH DUE REGARD TO THE SAFETY OF ALL BUILDING OCCUPANTS AND THE EMPLOYEES OF THE CONTRACTOR, WITH AS LITTLE
- 7. DEMOLISH ALL EQUIPMENT AS INDICATED, FIXTURES AND/OR MISCELLANEOUS ARTICLES IN THEIR ENTIRETY INCLUDING AUXILIARY EQUIPMENT, PIPING, WIRING & CONDUIT.
- 8. MATERIALS RESULTING FROM THE DEMOLITION OPERATIONS SHALL NOT BE ALLOWED TO ACCUMULATE ON THE FLOORS AND ROOF SURFACES, EXTERIOR GRADE SURFACES OR OTHER PARTS OF THE PREMISES, AND SHALL BE PROMPTLY REMOVED AND DISPOSED OF AWAY FROM THE PREMISES.
- 9. INCLUDE ALL DEMOLITION OF SYSTEMS AND COMPONENTS WHERE SYSTEMS SHALL BE REPLACED BY NEW WORK. REFER TO THE DRAWINGS AND SPECIFICATIONS FOR THE SCOPE OF NEW AND RECONNECTED WORK. THE INTENT OF THIS REQUIREMENT IS TO HAVE THE CONTRACTOR DISCONNECT, DEMOLISH AND REMOVE ALL EXPOSED AND CONCEALED WORK WHERE BEING REPLACED OR CONNECTED TO THE NEW LAYOUTS.
- 10. COORDINATE ELECTRICAL POWER DISCONNECTION PRIOR TO DEMOLITION WITH ELECTRICAL CONTRACTOR.
- 11. PROTECT ALL FIXTURES & PLUMBING WORK AND WORK OF OTHER TRADES WHICH IS TO REMAIN, FROM DAMAGE DURING DEMOLITION.
- 12. ALL PIPING TO REMAIN SHALL HAVE ENDS TERMINATED IN A NEAT MANNER READY FOR CONNECTION OF NEW WORK. ALL EXPOSED ENDS OF PIPING SHALL BE CAPPED. SCREWED PIPING SHALL END ON A SCREWED JOINT. FLANGED PIPE SHALL END WITH A FLANGED JOINT. WELDED PIPING SHALL BE MECHANICALLY CUT, CLEANED OF BURRS AND A CAP TACK WELDED TO THE PIPE. DUCTWORK SHALL BE CAPPED WITH SHEET METAL CONNECTED TO THE DUCT TO REMAIN.
- 13. REMOVAL OF EQUIPMENT & PIPING SHALL INCLUDE ALL HANGERS & SUPPORT ASSOCIATED WITH THE EQUIPMENT & PIPING TO BE REMOVED.ALTERATION WORK

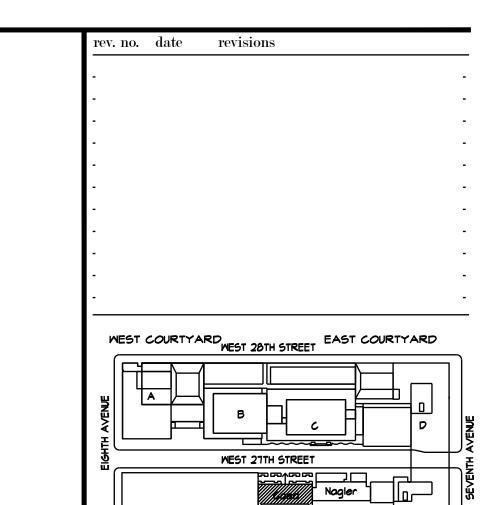
## GENERAL NOTES

- 1. ALL PIPING SHALL BE HUNG FROM BUILDING STEEL AND STRUCTURAL LOAD BEARING PORTION OF CONCRETE STRUCTURE ONLY. PLUMBING CONTRACTOR SHALL PROVIDE SUPPLEMENTARY STEEL AS NECESSARY TO SUPPORT PIPES FROM EXISTING STEEL. NO ANCHORAGE TO ANY STRUCTURALLY UNSUITABLE OR INADEQUATE ELEMENTS SHALL BE PERMITTED. THE ARCHITECT & STRUCTURAL ENGINEER SHALL BE THE SOLE DETERMINANTS AS TO PERMISSIBILITY OF HANGING NEW WORK FROM EXISTING STEEL BEAMS OR GIRDERS. WHERE THIS IS NOT POSSIBLE, FURNISH AND INSTALL INTERMEDIATE STEEL CHANNEL SUPPORTS OF SUFFICIENT SIZE AND LOAD BEARING CAPACITY SPANNING FROM EXISTING STRUCTURAL STEEL TO EXISTING STRUCTURAL STEEL. NEW WORK SHALL BE SUPPORTED FROM THESE CHANNELS AS REQUIRED.
- 2. FOR DETAIL ON CORE DRILLING REFER TO STRUCTURAL DRAWINGS. ALL CORE DRILLING IS TO BE PROVIDED UNDER THIS CONTRACT.
- 3. WHILE THE DRAWINGS SHALL BE ADHERED TO AS CLOSELY AS POSSIBLE, THE ARCHITECT'S RIGHT IS RESERVED TO VARY THE SIZE OF PIPES DURING THE PROGRESS OF THE WORK IF REQUIRED TO MEET CEILING HEIGHTS, TO MEET STRUCTURAL AND FIELD CONDITIONS. CONTRACTOR SHALL PROVIDE REDRAWING OF SHOP DRAWINGS AS NECESSARY TO ACCOMMODATE THE ARCHITECT'S REQUIREMENTS, AT NO ADDITIONAL COST TO THE OWNER. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR REQUIRED CEILING HEIGHTS.
- 4. INSTALL ALL PIPING IN STRICT ADHERENCE TO THE CEILING HEIGHTS INDICATED ON THE ARCHITECT'S DRAWINGS. CONSULT WITH OTHER CONTRACTORS AND IN CONJUNCTION WITH THE OTHER CONTRACTORS, ESTABLISH THE NECESSARY SPACE REQUIREMENTS FOR EACH TRADE. PREPARE THE COORDINATION DRAWINGS AS PER THE SPECIFICATIONS.
- 5. THE CONTRACTOR SHALL BE HELD RESPONSIBLE TO HAVE EXAMINED THE PREMISES AND COMPARED IT WITH THE DRAWINGS AND SPECIFICATIONS AND TO HAVE SATISFIED HIMSELF OF THE CONDITION EXISTING THERE AS TO THE PERFORMANCE OF THE WORK BEFORE SUBMISSION OF HIS BID.
- 6. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO CONVEY THE SCOPE OF WORK AND INDICATE GENERAL ARRANGEMENT OF EQUIPMENT, FIXTURES AND PIPING. FOLLOW DRAWINGS IN LAYING OUT WORK AND CHECK DRAWINGS OF OTHER TRADES AND EXISTING CONDITIONS TO VERIFY SPACES IN WHICH IT WILL BE INSTALED. WITHOUT ADDITIONAL COST MAKE MODIFICATIONS TO THE LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF OTHER TRADES, EXISTING CONDITIONS AND FOR PROPER EXECUTION OF THE WORK.
- 7. PIPING CONNECTED TO EQUIPMENT MAY REQUIRE DIFFERENT SIZE CONNECTION THAN INDICATED ON THE DRAWINGS. PROVIDE TRANSITION PIECES AS REQUIRED FOR EQUIPMENT.
- 8. BEFORE SUBMITTING BIDS, VISIT THE SITE AND REVIEW ALL EXISTING CONDITIONS. INCLUDE IN THE BID ALL WORK REQUIRED TO ACCOMMODATE EXISTING CONDITIONS.

#### 9. SHUTDOWNS:

- A. WHEN INSTALLATION OF A NEW SYSTEM REQUIRES THE TEMPORARY SHUTDOWN OF AN EXISTING OPERATING SYSTEM, THE CONNECTION OF THE NEW SYSTEM SHALL BE PERFORMED AT SUCH REGULAR TIME OR AT OVERTIME WHEN DESIGNATED BY OWNER AT NO ADDITIONAL COST TO THE OWNER
- B. THE OWNER SHALL BE NOTIFIED ON THE ESTIMATED DURATION OF THE SHUTDOWN PERIOD AT LEAST TEN (10) DAYS IN ADVANCE OF THE DATE THE WORK IS TO BE PERFORMED
- C. WORK SHALL BE ARRANGED FOR CONTINUOUS PERFORMANCE, INCLUDING OVERTIME, WHEN APPROVED BY THE OWNER, IF REQUIRED, TO ASSURE THAT THE EXISTING OPERATING SERVICES WILL BE SHUT DOWN ONLY DURING THE TIME ACTUALLY REQUIRED TO MAKE THE NECESSARY CONNECTIONS.
- 10. ACCESS DOORS IN FINISHED CONSTRUCTION:
- A. INSTALL ALL WORK SO THAT ALL PARTS REQUIRED ARE READILY ACCESSIBLE FOR INSPECTION, OPERATION, MAINTENANCE AND REPAIR. MINOR DEVIATIONS FROM THE DRAWINGS MAY BE MADE TO ACCOMPLISH THIS, BUT CHANGES OF SIGNIFICANT MAGNITUDE SHALL NOT BE MADE WITHOUT PRIOR WRITTEN REVIEW FROM THE ARCHITECT.
- B. WHEREVER MECHANISMS REQUIRING ACCESS FOR MAINTENANCE, OR FOR OPERATION ARE CONCEALED IN THE STRUCTURE AND WHEREVER ELSE INDICATED ON THE DRAWINGS, SUPPLY ACCESS DOORS OF SIZES NECESSARY TO PROVIDE READY ACCESS TO THE CONCEALED ITEMS.GROUP TOGETHER VALVES, EXPANSIONS JOINT, GAUGES, AND OTHER EQUIPMENT REQUIRING ACCESS IN WALLS AND FURRED SPACES TO REDUCE THE NUMBER OF ACCESS DOORS.
- 11. CONTRACTOR TO PROVIDE FIREPROOFING WHERE THE EXISTING FIREPROOFING WAS REMOVED TO EXPOSE THE EXISTING STEEL FOR HANGERS. REFER TO SPECIFICATION FOR FIREPROOFING.





WEST 26TH STREET

RENOVATION SPACE

LOCATION PLAN NOT TO SCALE

EXIT TO STREET

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### PROJE

CO-ED RESIDENCE HALL HORIZONTAL SANITARY LINES REPLACEMENT IOFL 230 WEST 27TH ST NEW YORK NY 10001

DRAWING TITLE:

PLUMBING SYMBOLS, ABBREVIATIONS, NOTES AND DETAILS

DEPARTMENT OF BUILDING JOB #

SEAL & SIGNATURE:

DATE: 4.05.2024

PROJECT No: 8969.02

DRAWING BY: C.N.

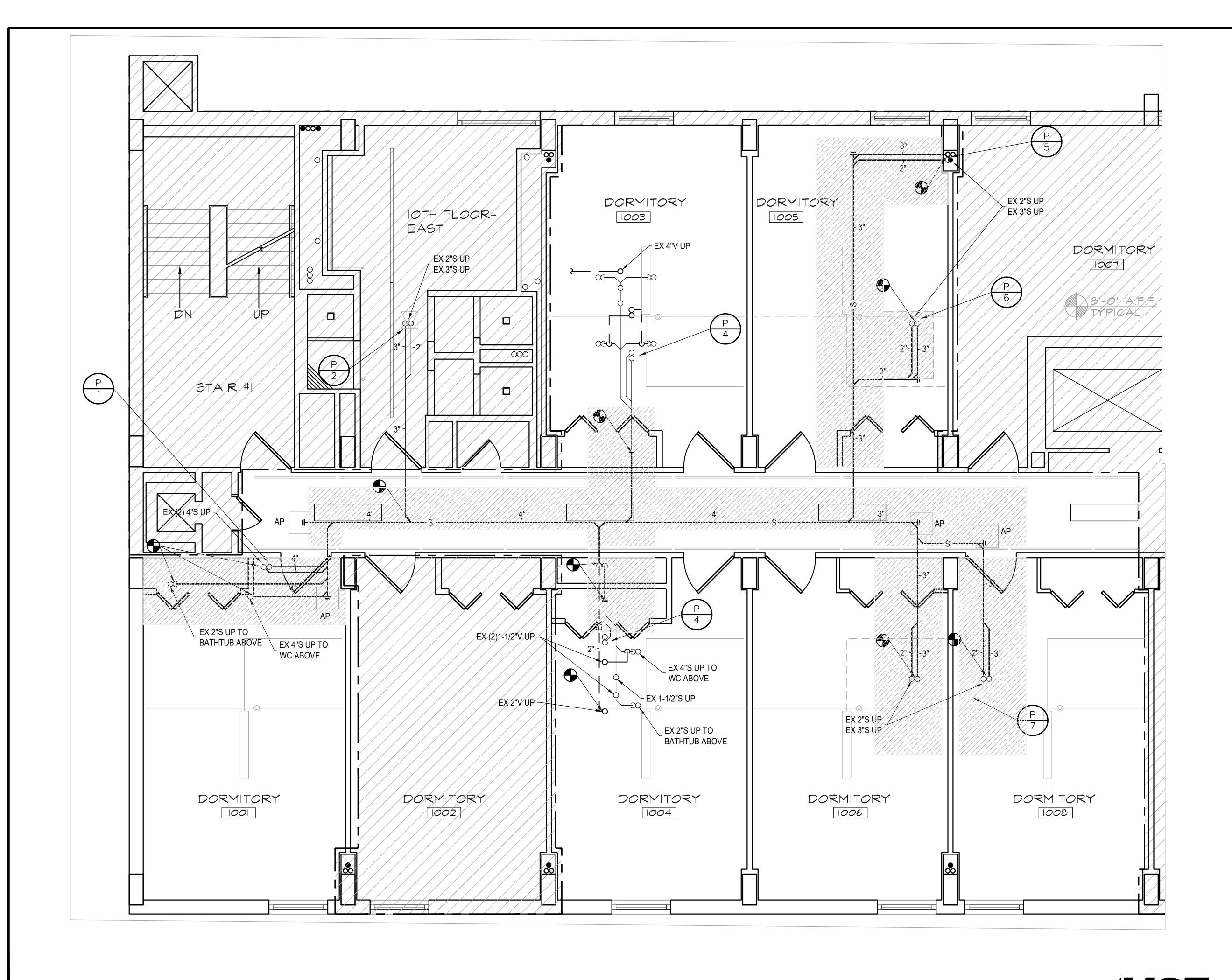
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DWG No:

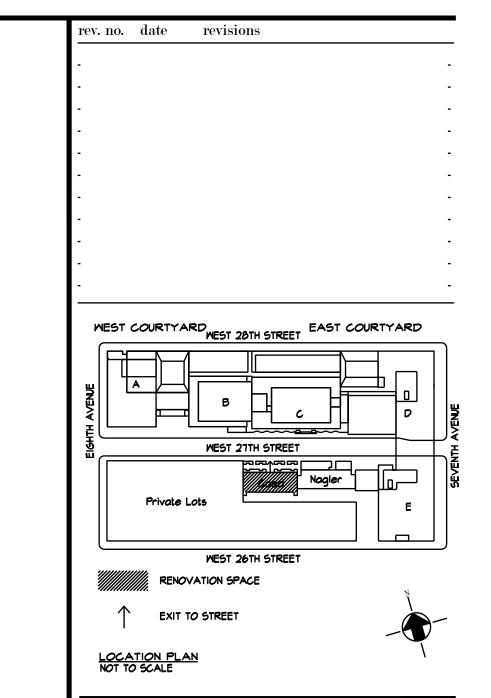
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SCALE: NTS

1 OF 3







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CO-ED RESIDENCE HALL HORIZONTAL SANITARY LINES REPLACEMENT IOFL 230 WEST 27TH ST NEW YORK NY 10001

DRAWING TITLE:

IOTH FLOOR PLUMBING PLAN

DEPARTMENT OF BUILDING JOB #

SEAL & SIGNATURE: DATE: 4.05.2024 PROJECT No: 8969.01 DRAWING BY: C.N.

P-101.00

4.05.2024

2 OF 3 SCALE: 3/8"=1"

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