

**FASHION INSTITUTE OF TECHNOLOGY
DUBINSKY BUILDING
MEN’S LOCKER ROOM – SHOWERS & RESTROOM UPGRADES
INVITATION FOR BID NUMBER C1605**

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SECTION I:
NOTICE TO BIDDERS

SECTION I: NOTICE TO BIDDERS

FASHION INSTITUTE OF TECHNOLOGY DUBINSKY BUILDING MEN'S LOCKER ROOM – SHOWERS & RESTROOM UPGRADES INVITATION FOR BID NUMBER C1605

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 **ONLY** accepting electronic scanned bids for the subject project. You must email your bid to purchasingbids@fitnyc.edu 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 **November 6, 2023, 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.

ATTACHMENT A - BID CHECKLIST

FASHION INSTITUTE OF TECHNOLOGY DUBINSKY BUILDING MEN'S LOCKER ROOM – SHOWERS & RESTROOM UPGRADES INVITATION FOR BID NUMBER C1605

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.)
<http://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 90%** of the project cost.
- Did you include an audited or reviewed financial report for the last two (2) years with your bid?

ATTACHMENT B - CONTRACTOR REFERENCE SHEET
FASHION INSTITUTE OF TECHNOLOGY
DUBINSKY BUILDING
MEN'S LOCKER ROOM – SHOWERS & RESTROOM UPGRADES
INVITATION FOR BID NUMBER C1605

FIT requests a minimum of three references for **completed** 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: _____
 Project Cost: _____
 Project Start/End Date: _____
For FIT Use Only – Reference Responses
 Quality of Work: _____ Site Maintenance: _____
 Scheduling: _____ Cooperation: _____ Safety Standards: _____
 Permits: _____ Report Submittals: _____ Payments: _____
 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 Responses
 Quality of Work: _____ Site Maintenance: _____
 Scheduling: _____ Cooperation: _____ Safety Standards: _____
 Permits: _____ Report Submittals: _____ Payments: _____
 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 Responses
 Quality of Work: _____ Site Maintenance: _____
 Scheduling: _____ Cooperation: _____ Safety Standards: _____
 Permits: _____ Report Submittals: _____ Payments: _____
 Other Relevant Factors: _____
 Overall Performance Rating: Excellent ___ Satisfactory ___ Marginal ___ Unsatisfactory ___

FIT

Interviewer: _____ Signature: _____ Date: _____

SECTION II:
BID TERMS AND CONDITIONS

SECTION II. BID TERMS AND CONDITIONS

SPECIFICATIONS FOR FASHION INSTITUTE OF TECHNOLOGY DUBINSKY BUILDING MEN'S LOCKER ROOM – SHOWERS & RESTROOM UPGRADES INVITATION FOR BID NUMBER C1605

I. INTRODUCTION

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 27th 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 immediately following Project Description herein below and by the Contract Documents.

Project Description: Provide labor, materials, tests, tools and equipment to complete the Men's Locker Room – Showers & Restroom Upgrades. Contractor may begin survey and procurement of materials immediately following award. The scope of this project includes the renovation of the Male shower area AX27B and AX25B and restrooms AX27A of the Dubinsky Building in the sub-cellar:

1. Some partitions to be demolished and replaced with new.
2. Some partitions to be retained and sanded/scarified to receive new tile.
3. Some door openings to be increased and receive new frames
4. New tiled showers and toilets with curbs, benches and new shower curtain, tracks and

- partition doors
5. New tiled and waterproofed walls
 6. Existing floor tile, trench drain and pitch to be demolished and new pitched subflooring, new trench drain grille including new floor drains to be installed.
 7. New tiled and waterproofed floors, saddles and stone curbs
 8. New mirrors
 9. New countertops and removable P-Lam panels
 10. New accessories and grab bars
 11. New paint in Staff Lockers AX27 and at new door frames and ceilings as required
 12. Existing ceiling to be demolished, new ceilings and new lighting
 13. Existing Plumbing fixtures to be demolished and new plumbing fixtures to be installed
 14. New exhaust duct work
 15. New electrical outlets and switches
 16. Misc. Demolition

A detailed scope of work is outlined in specifications.

The installation of all equipment in accordance with the Manufacturer's Installation/Operation & Maintenance Manuals & Instructions shall be followed.

III. **BIDDER REQUIREMENTS**

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 General Contractor in the renovation 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. **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.**
- 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 **not to exceed 90%** 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:

- N/A

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. **BID SECURITY**

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 **October 23rd, 2023 at 10:00 A.M.** at the Fashion Institute of Technology, Feldman Building "C Building" Lobby, located at 27th Street (between 7th and 8th Avenues). 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 of the Bidder to attend the mandatory pre-bid site inspection 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: purchasingbids@fitnyc.edu, no later than **October 27th, 2023 on or before 3:00 P.M.** Answers shall be provided in the form of an Addendum and be posted on the FIT purchasing department website. Reference Bid number **C1605**.

VII. BID DESIGNATION

- A. FIT is **ONLY** accepting electronic scanned bids for the subject project. You must email your bid to purchasingbids@fitnyc.edu 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 **November 6th, 2023, 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 (purchasingbids@fitnyc.edu) on or before **November 6th, 2023, on or before 12:00 PM** 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. In case FIT will decide to include the 'alternate' in the scope of work, the lowest bidder will be considered the contractor with the lowest total of the base bid plus the alternate 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. DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

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# 2023011197)

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: <http://www.esd.ny.gov/mwbe.html> 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: <https://online.ogs.ny.gov/SDVOB/search>."

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's equipment, supplies and/or services to the required use; and the ability of the bidder to provide future maintenance, service, and parts.

SECTION III:
CONTRACT TERMS AND CONDITIONS

SECTION III. CONTRACT TERMS AND CONDITIONS

I. COMPLIANCE REQUIREMENTS

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:

NONE

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 **the work on the men's locker room – showers & restroom upgrades.**

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 9:00 pm** 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. Simultaneously 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 a representative of FIT 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 on the **men's locker room – showers & restroom upgrades** within five (5) working days of receipt of a Notice to Proceed from FIT. The shop drawings process and ordering need to proceed first. Work shall commence on or about **November 27, 2023. The project shall be Substantially Completed no later than February 2, 2024.** Contractor must be de-mobilized and leave the job site on the ending date of work period. Only close-out, 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 9:00 P.M.**, Monday through Friday, 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.

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. DEMOLITION NOTES

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 FIT's certified asbestos abatement contractor prior to the work of this contract.
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. Contractor shall use Benjamin Moore, Regal Paint, or approved equal.
7. Employee Identification and Building Access: 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.
8. 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 on-site 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.
9. 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.
 10. 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.
 11. 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.
 12. 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.
 13. 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.
 14. 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.

15. 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 <https://www.fitnyc.edu/policies/>. 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, Architect, and Engineer 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, Architect, and Engineer 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.

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, the Architect & Engineer 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, the Architect and Engineer 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. SITE VISITS BY ARCHITECT/ENGINEER

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 Engineer 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 five (5) years, 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 and Engineer 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
DUBINSKY BUILDING
MEN’S LOCKER ROOM – SHOWERS & RESTROOM UPGRADES
INVITATION FOR BID NUMBER C1605
NYS PREVAILING WAGE SCHEDULE PRC # 2023011197**

BID BREAKDOWN

Line	Description	Total Labor Cost	Total Materials, Tools & Equipment	Line Total
1	SELECTIVE DEMOLITION	\$	\$	\$
2	MASONRY	\$	\$	\$
3	CONCRETE	\$	\$	\$
4	METALS	\$	\$	\$
5	WOOD, PLASTICS & COMPOSITES	\$	\$	\$
6	THERMAL & MOISTURE PROTECTION	\$	\$	\$
7	OPENINGS	\$	\$	\$
8	FINISHES	\$	\$	\$
9	SPECIALTIES	\$	\$	\$
10	EQUIPMENT	\$	\$	\$
11	FURNISHINGS	\$	\$	\$
12	PLUMBING	\$	\$	\$
13	HVAC	\$	\$	\$
14	ELECTRICAL	\$	\$	\$
15	ELECTRONIC SAFETY & SECURITY	\$	\$	\$
16	GENERAL REQUIREMENTS	\$	\$	\$
17	GENERAL CONDITIONS	\$	\$	\$

TOTAL BID PRICE (1-17) \$ _____

As stated in Section IV of the front end documents: Subcontracting shall be permitted **not to exceed 90%** 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)** _____%

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 **only** pricing format acceptable. Bidders **must** submit pricing using this form. **FIT will not accept bid responses on any other form.**

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.

SECTION IV.
GENERAL REQUIREMENTS

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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 above-ground 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.

SECTION V.
GENERAL CONDITIONS

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ARTICLE 1 -- DEFINITIONS

Section 1.01 - The following terms as used in the Contract Documents shall be defined 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.

ARTICLE 2 -- CONTRACT DOCUMENTS

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	<u>200</u>
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	<u>40,000</u>
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	<u>3,000</u>
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	<u>3,000</u>
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 Contractor 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
 - 2. 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 or 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: Purchasing

Sammy Li
Purchasing Deputy Director
FIT Purchasing
333 Seventh Avenue, 15th 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 non-compliance 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.
- B. 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.

SECTION VI.

LABOR & MATERIAL PAYMENT BOND

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 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. _____

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

STATE OF _____) ss:

COUNTY OF _____)

On the _____ day 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 at _____, that (s)he is the _____ of _____, the corporation described in and which executed the above instrument; and that (s)he signed her/his name thereto by order of the Board of Directors 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

_____, to me known and known to me to be a member of the firm _____, described 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 purpose 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 came _____, to me known and known to me to be the person described in and who executed the foregoing instrument and (s)he duly acknowledged that (s)he executed the same.

Notary Public

ACKNOWLEDGEMENT OF SURETY

STATE OF NEW YORK)

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 say that (s)he resides at _____, that (s)he is the _____ of _____, the corporation described in and which executed the above instrument; and that (s)he signed her/his name thereto by order of the Board of Directors of said corporation.

Notary Public

SECTION VII.
PERFORMANCE BOND

PERFORMANCE 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, in the amount of _____ and ____ /100 Dollars (\$ _____) for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, CONTRACTOR 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.

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 right to complete the Contract.

- 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:
 - 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.

Signed this _____ day of _____ 20__.

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. _____

ACKNOWLEDGEMENT OF PRINCIPAL, IF A CORPORATION

STATE OF _____) ss:

COUNTY OF _____)

On the _____ day 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 at _____, that (s)he is the _____ of _____, the corporation described in and which executed the above instrument; and that (s)he signed her/his name thereto by order of the Board of Directors 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

_____, to me known and known to me to be a member of the firm _____, described 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 purpose 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

came _____, to me known and known to me to be the person described in and who executed the foregoing instrument and (s)he duly acknowledged that (s)he executed the same.

Notary Public

ACKNOWLEDGEMENT OF SURETY

STATE OF NEW YORK)

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 say that (s)he resides at _____, that (s)he is the _____ of _____, the corporation described in and which executed the above instrument; and that (s)he signed her/his name thereto by order of the Board of Directors of said corporation.

Notary Public

SECTION VIII.
FORM OF BID

FORM OF BID

(Contract for Total of All Materials and Labor)

**The Fashion Institute of Technology
(Owner)**

For:

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 27th street campus. To be known from this point forward as the “ _____ ”

Pursuant to and in compliance with the Owner's advertisement for bids dated _____, 201 and the Contract Documents relating hereto, the undersigned hereby offers to provide all plant, labor, materials, supplies, equipment, and other facilities and things necessary or proper for or incidental to, the General Contracting and Electrical Work as required by, and in strict accordance with, the applicable provisions of the Contract Documents, as defined in the General Conditions, including changes thereto, and all of the addenda issued by the Owner and sent to the undersigned by facsimile transmission or delivered to the bidder prior to the date of opening of bids, whether received by the undersigned or not, for the total sum of

_____ 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 _____

SECTION IX.
NON-COLLUSIVE
BIDDING
CERTIFICATION

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 _____

By _____

(Signature and Title)

Dated: _____

Telephone (____) _____ Fax No. (____) _____

(Taxpayer ID or Social Security Number)

ACKNOWLEDGEMENT OF BIDDER, IF A CORPORATION

STATE OF NEW YORK)
COUNTY OF _____) ss:

On the ____ day of _____, 20__ , before me personally came _____
to me known, who, being by me duly sworn, did depose and say that (s)he resides at _____
_____, that (s)he is the _____ of _____
_____, the corporation described in and which executed the above instrument;
and that (s)he signed her/his name thereto by order of the Board of Directors of said corporation.

Notary Public

ACKNOWLEDGEMENT OF BIDDER, IF A PARTNERSHIP

STATE OF NEW YORK)
COUNTY OF _____) ss:

On the ____ day of _____, 20__, before me personally came _____
to me known and known to me to be a member of the firm _____
_____, described 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

ACKNOWLEDGEMENT OF BIDDER, IF AN INDIVIDUAL

STATE OF NEW YORK)
COUNTY OF _____) ss:

On the ____ day 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 acknowledged 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 specified item.

Specification Section and Title: _____

Paragraph _____ Page _____ Specified Item _____

Proposed Substitution: _____

Manufacturer: _____ Address: _____ Phone: _____

Trade Name: _____ Model No: _____

Price Difference: _____ or No Change _____

The Undersigned certifies:

- A. Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- B. Same warranty will be furnished for proposed substitution as for specified product.
- C. Same maintenance service and source of replacement parts, as applicable is available.
- D. Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- E. Proposed substitution does not affect dimensions and functional clearances.
- F. Payment will be made for changes to the building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: _____

Signed by: _____

Firm: _____

Address: _____

Telephone: _____ FAX: _____

ARCHITECT'S REVIEW AND ACTION

- Substitution Approved – Make submittals in accordance with General Requirements
- Substitution Approved As Noted – Make submittals in accordance with General Requirements.
- Substitution Rejected – Use specified materials.
- Substitution Request Received Too Late. Use specified materials.

Signed by: _____

Supporting Data Attached: Drawings Product Data Samples Tests
 Reports Other _____

SECTION XI.
CONTRACT

TO BE SIGNED ONLY UPON AWARD

CONTRACT

This Agreement made as of the _____ day of _____ 20____, by and between the _____, hereinafter referred to as the "OWNER" and _____ hereinafter referred to as the "Contractor", for Work at _____

WITNESSETH: That the **OWNER** and the Contractor for the consideration named agree as follows:

1. The Contractor shall Provide and shall perform all Work of every kind or nature whatsoever required and all other things necessary to complete in a proper and workmanlike manner the _____
_____ in strict accordance with the Contract Documents as defined in the General Conditions (and of which a listing of specifications and drawings are attached hereto) and in strict accordance with such changes as are ordered and approved pursuant to the Contract, and shall perform all other obligations imposed on such Contractor by the Contract.

2. The Contractor agrees to perform all Work and labor required, necessary, proper for, or incidental to the Work, and to Furnish all supplies and materials required, necessary, proper for, or incidental to the Work for the total sum of _____ and 00/100 Dollars (\$ _____ .00), which sum shall be deemed to be in full consideration for the performance by the Contractor of all the duties and obligations of such Contractor under the Contract.

3. The Contractor shall commence Work on the Contract at a time to be specified in a written notice to proceed issued by the OWNER and complete the project no later than _____.

IN WITNESS WHEREOF, the parties hereto have executed this Contract the day and year first above written.

Fashion Institute of Technology

Sherry Brabham, VP of Finance

(Name of Contractor)

By _____
(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 say that (s)he resides at _____, that (s)he is the _____ of _____, the corporation described in and which executed the above instrument; and that (s)he signed her/his name thereto by order of the Board of Directors of said corporation.

Notary Public

ACKNOWLEDGEMENT 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 member of the firm _____, described 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 purpose mentioned therein.

Notary Public

ACKNOWLEDGEMENT OF CONTRACTOR, IF AN INDIVIDUAL

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 the person described in and who executed the foregoing instrument and (s)he duly acknowledged that (s)he executed the same.

Notary Public

SECTION XII.
AFFIRMATIVE ACTION FORM

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 **REGARDLESS** 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 WOIULD 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

Payment Requisition Date _____
Payment Requisition Amount \$. _____
FIT Contract Number _____

CONTRACTOR INFORMATION

Name _____ Federal ID No. _____

Address _____

Contact Person _____ Telephone Number _____

PROJECT INFORMATION

Institution _____ City and Zip Code _____

Work Description _____

Part B - Payments to Subcontractors and Suppliers: Provide name, address and telephone number of ALL subcontractors to which you have awarded a subcontract or suppliers to which you have issued a purchase order. Place X in check box to indicate whether they are a New York State certified MBE or WBE or Other. In addition, for each firm listed below you must also include: the firms federal identification number; amount of intended payment to be made from proceeds of the accompanying requisition; percent complete, amount paid to date; the number of change orders or purchase orders; current value of subcontract (including change orders) or cumulative value of purchase orders; and a brief description of the work or service. All subcontractors or suppliers with whom you have an agreement should be listed below, even if they are not scheduled to receive a payment out of the proceeds of the attached requisition for payment. For further details, see Instruction Sheet

Firm _____ [] MBE [] WBE [] Other Fed. ID# _____

Address _____ Phone# _____ Intended Payment\$. _____

Address _____ Percent Complete _____ Amount Paid to Date\$ _____

No. of Change Orders. _____ Current Value of Subcontract \$ _____

No. of Purchase Orders Issued _____ Total Value of Purchase Orders \$ _____

Work Description _____

Firm _____ [] MBE [] WBE [] Other Fed. ID# _____

Address _____ Phone # _____ Intended Payment\$. _____

Address _____ Percent Complete _____ Amount Paid to Date\$ _____

No. of Change Orders. _____ Current Value of Subcontract \$ _____

No. of Purchase Orders Issued _____ Total Value of Purchase Orders \$ _____

Work Description _____

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.

Name of Principal or Officer (Type or Print)

Title of Principal or Officer (Type or Print)

Signature of Principal or Officer

Date

SECTION XIII.
CHANGE ORDER FORM

CHANGE ORDER

TO:

Contractor: _____ Contract No. _____

Street: _____ Contract Date: _____

City, State, Zip: _____ Original Contract Amount: \$ _____

Phone No. _____ Total Approved Change Orders: _____

Current Contract Amount: \$ _____

You are hereby directed to perform all labor and to provide all materials necessary to carry out the Work described below:

Full consideration for this change order shall be on **INCREASE/DECREASE** of the original contract amount by:
_____ Dollars.

Labor = _____

Materials = _____

INCREASE/DECREASE of the original schedule by days. In accepting and executing this change order, the Contractor, its heirs, executors, administrators, successors, and assigns hereby release and forever discharge the Owner, its successors, and assigns from any and all actions, causes of action, claims and demands whatsoever in law or in equity which the Contractor ever had, now has, or may have against the Owner in any way arising out of this change.

Recommended by:
CONSTRUCTION MANAGER OR ARCHITECT

Name: _____

By: _____ Date: _____

Approved by:

Name: _____

By: _____ Date: _____

Accepted by:
CONTRACTOR

Name: _____

By: _____ Date: _____

OWNER

Name: _____

By: _____ Date: _____

SECTION XIV.
CONTRACTOR'S
TRADE PAYMENT BREAKDOWN

EXHIBIT A: SAFETY EHS PLAN

EXHIBIT A. SAFETY EHS PLAN

FASHION INSTITUTE OF TECHNOLOGY

**OUTLINE FOR PREPARING WORK-SPECIFIC
ENVIRONMENT, 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 linear 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;
 - 5) 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

- 14) 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;
 - 5) 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 2

ON-SITE SUPERVISORY PERSONNEL of 2

Page 1

TITLE	: NAME(S) AND ON-SITE PHONE NUMBER
On-site EHS Coordinator	:
Contractor Project Managers	:
FIT's Project Manager(s)	:
<p><u>Contractor's Competent Persons</u></p>	<p>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</p>
<ul style="list-style-type: none"> • Confined Spaces 	:
<ul style="list-style-type: none"> • Excavations 	:
<ul style="list-style-type: none"> • Industrial Hygiene 	:
<ul style="list-style-type: none"> • Electrical--Lock Out/Tag Out 	:
<ul style="list-style-type: none"> • PPE, Respiratory Protection 	:
<ul style="list-style-type: none"> • Hazard Communication (Required for each department and project. Identify responsible employee for each subcontractor) 	:
<ul style="list-style-type: none"> • Fall Protection 	:
<ul style="list-style-type: none"> • Scaffolds 	:
<ul style="list-style-type: none"> • Cranes & Derricks 	:
<ul style="list-style-type: none"> • Blasting & Use of Explosives 	:

TABLE 2 (Cont'd)

ON-SITE 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 4

EMERGENCY CONTACT NAMES & TELEPHONE NUMBERS

1

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

Roberta Reardon, Commissioner

Fashion Institute of Technolog
Sam Li, Acting Director of Procurement
227 W27th St
New York NY 10001

Schedule Year 2023 through 2024
Date Requested 09/18/2023
PRC# 2023011197

Location Fashion Institute of Technolog
Project ID# C1605
Project Type Provide labor, materials, tests, tools and equipment to complete the Men's Locker Room Showers & Restroom Upgrades.

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 www.labor.ny.gov. 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 from 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 www.labor.ny.gov.

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, contemporaneous, 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 NYS DOL 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

Roberta Reardon, Commissioner

Fashion Institute of Technolog
Sam Li, Acting Director of Procurement
227 W27th St
New York NY 10001

Schedule Year 2023 through 2024
Date Requested 09/18/2023
PRC# 2023011197

Location Fashion Institute of Technolog
Project ID# C1605
Project Type Provide labor, materials, tests, tools and equipment to complete the Men's Locker Room Showers & Restroom Upgrades.

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 Number: _____		
Name: _____		
Address: _____ _____		
City: _____	State: _____	Zip: _____
Amount of Contract: \$ _____	Contract Type:	
Approximate Starting Date: ____/____/____	<input type="checkbox"/> (01) General Construction	
Approximate Completion Date: ____/____/____	<input type="checkbox"/> (02) Heating/Ventilation	
	<input type="checkbox"/> (03) Electrical	
	<input type="checkbox"/> (04) Plumbing	
	<input type="checkbox"/> (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, <https://dol.ny.gov/public-work-and-prevailing-wage>

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: dol.misclassified@labor.ny.gov .

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 dol.misclassified@labor.ny.gov. All complaints of fraud and violations are taken seriously. You can remain anonymous.

Employer Name:

IA 999 (09/16)



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 www.comptroller.nyc.gov – 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 or 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 requirements 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 than 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 **09/01/2023**

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 **09/01/2023**

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:

Boilermaker	33.5% of hourly	33.5% of Hourly
Repair \$ Renovations	Wage Paid	Wage Paid
	+ \$ 26.49	+ \$26.85

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 **09/01/2023**

JOB DESCRIPTION Broadband **DISTRICT 4**

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

WAGES

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

(*)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

Carpenter **09/01/2023**

JOB DESCRIPTION Carpenter **DISTRICT 8**

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

WAGES

Per hour:	07/01/2023
Piledriver	\$ 59.16 + 9.79*

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*

*This portion is not subject to overtime premiums

Supplemental benefits per hour:

All Terms: \$ 31.83

8-1556 Db

Carpenter

09/01/2023

JOB DESCRIPTION Carpenter

DISTRICT 8

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*

*This portion is not subject to overtime premiums

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*

*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

09/01/2023

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, 10, 11, 13, 16, 18, 19) 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*

*This portion is not subject to overtime premiums

Supplemental Benefits

Per Hour:

All terms \$ 31.83

8-1456MC

Carpenter

09/01/2023

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*

*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*

*This portion is not subject to overtime premiums

Supplemental benefits per hour:

One (1) year terms:

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

8-740.1

Carpenter

09/01/2023

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*

*This portion not subject to overtime premiums

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*

*This portion is not subject to overtime premiums

Supplemental benefits per hour:
All terms \$ 31.54

8-1556 Tm

Carpenter **09/01/2023**

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

Per hour: 07/01/2023

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.

*This portion is not subject to overtime premiums

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

Carpenter **09/01/2023**

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 Creek and south of the Southern State Parkway.

WAGES

Per hour: 07/01/2023

Show Exhibit \$ 55.75
+ 9.50**

Bldg. Carpenter*

\$55.05
+ 8.25**

* Not applicable in Putnam County

**This portion is not subject to overtime premiums

SUPPLEMENTAL BENEFITS

Per hour worked:

Show Exhibit \$ 44.50
Bldg. Carpenter 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

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

09/01/2023

JOB DESCRIPTION Carpenter - Heavy&Highway

DISTRICT 8

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*

*This portion is not subject to overtime premiums

Supplemental Benefits:

Per Hour:

All terms
 \$ 31.83

8-NYC H/H

Electrician

09/01/2023

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

09/01/2023

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

09/01/2023

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

09/01/2023

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
 Temporary Light/
 Power \$ 61.00 \$ 62.00

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*

* 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		
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:	Regular	Overtime	Regular	Overtime
0-6 mos.	\$ 16.43	\$ 17.63	\$ 17.18	\$ 18.38
7-12 mos.	16.69	17.92	17.44	18.67
Second Term:				
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

9-3

Electrician - Highway and Street Lighting, Traffic Signals and Controls **09/01/2023**

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	40.61	41.61

SUPPLEMENTAL BENEFITS

Per Hour:

	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*

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

Elevator Constructor

09/01/2023

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 & Service/Repairs 44.412

OVERTIME PAY

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

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

HOLIDAY

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

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

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%
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SUPPLEMENTAL BENEFITS

Elevator Constructor

1st Term	\$ 0.00
2nd & 3rd Term	36.024
4th & 5th Term	36.943
6th & 7th Term	38.448
8th & 9th Term	39.953

Modernization & Service/Repair

1st Term	\$ 0.00
2nd & 3rd Term	35.694
4th & 5th Term	36.525
6th & 7th Term	37.948
8th & 9th Term	39.38

Glazier **09/01/2023**

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

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

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

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

1st term \$ 21.93

2nd term 30.05

3rd term 39.95

4th term 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)

Insulator - Heat & Frost **09/01/2023**

JOB DESCRIPTION Insulator - Heat & Frost

DISTRICT 4

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:

Insulators \$ 35.76
 Heat & Frost

OVERTIME PAY

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

* Triple time for Labor Day (If worked)

HOLIDAY

Paid: See (1) on HOLIDAY PAGE

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

REGISTERED APPRENTICES

Wages:

1 year terms.

Wages Per Hour:

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

Supplemental Benefits:

\$ 14.30	\$ 17.88	\$ 21.46	\$ 25.03
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4-12

Ironworker

09/01/2023

JOB DESCRIPTION Ironworker

DISTRICT 9

ENTIRE COUNTIES

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

WAGES

Per Hour:	07/01/2023	01/01/2024
Stone Derrickmen Rigger	\$ 72.90	Additional + \$ 1.64
Stone Handset Derrickman	70.47	+ \$ 1.11

SUPPLEMENTAL BENEFITS

Per hour:

Stone Derrickmen Rigger	\$ 43.10
Stone Handset Derrickman	42.84

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

Paid: See (18) on HOLIDAY PAGE

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	22.11	32.58	32.58	32.58
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Stone Handset:

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

1st	2nd	3rd	4th
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07/01/2023	34.56	49.75	55.33	60.90
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Supplemental Benefits:

Per hour:				
07/01/2023	22.10	32.46	32.46	32.46

9-197D/R

Ironworker

09/01/2023

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
Chain Link Fence	46.90
Guide Rail	46.90

SUPPLEMENTAL BENEFITS

Per hour:
 Journeyworker: \$ 63.04

OVERTIME PAY

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

HOLIDAY

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

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

09/01/2023

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	Additional
Structural	\$ 57.20	\$ 1.75/Hr.*	\$ 1.75/Hr.*
Bridges			
Machinery			

(*)To be allocated at a later date.

SUPPLEMENTAL BENEFITS

PER HOUR PAID:

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
2nd	30.33
3rd - 6th	30.94

Supplemental Benefits

PER HOUR PAID:

All Terms \$ 60.69

4-40/361-Str

Ironworker

09/01/2023

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 & Metal Lathing \$ 56.95

"Base" Wage \$ 55.20
 plus \$ 1.75

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

SUPPLEMENTAL BENEFITS

Per hour:

Reinforcing & Metal Lathing \$ 42.72

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

*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 plus \$1.55	\$ 26.80 plus \$1.58	\$ 33.10 plus \$1.58	\$ 35.60 plus \$1.58

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

SUPPLEMENTAL BENEFITS

Per Hour:

1st term	2nd term	3rd term	4th Term
\$ 18.17	\$ 21.34	\$ 22.00	\$ 22.50

4-46Reinf

Laborer **09/01/2023**

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
Striping-Machine Operator	\$ 40.00	Additional \$ 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
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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
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9-1010-LS

Laborer **09/01/2023**

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 & Removal, Hazardous Waste Removal (including soil)	\$ 44.50	\$ 2.30
Basic	44.50	
Flagman	44.50	
Pipelayer	44.50	
*Tree Work, *Landscape	44.50	

*Includes trimming, cutting, planting and/or removal of trees.

** Applies to Heavy & Highway projects

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker	\$ 52.23
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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

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

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

9-731Ex

Laborer

09/01/2023

JOB DESCRIPTION Laborer

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour:

GROUP 14: Blasters.

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 & Vehicular Tunnels 80% of rates above

*An additional \$3.00 per day when using an air spade, jack hammer or pavement breaker.

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
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 &
 Vehicular Tunnels 80% of rates above

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

09/01/2023

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*	Additional \$ 1.25

*Before calculating premium wage deduct \$3.00

SUPPLEMENTAL BENEFITS

Per hour:

Basic Laborer and Mason Tender	\$ 29.39
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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*

*Before calculating premium wage deduct \$0.50

Supplemental Benefits per hour:

All Terms
07/01/2023

\$ 10.47

9-MTDC(79)

Laborer - Building

09/01/2023

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**

* Before calculating overtime wages deduct \$1.70

**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.

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

09/01/2023

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**

** 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*

* This portion is not subjected to overtime premiums.

Supplemental Benefits:

Per hour:

\$ 12.20	\$ 16.20	\$ 16.20
+\$2.00*	+\$2.45*	+\$3.55*

Journeyworker rate applies after 4000 hours

*This portion subjected to same premium as wages.

9-6A/18A/20-C

Laborer - Building

09/01/2023

JOB DESCRIPTION Laborer - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour:	07/01/2023	01/01/2024
Building:		Additional
Plasterer Tender and Spray Fireproofing Tender	\$ 43.80*	\$ 1.25

* Before calculating overtime wages deduct \$3.00.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker \$ 29.39

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
\$21.80*	\$23.55*	\$25.05*	\$27.55*

* Before calculating overtime wages deduct \$ 0.50

Supplemental Benefits per hour:

07/01/2023

All Terms: \$ 10.47

9-30 (79)

Laborer - Building

09/01/2023

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
Asbestos, Lead and Hazardous	\$ 39.50*	Additional \$ 1.50/Hr. 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
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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
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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

09/01/2023

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*	Additional
General Demolition Laborer:	30.51**	\$1.25

- *Before calculating overtime wages deduct \$3.00
- **Before calculating overtime wages deduct \$2.35

**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
 General Demolition Laborer: 21.33

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:
 (1) year terms at the following wage.

07/01/2023			
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:
 07/01/2023 \$ 10.47

9-79/95

Laborer - Concrete & Asphalt Paving

09/01/2023

JOB DESCRIPTION Laborer - Concrete & Asphalt Paving

DISTRICT 9

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 Screeper/Micro Paver	49.95 + \$ 7.25*
Asphalt Raker	58.85 + \$ 7.25*
Group 1	44.98 + \$ 7.25*
Group 2	44.98 + \$ 7.25*

* This portion is not subjected to overtime premiums.

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:

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*

* This portion is not subjected to overtime premiums.

Supplemental Benefits per hour:

2000 hours term:

1st term	2nd term
1-1999	2000-4000
\$ 17.15	\$ 17.15

9-1010H/H

Laborer - Trac Drill

09/01/2023

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

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

Laborer - Tunnel

09/01/2023

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 1, 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.

* 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/Comp Air

Mason

09/01/2023

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
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4-1Brk

Mason - Building

09/01/2023

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

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

WAGES

Building	07/01/2023	01/01/2024
Wages per hour:		Additional
Mosaic & Terrazzo Mechanic	\$ 60.65	\$1.06
Mosaic & Terrazzo Finisher	59.04	

SUPPLEMENTAL BENEFITS

Per hour:	
Mosaic & Terrazzo Mechanic	\$ 30.26* + \$9.16
Mosaic & Terrazzo Finisher	\$ 30.26* + \$9.15

*This portion of benefits subject to same premium rate as shown for overtime wages.

OVERTIME PAY

See (A, E, Q) on OVERTIME PAGE
 07/01/2023- Deduct \$7.25 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

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	\$ 33.19	\$ 36.39	\$ 40.38	\$ 48.52	\$ 54.59

Supplemental Benefits per hour:

\$6.00*	\$7.72*	\$18.16*	\$23.27*	\$24.21*	\$27.24*
+\$3.21	+\$4.12	+\$5.50	+\$6.41	+\$7.33	+\$8.29

*This portion of benefits subject to same premium rate as shown for overtime wages.

9-7/3

Mason - Building **09/01/2023**

JOB DESCRIPTION Mason - Building **DISTRICT 9**

ENTIRE COUNTIES
 Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour:	07/01/2023	12/04/2023	06/03/2024
		Additional	Additional
Tile Setters	\$ 63.46	\$ 0.73	\$ 0.73

SUPPLEMENTAL BENEFITS

Per Hour:

\$ 26.46*
+ 10.05

*This portion of benefits subject to same premium rate as shown for overtime wages.

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

REGISTERED APPRENTICES
 Wage per hour:

750 hour terms at the following wage rate:

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
1-750	751-1500	1501-2250	2251-3000	3001-3750	3751-4500	4501-5250	5251-6000	6001-6750	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

Supplemental Benefits per hour:

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
07/01/2023									
\$12.55*	\$12.55*	\$15.36*	\$15.36*	\$16.36*	\$17.86*	\$18.86*	\$18.86*	\$16.86*	\$22.11*
+\$.73	+\$.78	+\$.88	+\$.88	+\$1.37	+\$1.42	+\$1.83	+\$1.88	+\$6.03	+\$6.61

*This portion of benefits subject to same premium rate as shown for overtime wages.

9-7/52

Mason - Building **09/01/2023**

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
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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.

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- 900	2nd 901- 1800	3rd 1801- 2700	4th 2701
\$ 33.04	\$ 37.78	\$ 42.49	\$ 47.22

Supplemental Benefits Per Hour:
 27.65 28.52 29.41 30.29

07/03/2023

900 hour term at the following wage:

1st 1- 900	2nd 901- 1800	3rd 1801- 2700	4th 2701
\$ 33.19	\$ 37.95	\$ 42.69	\$ 47.44

Supplemental Benefits Per Hour:
 27.99 28.86 29.76 30.64

9-7/24-MP

Mason - Building

09/01/2023

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

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:

Journeyworker	\$ 39.03	\$ 39.34
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OVERTIME PAY

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

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
 Overtime: See (5, 6, 8, 11, 15, 16, 25) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wage Per Hour:
 07/01/2023

750 hour terms at the following wage

1st	2nd	3rd	4th	5th	6th	7th	8th
0-3000	3001-3750	3751-4500	4501-5250	5251-6000	6001-6750	6751-7500	7500+
\$ 26.42	\$ 39.62	\$ 42.91	\$ 46.22	\$ 49.52	\$ 53.38	\$ 59.67	\$ 62.82

Supplemental Benefits per hour:

07/01/2023

1st	2nd	3rd	4th	5th	6th	7th	8th
\$ 25.38	\$ 28.86	\$ 29.74	\$ 30.60	\$ 31.48	\$ 36.44	\$ 38.17	\$ 39.03

07/03/2023

Wage Per Hour:

750 hour terms at the following wage.

1st	2nd	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:

1st	2nd	3rd	4th	5th	6th	7th	8th
\$ 25.54	\$ 29.09	\$ 29.97	\$ 30.84	\$ 31.72	\$ 36.73	\$ 38.48	\$ 39.34

9-7/4

Mason - Building

09/01/2023

JOB DESCRIPTION Mason - Building

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour:	07/01/2023	12/04/2023	06/03/2024
Tile Finisher	\$ 48.78	Additional \$ 0.59	Additional \$ 0.60

SUPPLEMENTAL BENEFITS

Per Hour:	\$ 23.31*
	+ \$9.87

* 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

09/01/2023

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
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Marble, Stone, Maintenance Finishers:	\$ 27.26	\$ 27.44
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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
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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:

	07/01/2023	07/03/2023
0-750	\$ 21.89	\$ 22.04
751-1500	22.60	\$ 22.75
1501-2250	23.32	\$ 23.48
2251-3000	24.04	\$ 24.20
3001-3750	25.11	\$ 25.27
3751-4500	26.54	\$ 26.72
4501+	27.26	\$ 27.44

Supplemental Benefits:

Per hour:

0-750	12.03	\$ 12.24
751-1500	12.43	\$ 12.64
1501-2250	12.82	\$ 13.03
2251-3000	13.21	\$ 13.42
3001-3750	13.80	\$ 14.02
3751-4500	14.58	\$ 14.80
4501+	14.97	\$ 15.20

9-7/24M-MF

Mason - Building / Heavy&Highway

09/01/2023

JOB DESCRIPTION Mason - Building / Heavy&Highway

DISTRICT 9

ENTIRE COUNTIES

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

WAGES

Per hour:	07/01/2023	07/03/2023	01/01/2024 Additional \$ 0.53
Marble-Finisher	\$ 49.32	\$ 49.65	

SUPPLEMENTAL BENEFITS

Journeyworker:

Per hour

Marble- Finisher	\$ 36.62	\$ 36.67
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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 **09/01/2023**

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:

		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

Mason - Building / Heavy&Highway **09/01/2023**

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
Stone Setter	\$ 68.45	\$ 3.32*
Base Rate	52.76	
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 **09/01/2023**

JOB DESCRIPTION Mason - Heavy&Highway **DISTRICT 4**

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

WAGES
 Per Hour: 07/01/2023

Pointer, Caulkers & Cleaners \$ 62.19

SUPPLEMENTAL BENEFITS
 Per Hour:

Pointer, Cleaners & Caulkers \$ 30.65

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)

1st	2nd	3rd	4th
\$ 15.30	\$ 20.00	\$ 23.75	\$ 24.75

4-1PCC

Operating Engineer - Building **09/01/2023**

JOB DESCRIPTION Operating Engineer - Building **DISTRICT 9**

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

* This portion subject to same premium as wages

Non-Worked Holiday Supplemental Benefit:	21.19
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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

9-15Db

Operating Engineer - Building, Maintenance, Steel Erection & Heavy Construction	09/01/2023
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JOB DESCRIPTION Operating Engineer - Building, Maintenance, Steel Erection & Heavy Construction **DISTRICT 9**

ENTIRE COUNTIES
 Bronx, Kings, New York, Queens, Richmond

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 accumulator 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

* This portion of benefits subject to same OT premium as wages.

9-15Ab

Operating Engineer - Building / Heavy&Highway **09/01/2023**

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

* This portion of benefits subject to the same premium as overtime wages

9-15Sewer

Operating Engineer - Building / Heavy&Highway **09/01/2023**

JOB DESCRIPTION Operating Engineer - Building / Heavy&Highway **DISTRICT 4**

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

WAGES
 Per Hour: 07/01/2023 08/01/2023

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 & Helper	10% of straight time rate plus \$ 13.50
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Additional \$ 4.25/Hr. for Premium Time Hours Worked

OVERTIME PAY

See (B2, P, S) on OVERTIME PAGE

HOLIDAY

Paid:	See (5, 6, 16, 23) on HOLIDAY PAGE
Overtime:	See (5, 6, 16, 23) on HOLIDAY PAGE

REGISTERED APPRENTICES

Apprentices at 12 Month Terms

Wages Per Hour:

1st Term	\$ 28.00
2nd Term	29.00
3rd Term	30.00

SUPPLEMENTAL BENEFITS

Per Hour:

All Terms	10% of Wage + \$ 13.50
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Additional \$4.25/Hr. for premium time hours worked.

4-138well

Operating Engineer - Building & Steel Erection

09/01/2023

JOB DESCRIPTION Operating Engineer - Building & Steel Erection

DISTRICT 9

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, Boom Trucks	100.81
Compressors, Welding Machines	63.21
Compressors (not combined with welding machines)	60.56

BUILDING CONSTRUCTION:

Cranes, Stone Derrick, Boom Trucks, Hydraulic Cranes,	101.22
Double Drum	96.01
4 Pole Hoists and Single Drum Hoists	87.63
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
 62.05

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
Tower Crane	\$ 2.00/hr

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2023

All Operator Classes \$ 25.40*
 plus \$ 6.20

* This portion of the benefits is subject to the same premium as shown for overtime wages.

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

**Applies to Building Construction category

***Applies to Steel Erection

HOLIDAY

Paid: See (5, 6, 7, 8, 11, 12, 16, 26) on HOLIDAY PAGE

Overtime: See (5, 6, 7, 8, 11, 12, 16, 26) on HOLIDAY PAGE

Codes 8 and 12 apply ONLY to Steel Erection

Code 16 applies ONLY to Building Construction

REGISTERED APPRENTICES

Wage Per Hour:

Apprentices (1) year terms at the following rates:

	1st	2nd	3rd
07/01/2023	\$ 43.95	\$ 53.21	\$ 62.47

Supplemental Benefits Per Hour:

07/01/2023

Straight Time \$ 14.90*
 plus \$ 6.20

* This portion of benefits subject to the same premium as shown for overtime wages.

9-14 B&S

Operating Engineer - Heavy Construction 1

09/01/2023

JOB DESCRIPTION Operating Engineer - Heavy Construction 1

DISTRICT 9

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
- 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, etc.
- 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
- Group 22: Roller (non paving, all sizes)

WAGES:(per hour) 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 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:

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

* This portion of benefits is subject to the SAME PREMIUM as shown for overtime wages

9-14 HC

Operating Engineer - Heavy Construction 2

09/01/2023

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:

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

* This portion of benefits subject to same OT premium as wages.

9-15 HC

Operating Engineer - Marine Dredging **09/01/2023**

JOB DESCRIPTION Operating Engineer - Marine Dredging

DISTRICT 4

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

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
CLASS C2 Boat Operator	33.67	34.68
CLASS D Shoreman, Deckhand, Oiler, Rodman, Scowman, Cook, Messman, Porter/Janitor	27.97	28.81

SUPPLEMENTAL BENEFITS

Per Hour:

THE FOLLOWING SUPPLEMENTAL BENEFITS APPLY TO ALL CATEGORIES

All Classes A & B	\$ 11.85 plus 6% of straight time wage, Overtime hours add \$ 0.63	\$ 12.00 plus 6% of straight time wage, Overtime hours add \$ 0.63
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All Class C	\$ 11.60 plus 6% of straight time wage, Overtime hours add \$ 0.50	\$ 11.75 plus 6% of straight time wage, Overtime hours add \$ 0.50
All Class D	\$ 11.35 plus 6% of straight time wage, Overtime hours add \$ 0.38	\$ 11.60 plus 6% of straight time wage, Overtime hours 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 **09/01/2023**

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 Dutchess 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

9-15dconsult

Painter **09/01/2023**

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 or lead containing paint on materials to be repainted.	51.70*
Spray & Scaffold	\$ 54.70*

Fire Escape	54.70*
Decorator	54.70*
Paperhanger/Wall Coverer	54.48*

*Subtract \$ 0.10 to calculate premium rate.

SUPPLEMENTAL BENEFITS

Per hour:

Paperhanger	\$ 34.60
All others	32.73
Premium	36.70**

**Applies only to "All others" category, not paperhanger journeyworker.

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*

*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

Painter

09/01/2023

JOB DESCRIPTION Painter

DISTRICT 8

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
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

09/01/2023

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	+ 3.10
	+ 10.10*	

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:	\$ 11.78
	+ 30.85*

* 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
2nd year	\$ 32.70
	+ 6.06

3rd year	\$ 43.60 + 8.08
Supplemental Benefits - Per hour:	
1st year	\$.90 + 12.34
2nd year	\$ 7.07 + 18.51
3rd year	\$ 9.42 + 24.68

NOTE: All premium wages are to be calculated on base rate per hour only.

8-DC-9/806/155-BrSS

Painter - Metal Polisher

09/01/2023

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

*Note: Applies on New Construction & complete renovation

** Note: Applies when working on scaffolds over 34 feet.

SUPPLEMENTAL BENEFITS

Per Hour:	07/01/2023
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Journeyworker:

All classification	\$ 12.34
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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, 9, 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
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

*Note: Applies on New Construction & complete renovation

** Note: Applies when working on scaffolds over 34 feet.

Supplemental benefits:

Per hour:

1st year	\$ 8.69
2nd year	8.69
3rd year	8.69

8-8A/28A-MP

Plasterer

09/01/2023

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 & Spraying Fireproofing	\$ 46.00 + \$5.00*	\$ 47.72 + \$5.00*

SUPPLEMENTAL BENEFITS

Per hour:

Journeyworker	\$ 23.15	\$ 25.35
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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*	

*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	

9-262

Plumber

09/01/2023

JOB DESCRIPTION Plumber

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour:

	07/01/2023
Plumber	\$ 72.50
Temporary Service**	\$ 58.08

** 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.

****THERE ARE NO HELPERS UNDER THIS CLASSIFICATION.**

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

09/01/2023

JOB DESCRIPTION Plumber - Pump & Tank: Oil Trades Installation & Maintenance

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour:

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.

Plumber - Repairs & Maintenance

09/01/2023

JOB DESCRIPTION Plumber - Repairs & Maintenance

DISTRICT 9

ENTIRE COUNTIES

Bronx, Kings, New York, Queens, Richmond

WAGES

Per hour:

Repairs & Maintenance 07/01/2023
 \$ 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

09/01/2023

JOB DESCRIPTION Roofer

DISTRICT 9

ENTIRE COUNTIES

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

WAGES

Per Hour:	07/01/2023	05/01/2024
		Additional
Roofer/Waterproofer	\$ 46.50	\$2.50
	+ \$7.00*	

* This portion is not subjected to overtime premiums.

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.

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

* This portion is not subjected to overtime premiums.

(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

* This portion is not subjected to overtime premiums.

9-8R

Sheetmetal Worker **09/01/2023**

JOB DESCRIPTION Sheetmetal Worker

DISTRICT 4

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

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
\$ 14.95	\$ 16.95	\$ 18.93	\$ 20.93	\$ 28.56	\$ 31.05	\$ 33.57	\$ 36.05	\$ 38.56	\$ 41.05

4-137-SE

Sheetmetal Worker **09/01/2023**

JOB DESCRIPTION Sheetmetal Worker

DISTRICT 4

ENTIRE COUNTIES

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

WAGES

Per Hour: 7/01/2023 11/01/2023

Sheetmetal Worker \$ 59.94 Additional \$ 3.00/Hr.*

Maintenance of Fans \$ 47.95

Temporary Operation

(*)To be allocated at a later date.

SUPPLEMENTAL BENEFITS

Per Hour:

Sheetmetal Worker	\$ 51.16
Maintenance Worker	\$ 51.16

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
3rd & 4th Term	26.87
5th & 6th Term	32.89
7th & 8th Term	41.94
9th Term	47.53

Per Hour: Supplemental Benefits

1st & 2nd Term	\$ 19.02
3rd & 4th Term	25.90
5th & 6th Term	30.55
7th & 8th Term	37.49
9th Term	42.14

4-28

Steamfitter

09/01/2023

JOB DESCRIPTION Steamfitter

DISTRICT 4

ENTIRE COUNTIES

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

WAGES

Per Hour:	07/01/2023	01/01/2024 Additional	07/01/2024 Additional
AC Service/Heat Service & Refrigeration	\$ 44.85	\$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

09/01/2023

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
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4-638A-StmSpFtr

Teamster - Heavy Construction

09/01/2023

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

Dump Trucks	\$ 43.835
Tractor Trailers	46.115
Euclid/Turnapull	46.68

Effective 7/1/2020 an Additional \$2.75/Hr. to be allocated.

SUPPLEMENTAL BENEFITS

Per Hour:

Dump Trucks Up to 40 Hours Worked	\$ 51.5525
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ALL OTHERS Up to 40 Hours Worked	51.5025
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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

09/01/2023

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, Schuylar, 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
- (I) 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.)

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:

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
- (28) Easter Sunday

(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:

(Check Only One) Contracting Agency Architect or Engineering Firm Public Work District Office Date: _____

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)

Telephone _____ Fax _____

E-Mail: _____

2. NY State Units (see Item 5).

- | | |
|---|--|
| <input type="checkbox"/> 01 DOT | <input type="checkbox"/> 07 City |
| <input type="checkbox"/> 02 OGS | <input type="checkbox"/> 08 Local School District |
| <input type="checkbox"/> 03 Dormitory Authority | <input type="checkbox"/> 09 Special Local District, i.e.,
Fire, Sewer, Water District |
| <input type="checkbox"/> 04 State University
Construction Fund | <input type="checkbox"/> 10 Village |
| <input type="checkbox"/> 05 Mental Hygiene
Facilities Corp. | <input type="checkbox"/> 11 Town |
| <input type="checkbox"/> 06 OTHER N.Y. STATE UNIT | <input type="checkbox"/> 12 County |
| | <input type="checkbox"/> 13 Other Non-N.Y. State
(Describe) |

3. SEND REPLY TO (check if new or change)
Name and complete address: _____

Telephone _____ Fax _____

E-Mail: _____

4. SERVICE REQUIRED. Check appropriate box and provide project information.

- New Schedule of Wages and Supplements.
APPROXIMATE BID DATE : _____
- Additional Occupation and/or Redetermination

PRC NUMBER ISSUED PREVIOUSLY FOR
THIS PROJECT : _____

OFFICE USE ONLY

B. PROJECT PARTICULARS

5. Project Title _____

Description of Work _____

Contract Identification Number _____

Note: For NYS units, the OSC Contract No. _____

6. Location of Project:

Location on Site _____

Route No/Street Address _____

Village or City _____

Town _____

County _____

7. Nature of Project - Check One:

1. New Building
2. Addition to Existing Structure
3. Heavy and Highway Construction (New and Repair)
4. New Sewer or Waterline
5. Other New Construction (Explain)
6. Other Reconstruction, Maintenance, Repair or Alteration
7. Demolition
8. Building Service Contract

8. OCCUPATION FOR PROJECT :

- | | |
|--|---|
| <input type="checkbox"/> Construction (Building, Heavy
Highway/Sewer/Water) | <input type="checkbox"/> Fuel Delivery |
| <input type="checkbox"/> Tunnel | <input type="checkbox"/> Guards, Watchmen |
| <input type="checkbox"/> Residential | <input type="checkbox"/> Janitors, Porters, Cleaners,
Elevator Operators |
| <input type="checkbox"/> Landscape Maintenance | <input type="checkbox"/> Moving furniture and
equipment |
| <input type="checkbox"/> Elevator maintenance | <input type="checkbox"/> Trash and refuse removal |
| <input type="checkbox"/> Exterminators, Fumigators | <input type="checkbox"/> Window cleaners |
| <input type="checkbox"/> Fire Safety Director, NYC Only | <input type="checkbox"/> Other (Describe) |

9. Does this project comply with the Wicks Law involving separate bidding? YES NO

10. Name and Title of Requester

Signature



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.

Debarment Database: 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, or under NYS Workers' Compensation Law Section 141-b, access the database at this link: <https://apps.labor.ny.gov/EDList/searchPage.do>

For inquiries where WCB is listed as the "Agency", please call 1-866-546-9322

NYS DOL Bureau of Public Work Debarment List 09/15/2023

Article 8

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	****4018	ADIRONDACK BUILDING RESTORATION INC.		4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
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 F COKER		2610 SOUTH SALINA STREET SUITE 14SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL		ANGELO GARCIA		515 WEST AVE UNIT PH 13NORWALK CT 06850	05/12/2021	05/12/2026
DOL	DOL		ANGELO TONDO		449 WEST MOMBASHA ROAD MONROE NY 10950	06/06/2022	06/06/2027
DOL	DOL		ANITA SALERNO		158 SOLAR ST SYRACUSE NY 13204	01/07/2019	01/07/2024
DOL	DOL	****4231	ANKER'S ELECTRIC SERVICE, INC.		10 SOUTH 5TH ST LOCUST VALLEY NY 11560	09/26/2022	09/26/2027
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	****2591	AVI 212 INC.		260 CROPSEY AVENUE APT 11GBROOKLYN NY 11214	10/30/2018	10/30/2023
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	NYC		BALWINDER SINGH		421 HUDSON ST SUITE C5NEW YORK NY 10014	02/20/2019	02/20/2024
DOL	NYC	****8416	BEAM CONSTRUCTION, INC.		50 MAIN ST WHITE PLAINS NY 10606	01/04/2019	01/04/2024
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	****4512	BOB BRUNO EXCAVATING, INC		5 MORNINGSIDE DR AUBURN NY 13021	05/28/2019	05/28/2024
DOL	DOL		BOGDAN MARKOVSKI		370 W. PLEASANTVIEW AVE SUITE 2.329HACKENSACK NJ 07601	02/11/2019	02/11/2024
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	****9383	C.C. PAVING AND EXCAVATING, INC.		2610 SOUTH SALINA ST SUITE 12SYRACUSE NY 13205	12/04/2018	12/04/2023
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	AG	****7247	CENTURY CONCRETE CORP		2375 RAYNOR ST RONKONKOMA NY 11779	08/04/2021	08/04/2026

NYS DOL Bureau of Public Work Debarment List 09/15/2023

Article 8

DOL	DOL	****0026	CHANTICLEER CONSTRUCTION LLC		4 BROTHERS ROAD WAPPINGERS FALLS NY 12590	10/20/2020	10/20/2025
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 J MAINI		19 CAITLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
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	****2524	CSI ELECTRICAL & MECHANICAL INC		42-32 235TH ST DOUGLSTON NY 11363	01/14/2019	01/14/2024
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		DARIAN L COKER		2610 SOUTH SALINA ST SUITE 2CSYRACUSE NY 13205	12/04/2018	12/04/2023
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	****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		FAIGY LOWINGER		11 MOUNTAIN RD 28 VAN BUREN DRMONROE NY 10950	03/20/2019	03/20/2024
DOL	DOL		FRANK BENEDETTO		19 CATLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
DOL	DOL	****4722	FRANK BENEDETTO AND CHRISTOPHER J MAINI	B & M CONCRETE	19 CAITLIN AVE JAMESTOWN NY 14701	09/17/2018	09/17/2023
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		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	DOL		GEOFF CORLETT		415 FLAGGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
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	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

NYS DOL Bureau of Public Work Debarment List 09/15/2023

Article 8

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	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	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	10/25/2022	10/25/2027
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		JORI PEDERSEN		415 FLAGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
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

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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	****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
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		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		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	12/01/2025
DOL	DOL		KATE E. CONNOR		7088 INTERSTATE ISLAND RD SYRACUSE NY 13209	03/31/2021	03/31/2026
DOL	DOL	****2959	KELC DEVELOPMENT, INC		7088 INTERSTATE ISLAND RD SYRACUSE NY 13209	03/31/2021	03/31/2026
DOL	DOL		KIMBERLY F. BAKER		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026
DOL	DA	****8816	LAKE CONSTRUCTION AND DEVELOPMENT CORPORATION		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	DOL		LEROY E. NELSON JR		531 THIRD ST ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL		LEROY E. NELSON JR		531 THIRD ST ALBANY NY 12206	12/22/2022	12/22/2027
DOL	AG	****3291	LINTECH ELECTRIC, INC.		3006 TILDEN AVE BROOKLYN NY 11226	02/16/2022	02/16/2027
DOL	DOL		LOUIS A. CALICCHIA		1223 PARK ST. PEEKSKILL NY 10566	05/17/2021	05/17/2026
DOL	NYC		LUBOMIR PETER SVOBODA		27 HOUSMAN AVE STATEN ISLAND NY 10303	12/26/2019	12/26/2024
DOL	NYC		M & L STEEL & ORNAMENTAL IRON CORP.		27 HOUSMAN AVE STATEN ISLAND NY 10303	12/26/2019	12/26/2024
DOL	DOL	****2196	MAINSTREAM SPECIALTIES, INC.		11 OLD TOWN RD SELKIRK NY 12158	02/02/2021	02/02/2026
DOL	DA		MANUEL P TOBIO		150 KINGS STREET BROOKLYN NY 14444	08/19/1998	08/19/2998
DOL	DA		MANUEL TOBIO		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	NYC		MAREK FABIJANOWSKI		50 MAIN ST WHITE PLAINS NY 10606	01/04/2019	01/04/2024
DOL	NYC		MARIA NUBILE		84-22 GRAND AVENUE ELMHURST NY 11373	03/10/2020	03/10/2025
DOL	DOL		MATTHEW P. KILGORE		4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
DOL	DOL	****4829	MILESTONE ENVIRONMENTAL CORPORATION		704 GINESI DRIVE SUITE 29MORGANVILLE NJ 07751	04/10/2019	04/10/2024
DOL	NYC	****9926	MILLENNIUM FIRE PROTECTION, LLC		325 W. 38TH STREET SUITE 204NEW YORK NY 10018	11/14/2019	11/14/2024
DOL	NYC	****0627	MILLENNIUM FIRE SERVICES, LLC		14 NEW DROP LNE 2ND FLOORSTATEN ISLAND NY 10306	11/14/2019	11/14/2024
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	DA	****9786	NATIONAL INSULATION & GC CORP		180 MILLER PLACE HICKSVILLE NY 11801	12/12/2018	12/12/2023
DOL	NYC		NAVIT SINGH		402 JERICHO TURNPIKE NEW HYDE PARK NY 11040	08/10/2022	08/10/2027

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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 CONSTRUCTION, 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		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	****9148	RICH T CONSTRUCTION		107 WILLOW WOOD LANE CAMILLUS NY 13031	11/13/2018	11/13/2023
DOL	DOL		RICHARD MACONE		8617 THIRD AVE BROOKLYN NY 11209	09/17/2018	09/17/2023
DOL	DOL		RICHARD REGGIO		1617 MAIN ST PEEKSKILL NY 10566	03/03/2020	03/03/2025
DOL	DOL	****9148	RICHARD TIMIAN	RICH T CONSTRUCTION	108 LAMONT AVE SYRACUSE NY 13209	10/16/2018	10/16/2023
DOL	DOL		RICHARD TIMIAN JR.		108 LAMONT AVE SYRACUSE NY 13209	10/16/2018	10/16/2023
DOL	DOL		RICHARD TIMIAN JR.		108 LAMONT AVE SYRACUSE NY 13209	11/13/2018	11/13/2023
DOL	DOL		ROBBYE BISSEAR		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	****1365	S & L PAINTING, INC.		11 MOUNTAIN ROAD P.O BOX 408MONROE NY 10950	03/20/2019	03/20/2024
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

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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	NYC	****6597	SHAIRA CONSTRUCTION CORP.		421 HUDSON STREET SUITE C5NEW YORK NY 10014	02/20/2019	02/20/2024
DOL	DOL		SHULEM LOWINGER		11 MOUNTAIN ROAD 28 VAN BUREN DRMONROE NY 10950	03/20/2019	03/20/2024
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		STEVE TATE		415 FLAGER AVE #302STUART FL 34994	10/31/2018	10/31/2023
DOL	DOL	****3800	SUBURBAN RESTORATION CO. INC.		5-10 BANTA PLACE FAIR LAWN PLACE NJ 07410	03/29/2021	03/29/2026
DOL	DOL	****1060	SUNN ENTERPRISES GROUP, LLC		370 W. PLEASANTVIEW AVE SUITE 2.329HACKENSACK NJ 07601	02/11/2019	02/11/2024
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	****8209	SYRACUSE SCALES, INC.		158 SOLAR ST SYRACUSE NY 13204	01/07/2019	01/07/2024
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		TEST		P.O BOX 123 ALBANY NY 12204	05/20/2020	05/20/2025
DOL	DOL	****6789	TEST1000		P.O BOX 123 ALBANY NY 12044	03/01/2021	03/01/2026
DOL	DOL	****5766	THE COKER CORPORATION	COKER CORPORATION	2610 SOUTH SALINA ST SUITE 14SYRACUSE NY 13205	12/04/2018	12/04/2023
DOL	DOL	****5766	THE COKER CORPORATION	COKER CORPORATION	2610 SOUTH SALINA ST SUITE 14SYRACUSE NY 13205	09/17/2020	09/17/2025
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 MOMBASHA ROAD MONROE NY 10950	06/06/2022	06/06/2027
DOL	DOL	****6392	V.M.K CORP.		8617 THIRD AVE BROOKLYN NY 11209	09/17/2018	09/17/2023

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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		VICTOR ALICANTI		42-32 235TH ST DOUGLASTON NY 11363	01/14/2019	01/14/2024
DOL	NYC		VIKTAR PATONICH		2630 CROPSEY AVE BROOKLYN NY 11214	10/30/2018	10/30/2023
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	****4730	XGD SYSTEMS, LLC	TDI GOLF	415 GLAGE AVE #302STUART FL 34994	10/31/2018	10/31/2023

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SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

- A. Perform the work of this Section in accordance with the requirements of the Contract Documents.
 - 1 Reference men's locker room – showers & restroom upgrades bidding documents and FIT guidelines for additional requirements.
 - 2 Contractor shall comply with contract and University and State requirements for work on the project site.

1.2 SUMMARY

- A. Section Includes:
 - 1. Project information.
 - 2. Work covered by Contract Documents.
 - 3. Work restrictions.

1.3 INTERPRETATION OF DRAWINGS AND SPECIFICATIONS

- A. Direct questions relating to the intent of the Specifications or Drawings quality of work required thereby to the Architect. In the event of disagreement, the Architect's interpretations becomes final conclusive and binding on all parties.

1.4 PROJECT INFORMATION

- A. Project Identification: 227 West 27th Street New York N.Y 10001
- B. Owner (Client): FIT STATE UNIVERSITY OF NEW YORK
- C. Architect: Gerner Kronick + Valcarcael Architects DPC.

1.5 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and consists of the following:
 - 1. The Work consists of interior construction of existing space to extent as indicated on Drawings.
 - 2. Finishes shall be to the extent shown on Drawings and as specified.

1.6 PHASED CONSTRUCTION

- A. The Work shall be conducted in one phase as scheduled with each phase substantially complete as indicated:
- B. Before commencing Work of each phase submit an updated copy of Contractor's construction schedule showing the sequence commencement and completion dates and move-out and -in dates of Owner's personnel for all phases of the Work.

1.7 WORK UNDER SEPARATE CONTRACTS

- A. General: Cooperate fully with separate contractors so work on those contracts may be carried out smoothly without interfering with or delaying work under this Contract or other contracts. Coordinate the Work of this Contract with work performed under separate contracts.

1.8 ACCESS TO SITE

- A. General: Contractor shall have full use of Project site for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project.

1.9 WORK RESTRICTIONS

- A. Work Restrictions General: Comply with Owner restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. Work Hours/Code requirements: Comply with the requirements of the Owner requirements and Building Code of the City of New York unless otherwise indicated.
- C. Nonsmoking Site: Smoking is not permitted on the site or within 25 feet of entrances operable windows or outdoor-air intakes and as per Owner requirements.
- D. Controlled Substances: Use of tobacco products and other controlled substances within the existing building on project site is not permitted.

1.10 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms words and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall" "shall be" or "shall comply with" depending on the context are implied where a colon (:) is used within a sentence or phrase.
 - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard and scheduled on Drawings.
 - 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.
- D. If a conflict arises within the drawings or with the specifications the stringent or extensive requirement as judged by the Architect shall govern and shall be deemed the contract requirement.

PART 2 - PRODUCTS (Not Used)
PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

- A. Perform the work of this Section in accordance with the requirements of the Contract Documents.
 - 1 Reference men's locker room – showers & restroom upgrades bidding documents and FIT guidelines for additional requirements.
 - 2 Contractor shall comply with contract and University and State requirements for work on the project site.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for alternates.

1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products materials equipment systems or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate miscellaneous devices accessory objects and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract notify each party involved in writing of the status of each alternate. Indicate if alternates have been accepted rejected or deferred for later consideration. Include a complete description of negotiated revisions to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

1.5 SCHEDULE OF ALTERNATES

- A. Refer to individual Specification Sections for alternate listing and description.
- B. Alternate (1): Provide alternate pricing for installation of tile on sheathing in lieu of tile over tile installation in areas indicated. (If approved).

END OF SECTION 012300

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

- A. Perform the work of this Section in accordance with the requirements of the Contract Documents.
 - 1 Reference men's locker room – showers & restroom upgrades bidding documents and FIT guidelines for additional requirements.
 - 2 Contractor shall comply with contract and University and State requirements for work on the project site.

1.2 SUMMARY

- A. Section includes:
 - 1. Administrative provisions for coordinating construction operations on Project including but not limited to the following:
 - a. General coordination procedures.
 - b. Owner's requirements
 - c. Coordination drawings.
 - d. Requests for Information (RFIs).
 - e. Project meetings.
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.

1.3 INTERPRETATION OF DRAWINGS AND SPECIFICATIONS

- A. Direct questions relating to the intent of the Specifications or Drawings quality of work required thereby to the Architect in the event of disagreement the Architect's interpretations becomes final conclusive and binding on all parties.

1.4 DEFINITIONS

- A. RFI: Request from Architect or Contractor seeking information required by or clarifications of the Contract Documents.

1.5 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Name address and telephone number of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references as appropriate
 - 4. Work covered by subcontract.
- B. Key Personnel Names: Within 15 days of starting construction operations submit a list of key personnel assignments including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers including home

office and cellular telephone numbers and e-mail addresses. Provide names addresses and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.

1. Post copies of list in project meeting room in temporary field office and by each temporary telephone. Keep list current at all times.

1.6 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation connection and operation.
 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components before or after its own installation.
 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance service and repair.
 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Prepare memoranda for distribution to each party involved outlining special procedures required for coordination. Include such items as required notices reports and list of attendees at meetings.
 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include but are not limited to the following:
 1. Preparation of Contractor's construction schedule.
 2. Preparation of the schedule of values.
 3. Installation and removal of temporary facilities and controls.
 4. Delivery and processing of submittals.
 5. Progress meetings.
 6. Preinstallation conferences.
 7. Project closeout activities.
 8. Startup and adjustment of systems.

1.7 COORDINATION DRAWINGS

- A. Coordination Drawings General: Prepare coordination drawings according to requirements in individual Sections and additionally where installation is not completely shown on Shop Drawings where limited space availability necessitates coordination or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.
 1. Content: Project-specific information drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information as applicable:
 - a. Use applicable Drawings as a basis for preparation of coordination drawings. Prepare sections elevations and details as needed to describe relationship of various systems and components.
 - b. Indicate functional and spatial relationships of components of architectural structural civil mechanical and electrical systems.

- c. Indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation.
- d. Show location and size of access doors required for access to concealed dampers valves and other controls.
- e. Indicate required installation sequences.
- f. Indicate dimensions shown on the Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.

B. Coordination Drawing Organization: Organize coordination drawings as follows:

- 1. Floor Plans and Reflected Ceiling Plans: Show architectural and structural elements and mechanical plumbing fire-protection fire-alarm and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid. Supplement plan drawings with section drawings where required to adequately represent the Work.
- 2. Mechanical and Plumbing Work: Show the following:
 - a. Sizes and bottom elevations of ductwork piping and conduit runs including insulation bracing flanges and support systems.
 - b. Dimensions of major components such as dampers valves diffusers access doors cleanouts and electrical distribution equipment.
 - c. Fire-rated enclosures around ductwork.
- 3. Electrical Work: Show the following:
 - a. Runs of vertical and horizontal conduit 1-1/4" inches in diameter and larger.
 - b. Panel board switch board locations.
 - c. Location of pull boxes and junction boxes dimensioned from column center lines.
- 4. Review: Architect will review coordination drawings to confirm that the Work is being coordinated but not for the details of the coordination which are Contractor's responsibility. If Architect determines that coordination drawings are not being prepared in sufficient scope or detail or are otherwise deficient Architect will so inform Contractor who shall make changes as directed and resubmit.
- 5. Coordination Drawing Prints: Prepare coordination drawing prints according to requirements in Section 013300 "Submittal Procedures."

C. Coordination Digital Data Files: Prepare coordination digital data files according to the following requirements:

- 1. File Preparation Format: Same digital data software program version and operating system as original Drawings.
- 2. File Submittal Format: Submit or post coordination drawing files using Portable Data File (PDF) format.
- 3. Architect will furnish Contractor one set of digital data files of Drawings for use in preparing coordination digital data files.
 - a. Architect makes no representations as to the accuracy or completeness of digital data files as they relate to Drawings.

1.8 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents Contractor shall prepare and submit an RFI in the form specified.
1. Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed legible description of item needing information or interpretation and the following:
1. Project name.
 2. Project number.
 3. Date.
 4. Name of Contractor.
 5. Name of Architect and University representative.
 6. RFI number numbered sequentially.
 7. RFI subject.
 8. Specification Section number and title and related paragraphs as appropriate.
 9. Drawing number and detail references as appropriate.
 10. Field dimensions and conditions as appropriate.
 11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum Contractor shall state impact in the RFI.
 12. Contractor's signature.
 13. Attachments: Include sketches descriptions measurements photos Product Data Shop Drawings coordination drawings and other information necessary to fully describe items needing interpretation.
 - a. Include dimensions thickness structural grid references and details of affected materials assemblies and attachments on attached sketches.
- C. RFI Forms: AIA Document G716 or other forms approved by the Architect.
1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- D. Architect's Action: Architect will review each RFI determine action required and respond. Allow seven working days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
1. The following Contractor-generated RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for approval of Contractor's means and methods.
 - d. Requests for coordination information already indicated in the Contract Documents.
 - e. Requests for adjustments in the Contract Time or the Contract Sum.
 - f. Requests for interpretation of Architect's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFIs.
 2. Architect's action may include a request for additional information in which case Architect's time for response will date from time of receipt of additional information.
 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal

- a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum notify Architect in writing within 10 days of receipt of the RFI response.
 - E. RFI Log: Prepare maintain and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Include the following:
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect and University Representative.
 - 4. RFI number including RFIs that were returned without action or withdrawn.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Architect's response was received.
 - F. On receipt of Architect's action update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.
 - 1. Identification of related Minor Change in the Work Construction Change Directive and Proposal Request as appropriate.
- 1.9 PROJECT MEETINGS
- A. General: Contractor will schedule and conduct meetings and conferences at Project site unless otherwise indicated.
 - 1. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned including Owner and Architect within three days of the meeting.
 - B. Preconstruction Conference: Contractor will schedule and conduct a preconstruction conference before starting construction at a time convenient to Owner and Architect but no later than 15 days after execution of the Agreement.
 - 1. Conduct the conference to review responsibilities and personnel assignments.
 - 2. Attendees: Authorized representatives of Owner Architect and their consultants; Contractor and its superintendent major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Discuss items of significance that could affect progress including the following:
 - a. Tentative construction schedule.
 - b. Critical work sequencing and long-lead items.
 - c. Lines of communications.
 - d. Procedures for processing field decisions and Change Orders.
 - e. Procedures for RFIs.
 - f. Procedures for testing and inspecting.
 - g. Procedures for processing Applications for Payment.
 - h. Submittal procedures.
 - i. Sustainable design requirements.
 - j. Preparation of record documents.
 - k. Working hours.
 - l. Responsibility for temporary facilities and controls.
 - m. Construction waste management and recycling.
 - n. Office work and storage areas.
 - o. Equipment deliveries and priorities.

- p. Security.
- 4. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Project Closeout Conference: Contractor will schedule and conduct a project closeout conference at a time convenient to Owner and Architect but no later than 90 days prior to the scheduled date of Substantial Completion.
 - 1. Conduct the conference to review requirements and responsibilities related to Project closeout.
 - 2. Attendees: Authorized representatives of Owner Architect and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Discuss items of significance that could affect or delay Project closeout including the following:
 - a. Preparation of record documents.
 - b. Submittal of written warranties.
 - c. Requirements for completing sustainable design documentation.
 - d. Requirements for preparing operations and maintenance data.
 - e. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
 - 4. Minutes: Entity conducting meeting will record and distribute meeting minutes.
- D. Progress Meetings: Contractor will conduct progress meetings at regular intervals.
 - 1. Coordinate dates of meetings with preparation of payment requests.
 - 2. Attendees: In addition to representatives of Owner and Architect each contractor subcontractor supplier and other entity concerned with current progress or involved in planning coordination or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Review present and future needs of each entity present including the following:
 - 1) Status of submittals.
 - 2) Status of sustainable design documentation.
 - 3) Deliveries.
 - 4) Status of correction of deficient items.
 - 5) Field observations.
 - 6) Status of RFIs.
 - 7) Status of proposal requests.
 - 8) Status of Change Orders.
 - 9) Documentation of information for payment requests.
 - 4. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
 - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Used)
PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

- A. Perform the work of this Section in accordance with the requirements of the Contract Documents.
 - 1 Reference men's locker room – showers & restroom upgrades bidding documents and FIT guidelines for additional requirements.
 - 2 Contractor shall comply with contract and University and State requirements for work on the project site.

1.2 SUMMARY

- A. Section includes:
 - 1. Requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Sections: The following Sections contain requirements related to this Section:
 - 1. All sections in Division 1 - General Requirements
 - 2. Owner Contract requirements

1.3 INTERPRETATION OF DRAWINGS AND SPECIFICATIONS

- A. Direct questions relating to the intent of the Specifications or Drawings, quality of work required thereby, to the Architect, in the event of disagreement the Architect's interpretations becomes final, conclusive, and binding on all parties.

1.4 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."
- C. File Transfer Protocol (FTP): Communications protocol that enables transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users are able to access files.
- D. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

1.5 SUBMITTALS

- 1.6 Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.
1. Initial Submittal: Submit concurrently with startup construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
 2. Final Submittal: Submit concurrently with the first complete submittal of construction schedule.
 - a. Submit revised submittal schedule to reflect changes in current status and timing for submittals.
 3. Format: Arrange the following information in a tabular format:
 - a. Scheduled date for first submittal.
 - b. Specification Section number and title.
 - c. Submittal category: Action; informational.
 - d. Name of subcontractor.
 - e. Description of the Work covered.
 - f. Scheduled date for Architect's final release or approval.
 - g. Scheduled date of fabrication.
 - h. Scheduled dates for purchasing.
 - i. Scheduled dates for installation.
 - j. Activity or event number.

1.7 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Architect's Digital Data Files: Electronic digital data files of the Contract Drawings will not be provided by Architect for Contractor's use in preparing submittals.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
 4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow 10 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. University Representative will advise Contractor when a submittal being processed must be delayed for coordination.
 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 3. Resubmittal Review: Allow 10 days for review of each resubmittal.
 4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 20 days for initial review of each submittal.
- D. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
 2. Name file with submittal number or other unique identifier, including revision identifier.
 - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
 3. Provide means for insertion to permanently record Contractor's review and Architect approval markings and action taken by Architect.
 4. Transmittal Form for Electronic Submittals: Use software-generated form from electronic project management software acceptable to Architect, containing the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name of University Representative.
 - e. Name of Contractor.
 - f. Name of firm or entity that prepared submittal.
 - g. Names of subcontractor, manufacturer, and supplier.
 - h. Category and type of submittal.
 - i. Submittal purpose and description.
 - j. Specification Section number and title.
 - k. Specification paragraph number or drawing designation and generic name for each of multiple items.
 - l. Drawing number and detail references, as appropriate.
 - m. Location(s) where product is to be installed, as appropriate.
 - n. Related physical samples submitted directly.
 - o. Indication of full or partial submittal.
 - p. Transmittal number.
 - q. Submittal and transmittal distribution record.
 - r. Other necessary identification.
 - s. Remarks.
 5. Metadata: Include the following information as keywords in the electronic submittal file metadata:
 - a. Project name.
 - b. Number and title of appropriate Specification Section.
 - c. Manufacturer name.
 - d. Product name.
- E. Options: Identify options requiring selection by Architect.

- F. Deviations and Additional Information: On an attached separate sheet, prepared on letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same identification information as related submittal.
- G. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.
- H. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- I. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
 - 1. Submit electronic submittals via email as editable PDF electronic files.
 - a. Architect through University Representative will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
 - 2. Action Submittals: Submit three paper copies of each submittal unless otherwise indicated. Architect, through University Representative will return two copies.
 - 3. Informational Submittals: Submit two paper copies of each submittal unless otherwise indicated. Architect and University Representative will not return copies.
 - 4. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - a. Provide a digital signature with digital certificate on electronically submitted certificates and certifications where indicated.
 - b. Provide a notarized statement on original paper copy certificates and certifications where indicated.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.

- d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
4. Submit Product Data before or concurrent with Samples.
 5. Submit Product Data in the following format:
 - a. Editable PDF electronic file.
 - b. Three paper copies of Product Data unless otherwise indicated. Architect, through University Representative will return two copies.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Relationship and attachment to adjoining construction clearly indicated.
 - e. Seal and signature of professional engineer if specified.
 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings as directed
 3. Submit Shop Drawings in the following format:
 - a. Editable PDF electronic file.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of applicable Specification Section.
 - e. Specification paragraph number and generic name of each item.
 3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
 4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
 5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.

- a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect, through University Representative will return submittal with options selected.
- E. Maintenance Data: Comply with requirements
- F. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- G. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- H. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- I. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- J. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- K. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- L. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- M. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.

2.2 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file and paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect and University Representative.
- B. Project Closeout and Maintenance Material Submittals: See requirements in Section 017700 "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

- A. Action Submittals: Architect will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
 - 1. "No Exceptions Taken": "No Exceptions Taken" means the submission is in general conformance with design concept. Construction, fabrication and/ or manufacture can proceed subject to the provision that the work shall be in accordance with the requirements of the Contract Documents. Final acceptance of the work shall be contingent upon such compliance.
 - 2. "Make Corrections Noted": "Make Corrections Noted" means the submission is in general conformance with the design concept subject to notations on the returned Shop Drawings. Construction, fabrication and/ or manufacturer can proceed subject to the provision that the work shall be carried out in compliance with all annotations and/ or corrections indicated on the returned Shop Drawings and Product Data and in accordance with the requirements of the Contract Documents. Final acceptance of the work shall be contingent upon such compliance.
 - 3. "Revise and Resubmit": "Revise and Resubmit" means that the Contractor shall revise and resubmit the Action Submittals in accordance with all annotations and/ or corrections indicated therein. If construction, fabrication and/ or manufacture proceeds it is at the Contractor's risk. Action Submittals bearing "Revise and Resubmit" stamp shall not be permitted on the Project Site.
 - 4. "Rejected": "Rejected" means that the submission is rejected for nonconformance with the construction documents and the Contractor shall make a new submittal which shall comply with the requirements of the Contract Documents. If construction, fabrication and/ or manufacture proceeds it is at the Contractor's risk. Action Submittals bearing "Rejected" stamp shall not be permitted on the Project Site. Any submittal rejected shall not be considered a first cycle submittal for the purpose of scheduling subsequent reviews, i.e., restart submittal process.
 - a. Do not use, or allow others to use, Action Submittals marked "Revise and Resubmit" or "Rejected" at the Project Site or elsewhere where Work is in progress.
- B. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.

E. Submittals not required by the Contract Documents may be returned by the Architect without action.

END OF SECTION 013300

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

- A. Perform the work of this Section in accordance with the requirements of the Contract Documents.
 - 1 Reference men's locker room – showers & restroom upgrades bidding documents and FIT guidelines for additional requirements.
 - 2 Contractor shall comply with contract and University and State requirements for work on the project site.

1.2 SUMMARY

- A. Section includes.
 - 1. Administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests inspections and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-assurance and control services required by Architect Owner University Representative or authorities having jurisdiction are not limited by provisions of this Section.
- C. Related Sections: The following Sections contain requirements related to this Section:
 - 1. All sections in Division 1 - General Requirements

1.3 INTERPRETATION OF DRAWINGS AND SPECIFICATIONS

- A. Direct questions relating to the intent of the Specifications or Drawings quality of work required thereby to the Architect in the event of disagreement the Architect's interpretations becomes final conclusive and binding on all parties.

1.4 DEFINITIONS

- A. Quality-Assurance Services: Activities actions and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests inspections procedures and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect or Owner.

- C. Mockups: Full-size physical assemblies that are constructed on-site. Mockups are constructed to verify selections made under Sample submittals; to demonstrate aesthetic effects and where indicated qualities of materials and execution; to review coordination testing or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Unless otherwise indicated approved mockups establish the standard by which the Work will be judged.
 - 1. Integrated Mockups: Mockups of the on project site consisting of multiple products assemblies and subassemblies.
- D. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.
- E. Product Testing: Tests and inspections that are performed by an NRTL an NVLAP or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction to establish product performance and compliance with specified requirements.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source e.g. plant mill factory or shop.
- G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Testing Agency: An entity engaged to perform specific tests inspections or both. Testing laboratory shall mean the same as testing agency.
- I. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee Subcontractor or Sub-subcontractor to perform a particular construction operation including installation erection application and similar operations.
 - 1. Use of trade-specific terminology in referring to a trade or entity if it does not require that certain construction activities be performed by accredited or unionized individuals or that requirements specified apply exclusively to specific trade(s).
- J. Experienced: When used with an entity or individual "experienced" means having successfully completed a minimum of five previous projects similar in nature size and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.5 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels comply with the most stringent requirement. Refer conflicting requirements that are different but apparently equal to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified or it may exceed the minimum within reasonable limits. To comply with these requirements indicated numeric values are minimum or maximum as appropriate for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.6 INFORMATIONAL SUBMITTALS

- A. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
 - 1. Specification Section number and title.
 - 2. Entity responsible for performing tests and inspections.
 - 3. Description of test and inspection.
 - 4. Identification of applicable standards.
 - 5. Identification of test and inspection methods.
 - 6. Number of tests and inspections required.
 - 7. Time schedule or time span for tests and inspections.
 - 8. Requirements for obtaining samples.
 - 9. Unique characteristics of each quality-control service.

1.7 CONTRACTOR'S QUALITY-CONTROL PLAN

- A. Quality-Control Plan General: Submit quality-control plan within 10 days of Notice of Award and not less than five days prior to preconstruction conference. Submit in format acceptable to Architect. Identify personnel procedures controls instructions tests records and forms to be used to carry out Contractor's quality-assurance and quality-control responsibilities. Coordinate with Contractor's construction schedule.
- B. Quality-Control Personnel Qualifications: Engage qualified full-time personnel trained and experienced in managing and executing quality-assurance and quality-control procedures similar in nature and extent to those required for project.
 - 1. Project quality-control manager may also serve as Project superintendent.
- C. Submittal Procedure: Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.
- D. Testing and Inspection: In quality-control plan include a comprehensive schedule of Work requiring testing or inspection including the following:
 - 1. Contractor-performed tests and inspections including subcontractor-performed tests and inspections. Include required tests and inspections and Contractor-elected tests and inspections.
 - 2. Special inspections required by authorities having jurisdiction and indicated on the "Statement of Special Inspections."
 - 3. Owner-performed tests and inspections indicated in the Contract Documents.
- E. Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.
- F. Monitoring and Documentation: Maintain testing and inspection reports including log of approved and rejected results. Include work Architect has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

1.8 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
1. Date of issue.
 2. Project title and number.
 3. Name address and telephone number of testing agency.
 4. Dates and locations of samples and tests or inspections.
 5. Names of individuals making tests and inspections.
 6. Description of the Work and test and inspection method.
 7. Identification of product and Specification Section.
 8. Complete test or inspection data.
 9. Test and inspection results and an interpretation of test results.
 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 12. Name and signature of laboratory inspector.
 13. Recommendations on retesting and reinspecting.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
1. Name address and telephone number of technical representative making report.
 2. Statement on condition of substrates and their acceptability for installation of product.
 3. Statement that products at Project site comply with requirements.
 4. Summary of installation procedures being followed whether they comply with requirements and if not what corrective action was taken.
 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 6. Statement whether conditions products and installation will affect warranty.
 7. Other required items indicated in individual Specification Sections.
- C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:
1. Name address and telephone number of factory-authorized service representative making report.
 2. Statement that equipment complies with requirements.
 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 4. Statement whether conditions products and installation will affect warranty.
 5. Other required items indicated in individual Specification Sections.
- D. Permits Licenses and Certificates: For Owner's records submit copies of permits licenses certifications inspection reports releases jurisdictional settlements notices receipts for fee payments judgments correspondence records and similar documents established for compliance with standards and regulations bearing on performance of the Work.

1.9 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.

- B. **Manufacturer Qualifications:** A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance as well as sufficient production capacity to produce required units.
- C. **Fabricator Qualifications:** A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance as well as sufficient production capacity to produce required units.
- D. **Installer Qualifications:** A firm or individual experienced in installing erecting or assembling work similar in material design and extent to that indicated for this Project whose work has resulted in construction with a record of successful in-service performance.
- E. **Professional Engineer Qualifications:** A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system assembly or product that are similar in material design and extent to those indicated for this Project.
- F. **Specialists:** Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- G. **Testing Agency Qualifications:** An NRTL an NVLAP or an independent agency with the experience and capability to conduct testing and inspecting indicated as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction that is acceptable to authorities.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. **Manufacturer's Technical Representative Qualifications:** An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material design and extent to those indicated for this Project.
- I. **Factory-Authorized Service Representative Qualifications:** An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material design and extent to those indicated for this Project.
- J. **Preconstruction Testing:** Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods comply with the following:
 - 1. Contractor responsibilities include the following:
 - a. Provide test specimens representative of proposed products and construction.
 - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. Provide sizes and configurations of test assemblies mockups and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
 - 2. Testing Agency Responsibilities: Submit a certified written report of each test inspection and similar quality-assurance service to Architect through University Representative with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.

- K. Mockups: Before installing portions of the Work requiring mockups build mockups for each form of construction and finish required to comply with the following requirements using materials indicated for the completed Work:
1. Build mockups in location and of size indicated or if not indicated as directed by Architect . Manager.
 2. Notify Architect seven days in advance of dates and times when mockups will be constructed.
 3. Employ supervisory personnel who will oversee mockup construction. Employ workers that will be employed during the construction at project.
 4. Demonstrate the proposed range of aesthetic effects and workmanship.
 5. Obtain Architect's and University Representative approval of mockups before starting work fabrication or construction.
 - a. Allow seven days for initial review and each re-review of each mockup.
 6. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
 7. Demolish and remove mockups when directed unless otherwise indicated.

1.10 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility Owner will engage a qualified testing agency to perform these services.
1. Owner will furnish Contractor with names addresses and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
 2. Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor.
- B. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements whether specified or not.
1. Unless otherwise indicated provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction whether specified or not.
 2. Where services are indicated as Contractor's responsibility engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ same entity engaged by Owner unless agreed to in writing by Owner.
 3. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
 4. Where quality-control services are indicated as Contractor's responsibility submit a certified written report in duplicate of each quality-control service.
 5. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 6. Submit additional copies of each written report directly to authorities having jurisdiction when they so direct.
- C. Manufacturer's Field Services: Where indicated engage a factory-authorized service representative to inspect field-assembled components and equipment installation including service connections. Report results in writing.

- D. **Manufacturer's Technical Services:** Where indicated engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences examination of substrates and conditions verification of materials observation of Installer activities inspection of completed portions of the Work and submittal of written reports.
- E. **Retesting/Reinspecting:** Regardless of whether original tests or inspections were Contractor's responsibility provide quality-control services including retesting and reinspecting for construction that replaced Work that failed to comply with the Contract Documents. Cost of retesting and reinspection shall be paid by the Contractor whose work is being retested or reinspected.
- F. **Testing Agency Responsibilities:** Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
 - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 4. Submit a certified written report in duplicate of each test inspection and similar quality-control service through Contractor.
 - 5. Do not release revoke alter or increase the Contract Document requirements or approve or accept any portion of the Work.
 - 6. Do not perform any duties of Contractor.
- G. **Associated Services:** Cooperate with agencies performing required tests inspections and similar quality-control services and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 - 4. Facilities for storage and field curing of test samples.
 - 5. Delivery of samples to testing agencies.
 - 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 - 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- H. **Coordination:** Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests inspections obtaining samples and similar activities.
- I. **Schedule of Tests and Inspections:** Prepare a schedule of tests inspections and similar quality-control services required by the Contract Documents. Coordinate and submit concurrently with Contractor's construction schedule. Update as the Work progresses.
 - 1. **Distribution:** Distribute schedule to Owner Architect University Representataive testing agencies and each party involved in performance of portions of the Work where tests and inspections are required.

1.11 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections: Conducted by a qualified testing agency as required by authorities having jurisdiction as indicated in individual Specification Sections and as follows:
 - 1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviews the completeness and adequacy of those procedures to perform the Work.
 - 2. Notifying Architect University Representative and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 - 3. Submitting a certified written report of each test inspection and similar quality-control service to Architect through University Representative with copy to Contractor and to authorities having jurisdiction.
 - 4. Submitting a final report of special tests and inspections at Substantial Completion which includes a list of unresolved deficiencies.
 - 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 - 6. Retesting and reinspecting corrected work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
 - 1. Date test or inspection was conducted.
 - 2. Description of the Work tested or inspected.
 - 3. Date test or inspection results were transmitted to Architect.
 - 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Architect's and University Representative 's reference during normal working hours.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing inspecting sample taking and similar services repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Section 017300 "Execution."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

SECTION 014200 - REFERENCES

PART 1 - GENERAL

1.1 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals applications and requests "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested" "authorized" "selected" "required" and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings in Specifications and in other Contract Documents. Other terms including "shown" "noted" "scheduled" and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws ordinances statutes and lawful orders issued by authorities having jurisdiction and rules conventions and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site ready for unloading unpacking assembly installation and similar operations.
- G. "Install": Unload temporarily store unpack assemble erect place anchor apply work to dimension finish cure protect clean and similar operations at Project site.
- H. "Provide": Furnish and install complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.
- J. "General and Supplementary Conditions": When used in the Specifications shall mean the Construction Agreement.

1.2 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
 - 1. Where copies of standards are needed to perform a required construction activity obtain copies directly from publication source.

1.3 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents they shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."
- B. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents they shall mean the recognized name of the entities in the following list. This information is believed to be accurate as of the date of the Contract Documents.
 - 1. NYBC – New York City Building Code.
 - 2. ADA
 - 3. State University
- C. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents they shall mean the recognized name of the entities in the following list. Information is subject to change and is up-to-date as of the date of the Contract Documents.
 - 1. EPA - Environmental Protection Agency; www.epa.gov.
 - 2. OSHA - Occupational Safety & Health Administration; www.osha.gov.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

- A. Perform the work of this Section in accordance with the requirements of the Contract Documents.
 - 1 Reference men's locker room – showers & restroom upgrades bidding documents and FIT guidelines for additional requirements.
 - 2 Contractor shall comply with contract and University and State requirements for work on the project site.

1.2 SUMMARY

- A. Section includes:
 - 1. Administrative and procedural requirements for selection of products for use in Project; product delivery storage and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
 - 2. Compatibility of options between products proposed and specified.
 - 3. Reliability of date calculations by Date Sensitive Equipment.
 - 4. Selection of products for use in Project.
 - 5. Product delivery storage and handling.
 - 6. Manufacturers' standard warranties on products.
 - 7. Special warranties.
 - 8. Product substitutions.
 - 9. Comparable products.

1.3 INTERPRETATION OF DRAWINGS AND SPECIFICATIONS

- A. Direct questions relating to the intent of the Specifications or Drawings quality of work required thereby to the Architect. In the event of disagreement the Architect's interpretations becomes final conclusive and binding on all parties.

1.4 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material" "equipment" "system" and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility except that products consisting of recycled-content materials are allowed unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process or where indicated as a product substitution to have the indicated qualities related to type function dimension in-service performance physical properties appearance and other characteristics that equal or exceed those of specified product.
- B. Substitutions: Changes in products materials equipment and methods of construction from those required by the Contract Documents and proposed by Contractor.

- C. Basis- of- Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design" including make or model number or other designation to establish the significant qualities related to type function dimension in-service performance physical properties appearance and other characteristics for purposes of evaluating comparable products of other named manufacturers.

1.5 SUBMITTALS

- A. Product List: Submit a list in tabular form showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.
 - 1. Coordinate product list with Contractor's Construction Schedule and the Submittals Schedule.
 - 2. Form: Tabulate information for each product under the following column headings:
 - a. Specification Section number and title.
 - b. Generic name used in the Contract Documents.
 - c. Proprietary name model number and similar designations.
 - d. Manufacturer's name and address.
 - e. Supplier's name and address.
 - f. Installer's name and address.
 - g. Projected delivery date or time span of delivery period.
 - h. Identification of items that require early submittal approval for scheduled delivery date.
 - 3. Completed List: Within 15 days after date of commencement of the Work submit an electronic copy of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.
 - 4. Architect's Action: Architect will respond in writing to Contractor within 10 days of receipt of completed product list. Architect's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Architect's response or lack of response does not constitute a waiver of requirement to comply with the Contract Documents.
- B. Substitution Requests: Submit an electronic copy and hard copy if requested of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Form: Use format as approved by the Architect.
 - 2. Documentation: Show compliance with requirements for substitutions and the following as applicable:
 - a. Statement indicating why specified material or product cannot be provided.
 - b. Coordination information including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance weight size durability visual effect and specific features and requirements indicated.
 - d. Product Data including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples where applicable or requested.
 - f. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
 - g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - h. Research/evaluation reports evidencing compliance with building code in effect for Project from a model code organization acceptable to authorities having jurisdiction.

- i. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time include letter from manufacturer on manufacturer's letterhead stating lack of availability or delays in delivery.
 - j. Cost information including a proposal of change if any in the Contract Sum.
 - k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
 - l. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- 3. Architect's Action: If necessary Architect will request additional information or documentation for evaluation within 10 days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request or 10 days of receipt of additional information or documentation whichever is later.
 - a. Form of Acceptance: Change Order.
 - b. Use product specified if Architect cannot make a decision on use of a proposed substitution within time allocated.
- C. Comparable Product Requests: Submit electronic copy and hard copy if requested of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Architect's Action: If necessary Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 7 days of receipt of request or 7 days of receipt of additional information or documentation whichever is later.
 - a. Form of Approval: As specified in Division 01 Section "Submittal Procedures."
 - b. Use product specified if Architect cannot make a decision on use of a comparable product request within time allocated.
- D. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.

1.6 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project product selected shall be compatible with products previously selected even if previously selected products were also options.
 - 1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
 - 2. If a dispute arises between contractors over concurrently selectable but incompatible products Architect will determine which products shall be used.

1.7 PRODUCT DELIVERY STORAGE AND HANDLING

- A. Deliver store and handle products using means and methods that will prevent damage deterioration and loss including theft. Comply with manufacturer's written instructions.
- B. Delivery and Handling:

1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable hazardous easily damaged or sensitive to deterioration theft and other losses.
3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system complete with labels and instructions for handling storing unpacking protecting and installing.
4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

C. Storage:

1. Store products to allow for inspection and measurement of quantity or counting of units.
2. Store materials in a manner that will not endanger Project structure.
3. Store products that are subject to damage by the elements under cover in a weathertight enclosure above ground with ventilation adequate to prevent condensation.
4. Store cementitious products and materials on elevated platforms.
5. Store foam plastic from exposure to sunlight except to extent necessary for period of installation and concealment.
6. Comply with product manufacturer's written instructions for temperature humidity ventilation and weather-protection requirements for storage.
7. Protect stored products from damage and liquids from freezing.
8. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with University Representative.

1.8 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to and run concurrent with other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to University.
 2. Special Warranty: Written warranty required by or incorporated into the Contract Documents either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification ready for execution. Submit a draft for approval before final execution.
1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 2. Specified Form: When specified forms are included with the Specifications prepare a written document using appropriate form properly executed.
 3. Refer to Divisions 02 through 16 Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents that are undamaged and unless otherwise indicated that are new at time of installation.
1. Provide products complete with accessories trim finish fasteners and other items needed for a complete installation and indicated use and effect.
 2. Standard Products: If available and unless custom products or nonstandard options are specified provide standard products of types that have been produced and used successfully in similar situations on other projects.
 3. Architect reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 4. Where products are accompanied by the term "as selected" Architect will make selection.
 5. Where products are accompanied by the term "match sample" sample to be matched is Architect's.
 6. Descriptive performance and reference standard requirements in the Specifications establish "salient characteristics" of products.
 7. Or Equal: Where products are specified by name and accompanied by the term "or equal" or "or approved equal" or "or approved" comply with provisions in Part 2 "Comparable Products" Article to obtain approval for use of an unnamed product.
- B. Product Selection Procedures:
1. Product: Where Specifications name a single product and manufacturer provide the named product that complies with requirements.
 2. Manufacturer/Source: Where Specifications name a single manufacturer or source provide a product by the named manufacturer or source that complies with requirements.
 3. Products: Where Specifications include a list of names of both products and manufacturers provide one of the products listed that complies with requirements.
 4. Manufacturers: Where Specifications include a list of manufacturers' names provide a product by one of the manufacturers listed that complies with requirements.
 5. Available Products: Where Specifications include a list of names of both products and manufacturers provide one of the products listed or an unnamed product that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
 6. Available Manufacturers: Where Specifications include a list of manufacturers provide a product by one of the manufacturers listed or an unnamed manufacturer that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
 7. Product Options: Where Specifications indicate that sizes profiles and dimensional requirements on Drawings are based on a specific product or system provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.
 8. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers provide the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes profiles dimensions and other characteristics that are based on the product named. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product by the other named manufacturers.
 9. Visual Matching Specification: Where Specifications require matching an established Sample select a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.

- a. If no product available within specified category matches and complies with other specified requirements comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.
10. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors patterns textures" or a similar phrase select a product that complies with other specified requirements.
- a. Standard Range: Where Specifications include the phrase "standard range of colors patterns textures" or similar phrase Architect will select color pattern density or texture from manufacturer's product line that does not include premium items.
 - b. Full Range: Where Specifications include the phrase "full range of colors patterns textures" or similar phrase Architect will select color pattern density or texture from manufacturer's product line that includes both standard and premium items.

2.2 PRODUCT SUBSTITUTIONS

- A. Timing: Architect will not consider requests for substitution received after the Notice to Proceed is issued. Requests received after that time may be considered or rejected at discretion of Architect.
- B. Conditions: Architect may consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied Architect will return requests without action except to record noncompliance with these requirements:
 - 1. Requested substitution offers Owner a substantial advantage in cost time energy conservation or other considerations after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services increased cost of other construction by Owner and similar considerations.
 - 2. Requested substitution does not require extensive revisions to the Contract Documents.
 - 3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - 4. Substitution request is fully documented and properly submitted.
 - 5. Requested substitution will not adversely affect Contractor's Construction Schedule.
 - 6. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - 7. Requested substitution is compatible with other portions of the Work.
 - 8. Requested substitution has been coordinated with other portions of the Work.
 - 9. Requested substitution provides specified warranty.
 - 10. If requested substitution involves more than one contractor requested substitution has been coordinated with other portions of the Work is uniform and consistent is compatible with other products and is acceptable to all contractors involved.

2.3 COMPARABLE PRODUCTS

- A. Conditions: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied Architect will return requests without action except to record noncompliance with these requirements:
 - 1. Evidence that the proposed product does not require extensive revisions to the Contract Documents that it is consistent with the Contract Documents and will produce the indicated results and that it is compatible with other portions of the Work.
 - 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance weight size durability visual effect and specific features and requirements indicated.
 - 3. Evidence that proposed product provides specified warranty.

4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners if requested.
5. Samples if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

- A. Perform the work of this Section in accordance with the requirements of the Contract Documents.
 - 1 Reference men's locker room – showers & restroom upgrades bidding documents and FIT guidelines for additional requirements.
 - 2 Contractor shall comply with contract and University and State requirements for work on the project site.

1.2 SUMMARY

- A. Section includes.
 - 1. General administrative and procedural requirements governing execution of the Work including but not limited to the following:
 - a. Construction layout.
 - b. Field engineering and surveying.
 - c. Cutting and patching.
 - d. Temporary facilities and protections
- B. Related Sections: The following Sections contain requirements related to this Section:
 - 1. All sections in Division 1 - General Requirements

1.3 INTERPRETATION OF DRAWINGS AND SPECIFICATIONS

- A. Direct questions relating to the intent of the Specifications or Drawings quality of work required there by to the Architect in the event of disagreement the Architect's interpretations becomes final conclusive and binding on all parties.

1.4 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.
- B. Patching: Fitting and repair work required to restore construction to original condition after installation of other work.

1.5 QUALITY ASSURANCE

- A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
 - 1. Structural Elements: When cutting and patching structural elements notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore brace and support structural elements during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection.
 - 2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.

3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
 4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would in Architect's opinion reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- B. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces use materials that visually match in-place adjacent surfaces to the fullest extent possible.
1. If identical materials are unavailable or cannot be used use materials that when installed will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of concealed and other utilities and construction indicated as existing are not guaranteed. Before beginning site work investigate and verify the existence and location of utilities and other construction affecting the Work.
1. Before construction verify the location and invert elevation at points of connection of sanitary sewer and water-service piping electrical services and other utilities.
 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work examine substrates areas and conditions with Installer or Applicator present where indicated for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
 2. Examine walls floors for suitable conditions where products and systems are to be installed.
 3. Verify compatibility with and suitability of substrates including compatibility with existing and new finishes or primers.
- C. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections include the following:
1. Description of the Work.
 2. List of detrimental conditions including substrates.

3. List of unacceptable installation tolerances.
4. Recommended corrections.

D. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor submit a request for information to Architect according to requirements in Section 013100 "Project Management and Coordination."

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work verify layout information shown on Drawings in relation to the property survey and existing benchmarks. If discrepancies are discovered notify Architect and University Representative promptly.
- B. General:
 1. Establish benchmarks and control points to set lines and levels as needed to locate each element of Project.
 2. Establish limits on use of Project site.
 3. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
 4. Inform installers of lines and levels to which they must comply.
 5. Check the location level and plumb of every major element as the Work progresses.
 6. Notify Architect and University Representative when deviations from required lines and levels exceed allowable tolerances.

3.4 FIELD ENGINEERING

- A. Reference Points: Locate existing permanent bench marks control points and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
 1. Do not change or relocate existing benchmarks or control points without prior written approval of Architect or University Representative. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to Architect and University Representative before proceeding.
 2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.

3.5 CUTTING AND PATCHING

- A. Cutting and Patching General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.
 - 1. Cut in-place construction to provide for installation of other components or performance of other construction and subsequently patch as required to restore surfaces to their original condition.
- B. Existing Warranties: Remove replace patch and repair materials and surfaces cut or damaged during installation or cutting and patching operations by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection conditions for portions of Project that might be exposed during cutting and patching operations. Provide dust control and safety controls as required.
- E. Cutting: Cut in-place construction by sawing drilling breaking chipping grinding and similar operations including methods least likely to damage elements retained or adjoining construction. If possible review proposed procedures with original Installer comply with original Installer's written recommendations.
 - 1. In general use hand or small power tools designed for sawing and grinding not hammering and chopping. Cut holes and slots neatly to minimum size required and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. Concrete and Masonry: Cut using a cutting/Grinding machine such as an abrasive saw or a diamond-core drill.
 - 3. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap valve or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 - 4. Proceed with patching after construction operations requiring cutting are complete.
- F. Patching: Patch construction by filling repairing refinishing closing up and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections where applicable.
 - 1. Inspection: Where feasible test and inspect patched areas after completion to demonstrate physical integrity of installation.
 - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
 - a. Clean piping conduit and similar features before applying paint or other finishing materials.
 - b. Restore damaged pipe covering to its original condition.
- G. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint mortar oils putty and similar materials from adjacent finished surfaces.

END OF SECTION 017300

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

- A. Perform the work of this Section in accordance with the requirements of the Contract Documents.
 - 1 Reference men's locker room – showers & restroom upgrades bidding documents and FIT guidelines for additional requirements.
 - 2 Contractor shall comply with contract and University and State requirements for work on the project site.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for each Contractor for each contract closeout including but not limited to the following:
 - 1. Substantial Completion procedures
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.

1.3 SUBMITTALS

- A. Product Data: For cleaning agents.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.

1.4 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.
- C. Field Report: For pest control inspection.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.6 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list) indicating the value of each item on the list and reasons why the Work is incomplete.

B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.

1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits operating certificates and similar releases.
2. Submit closeout submittals including project record documents, operation and maintenance manuals, final completion construction photographic documentation and similar final record information.
3. Submit closeout submittals specified in individual Sections including specific warranties workmanship bonds maintenance service agreements final certifications and similar documents.
4. Submit maintenance material submittals specified in individual Sections including tools spare parts extra materials and similar items and deliver to location designated by University Representative. Label with manufacturer's name and model number where applicable.
 - a. Schedule of Maintenance Material Items: Prepare and submit schedule of maintenance material submittal items including name and quantity of each item and name and number of related Specification Section. Obtain Architect's and signature for receipt of submittals.
5. Submit test/adjust/balance records.

C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.

1. Advise Owner of pending insurance changeover requirements.
2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
3. Complete startup and testing of systems and equipment.
4. Perform preventive maintenance on equipment used prior to Substantial Completion.
5. Instruct Owner's personnel in operation adjustment and maintenance of products equipment and systems
6. Advise Owner of changeover in heat and other utilities.
7. Participate with Owner in conducting inspection and walkthrough with local emergency responders if required.
8. Terminate and remove temporary facilities from Project site along with mockups construction tools and similar elements.
9. Complete final cleaning requirements including touchup painting.
10. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request Architect and University representative will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items either on Contractor's list or additional items identified by Architect that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

2. Results of completed inspection will form the basis of requirements for final completion.

1.7 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion complete the following:
 1. Submit a final Application for payment according approved Contract procedures.
 2. Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list) endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 3. Certificate of Insurance: Submit evidence of final continuing insurance coverage complying with insurance requirements.
 4. Submit pest-control final inspection report.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request Architect and University representative will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.8 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including areas disturbed by Contractor that are outside the limits of construction. Use CSI Form 14.1A.
 1. Organize list of spaces in sequential order starting with exterior areas first and proceeding from lowest floor to highest floor.
 2. Organize items applying to each space by major element including categories for ceiling individual walls floors equipment and building systems.
 3. Include the following information at the top of each page:
 - a. Project name.
 - b. Date.
 - c. Name of Architect and University Representative.
 - d. Name of Contractor.
 - e. Page number.
 4. Submit list of incomplete items in the following format:
 - a. MS Excel electronic file. Architect through University Representative will return annotated file.
 - b. PDF electronic file. Architect through University Representative will return annotated file.

1.9 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Partial Occupancy: Submit properly executed warranties within 15 days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- C. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
 - 1. Bind warranties and bonds in heavy-duty three-ring vinyl-covered loose-leaf binders, thickness as necessary to accommodate contents and sized to receive 8-1/2"-by-11"-inch paper.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation including the name of the product and the name address and telephone number of Installer.
 - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES" Project name and name of Contractor.
 - 4. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
- D. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
 - 1. Use cleaning products that comply with Green Seal's or VOC Code maximum allowable VOC levels.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project by the respective designated Contractors determined by University Representative.

- a. Clean Project site disturbed by construction activities including areas of rubbish waste material litter and other foreign substances.
- b. Sweep areas broom clean. Remove petrochemical spills stains and other foreign deposits.
- c. Remove tools construction equipment machinery and surplus material from Project site.
- d. Remove debris and surface dust from limited access spaces including plenums shafts and similar spaces.
- e. Clean transparent materials including mirrors and glass. Remove glazing compounds and other noticeable vision-obscuring materials. Polish mirrors and glass taking care not to scratch surfaces.
- f. Remove labels that are not permanent.
- g. Wipe surfaces of mechanical electrical equipment and similar equipment. Remove excess lubrication paint and mortar droppings and other foreign substances.
- h. Clean plumbing fixtures to a sanitary condition free of stains including stains resulting from water exposure.
- i. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers registers and grills.
- j. Clean ducts blowers and coils if units were operated without filters during construction or that display contamination with particulate matter on inspection.
 - 1) Clean HVAC system in compliance with NADCA Standard 1992-01. Provide written report on completion of cleaning.
- k. Clean light fixtures lamps globes and reflectors to function with full efficiency.
- l. Leave Project clean and ready for occupancy.

C. Pest Control: Comply with pest control requirements Prepare written report.

D. Construction Waste Disposal: Comply with waste disposal requirements.

3.2 REPAIR OF THE WORK

A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.

B. Repair or remove and replace defective construction. Repairing includes replacing defective parts refinishing damaged surfaces touching up with matching materials and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.

- 1. Remove and replace chipped scratched and broken surfaces and other damaged materials.
- 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that that already show evidence of repair or restoration.
 - a. Do not paint over "UL" and other required labels and identification including mechanical and electrical nameplates. Remove paint applied to required labels and identification.
- 3. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.

4. Replace burned-out bulbs noticeably dimmed by hours of use and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.

END OF SECTION 017700

SECTION 024119 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: The Work of this Section shall include but not be limited to the following:
1. Selective interior demolition and removals as indicated and as required for new construction.
 2. Restoration and repair of building elements as required.
 3. Salvage of existing items to be returned to Owner.
 4. Disconnecting relocation or removal of pipes conduits ducts and other mechanical and electrical work (including equipment) as required.
 5. Temporary protections structures enclosures and similar protections for utilities structures and persons.

1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged or reinstalled.
- B. Remove and Salvage: Detach items from existing construction in a manner to prevent damage and deliver to Owner ready for reuse or store.
- C. Remove and Reinstall: Detach items from existing construction in a manner to prevent damage prepare for reuse and reinstall where indicated.
- D. Existing to Remain: Leave existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.
- E. Dismantle: To remove by disassembling or detaching an item from a surface using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.

1.3 MATERIALS OWNERSHIP

- A. Except for items or materials indicated to be reused salvaged reinstalled or otherwise indicated to remain the Owner's property demolished materials shall become Contractor's property and shall be removed and legally disposed from the site.

1.4 SUBMITTALS

- A. Qualification Data: For demolition firm and professional engineer if required.
- B. Schedule of Selective Demolition Activities: Indicate the following:
1. Detailed sequence of selective demolition and removal work with starting and ending dates for each activity. Ensure Owner's on-site operations are uninterrupted and protected.
 2. Interruption of utility services. Indicate how long utility services will be interrupted.
 3. Coordination for shutoff capping and continuation of utility services.
 4. Use of elevator and stairs or egress paths as directed.
 5. Locations of proposed dust- and noise-control temporary partitions and means of egress.

6. Means of protection for items to remain and items in path of work or waste removal from building.

C. Pre-demolition Photographs: Show existing conditions of adjoining construction and site improvements including finish surfaces that might be misconstrued as damage caused by selective demolition operations.

1.5 QUALITY ASSURANCE

A. Demolition Firm Qualifications: An experienced firm that has specialized in demolition work similar in material and extent to that indicated for this Project.

B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

C. Standards: Comply with ANSI A10.6 and NFPA 241.

D. Pre-demolition Conference: Conduct conference at Project site. Review methods and procedures related to selective demolition including but not limited to the following:

1. Inspect and discuss condition of construction to be selectively demolished.
2. Review and finalize selective demolition schedule and verify availability of materials demolition personnel equipment and facilities needed to make progress and avoid delays.
3. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
4. Review areas where existing construction is to remain and require protection.

1.6 PROJECT CONDITIONS

A. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.

B. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.

C. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.

1. Hazardous materials will be removed by building Owner before start of the Work.
2. If materials suspected of containing hazardous materials are encountered do not disturb; immediately notify Architect and Owner. Owner will remove hazardous materials under a separate contract if required.
3. Any asbestos contaminated material will be removed by FIT's certified asbestos abatement contractor prior to the work of this contract.

D. Maintain access as directed to existing entrances walkways corridors and other adjacent occupied or used facilities as directed.

E. Protections: Provide temporary barricades and other forms of protection as required to protect personnel and general - public from injury due to selective demolition work.

1. Provide shoring bracing or support to prevent movement settlement or collapse of structure or element to be demolished and adjacent facilities or work to remain.
2. Provide dust Control and area separations as required.

- F. Promptly repair damage caused to adjacent facilities and construction by selective demolition work at no cost to Owner.
- G. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
- H. Conduct selective demolition operations and debris removal in a manner to ensure minimum interference with adjacent facilities.
- I. Use of explosives will not be permitted.
- J. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
- K. Maintain fire-protection facilities in service during selective demolition operations.
- L. The sale of removed items or materials on-site will not be permitted.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ASSE A10.6 and NFPA 241.

2.2 REPAIR MATERIAL

- A. General: Use repair materials identical to existing materials.
 - 1. Where identical materials are unavailable or cannot be used for exposed surfaces use materials that match existing adjacent surfaces to the extent possible. Repair materials and workmanship are subject to the Architects acceptance/approval.
- B. Use materials whose installed performance equals or surpasses that of existing materials.
- C. Comply with material and installation requirements specified in individual Specification Sections.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been 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 or reinstalled.
- D. When unanticipated mechanical electrical or structural elements that conflict with intended function or design are encountered investigate and measure the nature and extent of conflict. Promptly submit a written report

- E. (As required) Contractor shall Engage a New York State licensed professional engineer to survey condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective demolition operations if required.
- F. Survey of Existing Conditions: Record existing conditions by use of measured drawings preconstruction photographs preconstruction videotapes and templates.
- G. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems: Maintain services/systems indicated to remain and protect them against damage during selective demolition operations.
- B. Service/System Requirements: Locate identify disconnect and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.
 - 1. Owner will arrange to shut off indicated services/systems when requested by Contractor.
 - 2. Arrange to shut off indicated utilities with utility companies.
 - 3. If services/systems are required to be removed relocated or abandoned before proceeding with selective demolition provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
 - 4. Cut off pipe or conduit in walls or partitions to be removed. Cap valve or plug and seal remaining portion of pipe or conduit after bypassing.
 - a. Where entire wall is to be removed existing services/systems may be removed with removal of the wall.

3.3 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads streets walks walkways and other adjacent occupied and used facilities.
- B. Temporary Facilities: Provide temporary barricades/dust barriers and other protection required to prevent injury to people and damage to adjacent occupied facilities to remain.
 - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
 - 2. Maintain required egress routes site safety to building occupants and maintain building security.
 - 3. Provide temporary duct protection for adjacent occupied space during interval between selective demolition of existing construction and new interior areas.
 - 4. Protect walls, ceiling floors and other existing finish work that are to remain or that are exposed during selective demolition operations.
 - 5. Cover and protect equipment that has not been removed.
 - 6. Comply with requirements for temporary enclosures dust control heating and cooling specified in Division 1 Section "Temporary Facilities."

3.4 SELECTIVE DEMOLITION GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:

FIT STATE UNIVERSITY OF NEW YORK
 227 West 27th Street New York N.Y 10001
 DUBINSKY BUILDING MEN'S LOCKER ROOM
 SHOWER & RESTROOM UPGRADES

SELECTIVE DEMOLITION
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1. Proceed with selective demolition systematically from higher to lower level.
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. Use hand tools or small power tools designed for sawing or grinding not hammering and chopping to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
3. Remove existing floor coverings and prepare surface as required to install new finish materials meeting finish manufacturers requirements.
4. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
5. 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.
6. Maintain adequate ventilation.
7. Remove decayed vermin-infested or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
8. Remove structural framing members by method suitable to avoid free fall and to prevent impact or dust generation.
9. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls floors or framing.
10. Dispose of demolished items and materials promptly.

B. Removed and Reinstalled Items: (As required)

1. Clean and repair items to functional condition adequate for intended reuse. Paint/finish equipment to match new equipment.
2. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections supports and miscellaneous materials necessary to make item functional for use indicated.
3. Salvaged items shall be turned over to Owner's representative as directed.

C. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect items may be removed to a suitable protected storage location during selective demolition and reinstalled in their original locations after selective demolition operations are complete.

3.5 PATCHING AND REPAIRS

- A. Repair demolition performed in excess of that required. Return structures and surfaces to remain to condition existing prior to commencement of selective demolition work. Repair adjacent construction or surfaces soiled or damaged by selective demolition work.
- B. Promptly patch and repair holes and damaged surfaces caused to adjacent construction by selective demolition operations.
- C. Repairs: Where repairs to existing surfaces are required patch to produce surfaces suitable for new materials.
 1. Completely fill holes depressions and make repairs to existing construction and finishes damaged by selective demolition operations with materials systems and workmanship recognized in the respective industry as the standard of excellence for the type of damage and repair required.
 2. Repaired and restored systems shall be executed in a manner resulting that eliminates evidence of the patching or repair as judged by the Architect.

- D. Closely match texture and finish of existing adjacent surface.
- E. Where patching smooth painted surfaces extend final paint coat over entire unbroken surface containing the patch after the surface has received primer and second coat.

3.6 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Flooring and finish materials: Demolish in sections clean and or level concrete subfloor as required for new finish materials and manufacturers requirements.

3.7 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be reused salvaged reinstalled or otherwise indicated to remain Owner's property remove demolished materials from Project site and legally dispose of them in an EPA- approved landfill.

1. Do not allow demolished materials to accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
3. Remove debris from elevated portions of building by chute hoist or other device that will convey debris to grade level in a controlled descent.
4. Provide waste disposal compliance receipts if requested.

- B. Burning: Do not burn demolished materials.

- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

3.8 CLEANING

- A. Clean adjacent structures and improvements of dust dirt and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119

SECTION 035300 – CONCRETE TOPPING

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: The Work of this Section includes but is not limited to the following:
 - 1. Self-Leveling Underlayment Concrete.
 - 2. Self-Leveling Flooring Underlayment.
 - 3. Concrete Underlayment Patch.

1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Plans indicating substrates locations and average depths of cement-based underlayment based on survey of substrate conditions.
 - 1. Contractor shall coordinate and provide all required topping and leveling/sloping of slabs for installation of all floor finishes. Contractor shall coordinate with manufacturer and installer requirements for all floor finishes and provide removal of existing finish and provide grinding fill topping and other work to provide for all flooring installations - no exceptions. Contractor shall maintain a Min. of 1/8" inch tolerances over entire areas.
 - 2. Reference drawing for drainage requirements.
 - 3. Coordinate with new concrete curbs and drainage assemblies.
- C. Manufacturer Certificates: Signed by manufacturers of both underlayment and Tile/floor covering system certifying that products are compatible.
- D. Qualification Data: For Installer.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Installer who is approved by manufacturer for application of underlayment products required for this Project.
- B. Product Compatibility: Manufacturers of both underlayment/bonding of floor and wall covering system certify in writing that products are compatible.
- C. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination."

1.4 DELIVERY STORAGE AND HANDLING

- A. Deliver materials in original packages and containers with seals unbroken bearing manufacturer's labels indicating brand name and directions for storage mixing with other components and application.
- B. Store materials to comply with manufacturer's written instructions to prevent deterioration from moisture or other detrimental effects.

1.5 PROJECT CONDITIONS

- A. Environmental Limitations: Comply with manufacturer's written recommendations for substrate temperature and moisture content ambient temperature and humidity ventilation and other conditions affecting underlayment performance.
- B. Close areas to traffic during underlayment application and for time period after application recommended in writing by manufacturer.

1.6 COORDINATION

- A. Coordinate cement-based underlayment with requirements of finish flooring products including adhesives specified in Division 9 Sections.
 - 1. Before installing surface finish verify compatibility with finish installation adhesive materials.
 - 2. Coordinate with Structural requirements if Standard concrete is required for sloped installations.

PART 2 - PRODUCTS

2.1 SELF-LEVELING UNDERLAYMENT CONCRETE

- A. Thick Concrete Underlayment (1 inch or more in thickness): Hydronic-cement-based polymer-modified self-leveling product that can be applied in minimum uniform thicknesses that can be feathered at edges to match adjacent floor elevations.
 - 1. Products: Subject to compliance with requirements provide one of the following:
 - a. Ardex: K-15 Self-Leveling Underlayment Concrete.
 - b. BSAF Chem Rex; Thoro Underlayment Self-Leveling.
 - c. Con spec a Dayton Superior Company: Conflow.
 - d. Dayton Superior Corporation: Levelayer .
 - e. L&M Construction Chemicals Inc: Duracrete
 - f. As approved
 - 2. Cement Binder: ASTM C 150 portland cement or hydraulic or blended hydraulic cement as defined by ASTM C 219.
 - 3. Compressive Strength: Not less than 4100 psi at 28 days when tested according to ASTM C 109/C 109M.
 - 4. Underlayment Additive: Resilient-emulsion product of underlayment manufacturer formulated for use with underlayment when applied to substrate and conditions indicated.
 - 5. Provide type as required for sloped applications as per manufacturer,
- B. Aggregate: Well-graded washed gravel 1/8" to 1/4" inch or coarse sand as recommended by underlayment manufacturer.
 - 1. Provide aggregate when recommended in writing by underlayment manufacturer for underlayment thickness required.
- C. Water: Potable and at a temperature of not more than 70 deg F.
- D. Reinforcement: For underlayment applied to wood substrates provide galvanized metal lath or other corrosion-resistant reinforcement recommended in writing by underlayment manufacturer.
- E. Primer: Product of underlayment manufacturer recommended in writing for substrate conditions and application indicated.

2.2 SELF-LEVELING FLOORING UNDERLAYMENT

- A. Thin Self-Leveling Underlayment: Cement-based polymer-modified self-leveling product including primer recommended by mixture manufacturer that can be applied in uniform thicknesses from 1/8" to 3/8" in one pour and up to 1/2" inch with the addition of aggregate and that can be feathered at edges to match adjacent floor elevations.
 - 1. Products: Subject to compliance with requirements provide the following or approved equal:
 - a. Ardex Inc: Ardex K-40
 - 2. Compressive Strength: Not less than 3600 psi at 28 days when tested according to ASTM C 109/C 109M.
- B. Primer: Product of underlayment manufacturer recommended in writing for substrate conditions and application indicated.
- C. Aggregate shall be well-graded washed gravel for use when installing at 1/2" inch thick.
- D. Water shall be clean potable and sufficiently cool (not warmer than 70°F).

2.3 CONCRETE UNDERLAYMENT PATCH

- A. Flush Patching Cement: For floor repairs requiring spot flush patching use portland cement-based self-drying fast-setting trowelable underlayment that can be applied in uniform thicknesses from a true featheredge to 1/2" thick over large areas and to any thickness in well-defined areas such as filling holes or gouges.
 - 1. Products: Subject to compliance with requirements provide the following or approved equal:
 - a. Ardex Inc: Ardex XF Feather Finish.
 - 2. Compressive Strength: Not less than 4200 psi at 28 days when tested according to ASTM C 109/C 109M.
- B. Primer: Product of underlayment manufacturer recommended in writing for substrate conditions and application indicated.
- C. Water shall be clean potable and sufficiently cool (not warmer than 70°F).

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates with Installer present for conditions affecting performance of underlayment including substrate moisture content. Begin underlayment application only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. General: Prepare and clean substrate according to manufacturer's written instructions for substrate indicated. Provide clean dry neutral-pH substrate for underlayment application.

1. Treat nonmoving substrate cracks to prevent cracks from telegraphing (reflecting) through underlayment according to manufacturer's written recommendations.
 2. Fill substrate voids to prevent underlayment from leaking.
- B. Concrete Substrates: Mechanically remove laitance glaze efflorescence curing compounds adhesives form-release agents dust dirt grease oil and other contaminants that might impair underlayment bond.
1. Moisture Testing: Perform anhydrous calcium chloride test ASTM F 1869. Proceed with installation only after substrates do not exceed a maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. in 24 hours.
- C. Metal Substrates: Mechanically remove rust foreign matter and other contaminants that might impair underlayment bond according to manufacturer's written instructions. Apply corrosion-resistant coating compatible with underlayment if recommended in writing by underlayment manufacturer.
- D. Nonporous Substrates: For ceramic tile substrates remove waxes sealants and other contaminants that might impair underlayment bond according to manufacturer's written instructions. Reference TCNA requirements.
- E. Adhesion Tests: After substrate preparation test substrate for adhesion with underlayment according to manufacturer's written instructions.

3.3 APPLICATION

- A. General: Mix and apply underlayment components according to manufacturer's written instructions.
1. Coordinate application of components to provide optimum underlayment-to-substrate and adhesion.
 2. At substrate expansion isolation and other moving joints allow joint of same width to continue through underlayment.
- B. Apply primer over prepared substrate at manufacturer's recommended spreading rate.
- C. Apply underlayment to produce uniform level surface.
1. Apply a final layer without aggregate if required to produce smooth surface.
 2. Feather edges to match adjacent floor elevations.
- D. Cure underlayment according to manufacturer's written instructions. Prevent contamination during application and curing processes.
- E. Do not install finish flooring over underlayment until after time period recommended by underlayment manufacturer.
- F. Remove and replace underlayment areas that evidence lack of bond with substrate including areas that emit a "hollow" sound when tapped.

3.4 FIELD QUALITY CONTROL

- A. Field Samples: Take at least three molded-cube samples from each underlayment batch. Test samples according to ASTM C 109/C 109M for compliance with compressive-strength requirements. When requested provide test results to Architect.

3.5 PROTECTION

- A. Protect underlayment from concentrated and rolling loads for remainder of construction period.

END OF SECTION 035300

SECTION 039000 – PENETRATING CONCRETE SEALER

PART 1 - GENERAL

1.1 SUMMARY

A. The Work of this Section shall include but is not limited to the following:

1. Sealing of interior concrete as indicated or required.

1.2 SUBMITTALS

A. Product Data: Submit the following information:

1. Sufficient technical data to prove compliance with the specified requirements.
2. Evidence that the proposed applicator is currently approved by the manufacturer of the specified product.

1.3 INFORMATIONAL SUBMITTALS

A. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency for concrete floor topping.

1.4 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Use an applicator currently approved in writing by the manufacturer of the specified product.
- C. Pre-installation Conference: Conduct conference at Project site.

1.5 DELIVERY STORAGE AND HANDLING

- A. Deliver materials in original packages and containers with seals unbroken bearing manufacturer's labels indicating brand name and directions for storage mixing with other components and application.
- B. Store materials to comply with manufacturer's written instructions to prevent deterioration from moisture or other detrimental effects.

1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Comply with manufacturer's written instructions for substrate temperature and moisture content ambient temperature and humidity ventilation and other conditions affecting concrete floor topping performance.
1. Place concrete floor topping only when ambient temperature and temperature of base slabs are between 50 and 86 deg F.
- B. Close areas to traffic during topping application and after application for time period recommended in writing by manufacturer.

1.7 WARRANTY

- A. Upon completion of the work of this Section and as a condition of its acceptance the Contractor together with the manufacturer of the penetrating concrete sealer shall provide a warranty against water penetration chloride salt damage or scaling of sealed areas. If the treated surfaces show water penetration of structurally sound areas or if spalling of the concrete occurs from chloride salt damage within the warranty period the manufacturer shall supply labor and materials to repair spalled surfaces and to re-treat such problem areas at no cost to the Owner.

1. Warranty Period: Ten (10) years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements available manufacturers offering products that may be incorporated into the Work include but are not limited to the following:
1. Hydrozo Coatings
 2. IPA SystemsInc.
 3. Prosoco (Basis of Design)
- B. Selected Product: Provide "Consolideck" impregnating liquified sealer solution as manufactured by Prosoco or approved equal.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates with Installer present for conditions affecting performance of concrete floor topping.
- B. Proceed with application only after unsatisfactory conditions have been corrected.

3.2 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.3 APPLICATION

- A. Preparation: The concrete deck shall be clean and free of debris oils or particles which would prevent proper penetration of the sealer.
- B. Installation: The sealant shall be applied at the rate of 350 square feet per gallon of material. Water curing and vinyl protection of the concrete is required with this system. If results appear to be spotty apply additional coat at 50 sq. ft. per gallon to needed areas. Follow manufacturers recommended practices.

END OF SECTION 039000

SECTION 042000 - UNIT MASONRY

PART 1 – GENERAL

1.1 SUMMARY

- A. Work Included: The Work of this Section shall include but not be limited to the following:
 - 1. Patching of existing masonry units.
 - 2. Masonry units as required to match existing
 - 5. Mortar grout fasteners anchors reinforcement and additional masonry accessories as required for installation.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data for each type of masonry unit accessory and other manufactured products including certifications that each type complies with specified requirements.
- B. Samples:
 - 1. Submit samples of each type of exposed masonry unit. Include in each set of samples the full range of textures to be expected in completed work.
 - 2. Submit 12" long samples of each type of joint reinforcement and samples of each type of anchor and tie.
 - 3. Match existing unless otherwise indicated.

1.3 QUALITY ASSURANCE

- A. Fire Performance Characteristics: Where indicated provide materials and construction which are identical to those of assemblies whose fire endurance has been determined by testing in compliance with ASTM E 119 by a recognized testing and inspecting organization or by another means as acceptable to authority having jurisdiction.
- B. Single Source Responsibility for Masonry Units: Obtain masonry units of uniform texture and color or a uniform blend within the ranges accepted for these characteristics from one manufacturer for each different product required for each continuous surface or visually related surfaces.
- C. Single Source Responsibility for Mortar Materials: Obtain mortar ingredients of uniform quality including color for exposed masonry from one manufacturer for each cementitious component and from one source and producer for each aggregate.

1.4 DELIVERY STORAGE AND HANDLING

- A. Deliver masonry materials to project in undamaged condition.
- B. Store and handle masonry units to prevent their deterioration or damage due to moisture temperature changes contaminants corrosion or other causes.
- C. Store cementitious materials off the ground under cover and in dry location.
- D. Store aggregates where grading and other required characteristics can be maintained.

- E. Store masonry accessories including metal items to prevent deterioration by corrosion and accumulation of dirt.

1.5 PROJECT CONDITIONS

- A. Staining: Prevent grout or mortar or soil from staining the face of masonry to be left exposed or painted. Remove immediately grout or mortar in contact with such masonry.
- B. Protect base of walls from mortar splatter by means of coverings spread on ground and over wall surface.
- C. Protect sills ledges and projections from droppings of mortar.

PART 2 - PRODUCTS

2.1 CONCRETE MASONRY UNITS

- A. General: Comply with referenced standards and other requirements indicated below applicable to each form of concrete masonry unit required.
 - 1. Provide special shapes where required for special conditions.
- B. Concrete Block: Provide units complying with characteristics indicated below for Grade Type size exposed face and under each form of block included for weight classification.
 - 1. Grade: to match existing.
 - 2. Provide glazed units to match existing as required.
 - 2. Size: Manufacturer's standard units with nominal face dimensions of 16" long x 8" high (15-5/8" x 7-5/8" actual) x thicknesses indicated and to match existing.
 - 3. Hollow and Solid Load-Bearing Block: ASTM C 90 and as follows:
 - a. Weight Classification: Lightweight or match existing

2.2 MORTAR AND GROUT MATERIALS

- A. Portland Cement: ASTM C 150 Type I except Type III may be used for cold weather construction. Provide white cement as required to produce required mortar color.
- B. Hydrated Lime: ASTM C 207 Type S.
- C. Aggregate for Mortar: ASTM C 144 except for joints less than 1/4" use aggregate graded with 100% passing the No. 16 sieve.
- D. Aggregate for Grout: ASTM C 404.
- E. Water: Clean and potable.

2.3 JOINT REINFORCEMENT

- A. Materials: Comply with requirements indicated below for basic materials and with requirements indicated under each form of joint reinforcement tie and anchor for size and other characteristics:

1. Zinc-Coated (galvanized) Steel Wire: ASTM A 82 for uncoated wire and with ASTM A 641 for zinc coating of class indicated below:
 - a. Class 3 (0.80 oz. per sq. ft. of wire surface).
 - b. Application: Use for masonry not exposed to exterior.

- B. Joint Reinforcement: Provide welded-wire units prefabricated with deformed continuous side rods and plain cross rods into straight lengths of not less than 10' with prefabricated corner and tee units and complying with requirements indicated below:
 1. For patching match existing for type and configuration

- C. Bent-Wire Ties: Provide individual prefabricated bent-wire units complying with requirements indicated below:
 1. Wire Size: 0.1875" diameter.
 2. Length: Provide units of length indicated but not less than that required for embedment into each wythe of 1.5" for solid units and for embedment of tie end into face shells of hollow units with not less than 1/2" mortar cover on face joints.

- D. Rigid Anchors: Provide straps of form and length indicated fabricated from sheet metal strips of following width and thickness unless otherwise indicated.
 1. Width: 1-1/2".
 2. Thickness: 1/4".

- E. Unit Type Masonry Inserts in Concrete: Furnish cast iron or malleable iron inserts of type and size indicated.

- F. Anchor Bolts: Provide steel bolts with hex nuts and flat washers complying with ASTM A 307 Grade A hot-dip galvanized to comply with ASTM C 153 Class C in sizes and configurations indicated.

- G. Available Manufacturers: Subject to compliance with requirements manufacturers offering products which may be incorporated in the work include but are not limited to the following:
 1. AA Wire Products Co.
 2. Dur-0-Wal Inc.
 3. Hohmann & Barnard Inc.
 4. National Wire Products Corp.

2.4 MISCELLANEOUS MASONRY ACCESSORIES

- A. Non- Metallic Expansion Joint Strips: Pre-molded flexible cellular neoprene rubber filler strips complying with ASTM D 1056 Grade RE4IEI capable of compression up to 35% of width and thickness indicated.

- B. Pre-molded Control Joint Strips: Material as indicated below designed to fit standard sash block and to maintain lateral stability in masonry wall; size and configuration as indicated.
 1. Polyvinyl chloride complying with ASTM D 2287 General Purpose Grade Designation PVC-63506.

- C Bond Breaker Strips: Asphalt saturated organic felt complying with ASTM D 226 Type I (No. 15 asphalt felt)

2.5 MORTAR AND GROUT MIXES

- A. General: Do not add admixtures including coloring pigments air entraining agents accelerators retarder water repellent agents anti-freeze compounds or other admixtures unless otherwise indicated.
 - 1. Do not use calcium chloride in mortar or grout.
- B. Mixing: Combine and thoroughly mix cementitious materials water and aggregates in a mechanical batch mixer; comply with referenced ASTM standards for mixing time and water content.
- C. Mortar for Unit Masonry: Comply with ASTM C 270 Proportion Specification for types of mortar required unless otherwise indicated.
 - 1. Limit cementitious materials in mortar to portland cement-lime.
 - 2. Use Type S mortar for reinforced masonry and where indicated.
 - 3. Provide mortar of same design and strength of existing mortar.
- D. Grout for Unit Masonry: Comply with ASTM C 476 for grout for use in construction of reinforced and non-reinforced unit masonry. Use grout of consistency indicated or if not otherwise indicated of consistency (fine or coarse) at time of placement which will completely fill all spaces intended to receive grout.
 - 1. Use fine grout in grout spaces less than 2" in horizontal direction unless otherwise indicated.
 - 2. Use coarse grout in grout spaces 2" or more in least horizontal dimension unless otherwise indicated.

PART 3 - EXECUTION

3.1 INSTALLATION GENERAL

- A. Do not wet concrete masonry units.
- B. Cleaning Reinforcing: Before placing remove loose rust and other coatings from reinforcing.
- C. Thickness: Build composite walls floors and other masonry construction to the full thickness shown. Build single-wythe walls (if any) to the actual thickness of the masonry units using-units of nominal thickness indicated.
- D. Build chases and recesses as shown and as required for the work of other trades. Provide not less than 8" of masonry between chase or recess and jamb of openings and between adjacent chases and recesses.
- E. Leave openings for equipment to be installed before completion of masonry work. After installation of equipment complete masonry work to match existing work immediately adjacent to the opening.
- F. Cut masonry units with motor-driven saws to provide clean sharp unchipped edges. Cut units as required to provide continuous pattern and to fit adjoining work Use full-size units without cutting where possible.
 - 1. Use dry cutting saws to cut concrete masonry units.

- G. Matching Existing Masonry Work: Match coursing bonding and texture of new masonry work with existing work.

3.2 CONSTRUCTION TOLERANCES

- A. General: Construction tolerances shall comply with ACI 530.1. and shall not exceed specified tolerances.
 1. Variation from Plumb: 1/4" in 10' or 3/8" in 20'.
 2. Variation from Level: 1/4" in 20'.
 3. Variation from Location: 1/2" in 20'.
 4. Variation in Width: 1/4" or plus 1/2".
 5. Variation in Joint Size: Plus or minus 1/8" 1/2" maximum joint.

3.3 MASONRY

- A. Layout work for accurate spacing of surface bond patterns with uniform joint widths and to accurately locate openings movement-type joints returns and offsets. Avoid the use of less-than-half size units at corners jambs and wherever possible at other locations.
- B. Built-In Work: As the work progresses build in items specified under this and other sections of these specifications. Fill in solidly with masonry around built-in items.
 1. Fill space between frames and masonry solidly with mortar.
 2. Where built-in items are to be embedded in cores of hollow masonry units place a layer of metal lath in the joint below and rod mortar or grout into core. Fill cores in hollow concrete masonry units with grout 3 courses (24") under bearing plates beams lintels posts and similar items unless otherwise indicated.

3.4 MORTAR BEDDING AND JOINTING

- A. Maintain joint widths shown except for minor variations required to maintain bond alignment. If not shown lay walls with 3/8" joints.
- B. Cut joints flush for masonry walls which are to be concealed or to be covered by other materials unless otherwise indicated.
- C. Remove masonry units disturbed after laying; clean and reset in fresh mortar. Do not pound corners of jambs to shift adjacent stretcher units which have been set in position. If adjustments are required remove units clean off mortar and reset in fresh mortar.

3.5 HORIZONTAL JOINT REINFORCING

- A. General: Provide continuous horizontal joint reinforcement as indicated. Install longitudinal side rods in mortar for their entire length with a minimum cover of 5/8" on exterior side of walls 1/2" elsewhere; rap reinforcement a minimum of 6".
- B. Cut or interrupt joint reinforcement at control and expansion joints unless otherwise indicated.
- C. Reinforce hollow concrete masonry walls with continuous horizontal joint reinforcement.

3.6 ANCHORING MASONRY WORK

- A. General: Provide anchor devices of the type required.
- B. Anchor masonry to structural members where masonry abuts or faces structural members to comply with the following:
 - 1. Provide an open space not less than 1" in width between masonry and structural member unless otherwise indicated. Keep open space free of mortar or other rigid materials.
 - 2. Anchor masonry to structural members with flexible anchors embedded in masonry joints and attached to structure.
 - 3. Space anchors as indicated but not more than 24" O.C. vertically and 36" O.C. horizontally.

3.7 CONTROL JOINTS

- A. General: Provide vertical and horizontal expansion control and isolation joints in masonry where shown. Build-in related items as the masonry work progresses.

3.8 REPAIRING POINTING AND CLEANING

- A. Remove and replace masonry units that are loose chipped broken stained or otherwise damaged or that do not match adjoining units. Install new units to match adjoining units; install in fresh mortar pointed to eliminate evidence of replacement.
- B. Pointing: During the tooling of joints enlarge voids and holes except weep holes and completely fill with mortar. Point up joints including corners openings and adjacent construction to provide a neat uniform appearance. Prepare joints for sealant application.
- C. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.

END OF SECTION 042000

SECTION 055000 - METAL FABRICATIONS

PART 1 - GENERAL

1.1 SUMMARY

- A. The Work of this Section includes but not necessarily limited to the following.
1. Miscellaneous framing and supports.
 2. Rough hardware.
 3. Loose bearing and leveling plates.
 4. Concealed supports for countertops shelves doors walls and mounted assemblies
 5. Provide all structural suspension and bracing systems as indicated or required.
 - a. Contractor shall provide all supplemental suspension bracing and backing plates for assemblies including but not limited to fixtures partitions wall assemblies door assemblies or other items as required no exceptions. if assemblies are not indicated Contractor shall provide structural data and shop drawings as required to complete assemblies.

1.2 SUBMITTALS

- A. Product Data: Submit product data for products used in miscellaneous metal fabrications including paint products and grout.
- B. Shop Drawings: Submit shop drawings for fabrication and erection of metal fabrications. Include plans elevations and details of sections and connections. Show anchorage and accessory items. Provide templates for anchors and bolts installed by others. Show new and each type of repair details proposed for the repair/replacement of the steel assemblies.
1. Where fabrications are indicated to comply with design loadings include structural computations material properties and other information needed for structural analysis.
 2. Structural data shall be signed and sealed by the qualified professional engineer who was responsible for their preparation.
- C. Structural Requirements: Portions of the work are supported on existing building elements. Portions of the work will be supported on secondary structural members that shall be provided and designed by the Contractor. Contractor shall provide all secondary steel to anchor and support assemblies to the structure as required by code and provide acceptable requirements for each assembly.
1. Provide anchoring/Bracing systems and assemblies which result in attachments developing the capability to sustain the following forces generated by the supported element (individual member or assembly) acting separately based on the yield strength of the material:
 - a. A total force of 4 times the dead weight of the element supported applied vertically downward through the element's center of gravity combined with loads caused by thermal movements.
 - b. A total force of 2 times the dead weight of the element applied horizontally outward through the center of gravity of the element combined with loads caused by thermal movements.
- D. Samples: Submit samples representative of materials and finished products as may be requested by Architect.

- E. Certifications: Submit welding certificates certifying that welders comply with requirements of "Quality Assurance" article.

1.2 QUALITY ASSURANCE

- A. Fabricator: Firm experienced in successfully producing metal fabrications similar to those required for this Project.
- B. Installer: Arrange for installation of metal fabrications by same firm that fabricated them.
- C. Welding: Qualify welding processes and operators in accordance with AWS D1.1 "Structural Welding Code - Steel" D1.3 "Structural Welding Code - Sheet Steel.@
- D. Engineer Qualifications: Professional engineer licensed to practice in the State of New York and experienced in structural engineering of metal fabrications similar to those indicated for this Project.

1.3 PROJECT CONDITIONS

- A. Field Measurements: Where metal fabrications are indicated to fit walls and other construction verify dimensions by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1.4 COORDINATION

- A. Coordinate installation of anchorages for metal fabrications. Furnish setting drawings templates and directions for installing anchorages including sleeves inserts anchor bolts and items with integral anchors that are to be embedded in substrate. Deliver such items to Project site in time for installation.

PART 2 - PRODUCTS

2.1 FERROUS METALS

- A. Metal Surfaces General: For exposed metal fabrications provide materials selected for their surface flatness smoothness and freedom from surface blemishes.
 - 1. Do not use materials whose exposed surfaces exhibit pitting seam marks roller marks rolled trade names roughness and for steel sheet variations in flatness exceeding those permitted by reference standards for stretcher leveled sheet.
 - 2. Metals exposed to exterior or wet areas and shall be galvanized.
- B. Steel Plates Shapes and Bars: ASTM A 36. metal fabrications shall be galvanized in wet or exterior assemblies.
- C. Structural Steel Sheet: Cold-rolled ASTM A 611; or hot-rolled ASTM A 570 grade as required by design loading.
- D. Galvanized Steel Sheet: ASTM A 446; Grade A and G90 coating designation unless otherwise indicated.
- E. Gray Iron Castings: ASTM A 48 Class 30.
- F. Malleable Iron Castings: ASTM A 47 Grade 32510.

- G. Brackets Flanges and Anchors: Cast or formed metal of the same type material and finish as supported rails unless otherwise indicated.
- H. Welding Rods and Bare Electrodes: Select in accordance with AWS specifications for the metal alloy to be welded.

2.2 GROUT AND ANCHORING CEMENT

- A. Non-shrink Nonmetallic Grout: Premixed factory-packaged non-staining noncorrosive nongaseous grout complying with CE CRD- C 621 and recommended by manufacturer for interior and exterior use.

2.3 FASTENERS

- A. General: Provide zinc-coated fasteners where exposed to moisture. Select fasteners for the type grade and class required.
- B. Bolts and Nuts: Regular hexagon head type ASTM A 307 Grade A.
- C. Lag Bolts: Square head type FS FF-B-561.
- D. Machine Screws: Cadmium plated steel FS FF-S-92.
- E. Plain Washers: Round carbon steel FS FF-W-92.
- F. Expansion Anchors: FS FF-S-325 Group VIII Type I; and machine bolts complying with FS FF-B-575 Grade 5.
- G. Toggle Bolts: Tumble-wing type FS FF-B-588 type class and style as required.
- H. Lock Washers: Helical spring type carbon steel FS FF-W-84.

2.4 ROUGH HARDWARE

- A. Furnish bent or otherwise custom fabricated bolts plates anchors hangers dowels and other miscellaneous steel and iron shapes as required for framing and supporting woodwork and for anchoring or work to concrete or other structures. Straight bolts and other stock rough hardware items are specified in Section 061000 -Rough Carpentry.
- B. Fabricate items to sizes shapes and dimensions required. Furnish malleable-iron washers for heads and nuts which bear on wood structural connections; elsewhere furnish steel washers.

2.5 MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Provide steel framing and support which are not a part of structural work as required to complete work.
 - 1. Provide all supplementary concealed support framing and bracing for all installed assemblies to include but not be limited to wall assemblies glazed/Special wall and door assemblies and other construction as required for secure and complete installations.
- B. Fabricate units to sizes shapes and profiles required to support other construction. Fabricate from structural steel of welded construction using mitered joints for field connection. Cut drill and tap units to receive other work.

1. Equip units with integrally welded anchors for embedment. Furnish inserts if units must be installed after work is placed.
2. Except as otherwise indicated space anchors 24" inches O.C. Provide anchors 1-1/4" inches wide x 1/4" inch x 8" inches long.

2.6 LOOSE BEARING AND LEVELING PLATES

- A. Provide loose bearing and leveling plates for steel items bearing on masonry or concrete construction. Drill plates to receive anchor bolts and for grouting.
 1. Galvanize plates after fabrication.

2.7 PAINT

- B. Shop Primer for Ferrous Metal: Fabricator's standard fast-curing lead-free alkyd primer selected for compatibility with finish paint; complying with performance requirements of FS TT-P-645.
- C. Galvanizing Repair Paint: Paint with dry film containing not less than 94 percent zinc dust by weight and complying with SSPC-Paint-20.
- D. Bituminous Paint: Cold-applied asphalt mastic complying with SSPC-Paint 12 except containing no asbestos fibers.

2.7 FABRICATION GENERAL

- A. Form metal fabrications of size thickness and shapes indicated but not less than needed to comply with performance requirements. Work to dimensions on shop drawings using proven details of fabrication and support.
- B. Form exposed work true to line and level with accurate angles and surfaces and straight sharp edges. Ease exposed edges slightly.
 1. Remove sharp edges on exposed surfaces.
- C. Allow for thermal movement resulting from 100 deg. F change (range) in air temperature in the design fabrication and installation of installed metal assemblies to prevent buckling opening up of joints and overstressing of welds and fasteners.
- D. Shear and punch metals cleanly and accurately. Remove burrs. Remove sharp or rough areas on exposed traffic surfaces.
- E. Ease exposed edges to a radius of approximately 1/32" inch. Form bent-metal corners to smallest radius possible without impairing work.
- F. Weld corners and seams continuously to comply with AWS recommendations and the following:
 1. Minimize distortion and develop strength of base metals.
 2. Obtain fusion without under cut or overlap.
 3. Remove welding flux immediately.
 4. Finish exposed welds smooth and flush with adjacent surfaces.
- G. Form exposed connections with hairline joints flush and smooth using concealed fasteners where possible. Use Phillips flat-head fasteners where exposed. Locate joints where least conspicuous.

- H. Provide for anchorage of type indicated. Fabricate and space anchoring devices to provide adequate support for intended use.
- I. Preassemble items in shop where possible. Disassemble units only as necessary for shipping and handling. Use connections that maintain structural value of joined pieces.
- J. Cut reinforce drill and tap miscellaneous metal work as required to receive finish hardware screws and similar items.
- K. Fabricate joints that will be exposed to weather in a manner to exclude water or provide weep holes where water may accumulate.

2.8 FINISHES GENERAL

- A. Comply with NAAMM "Metal Finishes Manual" for recommendations relative to application and designations of finishes.
- B. Finish metal fabrications after assembly.

2.9 STEEL AND IRON FINISHES

- A. Galvanizing: For galvanized items apply zinc-coating by the hot-dip process in compliance with the following requirements:
 - 1. ASTM A 153 for galvanizing iron and steel hardware.
 - 2. ASTM A 123 for galvanizing iron and steel shapes plates bars and strip 0.0299" inch thick and heavier.
- B. Preparation for Shop Priming: Prepare uncoated ferrous metal surfaces to comply with minimum requirements indicated below:
 - 1. Interiors (SSPC Zone 1A): SSPC-SP3 "Power Tool Cleaning."
- C. Apply shop primer to uncoated metal except surfaces with galvanized finish or to be embedded in concrete sprayed-on fireproofing or masonry. Comply with SSPC-PA1 "Paint Application Specification No. 1" for shop painting.
 - 1. Finish Paint: To match Approved sample.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Coordinate and furnish anchorages setting drawings diagrams and directions for installation of anchorages that are to be embedded in concrete or masonry. Coordinate delivery of such items.

3.2 INSTALLATION GENERAL

- A. Anchors: Provide anchors and fasteners where necessary for securing metal fabrications to in-place construction.
- B. Cutting Fitting and Placement: Perform cutting drilling and fitting required for installation of metal fabrications. Set metal fabrications accurately in location alignment and elevation; with edges and surfaces level plumb true and free of rack; and measured from established lines and levels.

- C. Provide temporary bracing or anchors in formwork for items that are to be built into concrete masonry or similar construction.
- D. Fit exposed connections accurately to form hairline joints. Weld connections that cannot be shop welded. Do not weld cut or abrade units which have been hot-dip galvanized after fabrication.
- E. Field Welding: Comply with AWS Code for welding appearance and quality of welds made methods used in correcting welding work and as required for shop welding.
- F. Corrosion Protection: Coat concealed surfaces of aluminum that will come into contact with dissimilar materials with a heavy coat of bituminous paint or zinc chromate primer.
- G. Manufactured Items: Install manufactured products to comply with manufacturer's instructions unless otherwise shown.

3.3 INSTALLING MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Install framing and support to comply with requirements of items being supported including manufacturers' written instructions and requirements indicated on Shop Drawings.
- B. Support steel members on solid grouted masonry or concrete. Secure members with anchor bolts embedded in grouted masonry or concrete.
- C. Where grout space under bearing and plates is indicated at members supported on concrete or masonry install as specified above for setting and grouting bearing and leveling plates.

3.4 ADJUSTING AND CLEANING

- A. Immediately after erection clean field welds bolted connections and abraded areas of shop paint and paint exposed areas with same material as used for shop painting. Comply with SSPC-PA 1 to provide a minimum dry film thickness of 2.0 mils.
- B. For galvanized surfaces clean welds bolted connections and abraded areas and apply galvanizing repair paint to comply with ASTM A 780.

END OF SECTION 055000

SECTION 055313 - DRAIN AND GRATING ASSEMBLIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: The Work of this Section includes but is not limited to the following:
 - 1. Metal bar gratings with metal frames and supports.
 - 2. Metal frames and supports for gratings.
 - 3. Custom trench Drain assemblies.

1.2 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Gratings shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated.
 - 1. Uniform load of 250 lbf/sq. ft. or concentrated load of 300 lbf Min whichever produces the greater stress. Provide vehicle rated loading as approved by Engineer.
 - 2. Limit deflection to L/360 or 1/4" inch whichever is less.

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's specifications and installation instructions details of construction relative to materials dimensions of individual components profiles and finishes.
 - 1. Clips and anchorage devices for gratings.
 - 2. Coordinate waterproofing tile and drain connections.
- B. Shop Drawings: Submit shop drawings showing layout and types of gratings and frames full-scale sections of typical installations details of patterns or designs anchors and accessories.
 - 1. Coordinate shop drawing submittal with concrete/tile work showing recess for installation of frames.
 - 2. Indicate removable lockdowns where required.
- C. Delegated-Design Submittal: For gratings including manufacturers' published load tables.
- D. Welding certificates.

1.4 QUALITY ASSURANCE

- A. Single-Source Responsibility: Obtain grates and frames from one source from a single manufacturer.
- B. Comply with New York State and Local Building Codes ADA requirements and other authorities having jurisdiction.

1.5 COORDINATION

- A. Coordinate installation of anchorages for gratings grating frames and supports. Furnish setting drawings templates and directions for installing anchorages including sleeves inserts anchor bolts and items with integral anchors that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

1.6 FIELD CONDITIONS

- A. Field Measurements: Verify actual locations of walls, drains flashings and other construction contiguous with gratings by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 PRODUCTS

- A. Products General: Subject to compliance with requirements provide the following products in dimensions indicated or if not indicated as selected by the Architect.:

- 1. Product: Architectural grill: AG10 Stainless steel

2.2 MATERIALS

- A. General: Provide patterns and profiles of materials including tread surface materials and finishes as indicated or specified. Where not indicated provide finish patterns and profiles selected by Architect from manufacturer's full range of products.

- 1. Stainless-Steel Sheet Strip Plate and Flat Bars: ASTM A 666 Type 304.

2.3 METAL BAR GRATINGS

- A. Metal Bar Grating Standards: Comply with NAAMM MBG 531 "Metal Bar Grating Manual."

- B. Rectangular Welded Steel Grating:

- 1. Bearing Bar Spacing: ¼" inches O.C.
- 2. Bearing Bar Depth: ½" inch unless otherwise required to comply with structural performance requirements.
- 3. Bearing Bar Thickness: 1/8" inch unless otherwise required to comply with structural performance requirements.
- 4. Crossbar Spacing: as required to meet performance requirements.
- 5. Traffic Surface: Plain.
- 6. Steel Finish: Stainless steel Satin polish.

2.4 FASTENERS

- A. General: Unless otherwise indicated provide Type 316 stainless-steel fasteners. Select fasteners for type grade and class required.

- B. Stainless-Steel Bolts and Nuts: Regular hexagon-head annealed stainless-steel bolts nuts and where indicated flat washers; ASTM F 593 for bolts and ASTM F 594 for nuts Alloy Group 1 or Group 2.

- C. Plain Washers: Round ASME B18.22.1.

- D. Lock Washers: Helical spring type ASME B18.21.1.

2.5 MISCELLANEOUS MATERIALS

- A. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187/D 1187M.

2.6 FABRICATION

- A. Shop Assembly: Fabricate grating sections in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.
- B. Fabricate frame members in single lengths or where frame dimensions exceed maximum available lengths provide minimum number of pieces possible with hairline joints equally spaced and pieces spliced together by means of straight connecting pins.
- C. Cut drill and punch material cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32" inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- D. Form from materials of size thickness and shapes indicated but not less than that needed to support indicated loads.
- E. Fit exposed connections accurately together to form hairline joints.
- F. Provide for anchorage of type indicated coordinate with supporting structure. Fabricate and space the anchoring devices to secure gratings frames and supports rigidly in place and to support indicated loads.
- G. Fabricate cutouts in grating sections for penetrations indicated. Arrange cutouts to permit grating removal without disturbing items penetrating gratings.
 - 1. Edge-band openings in grating that interrupt four or more bearing bars with bars of same size and material as bearing bars.
- H. Do not notch bearing bars at supports to maintain elevation.

2.7 GRATING FRAMES AND SUPPORTS

- A. Fabricate from metal shapes plates and bars of welded construction to sizes shapes and profiles indicated and as necessary to receive gratings. Miter and weld connections for perimeter angle frames. Cut drill and tap units to receive hardware and similar items.
 - 1. Unless otherwise indicated fabricate from same metal as gratings.
 - 2. Equip units indicated to be cast into concrete or built into masonry with integrally welded anchors. Unless otherwise indicated space anchors 24" inches O.C.
- B. Hidden locking devices shall be used to prevent warping and rattling. The number of lockdowns to be used shall be in accordance with manufacturer recommendations.
- C. Finish: Match gratings

PART 3 - EXECUTION

3.1 INSTALLATION GENERAL

- A. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing gratings to in-place construction. Include threaded fasteners for concrete and masonry inserts through-bolts lag bolts and other connectors.

- B. Cutting Fitting and Placement: Perform cutting drilling and fitting required for installing gratings. Set units accurately in location alignment and elevation; measured from established lines and levels and free of rack.
- C. Provide temporary bracing or anchors in formwork for items that are to be built into concrete or masonry.
- D. Fit exposed connections accurately together to form hairline joints.

3.2 INSTALLING METAL BAR GRATINGS

- A. General: Install gratings to comply with recommendations of referenced metal bar grating standards that apply to grating types and bar sizes indicated including installation clearances and standard anchoring details.
- B. Attach removable units to supporting members with type and size of clips and fasteners indicated or if not indicated as recommended by grating manufacturer for type of installation conditions shown.
- C. Attach nonremovable units to supporting members by welding where both materials are same; otherwise fasten by bolting as indicated above.
 - 1. Provide necessary shims spacers and anchorages for proper location and secure attachment of recessed frames to concrete.

3.3 ADJUSTING AND CLEANING

- A. Clean connections and abraded areas and repair if required.

END OF SECTION 055313

SECTION 055750 - METAL REPAIR AND REFINISHING

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: The Work of this Section shall include but not be limited to the following:
1. Repair and refinish surrounds convector covers and doors as directed.
 2. Finish and/or reinstall elements as required.
 3. Installation of new fabrications as required or indicated.
 4. Metal finishing Priming and painting finish systems
 5. Perform all necessary work and provide all material considered necessary for the successful completion of the work.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product specifications and installation instructions for each type of product specified including data showing compliance with Specification requirements.
- B. Submit for approval manufacturer's technical information for each product used in Work including Material Safety Data Sheets (MSD's) and certification that each product complies with specified requirements. Include instructions for handling storage application installation and protection of each product used in Work of this Section.
- C. Samples: Submit samples for verification of materials dimensions profiles and application including the following:
1. Each type of repair or cleaning material for each element.
 2. Abrasive cleaning medium.
 3. Chemical cleaning materials.
 4. Epoxy filler.
 5. Fasteners.
- D. The Contractor shall be responsible for the fabrication finishing and installation of each different type of assembly as well as for the performances for each type of finish. Contractor shall submit a schedule of procedures for each type of work and finish operation.

1.3 QUALITY ASSURANCE

- A. Intent of the Work:
1. This work shall consist of the cleaning and preparation of portions of existing metal assemblies and new structures indicated. the furnishing and application of the coatings.
 - a. Repair and Clean and Refinish Existing Metal Elements. Replicate and Install New Elements as Directed to Replace Damaged Components or New as required. Modify All Elements to Insure proper expansion and contraction Capabilities When Reinstalled. Replace All Fasteners as required.
- B. Fabricator Qualifications: Firm experienced in successfully producing metalwork similar to that indicated for this Project with sufficient production capacity to produce required units without causing delay in the Work.

- C. Installer Qualifications: Arrange for installation of ornamental metalwork specified in this section by same firm which fabricated them.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. All materials shall be new of good quality and without defects that would lessen the quality of the product.
 - 1. All materials shall conform to the specifications and standard practices of the latest editions of the AISC Manual of Metal Construction AISI Specifications for the Design of Cold Formed Members ASTM A6 Standard Specifications for General Requirements for Rolled Metal Plates Shapes Sheets and Bars for Structural Use and AWS D1.1 for welded connections.
- B. The paint materials shall meet the requirements of the following articles of the Standard Specification:
 - 1. Organic Zinc Rich Primer
- C. Miscellaneous Materials:
 - 1. Filler: Two- part epoxy filler such as Super Metal by Belzona or Plastic Metal by Devcon.
 - 2. Coating Removal Pretreatment Material: Pre-Tox 2000 manufactured by Nex-Tec USA Dubuque IA (800) 338-8296. Or as approved

2.2 CLEANING AND PAINTING OF METAL

- A. Description. This work shall consist of the surface scraping preparation and painting of existing Metal. The existing metal shall be prepared and primed. The existing metal shall be prepared and if bare metal is exposed primed.
- B. Surface Preparation: After inspection clean metalwork to be painted. Remove loose rust loose mill scale and spatter slag or flux deposits. Clean metal in accordance with Metal Structures Painting Council (SSPC) as follows and as directed.
 - 1. SP-1 "Solvent Cleaning.
 - 2. SP-2 "Hand-Tool Cleaning."
 - 3. SP-3 "Power-Tool Cleaning."
- C. Painting: Immediately after surface preparation apply metal primer paint in accordance with manufacturer's instructions and at a rate to provide dry film thickness that result in full coverage of joints corners edges and exposed surfaces.

2.3 METAL FINISHES

- A. Preparation for Priming: Prepare uncoated ferrous metal surfaces to comply with requirements indicated
- B. Apply shop primer to uncoated metal except surfaces. Comply with SSPC-PA1 "Paint Application Specification No. 1" for shop painting.

1. Primer Paint colors and gloss to match Architect's sample.
- C. Existing structures shall be cleaned and painted in accordance with requirements of approved Paint System
1. All exposed areas of the existing metal and any other previously painted metal surfaces of the existing structure shall receive one (1) primer coat and 5 mils minimum dry film thickness one (1) intermediate coat 5 mils minimum dry film thickness and one (1) finish coat 3.5 mils minimum dry film thickness
 2. The color of the finish coat shall be to match Architects samples.
 3. Reference Section 099000 for paint types and 099110 Electrostatic Painting.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Following removal or cleaning of each element perform an inspection accompanied by the Owner's Representative to determine the condition of the element.

3.2 CLEANING STRIPPING PREPARATION

A. Examination:

1. Examine each element prior to scraping of finish. Inform the Architect if any element has been damaged and to what extent.

B. Cleaning General

1. Surface Preparation: Prior to painting all loose abrasives paint and residue shall be contained collected removed from the surface area and properly disposed of as specified later in this specification. Painted surfaces of metal damaged by abrasive cleaning or by the Contractor's operations shall be repainted.
2. Perform each cleaning and coating method indicated in a manner which results in uniform coverage of all surfaces including corners moldings and interstices and which produces an even effect without streaking or damage to adjacent surfaces.
3. Apply cleaners and finishes to metal surfaces to comply with manufacturer's recommendations.
4. Upon completion of coating work remove all protective coverings and coatings and clean other coating-spattered surfaces. Remove spattered coatings by proper methods as recommended by coating manufacturer using care not to damage adjacent surfaces.

C. Cleaning/ Stripping: Use methods approved by Architect.

1. Before power tool clean and remove visible oil grease soluble welding residues and salts by the methods outlined in SSPC-SP 1.
2. The surfaces of existing metal in all areas shall be prepared according to SSPC-SP3 Power Tool Cleaning using vacuum-shrouded power tools equipped with HEPA filtration. The surface preparation shall remove all loose rust loose mill scale and loose checked alligatored and peeling paint from the contact surface or SSPC-SP15 Commercial Grade Power Tool Cleaning may be substituted for SSPC-SP3 at no additional cost to the Owner.

Chemical Cleaning Preparation

1. Comply with recommendations of manufacturers of cleaner strippers and coatings for protecting building surfaces against damage from exposure to their products.
2. Protect adjacent surfaces from contact with chemicals and finishes by covering them with liquid strippable masking agent or polyethylene film and waterproof masking tape. Apply masking agent to comply with manufacturer's recommendations. Do not apply liquid masking agent to porous surfaces.

3.3 PAINTING

- A. The manufacturer's written instructions shall be followed for paint storage mixing thinning application ambient conditions and drying times between coats. The surface shall be free of dirt dust and debris prior to the application of any coat. The coatings shall be applied as a continuous film of uniform thickness free of defects including but not limited to runs sags overspray dry spray pinholes voids skips misses and shadow-through. Defects such as runs and sags shall be brushed out immediately during application.
- B. The Architect will approve surface preparation prior to priming.
 1. For Primary connections the surface of the prepared metal shall be primed with an organic zinc rich primer as selected.
- C. The primer shall cure according to the manufacturer's instructions.

3.4 REPAIRS

- A. Provide repairs as indicated elements which require cosmetic repairs only. No weld plated and filler repairs are to be performed where structural durability is necessary.
- B. Provide new malleable filler to be welded where original material is missing. Prepare properly and weld new material in place or weld existing fractures in conformance with applicable AWS reference standards for welding. Fill irregularities in exposed face with filler. Sand filler flush with face of element.

3.5 PROTECTION

- A. Protect all elements during repair or reinstallation from damage or deterioration.
- B. Protect finish of elements from damage during the construction period by use of approved temporary coverings. Remove covering at time of substantial completion.
- C. Restore all finishes damaged by installation and construction to insure that no evidence of corrective work is visible.

3.6 COLLECTION TEMPORARY STORAGE TRANSPORTATION AND DISPOSAL OF WASTE.

- A. The Contractor is responsible for all aspects of waste collection testing and identification handling storage transportation and disposal according to these specifications and all applicable Federal State and Local regulations.

END OF SECTION 055750

SECTION 061000 - ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

- A. The Work of this Section shall include but is not limited to the following:
1. Wood grounds, blocking and furring and other carpentry work which is generally not exposed.
 2. Plywood backing panels for equipment and mirrors.

1.2 SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.
1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements. Indicate type of preservative used and net amount of preservative retained.
 2. Include data for fire-retardant treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements. Include physical properties of treated materials based on testing by a qualified independent testing agency.
 3. For products receiving a water-borne treatment include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.
 4. Include copies of warranties from chemical treatment manufacturers for each type of treatment.
- B. Material Certificates: Submit listing of species and grade selected for framing lumber and a signed copy of grading rules showing design values for selected lumber. Design values shall comply with specified requirements and approved by the ALSC Board of Review.
- C. Research/Evaluation Reports: For the following showing compliance with building code in effect for Project:
1. Wood-preservative-treated wood.
 2. Fire-retardant-treated wood.
 3. Power-driven fasteners.
 4. Powder-actuated fasteners.
 5. Research or evaluation reports of the model code organization acceptable to authorities having jurisdiction that evidence compliance of fire-retardant-treated wood with building code in effect for project.

1.3 QUALITY ASSURANCE

- A. Testing Agency Qualifications: For testing agency providing classification marking for fire-retardant treated material an inspection agency acceptable to authorities having jurisdiction that periodically performs inspections to verify that the material bearing the classification marking is representative of the material tested.

1.4 DELIVERY STORAGE AND HANDLING

- A. Delivery and Storage: Keep materials under cover and dry. Stack wood to provide air circulation within and around stacks.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated provide lumber that complies with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
- B. Factory mark each piece of lumber with grade stamp of grading agency.

2.2 WOOD-PRESERVATIVE-TREATED LUMBER

- A. Preservative Treatment by Pressure Process: AWPA C2.
 - 1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium.
- B. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or does not comply with requirements for untreated material.
- C. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
- D. Application: Treat all rough carpentry unless otherwise indicated.

2.3 FIRE-RETARDANT-TREATED MATERIALS

- A. General: Comply with performance requirements in AWPA C20 (lumber) and AWPA C27 (plywood).
 - 1. Use Interior Type A for typical locations unless otherwise indicated.
- B. Identify fire-retardant-treated wood with appropriate classification marking of testing and inspecting agency acceptable to authorities having jurisdiction.

2.4 MISCELLANEOUS LUMBER

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction including the following:
 - 1. Blocking.
 - 2. Nailers.
 - 3. Cants.
 - 4. Furring.
 - 5. Grounds.
- B. For items of dimension lumber size provide Construction or No. 2 grade lumber with 19 percent maximum moisture content of any species.
- C. For concealed boards provide lumber with 19 percent maximum moisture content and any of the following species and grades:
 - 1. Mixed southern pine No. 2 grade; SPIB.
 - 2. Eastern softwoods No. 2 Common grade; NeLMA.
 - 3. Northern species No. 2 Common grade; NLGA.

4. Western woods Construction or No. 2 Common grade; WCLIB or WWPA.

- D. For blocking not used for attachment of other construction Utility Stud or No. 3 grade lumber of any species may be used provided that it is cut and selected to eliminate defects that will interfere with its attachment and purpose.
- E. For blocking and nailers used for attachment of other construction select and cut lumber to eliminate knots and other defects that will interfere with attachment of other work.
- F. For furring strips for installing plywood or hardboard paneling select boards with no knots capable of producing bent-over nails and damage to paneling.

2.5 PLYWOOD BACKING PANELS

- A. Telephone and Electrical Equipment Backing Panels: DOC PS 1 Exposure 1 C-D Plugged fire-retardant treated in thickness indicated or if not indicated not less than 1/2-inch nominal thickness.
- B. Mirror Backing Panels: Marine grade plywood Grade AA.
- C. Concealed APA Performance Rated Panels: Where construction panels will be used for the following concealed types of applications provide APA Performance Rated Panels of thickness shown and complying with requirements indicated for grade designation span rating exposure durability classification and edge detail where applicable.

2.6 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and manufacture.
 - 1. Where rough carpentry is exposed to weather in ground contact pressure-preservative treated or in area of high relative humidity provide fasteners of Type 304 stainless steel.
- B. Nails Brads and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: NES NER-272.
- D. Wood Screws: ASME B18.6.1.
- E. Lag Bolts: ASME B18.2.1.
- F. Bolts: Steel bolts complying with ASTM A 307 Grade A; with ASTM A 563 hex nuts and where indicated flat washers.

PART 3 - EXECUTION

3.1 INSTALLATION GENERAL

- A. Set rough carpentry to required levels and lines with members plumb true to line cut and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate furring nailers blocking grounds and similar supports to comply with requirements for attaching other construction.
- B. Set rough carpentry to required levels and lines with members plumb true to line cut and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate

furring nailers blocking grounds and similar supports to comply with requirements for attaching other construction.

- C. Do not splice structural members between supports unless otherwise indicated.
- D. Provide blocking and framing as indicated and as required to support facing materials fixtures specialty items and trim.
 - 1. Provide metal clips for fastening gypsum board or lath at corners and intersections where framing or blocking does not provide a surface for fastening edges of panels. Space clips not more than 16" inches O.C.
- E. Comply with AWPA M4 for applying field treatment to cut surfaces of preservative-treated lumber.
- F. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated complying with the following:
 - 1. NES NER-272 for power-driven fasteners.
 - 2. Table 2304.9.1 "Fastening Schedule" in ICC's International Building Code.

3.2 WOOD GROUNDS NAILERS AND BLOCKING

- A. Provide where shown for screeding or attachment of other work. Shape as shown and locate for true line and level of work to be attached.
- B. Attach to support applied loading. Countersink exposed bolts and nuts flush with surfaces. Where possible anchor to concrete and masonry during their installation.
- C. Provide permanent grounds of dressed preservative treated key-bevelled lumber not less than 1-1/2" inch wide and of thickness to match finish material. Remove temporary grounds when no longer required.

3.3 WOOD FURRING

- A. Install plumb and level with closure strips at edges and openings. Shim with wood as required for tolerance of finished work.
- B. Provide furring of sizes and spacing as shown on the Drawings.

3.4 INSTALLATION OF CONSTRUCTION PANELS

- A. General: Comply with applicable recommendations in APA Form No. E30 "Engineered Wood Construction Guide" for types of structural-use panels and applications indicated.
- B. Fastening Methods: Fasten panels as indicated below:
- C. Plywood Construction Panels: Screw or nail to supports or substrate.

3.5 PROTECTION

- A. Protect rough carpentry from weather. If despite protection rough carpentry becomes wet apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

END OF SECTION 061000

SECTION 062000- FINISH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Includes: The Work of this Section shall include but not be limited to the following:
1. Interior sub paneling and framing for counter/sink assemblies
 2. Frames and casings as required.
 3. Provide ADA under sink hot piping shield as indicated.
 4. Removable Panels as required.
 5. Metal base and trim

1.2 SUBMITTALS

- A. Product Data: Submit product data for each type of product and process specified in this section and incorporated into items of architectural woodwork.
- B. Material Certificates: Submit listing of species and grade selected for framing lumber and a signed copy of grading rules showing design values for selected lumber. Design values shall comply with specified requirements and American Lumber Standards Committee and FSC Certified wood certification.
- C. Fire-Retardant Data: Submit fire-retardant treatment data for material impregnated by pressure process to reduce combustibility. Include certification by treating plant that treated materials comply with requirements.
- D. Shop Drawings: Submit shop drawings showing location of each woodwork item specified within this section dimensioned plans and elevations large-scale details attachment devices and other components.
1. Include full scale drawings of all exposed-to-view edge conditions.
 2. Submit coordination drawings indicating locations of concealed grounds plates and other required fabrications.
 3. Include fully dimensioned typical and special unit plans and elevations include the following information:
 - a. Tolerances.
 - b. Profiles of members.
 - c. Anchorage system.
 - d. Connections and fasteners.
 - f. Provisions for expansion and contraction.
 - g. Finishes.
 - h. Interface with building construction. And other assemblies
- E. Selection Samples: Submit samples for initial selection purposes of actual units or sections of units showing full range of colors textures and patterns available for each type of material indicated.
1. Metal Base
 2. Laminate Panels.
 3. Counter materials
 2. Applied finish as scheduled.
- F. Verification Samples: Submit samples for verification purposes of the following:

1. Laminate clad panel products 8-1/2" inches by 11" inches for each type color pattern and surface finish including edge conditions with separate samples of unfaced panel product used for core.
 2. Hardware one unit of each type and finish.
 3. Metal Base Trim: 3"x3" Base /Trim molding as specified.
 4. Exposed Fasteners: Sets of three of each different exposed fastener proposed for the finish carpentry work.
 5. Miscellaneous Fasteners: Provide full size samples of each type size and finish of fastening devices which will be incorporated into construction.
 6. Provide assembled units as directed complete with fasteners.
- G. Wood Treatment Data: Submit chemical treatment manufacturer's instructions for handling storing installation and finish of treated material.
1. Fire-Retardant Treatment: Include certification by treating plant that treated materials comply with requirements.
- H. Quality Certification: Submit woodwork Manufacturer's (Fabricator's) certification stating that fabricated woodwork complies with quality grades and other requirements indicated
- 1.3 QUALITY ASSURANCE
- A. Testing Agency Qualifications: For testing agency providing classification marking for fire-retardant treated material an inspection agency acceptable to authorities having jurisdiction that periodically performs inspections to verify that the material bearing the classification marking is representative of the material tested.
- B. Manufacturer Qualifications: Firm experienced in successfully producing architectural woodwork similar to that indicated for this Project with sufficient production capacity to produce required units without causing delay in the Work.
- C. Single-Source Manufacturing and Installation Responsibility: Engage a qualified Manufacturer to assume undivided responsibility for woodwork specified in this section including fabrication finishing and installation
- D. AWI Quality Standard: Comply with applicable requirements of "Architectural Woodwork Quality Standards" published by the Architectural Woodwork Institute (AWI) except as otherwise indicated
- E. Fire-Test-Response Characteristics: Where fire-retardant materials or products are indicated provide materials and products with specified fire-test-response characteristics as determined by testing identical products per test method indicated by UL ITS or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify with appropriate markings of applicable testing and inspecting agency in the form of separable paper label or where required by authorities having jurisdiction imprint on surfaces of materials that will be concealed from view after installation.
- 1.4 DELIVERY STORAGE AND HANDLING
- A. Protect woodwork during transit delivery storage and handling to prevent damage soilage and deterioration.
- B. Do not deliver woodwork until staining wet work grinding and similar operations that could damage soil or deteriorate woodwork have been completed in installation areas. If woodwork must be stored in other than installation areas store only in areas whose environmental conditions meet requirements specified in "Project Conditions.

1.5 PROJECT CONDITIONS

- A. Environmental Conditions: Woodwork Manufacturer and Installer shall advise Contractor of temperature and humidity requirements for woodwork installation and storage areas. Do not install woodwork until required temperature and humidity have been stabilized and will be maintained in installation and storage areas.
- B. Field Measurements: Where woodwork is indicated to be fitted to other construction check actual dimensions of other construction by accurate field measurements before manufacturing woodwork; show recorded measurements on final shop drawings. Coordinate manufacturing schedule with construction progress to avoid delay of Work.

1.6 COORDINATION

- A. Coordinate sizes and locations of framing blocking reinforcements and other related units of Work specified in other Sections to ensure that architectural woodwork can be supported and installed as indicated.
 - 1. Verify all dimensions in the field prior to fabrication of all architectural woodwork to assure proper fit.

PART 2 – PRODUCTS

2.1 BASIC MATERIALS

- A. General: Provide materials that comply with requirements of the AWI woodworking standard for each type of woodwork and quality grade indicated and where the following products are part of woodwork with requirements of the referenced product standards that apply to product characteristics indicated:
 - 1. Hardboard: AHA A135.4
 - 2. Hardwood Plywood: HPMA FE.
- B. Plywood: Veneer faced board core minimum thickness as indicated exterior marine grade using exterior type waterproof glue. At locations where moisture is evident (bathrooms sinks etc.)
- D. Plastic Laminate: NEMA Standard LD3 matte finish unless noted otherwise 0.05 in. thick for all exposed surfaces; backing grade and cabinet liner grade where appropriate. Plastic laminate by manufacturer and in colors and textures as selected by the Architect.
 - 1. Colors and Patterns: Provide plastic laminate matching approved samples unless otherwise indicated.
 - 2. Product: As scheduled
- E. Metal Base and panels: Stainless Steel base and panels as scheduled.
- F. Miscellaneous Products:
 - 1. Fasteners: All fasteners to be concealed unless otherwise indicated where indicated to be exposed provide material driver type and head profile as approved by Architect.
 - a. Wood Screws: FS FF-S-111 type size material and finish as required for the condition of use.
 - b. Nails: FS FF-N-105 type size material and finish as required for the condition of use.
 - c. Anchors: Type size material and finish as required for the condition of use.
 - 2. Adhesives:

- a. For Laminating Plastic Laminate Surfaces: Melamine phenol-resin or resorcinol-resin complying with FS MMM-A-181; type grade and class best suited for the purpose.
 - b. For All Other Uses: Moisture resistant complying with FS MMM-A-125 Type II or MMM-A-188 Type I II or III; type best suited for the purpose.
- F. Inspection Agencies: Inspection agencies and the abbreviations used to reference them with lumber grades and species include the following:
- 1. SPIB - Southern Pine Inspection Bureau.
 - 2. WCLIB - West Coast Lumber Inspection Bureau.
 - 3. WWPA - Western Wood Products Association.
- G. Grade Stamps: Provide lumber with each piece factory-marked with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency grade species moisture content at time of surfacing and mill.

2.2 FABRICATION GENERAL

- A. Wood Moisture Content: Comply with requirements of referenced quality standard for moisture content of lumber in relation to relative humidity conditions existing during time of fabrication and in installation areas.
- B. Fabricate woodwork to dimensions profiles and details indicated.
- C. Complete fabrication including assembly finishing and hardware application before shipment to project site to maximum extent possible. Disassemble components only as necessary for shipment and installation. Where necessary provide ample allowance for scribing trimming and fitting at site.
- D. Provide factory-cut openings to maximum extent possible for receiving hardware appliances plumbing fixtures electrical work and similar items. Locate openings accurately smooth edges of cutouts and where located in countertops seal edges of cutouts with a water-resistant coating.
- E. Factory seal all cut surfaces. Field cuts shall be sealed prior to installation.

2.10 COUNTERS AND CLADDING

- A. Fabricate solid surface material countertops and shelves according to solid surface material manufacturer's written instructions and to the AWI/AWMAC/WI's "Architectural Woodwork Standards."
- B. Plywood subframe and support assemblies: As approved
 - 1. Grade: Premium.
 - 2. Reference 064150 Countertops for additional requirements.
- C. Additional Fabrication Requirements:
 - 1. Trim: For trim in form of boards and worked products provide lumber complying with the following requirements
 - 2. Fixed Frames/panels: Coordinate mounting of fixed panels with concealed framing and other required supports; Secure members to supports isolate installed work from structural building members prevent transferring of loads to finish surfaces or members not designed to support installed work. Construction shall be installed level plumb straight and even as indicated coordinate installation with related trades and adjacent work to ensure proper fit of units and cut outs are located properly.

2.11 LAMINATE PANEL ASSEMBLIES

- A. Quality Standard: Comply with AWI Section 400 requirements for laminate cabinets.
- B. Grade: Custom.
- C. AWI Type of Cabinet Construction: As indicated.
 - 1. Laminate Cladding for Exposed Surfaces: High-pressure decorative laminate complying with the following requirements:
 - 2. General Applications: Provide high pressure decorative laminate, NEMA LD 3, grades as indicated, or if not indicated, as required by woodwork quality standard.
 - 3. High Abuse Applications: Provide high pressure decorative, "color core" with minimum 0.051" thickness laminate complying with NEMA LD 3, for high abuse applications and as indicated.
 - 4. Edge Treatment: Same as laminate cladding on horizontal surfaces, unless otherwise indicated.
 - 5. Provide laminates as indicated.
 - 6. Provide hardware for removeable applications as approved.
- D. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements:
 - 1. Provide Architect's selections from laminate manufacturer's full range of colors and finishes, matching approved samples.

2.12 METAL BASE WITH FASTENERS AND ANCHORS

A STAINLESS STEEL

- 1 Sheet, Strip, Plate, and Flat Bar: ASTM A 666, Type 304 .
- 2 Bars and Shapes: ASTM A 276, Type 304 .
- 3 Custom Finish to match samples.

2.13 FASTENERS AND ANCHORS

- A. Screws: Select material type size and finish required for each use. Comply with FS FF-S-111 for applicable requirements.
- B. Nails: Select material type size and finish required for each use. Comply with FS FF-N-105 for applicable requirements.
- C. Anchors: Select material type size and finish required by each substrate for secure anchorage. Provide nonferrous metal or hot-dip galvanized anchors and inserts as required for corrosion resistance. Provide toothed steel or lead expansion bolt devices for drilled-in-place anchors.
- D. Adhesives: Where adhesives are required use epoxy resin type materials only. Comply with manufacturer's recommendations for each application.
 - 1. For adhering panels to substrate indicated provide one of the following:
 - a. Gorilla Brand Premier Glue manufactured by the Gorilla Group.
 - b. Franklin Polyurethane no VOC glue.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Condition woodwork to average prevailing humidity conditions in installation areas prior to installing.
- B. Before installing architectural woodwork examine shop-fabricated work for completion and complete work as required including back priming and removal of packing.
- C. Provide all grounds and other required fabrications which are to be built into other work when required.

3.2 INSTALLATION GENERAL

- A. Quality Standard: Install woodwork to comply with AWI Section 1700 for the same grade specified in Part 2 of this Section for type of woodwork involved.
- B. Install the work plumb level true and straight with no distortions. Shim as required using concealed shims. Install to a tolerance of 1/8" inch in 8" feet-0 inch for plumb and level; with no offset in flush adjoining surface 1/16" inch maximum offsets in revealed adjoining surfaces.
- C. Scribe and cut work to fit adjoining work and refinish cut surfaces or repair damaged finish at cuts.
- D. Fire-Retardant-Treated Wood: Handle store and install fire- retardant-treated wood to comply with recommendations of chemical treatment manufacturer including those for adhesives where used to install woodwork.
- E. Anchor woodwork to anchors or blocking built in or directly attached to substrates. Secure to grounds stripping and blocking with countersunk concealed fasteners and blind nailing as required for a complete installation. Except where prefinished matching fastener heads are required use fine finishing nails for exposed nailing countersunk and filled flush with woodwork and matching final finish where transparent finish is indicated.
- F. Trim/Base: Install with minimum number of joints possible using full-length pieces (from maximum length of lumber available) to the greatest extent possible. Stagger joints in adjacent and related members. Cope at returns and miter at corners.

3.4 ADJUSTMENT CLEANING FINISHING AND PROTECTION

- A. Complete the finishing work specified in this Section to extent not completed at shop or before installation of woodwork. Fill nail holes with matching filler where exposed. Apply specified finish coats including stains and paste fillers if any to exposed surfaces where only sealer/prime coats were applied in shop.
- B. Repair damaged and defective woodwork to eliminate defects where not possible to repair properly replace woodwork. Adjust joinery for uniform appearance.
- C. Clean hardware lubricate and make final adjustments for proper operation.
- D. Clean woodwork on exposed and semi-exposed surfaces. Touch-up shop-applied finishes to restore damaged or soiled areas.
- E. Protect woodwork during remainder of construction period to ensure that work will be without damage or deterioration at time of acceptance.

END OF SECTION 062000

SECTION 064150 - COUNTERTOPS

PART 1 - GENERAL

1.1 SUMMARY

A. The Work of this Section includes but not necessarily limited to the following:

1. Countertops and mounting hardware

1.2 SUBMITTALS

A. Product Data: For the following:

1. For each type of countertop. Include data on physical properties required by referenced ASTM standards.
2. Accessories and other manufactured products.

B. Shop Drawings: Include plans sections details and attachments to other work.

1. Indicate provisions for under counter mounted sinks hardware and accessory items.
2. Provide for ADA requirements.
3. Provide ADA under sink hot piping shield as indicated.

C. Qualification Data: For Installer.

D. Sealant Compatibility Test Report: From sealant manufacturer complying with requirements in Division 7 Section "Joint Sealants" and indicating that sealants will not stain or damage counter material.

E. Maintenance Data: For countertops to include in maintenance manuals. Include Product Data for products used or recommended by Installer and names addresses and telephone numbers of local sources for products.

1.3 QUALITY ASSURANCE

A. Fabricator Qualifications: Shop that employs skilled workers who custom fabricate countertops similar to that indicated for this Project and whose products have a record of successful in-service performance.

B. Installer Qualifications: Fabricator of products.

C. Source Limitations: Obtain each variety of material with resources to provide materials of consistent quality in appearance and physical properties.

1.4 DELIVERY STORAGE AND HANDLING

A. Store counter material on wood A-frames or pallets with non-staining separators and non-staining waterproof covers. Ventilate under covers to prevent condensation.

1.5 PROJECT CONDITIONS

A. Field Measurements: Verify dimensions of construction to receive material countertops by field measurements before fabrication and indicate measurements on Shop Drawings.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements manufacturers offering products which may be incorporated in the work include but are not limited to the following:
 - 1. Caesarstone (Basis of Design)
 - 2. As approved
- B. As scheduled
 - 1. Coordinate with Architectural Finish Specifications for all current products and modifications and for additional requirement

2.2 COUNTERTOPS

- A. Selected Products and Manufacturers: Refer to Architectural Material and Finish Specifications" for all products and manufacturers.

2.3 ADHESIVES GROUT SEALANTS AND MATERIAL ACCESSORIES

- A. General: Use only adhesives formulated and recommended by their manufacturer for the application indicated.
- B. Water-Cleanable Epoxy Grout: ANSI A118.3 chemical-resistant water-cleanable setting and -grouting epoxy.
- C. Adhesive: 2-part epoxy or polyester adhesive formulated specifically for material with an initial set time of not more than 2 hours at 70 deg F.
 - 1. Color: Match adjacent material.
 - 2. Available Products: Subject to compliance with requirements products that may be incorporated into the Work include but are not limited to the following:
 - a. Epoxy Adhesive: Akemi North America; Akepox.
 - b. Epoxy Adhesive: Axson North America Inc. Wood & Material Company; Akabond Epoxy.
- D. Sealant for Countertops: Manufacturer's standard sealant of characteristics indicated below that comply with applicable requirements in Division 7- "Joint Sealants" and will not stain the material.
 - 1. Single-component non staining neutral-curing silicone sealant.
 - 2. Color: As selected by Architect from manufacturer's full range.
- E. Cleaner: Cleaner specifically formulated for types finishes and applications indicated as recommended by producer and if a sealer is specified by sealer manufacturer. Do not use cleaning compounds containing acids caustics harsh fillers or abrasives.
- F. Sealer: Colorless stain-resistant sealer that does not affect color or physical properties of material surfaces as recommended by material producer for application indicated.

1. Available Manufacturers: Subject to compliance with requirements products that may be incorporated into the Work include but are not limited to the following:
 - a. Bostik Findley Inc.
 - b. Custom Building Products.
 - c. Hillyard Inc.

2.4 FABRICATION GENERAL

- A. Select material for intended use to prevent fabricated units from containing cracks seams and starts that could impair structural integrity or function.
 1. Repairs that are characteristic of the varieties specified are acceptable provided they do not impair structural integrity or function and are not aesthetically unpleasing as judged by Architect.
- B. Fabricate countertops in sizes and shapes required to comply with requirements indicated including details on Drawings and Shop Drawings.
 1. Dress joints straight and at right angle to face unless otherwise indicated.
 2. Cut and drill sinkages and holes in material for anchors supports and attachments.
 3. Provide openings reveals and similar features as needed to accommodate adjacent work.
 4. Fabricate molded edges with machines having abrasive shaping wheels made to reverse contour of edge profile to produce uniform shape throughout entire length of edge and with precisely formed arris slightly eased to prevent snipping and matched at joints between units. Form corners of molded edges as indicated with outside corners slightly eased unless otherwise indicated.
 5. Finish exposed faces to comply with requirements indicated for finish to match approved Samples and mockups. Provide matching finish on exposed edges of countertops splashes and cutouts.
- C. Carefully inspect finished units at fabrication plant for compliance with requirements for appearance material and fabrication. Replace defective units.

2.5 COUNTERTOPS

- A. Nominal Thickness: Provide thickness indicated but not less than 7/8 inch. Gage backs to provide units of identical thickness.
- B. Edge Detail: As indicated and approved.
- C. Provide undermount hardware where indicated.
- D. Splashes: Type as indicated.
 1. Height: As indicated.
 2. Top-Edge Detail: As indicated.
- E. Joints: Fabricate countertops in sections for joining in field with joints at locations indicated and as follows:
 1. Bonded Joints: 1/32" inch or less in width.
 2. Grouted Joints: 1/16" inch in width.
 3. Sealant-Filled Joints: 1/16" inch in width.

F. Cutouts and Holes:

1. Fittings: Drill countertops in shop for plumbing fittings dispensers and similar items.
2. Mounting hardware of each type required.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates indicated to receive countertops and conditions which countertops will be installed with Installer present for compliance with requirements for installation tolerances and other conditions affecting performance.
1. For the record prepare written report endorsed by Installer listing conditions detrimental to performance of countertops.
 2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Advise installers of other work about specific requirements for placement of inserts and similar items to be used by countertop Installer for anchoring countertops. Furnish installers of other work with Drawings or templates showing locations of these items.
- B. Clean dirty or stained material surfaces by removing soil stains and foreign materials before setting. Clean units by thoroughly scrubbing and then drenching with clear water. Use only mild cleaning compounds that contain no caustic or harsh materials or abrasives. Allow to dry before installing.

3.3 CONSTRUCTION TOLERANCES

- A. Variation from Plumb: For vertical lines and surfaces do not exceed 1/16" inch in 48" inches .
- B. Variation from Level: Do not exceed 1/8" inch in 96" inches ¼" inch maximum.
- C. Variation in Joint Width: Do not vary joint thickness more than 1/4 of nominal joint width.
- D. Variation in Plane at Joints (Lipping): Do not exceed 1/64"-inch difference between planes of adjacent units.
- E. Variation in Line of Edge at Joints (Lipping): Do not exceed 1/64"-inch difference between edges of adjacent units where edge line continues across joint.

3.4 INSTALLATION OF COUNTERTOPS

- A. General: Install countertops over plywood sub-tops if indicated with full spread of water-cleanable epoxy adhesive.
- B. General: Install countertops by adhering to supports with water-cleanable epoxy adhesive.
- C. Do not cut material in field unless otherwise indicated. If countertops or splashes require additional fabrication not specified to be performed at Project site return to fabrication shop for adjustment.

- D. Use power saws with diamond blades to cut counters. Cut lines straight true and at right angles to finished surfaces unless beveling is required for clearance. Ease edges slightly to prevent snipping.
- E. Set counters to comply with requirements indicated on Drawings and Shop Drawings. Shim and adjust to locations indicated with uniform joints of widths indicated and with edges and faces aligned according to established relationships and indicated tolerances. Install anchors and other attachments indicated or necessary to secure material countertops in place.
- F. Bond joints with adhesive and draw tight as countertops are set. Mask areas of countertops adjacent to joints to prevent adhesive smears.
- G. Space joints with 1/16"-inch gap for filling with grout. Use temporary shims to ensure uniform spacing.
 - 1. Clamp units to temporary bracing supports or each other to ensure that countertops are properly aligned and joints are of specified width.
- H. Complete cutouts not finished in shop. Mask areas of countertops adjacent to cutouts to prevent damage while cutting. Use power saws with diamond blades to cut material. Make cutouts to accurately fit items to be installed and at right angles to finished surfaces unless beveling is required for clearance. Ease edges slightly to prevent snipping.
- I. Install backsplash and end splash by adhering to countertops with material adhesive. Mask areas of countertops and splashes adjacent to joints to prevent adhesive smears. Leave 1/16"-inch gap between splash and wall for filling with sealant. Use temporary shims to ensure uniform spacing.
- J. Grout joints to comply with ANSI A108.10. Remove temporary shims before grouting. Tool grout uniformly and smoothly with plastic tool.
- K. Apply sealant to joints and gaps specified for filling with sealant; comply with Division 7 Section "Joint Sealants." Remove temporary shims before applying sealant.

3.5 ADJUSTING AND CLEANING

- A. In-Progress Cleaning: Clean countertops as work progresses. Remove adhesive grout mortar and sealant smears immediately.
- B. Remove and replace countertops of the following description:
 - 1. Broken chipped stained or otherwise damaged counters. Material may be repaired if methods and results are approved.
 - 2. Defective countertops.
 - 3. Defective joints including misaligned joints.
 - 4. Interior countertops and joints not matching approved Samples and mockups.
 - 5. Interior countertops not complying with other requirements indicated.
- C. Replace in a manner that results in countertops matching approved Samples and mockups complying with other requirements and showing no evidence of replacement.
- D. Clean countertops not less than six days after completion of sealant installation using clean water and soft rags. Do not use wire brushes acid-type cleaning agents cleaning compounds with caustic or harsh fillers or other materials or methods that could damage material.

- E. Sealer Application: Apply sealer to comply with producer's and sealer manufacturer's written instructions.

END OF SECTION 064150

SECTION 072550 - FIREPROOFING

PART 1 - GENERAL

1.1 SUMMARY

- A. The Work of this Section includes but not necessarily limited to the following:
 - 1. New work repairs and patching of existing fireproofing where damaged by new construction work and as required for new work.
 - 2. Accessories and related items as required for complete installation and required fire resistance performance.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data for fireproofing product indicated.
 - 1. Submit manufacturer's product specifications and installation instructions for material required.
- B. Shop Drawings: Submit structural framing plans and other views to show the extent of various types thicknesses fire- resistance ratings locations damaged by new construction Work and any surface preparation of fireproofing systems to be installed
- C. Certificates: Submit the following certificates:
 - 1. Fireproofing manufacturers' certification that their proposed products comply with specification requirements are suitable for the use indicated and will comply with building code requirements in effect for the Project.
 - 2. Certified approvals of the material and approved tested assemblies of testing agencies.
- D. Compatibility and Adhesion Test Reports: From sprayed fire-resistive material manufacturer indicating the following:
 - 1. Materials have been tested for bond with substrates.
 - 2. Materials have been verified by sprayed fire-resistive material manufacturer to be compatible with substrate primers and coatings.
 - 3. Interpretation of test results and written recommendations for primers and substrate preparation needed for adhesion.

1.3 QUALITY ASSURANCE

- A. Single Source Responsibility: Obtain fireproofing materials from a single manufacturer for each different product.
- B. Applicator/Installer Qualifications: Fireproofing shall be applied by a Contractor approved by the fireproofing manufacturer and having the proper equipment in accordance with manufacturer's recommendations.
- C. Fire Performance Characteristics: Provide materials and construction which are identical to those tested for the following fire performance characteristics according to test method indicated by UL or other testing and inspecting agency acceptable to authorities having jurisdiction.

1. Fire Resistance Ratings: As indicated by reference to design designation in UL "Fire Resistance Directory" for fire-rated assemblies in which fireproofing serves as direct-applied protection tested per ASTM E 119.
 2. Surface Burning Characteristics: As indicated for each fireproofing product required tested per ASTM E 84 and listed in UL "Building Materials Directory"
 3. Fire Resistance Rating: Minimum fire resistance rating shall be 2 hours unless indicated on the drawings otherwise.
- D. Testing Agency Qualifications: To qualify for acceptance an independent testing agency hired by the Owner to test sprayed-on fireproofing products must demonstrate to Owners satisfaction based on evaluation of agency-submitted criteria conforming to ASTM E 699 that it has the experience and capability to conduct satisfactorily the testing indicated.
1. Field Inspections: An independent testing laboratory will be employed by the Owner to test random samples as applied to verify thickness fireproofing in accordance with SSPC-PA2 Steel Structures Painting Council Paint Application Specification No. 2 - Measurement of Dry Paint Thickness with Magnetic Gages@ and to test cementitious fireproofing. Inspection shall be executed prior to application of the decorative top coat.
- E. Compatibility and Adhesion Testing: Engage a qualified testing and inspecting agency to test for compliance with requirements for specified performance and test methods.
1. Test for bond per ASTM E 736 and requirements in UL's "Fire Resistance Directory" for coating materials. Provide bond strength indicated in referenced fire-resistance design but not less than minimum specified within this Section.
 2. Verify that manufacturer through its own laboratory testing or field experience has not found primers or coatings to be incompatible with sprayed fire-resistive material.

1.4 DELIVERY STORAGE AND HANDLING

- A. Deliver products to project site in original unopened packages. Include labels with names of products and manufacturers date of manufacture shelf life and UL labels for fire-resistance ratings.
1. Do not use materials whose shelf life has expired.
- B. Store materials inside under cover and in a manner to keep them dry until ready to use. Remove from project site and discard any materials that have been exposed to moisture or have otherwise deteriorated.

1.5 PROJECT CONDITIONS

- A. Ventilate fireproofing by means of natural or where this is inadequate of forced air circulation during and after application until it dries thoroughly. Follow the manufacturers instructions.

1.6 SEQUENCING

- A. Sequence and coordinate application of fireproofing to avoid unnecessary exposure of fireproofing to abrasion and other damage likely to occur during construction operations.
1. Ensure that fireproofing is installed prior to installation of enclosing or concealing Work with sufficient time allowed for inspection testing and correction of defective fireproofing.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements provide fireproofing products as manufactured by one of the following or equal acceptable to the Architect:
1. Carboline Co.; Fireproofing Products Division.
 2. Isolatek International; Cafco Products.
 3. W.R. Grace & Co.
 4. Match existing as approved.

2.2 SPRAYED-ON FIREPROOFING PATCHING MATERIALS

- A. General: For concealed and exposed areas of sprayed-on fireproofing to be patched and/or repaired; provide manufacturer's standard products complying with requirements indicated for material composition and for minimum physical properties representative each product listed measured by standard test methods referenced with each property.
- B. Sprayed-on Fireproofing Material Composition: Factory-mixed cementitious dry formulation of inorganic binders and lightweight mineral aggregates mixed with water at project site to form a slurry for pumping and for dispersal by compressed air introduced at spray nozzle. Products containing mineral wool fibers will not be considered for use on this project.
- C. Physical Properties: Provide sprayed-on fireproof patching materials with the following performance characteristics unless otherwise indicated:
1. Dry Density: 15 lb/cu. ft. for average and individual densities regardless of density indicated in referenced fire-resistance design or greater if required to attain fire-resistance ratings indicated per ASTM E 605 or AWCI Technical Manual 12-A Section 5.4.5 "Displacement Method."
 2. Bond Strength: 200 lbf/sq. ft. per ASTM E 736.
 3. Compressive Strength: 8.25 lbf/sq. in. or 1200 psf; per ASTM E 761.
 4. Corrosion Resistance: No evidence of corrosion per ASTM E 937.
 5. Deflection: No cracking spalling delamination or the like per ASTM E 759.
 6. Effect of Impact on Bonding: No cracking spalling delamination or the like per ASTM E 760.
 7. Air Erosion: Maximum weight loss of 0.005 g/sq. ft. in 24 hours per ASTM E 859. For laboratory tests minimum thickness of sprayed fire-resistive material is 0.75" inch maximum dry density is 15 lb/cu. ft. test specimens are not pre-purged by mechanically induced air velocities and tests are terminated after 24 hours.
 8. Resistance to Mold: Tested per ASTM G21 and show resistance to mold growth for a period of 60 days.
 9. Provide coatings and sealers as per manufacturer.
- D. Color: Material as supplied to the jobsite shall have been formulated by the manufacturer at the factory with a signal colorant. Fireproofing shall dry to a blue color which can be identified through the product matrix to identify specific areas of patched fireproofing.
- E. Selected Products: Provide Retro-Guard as manufactured by W.R. Grace & Co. or one of the following as acceptable to the Architect:
1. Cafco 300 SB@ as manufactured by Isolatek International Cafco Products.
 2. Pyrolite 15 Blue@ as manufactured by Carboline Co. Fireproofing Products Division.
 3. Match existing or as approved.

2.3 AUXILIARY FIREPROOFING MATERIALS

- A. General: Provide auxiliary fire-resistive materials that are compatible with sprayed fire-resistive materials and substrates and are approved by UL or another testing and inspecting agency acceptable to authorities having jurisdiction for use in fire-resistance designs indicated.
- B. Substrate Primers: For use on each substrate and with each sprayed fire-resistive product provide primer that complies with one or more of the following requirements:
 - 1. Primer's bond strength complies with requirements specified in UL's Fire Resistance Directory for coating materials based on a series of bond tests per ASTM E 736.
 - 2. Primer is identical to those used in assemblies tested for fire-test-response characteristics of sprayed fire-resistive material per ASTM E 119 by UL or another testing and inspecting agency acceptable to authorities having jurisdiction.
 - 3. Sealers: Coat with sealer to prevent airborne matter.
- C. Adhesive for Bonding Fireproofing: Type recommended by fireproofing manufacturer to achieve the specified bond and deflection requirements.
- D. Metal Lath: Provide 3.4 lb. per sq. yd. expanded galvanized diamond steel lath with reinforcing and anchorage devices where required for substrate and complying with applicable fire-endurance tests. Provide corner beads and other lathing accessories of standard design and weight.
- E. Accessories: As required to meet the requirements of U.L. designs having the required fire resistance ratings; and as recommended by the system manufacturer.
- F. Temporary Protections: Provide pressure sensitive tapes tarps sheeting and other such devices required to ensure that adjacent materials and finishes not scheduled to receive sprayed-on fireproofing patching/repairs materials are free from overspray contamination and fall-out resulting from application of specified materials/ systems.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Require Installer to examine substrates to determine if they are in satisfactory condition to receive fireproofing.
- B. Rating Requirements:
 - 1. Provide thicknesses as required for compliance with indicated fire-endurance ratings. Extend fireproofing full thickness over entire area of each substrate to be protected. Except as otherwise recommended by manufacturer install body of fireproof covering material in a single course and as follows.
 - 2. Unless otherwise indicated apply sprayed fire-resistive materials in thicknesses and densities required to achieve the fire resistance ratings matching those of the existing adjacent fireproofing as required by Code.

3.2 PREPARATION

- A. Provide ventilation in areas to receive fire resistive coating.
- B. Clean substrates of oil grease rolling compounds incompatible primers and loose mill scale which could impair bond of fireproofing.

- C. Prime substrates where recommended by fireproofing manufacturer.
- D. Cover other Work and existing improvements which might be damaged by fall-out or spatter of fireproofing materials during patching/repair application. Provide temporary enclosure as required to confine fireproofing operations protect the environment and to ensure adequate ambient conditions for temperature and ventilation.

3.3 INSTALLATION GENERAL

- A. Comply with fire-resistive material manufacturer's written instructions for mixing materials application procedures and types of equipment used to mix convey and spray on fire-resistive material as applicable to particular condition of installation and as required to achieve fire-resistance ratings indicated.
- B. Apply sprayed fire-resistive material that meets requirements indicated within this Section and substantiated by test reports with respect to rate of application accelerator use sealers topcoats tamping troweling water overspray or other materials and procedures affecting test results.
- C. Install metal lath as required to comply with fire-resistance ratings and fire-resistive material manufacturer's written recommendations for conditions of exposure and intended use. Securely attach lath to substrate in position required for support and reinforcement of fire-resistive material. Use anchorage devices of type recommended in writing by sprayed fire-resistive material manufacturer. Attach lathing accessories where indicated or required for secure attachment to substrate.
- D. Coat substrates with adhesive before applying fire-resistive material where required to achieve fire-resistance rating or as recommended in writing by sprayed fire-resistive material manufacturer for material and application indicated.
- E. Extend fire-resistive material in full thickness over entire area of each substrate to be protected. Unless otherwise recommended in writing by sprayed fire-resistive material manufacturer install body of fire-resistive covering in a single course.
- F. Spray apply fire-resistive materials to maximum extent possible. Following the spraying operation in each area complete the coverage by trowel application or other placement method recommended in writing by sprayed fire-resistive material manufacturer.
- G. Maintain ambient conditions during installation and for cure period following installation as recommended by manufacturer. Provide ventilation and avoid excessive rate of drying. Protect from exposure to sun.

3.4 INSTALLING CONCEALED SPRAYED FIRE-RESISTIVE MATERIALS

- A. Apply concealed fire-resistive material in thicknesses and densities matching the existing but not less than those required to achieve fire-resistance ratings designated for each condition and comply with requirements for thickness specified or stated.
- B. Apply concealed sprayed-on fire-resistive material in thicknesses required to obtain designated fire-resistance rating in accordance with the NYC Code.

3.5 FIELD QUALITY CONTROL

- A. Repair or replace fireproofing within areas where test results indicate fireproofing does not comply with code or performance requirements. Repair and retest until passing. Repair damage due to testing.

- B. Testing: The Owner will engage a Testing Laboratory or Inspection Agency upon approval by the Architect to inspect and perform the required tests.
 - 1. The testing laboratory will verify thickness and dry density of in-place material in accordance with ASTM E 605 and verify bond strength in accordance with ASTM E 736.
 - a. Test Results: Results of above tests will be made available to all parties at the completion of each floor.
 - b. When test results indicate fireproofing does not comply with the Contract requirements additional random testing will be done within the testing area to determine the extent of noncompliance. This additional testing as well as remedial Work necessary to comply with specified requirements shall be paid for by the Contractor.

3.6 PATCHING AND REPAIRS

- A. Inspect after mechanical electrical and other trades have completed Work in contact with fireproofing material but before sprayed material is covered by subsequent construction.
- B. Perform corrective measures in accordance with fireproofing material Manufacturer's recommendations.
 - 1. Re-spray areas requiring additional fireproofing material to provide the required thickness and replace dislodged or removed material.
 - 2. Spray material for patching by machine directly on point to be patched or into a container and then hand apply. Hand mixing of material is not permitted.
- C. Repair:
 - 1. Re-spray all test and rejected areas.
 - 2. Patch fireproofing material which is removed or disturbed after approval.
- D. Perform final inspection of sprayed areas after patching and repair.

3.7 CLEANING AND PROTECTION

- A. Immediately upon completion of troweled-on operations in each containable area of project remove spatter and fall-out of materials from surfaces of other Work and clean exposed surfaces to remove evidence of soiling.
- B. Cure exposed fireproofing materials in compliance with fireproofing manufacturer's recommendations.
- C. Protect fireproofing in accordance with the manufacturer's recommendations from damage resulting from construction operations so that fireproofing will be without damage or deterioration at time of substantial completion.
- D. Coordinate installation of fireproofing patching/repairs with other Work in order to minimize the need for other trades to cut or remove fireproofing. As other trades successively complete installation of their Work maintain protection of structure afforded by fireproofing by patching any areas which have been removed or damaged prior to concealment of fireproofing by other Work.

END OF SECTION 072550

SECTION 078413 - PENETRATION FIRESTOPPING

PART 1 - GENERAL

1.1 SUMMARY

- A. The Work of this Section includes but not necessarily limited to the following:
1. Through-penetration fire-stopping systems for penetrations through fire-resistance-rated constructions including both empty openings and openings containing penetrating items
 2. Penetrations through fire-resistance-rated construction including both empty openings and openings containing cables pipes ducts conduits and other penetrating items.
 3. Penetrations through smoke barriers and construction enclosing compartmentalized areas involving both empty openings and openings containing penetrating items.
 4. Sealant joints in fire-resistance-rated construction.
 5. Furnishing of dams clips and closures for support and containment of fire-safing materials and installation of dams clips and closures where possible to install after completion of floors walls or other construction.

1.2 PERFORMANCE REQUIREMENTS

- A. General: For penetrations through the following fire-resistance-rated constructions including both empty openings and openings containing penetrating items provide through-penetration fire-stopping systems that are produced and installed to resist spread of fire according to requirements indicated resist passage of smoke and other gases and maintain original fire-resistance rating of construction penetrated.
1. Fire-resistance-rated walls including fire wall fire partitions fire barriers and smoke barriers.
 2. Fire-resistance-rated horizontal assemblies including floors floor/ceiling assemblies and ceiling membranes of roof/ceiling assemblies.
- B. Rated Systems: Provide through-penetration fire-stopping systems with the following ratings determined per ASTM E 814 or UL 1479:
1. F-Rated Systems: Provide through-penetration fire-stopping systems with F-ratings indicated but not less than that equaling or exceeding fire-resistance rating of constructions penetrated.
 2. T-Rated Systems: For the following conditions provide through-penetration fire-stopping systems with T-ratings indicated as well as F-ratings where systems protect penetrating items exposed to potential contact with adjacent materials in occupied floor areas:
 - a. Penetrations located outside wall cavities.
 - b. Penetrations located outside fire-resistance-rated shaft enclosures.
 3. L-Rated Systems: Where through-penetration fire-stopping systems are indicated in smoke barriers provide through-penetration fire-stopping systems with L-ratings indicated at both ambient temperatures and 400 deg F
- C. For through-penetration fires-topping systems exposed to view traffic moisture and physical damage provide products that after curing do not deteriorate when exposed to these conditions both during and after construction.
1. For piping penetrations for plumbing and wet-pipe sprinkler systems provide moisture-resistant through-penetration fire-stopping systems.

2. For floor penetrations with annular spaces exceeding 4 inches in width and exposed to possible loading and traffic. Provide fire-stopping systems capable of supporting floor loads involved either by installing floor plates or by other means.
 3. For penetrations involving insulated piping provide through-penetration fire-stopping systems not requiring removal of insulation.
- D. For through-penetration fire-stopping systems exposed to view provide products with flame-spread and smoke-developed indexes of less than 25 and 450 respectively as determined per ASTM E 84.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: For each through-penetration fire-stopping system show each type of construction condition penetrated relationships to adjoining construction and type of penetrating item. Include fire-stopping design designation of qualified testing and inspecting agency that evidences compliance with requirements for each condition indicated.
1. Submit documentation including illustrations from a qualified testing and inspecting agency that is applicable to each through-penetration fire-stopping system configuration for construction and penetrating items.
 2. Where Project conditions require modification to a qualified testing and inspecting agency's illustration for a particular through-penetration fire-stopping condition submit illustration with modifications marked approved by through-penetration fire-stopping system manufacturer's fire-protection engineer as an engineering judgment or equivalent fire-resistance-rated assembly.
- C. Through-Penetration Fire-stopping System Schedule: Indicate locations of each through-penetration fire-stopping system along with the following information:
1. Types of penetrating items.
 2. Types of constructions penetrated including fire-resistance ratings and where applicable thicknesses of construction penetrated.
 3. Through-penetration fire-stopping systems for each location identified by fire-stopping design designation of qualified testing UL assembly and inspecting agency.
- D. Qualification Data: For Installer.
- E. Product Certificates: For through-penetration fire-stopping system products signed by product manufacturer.
- F. Product Test Reports: From a qualified testing agency indicating through-penetration fire-stopping system complies with requirements based on comprehensive testing of current products.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: A firm that has been approved by FMG according to FMG 4991 "Approval of Fire-stopping Contractors."
- B. Installer Qualifications: A firm experienced in installing through-penetration fire-stopping systems similar in material design and extent to that indicated for this Project whose work has resulted in construction with a record of successful performance.

- C. Installation Responsibility: Assign installation of through-penetration fire-stopping systems and fire-resistive joint systems in Project to a single qualified installer.
- D. Source Limitations: Obtain through-penetration fire-stopping systems for each kind of penetration and construction condition indicated through one source from a single manufacturer.
- E. Fire-Test-Response Characteristics: Provide through-penetration fire-stopping systems that comply with the following requirements and those specified in Part 1 "Performance Requirements" Article:
 - 1. Fire-stopping tests are performed by a qualified testing and inspecting agency. A qualified testing and inspecting agency is UL or another agency performing testing and follow-up inspection services for fire-stopping systems acceptable to authorities having jurisdiction.
 - 2. Through-penetration fire-stopping systems are identical to those tested per testing standard referenced in "Part 1 Performance Requirements" Article. Provide rated systems complying with the following requirements:
 - a. Through-penetration fire-stopping system products bear classification marking of qualified testing and inspecting agency.
 - b. Through-penetration fire-stopping systems correspond to those indicated by reference to through-penetration fire-stopping system designations listed by the following:
 - 1) UL in its "Fire Resistance Directory."
 - 2) OPL in its "Directory of Listed Building Products Materials & Assemblies."
 - 3) ITS in its "Directory of Listed Products."
 - 4) code requirements
- F. Pre-installation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section - "Project Coordination."

1.5 DELIVERY STORAGE AND HANDLING

- A. Deliver through-penetration fire-stopping system products to Project site in original unopened containers or packages with intact and legible manufacturers' labels identifying product and manufacturer date of manufacture lot number shelf life if applicable qualified testing and inspecting agency's classification marking applicable to Project curing time and mixing instructions for multicomponent materials.

1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not install through-penetration fire-stopping systems when ambient or substrate temperatures are outside limits permitted by through-penetration fire-stopping system manufacturers or when substrates are wet due to rain frost condensation or other causes.
- B. Ventilate through-penetration fire-stopping systems per manufacturer's written instructions by natural means or where this is inadequate forced-air circulation.

1.7 COORDINATION

- A. Coordinate construction of openings and penetrating items to ensure that through-penetration fire-stopping systems are installed according to specified requirements.

- B. Coordinate sizing of sleeves openings core-drilled holes or cut openings to accommodate through-penetration fire-stopping systems.
- C. Notify Owner's inspecting agency at least seven days in advance of through-penetration fire-stopping system installations; confirm dates and times on days preceding each series of installations.
- D. Do not cover up through-penetration fire-stopping system installations that will become concealed behind other construction until each installation has been examined by Owner's inspecting agency and building inspector if required by authorities having jurisdiction.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Products: Subject to compliance with requirements provide through-penetration fire-stopping systems approved for each application that are produced by one of the following manufacturers:
 1. Grace W. R. & Co.
 2. Hilti Inc.
 3. Johns Manville.
 4. 3M; Fire Protection Products Division.
 5. Tremco; Sealant/Weatherproofing Division.
 6. USG Corporation.

2.2 FIRE-STOPPING GENERAL

- A. Compatibility: Provide through-penetration fire-stopping systems that are compatible with one another; with the substrates forming openings; and with the items if any penetrating through-penetration fire-stopping systems under conditions of service and application as demonstrated by through-penetration fire-stopping system manufacturer based on testing and field experience.
- B. Accessories: Provide components for each through-penetration fire-stopping system that are needed to install fill materials and to comply with Part 1 "Performance Requirements" Article. Use only components specified by through-penetration fire-stopping system manufacturer and approved by qualified testing and inspecting agency for fire-stopping systems indicated. Accessories include but are not limited to the following items:
 1. Permanent forming/damming/backing materials including the following:
 - a. Slag-/rock-wool-fiber insulation.
 - b. Sealants used in combination with other forming/damming/backing materials to prevent leakage of fill materials in liquid state.
 - c. Fire-rated form board.
 - d. Fillers for sealants.
 2. Collars.
 3. Impaling clips.
 4. Support angles and thread rods.

2.3 FILL MATERIALS

- A. General: Provide through-penetration fire-stopping systems containing the types of fill materials indicated in the Through-Penetration Fire-stopping System Schedule at the end of Part 3 by

referencing the types of materials described in this Article. Fill materials are those referred to in directories of referenced testing and inspecting agencies as "fill" "void" or "cavity" materials.

- B. Cast-in-Place Fire-stopping Devices: Factory-assembled devices for use in cast-in-place concrete floors and consisting of an outer metallic sleeve lined with an intumescent strip a radial extended flange attached to one end of the sleeve for fastening to concrete formwork and a neoprene gasket.
- C. Latex Sealants: Single-component latex formulations that after cure do not re-emulsify during exposure to moisture.
- D. Fire-stopping Devices: Factory-assembled collars formed from galvanized steel and lined with intumescent material sized to fit specific diameter of penetrant.
- E. Intumescent Composite Sheets: Rigid panels consisting of aluminum-foil-faced elastomeric sheet bonded to galvanized steel sheet.
- F. Intumescent Putties: Non-hardening dielectric water-resistant putties containing no solvents inorganic fibers or silicone compounds.
- G. Intumescent Wrap Strips: Single-component intumescent elastomeric sheets with aluminum foil on one side.
- H. Mortars: Prepackaged dry mixes consisting of a blend of inorganic binders hydraulic cement fillers and lightweight aggregate formulated for mixing with water at Project site to form a non-shrinking homogeneous mortar.
- I. Pillows/Bags: Reusable heat-expanding pillows/bags consisting of glass-fiber cloth cases filled with a combination of mineral-fiber water-insoluble expansion agents and fire-retardant additives.
- J. Silicone Foams: Multi-component silicone-based liquid elastomers that when mixed expand and cure in place to produce a flexible non-shrinking foam.
- K. Silicone Sealants: Single-component silicone-based neutral-curing elastomeric sealants of grade indicated below:
 - 1. Grade: Pourable (self-leveling) formulation for openings in floors and other horizontal surfaces and non-sag formulation for openings in vertical and other surfaces requiring a non-slumping gunnable sealant unless indicated fire-stopping system limits use to non-sag grade for both opening conditions.
 - 2. Grade for Horizontal Surfaces: Pourable (self-leveling) formulation for openings in floors and other horizontal surfaces.
 - 3. Grade for Vertical Surfaces: Non-sag formulation for openings in vertical and other surfaces.
- L. For those products requiring mixing before application comply with through-penetration fire-stopping system manufacturer's written instructions for accurate proportioning of materials water (if required) type of mixing equipment selection of mixer speeds mixing containers mixing time and other items or procedures needed to produce products of uniform quality with optimum performance characteristics for application indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

FIT STATE UNIVERSITY OF NEW YORK
227 West 27th Street New York N.Y 10001
DUBINSKY BUILDING MEN'S LOCKER ROOM
SHOWER & RESTROOM UPGRADES

PENETRATION FIRESTOPPING
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- A. Examine substrates and conditions with Installer present for compliance with requirements for opening configurations penetrating items substrates and other conditions affecting performance of work.
 - 1. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Surface Cleaning: Clean out openings immediately before installing through-penetration fire-stopping systems to comply with fire-stopping system manufacturer's written instructions and with the following requirements:
 - 1. Remove from surfaces of opening substrates and from penetrating items foreign materials that could interfere with adhesion of through-penetration fire-stopping systems.
 - 2. Clean opening substrates and penetrating items to produce clean sound surfaces capable of developing optimum bond with through-penetration fire-stopping systems. Remove loose particles remaining from cleaning operation.
 - 3. Remove laitance and form-release agents from concrete.
- B. Priming: Prime substrates where recommended in writing by through-penetration fire-stopping system manufacturer using that manufacturer's recommended products and methods. Confine primers to areas of bond; do not allow spillage and migration onto exposed surfaces.
- C. Masking Tape: Use masking tape to prevent through-penetration fire-stopping systems from contacting adjoining surfaces that will remain exposed on completion of Work and that would otherwise be permanently stained or damaged by such contact or by cleaning methods used to remove smears from fire-stopping system materials. Remove tape as soon as possible without disturbing fire-stopping system's seal with substrates.

3.3 THROUGH-PENETRATION FIRESTOPPING SYSTEM INSTALLATION

- A. General: Install through-penetration fire-stopping systems to comply with Part 1 "Performance Requirements" Article and with fire-stopping system manufacturer's written installation instructions and published drawings for products and applications indicated.
- B. Install forming/damming/backing materials and other accessories of types required to support fill materials during their application and in the position needed to produce cross-sectional shapes and depths required to achieve fire ratings indicated.
 - 1. After installing fill materials and allowing them to fully cure remove combustible forming materials and other accessories not indicated as permanent components of fire-stopping systems.
- C. Install fill materials for fire-stopping systems by proven techniques to produce the following results:
 - 1. Fill voids and cavities formed by openings forming materials accessories and penetrating items as required to achieve fire-resistance ratings indicated.
 - 2. Apply materials so they contact and adhere to substrates formed by openings and penetrating items.
 - 3. For fill materials that will remain exposed after completing Work finish to produce smooth uniform surfaces that are flush with adjoining finishes.

3.4 IDENTIFICATION

- A. Identify fire-stopping with preprinted metal or plastic labels. Attach labels permanently to surfaces adjacent to and within 6 inches of fire-stopping edge so labels will be visible to anyone seeking to remove penetrating items or fire-stopping. Use mechanical fasteners or self-adhering-type labels with adhesives capable of permanently bonding labels to surfaces on which labels are placed. Include the following information on labels:
- B. The words "Warning – Fire-stopping - Do Not Disturb. Notify Building Management of Any Damage."
 - 1. Contractor's name address and phone number.
 - 2. Designation of applicable testing and inspecting agency.
 - 3. Date of installation.
 - 4. Manufacturer's name.
 - 5. Installer's name.

3.5 FIELD QUALITY CONTROL

- A. Inspecting Agency: Owner will engage a qualified independent inspecting agency to inspect through-penetration fire-stoppings. Independent inspecting agency shall comply with ASTM E 2174 requirements including those related to qualifications conducting controlled inspections and preparing test reports.
 - 1. Fire-stopping is subject to special inspection in accordance with the Building Code.
- B. Where deficiencies are found repair or replace through-penetration fire-stopping systems so they comply with requirements.
- C. Proceed with enclosing through-penetration fire-stopping systems with other construction only after inspection reports are issued and fire-stopping installations comply with requirements.

3.6 CLEANING AND PROTECTING

- A. Clean off excess fill materials adjacent to openings as Work progresses by methods and with cleaning materials that are approved in writing by through-penetration fire-stopping system manufacturers and that do not damage materials in which openings occur.
- B. Provide final protection and maintain conditions during and after installation that ensure that through-penetration fire-stopping systems are without damage or deterioration at time of Substantial Completion. If despite such protection damage or deterioration occurs cut out and remove damaged or deteriorated through-penetration fire-stopping systems immediately and install new materials to produce systems complying with specified requirements.

END OF SECTION 078413

SECTION 079210 – JOINT SEALANTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: The Work of this Section shall include but not be limited to the following:
 - 1. Joints in vertical surfaces.
 - 2. Joints in horizontal surfaces.
 - 3. Primers bond breakers backer rods and other accessory materials for interior joints.

1.2 DEFINITIONS

- A. Joint: The reference to the term “joint” as indicated on the Contract Documents shall be defined as the space between similar and dissimilar building components systems and similar construction elements; joints shall include but not be limited to the connection points of materials to form and unite surfaces. Joints may be structural acoustical or required to meet other performances specified.
 - 1. The term joint shall include surface preparation priming/conditioning accessory materials sealants and tooling of the specified materials resulting in a completed system.

1.3 SYSTEM PERFORMANCE REQUIREMENTS

- A. Provide joint sealers that have been produced and installed to establish and maintain watertight or airtight continuous seals.
- B. Sealants shall not experience adhesive or cohesive failure. Sealants shall withstand movements up to the limits prescribed by the manufacturer. Exposed sealant surface shall not crack or bubble or craze. Sealants and primers shall not stain adjacent materials. Sealants shall not be adhered to or placed against the edge of a laminated glass unit interlayer.

1.4 SUBMITTALS

- A. Material Safety Data Sheets (MSDS) for all applicable products. Applicable products include but are not limited to adhesives sealant carpets paints and coatings applied on the interior of the building. MSDS shall indicate the Volatile Organic Compound (VOC) limits of products submitted (If an MSDS does not include a product’s VOC content then product data sheets manufacturer literature or a letter of certification from the manufacturer can be submitted in addition to the MSDS to indicate the VOC content).
- B. Product Data: Submit manufacturer's technical data for each product required including instructions for preparation and application.
- C. Samples: Submit manufacturer's standard bead samples consisting of strips of actual products showing full range of colors available.
- D. Product Test Reports: Based on comprehensive testing of product formulations performed by a qualified testing agency indicating that sealants comply with requirements.
- E. Certificates: Submit certificates from manufacturers that their products comply with specifications and are suitable for the use indicated.
- F. Warranties: Special warranties specified in this Section.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has completed 2 joint sealant applications similar in scope material and design to this Project within the last 5 years.
- B. Source for Materials: Obtain joint sealer materials from a single manufacturer for each different product.
- C. Periodically test sealants in place for adhesion using methods recommended by sealant manufacturer. Promptly replace any sealant which does not adhere or fails to cure.
- D. Sealant manufacturers shall review Shop Drawings to verify acceptability of sealant application with proper testing for adhesion and compatibility.

1.6 DELIVERY STORAGE AND HANDLING

- A. Deliver materials in original unopened containers with labels indicating manufacturer expiration date and other pertinent data.
- B. Store and handle materials to prevent their deterioration or damage due to moisture temperature changes contaminants or other causes.

1.7 PROJECT CONDITIONS

- A. Environmental Conditions: Do not install joint sealers when air and surface temperatures are outside the limits permitted by joint sealer manufacturer or when joint substrates are wet or dirty.
- B. Joint Widths: Do not proceed with installation of joint sealers when joint widths are less than allowed by joint sealer manufacturer.

1.8 WARRANTY

- A. Submit a written warranty agreeing to repair or replace defective joint sealer materials or workmanship including staining loss of adhesion loss of cohesion cracking or discoloration for a period of 10 years from the date of Substantial Completion.
- B. The warranty should include a provision that the period of such warranty shall commence with the Owners final acceptance of all work covered under the Contract or at such other date or dates as the Owner may specify in writing prior to that time.
- C. The following types of failure will be adjudged as defective work:
 - 1. Abnormal deterioration aging or weathering of the Work.
 - 2. Sealant loss of adhesion loss of cohesion cracking or discoloration.
 - 3. Staining of sealed substrates by sealant or primer

PART 2 - PRODUCTS

2.1 MATERIALS GENERAL

- A. Compatibility: Provide joint sealer joint fillers and related materials that are compatible with one another and with joint substrates as demonstrated by testing and field experience.
- B. Colors: Provide colors of joint sealers as approved by the Architect.

- C. Stain-Test-Response Characteristics: Where elastomeric sealants are specified they are to be non-staining to porous substrates provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.

2.2 ELASTOMERIC JOINT SEALANTS

- A. Elastomeric Sealant Standard: Comply with ASTM C 920.
- B. One-Part Non-Acid-Curing Silicone Sealant: Type S; Grade NS; Class 25; non-staining medium modulus and complying with the following requirements:
 - 1. Uses: Non-traffic (NT) masonry (M) glass (G) aluminum (A) and as applicable to substrates indicated other materials (O).
 - 2. Additional Capability: When tested per ASTM C 719 to withstand 50 percent increase and decrease of joint width.
- C. One-Part Mildew-Resistant Silicone Sealant: Type S; Grade NS; Class 25:
 - 1. Interior Uses: Non-traffic (NT) glass (G) aluminum (A) and nonporous joint substrates indicated; formulated with fungicide for sealing interior joints with nonporous substrates at plumbing fixtures
 - 2. One-Part Mildew-Resistant Silicone Sealant:
 - a. "Dow Corning 786"; Dow Corning Corp.
 - b. "SCS 2000"; General Electric Co.
 - c. "863 #345 White"; Pecora Corp.
 - d. "Pro-glaze White"; Tremco Corp.
- D. One-Part Pourable Urethane Sealant: Type S; Grade P (self-leveling); Class 25:
 - 1. Exterior Use: Traffic (T) for pavements.
 - 2. Products: Subject to compliance with requirements provide one of the following or approved equal:
 - a. "Chem-Calk 950": Bostik Construction Product Div.
 - b. "Vulkem 45": Mameco International Inc.
 - c. "NR-201 Urexpan": Pecora Corp.
 - d. "THC-900": Tremco Corp.

2.3 LATEX JOINT SEALANTS

- A. Acrylic-Emulsion Sealant: One-part non-sag sealant complying with ASTM C 834 paintable and recommended for interior applications with joint movement of not more than plus or minus 5 percent.
- B. Products: Subject to compliance with requirements provide one of the following:
 - 1. Acrylic-Emulsion Sealant:
 - a. "Chem-Calk 600"; Bostik Construction Products Div.
 - b. "AC-20"; Pecora Corp.
 - c. "Tremco Acrylic Latex 834": Tremco Inc.

2.4 IMMERSIBLE JOINT SEALERS

- A. Liquid Applied Joint Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid applied joint sealant specified including those referencing ASTM C 920 classifications for type grade class and uses related to exposure and joint substrates.

1. Suitability for Immersion in Liquids. Where sealants are indicated for Use I for joints that will be continuously immersed in liquids provide products that have undergone testing according to ASTM C 1247. Liquid used for testing sealants is deionized water unless otherwise indicated.
- B. Immersible Single Component Non-sag Traffic Grade Urethane Joint Sealant: ASTM C 920 Type S Grade NS Class 25 for Uses T and I.
1. Products: Subject to compliance with requirements [provide one of the following]:
 - a. BASF Building Systems: Sonolastic NP1.
 - b. Sika Corporation Construction Products Division: Sikaflex 1a.
 - c. Tremco Incorporated: Vulkem 116.

2.5 MISCELLANEOUS JOINT SEALANTS

- A. Acoustical Sealant for Concealed Joints: Manufacturer's standard nondrying nonhardening non-skinning non-staining gunnable synthetic rubber sealant recommended for sealing interior concealed joints to reduce transmission of airborne sound.
- B. Structural Sealant: ASTM C 1184 chemically curing silicone formulation that is compatible with system components with which it comes in contact specifically formulated and tested for use as structural sealant and approved by structural-sealant manufacturer for use in assemblies indicated.
- C. Butyl-Polyisobutylene Sealant: Manufacturer's standard solvent- release-curing butyl-polyisobutylene sealant complying with AAMA 809.1 recommended for concealed joints.
- D. Butyl-Polyisobutylene Tape Sealant: Manufacturer's standard solvent-free butyl-polyisobutylene tape sealant with a solids content of 100%; complying with AAMA 804.1; non-staining paintable and non-migrating; packaged on rolls with a release paper on one side; with reinforcement thread to prevent stretch.
- E. Products: Subject to compliance with requirements provide one of the following:
 1. Acoustical Sealants for Concealed Joints:
 - a. "BA-98"; Pecora Corp.
 - b. "Tremco Acoustical Sealant"; Tremco Inc.
 2. Butyl-Polyisobutylene Sealant:
 - a. "PTI 404"; Protective Treatment Inc.
 3. Butyl-Polyisobutylene Tape Sealant:
 - a. "Extru-Seal Tape"; Pecora Corp.
 - b. "PTI 606"; Protective Treatments Inc.
 - c. "Tremco 440 Tape"; Tremco Inc.

2.6 JOINT SEALANT BACKING

- A. General: Provide backings which are non-staining; are compatible with joint substrates sealants primers and other joint fillers; and are approved for applications indicated by sealant manufacturer.
- B. Plastic Foam Joint-Fillers: Preformed compressible resilient non-waxing non-extruding strips of plastic foam of material indicated below and of size shape and density to control sealant depth and completely fill indicated joint widths without failure.

1. Either flexible open cell polyurethane foam or non-gassing closed-cell polyethylene foam unless otherwise indicated or as recommended by the sealant manufacturer.
- C. Tubing Joint-Fillers: Neoprene EPDM or silicone tubing complying with ASTM D 1056 non-absorbent to water and gas resilient at temperatures down to -26 deg F. of size and shape to provide a secondary seal.
- D. Bond-Breaker Tape: Polyethylene tape or other plastic tape to prevent bond between sealant and materials at back of joint. Provide self-adhesive tape where applicable.

2.7 MISCELLANEOUS MATERIALS

- A. Primer: Provide type recommended by joint sealer manufacturer; required for adhesion of sealant to joint substrates as determined from preconstruction joint sealer-substrate and field tests.
- B. Cleaners: Provide non-staining cleaner of type acceptable to manufacturer of sealant and sealant backing materials.
- C. Masking Tape: Provide non-staining non-absorbent type compatible with joint sealants and to surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Inspect joints to receive joint sealers for compliance with requirements. Report conditions detrimental to joint sealer work. Proceed after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealers to comply with recommendations of joint sealer manufacturers and the following requirements:
 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant including dust paints (except for permanent protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer) oil grease waterproofing water repellents water surface dirt frost and other contaminants.
 2. Clean porous joint substrate surfaces by brushing grinding blast cleaning mechanical abrading or a combination of these methods to produce a clean sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil-free compressed air.
 3. Remove laitance and form-release agents from concrete.
 4. Clean nonporous surfaces with chemical cleaners or other means that do not stain harm substrates or leave residues capable of interfering with adhesion of joint sealants.
- B. Joint Priming: Prime joint substrates to comply with joint sealer manufacturer's recommendations. Confine primers to areas of joint sealer bond; not on adjoining surfaces.
- C. Masking Tape: Mask adjoining surfaces which might be stained or damaged by sealant or by cleaning required to remove sealant. Remove tape immediately after tooling without disturbing joint.

3.3 INSTALLATION OF JOINT SEALERS

- A. General: Comply with joint sealer manufacturers' printed installation instructions except where more stringent requirements apply.

- B. Elastomeric Sealant Installation Standard: Comply with ASTM C 962 for use of joint sealants as applicable to conditions indicated.
- C. Latex Sealant Installation Standard: Comply with ASTM C 790 for use of latex sealants.
- D. Acoustical Sealant Application Standard: Comply with ASTM C 919 for use of joint sealants in acoustical applications.
- E. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 - 1. Do not leave gaps between ends of sealant backings.
 - 2. Do not stretch, twist, puncture or tear sealant backings.
 - 3. Do not use absorbent joint-filler materials.
 - 4. Install bond breaker tape where required to prevent third-side adhesion of sealant to back of joint.
- F. Installation of Sealants: Install sealants by proven techniques that result in sealants directly contacting joint substrates completely filling joints and providing uniform cross-sectional shapes and depths for optimum sealant movement. Mask adjacent surfaces if necessary to protect them from sealants.
- G. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
- H. Remove excess sealants from surfaces adjacent to joint.
 - 1. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
 - 2. Provide concave joint configuration per Figure 5A in ASTM C 1193 unless otherwise indicated.

3.4 CLEANING

- A. Clean off excess sealants or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.5 PROTECTION

- A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If despite such protection damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from the original work.

END OF SECTION 079210

081113 - HOLLOW METAL FRAMES AND SURROUNDS

PART 1 - GENERAL

1.1 SUMMARY

- A. The Work of this Section includes but not necessarily limited to the following.
 - 1. Standard and custom hollow metal frames wall caps and surrounds

1.2 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details material descriptions core descriptions hardware reinforcements profiles anchors and finishes.
- B. Furnish templates to the steel frame supplier in order to prepare frames.
- C. Shop Drawings: Include the following:
 - 1. Elevations of each design.
 - 2. Details including vertical and horizontal edge details and metal thicknesses.
 - 3. Frame details for each frame type including dimensioned profiles and metal thicknesses.
 - 4. Locations of reinforcement.
 - 5. Details of anchorages joints field splices and connections.
 - 5. Details of accessories.

1.3 QUALITY ASSURANCE

- A. Source Limitations: Obtain hollow metal frames through one source from a single manufacturer wherever possible.

1.4 DELIVERY STORAGE AND HANDLING

- A. Deliver hollow metal work palletized wrapped or crated to provide protection during transit and Project site storage. Do not use non-vented plastic.

1.5 PROJECT CONDITIONS

- A. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication.

1.6 COORDINATION

- A. Coordinate installation of anchorages for hollow metal frames. Furnish setting drawings templates and directions for installing anchorages including sleeves inserts anchor bolts and items with integral anchors. Deliver such items to Project site in time for installation.

1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace frames that fail in materials or workmanship within specified (1) year warranty period.

- B. Warranty includes installation and finishing that may be required due to repair or replacement of defective frames.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements provide steel frames from one of the following manufacturers:
 - 1. Assa Abloy
 - 2. Or Approved Equal.
- B. Curries frames with custom color as scheduled

2.2 MATERIALS

- A. Metallic-Coated Steel Sheet: ASTM A 653/A 653M Commercial Steel (CS) Type B; with minimum G60 metallic coating.
- B. Frame Anchors: ASTM A 653/A 653M Commercial Steel (CS) Commercial Steel (CS) Type B; with minimum G60 metallic coating.

2.3 HOLLOW METAL FRAMES

- A. Interior Frames: Fabricated from galvanized cold-rolled steel sheet
 - 1. Fabricate frames with mitered or coped corners. Profile as indicated on drawings.
 - 2. Frames: Minimum 16 gauge thick steel sheet.
- B. Reinforcement: Fabricate with reinforcement plates from same material as frames.

2.4 FRAME ANCHORS

- A. Jamb Anchors:
 - 1. Masonry Type: Adjustable strap-and-stirrup or T-shaped anchors to suit frame size formed from A60 metallic coated material not less than 0.042" inch thick with corrugated or perforated straps not less than 2" inches wide by 10" inches long; or wire anchors not less than 0.177" inch thick.
 - 2. Stud Wall Type: Designed to engage stud and not less than 0.042" inch thick.
- B. Floor Anchors: Floor anchors to be provided at each jamb formed from A60 metallic coated material not less than 0.042" inches thick.
- C. Mortar Guards: Formed from same material as frames not less than 0.016" inches thick.

2.5 FABRICATION

- A. Fabricate hollow metal work to be rigid and free of defects warp or buckle. Accurately form metal to required sizes and profiles with minimum radius for thickness of metal. Where practical fit and assemble units in manufacturer's plant. When shipping limitations so dictate frames for large openings are to be fabricated in sections for splicing or splining in the field by others.

- B. Tolerances: Fabricate hollow metal work to tolerances indicated in ANSI/SDI A250.8.
- C. Hollow Metal Frames:
 - 1. Knocked Down Frames: Provide frames with locking corner tabs which permit field assembly. Factory install compression type anchors and countersunk screw holes to secure the bottom of the jambs.
 - 2. Provide countersunk flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated for removable stops provide security screws at exterior locations.
 - 3. Floor Anchors: Weld anchors to bottom of jambs and mullions with at least four spot welds per anchor.
 - 4. Jamb Anchors: Provide number and spacing of anchors as follows:
 - a. Stud Wall Type: Locate anchors not more than 18" inches from top and bottom of frame. Space anchors not more than 32" inches OC. and as follows:

2.6 STEEL FINISHES

- A. Prime Finishes: Frames to be cleaned and chemically treated to insure maximum finish paint adhesion. Surfaces of the frame exposed to view to receive a factory applied coat of rust inhibiting shop primer.
 - 1. Shop Primer: Manufacturer's standard fast-curing lead and chromate free primer complying with ANSI/SDI A250.10 acceptance criteria; recommended by primer manufacturer for substrate; and compatible with substrate and field-applied coatings.
- A. Field Finish: Galvanized Metal:
 - 1. High Performance Polyurethane Finish System: Provide the following, or approved equal system from one of the above manufacturers:
 - a. Primer Coat: One coat of polyamide epoxy coating.
 - b. Intermediate and Finish Coats: One coats aliphatic acrylic polyurethane; Series 1075 Endura-Shield, by Tnemec
 - c. Custom color

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates areas and conditions with Installer present for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. General Contractor to verify the accuracy of dimensions given to the steel frame manufacturer for existing openings or existing frames.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove welded in shipping spreaders installed at factory. Restore exposed finish by grinding filling and dressing as required to make repaired area smooth flush and invisible on exposed faces.
- B. Prior to installation adjust and securely brace metal frames for square level twist and plumb condition.

3.3 INSTALLATION

- A. General: Install hollow metal work plumb rigid properly aligned and securely fastened in place; comply with Drawings and manufacturer's written instructions.
 - 1. Set frames accurately in position plumbed leveled aligned and braced securely until permanent anchors are set. After wall construction is complete and frames properly set and secured remove temporary braces leaving surfaces smooth and undamaged. Shim as necessary to comply with installation tolerances.
 - 2. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor and secure with post-installed expansion anchors.
 - 3. Masonry Walls: Coordinate installation of frames to allow for solidly filling space between frames and masonry with mortar.
 - 4. Grout Requirements: Do not grout head of frames unless reinforcing has been installed in head of frame. Do not grout vertical or horizontal closed mullion members.

3.4 ADJUSTING AND CLEANING

- A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work including hollow metal work that is warped bowed or otherwise unacceptable.
- B. Remove grout and other bonding material from hollow metal work immediately after installation.
- C. Prime-Coat and Painted Finish Touchup: Immediately after erection sand smooth rusted or damaged areas of prime coat or painted finishes and apply touchup of compatible air drying rust-inhibitive primer zinc rich primer (exterior and galvanized openings) or finish paint.

END OF SECTION 081113

SECTION 083114 - ACCESS DOORS AND FRAMES

PART 1 - GENERAL

A. Work Included: The Work of this Section shall include but not be limited to the following:

1. Access doors and frames for walls and ceilings.

1.2 SUBMITTALS

A. Product Data: For each type of access door and frame indicated include construction details materials individual components and profiles and finishes.

B. Shop Drawings: Submit detailed shop drawings showing fabrication and installation details of access doors and frames for each type of substrate. Include plans elevations sections details and attachments to other work.

1. Contractor shall coordinate and schedule access panels for all trades.

C. Samples: For each door face material at least 3" by 5" inches in size in specified finish.

D. Coordination Drawings: Provide plans including all required access doors and frames and coordinated with requirements for each required type and location.

1.3 QUALITY ASSURANCE

A. Source Limitations: Obtain each type of access door(s) and frame(s) through one source from a single manufacturer.

B. Size Variations: Obtain Architect's acceptance of manufacturer standard-size units which may vary slightly from sizes indicated.

C. Fire-Rated Access Doors and Frames: (as required) Assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency for fire-protection and temperature-rise limit ratings indicated according to NFPA 252 or UL 10B.

1.4 COORDINATION

A. Verification: Determine specific locations and sizes for access doors needed to gain access to concealed plumbing mechanical or other concealed work and indicate in the schedule specified in "Submittals" Article.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements provide manufacturers materials and applications as scheduled and as approved for use.

1. Karp (Basis of Design)
2. Coordinate for each size type and location

2.2 STEEL MATERIALS

A. Steel Plates Shapes and Bars: ASTM A 36.

1. ASTM A 123 for galvanizing steel and iron products.
 2. ASTM A 153 for galvanizing steel and iron hardware.
- B. Steel Sheet: Uncoated or electrolytic zinc coated ASTM A 879 with cold-rolled steel sheet substrate complying with ASTM A 1008 Commercial Steel (CS) exposed.
- C. Steel Finishes: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
1. Surface Preparation for Steel Sheet: Clean surfaces to comply with SSPC-SP 1 "Solvent Cleaning" to remove dirt oil grease or other contaminants that could impair paint bond. Remove mill scale and rust if present from uncoated steel complying with SSPC-SP 5/NACE No. 1 "White Metal Blast Cleaning" or SSPC-SP 8 "Pickling."
 2. Powder-Coat Finish: Immediately after cleaning and pretreating apply manufacturer's standard thermosetting polyester or acrylic urethane powder coating with cured-film thickness not less than 1.5 mils. Prepare treat and coat metal to comply with resin manufacturer's written instructions.⁴

2.3 STAINLESS-STEEL MATERIALS

- A. Stainless-Steel Sheet Strip Plate and Flat Bars: ASTM A 666 Type 316. Remove tool and die marks and stretch lines or blend into finish.
1. Finish: Directional Satin No. 4.
 2. Provide stainless steel access doors or all toilet and shower area locations.
- B. Drywall Beads: Edge trim formed from 0.0299"-inch zinc-coated steel sheet formed to receive joint compound and in size to suit thickness of gypsum board.

2.4 ACCESS DOORS AND FRAMES FOR WALLS AND CEILINGS

- A. Flush Access Doors and Trim-less Frames: Fabricated from steel sheet in typical areas.
1. Locations: Wall and ceiling surfaces.
 2. Door: Minimum 0.060" inch thick sheet metal set flush with surrounding finish surfaces.
 3. Frame: Same material and thickness as door; with drywall bead flange.
 4. Hinges: Continuous piano.
 5. Lock: Latch or Lock as per building standards.
- B. Recessed Access Doors: (as scheduled)
1. Assembly Description: Fabricate door in the form of a pan recessed ½" inch 5/8" inch 1" inch for gypsum board plaster or acoustical tile infill. Provide frame with gypsum board bead for concealed flange plaster bead for concealed flange no bead for acoustical tile installation.
 2. Locations: Wall and ceiling as required.
 3. Door Size: As per approved schedule
 4. Uncoated Steel Sheet for Door: Nominal 0.060" inch 16 gage.
 - a. Finish: Factory prime.
 5. Metallic-Coated Steel Sheet for Door: Nominal 0.064" inch 16 gage.
 - a. Finish: Factory prime or as approved.
 6. Frame Material: Same material and thickness as door.

7. Hinges: Manufacturer's standard.
8. Hardware: Latch or Lock as per building standard.

2.5 FABRICATION

- A. General: Provide access door and frame assemblies manufactured as integral units ready for installation.
- B. Metal Surfaces: For metal surfaces exposed to view in the completed Work provide materials with smooth flat surfaces without blemishes. Do not use materials with exposed pitting seam marks roller marks rolled trade names or roughness.
- C. Doors and Frames: Grind exposed welds smooth and flush with adjacent surfaces. Furnish attachment devices and fasteners of type required to secure access panels to types of supports indicated.
 1. For trim-less frames with drywall bead provide edge trim for gypsum board securely attached to perimeter of frames.
 2. Provide mounting holes in frame for attachment of masonry anchors.
- D. Latching Mechanisms: Furnish number required to hold doors in flush smooth plane when closed.
 1. For cylinder lock furnish two keys per lock and key all locks alike. Key locks to building keying system. (if required)
 2. Cam Locks where approved

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's written instructions for installing access doors and frames.
- B. Set frames accurately in position and attach securely to supports with plane of face panels aligned with adjacent finish surfaces.
- C. Install doors flush with adjacent finish surfaces or recessed to receive finish material.

3.3 ADJUSTING AND CLEANING

- A. Adjust doors and hardware after installation for proper operation.
- B. Remove and replace doors and frames that are warped bowed or otherwise damaged.

END OF SECTION 083114

SECTION 088310 - MIRRORS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Work of this Section includes but is not limited to the following:
 - 1. Monolithic Low Iron glass mirrors.
 - 2. Tempered glass mirrors qualifying as safety glazing.
 - 3. Wall mounted mirror assemblies.

1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
 - 1. Mirrors. Include description of materials and process used to produce each type of silvered flat glass mirror specified that indicates sources of glass coating components edge sealer and quality-control provisions.
 - 2. Reference 061000 for plywood backing panels.
- B. Shop Drawings: Include mirror elevations edge details mirror hardware and attachments to other work.
- C. Qualification Data: For qualified Installer.
- D. Product Certificates: For each type of mirror and mirror mastic from manufacturer.
- E. Preconstruction Test Reports: From mirror manufacturer indicating that mirror mastic was tested for compatibility and adhesion with mirror backing paint film and substrates on which mirrors are installed.
- F. Warranty: Sample of warranty.
- G. Maintenance Data: For mirrors to include in maintenance manuals.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who employs glass installers for this Project who are certified under the National Glass Association's Certified Glass Installer Program.
- B. Source Limitations for Mirrors: Obtain mirrors from single source from single manufacturer.
- C. Source Limitations for Mirror Accessories: Obtain mirror glazing accessories from single source.
- D. Glazing Publications: Comply with the following published recommendations:
 - 1. GANA's "Glazing Manual" unless more stringent requirements are indicated. Refer to this publication for definitions of glass and glazing terms not otherwise defined in this Section or in referenced standards.
 - 2. GANA Mirror Division's "Mirrors Handle with Extreme Care: Tips for the Professional on the Care and Handling of Mirrors."
- E. Build mock-ups in the location as directed by Architect as per finish schedule.

1. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

F. Safety Glazing Products: For film-backed tempered mirrors provide products complying with testing requirements in 16 CFR 1201 for Category II materials.

G. Preconstruction Mirror Mastic Compatibility Test: Submit mirror mastic products to mirror manufacturer for testing to determine compatibility of mastic with mirror backing paint film and substrates on which mirrors are installed.

1.4 DELIVERY STORAGE AND HANDLING

A. Protect mirrors according to mirror manufacturer's written instructions and as needed to prevent damage to mirrors from moisture condensation temperature changes direct exposure to sun or other causes.

B. Comply with mirror manufacturer's written instructions for shipping storing and handling mirrors as needed to prevent deterioration of silvering damage to edges and abrasion of glass surfaces and applied coatings. Store indoors.

1.5 PROJECT CONDITIONS

A. Environmental Limitations: Do not install mirrors until ambient temperature and humidity conditions are maintained at levels indicated for final occupancy.

1.6 WARRANTY

A. Warranty: Manufacturer's standard form in which mirror manufacturer agrees to replace mirrors that deteriorate within specified warranty period. Deterioration of mirrors is defined as defects developed from normal use that are not attributed to mirror breakage or to maintaining and cleaning mirrors contrary to manufacturer's written instructions. Defects include discoloration black spots and clouding of the silver film.

1. Warranty Period: Five years from date of Substantial Completion

PART 2 - PRODUCTS

2.1 SILVERED FLAT GLASS MIRRORS

A. Glass Mirrors: General: ASTM C 1503; manufactured using copper-free low-lead mirror coating process.

1. Manufacturers: Subject to compliance with requirements provide products by one of the following McGory or Bendheim or approved from the following

- a. Arch Aluminum & Glass Co. Inc.
- b. Avalon Glass and Mirror Company.
- c. Binswanger Mirror; a division of Vitro America Inc.
- d. As scheduled selected or approved by Architect.

2. Products: As scheduled

B. Clear Glass: Mirror Glazing Quality Tempered ultra-clear (low-iron) float glass with a minimum 91 percent visible light transmission.

C. Tempered Clear Glass: Mirror Glazing Quality for blemish requirements; and comply with ASTM C 1048 for Kind FT Condition A tempered float glass before silver coating is applied.

1. Nominal Thickness: As indicated.

D. Wall Mirror: Match samples

2.2 MISCELLANEOUS MATERIALS

A. Setting Blocks: Elastomeric material with a Shore Type A durometer hardness of 85 plus or minus 5.

B. Edge Sealer: Coating compatible with glass coating and approved by mirror manufacturer for use in protecting against silver deterioration at mirrored glass edges.

C. Mirror Mastic: An adhesive setting compound asbestos-free produced specifically for setting mirrors and certified by both mirror manufacturer and mastic manufacturer as compatible with glass coating and substrates on which mirrors will be installed.

1. Manufacturers: Subject to compliance with requirements provide products by one of the following:

- a. Franklin International: Titebond Division.
- b. Laurence C. R. Co. Inc.
- c. Macco Adhesives: Liquid Nails Division.
- d. OSI Sealants Inc.
- e. Palmer Products Corporation.

D. Film Backing for Safety Mirrors: Film backing and pressure-sensitive adhesive both compatible with mirror backing paint as certified by mirror manufacturer.

2.3 MIRROR HARDWARE

A. Top and Bottom Aluminum J-Channels: Aluminum extrusions with a return deep enough to produce a glazing channel to accommodate mirrors of thickness indicated and in lengths required to cover bottom and top edges of each mirror in a single piece.

1. Bottom Trim: Angles formed with front leg and back leg not less than 3/8 and 7/8 inch in height respectively and a thickness of not less than 0.04 inch.

a. Products: Subject to compliance with requirements provide one of the following:

- 1) Laurence C. R. Co. Inc: CRL
- 2) Sommer & Maca Industries Inc. Aluminum Moulding Lower Bar.
- 3) Sommer & Maca Industries Inc: Heavy Gauge Aluminum.
- 4) Or approved equal.

2. Top Trim: Angles formed with front leg and back leg not less than 5/8" and 1" inch in height respectively and a thickness of not less than 0.04" inch.

3. Finish: Clear bright anodized or as selected by Architect

B. Plated Steel Hardware: Formed-steel shapes with plated finish indicated.

1. Profile: As indicated.
2. Finish: as approved
3. As indicated as recommended by fabricator.

C. Fasteners: Fabricated of same basic metal and alloy as fastened metal and matching it in finished color and texture where fasteners are exposed.

- D. Anchors and Inserts: Provide devices as required for mirror hardware installation. Provide toothed or lead-shield expansion-bolt devices for drilled-in-place anchors. Provide galvanized anchors and inserts for applications on inside face of exterior walls and where indicated.

2.4 FABRICATION

- A. Mirror Sizes: To suit Project conditions and before tempering cut mirrors to final sizes and shapes.
- B. Cutouts: Fabricate cutouts before tempering for notches and holes in mirrors without marring visible surfaces. Locate and size cutouts so they fit closely around penetrations in mirrors.
- C. Mirror Edge Treatment: Flat polished edge of width shown.
 - 1. Seal edges of mirrors with edge sealer after edge treatment to prevent chemical or atmospheric penetration of glass coating.
 - 2. Require mirror manufacturer to perform edge treatment and sealing in factory immediately after cutting to final sizes.
- D. Film-Backed Safety Mirrors: Apply film backing with adhesive coating over mirror backing paint as recommended in writing by film-backing manufacturer to produce a surface free of bubbles blisters and other imperfections.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates over which mirrors are to be mounted with Installer present for compliance with installation tolerances substrate preparation and other conditions affecting performance of the Work.
- B. Verify compatibility with and suitability of substrates including compatibility of mirror mastic with existing finishes or primers.
- C. Proceed with installation only after unsatisfactory conditions have been corrected and surfaces are dry.

3.2 PREPARATION

- A. Comply with mastic manufacturer's written installation instructions for preparation of substrates including coating substrates with mastic manufacturer's special bond coating where applicable.

3.3 INSTALLATION

- A. General: Install mirrors to comply with mirror manufacturer's written instructions and with referenced GANA publications. Mount mirrors accurately in place in a manner that avoids distorting reflected images.
- B. Provide a minimum air space of 1/8" inch between back of mirrors and mounting surface for air circulation between back of mirrors and face of mounting surface.
- C. Wall-Mounted Mirrors: Install mirrors with mastic and mirror hardware. Attach mirror hardware securely to mounting surfaces with mechanical fasteners installed with anchors or inserts as applicable. Install fasteners so heads do not impose point loads on backs of mirrors.
 - 1. Top and Bottom Aluminum Angles: Provide setting blocks 1/8" inch thick by 4" inches long at quarter points. To prevent trapping water provide between setting blocks two slotted weeps not less than 1/4" inch wide by 3/8" inch long at bottom channel.

2. Install mastic as follows:

- a. Apply mastic to comply with mastic manufacturer's written instructions for coverage and to allow air circulation between back of mirrors and face of mounting surface.

3.4 CLEANING AND PROTECTION

- A. Protect mirrors from breakage and contaminating substances resulting from construction operations.
- B. Do not permit edges of mirrors to be exposed to standing water.
- C. Maintain environmental conditions that will prevent mirrors from being exposed to moisture from condensation or other sources for continuous periods of time.
- D. Wash exposed surface of mirrors not more than four days before date scheduled for inspections that establish date of Substantial Completion. Wash mirrors as recommended in writing by mirror manufacturer.

END OF SECTION 088310

SECTION 092100 – PATCHING AND FINISH SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: The Work of this Section shall include but not be limited to the following:
 - 1. Finish and patching coatings over concrete/Masonry substrates and ceilings as indicated.
 - 2. Preparation for painting and finish of walls and ceilings.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product specifications and installation instructions for material required.
- B. Samples: Submit 12" sq. sample of smooth finish coating showing coating thickness and final color. Acceptance shall be for color and finish only.
- C. Certified Tests: With product data submit certified test reports on performances including burning characteristics density compressive strength bond strength hardness water absorption and corrosion resistance.
- D. Schedule: Submit schedule and schematics of areas to receive treatment items to be left untreated and timing of applications.

1.3 QUALITY ASSURANCE

- A. References: Applicable trade association names and titles of general standards are referred to by accepted abbreviations.
- B. Installer: A firm approved by manufacturer of primary cementitious coating materials including qualified factory training where recommended by manufacturer.
- C. Fire-Spread Ratings: Provide products which have been tested and listed by UL for required surface burning characteristics (fuel contributed smoke contributed) in accordance with ASTM E 84. Provide completed installations including coatings rated at a maximum flame-spread of 0 and smoke developed of 0.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's product specifications and installation instructions for material required.
- B. Samples: Submit 12" sq. sample of smooth finish coating showing coating thickness and final color. Acceptance shall be for color and finish only.
- C. Certified Tests: With product data submit certified test reports on performances including burning characteristics density compressive strength bond strength hardness water absorption and corrosion resistance.
- D. Schedule: Submit schedule and schematics of areas to receive treatment items to be left untreated and timing of applications.

1.5 PRODUCT HANDLING

- A. Protect materials from deterioration. Do not allow materials to become wet or soiled. Comply with manufacturer's recommendations for handling and protection during installation.

1.6 WARRANTY

- A. The Subcontractor hereby warrants that all work specified in this Section will be free from defects of materials and workmanship for a period of five (5) years.
- B. The following types of failure will be adjudged as defective work:
 - 1. Deterioration in the form of cracking peeling or flaking.
 - 2. Delamination from substrate.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Manufacturers: Subject to compliance with requirements provide materials and applications as scheduled or as acceptable to the Architect
- B. Patching and coatings:
 - 1. G-P Gypsum.
 - 2. National Gypsum Company.
 - 3. USG Corporation. (Basis of Bid)
 - 4. As approved
- C. Selected Products: Refer to the Drawings and Finish Schedules for products and manufacturers
 - 1. Coordinate with Architectural Finish Specifications for all current products and modifications and for additional requirements:
- D. Selected Product: Subject to compliance with requirements provide Cover Coat Brand Compound as manufactured by USG Corporation or approved equal.

2.2 MATERIALS

- A. Coating: Proprietary acrylic co-polymer mixture; formulated without asbestos mineral fibers or other harmful corrodible or deleterious materials. Materials shall be mixed and conveyed to the surfaces in a series of layers as recommended by the manufacturer.
- B. Provide mix for applications indicated. Mix and density of between as recommended by the manufacturer. Applied to properly prepared solid concrete and gypsum board substrates with no air gap.
- C. Mix shall be integrally colored; Color: White matching approved samples.

2.3 AUXILIARY MATERIALS

- A. Substrate Primers: Provide type which is compatible with condition of each substrate to be coated which is recommended by smooth finish coating materials manufacturer for compatibility with bonding adhesives and cementitious materials.

PART 3 - EXECUTION

3.1 INSPECTION AND PREPARATION

- A. Examine the substrates and conditions that may affect work. Proceed with work after unsatisfactory conditions have been corrected. Commencement of the work affirms the Contractor's acceptance of the substrates and conditions.
- B. Clean substrates of substances which might be incompatible with or interfere with bond of cementitious coating including but not limited to oil dirt scale and rust. Remove ill-timed work which might interfere with installation of cementitious coating.
- C. Cover other work which might be damaged by fall-out of finish system materials. Protect the environment and ensure adequate ambient conditions including temperature minimum of 55 deg. F. Maintain substrate temperatures of at least 40 deg. F.

3.2 INSTALLATION GENERAL

- A. Comply with manufacturer's instructions and recommendations. Consult with manufacturer's technical representative for conditions not covered by printed instructions.
- B. Prime substrate with primer as recommended by coating material manufacturer.
- C. Provide (3) three coat application method and minimum thickness not less than those recommended by the manufacturer.
- D. Maintain ambient conditions during installation and for cure period following installation as recommended by manufacturer. Provide ventilation and avoid excessive rate of drying. Protect from exposure to sun.

3.3 INSTALLATION OF COATING

- A. Provide smooth finish and color matching the Architect's sample and approved mock-ups.

3.4 CLEANING PATCHING PROTECTION

- A. Cleaning: Immediately upon completion of application in each area of project remove fall-out of materials and clean surfaces to remove evidence of soiling. Repair or replace damaged work to restore surfaces to acceptable condition.
- B. Coordination: Coordinate installation of coating system to minimize the need for other trades to cut or remove cementitious coating. Patch cementitious coating which has been cut to maintain complete coverages of full thickness on substrates to be protected. Trowel-applied coating is acceptable for patching. Do not allow work requiring patching to be concealed before patching is completed.
- C. Protection: Installer shall meet protection requirements for cementitious coating work which will ensure that cementitious coating will be substantially without damage or deterioration at time of substantial completion of project. Provide protection from reasonably predictable harmful exposures. Repair or replace work which has not been successfully protected.

END OF SECTION 092100

SECTION 092111 - DIRECT APPLIED CEILING FINISH SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: The Work of this Section includes but is not limited to the following:
 - 1. Polymer modified cementitious finish system.
 - 2. Vapor retarding membranes
 - 3. Related accessories.

1.2 REFERENCES

- A. ASTM Standards
 - 1. C920 Standard Specification for Elastomeric Joint Sealants
 - 2. E84 Standard Test Method for Surface Burning Characteristics of Building Materials
- B. South Coast Air Quality Management District (South Coast AQMD)
 - 1. Rule 1113 Architectural Coatings

1.3 SYSTEM PERFORMANCE REQUIREMENTS

- A. Provide systems complying with manufacturer's written instructions recommendations and the following performance requirements:
 - 1. Bond Integrity: Free from bond failure within system components or between system and supporting construction resulting from exposure to in-service conditions.
 - 2. Adhesion ASTM C-297 Minimum 10 psi.
 - 3. Mildew Resistance ASTM D-3273 No growth supported during 28- day exposure period.
 - 4. Surface Burning.
 - a. Waterproofing primers and applicable finish components: ASTM E84 flame Spread less than 25 smoke developed less than 75 Class A building material
 - 5. No deleterious effects: no cracking checking crazing erosion rusting blistering peeling or delamination.
 - 6. Waterproofing primers and applicable finish components: South Coast AQMD Rule 1113 Volatile Organic Content (VOC) comply with applicable requirement of coating category

1.4 SUBMITTALS

- A. Product Data: Submit product data for each component of exterior finish systems.
- B. Shop Drawings: Submit shop drawings showing fabrication and installation of system including plans elevations sections details of suspension components, joint locations and configurations within system and between system and construction penetrating it and attachments to construction behind system.
- C. Samples: Submit samples in the form of 1x1-foot-square panels for each finish color and texture specified. Prepare samples using same tools and techniques intended for actual Work.

- D. Qualifications: Qualification data for firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include list of completed projects with project names addresses names of Architects and Owners plus other information specified.
- E. Installer certificates signed by manufacturer certifying that Installers comply with requirements under "Quality Assurance" Article.
- F. Sealant compatibility and test report from sealant manufacturer certifying that materials forming joint substrates of system have been tested for compatibility and adhesion with joint sealants; include sealant manufacturer's interpretation of results relative to sealant performance and recommendations for primers and substrate preparation needed to obtain adhesion.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Engage a firm experienced in manufacturing systems that are similar to those indicated for this Project and that have a record of successful in-service performance.
- B. Installer Qualifications: Engage an experienced Installer who has completed systems similar in material design and extent to that indicated for Project that have resulted in construction with a record of successful in-service performance.
- C. Single-Source Responsibility: Obtain materials for system from either a single manufacturer or manufacturers approved by the system manufacturer as compatible with other system components.
- D. Field-Constructed Mock-Up: Prior to installation of system erect mock-up for each form of construction and finish required to verify selections made under sample submittals and to demonstrate esthetic effects including those related to execution. Build mock-up to comply with the following requirements using materials and substrates indicated for final Work:
 - 1. Mock-up is combined with the ceiling system mock-up. Locate mock-up on site in location and of size indicated or if not indicated as directed by Architect.
 - 2. Demonstrate the proposed range of color texture and workmanship to be expected in completed Work.
 - 3. Obtain Architect's acceptance of mock-up before start of final work.
 - 4. Retain and maintain mock-up during construction for judging completed Work.
 - a. Accepted mock-up in undisturbed condition at time of Substantial Completion may become part of completed work.

1.6 PROJECT CONDITIONS

- A. Environmental Conditions: Install system when ambient temperatures above 50/80 deg F during installation of wet materials and for 24 hours after installation or longer to allow them to become thoroughly dry.

1.7 WARRANTY

- A. Warranty: Submit a written Warranty executed by the Manufacturer agreeing to repair or replace panel and finish systems that fail in materials or workmanship within the specified warranty period. Failures include but are not necessarily limited to:
 - 1. Structural failures including excessive deflection excessive vapor infiltration.
 - 2. Delamination blistering cracking and related deterioration of coatings and substrates.

3. Warranty shall cover finish against color fade pitting chalking chipping film integrity beyond normal weathering.
4. Warranty Period: As per manufacturer.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements provide the following finish system.:
1. STO Industries Inc.
 2. Product: Sto-Quik finish system.

2.2 MATERIALS

- A. Finishes primers adhesives stains and any other associated materials used with the finish shall be Class A building materials based on testing in accordance with ASTM E84. VOC (Volatile Organic Content) shall be less than 50g/L and shall comply with South Coast AQMD Rule 1113 requirements.
- B. Interior wallboard (as approved)
1. PermaBase® Brand cement board as manufactured by National Gypsum
 2. DensShield® Tile Backer as manufactured by Georgia-Pacific.
 3. Diamondback® Tile Backer as manufactured by CertainTeed.
 4. Durock® Brand cement board as manufactured by USG.
- C. Surface Reinforcement
1. Sto Mesh – nominal 4.5 oz/sq.yd. glass fiber reinforcing mesh treated for compatibility with Sto materials.
- D. Waterproof Base Coat
1. Sto Flexyl – two component: acrylic additive combined with portland cement in the field
 2. Sto Watertight Coat – two component: acrylic additive with pre-proportioned portland cement
- E. Primer
1. StoPrime® Sand – acrylic-based sanded primer for use with Sto Textured Finishes
- F. Textured Finishes
1. Stolit - Freeform - factory blended decorative and protective hydrophobic acrylic textured finish with integral color.
 2. Colors and Textures of Protective Coating: As selected by Architect.
- G. Water: Clean and potable.
- H. Sealant Products: Provide manufacturer's standard chemically curing elastomeric sealant that is compatible with joint fillers joint substrates finish system and other related materials and complies with requirements of Division 7 Section "Joint Sealers" for products corresponding to description indicated below.

1. StoSeal STPE Sealant - high-movement low modulus non-sag one-component silyl-terminated polyether joint sealant in compliance with ASTM C920
 2. Sealant Color: Match finish coat color of system as approved by Architect.
- I. Sealer: Sto Clear Coat sealer
- J. Accessories: Provide all required accessories trim and jointing materials and assemblies for complete installation.
1. Reference 092600 Gypsum Board Assemblies for suspension assemblies

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates with Installer present to determine if they are in satisfactory condition for installation of system. Do not proceed with installation of system until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. General Surface Preparation: Ceiling substrates must be clean dry and free of surface contamination. Wall board and ceiling substrates must be installed in conformance with wall board manufacturer's written installation instructions except joint taping and spotting of fasteners with joint compound are not required. Accessories such as corner beads must be corrosion proof and with perforated flanges for keying of the base coat.

B. Mixing

1. Mix Sto products in accordance with published literature. Refer to applicable Product Bulletins for specific information on use handling application precautions and limitations of specific products.

C. Application

1. Install corrosion resistant termination accessories at junctures with penetrations such as pipes electrical fixtures and window and door openings. Refer to Sto Guide details.
2. Install nominal 1/8" inch base coat by trowel to the wall board surface. Work horizontally or vertically in strips of 40" inches and immediately embed the mesh into the wet base coat by troweling from the center to the edge of the mesh. Overlap mesh not less than 2-1/2" inches at mesh seams and feather at seams. Double wrap all inside and outside corners with minimum 6"-inch overlap in each direction (if accessories are NOT used at these locations). Avoid wrinkles in the mesh. The mesh must be fully embedded so that no mesh color shows through the base coat when it is dry. Re-skim with additional base coat if mesh color is visible. Where accessories are used overlap perforated flanges of accessories with the base coat/reinforcing mesh application. Do not install base coat and mesh onto solid (unperforated) portions of accessories.
3. When the base coat application is dry apply the primer by brush or roller to the entire base coat surface.
4. When the primer application is dry apply the Sto finish.

- a. Sto Textured Finish Installation: Refer to applicable Product Bulletin

3.3 INSTALLATION OF JOINT SEALANTS

- A. Prepare joints and apply sealants of type and at locations indicated to comply with applicable requirements of "EIMA Joint Sealant Specifications for Exterior Insulation and Finish Systems.
- B. Protection
 - 1. Provide protection of installed materials from water infiltration into or behind them.
 - 2. Provide protection of installed materials from dust dirt precipitation freezing and continuous high humidity until they are fully dry.
 - 3. Seal penetrations seams gaps cracks and other discontinuities in the finished wall and ceiling surfaces to prevent air leakage towards the exterior or adjacent spaces.

3.4 CLEANING

- A. Remove temporary covering and protection of other work. Promptly remove protective coatings from window and door frames and any other surfaces outside areas indicated to receive protective coating.
- B. Provide final protection and maintain conditions in a manner acceptable to Installer and system manufacturer that ensures system's being without damage or deterioration at time of Substantial Completion.

END OF SECTION 092111

SECTION 092600 - GYPSUM BOARD ASSEMBLIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract including General and Supplementary Conditions and Division 01 Specification Sections apply to this Section.

1.2 SUMMARY

- A. Work Included: The Work of this Section includes but is not limited to the following:

1. Steel framing systems for interior gypsum board assemblies.
2. Replacement/repair of existing framing systems
3. Gypsum board applications.
4. Tile Sheathing
5. Suspension systems for interior ceilings and soffits.
6. Drywall finishing with joint tape- and- compound.
7. Acoustical insulation and sealant for gypsum board products.
8. Metal reveals trims and backing plates.
9. Patching and repairs to existing drywall.

1.3 SYSTEM DESCRIPTION

- A. Performance Requirements General: Provide gypsum board wall systems complying with performance requirements specified as demonstrated by pre-tested manufacturer's corresponding stock systems.
- B. Structural Requirements: Provide gypsum board and wall assemblies (partitions furring and other assemblies indicated) capable of withstanding following lateral design loadings for maximum heights of partitions without failing. Evidence of failure includes deflections exceeding limits indicated bending stresses causing studs to break or to distort and end-reaction shear causing track (runners) to bend or to shear and studs to become crippled. Comply with requirements of the Building Code and SA923 United States Gypsum Company for loading performance criteria.
 1. Structural Criteria: Limiting heights of partitions are based on L/240 at 10 psf. Increase gage of steel framing to maintain above criteria while not increasing the thickness of partition.
 2. Seismic Characteristics: Fabricate all assemblies to comply with seismic load criteria as required by local codes of governing authority having jurisdiction.
 3. Lateral Loading Partition Furring and Other Assemblies: 5.0 psf. unless otherwise indicated.
 4. Deflection Limits Painted Assemblies: 1/240 of partition height.
 5. Deflection Limits; Tile and Other Hard Finish Surfaces: 1/360 of partition height.
- C. Fire-Resistance Ratings: Where indicated provide materials and construction which are identical to those of assemblies including those incorporating elevator door and other framing whose fire resistance has been determined per ASTM E 119 by a testing and inspecting organization acceptable to authorities having jurisdiction.
 1. Provide fire- resistance rated assemblies identical to those indicated by reference to GA File Numbers in GA 600 AFire Resistance Design Manual or to design designations in UL AFire Resistance Directory or in listings of other testing and inspecting agencies acceptable to authorities having jurisdiction.

- D. Sound Attenuation Performance: Provide gypsum board wall systems designed and pretested to achieve the minimum ratings indicated for sound transmission class (STC)/NIC per ASTM E 90. Reference acoustic report as required for all sound required assembly performance.
 - 1 Demising partition shall be constructed with 2 layers of drywall on both sides of metal studs with sound attenuation blankets within the stud cavity. Partition construction should achieve a rating of NIC-40/5050 +/- Min. assuming 3-5/8" studs. Demising partitions should be constructed full height from slab to slab.
 - 2 Electrical receptacles and data junction boxes should not be located back-to-back. locate in separate stud cavities and provide with a putty pad backing as or equivalent to Kinetics Iso-Backer.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's specifications and installation instructions for materials for gypsum drywall and backer board. Submit other data as required to show compliance with project requirements.
- B. Shop Drawings: Show locations fabrication and installation of control and expansion joints including plans elevations sections details of components and attachments to other units of Work. Indicate locations for backing plates.
 - 1 Coordination of grounds and concealed supports.
- C. Engineering data from gypsum board assembly manufacturer certifying and substantiating compliance of gypsum board wall assemblies with structural performance requirements for all site assemblies.
- D. Assembly test reports from a qualified independent testing agency certifying and substantiating compliance of gypsum board shaft-wall assemblies with structural and sound-attenuation performance requirements based on tests performed on manufacturers standard assemblies representing those indicated.
- E. Fire-test-response reports from testing and inspecting agency substantiating compliance of gypsum board shaft-wall assemblies with fire-resistivity performance requirements.
 - 1. Include data substantiating that items indicated as penetrating gypsum board shaft-wall assemblies do not negate fire resistance rating.
- F. Samples: Submit 12" inch long samples of each type of trim accessory.

1.5 QUALITY ASSURANCE

- A. Fire-Resistance Rating: Where ratings are indicated match applicable assemblies tested per ASTM E 119 by fire testing laboratories or to design designations in UL "Fire Resistance Directory" or in listing of other testing agencies acceptable to authorities having jurisdiction.
- B. Calculations: Submit calculations for the design of the system including deflections in place stresses negative pull-off loads and capacity of fasteners. Calculations shall be signed and sealed by a Professional Engineer registered in the State of New York
- C. Gypsum Board Terminology Standard: GA-505 by Gypsum Association.
- D. Installer: Firm with not less than 5 years of successful experience in the installation of specified materials.

1.6 DELIVERY STORAGE AND HANDLING

- A. Deliver materials in original packaging bearing brand name and identification of manufacturer or supplier.
- B. Store materials to keep them dry and protected from soiling dirt or damage. Neatly stack gypsum boards flat to prevent sagging.
- C. Handle gypsum boards to prevent damage to edges ends or surfaces. Protect trim accessories from being bent or damaged.

1.7 PROJECT CONDITIONS

- A. Environmental Limitations: Comply with ASTM C 840 requirements or gypsum board manufacturer's written recommendations whichever are more stringent.
- B. Do not install interior products until installation areas are enclosed and conditioned.
- C. Do not install panels that are wet those that are moisture damaged and those that are mold damaged.
 - 1. Indications that panels are wet or moisture damaged include but are not limited to discoloration sagging or irregular shape.
 - 2. Indications that panels are mold damaged include but are not limited to fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

2.1 FRAMING SYSTEMS

- A. Manufacturers: Subject to compliance with requirements manufacturers offering gypsum board systems which may be incorporated in the Work include but are not limited to the following:
 - 1. Galvanized Steel Framing and Furring:
 - a. Bostwick Steel Framing Co.
 - b. Gold Bond Building Products Division.
 - c. Marino Industries Corp.
- B. Framing Members: Comply with ASTM C 754 for conditions indicated.
- C. Steel Sheet Components: Comply with ASTM C 645 requirements for metal unless otherwise indicated.
- D. Protective Coating: (Typical) ASTM A 653/A 653M G60 hot-dip galvanized unless otherwise indicated.
- E. Studs and Runners: ASTM C 645; spacing as noted. (All studs shall be galvanized type – No exceptions)
 - 1. Base- Metal Thickness: Minimum 22 gage except provide material with thickness required to accommodate deflection performance requirements without increasing overall wall thickness indicated.
 - 2. Depth of Section: As indicated on the Drawings.
 - 3. Runners: Match studs; type recommended by stud manufacturer for floor and ceiling support of studs and for vertical abutment of drywall work at other work.

- F. Fasteners for Furring Members: Type and size recommended by furring manufacturer for the substrate and application as required. (All studs shall be galvanized type – No exceptions)
- G. Deflection Tracks: Steel sheet top runner manufactured to prevent cracking of finishes applied to interior partition framing resulting from deflection of structure above in thickness not less than indicated for studs and in width to accommodate depth of studs.
- H. Firestop Tracks: Top runner manufactured to allow partition heads to expand and contract with movement of the structure while maintaining continuity of fire-resistance-rated assembly indicated; in thickness not less than indicated for studs and in width to accommodate depth of studs.
 - 1. Products: Subject to compliance with requirements products that may be incorporated into the Work include but are not limited to the following:
 - a. Fire Trak Corp: Fire Trak attached to studs with Fire Trak Slip Clip unless otherwise indicated.
 - b. Metal- Lite Inc; The System.
- I. Flat Strap and Backing Plate: Steel sheet for blocking and bracing in length and width to accommodate item being supported.
 - 1. Minimum Base-Metal Thickness: 0.033" inch.
- J. Cold-Rolled Channel Bridging: Steel 0.053"-inch minimum base-metal thickness with minimum 1/2-inch- wide flanges.
 - 1. Depth: As indicated on Drawings.
 - 2. Clip Angle: Not less than 1-1/2" by 1-1/2" inches 0.068"-inch- thick galvanized steel.
- K. Hat-Shaped Rigid Furring Channels: ASTM C 645.
 - 1. Minimum Base-Metal Thickness: 0.018" inch.
 - 2. Depth: As indicated on Drawings.

2.2 PANELS GENERAL

- A. Size: Provide in maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

2.3 INTERIOR GYPSUM BOARD

- A. General: Complying with ASTM C 36/C 36M or ASTM C 1396/C 1396M as applicable to type of gypsum board indicated and whichever is more stringent.
 - 1. Manufacturers: Subject to compliance with requirements provide products by one of the following:
 - a. American Gypsum Co.
 - b. BPB America Inc.
 - c. G-P Gypsum.
 - d. Lafarge North America Inc.
 - e. National Gypsum Company.
 - f. USG Corporation.

- B. Moisture- and Mold-Resistant Type: With moisture- and mold-resistant core and surfaces.
Location (All walls and types no exceptions)

1. Core: 5/8" inch Type X.
2. Long Edges: Tapered.

2.4 TILE BACKING PANELS

- A. Glass Mat Water Resistant Backing Board: ASTM C 1178/C 1178M with manufacturer's standard edges.

1. Products: Subject to compliance with requirements [provide one of the following or approved equal:
 - a. USG Durock
 - b. CertainTeed Corp.; Glass Roc Tile Backer.
 - c. Georgia Pacific Gypsum LLC; Dens-Shield Tile Backer.
 - d. Or equal
2. Core: 5/8" inch Type X. Min
3. Mold Resistance: ASTM D 3273 score of 10.

2.5 SUSPENSION SYSTEMS (all systems shall be galvanized no exceptions)

- A. Hanger Attachments to Concrete:

1. Anchors: Fabricated from corrosion-resistant materials with holes or loops for attaching wire hangers and capable of sustaining without failure a load equal to 5 times that imposed by construction as determined by testing according to ASTM E 488 by an independent testing agency.
 - a. Type: Post-installed chemical anchor or expansion anchor to suit application.
2. Powder-Actuated Fasteners: Suitable for application indicated fabricated from corrosion-resistant materials with clips or other devices for attaching hangers of type indicated and capable of sustaining without failure a load equal to 10 times that imposed by construction as determined by testing according to ASTM E 1190 by an independent testing agency.

- B. Flat Hangers or Rods: Steel sheet 1" by 3/16" inch or 0.25" inch diameter steel rod by length to suit application.

- C. Carrying Channels: Galvanized Cold-rolled commercial-steel sheet with a base-metal thickness of 0.053" inch and minimum 1/2"-inch- wide flanges.

1. Depth: As Required for Loading

- D. Hat-Shaped Rigid Furring Channels: ASTM C 645.

1. Minimum Base-Metal Thickness: 0.018" inch.
2. Depth: As indicated on Drawings.

- E. Grid Suspension System for Gypsum Board Ceilings: ASTM C 645 indirect-hung system composed of main beams and cross-furring members that interlock.

1. Products: Subject to compliance with requirements products that may be incorporated into the Work include but are not limited to the following:

- a. Armstrong World Industries Inc.: Drywall Grid Systems.
- b. Chicago Metallic Corporation: Drywall Grid System.
- c. USG Corporation: Drywall Suspension System.
- d. Custom perimeter trim

2.6 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that comply with referenced installation standards.
 - 1. Fasteners for Metal Framing: Of type material size corrosion resistance holding power and other properties required to fasten steel members to substrates.
- B. Isolation Strip at Exterior Walls: Provide one of the following:
 - 1. Foam Gasket: Adhesive-backed closed-cell vinyl foam strips that allow fastener penetration without foam displacement 1/8" inch thick in width to suit steel stud size.
- C. Steel Drill Screws: ASTM C 1002 unless otherwise indicated.
- D. Track Fasteners: Power-driven fasteners of size and material required to withstand loading conditions imposed on shaft-wall assemblies without exceeding allowable design stress of track fasteners or structural substrates in which anchors are embedded.
 - 1. Expansion Anchors: Fabricated from corrosion-resistant materials with capability to sustain without failure a load equal to 5 times design load as determined by testing per ASTM E 488 conducted by a qualified testing agency.
 - 2. Power-Actuated Anchors: Fastener system of type suitable for application indicated fabricated from corrosion-resistant materials with capability to sustain without failure a load equal to 10 times design load as determined by testing per ASTM E 1190 conducted by a qualified testing agency.

2.7 JOINT TREATMENT MATERIALS

- A. General: Comply with ASTM C 475/C 475M.
- B. Joint Tape:
 - 1. Interior Gypsum Wallboard: Water/mold resistant "FibraTape" or equal
 - 2. Tile Backing Panels: Adfors Tape" or equal.
- C. Joint Compound for Interior Gypsum Wallboard: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.
 - 1. Pre-filling: At open joints rounded or beveled panel edges and damaged surface areas use setting-type taping compound.
 - 2. Embedding and First Coat: For embedding tape and first coat on joints fasteners and trim flanges use setting-type taping compound.
 - a. Use setting-type compound for installing paper-faced metal trim accessories.
 - 3. Fill Coat: For second coat use setting-type sandable topping compound.
 - 4. Finish Coat: For third coat use setting-type sandable topping compound.
 - 5. Skim Coat: For final coat of Level 5 finish (or as approved) use high-build interior coating product designed for application by airless sprayer and to be used instead of skim coat to produce Level 5 finish.

2.8 TRIM ACCESSORIES

- A. General: Except where shown otherwise provide manufacturer's custom and standard trim accessories for drywall work formed of either galvanized steel with either knurled and perforated or expanded flanges for nailing or stapling and/or extruded aluminum members; and beaded for concealment of flanges in joint compound.
- B. Steel Edge Trims: ASTM C 1047; standard trim accessories of types required for drywall work formed of galvanized steel and beaded for concealment of flanges in joint compound.
 - 1. Provide corner beads at external corners L-type edge trim-beads and one-piece control joint beads. Provide U-type edge trim beads where indicated.
 - 2. Where indicated on the Drawings or as directed by the Architect provide custom formed bent steel shapes for wall and ceiling conditions as manufactured by Fry Reglet or approved equal.
- C. Aluminum Reveal/Corner Trim: Provide extruded aluminum reveal trims fabricated from 6063-T5 alloy aluminum. Provide reveal trims with the manufacturer's standard clear anodized finish matching the Architect's samples. Trims and accessories shall be of the sizes profiles shapes and configurations as indicated on the Drawings.
 - 1. Product: Type profile and color as approved
 - 2. As manufactured by Fry Reglet as scheduled.
 - 3. Other profiles indicated.
- D. End caps and partition seals: (if required)
 - 1. Emseal quite joint and end cap
 - 2. Neoprene closure

2.9 MISCELLANEOUS MATERIALS

- A. General: Provide auxiliary materials for gypsum drywall work of the type and grade recommended by the manufacturer of the gypsum board.
- B. Gypsum Board Screws: Comply with ASTM C 1002 for fastening gypsum board to type of framing or substrate material indicated.
- C. Acoustical Sealant: Non- drying non-hardening non-staining non-bleeding sealant for concealed applications and non-oxidizing skinnable paintable gunnable sealant for exposed applications per ASTM C 919. Product effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90
 - 1. Products: Subject to compliance with requirements products that may be incorporated into the Work include but are not limited to the following:
 - a. Accumetric LLC; BOSS 824 Acoustical Sound Sealant.
 - b. Grabber Construction Products; Acoustical Sealant GSC.
 - c. Pecora Corporation; AC-20 FTR or AIS-919 to suit application.
 - d. Specified Technologies Inc.; Smoke N Sound Acoustical Sealant.
 - e. USG Corporation; SHEETROCK Acoustical Sealant.
 - 2. Acoustical joint sealant shall have a VOC content of 250 g/L or less when calculated according to 40 CFR 59 Subpart D (EPA Method 24).
- D. Sound Attenuation Blankets: ASTM C 665 Type I (blankets without membrane facing) produced by combining thermosetting resins with mineral fibers manufactured from slag wool or rock wool.

1. Fire-Resistance-Rated Assemblies: Comply with mineral-fiber requirements of assembly.
 2. Reference Section Division 7 Insulation for installation and additional requirements.
- E. Laminating Adhesive: Water-resistant adhesive as recommended by gypsum board manufacturer for laminating gypsum boards.
- F. Expansion Joints: Types as approved.
- G. Leveling and Patching Compound: Latex cement as recommended by gypsum board manufacturer.
- H. Water: Clean and free of deleterious material.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and substrates with Installer present and including welded hollow-metal frames and framing for compliance with requirements and other conditions affecting performance.
- B. Examine panels before installation. Reject panels that are wet moisture damaged and mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Where required attach offset anchor plates to surfaces indicated. Provide continuous units fastened to building structure not more than 24" inches O.C. and to ceiling runners.

3.3 INSTALLING FRAMED ASSEMBLIES

- A. Install studs at spacing indicated so flanges within framing system point in same direction.
- B. Install tracks (runners) at floors and overhead supports. Extend framing full height to structural supports or substrates above suspended ceilings except where partitions are indicated to terminate at suspended ceilings. Continue framing around ducts penetrating partitions above ceiling.
 1. Slip-Type Head Joints: Where framing extends to overhead structural supports install to produce joints at tops of framing systems that prevent axial loading of finished assemblies.
 2. Door Openings: Screw vertical studs at jambs to jamb anchor clips on door frames; install runner track section (for cripple studs) at head and secure to jamb studs.
 - a. Install two studs at each jamb unless otherwise indicated.
 - b. Install cripple studs at head adjacent to each jamb stud with a minimum ½"-inch clearance from jamb stud to allow for installation of control joint in finished assembly.
 - c. Extend jamb studs through suspended ceilings and attach to underside of overhead structure.
 3. Other Framed Openings: Frame openings other than door openings the same as required for door openings unless otherwise indicated. Install framing below sills of openings to match framing required above door heads.

4. Fire-Resistance-Rated Partitions: Install framing to comply with fire-resistance-rated assembly indicated and support closures and to make partitions continuous from floor to underside of solid structure.
 - a. Firestop Track: Where indicated install to maintain continuity of fire-resistance-rated assembly indicated.
5. Sound-Rated Partitions: Install framing to comply with sound-rated assembly indicated.

- C. Installation Tolerance: Install each framing member so fastening surfaces vary not more than 1/8" inch from the plane formed by faces of adjacent framing.

3.4 INSTALLING SUSPENSION SYSTEMS

- A. Install suspension system components in sizes and spacings indicated on Drawings but not less than those required by referenced installation standards for assembly types and other assembly components indicated.
- B. Isolate suspension systems from building structure where they abut or are penetrated by building structure to prevent transfer of loading imposed by structural movement.
- C. Suspend hangers from building structure as follows:
 1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structural or suspension system.
 - a. Splay hangers only where required to miss obstructions and offset resulting horizontal forces by bracing countersplaying or other equally effective means.
 2. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with locations of hangers required to support standard suspension system members install supplemental suspension members and hangers in the form of trapezes or equivalent devices.
 - a. Size supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced installation standards.
 3. Flat Hangers: Secure to structure including intermediate framing members by attaching to inserts eye screws or other devices and fasteners that are secure and appropriate for structure and hanger and in a manner that will not cause hangers to deteriorate or otherwise fail.
 4. Do not connect or suspend steel framing from ducts pipes or conduit.
- D. Seismic Bracing: Sway-brace suspension systems with hangers used for support.
- E. Grid Suspension Systems: Attach perimeter wall track or angle where grid suspension systems meet vertical surfaces. Mechanically join main beam and cross-furring members to each other and butt-cut to fit into wall track.
- F. Installation Tolerances: Install suspension systems that are level to within 1/8" inch in 12 feet measured lengthwise on each member that will receive finishes and transversely between parallel members that will receive finishes.

3.5 APPLYING AND FINISHING PANELS GENERAL

- A. Comply with ASTM C 840.

- B. Install ceiling panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.
- C. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16" inch of open space between panels. Do not force into place.
- D. Locate edge and end joints over supports except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.
- E. Form control and expansion joints with space between edges of adjoining gypsum panels. Locate where indicated and if not indicated space at 30 feet on center in locations as approved by the Architect.
- F. Cover both faces of support framing with gypsum panels in concealed spaces (above ceilings etc.) except in chases braced internally.
 - 1. Unless concealed application is indicated or required for sound fire air or smoke ratings coverage may be accomplished with scraps of not less than 8 sq. ft. in area.
 - 2. Fit gypsum panels around ducts pipes and conduits.
 - 3. Where partitions intersect structural members projecting below underside of floor/roof slabs and decks cut gypsum panels to fit profile formed by structural members; allow 1/4"- to 3/8"-inch- wide joints to install sealant.
- G. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments except floors. Provide 1/4"- to 1/2"-inch- wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.
- H. Attachment to Steel Framing: Attach panels so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.
- I. STC-Rated Assemblies: Seal construction at perimeters behind control joints and at openings and penetrations with a continuous bead of acoustical sealant. Install acoustical sealant at both faces of partitions at perimeters and through penetrations. Comply with ASTM C 919 and with manufacturer's written recommendations for locating edge trim and closing off sound-flanking paths around or through assemblies including sealing partitions above acoustical ceilings.
- J. Install sound attenuation blankets before installing gypsum panels unless blankets are readily installed after panels have been installed on one side.

3.6 APPLYING INTERIOR GYPSUM BOARD

- A. Single-Layer Application:
 - 1. On ceilings apply gypsum panels before wall/partition board application to greatest extent possible and at right angles to framing unless otherwise indicated.
 - 2. On partitions/ walls apply gypsum panels horizontally perpendicular to framing unless otherwise indicated or required by fire-resistance-rated assembly and minimize end joints.
 - a. Stagger abutting end joints not less than one framing member in alternate courses of panels.
 - 3. Fastening Methods: Apply gypsum panels to supports with steel drill screws.

B. Multilayer Application:

1. On partitions/walls apply gypsum board indicated for base layers and face layers vertically (parallel to framing) with joints of base layers located over stud or furring member and face-layer joints offset at least one stud or furring member with base-layer joints unless otherwise indicated or required by fire-resistance-rated assembly. Stagger joints on opposite sides of partitions.
2. Fastening Methods: Fasten base layers with screws fasten face layers with adhesive and supplementary fasteners.

3.7 APPLYING GYPSUM PANELS FOR CEILINGS AND SOFFITS

A. Apply panels perpendicular to supports with end joints staggered and located over supports.

1. Install with ¼"-inch open space where panels abut other construction or structural penetrations.
2. Fasten with corrosion-resistant screws.

3.8 TRIM ACCESSORIES

A. General: For trim with back flanges intended for fasteners attach to framing with same fasteners used for panels. Otherwise attach trim according to manufacturer's written instructions.

B. Interior Trim: Install in the following locations:

1. Cornerbead: Use at outside corners unless otherwise indicated.
2. LC-Bead: Use where indicated.

3.9 FINISHING GYPSUM BOARD

A. General: Treat gypsum board joints interior angles edge trim control joints penetrations fastener heads surface defects and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.

B. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:

1. Level 1: Ceiling plenum areas concealed areas and where indicated.
2. Level 2: Panels that are substrate for tile and where indicated.
3. Level 3: Where indicated on Drawings.
4. Level 4: (Provide level floor typ.) At panel surfaces that will be exposed to view unless otherwise indicated.
5. Primer and its application to surfaces are specified in other Division 09 Sections.
6. Level 5: At panel surfaces where special paint applied finishes and assemblies are scheduled and where indicated on drawings.
 - a. Primer and its application to surfaces are specified in other Division 09 Sections.
 - b. Coordinate all levels for special materials and wall covering requirements. Reference manufacturers requirements

C. Cementitious Backer Units: Finish according to manufacturer's written instructions.

D. Water-Resistant and Tile Backer Board: Treat joints and fasteners to comply with directions of backer board and water-resistant joint compound manufacturer using water-resistant joint compound. Do not crown the joints. Embed tape in joints and form true angles.

- E. Partial Finishing: Omit third coat and sanding on concealed drywall work which requires finishing to achieve fire-resistance rating sound rating or to act as an air or smoke barrier.

3.10 GYPSUM BOARD REPAIRS

- A. General: Prior to construction, verify site conditions and document locations where existing gypsum board assemblies need to be patched, replaced or repaired. Perform repair work in accordance with the requirements specified within this Section for new work, as well as United States Gypsum Co.'s "Gypsum Construction Handbook".

3.11 PROTECTION

- A. Protect installed products from damage from weather condensation direct sunlight construction and other causes during remainder of the construction period.
- B. Remove and replace panels that are wet moisture damaged and mold damaged.
 - 1. Indications that panels are wet or moisture damaged include but are not limited to discoloration sagging or irregular shape.
 - 2. Indications that panels are mold damaged include but are not limited to fuzzy or splotchy surface contamination and discoloration.

END OF SECTION 092600

SECTION 093000 – TILE

PART 1 - GENERAL

1.1 SUMMARY

- A. The Work of this Section shall include but is not limited to the following:
 - 1. Ceramic tile as scheduled.
 - 2. Tile over glazed masonry installations.
 - 3. Shower assemblies
 - 4. Trench drain fabrications
 - 5. Stone Thresholds
 - 6. Shower curb
 - 7. Waterproofing/Crack isolation Membrane
 - 8. Trim units matching field tile.
 - 9. Mortars, grouts and similar setting accessories.
 - 10. Metal edge strips installed as part of tile installations.

1.2 DEFINITIONS

- A. General: Definitions in the ANSI A108 series of tile installation standards and in ANSI A137.1 apply to Work of this Section unless otherwise specified.
 - 1. Coordinate TCNA- installations for tile installation requirements.
- B. Module Size: Actual tile size (minor facial dimension as measured per ASTM C 499) plus joint width indicated.
- C. Facial Dimension: Actual tile size (minor facial dimension as measured per ASTM C 499).
- D. Facial Dimension: Nominal tile size as defined in ANSI A137.1.
- E. Coordinate TCNA- installations for Large format tile installation requirements

1.3 PERFORMANCE REQUIREMENTS

- A. Static Coefficient of Friction: For tile installed on walkway surfaces, provide products with the following values as determined by testing identical products per ASTM C 1028:
 - 1. Level Surfaces: Minimum 0.06.
- B. ADA/ABA Accessibility Guidelines: U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disability Act (ADA) and Architectural Barriers Act (ABA) Accessibility Guidelines for Buildings and Facilities.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show locations of each type of tile and tile pattern. Show widths details and locations of expansion contraction control and isolation joints in tile substrates and finished tile surfaces.

1. Shop drawings shall clearly show tile pattern, the identity and finish of tile, large size details and sections where tile abut other materials dimensions, thicknesses, and special details.
2. Show locations and details of joints both within tile and between adjacent construction.
3. Include details of mortar joints.
4. Show locations and details of anchors and backup.
5. Provide Custom pattern drawings where required
6. Coordinate tile install in other assemblies.

C. Samples for Verification:

1. Full-size units of each type and composition of tile and for each color and finish required.
2. Assembled samples with grouted joints for each type and composition of tile and for each color and finish required at least 12" inches square and mounted on rigid panel. Use grout of type and in color or colors approved for completed work.
3. Full-size units of each type of trim and accessory.
4. Stone thresholds in 6"-inch lengths.
5. Metal edge strips in 6"-inch lengths.

D. Installation Program: (TCNA-TR712/TR713) detail tile over tile installation process plan, including bonding agents, protection of surrounding materials and project site. Provisions for health safety and for dust control during operations. Describe in detail the materials, methods and equipment to be used.

1. Describe proposed as a written description including evidence of successful use on other comparable projects and a testing program to demonstrate their effectiveness for this Project.
2. Provide for mock up and bonding test prior to start of work.

E. Master Grade Certificates: For each shipment type and composition of tile signed by tile manufacturer and Installer.

F. Product Certificates: For each type of product signed by product manufacturer.

G. Qualification Data: For Installer.

H. Material Test Reports: For each tile-setting and -grouting product.

1.5 QUALITY ASSURANCE

A. Source Limitations for Tile: Obtain all tile of same type and color or finish from one source or producer.

1. Obtain tile from same production run and of consistent quality in appearance and physical properties for each contiguous area.

B. Source Limitations for Setting and Grouting Materials: Obtain ingredients of a uniform quality for each mortar adhesive and grout component from a single manufacturer and each aggregate from one source or producer.

C. Source Limitations for Other Products: Obtain each of the following products specified in this Section through one source from a single manufacturer for each product:

1. Stone thresholds and saddles:
 2. Waterproofing/crack isolation membrane.
 3. Joint sealants.
 4. Cementitious backer units.
 5. Metal edge strips
 6. Special adhesives and bonding mortar.
- D. Mockups: Build mockups to verify selections made under sample Submittals and to demonstrate aesthetic effects and qualities of materials and execution.
1. Build mockup of each type of floor and wall installation.
 2. For each installation, Contractor shall build a dry mock-up to show varieties in color and pattern of tile, for the Architect and Owners Representative to approve. Rearrange units as necessary to provide even distribution and range of color or pattern.
- E. Pre-installation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination."
- 1.6 DELIVERY STORAGE AND HANDLING
- A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Comply with requirement in ANSI A137.1 for labeling sealed tile packages.
 - B. Store tile and cementitious materials on elevated platforms under cover and in a dry location.
 - C. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
 - D. Store liquid latexes and emulsion adhesives in unopened containers and protected from freezing.
 - E. Handle tile that has temporary protective coating on exposed surfaces to prevent coated surfaces from contacting backs or edges of other units. If coating does contact bonding surfaces of tile remove coating from bonding surfaces before setting tile.
- 1.7 PROJECT CONDITIONS
- A. Environmental Limitations: Do not install tile until construction in spaces is complete and ambient temperature and humidity conditions are maintained at the levels indicated in referenced standards and manufacturer's written instructions.
- 1.8 EXTRA MATERIALS
- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 1. Tile and Trim Units: Furnish quantity of full-size units equal to 3 percent of amount installed for each type composition color pattern and size indicated.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements manufacturers offering products that may be incorporated in the work include but are not limited to the following:
- B. Tile:
 - 1. Daltile
 - 2. (Basis of Design) As scheduled
- C. Setting and Grout Manufacturers:
 - 1. Bostik Inc.
 - 2. Laticrete International Inc.
 - 3. MAPEI Corporation.
 - 4. Litokol
 - 5. Ardex
 - 6. As scheduled.
- D. Selected Products: Refer to the Drawings and Finish Schedules for products and manufacturers.
 - 1. Coordinate with Architectural Finish Specifications for all current products and modifications and for additional requirements

2.2 PRODUCTS GENERAL

- A. ANSI Ceramic Tile Standard: Provide tile that complies with ANSI A137.1 "Specifications for Ceramic Tile" for types compositions and other characteristics indicated.
 - 1. Provide tile complying with Standard grade requirements unless otherwise indicated.
 - 2. For facial dimensions of tile comply with requirements relating to tile sizes specified in Part 1 "Definitions" Article.
- B. ANSI Standards for Tile Installation Materials: Provide materials complying with ANSI standards referenced in "Setting and Grouting Materials" Article.
- C. Colors Textures and Patterns: Where manufacturer's standard products are indicated for tile grout and other products requiring selection of colors surface textures patterns and other appearance characteristics provide specific products or materials complying with the following requirements:
 - 1. As selected by Architect from manufacturer's full range.
- D. Factory Blending: For tile exhibiting color variations within ranges selected during Sample submittals blend tile in factory and package so tile units taken from one package show same range in colors as those taken from other packages and match approved Samples.
- E. Mounting: For factory-mounted tile provide back- or edge-mounted tile assemblies as standard with manufacturer unless otherwise indicated.

1. Where tile is indicated for installation in wet areas do not use back- or edge-mounted tile assemblies unless tile manufacturer specifies in writing that this type of mounting is suitable for installation indicated and has a record of successful in-service performance.
- F. Factory-Applied Temporary Protective Coating: Where indicated under tile type protect exposed surfaces of tile against adherence of mortar and grout by precoating with continuous film of petroleum paraffin wax applied hot. Do not coat unexposed tile surfaces.

2.3 PRODUCTS

- A. Available Varieties and Sources: Subject to compliance with requirements stone varieties that may be incorporated into the Work include but are not limited to those indicated.
- B. Abrasion Resistance: Provide stone with a value of not less than 10 as determined per ASTM C 1353 or ASTM C 241.

2.4 THRESHOLDS/CURBS

- A. General: Fabricate to sizes and profiles indicated or required to provide transition between adjacent floor finishes.
1. Bevel edges at 1:2 slope aligning lower edge of bevel with adjacent floor finish. Limit height of bevel to 1/2" inch or less and finish bevel to match face of threshold.
- B. Thresholds: ASTM C 503 with a minimum abrasion resistance of 10 per ASTM C 1353 or ASTM C 241.
1. Description: Stone or building standard to Match Architect's sample and as scheduled
- C. Shower Curb: As schedules match approved samples

2.5 WATERPROOFING MEMBRANES FOR THIN-SET TILE INSTALLATIONS

- A. General: Manufacturer's standard product that complies with ANSI A118.10.
- B. Latex Rubber Waterproofing: Manufacturer's standard factory- prepackaged job-mixed proprietary two-part formulation consisting of liquid latex rubber and powder for trowel application and glass fiber fabric reinforcing.
1. Products: Subject to compliance with requirements provide "Laticrete 9235 Waterproof Membrane" as manufactured by Laticrete International Inc or as approved.

2.6 CRACK ISOLATION MEMBRANE

- A. General: Manufacturer's standard product that complies with ANSI A118.10.
1. Fabric Reinforced Fluid Applied Product: System consisting of liquid latex rubber with a VOC content of 65 g/L or less when calculated according to 40 CFR 59 Subpart D (EPA Method 24) and fabric reinforcement. Provide manufacturer's standard factory - prepackaged job mixed proprietary two-part formulation consisting

of liquid latex rubber and powder for trowel/roller application and glass fiber fabric reinforcing.

2. Selected Product: Subject to compliance with requirements provide "Laticrete Blue 92 Anti Fracture Membrane" and fabric reinforcement as manufactured by Laticrete International Inc. or approved equal.
3. For drainage fabrications provide Hydro Ban reinforced sheet membranes.

2.7 SETTING AND GROUTING MATERIALS

- A. General: Manufacturer's standard product that complies with ANSI A118.10 and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer.

2.8 SETTING MATERIALS

- A. Portland cement Mortar (Thickset) Sloped Installation Materials: ANSI A108.02.
 1. Reinforcing Wire Fabric: Galvanized welded wire fabric 2" by 2" inches by 0.062"-inch diameter; comply with ASTM A 185 and ASTM A 82 except for minimum wire size.
 2. Latex Additive: Manufacturer's standard water emulsion serving as replacement for part or all of gaging water of type specifically recommended by latex-additive manufacturer for use with field-mixed portland cement and aggregate mortar bed.
- B. Latex-Portland Cement Mortar (Thin Set): ANSI A118.4.
 1. Provide prepackaged dry-mortar mix containing dry redispersible vinyl acetate or acrylic additive to which only water must be added at Project site.
 2. For wall applications provide mortar that complies with requirements for non-sagging mortar in addition to the other requirements in ANSI A118.4.
 3. For wet areas provide Epoxy Grout as directed.

2.9 GROUT MATERIALS

- A. Polymer-Modified Tile Grout: ANSI A118.7.
 1. Polymer Type: Ethylene vinyl acetate or acrylic additive in dry redispersible form prepackaged with other dry ingredients.
 2. (As approved) Epoxy grout for wet areas and special applications: epoxy grout comply with ANSI A108.6
- B. General: Provide manufacturer's standard chemically curing elastomeric sealants of base polymer and characteristics indicated that comply with applicable requirements in Division 7 Section "Joint Sealants."
- C. Colors: Provide colors of exposed sealants to match colors of grout in tile adjoining sealed joints unless otherwise indicated.
- D. One-Part Mildew-Resistant Silicone Sealant: ASTM C 920; Type S; Grade NS; Class 25; Uses NT G A and as applicable to nonporous joint substrates indicated O; formulated with fungicide intended for sealing interior ceramic tile joints and other nonporous substrates that are subject to in-service exposures of high humidity and extreme temperatures.

2.10 TILE OVER TILE PRIMER MATERIAL

- A. Bond Promoting Primer:
 - 1. Sika® Latex R or as approved.
 - 2. Mapei: ECO Prim Grip

2.11 MISCELLANEOUS MATERIALS

- A. Trowelable Underlayments and Patching Compounds: Latex-modified portland cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated.
- B. Metal Edge Strips: Angle or L-shape height to match tile and setting-bed thickness metallic or combination of metal and PVC or neoprene base designed specifically for flooring applications white zinc alloy exposed-edge material.
 - 1. As scheduled.
 - a. Schluter Deco
 - b. Schluter Quadec
 - c. Schluter Indec
- C. Temporary Protective Coating: Either product indicated below that is formulated to protect exposed surfaces of tile against adherence of mortar and grout; compatible with tile mortar and grout products; and easily removable after grouting is completed without damaging grout or tile.
- D. Tile Cleaner: A neutral cleaner capable of removing soil and residue without harming tile and grout surfaces specifically approved for materials and installations indicated by tile and grout manufacturers.
- E. Grout Sealer: Manufacturer's silicone product for sealing grout joints that does not change color or appearance of grout.

2.12 MIXING MORTARS AND GROUT

- A. Mix mortars and grouts to comply with referenced standards and mortar and grout manufacturers' written instructions.
- B. Add materials water and additives in accurate proportions.
- C. Obtain and use type of mixing equipment mixer speeds mixing containers mixing time and other procedures to produce mortars and grouts of uniform quality with optimum performance characteristics for installations indicated.

2.13 FABRICATION

- A. Facial Dimensions of Tiles: Do not vary facial dimensions from specified dimensions by more than plus or minus 1/64 inch.
- B. Joint Surfaces: Except for specified beveled or eased edges if any dress joint surfaces square for full depth of tile.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates areas and conditions where tile will be installed with Installer present for compliance with requirements for installation tolerances and other conditions affecting performance of installed tile.
 - 1. Verify that substrates for setting tile are firm; dry; clean; free of oil waxy films and curing compounds; and within flatness tolerances required by referenced ANSI A108 Series of tile installation standards for installations indicated.
 - 2. Verify that installation of ground anchors recessed frames electrical and mechanical units of work and similar items located in or behind tile has been completed before installing tile.
 - 3. Verify that joints and cracks in tile substrates are coordinated with tile joint locations; if not coordinated adjust joint locations in consultation with Architect.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove coatings including curing compounds and other substances that contain soap wax oil or silicone that are incompatible with tile-setting materials.
- B. Provide concrete substrates for tile floors installed with adhesives or thin-set mortar that comply with flatness tolerances specified in referenced ANSI A108 Series of tile installation standards.
 - 1. Fill cracks holes and depressions with trowelable leveling and patching compound according to tile-setting material manufacturer's written instructions. Use product specifically recommended by tile-setting material manufacturer.
 - 2. Remove protrusions bumps and ridges by sanding or grinding.
- C. Blending: For tile exhibiting color variations within ranges selected during Sample submittals verify that tile has been factory blended and packaged so tile units taken from one package show same range of colors as those taken from other packages and match approved Samples. If not factory blended either return to manufacturer or blend tiles at Project site before installing.

3.3 INSTALLATION GENERAL

- A. ANSI Tile Installation Standards: Comply with parts of ANSI A108 Series "Specifications for Installation of Ceramic Tile" that apply to types of setting and grouting materials and to methods indicated in ceramic tile installation schedules.
- B. TCNA Installation Guidelines: TCNA's "Handbook for Ceramic Tile Installation." Comply with TCNA installation methods indicated in ceramic tile installation schedules.
- C. Extend tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions edges and corners without disrupting pattern or joint alignments.

- D. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim finish or built-in items for straight aligned joints. Fit tile closely to electrical outlets piping fixtures and other penetrations so plates collars or covers overlap tile.
- E. Jointing Pattern: Lay tile in grid pattern unless otherwise indicated. Align joints when adjoining tiles on floor base walls and trim are same size. Lay out tile work and center tile fields in both directions in each space or on each wall area. Adjust to minimize tile cutting. Provide uniform joint widths unless otherwise indicated.
 - 1. For tile mounted in sheets make joints between tile sheets same width as joints within tile sheets so joints between sheets are not apparent in finished work.
- F. Expansion Joints: Locate expansion joints and other sealant-filled joints including control contraction and isolation joints where indicated during installation of setting materials mortar beds and tile. Do not saw-cut joints after installing tiles.
 - 1. Locate joints in tile surfaces directly above joints in concrete substrates.
 - 2. Prepare joints and apply sealants to comply with requirements in Division 7 Section "Joint Sealants."
- G. Grout tile to comply with requirements of the following tile installation standards:
 - 1. For ceramic tile grouts (sand-portland cement; dry-set commercial portland cement; and latex-portland cement grouts) comply with ANSI A108.10.
 - 2. For chemical-resistant epoxy grouts comply with ANSI A108.6.
 - 3. For chemical-resistant furan grouts comply with ANSI A108.8.

3.4 WATERPROOFING MEMBRANE INSTALLATION

- A. Install waterproofing to comply with ANSI A108.13 and waterproofing manufacturer's written instructions to produce waterproof membrane of uniform thickness bonded securely to substrate.
- B. Install crack-suppression membrane to comply with manufacturer's written instructions to produce membrane of uniform thickness bonded securely to substrate.
- C. Do not install tile over waterproofing until waterproofing has cured and been tested to determine that it is watertight.

3.5 WALL TILE INSTALLATION METHODS

- A. Install types of wall tile designated to comply with requirements indicated below for setting bed methods and TCNA installation methods related to subsurface and grout.
 - 1. Latex Portland Cement Mortar: ANSI A108.5.
 - 2. Water Resistant Backer Board: TCA B413.
 - 3. Grout: Latex portland cement.
 - 4. Provide cement backer for full wall installations if required
 - 5. Coordinate special TCNA requirements for large tile over tile installations.

3.6 TILE OVER TILE INSTALLATION

- A. Reference TR[®]/Renovation methods in the TCNA Handbook for Ceramic, Glass and Stone Tile Installation and NTCA Reference Manual section "Tile Over Other Surfaces"

B. TCNA - TR712 and TR713

C. Methods General

1. Ensure that the structure will be able to support the added weight of the new tile and bond coat over the existing installation.
2. Provide Mechanical or chemical abrasion to existing tile.
3. Provide bond coating.
4. Test bonding sample

3.7 FLOOR INSTALLATION METHODS

A. Ceramic Floor Tile: Install tile to comply with requirements indicated below for setting bed methods TCNA installation methods related to types of subfloor construction and grout types:

B. Coordinate for concrete curbs and sloped assemblies

C. Coordinate trench drain fabrications and waterproofing.

D. Latex Portland Cement Mortar: ANSI A108.5; for ceramic tile floors unless otherwise indicated.

E. Latex Portland Cement (Thin Set) Interior: TCNA F122 03; with waterproof/crack isolation membrane at locations indicated on the Drawings or as directed by the Architect.

F. Grout: Latex portland cement grout for ceramic tile installations.

G. Stone Thresholds: TCNA TR611 03; Install stone thresholds at locations indicated; set in same type of setting bed as abutting field tile.

1. Set thresholds in latex portland cement mortar where mortar bed would otherwise be exposed above adjacent floor finish.

3.8 FLOOR TILE INSTALLATION

A. General: Install tile to comply with requirements in the Floor Tile Installation Schedule including those referencing TCNA installation methods and ANSI A108 Series of tile installation standards.

1. Latex Portland Cement Mortar: ANSI A108.5; for tile floors unless otherwise indicated.
2. Concrete Subfloors Interior: TCNA F113; latex-portland cement mortar.
3. Waterproof Membrane Interior: TCNA F122; thin- set with waterproof membrane.
4. Waterproof Membrane Interior: TCNA F 121; (sloped) cement mortar bed with waterproof membrane.
5. Grout: Sanded and unsanded latex-portland cement grout as specified.
6. Floor Tile: Install tile to comply with requirements indicated below for setting bed methods TCNA installation methods related to types of subfloor construction and grout types:
7. Meet the specifications for large format tiles - maximum substrate variation is not more than 1/8" in 10" and 1/16" in 24" - when measured from surface high points with a straightedge. Any substrate that exceeds the ANSI standards must be fixed with self-leveling underlayment to meet the flatness requirements before installing the tiles.

8. Coordinate special TCNA requirements for large format tile.
- B. Metal Edge Strips: Install metal edge strips at locations indicated; set according to manufacturer recommendations.
 - C. Grout Sealer: Apply grout sealer to grout joints according to grout-sealer manufacturer's written instructions. As soon as grout sealer has penetrated grout joints remove excess sealer and sealer that has gotten on tile faces by wiping with soft cloth.
- 3.9 CLEANING AND PROTECTING
- A. Cleaning: On completion of placement and grouting clean all ceramic tile surfaces so they are free of foreign matter.
 1. Remove latex-portland cement grout residue from tile as soon as possible.
 2. Clean grout smears and haze from tile according to tile and grout manufacturer's written instructions but no sooner than 10 days after installation. Use only cleaners recommended by tile and grout manufacturers and only after determining that cleaners are safe to use by testing on samples of tile and other surfaces to be cleaned. Protect metal surfaces and plumbing fixtures from effects of cleaning. Flush surfaces with clean water before and after cleaning.
 3. Remove temporary protective coating by method recommended by coating manufacturer that is acceptable to tile and grout manufacturer. Trap and remove coating to prevent it from clogging drains.
 - B. When recommended by tile manufacturer apply coat of neutral protective cleaner to completed tile walls and floors. Protect installed tile work with kraft paper or other heavy covering during construction period to prevent staining damage and wear.
 - C. Prohibit foot and wheel traffic from tiled floors for at least seven days after grouting is completed.
 - D. Before final inspection remove protective coverings and rinse neutral cleaner from tile surfaces.

END OF SECTION 093000

SECTION 099100- PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: The Work of this Section shall include but not be limited to the following:
1. Painting of interior surfaces as indicated and where required.
 2. Metal assembly finish painting as indicated.
- B. Work Not Included:
1. Pre-Finished Items: Do not include painting when shop or factory finishing is specified for such items as elevator and mechanical and electrical equipment.
 2. Concealed Surfaces: Painting is not required on surfaces in concealed and generally inaccessible areas such as pipe spaces duct shafts.
 3. Finished Metal Surfaces: Anodized aluminum factory-finished aluminum bronze stainless steel and similar finished metals will not require painting. Exposed no-hub piping will not require painting.
 4. Operating Parts: Moving parts of mechanical and electrical devices motor and fan shafts will not require painting.
- C. Labels: Do not paint over any code-required labels such as Underwriters' Laboratories and Factory Mutual or any equipment identification performance rating name or nomenclature plates.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's technical information including paint label analysis and application instructions for each material proposed.
1. Material List: Provide an inclusive list of required coating materials. Indicate each material and cross-reference specific coating finish system and application. Identify each material by manufacturer's catalog number and general classification.
- B. Samples: Prior to painting submit samples for Architect's review of each required color and texture. Identify materials used on samples. Samples shall have each coat of paint exposed the same amount and tinted slightly different than other coats.
1. On 12" by 12" hardboard submit three samples of each color material and texture until sheen color and texture are acceptable.
 2. Field Samples: On wall surfaces and other component surfaces duplicate finishes of prepared samples. Provide full-coat finish samples on at least 100 sq. ft. of surface until required sheen color and texture are obtained; simulate finished lighting conditions for review of in-place work.
 - a. Modify each color of the field samples a maximum of one (1) time and install a new field sample panel when directed by the Architect.
- C. Certification by the manufacturer that products supplied comply with local regulations controlling use of volatile organic compounds (VOCs).

1.4 QUALITY ASSURANCE

- A. Single Source Responsibility: Provide primers fillers and undercoats produced by same manufacturer as finish coats. Use only thinners approved by paint manufacturer and use only within recommended limits.

- B. Coordination of Work: Review other sections of these specifications for shop primers to ensure compatibility of total coatings system. Upon request from other trades furnish information on finish materials to ensure that compatible prime coats are used.
- C. Applicator Qualifications: Engage an experienced applicator who has completed painting/coating system applications similar in materials and scope to that indicated for this Project with a record of successful in-service performance.
 - 1. In addition the applicator shall have not less than 5 consecutive years of professional paint experience; and be acceptable to the paint manufacturer for the application of the specified systems.

1.5 DELIVERY AND STORAGE

- A. Deliver materials in original new and unopened packages and containers bearing manufacturer's name and label and following information:
 - 1. Name or title of material.
 - 2. Fed. Spec. number if applicable.
 - 3. Manufacturer's name stock number and date of manufacture.
 - 4. Contents by volume for major pigment and vehicle constituents.
 - 5. Thinning and application instructions.
 - 6. Color name and number.
- B. Store materials not in actual use in tightly covered containers. Maintain containers used in storage of paint in a clean condition free of foreign materials and residue.
 - 1. Protect materials from freezing where necessary. Keep storage area neat and orderly. Remove oily rags and waste daily. Ensure that workmen and work areas are adequately protected from fire hazards and health hazards resulting from use of paints.

1.6 PROJECT CONDITIONS

- A. Apply water-base paints only when temperature of surfaces to be painted and surrounding air temperatures are between 50 deg. F and 90 deg. F unless otherwise permitted by paint manufacturer's instructions.
- B. Apply solvent-thinned paints only when temperature of surfaces to be painted and surrounding air temperatures are between 45 deg. F and 95 deg. F unless otherwise permitted by paint manufacturer's instructions.
- C. Do not apply paint when relative humidity exceeds 85%; or to damp or wet surfaces; unless otherwise permitted by paint manufacturer.
- D. Cover other work which might be damaged by surface preparation. Provide temporary enclosures as required to confine surface preparation to protect the environment persons and property.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements provide paint products as manufactured by one of the following or equal acceptable to the Architect:
 - 1. Benjamin Moore and Company.

2. Sherman Williams
2. Approved equal

B Selected Products: Refer to the Drawings and Finish Schedules for products and manufacturers.

1. Coordinate with Architectural Finish Specifications for all current products and modifications and for additional requirements
2. Coordinate with types building standard paints and applications.

2.2 MATERIALS

- A. Material Quality: Provide best quality grade of various types of coatings as regularly manufactured by acceptable paint materials manufacturers. Materials not displaying manufacturer's identification as a standard best-grade product will not be acceptable.
- B. Volatile Organic Materials: Provide paint and coating products to comply with applicable environmental regulations and local authorities. Federal numbers where specified or referred to are for guidelines only.
- C. Primers and Undercoaters: Provide primers and undercoaters recommended by the finish coating manufacturer for suitability with the substrate and compatibility with finish coats.
- D. Color Pigments: Pure non-fading to suit substrates and service.
 1. Lead content in pigment if any is limited to contain not more than 0.5% lead as lead metal based on the total non-volatile (dry-film) of paint by weight.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Applicator must examine areas and conditions under which painting work is to be applied and notify Contractor in writing of conditions detrimental to proper and timely completion of work. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to Applicator.
 1. Starting of painting work will be construed as Applicator's acceptance of surfaces and conditions within any area.
- B. Do not paint over dirt rust scale grease moisture scuffed surfaces or conditions otherwise detrimental to formation of a durable paint film.
- C. It shall be the responsibility of the Contractor to see that all mixed colors match the color selections made by the Architect prior to application of paint or finish.

3.2 SURFACE PREPARATION

- A. General: Perform preparation and cleaning in accordance with paint manufacturer's instructions and as herein specified.
 1. Provide barrier coats over incompatible primers or remove and reprime as required. Notify Architect in writing of any anticipated problems with substrates primed by others.
 2. Remove hardware accessories, lighting fixtures and similar items not to be field-painted or provide suitable protection. Remove items if necessary for painting of items or adjacent surfaces. Reinstall removed items on completion of painting.

3. Clean surfaces to be painted. Remove oil and grease prior to other cleaning. Be sure that cleaning materials do not fall onto newly-painted surfaces.
- B. Surface Preparation: Clean and prepare surfaces to be painted in accordance with the manufacturer's instructions for each particular substrate condition and as specified.
1. Ferrous Metals: Clean non-galvanized ferrous-metal surfaces that have not been shop coated; remove oil grease dirt loose mill scale and other foreign substances. Use solvent or mechanical cleaning methods that comply with recommendations of the Steel Structures Painting Council.
 - a. Blast steel surfaces clean as recommended by the paint system manufacturer and in accordance with requirements of SSPC specification SSPC-SP 10 for interior surfaces and SSPC-SP 6 for exterior surfaces.
 - b. Treat bare and sandblasted or pickled clean metal with a metal treatment wash coat before priming.
 - c. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush clean with solvents recommended by the paint manufacturer and touch up with the same primer as the shop coat.
 2. Galvanized Surfaces: Clean galvanized surfaces that have not been shop primed and/or intermediate coated with nonpetroleum-based solvents so surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods.
 - a. Touch-up bare and damaged areas of the shop-applied prime coat that have been damaged; wire brush mechanically clean and/or solvent clean such areas in compliance with the manufacturer recommendations.
 - b. Use the coating materials identical to those applied in the shop. Refer to other Sections of these specifications for materials and other requirements.
 3. Cementitious Materials: Prepare concrete concrete masonry block and cement plaster surfaces to be painted. Remove efflorescence chalk dust dirt grease oils and release agents. Roughen as required to remove glaze. If hardeners or sealers have been used to improve curing use mechanical methods of surface preparation.
 - a. For painting of interior concrete surfaces at location indicated on the drawings fill voids cracks or other defects and grind down to provide smooth surface.
 - b. Use abrasive blast-cleaning methods if recommended by the paint manufacturer.
 4. Wood: Clean wood surfaces to be painted of dirt oil or other foreign substances with scrapers mineral spirits and sandpaper as required. Sandpaper smooth those finished surfaces exposed to view and dust off. Scrape and clean small dry seasoned knots and apply a thin coat of white shellac or other recommended knot sealer before application of priming coat. After priming fill holes and imperfections in finish surfaces with putty or plastic wood-filler. Sandpaper smooth when dried.
 1. Prime stain or seal wood required to be field-painted immediately upon delivery to job. Prime edges end faces undersides and backsides of such wood.

3.3 MATERIALS PREPARATION

- A. Mix and prepare painting materials in accordance with manufacturer's directions.
- B. Maintain containers used in mixing and application of paint in a clean condition free of foreign materials and residue.

- C. Stir materials before application to produce a mixture of uniform density and stir as required during application. Remove surface film and if necessary strain material before using.

3.4 APPLICATION

- A. General: Apply paint in accordance with manufacturer's directions. Use techniques best suited for substrate and type of material being applied.
 - 1. Apply additional coats when undercoats show through final coat of paint until paint film is of uniform finish color and appearance including edges corners crevices welds and fasteners.
 - 2. Sand lightly between each succeeding enamel coat.
 - 3. Omit first coat (primer) on metal surfaces which have been shop-primed and touch-up painted.
- B. Scheduling Painting: Apply first-coat material to surfaces that have been prepared for painting as soon as practicable after preparation. Allow sufficient time for proper drying. Do not recoat until paint feels dry and firm.
- C. Minimum Coating Thickness: Apply materials to establish a total dry film thickness (DFT) as indicated or if not indicated as recommended by coating manufacturer.
- D. Mechanical and Electrical Work: Painting of mechanical and electrical work is limited to those items exposed in mechanical equipment rooms and in occupied spaces.
- E. Prime Coats: Apply prime coat on surface which is required to be painted or finished and which has not been prime coated by others. Recoat primed and sealed surfaces where there is evidence of defects in first coat to assure a finish coat without defects.
- F. Pigmented (Opaque) Finishes: Completely cover to provide an opaque smooth surface of uniform finish color appearance and coverage. Cloudiness spotting holidays laps brush marks runs sags or other surface imperfections will not be acceptable.
- G. Completed Work: Match approved samples for color and texture. Repaint work not in compliance with specified requirements.
- H. At mechanical equipment indicated to be painted verify that air intake systems have not been clogged due to application of paint system specified.

3.5 CLEAN-UP AND PROTECTION

- A. Clean-Up: During progress of work remove from site discarded paint materials rubbish cans and rags at end of each workday.
 - 1. Upon completion of painting work clean paint-spattered surfaces. Remove spattered paint by proper methods with care not to scratch or otherwise damage finished surfaces.
- B. Protection: Protect work of other trades against damage by painting and finishing work. Correct any damage by cleaning repairing or replacing and repainting as acceptable to Architect.
 - 1. Provide "Wet Paint" signs to protect newly-painted finishes. Remove temporary protective wrappings provided by others for protection of their work after completion of painting operations.
 - 2. At completion of work of other trades touch-up and restore all damaged or defaced surfaces.

3.6 INTERIOR PAINT SCHEDULE

- A. General: Provide the following interior paint systems by Benjamin Moore (Ultra-Spec) and Sherman Williams of colors as selected by the Architect.
 - 1. Refer to Finish Schedule on Contract Drawings for locations of types colors and sheen.
- B. Gypsum Drywall Ceilings:
 - 1. Flat Finish Vinyl Acrylic Latex
 - a. Primer Coat: Latex primer sealer.
 - b. Two Coats: Vinyl latex paint flat finish.
- C. Gypsum Drywall Walls:
 - 1. Semi-Gloss Alkyd Eggshell Enamel
 - a. Primer Coat: Prime Seal.
 - b. Two Coats: Alkyd enamel.
- D. Acrylic Latex Eggshell Enamel Finish:
 - 1. Primer Coat: Latex primer Sealer.
 - 2. Two Coats: Vinyl latex paint Eggshell Enamel
- E. Acrylic Latex Semi-Gloss Enamel Finish:
 - 1. Primer Coat: Latex primer Sealer.
 - 2. Two Coats: Vinyl latex paint Semi-Gloss Enamel.
- F Ceiling Finish:
 - 1. Primer Coat: primer Sealer.
 - 2. Two Coats: Super White (Ultra-Spec 500)
- G. Metal doors and convectors:
 - 1 Water based polyurethane (Scuffmaster)
 - 2 Metallic series or as scheduled.
 - 3 Provide type approved for electrostatic application.
- H. Electrical and telephone back panels interior of ductwork behind grilles and registers and where indicated:
 - 1. 2 Coats: Suitable flat black paint.
- I. Ferrous Metal (as scheduled):
 - 1. Semi-Gloss Alkyd
 - a. Prime Coat: Iron Clad Retardo Rust Inhibitive Paint
 - b. Two Coats: Moore's Alkyd Dulamel.
- J. Ferrous Metal Conduits and Mechanical Piping:
 - 1. Satin Finish Polyamide Epoxy
 - a. Surface Preparation: SSPC-SP 6
 - b. Primer Coat: Tnemec 90-97; 2.5 to 4.0 mils d.f.t.

- c. Intermediate Coat: Tnemec Series 66 Epoxoline - 3.0 to 5.0 mils d.f.t.
- d. Finish Coat: Tnemec Series 66 Epoxoline - 2.0 to 3.0 mils d.f.t.

K. Wood: Acrylic Latex Semi-Gloss Enamel Finish:

- 1. Primer Coat: Latex primer Sealer.
- 2. Two Coats: Vinyl latex paint Semi-Gloss Enamel.

END OF SECTION 099100

SECTION 099110 - ELECTROSTATIC PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: The Work of this Section shall include but not be limited to the following:
 - 1. Electro-static painting and finishing of the existing metal assemblies as indicated.
- B. Items Not to Be Painted:
 - 1. Concealed Surfaces: Unless otherwise indicated painting is not required on concealed surfaces.
 - 2. Adjacent Surfaces: Do not paint adjacent wall and ceiling surface.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's technical information including paint label analysis and application instructions for each material proposed for use. Include gloss ratings for each color and finish required.
- B. Samples: Submit samples for Architect's review of color and texture only. Provide a listing of material and application for each coat of each finish sample.
 - 1. On 12" x 12" sheet metal provide samples of each color gloss and material with texture to simulate actual conditions. Resubmit samples as requested by Architect until acceptable sheen color and texture is achieved.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Installer shall be a firm with not less than 5 years successful experience in applying coatings and finishes of the type required on projects of similar type and quality level as this Project.
- B. Source Quality Control: The manufacturer providing paints shall record the formula for each color of paint prepared. Colors shall be labeled and keyed to the paints provided. Manufacturer shall keep formulas on file and accessible for a minimum of 5 years.

1.4 MOCK-UPS

- A. On actual surfaces duplicate painted finishes of prepared samples. On at least 100 sq. ft. of surfaces as indicated on the Drawings or as directed provide full-coat finish samples until required sheen color and texture is obtained; simulate finished lighting conditions for review of in-place work.

1.5 PRODUCT HANDLING

- A. Deliver paint materials to the job site in original containers and packages bearing the manufacturer's labels indicating name type and brand. Unless otherwise directed by the Architect deliver paints ready-mixed. Order in advance in large enough quantities and in ample time to facilitate the Work.
- B. Store materials and equipment in a designated storage space on the site. Keep storage space neat clean and accessible at all times. Protect floors from paint spillage.

1.6 ENVIRONMENTAL CONDITIONS

- A. Do not paint when the air is dust-laden nor when temperature conditions are unsuitable. Comply with manufacturer's recommendations when they are more stringent with respect to application temperatures.

1.7 PROTECTION

- A. Place paint or solvent soaked rags waste or other materials which might constitute a fire hazard in metal containers and remove from premises at the close of each day's work. Take every precaution to avoid damage by fire.
- B. Provide suitable coverings to protect surfaces not requiring painting.
- C. Remove or protect items such as hardware hardware accessories plates lighting fixtures and similar items placed prior to painting. Reposition or remove protection upon completion of each space.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Provide paint products by the manufacturers recommended by the electrostatic paint system Applicator/Installer.
- B. As scheduled: As scheduled or approved for type and color.

2.2 COLORS AND FINISHES

- A. General: On Drawings and similar designations indicate different custom colors and their respective glosses to be selected by the Architect.
 - 1. Proprietary names used to designate colors are not intended to imply that products of the named manufacturers are required.
- B. Color Pigments: Pure non-fading applicable types to suit substrates and service indicated.
 - 1. Lead content in pigment if any is limited to contain not more than 0.5% lead as lead metal based on the total non-volatile (dry-film) of paint by weight.
 - 2. Colors shall be factory premixed. No job site tinting is permitted for finish coats.
- C. Gloss Ratings: Specular gloss of finished surfaces shall be within the following ranges when measured at 60 deg. in accordance with ASTM D 523.

<u>Degree of Gloss</u>	<u>Gloss Units</u>
Semi-Gloss	30 to 60

2.3 MATERIAL QUALITY

- A. Provide best quality grade of various types of coatings as regularly manufactured by acceptable paint materials manufacturers.
 - 1. Materials not displaying manufacturer's identification as a standard best-grade product will not be acceptable.
- B. Provide dust-coat paint produced by same manufacturer as finish coats. Use only thinners approved by paint manufacturer and use only within recommended limits.

- C. Where indicated and in locations where ambient temperature-humidity conditions encourage the ready formation of mildew use paints with additional mildew inhibitive agent incorporated during the manufacturing process of type and in concentration recommended by the paint manufacturer to withstand such mildew formation.

2.4 PAINT SYSTEMS

- A. General: Provide the following paint systems for substrates as indicated.
 - 1. Ferrous Metal Semi-Gloss Finish: Provide the following electro-statically applied paint systems unless otherwise indicated.
 - a. 1st Coat: Dust Coat - Compatible with finish coat
 - b. 2nd Coat: Silicone enamel; color matching the Architect=s sample.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine areas and conditions under which painting work is to be applied for conditions detrimental to proper and timely completion of work. Do not proceed with work until unsatisfactory conditions have been corrected.
- B. Starting of painting work will be construed as acceptance of surfaces and conditions within any particular area.
- C. Do not paint over dirt rust scale grease moisture scuffed surfaces or conditions otherwise detrimental to formation of a durable paint film.

3.2 SURFACE PREPARATION

- A. General: Perform preparation and cleaning procedures in accordance with paint manufacturer's instructions and as herein specified for each particular substrate condition.
- B. Remove hardware hardware accessories and similar items in place and not to be finish-painted or provide surface-applied protection prior to surface preparation and painting operations. Following completion of painting of each space or area reinstall removed items.
- C. Sand and wash surfaces to be painted before applying paint or surface treatments. Remove oil and grease prior to cleaning. Program cleaning and painting so that contaminants from cleaning process will not fall onto wet newly-painted surfaces.

3.3 MATERIALS PREPARATION

- A. Mix and prepare painting materials in accordance with manufacturer's directions.
- B. Store materials not in actual use in tightly covered containers. Maintain containers used in storage mixing and application of paint in a clean condition free of foreign materials and residue.
- C. Stir materials before application to produce a mixture of uniform density and stir as required during application. Do not stir surface film into material. Remove film and if necessary strain material before using.

3.4 APPLICATION

- A. General: Apply paint in accordance with manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied.

B. Scheduling Painting:

1. Apply dust-coat material to surfaces that have been cleaned and otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
2. Allow sufficient time between successive coatings to permit proper drying. Do not recoat until paint has dried to where it feels firm does not deform or feel sticky under moderate thumb pressure and application of another coat of paint does not cause lifting or loss of adhesion of the undercoat.

C. Minimum Coating Thickness: Apply materials at not less than manufacturer's recommended spreading rate to establish a total dry film thickness as indicated or if not indicated as recommended by coating manufacturer.

D. Pigmented (Opaque) Finishes: Completely cover to provide an opaque smooth surface of uniform finish color appearance and coverage. Cloudiness spotting holidays laps runs sags ropiness or other surface imperfections will not be acceptable.

E. Completed Work: Match approved samples for color texture and coverage. Remove refinish or repaint work not in compliance with specified requirements.

3.5 CLEAN-UP AND PROTECTION

A. Clean-Up: During progress of work remove from site discarded paint materials rubbish cans and rags at end of each work day.

1. Upon completion of painting work clean paint-spattered surfaces. Remove spattered paint by proper methods of washing and scraping using care not to scratch or otherwise damage finished surfaces. Protect work of other trades whether to be painted or not against damage by painting and finishing work. Correct any damage by cleaning repairing or replacing and repainting as acceptable to Architect.
2. Provide "Wet Paint" signs as required to indicate newly-painted finishes. Remove temporary protective wrappings provided by others for protection of their work after completion of painting operations.
3. At the completion of work of other trades touch-up and restore all damaged or defaced painted surfaces.

END OF SECTION 099110

SECTION 101400 – IDENTIFYING/GRAPHIC DEVICES

PART 1 - GENERAL

1.1 SUMMARY

- A. The Work of this Section includes but not necessarily limited to the following:
 - 1. Panel signs and frames, including Code required signs and room identification signs.
 - 2. ADA required signage.
 - 3. Reinstallation of salvaged items where applicable
 - 4. Custom mounted signage

1.2 DEFINITIONS

- A. ADA-ABA Accessibility Guidelines: U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines."

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's product data for mounting material supporting and anchorage devices and accessories. Product data shall consist of manufacturer's product specifications and installation instructions.
- B. Shop Drawings: Provide shop drawings for fabrication and erection of signs and art fabrications. Include plans, elevations, and large-scale sections of typical members and other components. Show anchors, grounds, reinforcement, accessories, layout, and installation details.
 - 1. Provide message list for each sign required, including full-size details of wording, font and layout of lettering.
 - 2. For signs supported by or anchored to permanent construction, provide setting drawings, templates, and directions for installation and other anchors to be installed as a unit of work in other Sections.
 - 3. Furnish full-size spacing templates for individually mounted dimensional numbers.
 - 4. Reference Part 2 for decorative plaques
- C. Samples: Submit samples of each sign component for initial selection of color, pattern and surface texture as required and for verification of compliance with requirements indicated.
- D. Qualification Data: For fabricator.
- E. Maintenance Data: For signs to include in maintenance manuals.
- F. Warranty: Special warranty specified in this Section.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Fabricator of products.
- B. Fabricator Qualifications: Shop that employs skilled workers who custom-fabricate products similar to those required for this Project and whose products have a record of successful in-service performance.
- C. Source Limitations for Signs: Obtain each sign type indicated from one source from a single manufacturer.

- D. Regulatory Requirements: Comply with applicable provisions in ADA-ABA Accessibility Guidelines.

1.5 PROJECT CONDITIONS

- A. Field Measurements: Verify recess openings by field measurements before fabrication and indicate measurements on Shop Drawings.

1.6 COORDINATION

- A. Coordinate placement of anchorage devices with templates for installing signs.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, provide identification device products as manufactured by one of the following or an equal acceptable to the Architect:

1. Panel Signs:
 - a. American Graphics Inc.
 - b. ASI Sign Systems, Inc.(specified)
 - c. Best Manufacturing Co.
 - d. Innerface Sign Systems, Inc.
 - e. Mills Manufacturing, Inc.
 - f. Signature Signs, Inc.
2. Art Work fabrications: 3Form
3. Coordinate with Owner requirements.

2.2 MATERIALS

- A. Aluminum Sheet and Plate: ASTM B 209, alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with at least the strength and durability properties of Alloy 5005-H32.
- B. Bronze/Brass- Bar, Plate, Sheet, Strip and Bars: Provide alloy UNS No. C28000 (muntz metal, 60 percent copper) conforming to CDA and ASTM B 36 or other alloy to match approved samples.
- C. Steel:
 1. Galvanized Steel Sheet: ASTM A 653/A 653M, G90 coating, either commercial or forming steel.
 2. Stainless-Steel Sheet: ASTM A 240/A 240M or ASTM A 666, Type [304] [316], stretcher-leveled standard of flatness.
 3. Steel Members Fabricated from Plate or Bar Stock: ASTM A 529/A 529M or ASTM A 572/A 572M, 42,000-psi minimum yield strength.
 4. For steel exposed to view on completion, provide materials having flat, smooth surfaces without blemishes. Do not use materials whose surfaces exhibit pitting, seam marks, roller marks, rolled trade names, or roughness.

- D. Fiberglass Sheet: Molded, seamless, thermosetting, glass-fiber-reinforced polyester panels with a minimum tensile strength of 15,000 psi when tested according to ASTM D 638 and with a minimum flexural strength of 30,000 psi when tested according to ASTM D 790.
 - E. Acrylic Sheet: ASTM D 4802, Category A-1 (cell-cast sheet), Type UVA (UV absorbing).
 - F. Polycarbonate Sheet: Of thickness indicated, manufactured by extrusion process, coated on both surfaces with abrasion-resistant coating:
- 2.3 Applied Vinyl: Die-cut characters from vinyl film of nominal thickness of 3 mils with pressure-sensitive adhesive backing, suitable for exterior applications.
- 2.4 DECORATIVE APPLIED PLAQUES
- A. The intent of the work of this Section is to provide all labor, supervision, materials equipment and services necessary to complete and install decorative applies artwork as shown on the drawings or as specified herein. It is the intent of this Section to provide for preparation of these surfaces to receive work.
 - 1. Prepare surfaces using approved fasteners and finishes including colored art -work fabrications and specified materials as indicated on drawings.
 - 2. Manufacturer: 3 Form
 - 3. Resin Material as approved
 - B. The Architect shall review and approve all required submittals, including but not limited to Art layouts shop drawings product data and samples for the limited purpose of checking for conformance with the design concept and the information expressed in the Contract Documents.
 - C. Colors: Paint colors, glazes and finishes, Schedules and Drawings will be approved by Architect. All finish paints shall be custom made to match approved colors.
- 2.5 PANEL SIGNS
- A. Panel Signs: Comply with requirements indicated for materials, thicknesses, finishes, colors, designs, shapes, sizes, and details of construction.
 - 1. Produce smooth, even, level sign panel surfaces, constructed to remain flat under installed conditions within a tolerance of plus or minus 1/16" inch measured diagonally.
 - B. Graphic Content and Style: Provide sign copy that complies with the requirements indicated for size, style, spacing, content, position, material, finishes, and colors of letters, numbers, ADA compliant Braille, and other additional graphic devices.
 - C. Products: Provide "Emboss" acrylic plaques with molded plastic frames "Series SPF with Series 390 Frames" as manufactured by ASI Sign Systems Inc. or an equal acceptable to the Architect.
 - 1. Type style (Font): As selected by Architect.
 - 2. Colors: As selected by the Architect
- 2.6 ACCESSORIES
- A. Mounting Methods: Use concealed fasteners or adhesive fabricated from materials that are not corrosive to sign material and mounting surface, unless otherwise recommended by the manufacturer.

- B. Anchors and Inserts: Provide nonferrous-metal or hot-dip galvanized anchors and inserts for installations and elsewhere as required for corrosion resistance. Use toothed steel or lead expansion-bolt devices for drilled-in-place anchors. Furnish inserts, as required, to be set into concrete or masonry work.

2.7 FABRICATION

- A. General: Provide manufacturer's standard signs of configurations indicated.
 - 1. Mill joints to tight, hairline fit. Form joints exposed to weather to exclude water penetration.
 - 2. Preassemble signs in the shop to greatest extent possible. Disassemble signs only as necessary for shipping and handling limitations. Clearly mark units for reassembly and installation, in location not exposed to view after final assembly.
 - 3. Conceal fasteners if possible; otherwise, locate fasteners where they will be inconspicuous.

2.8 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of range of approved Samples. Noticeable variations in same piece are not acceptable. Variations in appearance of other components are acceptable if they are within range of approved Samples and are assembled or installed to minimize contrast.

2.9 FINISHES

- A. Clear Anodic Finish: Manufacturer's standard clear anodic coating, 0.018 mm or thicker, over a satin (directionally textured) mechanical finish.
- B. Color anodized (AA-C22A42), color as selected by Architect.
- C. Plaque Finishes: As approved.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.
- B. Verify that items provided under other sections of Work are sized and located to accommodate signs.
- C. Examine supporting members to ensure that surfaces are at elevations indicated or required to comply with authorities having jurisdiction and are free from dirt and other deleterious matter.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Locate sign units and accessories where indicated, using mounting methods of the type described and in compliance with the manufacturer's instructions.
 - 1. Install signs level, plumb, and at the height indicated, with sign surfaces free from distortion or other defects in appearance.
- B. Wall Mounted Panels: Attach panel signs to wall surfaces using the methods indicated below:
 - 1. Mechanical Fastening: Mount signs using concealed fastening methods as recommended by the manufacturer. Provide heavy paper template to locate holes for fasteners.
- C. Mounting Locations: Mount signs as directed by the Architect to comply with the Americans with Disabilities Act (ADA) and with code provisions as adopted by authorities having jurisdiction.
 - 1. Typical Locations: Mount signs not more than 60" inches above finished floor and not more than 12" inches adjacent to latch side of door. Where doors have sidelights, center sign on doors. Center elevator signs between elevator jambs.
 - 2. Comply with code requirements.

3.3 CLEANING AND PROTECTION

- A. At completion of the installation, clean soiled sign surfaces in accordance with the manufacturer's instructions. Protect units from damage until acceptance by the Owner.

END OF SECTION 101400

SECTION 101550 – TOILET/SHOWER COMPARTMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: The Work of this Section includes but is not limited to the following:
1. Toilet compartments enclosures and urinal screens.
 2. Shower and dressing compartments
 3. Custom artwork plaques.

1.2 COORDINATION

- A. Coordinate accessory locations with other work to prevent interference with clearances required for proper installation adjustment operation cleaning and servicing of accessories.
- B. Coordinate custom signage with Section 101400
- C. Inserts and Anchorages: Furnish inserts and anchoring devices which are to be set concrete or built into masonry coordinate delivery with other work to avoid delay.
1. Provide backing plates and reinforcement in walls.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction detail material descriptions dimensions of individual components and profiles and finishes.
1. Construction details and dimensions.
 2. Anchoring and mounting requirements including requirements for cutouts in other work and substrate preparation.
 3. Material series and finish descriptions.
 4. Features that will be included for Project.
 5. Manufacturer's warranty.
- B. Shop Drawings: For toilet compartments. Include plans elevations sections details and attachments to other work.
1. Show locations of cutouts for compartment-mounted toilet accessories.
 2. Show locations of reinforcements for compartment-mounted grab bars.
 3. Show locations of centerlines of toilet fixtures.
 4. Show ceiling grid and overhead support or bracing locations. Provide all additional bracing and support as required.
- C. Samples for Verification: For the following products in manufacturer's standard sizes unless otherwise indicated:
1. Each type of material color and finish required for units prepared on 6"-inch- square Samples of same thickness and material indicated for Work.
 2. Each type of hardware and accessory.
- D. Setting Drawings: For cutouts required in other work include templates substrate preparation instructions and directions for preparing cutouts and installing anchoring devices.

- E. Product Schedule: Indicating types quantities sizes and installation locations by room of each accessory required. Use designations indicated in the Toilet and Bath Accessory Schedule and room designations indicated on Drawings in product schedule.
- F. Product Certificates: For each type of compartment from manufacturer.
- G. Maintenance Data: For compartments to include in maintenance manuals.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An authorized representative of manufacturer for installation and maintenance of units required for this project.
- B. Grab Bars: Install to withstand a downward load of at least 250 lbf when tested according to method in ASTM F 446.
- A. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84 or another standard acceptable to authorities having jurisdiction by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Flame-Spread Index: 25 or less.
 - 2. Smoke-Developed Index: 450 or less.
- C. Regulatory Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA) and Architectural Barriers Act (ABA) Accessibility Guidelines for Buildings and Facilities" for toilet compartments designated as accessible.
- D. Accessory Locations: Coordinate accessory locations with other work to avoid interference and to assure proper operation and servicing.
- E. Mockups: Build mockups to verify selections made under sample Submittals and to demonstrate aesthetic effects and qualities of materials and execution.
 - 1. Build mockup of each type of installation.
 - 2. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
 - 3. Include custom art plaque (Reference Section 101400)

1.5 DELIVERY STORAGE AND HANDLING

- A. Delivery: Deliver materials in manufacturer's original unopened and undamaged packages. Clearly identify manufacturer brand name contents color stock number and order number on each package.
- B. Storage: Store in original packaging under protective cover and protect from damage. Stack containers in accordance with manufacturer's recommendations.
- C. Handling: Handle materials in accordance with manufacturer's instructions to prevent damage to products and finishes.

1.6 PROJECT CONDITIONS

- A. Field Measurements: Verify dimensions in areas of installation by field measurements before fabrication and indicate measurements on shop drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1. Established Dimensions: Where field measurements cannot be made without delaying the Work establish dimensions and proceed with fabricating units without field measurements. Coordinate supports adjacent construction and fixture locations to ensure actual dimensions correspond to established dimensions.

1.7 WARRANTY

- A. Special Warranty: Provide written warranties executed by manufacturer of each item specified agreeing to repair or replace accessories or components that fail in materials or workmanship.
- B. Manufacturer's Warranty: Manufacturer's limited warranty for panels doors and stiles against breakage corrosion delamination and defects in factory workmanship Including guarantee against defects and corrosion in material and workmanship for door hardware and mounting brackets.

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

- A. Manufacturers: Subject to compliance with requirements provide manufacturers materials and applications as scheduled and as approved for use
 1. Bobrick
 2. As approved meeting requirements
- B. Product: As scheduled or as selected for type material and finish
 1. Series: 2088.67P Ceiling Hung - DuraLine Series Compact Grade Laminate
 2. Series: 2082.67P Overhead Braced - DuraLine Series Compact Grade Laminate
 3. Finish and color to match samples.
- C. Hardware: Stainless steel

2.2 MATERIALS

- A. Aluminum Castings: ASTM B 26/B 26M.
- B. Aluminum Extrusions: ASTM B 221.
- C. Stainless-Steel Sheet: ASTM A 666 Type 304 stretcher-leveled standard of flatness.
- D. Fasteners: Screws bolts and other devices of same material as accessory unit tamper and theft resistant when exposed and of galvanized steel when concealed.

2.3 COMPACT LAMINATE (SOLID PHENOLIC) MOISTURE RESISTANT SUBSTRATE

- A. Toilet-Enclosure Style: As per Manufacturer Floor mounted overhead braced and ceiling hung as scheduled.
- B. Urinal-Screen Style: Wall hung flat panel match partitions.
- C. Door Panel and Pilaster Construction: Seamless facing sheets pressure laminated to core material; with continuous interlocking molding strip or lapped-and-formed edge closures; corners secured by welding or clips and exposed welds ground smooth. Exposed surfaces shall be free of pitting seam marks roller marks stains discolorations telegraphing of core material or other imperfections.

- D. Materials: Solidly fused plastic laminate with matte-finish melamine surfaces; integrally bonded colored face sheets and black phenolic-resin core.
 - 1. Grab-Bar Reinforcement: Provide concealed internal reinforcement for grab bars mounted on units.
 - 2. Tapping Reinforcement: Provide concealed reinforcement for tapping (threading) at locations where machine screws are used for attaching items to units.
- E. Urinal-Screen Construction:
 - 1. Flat-Panel Urinal Screen: Matching panel construction.
- F. Facing Sheets and Closures: sheet of nominal thicknesses as follows:
 - 1. Pilasters Unbraced at One End: Manufacturer's standard thickness but not less than 0.050" inch.
 - 2. Panels: Manufacturer's standard thickness but not less than 0.031" inch.
 - 3. Doors: Manufacturer's standard thickness but not less than 0.031" inch.
 - 4. Flat-Panel Urinal Screens: Thickness matching the panels.
- G. Brackets (Fittings):
 - 1. Full-Height (Continuous) Type: Manufacturer's standard design; aluminum.
- H. Finish: To match samples. Protect exposed surfaces from damage by application of strippable temporary protective covering before shipment.
 - 1. Finish: type as selected to match approved samples

2.4 ACCESSORIES

- A. Hardware and Accessories: Manufacturer's heavy-duty operating hardware and accessories.
 - 1. Compliance: Operating force of less than 5 lb (2.25 kg).
 - 2. Emergency Access: Hinges latch allow door to be lifted over keeper from outside compartment on inswing doors.
 - 3. Materials: Type 304 heavy-gauge stainless steel with satin finish.
 - 4. Doorstops: Prevents in swinging doors from swinging out beyond stile on outswing doors doorstop prevents door from swinging in beyond stile.
 - 5. Fastening: Hardware is secured to door and stile with pin-in-head Torx stainless steel machine screws. Hinges latch and optional door stops secured to door with pin-in-head Torx stainless steel machine screws into factory-installed threaded brass inserts. Fasteners for hinges latch and optional door stops secured directly into core not acceptable.
 - a. Threaded Brass Inserts: Factory-installed; withstand direct pull force exceeding 1500 lb (680 kg) per insert.
 - 6. Clothes Hooks: Projecting no more than 1-1/8" inch from face of door.
 - 7. Door Latch: Track of door latch prevents inswing doors from swinging out beyond stile; on outswing doors door keeper prevents door from swinging in beyond stile; 16 gage sliding door latch 14 gage keeper.
 - 8. Locking: Door locked from inside by sliding door latch into keeper.
 - 9. Hinge Type:
 - a. Standard. Stainless steel

- 1) Balanced with field-adjustable cam to permit door to be fully closed or partially open when compartment is unoccupied.
 - b. Full-Height Institutional Hinge.
 - 1) Hinges: 16 gage stainless steel self-closing 3 section hinges.
10. Mounting Brackets:
- a. Concealed.
 - 1) Mounting Brackets: Mounted inside compartment; exposed brackets on exterior of compartment not acceptable with the exception of outswing doors.
 - b. Full-Height.
 - 1) Mounting Brackets: 18 gage stainless steel and extend full height of panel.
 - 2) U-Channels: Secure panels to stiles.
 - 3) Angle Brackets: Secure stiles-to-walls and panels to walls.
11. Anchorages and Fasteners: Manufacturer's exposed fasteners of stainless steel steel finished to match the items they are securing with theft-resistant-type heads. Provide sex-type bolts for through-bolt applications. For concealed anchors use stainless steel hot-dip galvanized steel or other rust-resistant protective-coated steel.

2.5 FABRICATION

- A. Provide manufacturer's corrosion-resistant anchoring assemblies with leveling adjustment nuts at pilasters for connection to structural support above finished ceiling. Provide assemblies that support pilasters from structure without transmitting load to finished ceiling. Provide sleeves (caps) at tops of pilasters to conceal anchorage.
- B. Door Size and Swings: Unless otherwise indicated provide 24"-inch- wide in-swinging doors for standard toilet compartments and 36"-inch- wide out-swinging doors with a minimum 32"-inch-wide clear opening for compartments designated as accessible.
- C. Wall-Hung Screens: Provide units in size indicated of same construction and finish as compartment panels unless otherwise indicated.
- B. General: One maximum 1 - ½" inch diameter unobtrusive stamped manufacturer logo as approved by Architect is permitted on exposed face of accessories. On interior surface not exposed to view or back surface of each accessory provide printed waterproof label or stamped nameplate indicating manufacturer's name and product model number.
- C. Surface Mounted Accessories: Unless otherwise indicated fabricate units with tight seams and joints and exposed edges rolled. Hang doors and access panels with continuous stainless steel hinge. Provide concealed anchorage where possible.
- D. Recessed Accessories: Unless otherwise indicated fabricate units of all welded construction without mitered corners. Hang doors and access panels with full length stainless steel hinge. Provide anchorage that is fully concealed when unit is closed.
- E. Hangers: Provide mounting system that permits rigid tamper and theft resistant installation as follows:
 1. Heavy duty wall brackets of galvanized steel.

- D. Anchors: Expansion shields and threaded rods at floor connections as applicable. Threaded rods secured to supports above ceiling as applicable. Supports above ceiling furnished and installed as Work of Section 055000 - Metal Fabrications.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Prepare substrates including but not limited to blocking and supports in walls and ceilings at points of attachment using methods recommended by the manufacturer for achieving the best result for the substrates under the project conditions.
 - 1. Inspect areas scheduled to receive compartments for correct dimensions plumbness of walls and soundness of surfaces that would affect installation of mounting brackets.
 - 2. Verify spacing of plumbing fixtures to assure compatibility with installation of compartments.
- B. If preparation is the responsibility of another installer notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.
- C. Do not proceed with installation until substrates have been properly prepared with blocking and supports in walls and ceilings at points of attachment and deviations from manufacturer's recommended tolerances are corrected. Commencement of installation constitutes acceptance of conditions.

3.2 INSTALLATION

- A. Install products in strict compliance with manufacturer's written instructions and recommendations including the following:
 - 1. Verify blocking and supports in walls and ceilings has been installed properly at points of attachment.
 - 2. Verify location does not interfere with door swings or use of fixtures.
 - 3. Use fasteners and anchors suitable for substrate and project conditions
 - 4. Install units rigid straight plumb and level.
 - 5. Conceal evidence of drilling cutting and fitting to room finish.
 - 6. Test for proper operation.
- B. Floor Mounted Overhead Braced Units: Secure pilasters to supporting structure and level plumb and tighten. Hang doors and adjust so bottoms of doors are level with bottoms of pilasters when doors are in closed position.
- C. Urinal Screens: Attach with anchoring devices to suit supporting structure. Set units level and plumb rigid and secured to resist lateral impact.

3.3 ADJUSTING

- A. Hardware Adjustment: Adjust and lubricate hardware according to hardware manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to hold doors open approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doors to return doors to fully closed position.
- B. Touch-up repair or replace damaged products.
- C. Clean exposed surfaces of compartments hardware and fittings.

END OF SECTION

SECTION 102800 – TOILET/SHOWER ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included: The Work of this Section shall include but not be limited to the following:
 - 1. Toilet accessories.
 - 2. Shower Benches
 - 3. Shower Curtains
 - 4. Other hardware items.
 - 5. Installation accessories.

1.2 COORDINATION

- A. Coordinate accessory locations with other work to prevent interference with clearances required for proper installation adjustment operation cleaning and servicing of accessories.
- B. Inserts and Anchorages: Furnish inserts and anchoring devices which are to be set in concrete or built into masonry; coordinate delivery with other work to avoid delay.
 - 1. Provide backing plates and reinforcement in walls.

1.3 SUBMITTALS

- A. Product Data: Include construction details material descriptions and thicknesses dimensions profiles fastening and mounting methods specified options and finishes for each type of accessory specified.
 - 1. Shop Drawings: Shop drawings shall indicate field-measured dimensions, materials, sizes, gauges, finishes, layout, accessories, fasteners, and installation details.
 - 2. Provide full size details of connections. Provide templates required for installation.
 - 3. Samples: Submit full size samples of each accessory if directed by the Architect.
- B. Setting Drawings: For cutouts required in other work; include templates substrate preparation instructions and directions for preparing cutouts and installing anchoring devices.
- C. Product Schedule: Indicating types quantities sizes and installation locations by room of each accessory required. Use designations indicated in the Schedule and room designations indicated on drawings in product schedule.
- D. Maintenance Data: For accessories to include in maintenance manuals or data.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An authorized representative of toilet accessory manufacturer for installation and maintenance of units required for this Project.
- B. Grab Bars: Install to withstand a downward load of at least 250 lbf when tested according to method in ASTM F 446.

- C. Accessory Locations: Coordinate accessory locations with other work to avoid interference and to assure proper operation and servicing.

1.5 WARRANTY

- A. Special Warranty: Provide written warranties executed by manufacturer of each item specified agreeing to repair or replace accessories or components that fail in materials or workmanship.
 - 1. Warranty Period: As standard with each selected manufacturer.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain each type of toilet accessory through one source from a single manufacturer or as scheduled.
 - 1. Bobrick
 - 2. Hillyard
 - 3. Georgia Pacific
 - 4. Richelieu Hardware
 - 5. Grab Bar Specialists
 - 6. Ponte Giulio
 - 7. Recreonics
 - 8. Inpro
- B. Products: Subject to compliance with requirements provide products as indicated in Architectural Finish Specification and drawing schedules or equal as approved by the Architect.
 - 1. Toilet accessories as scheduled.
 - 2. Shower benches as scheduled.
 - 3. Shower Curtains and hardware

2.2 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Where metal lockers are indicated to comply with accessibility requirements comply with the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities (ADAAG)."

2.3 MATERIALS

- A. Stainless Steel: ASTM A 666 Type 304 with No. 4 finish (satin) in 0.0312" inch minimum nominal thickness unless otherwise indicated.
- B. Sheet Steel: ASTM A 366 cold rolled commercial quality 0.0359" inch minimum nominal thickness; surface preparation and metal pretreatment as required for applied finish.
- C. Galvanized Steel Sheet: ASTM A 653 G60.
- D. Chromium Plating: ASTM B 456 Service Condition Number SC 2 (moderate service) nickel plus chromium electrodeposited on base metal.
- E. Galvanized Steel Mounting Devices: ASTM A 153 hot dip galvanized after fabrication.

- F. Fasteners: Screws bolts and other devices of same material as accessory unit tamper and theft resistant when exposed and of galvanized steel when concealed.

2.4 BENCH FABRICATIONS

- A. Basis-of-Design Products: "Recreonics" cantilevered, aluminum wall mounted bench with powder-coated non-skid aluminum plank and corrosion resistant aluminum under structure supports. Stainless steel hardware for mounting bench supports to seat blank included. Wall mounting hardware not included.
- B. Finish: Powder-coat finish in color selected by Architect from manufacturer's standard color range.
- C. Fasteners: Type 316 stainless-steel fasteners.
- D. Anchors capable of sustaining, without failure a load equal to six times the load imposed when installed as determined by testing according to ASTM E 488/E 488M.

2.5 FABRICATION

- A. General: One maximum 1 - ½" inch diameter unobtrusive stamped manufacturer logo as approved by Architect is permitted on exposed face of accessories. On interior surface not exposed to view or back surface of each accessory provide printed waterproof label or stamped nameplate indicating manufacturer's name and product model number.
- B. Surface Mounted Toilet Accessories: Unless otherwise indicated fabricate units with tight seams and joints and exposed edges rolled. Hang doors and access panels with continuous stainless steel hinge. Provide concealed anchorage where possible.
- C. Recessed Toilet Accessories: Unless otherwise indicated fabricate units of all welded construction without mitered corners. Hang doors and access panels with full length stainless steel hinge. Provide anchorage that is fully concealed when unit is closed.
- D. Hangers: Provide mounting system that permits rigid tamper and theft resistant installation as follows:
 - 1. Heavy duty wall brackets of galvanized steel.
- E. Keys: Provide universal keys for internal access to accessories for servicing and resupplying. Provide minimum of six keys to Owner's representative.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install accessories in accordance with manufacturers' written instructions using fasteners appropriate to substrate indicated and recommended by unit manufacturer.
- B. Install units plumb and level firmly anchored in locations and heights indicated.

3.2 ADJUSTING AND CLEANING

- A. Remove temporary labels and protective coatings.

B. Clean and polish all exposed surfaces after removing protective coatings.

END OF SECTION 102800

2214-01 - FIT Showers

Specifications



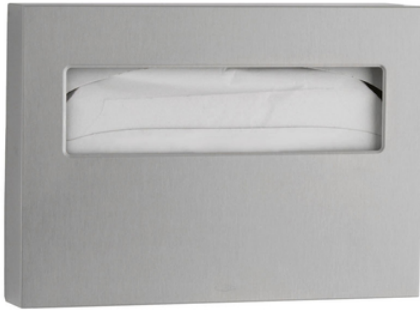
Gerner Kronick + Valcarcel, Architects, DPC

Prepared by GKV Architects on 9/15/2023

ACC-01

Surface Mounted Seat-Cover Dispenser

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom
Type	Seat-Cover Dispenser
Supplier	Bobrick
Mfg	Bobrick
Model	B-221
Item Tag	ACC-01
Dim	15 3/4" W, 11" H, 2" D
URL	https://www.bobrick.com/products/washroom-accessories/toilet-compartment-accessories/toilet-compartment-catalog/toilet-seat-cover-dispensers/product/b-221/
Qty	1.0 each

Manufacturer

Phone 631-249-7171
Contact Name Ernesto Hernandez
Contact Email ernesto@sylvester-assoc.com

FINISHES

Satin Stainless Steel

Supplier

Phone 631-249-7171
Contact Name Ernesto Hernandez
Contact Email ernesto@sylvester-assoc.com

ACC-02

Commercial Toilet Paper Dispenser

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom
Type	Toilet Paper Holder
Supplier	Bobrick
Mfg	Bobrick
Model	B-2890
Item Tag	ACC-02
Dim	10 21/32 " W, 10 5/8" H, 4 1/2" D
URL	https://www.bobrick.com/washroom-accessories-catalog/product/b-2890/
Qty	1.0 each

Manufacturer

Phone	631-249-7171
Contact Name	Ernesto Hernandez
Contact Email	ernesto@sylvester-assoc.com

Supplier

Phone	631-249-7171
Contact Name	Ernesto Hernandez
Contact Email	ernesto@sylvester-assoc.com

DESCRIPTION

Equipped with a lock keyed like other washroom accessories. Spindle holds one 10" (255mm) diameter core roll

FINISHES

Satin-Finish Stainless Steel

ACC-03

Surface-Mounted Soap Dispenser

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom
Type	Soap Dispenser
Supplier	Hillyard
Mfg	Hillyard
Model	HIL22304
Item Tag	ACC-03
Dim	3.75"L x 6.25"W x 11"H; manual
URL	https://www.hillyard.com/hillyard/db2b/en/USD/All-Products/Hand-%26-Personal-Care/Dispensers%2C-Parts-%26-Accessories/Dispensers/Hillyard%2C-Affinity%2C-Expressions%2C-1%2C250ml%2C-Black%2C-Manual-Dispenser/p/HIL22304
Qty	1.0 each

DESCRIPTION

Durable Construction with Molded-In Window Integrated Key and Push Button Design ADA Compliant One Hand Push Operation Easily customizable with printable plates

FINISHES

Black

ACC-04

Recessed Trash Receptacle

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom
Type	Paper Towel Dispenser
Supplier	Georgia-Pacific
Mfg	Georgia-Pacific
Model	59471
Item Tag	ACC-04
Dim	7.8" L x 17.2" W x 60.1" H
URL	https://www.gppro.com/gp/GP-PRO-Categories/Commercial-Paper-Towels-and-Dispensers/ENMOTION%C2%AE-RECESSED-TRASH-RECEPTACLE-FOR-12%22-16%22-CAVITIES-BY-GP-PRO-%28GEORGIA-PACIFIC%29,-STAINLESS,-1-TRASH-RECEPTACLE/p/59471
Qty	1.0 each

DESCRIPTION

Complimentary Design: Coordinates and complements Georgia-Pacific Recessed Towel Dispensers to enhance facility image and patron or tenant satisfaction

FINISHES

Stainless Steel

ACC-05 Toilet Seat

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Other
Type	Other
Supplier	Bemis
Mfg	Bemis
Model	1955CT
Item Tag	ACC-05
URL	https://www.build.com/bemis-1955c/s102503?uid=39447
Qty	1.0 each

FINISHES

White

ACC-06

Recessed Automated Touchless Paper Towel Dispenser

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom
Type	Paper Towel Dispenser
Supplier	Georgia-Pacific
Mfg	Georgia-Pacific
Model	59466A
Item Tag	ACC-06
Dim	8" L x 13.3" W
URL	https://www.gppro.com/gp/p/59466A?site=gppro
Qty	1.0 each

DESCRIPTION

COMPATIBLE with enMotion® 8" paper towel refills 89410, 89420, 89430 and 89440

FINISHES

Stainless Steel

ACC-007

Bathroom Robe Hook

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Other
Supplier	Richelieu Hardware
Mfg	Richelieu Hardware
Model	NB1090570
Item Tag	ACC-007
URL	https://www.richelieu.com/us/en/category/kitchen-and-bathroom-accessories/bathroom/decorative-bathroom-accessories/bathroom-hooks/bathroom-hook-bridgeport-collection/1166041/sku-NB1090570
Qty	1.0 each

Manufacturer

Phone 973-317-1400
Contact Name David Bryant
Contact Email DBryant@richelieu.com
Contact Phone (929) 832-7520

Supplier

Phone 973-317-1400
Contact Name David Bryant
Contact Email DBryant@richelieu.com
Contact Phone (929) 832-7520

DESCRIPTION

Mounting hardware is included with concealing screws

FINISHES

Satin Stainless Steel

AP-01

Ceiling Access Door, Plaster Finish - 12" x 12"

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Other
Type	Other
Supplier	Karp
Mfg	Karp
Model	DSC-210PL
Item Tag	AP-01
Dim	12" x 12"
URL	http://karpinc.com/product/recessed-access-door-plastered-surfaces/
Qty	1.0 each



RECESSED ACCESS DOOR

Model DSC-210PL

For Plaster



KARP ASSOCIATES, INC.
 260 Spagnoli Road, Melville, NY 11747
 (631)768-8300 - Phone
 (631)768-8350 - Fax

DATE

SPECIFICATIONS

GENERAL SCOPE:

Access doors shall be Karp Type DSC-210PL as manufactured by Karp Associates, Inc., Melville, N.Y. Sizes shall be as indicated on the drawings.

CONSTRUCTION:

1. Frame shall be 14 gage steel and door shall 16 gage steel.
2. Door shall be recessed 1/2" and lined with self furring 3.4 lb. flat rib galvanized steel lath.
3. Hinge shall be concealed pivoting rod type.
4. Locks shall be flush and screwdriver operated with cam and studs, or shall be key operated cylinder lock with automatic dust shutter.
5. Brass sleeves shall be spot welded to door to protect plaster around cam and stud.
6. Finish shall be prime coat of rust inhibitive electrostatic powder, baked white enamel.

STANDARD SIZES

DOOR SIZE H X W (IN.)	WALL/CEILING OPENING (IN.)	NUMBER OF STUD LATCHES	SHIP WT. (LBS.)
12 x 12	12 1/8 x 12 1/8	1	6.7
18 x 18	18 1/8 x 18 1/8	2	12.4
24 x 12	24 1/8 x 12 1/8	2	10.6
24 x 24	24 1/8 x 24 1/8	2	19.2
36 x 24	36 1/8 x 24 1/8	3	32.0

PROJECT DATA

Project Name:

Architect:

Contractor:

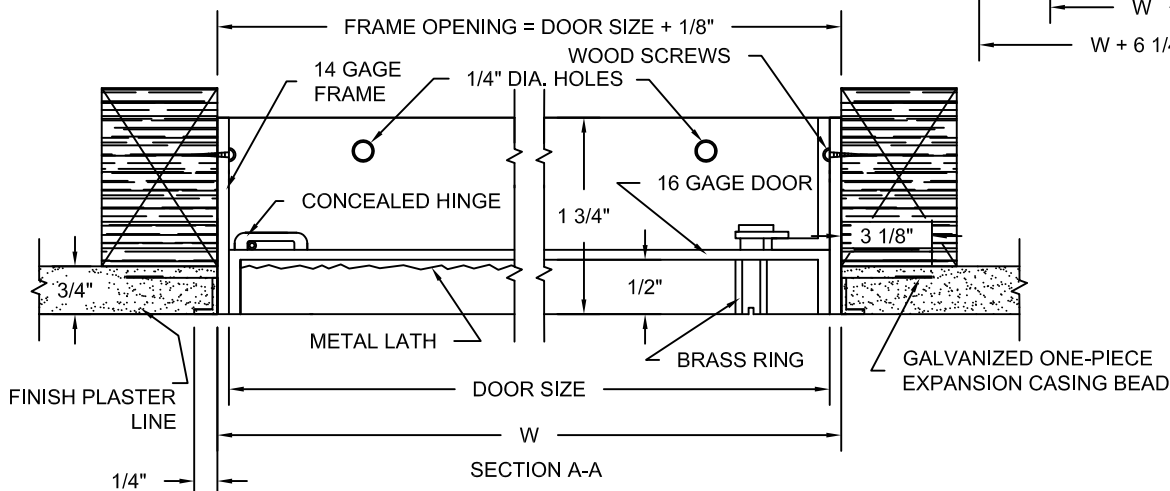
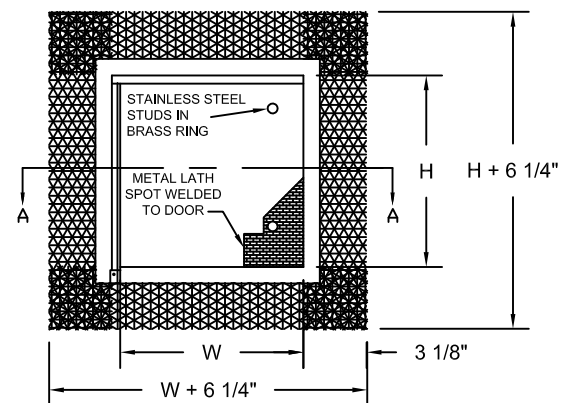
Agent/Customer Name:

Tagging Instructions:

Special Instructions:

PROJECT SCHEDULE

Qty.	H	W	No. of Latches	Finish	Remarks



Made with Union Labor

AP-02

Ceiling Access Door, Plaster Finish - 24" x 24"

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Other
Type	Other
Supplier	Karp
Mfg	Karp
Model	DSC-210PL
Item Tag	AP-02
Dim	24" x 24"
URL	http://karpinc.com/product/recessed-access-door-plastered-surfaces/
Qty	1.0 each



RECESSED ACCESS DOOR

Model DSC-210PL

For Plaster



KARP ASSOCIATES, INC.
 260 Spagnoli Road, Melville, NY 11747
 (631)768-8300 - Phone
 (631)768-8350 - Fax

DATE

SPECIFICATIONS

GENERAL SCOPE:

Access doors shall be Karp Type DSC-210PL as manufactured by Karp Associates, Inc., Melville, N.Y. Sizes shall be as indicated on the drawings.

CONSTRUCTION:

1. Frame shall be 14 gage steel and door shall 16 gage steel.
2. Door shall be recessed 1/2" and lined with self furring 3.4 lb. flat rib galvanized steel lath.
3. Hinge shall be concealed pivoting rod type.
4. Locks shall be flush and screwdriver operated with cam and studs, or shall be key operated cylinder lock with automatic dust shutter.
5. Brass sleeves shall be spot welded to door to protect plaster around cam and stud.
6. Finish shall be prime coat of rust inhibitive electrostatic powder, baked white enamel.

STANDARD SIZES

DOOR SIZE H X W (IN.)	WALL/CEILING OPENING (IN.)	NUMBER OF STUD LATCHES	SHIP WT. (LBS.)
12 x 12	12 1/8 x 12 1/8	1	6.7
18 x 18	18 1/8 x 18 1/8	2	12.4
24 x 12	24 1/8 x 12 1/8	2	10.6
24 x 24	24 1/8 x 24 1/8	2	19.2
36 x 24	36 1/8 x 24 1/8	3	32.0

PROJECT DATA

Project Name:

Architect:

Contractor:

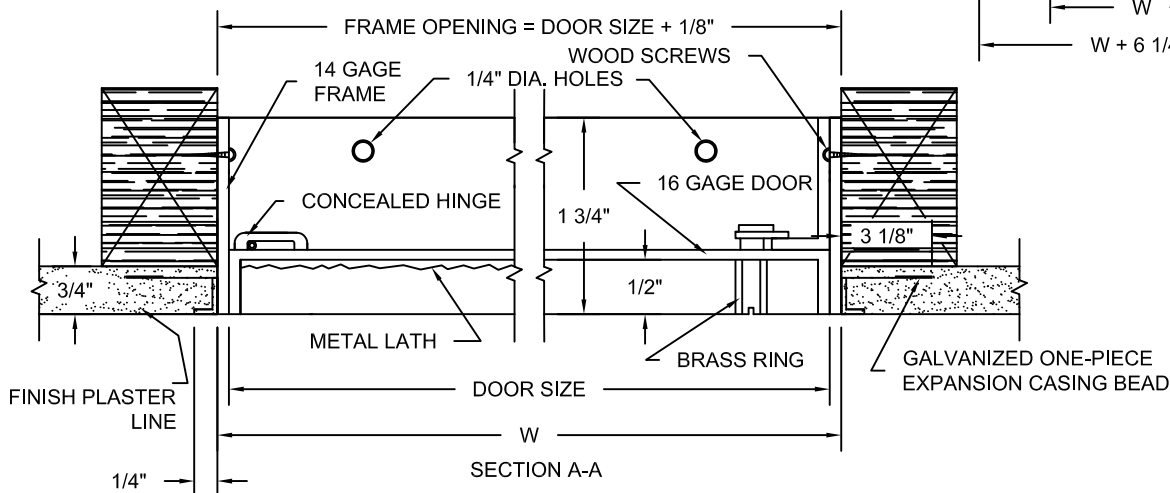
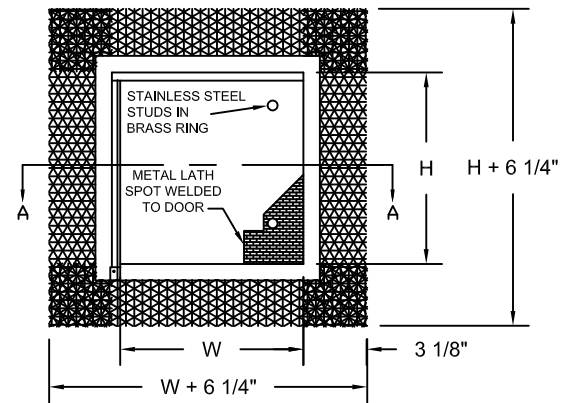
Agent/Customer Name:

Tagging Instructions:

Special Instructions:

PROJECT SCHEDULE

Qty.	H	W	No. of Latches	Finish	Remarks



Made with Union Labor

EQ-01 Vanity Sink

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom
Type	Sink
Supplier	Kohler Co
Mfg	Kohler Co
Model	18-1/2" rectangular drop-in/undermount bathroom sink
Item Tag	EQ-01
Dim	18-1/2" rectangular
URL	https://www.kohler.com/en/products/bathroom-sinks/shop-bathroom-sinks/iron-plains-drop-in-undermount-bathroom-sink-5400?skuld=5400-0
Qty	1.0 each

Manufacturer

Phone	800-421-9559 x71306
Contact Name	Lara Garahan
Contact Email	lara.garahan@kohler.com
Contact Phone	(347) 387-3761

Supplier

Phone	800-421-9559 x71306
Contact Name	Lara Garahan
Contact Email	lara.garahan@kohler.com
Contact Phone	(347) 387-3761

DESCRIPTION

Iron Plains 18-1/2" rectangular drop-in/undermount bathroom sink

FINISHES

White

EQ-02 Shower Seat

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Plumbing Fixture
Supplier	Grab Bar Specialists
Mfg	Grab Bar Specialists
Model	GBS-LL-PH-CONTOUR-SEAT
Item Tag	EQ-02
Dim	26" width
URL	https://www.grabbarspecialists.com/GBS-LifeLine-Phenolic-Contour-Shower-Seats
Qty	1.0 each

DESCRIPTION

ADA Compliant Life Line 26" phenolic contour shower seats with stainless steel, polished chrome, matte black and oil rubbed bronze frames. 500lb capacity

FINISHES

Phenolic contour shower seats with stainless steel frame

EQ-03

Stainless Steel Straight Grab Bar, Peened Texture Finish

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Plumbing Fixture
Supplier	Ponte Giulio
Mfg	Ponte Giulio
Model	Stainless Steel Collection
Item Tag	EQ-03
Dim	Refer to drawings
URL	https://www.pontegiulio.com/en-US/SK_XG57UAS01/Stainless-Steel-Straight-Grab-Bar-Peened-Texture-Finish
Qty	1.0 each

Manufacturer

Contact Name Becky Wright
Contact Email becky.wright@pontegiuliousa.com
Contact Phone 262-522-6687 direct

Supplier

Contact Name Becky Wright
Contact Email becky.wright@pontegiuliousa.com
Contact Phone 262-522-6687 direct

DESCRIPTION

As per drawings

FINISHES

N1 Color (Satin)

EQ-04

Wall Mounted Bench

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Furniture - Bench
Supplier	Recreonics
Mfg	Recreonics
Model	77-302.PC
Item Tag	EQ-04
Dim	Refer to Drawings
URL	https://www.recreonics.com/product/15-ft-wall-mounted-bench-powder-coated/
Qty	1.0 each

FINISHES

TBD

EQ-05

Bathroom Vanity Stone Top

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom
Type	Stone
Supplier	Caesarstone
Mfg	Caesarstone
Model	1111 Vivid White
Item Tag	EQ-05
Qty	1.0 each

DESCRIPTION

Quartz Countertop

Manufacturer

Contact Name Georgia Kanellos
Contact Email Georgia.Kanellos@caesarstone
us.com

Supplier

Contact Name Georgia Kanellos
Contact Email Georgia.Kanellos@caesarstone
us.com

FINISHES

Polished

HW-01 Bar Grille

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Hardware
Supplier	Architectural Grille
Mfg	Architectural Grille
Model	AG10
Item Tag	HW-01
URL	https://www.archgrille.com/collections/linear-bar-grilles/products/ag10-bar-grille
Qty	1.0 each

Manufacturer

Contact Name Ariella Winick
Contact Email awinick@archgrille.com
Contact Phone (718) 832-1200

Supplier

Contact Name Ariella Winick
Contact Email awinick@archgrille.com
Contact Phone (718) 832-1200

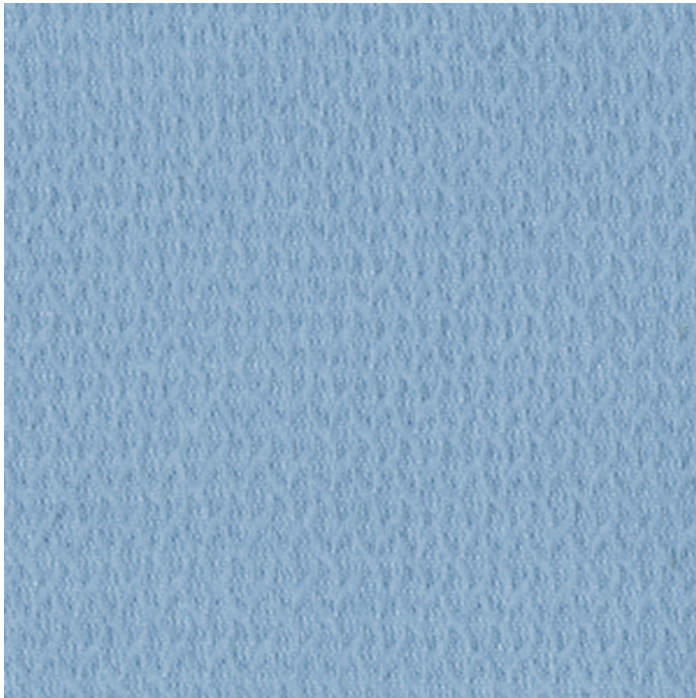
FINISHES

Satin Stainless Steel

HW-02

Shower Curtain

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Showers
Type	Hardware
Supplier	Inpro
Mfg	Inpro
Model	Chalet - Blue Moon
Item Tag	HW-02
Dim	72" high
URL	https://www.inprocorp.com/samples/fabric-palettes/chalet/?DisplayName=Blue%20Moon
Qty	1.0 each

Manufacturer

Contact Name Janine Hildebrandt
Contact Email jhildebrandt@inprocorp.com

FINISHES

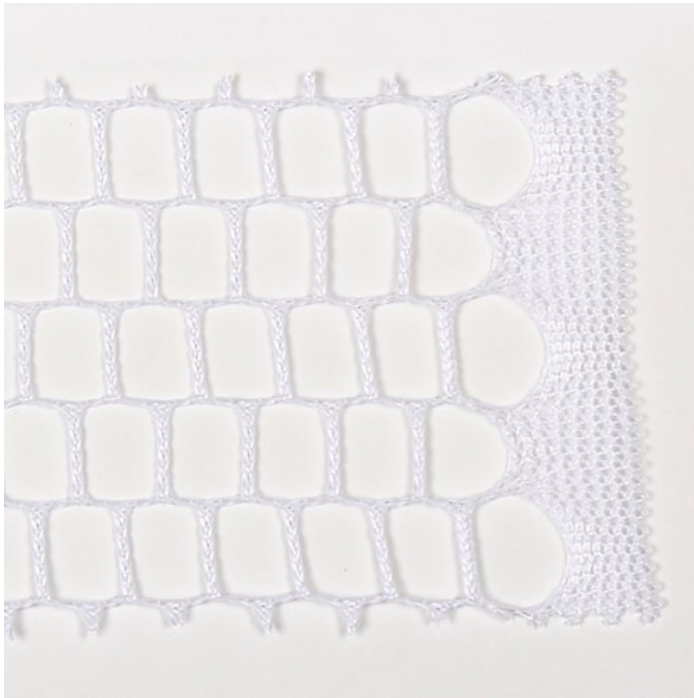
Blue Moon

Supplier

Contact Name Janine Hildebrandt
Contact Email jhildebrandt@inprocorp.com

HW-03 Curtain Mesh

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Showers
Type	Shower Curtain
Supplier	Inpro
Mfg	Inpro
Model	EZE-Mesh™ Cubicle Curtain Mesh
Item Tag	HW-03
URL	https://www.inprocorp.com/products/privacy-systems/cubicle-curtains/hardware-accessories/cubicle-curtain-mesh/
Qty	1.0 each

Manufacturer

Contact Name Janine Hildebrandt
Contact Email jhildebrandt@inprocorp.com

FINISHES

Snow (color)

Supplier

Contact Name Janine Hildebrandt
Contact Email jhildebrandt@inprocorp.com

HW-04

Curtain Hook

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Showers
Type	Shower Curtain
Supplier	Inpro
Mfg	Inpro
Model	Nanotrak® Cubicle Track Slide Carrier
Item Tag	HW-04
URL	https://www.inprocorp.com/products/privacy-systems/cubicle-curtain-track-and-accessories/nanotrak-slide-carrier/
Qty	1.0 each

Manufacturer

Contact Name Janine Hildebrandt
Contact Email jhildebrandt@inprocorp.com

Supplier

Contact Name Janine Hildebrandt
Contact Email jhildebrandt@inprocorp.com

HW-05 Shower Track

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Showers
Type	Shower Curtain
Supplier	Inpro
Mfg	Inpro
Model	Nanotrac® Cubicle Track
Item Tag	HW-05
URL	https://www.inprocorp.com/products/privacy-systems/cubicle-curtain-track-and-accessories/nanotrac/
Qty	1.0 each

Manufacturer

Contact Name Janine Hildebrandt
Contact Email jhildebrandt@inprocorp.com

Supplier

Contact Name Janine Hildebrandt
Contact Email jhildebrandt@inprocorp.com

HW-06

Metal frame around door into faculty room and rest rooms



ISSUE DATE: 9/15/2023

SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Other
Type	Other
Supplier	Assa Abloy - Entrance Systems
Mfg	Assa Abloy - Entrance Systems
Model	Curries Radisson 1013-1 / 9832-1402B / QT380LC-SF
Item Tag	HW-06
Dim	Refer to drawings
URL	https://www.curries.com/en
Qty	1.0 each

Manufacturer

Contact Name	Alan Tenenbaum
Contact Email	alan.tenenbaum@assaabloy.com
Contact Phone	(609) 578-2881

DESCRIPTION

Curries Radisson 1013-1 / 9832-1402B / QT380LC-SF

FINISHES

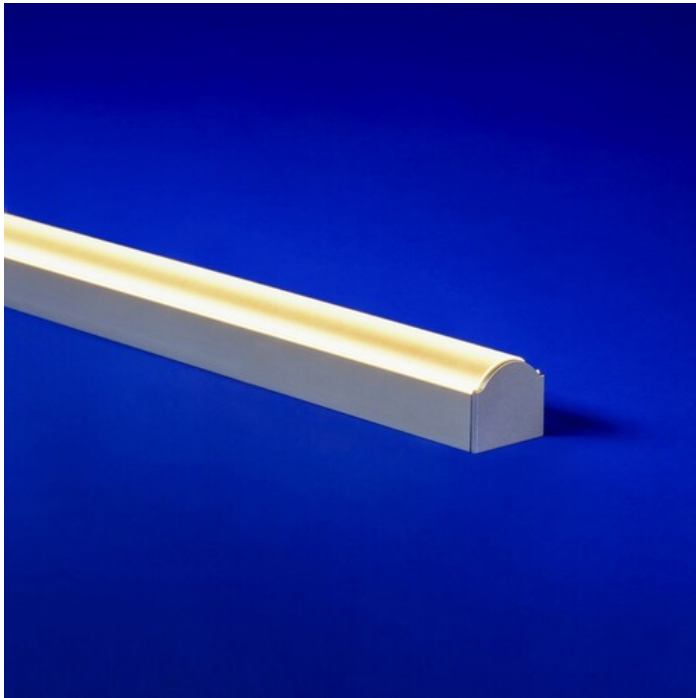
White

Supplier

Contact Name	Alan Tenenbaum
Contact Email	alan.tenenbaum@assaabloy.com
Contact Phone	(609) 578-2881

LF-01 Cove Lighting

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Showers and Toilets
Type	Lighting
Supplier	Q-Tran
Mfg	Q-Tran
Model	VERS-04-SW-5.0-30-WET-GZR-L1-WH-S1-BW-CLS-WH-X-X-ST-LENGTHS
Item Tag	LF-01
Dim	Refer to model
URL	www.q-tran.com
Qty	1.0 each

Manufacturer

Contact Name Taylor Pogue
Contact Email taylor@q-tran.com

FINISHES

Refer to model

Supplier

Contact Name Taylor Pogue
Contact Email taylor@q-tran.com

Part Number Builder

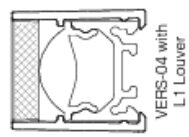
Static White
JAS-2016



Product	W/FT	CCT	Rated	Lens	Louver	Input/ Output	Connector/ Wire In	Connector/ Wire Out	Wire Color	Wire Type	Mounting	Finish	Length* (in)
VERS-04-SW	1.5 3.0 4.0 5.0 6.0	20 22 24 27 30 35 40	DRY (IP20)	GZR 25D	L1-WH L1-BK N/A	S1 S2 S3 S4 <small>Single (Closed exit)</small>	BW CON6 CON24	CLS	WH BK	CL2 CL2P	CC MG	ST BK BZ WH	
Voltage: 24 VDC													
Typical lumens at 5.0W/ft with GZR at 3000K: 449 lm/ft													
	1.5 3.0 4.0 5.0	24 27 30 35 40	DMP (IP54)			P1 P2 P3 P4 <small>Pass through</small>	BW CON6 CON24	BW CON6 CON24					
	1.5 3.0 4.0 5.0	20 22 24 27 30 35 40	WET (IP67)										

*Available in 1" increments for 1.5W/ft - 5.0W/ft and 2" increments for 6.0W/ft. Maximum fixture length of 98". See fixture detail on page 7. Minimum fixture length 6".

See **VERS-04-SK** for suspended version.



LF-02 Round Downlight

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Other
Type	Lighting
Supplier	USAI Lighting
Mfg	USAI Lighting
Model	BeveLED 2.2 Primary - P4RDF
Item Tag	LF-02
Dim	4.5" round
URL	https://www.usailighting.com/beveled-2-2-primary-p4rdf-round-4-inch-led-downlights
Qty	1.0 each

Manufacturer

Contact Name	First Name Last Name
Contact Email	info@sdaighting.com
Contact Phone	(718) 361-9150

Supplier

Contact Name	First Name Last Name
Contact Email	info@sdaighting.com
Contact Phone	(718) 361-9150

DESCRIPTION

Color Temperature: 3000K, 90+CRI / Wattage Option: 15L2, 15W LED / Beam Options: F Flood 95-degree beam / Dry, Damp, Wet. UL2043 rated for use in air handling plenums.

FINISHES

White

M-01

Bathroom Mirror

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Other
Type	Mirror
Model	Wall Mirror - refer to drawings
Item Tag	M-01
Dim	Refer to drawings
Qty	1.0 each

DESCRIPTION

Specify bathroom mirror with laminate safety glass

FINISHES

Refer to Schuler item tag in drawing for bevel thickness and finish

M-02

Bathroom Mirror

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Other
Type	Mirror
Model	Wall Mirror - refer to drawings
Item Tag	M-02
Dim	Refer to drawings
Qty	1.0 each

DESCRIPTION

Specify bathroom mirror with laminate safety glass

FINISHES

Refer to Schuler item tag in drawing for bevel thickness and finish

M-03

Bathroom Mirror

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Mirror
Model	Wall Mirror - refer to drawings
Item Tag	M-03
Dim	Refer to drawings
Qty	1.0 each

DESCRIPTION

Specify bathroom mirror with laminate safety glass

FINISHES

Refer to Schuler item tag in drawing for bevel thickness and finish

PA-01

Cubicle Partition System - Overhead Braced

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Other
Type	Other
Supplier	Sylvester & Associates (Bobrick)
Mfg	Sylvester & Associates (Bobrick)
Model	Series: 2082.67P Overhead Braced - DuraLine Series Compact Grade Laminate
Item Tag	PA-01
Dim	Refer to drawings
URL	https://www.bobrick.com/products/toilet-partitions-cubicle-systems/traditional-partitions/duralineseries-cgl/
Qty	1.0 each

Manufacturer

Contact Name David Tesser
Contact Phone 631-249-7171

Supplier

Contact Name David Tesser
Contact Phone 631-249-7171

DESCRIPTION

Series: 2082.67P Overhead Braced - DuraLine Series Compact Grade Laminate

FINISHES

Refer to drawings

PA-02

Cubicle Partition System - Ceiling Hung

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Other
Type	Other
Supplier	Sylvester & Associates (Bobrick)
Mfg	Sylvester & Associates (Bobrick)
Model	Series: 2088.67P Ceiling Hung - DuraLine Series Compact Grade Laminate
Item Tag	PA-02
Dim	Refer to drawings
URL	https://www.bobrick.com/products/toilet-partitions-cubicle-systems/traditional-partitions/duralineseries-cgl/
Qty	1.0 each

Manufacturer

Contact Name David Tesser
Contact Phone 631-249-7171

Supplier

Contact Name David Tesser
Contact Phone 631-249-7171

DESCRIPTION

Series: 2088.67P Ceiling Hung - DuraLine Series Compact Grade Laminate

FINISHES

Refer to drawings

PA-03

Occupancy Indicator Latch

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Other
Type	Other
Supplier	Sylvester & Associates (Bobrick)
Mfg	Sylvester & Associates (Bobrick)
Model	#1002612 Occupancy Indicator Latch Packet
Item Tag	PA-03
URL	https://www.washroomdirectsales.com/bathroom-accessories/bobrick-1002612-occupancy-indicator-latch
Qty	1.0 each

Manufacturer

Contact Name David Tesser
Contact Phone 631-249-7171

Supplier

Contact Name David Tesser
Contact Phone 631-249-7171

PF-01 Wall-Mounted Water Closet

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom
Type	Toilet
Supplier	Sloan
Mfg	Sloan
Model	ST-2459
Item Tag	PF-01
Dim	26 ¾" × 15" × 13 ¼"
URL	https://www.sloan.com/commercial-bathroom-products/water-closets/st-2459
Qty	1.0 each

Manufacturer

Contact Name Mona Kumar
Contact Email mona.kumar@sloan.com
Contact Phone (332) 877-5261

FINISHES

White

Supplier

Contact Name Mona Kumar
Contact Email mona.kumar@sloan.com
Contact Phone (332) 877-5261

PF-02

Royal Sensor Flushometer

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom
Type	Flushometer
Supplier	Sloan
Mfg	Sloan
Model	Royal 111 ESS-1.28-TMO
Item Tag	PF-02
Dim	Rough-in dimension: 11 1/2"
URL	chrome-extension://efaidnbmnnnibpcajpcgiclfefindmkaj/https://www.sloan.com/spec-sheet/3450055
Qty	1.0 each

Manufacturer

Contact Name Mona Kumar
Contact Email mona.kumar@sloan.com
Contact Phone (332) 877-5261

Supplier

Contact Name Mona Kumar
Contact Email mona.kumar@sloan.com
Contact Phone (332) 877-5261

DESCRIPTION

1.28 gpf, Polished Chrome Finish, Fixture Connection Top Spud, Single Flush, True Mechanical Override, Sensor-Operated, Royal® Exposed Sensor Hardwired Water Closet Flushometer.

FINISHES

Polished Chrome

PF-03 Bathroom Faucet

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom
Type	Plumbing Fixture
Supplier	Symmons
Mfg	Symmons
Model	SLS-3610-1.0-STN
Item Tag	PF-03
URL	https://www.symmons.com/products/duro-single-handle-faucet-sls-3610-stn-1-0/
Qty	1.0 each

Manufacturer

Contact Name Eli Drebin
Contact Email edrebin@symmons.com

Supplier

Contact Name Eli Drebin
Contact Email edrebin@symmons.com

DESCRIPTION

Duro Single Handle Faucet /Duro single handle lavatory faucet Single hole mount standard 1.0 gpm (3.8 L/min) Meets standards set by ADA (Americans with Disabilities Act) for safety and ease of use

FINISHES

Brushed Nickel

PF-04 Shower Trim (Shower Head)

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Other
Type	Plumbing Fixture
Supplier	Symmons
Mfg	Symmons
Model	Model 352SH-STN
Item Tag	PF-04
Dim	3" diameter
URL	https://www.symmons.com/products/dia-showerhead-1-mode-352sh-stn/
Qty	1.0 each

Manufacturer

Contact Name Eli Drebin
Contact Email edrebin@symmons.com

Supplier

Contact Name Eli Drebin
Contact Email edrebin@symmons.com

FINISHES

Satin Nickel

PF-05

Shower Trim (Shower Arm & Flange)

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Other
Type	Plumbing Fixture
Supplier	Symmons
Mfg	Symmons
Model	Model 300S-STN
Item Tag	PF-05
URL	https://www.symmons.com/products/shower-arm-flange-short-300s-stn/
Qty	1.0 each

Manufacturer

Contact Name Eli Drebin
Contact Email edrebin@symmons.com

Supplier

Contact Name Eli Drebin
Contact Email edrebin@symmons.com

FINISHES

Satin Nickel

PF-06

Handheld Shower spray with vertical sliding bar

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Plumbing Fixture
Supplier	Symmons
Mfg	Symmons
Model	H35-24-STN
Item Tag	PF-06
Dim	24" length
URL	https://www.symmons.com/products/dia-slide-grab-bar-24-h35-24/
Qty	1.0 each

Manufacturer

Contact Name Eli Drebin
Contact Email edrebin@symmons.com

Supplier

Contact Name Eli Drebin
Contact Email edrebin@symmons.com

DESCRIPTION

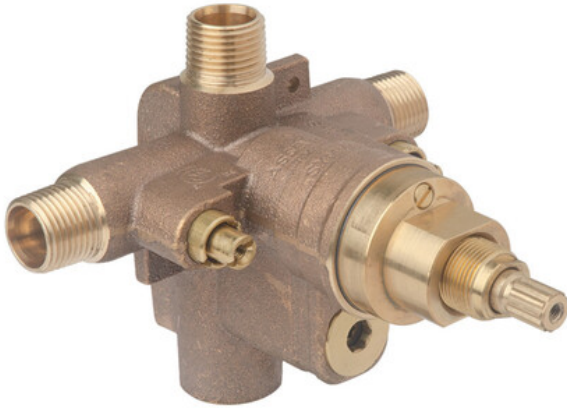
24" ADA grab bar - 1 1/2" diameter / ADA slide mechanism / Wall connection and flange. Unit is per 608.6 code. 608.6 Shower Spray Unit and Water. A shower spray unit with a hose 59 inches (1500 mm) long minimum that can be used both as a fixed-position shower head and as a hand-held shower shall be provided. The shower spray unit shall have an on/off control with a non-positive shut-off. If an adjustable-height shower head on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars. Shower spray units shall deliver water that is 120°F (49°C) maximum.

FINISHES

Satin Nickel

PF-07 Shower Valve

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Plumbing Fixture
Supplier	Symmons
Mfg	Symmons
Model	S262XBODYNS
Item Tag	PF-07
URL	https://www.symmons.com/products/temptrol-body-non-shared-s262xbodys/
Qty	1.0 each

Manufacturer

Contact Name Eli Drebin
Contact Email edrebin@symmons.com

Supplier

Contact Name Eli Drebin
Contact Email edrebin@symmons.com

PF-08 Shower Trim (Lever Handle)

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Plumbing Fixture
Supplier	Symmons
Mfg	Symmons
Model	Model S-3500-CYL-B-STN-TRM
Item Tag	PF-08
URL	https://www.symmons.com/products/dia-shower-valve-trim-s-3500-cyl-b-stn-trm/
Qty	1.0 each

Manufacturer

Contact Name Eli Drebin
Contact Email edrebin@symmons.com

Supplier

Contact Name Eli Drebin
Contact Email edrebin@symmons.com

DESCRIPTION

Dia shower trim with lever handle and secondary integral volume control. Volume control integrated into pressure balancing valve. ADA compliant

FINISHES

Satin Nickel

PL-01

Laminate - Doors

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Plastic Laminate
Supplier	Abet Laminati
Mfg	Abet Laminati
Model	852 SEI
Item Tag	PL-01
Dim	Refer to drawings
Qty	1.0 each

Manufacturer

Contact Name Roger Hernandez
Contact Email roger.hernandez@abetlaminati.com

Supplier

Contact Name Roger Hernandez
Contact Email roger.hernandez@abetlaminati.com

PL-02

Laminate - Partitions

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Plastic Laminate
Supplier	Abet Laminati
Mfg	Abet Laminati
Model	858 SEI
Item Tag	PL-02
Dim	Refer to drawings
Qty	1.0 each

Manufacturer

Contact Name Roger Hernandez
Contact Email roger.hernandez@abetlaminati.com

Supplier

Contact Name Roger Hernandez
Contact Email roger.hernandez@abetlaminati.com

PT-01

Wall paint for surrounding walls

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Other
Type	Paint
Supplier	Benjamin Moore
Mfg	Benjamin Moore
Model	To match existing
Item Tag	PT-01
Qty	1.0 each

FINISHES

To match existing

Manufacturer

Contact Name Jennifer Limberg
Contact Email jennifer.limberg@benjaminmoore.com
Contact Phone (201) 419-9790

Supplier

Contact Name Jennifer Limberg
Contact Email jennifer.limberg@benjaminmoore.com
Contact Phone (201) 419-9790

PT-02

Base paint for surrounding walls

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Other
Type	Paint
Supplier	Benjamin Moore
Mfg	Benjamin Moore
Model	To match existing
Item Tag	PT-02
Qty	1.0 each

FINISHES

To match existing

Manufacturer

Contact Name Jennifer Limberg
Contact Email jennifer.limberg@benjaminmoore.com
Contact Phone (201) 419-9790

Supplier

Contact Name Jennifer Limberg
Contact Email jennifer.limberg@benjaminmoore.com
Contact Phone (201) 419-9790

SS-01

Stainless Steel Mirror Base

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Other
Item Tag	SS-01
Dim	Refer to drawings
Qty	1.0 each

DESCRIPTION

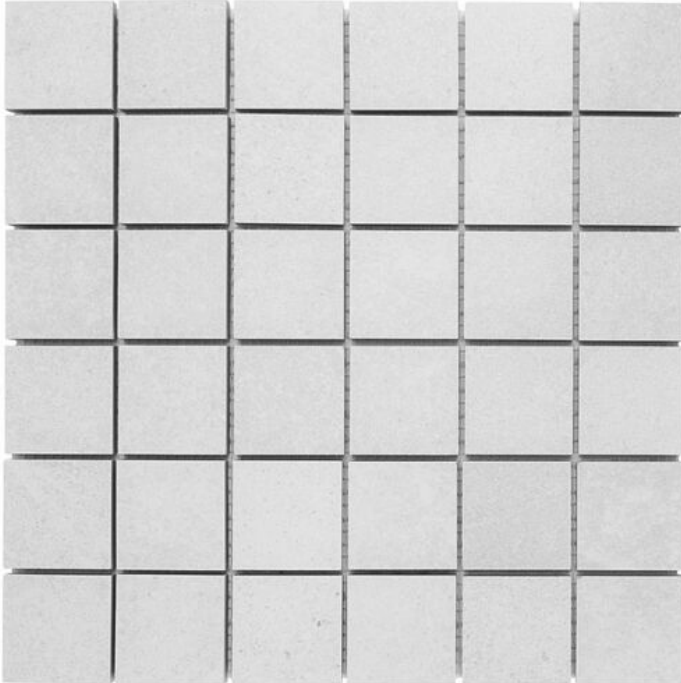
Stainless Steel base between mirror and floor

FINISHES

Satin Stainless Steel

T-01 Floor Tile

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Floor Tile
Supplier	Daltile
Mfg	Daltile
Model	Color Wheel Mosaic
Item Tag	T-01
Dim	2x2 square mosaic
URL	www.daltile.com
Qty	1.0 each

DESCRIPTION

Blue grout

FINISHES

White Matte

Manufacturer

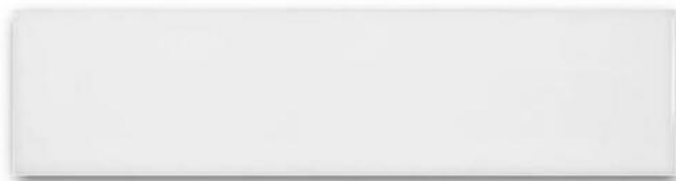
Contact Name Vickie Vigil
Contact Email vickie.vigil@daltile.com
Contact Phone (973) 856-4052

Supplier

Contact Name Vickie Vigil
Contact Email vickie.vigil@daltile.com
Contact Phone (973) 856-4052

T-02 Wall Tile

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Wall Tile
Supplier	Daltile
Mfg	Daltile
Model	Matte Arctic White 0790
Item Tag	T-02
Dim	4" x 16"
URL	https://www.daltile.com/products/wall/color-wheel-linear/matte-arctic-white
Qty	1.0 each

Manufacturer

Contact Name	Vickie Vigil
Contact Email	vickie.vigil@daltile.com
Contact Phone	(973) 856-4052

FINISHES

Matte

Supplier

Contact Name	Vickie Vigil
Contact Email	vickie.vigil@daltile.com
Contact Phone	(973) 856-4052

T-03 Wall Tile (Blue Accent)

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Wall Tile
Supplier	Daltile
Mfg	Daltile
Model	K189 - Navy
Item Tag	T-03
Dim	4" x 16"
URL	https://www.daltile.com/products/Wall/Color-Wheel-Linear/Navy
Qty	1.0 each

Manufacturer

Contact Name	Vickie Vigil
Contact Email	vickie.vigil@daltile.com
Contact Phone	(973) 856-4052

FINISHES

ColorMatch 4x16 white body using Natural Hues glazes

Supplier

Contact Name	Vickie Vigil
Contact Email	vickie.vigil@daltile.com
Contact Phone	(973) 856-4052

T-04 Floor Tile

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Floor Tile
Supplier	Daltile
Mfg	Daltile
Model	Color Wheel Mosaic
Item Tag	T-04
Dim	1.5" Hexagon Mosaic
URL	https://www.daltile.com/products/wall/color-wheel-mosaic
Qty	1.0 each

Manufacturer

Contact Name	Vickie Vigil
Contact Email	vickie.vigil@daltile.com
Contact Phone	(973) 856-4052

Supplier

Contact Name	Vickie Vigil
Contact Email	vickie.vigil@daltile.com
Contact Phone	(973) 856-4052

DESCRIPTION

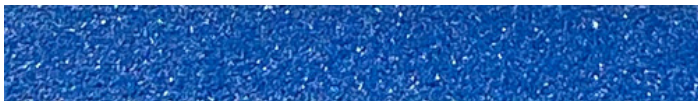
Blue grout

FINISHES

White Matte

T-05 Tile Grout

ISSUE DATE: 9/15/2023



SPECIFICATIONS

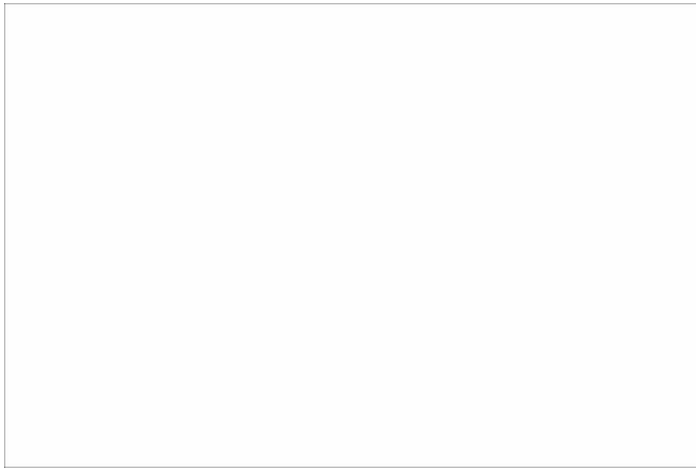
Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Other
Supplier	The Tile Doctor
Mfg	Litokol
Model	Starlike Evo Blu Zaffiro 350
Item Tag	T-05
URL	https://www.aquablumosaics.com/products/zaffiro-c-260-5-5lb-pail-tile-grout
Qty	1.0 each

FINISHES

Starlike Evo Blu Zaffiro 350

T-06 Shower Curb

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Other
Item Tag	T-06
Dim	3" curb
Qty	1.0 each

DESCRIPTION

Refer to drawings

FINISHES

Flamed stone to match 1111 Vivid White Caesarstone countertop

T-07 Bathroom Stone Saddle

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Stone
Item Tag	T-07
Dim	1/2" thickness - refer to drawings
Qty	1.0 each

DESCRIPTION

Double bevel hollywood threshold / for ADA showers


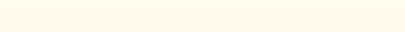

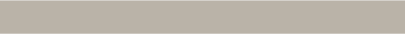
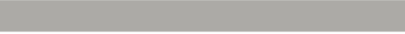


FINISHES

Flamed stone to match 1111 Vivid White Caesarstone countertop

T-08 Wall Tile Grout

ISSUE DATE: 9/15/2023

SUMMIT Palette

Brilliant White 35	
Polar White 01	
Fresh Lily 02	
Irish Crème 10	
Smoke 42	
Battleship 43	
Stormy Mist 25	

SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Wall Tile
Supplier	Ardex
Mfg	Ardex
Model	Brilliant White - 35
Item Tag	T-08
URL	https://www.ardexamericas.com/ardex-grout-selector/
Qty	1.0 each

FINISHES

Brilliant White - 35

Manufacturer

Phone	914.649.7394
Contact Name	John Lutkowski
Contact Email	john.lutkowski@ardexamericas.com
Contact Phone	(516) 270-6341

Supplier

Phone	914.649.7394
Contact Name	John Lutkowski
Contact Email	john.lutkowski@ardexamericas.com
Contact Phone	(516) 270-6341

TR-01

Decorative Edge-Protection Profile

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Finishes & Trim
Supplier	Schluter Systems
Mfg	Schluter Systems
Model	Schluter DECO
Item Tag	TR-01
Dim	Coordinate with tile thickness
Qty	1.0 each

DESCRIPTION

Coordinate size with thickness of tile

FINISHES

Satin Anodized Aluminum

Manufacturer

Contact Name Paul Cabiati
Contact Email pcabiati@schluter.com
Contact Phone (888) 472-4588 x4640

Supplier

Contact Name Paul Cabiati
Contact Email pcabiati@schluter.com
Contact Phone (888) 472-4588 x4640

TR-02

Finishing and edge-protection profile with a squared reveal surface

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Finishes & Trim
Supplier	Schluter Systems
Mfg	Schluter Systems
Model	Schluter QUADec
Item Tag	TR-02
Dim	Coordinate with tile thickness
URL	https://www.schluter.com/schluter-us/en_US/Profiles/For-Walls/Edging-%26-Outside-Wall-Corners/Schluter%C2%AE-QUADec/p/QUADec?facets=false
Qty	1.0 each

Manufacturer

Contact Name Paul Cabiati
Contact Email pcabiati@schluter.com
Contact Phone (888) 472-4588 x4640

Supplier

Contact Name Paul Cabiati
Contact Email pcabiati@schluter.com
Contact Phone (888) 472-4588 x4640

DESCRIPTION

Coordinate size with thickness of tile

FINISHES

Aluminum Brushed Nickel Anodized

TR-03

Edge-protection profile for outside corners with a square, recessed groove

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Finishes & Trim
Supplier	Schluter Systems
Mfg	Schluter Systems
Model	Schluter INDEC
Item Tag	TR-03
Dim	Coordinate with tile thickness
URL	https://www.schluter.com/schluter-us/en_US/Profiles/For-Walls/Edging-%26-Outside-Wall-Corners/Schluter%C2%AE-INDEC/p/INDEC?facets=false
Qty	1.0 each

Manufacturer

Contact Name Paul Cabiati
Contact Email pcabiati@schluter.com
Contact Phone (888) 472-4588 x4640

Supplier

Contact Name Paul Cabiati
Contact Email pcabiati@schluter.com
Contact Phone (888) 472-4588 x4640

DESCRIPTION

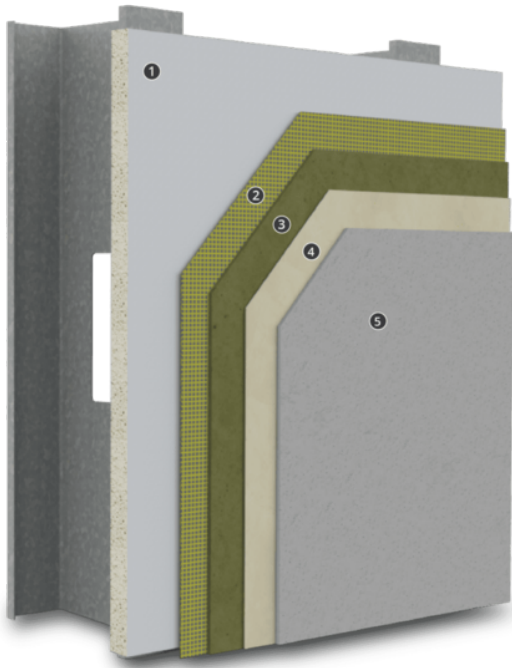
Coordinate size with thickness of tile

FINISHES

Satin Anodized Aluminum

WT-01 Finish System for Wet Environment

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Other
Supplier	Sto Corp
Mfg	Sto Corp
Model	Series 12.xx
Item Tag	WT-01
URL	https://www.stocorp.com/sto_systems/sto-interior-finish-system-pool-rooms/
Qty	1.0 each

Manufacturer

Phone (800) 221-2397
Contact Name David Hutchinson
Contact Email dhutchinson@stocorp.com
Contact Phone 8147773504

Supplier

Phone (800) 221-2397
Contact Name David Hutchinson
Contact Email dhutchinson@stocorp.com
Contact Phone 8147773504

DESCRIPTION

Contractor to include J channel and corner beads as required

FINISHES

Light finish

WT-02

Stucco Textured Finish

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Other
Supplier	Sto Corp
Mfg	Sto Corp
Model	StoLit Freeform
Item Tag	WT-02
URL	https://www.stocorp.com/sto_products/stolit-freeform/
Qty	1.0 each

DESCRIPTION

Light finish

Manufacturer

Phone (800) 221-2397
Contact Name David Hutchinson
Contact Email dhutchinson@stocorp.com
Contact Phone 8147773504

Supplier

Phone (800) 221-2397
Contact Name David Hutchinson
Contact Email dhutchinson@stocorp.com
Contact Phone 8147773504

WT-03 Clear Coat Sealer

ISSUE DATE: 9/15/2023



SPECIFICATIONS

Project	2214-01 - FIT Showers
Area	Bathroom / Showers
Type	Other
Supplier	Sto Corp
Mfg	Sto Corp
Model	Sto Clear Coat Sealer
Item Tag	WT-03
URL	https://www.stocorp.com/sto_products/sto-clear-coat-sealer-2/
Qty	1.0 each

FINISHES

80513 Matte

Manufacturer

Phone (800) 221-2397
Contact Name David Hutchinson
Contact Email dhutchinson@stocorp.com
Contact Phone 8147773504

Supplier

Phone (800) 221-2397
Contact Name David Hutchinson
Contact Email dhutchinson@stocorp.com
Contact Phone 8147773504

EXHIBIT D: DRAWINGS

FASHION INSTITUTE OF TECHNOLOGY

227 WEST 27TH STREET NEW YORK, NY 10001
 INTERIOR RENOVATION
 ISSUE FOR BID



CLIENT
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 227 West 27th Street
 New York, NY 10001-5992

ARCHITECT
Gerner Kronick + Valcarcel
 675 Third Ave, 16th Floor
 New York, NY 10017
 Tel: 212 679-6362
 Fax: 212 679-5877

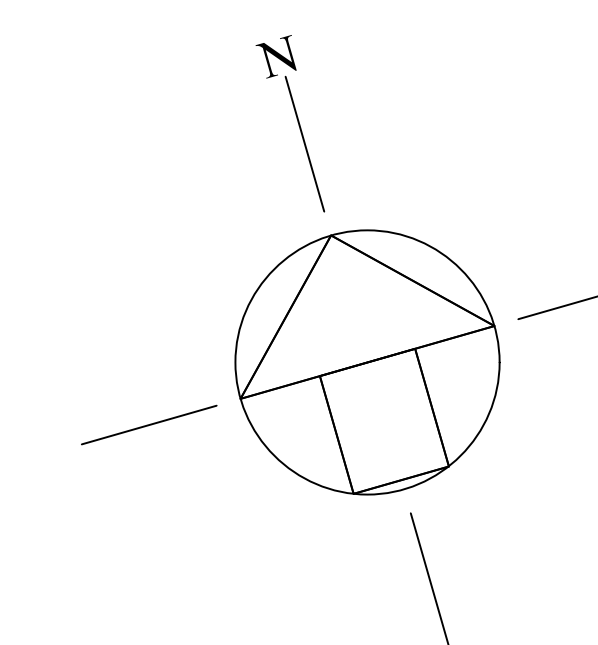
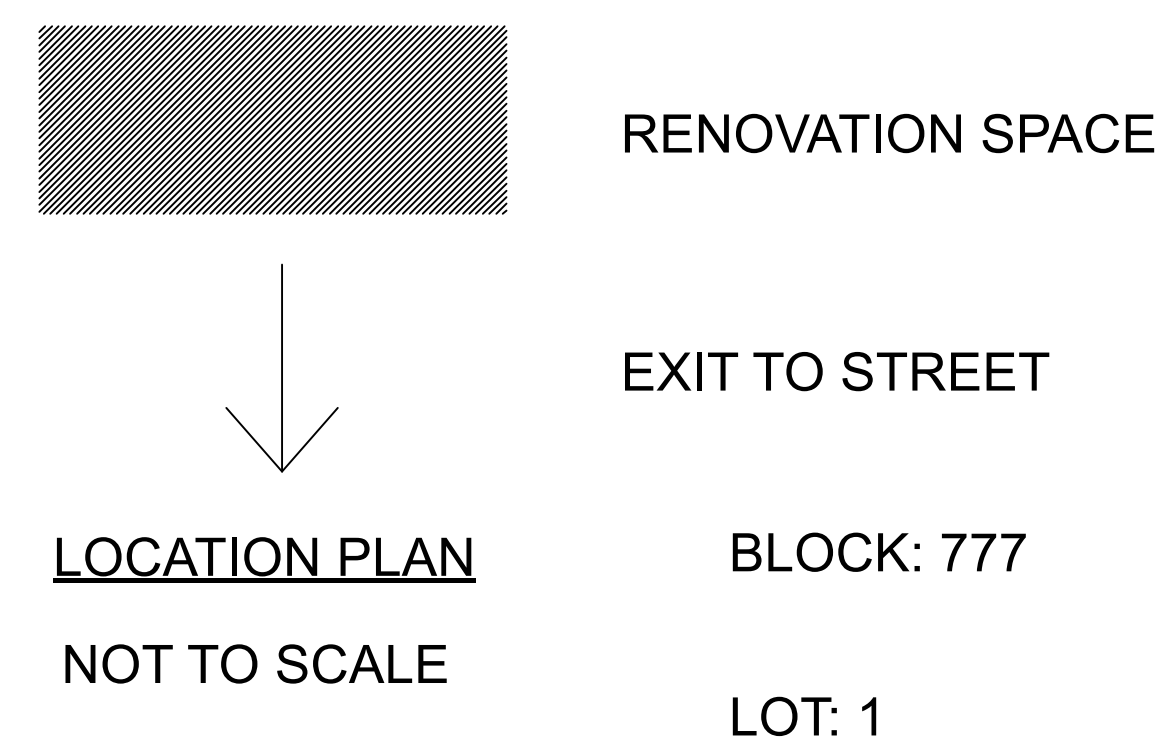
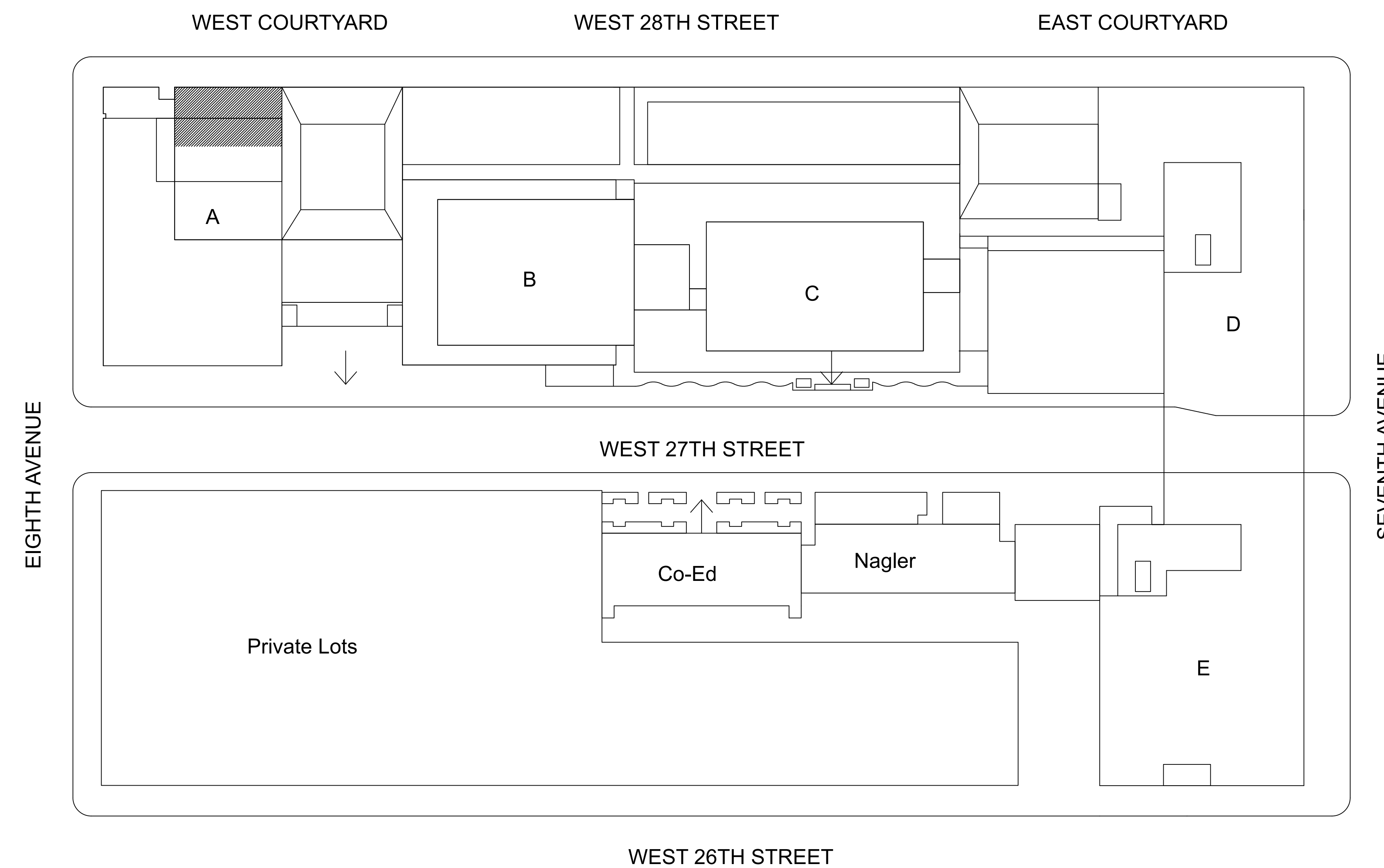
MEP ENGINEER
MG Engineering, D.P.C.
 116 West 32nd Street, 12th Floor
 New York, NY 10001
 Tel: 212 643-9055
 #9976

EXPEDITER
Municipal Expediting
 15 Maiden Lane, Suite 603
 New York, NY 10038
 Tel: 212 587-5707

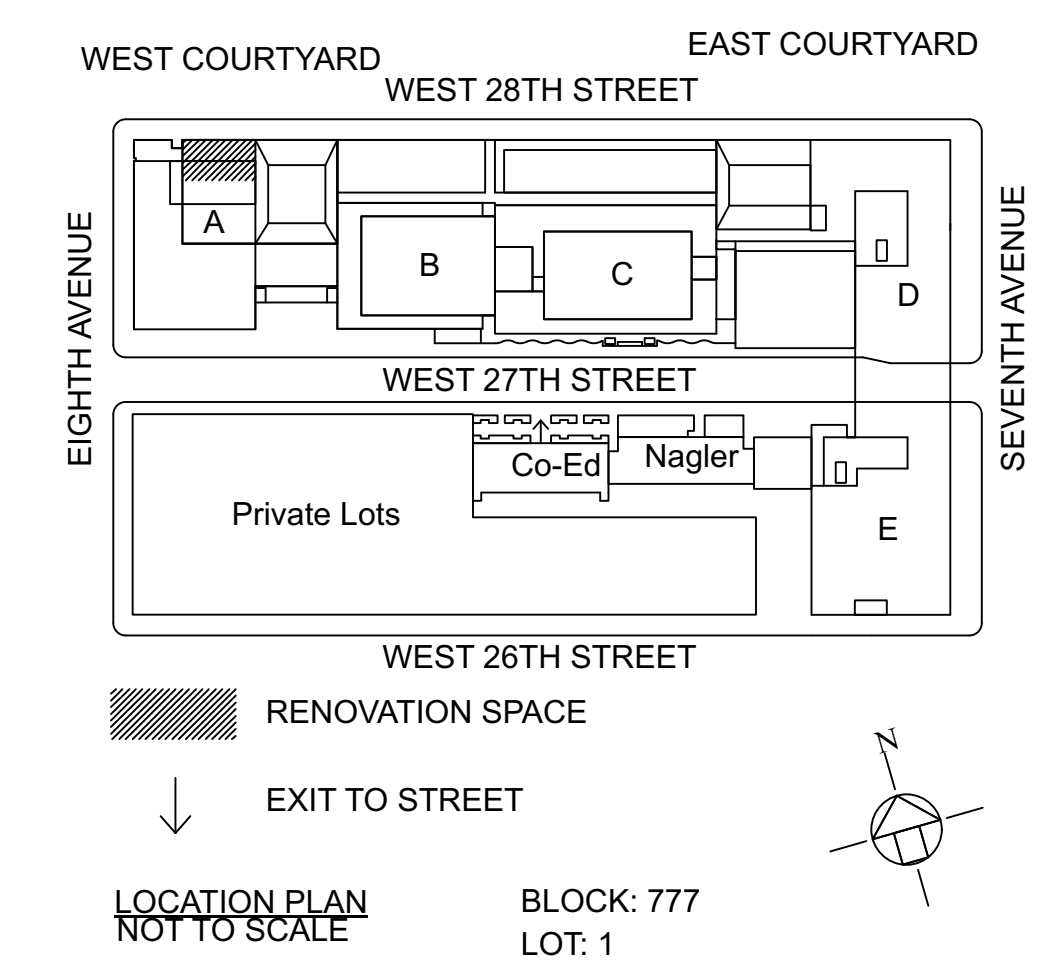
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 RELATED PL FILING DOB#: M00871728-I1

DRAWING SCHEDULE

SHEET #	SHEET DESCRIPTION	ISSUE FOR BID
A-000.00	COVER PAGE	8/11/23
A-001.00	NOTES	8/11/23
A-002.00	SYMBOLS & ADA REQUIREMENTS	8/11/23
DM-100	DEMOLITION PLAN	8/11/23
A-100.00	CONSTRUCTION PLAN	8/11/23
A-101.00	REFLECTED CEILING PLAN & EN CALC'S	8/11/23
A-102.00	FINISH PLAN	8/11/23
A-103.00	PITCH PLAN	8/11/23
A-200.00	AX-25B INTERIOR ELEVATIONS	8/11/23
A-201.00	AX-27A INTERIOR ELEVATIONS	8/11/23
A-202.00	AX-27B INTERIOR ELEVATIONS	8/11/23
A-300.00	DETAILS	8/11/23



KEY PLAN:



Revisions

1.	ISSUE FOR BID	08/11/23
No.	Issue	Date

Sign and Seal:

Drawing Title:

COVER PAGE

Drawing No.:

A-000.00

Project No.:
2214-01

Date:
08/11/23

Scale:

Sheet No.:
1 OF 12

CLIENT
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 227 West 27th Street
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 Tel: 212 679-6362
 Fax: 212 679-5877

MEP ENGINEER
MG Engineering, D.P.C.
 116 West 32nd Street, 12th Floor
 New York, NY 10001
 Tel: 212 643-9055

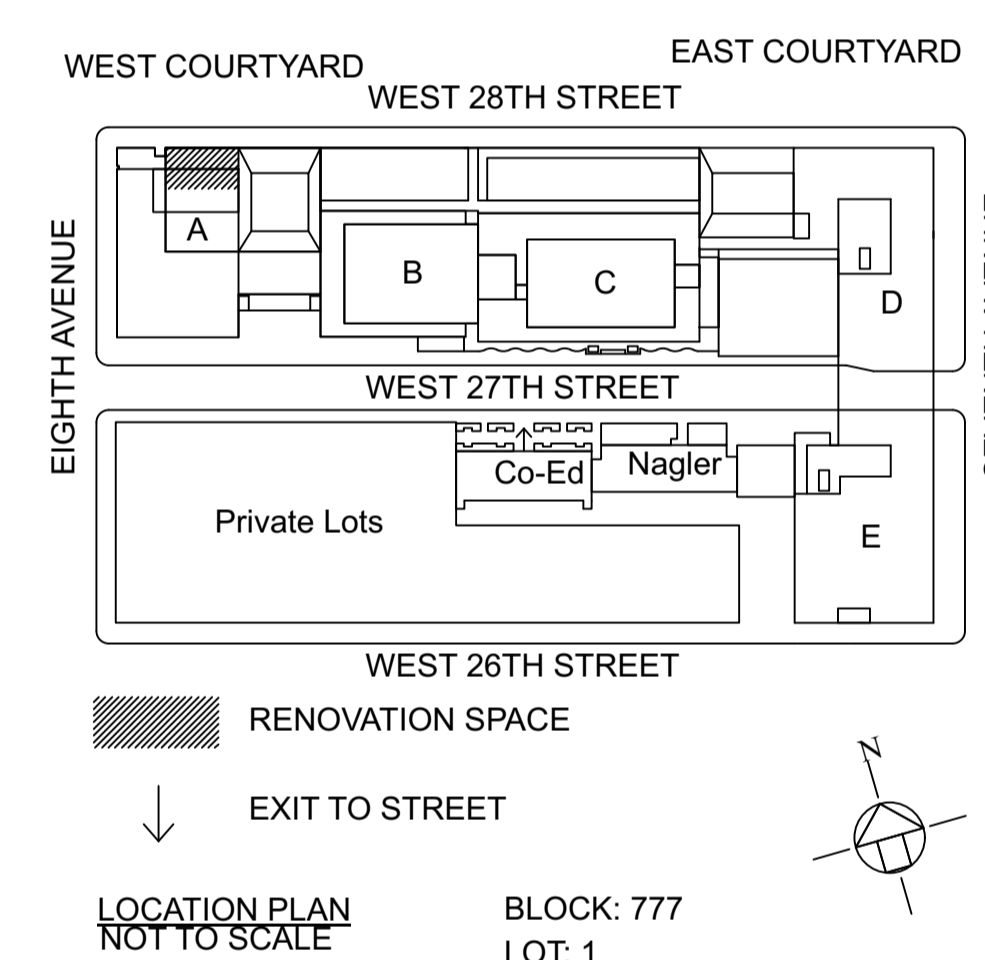
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EXPEDITER
Municipal Expediting
 15 Maiden Lane, Suite 603
 New York, NY 10038
 Tel: 212 587-5707

DOB#: M00871728-S1

RELATED PL FILING DOB#: M00871728-I1

KEY PLAN:



Revisions

No.	Issue	Date
1.	ISSUE FOR BID	08/11/23

Sign and Seal:

Drawing Title:
NOTES

Drawing No.:
A-001.00

Project No.:
 2214-01

Date:
 08/11/23

Scale:

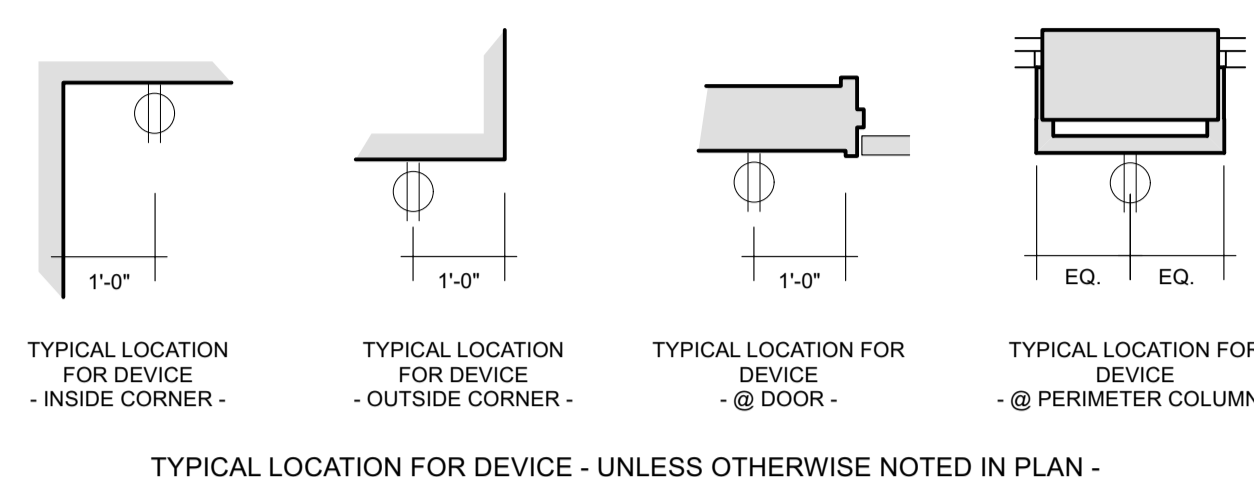
Sheet No.:
 2 OF 12

SCOPE OF WORK

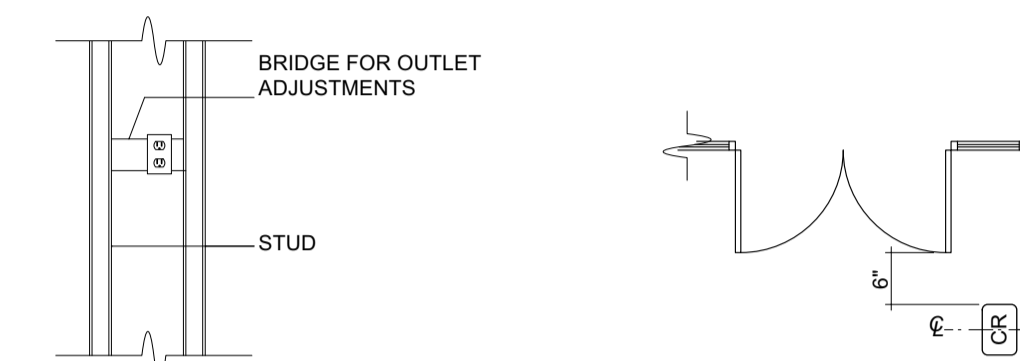
WORK INCLUDES
 INTERIOR RENOVATION OF LOCKER ROOM SHOWERS, STAFF SHOWERS, AND STAFF BATHROOM INCLUDING DEMOLITION AND CONSTRUCTION OF NEW PARTITIONS, DEMOLITION AND CONSTRUCTION OF NEW FLOOR TILES AND FINISHES, AND DEMOLITION AND CONSTRUCTION OF NEW CEILING.

PTE NOTES ON DEVICE LOCATIONS

- SEE DETAIL FOR TYPICAL MOUNTING HEIGHTS OF OUTLETS AND DEVICES
- NUMBER ADJACENT TO SYMBOL WHEN INDICATED. (30") DENOTES HEIGHT ABOVE FINISHED FLOOR TO CENTER LINE OF OUTLET OR DEVICE.
- ALL SYMBOLS WITH A SUBSCRIPT "E" DENOTE EXISTING DEVICES. LOCATIONS ARE APPROXIMATE CONTRACTOR TO VERIFY APPROPRIATENESS FOR RE-USE AND TO PROVIDE NEW DEVICES AS REQUIRED.
- ALL DEVICES SHALL BE MOUNTED VERTICALLY UNLESS OTHERWISE NOTED.
- CONTRACTOR MUST COORDINATE OUTLET + SWITCH LOCATIONS WITH ALL MILLWORK + FURNITURE. REPORT ALL CONFLICTS TO ARCHITECTS IMMEDIATELY. AWAIT REVISED LOCATIONS BEFORE PROCEEDING.

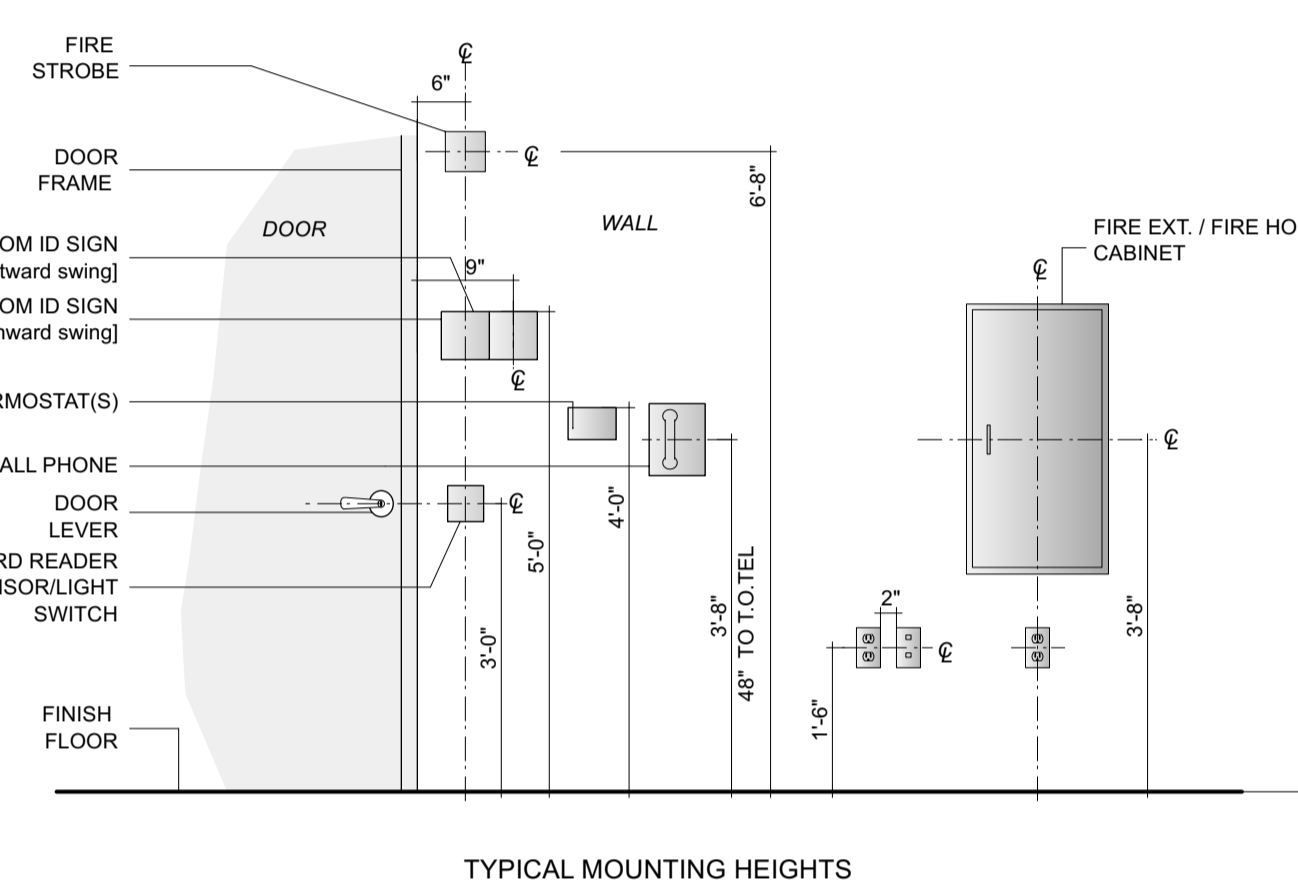


TYPICAL LOCATION FOR DEVICE - UNLESS OTHERWISE NOTED IN PLAN



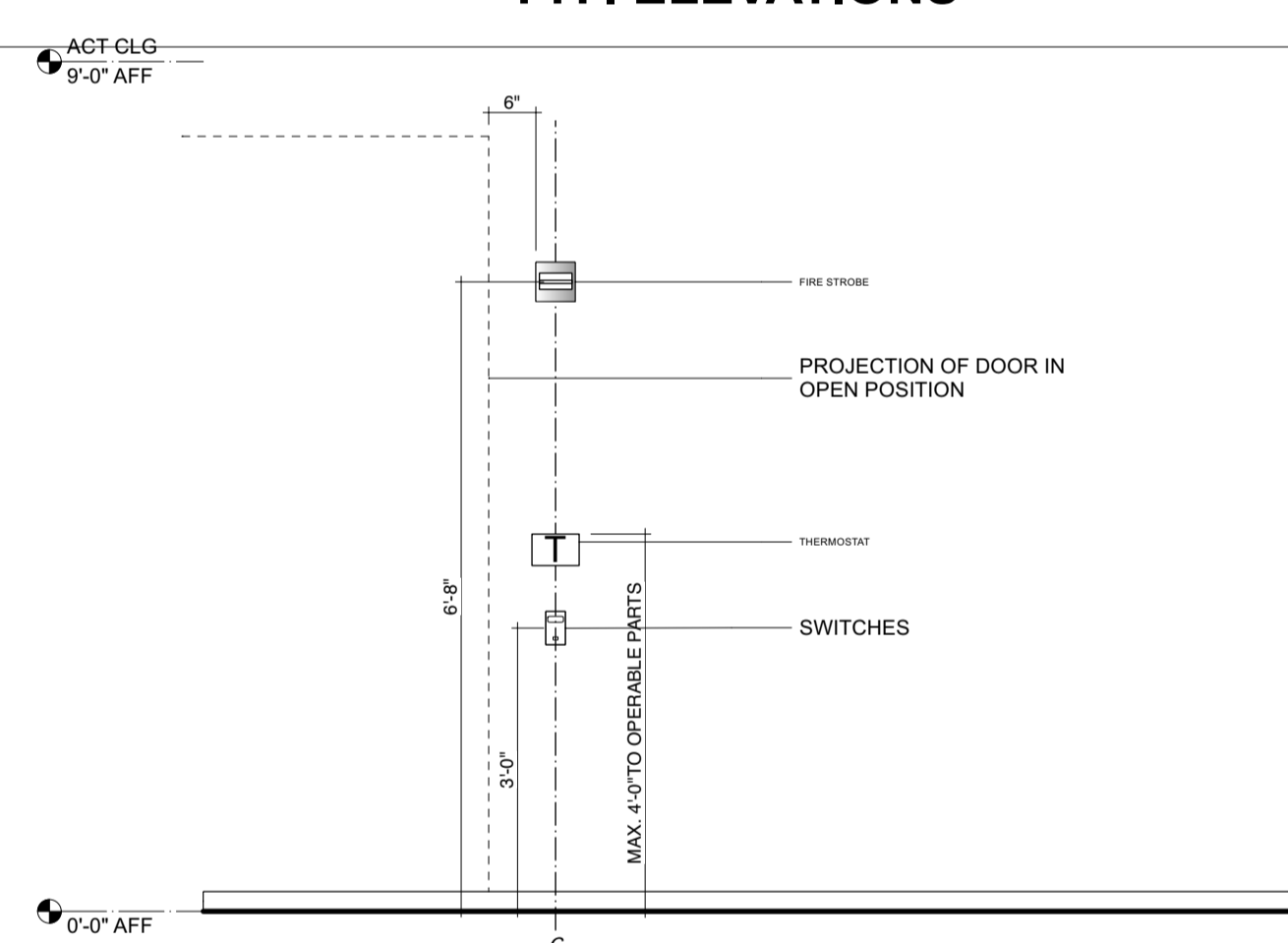
TYPICAL DETAIL OF OUTLET AT STUD

TYPICAL CARD READER + SWITCH LOCATION AT DOORS.



TYPICAL MOUNTING HEIGHTS

TYP. ELEVATIONS



ENERGY CODE PROGRESS INSPECTIONS

ITEMS OF SPECIAL INSPECTION	ENERGY CODE PROGRESS INSPECTIONS	SEPARATE FILING
TR-1 1. FIRE RESISTANT PENETRATIONS AND JOINTS AS PER BC 1704.27 2. SPRAY FIRE-RESISTANT MATERIALS AS PER BC 1704.11 3. ENERGY CODE COMPLIANCE INSPECTIONS BC 1103.5.	1. INTERIOR LIGHTING POWER	1. PLUMBING

GENERAL NOTES

- COMPLY WITH CODES, LAWS, ORDINANCES, RULES AND REGULATIONS OF PUBLIC AUTHORITIES HAVING JURISDICTION OVER THE WORK.
- OBTAIN AND PAY FOR PERMITS AND INSPECTIONS REQUIRED BY PUBLIC AUTHORITIES GOVERNING THE WORK. PROCEED WITH THE WORK IMMEDIATELY UPON RECEIVING SAME. COPIES SHALL BE FORWARDED TO THE OWNER / CLIENT.
- REVIEW DOCUMENTS, VERIFY DIMENSIONS AND FIELD CONDITIONS AND REPORT ANY CONFLICTS OR OMISSIONS TO THE ARCHITECT FOR CLARIFICATION PRIOR TO PERFORM ANY WORK IN QUESTION.
- SUBMIT REQUESTS FOR SUBSTITUTIONS, REVISIONS OR CHANGES TO ARCHITECT FOR REVIEW PRIOR TO PURCHASE, FABRICATION OR INSTALLATION.
- COORDINATE WORK WITH THE OWNER, INCLUDING SCHEDULING TIME AND LOCATIONS FOR DELIVERIES, BUILDING ACCESS, USE OF BUILDING SERVICES AND FACILITIES AND USE OF ELEVATORS. MINIMIZE DISTURBANCE OF BUILDING FUNCTIONS AND OCCUPANTS.
- OWNER WILL PROVIDE WORK NOTED "BY OTHERS" OR "NOC" UNDER SEPARATE CONTRACT. INCLUDE SCHEDULE REQUIREMENTS IN CONSTRUCTION PROGRESS SCHEDULE AND COORDINATE TO ASSURE ORDERLY SEQUENCE OF INSTALLATION.
- COORDINATE TELECOMMUNICATIONS, DATA AND SECURITY SYSTEMS INSTALLATIONS.
- MAINTAIN EXITS, EXIT LIGHTING, FIRE PROTECTIVE DEVICES AND ALARMS IN CONFORMANCE WITH CODES AND ORDINANCES.
- PROTECT AREA OF WORK AND ADJACENT AREAS FROM DAMAGE.
- MAINTAIN WORK AREAS SECURE AND LOCKABLE DURING CONSTRUCTION. COORDINATE WITH TENANT AND LANDLORD TO ENSURE SECURITY.
- DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN. IN CASE OF CONFLICT, CONSULT THE ARCHITECT.
- PARTITIONS ARE DIMENSIONED FROM FINISH FACE TO FINISH FACE, UNLESS OTHERWISE NOTED. MAINTAIN DIMENSIONS MARKED "CLEAR" ALLOW FOR THICKNESS OF FINISHES.
- WHERE EXISTING ACCESS PANELS CONFLICT WITH CONSTRUCTION, RELOCATE PANELS TO ALIGN AND FIT WITHIN THE NEW CONSTRUCTION.
- ALL LUMBER TO BE FIRE-RETARDANT TREATED AS PER REQUIREMENTS OF NEW YORK CITY BUILDING CODE, SECTION 27-328.
- CONTRACTOR IS TO VERIFY ALL GRADES AND ESTABLISHED ELEVATIONS (SHOWN) PRIOR TO THE START OF CONSTRUCTION. COORDINATE SAME AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO THE START OF ANY CONSTRUCTION. DO NOT DEVIATE FROM THESE PLANS WITHOUT FIRST NOTIFYING THE ARCHITECT IN WRITING.
- CONTRACTOR SHALL FOLLOW ACCEPTED TRADE PROCEDURES AND MANUFACTURER'S STANDARDS AND SHALL PRODUCE THE PROJECT IN A GOOD AND WORKMANLIKE MANNER. ALL MATERIALS ARE TO BE NEW AND CONTRACTOR SHALL NOT SUBSTITUTE ANY STRUCTURAL GRADE MATERIALS WITHOUT PRIOR WRITTEN APPROVAL FROM THE ARCHITECT.
- THE CONTRACTOR SHALL PRODUCE ALL PERMITS REQUIRED AND PROCEED WITH THE WORK IMMEDIATELY UPON RECEIVING SAME. COPIES SHALL BE FORWARDED TO THE OWNER / CLIENT.
- THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE SITE AGAINST THE DRAWINGS AND SHALL INFORM THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK. THE START OF WORK WILL CONSTITUTE THE ACCEPTANCE OF THE DRAWINGS AND EXISTING CONDITIONS BY THE GENERAL CONTRACTOR.
- CONTRACTOR TO REVIEW ARCHITECTURAL AND ENGINEERING PLANS. BOTH DISCIPLINES INDICATE THE TOTAL SCOPE OF WORK. WHERE DISCREPANCIES OCCUR ARCHITECT TO BE NOTIFIED. SUBCONTRACTORS TO GET BOTH ARCHITECTURAL AND ENGINEERING DRAWINGS.
- THE PROJECT CONSTITUTES INFORMATION ON ALL DRAWINGS. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO DISTRIBUTE THE ENTIRE SET OF DWGS TO ALL NECESSARY CONTRACTORS.
- ALL EXISTING DEMISING PARTITIONS TO BE PATCHED TO MAINTAIN REQUIRED RATING AS PER NYC CODE.
- ALL EXISTING SURFACES, INCLUDING WALLS, COLUMNS, PERIMETER WALLS, PERIMETER GWB SOFFIT ETC. TO REMAIN VISIBLE SHALL BE PATCHED, REPAIRED, CLEANED AND LEFT READY TO RECEIVE SPECIFIED FINISH. NO IMPERFECTIONS ARE TO BE TELEGRAPHED THROUGH THE SPECIFIED FINISH.

BUILDING DEPARTMENT NOTES

- ALL REFERENCE TO BUILDING CODE SHALL REFER TO BUILDING CODE OF THE CITY OF NEW YORK (1968 AMENDED UNLESS OTHERWISE STATED).
- CONTRACTORS SHALL COMPLY WITH ALL REQUIREMENTS OF NEW YORK CITY BUILDING CODES, STATE LABOR LAW AND ALL REGULATIONS OF NEW YORK CITY AND STATE. ALL PERMITS SHALL BE PROPERLY DISPLAYED.
- MEANS OF EGRESS SHALL BE KEPT UNOBSTRUCTED AT ALL TIMES.
- CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS, APPROVALS, TESTING AND INSPECTIONS AS MAY BE REQUIRED BY THE DEPARTMENT OF BUILDINGS, ENVIRONMENTAL PROTECTION AGENCY, AIR RESOURCES AND THE FIRE DEPARTMENT AS PER 27-147 OF THE CODE.
- CONTRACTORS SHALL OBTAIN AND PAY FOR ALL REQUIRED DEPARTMENT OF BUILDINGS PERMITS PRIOR TO THE START OF WORK.
- ALL MATERIALS OR ASSEMBLIES REQUIRED TO HAVE A FIRE RESISTANCE RATING SHALL COMPLY WITH ONE OF THE FOLLOWING:
 - IT SHALL CONFORM WITH NFPA FIRE RESISTANCE RATINGS DECEMBER 1994.
 - IT SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ASTM E-119-1961, STANDARD METHODS OF FIRE TESTS OF BUILDING CONSTRUCTION AND MATERIALS AND ACCEPTED BY THE COMMISSIONER.
 - IT SHALL HAVE BEEN ACCEPTABLE PRIOR TO THE EFFECTIVE DATE OF THE CODE.
- ALL CONCEALED SPACES WITHIN PARTITIONS, WALL, FLOORS, ROOFS, STAIRS, FURRING, PIPE OR HOT GASES FROM ONE FLOOR TO ANOTHER SHALL BE PROPERLY FIRESTOPPED AS PER WOOL, NON-COMBUSTIBLE MATERIAL, SHEET METAL, (02" THICK, 1/8" JAS PER SEC. C29-29.9).
- INTERIOR FINISHES TO HAVE FLAME SPREAD RATINGS AS PRESCRIBED IN ASTM E-84-1961 STANDARD METHOD TEST FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS GYPSUM BOARD TYPE X C-26-504.10
- ALL ROOMS WITHOUT WINDOWS ARE TO BE MECHANICALLY VENTILATED IN ACCORDANCE WITH 27-752 OF THE CODE.
- EXIT SIGNS AND DIRECTIONS ARROWS WILL COMPLY WITH SECTION 27-289.
- ALL CORRIDORS TO BE 3'-0" MIN CLEARANCE AS PER TABLE 5-1.
- ALL SPACES OCCUPIED AS INDICATED ON PLANS.
- ALL EXISTING PARTITIONS TO BE NON-COMBUSTIBLE.
- SUSPENDED CEILING CONSTRUCTION SHALL COMPLY WITH THE NEW YORK CITY BUILDING CODE, SECTION 27-350.
- ALL FIRE RATED DOORS SHALL BE 3'-0" x 7'-0" MINIMUM AND SHALL BEAR THE LABEL OF THE BOARD OF STANDARD AND APPEALS OR THE M.E.A. DIVISION.
- THIS DRAWING IS FILED TO SHOW TENANT RENOVATIONS. ALL EXISTING AND BASE BUILDING CONSTRUCTION PREVIOUSLY APPROVED.
- N/A.
- STRUCTURAL WORK SHALL BE CONSIDERED AS PARTIAL DEMOLITION (SEE DEFINITION IN 2014 AC, §26-101.5).
 - ADJOINING PROPERTY OWNERS SHALL BE NOTIFIED OF UPCOMING DEMOLITION OPERATIONS IN WRITING NOT LESS THAN 10 DAYS PRIOR TO THE SCHEDULED STARTING DATE OF THE DEMOLITION (BC 3306.3.2).
 - VERIFY ON PLAN NOTIFYING THE NYC DOB VIA PHONE OR ELECTRONICALLY AT LEAST 24 HOURS, BUT NO MORE THAN 48 HOURS PRIOR TO THE COMMENCEMENT OF DEMOLITION WORK (BC 3306.3.1).
 - DOB DEMOLITION SUBMITTAL CERTIFICATION FORM IS REQUIRED PRIOR TO PERMIT.
- TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE NEW YORK CITY ENERGY CONSERVATION CODE.

SAFETY NOTES

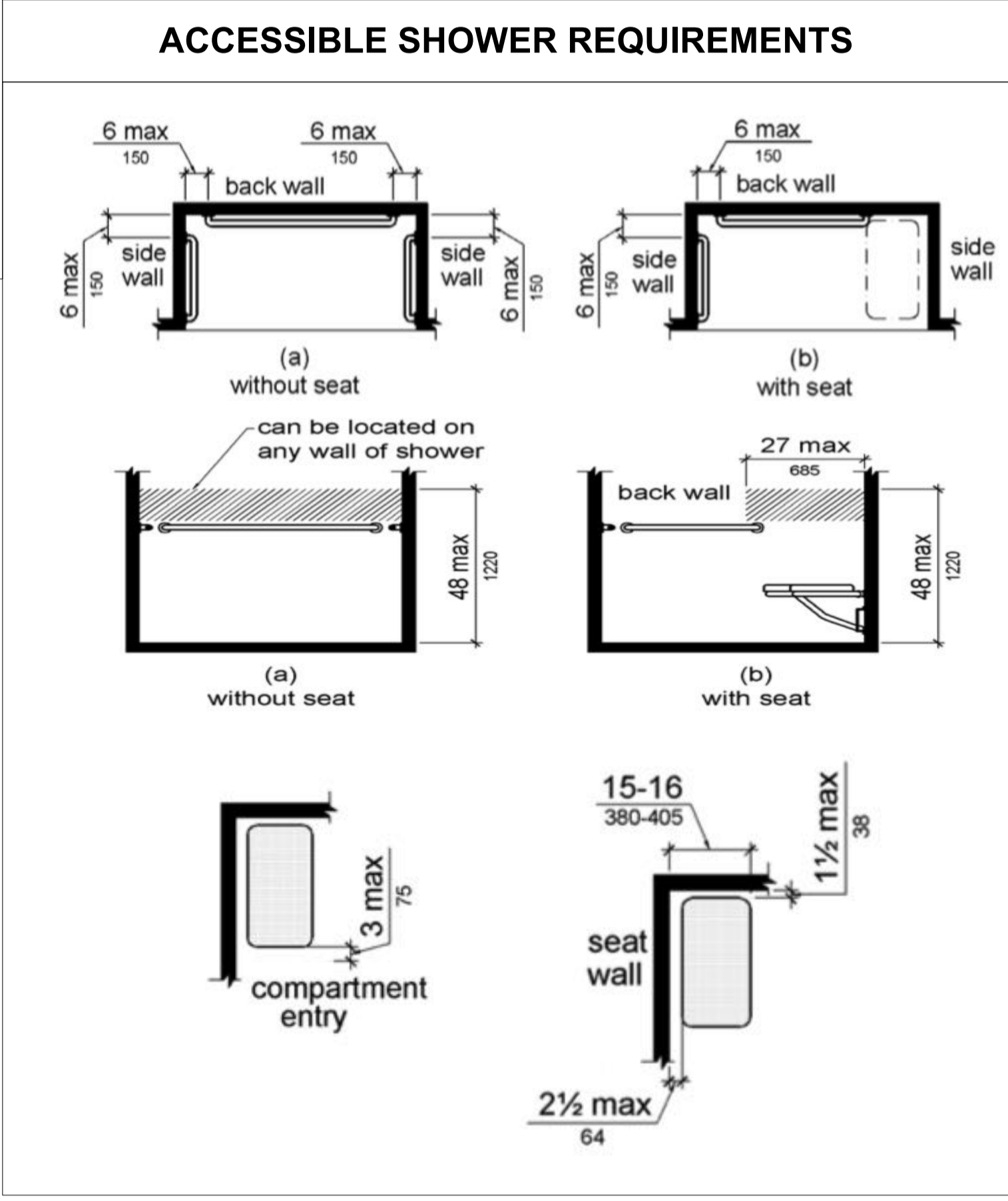
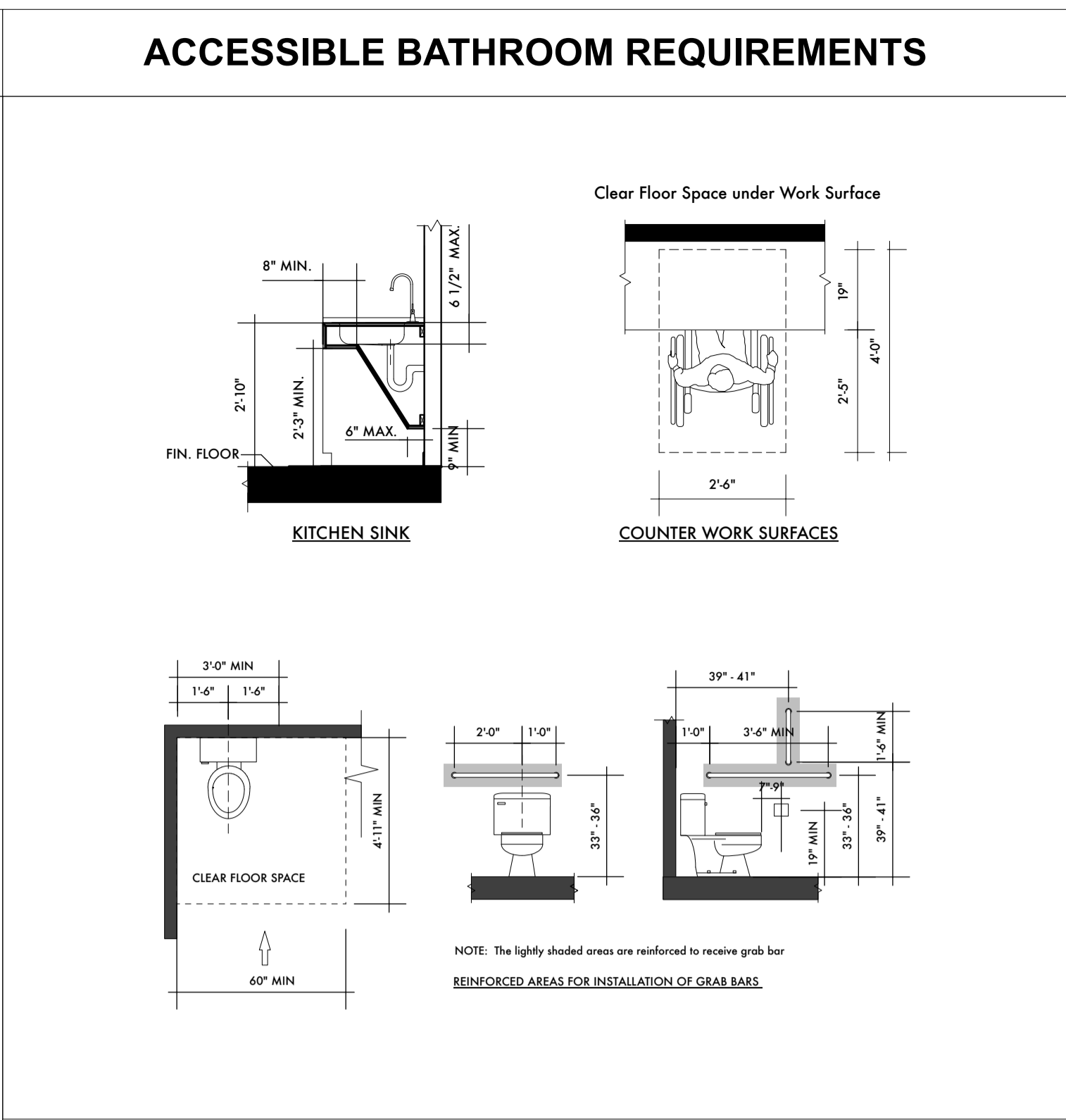
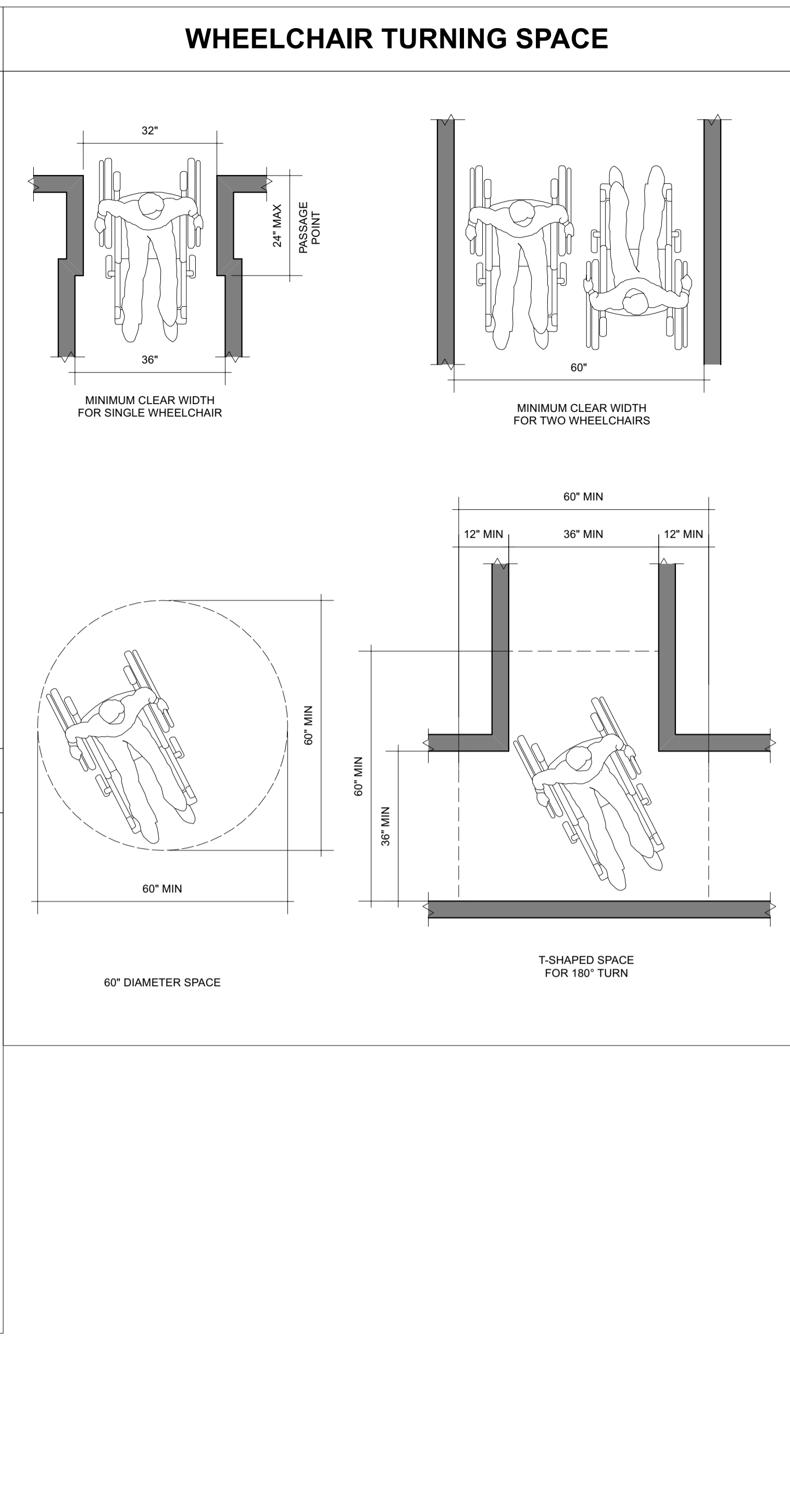
There is no effect to all other tenants for means of egress. All work to be done in accordance with the New York City Building code, and regulations of all other agencies having jurisdiction.

- Means of egress:

All existing means of egress from the building to be maintained clear and free of all obstructions, such as building materials, tools, etc.
- Fire safety:
 - All materials stored at construction area, and/or in any area of the building, are to be secured in a locked area. Access to such areas to be controlled by owner and/or general contractor.
 - All materials to be stored in an orderly fashion.
 - All flammable materials to be kept tightly sealed in their respective manufacturer's containers. Such materials are to be kept away from heat.
 - All flammable materials to be used and stored in an adequately ventilated space.
 - All electrical power to be shut-off where there is exposed conduit.
 - All electrical power in the construction area to be shut off after working hours.
- Contractor, at all times, to make sure there is no leakage of natural gas in the building, or any flammable gas used in construction.
 - All fire rating of egress path to be protected as to keep the integrity of the fire rating at all times, contractor shall be only allowed to disturb existing fire rated walls as per plans submitted.
 - As per FC 1404.1 Smoking is prohibited at the construction site and signage indicating no smoking shall be posted on the construction area as well as the entrance, and on each floor of the building.
 - Combustible waste shall not be allowed to accumulate within the building and shall be removed once a day as per 1404.22.11 Portable fire extinguishers shall be provided at each stairway where any combustible material is stored or combustible waste is generated.
- Health requirements:
 - Debris, dirt, and dust to be kept to a minimum and be confined to the immediate construction area.
 - Contractor to isolate construction area from occupied building areas by means of temporary partitions or heavy weight drop cloths.
 - Debris, dirt, and dust to be cleaned up and cleaned from building periodically to avoid any excessive accumulation.
 - Pandemic protection plan: the contractor shall follow a pandemic protection plan that will include guidelines on social distancing, personal protective equipment (PPE) personal and environmental hygiene, contact tracing and health monitoring and follow the guidelines and recommendations from New York City, New York State and Federal Agencies for the prevention of the spread of contagious diseases.
- Lead and Asbestos:
 - Asbestos test shall be done prior to commencement of construction.
 - 1.1 An ACPES asbestos report was issued and submitted with the construction documents.
 - 1.2 Contractor will be lead certified. 4.2 The project does not contain asbestos and lead. However if the contractor suspects any suspect material, the contractor will stop the work and notify the engineer immediately.
- Noise restrictions:
 - Whenever any construction devices listed 805/113 are employed, the contractor will file the noise mitigation plan before construction.
 - After-hour variance must be obtained from the NYC Department of Buildings prior to commencing any construction beyond the permitted times identified above.
- Maintaining essential services:
 - Work shall not interfere with heating, electrical, gas or plumbing service to other tenants.
 - Work shall take place during normal working hours only; 8:00 am to 5:00 pm Monday through Friday (not on Holidays).
- Notice to occupants: The owner shall post a notice regarding such plan in a conspicuous manner in the building lobby, as well as on each floor within ten feet of or in the main stairwell on such floor. The notice shall be in a form created or approved by the department and shall include:
 - Statement that occupants of the building may obtain a paper copy of such plans from the owner and may access such plan on the department web site;
 - The name and contact information for the site safety manager, site safety coordinator or superintendent of construction required by section 3501.3 of the New York City Building code, as applicable, or, if there is no site safety manager, site safety coordinator or superintendent of construction, the name and contact information of the owner of the building or such owners designee;
 - A statement that occupants of the building may call 311 to make complaints about the work.

ABBREVIATIONS	PTE KEY
A.C.	AIR CONDITIONING
ADJST.	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
B.	BEAM
CA.	CARPET
CL.	CENTER LINE
CL.G.	CEILING
CONC.	CONCRETE
DIA.	DIAMETER
DIM.	DIMENSION
DN.	DOWN
DR.	DOOR
DTL.	DETAIL
DWG.	DRAWING
EL.	ELEVATION
ELECT.	ELECTRICAL
EQUIP.	EQUIPMENT
EXIST.	EXISTING
F.O.G.	FACE OF GLASS (OUTSIDE)
GWB.	GYP/SUM BOARD
HT.	HEIGHT
HTG.	HEATING
INSUL.	INSULATION
INT.	INTERIOR
LAM.	LAMINATE
MECH.	MECHANICAL
MISC.	MISCELLANEOUS
MTL.	METAL
N.T.S.	NOT TO SCALE
OS	OPEN SHELVES
PART.	PARTITION
PLUMB.	PLUMBING
POL.	POLISHED
PTD.	PAINTED
R.	REVEAL
REQD.	REQUIRED
S.	SLAB
S.S.	STAINLESS STEEL
ST.	STONE
TEL.	TELEPHONE
T.O.	TOP OF
TYP.	TYPICAL
U.O.	UNDERSIDE OF
VIF	VERIFY IN FIELD
WD.	WOOD

CONSTRUCTION SYMBOL KEY	WHEELCHAIR TURNING SPACE
EXISTING WALL	MINIMUM CLEAR WIDTH FOR SINGLE WHEELCHAIR
NEW WALL CONSTRUCTION	MINIMUM CLEAR WIDTH FOR TWO WHEELCHAIRS
ELEVATION NUMBER	60" DIAMETER SPACE
DRAWING NUMBER	T-SHAPED SPACE FOR 180° TURN
ELEVATION NUMBER	
DRAWING NUMBER	
SECTION DESIGNATION	
DRAWING NUMBER	
DETAIL DESIGNATION	
DRAWING NUMBER	
FINISH PLAN: FLOOR CHANGE & SADDLE / TRANSITION TYPES	
PARTITION TYPE	
DOOR NUMBER	
NOTE NUMBER	
ROOM NUMBER	
DETAIL TITLE SCALE	
LOW VOLTAGE	
SWITCH CONTROL	
TIMER SWITCH	
RCP SYMBOL KEY	
CEILING TO BE REPAIRED, SANDED, SPACKLED AND REPAINTED	
ARMSTRONG CERAMAGUARD WHITE 2"x4" LAV-IN FOR KITCHENS AND SWIMMING POOLS	
NEW EXHAUST	
NEW LIGHT COVERS AROUND SHOWERS AND TOILETS. NOTE THAT LF-01 IS 2 LIGHT FIXTURES BUTTED IN THE MIDDLE AND FED FROM BOTH SIDES.	
NEW RECESSED DOWNLIGHTS	
NEW SHEETROCK CEILING	



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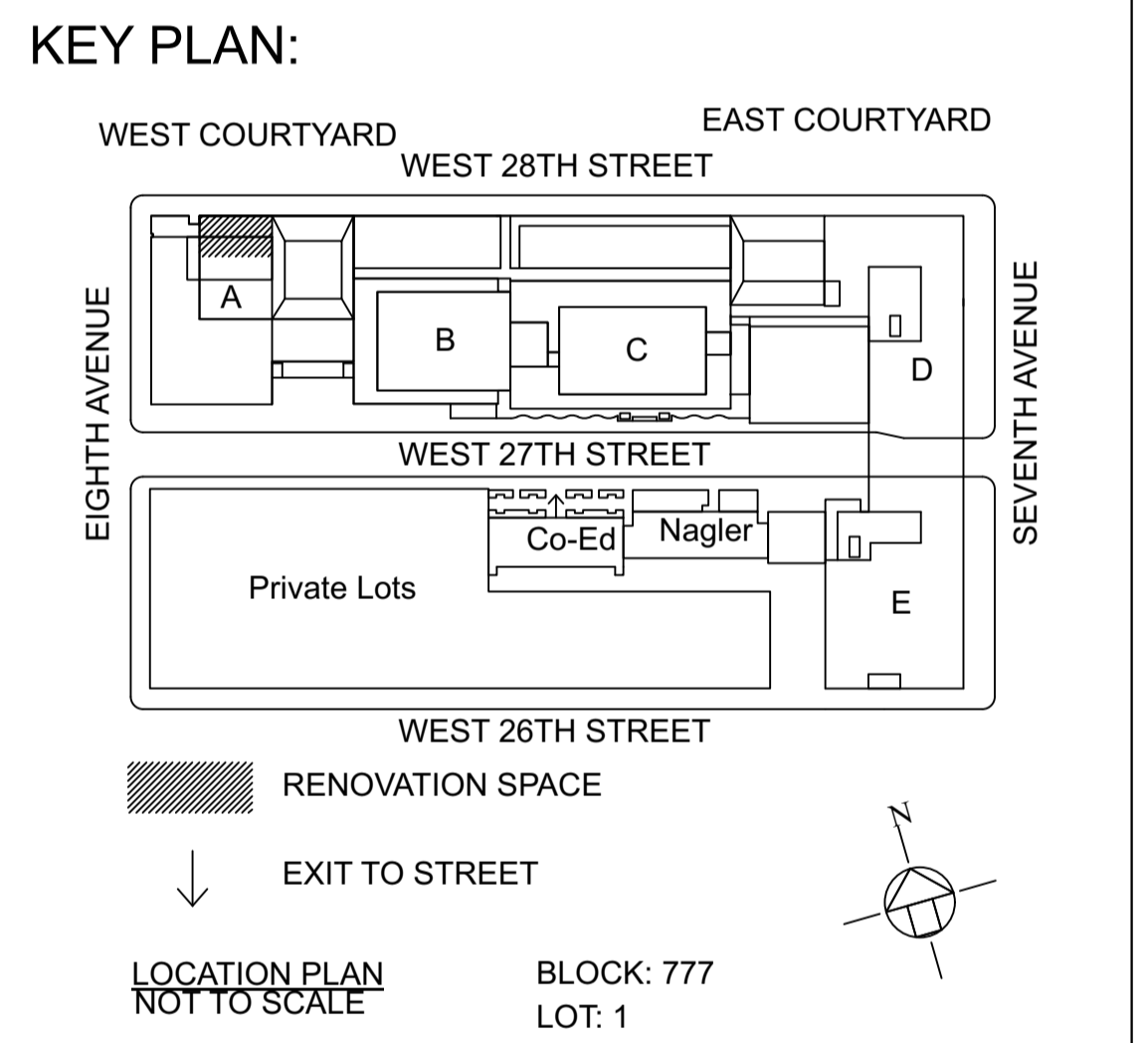
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DOB#: M00871728-S1
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Revisions

1. ISSUE FOR BID 08/11/23
 No. Issue Date

Sign and Seal:

Drawing Title:
SYMBOLS & ADA REQUIREMENTS

Drawing No.: **A-002.00**

Project No.: 2214-01 Date: 08/11/23

Scale: Sheet No.: 3 OF 12

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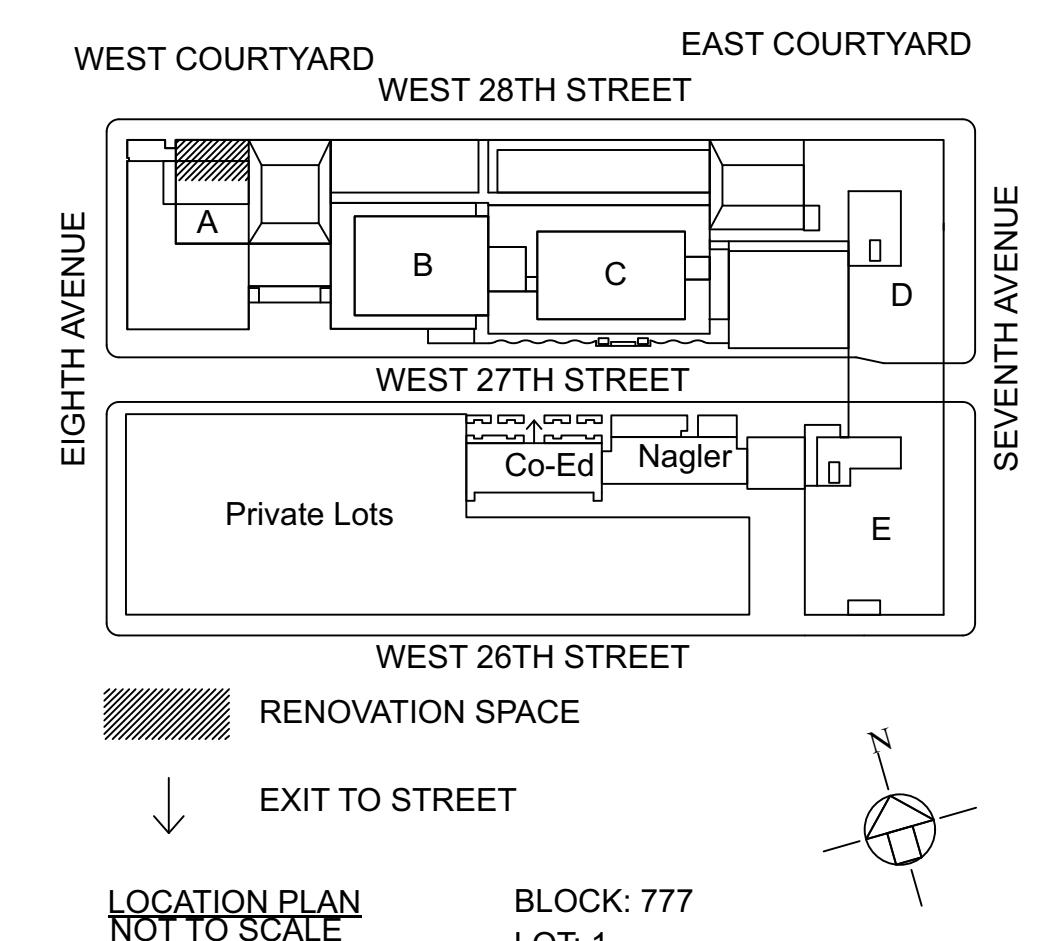
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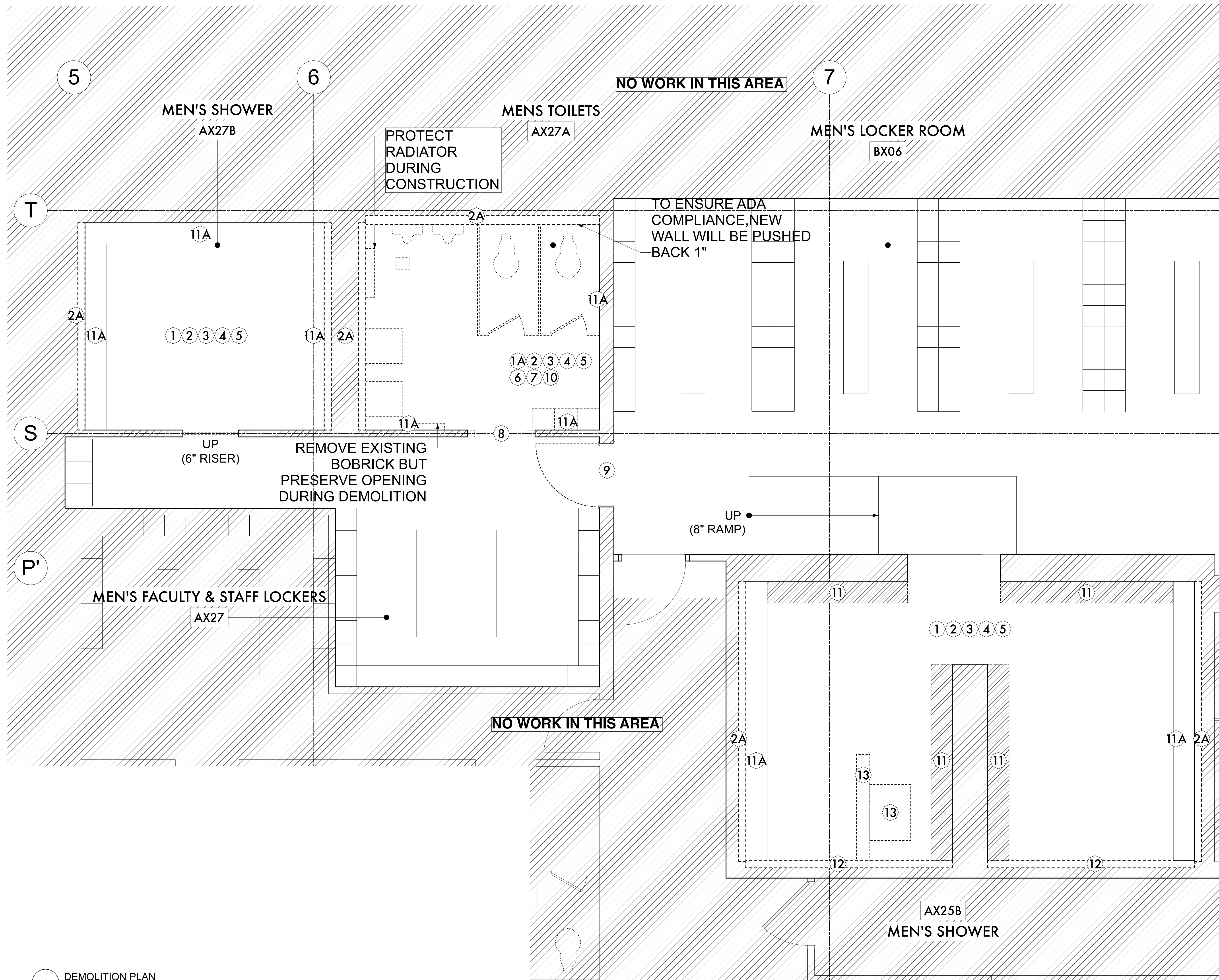
KEY PLAN:



DEMOLITION KEY

- ① REMOVE EXISTING PLUMBING FIXTURES, SOAP DISPENSER SYSTEMS, CURTAINS, AND CURTAIN RODS. REPAIR EXISTING WALL AS R'QD AFTER REMOVAL TO ACCEPT NEW FINISHES.
- 1A REMOVE EXISTING PLUMBING FIXTURES, MIRRORS, TOILET PARTITIONS, AND SOAP DISPENSER SYSTEM INCLUDING ALL ASSOCIATED CONTAINED IN OTHER AREAS AND OTHER ACCESSORIES. REPAIR EXISTING WALL AS R'QD AFTER REMOVAL TO ACCEPT NEW FINISHES.
- ② REMOVE PORTIONS OF EXISTING GLAZED WALL TO REROUTE OR CAP PLUMBING TO NEW INSTALLATION AREAS. INSTALL MATCHING UNGLAZED CMU TO CLOSE WALLS FOR FUTURE TILE INSTALLATION.
- 2A REMOVE EXISTING WALLS IN THEIR ENTIRETY, SCARPATCH EXISTING WALLS AND CEILINGS AS R'QD. REPLACE CEILING ABOVE AS R'QD. PREPARE EXISTING WALLS AND FINISHES TO RECEIVE NEW WALL.
- ③ DEMO EXISTING FLOOR TILE AND CONCRETE TOPPING TO ALLOW FOR NEW FLOORING, WATERPROOFING, AND SADDLES. REFER TO PITCH PLAN FOR NEW FLOOR PITCH.
- ④ DEMO EXISTING PLASTER CEILING AND RESPECTIVE HANGERS AND LIGHTS. SCARPATCH ALL WALLS TO RECEIVE NEW FINISHES AS R'QD.
- ⑤ SAND AND SCARIFY EXISTING GLAZED BLOCK IN PREPARATION FOR NEW TILE AND WATERPROOFING.
- ⑥ REMOVE AND SAVE RADIATOR COVER FOR FUTURE REUSE. REMOVE EXISTING FLOOR DRAINS. REFER TO MEP PLANS, PREPARE EXISTING FLOORING AND WATERPROOFING TO RECEIVE NEW FLOOR DRAINS.
- ⑦ WIDEN EXISTING ENTRANCE FROM 30" TO 36" MINIMUM. REMOVE EXISTING GLAZED CMU ON BOTH SIDES OF ENTRANCE. REPAIR OPENING AND INSTALL FLAT FLANGE PAINTED METAL JAMB ON BOTH SIDES. INSTALL SIMILAR HEADER AND REPAIR CEILING ON BOTH SIDES OF ROOM AFTER INSTALLATION.
- ⑧ REMOVE EXISTING DOOR BETWEEN STAFF AREA AND OPEN LOCKER AREA. PATCH AND REPAIR JAMBS, REPAIR, SPACKLE, SAND, AND REPAINT EXISTING CEILING AT REMOVED DOOR TO APPEAR CONTINUOUS.
- ⑨ REMOVE EXISTING LOCKERS.
- ⑩ IN TRENCHES THAT ARE BEING REMOVED, DEMO ALL TILE AND DRAINS. REMOVE EXISTING METAL COVER WHERE APPLICABLE INCLUDING BUT NOT LIMITED TO ALL BRACKETS AND SCREWS ETC. CAP EXISTING DRAINS.
- 11A REMOVE COVE BASE AT BOTTOM OF CMU WALL IN ALL TRENCHES/WALLS TO REMAIN. REMOVE EXISTING METAL COVER INCLUDING BUT NOT LIMITED TO ALL BRACKETS AND SCREWS ETC. REMOVE ALL TILES AND FLOOR DRAINS. PREPARE SURFACES FOR NEW WATERPROOFING, AND NEW FLOOR DRAINS.
- ⑫ REMOVE EXISTING FRP PANELS AND 1ST LAYER OF SHEETROCK. REPLACE EXISTING RUSTED STUDS AS R'QD. REPAIR AND SEAL EXISTING WALL TO ENSURE ALL FIRE RATINGS ARE BEING MAINTAINED. TOP OFF EXISTING WALL TO SEPERATE FROM CORRIDOR BEHIND.
- ⑬ REMOVE EXISTING WALL AND ADA SHOWER INCLUDING BUT NOT LIMITED TO ACCESSORIES, SEATS, CURTAINS, CURTAIN RODS, ETC.

- EXISTING PARTITION TO REMAIN
- EXISTING TO BE REMOVED. SEE DEMOLITION NOTES FOR ADDITIONAL INFORMATION.
- FILL IN EXISTING TRENCH. REMOVE ALL TILE AND CAP ALL UNUSED DRAINS. REFER TO DRAWING 5 ON SHEET A-300 FOR DETAILS.



1 DEMOLITION PLAN
 Scale: 1/2"=1'-0"

GENERAL DEMOLITION NOTES

- 1. CONTRACTOR IS TO PROVIDE CERTIFICATES OF LIABILITY INSURANCE AND PROOF OF WORKER'S COMPENSATION COVERAGE.
- 2. CONTRACTORS SHALL TAKE SPECIAL CARE TO DEMOLISH ONLY THAT WORK WHICH IS REQUIRED TO BE DEMOLISHED AND NOT TO DISTURB ANY WORK WHICH IS TO REMAIN. IF IN THE COURSE OF DEMOLITION, THE CONTRACTOR DESTROYS OR DISTURBS ANY WORK WHICH IS TO REMAIN, THEN THEY SHALL, AT THEIR OWN EXPENSE, REPAIR OR REPLACE SUCH WORK AS NECESSARY.
- 3. THE REMOVALS CANNOT DISTURB THE BUILDINGS STRUCTURE OR FIRE RATING.
- 4. THE CONTRACTOR SHALL REMOVE AND DISCARD ALL DEMOLISHED ITEMS IN A MANNER APPROVED BY THE CITY, STATE AND ANY OTHER GOVERNMENT AGENCY.
- 5. ALL WORK WITHOUT EXCEPTION SHALL BE DONE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATING AGENCIES AND CODES HAVING JURISDICTION OVER THE PROJECT.
- 6. DO NOT SCALE DRAWING
- 7. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND JOB CONDITIONS PRIOR TO SUBMITTING BIDS AND SHALL REPORT TO THE ARCHITECT ANY DISCREPANCIES OR OMISSIONS WHICH WOULD INTERFERE WITH SATISFACTORY COMPLETION OF THE WORK. ALL BUILDING DEPARTMENT PERMITS SHALL BE OBTAINED PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WORK.
- 8. CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT (INCLUDING TEMPORARY POWER) & MATERIALS REQUIRED TO COMPLETE ALL DEMOLITION, REMOVAL OR CUTTING AS SHOWN ON THE CONTRACT DOCUMENTS.
- 9. THE REMOVAL AS DESCRIBED HEREIN SHALL BE ACCOMPLISHED WITHOUT STORING EXCESSIVE QUANTITIES OF ANY MATERIALS, RUBBISH, DIRT, DEBRIS OR WASTE OF ANY SORT RESULTING FROM THE REMOVAL OPERATIONS ON THE FLOOR. ALL DEBRIS SHALL BE REMOVED FROM THE CONSTRUCTION SITE DAILY.
- 10. CONTRACTOR SHALL CONSULT THE BUILDING MANAGEMENT AND SUPERINTENDENT AND ADHERE TO ALL REGULATIONS OF THE BUILDING AS TO TIME AND METHOD OF DELIVERY, DEBRIS REMOVAL, USE OF BUILDING ELEVATORS, HOURS OF DEMOLITION AND NOISY CONSTRUCTION & ACCESS TO OTHER TENANT OR BUILDING SPACES.
- 11. DEMOLITION WORK SHALL NOT BE CARRIED OUT WITHOUT TIMELY NOTIFICATION OF THE BUILDING MANAGEMENT OF ITS SCOPE.
- 12. IF ENTERING, PASSING THROUGH OR WORKING IN ANY SUCH SPACE IN THE PREMISES IN THE PERFORMANCE OF ALL WORK, THE CONTRACTOR SHALL AT ALL TIMES FURNISH AND MAINTAIN PROPER PROTECTION OF EXISTING FLOORS, WALLS, CEILINGS, FIXTURES AND OTHER PROPERTY OF THE OWNERS THROUGHOUT THE BUILDING.
- 13. BEFORE DISCONNECTING, THE CONTRACTOR MUST CONFIRM, VERIFY AND MARK ALL EXISTING PIPING AND WIRING DISCONNECTS WITH A BUILDING REPRESENTATIVE PRESENT TO ENSURE THAT DEMO OF THESE ITEMS WILL NOT UNNECESSARILY INTERFERE WITH BUILDING SERVICES.
- 14. CONTRACTOR TO PROVIDE PROBE OPENINGS AS REQUIRED BY ARCHITECT.
- 15. CONTRACTOR TO PROVIDE PROPER PROTECTION TO PREVENT DUST FROM ENTERING ELEVATOR MACHINE ROOMS AND ELEVATOR SHAFTS.
- 16. ALL MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS MUST BE ISOLATED & SECURED PRIOR TO DEMOLITION.
- 17. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO EXAMINE THE EXISTING CONDITIONS, DRAWINGS AND COORDINATE THE EXACT SCOPE OF WORK WITH THE ARCHITECT AND BUILDING MANAGER.
- 18. PRIOR TO DEMOLITION, CONTRACTOR TO CONDUCT FINAL WALKTHROUGH WITH OWNERSHIP/BUILDING MANAGEMENT, AND ARCHITECT TO ENSURE ANY ITEMS ARE SAVED, PROTECTED, AND STORED AS REQUIRED.
- 19. INCLUDE ADD ALTERNATE TO REMOVE AND REPLACE ENTIRE WALL WITH #1 WALL TOWARDS CORRIDOR(SOUTH WALL OF AX25B MENS SHOWER.) REPAINT ON CORRIDOR SIDE.
- 20. STABILIZE CMU WALLS THAT ARE NOT BEING DEMOLISHED DURING DEMOLITION. TOOTH IN NEW WALLS WITH EXISTING ONES AS REQUIRED. USE SAME FORMAT.

Revisions

No.	Issue	Date

1. ISSUE FOR BID 08/11/23
 No. Issue Date

Sign and Seal:

Drawing Title:
**MEN'S SHOWERS
 DEMO PLAN**

Drawing No.: **DM-100.00**

Project No.: 2214-01 Date: 08/11/23

Scale: 1/2"=1'-0" Sheet No.: 4 OF 12

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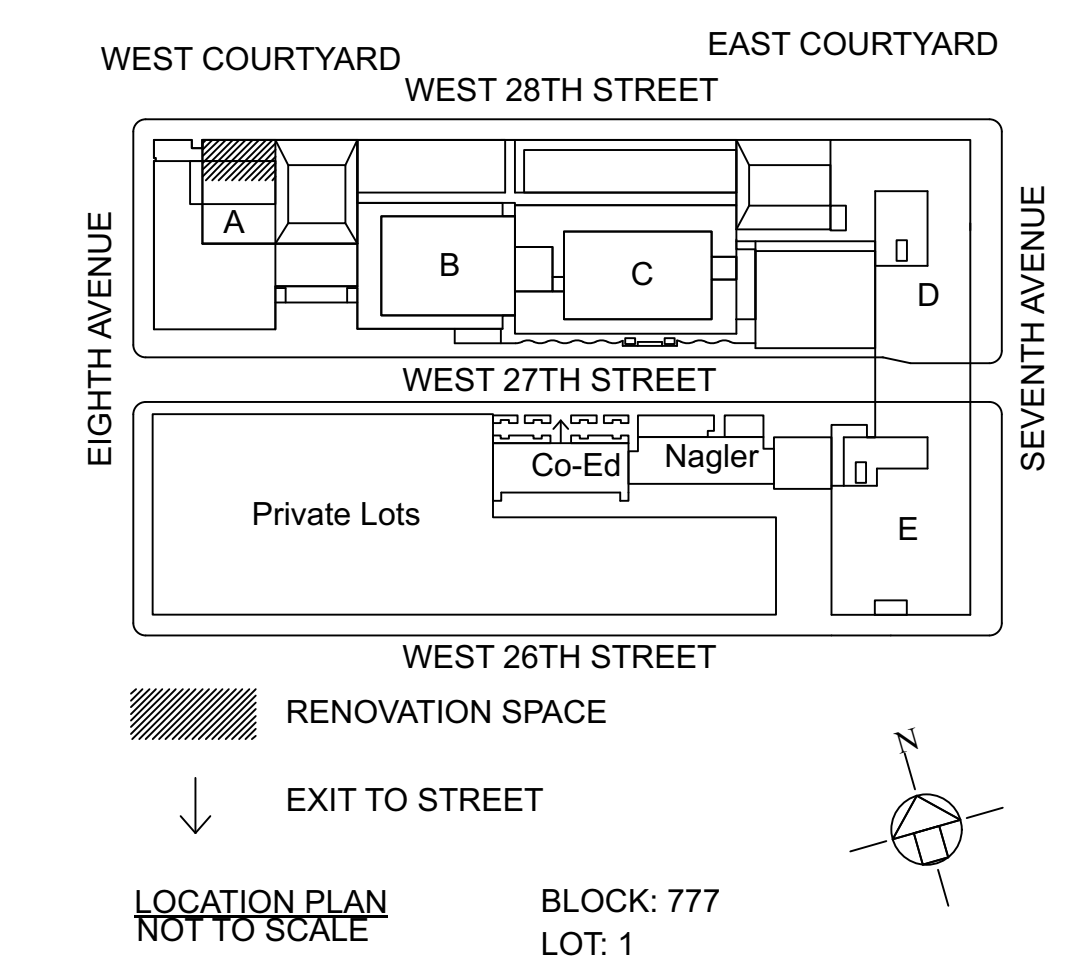
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DOB#: M00871728-S1
 RELATED PL FILING DOB#: M00871728-11

KEY PLAN:



GENERAL CONSTRUCTION NOTES

1. ALL NEW WORK ABUTTING EXISTING WALLS, COLUMNS, ETC. IS TO BE CONSTRUCTED FLUSH & FEATHERED SMOOTH TO MATCH ADJACENT SURFACES.
2. VERIFY EXISTING WALL THICKNESSES IN FIELD
3. EXISTING CONDITIONS AND DIMENSIONS SHOWN SHALL BE VERIFIED IN FIELD BY ALL CONTRACTORS BEFORE CONSTRUCTION BEGINS. ANY DIMENSIONAL DISCREPANCIES MUST BE IMMEDIATELY BROUGHT TO THE ARCHITECTS ATTENTION FOR DIRECTION, OR THE GC WILL ASSUME THE RISK OF ALL COSTS ASSOCIATED WITH FUTURE REQUIRED ADJUSTMENTS IN LAYOUT.
4. FULL WATERPROOFING UNDER ALL NEW FLOORS. USE LATICRETE #9235 WITH MEMBRANE. IT SHALL EXTEND TO THE CEILINGS IN ALL SHOWER AREAS AND AT LEAST 6" UP AT ALL OTHER WALLS IN THE BATHROOM.
5. USE GALVANIZED STUDS OR STUDS SUITABLE FOR WET ENVIRONMENT.

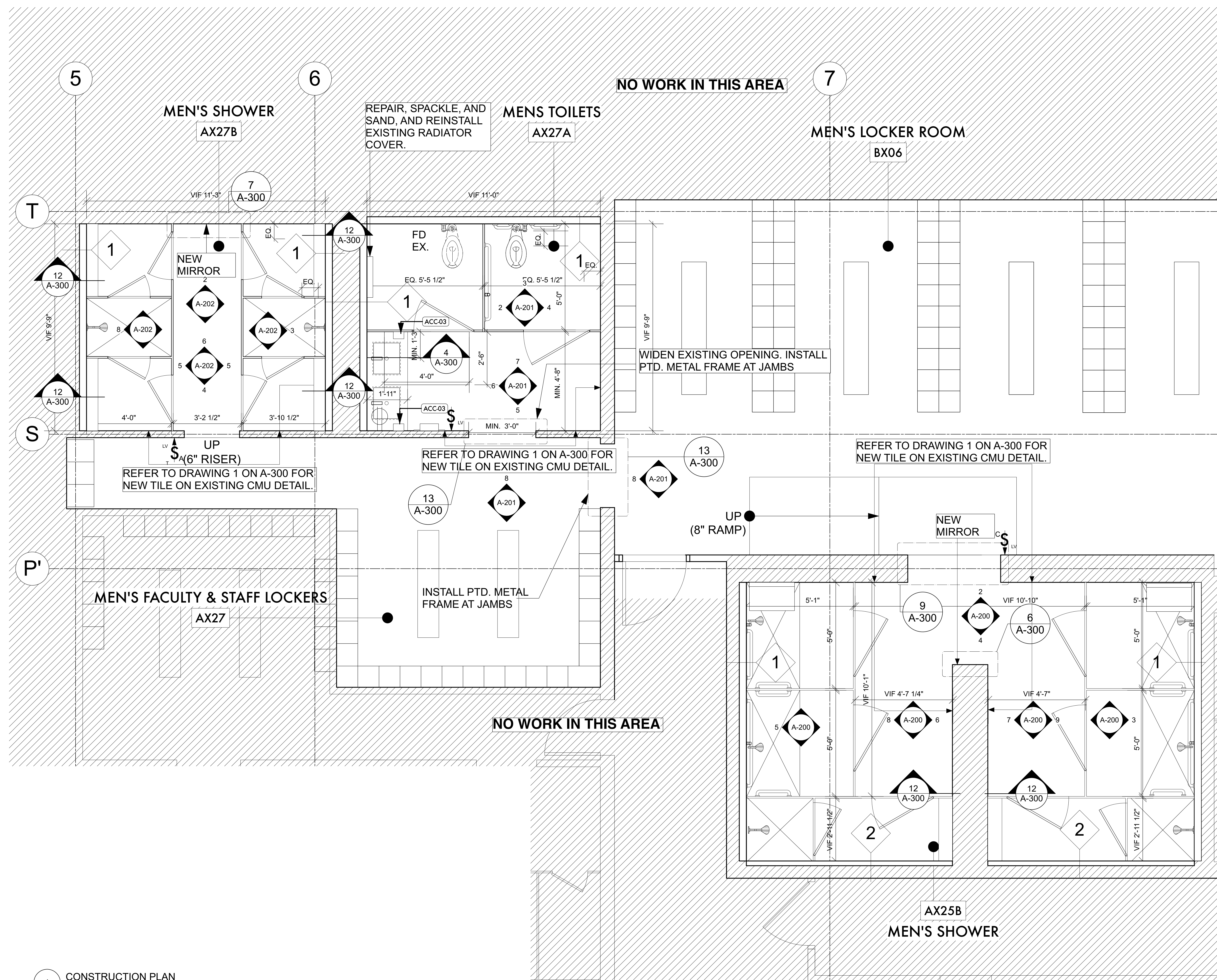
GENERAL CONSTRUCTION NOTES

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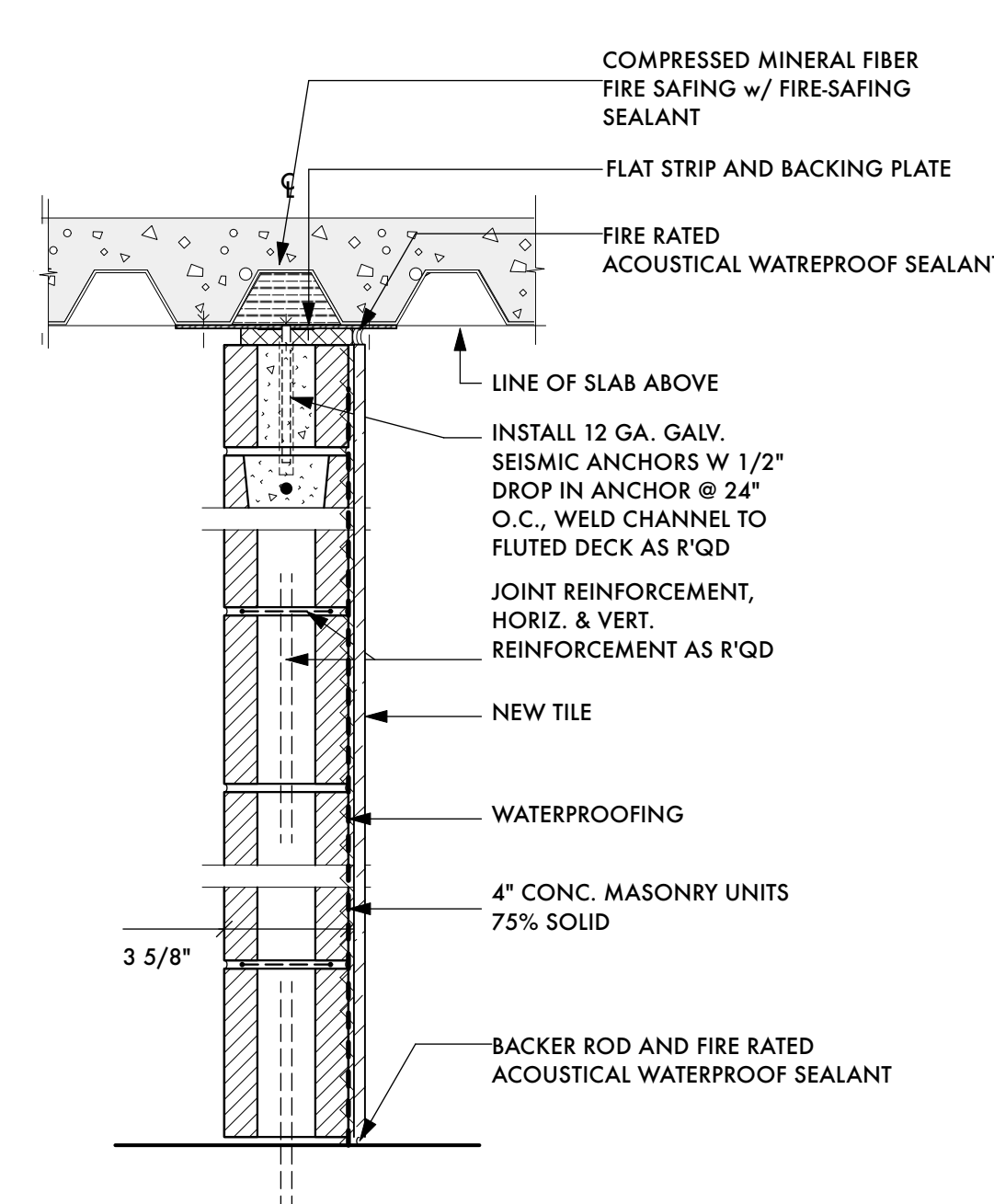
GENERAL PARTITION NOTES

1. USE GALVANIZED STUDS OR STUDS SUITABLE FOR WET ENVIRONMENT.

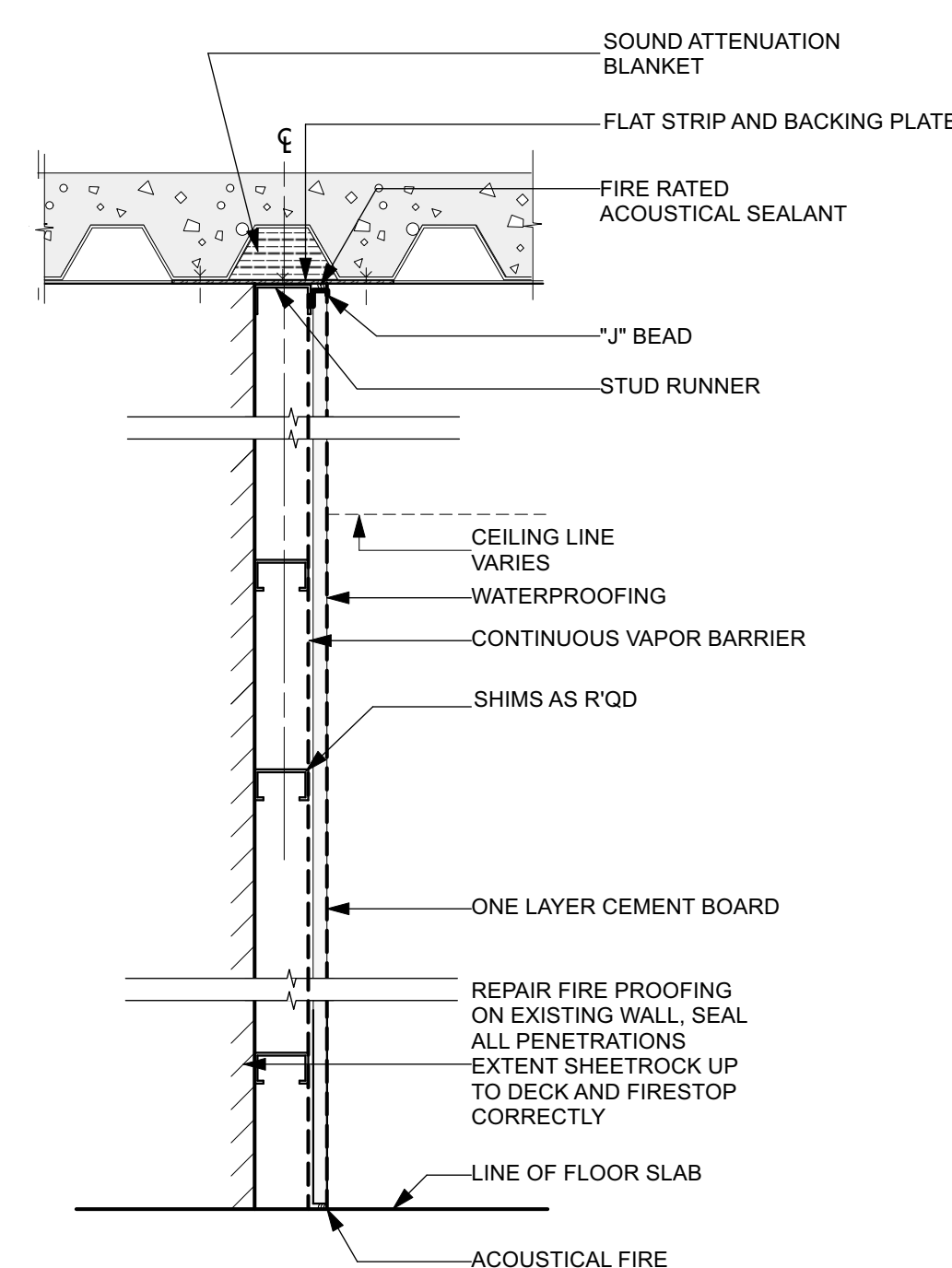
CONTRACTOR TO PROVIDE ALTERNATE:
 REPLACE SOUTH WALL OF BATHROOM IN IT'S ENTIRETY.
 ALLOW FOR NEW PAINT AND WALL BASE ON CORRIDOR SIDE TO MATCH EXISTING
 REPAIR CEILING AND CEILING GRID. TIE INTO NEW WALLS.



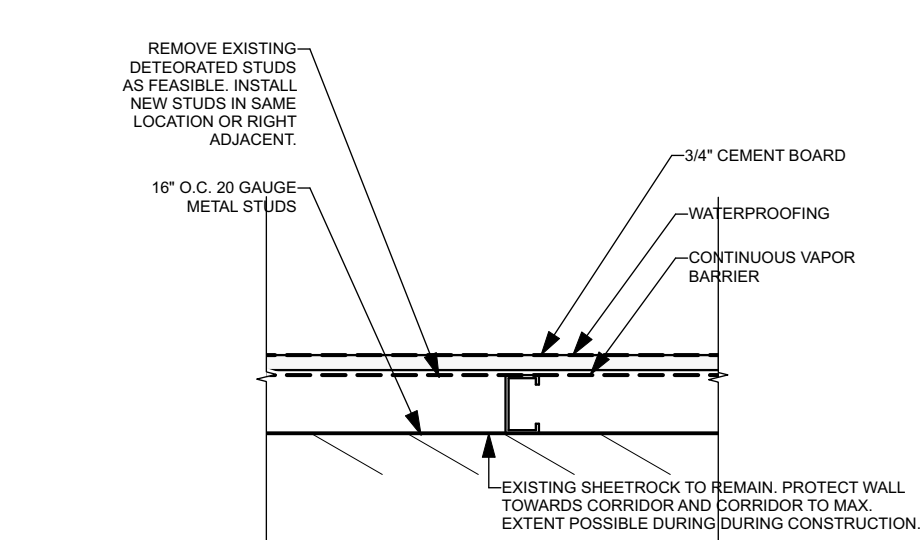
1 CONSTRUCTION PLAN
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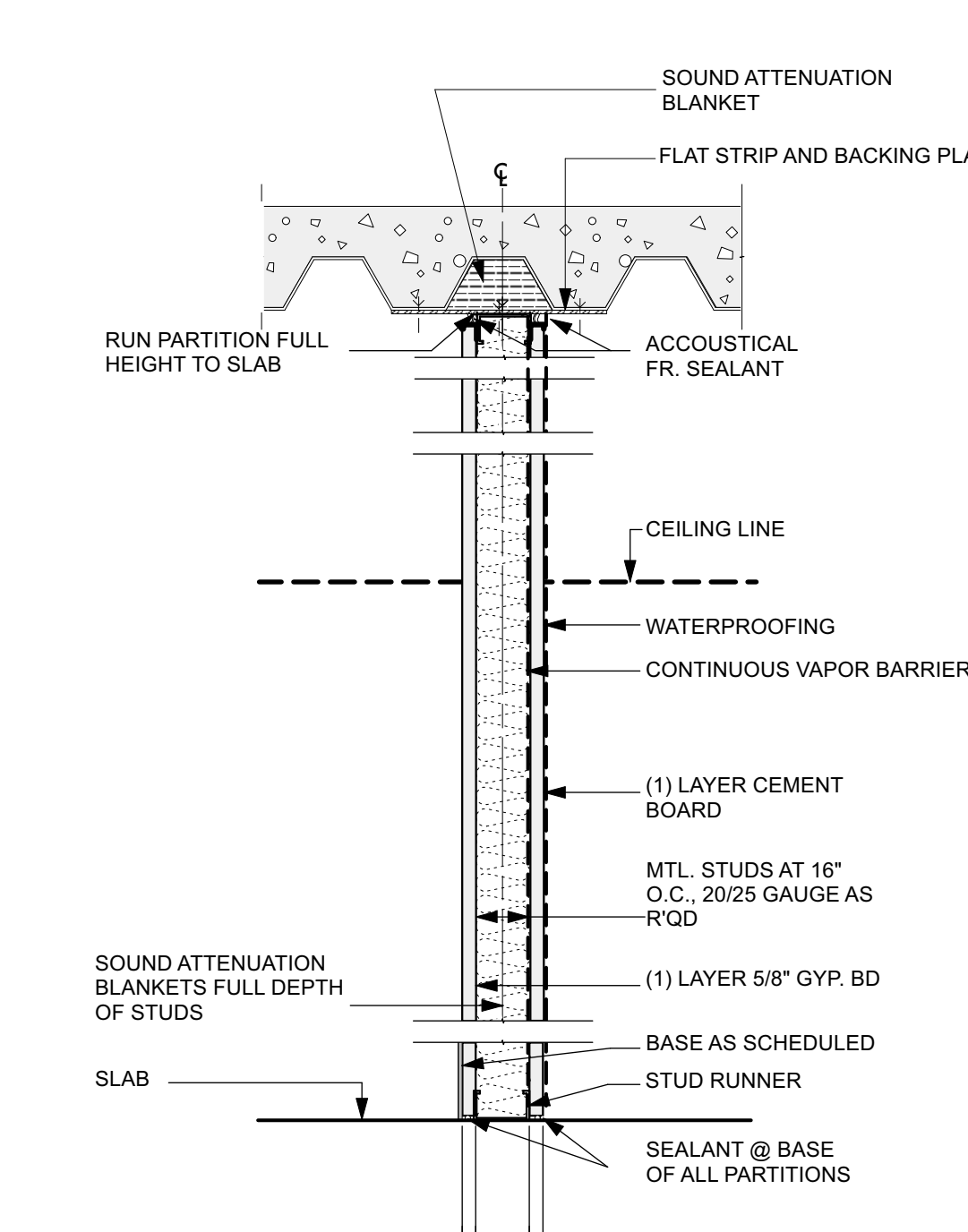
1 4" CMU WALL WITH NEW TILE
 1 1/2"=1'-0"



2 PARTITION
 Scale: 1 1/2"=1'-0"



2 PARTITION PLAN
 Scale: 1 1/2"=1'-0"



2 ALT PARTITION
 TO UNDERSIDE OF SLAB

Revisions

No.	Issue	Date
1.	ISSUE FOR BID	08/11/23

Sign and Seal:

Drawing Title:
**MEN'S SHOWERS
 CONSTRUCTION PLAN**

Drawing No.:
A-100.00

Project No.:
 2214-01

Date:
 08/11/23

Scale:
 1/2"=1'-0"

Sheet No.:
 5 OF 12

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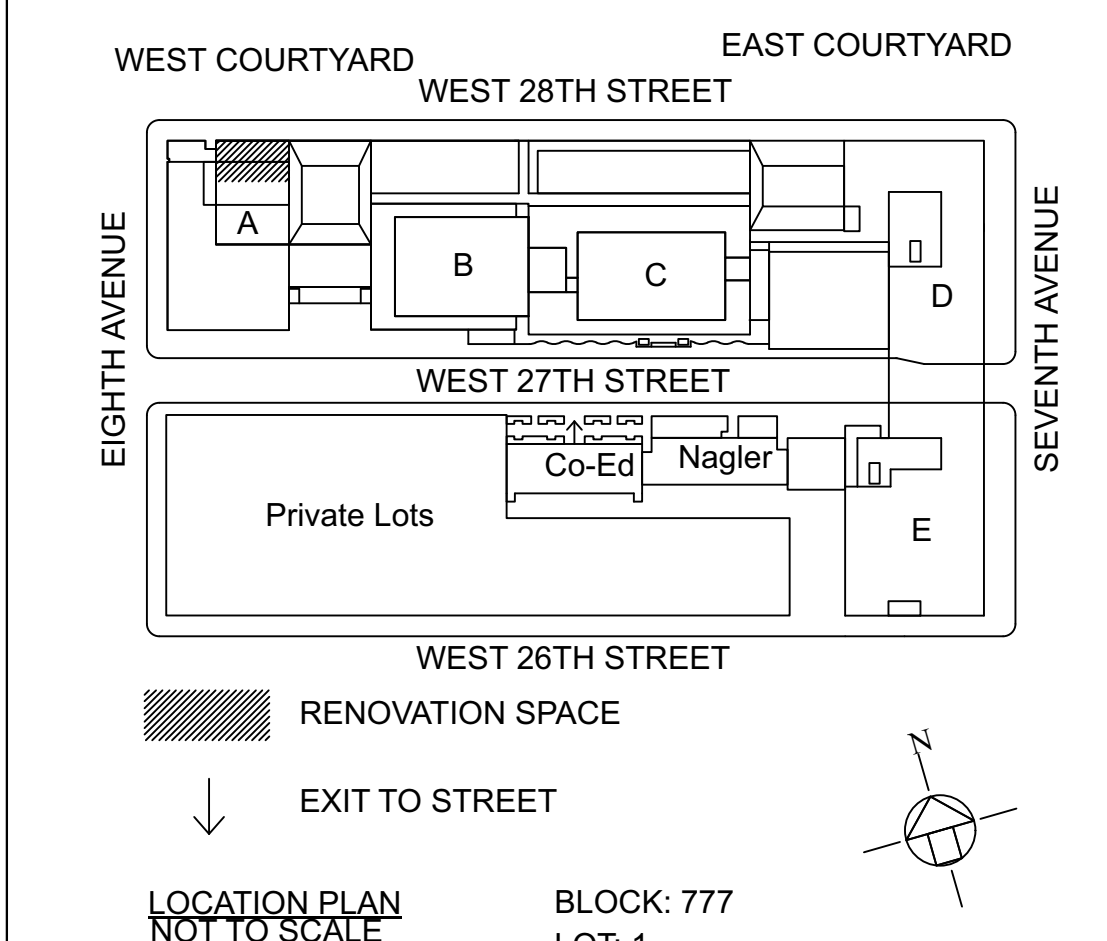
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KEY PLAN:



Revisions

1.	ISSUE FOR BID	08/11/23
No.	Issue	Date

Sign and Seal:

Drawing Title:
**MEN'S SHOWERS
 RCP AND EN CALC'S**

Drawing No.:
A-101.00

Project No.:
 2214-01

Date:
 08/11/23

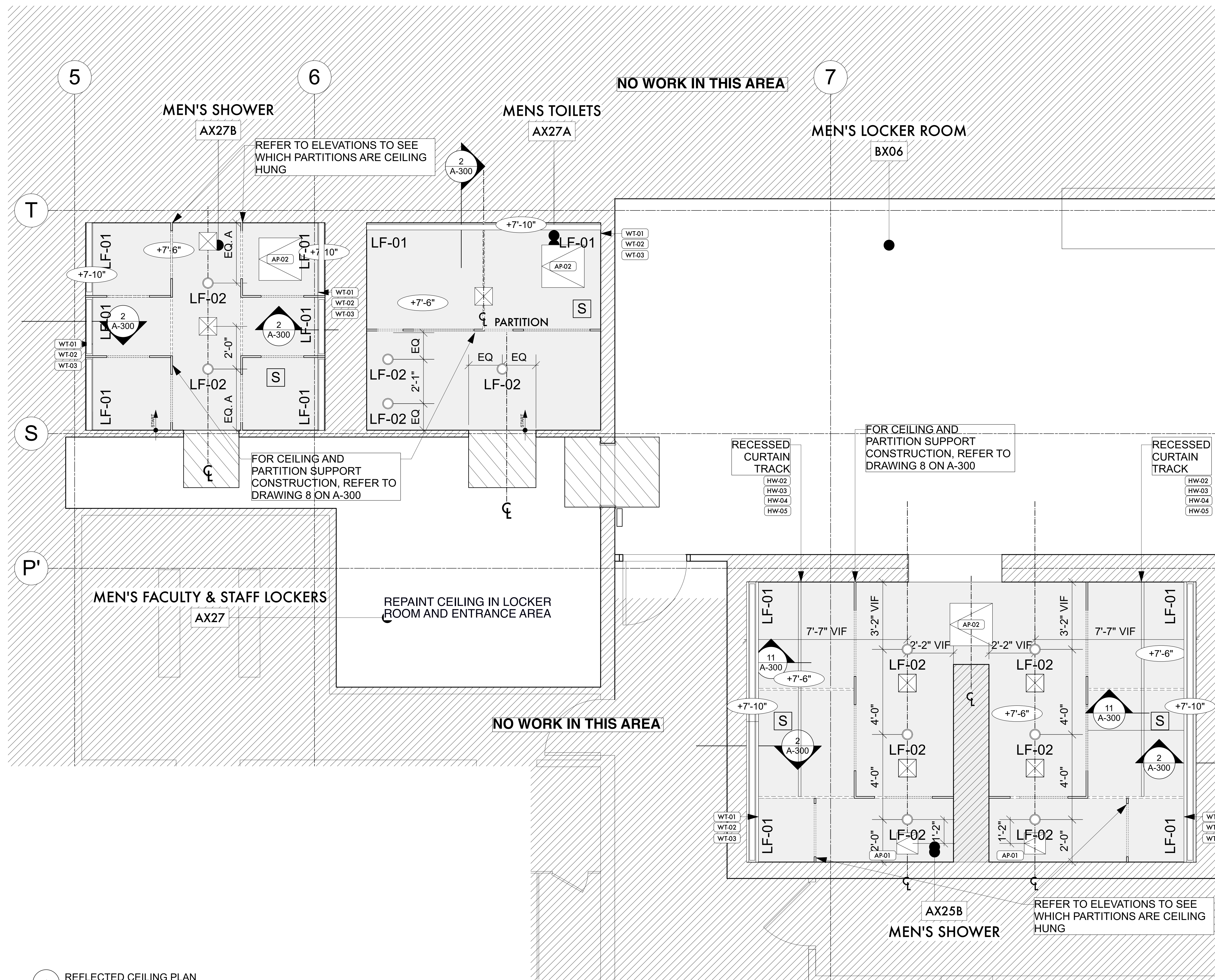
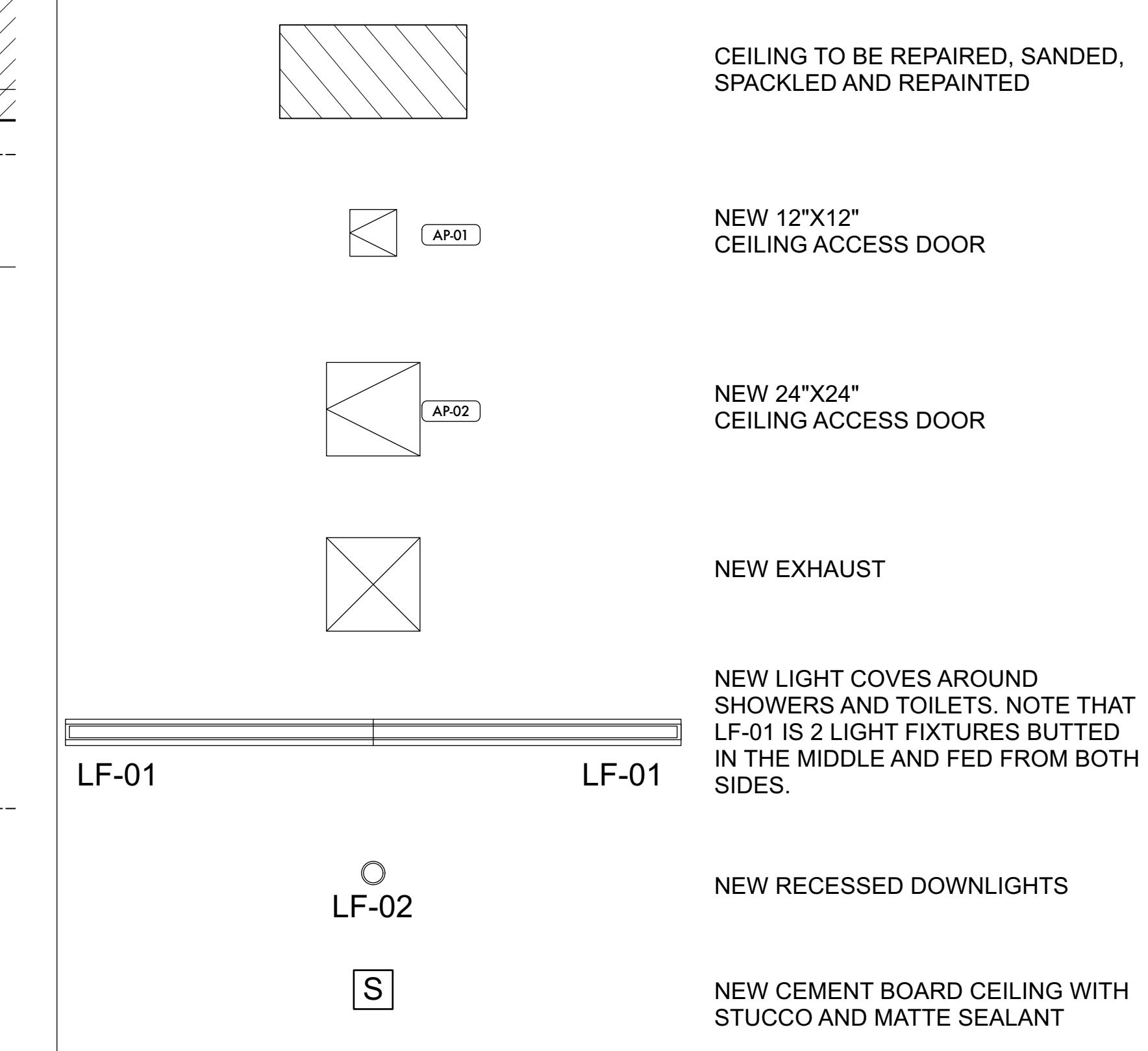
Scale:
 1/2"=1'-0"

Sheet No.:
 6 OF 12

GENERAL RCP NOTES

- ALL CEILING HEIGHTS TO BE RAISED TO 7'6". NEW LIGHT COVE HEIGHTS TO BE 7'-10".
- REPLACE AND REPAIR EXISTING FIREPROOFING ALLOWANCE FOR 50 SQUARE FEET.

RCP KEY



1 REFLECTED CEILING PLAN
 Scale: 1/2"=1'-0"

Part Number Builder

Static White

Product	WFT	CCT	Rated	Lens	Lower	Input/Output	Connector/ Wires In	Connector/ Wires Out	Wire Color	Wire Type	Mounting	Finish	Length (ft)
VERS-04-SW													

Voltage: 24 VDC
 Typical lumens at 5,000K with CCT at 3000K: 449 lm/ft

Options: DRY (P20), GZR 250, L1-WH L1-BK NA, S1 S2 S3 S4, BW CON24, CLS, WH BK, CL2 CL2P, CC NG, ST BK GZ WH, P1 P2 P3 P4, BW CON24, BW CON24, P1 P2 P3 P4, Pass through.

Available in 1" increments for 1.5W/ft, 5.0W/ft and 2" increments for 6.0W/ft. Maximum fixture length of 96". See fixture detail on page 7. Minimum fixture length 6". See VERS-04-SK for suspended version.

4.5" Round Downlight

Specify fixture part number. (All boxes must be completed to)

P4RDF **WH**

Downlight Wattle Options LED Color Temperature Options Beam Options Trim Finish

P4RDF 4.5" Round Downlight

Classic White

09L2 9W LED	27KS 2700K, 80+ CRI	M Medium 35° Beam
15L2 15W LED	27KH 2700K, 90+ CRI	F Flood 95° Beam
22L2 22W LED	30KS 3000K, 80+ CRI	
	30KH 3000K, 90+ CRI	
	35KS 3500K, 80+ CRI	

LIGHTING POWER CALCULATION REQUIREMENTS 2020 NYC ECC

ROOM ID #	ROOM DESCRIPTION	SPACE CLASSIFICATION	Area (SF)	MAX. LPD (W/SF)	INSTALLED LPD (W/SF)	MAX. TOTAL POWER (WATTS)	INSTALLED LIGHTING POWER (WATTS)
AX27B	AX27B SHOWERS	SHOWER	110	0.75	0.80	83	89
2	AX27A TOILET	TOILET	104	0.75	0.75	78	78
3	AX25B SHOWERS	SHOWER	262	0.65	0.65	197	169
			476	2.25	2.20	357	335.7

ROOM ID #	ROOM DESCRIPTION	SPACE CLASSIFICATION	Area (SF)	LIGHTING FIXTURE LF-1 (LF)	# OF LIGHTING FIXTURE LF-2	INSTALLED LIGHTING POWER (WATTS)
1	AX27B SHOWERS	SHOWER	110	19.50	2	88.5
2	AX27A TOILET	TOILET	104	11	3	78
3	AX25B SHOWERS	SHOWER	262	26.4	6	169.2

LF-1 3 WLF
 LF-2 15 W/FIXTURE

INSTALLED LPD 2.20 < MAX. LPD 2.25 ok.

LF-01

LF-02

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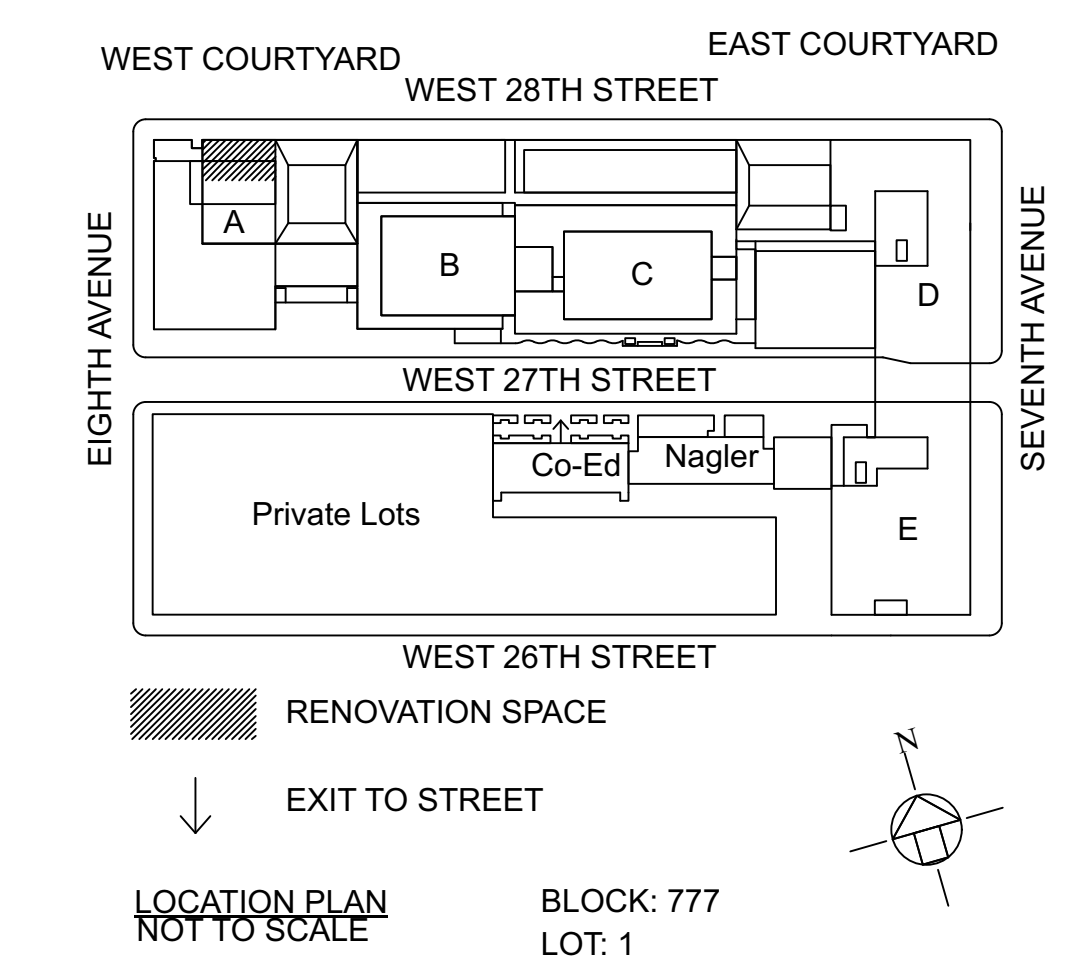
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KEY PLAN:



Revisions

1.	ISSUE FOR BID	08/11/23
No.	Issue	Date

Sign and Seal:

Drawing Title:
**MEN'S SHOWERS
 FINISH PLAN**

Drawing No.:
A-102.00

Project No.:
 2214-01

Date:
 08/11/23

Scale:
 1/2"=1'-0"

Sheet No.:
 7 OF 12

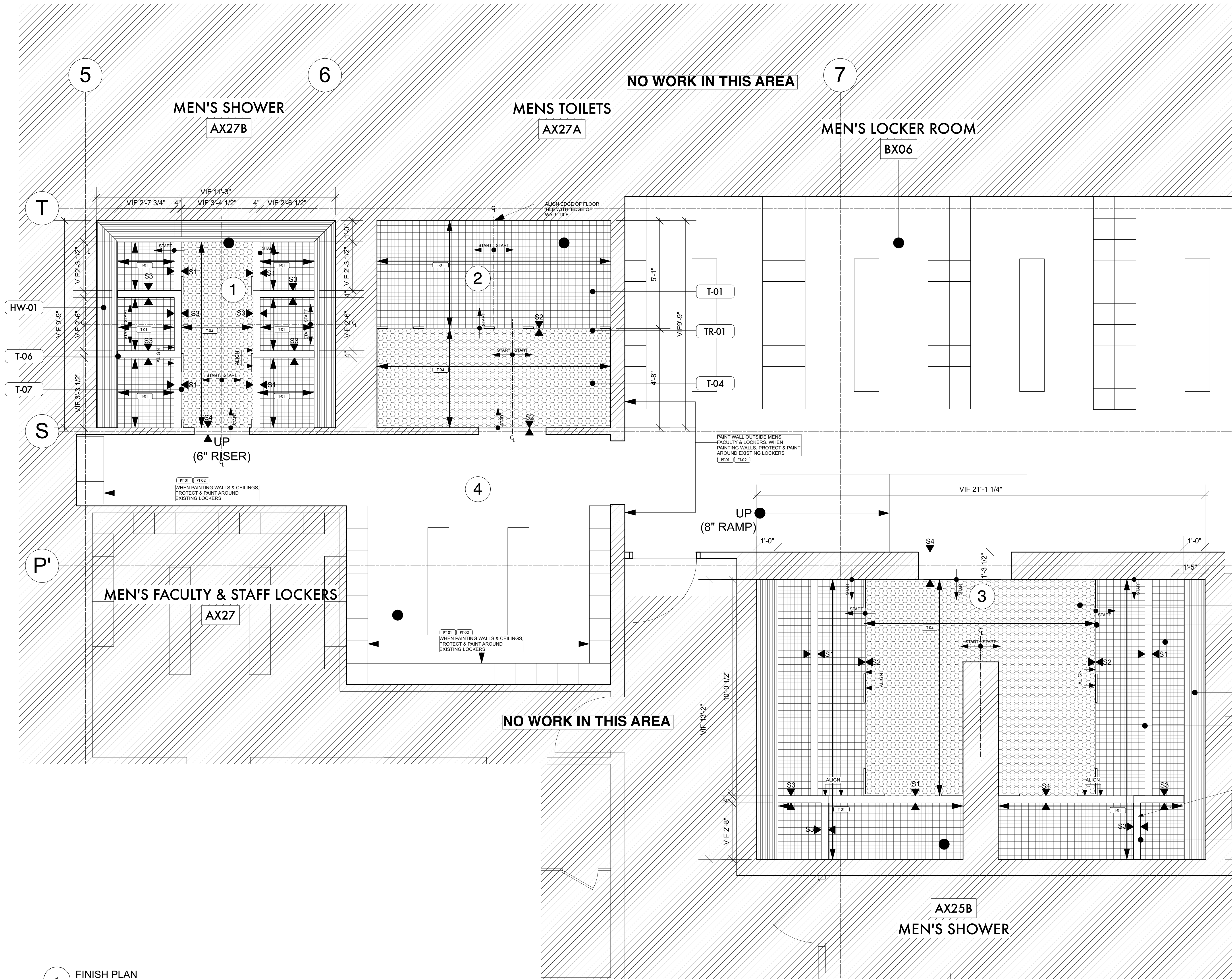
GENERAL FINISH NOTES

- REFER TO ELEVATIONS FOR CLARIFICATION ON FINISH LOCATIONS.
- DO NOT SCALE OFF THIS DRAWING FOR LAYOUTS.
- REFER TO APPENDICES FOR FINISH CODES AND SPECS.
- REFER TO RCP FOR LOCATION OF CEILING TYPES, LIGHT FIXTURES, ETC.
- ALL FLOOR/ CEILING TILE STARTING POINTS NOT INDICATED ON THE DRAWING SHALL BE IN THE CENTER OF THE ROOM.
- REPAIR, PATCH & PAINT ALL EXISTING WALLS & PARTITIONS IN AREA OF WORK AS REQ'D. PAINT AS SPECIFIED.
- ALL FLOOR GROUTS TO USE T-05 TILE GROUT. REFER TO SPECIFICATIONS FOR PRODUCT INFORMATION.

FINISH KEY

① AX27B MENS SHOWERS		② AX27A MENS TOILETS	
CLG	ACT-01	CLG	ACT-01
WALL	T-02 & T-03	WALL	T-02 & T-03
FLOOR	T-04	FLOOR	T-04
SHOWER FLOOR	T-01	TOILET FLOOR	T-01

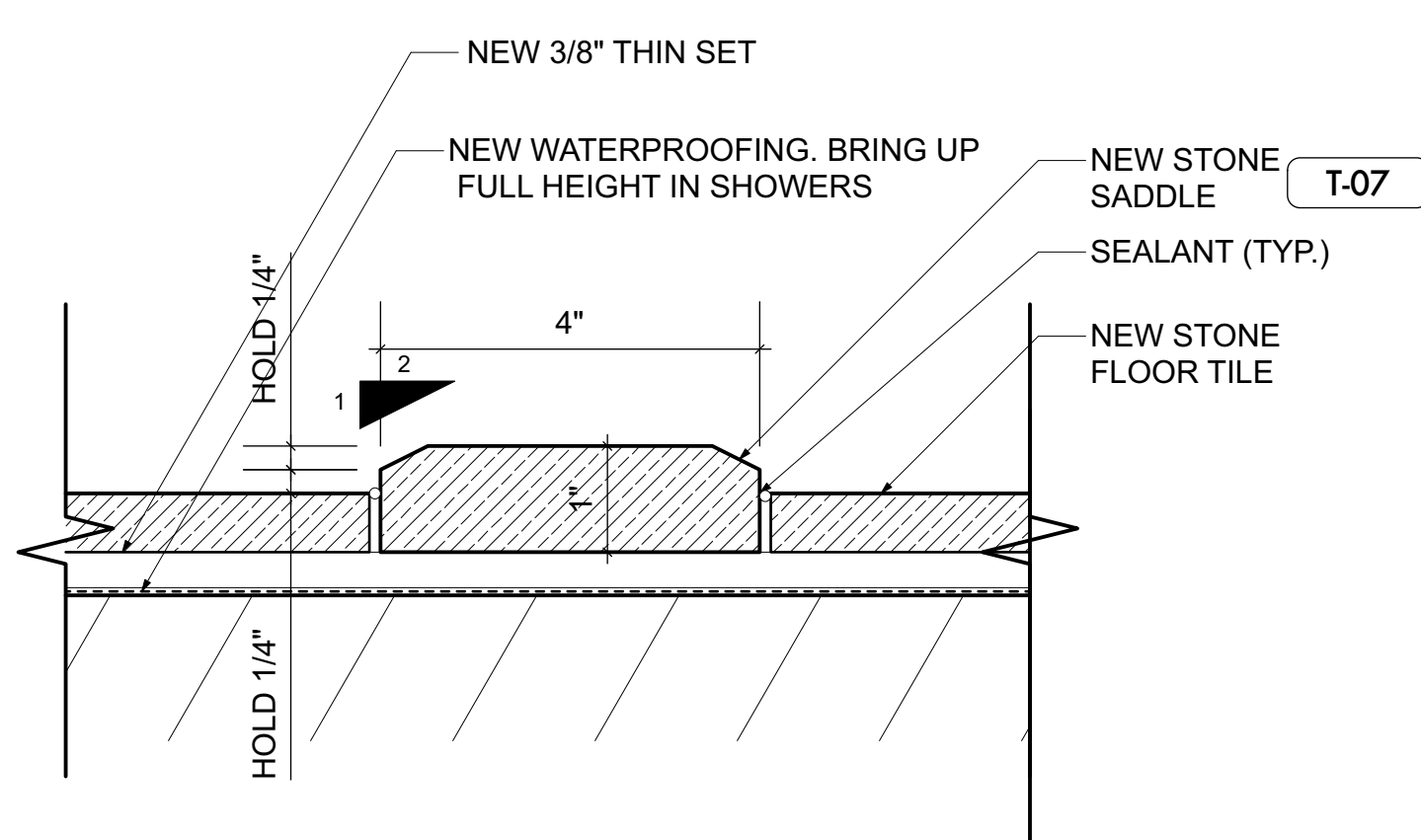
③ AX25B MENS SHOWERS		④ AX27 MENS FACULTY & STAFF LOCKERS	
CLG	ACT-01	WALL	PT-01
WALL	T-02 & T-03	BASE	PT-02
FLOOR	T-04		
SHOWER FLOOR	T-01		



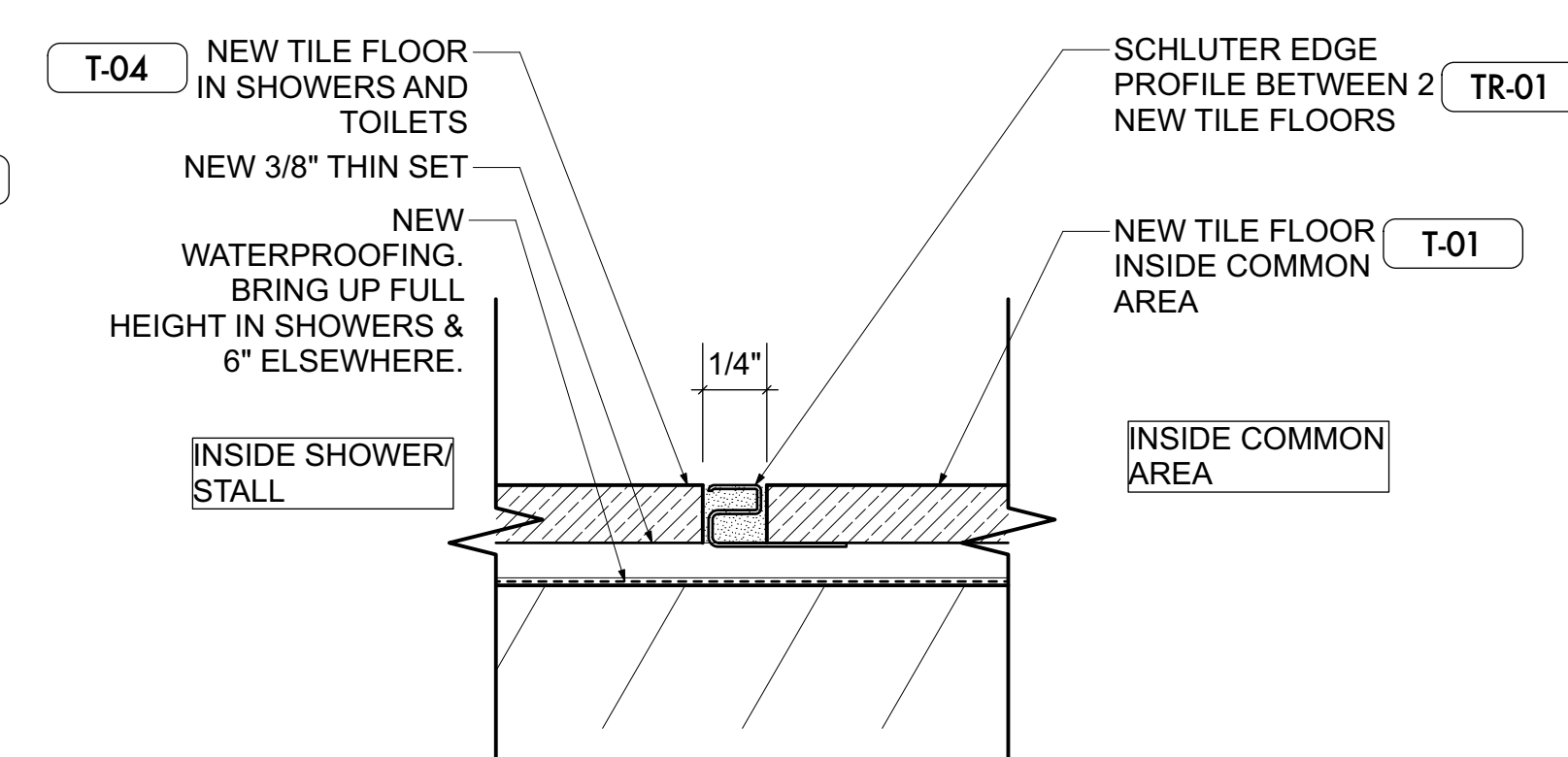
1 FINISH PLAN
 Scale: 1/2"=1'-0"

SILL DETAILS GENERAL NOTES

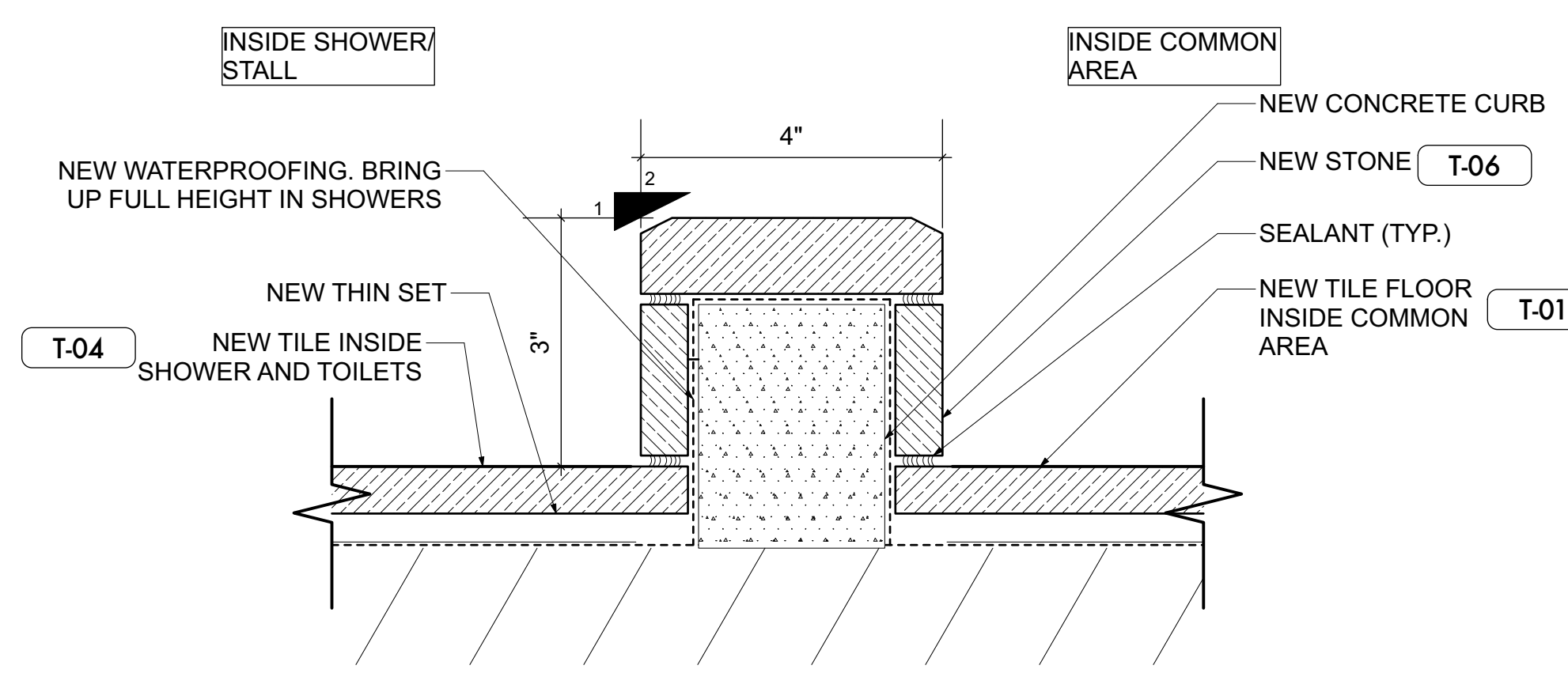
- USE SEALANT APPROPRIATE FOR SHOWER USE EVERYWHERE.



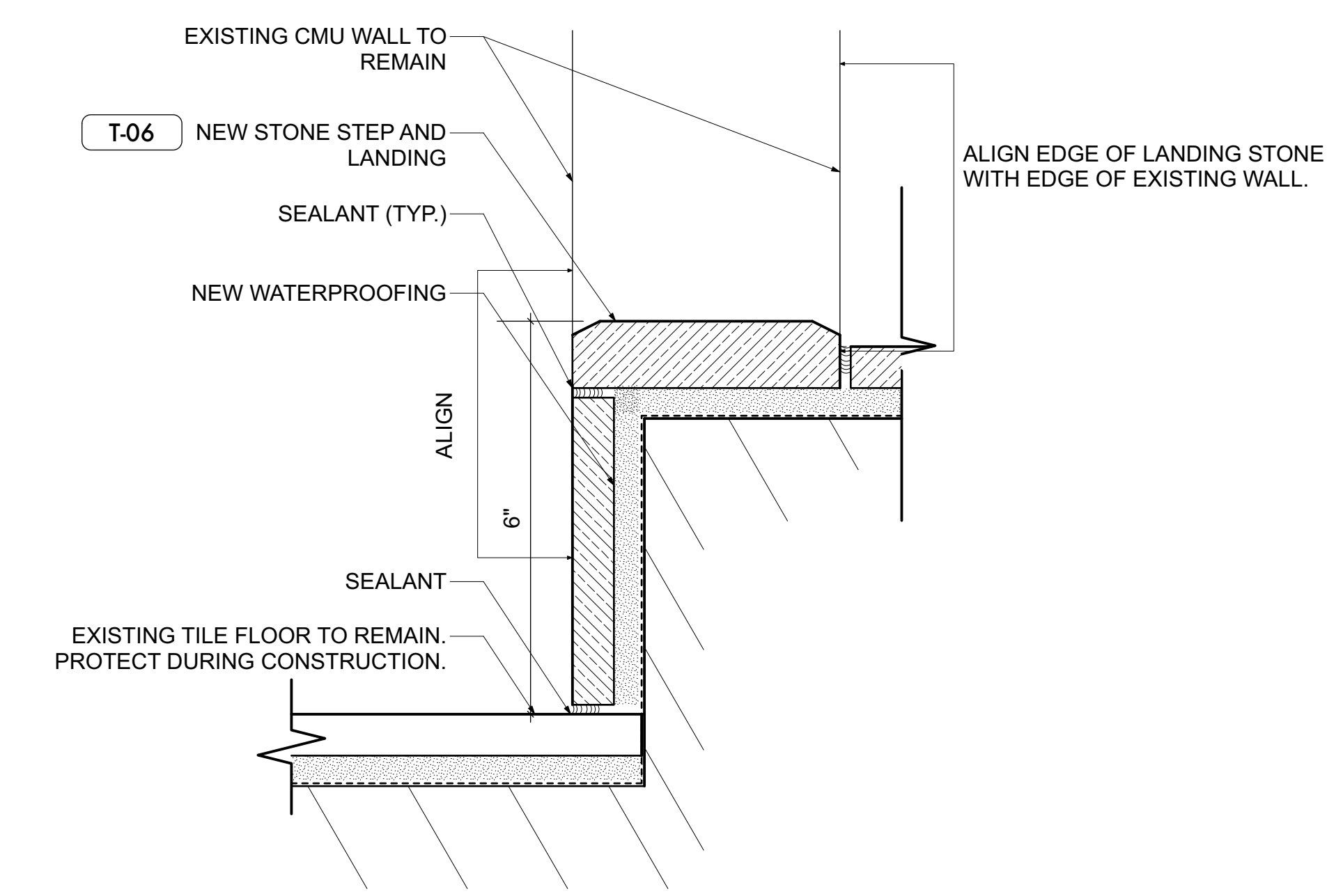
S1 NEW SADDLE DETAIL
 Scale: Half Actual Size



S2 NEW SCHLUTER BETWEEN TILES DETAIL
 Scale: Half Actual Size



S3 NEW STONE CURB DETAIL
 Scale: Half Actual Size



S4 NEW STONE STEP DETAIL
 Scale: Half Actual Size

GENERAL NOTES

1. AFTER REMOVAL OF EXISTING QUARRY TILE: SCARIFY AND REGRADE FLOORING FOR NEW PITCH TOWARDS TRENCH DRAIN.
2. PITCH OF FLOOR TO NOT EXCEED 1:48 IN ADA SHOWERS
3. PITCH AT BOTTOM OF TRENCH DRAIN TO REMAIN AS EXISTING.

KEY

HP HIGH POINT

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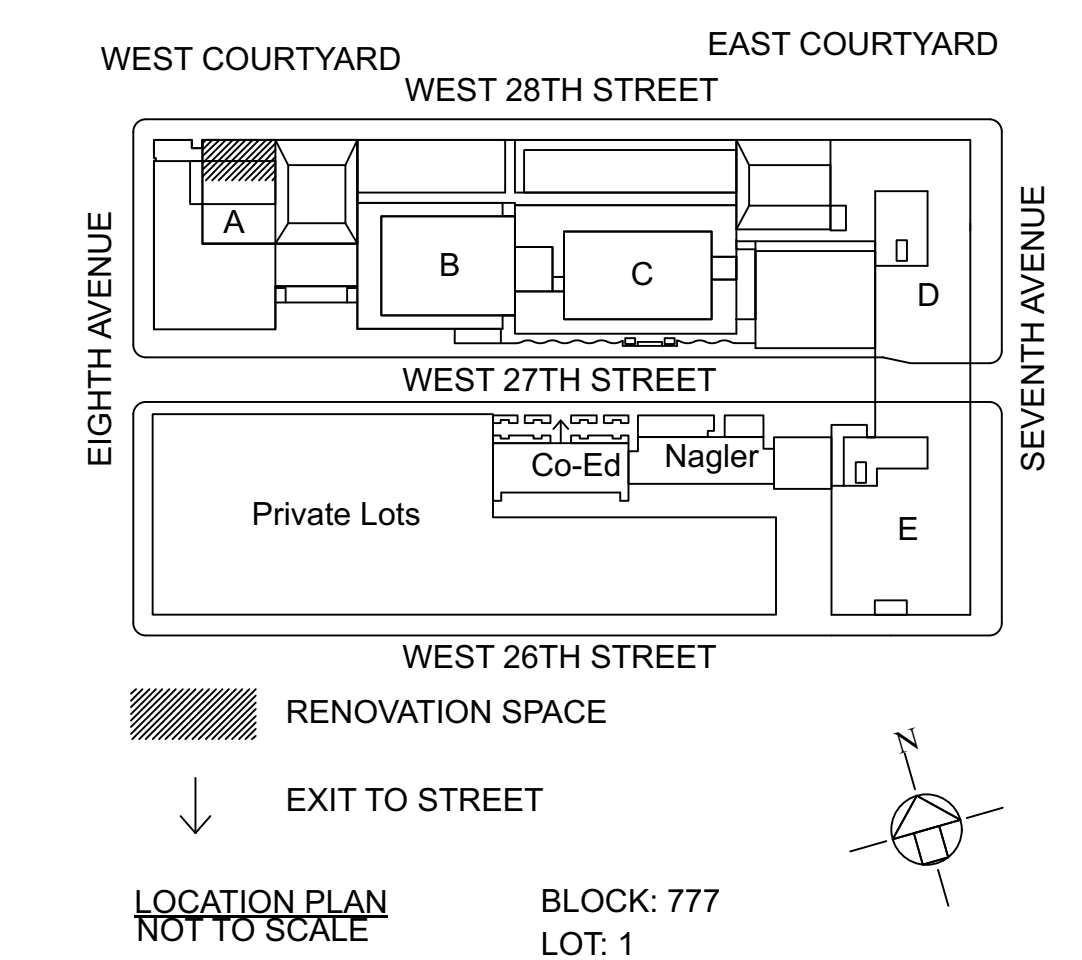
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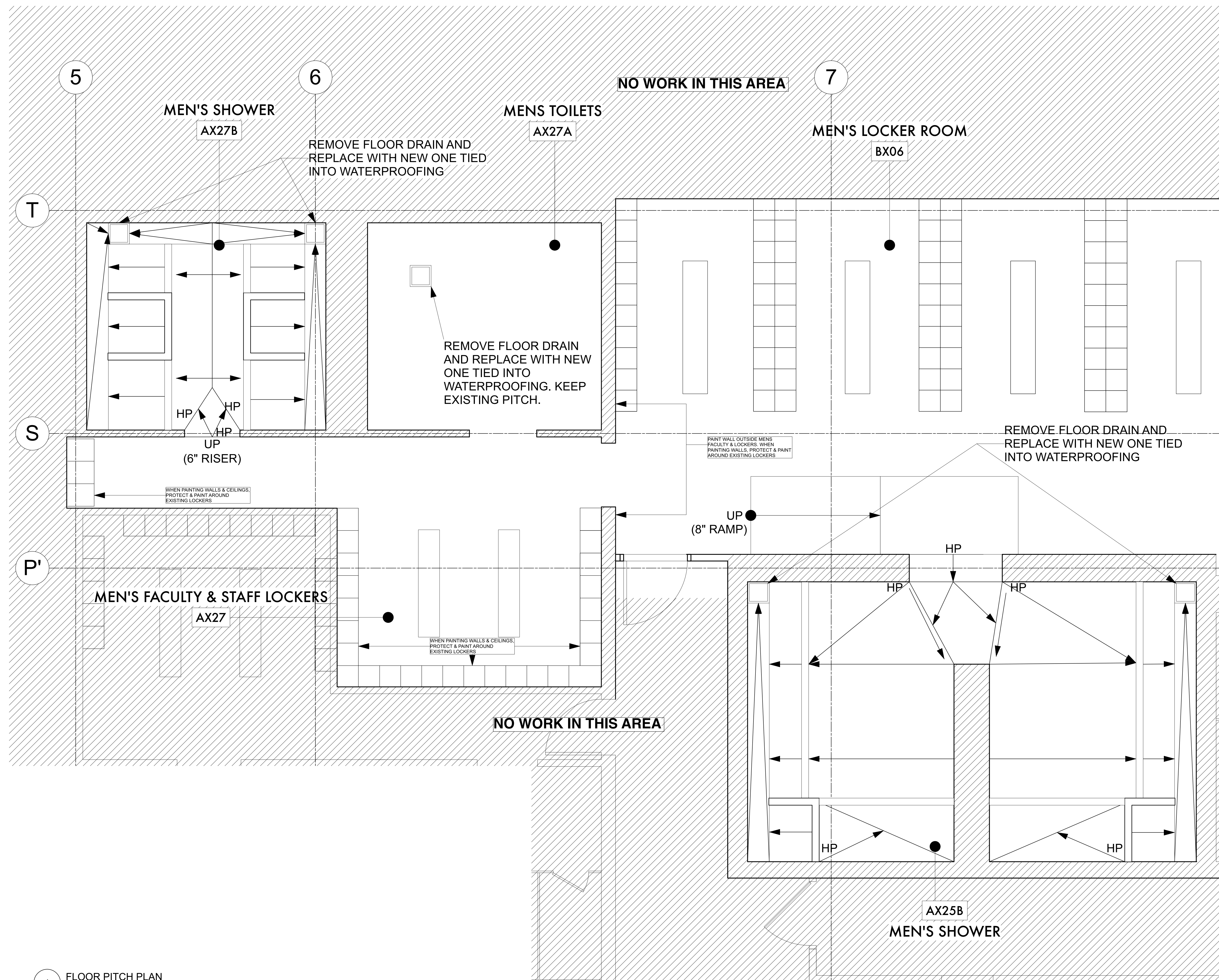
Sign and Seal:

Drawing Title:
**MEN'S SHOWERS
 PITCH PLAN**

Drawing No.: **A-103.00**

Project No.: 2214-01
 Date: 08/11/23

Scale: 1/2"=1'-0"
 Sheet No.: 8 OF 12



1 FLOOR PITCH PLAN
 Scale: 1/2"=1'-0"

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KEY PLAN:

Revisions		
No.	Issue	Date
1.	ISSUE FOR BID	08/11/23

Sign and Seal:

Drawing Title:
**MEN'S SHOWERS AX-25B
 INTERIOR ELEVATIONS**

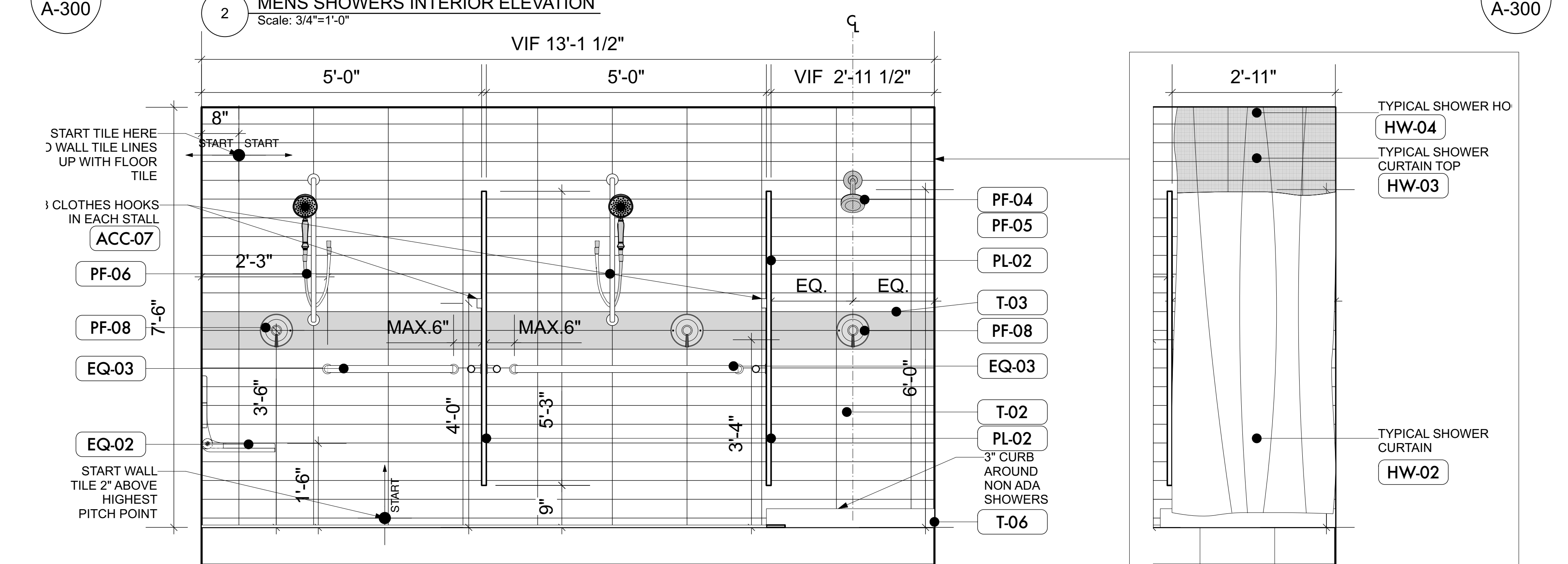
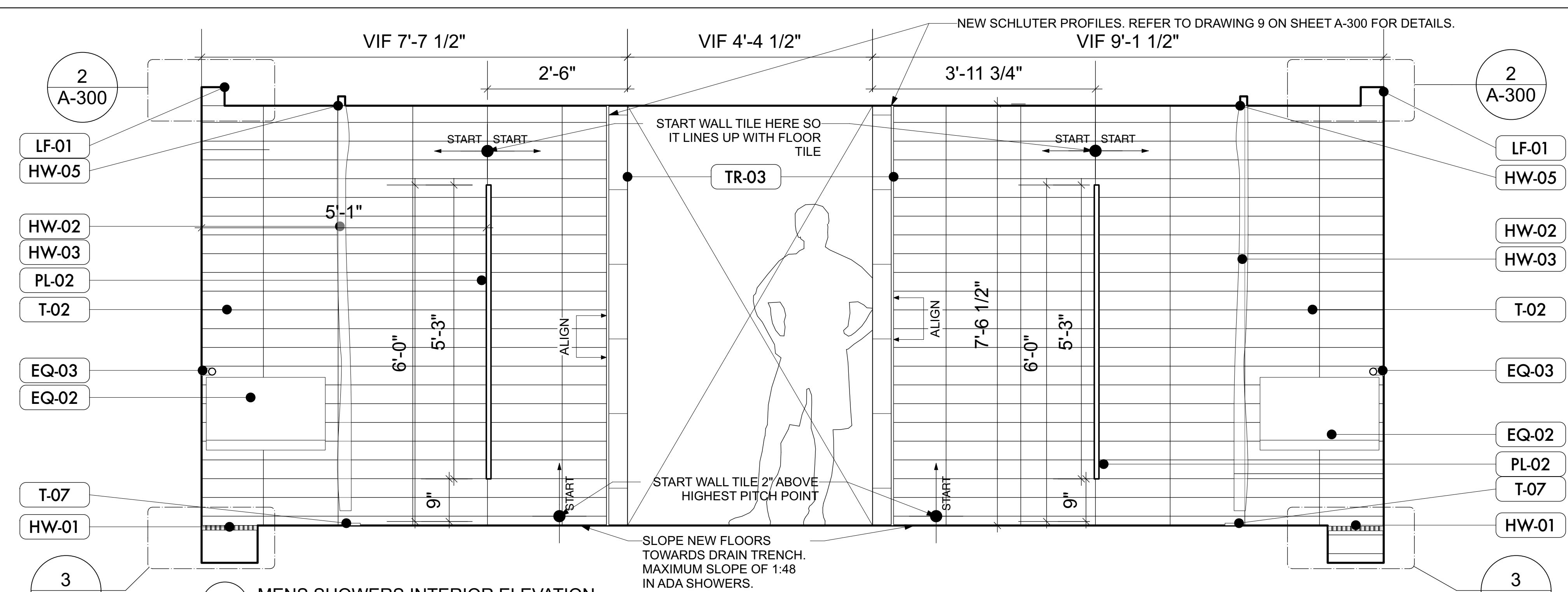
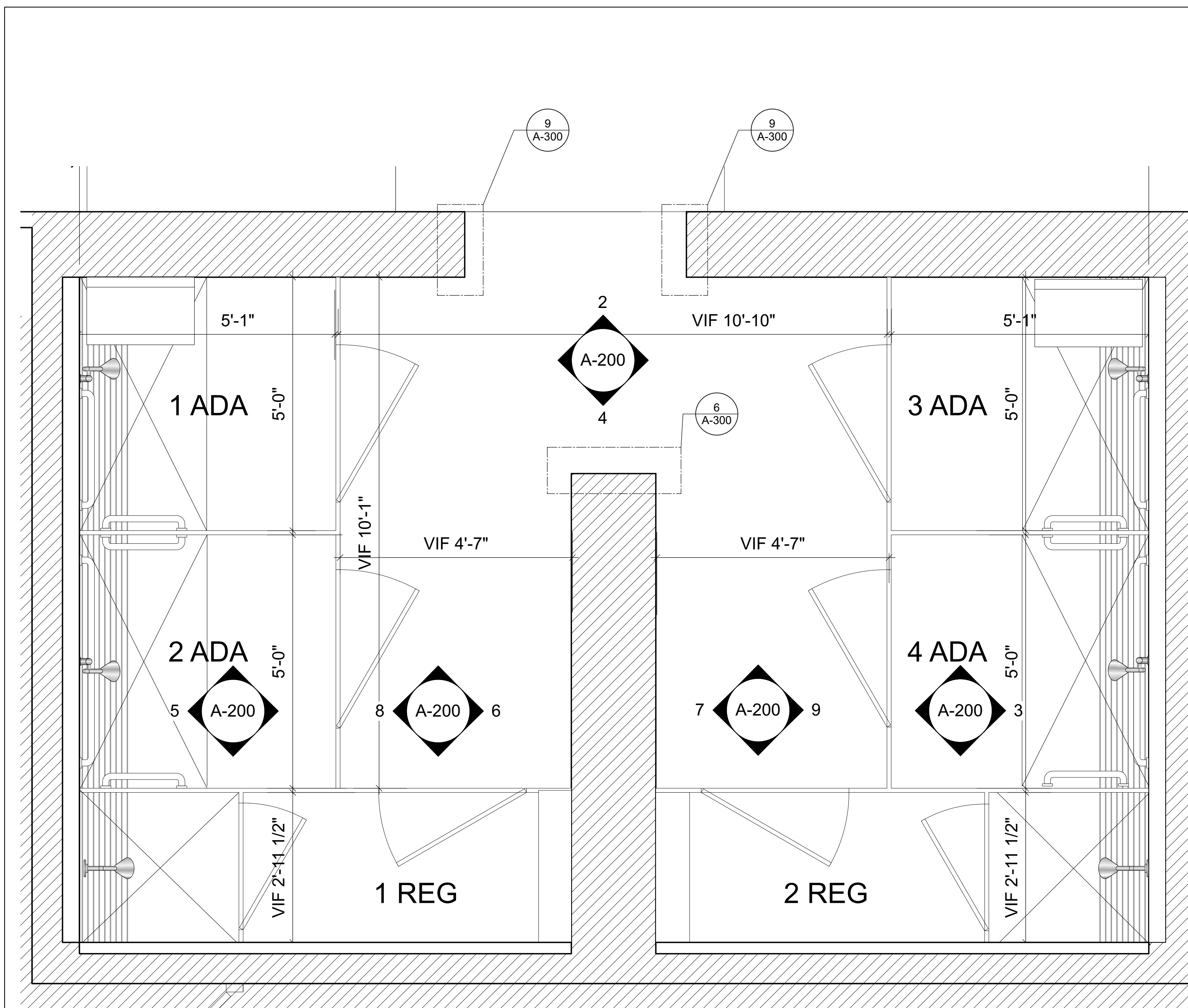
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A-200.00

Project No.:
 2214-01

Date:
 08/11/23

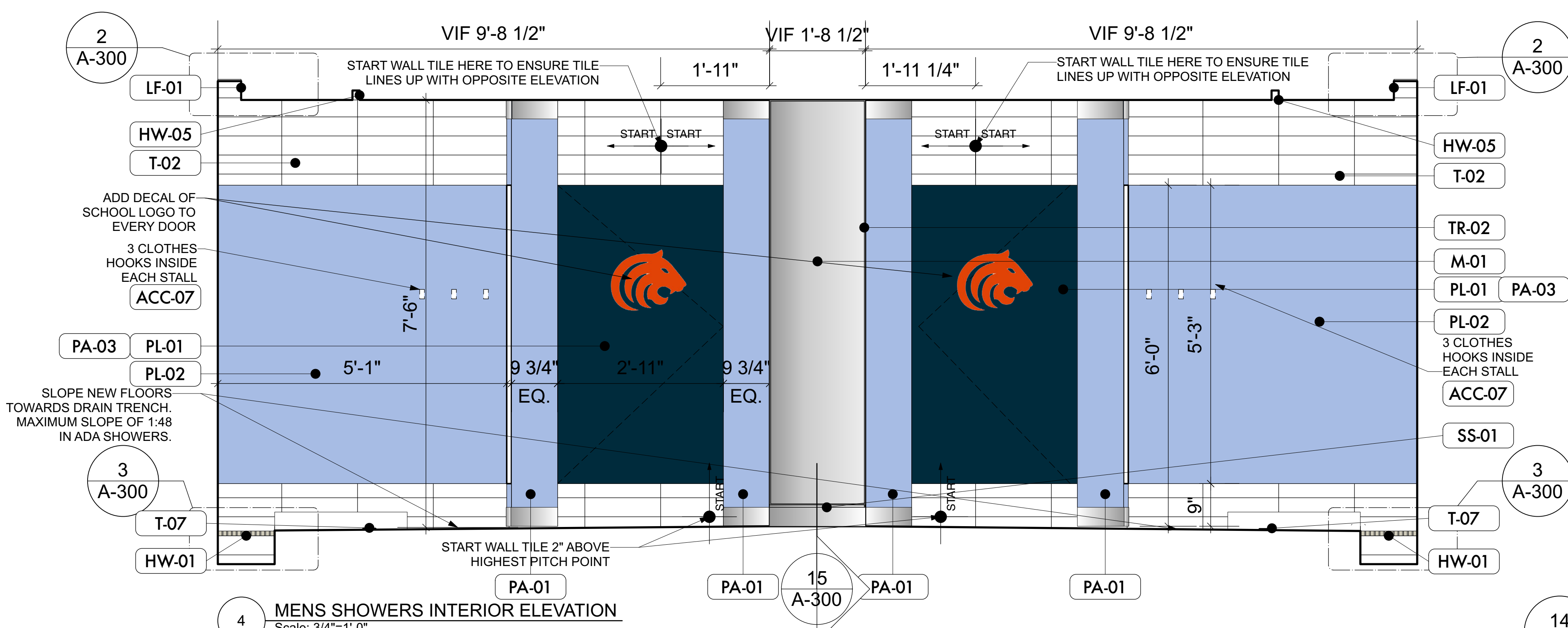
Scale:
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Sheet No.:
 9 OF 12

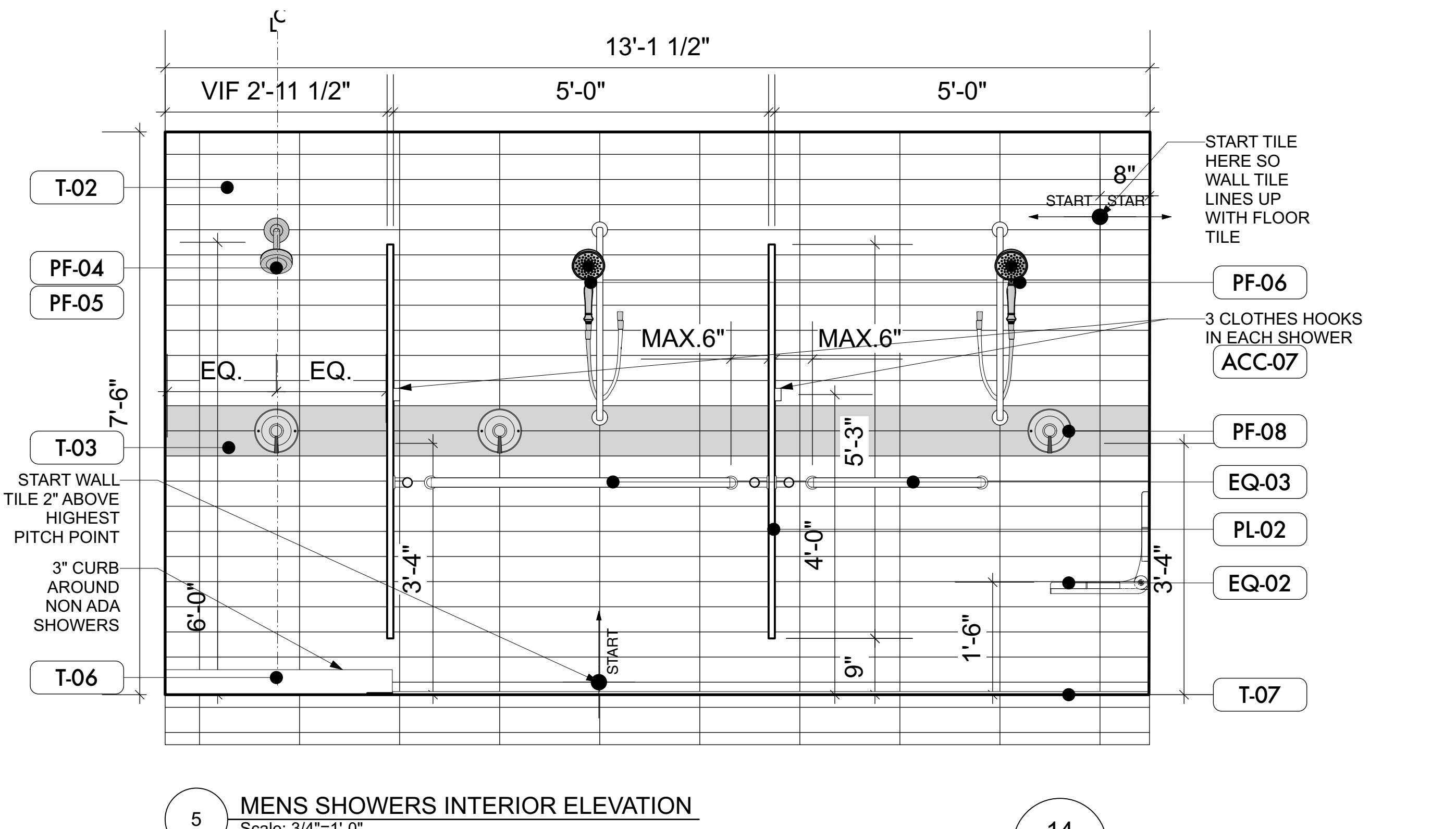


1 AX-25B ENLARGED PLAN
 Scale: 3/4"=1'-0"

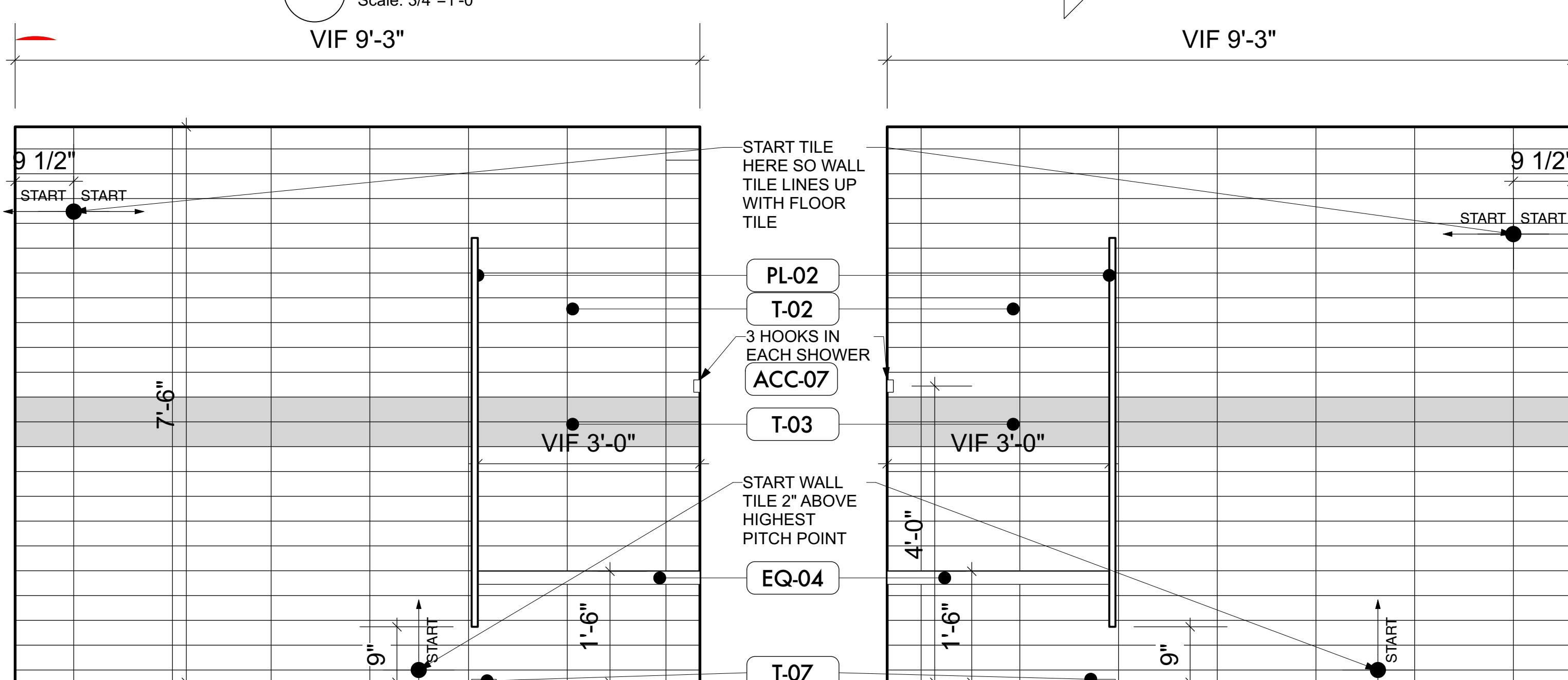
2 MENS SHOWERS INTERIOR ELEVATION
 Scale: 3/4"=1'-0"



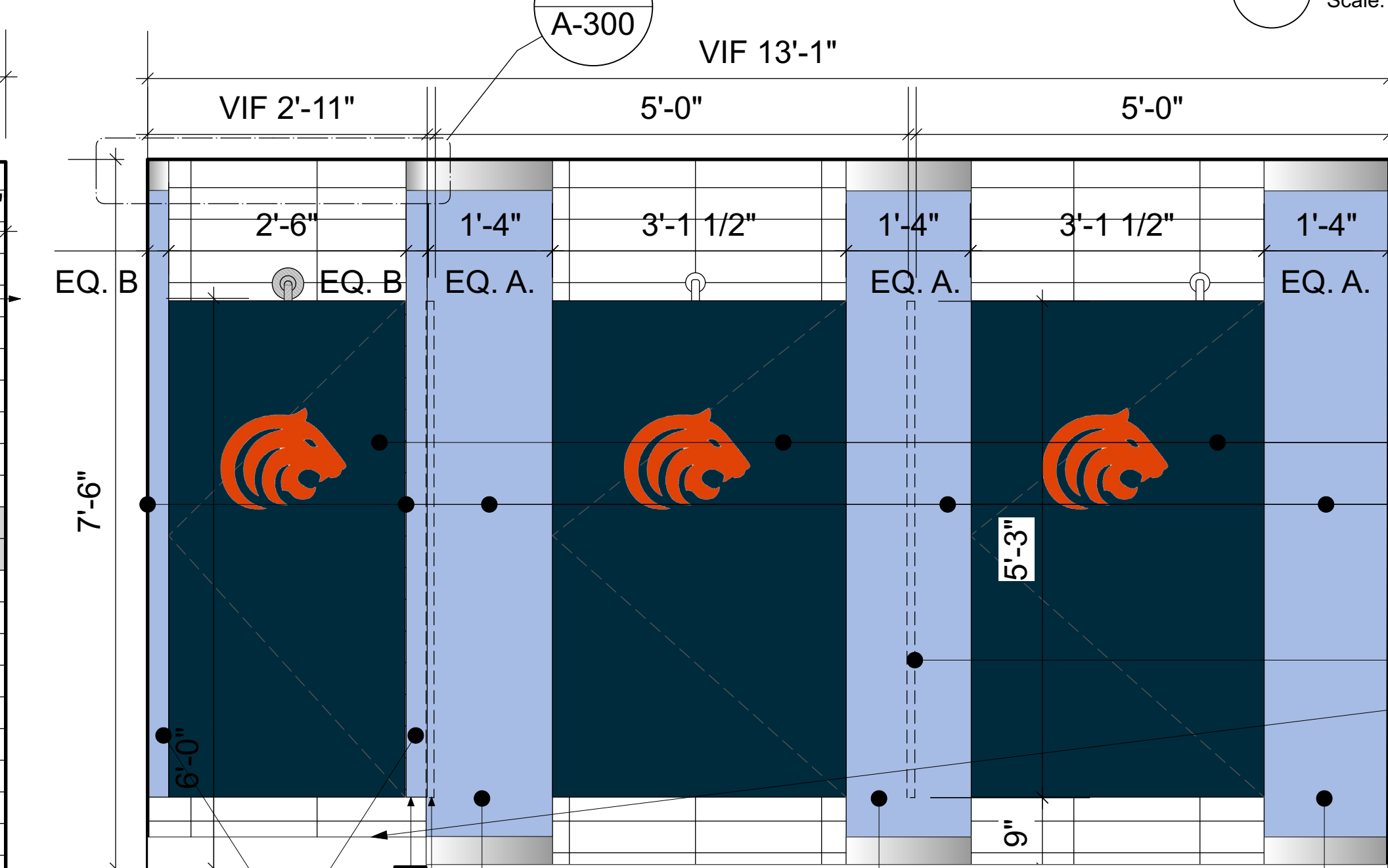
3 MENS SHOWERS INTERIOR ELEVATION
 Scale: 3/4"=1'-0"



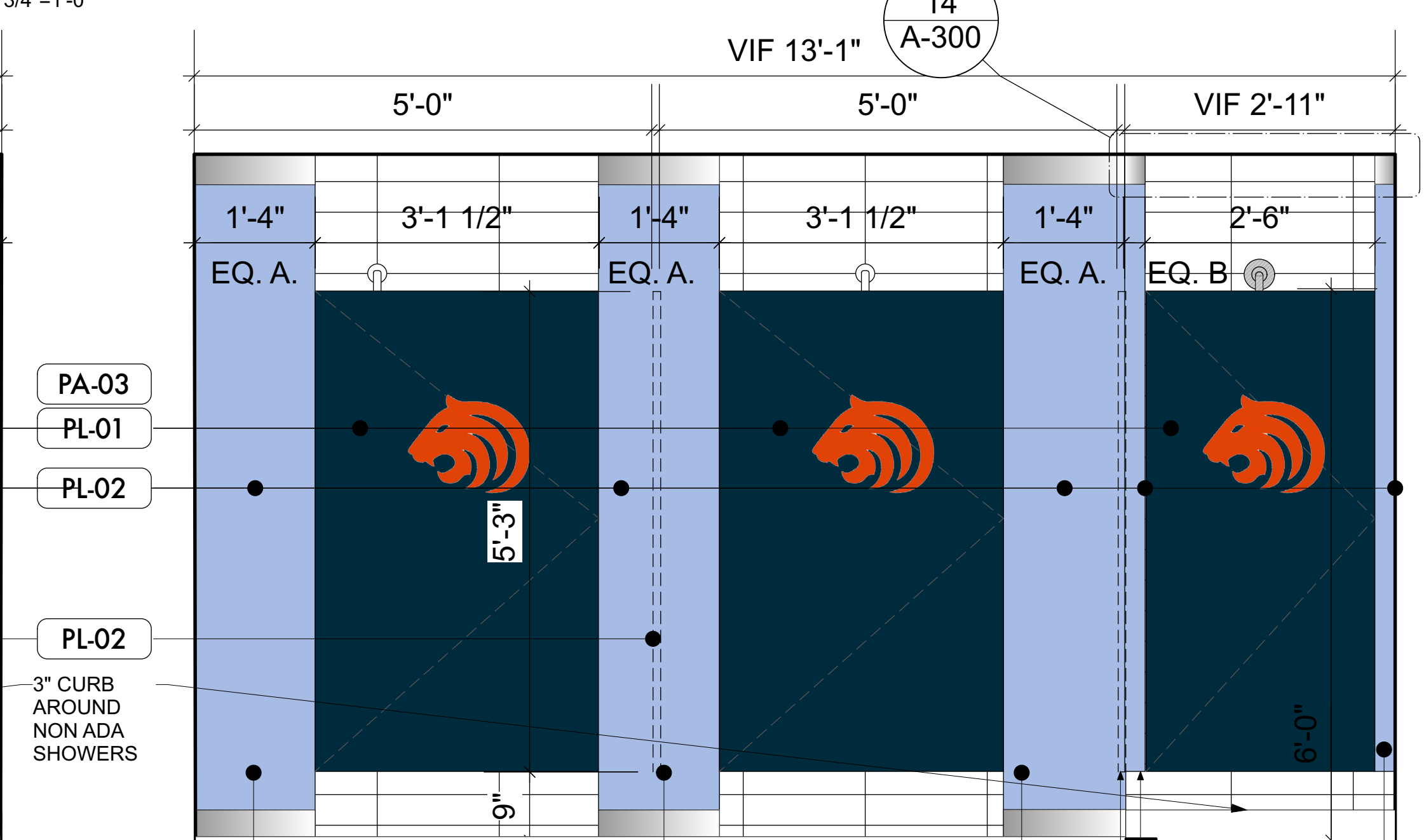
4 MENS SHOWERS INTERIOR ELEVATION
 Scale: 3/4"=1'-0"



5 MENS SHOWERS INTERIOR ELEVATION
 Scale: 3/4"=1'-0"



6 MENS SHOWERS INTERIOR ELEVATION
 Scale: 3/4"=1'-0"



7 MENS SHOWERS INTERIOR ELEVATION
 Scale: 3/4"=1'-0"

8 MENS SHOWERS INTERIOR ELEVATION
 Scale: 3/4"=1'-0"

9 MENS SHOWERS INTERIOR ELEVATION
 Scale: 3/4"=1'-0"

10 MENS SHOWERS INTERIOR ELEVATION
 Scale: 3/4"=1'-0"

11 MENS SHOWERS INTERIOR ELEVATION
 Scale: 3/4"=1'-0"

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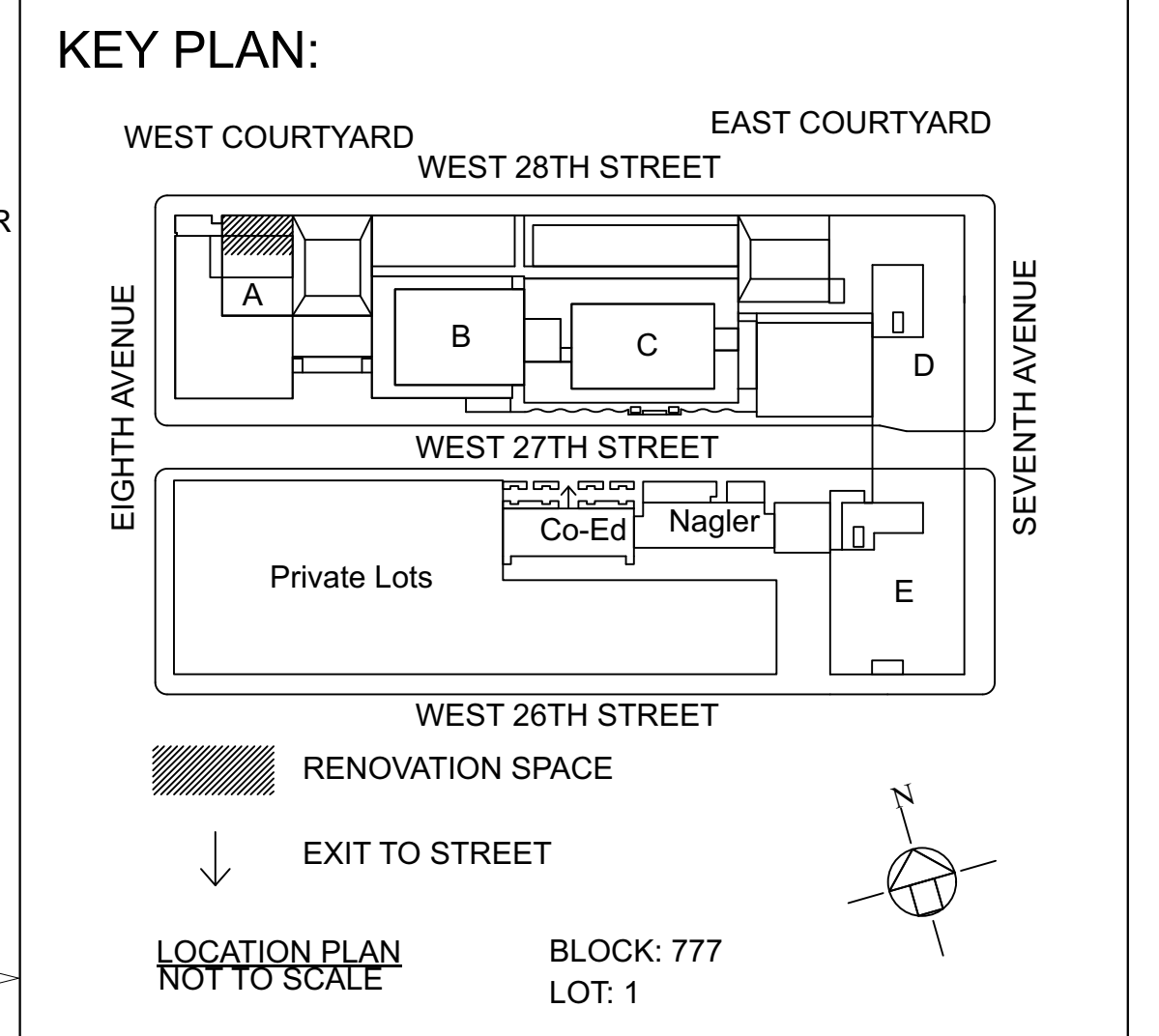
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Revisions

No.	Issue	Date
1.	ISSUE FOR BID	08/11/23

Sign and Seal:

Drawing Title:
DETAILS

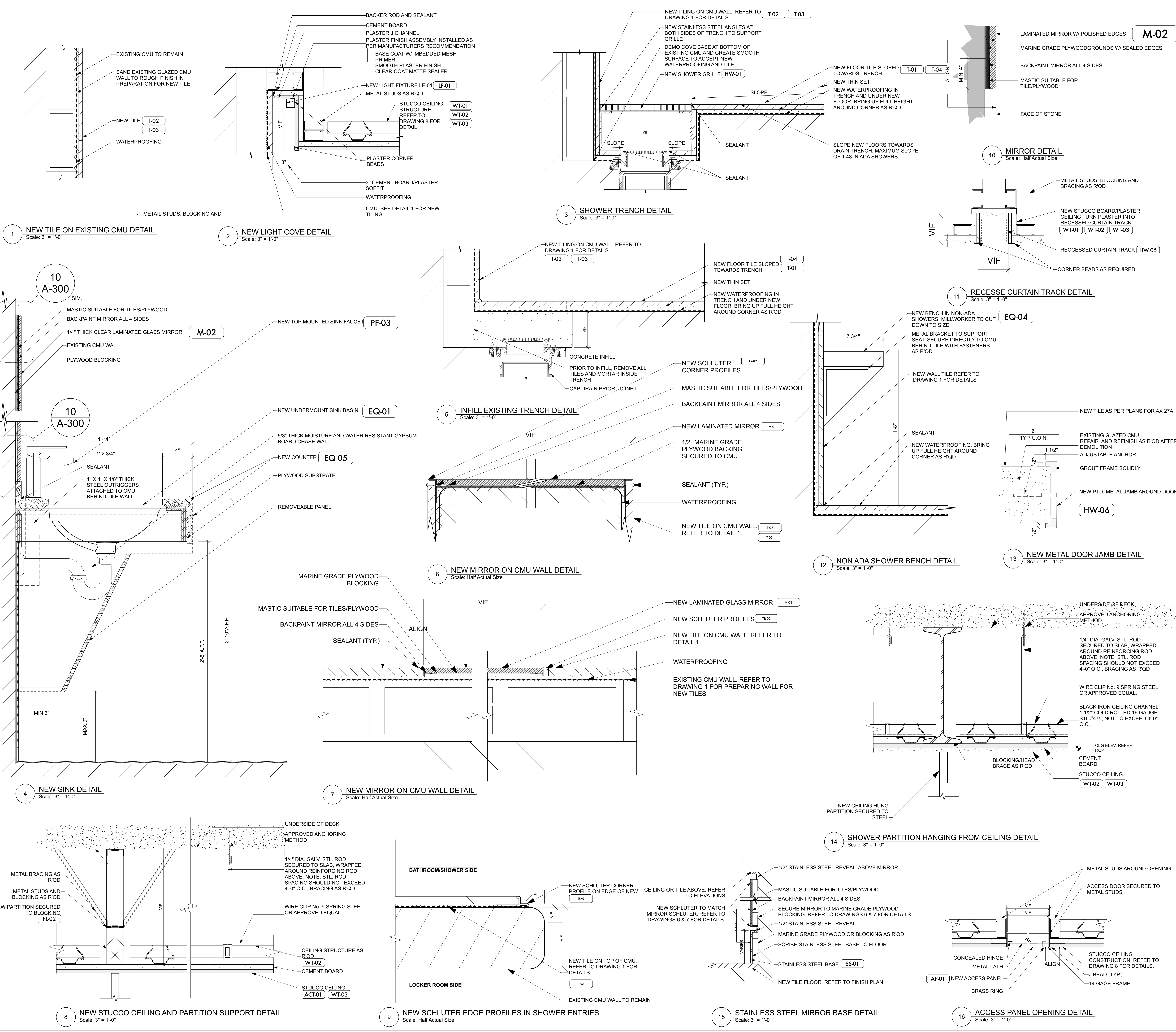
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Project No.:
 2214-01

Date:
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 AS NOTED

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 12 OF 12



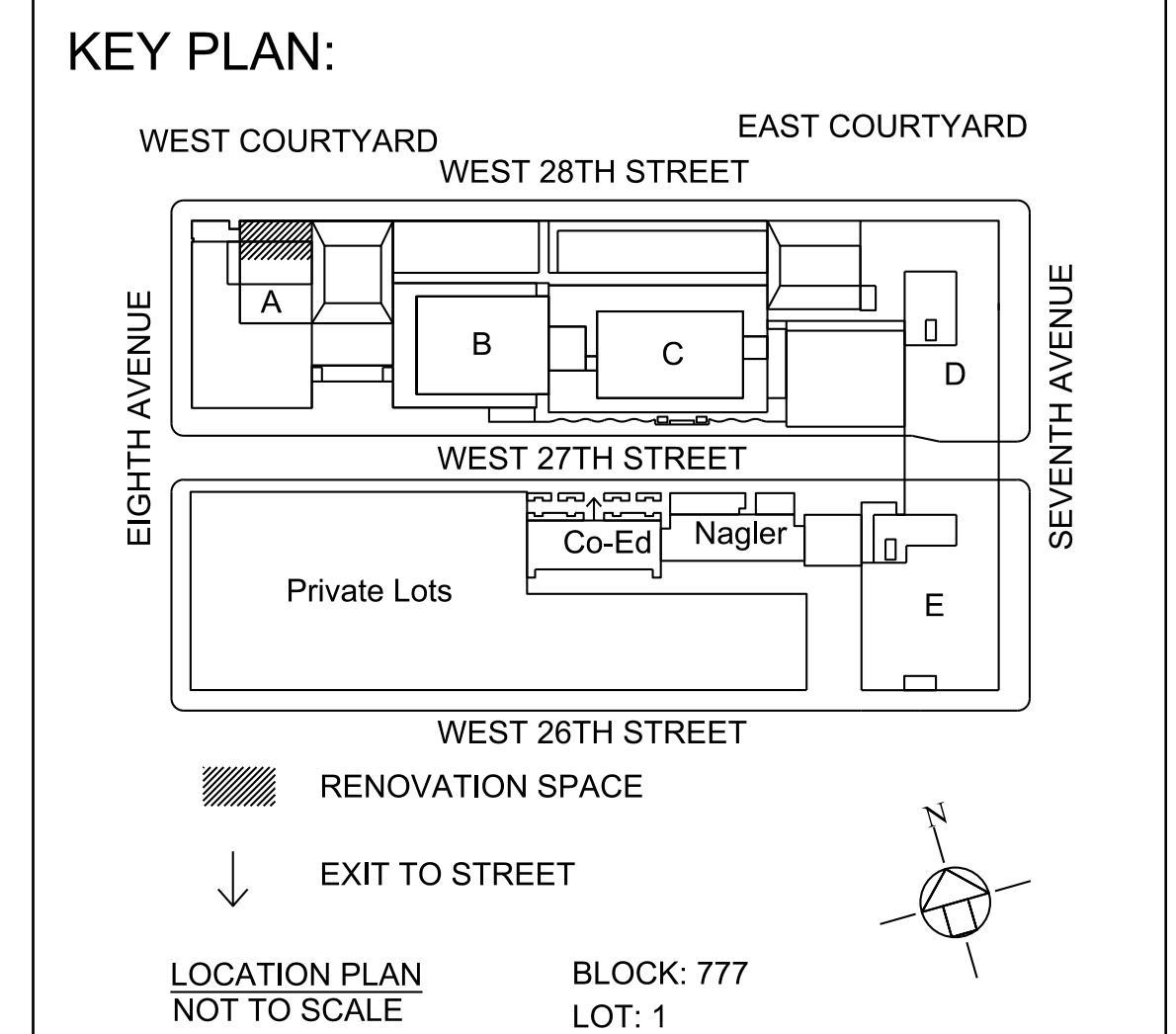
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Revisions

1. ISSUED FOR BID 08/11/23
 No. Issue Date

Sign and Seal:

Drawing Title:
**ELECTRICAL LEGEND,
 NOTES & ABBREVIATIONS**

Drawing No.:
E-001.00

Project No.: 2214-01 Date: 08/11/23

Scale: N.T.S. Sheet No.: 1 OUT OF 5

ELECTRICAL - SYMBOLS	
	WALL MOUNTED EXIT LIGHT.
	CEILING MOUNTED EXIT LIGHT WITH SELF CONTAINED BATTERY PACK. SHADED AREA INDICATES ILLUMINATED FACE(S). DIRECTIONAL ARROWS ARE INDICATED.
	PANELBOARD
	DISTRIBUTION OR POWER PANELBOARD.
	GROUND BAR
	CT CABINET
	METER (DIRECT / UTILITY)
	SUB-METER
	HOMERUN TO DESIGNATED PANELBOARD - NUMERALS INDICATE CIRCUIT NUMBER.
	GROUND CONNECTION
	DUPLICATE RECEPTACLE. SUBSCRIPT INDICATES: WP - WEATHERPROOF ENCLOSURE GFI - GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE G - ISOLATED GROUNDING RECEPTACLE 30A - 30 AMP RECEPTACLE HG - HOSPITAL GRADE RECEPTACLE C - AUTOMATICALLY CONTROLLED RECEPTACLE F - FUTURE SWITCHED RECEPTACLES FOR MOTORIZED SHADES # - IDENTIFIES PANELBOARD CIRCUIT NUMBER (TYPICAL FOR ALL RECEPTACLES) USB - USB RECEPTACLE - NEMA 5-20R USB. PASS & SEYMOUR CAT# TRN6303 OR EQUIVALENT
	DOUBLE DUPLEX CONVENIENCE RECEPTACLE WALL MOUNTED IN GANG BOX
	HALF SWITCHED DUPLEX RECEPTACLE.
	NEMA 5-20R, 20A RECEPTACLE (GFCI)
	RECEPTACLE NEMA 6-50R, 50VA COORDINATE WITH MANUFACTURER
	DOUBLE DUPLEX RECEPTACLE
	STUB UP FACE PLATE TO BE MTD. ON MILLWORK FOR RECEPTACLE
	DUPLICATE RECEPTACLE GFI
	FLOOR MOUNTED DUPLEX / DOUBLE DUPLEX / SIMPLEX RECEPTACLE, 20A, 3 WIRE, 125 VOLT, POKE-THRU SERVICE FITTING, UO/L. SPECIAL PURPOSE OUTLET. COORDINATE REQUIREMENTS WITH VENDOR FOR EACH EQUIPMENT.
	SIMPLEX RECEPTACLE
	NEMA 5-20R RECESSED SIMPLEX CLOCK/HVAC RECEPTACLE
	SINGLE CEILING MOUNTED CONVENIENCE RECEPTACLE
	SPECIAL PURPOSE CEILING MOUNTED RECEPTACLE
	SINGLE POLE SWITCH LOWER CASE LETTER IDENTIFIES OUTLETS CONTROLLED UPPER CASE LETTER AND OR NUMERAL INDICATES: 2- DOUBLE POLE 3- THREE WAY 4- FOUR WAY P - WITH PILOT LIGHT H - HORSEPOWER RATED WITH HASP FOR LOCK K - KEY OPERATED D - DIMMER SWITCH T - TIMES SWITCH (Interrupter #TS-400) J - DOOR JAM SWITCH L - LOCKING - WITH HASP FOR LOCK LV - LOW VOLTAGE TS - THERMAL SWITCH OS - OCCUPANCY SENSOR SWITCH VS - VACUANCY SENSOR SWITCH SS - SCENE SELECTOR OV - OVER-RIDE SWITCH
	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR
	CEILING MOUNTED DUAL TECHNOLOGY VACUANCY SENSOR
	PHOTO-CELL
	DAYLIGHT SENSOR
	3-POLE UNFUSED DISCONNECT (SAFETY SWITCH). NUMERAL INDICATES AMPACITY. W/P DENOTES WEATHERPROOF ENCLOSURE. NO NUMBER INDICATES 30A OR LESS.
	3-POLE FUSED DISCONNECT (SAFETY SWITCH). NUMERAL INDICATES SWITCH AMPACITY FUSE SIZE. W/P DENOTES WEATHERPROOF ENCLOSURE. NO NUMBER INDICATES 30A OR LESS.
	3-POLE COMBINATION DISCONNECT & MOTOR STARTER. NUMERAL INDICATES FUSE SIZE. W/P DENOTES WEATHERPROOF ENCLOSURE.
	3-POLE MOTOR STARTER. NUMERAL INDICATES FUSE SIZE. W/P DENOTES WEATHERPROOF ENCLOSURE.
	VARIABLE FREQUENCY DRIVE
	MOTOR # INDICATES HORSEPOWER
	FUSIBLE SWITCH
	BOLTED PRESSURE SWITCH
	CIRCUIT BREAKER

ELECTRICAL - SYMBOLS	
	KIRK KEY INTERLOCK. NUMBERS INDICATE MATCHING KEYS.
	DIESEL GENERATOR
	NATURAL GAS GENERATOR
	TRANSFORMER
	ATS OPEN TRANSITION
	ATS CLOSED TRANSITION
	ATS MAINTENANCE BYPASS
	POWER & ENERGY METER (PEM). SAFE/C CAT# PM156H OR EQUIVALENT. CONTRACTOR TO FURNISH AND INSTALL ELECTRICAL POWER & ENERGY METER AND ASSOCIATED CURRENT TRANSFORMERS & WIRING. PEM SHALL BE ABLE TO INTERFACE VIA RS-485 AND MODBUS OVER ETHERNET CABLING WITH BLDG CENTRAL POWER & ENERGY MANAGEMENT SYSTEM. TO BE PROVIDED BY OTHERS.
	EMERGENCY LIGHTING RELAY (ELR). CONTRACTOR TO FURNISH, INSTALL AND WIRE EMERGENCY LIGHTING RELAY. WATTS/STOPPER (LEGRAND) CAT# ELCU-200 OR EQUAL. APPROVED IN WRITING BY ENGINEER. CONTRACTOR TO PROVIDE TEST BUTTON AND BACK-BOX FLUSH MOUNTED PREFERABLY 8" AFF. COORDINATE EXACT LOCATION AND HEIGHT OF TEST BUTTON WITH ARCHITECT. RELAY SHALL BE CONFIGURED SO THAT UNDER NORMAL CONDITIONS LIGHT FIXTURES ARE CONTROLLED BY DIMMER (OR SWITCH) AND SUPPLIED BY NORMAL POWER FROM LOCAL LIGHTING PANEL. UNDER POWER FAILURE OF CIRCUIT, RELAY SHALL PROVIDE UNDIMMED (OR UNSWITCHED) EMERGENCY POWER FROM EMERGENCY LIGHTING PANEL.
	GENERATOR REMOTE ANNUNCIATOR AND ATS REMOTE CONTROL PANEL
	REMOTE LIGHTING TRANSFORMER
	FUSE CUT OUT
	FIRE ALARM FUSED DISCONNECT SWITCH
	FIRE ALARM DATA GATHERING PANEL
	FIRE ALARM CONTROL PANEL
	FIRE ALARM REMOTE ANNUNCIATOR
	SMOKE ALARM 'CS' DENOTES SELF-CONTAINED COMBINATION CARBON MONOXIDE / SMOKE ALARM DETECTOR. D - DENOTES DUCT DETECTOR
	120V CARBON MONOXIDE DETECTOR. CONNECT TO CIRCUIT NOT PROTECTED BY A GFCI CIRCUIT BREAKER
	FIRE SMOKE DAMPER
	HEAT TRACE
	MOTORIZED SHADE
	MOTORIZED DAMPER
	BREAK GLASS SWITCH
	EMERGENCY POWER OFF
	EMERGENCY STOP
	THERMOSTAT
	CEILING/WALL/FLOOR MOUNTED JUNCTION BOX
	SPRINKLE BOX
	PULL BOX
	TIME CLOCK
	CONTACTOR / RELAY
	LEAK DETECTOR
	CONNECTOR - LETTER DESIGNATES UNIQUE CONNECTION POINT
	PUSHBUTTON
	DOOR CONTACT. SEE LIGHTING PLANS FOR LOCATIONS.

- GENERAL NOTES**
- ELECTRICAL CONTRACTOR IS RESPONSIBLE TO VISIT AND INSPECT SITE TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS ASSOCIATED WITH BUT NOT LIMITED TO THE FOLLOWING: CONTRACTORS INSPECTION SHALL BE CONDUCTED PRIOR TO FINAL BID. AND ANY ADDITIONAL WORK REQUIRED DUE TO FAILURE TO VISIT SITE OR INADEQUATE INSPECTION SHALL NOT BE CONSIDERED FOR COMPENSATION.
 - ELECTRICAL CONTRACTOR SHALL VERIFY ELECTRICAL AND GROUNDING REQUIREMENTS OF ALL NEW AND EXISTING EQUIPMENT TO BE USED. ALL SPECIAL PURPOSE RECEPTACLES INDICATED ON PLAN SHALL BE VERIFIED WITH EQUIPMENT MANUFACTURER TO INSURE PROPER WIRING.
 - CIRCUIT NUMBERS ARE FOR GUIDANCE ONLY. CONTRACTOR SHALL BE RESPONSIBLE TO BALANCE PHASES. REFER TO PANEL SCHEDULES FOR BRANCH CIRCUIT REQUIREMENTS.
 - CIRCUIT WIRE SIZES OTHER THAN 2 #12-3/4" ARE INDICATED ON PLAN. REFER TO PANEL SCHEDULES FOR BRANCH CIRCUIT BREAKERS OTHER THAN 1 POLE, 20 AMP. ALL CIRCUITS AND FEEDERS SHALL HAVE A FULL SIZE INSULATED GREEN GROUND CONDUCTOR AND BE CONNECTED TO GROUND BUS IN RESPECTIVE PANEL. MINIMUM SIZE CONDUCTOR AND CONDUIT IS #12 THHN CU, 3/4" (EMT).
 - THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND PROVIDING THE ACTUAL NUMBER OF CONDUCTORS REQUIRED FOR ALL BRANCH CIRCUIT WIRING TO SERVE THE INTENDED FUNCTION.
 - ALL DEVICE PLATE FINISHES/COLORS SHALL BE AS INDICATED BY ARCHITECT. REFER TO ARCHITECT'S TELECOM AND ELECTRIC PLANS FOR ADDITIONAL ELECTRICAL INFORMATION.
 - FOR EXACT LOCATION AND QUANTITY OF RECEPTACLES, TELEPHONE AND OTHER OUTLETS, REFER TO THE ARCHITECT'S DRAWINGS.
 - MOUNT ALL WALL SWITCHES, DIMMERS, ETC. AT 4' 0" AFF. TO CENTER LINE OF DEVICES. UNCL. RECEPTACLES SHALL BE MOUNTED AT 1' 6" AFF. UNCL. REFER TO ARCHITECT'S PLANS FOR EXACT LOCATION AND MOUNTING HEIGHT.
 - THIS CONTRACTOR IS TO NOTIFY ENGINEER/ARCHITECT OF ANY CONFLICTS FOUND ON THE DESIGN DOCUMENTS AND BASE THE BID ON THE MORE "STRINGENT & EXPENSIVE" CONDITIONS.
 - ELECTRONIC AS-BUILT DRAWINGS, SHOWING CONDUIT RUNS AND CIRCUITING MUST BE GIVEN TO ARCHITECT, ENGINEER AND OWNER AT THE COMPLETION OF THE JOB.
 - THE CONTRACTOR SHALL REMOVE AND/OR RELOCATE ALL EXISTING ELECTRICAL WORK WHICH INTERFERES WITH THE NEW ARCHITECTURAL AND ELECTRICAL LAYOUTS. ALL WORK WHICH IS NO LONGER REQUIRED TO FUNCTION SHALL BE DE-ENERGIZED AND DISCONNECTED AT THE SOURCE OF POWER SUPPLY.
 - PANEL DIRECTORIES SHALL BE MODIFIED AND COMPLETELY FILLED AT COMPLETION OF JOB.
 - ANY EXISTING WORK NOT STATED FOR REMOVAL AND DAMAGED AS A RESULT OF PERFORMING THE WORK OF THIS CONTRACT SHALL BE REPAIRED OR REPLACED AS REQUIRED. MATERIAL AND FINISH TO MATCH EXISTING TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
 - CONNECT NEW WORK TO EXISTING WORK IN A NEAT AND ACCEPTABLE MANNER. DISPOSE OF REMOVED RACEWAYS, WIRE, PANELS, ETC. AS DIRECTED BY CM & OWNER.
 - ALL ELECTRICAL WORK IN ADJOINING AREAS WHICH IS REQUIRED TO FUNCTION BUT IS AFFECTED BY THIS WORK SHALL BE RECONNECTED AND RESTORED TO ITS PRESENT FUNCTION AS PART OF THE ELECTRICAL SYSTEM OF THE BUILDINGS).
 - ALL RACEWAYS WHICH BECOME EXPOSED BEYOND FINISHED SURFACES BECAUSE OF THE ALTERATION WORK SHALL BE REMOVED AND RE-ROUTED BEHIND THE FINISHED SURFACES.
 - ANY FIRE SAFETY EQUIPMENT AND THIS ASSOCIATED CONDUIT AND WIRING SYSTEM SHALL NOT BE HARMED DURING DEMOLITION AND/OR CONSTRUCTION AND SHALL BE PROTECTED FROM ANY PHYSICAL DAMAGE.
 - ALL NEW VOICE AND DATA WIRING IN CEILING PLENUM SHALL BE TELON-COATED OR IN EMT CONDUIT. NEW WALL OUTLETS SHALL RECEIVE 3/4" EMPTY CONDUIT STUB-UP WITH DRAG WIRE AND JUNCTION BOX.
 - EACH COMBINATION DATA/TELEPHONE AND DATA OUTLET SHALL UTILIZE 1" E.M.T. STUB-UP TO HANG CEILING FROM JUNCTION BOX.
 - ALL NEW TELEPHONE, ELECTRIC AND DATA OUTLETS TO BE INSTALLED ON AN EXISTING WALL SHOULD BE FLUSH MOUNTED WITH THE FINISHED WALL SURFACE.
 - CONTRACTOR SHALL COORDINATE ALL NEW TELEPHONE CONDUIT RUNS WITH TELECOM COMPANY REPRESENTATIVE BEFORE STARTING WORK.
 - CONTRACTOR TO PROVIDE AN EMPTY CONDUIT SYSTEM AND OUTLET BOXES FOR INSTALLATION OF NEW SECURITY SYSTEM. VERIFY EXACT REQUIREMENTS WITH SECURITY VENDOR.
 - ALL OPEN FLOOR OUTLETS, NOT USED, SHALL BE CAPPED.
 - ALL HOLES IN SLABS OR WALLS SHALL BE FIRE STOPPED VIA LISTED FIRE-STOPPING ASSEMBLIES. SUBMIT TO ENGINEER FOR APPROVAL.
 - PROVIDE A GROUND BUS IN NEW PANELS.
 - CONTRACTOR TO DE-RATE CONDUCTORS IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODES WHEN INSTALLING MORE THAN THREE (3) CIRCUITS IN A 3/4" HOMERUN AND OTHERWISE REQUIRED.
 - REFER TO PROJECT BOOK SPECIFICATIONS FOR ADDITIONAL IMPORTANT REQUIREMENTS.

- GENERAL DEMOLITION NOTES**
- THE CONTRACTOR SHALL INCLUDE ALL COSTS FOR REMOVALS AND RELOCATIONS IN THE CONTRACT. THESE COSTS SHALL INCLUDE WORK DESCRIBED IN THE SPECIFICATIONS AND SHOWN ON THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS WITH ALLOWANCES FOR NORMAL UNFORESEEN DIFFICULTIES WHEN CONCEALED WORK HAS BEEN OPENED. NO CLAIMS FOR ADDITIONAL WORK ASSOCIATED WITH DEMOLITION WILL BE ACCEPTED, EXCEPT IN SPECIFIC CASES CONSIDERED JUSTIFIABLE BY THE ARCHITECT.
 - THE CONTRACTOR SHALL REMOVE AND/OR RELOCATE ALL EXISTING ELECTRICAL WORK WHICH INTERFERES WITH THE NEW ELECTRICAL LAYOUTS. ALL WORK WHICH IS NO LONGER REQUIRED TO FUNCTION SHALL BE DE-ENERGIZED AND DISCONNECTED AT THE SOURCE OF POWER SUPPLY.
 - ALL PRESENT ELECTRICAL MATERIAL AND EQUIPMENT WHICH ARE TO BE REMOVED UNDER THIS CONTRACT SHALL BE REMOVED BY THE ELECTRICAL CONTRACTOR AND SHALL BECOME THE PROPERTY OF BUILDING MANAGEMENT, U.O.A.
 - ALL RACEWAYS WHICH BECOME EXPOSED BEYOND FINISHED SURFACES BECAUSE OF THE ALTERATION WORK SHALL BE REMOVED AND RE-ROUTED BEHIND THE FINISHED SURFACES.
 - PORTIONS OF FEEDER LINES THAT HAVE TO BE REMOVED OR ABANDONED AS A RESULT OF DEMOLITION WORK BUT ARE REQUIRED TO CONTINUE TO FUNCTION SHALL BE CUT AT CONVENIENT LOCATIONS, RECONNECTED AND RECONNECTED FOR CONTINUATION OF THEIR PRESENT FUNCTION. NEW FEEDER EXTENSIONS SHALL MATCH EXISTING ONES IN ALL RESPECTS, CONDUCTOR CAPACITY, CONDUITS SIZE, ETC.
 - EXISTING ELECTRICAL ITEMS AND/OR CONDUIT AND WIRE IN WALLS, HUNG CEILING, ETC. OR AREAS NOT BEING UTILIZED, SHALL BE DISCONNECTED AND REMOVED.
 - ANY FIRE SAFETY EQUIPMENT AND THIS ASSOCIATED CONDUIT AND WIRING SYSTEMS SHALL NOT BE HARMED DURING DEMOLITION AND/OR CONSTRUCTION AND SHALL BE PROTECTED FROM ANY PHYSICAL DAMAGE.
 - THIS DEMOLITION NOTES ARE DIAGRAMMATIC DESCRIPTION OF THE REMOVAL SCOPE OF WORK. THE CONTRACTOR, BY SITE INVESTIGATION, SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT SCOPE OF THE WORK INVOLVED PRIOR TO SUBMITTING HIS BID. COORDINATE WITH ARCHITECT, BUILDING MANAGEMENT AND MECHANICAL CONTRACTORS BEFORE ANY WORK.

- EXISTING CONDITION & RELOCATION NOTES**
- GENERALLY, IN AREAS SCHEDULED FOR DEMOLITION AND REMODELING, REMOVE ALL ELECTRICAL DEVICES SUCH AS LIGHTING FIXTURES, WIRING DEVICES, TELEPHONE BOXES, SPEAKERS, FIRE ALARM DEVICES, TELEVISION OUTLETS, DISCONNECT, MOTORS, ETC., THAT ARE LOCATED ON EXISTING WALLS OR PARTITIONS WHICH ARE TO BE DEMOLISHED. REMOVE EXPOSED PORTIONS OF THE BRANCH AND SIGNAL CIRCUIT WIRING AND CONDUITS AND BE RESPONSIBLE FOR MAINTAINING THE CONTINUITY OF EXISTING CIRCUITS FEEDING DEVICES THAT ARE TO REMAIN. MAINTAIN THE CONTINUITY OF EXISTING CIRCUITS THROUGH OTHER SPACES BUT PASSING THROUGH THE AREA OF RENOVATION.
 - ALL RACEWAYS AND FEEDERS SERVING PANEL BOARDS SCHEDULED FOR DEMOLITION SHALL BE REMOVED TO THEIR ENTIRETY BACK TO THEIR SOURCE. UPDATE PANEL SCHEDULES AND LABELS OF UPSTREAM PANEL BOARDS TO REFLECT DEMOLITION, REINSTALLATION AND RECONNECTIONS.
 - CIRCUITS STILL IN USE WHICH ARE DERIVED FROM PANELS SCHEDULED TO BE DEMOLISHED SHALL BE RE-ROUTED TO ALTERNATE PANELS. NOTIFY OWNERS REPRESENTATIVE AND ARCHITECT FOR RECOMMENDATIONS.
 - IN SUCH CASES WHERE EXISTING WALLS ARE TO REMAIN, EXPOSED RACEWAYS, SURFACE AND RECESSED OUTLET BOXES, ETC. WHICH ARE NOT TO BE REUSED SHALL BE COMPLETELY REMOVED. IN SUCH CASES, WHERE NEW CONDUITS AND OUTLETS ARE TO BE INSTALLED IN EXISTING WALLS IN FURNISHED ROOMS, THEY SHALL BE CONCEALED BY CUTTING AND PATCHING THE WALLS FOR THE CONDUITS AND OUTLET BOXES UNLESS OTHERWISE NOTED.
 - CONDUITS OR SLEEVES, THAT ARE NO LONGER REQUIRED, WHICH ARE PROTRUDING THROUGH THE FLOOR SLAB SHALL BE CUT BACK AND CAPPED. ALL FEEDERS TO BE REMOVED BACK TO PANEL BOARD.
 - ELECTRICAL EQUIPMENT REMOVED SHALL BE RETURNED TO OWNER OR DISPOSED PER OWNER DIRECTIVE.
 - REMOVE TELEPHONE AND DATA CABLES BACK TO CLOSET OF ORIGINATION. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OWNER'S TELECOMMUNICATION DEPARTMENTS FOR THE DISCONNECTION AND REMOVAL, LOW TENSION DEVICES.
 - ELECTRICAL CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF EXISTING SYSTEM CIRCUITS FOR FIRE ALARM POWER AND TELECOMMUNICATIONS, ETC., DURING DEMOLITION.
 - THE ELECTRICAL CONTRACTOR SHALL REMOVE ALL ABANDONED WIRING/CABLING NO LONGER IN USE FROM RACEWAYS.
 - UTILIZE, WHENEVER POSSIBLE, PRACTICAL, AND APPROVED BY ARCHITECT EXISTING OUTLET BOXES, ETC. COMPATIBLE WITH THE MATERIAL SPECIFIED FOR INSTALLATION IN THE NEW CONSTRUCTION AREAS. WHENEVER EXISTING RACEWAY SYSTEMS ARE UTILIZED, REMOVE ALL EXISTING WIRING. IN SUCH CASES, ALL ASSOCIATED CONDUITS AND WIRING SHALL BE ARRANGED TO ACCOMMODATE THE NEW CIRCUITING AS SHOWN ON THE DRAWING.
 - THE ELECTRICAL DEMOLITION PLANS INDICATE GENERAL INTENT AND ARE NOT INTENDED TO SHOW ALL COMPONENTS AND ITEMS TO BE REMOVED OR RETAINED. THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMISSION OF THEIR BID TO BECOME FAMILIAR WITH THE ACTUAL WORKING CONDITIONS AND EXTENT OF WORK. DEVICES AND EQUIPMENT LOCATED ON THE WALLS AND/OR CEILING DESIGNATED TO BE REMOVED SHALL BE DISCONNECTED AND MADE SAFE. THE ELECTRICAL CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATION AND ARCHITECT OF ANY UNANTICIPATED OR HIDDEN CONDITIONS ENCOUNTERED DURING DEMOLITION.
 - THE ELECTRICAL CONTRACTOR SHALL CIRCUIT TRACE AND LABEL ALL EXISTING BRANCH AND FEEDERS WITHIN OR ASSOCIATED WITH DEMOLITION SCOPE PRIOR TO DE-ENERGIZING AND DISCONNECTION. ALL CIRCUITS WITHIN PANELBOARDS, LOAD CENTERS, MOTOR CONTROL CENTERS AND SWITCHBOARDS, IDENTIFIED FOR REMOVAL, SHALL BE TRACED AND RE-LABELLED TO ENSURE THAT NO AREA OUTSIDE THE SCOPE LIMIT IS AFFECTED.
 - COORDINATE ALL TEL/DATA WIRING DEMOLITION WITH FIT INFORMATION SYSTEMS STAFF PRIOR TO THE START OF ANY DEMOLITION AFTER PROPERLY IDENTIFYING TEL/DATA WIRING. CABLES ARE TO BE COMPLETELY REMOVED FROM ALL TERMINATION INCLUDING JACKS, WALL PLATES AND PATCH PANELS.
 - CONTRACTOR TO OPEN EXISTING CEILING AS REQUIRED FOR INSTALLATION OF NEW WORK OR REMOVAL/MODIFICATION OF EXISTING SYSTEMS AND EQUIPMENT. CEILING IS TO BE CLOSED UPON COMPLETION OF WORK.

ELECTRICAL DRAWING LIST	
DWG No.	DRAWING TITLE
E-001.00	ELECTRICAL SYMBOL LIST, ABBREVIATIONS, AND DRAWING LIST
E-101.00	SUBCELLULAR PART ELECTRICAL PLAN
E-800.00	ELECTRICAL SPECIFICATIONS I
E-801.00	ELECTRICAL SPECIFICATIONS II
E-801.00	SUBCELLULAR DEMOLITION PART PLAN

LEGEND	
	NEW WORK
	EXISTING
	DEMOLITION
	U/G (CONCRETE ENCASED)
	MULTI-OUTLET RACEWAY ASSEMBLY (PLUMB/OIL-WIRE/MOLD)
	BUSWAY
	CONDUIT BANK
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
	FLEX TYPE FMC / LFM CONDUIT AS REQUIRED
	CAPPED CONDUIT

MISCELLANEOUS SYMBOLS	
	DESCRIPTION
	RISER SERVICE
	RISER NUMBER
	RISER SERVICE
	RISER NUMBER
	RISER SERVICE
	RISER NUMBER
	SECTION
	DETAIL
	DRAWING LOCATION
	DETAIL
	DRAWING LOCATION
	REVISION NUMBER

ABBREVIATIONS			
A	AMPERE	LTC	LIGHTING THOUSAND CIRCULAR MILS
AC	ABOVE COUNTER TOP	MCM/KCMIL	MECHANICAL MISCELLANEOUS
AFF	ABOVE FINISHED FLOOR	MSC	MISCELLANEOUS
AWG	AMERICAN WIRE GAUGE	MTC	MOUNTED
BLDG	BUILDING	NIC	NOT-IN-CONTRACT
C	CONDUIT	NL	NOT TO SCALE
CCTV	CIRCUIT BREAKER	NTS	NOT TO SCALE
CKT	CLOSED CIRCUIT TELEVISION	PNL	PANEL
CLG	CIRCUIT	R	REMOVE
CU	COPPER	RE	RELOCATED EXISTING DEVICE
DISC	DISCONNECT	RM	ROOM
DWG	DRAWING	RE	RELOCATED EXISTING DEVICE
E	EXISTING	SPCS	SPECIFICATIONS
EC	EMPTY CONDUIT	SW	SWITCH
ELEC	ELECTRICAL	TV	TELEVISION
EM	EMERGENCY	TY	TYPICAL
ER	EXISTING TO BE RELOCATED	UC	UNDER COUNTER UNFUSED
FA	FIRE ALARM	UF	UNFUSED
FT	FEET	UON	UNLESS OTHERWISE NOTED
GF	GROUND FAULT INTERRUPTER	V	VOLT OR VOLTAGE
GD	GROUND	W	WATT
HP	HORSEPOWER	WP	WEATHER-PROOF
IBC	INTERLUPTING CAPACITY		
JB	JUNCTION BOX		
KVA	KILOVOLT AMPERE		
KW	KILOWATT		



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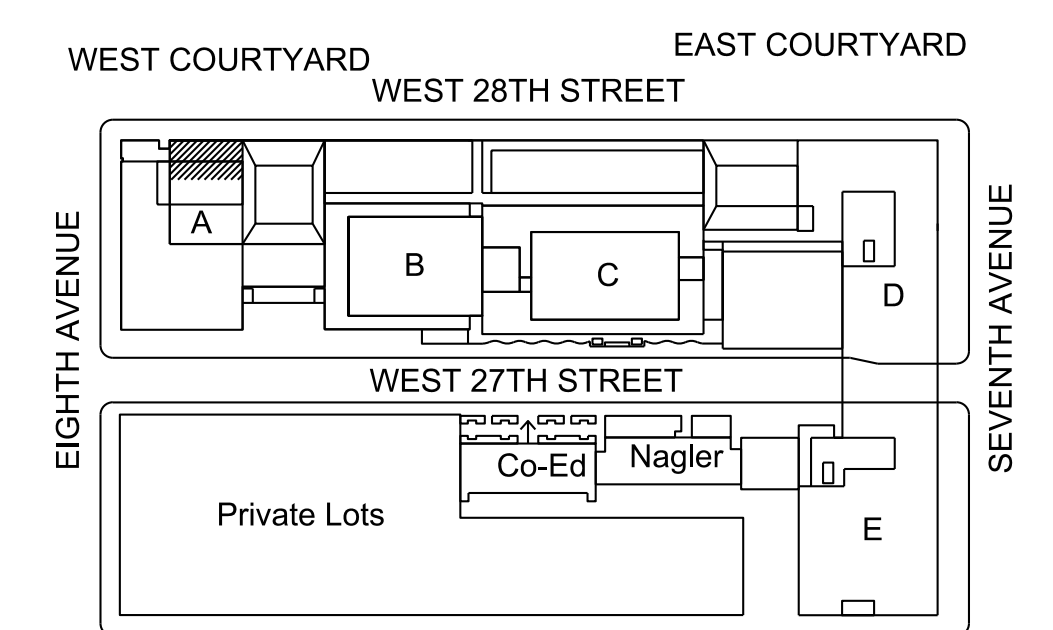
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KEY PLAN:



Revisions

No.	Issue	Date
1.	ISSUED FOR BID	08/11/23

Sign and Seal:

Drawing Title:
ELECTRICAL SPECIFICATIONS I

Drawing No.:
E-800.00

Project No.: 2214-01	Date: 08/11/23
Scale: N.T.S.	Sheet No.: 3 OUT OF 5



ELECTRICAL SPECIFICATIONS

1. WORK INCLUDED

A. WORK UNDER THE ELECTRICAL CONTRACT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND CONTRACTORS SERVICES REQUIRED FOR A COMPLETE AND OPERABLE INSTALLATION OF ELECTRICAL WORK SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- 1) PREPARATION AND SUBMISSION OF SHOP DRAWINGS.
- 2) BALANCING, CLEANING, TESTING, ADJUSTMENT, AND GUARANTEE OF ALL WORK DONE UNDER THIS CONTRACT.
- 3) REPRODUCIBLE RECORD DRAWINGS.
- 4) REMOVAL, ALTERATION, AND/OR RELOCATION OF EXISTING EQUIPMENT.
- 5) IDENTIFICATION OF EQUIPMENT.
- 6) COMPLIANCE WITH ALL FEDERAL, STATE, COUNTY AND MUNICIPAL CODES AND ALL OTHER AUTHORITIES HAVING JURISDICTION.
- 7) PROVIDING ALL NECESSARY PERMITS AND APPROVALS AND PAYING ALL REQUIRED FEES IN CONNECTION WITH THE WORK OF THIS CONTRACT.
- 8) HVAC CONTROL WIRING.
- 9) COMPLETE WIRING SYSTEMS FOR LIGHTING AND POWER INSTALLATION, HVAC EQUIPMENT PLUMBING AND SPRINKLER SYSTEMS AND MISCELLANEOUS DEVICES.
- 10) LIGHTING FIXTURES AND LAMPS, INSTALLATION AND WIRING
- 11) LIGHTING CONTROL SYSTEMS TO MEET ENERGY CODE REQUIREMENTS AND AS OTHERWISE INDICATED IN THIS CONTRACT.
- 12) TEMPORARY LIGHTING AND POWER FOR CONSTRUCTION PURPOSES.
- 13) MAINTENANCE OF EXISTING ELECTRICAL SERVICES IN THE BUILDING TO SERVE AS TEMPORARY LIGHT AND POWER FOR CONSTRUCTION.
- 14) SWITCHES, RECEPTACLES, TELEPHONE AND SIGNAL OUTLETS AND WIRING DEVICES.
- 15) FEEDERS, SUB-FEEDERS AND BRANCH CIRCUITS, FOR LIGHTING POWER AND CONTROLS, WIRING, CONDUIT AND RACEWAYS, INCLUDING CONNECTORS TO PANELS, TRANSFORMERS, MOTOR CONTROLLERS, MOTORS, ETC.
- 16) SAFETY SWITCHES AND FUSES.
- 17) PANELBOARDS.
- 18) CABLE SUPPORT AND PULLBORES.
- 19) HANGERS, ANCHORS, INSERTS, SUPPORTS, SLEEVES, CHASE.
- 20) PREPARATION OF A SET OF "AS-BUILT" DRAWINGS AS DESCRIBED HEREINAFTER.
- 21) TESTING AND ADJUSTMENT OF SYSTEMS.
- 22) RIGGING, SCAFFOLDING AND HANDLING OF ALL MATERIALS AND EQUIPMENT.
- 23) INSTALLATION OF EQUIPMENT FURNISHED BY OTHERS.
- 24) GROUNDING SYSTEM.
- 25) ALL REQUIRED CONDUIT AND WIRING FOR AUTOMATIC TEMPERATURE, SAFETY AND INTERLOCKING CONTROLS PERTAINING TO HVAC, PLUMBING, OR ELECTRICAL SYSTEMS AS CALLED FOR ON DRAWINGS AND SPECIFICATIONS OF THE HVAC, PLUMBING, AND ELECTRICAL DIVISION.

2. WORK NOT INCLUDED

A. IN CONNECTION WITH THE ELECTRIC MOTOR DRIVEN AND OTHER ELECTRICALLY CONNECTED EQUIPMENT WHICH OCCUR IN MECHANICAL, PLUMBING AND FIRE PROTECTION SYSTEMS, THE FOLLOWING SHALL BE EXCLUDED FROM THE ELECTRIC WORK:

- 1) THE FURNISHING OF MOTORS, MOTOR STARTERS, START OR STOP PUSHBUTTON STATIONS, PILOT LIGHT STATIONS, LOCK OUT FACILITIES, ACTUATION DEVICES, EXCEPT AS SPECIFIED HEREINAFTER.
- 2) THE INSTALLATION OF MOTOR CONTROL DEVICES SUCH AS PRESSURESTATS, ADJUSTATS, SOLENOID VALVES AND DAMPER OR VALVE MOTOR OPERATORS, FREEZESTATS, ETC., WHICH REQUIRE CONNECTIONS TO MECHANICAL SYSTEMS.

B. ALL FINISHED PAINTING OF EXPOSED PIPES, APPARATUS, ETC.

C. ALL CUTTING AND PATCHING, EXCEPT AS SPECIFICALLY MODIFIED IN THESE SPECIFICATIONS.

D. FURNISHINGS AND INSTALLATION OF ACCESS DOORS.

E. FURNISHINGS AND INSTALLATION OF TELEPHONE SYSTEM WIRING INSTRUMENTS AND EQUIPMENT.

F. FURNISHINGS AND INSTALLATION ALARM DEVICES, UNLESS OTHERWISE SPECIFICALLY MENTIONED HEREIN.

G. BASE FLASHING FOR CONDUITS THROUGH ROOF.

H. FURNISHING OF UTILITY COMPANY CURRENT TRANSFORMERS AND METERING EQUIPMENT.

3. GENERAL CONDITIONS

A. THE APPLICABLE PROVISIONS OF THE GENERAL CONSTRUCTION SPECIFICATIONS SHALL APPLY TO THESE SPECIFICATIONS.

4. NOTICE TO BIDDERS

A. THE SPECIFICATIONS AND DRAWINGS ARE INTENDED TO SERVE AS A BASIS UPON WHICH THE CONTRACTOR SHALL SUBMIT A CONTRACT PRICE FOR THE MATERIAL AND LABOR PROVIDED.

B. WHEN CONFLICTS OCCUR IN THE SPECIFICATIONS OR ON THE DRAWINGS, OR BETWEEN EITHER, THE ITEMS OF GREATER QUANTITY OR HIGHER COST SHALL BE PROVIDED. BIDDER/CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONFLICTS.

C. THE CONTRACTOR SHALL PROVIDE ALL ITEMS OF LABOR OR MATERIALS NOT SPECIFICALLY INDICATED BUT REQUIRED TO COMPLETE THE INTENDED INSTALLATIONS.

D. CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES AND CONFER WITH OTHER CONTRACTORS WHOSE WORK MIGHT AFFECT THIS INSTALLATION. CONTRACTOR SHALL ARRANGE ALL PARTS OF THIS WORK AND EQUIPMENT IN PROPER RELATION TO THE WORK AND EQUIPMENT OF OTHERS AND WITH BUILDING CONSTRUCTION AND ARCHITECTURAL FINISHES THAT IT WILL HANDLE IN SERVICE AND APPEARANCE.

E. THE WORK UNDER THIS CONTRACT SHALL BE PERFORMED SIMULTANEOUSLY WITH THE WORK OF OTHER TRADES, SO AS NOT TO DELAY THE OVERALL PROGRESS OF WORK.

F. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR HIS WORK WITH HIS COMPLETION AND FINAL ACCEPTANCE AND SHALL RELIEVE ANY OF THE SAME WHICH BECOMES DAMAGED, LOST OR STOLEN, WITHOUT ADDITIONAL COST TO THE OWNER.

G. THE DRAWINGS ARE DIAGNOSTIC AND INDICATE SIZE AND GENERAL LOCATION OF WORK. SCALE DIMENSIONS SHALL NOT BE USED. THE EXACT LOCATION AND ELEVATION OF ALL LIGHTING FIXTURES AND OUTLETS, ETC., SHALL BE DETERMINED FROM THE ARCHITECTS DRAWINGS. CONTRACTOR SHALL FURNISH ALL NECESSARY OUTLETS, SUPPORTS, FITTINGS, AND ACCESSORIES TO FULLY APPLY CODES, REGULATIONS, BUILDING STANDARDS AND THE BEST PRACTICES OF THE TRADE FOR INSTALLATION OF ELECTRICAL WORK.

H. ALL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN A WORKMANLIKE MANNER. ANY MATERIAL AND EQUIPMENT NOT SO INSTALLED SHALL BE REMOVED AND REPLACED IN A SATISFACTORY MANNER. ALL EXPENSES INCIDENTAL THERE TO SHALL BE BORNE BY THE CONTRACTOR.

5. OPERATING AND MAINTENANCE INSTRUCTIONS

A. AFTER FINAL TEST AND ADJUSTMENTS FULLY INSTRUCT OWNERS OPERATING PERSONNEL, IN ALL DETAILS OF OPERATION FOR EQUIPMENT INSTALLED. A SIGNED RECEIPT WHICH SHALL BE OBTAINED FROM THE OPERATOR SHALL BE CONSIDERED AS EVIDENCE THAT INSTRUCTIONS WERE SATISFACTORY.

B. FURNISH TWO (2) COPIES OF WRITTEN DESCRIPTIONS OF ALL SYSTEMS COVERING ALL MANUAL AND AUTOMATIC OPERATING PROCEDURES.

6. SHOP DRAWINGS AND EQUIPMENT SUBMISSIONS

A. WITHIN SUCH TIME AS DIRECTED, SUBMIT FOR APPROVAL SHOP DRAWINGS AND SAMPLES OF EQUIPMENT PROPOSED FOR USE. INTENTION OF USING SPECIFIED MATERIALS DOES NOT RELIEVE OBLIGATIONS OF SUBMITTING SHOP DRAWINGS.

B. SHOP DRAWINGS SHALL CERTIFY WORK TO BE INSTALLED AS COORDINATED WITH WORK OF ALL OTHER TRADES WITHIN SPACES ALLOCATED. CONTRACTOR SHALL PLAN WORK SO THAT SUFFICIENT TIME IS ALLOWED FOR THIS COORDINATION PRIOR TO SUBMISSION OF SHOP DRAWINGS.

C. IF MATERIALS OR EQUIPMENT IS INSTALLED BEFORE IT IS APPROVED FOR FULLY COORDINATED, THE CONTRACTOR SHALL BE LIABLE FOR ITS REMOVAL AND REPLACEMENT AT NO CHARGE IF, IN OPINION OF THE OWNER OR ENGINEER, MATERIAL OR EQUIPMENT DOES NOT MEET INTENT OF DRAWINGS AND SPECIFICATIONS.

D. CONTRACTOR SHALL PREPARE SHOP DRAWINGS AND SUBMIT TO GENERAL CONTRACTOR ALL REQUIRED OPENINGS IN STRUCTURAL WALLS AND/OR FLOORS.

E. PRIOR TO SHIPMENT OF EQUIPMENT OR START OF INSTALLATION OF SYSTEM COMPONENTS, SUBMIT ONE (1) ELECTRONIC PDF FILED COPY OF SHOP DRAWINGS OF THE FOLLOWING FOR APPROVAL:

- 1) PANELBOARDS
- 2) RISER DIAGRAMS.
- 3) WIRING DEVICES
- 4) LIGHTING FIXTURES AND LAMPS (SUBMIT WITH NEW YORK CITY APPROVAL CALENDAR NUMBER).
- 5) PULLBOXES, OUTLET BOXES.
- 6) CONDUIT AND FITTINGS.

7) WIRE AND CABLE TYPE.

8) DISCONNECT SWITCHES AND FUSES.

8. RECORD DRAWINGS

A. REPRODUCIBLE RECORD DRAWINGS SHALL BE SUPPLIED UPON WHICH CORRECTIONS SHALL BE MADE TO PROVIDE AN ACCURATE AND COMPLETE RECORD OF THE WORK AS INSTALLED.

B. UPON COMPLETION OF THE INSTALLATION, PROVIDE AN ELECTRONIC OR HARD COPY OF "RED-LINE" MARK-UP OF ALL CHANGES TO THE ORIGINAL DESIGN DRAWINGS, AS ACTUALLY INSTALLED, TO THE ENGINEER FOR REVIEW. MAKE NECESSARY CHANGES AND SUBMIT ONE COMPLETE SET OF AS-BUILT RECORD DRAWINGS IN ELECTRONIC FORMAT, AUTOCAD AND PDF, TO THE ENGINEER, ARCHITECT AND OWNER.

9. APPROVALS AND SUBMISSIONS

A. IT IS THE INTENT OF THESE SPECIFICATIONS THAT WHENEVER MANUFACTURERS (R) SPECIFIED AND SUBSTITUTIONS ARE MADE, THEY SHALL CONFORM IN ALL RESPECTS TO THE SPECIFIED ITEM. CRITERIA AS DELINEATED FOR EQUIPMENT SHALL BE INTERPRETED AS MINIMUM PERFORMANCE REQUIREMENTS.

B. BASE ALL BIDS ON THE EQUIPMENT AND MANUFACTURERS LISTED. IF SUBSTITUTION IS PROPOSED, MAKE APPLICATION TO THE ENGINEER AND OWNER IN WRITING STATING THE COST DIFFERENTIAL INVOLVED. CONTRACTOR IS RESPONSIBLE FOR DEMONSTRATION SUBSTITUTED EQUIPMENT'S COMPLIANCE WITH ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS, AS WELL AS ITS ABILITY TO FIT IN THE SPACE DESIGNED AND MEET ALL REQUIRED CLEARANCES.

C. ANY ADDITIONAL COORDINATION TO ENSURE FIT OR ADEQUATE CLEARANCES IS THE RESPONSIBILITY OF THE CONTRACTOR. ADDITIONAL REVIEW TIME OR COORDINATION REQUIRED AS A RESULT OF FAILURE TO ADEQUATELY DEMONSTRATE SUCH COMPLIANCE WILL BE CHARGED BACK TO THE CONTRACTOR.

D. PRIOR TO THE ELECTRICAL CONTRACTOR BEING RELEASED FROM ALL OBLIGATIONS, HE WILL OBTAIN AND TURN OVER TO THE BUILDING MANAGER THE ORIGINAL COPY OF THE CITY OF NEW YORK, DEPARTMENT OF BUILDINGS, BUREAU OF ELECTRICAL CONTROL, "CERTIFICATE OF ELECTRICAL INSPECTION".

10. TEST AND INSPECTION

A. PROPERLY TEST THE PHASE ROTATION OF ALL NEW FEEDERS AND BRANCH CIRCUITS AND MAKE SUCH CHANGES AND ALTERATIONS NECESSARY TO INSURE THE CORRECT ROTATION OF ALL MOTOR DRIVEN EQUIPMENT THROUGHOUT THE NEW INSTALLATION.

B. CONTRACTOR SHALL PERFORM INSULATION RESISTANCE (MEGGER) TESTING ON ALL FEEDER AND SERVICE CONDUCTORS. PROVIDE TESTING AS PER ANSI/NETA ATS-2013 INTERNATIONAL ELECTRICAL TESTING ASSOCIATION STANDARD FOR ACCEPTANCE TESTING SPECIFICATIONS PART 3.3.3. TEST RESULTS SHALL BE VALIDATED AS PER ANSI/NETA ATS-2013 TABLE 100.1. APPLIED POTENTIAL SHALL BE 1000VDC FOR A DURATION OF ONE MINUTE. RECORD ON NETA STANDARD FORMS OR OTHER FORMS APPROVED BY ENGINEER. IDENTIFY SPECIFIC FEEDER TESTS ON EACH FORM INCLUDING EQUIPMENT NAME/REFERENCE AT EACH END OF FEEDER. TEST EQUIPMENT MUST MEASURE VALUES ACCURATELY UP TO A MINIMUM OF 100 MEG-OHMS (NOT A PASS-FAIL TEST). RECORD ACTUAL MEG-OHM READINGS BELOW 100 MEG-OHM. SUBMIT COMPLETED TEST FORMS TO ENGINEER FOR REVIEW & APPROVAL.

C. BEFORE ENERGIZING ANY FACTORY FABRICATED EQUIPMENT, INSPECT EACH UNIT IN DETAIL TO ASSURE ALL BOLTS AND CONNECTIONS ARE TIGHT (TORQUE-TIGHTEN WHERE REQUIRED) AND THAT THE COMPONENTS ARE IN PROPER ALIGNMENT AND ARE IN SAFE OPERABLE CONDITION.

D. THE COMPLETE ELECTRICAL SYSTEM SHALL TEST FREE OF GROUNDS AND SHORT CIRCUITS PRIOR TO ENERGIZING.

E. SHOULD ANY PART OF THE SYSTEM FAIL TO MEET THE CONTRACT REQUIREMENTS, ADJUST, REPAIR OR REPLACE ALL DEFECTIVE OR NONOPERATIVE PARTS AND AGAIN CONDUCT THE COMPLETE PERFORMANCE TEST.

11. REMOVEALS AND ALTERATIONS

A. THE CONTRACTOR SHALL VISIT THE PREMISES TO DETERMINE EXISTING CONDITIONS AND COMPARE SAME WITH DRAWINGS AND SPECIFICATIONS AND SATISFY HIMSELF OF ALL CONDITIONS PRIOR TO THE SUBMISSION OF A BID PROPOSAL. NO ALLOWANCE WILL BE MADE FOR FAILURE TO COMPLY WITH THESE REQUIREMENTS AND A BID PROPOSAL SHALL BE CONSIDERED AS EVIDENCE HE HAS DONE SO.

B. ALL REMOVED EQUIPMENT AND MATERIAL SHALL BE REMOVED FROM THE PROJECT SITE, OR TO A LOCATION AS DIRECTED BY THE OWNER.

12. IDENTIFICATION OF EQUIPMENT AND CONTROLS

A. ALL EQUIPMENT SHALL BE STENCILED OR LABELED WITH LAMACOD PLATES SCREWED THEREON WHICH SHALL INDICATE SYSTEMS SERVED.

B. IN COMMERCIAL BUILDINGS, WALL PLATES OF 100V 1/8" AND 20A RECEPTACLES DEDICATED TO SPECIFIC APPLIANCES OR OTHER EQUIPMENT SHALL BE LABELED WITH LAMACOD PLATES WHERE THERE ARE MULTIPLE RECEPTACLES, INCLUDING RECEPTACLES SERVING PANTRIES AND KITCHENS.

13. CODES, PERMITS AND INSPECTIONS

A. ALL WORK SHALL MEET OR EXCEED LATEST REQUIREMENTS OF THE CURRENT LOCAL ELECTRICAL CODES, BUILDING CODES AND FIRE CODES AND ALL OTHER APPLICABLE FEDERAL, STATE, COUNTY, AND MUNICIPAL CODES AND THE REQUIREMENTS OF OTHER AUTHORITIES HAVING JURISDICTION.

B. ANY PORTION OF WORK WHICH IS NOT SUBJECT TO THE APPROVAL OF AUTHORITY HAVING JURISDICTION SHALL BE PROVIDED IN ACCORDANCE WITH NATIONAL FIRE PROTECTION ASSOCIATION REQUIREMENTS.

C. COMPLY WITH APPLICABLE UTILITY COMPANY RULES AND REGULATIONS.

D. COMPLY WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) REQUIREMENTS.

E. SECURE PERMITS AND INSPECTION CERTIFICATES AND TRANSMIT SAME TO THE OWNER AT THE COMPLETION OF THE WORK.

14. GUARANTEE AND SERVICE

A. THE CONTRACTOR SHALL GUARANTEE AND SERVICE THE ENTIRE INSTALLATION FOR A PERIOD OF ONE YEAR FROM THE DATE OF THE FINAL ACCEPTANCE OF THE INSTALLATION BY THE ENGINEER.

B. THE CONTRACTOR SHALL, DURING THE PERIOD OF THE GUARANTEE, REPLACE OR REPAIR AT HIS OWN EXPENSE ANY PIECE OF EQUIPMENT AND/OR MATERIAL WHICH IS FOUND TO BE DEFECTIVE. THE REPLACE/REPAIR OR REPAIR SHALL BE PERFORMED THE SAME DAY OF THE NOTIFICATION IN AN EMERGENCY CASE WHEN NOTIFIED BY THE OWNER OR AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL ALSO REPAIR ALL DAMAGE TO SURROUNDING WORK CAUSED BY THE FAILURE, REPAIR OR REPLACEMENT OF DEFECTIVE EQUIPMENT.

C. THE FINAL INSPECTION WILL BE MADE AFTER THE CONTRACTOR HAS INSTALLED AND ADJUSTED HIS EQUIPMENT, DEMONSTRATED THAT IT FULFILLS THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS, AND HAS FURNISHED ALL THE REQUIRED CERTIFICATES OF INSPECTION AND APPROVALS.

15. HVAC CONTROLS

A. THE ELECTRICAL CONTRACTOR SHALL RECEIVE, SET AND MOUNT ALL POWER, TEMPERATURE AND SAFETY CONTROLS INCLUDING ALL CONTROLS, RELAYS, DAMPERS, ETC., WHICH SHALL BE FURNISHED AS DEFINED IN THE SPECIFICATIONS AND DRAWINGS OF MECHANICAL AND OTHER TRADES. IT SHALL BE THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXTENT OF NECESSARY WIRING BY REVIEW OF THE PLANS AND SPECIFICATIONS OF MECHANICAL AND ALL OTHER TRADES AND THE DEFINITIONS THEREIN.

B. POINT-TO-POINT WIRING DIAGRAMS FOR ALL FIELD INSTALLED WIRING OF OTHER TRADES INCLUDING CONTROL WIRING SHALL BE FURNISHED BY THE RESPECTIVE TRADE CONTRACTOR DURING THE CONSTRUCTION PHASE FOR INSTALLATION UNDER THIS DIVISION OF THE WORK.

C. ALL STARTERS, TEMPERATURE CONTROLLERS, SUPERVISORY DEVICES, ALARMS AND OTHER CONTROL EQUIPMENT SHALL BE FURNISHED BY THE RESPECTIVE TRADE CONTRACTOR FOR INSTALLATION UNDER THIS DIVISION OF THE WORK.

D. WHEN STARTERS ARE NOT INSTALLED IN SIGHT OF MOTORS THEY CONTROL AND WHEREVER ELSE REQUIRED, A LOCAL DISCONNECT SWITCH OF THE SIZE AND TYPE REQUIRED TO PRECISELY AND SAFELY DISCONNECT THE LOAD SHALL BE PROVIDED.

16. GENERAL REQUIREMENTS

A. EXECUTE THE WORK IN THE BEST MANNER TO ASSURE EASE OF OPERATION AND MAINTENANCE, AS WELL AS SATISFACTORY PERFORMANCE. GUARANTEE THAT THE MATERIALS AND WORKMANSHIP PROVIDED UNDER THIS SECTION WILL BE OF THE BEST GRADE, THAT THE VARIOUS SYSTEMS WILL BE COMPLETELY READY TO OPERATE WHEN TURNED OVER TO THE OWNER, AND THAT THEY WILL INCLUDE ALL NECESSARY MATERIALS REQUIRED TO MAKE THEM SO, ALTHOUGH NOT SPECIFICALLY INDICATED OR MENTIONED HEREIN. THE ARCHITECT AND CONSULTING ENGINEER WILL INTERPRET THE MEANING OF THE CONTRACT DOCUMENTS AND SHALL HAVE THE POWER TO RECTIFY ANY WORK OR MATERIALS WHICH, IN THEIR JUDGMENT, DO NOT MEET THE CONTRACT REQUIREMENTS.

B. ALL MATERIALS, EQUIPMENT AND APPARATUS SHALL BE NEW AND UNDERWRITERS LABELED FOR ALL ITEMS WHERE SUCH LABELS ARE AVAILABLE. ITEMS WHICH ARE NOT UNDERWRITERS LABELED WILL NOT BE ACCEPTABLE IF LABELED EQUIPMENT CAN BE OBTAINED FROM ANOTHER ACCEPTABLE MANUFACTURER.

C. CLEANING

(WHEN DIRECTED BY GENERAL CONTRACTOR, REMOVE FROM ENTIRE INSTALLATION OF WORK OF THIS SECTION ALL PROTECTING MATERIALS, DIRT, DUST, SMOGERS, STAINS, PAINT SPOTS, AND THE LIKE, AND LEAVE A CLEAN CONDITION, CLEAN AND REMOVE ALL SAUAGES, FINGERPRINTS, ETC., FROM LIGHTING FIXTURES AFTER INSTALLATION.

D. CUTTING AND PATCHING

- 1) IN GENERAL, CUTTING AND PATCHING WILL BE DONE UNDER OTHER SECTIONS OF THE WORK EXCEPT FOR THE ELECTRICAL CONDUIT DISTRIBUTION SYSTEM, WHICH SHALL BE DONE UNDER THIS SECTION.
- 2) THE ELECTRICAL CONTRACTOR SHALL FURNISH TO THE GENERAL CONTRACTOR THE NECESSARY INFORMATION SO THAT NECESSARY OPENINGS CAN BE PROVIDED.

18. WIRE & CABLES

A. WIRE SHALL BE 600-VOLT RATED, COPPER CONDUCTORS, #12 MINIMUM UNLESS OTHERWISE NOTED, WITH TYPE THWN-2 INSULATION. FIXTURE WIRING SHALL BE TYPE SF-1. ALL WIRE #8 AND SMALLER SHALL BE SOLID, WIRE #8 AND LARGER SHALL BE STRANDED. CONTROL CONDUCTORS SHALL NOT BE LESS THAN #14 AWG. WIRE SHALL BE

3) NO CUTTING OR DRILLING OF THE EXISTING STRUCTURE SHALL BE DONE WITHOUT THE WRITTEN APPROVAL OF THE GENERAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL SUBMIT FOR APPROVAL ALL LOCATIONS OF PROPOSED PENETRATIONS THROUGH THE EXISTING STRUCTURE FOR WORK BEING DONE.

E. LIMITING NOISE PRODUCED BY ELECTRICAL INSTALLATIONS

ALL WORK SHALL OPERATE UNDER ALL CONDITIONS OF LOAD WITHOUT ANY SOUND OR VIBRATION WHICH IS DETECTABLE, IN OPINION OF THE ARCHITECT AND OWNER. SOUND OR VIBRATION CONDITIONS CONSIDERED OBJECTABLE SHALL BE CORRECTED IN APPROVED MANNER BY CONTRACTOR AT HIS EXPENSE.

F. IDENTIFICATION

- 1) IDENTIFICATION FOR SWITCHBOARDS AND PANELBOARDS SHALL BE BY MEANS OF ENGRAVED LAMACOD NAMEPLATES SHOWING 14" HIGH WHITE LETTERING ON A BLACK BACKGROUND FASTENED TO THE OUTSIDE FACE OF THE FRONT.
- 2) IDENTIFICATION FOR DISTRIBUTION SWITCHES OR CIRCUIT BREAKERS SHALL BE BY MEANS OF THE FOLLOWING:
 - A) WHERE INDIVIDUALLY ENCLOSED SWITCHBOARDS AND PANELBOARDS SHOWING 14" HIGH WHITE LETTERING ON A BLACK BACKGROUND FASTENED TO THE OUTSIDE FRONT OF THE ENCLOSURE.
 - B) WHERE IN POWER CENTERS AND ENCLOSED SWITCHBOARDS WITHOUT DOORS, SAME AS FOR INDIVIDUALLY ENCLOSED.
 - C) WHERE IN PANELBOARDS WITH DOORS - DIRECTORIES AND MOUNTED BEHIND TRANSPARENT PLASTIC COVERS IN METAL FRAMES FASTENED ON THE INSIDE FACE OF THE DOORS.
- 3) IDENTIFICATION FOR THE WIRES AND CABLES OF SERVICE SHALL BE BY MEANS OF WRAP-AROUND LABELS.
- 4) DEVICE PLATES FOR LOCAL TOGGLE SWITCHES, TOGGLE SWITCH-TYPE MOTOR STARTERS, PILOT LIGHTS, AND THE LIKE, WHOSE FUNCTION IS NOT READILY APPARENT, SHALL BE ENGRAVED WITH 1/8" HIGH LETTERS SUITABLE TO DESCRIBE THE EQUIPMENT CONTROLLED OR INDICATED.

G. ENTRANCE SEALS

WHERE A CONDUIT ENTERS BUILDING THROUGH THE CONCRETE FOUNDATION WALL OR FLOOR BELOW GROUND, WALLS AND WATER/TIGHT ENTRANCE SEAL SHALL BE USED. THESE SEALS SHALL BE O.2 TYPE "FK" OR "YK" OR AS ACCEPTED.

H. SLEEVES

- 1) SLEEVES IN FLOOR SLABS FOR CONDUIT SHALL BE MADE OF GALVANIZED SHEET STEEL, SECURELY FASTENED IN POSITION. SLEEVES SHALL BE SET WITH THEIR TOP END SET AT LEAST TWO INCHES ABOVE FINISHED FLOOR, EXCEPT MACHINE ROOMS WHERE THEY SHALL BE SET WITH TOPS INCHES ABOVE FINISHED FLOOR. IN ADDITION, WHERE SLEEVES PERCEE SLABS OR WALLS SEPARATING MACHINE ROOM AREAS FROM OFFICE AREAS OR OTHER QUIET AREAS, SLEEVES SHALL BE PACKED WITH REMOVABLE COVERS TO PROVIDE FIRE BARRIER, BOTH USED AND UNUSED SLEEVES SHALL BE PACKED.
- 2) SLEEVES PASSING THROUGH EXTERIOR WALLS OR WATER-PROOFED FLOORS SHALL BE MADE OF GALVANIZED PIPE AND AFTER INSTALLATION OF CONDUIT SHALL BE WATER-PROOFED WITH "SEA-TIGHT" WHITE CAULK AND SEALED WITH APPROVED MASTIC ON FACE EXPOSED TO INTERIOR.

I. CABLE SUPPORT AND BOXES

CABLE SUPPORT BOXES SHALL BE INSTALLED IN THE RISER SHAFTS AT THE LEVELS INDICATED AND WHERE REQUIRED, THESE BOXES SHALL BE CONSTRUCTED OF CODE GAUGE STEEL, WITH REMOVABLE COVERS SECURED BY MACHINE SCREWS AND SHALL BE STIFFENED WITH HEAVY ANGLE IRON. PROVIDE ISOLATION BARRIERS FOR DIFFERENT SERVICE ORIGINS.

J. INSERTS, ANCHORS, ETC.

FURNISH TO THE PROPER TRADE ALL INSERTS, ANCHORS OR OTHER REQUIRED ITEMS WHICH ARE TO BE BUILT IN BY THEM FOR SECURING ALL HANGERS OR OTHER SUPPORTS FOR CONDUIT AND FOR ANCHORAGE OF ELECTRICAL APPARATUS AND EQUIPMENT. SUPERVISE THE PLACING OF THESE ANCHORS, INSERTS, ETC.

K. INSTALLATION OF EQUIPMENT NOT PURCHASED

- 1) COORDINATE DELIVERY, RECEIVE AND INSPECT ITEMS, REPORT ALL DEFECTS, SET MOUNT AND CONNECT UP COMPLETE FOR OPERATION. INCLUDE ADAPTERS, FITTINGS, TOOLS, LABOR AND EQUIPMENT REQUIRED FOR FULL OPERATION.
- 2) MAKE CLAIMS TO OWNERS WRITING OF DEFECTS, LACK OF PERFORMANCE AND ANY DEVIATIONS FROM EQUIPMENT DESCRIPTION PRIOR TO ACCEPTING EQUIPMENT FOR INSTALLATION.
- 3) COORDINATION OF DELIVERY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NOTIFY ARCHITECT IF THERE ARE ANY DEVIATIONS FROM THE ANTICIPATED DELIVERY DATES.
- 4) RECEIVE, STORE, HANDLE, PROTECT, RIG SAFELY AND INSTALL ALL EQUIPMENT AS REQUIRED IN ACCORDANCE WITH THE PROJECT SPECIFICATION AND DELIVERY SCHEDULE.

L. IDENTIFICATION

- 1) THE ELECTRICAL CONTRACTOR SHALL AGREE TO IDENTIFY AND SAVE HARMLESS THE PARTY CONTRACTING FOR HIS SERVICES AGAINST LOSS OR EXPENSE BY REASON OF THE LIABILITY IMPOSED BY LAW UPON SUCH PARTY FOR DAMAGES BECAUSE OF A FAILURE TO IDENTIFY AT ANY TIME THE RESULTS THEREOF. ACCIDENTALLY SUSTAINED BY OR PERSONS OR ON ACCOUNT OF DAMAGE TO PROPERTY ARISING OUT OF OR IN CONSEQUENCE OF THE PERFORMANCE OF THIS CONTRACT, WHETHER SUCH DAMAGES TO PERSONS OR DAMAGE TO PROPERTY ARE DUE OR CLAIMED TO BE DUE TO ANY NEGLIGENCE OF THE ELECTRICAL CONTRACTOR, THE PARTY CONTRACTING FOR HIS SERVICES, HIS OR THEIR EMPLOYEES OR AGENTS, OR ANY OTHER PERSONS.
- 2) THE ELECTRICAL CONTRACTOR SHALL CARRY ALL THE INSURANCE NECESSARY TO SUPPORT THE ABOVE AGREEMENT AND SHALL SUBMIT COPIES OF THE INSURANCE CERTIFICATES ATTESTING TO THE FACT THAT HE IS PROPERLY COVERED.
- 3) THE ELECTRICAL CONTRACTOR SHALL OBTAIN ALL NECESSARY ALLOWANCES, PAY ANY ROYALTIES, ETC., IN CONNECTION WITH THE USE OF ANY PATENTED DEVICES OR SYSTEMS, AND SHALL RELEASE THE PARTY CONTRACTING FOR HIS SERVICES HARMLESS FROM ANY CLAIM OR LAWSUITS ARISING FROM SUCH USE.

17. RACEWAYS

A. ALL WIRING SHALL BE INSTALLED IN CONDUIT SYSTEMS IN ACCORDANCE WITH THE APPLICABLE ELECTRICAL CODES AND THE FOLLOWING:

- 1) INTERIOR FEEDERS AND BRANCH CIRCUIT WIRING SHALL BE INSTALLED IN EMT CONDUIT WITH SET-SCREW FITTINGS EXCEPT THAT FRAM-TIGHT COMPRESSION FITTINGS MUST BE USED WHERE THEY ARE INSTALLED BELOW DESIGN FLOOD ELEVATIONS WHERE PERMITTED BY CODE. UNLESS OTHERWISE NOTED, MINIMUM SIZE CONDUIT SHALL BE 3/4 INCH TRADE SIZE, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- 2) FLEXIBLE METALLIC CONDUIT AND METAL CLAD CABLE MAY BE INSTALLED WHERE PERMITTED BY CODE FOR BRANCH CIRCUIT WIRING CONCEALED IN CEILING AND WALLS AND SHALL BE INSTALLED IN STRICT ACCORDANCE WITH BUILDING MANAGEMENT STANDARDS.
- 3) TYPE-MC METAL CLAD MAY BE USED FOR LIGHTING AND RECEPTACLE BRANCH CIRCUIT WIRING IN ACCORDANCE WITH THE APPLICABLE ELECTRICAL CODES. USE SHALL BE LIMITED TO CONCEALED/DRY LOCATIONS WITH CABLES SATISFYL SECURED AND SUPPORTED AT INTERVALS NOT EXCEEDING 14-1/2 FEET. CABLE SHALL BE INSTALLED IN SUCH A MANNER AS TO PRECLUDE RESTING UPON FINISHED WORKING SURFACES OR IMPAIR REMOVAL OF ANY ACCESSIBLE CEILING TILE. CABLE SHALL BE CONTINUOUS FROM OUTLET TO OUTLET, WITH ALL CONNECTION FITTINGS FOR THE LOCAL/40-TYPE WIRING FROM THE FIRST OUTLET PORTING FROM THE BRANCH CIRCUIT (HOMERUN) SHALL BE INSTALLED TO THE PANELBOARD IN RIGID IMC OR EMT CONDUIT OF 1/2 INCH MINIMUM SIZE. TYPE MC METAL CLAD CABLE SHALL NOT BE USED FOR HOMERUN CONNECTIONS TO LIGHT FIXTURE SUPPLY LEADS, EMBEDDED IN SLABS, MASONRY CONSTRUCTION OR PERIPHERAL ENCLOSURES.
- 4) FLEXIBLE METALLIC CONDUIT SHALL BE USED FOR FINAL CONNECTIONS FROM OUTLET BOXES TO RECESSED LIGHTING FIXTURES. LENGTH OF FIXTURE LEAD SHALL NOT BE LESS THAN 4 FEET AND NOT MORE THAN 6 FEET FROM OUTLET BOX TO FIXTURE.
- 5) TYPE-RMC RIGID METALLIC CONDUIT AND TYPE-IMC INTERMEDIATE METAL CONDUIT SHALL BE USED WHERE REQUIRED BY CODE AND AUTHORITIES HAVING JURISDICTION, AND FOR ALL FACEWAY OUTDOORS IN WET AND DAMP LOCATIONS AND WHERE WALLS ARE FREQUENTLY WASHED, UNLESS OTHERWISE NOTED.
- 6) CONDUIT RUN IN FINISHED AREAS SHALL BE RUN CONCEALED AND HUNG IN PURRED CELLINGS, METAL AND DRYWALL PARTITIONS, BARJOIST CONSTRUCTION AND MASONRY.
- 7) CONDUIT RUNS EXPOSED IN FINISHED AND UNFINISHED AREAS SHALL BE RUN PARALLEL TO WALLS AND CEILINGS.
- 8) PROVIDE CONDUIT EXPANSION FITTINGS, O.2 TYPE "FK" OR "AK" TOGETHER WITH AN O.2 TYPE "EX" OR "AX" BONDING JUMPER WHERE REQUIRED.
- 9) WIRE MOLDING AND EXPOSED CONDUIT IS NOT PERMITTED IN FINISHED AREAS.
- 10) FITTINGS, FITTINGS AND COUPLINGS: FITTINGS FOR TYPE-RMC, TYPE-IMC AND ALL OTHER THEATDED CONDUIT SHALL BE FIELD-TIGHT FITTINGS, WHERE THEATDED FITTINGS ARE OFF. CONDUIT ENDS SHALL BE FIELD-TIGHT, REAMED AND BURRS REMOVED, AND THREADS COATED WITH CONDUCTIVE CORROSION-PREVENTING COMPOUND PRIOR TO ASSEMBLY. FITTINGS FOR STEEL CONDUIT SHALL BE HOT DIPPED GALVANIZED OR GALVANNEAL IRON. FITTINGS FOR ALUMINUM CONDUIT SHALL BE OF ALUMINUM CONTAINING NOT MORE THAN 0.4 PERCENT COPPER. COMPRESSION FITTINGS FOR ELECTRIC METALLIC TUBING SHALL BE STEEL OR ALUMINUM. FITTINGS FOR LIQUID TIGHT FLEXIBLE CONDUIT SHALL BE STEEL, JOINT TIGHT WITH NYLON INSULATED THROATS. THOMAS & BETTS SERIES 5122 AND 5123, OR APPROVED EQUAL, FITTINGS FOR FLEXIBLE STEEL CONDUIT SHALL BE STEEL WITH NYLON INSULATED THROATS. THOMAS & BETTS SERIES 3310, OR APPROVED EQUAL, BUSHINGS FOR CONDUITS ONE INCH AND LARGER SHALL BE OF THE INSULATOR TYPE. O.2 TYPE "FK" OR APPROVED EQUAL GROUNDING BUSHINGS SHALL BE O.2 TYPE "BLG" OR APPROVED EQUAL. CONDUIT TERMINATIONS SHALL HAVE DOUBLE LOCKNUTS, EXCEPT CONDUIT FOR TELEPHONE, SIGNAL, AND OTHER LOW-TENSION SERVICES.
- 11) CONDUIT HANGERS SHALL BE GALVANIZED STEEL WITH ACCESSORIES DESIGNED TO HAVE ADEQUATE STRENGTH TO SUPPORT THE LOAD, GROUNDING OR HANGING OR APPROVED EQUAL. HANGERS TO BE SUPPORTED USING MINIMUM 3/8" RODS, PROVIDE ADDITIONAL FRAMING AS REQUIRED.
- 12) MANUFACTURERS: STEEL CONDUIT (RIGID, FLEXIBLE & EMT); TRIMBLE, PWC INC., WHEATLAND TUBE CO., APPLIED TUBE, KASBER, ALUMINUM CONDUIT: ALCOA, KASBER, CONDUIT FITTINGS: APPLETON, GEORNEY, O.2 ELECTRIC, THOMAS & BETTS, RACO.

19. WIRE & CABLES

A. WIRE SHALL BE 600-VOLT RATED, COPPER CONDUCTORS, #12 MINIMUM UNLESS OTHERWISE NOTED, WITH TYPE THWN-2 INSULATION. FIXTURE WIRING SHALL BE TYPE SF-1. ALL WIRE #8 AND SMALLER SHALL BE SOLID, WIRE #8 AND LARGER SHALL BE STRANDED. CONTROL CONDUCTORS SHALL NOT BE LESS THAN #14 AWG. WIRE SHALL BE

FACTORY COLOR CODED. BRANCH CIRCUITS SHALL CONTAIN THE NECESSARY NUMBER OF WIRES TO PROVIDE SWITCH CONTROL, INDICATED ON DRAWINGS. WHERE ALUMINUM WIRE IS SPECIFIED, WIRE SHALL BE 800-VOLT RATED, #12 MINIMUM UNLESS OTHERWISE NOTED, WITH TYPE THWN-2 OR XHHW-2 INSULATION.

B. CONNECTIONS FOR CONDUCTORS #8 AND SMALLER SHALL BE PRESSURE TYPE CONNECTORS. SET SCREW CONNECTORS SHALL NOT BE USED. CONNECTORS SHALL BE MANUFACTURED BY THOMAS & BETTS SERVICES PT-1 IDEAL, SCOTCH-LOCK, BUCHANAN OR EQUAL.

C. CABLES SHALL BE IDENTIFIED IN ALL PULL BOXES, WIREWAYS AND WIRING GUTTERS OR PANELS. TAGS SHALL IDENTIFY WIRE OR FEEDER NUMBER AND/OR EQUIPMENT SERVED AS SHOWN ON DRAWINGS OR HEREIN SPECIFIED. TAG AND IDENTIFY ALL BRANCH CIRCUITS WHICH ARE LOOPED AND TERMINATED IN JUNCTION OR OUTLET BOXES. TAGS SHALL BE OF FLAME-RESISTING ADHESIVE MATERIAL, BRAY 5-600 VNI CLTH OR APPROVED EQUAL.

D. MANUFACTURERS: AMERICAN INSULATED WIRE CORP., ESSEX GROUP, INC., TRANGLE PWS, CAROL CABLE CO., SOUTHWIRE CO., OR APPROVED EQUAL.

19. WIRE CONNECTIONS AND DEVICES

A. COPPER CABLE BRANCH TAPS FROM COPPER CABLE MAIN LINES UNDER 800 VOLT SHALL BE MADE IN JUNCTION BOXES, PANELBOARDS OR PULLBOXES, WITH APPROVED CAST COPPER ALLOY SOLDERLESS CONNECTORS IN A HIMPACT PHENOLIC INSULATING COVER HAVING AT LEAST TWO SPRING CLIP FASTENERS. CONNECTORS SHALL BE O.2 TYPE "FK" PARALLEL TAP WITH "TTC" COVER, TYPE "TFC" PARALLEL LOOPED TAP WITH "TMC" COVER AND TYPE "T" CABLE TAP WITH TYPE "TC" COVER.

B. SPLICES (800 VOLTS AND BELOW) OF COPPER CONDUCTORS SHALL BE MADE IN JUNCTION OR PULL BOXES WITH AN APPROVED O.2 TYPE "TFC" OR "YK" CAST COPPER ALLOY SOLDERLESS CONNECTOR IN A HIMPACT PHENOLIC INSULATING COVER TYPE "TTC" COVER.

C. CONNECTORS AND LUGS SHALL BE AS MANUFACTURED BY BURNDY, THOMAS & BETTS, O.Z. GEORNEY, OR AS APPROVED.

20. OUTLET BOXES

A. OUTLET BOXES SHALL BE CODE GAUGE HOT DIPPED GALVANIZED STAMPED STEEL. BOXES SHALL BE 4 SQUARE, DEPTH AS REQUIRED. EXTENSION COLLARS SHALL BE USED WHERE REQUIRED TO MEET CONSTRUCTION REQUIREMENTS.

B. BOXES SHALL BE MANUFACTURED BY APPLETON RACO, STEEL CITY, OR APPROVED EQUAL.

21. INSULATION BUSHINGS

ALL RIGID CONDUIT TERMINATING IN CABINETS, PANELBOARDS, PULL BOXES, ETC., SHALL HAVE INSULATING BUSHINGS O.2 TYPE B OR TYPE BLO FOR GROUNDING BUSHINGS OR AS MANUFACTURED BY THOMAS & BETTS OR APPROVED EQUAL.

22. TAPS, SPLICES, TERMINATIONS

A. CONNECTORS FOR SPLICES, TAPS, AND TERMINATIONS SHALL BE OF THE COMPRESSION TYPE AND SHALL BE THOMAS & BETTS SERIES 54000 OR EQUAL FOR COPPER CONDUCTORS #8 AND LARGER. CONNECTORS FOR COPPER CONDUCTORS #10 AND SMALLER SHALL BE MADE WITH APPROVED PRESSURE CONNECTORS. ALL JOINTS SHALL BE COVERED WITH INSULATION EQUAL TO THAT OF THE CONDUCTORS. LUGS FOR CONNECTORS #8 AND LARGER SHALL BE OF THE TWSBOLT TYPE. THE MANUFACTURERS RECOMMENDED HEXAGONAL DIES AND HYPONALUT SHALL BE USED. PRESSURE CONNECTORS SHALL BE THOMAS & BETTS SERIES PT-1, IDEAL, T18 SERIES, SCOTCH-LOCK, BUCHANAN OR APPROVED EQUAL.

B. UNLESS OTHERWISE SPECIFIED, ALL COVERS, TRIMS AND DOORS ON SUCH BOXES AND ALL EXPOSED BOXES, INCLUDING DOORS AND TRIMS, SHALL BE BONDERIZED OR TREATED IN SOME EQUIVALENT MANNER TO RESIST RUSTING AND SHALL BE PAINTED WITH TWO COATS OF PROTECTIVE PRIMER PAINT PINK IN COLOR. ALL FINISH PAINTING WILL BE DONE AS SPECIFIED UNDER ARCHITECTURAL SECTIONS OF THE SPECIFICATION. ALL IRONS RECEIVING ALUMINUM CONDUIT SHALL BE GALVANIZED.

C. JUNCTION BOXES SHALL BE FURNISHED AND INSTALLED WHERE INDICATED ON PLANS, AND WHEREVER ELSE SUCH A BOX MAY BE DEEMED NECESSARY. PROVIDING LOCATION IS ACCEPTED BY THE ARCHITECT, TO FACILITATE THE PULLING OF WIRES AND CABLES. ALL SUCH BOXES MUST BE MADE ACCESSIBLE AND BUILT OF HEAVY GAUGE STEEL UNLESS OTHERWISE SPECIFIED, AND SHALL BE BUILT ONLY FROM DETAIL WORKING DRAWINGS. THE COVERS OF BOXES SHALL BE LOCKED FOR QUICK REMOVAL, WHEN THE SYSTEM IS FINISHED. THE BOXES SHALL CONTAIN NO OPENINGS, EXCEPT THAT INTO WHICH THE CONDUIT PASSED. JUNCTION BOXES SHALL NOT BE EXPOSED IN FINISHED SPACES AND SHALL MEET THE APPROVAL OF THE OWNER. JUNCTION BOXES INSTALLED IN FINISHED AREAS SHALL HAVE REMOVABLE COVER PLATES FLUSH WITH FINISHED CEILING OR SHALL BE LOCATED IN HANGING CEILING BEHIND READY IDENTIFIABLE ACCESS DOORS. ALL CABLES WITHIN PULLBOXES SHALL BE PROPERLY TIED FOR IDENTIFICATION. IDENTIFIABLE ACCESS DOORS, ALL CABLES WITHIN PULLBOXES SHALL BE PROPERLY SUPPORT FEEDERS PASSING THROUGH THE BOXES SO THAT THE CONDUCTORS WILL NOT REMAIN UNSUPPORTED FOR A DISTANCE GREATER THAN THREE FEET AS REQUIRED BY CODE.

D. SUPPORT JUNCTION BOXES INDEPENDENTLY TO BUILDING STRUCTURE WITH NO WEIGHT BEARING ON CONDUITS.

24. WIRING DEVICES

A. SWITCHES

LOCAL LIGHTING SWITCHES: 20 AMPERE, 120/277 VOLT, RATED SINGLE POLE OR 3-WAY AS INDICATED, OR EQUAL, FINISH COLOR AS SPECIFIED BY THE ARCHITECT. SWITCHES SHALL BE AS FOLLOWS, UNLESS OTHERWISE INDICATED:

- 1) 20 AMPERES, SINGLE POLE: 120/277 VOLTS, LEVITON "DECOR" NO. 9621-W.

2) COLOR

- D) SWITCHES: WHITE OR AS DIRECTED BY ARCHITECT.
- E) PILOT LIGHT: RED.
- F) ILLUMINATED SWITCHES: AS DIRECTED BY ARCHITECT.

B. RECEPTACLES

HEAVY DUTY, GROUNDING TYPE, BACK AND SIDE WIRE, FULLY ENCLOSED IN COMPOSITION CASE.

RECEPTACLES SHALL BE AS FOLLOWS UNLESS OTHERWISE INDICATED:

- 1)
- 2) 20 AMPERES, DUPLEX, NEMA 5-20R: LEVITON "DECOR" NO. 16362-W.
- 3) 20 AMPERES, SINGLE, NEMA 5-20R: LEVITON "DECOR" NO. 16351.
- 4) 20 AMPERES, DUPLEX GFCI, NEMA 5-20R: LEVITON "DECOR" NO. 8988-AG.
- 5) 15 AMPERES, ISOLATED GROUND, DUPLEX, NEMA 5-15R: LEVITON "DECOR" NO. 16262-1GG.
- 6) COLORS: WHITE AND GRAY AS INDICATED AND REQUIRED FOR DEDICATED OUTLETS OR AS DIRECTED BY ARCHITECT.

D. PLATES FOR FLUSH MOUNTED DEVICES SHALL BE LEVITON "DECOR" NO. 80401-N TYPE, OR AS SPECIFIED BY THE ARCHITECT. BOXES WITHOUT DEVICES SHALL HAVE BEAN PLATES. MULTIPLE DEVICES LOCATED AT ONE POINT SHALL BE UNDER A COMMON COVER, UNLESS OTHERWISE NOTED. SUBMIT SAMPLES OF ALL PLATE TYPES TO THE ARCHITECT FOR APPROVAL, PRIOR TO INSTALLATION.

25. SAFETY SWITCHES AND FUSES

A. SWITCHES SHALL BE VOLTAGE RATED TO SUIT CHARACTERISTICS OF THE SYSTEM FROM WHICH THEY ARE SUPPLIED.

B. SWITCHES SHALL BE HEAVY-DUTY, METAL ENCLOSED, EXTERNALLY OPERATED SAFETY SWITCHES, FUSED OR UNFUSED, OF SUCH TYPE AND SIZE AS REQUIRED TO PROPERLY PROTECT OR DISCONNECT THE LOAD FOR WHICH THEY ARE INTENDED. PROVIDE REJECTION TYPE FUSE CLIPS WHERE REJECTION TYPE FUSES ARE INSTALLED.

C. SAFETY SWITCH ENCLOSURES SHALL BE NEMA 1, FACTORY FINISHED, FOR INTERIOR INSTALLATION. NEMA 12 SHALL BE PROVIDED FOR EXTERIOR INSTALLATIONS WHERE INSTALLATION IS SUBJECT TO MOISTURE. WET LOCATIONS SHALL BE NEMA 4.

D. EACH FUSIBLE SWITCH SHALL BE LEFT EQUIPPED WITH A COMPLETE SET OF 1/4 INCH CLASS RK1 DUAL-ELEMENT FUSES FOR INDUCTIVE MOTOR LOADS AND 1/4 INCH CLASS RK1 FOR RESISTIVE LOADS, UNLESS OTHERWISE INDICATED. FUSES SHALL BE FUSIBLE, RATED AS INDICATED, MANUFACTURED BY BUSSMANN MANUFACTURING COMPANY, FEDERAL-SWAMINT OR EQUAL.

E. OPERATING MECHANISMS SHALL BE DESIGNED SO THAT THE SWITCHES MAY BE LOCKED IN THE ON OR OFF POSITIONS.

- 1) THE SWITCH SHALL HAVE AN INTERLOCK TO PREVENT UNAUTHORIZED OPENING OF THE HINGED COVER WHEN THE SWITCH IS IN THE ON POSITION, AND AN INTERLOCK TO PREVENT CLOSING THE SWITCH MECHANISM WITH THE HINGED COVER OPEN.

F. FUSES SHALL BE INSTALLED SO THAT THE NAMEPLATE IS CLEARLY VISIBLE FROM THE FRONT OF THE EQUIPMENT.

G. UPON COMPLETION OF THE WORK, PROVIDE TO THE OWNER 8 SPARE FUSES OF EACH SIZE AND TYPE INSTALLED IN THE FUSED SWITCHES PROVIDED UNDER THIS CONTRACT.

H. SWITCHES SHALL BE MANUFACTURED BY:

- 1) ABB, LTD.
- 2) EASTON ELECTRICAL INC., CUTLER-HAMMER BUSINESS UNIT.
- 3) GENERAL ELECTRIC COMPANY, GE CONSUMER & INDUSTRIAL - ELECTRICAL DISTRIBUTION.
- 4) GENERAL ELECTRIC COMPANY, GE CONSUMER & INDUSTRIAL - ELECTRICAL DISTRIBUTION.
- 5) SQUARE D, A BRAND OF SCHNEIDER ELECTRIC.

I. FUSES SHALL BE MANUFACTURED BY:

- 1) COOPER-BUSSMANN, INC.
- 2) EDISON FUSE, INC.
- 3) HERRON, USA (FERRAZ SHRAMIT, INC.)
- 4) LITTELFUSE, INC.

27. PANELBOARDS

A. ALL PANELBOARDS SHALL BE BOLT-ON CIRCUIT BREAKER TYPE WITH THE EXCEPTION OF LOAD CENTERS USED IN RESIDENTIAL DWELLING UNITS.

B. MAIN BUSWORK SHALL BE HIGH CONDUCTIVITY COPPER AND SHALL, AS A MINIMUM, BE DESIGNED TO CARRY THE FULL RATING OF THE FEEDER BREAKER OR SWITCH SUPPLYING THE PANEL, WITHOUT PERCEPTIBLE HEATING.

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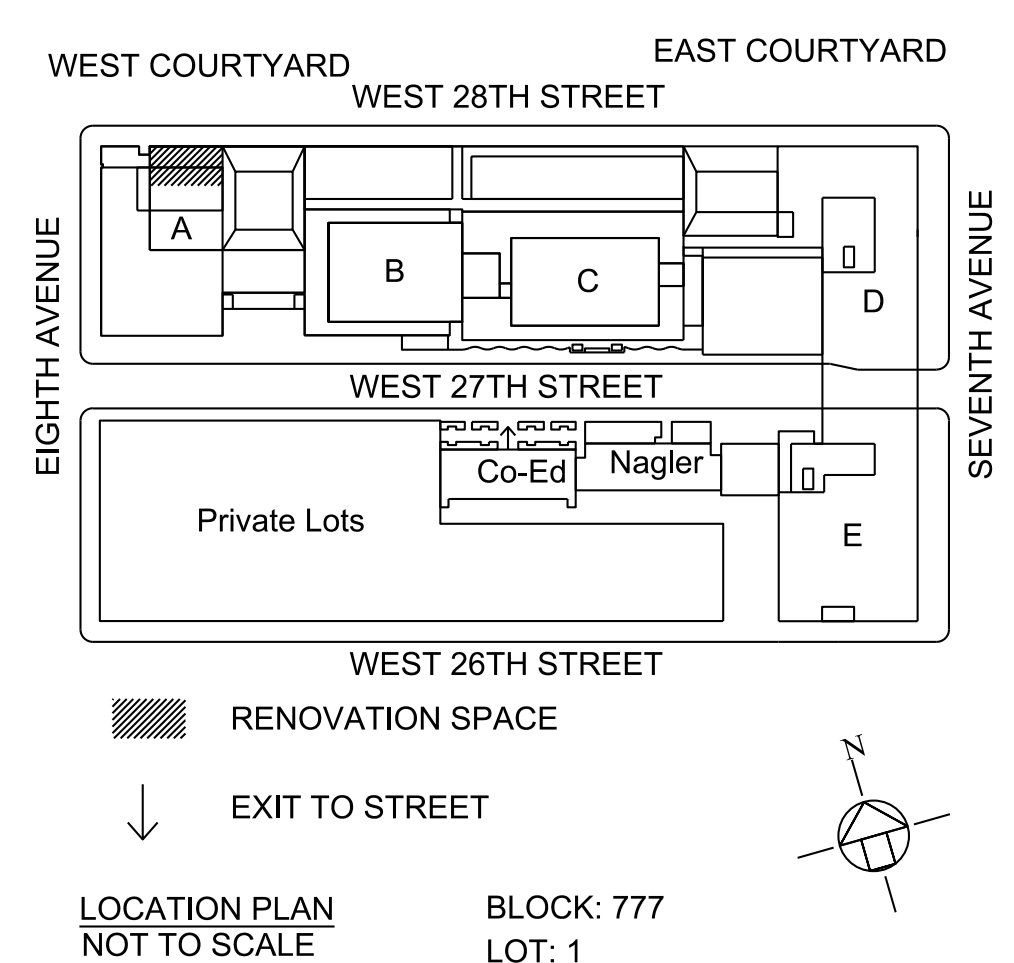
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- PANELS SHALL HAVE A GROUND BUS.
- C. THE PANEL SECTIONS SHALL BE MOUNTED AWAY FROM THE BACK OF THE CABINET TRIM AND FRAMES. GUTTER SPACE SHALL BE PROVIDED ON SIDES, TOP AND BOTTOM AND SHALL BE OF SUFFICIENT SIZE TO PREVENT OVERCROWDING OF WIRES AND CABLES AND OVERHEATING OF THE CIRCUIT.
- PANEL CONSTRUCTION SHALL BE "DOOR WITHIN A DOOR" TYPE TO FACILITATE VIEWING OF PANEL GUTTERS.
 - CABINETS SHALL BE COMPLETE WITH HINGED DOORS WITH CYLINDER LOCK, DIRECTORY FRAME WITH NONCOMBUSTIBLE TRANSPARENT COVER AND NEATLY TYPED DIRECTORY.
 - PROVIDE ANGLE IRON ON THE INSIDE OF THE BOTTOM OF EACH TRIM FOR EASE OF TRIM INSTALLATION.
- D. THE BRANCH CIRCUIT BREAKERS, IN GENERAL, SHALL BE MOLDED CASE, BOLT ON TYPE, THERMAL MAGNETIC TRIP, SINGLE, 2 OR POLE AS NOTED ON THE DRAWINGS.
- ALL MULTIPLE POLE BREAKERS SHALL BE SINGLE HANDLE, COMMON TRIP. DO NOT USE WIRES OR OTHER OBJECTS TO THE MULTIPLE POLE BREAKER HANDLES TOGETHER UNLESS THEY ARE EXPRESSLY DESIGNED AND UL LISTED FOR SUCH USE.
 - CONTRACTOR SHALL PERFORM SHORT-CIRCUIT AND OVER-CURRENT PROTECTIVE STUDY, CONTRACTOR IS RESPONSIBLE TO COORDINATE LEVELS OF OVER-CURRENT PROTECTION AS PER ELECTRICAL CODE REQUIREMENTS AND TO SIZE INTERRUPTING RATINGS OF BOARDS, PANELS AND OVER-CURRENT DEVICES AS PER THE STUDY RESULTS AT NO ADDITIONAL COST TO OWNER.
 - BRANCH CIRCUIT BREAKERS SHALL BE ARRANGED SO THAT EACH BREAKER IS READILY REMOVABLE FROM THE PANEL WITHOUT DISTURBING ADJACENT BREAKERS.
 - PHASE LEGS SHALL BE ALTERNATELY BUSSED TO EACH CIRCUIT BREAKER IN A MANNER TO EFFECT BALANCING THE BRANCH CIRCUIT CONNECTIONS AS NEARLY AS POSSIBLE OVER EACH PHASE. NOTIFY ENGINEER IF CIRCUITS CAN NOT BE BALANCED TO WITHIN 10%.
- E. PANELS AS MANUFACTURED BY ABB POWER (I.E. Eaton, SCHNEIDER ELECTRIC (SQUARE-D), SIEMENS SHALL BE ACCEPTABLE (N.Y. CITY, ATLAS, ELECTROTECH, LINCOLN, OR EQUAL).
- F. PROVIDE SHUNT TRIP CIRCUIT BREAKERS AS REQUIRED FOR ANY KITCHEN EQUIPMENT ELECTRICAL LOADS PROTECTED BY AN ANALYTICAL SYSTEM.
- G. PROVIDE TYPE-GFCI CIRCUIT BREAKERS FOR HVAH OR HEAT TRACE CABLING CIRCUITS AS REQUIRED.
- 28.
29. LIGHTING FIXTURES
- A. FURNISH AND INSTALL LIGHTING FIXTURES, LAMPS AND LIGHTING CONTROLS AS INDICATED ON THE DRAWINGS AND/OR SPECIFIED BY THE ARCHITECT.
- B. CONTRACTOR SHALL REVIEW ARCHITECTURAL AND LIGHTING DESIGNER'S DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTATION FOR GENERAL & DECORATIVE LIGHTING FIXTURE INFORMATION, FIXTURE CUTS, COMPLETE LIGHTING SCHEDULES, LIGHTING CONTROL, INFORMATION AND ADDITIONAL PROJECT LIGHTING REQUIREMENTS.
- C. ALL LIGHTING AND LIGHTING CONTROLS MUST BE IN ACCORDANCE WITH THE REQUIREMENTS OF ENERGY CONSERVATION CODES APPLICABLE TO THE PROJECT.
- D. HALF SHADED FIXTURES OR LETTERS "DM" DENOTE FIXTURES WITH EMERGENCY LIGHTING POWER. SEE LIGHTING PLANS, PANELS SCHEDULES & DETAILS FOR CIRCUITING FROM EMERGENCY POWER. PROVIDE EMERGENCY LIGHTING RELAYS AS REQUIRED.
- E. POWER EQUIPMENT: IF FIXTURES IS NOT SHOWN WITH EMERGENCY POWER CIRCUIT, CONTRACTOR IS TO PROVIDE INTEGRATED BATTERY BACKUP, BALLAST AND TEST SWITCH, FOR EACH.
- F. EMERGENCY POWER CIRCUIT WITH SWITCHED FIXTURES: CONTRACTOR SHALL PROVIDE EMERGENCY LIGHTING RELAYS (ELR) OR AS OTHERWISE INDICATED AND TEST SWITCH, COORDINATE TEST SWITCH LOCATIONS WITH ARCHITECT. CONTRACTOR IS RESPONSIBLE TO PROVIDE EMERGENCY LIGHTING RELAYS TO MEET CODE REQUIREMENTS, REGARDLESS OF WHETHER THEY ARE EXPLICITLY SHOWN IN DRAWINGS OR NOT. ALL LIGHTING CIRCUITS THAT ARE SWITCHED AND PROVIDED WITH EMERGENCY POWER CIRCUIT (I.E. FROM GENERATOR OR BATTERY) SHALL BE PROVIDED WITH EMERGENCY LIGHTING RELAYS, WIRE TO NORMAL CIRCUIT SENSING AND FIRE ALARM SYSTEM AS REQUIRED. LIGHTING SHALL COME TO FULL BRIGHTNESS UPON POWER FAILURE AND WHERE REQUIRED, UPON FIRE ALARM.
- G. ALL LIGHTING FIXTURES SHALL BE LISTED & APPROVED. CONTRACTOR SHALL SUBMIT ALL LIGHTING FIXTURE AND BALLAST PRODUCT DATA AND CUTS TO OWNER FOR REVIEW & APPROVAL. CONTRACTOR SHALL NOT MAKE SUBSTITUTIONS WITHOUT PRIOR PERMISSION OF THE ENGINEER, ARCHITECT AND LIGHTING DESIGNER.
- H. FLUORESCENT LIGHTING REQUIREMENTS:
- BALLASTS: BALLASTS FOR FLUORESCENT LAMPS SHALL BE HIGH POWER FACTOR, CLASS "P" SOUND RATING A, TWO OR THREE LAMP BALLASTS SHALL BE PROVIDED WHERE PRACTICABLE. ALL BALLASTS AND TRANSFORMERS SHALL BE REMOVABLE TO FACILITATE REPAIRS. ALL BALLASTS SHALL BE INDIVIDUALLY EQUIPPED WITH A BUILT IN AUTOMATIC RESISTING THERMAL PROTECTOR. BALLASTS SHALL BE ELECTRONIC TYPE WITH LESS THAN 10% TOTAL HARMONIC DISTORTION. BALLASTS SHALL BE AS MANUFACTURED BY EBT, MANGOTEK, UNIVERSAL, ADVANCE, MOTOROLA.
 - LAMPS: FLUORESCENT LAMPS USED FOR GENERAL LIGHTING MUST HAVE A LUMENS PER WATT (LPW) AND COLOR RENDERING INDEX (CRI) OF NOT LESS THAN 80 AND TO RESPECTIVELY. LAMPS SHALL BE MANUFACTURED BY PHILLIPS, OSRAM, SYLVANIA.
 - CONTRACTOR SHALL PROVIDE DIMMING BALLASTS FOR ALL FLUORESCENT FIXTURES REQUIRING DIMMING TO MEET ENERGY CODE REQUIREMENTS OR ELSEWHERE REQUIRED IN THE CONTRACT DOCUMENTS.
30. LIGHTING CONTROLS
- PROVIDE A COMPLETE AND OPERATIONAL LIGHTING ENERGY CONTROL SYSTEM MEETING THE APPLICABLE ENERGY CODE AND SEQUENCE OF OPERATIONS NARRATIVE AS SPECIFIED HEREIN. CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL ADJUSTMENT, COMMISSIONING AND TESTING OF LIGHTING CONTROL SYSTEMS.
 - PROVIDE ALL COMPONENTS REQUIRED TO MEET THE DESIGN INTENT, SEQUENCES OF OPERATION, AND ENERGY CODE REQUIREMENTS, WHETHER OR NOT THIS EQUIPMENT APPEARS ON THE DESIGN DOCUMENTS. THIS INCLUDES OCCUPANCY SENSORS, VACANCY SENSORS, TIME CLOCKS, DAYLIGHT SENSORS, MOTION SENSORS, PHOTOCELLS, ROOM CONTROLLERS, POWER PACKS, EMERGENCY LIGHTING RELAYS, AND OTHER COMPONENTS TO PROVIDE A FULLY FUNCTIONAL, CODE-COMPLIANT SYSTEM. NOTE THAT ENGINEER MAY SHOW ALL SOME OR NONE OF THESE COMPONENTS ON THE PLANS AT THE ENGINEER'S DISCRETION. CONTRACTOR IS RESPONSIBLE TO PROVIDE THIS EQUIPMENT AND QUANTITIES OF EQUIPMENT FOR A SUCCESSFUL, COMPLETE TEST IN THEIR BASES AND CHANGE ORDERS FOR ADDITIONAL EQUIPMENT AND SERVICES TO THE OWNER WILL NOT BE ACCEPTED.
 - ROOM CONTROLLERS
- A. PROVIDE PRODUCT APPROVED BY ENGINEER BY ONE OF THE FOLLOWING OR APPROVED EQUAL:
- LEVITON MFG. COMPANY INC.
 - CRESTRON ELECTRONICS, INC.
 - DOUGLAS LIGHTING CONTROLS
 - HUBBELL
 - LUTRON ELECTRONICS CO., INC.
 - WATT STOPPER.
- 4) INDOOR OCCUPANCY / VACANCY / DAYLIGHT SENSORS
- A. PROVIDE PRODUCT APPROVED BY ENGINEER BY ONE OF THE FOLLOWING OR APPROVED EQUAL:
- LEVITON MFG. COMPANY INC.
 - DOUGLAS LIGHTING CONTROLS
 - LUTRON ELECTRONICS CO., INC.
 - HUBBELL
 - SENSOR SWITCH, INC.
 - STERNEK
 - WATT STOPPER.
- B. GENERAL REQUIREMENTS FOR SENSORS
- OPERATION: THE RELAY FOR TURNING LIGHTS OFF, ADJUSTABLE OVER A MINIMUM RANGE OF 1 TO 15 MINUTES.
 - COMPLYING WITH UL 773A.
 - AUTOMATIC LIGHT-LEVEL SENSOR: ADJUSTABLE FROM 2 TO 200 FC. TURN LIGHTS OFF WHEN SELECTED LIGHTING LEVEL IS PRESENT.
 - DUAL-TECHNOLOGY TYPE: DETECT OCCUPANTS IN COVERAGE AREA USING PIR AND ULTRASONIC DETECTION METHODS.
 - SENSITIVITY ADJUSTMENT: SEPARATE FOR EACH SENSING TECHNOLOGY AND ADJUSTABLE FROM 100% TO 0% SENSITIVITY.
 - ELECTRONIC TIME SWITCHES: SOLID STATE, PROGRAMMABLE, WITH ALPHANUMERIC DISPLAY; COMPLYING WITH UL 917.
- A. LISTED AND LABELED AND MARKED FOR INTENDED LOCATION AND APPLICATION.
- B. CONTACT RATING: 30-A INDUCTIVE OR RESISTIVE, 20-AV AC, 100A; PROVIDE 277V CONTACT RATING WHERE REQUIRED.
- C. ASTRONOMIC TIME: ALL CHANNELS.
- D. AUTOMATIC DAYLIGHT SAVINGS TIME CHANGEOVER.
- E. BATTERY BACKUP: NOT LESS THAN SEVEN DAYS RESERVE, TO MAINTAIN SCHEDULES AND TIME CLOCK.
- F. PROVIDE PRODUCT INDICATED ON DRAWINGS OR COMPARABLE PRODUCT BY ONE OF THE FOLLOWING:
- COOPER INDUSTRIES, INC.
 - HUBBELL
 - LEVITON MFG. COMPANY INC.
 - NSI INDUSTRIES LLC, TORX PRODUCTS.
 - TYCO ELECTRONICS, A35 BRAND.
- A. PROVIDE BASIS-OF-DISIGN PRODUCT BY LEVITON MFG. COMPANY INC., OR PROVIDE EQUAL PRODUCT APPROVED BY ENGINEER BY ONE OF THE FOLLOWING:
- DOUGLAS LIGHTING CONTROLS
 - LUTRON ELECTRONICS CO., INC.
 - HUBBELL
 - SENSOR SWITCH, INC.
 - STERNEK
 - WATT STOPPER.
- B. GENERAL REQUIREMENTS FOR SENSORS
- SWITCH RATING: NOT LESS THAN 800-VA FLUORESCENT AT 120 V, 1200-VA FLUORESCENT AT 277 V, AND 800-VA INCANDESCENT.
33. INSTALLATION
- A. CONDUIT
- CONDUIT SHALL BE SECURELY FASTENED IN PLACE AT NOT MORE THAN 5-FOOT CENTERS, AND HANGERS, SUPPORTS OR FASTENERS SHALL BE PROVIDED AT EACH ELBOW AT EACH END OF EACH STRAIGHT RUN TERMINATED AT A BOX OR CABINET. WHERE RISER CONDUITS PENETRATE FLOOR SLABS, THEY SHALL REST ON EACH FLOOR WITH APPROVED BEAM CLAMPS, SPECIAL BRACKETS, OR ADJUSTABLE TRAPEZE HANGERS. CONDUIT IN HUNG CEILING SHALL BE ADEQUATELY SUPPORTED BY MEANS OF CLAMPS, PIPE STRAPS OR

- HEAVY IRON TE WIRE TO THE STRUCTURAL MEMBERS SUPPORTING THE CEILING. DO NOT SUPPORT CONDUIT FROM DUCTWORK, PIPING, EQUIPMENT, ETC. ALL CONDUIT SHALL BE RUN CONCEALED UNLESS OTHERWISE INDICATED. OPENINGS AROUND ELECTRICAL PENETRATIONS THROUGH FIRE RESISTANCE RATED WALLS, PARTITIONS, FLOORS OR CEILING SHALL BE FIRE STOPPED USING APPROVED METHODS.
- THE ENTIRE CONDUIT AND WIRING SYSTEMS SHALL BE THOROUGHLY GROUNDED IN AN APPROVED MANNER. GROUND WIRES SHALL BE SUITABLY PROTECTED FROM MECHANICAL INJURY.
 - RUNNING THREADS SHALL NOT BE USED. WHERE CONDUIT WITH TAPERED THREADS CANNOT BE COUPLED WITH STANDARD COUPLINGS, O.Z. SPLIT COUPLINGS OR ERKSON COUPLINGS SHALL BE USED. ALL EXPOSED CONDUIT MUST BE SECURELY FASTENED AND IN PLACE BY MEANS OF APPROVED SUPPORTS AND FASTENINGS. EXPOSED BRANCH CIRCUIT CONDUIT SHALL RUN AT RIGHT ANGLES, USING CONDUIT FITTINGS FOR TAPS AND DIRECTION CHANGES.
 - THE ENDS OF ALL CONDUIT SHALL BE CAREFULLY REAMED BEFORE INSTALLATION. WHERE IT BECOMES NECESSARY TO CUT A LENGTH OF CONDUIT, IT SHALL BE DONE WITH A HACKSAW OR ESPECIALLY APPROVED CUTTER AND CARE SHALL BE TAKEN TO SECURE A SQUARE END ON ALL CONDUIT. PROVIDE NYLON DRAGS IN ALL EMPTY CONDUIT FACEWAYS. CONDUIT TERMINATIONS AT BOXES AND CABINETS SHALL BE RIGIDLY SECURE WITH DOUBLE LOCKNUTS AND BUSHINGS.
 - WHERE CONDUITS TERMINATE IN CABINETS, THEY SHALL BE NEATLY ARRANGED AND ALL ENDS SHALL BE AT THE SAME LEVEL. THE ENDS OF ALL CONDUITS SHALL BE CAREFULLY FLANGED WITH A BUSHNETS SO AS TO AVOID THE ENTRANCE OF FOREIGN MATERIALS OR MOISTURE AND KEPT SO UNTIL WIRES ARE PULLED. THE ENDS OF THE CONDUITS AT MOTORS, MOTOR STARTING BOXES AND SIMILAR APPARATUS AND DEVICES SHALL BE FURNISHED WITH SUITABLE CONDUIT FITTINGS AS REQUIRED IN EACH CASE.
 - CUT BACK TO FLOOR, WALL, OR CEILING AND PLUG BOTH ENDS OF CONCEALED CONDUITS MADE OBSOLETE BY THIS ALTERATION. REMOVE EXPOSED CONDUITS, OUTLET BOXES AND HANGERS MADE OBSOLETE BY ALTERATION, UNLESS DESIGNATED TO REMAIN. ALL UNUSED CONDUIT AND WIRE SHALL BE REMOVED.
- B. WIRING AND BRANCH CIRCUITING
- NO WIRE SHALL BE PULLED IN UNTIL THE CONDUIT SYSTEM IS COMPLETED. ONLY APPROVED PULLING COMPOUND SHALL BE USED. ALL WIRES SHALL BE CONTINUOUS BETWEEN OUTLET AND OUTLET, OR FROM PANELBOARDS TO THE FIRST OUTLET. JOINTS THAT BECOME NECESSARY IN CIRCUIT WORK AT THE OUTLETS SHALL BE MADE WITH APPROVED PRESSURE CONNECTORS. ALL JOINTS SHALL BE COVERED WITH AN INSULATION EQUAL TO THAT ON THE CONDUCTORS.
 - CIRCUIT WIRE SIZES OTHER THAN #12 AWG ARE INDICATED ON PLAN. REFER TO PANEL SCHEDULES FOR BRANCH CIRCUIT BREAKERS OTHER THAN 1 POLE, 20 AMP. ALL CIRCUIT AND FEEDERS SHALL HAVE INSULATED GREEN GROUND CONDUCTOR AND HAVE CONNECTED TO GROUND BUS IN RESPECTIVE PANEL. MINIMUM SIZE CONDUCTOR AND CONDUIT IS #12 THRU 1/2" MIN. CU. WTC. NEUTRALS OF ALL 120/208V CIRCUITS SERVING RECEPTACLES AND LANDSCAPE FURNITURE SHALL BE #10 AWG MINIMUM. CONTRACTOR SHALL PROVIDE ONE (1) #12 INSULATED GROUND WIRE IN EACH HOMERUN CONDUIT UNLESS OTHERWISE NOTED.
 - WIRES FOR HOMERUNS SHALL BE NO. 10 AWG IF LONGER THAN 100 FEET FOR 120 VOLT CIRCUITS. SIZES OF WIRES FOR THE VARIOUS SIGNAL AND SPECIAL SYSTEMS SERVICE SHALL BE SPECIFIED UNDER THE RESPECTIVE HEADINGS AND AS APPROVED.
 - WHEREVER IT IS REQUIRED TO DISCONNECT OR REMOVE ANY PART OF AN EXISTING CIRCUIT, IMMEDIATELY RECONNECT THAT CIRCUIT TO RE-ESTABLISH SERVICE IN THE REMAINING PORTION OF THE CIRCUIT.
 - CONTRACTOR TO NOTIFY ENGINEER PRIOR TO INSTALLATION IF AVAILABLE CIRCUITS ARE NOT ADEQUATE TO SUPPLY NEW REQUIREMENTS AS SHOWN ON THE DRAWING.
 - PHASE LEGS OF ALL NEW PANELS SHALL BE BALANCED AT SUPPLY POINT. ANY PANEL WITH UNBALANCED LOADS SHALL HAVE ITS CIRCUITS REARRANGED AS REQUIRED TO THE BALANCE PHASE LEGS.
 - ALL PANELS SHALL BE PROVIDED WITH TYPEWRITTEN PANEL DIRECTORIES, COMPLETELY FILLED IN TO CONFORM TO NEW FINAL ARRANGEMENT OF CIRCUITS. SUBMIT ELECTRONIC COPY OF TYPEWRITTEN PANEL SCHEDULE TO ENGINEER AND BUILDING MANAGER / OWNER FOR THEIR USE.
 - ALL WIRES AND CABLES IN PULL, SPICE AND SUPPORT BOXES, PANELBOARDS, ETC. SHALL BE TAGGED USING FLAME RESISTANT TAGS. TAGS SHALL IDENTIFY CABLES AND EQUIPMENT SERVICE.
 - ALL WIRING SHALL BE COLOR CODED THE SAME AS THE EXISTING SYSTEM AND AS PER ELECTRIC CODE REQUIREMENTS.
 - WIRE PREVIOUSLY PULLED IN CONDUIT IS CONSIDERED USED AND SHALL NOT BE RE-PULLED.
 - CHASING OF MASONRY AND GYPSUM SHAFT WALL CONSTRUCTION CORE AND/OR EXTERIOR WALLS WILL NOT BE PERMITTED.
- C. OUTLET BOXES
- OUTLET BOXES SHALL BE FIRMLY ANDHORED IN PLACE AND, WHERE REQUIRED, PROVIDED WITH FIXTURE SUPPORTS. PROVIDE SPECIAL SUPPORTS FOR RECESSED FIXTURES, ETC. SUITABLE EXPANSION SCREWS SHALL BE USED FOR SECURING BOXES TO SOLID MASONRY AND APPROVED TYPE TOGGLES FOR SECURING TO HOLLOW MASONRY UNITS. BOXES IN HUNG PLASTER CEILING SHALL BE PROVIDED WITH TWO HANGER BARS AND TWO HANGER CLIPS FOR EACH BAR.
 - NOT MORE THAN FOUR CONDUITS FOR BRANCH CIRCUITS SHALL ENTER A STANDARD OUTLET BOX. WHERE THE NUMBER OF CONDUITS ENTERING AN OUTLET BOX EXCEEDS FOUR, BOX SIZE SHALL BE INCREASED.
- D. LIGHTING EQUIPMENT
- ALL HANGERS, BASES, CABLES, SUPPORTS, CHANNELS, FRAMES, AND BRACKETS OF ALL KINDS FOR SAFELY ERECTING THIS EQUIPMENT AND IN PLACE SHALL BE FURNISHED AND INSTALLED UNDER THIS SECTION.
 - ALL LIGHTING UNITS, WHEN INSTALLED, SHALL SET TRUE AND BE FREE OF LIGHT LEAKS, WARPS, DENTS, AND OTHER IRREGULARITIES.
 - ALL LIGHTING UNITS SHALL BE FREE OF DUST AND DIRT AT TIME OF INSTALLATION.
 - HANGING OF LIGHTING FIXTURES IS TO BE DONE IN ACCORDANCE WITH LOCAL ELECTRICAL CODES AND BUILDING CODE. LIGHTING FIXTURES WEIGHING UP TO AND INCLUDING 40 POUNDS MAY BE SUPPORTED FROM THE STEEL "Z" BARS. LIGHTING FIXTURES WEIGHING FROM 41 POUNDS UP TO AND INCLUDING 80 POUNDS MAY BE SUPPORTED FROM THE PURLINS. LIGHTING FIXTURES WEIGHING OVER 80 POUNDS SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE AND NOT FROM THE CEILING SUSPENSION SYSTEM.
34. GROUNDING SYSTEM
- A. THE ELECTRICAL SYSTEM AND EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ELECTRICAL CODE AND AS SPECIFIED. THE GROUNDING CONDUCTOR SHALL BE AN INSULATED COPPER WIRE OF SIZE INDICATED. WHERE SIZE IS NOT INDICATED, THE CONDUCTOR SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE ELECTRICAL CODE EXCEPT THAT MINIMUM SIZE SHALL BE NO. 12. ACCESSIBLE CONNECTIONS SHALL BE MADE WITH MULTIPLE BOLT SILICON BRONZE CONNECTORS SPECIFICALLY DESIGNED AND APPROVED FOR THE CONNECTION TO BE MADE.
- B. EQUIPMENT GROUNDING
- THROUGHOUT THIS SPECIFICATION AN EQUIPMENT GROUND CONDUCTOR (GROUNDING CONDUCTOR) SHALL BE DEEMED TO MEAN A COPPER WIRE OF THE GAUGE SHOWN, OR WHERE NOT SHOWN AS SIZED BY LOCAL CODE.
 - PANELBOARDS, PULL BOXES AND ANY OTHER ENCLOSURE TERMINATING A RACEWAY RUN SHALL BE GROUNDED BY BONDING THE EQUIPMENT GROUND CONDUCTOR TO THE PROVIDED GROUND BUS OR TO GROUND LUG. IN ADDITION, ALL INCOMING AND OUTGOING CONDUITS SHALL BE GROUNDED BY MEANS OF GROUNDING BUSHINGS. BUSHINGS SHALL BE CONNECTED TOGETHER AND TO THE PANEL OR PULL BOX GROUND LUG OR GROUND BAR WITH A BONDING JUMPER.
 - MOTORS SHALL BE GROUNDED BY MEANS OF A GROUNDING CONDUCTOR IN THE SAME RACEWAY WITH THE MOTOR FEEDER CONNECTED TO THE GROUNDING BUSHING AT THE MOTOR TERMINAL BOX AND THE GROUND BUS IN THE MOTOR CONTROL CENTER OR TO THE INCOMING CONDUIT GROUNDING BUSHING OF AN INDIVIDUALLY MOUNTED MOTOR STARTER.
 - WHEREVER FLEXIBLE CONDUIT IS USED FOR PART OF A CONDUIT RUN, EXCEPT LIGHTING BRANCH CIRCUITS, A GROUNDING CONDUCTOR SHALL BE PROVIDED IN THE CONDUIT AND CONNECTED TO GROUNDING BUSHINGS AT EACH END OF THE RUN.
 - A GREEN INSULATED GROUNDING CONDUCTOR #12 MIN. SHALL BE INSTALLED IN ALL BRANCH CIRCUIT AND FEEDER CONDUITS.
 - TRANSFORMERS SHALL BE GROUNDED BY MEANS OF A GROUNDING CONDUCTOR IN THE SAME RACEWAY WITH THE PRIMARY VOLTAGE SUPPLY FEEDER CONNECTED TO GROUNDING BUSHINGS AT SUPPLY END OF THE CONDUIT RUN AND TO THE COMMON GROUNDING STUD ON TRANSFORMER CASE.
35. TEMPORARY LIGHT AND POWER
- A. PROVIDE TEMPORARY LIGHT AND POWER FOR THE DURATION OF THE JOB.
- B. PROVIDE TEMPORARY LIGHT AND POWER ON ELECTRICIANS HOLIDAYS WHEN OTHER TRADES WILL BE WORKING.
- C. PROVIDE TEMPORARY LIGHT AND POWER FOR OVERTIME DELIVERIES BY OTHER TRADES

KEY PLAN:



Revisions

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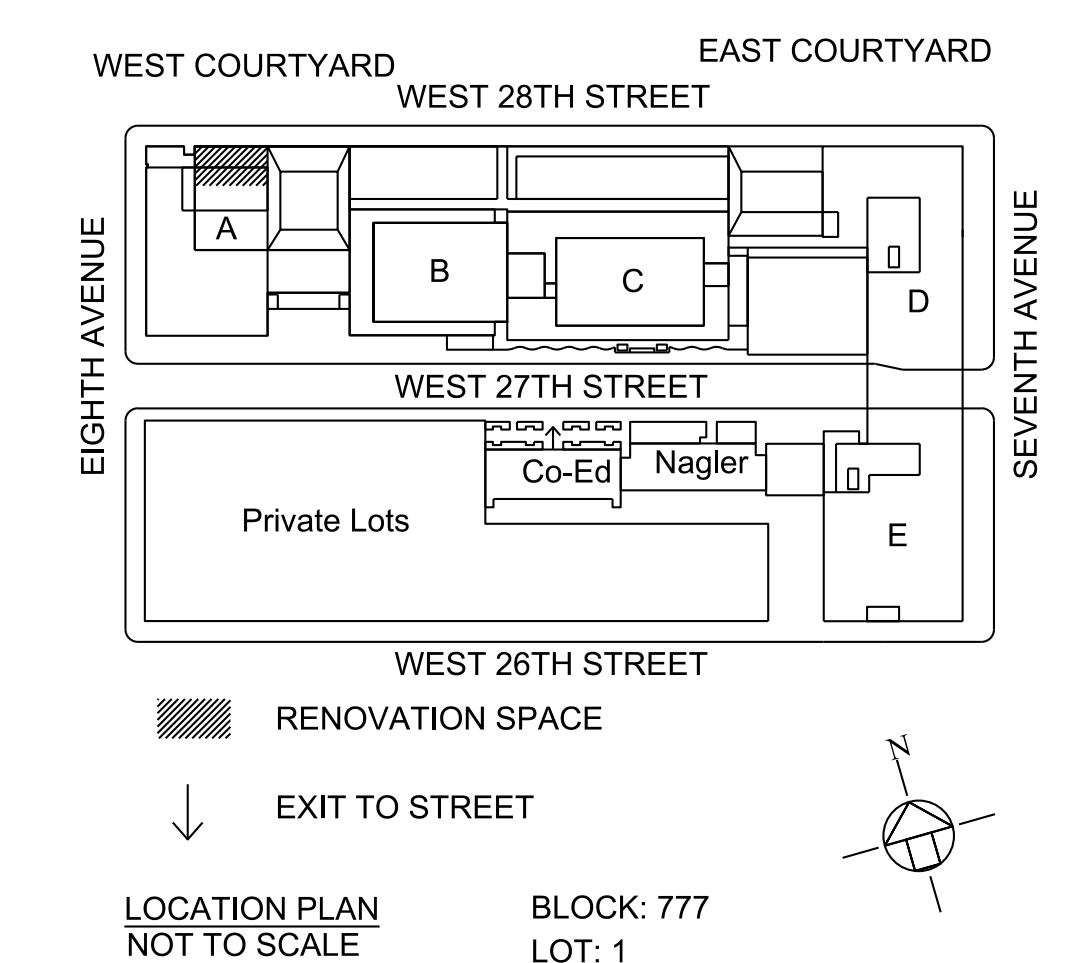
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Drawing Title:
SUBCELLAR ELECTRICAL DEMOLITION PLAN

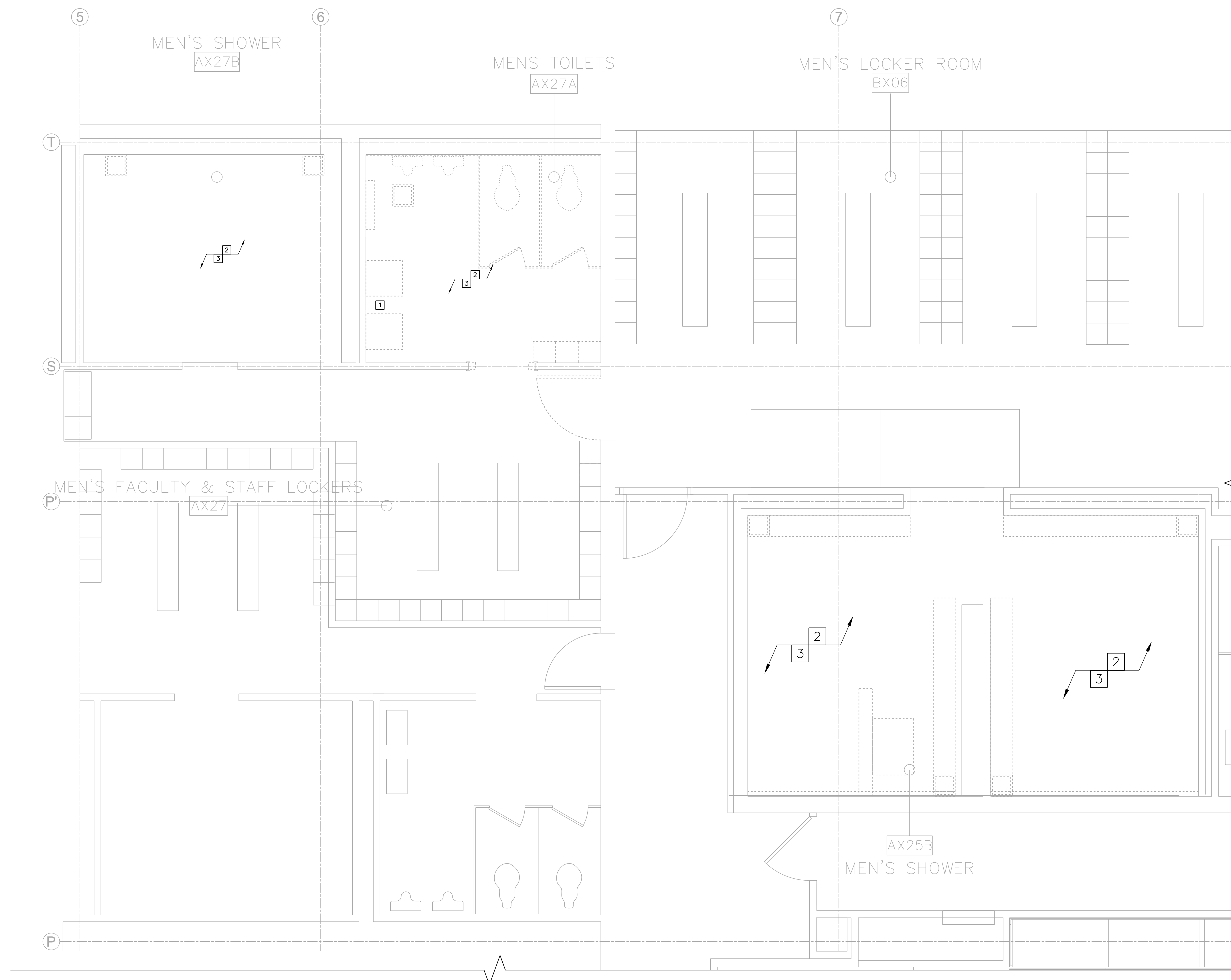
Drawing No.:
E-901.00

Project No.:
 2214-01

Date:
 08/11/23

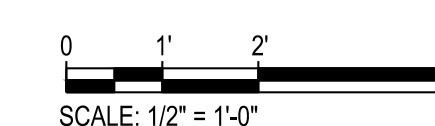
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 1/2" = 1'-0"

Sheet No.:
 5 OUT OF 5



DEMOLITION KEY NOTES	
REFER TO THIS DWG. E-901 FOR GENERAL DEMOLITION NOTES. FOR ADDITIONAL DEMO NOTES SEE ARCHITECTURAL DRAWING.	
AREAS THAT ARE HATCHED ARE CONSIDERED NOT IN CONTRACT. SCOPE OF WORK IS AREA THAT IS NOT HATCHED.	
1	UNLESS OTHERWISE NOTED, ALL EXISTING DEVICES AND RECEPTACLES SHALL BE DISCONNECTED AND REMOVED IN THEIR ENTIRETY INCLUDING ALL BRANCH WIRING AND CONDUIT. EXISTING FLOOR BOXES TO BE DISCONNECTED AND REMOVED IN THEIR ENTIRETY. FLOOR SHALL BE FILLED AND PATCHED AS REQUIRED.
2	UNLESS OTHERWISE NOTED, ALL EXISTING LIGHT FIXTURES AND ASSOCIATED LIGHTING CONTROLS TO BE DISCONNECTED AND REMOVED IN THEIR ENTIRETY INCLUDING ALL BRANCH WIRING AND CONDUIT.
3	ALL BRANCH CIRCUITS TO BE TRACED OUT TO VERIFY CIRCUITS ARE NOT SERVING EQUIPMENT TO REMAIN. IDENTIFY ALL PANEL FEEDERS AND ASSOCIATED BRANCH CIRCUITS WHICH WILL NEED TO REMAIN. THE EXISTING BRANCH CIRCUITS IDENTIFIED SHALL BE TERMINATED IN A JUNCTION BOX AND LABELED WITH PANEL NAME AND CKT NUMBER FOR RE-USE/EXTENSION DURING CONSTRUCTION PHASE.

1 SUBCELLAR ELECTRICAL DEMOLITION PLAN
 1/2"=1'-0"



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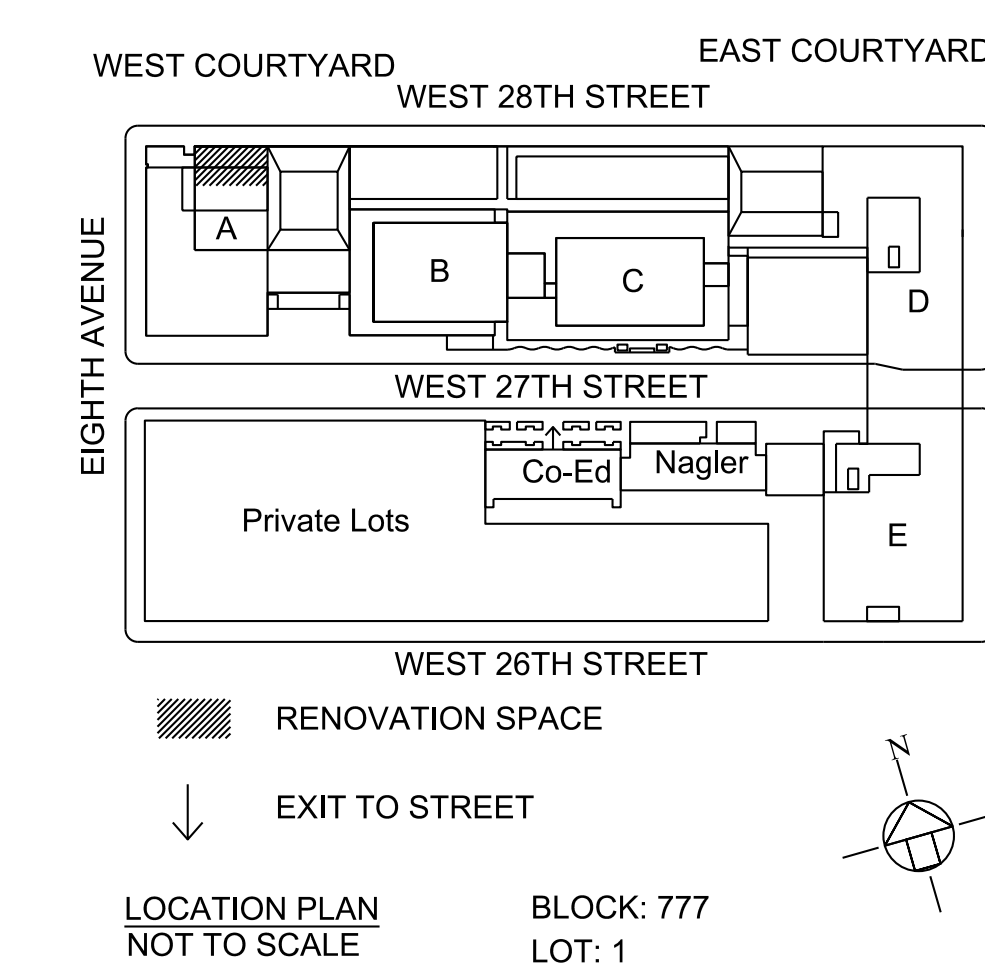
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Revisions

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Sign and Seal:

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SUBCELLAR MECHANICAL PLAN

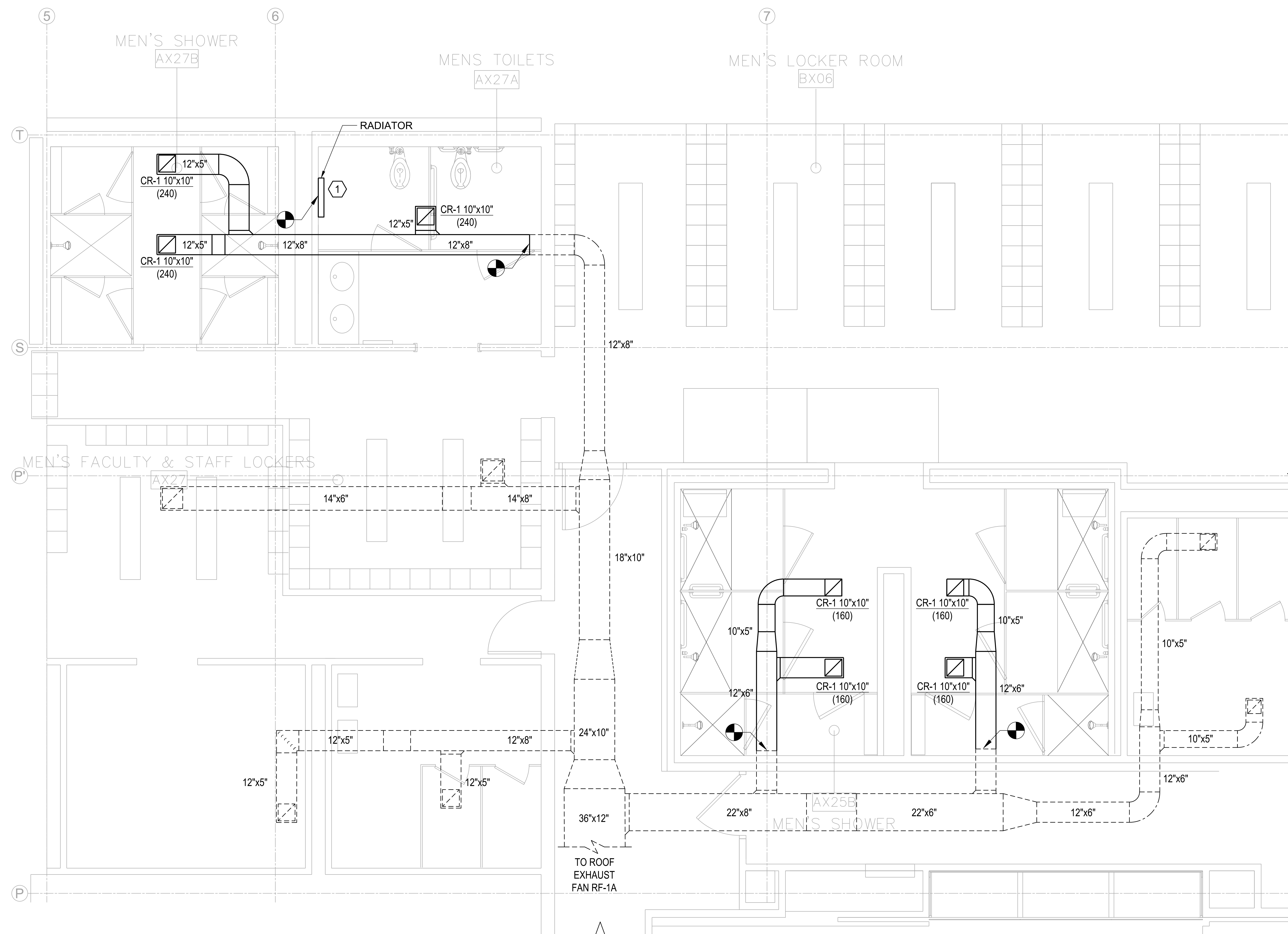
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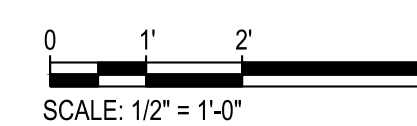
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Sheet No.:
 2 OUT OF 5



1 SUBCELLAR MECHANICAL PLAN
 1/2" = 1'-0"



WORK NOTES:

- PRIOR TO STARTING DEMOLITION WORK CONTRACTOR SHALL MEASURE THE AIR FLOW AT THE EXISTING REGISTERS TO BE REMOVED. CONTRACTOR TO SUBMIT THE AIRFLOW REPORT TO THE ENGINEER FOR REVIEW. DO NOT START DEMOLITION WORK BEFORE THE AIRFLOW REPORT IS REVIEWED BY THE ENGINEER. VERIFY AND DOCUMENT IN THE REPORT THE OPERATION OF RF-1A DURING THE AIRFLOW MEASUREMENT.
- COORDINATE THE DEMOLITION WORK WITH THE REMOVAL OF THE CEILING.
- PROTECT THE REMAINING DUCTWORK. SEE DEMOLITION NOTES ON M-001.
- COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLANS FOR THE LOCATION OF EXHAUST GRILLES.

KEY NOTES:

- INSTALL ISOLATION VALVES ON THE REMAINING HOT WATER RADIATION SYSTEM. CLEAN AND RECONNECT STORED RADIATOR. COORDINATE WITH ARCHITECTURAL DRAWINGS. CONTRACTOR TO PROVIDE NEW RADIATOR IF EXISTING RADIATOR IS DAMAGED.

NEW YORK CITY BUILDING DEPARTMENT NOTE
 THIS PLAN IS FOR ECC SCOPE AND APPROVAL ONLY.
 (NOTE IS APPLICABLE ONLY TO NYC DOB REVIEW PROCESS. CONTRACTOR MUST PROVIDE ALL WORK SHOWN ON PLAN.)

NEW YORK CITY BUILDING DEPARTMENT APPROVAL NOTE
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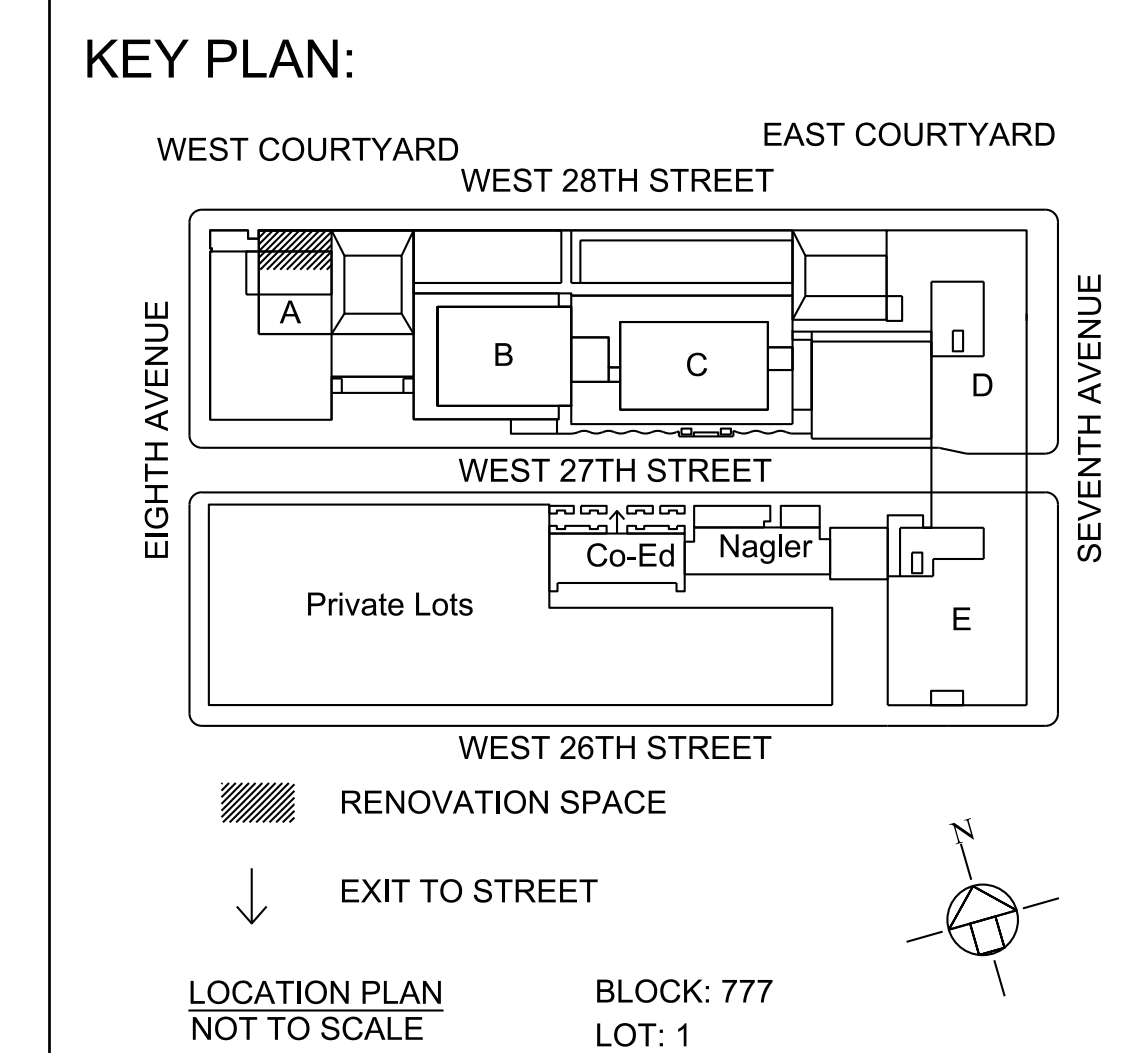
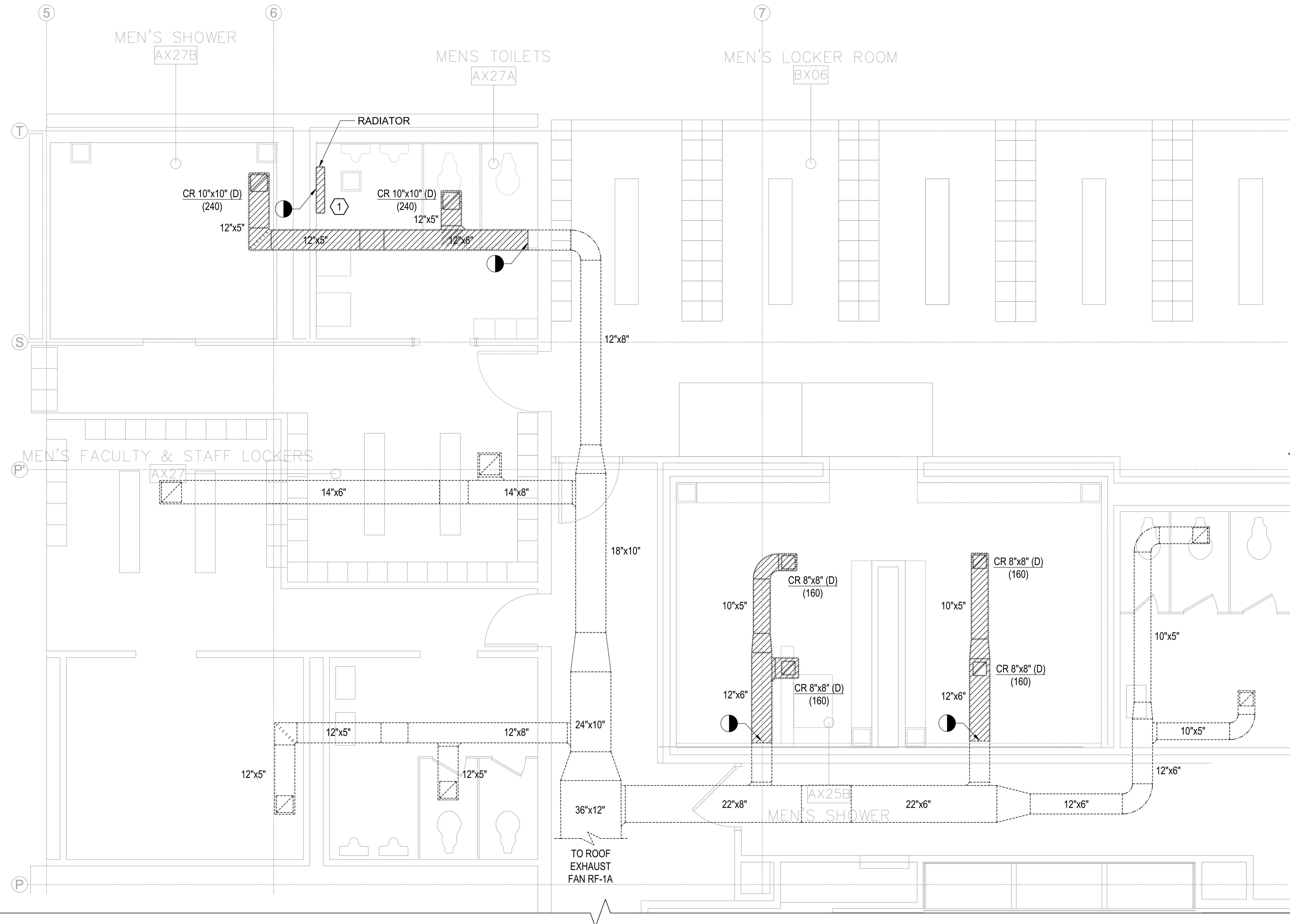
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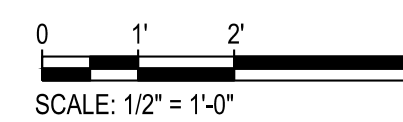
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2. COORDINATE THE DEMOLITION WORK WITH THE REMOVAL OF THE CEILING.
3. PROTECT THE REMAINING DUCTWORK. SEE DEMOLITION NOTES ON M-001.
4. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLANS FOR THE LOCATION OF EXHAUST GRILLES.

KEY NOTES:

1. DISCONNECT AND STORE EXISTING RADIATOR TO BE CLEANED AND RECONNECTED. COORDINATE WITH ARCHITECTURAL DRAWINGS. INSTALL ISOLATION VALVES ON THE REMAINING HOT WATER RADIATION SYSTEM. CONTRACTOR TO PROVIDE NEW RADIATOR IF EXISTING RADIATOR IS DAMAGED.

1 SUBCELLAR MECHANICAL DEMOLITION PLAN
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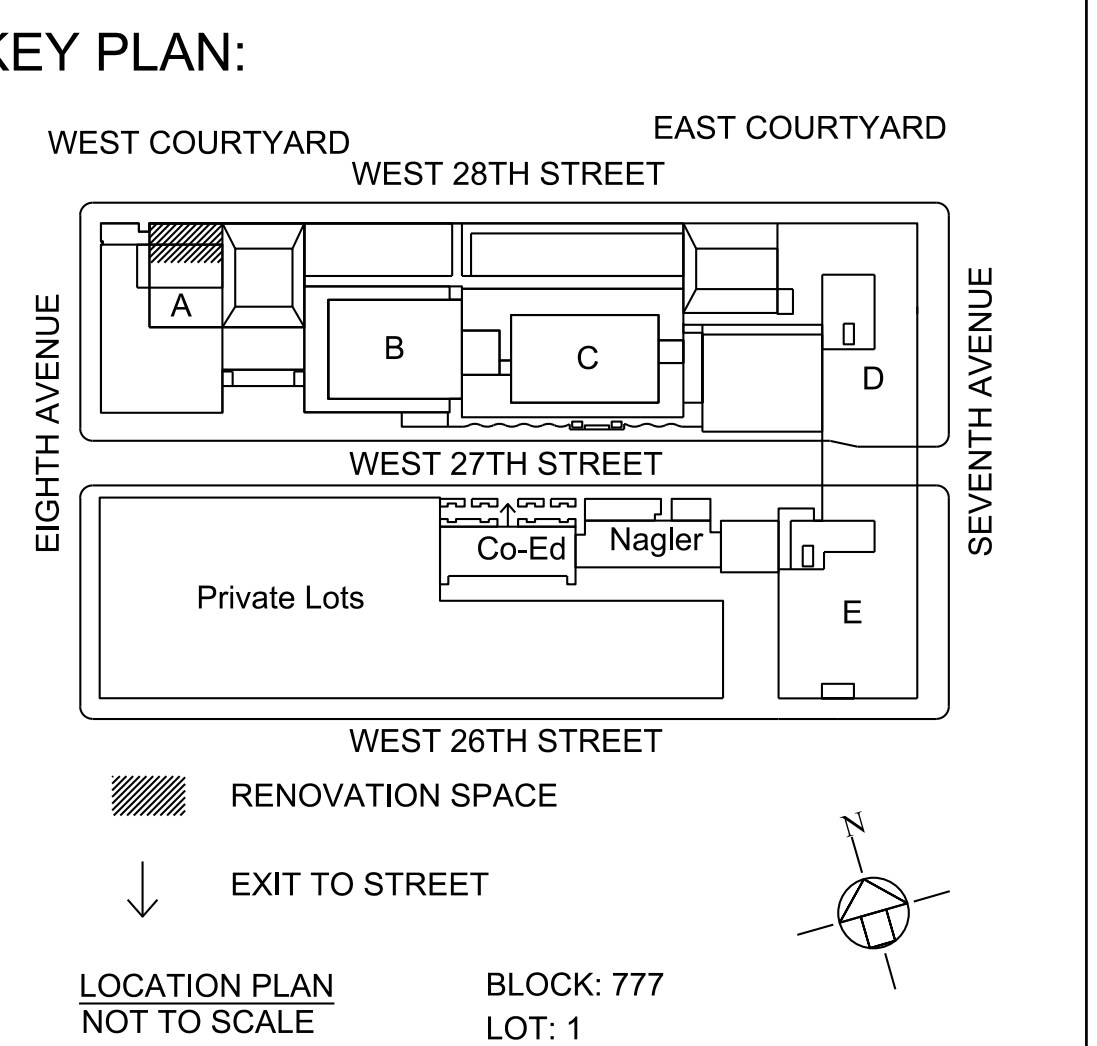
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**PLUMBING SYMBOL LIST,
 ABBREVIATIONS AND NOTES**

Drawing No.:
P-001.00

Project No.: 2214-01 Date: 08/11/23

Scale: Sheet No.: 2 of 7

PLUMBING SYMBOLS	
	DOMESTIC COLD WATER PIPING
	DOMESTIC HOT WATER PIPING (120°)
	DOMESTIC HOT WATER RETURN PIPING (120°)
	VENT PIPING
	SOIL, WASTE OR SANITARY PIPING
	UNDER GROUND SOIL, WASTE OR SANITARY PIPING
	BURIED PIPING
	LEADER PIPING OR STORM (ST)
	CLEAN OUT/PLUGGED OUTLET
	CAPPED OUTLET
	CLEAN-OUT DECK PLATE COOP (FLOOR PLAN)
	P-TRAP (FLOOR PLAN)
	ELBOW TURNED UP
	ELBOW TURNED DOWN
	BOTTOM PIPE CONNECTION
	TOP PIPE CONNECTION
	SLOPE CHANGE IN PIPE ELEVATION (ROLL DOWN)
	GLOBE VALVE
	CHECK VALVE
	BALL VALVE
	DIRECTION OF PUMPED FLOW
	ARROW INDICATES DIRECTION OF FLOW
	PIPE SLEEVE
	UNION
	CAPPED PIPE WITH SHUT-OFF VALVE
	TRAP (RISER DIAGRAM)
	VACUUM BREAKER ASSEMBLY
	FLOOR AREA/RAIN/PLENUM DRAIN (PLAN VIEW)
	FLOOR, AREA ROOF DRAIN (RISER DIAGRAM)
	CONNECT NEW WORK TO EXISTING
	DISCONNECT EXISTING WORK & CAP

PLUMBING ABBREVIATIONS			
AD	ACCESS DOOR	HWC	HOT WATER CIRCULATION
AFF	ABOVE FINISHED FLOOR	IE	INVERT ELEVATION
AP	ACCESS PANEL	JC	JMINTORS CLOSET
BLDG	BUILDING	L	LEADER
BOP	BOTTOM OF PIPE	LAV	LAVATORY
CLG	CEILING	MAX	MAXIMUM
CM	COFFEE MAKER	MECH	MECHANICAL
CO	CLEAN OUT	MER	MECHANICAL EQUIPMENT ROOM
COOP	CLEANOUT DECK PLATE	MFR	MANUFACTURER
CONN	CONNECTION	MN	MINIMUM
CONT	CONTINUATION	MISC	MISCELLANEOUS
CORR	CORRIDOR	MTD	MOUNTED
COHP	CLEANOUT WALL PLATE	NIC	NOT IN CONTRACT
CV	CHECK VALVE	NTS	NOT TO SCALE
CW	COLD WATER	PD	PLAZA DRAIN
DET	DETAIL	PLBG	PLUMBING
DF	DRINKING FOUNTAIN	PO	PLUGGED OUTLET
DIA	DIAMETER	RCV	RISER CONTROL VALVE
DM	DIMENSION	RM	ROOM
DN	DOWN	RPM	REVOLUTIONS PER MINUTE
DR	DRAIN	S	SANITARY/SOIL
DWG	DRAWING	SHT	SHEET
EA	EACH	SK	SINK
EL	ELEVATION	SLV	SLEEVE
ELEC	ELECTRICAL	SG	SQUARE
ELEV	ELEVATOR	SG.FT.	SQUARE FOOT (1/2)
ENR	ELEVATOR MACHINE ROOM	STD	STANDARD
ENG	ENGINEER	STOR	STORAGE
EOS	EDGE OF SLAB	TEMP	TEMPORARY
EQUIP	EQUIPMENT	THRU	THROUGH
EX	EXISTING	TP	TRAP PRIMER
EXT	EXTERIOR	TYP.	TYPICAL
FD	FLOOR DRAIN	V	VENT
FD/TP	FLOOR DRAIN WITH TRAP PRIMER	VB	VACUUM BREAKER
FF	FINISH FLOOR	VERT	VERTICAL
FL	FLOOR	W	WASTE
FXT	FIXTURE	W	WITH
GOCM	GENERAL CONTRACTOR/CONST. MANAGER	WC	WATER CLOSET
GAL	GALLONS	WHA	WATER HAMMER ARRESTOR
GPM	GALLONS PER MINUTE		
HVAC	HEATING, VENTILATION, & AIR CONDITIONING		
HW	HOT WATER		

2022 NYC PLUMBING NOTES

THE PLUMBING SYSTEMS (SANITARY, WASTE, STORM, VENT, GAS, WATER DISTRIBUTION) AND ALL ASSOCIATED EQUIPMENT WILL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE FULL REQUIREMENTS OF THE 2022 BUILDING CODE OF THE CITY OF NEW YORK AS CITED IN CHAPTER 29, THE 2022 NEW YORK CITY PLUMBING CODE AND THE 2022 FUEL GAS CODE.

- THE SANITARY SYSTEM SHALL BE PROVIDED IN FULL ACCORDANCE WITH THE GENERAL PROVISIONS OF CHAPTER 7.
- THE MATERIALS USED IN THE PLUMBING SYSTEM SHALL BE PROVIDED IN FULL ACCORDANCE WITH CHAPTER 3.
- EQUIPMENT HOOD-UP AND THE JOINING OF PIPING SHALL BE IN FULL COMPLIANCE WITH CHAPTER 4.
- THE INSTALLATION OF FIXTURES SHALL BE IN FULL ACCORDANCE WITH SECTION PC CHAPTER 4.
- TRAPS FOR FIXTURES AND DRAIN LINES SHALL BE PROVIDED AND CLEANOUTS INSTALLED IN FULL COMPLIANCE WITH CHAPTER 10 AND CLEANOUTS INSTALLED IN FULL COMPLIANCE WITH CHAPTER 7.
- VERTICAL AND HORIZONTAL PIPING SHALL BE HUNG AND SUPPORTED AS DIRECTED IN SPECIFICATIONS AND WITH THE FULL COMPLIANCE WITH SECTION CHAPTER 3.
- THE WATER SUPPLY SYSTEMS SHALL BE INSTALLED AND MAINTAINED IN FULL COMPLIANCE WITH CHAPTER 6.
- THE SANITARY DRAINAGE SYSTEM SHALL BE SIZED AND INSTALLED IN FULL COMPLIANCE WITH SECTIONS CHAPTER 7.
- THE VENT PIPING FOR THE SANITARY DRAINAGE SYSTEM SHALL BE INSTALLED IN FULL COMPLIANCE WITH CHAPTER 8.
- THE STORM DRAINAGE SYSTEM AND PIPING SHALL BE INSTALLED IN FULL COMPLIANCE WITH CHAPTER 11.
- RODENT PROOFING SHALL BE IN ACCORDANCE WITH SECTION PC 304.
- TEMPORARY TOILET FACILITIES SHALL BE PROVIDED FOR WORKMAN AS PER SECTION PC 311.
- ALL TRENCHING SHALL BE DONE IN ACCORDANCE WITH SECTION PC 306.

PLUMBING DEMOLITION NOTES

- THE CONTRACTOR SHALL INCLUDE IN HIS PRICE ALL COSTS ASSOCIATED WITH REMOVALS AND RELOCATIONS OF PLUMBING WORK AS DESCRIBED ON THE DRAWINGS AND IN THE SPECIFICATIONS WITH ALLOWANCES FOR EXPECTED OR UNFORESEEN DIFFICULTIES WHEN CONCEALED WORK HAS BEEN EXPOSED. NO CLAIMS FOR ADDITIONAL WORK ASSOCIATED WITH DEMOLITION WILL BE ACCEPTED, EXCEPT IN CERTAIN CASES CONSIDERED JUSTIFIED BY THE ARCHITECT.
- THE CONTRACTOR SHALL REMOVE AND/OR RELOCATE ALL EXISTING PLUMBING WORK WHICH INTERFERES WITH THE NEW ARCHITECTURAL LAYOUTS. ALL SYSTEMS WHICH ARE NO LONGER REQUIRED TO FUNCTION SHALL BE REMOVED BACK TO ACTIVE LINES AND SHALL BE CAPPED/PLUGGED OR VALVED OFF AS NEEDED.
- THE CONTRACTOR SHALL PERFORM DEMOLITION AND REMOVAL WORK WITH MINIMUM INTERFERENCE TO FUNCTIONING PLUMBING SYSTEMS. ALL AFFECTED SYSTEMS SHALL BE RECONNECTED AND RESTORED.
- DEMOLITION AND REMOVAL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER. THE CONTRACTOR SHALL PATCH, REPAIR, OR OTHERWISE RESTORE ANY DAMAGED INTERIOR OR EXTERIOR BUILDING SURFACE TO ITS ORIGINAL CONDITION.
- THE CONTRACTOR SHALL REMOVE ALL PIPING SUPPORTS, ETC. FROM PARTITIONS THAT ARE TO BE REMOVED. WHERE THE REMOVAL OF THESE ITEMS DISRUPTS EXISTING PIPING THAT IS TO REMAIN, THE CONTRACTOR SHALL INSTALL AND PROVIDE BYPASS CONNECTIONS AS NECESSARY.
- ALL PIPING WHICH BECOMES EXPOSED DURING THE ALTERATION WORK SHALL BE REMOVED AND REROUTED CONCEALED BEHIND FINISHED SURFACES.
- PORTIONS OF MAINS TO BE REMOVED OR ABANDONED AS A RESULT OF DEMOLITION WORK, BUT ARE REQUIRED TO REMAIN ACTIVE, SHALL BE CUT AT CONVENIENT LOCATIONS, REROUTED AND RECONNECTED.
- THE CONTRACTOR SHALL NOTIFY THE OWNER AT THE APPROPRIATE TIME OF THE PROJECTED DEMOLITION AND PHASING SCHEDULE SO THAT REMOVAL OR RELOCATION OF AFFECTED UTILITIES MAY BE CARRIED OUT IN COORDINATION WITH THE PROJECT REQUIREMENTS.
- ALL EXISTING MATERIAL AND EQUIPMENT IN USABLE CONDITION, WHICH IS TO BE REMOVED UNDER THIS CONTRACT SHALL REMAIN THE PROPERTY OF THE OWNER OR SHALL BE DISPOSED OF BY THE PLUMBING CONTRACTOR, AS DIRECTED BY THE OWNER.
- ARRANGE TO WORK CONTINUOUSLY, INCLUDING OVERTIME, IF REQUIRED, TO ASSURE THAT SYSTEMS WILL BE SHUT DOWN ONLY DURING TIME REQUIRED TO MAKE THE NECESSARY CONNECTIONS TO THE EXISTING SYSTEMS.
- ALL PIPING TO BE REMOVED SHALL BE PROPERLY PLUGGED OR CAPPED SO THAT UPON COMPLETION OF ALL NEW WORK, ALL ABANDONED PIPING SHALL BE REMOVED FROM FINISHED AREAS.
- NO DEAD ENDS SHALL BE LEFT ON ANY PIPING UPON COMPLETION OF THE PROJECT.
- EXISTING EXPOSED PIPING NOT SPECIFICALLY NOTED OR SHOWN ON DRAWINGS TO BE ABANDONED SHALL BE COMPLETELY REMOVED.

GENERAL PLUMBING NOTES:

- EACH BIDDER SHALL VISIT THE SITE AND BECOME INFORMED AS TO THE CONDITION OF THE PREMISES AND THE EXTENT AND CHARACTER OF WORK REQUIRED. NO ADDITIONAL COMPENSATION WILL BE APPROVED DUE TO THE FIELD CONDITIONS.
- ALL EXISTING SYSTEMS SHALL BE LEFT IN PERFECT WORKING ORDER UPON COMPLETION OF ALL NEW WORK.
- EXACT SIZES AND LOCATIONS OF ALL EXISTING PIPING SHALL BE VERIFIED ON THE SITE.
- NO EXISTING OR REMOVED PIPING SHALL BE REUSED UNLESS OTHERWISE INDICATED.
- THIS CONTRACTOR SHALL NOT INTERRUPT ANY OF THE SERVICES OF THE EXISTING BUILDING NOR INTERFERE WITH THE SERVICES IN ANY WAY WITHOUT THE EXPRESSED PERMISSION OF THE OWNER. SUCH INTERRUPTIONS AND INTERFERENCES SHALL BE MADE AS BRIEF AS POSSIBLE.
- UNDER NO CIRCUMSTANCES WILL THIS CONTRACTOR OR HIS WORKMEN BE PERMITTED TO USE ANY PART OF THE BUILDING AS A SHOP, EXCEPT PART DESIGNATED BY THE OWNER FOR SUCH PURPOSES.
- UNNECESSARY NOISE SHALL BE AVOIDED AT ALL TIMES AND NECESSARY NOISE SHALL BE REDUCED TO A MINIMUM.
- WHERE THE WORK MAKES TEMPORARY SHUT DOWN OF SERVICES UNAVOIDABLE, THEY SHALL BE MADE AT NIGHT OR AT SUCH TIMES THAT WILL CAUSE THE LEAST INTERFERENCE WITH THE ESTABLISHED OPERATING ROUTINE OF THE BUILDING.
- THIS CONTRACTOR SHALL ARRANGE ALL WORK CONTINUOUSLY, INCLUDING OVERTIME AS REQUIRED, TO ASSURE THAT SERVICES WILL BE SHUT DOWN AND OUTLINE ONLY DURING THE TIME ACTUALLY REQUIRED TO MAKE THE NECESSARY CONNECTION TO EXISTING WORK.
- THIS CONTRACTOR SHALL GIVE WRITTEN NOTICE IN ADVANCE TO THE OWNER OF ANY REQUIRED SHUT DOWNS.
- ANY AND ALL REQUIRED DEMOLITION WORK TO BE PERFORMED ABOVE EXISTING SUSPENDED CEILINGS AND FURRED OUT WALLS SHALL BE DONE AT THE TIME WHEN THE EXISTING CEILINGS AND FURRED OUT WALLS ARE REMOVED BY THE GENERAL CONTRACTOR.
- TO ENSURE CONTINUOUS OPERATION, MAKE ALL NECESSARY TEMPORARY CONNECTIONS BETWEEN NEW AND EXISTING WORK. ALL COST RESULTING FROM TEMPORARY SHUTDOWNS SHALL BE BORNE BY THIS CONTRACTOR.
- ALL VENT, HOT WATER CIRCULATION, HOT AND COLD WATER PIPING ARE AT CEILING OR IN HUNG CEILING. EXCEPT IN PIPE CHASES OR OTHERWISE NOTED.
- CONTRACTOR SHALL CHECK AND VERIFY THE EXACT LOCATION OF ALL PIPE PENETRATIONS, PIPE ELEVATIONS, DRAINS, ETC.
- ACCESS DOORS SHALL BE PROVIDED FOR ALL CLEANOUTS, VALVES, FLUSH VALVES, AND ANY OTHER EQUIPMENT AND ACCESSORIES THAT MAY REQUIRE ACCESS FOR MAINTENANCE OR OPERATION WHICH ARE LOCATED BEHIND WALLS AND PARTITIONS OR CONCEALED IN HUNG CEILINGS. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR.
- THIS CONTRACTOR SHALL OBTAIN A COPY OF THE BUILDING RULES AND REGULATIONS AND PROVIDE ALL WORK AS REQUIRED TO CONFORM TO ALL REQUIREMENTS.
- THIS CONTRACTOR SHALL PROVIDE ALL WORK AT THE CEILING OF THE FLOOR BELOW AS INDICATED ON THE DRAWINGS, COORDINATE EXACT ROUTING OF PIPING IN THE FIELD WITH EXISTING CONDITIONS AND WORK OF OTHER TRADES. ALL WORK SHALL BE SCHEDULED AND COORDINATED TO ACCOMMODATE TENANT AND BUILDING ENGINEERS.
- THIS CONTRACTOR SHALL PROVIDE CUTTING AND PATCHING OF ALL WORK AS REQUIRED INCLUDING WORK OUTSIDE OF THE GENERAL PROJECT LIMIT LINES (I.E. CEILING OF THE FLOOR BELOW).
- THIS CONTRACTOR SHALL PROVIDE CAPPED/VALVED OUTLETS FOR FUTURE CONNECTIONS WHENEVER CONNECTING INTO AN EXISTING CAPPED/VALVED OUTLET. SIZE OF NEW CAPPED/VALVED OUTLET SHALL MATCH EXISTING.

GENERAL PLUMBING FIXTURE NOTES:

- THIS CONTRACTOR SHALL PROVIDE ALL FIXTURES AS REQUIRED. (REFER TO ARCHITECTURAL DOCUMENTS FOR PLUMBING FIXTURE SPECIFICATIONS).
- ALL FIXTURES MUST COMPLY WITH THE NYC PLUMBING CODE INCLUDING MAXIMUM ALLOWABLE FLOW RATES AND WATERSENSE LABELING. NO CHANGE ORDERS WILL BE PERMITTED FOR WORK RELATED TO THE PURCHASE OR INSTALLATION OF NON-CODE COMPLIANT FIXTURES. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE CODE COMPLIANT PLUMBING FIXTURES.
- THE EXACT LOCATION AND MOUNTING HEIGHTS OF ALL PLUMBING FIXTURES SHALL COMPLY WITH THE ARCHITECTURAL DRAWINGS.
- ALL SINKS AND LAVATORIES THAT ARE HANDICAPPED ACCESSIBLE SHALL BE PROVIDED WITH THERMAL AND IMPACT INSULATION/HELDING KITS ON SUPPLIES, TRAPS, TAILPIECES AND WASTE OUTLETS.

NYC FLOOD HAZARD AREA NOTES

- PROPERTY IS NOT IN SPECIAL FLOOD HAZARD AREA

PLUMBING DRAWING LIST

P-001.00	PLUMBING NOTES, SYMBOLS, ABBREVIATIONS & DRAWING LIST
P-101.00	SUB-CELLAR FLOOR PLUMBING PLAN
P-601.00	PLUMBING DETAIL
P-601.00	PLUMBING RISER DIAGRAM
P-601.00	PLUMBING RISER DIAGRAM
P-601.00	CELLAR FLOOR PLUMBING DEMOLITION PLAN

NYC DOB SPECIAL INSPECTION NOTES

- AN INDEPENDENT SPECIAL INSPECTOR SHALL BE RETAINED TO PERFORM SPECIAL INSPECTIONS AS WELL AS FILE FORM TR-1 FOR PLUMBING SYSTEM DESIGN AS DOCUMENTED ON THESE PLANS IN ACCORDANCE WITH THE NYC BUILDING CODE.
- SPECIAL INSPECTION REQUIRED FOR FIRE-RESISTANT PENETRATIONS AND JOINTS PER 2022 NYCBC 1705.17.
- SPECIAL INSPECTION REQUIRED FOR POST-INSTALLED ANCHORS PER 2022 NYCBC 1705.37.
- FINAL INSPECTION REQUIRED PER 2022 NYCBC 26-116.2.4.2, BC110.5, DIRECTIVE 14 OF 1975, & 1 RCNY 101-10.

PLUMBING FIXTURE SPECIFICATION SCHEDULE

FIXTURE DESIGNATION	MODEL No.	MANUFACTURER (OR EQUIV)	DESCRIPTION
P-1 WATER CLOSET	S1-2459	SLOAN	WALL MOUNTED FLUSHMETER VALVE TOILET - SPHON JET, VITREOUS CHINA, ELONGATED BOWL, WITH 1/2" TOP SPUD, LOW CONSUMPTION 1.6GPF, ADA COMPLIANT
	111651-128-T10	SLOAN	1.28GPF, FLUSH VALVE, POLISHED CHROME FINISH, TOP SPUD, SINGLE FLUSH, TRUE MECHANICAL OVERRISE, SENSOR OPERATED, 80% FULSHING, HARDWIRE
	198932CT	BEHRM	TOILET SEAT, HEAVY DUTY BOWL, OPEN FRONT, LESS COVER, WHITE WATER CLOSET CARRIER
P-2 LAVATORY	K5400	KOHLER	18-1/2" RECTANGULAR DROP-UNDERMOUNT BATHROOM SINK, ENAMELED CAST IRON, WITH OVERFLOW DRAIN
	XXXX	XXXX	HAND OPERATED FAUCET, 0.5 GPM, LEAD FREE, ADA COMPLIANT
P-3 SHOWER	H95-547N	SYMCOS	GRAB BAR AND SLIDE BAR ASSEMBLY, ADA ADJUSTABLE SLIDE MECHANISM, 60" FLEXIBLE METAL HOSE, 2.0 GPM FLOW RESTRICTOR, POLISHED CHROME FINISH
	S3507-C1L-647N-TFM	SYMCOS	SHOWER TRIM WITH INTEGRAL VOLUME CONTROL, 2.0 GPM FLOW RESTRICTOR
	S3282000NS	SYMCOS	PRESSURE BALANCING SHOWER VALVE WITH INTEGRAL DIVERTER AND SERVICE STOPS

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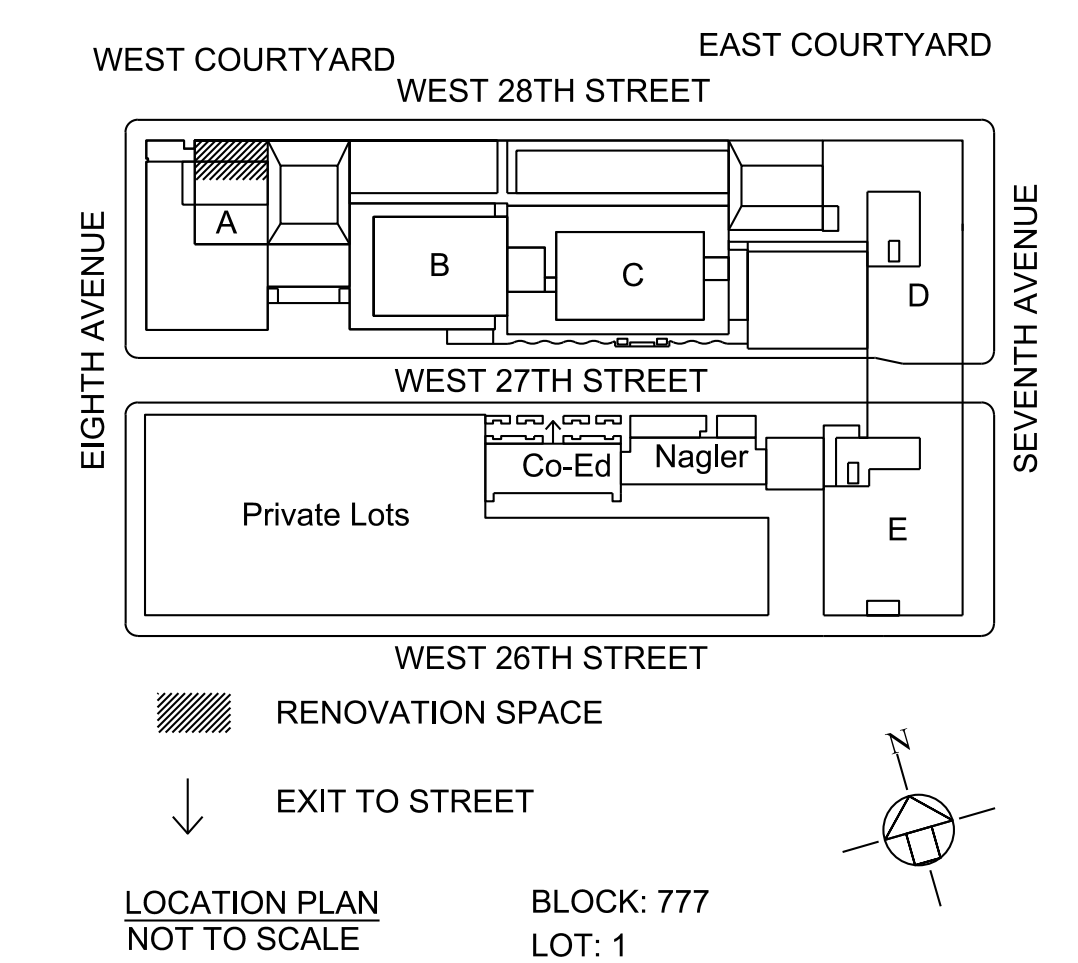
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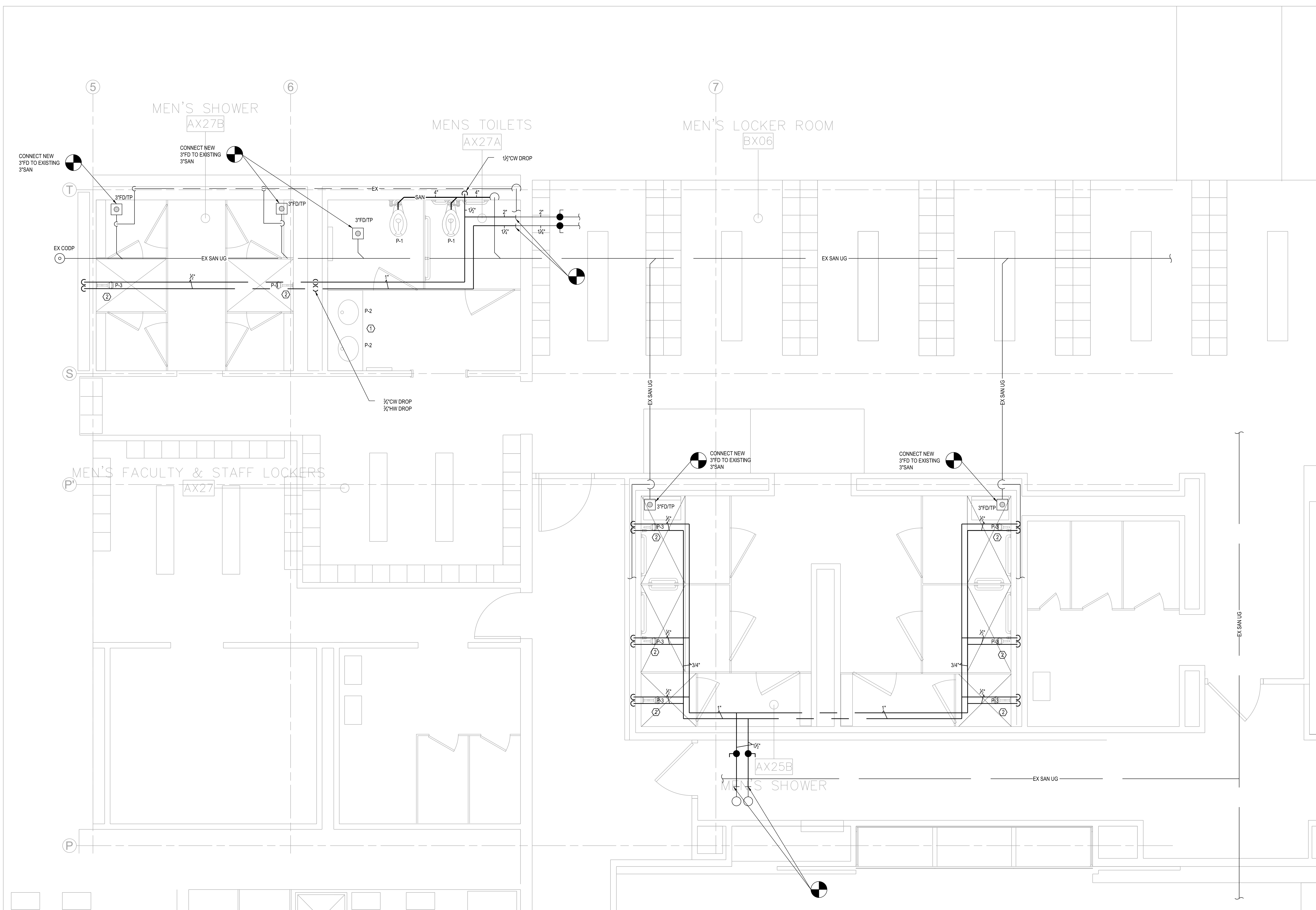
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SUBCELLAR PLUMBING PLAN

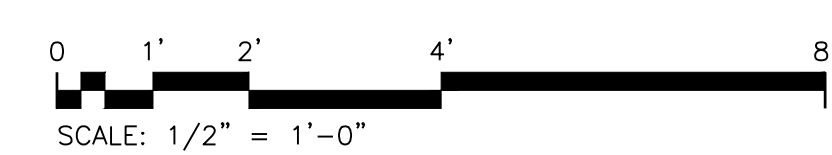
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1 SUBCELLAR PLUMBING PLAN
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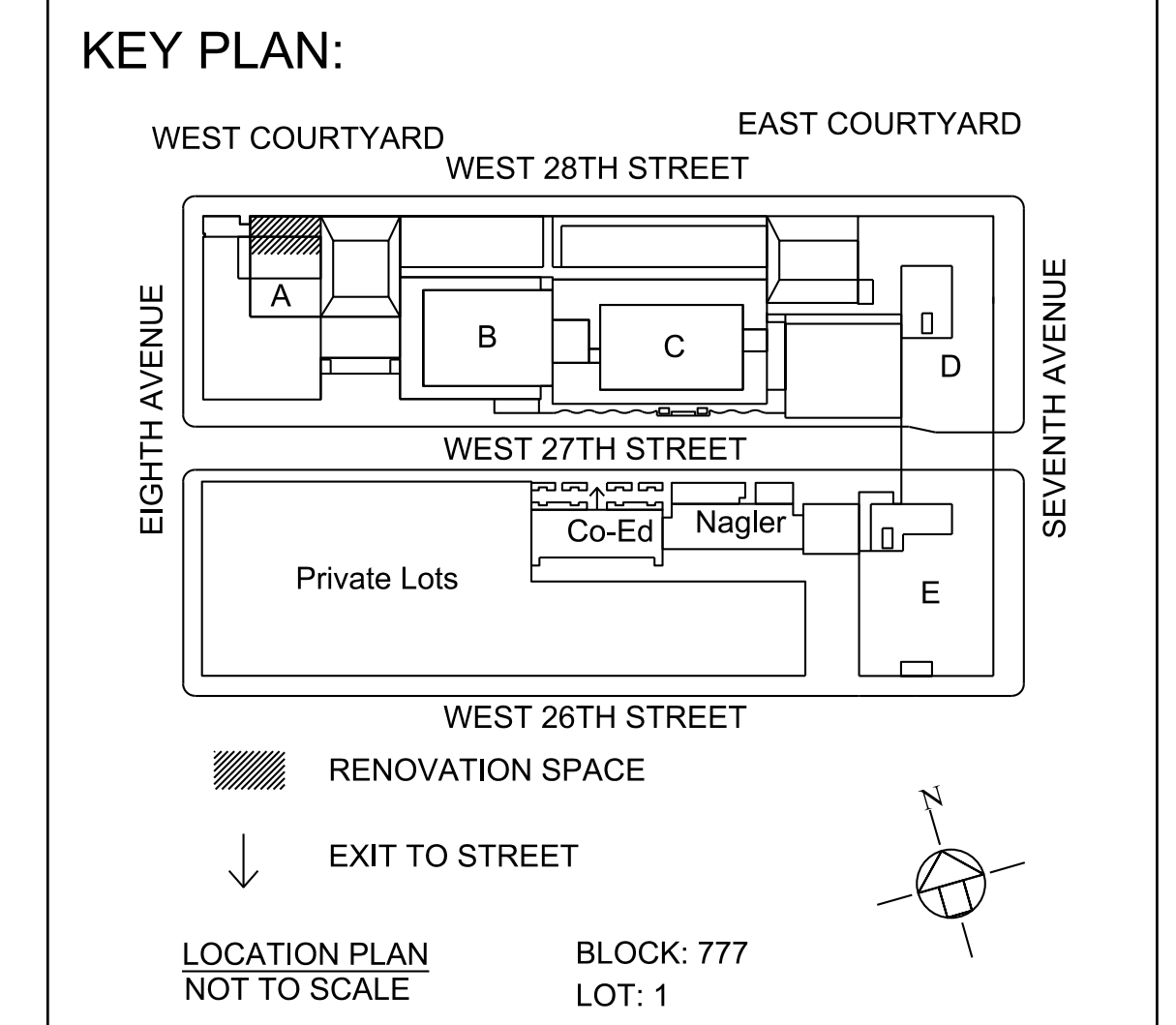
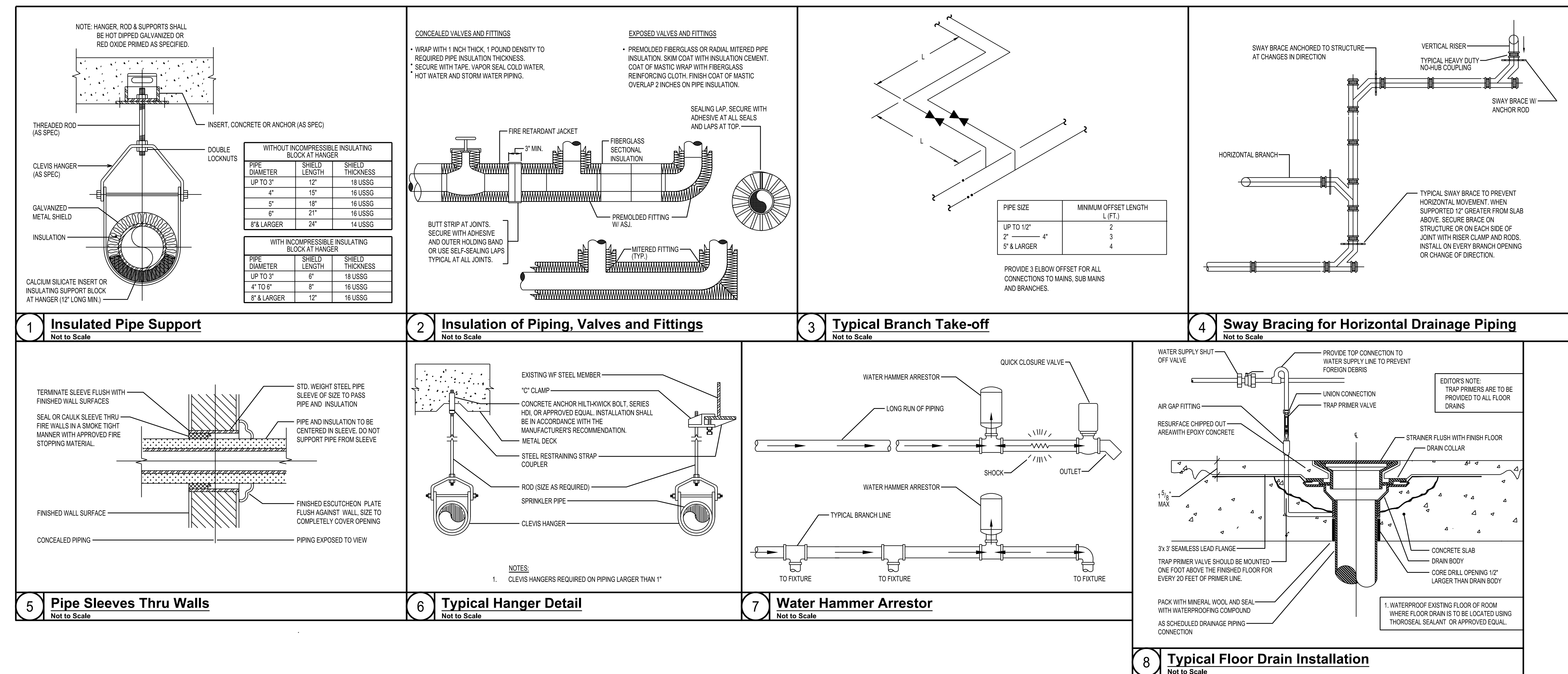
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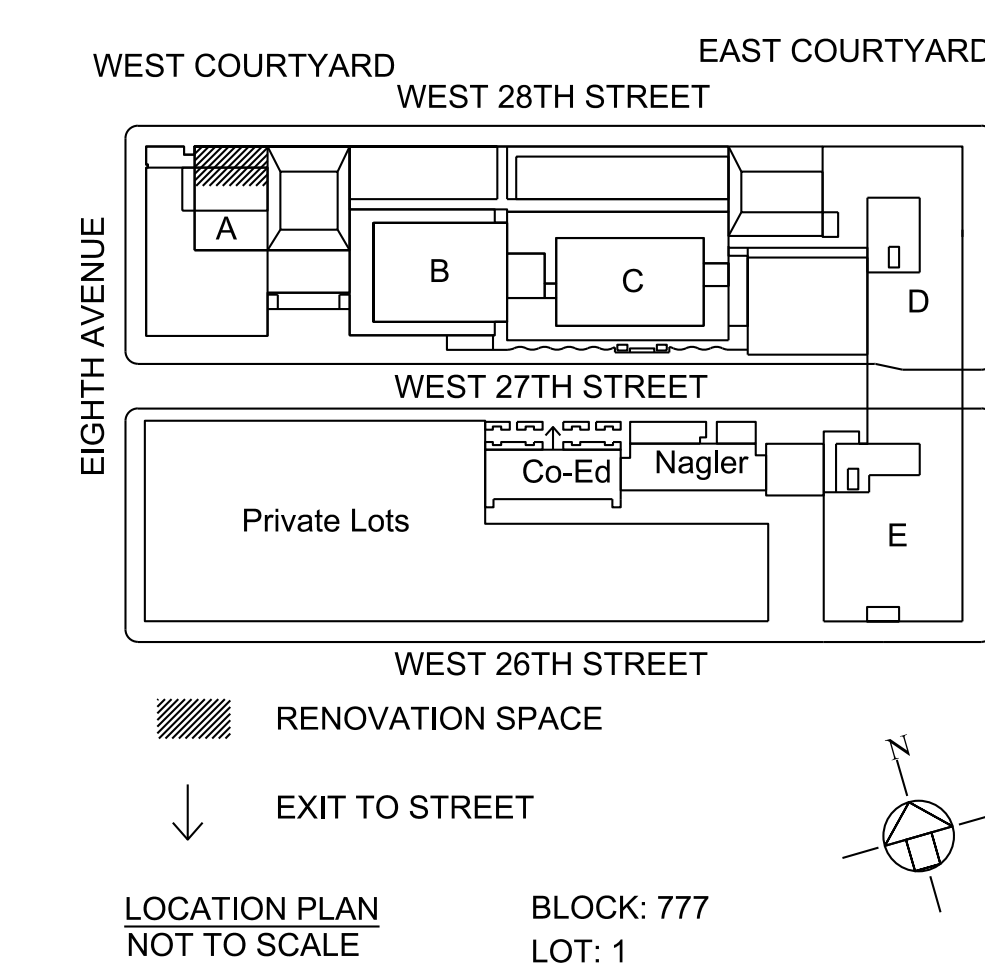
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PLUMBING RISER DIAGRAM

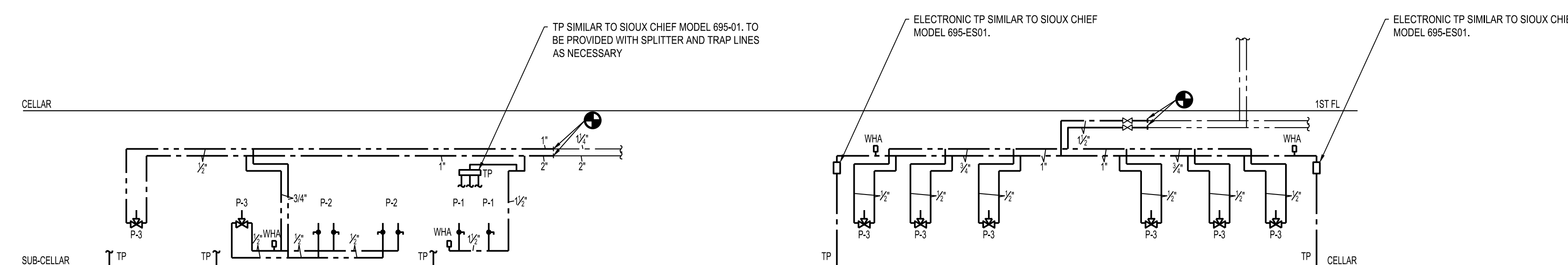
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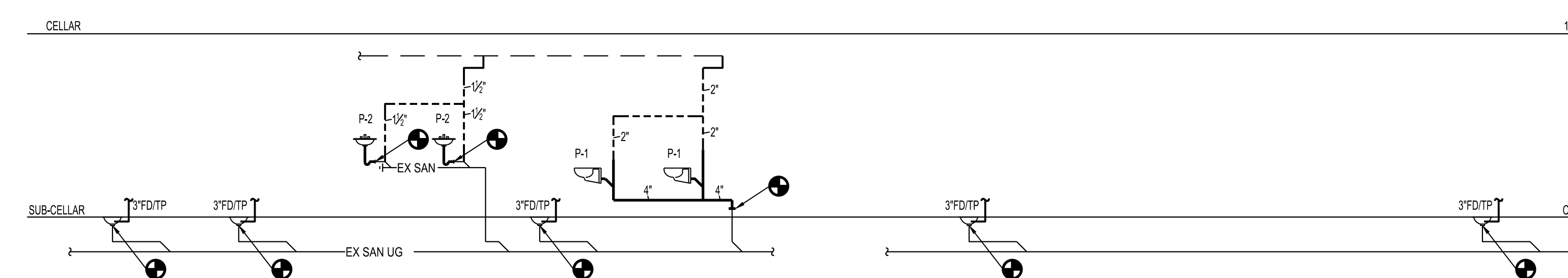
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DOMESTIC WATER RISER DIAGRAM
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SANITARY RISER DIAGRAM
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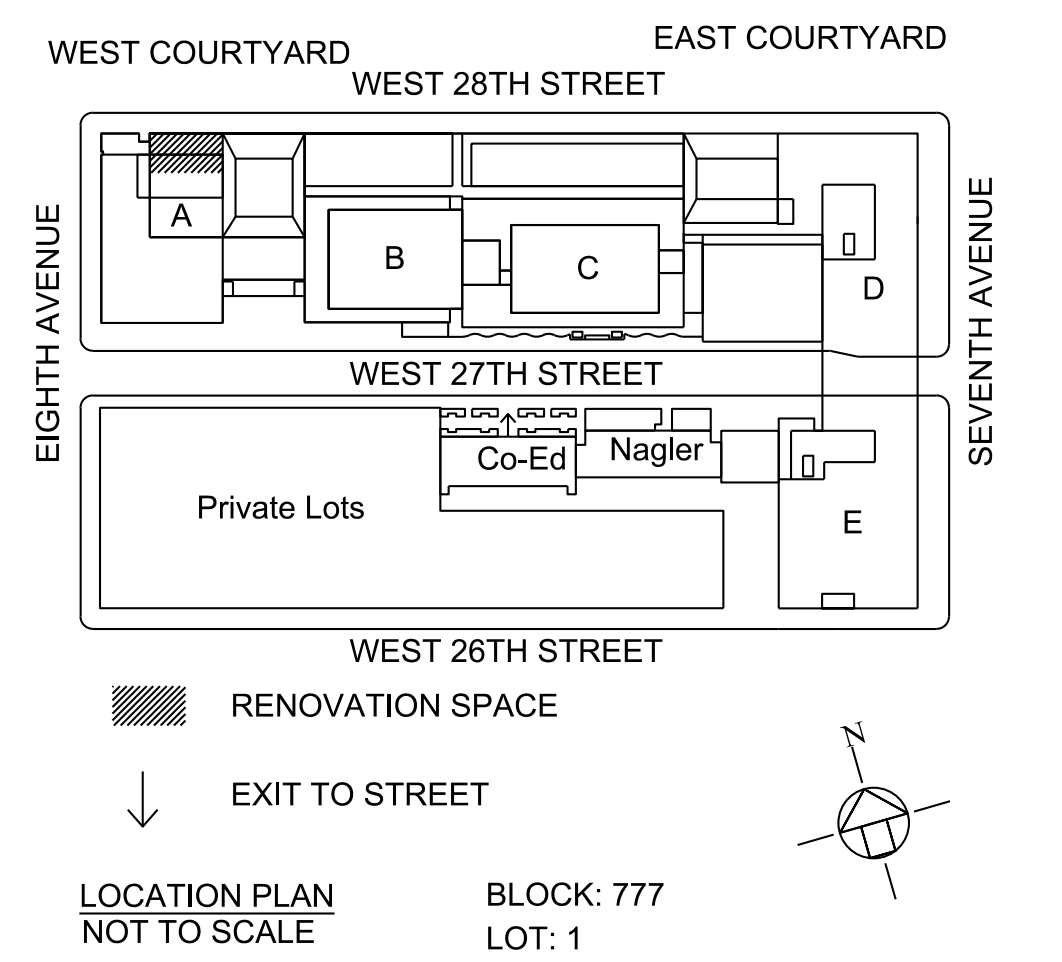
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GENERAL SPECIFICATIONS

1.01 REFERENCE TO GENERAL CONDITIONS AND SUPPLEMENTAL INSTRUCTIONS:

A. OBTAIN A COPY OF THE GENERAL CONDITIONS AND SUPPLEMENTAL INSTRUCTIONS TO THE CONTRACT DOCUMENTS AND PERFORM WORK WITH THE REQUIREMENTS CONTAINED THEREIN.

1.02 SCOPE OF WORK:

A. ALL WORK INDICATED ON THE DRAWINGS AND SPECIFICATIONS SHALL BE INCLUDED UNDER THE BASE BID EXCEPT WHERE THERE IS SPECIFIC REFERENCE TO EXCLUSION AND INCORPORATION IN OTHER QUOTATIONS.

1.03 GENERAL:

A. EXISTING PIPING WHERE INDICATED FOR EXISTING SYSTEMS IS DIAGRAMMATIC ONLY.
 B. BECOME THOROUGHLY FAMILIAR WITH ACTUAL BUILDING SYSTEMS WHICH ARE TO BE CHANGED, ALTERED, OR TO WHICH NEW CONNECTIONS ARE TO BE MADE, VERIFY ALL EXISTING CONDITIONS INCLUDING PIPE SIZE, LOCATION, AND ELEVATION.

C. THE INTENT OF THE WORK IS INDICATED ON THE DRAWINGS AND DESCRIBED HEREINAFTER. NO CONSIDERATION WILL BE GRANTED FOR REASON OF LACK OF FAMILIARITY ON THE PART OF THE CONTRACTOR REGARDING ACTUAL PHYSICAL CONDITIONS AT THE SITE.

D. COORDINATE WORK WITH ALL TRADES AND EXISTING CONDITIONS OF THE JOB SITE AND MAINTAIN REQUIRED CEILING HEIGHTS AND SPACE CONDITIONS.

E. ALL EQUIPMENT SHALL BE ASBESTOS FREE AND INDICATED AS SUCH.

F. DUE TO THE NATURE OF ALTERATION WORK WHICH REQUIRES THE BUILDING OR FACILITY TO BE KEPT OPERABLE AT ALL TIMES, IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE ALL ACTIVITIES, CONNECTIONS, SHUT DOWNS AND THE LIKE WITH THE GENERAL CONTRACTOR, TENANT, AND BUILDING OWNER, ANY INTERRUPTIONS OF BUILDING SERVICES INCLUDING PHYSICAL ACCESS TO ADJACENT SPACES MUST BE COORDINATED WITH THE BUILDING OWNER. ALL TEMPORARY CONNECTIONS OR AFTERHOURS WORK SHALL BE SO ARRANGED WITH ALL PARTIES INVOLVED.

G. IF THIS TRADE MUST PERFORM WORK IN OCCUPIED AREAS, IT SHALL MAKE ARRANGEMENTS WITH THE GENERAL CONTRACTOR AND THE OWNER AS TO THE TIME AND METHOD IN WHICH THIS WORK SHALL BE PERFORMED. ARRANGE FOR ALL ADJACENT AREAS TO BE PROPERLY PROTECTED AGAINST DAMAGE, DEBRIS, DIRT AND DUST.

H. PROVIDE AS PART OF NEW WORK:

1. HANGERS AND SUPPORTS FOR PIPING
2. SCAFFOLDING, RIGGING, AND HOISTING
3. RUBBER REMOVAL AND CLEANING
4. CUTTING AND PATCHING
5. SLEEVES, OPENINGS AND THE CORE DRILLING OF EXISTING SLABS
6. CAULKING, REPROOFING, AND THE PACKING AND FILLING OF SLEEVES AND OPENINGS
7. SHOP DRAWINGS AND AS-BUILT DRAWINGS
8. OPERATING AND MAINTENANCE INSTRUCTIONS
9. OBTAINING ALL REQUIRED PERMITS, APPROVALS, ACCEPTANCE, PLUMBING AND INSPECTION CERTIFICATES
10. GUARANTEE ALL WORK, LABOR AND MATERIALS FOR ONE YEAR FOLLOWING DATE OF ACCEPTANCE
11. VERIFYING EXISTING CONDITIONS AT THE PROJECT SITE
12. SPARE PARTS AND TOOLS
13. TESTS, OPERATION, PERFORMANCE AND CODE-REQUIRED TESTS
14. PROTECTION OF WORK AND ADJACENT SPACES DURING CONSTRUCTION
15. COORDINATION WITH OTHER TRADES
16. IDENTIFICATION, VALVE TAGS, VALVE TAG SCHEDULES, AND PIPING IDENTIFICATION

I. DRAWINGS ARE DIAGRAMMATIC AND THEREFORE DO NOT RELIEVE THIS CONTRACTOR FROM PROVIDING ALL WORK AND EQUIPMENT NECESSARY TO COMPLETE THE INSTALLATION ACCORDING TO THE REQUIREMENTS.

J. THE ARRANGEMENT, POSITION, AND CONNECTION OF PIPES, VALVES, ETC. INDICATED ON THE DRAWINGS SHALL BE TAKEN AS A CLOSE APPROXIMATION, AND WHILE THEY SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE, THE RIGHT IS RESERVED BY THE OWNER TO CHANGE THE LOCATIONS TO ACCOMMODATE ANY CONDITIONS WHICH MAY ARISE DURING THE PROGRESS OF THE WORK, WITHOUT ADDITIONAL COMPENSATION TO THIS CONTRACTOR FOR SUCH CHANGES, PROVIDED THAT THE CHANGES ARE REQUESTED PRIOR TO THE INSTALLATION OF THIS CONTRACTOR'S WORK.

K. THE RESPONSIBILITY FOR ACCURATELY LAYING OUT THE WORK RESTS WITH THIS CONTRACTOR. SHOULD IT BE FOUND THAT ANY OF HIS WORK IS SO LAID OUT THAT INTERFERENCE WILL OCCUR, HE SHALL SO REPORT THAT TO THE ARCHITECT/TOWNER.

1.04 CODES, PERMITS AND INSPECTIONS:

A. INSTALL ALL WORK IN FULL ACCORDANCE WITH THE REQUIREMENTS OF ALL LOCAL AND GOVERNMENTAL DEPARTMENTS HAVING JURISDICTION OVER THESE MATTERS, AS WELL AS WITH ANY REQUIREMENTS OF NFPA, UL, FM, ETC. AND OTHER APPLICABLE CODES.

B. SECURE AND PAY FOR ALL NECESSARY APPROVALS, PERMITS, INSPECTIONS, CHARTING, LEGAL DUMPING, ETC. AND DELIVER THE OFFICIAL RECORDS OF THE GRANTING OF PERMITS TO THE ARCHITECT AND OWNER WITHOUT ANY ADDITIONAL COST TO THE OWNER.

C. PAY ALL FILING FEES TO OBTAIN RELEASE OF APPROVED PLANS.

D. PAY ROYALTIES OR FEES REQUIRED IN CONNECTION WITH THE USE OF PATENTED DEVICES OR SYSTEMS, AND SAVE THE OWNER, THE ARCHITECT, THE CONSULTING ENGINEER, AND THE TENANT HARMLESS FROM ANY CLAIMS OR LAWSUITS ARISING FROM SUCH USE, AND INDEMNIFY EACH THEREOF AGAINST ATTORNEYS' FEES IN CONNECTION THEREWITH.

E. PROVIDE ALL SIGNS REQUIRED BY THE MUNICIPAL AUTHORITIES.

1.05 TESTS:

A. PRIOR TO SUBMITTING AN APPLICATION FOR FINAL ACCEPTANCE OF THE WORK, ALL TESTS DEEMED NECESSARY TO SHOW PROPER EXECUTION OF THE WORK SHALL HAVE BEEN PERFORMED AND COMPLETED IN THE PRESENCE OF AN ARCHITECT'S OWNERS REPRESENTATIVE. SCHEDULING OF ALL TESTING PROCEDURES SHALL BE ARRANGED TO SUIT THE CONVENIENCE OF THE ARCHITECT AND/OR OWNERS REPRESENTATIVE.

1.06 GUARANTEES AND CERTIFICATIONS:

A. ALL WORK SHALL BE GUARANTEED TO BE FREE FROM LEAKS OR DEFECTS, ANY DEFECTIVE MATERIALS OR WORKMANSHIP AS WELL AS DAMAGE TO THE WORK OF OTHER TRADES RESULTING FROM SAME SHALL BE REPLACED OR REPAIRED AS DIRECTED FOR THE DURATION OF STIPULATED GUARANTEE PERIODS. THE DURATION OF GUARANTEE PERIODS SHALL BE ONE YEAR FROM THE DATE OF THE FINAL ACCEPTANCE OF THE INSTALLATION BY THE OWNER, UNLESS A MORE STRINGENT PERIOD IS STIPULATED ELSEWHERE.

1.07 ENGINEERS REVIEW, SHOP DRAWINGS, AND CERTIFICATIONS:

A. PREPARE AND SUBMIT DETAILED SHOP DRAWINGS. THE ENGINEER WILL REVIEW SHOP DRAWINGS AND SAMPLES FOR CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND THE INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS. THE ENGINEER'S REVIEW OF SHOP DRAWINGS AND SAMPLES IS ONLY FOR THE CONVENIENCE OF THE OWNER IN FOLLOWING THE WORK, AND DOES NOT RELIEVE THIS TRADE OF RESPONSIBILITY FOR DEVIATIONS FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE ENGINEER'S REVIEW SHALL NOT BE CONSTRUED AS A COMPLETE OR DETAILED CHECK OF THE WORK SUBMITTED, NOR SHALL IT RELIEVE THIS TRADE 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 HAVE BEEN OMITTED FROM THE SHOP DRAWING SUBMITTALS.

B. NO PART OF THE WORK SHALL BE STARTED IN THE SHOP OR IN THE FIELD UNTIL THE ENGINEER HAS 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 DRAWINGS. PRIOR TO ASSEMBLING THE WORK, THE FOLLOWING SHALL BE SUBMITTED: SCALED FLOOR, PLAN AND CEILING DRAWINGS WITH DIMENSIONS, LOCATIONS OF ALL PIPING AND EQUIPMENT INCLUDING SIZES, ELEVATIONS, AND APPROPRIATE INDICATION OF COORDINATION BETWEEN STRUCTURAL AND MECHANICAL ELEMENTS, MANUFACTURERS CATALOGUE CUTS OF ALL EQUIPMENT TO BE USED, SAMPLES OF ALL DEVICES WHICH WILL BE CLEARLY VISIBLE TO VIEW. ALL SUBMITTALS SHALL BE PROPERLY IDENTIFIED WITH PROJECT NAME, ARCHITECT, ENGINEER, AND SUBCONTRACTORS NAME, ADDRESS, AND TELEPHONE NUMBER. PROVIDE CLEAR, DETAILED, REPRODUCIBLE "AS-BUILT" DRAWINGS UPON COMPLETION OF WORK AND PROVIDE SETS OF THE SAME TO LANDLORD AS DIRECTED.

C. THE ARCHITECT AND/OR ENGINEER WILL REVIEW SHOP DRAWINGS AND SAMPLES WITH REASONABLE PROMPTNESS AND WILL RETURN THEM TO THE CONTRACTOR STAMPED TO INDICATE THE APPROPRIATE ACTION AS FOLLOWS:

1. "NO EXCEPTIONS TAKEN" MEANS THAT FABRICATION, MANUFACTURE OR CONSTRUCTION MAY PROCEED PROVIDING THE SUBMITTAL COMPLIES WITH THE CONTRACT DOCUMENTS.
2. "MAKE CORRECTIONS 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 ARE NOT 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 ARE NOT PERMITTED ON THE JOB SITE.

1.08 DEMOLITION, CONNECTIONS TO EXISTING WORK, AND ALTERATION:

A. REFER TO THE CONTRACT DOCUMENTS FOR THE EXTENT OF SYSTEMS TO BE REMOVED. THE CONTRACTOR SHALL FIELD VERIFY AND INCLUDE IN THE BID ALL REMOVALS REQUIRED FOR THE COMPLETION OF WORK.

B. PLAN INSTALLATION OF NEW WORK AND CONNECTIONS TO EXISTING SYSTEMS TO INSURE MINIMAL INTERFERENCE WITH REGULAR OPERATION OF EXISTING FACILITIES. SUBMIT TO OWNER AND ARCHITECT FOR APPROVAL. DATE AND SCHEDULE OF ALL NECESSARY TEMPORARY SHUTDOWNS OF EXISTING SERVICES. ALL SHUTDOWNS SHALL BE MADE AT SUCH TIMES AS THEY WILL NOT INTERFERE WITH REGULAR OPERATION OF EXISTING FACILITIES AND ONLY AFTER WRITTEN APPROVAL OF THE SAME HAS BEEN OBTAINED FROM OWNER.

C. MAKE TEMPORARY CONNECTIONS AS REQUIRED BETWEEN NEW AND EXISTING WORK TO INSURE CONTINUOUS OPERATION OF THE FACILITY. ALL COSTS ASSOCIATED WITH RESTORING ANY DISTURBED EXISTING WORK TO ITS ORIGINAL CONDITION.

D. CONNECT NEW WORK TO EXISTING WORK IN A NEAT AND APPROVED MANNER. RESTORE ANY DISTURBED EXISTING WORK TO ITS ORIGINAL CONDITION.

E. PROVIDE CAPS, PLUGS, AND OUTLETS AS REQUIRED ON EXISTING PIPING.

F. REMOVE AND/OR RELOCATE EXISTING AND OTHER WORK AS REQUIRED TO COMPLETE FINAL INSTALLATION.

G. ANY PIPING RENDERED DEFUNCT BY THIS ALTERATION WORK SHALL BE REMOVED. ALERT THE ARCHITECT AND GENERAL CONTRACTOR OF ANY "DISCOVERED" ABANDONED PIPING. IN GENERAL, ALL ABANDONED, INACTIVE, OR SUPERFLUOUS PIPING, INCLUDING HANGERS AND CLAMPS SHALL BE REMOVED AS PER N.Y.C. PLUMBING CODE SECTION 704 SO AS TO ELIMINATE THE POSSIBILITY OF FUTURE BREAKS AND UNNECESSARY INTERFERENCES IN HUNG CEILING.

H. ALL NEW AND EXISTING SYSTEMS SHALL BE LEFT IN PERFECT WORKING ORDER UPON COMPLETION OF ALL NEW WORK.

PLUMBING SPECIFICATIONS

1.01 GENERAL:

A. ALL PROVISIONS IN THE GENERAL SPECIFICATIONS ABOVE APPLY TO THE PLUMBING SPECIFICATIONS.

B. ALL PIPING AND EQUIPMENT SHALL BE SUBSTANTIALLY SUPPORTED FROM THE BUILDING STRUCTURE. HANGERS AND SUPPORTS SHALL BE SPECIFICALLY APPROVED FOR USE IN EACH APPLICATION, WHERE OVERHEAD CONDITIONS DOES NOT PERMIT THE FASTENING OF HANGER RODS IN REQUIRED LOCATIONS. PROVIDE ADDITIONAL STEEL FRAMING AS REQUIRED AND APPROVED. DO NOT USE EXPANSION SHIELDS.

C. NO PLUMBING WORK SHALL BE HUNG FROM DUCTWORK OR THE HANGERS OF OTHER TRADES.

1.02 MATERIALS OF PIPING SYSTEMS:

A. SOIL, WASTE AND VENT PIPING SHALL BE CAST IRON HEAVY DUTY HUSKY 4000 ROD CLAMP ALL H-TORQ-125 COUPLINGS NONGRUB WITH MECHANICAL JOINTS OF STAINLESS STEEL BAND AND NEOPRENE SLEEVES. WEIGHT, SIZE, AND MANUFACTURER SHALL BE CAST OR STAMPED ON EACH LENGTH OF PIPE. ALL PIPES SHALL BE MANUFACTURED BY A MEMBER OF THE CAST IRON SOIL PIPE INSTITUTE.

B. WATER PIPING SHALL BE SEAMLESS DRAWN OR EXTRUDED TYPE "L" COPPER TUBING, HARD TEMPER IN ACCORDANCE WITH ASTM SPECIFICATION B-88. JOINTS SHALL BE WROUGHT OR CAST BRASS SOLDERED FITTINGS MADE BY AMERICAN BRASS CO. OR AS APPROVED OF STANDARD DESIGN. SOLDER JOINTS SHALL BE MADE WITH 95% (70% AND ANTIKNOX) SOLDER. NO OTHER TYPE OF SOLDER IS TO BE USED FOR ANY PURPOSE ON THE PROJECT.

C. ALL PIPING EXPOSED TO VIEW SHALL BE CHROME PLATED. THE TERM EXPOSED TO VIEW SHALL APPLY TO ALL PIPING FROM THE POINT WHERE IT LEAVES THE WALL TO THE POINT OF FINAL CONNECTION TO THE FIXTURE.

D. SPECIFICATIONS FOR PLUMBING MATERIAL AND INSTALLATION SHALL BE PROVIDED IN ACCORDANCE WITH RUBEN STANDARDS.

1.03 HANGERS:

A. PROVIDE SUITABLE AND SUBSTANTIAL HANGERS AND SUPPORTS FOR ALL PIPING, SUPPORT HORIZONTAL PIPING IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

PIPE SIZE	MAX. HANGER	SPACING ROD SIZE
1" & SMALLER	5/8"	3/8"
1 1/4" TO 2"	3/4"	3/8"
NON-HUB PIPING	5/8"	1/2"

B. NON-HUB PIPING SHALL HAVE A MINIMUM OF TWO HANGERS PER LENGTH OF PIPE. PIPE HANGERS TO BE INSTALLED ON EACH SIDE OF THE JOINT.

1.04 INSULATION:

A. COMPLY WITH THE 2022 NYC PLUMBING CODE, 2020 NEW YORK CITY ENERGY CONSERVATION CODE (NCECC) AND ASHRAE 90-2018 AS MODIFIED BY APPENDIX CA OF THE 2020 NCECC FOR MATERIALS AND INSTALLATION.

- FOR COLD WATER PIPING PROVIDE INSULATION AS FOLLOWS:
 PIPE SIZE SMALLER THAN 1/2" INSULATION SHALL BE 1"
 PIPE SIZE 1/2" AND LARGER INSULATION SHALL BE 1"
 -FOR HOT WATER PIPING PROVIDE INSULATION AS FOLLOWS:
 PIPE SIZE SMALLER THAN 1/2" INSULATION SHALL BE 1"
 PIPE SIZE 1/2" AND LARGER INSULATION SHALL BE 1 1/2"

B. ON HOT AND COLD WATER PIPING PROVIDE OWENS-CORNING FIBERGLASS INSULATION WITH FACTORY APPLIED SELF-SEALING VAPOR BARRIER JACKETS.

C. ALL INSULATION AND VAPOR BARRIERS SHALL BE SEALED AND CONTINUOUS THROUGH HANGERS, SLEEVES, FITTINGS, VALVES, ETC.

1.05 PLUMBING FIXTURES:

A. SEE DWG P-801.00

B. ALL PIPING ESCUTCHEONS, FIXTURE TAILPIECES, TRAPS, ETC. EXPOSED TO VIEW TO BE CHROME PLATED.

C. PROVIDE INDIVIDUAL FIXTURE STOP VALVES ON THE WATER SUPPLIES AT EACH NEW FIXTURE.

1.06 SLEEVES:

A. PROVIDE 18 GAUGE GALVANIZED SHEET METAL SLEEVES FOR ALL PIPES PASSING THROUGH WALLS. PROVIDE SLEEVES WITH AN ID. OF AT LEAST 1/2" GREATER THAN THE OUTSIDE OF THE PIPE, INCLUDING INSULATION WHICH MUST BE CONTINUOUS THROUGH THE SLEEVE. PACK SPACE BETWEEN PIPES AND SLEEVES WITH AN APPROVED PRESTOP MATERIAL, WHERE SLEEVES PASS THROUGH RATED CONSTRUCTION. FIT ESCUTCHEONS ON BOTH SIDES OF CONSTRUCTION.

1.07 VALVES:

A. ALL VALVES SHALL BE APOLLO. PROVIDE BALL VALVE TYPE WITH THREADED CONNECTIONS. NOTE: SOLDERED OR BRASS CONNECTIONS WILL NOT BE ACCEPTED.

B. BRANCH PRESSURE REDUCING VALVES WHERE REQUIRED: BRANCH PRESSURE REDUCING VALVES SHALL MAINTAIN A CONSTANT DOWNSTREAM PRESSURE PLUS OR MINUS 3 PSI) REGARDLESS OF CHANGING INLET PRESSURES AND/OR FLOW RATES. THE VALVE SHALL CLOSE DROPTIGHT WHEN THE DOWNSTREAM PRESSURE RISES TO THE SETTING OF THE SPRING. NO PRESSURE "CREEP" OR LEAK CAN BE TOLERATED. VALVE BODY AND COVER SHALL BE OF AN ALL BRONZE CONSTRUCTION. THE TRIM SHALL BE 416 STAINLESS STEEL. THE VALVE SHALL CONTAIN AN INTEGRAL CHROME NODDLE. STAINLESS STEEL STRAINER AND LOW FLOW BYPASS. ALL REPAIRS SHALL BE POSSIBLE WITHOUT REMOVING THE VALVE BODY FROM THE LINE. THE VALVE BODY SHALL BE CONSTRUCTED OF NPT UNION TAIL PIECES AT THE INLET AND OUTLET OF THE VALVE. THE VALVE SHALL BE SIMILAR IN ALL RESPECTS TO "GLAVAL CO. 897" OR 8042 PRESSURE REDUCING VALVE AS MANUFACTURED BY "GLAVAL CO." OR "JIC GUNDMANAGER". PIV. VALVE OF SAME CONFIGURATION IS AN APPROVED ALTERNATE. NO OTHER SUBSTITUTIONS WILL BE ACCEPTED.

1.08 CUTTING AND PATCHING:

A. DO ANY CUTTING REQUIRED FOR THE PASSAGE OR INSTALLATION OF PIPES, SUPPORTS, AND THE LIKE. IN GENERAL, OTHERS WILL DO DEMOLITION OF EXISTING WALLS AND CEILING.

B. THE EXPENSE OF CUTTING AND RESTORING SURFACES TO THEIR ORIGINAL CONDITION WHEN CAUSED BY THIS TRADES FAILURE TO PERFORM ITS PRELIMINARY WORK SHALL BE BORNE BY THIS TRADE.

1.09 CLEANING:

A. BEFORE FINAL CONNECTIONS ARE MADE AND BEFORE OPERATION OF EQUIPMENT AND PIPING, THOROUGHLY BLOW OUT, ROD OUT, OR WASH OUT ALL PIPING IN A MANNER DIRECTED AND APPROVED BY THE ENGINEER, TO REMOVE ALL ACCUMULATION OF DIRT, CHIPS, OR OTHER DELETERIOUS MATERIAL.

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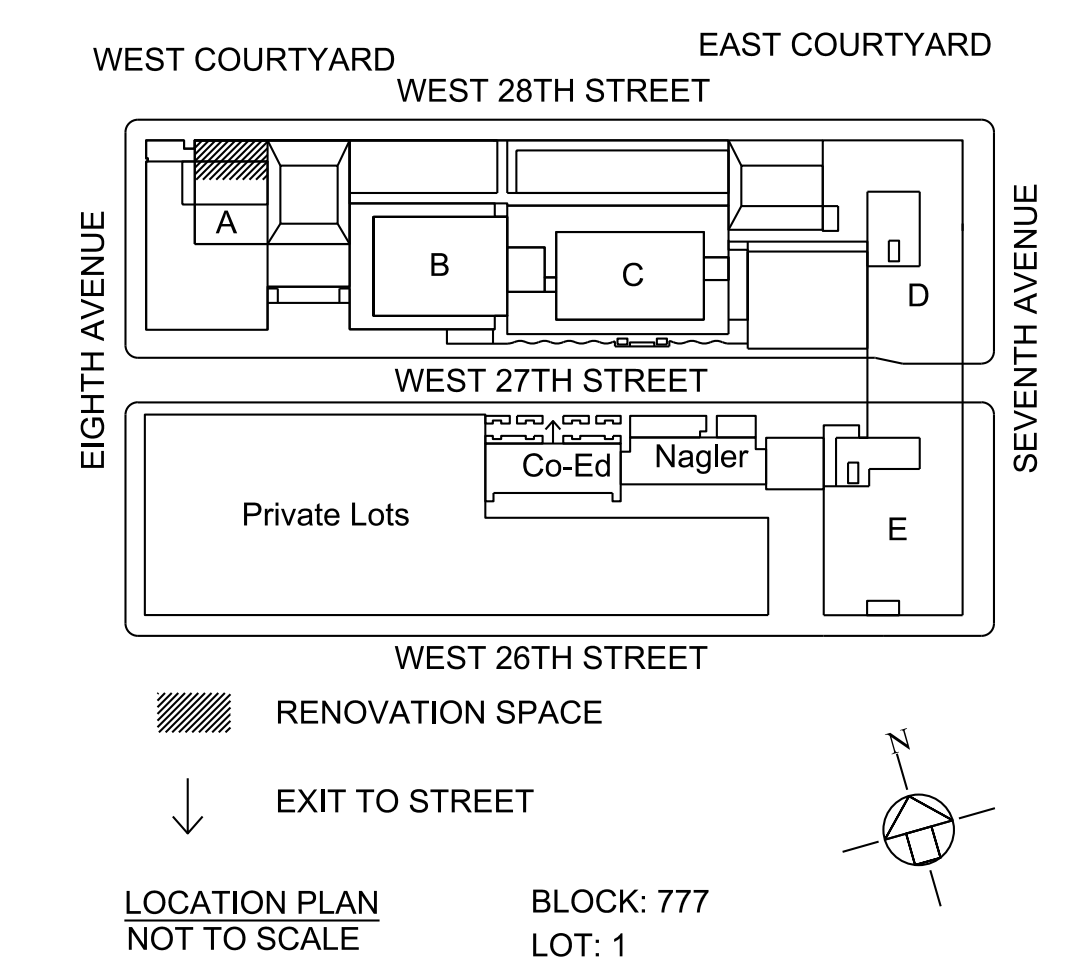
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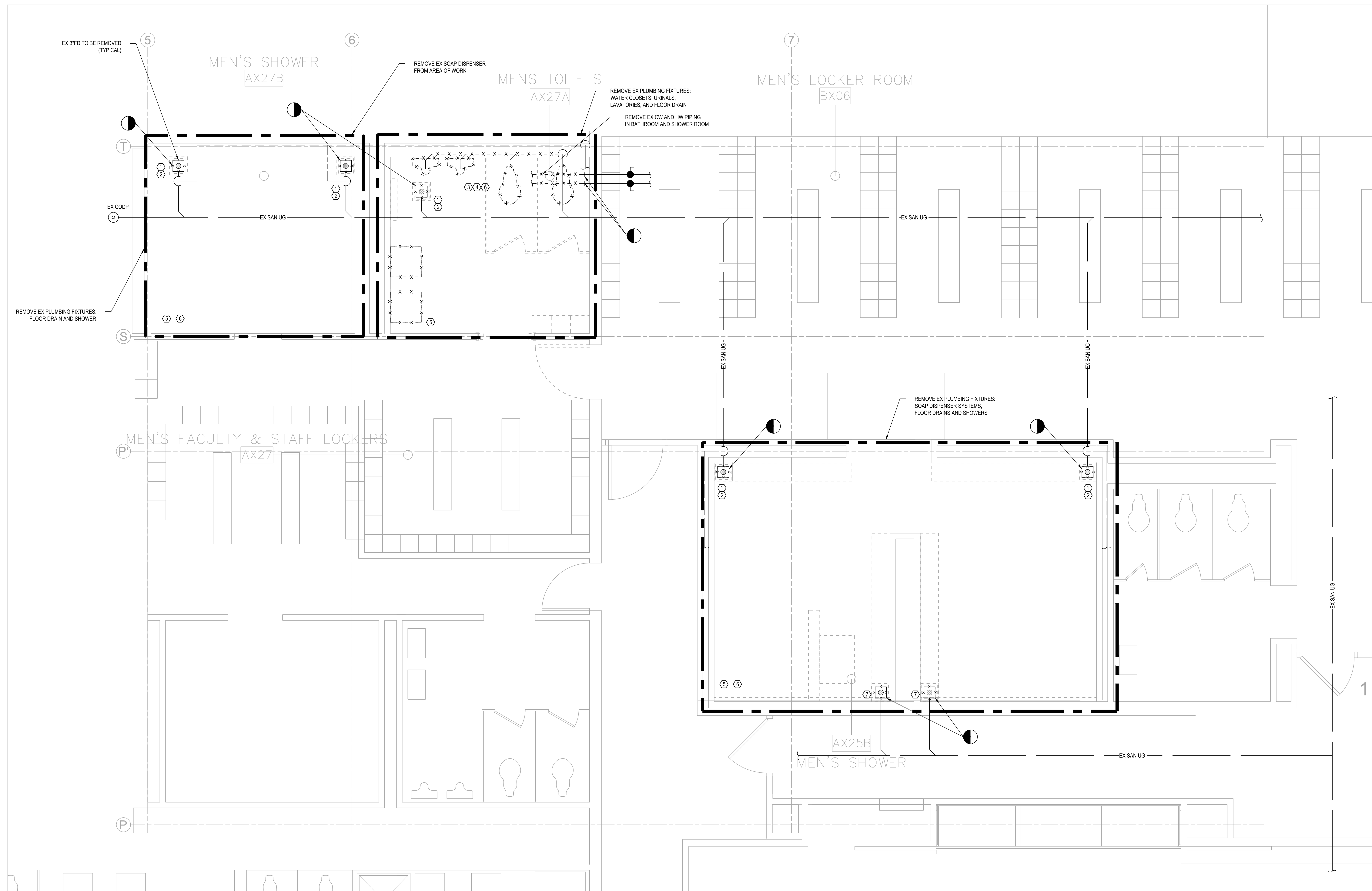
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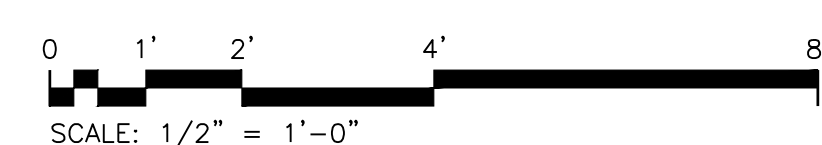
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1 SUBCELLAR PLUMBING DEMOLITION PLAN
 1/2"=1'-0"

NOTES:

- ① CHOP THE SLAB AROUND THE FLOOR DRAIN. THE EXISTING SANITARY PIPING SHALL REMAIN IN PLACE
- ② HYDRAULICALLY TEST THE EXISTING SANITARY PIPING AT A FLOW NO LES OF 5GPM. SNAKE THE SANITARY LINE IF NECESSARY. RETEST PIPE.
- ③ REMOVE ALL SANITARY PIPING AS INDICATED.
- ④ REMOVE VENT PIPING FROM URINALS AND WATER CLOSETS ALL THE WAY BACK TO THEIR POINT OF CONNECTION. CUT AND CAP AT POINT OF CONNECTION
- ⑤ REMOVE ALL SHOWER TRIM, MIXING VALVE AND ASSOCIATED CW AND HW PIPING.
- ⑥ REMOVE CW AND HW PIPING
- ⑦ CAP EXISTING DRAIN



ISSUED FOR BID 08/11/23

NEW YORK CITY BUILDING DEPARTMENT APPROVAL NOTE
 THIS PLAN IS APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

NEW YORK CITY ENERGY CONSERVATION CODE
 TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE 2020 NEW YORK CITY ENERGY CONSERVATION CODE.

