

1. GENERAL

- 1.1. Definitions. The term “Subcontractor” herein shall mean any subcontractor, supplier, service provider, or other vendor under the contract, (herein the “Agreement”), to which this document is attached and made a part. The term “Owner” refers to the owner of the Project under the construction contract between Contractor and that owner for the Project (the “Prime Contract”). The term “Contractor” refers to BNBuilders, Inc.
- 1.2. Purpose. The purpose of this Attachment C is to supplement the Agreement and Subcontract Documents. To the extent possible, this attachment shall be read to supplement and complement those other documents. Notwithstanding, Subcontractor should take special note of the fact that the Agreement contains additional terms and conditions dealing with the same topics as covered under this attachment. In the event of a conflict, ambiguity, or inconsistency between this attachment and the Agreement and/or any of the Subcontract Documents, the more burdensome, costly, and/or stringent provision upon Subcontractor shall govern.
- 1.3. The following items shall be submitted within ten (10) calendar days of award, as required by other Subcontract Documents, or as required by Prime Contract, whichever is earlier, for Contractor approval:
 - 1.3.1. Schedule of Values;
 - 1.3.2. Insurance Certificate;
 - 1.3.3. Payment and Performance Bonds (if applicable);
 - 1.3.4. Project-Specific Safety and Accident Prevention Plans;
 - 1.3.5. Detailed schedule outlining all of Subcontractor’s required work activities. The schedule shall include key milestones, inspections, submittals and their approvals, and procurement durations; and
 - 1.3.6. Total of the estimated hours, per work activity.

2. PROJECT ADMINISTRATION

- 2.1. Prevailing Wages. This Project is / is not subject to the provisions of the State’s Prevailing Wage Act. See the Attachment B Billing Requirements for the certified payroll requirements.
- 2.2. Business Licenses. Subcontractor shall maintain a current business license for the city in which the Project is located.
- 2.3. Permits. The Owner or others will provide the Master Use Permit and the Building Permit. Subcontractor shall provide and pay for any other permits, licenses, and fees necessary for the completion of its Work, including trade permits, unless provided otherwise under the Subcontract Documents. Subcontractor shall provide copies of all permits and inspection reports to Contractor’s Project Superintendent.
- 2.4. PlanGrid. Subcontractor shall secure its own license for PlanGrid (www.plangrid.com). Contractor will assist with training and implementation needs at the project level.
- 2.5. Sustainability.
 - 2.5.1. This is a LEED XXX certified Project. Subcontractors shall comply with related performance and administrative requirements and shall provide all documentation for the LEED certification.
 - 2.5.2. The Prime Contract requirements regarding the LEED certification for the Project are hereby incorporated into and made a part of this attachment by this reference. Subcontractor shall comply with such requirements as it relates to Subcontractor’s Work.

- 2.6. Escalation. All escalation costs for the duration of the Project, including but not limited to increases in the cost of labor, material, equipment, and fuel, are included in the Subcontract Sum. Subcontractor will not be entitled to an increase in its compensation for increases in its cost of the work due to such market conditions.
- 2.7. Media. Without exception, no publicity releases (newspaper, radio, TV, advertisement, etc.) will be issued without prior written approval from Contractor.
- 2.8. Submittals.
- 2.8.1. Within two (2) weeks of contract execution, or as otherwise directed by Contractor in writing, Subcontractor shall submit all submittals except the closeout submittals to Contractor. Subcontractor shall also provide lead times for fabrication and delivery and required order release dates to maintain the schedule for all materials, equipment, and fabricated assemblies Subcontractor is providing.
- 2.8.2. Unless otherwise directed by Contractor in writing, submittals shall be submitted electronically.
- 2.8.3. Submittals shall conform to the Subcontract Documents and include the following information:
- 2.8.3.1. Rough opening dimensions;
- 2.8.3.2. Backing, blocking, or steel supports required for installation of Subcontractor's Work (regardless of whether it's included in the Subcontractor's Work or not); and
- 2.8.3.3. Weights of heavy equipment or loads that will be imposed on the structure or on any adjacent temporary shoring. If the loads exceed the indicated loads on the load diagrams or if no load diagrams are provided, Subcontractor is required obtain approval from the engineer of record before starting its Work.
- 2.8.4. If deferred submittals are a requirement of the specifications that Subcontractor is responsible to provide, Subcontractor is responsible for providing engineering, submittal documents, submitting the submittal package to the city, coordination with the city, and the associated fees. The deferred submittal package shall be submitted to conform to the Project Schedule.
- 2.8.5. Contractor shall review Subcontractor's submittals but only for apparent conformance with the Subcontract Documents. Any notations, comments, or dimensions indicated on these submittals by Contractor are for information only and are not to be construed as substitutes for the Subcontractor's own verification of dimensions and coordination with the work of others on the Project, nor do they modify or waive any of the Subcontractor's responsibilities as set forth in the Subcontract Documents or constitute a change order under or to the Agreement.
- 2.8.6. Modifications or notations included in the reviewed submittals do not relieve Subcontractor of its obligation to provide what is required in the Subcontract Documents. Notations in the submittals that Subcontractor construes as changes in its Work shall be documented by Subcontractor via a request for information (RFI) prior to Subcontractor's performance of the potential change. Any cost or schedule impacts must be incorporated into a change order prior to Subcontractor proceeding with the changed work.
- 2.8.7. Insert mockup requirements beyond those in the specifications here, or delete this line if there are none.
- 2.9. Requests for Information (RFI).
- 2.9.1. RFIs shall be submitted by Subcontractor to Contractor in a timely fashion.
- 2.9.2. All Subcontractor Work shall be completed in accordance with each manufacturer's recommendations and/or directions. No preparatory step or installation procedure may be omitted unless modified or exempted in writing by the manufacturer specifically for the

Project. Where more than one manufacturer is involved in the Work, or its component parts, Subcontractor shall follow all manufacturers' directions and recommendations. In the event of conflict between two or more manufacturers' directions and recommendations, Subcontractor shall submit such discrepancy or conflict to the Architect for resolution and instruction under an RFI before submittals are submitted where reasonably practicable, and in all cases before the Subcontractor proceeds with the affected Subcontract Work.

- 2.10. Substitutions. Substitution requests shall be submitted and approved per the process defined in the Prime Contract. If a substitution is accepted by the Owner and/or its architect, Subcontractor shall be liable for all costs, claims, damages, liabilities, and losses sustained by Contractor or the Owner associated with the substituted materials.
- 2.11. Coordination. Subcontractor shall a) coordinate its Work with that of the Contractor and all others whose work may interfere with Subcontractor's Work; b) immediately advise Contractor in writing of any such interference with Subcontractor's Work; c) pause its Work until such interferences are resolved; d) cooperate and diligently work with Contractor to resolve such discrepancies; and e) in all cases participate in the preparation of coordination drawings, work schedules, and planning in areas congested by the Work of Subcontractor and others. Subcontractor shall not be entitled to compensation relating to such conflicts, to the extent resolution constitutes a bona fide change in Subcontractor's Work, if Subcontractor does not participate in coordination of its Work with others.
- 2.12. Reports.
- 2.12.1. Subcontractor shall submit daily reports of its Work to Contractor. Subcontractor's daily reports shall be submitted to Contractor the morning of the following business day and shall include the following information:
- 2.12.1.1. Work Force: Provide an accurate count of all labor for all tiers of subcontractors on site;
- 2.12.1.2. Work Performed: Provide a description of the Work performed including locations within the building and/or on the job site (i.e., floor, elevation, gridlines, etc.), major equipment used, and quantities installed or placed;
- 2.12.1.3. Safety: Incidents, near-misses, reviews, and meetings;
- 2.12.1.4. Accidents: List all accidents;
- 2.12.1.5. Stoppages, Delays, Shortages, and Losses: Identify the same and provide details of the cause. Note Section 2.12.2 below, however;
- 2.12.1.6. Time & Material (T&M) Work: Note any T&M Work performed. All T&M Work must be provided in accordance with the requirements in the Agreement, however, which compliance is a condition precedent to payment for such work;
- 2.12.1.7. Inspections: Note all inspections that were scheduled and their results;
- 2.12.1.8. Equipment or System Tests and Start Ups: Indicate commissioning items and their statuses of implementation.
- 2.12.1.9. Utilities. Utility services connected or disconnected;
- 2.12.1.10. Weather: Temperature, wind speed, rain, snow, and other significant weather events.
- 2.12.1.11. Unresolved issues. Note Section 2.12.2, however.
- 2.12.1.12. Deliveries: Indicate all materials, equipment, and assemblies delivered to the job site
- 2.12.2. Nothing provided in the daily reports shall be considered a change order, a notice of a change, a request for a change order, a claim, or a notice of a claim. Subcontractor shall strictly follow the Subcontract Documents for change orders and claims.

2.13. Changes.

2.13.1. Change order requests shall include, but not be limited to the following:

- 2.13.1.1. Contractor's Change Proposal Number;
- 2.13.1.2. Identify the work impacted, referencing the appropriate drawings, specifications, details, etc.;
- 2.13.1.3. Quantities of materials, labor, equipment, etc. affected, material credits, and restocking costs if applicable;
- 2.13.1.4. Changes in productivity;
- 2.13.1.5. Proposals from lower tier subcontractors and suppliers; and
- 2.13.1.6. Schedule impacts.

2.13.2. Labor Rates. Labor rates shall include the rates, benefits, employment taxes, fringes, union contributions, and other labor burden if applicable. Labor rates shall not include supervision, safety, tools, or any other mark up or fee.

2.13.3. Equipment.

- 2.13.3.1. Equipment that is owned by Subcontractor and rented to the Project shall not exceed 75% of the fair market purchase value as established by Equipment Watch (www.equipmentwatch.com).
- 2.13.3.2. Tools or equipment rented from a third party shall be paid at the actual invoiced amount provided the amount represents the fair market rental rate.
- 2.13.3.3. Mobilization and standby costs shall not be charged for equipment that is already at the site.

2.13.4. Overhead and Profit. Subcontractor's overhead and profit markup on change orders is the compensation for all home office overhead, jobsite overhead, jobsite general requirements, profit, and other costs including but not limited to supervision, clerical assistants and costs, project manager, project engineer, other engineers, project foreman, estimator, superintendent, other project management, vehicles, taxes (except for sales tax), employee per diem, subsistence and travel costs, warranty, safety costs, printing and copying, layout and control, quality control / assurance, purchasing, attorney fees, expert fees, financing costs, small or hand tools (a tool that costs \$500 or less and is normally provided by the performing subcontractor), expendables, preparation of as-built drawings, impact on unchanged work, claim and change preparation, and delay and impact costs of any kind (cumulative, ripple, or otherwise). Unless otherwise specified within the Prime Contract, the overhead and profit markups shall be limited as follows:

- 2.13.4.1. Subcontractor shall receive 10% of the costs of any materials, equipment, and work properly performed by the Subcontractor's own forces;
- 2.13.4.2. Subcontractor shall receive 5% of the amount owed directly to a lower-tier subcontractor or supplier for materials, equipment, and work properly performed by that subcontractor or supplier;
- 2.13.4.3. Each lower-tier subcontractor of any tier shall receive 10% of the costs of any materials, equipment, and or work properly performed by its own forces;
- 2.13.4.4. Each lower-tier subcontractor of any tier shall receive 5% of the amount it properly incurs for materials, equipment, and work properly performed by its suppliers or subcontractors of any lower tier;
- 2.13.4.5. None of the fee or markup percentages in this section shall be compounded or included in the calculation of any other markup (i.e., there shall be no markup of markup);

- 2.13.4.6. Small tools (above \$500 but less than \$1,000) and general safety shall not exceed 1.5% of labor costs;
 - 2.13.4.7. Markups shall apply to both additive and deductive change orders (i.e., there shall be negative overhead and profit on deductive changes orders; markup on combined changes orders will be upon the net additive amount); and
 - 2.13.4.8. Markups that are not identified in this Section 2.13 shall not be applied to any change order.
- 2.13.5. Insurance and Bond Mark Ups
- 2.13.5.1. Insurance: The actual cost of any changes in Subcontractor's liability insurance arising directly from the change to the Work expressed as a percentage submitted with the certificate of insurance and subject to an audit.
 - 2.13.5.2. Bonds: The actual cost of the change in Subcontractor's premium for the statutorily or contractually required payment and performance bonds arising directly from the changed Work expressed as a percentage submitted with evidence of bondability and subject to audit.
 - 2.13.5.3. Upon request, Subcontractor shall provide the supporting documentation from its insurer or surety of any claimed costs.
- 2.14. Time and Material Work. In the event Contractor directs Subcontractor in writing to perform any work on a time and material basis (T&M), the following requirements apply:
- 2.14.1. Subcontractor shall submit, on a daily basis, Extra Work Authorizations (EWA) tickets for acknowledgement signature by Contractor's Project Manager. No other person is authorized to approve Subcontractor's EWAs, including but not limited to Contractor's Superintendents, foremen, or field craft personnel, except as Contractor may provide otherwise by written change order. Subcontractor may not rely on any change to Contractor's authorized person via verbal communication, email, or any other method other than written change order. The signature of Contractor's authorized representative shall not constitute agreement that the work of the EWA ticket has been performed in accordance with the requirements of the Subcontract Documents, which shall remain Subcontractor's responsibility. The signature of Contractor's authorized representative shall not entitle Subcontractor to payment for the work of the EWA ticket. Subcontractor's strict compliance with the requirements of Section 2.14 is a condition precedent to Subcontractor's right to payment for T&M Work. Subcontractor shall not be entitled to payment for any EWA ticket work claimed to have been performed when the EWA tickets documenting such work have not been duly signed by Contractor's authorized representative.
 - 2.14.2. Subcontractor's EWA tickets shall include, at a minimum, the following information:
 - 2.14.2.1. Contractor's Change Proposal number; RFI, ASI, CCD, or the like; or identification of the genesis of the T&M Work (including the party responsible for the necessity of the work);
 - 2.14.2.2. The date on which the work was performed;
 - 2.14.2.3. A detailed description, location, and time the work is performed;
 - 2.14.2.4. The name of the Contractor's representative authorizing such work to be performed;
 - 2.14.2.5. Craft persons' names, labor hours, and labor rates for all labor performed, with separate identification of regular and overtime hours;
 - 2.14.2.6. Quantities and costs for each item of materials used to perform the work;
 - 2.14.2.7. Quantities and costs for each item of equipment used to perform the work;
 - 2.14.2.8. The signature of Contractor's authorized representative.

- 2.14.3. Without limiting Subcontractor's obligation to strictly comply with this Section 2.14, any EWA work performed that does not contain the information set forth in Section 2.14.2 shall be performed at Subcontractor's risk and without the right to compensation.
 - 2.14.4. EWA numbering shall not have any sequencing gaps.
 - 2.14.5. EWA tickets shall not combine more than one change item.
 - 2.14.6. EWA tickets shall not include more than one day's work.
 - 2.14.7. Work tracked on EWAs are for actual costs only. Small tools and safety cannot be applied per the percentage in Section 2.15.6.6.
 - 2.14.8. Final pricing for EWA tickets that are acknowledged by Contractor's Project Manager is due to Contractor within five (5) calendar days of the date of the EWA ticket, otherwise the ticket is void.
- 2.15. Quality Control.
- 2.15.1. Subcontractor shall comply with any quality control plan Contractor may promulgate for the Work or Project.
 - 2.15.2. Subcontractor shall submit its own site-specific Quality Assurance / Quality Control (QA/QC) plan that covers its Work prior to the first preconstruction / mobilization meeting and beginning its Work. The QA/QC plan must conform to the Subcontract Documents and include the following:
 - 2.15.2.1. Method to verify the proper material and equipment is delivered to the site and inspected for non-conformities before acceptance;
 - 2.15.2.2. Method to verify the latest approved field installation plans are given to field;
 - 2.15.2.3. Confirmation that the approved field installation plans are in alignment with the Contract Documents and approved submittals;
 - 2.15.2.4. Method to verify the Work is installed correctly; and
 - 2.15.2.5. Confirmation of installation restrictions of scope of work (temperature, humidity, etc.)
- 2.16. As-Built Documents. If applicable to Subcontractor's Work under the Prime Contract, as-built documents shall be maintained current at all times. Failure to maintain current as-built documents shall result in withheld payments.

3. SCHEDULE

- 3.1. Subcontractor and its sub-tier subcontractors are required to participate in weekly "pull-planning" schedule meetings that are at least one hour long, or as otherwise required by Contractor. Contractor shall provide notice of the meetings so subcontractors can prepare information regarding tasks, manpower, and logistics for its upcoming work. Subcontractor shall work collaboratively during these sessions with Contractor and other subcontractors to coordinate the scheduling of Subcontractor's Work and to resolve potential schedule conflicts with the work of others.
- 3.2. 6 week look-ahead schedules shall be submitted by Subcontractor to Contractor every week. Contractor shall rely on these schedules to schedule its work and the work of others on the Project.
- 3.3. Subcontractor shall include multiple mobilizations for its Work as shown in Attachment E.
- 3.4. Subcontractor shall assume that all working areas will be shared with other subcontractors and shall include the impact of the same in its price for the Work.
- 3.5. Subcontractor shall include premium time or shift work as may be required to timely perform its Work so as to maintain and not delay the schedule per Attachment E.

- 3.6. Premium time work must be performed during the work week or on Saturdays. Work on Sundays shall only be permitted if Subcontractor has worked premium time during the previous work week and Saturday. Contractor's supervision during Subcontractor's premium time work shall be billed to Subcontractor at \$200/hour.

4. PERSONNEL

- 4.1. Subcontractor shall provide the appropriate project management and supervision for the duration of its Work on the Project.
- 4.2. Subcontractor's field supervisor shall be available on site at all times when Subcontractor's Work is in progress (including sub-tier work); authorized to bind Subcontractor in all respects under the Subcontract; and capable of coordinating Subcontractor's Work.
- 4.3. Subcontractor's supervisor shall be fluent in English and in the language(s) spoken by its employees in order to communicate with them and direct the Work.
- 4.4. Subcontractor is reminded that it is bound by the terms of any Non-Disclosure Agreement (NDA) that may exist for the Project and agrees it shall require its employees and sub-tier subcontractors and vendors to be bound to the terms of the same prior to sharing any Project information or working on the Project.
- 4.5. All personnel accessing or working on the job site are required to attend a project orientation prior to entering or starting work on the site. Orientations are ordinarily held at 7:15am and shall be scheduled at the discretion of Contractor's Superintendent. Please notify the Superintendent 48 hours in advance of needing an orientation. Orientations are one hour long and address the site protocols as well as safety requirements. Additional training or meetings may be required if Subcontractor or any party for which it is responsible does not follow the required site protocols.
- 4.6. Subcontractor's on-site personnel are required to participate in mandatory daily "stretch and extend" or "stretch and flex" meetings/sessions on site. All workers shall be wearing all required personal protective equipment (PPE) at the start of the meetings. At these meetings, safety announcements will be made, and each crew lead will give a brief description of their crew's tasks for the day and main hazards of which others need to be aware. Subcontractor shall be assessed a back charge of \$100 for each meeting that any of its employees, or that of its sub-tiers, fail to attend.
- 4.7. Subcontractor's on-site supervisor or Project Manager is required to attend weekly subcontractor meetings. Subcontractor may be requested to attend the Owner Architect Contractor (OAC) meetings if necessary.
- 4.8. Eating and drinking is not permitted on site except in the designated lunch and break areas. However, water is allowed on site.
- 4.9. Use of tobacco and vaping products is not permitted on site.
- 4.10. Musical radios or devices, including personal devices, are not permitted on site.
- 4.11. Subcontractor is responsible for providing its field crews with current Contract Documents including drawings, specifications, RFIs, ASIs, CCDs, etc. and approved submittals.
- 4.12. Subcontractor will comply with all OSHA - DOSH, federal, state, and local safety laws, regulations, ordinances, and requirements.
 - 4.12.1. Any employees of the Subcontractor who may have regularly scheduled unsupervised access to children shall be subject to a record check through the Federal Bureau of Investigation before Contractor permits them to have such access to children. The cost for record checks shall be included in the Subcontract Sum under the Agreement.
 - 4.12.2. Neither Subcontractor nor any of Subcontractor's subcontractors of any tier shall utilize any employee at the site, or permit any contact between children and any employee, who has pled guilty to or been convicted of any felony crime involving the physical neglect of a child, the physical injury or death of a child, sexual exploitation of a child, sexual offenses

where a minor is a victim, promoting prostitution of a minor, or the sale or purchase of a minor child. Subcontractor shall remove from the work site any employee or individual who has engaged in such actions or who the Contractor or Owner reasonably considers objectionable in the same respect.

5. SITE COORDINATION

- 5.1. Working Hours. Site working hours are generally from 7:00am to 3:30pm, Monday through Friday for all trades. Subcontractor shall confirm the hours for the Project with Contractor. Requests to work outside these hours shall be made in writing and as part of any work plan of Subcontractor. Contractor reserves the right to change the hours for both the standard and off-hour shifts.
- 5.2. Site Logistics Plans. Subcontractor shall strictly comply with the site logistics plan(s) developed by Contractor, as the same may be amended from time to time.
- 5.3. Lean Construction Principles. The Project will / will not utilize Lean Construction principles developed by the Lean Construction Institute in planning and implementing the Work. If the Project will utilize Lean Construction, as selected in the preceding sentence, the remainder of this Section applies. Otherwise, it may be disregarded, except as otherwise provided under this Attachment.
 - 5.3.1. This process includes but is not limited to the issuance of a milestone schedule, collaboratively created phase schedules, "make-ready" look-ahead plans, weekly work plans, and a method for measuring, recording, and improving the reliability of the schedules, planning, information, and other work product derived under the process. Subcontractor and its subcontractors, to the lowest tier, shall participate in Pull Planning sessions as directed by Contractor and as described above in this attachment. Individuals who understand the Subcontractor's Work shall participate in the process on behalf of Subcontractor. The scheduling information and agreements developed in these Pull Planning sessions will be used to create look-ahead schedules. Subcontractor is responsible to actively identify and resolve constraints (i.e., issues that would prevent the work from being performed as planned) manifested by such schedules that affect Subcontractor's Work.
 - 5.3.2. This Project will be using the Last Planner System (part of the Lean Construction principles) for improving the level of coordination, planning, and controlling of the scheduling of work for this Project. Subcontractor shall actively participate in the system.
 - 5.3.3. This Project will be utilizing the principles of "5S" in Lean Construction (i.e., sort, set in order, shine, standardize, and sustain) to improve jobsite cleanliness, safety, and work efficiency. All tradespersons entering the site will receive training on the principles of 5S and will be expected to implement the same respecting their work.
 - 5.3.4. Subcontractor shall follow the principle of just-in-time delivery for all materials, equipment, fabricated assemblies, supplies and otherwise being delivered to the site as. Subcontractor shall coordinate all deliveries with the Contractor's superintendent and/or onsite staff with advance notice as may be reasonable under the circumstances. Unscheduled deliveries may be turned away.
- 5.4. Noise. Subcontractor shall comply with all noise restrictions and monitoring imposed by the authorities, the Owner, and Contractor.
 - 5.4.1. Restricted activities:
 - 5.4.2. Noise restriction hours:
 - 5.4.3. Notification requirements:
- 5.5. Parking. Parking will not be available on site and is the responsibility of Subcontractor.
- 5.6. Safety.

- 5.6.1. Subcontractor shall communicate all safety and workplace requirements to its employees, sub-tier subcontractors, suppliers, and other vendors and cause the same to fully comply with such requirements.
- 5.6.2. Subcontractor shall provide all necessary and required personal protective equipment (PPE) to its personnel and shall cause the same, as well as the personnel of its subcontractors, suppliers, and other vendors to the lowest tier, to use and wear such PPE at all times while on site or working on behalf of the Project. PPE includes but may not be limited to hard hats, safety glasses, high visibility vests, and gloves. Additional PPE for specific activities is required per Attachment G. Employees without proper PPE shall not be allowed on site. Contractor may but shall not be obligated to provide PPE. In the event Contractor provides PPE, it shall be at the following rates paid by Subcontractor by way of deductive change order:
 - 5.6.2.1. Hard Hat: \$75
 - 5.6.2.2. Safety Glasses: \$50
 - 5.6.2.3. Safety Vest: \$400
 - 5.6.2.4. Gloves: \$50
 - 5.6.2.5. All other items shall be billed at cost plus 20% mark up.
- 5.6.3. Subcontractor shall provide all other safety equipment required to perform its Work safely and in compliance with all safety-related laws, statutes, regulations, acts, ordinance, custom, standards, and other rules.
- 5.6.4. Subcontractor's employees' certifications (e.g., flagging, welding, operator, etc.) must be readily available to Contractor. Subcontractor shall ensure its workers are at all times properly certified and qualified for all work assigned to them.
- 5.6.5. Subcontractor shall provide at least one site safety inspection of the site per week while Subcontractor's activities are occurring on the Project site.
- 5.7. Material Storage and Deliveries to the Job Site.
 - 5.7.1. Deliveries need to be made just in time for installation as set forth in Section 5.3.4 above, whether or not Lean Construction processes apply to the Project.
 - 5.7.2. Trucking times may be restricted by the authorities, Contractor, Owner, or others. Trucking permits that are required for delivery of Subcontractor's materials are Subcontractor's responsibility.
 - 5.7.3. Subcontractor must be present for all deliveries associated with its Work. Contractor will not accept deliveries on Subcontractor's behalf.
 - 5.7.4. Subcontractor is responsible for receiving, off-loading, storage, security, and protection of its deliveries.
 - 5.7.5. Subcontractor should presume that no space will be available for temporary storage of materials, equipment, and manufactured assemblies onsite. However, if the Contractor's Superintendent allows temporary storage of such items, the following shall apply:
 - 5.7.5.1. The Contractor's Superintendent will designate the storage location(s) and shall have the sole and unfettered discretion to designate a different location at any time and on any number of occasions. Relocation of Subcontractor's property shall be at the sole cost and expense of Subcontractor.
 - 5.7.5.2. Subcontractor will secure and protect its stored items. Contractor will not be liable for damaged or missing items.
 - 5.7.5.3. Subcontractor shall confirm with a structural engineer, at Subcontractor's sole cost and expense, that loading of materials shall not overload the structure.

- Subcontractor shall be liable for all damages storage of its property may cause to the building or site.
- 5.7.5.4. Materials shall be stored on pallets, carts, racks, or other storage devices to allow for maneuvering by pushing, pulling, forklift, or pallet jack, orderly storage, and protection of the substrate.
- 5.7.6. Offsite storage, if required, is Subcontractor's responsibility. Subcontractor is also responsible for transportation, handling, rent, and insurance respecting its property. If payment for materials stored offsite is allowed under the Prime Contract, Subcontractor shall strictly follow those requirements and the requirements defined in the Attachment B relating to the same as a condition precedent to the right to payment. In all cases, Subcontractor shall protect the property by segregating the same, labeling it for the Project, and transferring title to either the Contractor or the Owner under a Bill of Sale. Notwithstanding, the risk of loss shall remain with Subcontractor until the property is delivered to the jobsite and the risk is transferred under the terms of the Subcontract Documents.
- 5.8. Flagging and Traffic Control. Subcontractor shall provide flaggers and traffic control for its Work. Subcontractor shall comply with all applicable traffic control regulations.
- 5.9. Layout and Measurements.
- 5.9.1. Contractor shall provide two gridlines and one elevation benchmark for each level of work.
- 5.9.2. Subcontractor is responsible for all taking and confirming all other measurements for proper detailing, fabrication, staging, erection, layout, installation, and otherwise for its Work.
- 5.9.3. Requests for surveying work by Contractor beyond that set forth in Section 5.9.1 above (i.e., gridlines and/or benchmarks) must be submitted to the Contractor's Superintendent two (2) weeks before it is needed. Any such additional surveying work shall be provided at Subcontractor's cost and expense.
- 5.10. Utilities.
- 5.10.1. In general, operating equipment on sidewalks is not permitted unless approved in advance by Contractor in writing. In all cases, Subcontractor shall provide full and complete protection under the equipment or otherwise to prevent damage to the sidewalk and any utilities located underneath and shall repair or replace any sidewalk or utilities damaged in a manner and to the extent required by Contractor.
- 5.10.2. Subcontractor shall take all actions necessary to prevent damage to unknown and unidentified utilities by its Work. If Subcontractor is working in areas close to utilities, Subcontractor shall locate them before starting work in those areas. Subcontractor shall provide Contractor with the utility locations of existing utilities in or about the area in which it is working, or that may affect its Work, and any new utilities it is or has installed, both on a weekly basis.
- 5.10.3. If Subcontractor is working on or around underground utilities, it shall provide and maintain proper shoring, bracing, and protection. Shoring, bracing, and protections shall be engineered at Subcontractor's cost and expense and the engineering shall be submitted to Contractor at least six (6) weeks before work starts for Contractor's information. Contractor shall have the right but not the obligation to review such engineering and require additional, new, or different engineering and/or additional, new, or different protective measures, any or all of which shall be provided at Subcontractor's sole cost and expense.
- 5.10.4. Subcontractor shall follow the utility shutdown procedures established by Contractor for all existing and new utilities. Subcontractor shall schedule all utility shutdowns with Contractor in advance by at least four weeks. All overtime costs incurred by any party as

a result of any utility shutdown required by, for, as a part of Subcontractor's Work shall be the responsibility of Subcontractor

- 5.10.5. If Subcontractor or any other party for which Subcontractor is responsible damages any utilities, Subcontractor shall be responsible (i) to repair and replace those utilities in a manner and to the extent required by Contractor and (ii) for any associated cost and/or time impacts.
- 5.10.6. If Subcontractor's Work includes either modifying existing utilities or installing new utilities, Subcontractor shall maintain current as-built documents and shall submit them to Contractor on a monthly basis.
- 5.11. Hot Work. Hot work permits are required for any work that creates sparks or fire hazards and must be obtained from Contractor prior to commencing the work. Subcontractor shall provide fire extinguishers, fire resistive blankets, and fire watch in , around, and below the affected area. Fire watch will continue for at least 30 minutes after the completion of the task.
- 5.12. Embeds, Backing, and Penetrations.
 - 5.12.1. Subcontractor shall furnish all items that are to be embedded in cast-in-place concrete to the Contractor or concrete subcontractor at least one week before forming activities for those locations begin. Subcontractor shall also provide a layout drawing that includes detailed dimensions and such other information as may be necessary to precisely define the embed locations. Subcontractor shall review the embed installation promptly upon completion to confirm they are installed correctly and in the correct location. In the event Subcontractor fails to do so and later discovers a defect in the installation of an embed, Subcontractor shall be responsible for the cost to correct or otherwise accommodate the defect as it may exceed that cost which would have been incurred if caught promptly after installation.
 - 5.12.2. Should the Subcontractor under the Agreement to which this attachment is attached be the concrete subcontractor, such Subcontractor shall promptly correct any non-conforming embed installations at its cost and expense and/or shall be responsible for any work required to otherwise accommodate any non-conforming embed installation including but not limited to engineering and labor. Any alternate method of embed installation required must be reviewed and approved by a structural engineer and approved by the Contractor.
 - 5.12.3. Notwithstanding and without limiting Section 5.12.1 above, Subcontractor shall provide its own pour watch to ensure that its embeds do not move during the pour.
 - 5.12.4. Subcontractor shall be responsible for any work required to install or otherwise accommodate any missed embed after the concrete is poured if Subcontractor fails to comply with the foregoing in this Section 5.12, including but not limited to engineering and labor. Any alternate method of embed installation required must be reviewed and approved by a structural engineer and approved by the Contractor.
 - 5.12.5. Core drills and penetrations in the post-tensioned decks must be coordinated and approved by the structural engineer of record for the Project and the Contractor. Locations shall be imaged to confirm PT cable and reinforcing locations prior to any cutting or drilling.
 - 5.12.6. Ordinary backing and blocking will be provided for Subcontractor by others on the following conditions.
 - 5.12.6.1. Subcontractor shall provide a drawing (with dimensions) showing the exact locations and type of backing/blocking for all backing or blocking Subcontractor requires for its Work. These drawings will be submitted to the Contractor (or the subcontractor providing the blocking and backing) at least one (1) week prior to framing of the walls.

- 5.12.6.2. Subcontractor shall promptly review the installed backing and blocking to ensure it is installed properly. In the event Subcontractor fails to do so and later discovers a defect in the installation of the blocking or backing, Subcontractor shall be responsible for the cost to correct or otherwise accommodate the defect as it may exceed that cost which would have been incurred if caught promptly after installation.
- 5.12.6.3. Should the Subcontractor under the Agreement to which this attachment is attached be the subcontractor responsible for installing the blocking and backing, such Subcontractor shall promptly correct any non-conforming blocking and backing at its cost and expense and/or shall be responsible for any work required to otherwise accommodate any non-conforming blocking and backing including but not limited to engineering and labor. Any alternate method of embed installation required must be reviewed and approved by a structural engineer, if necessary as the case may be, and approved by the Contractor.
- 5.12.7. Subcontractor shall be responsible for cutting its own penetrations and furnishing and installing fire-rated sealants for all penetrations through fire-rated assemblies in such a manner as to maintain the assembly's fire rating.
- 5.12.8. Subcontractor shall be responsible for cutting its own penetrations and furnishing and installing acoustic sealants for all penetrations through acoustic assemblies in such a manner as to maintain the assembly's acoustical rating.
- 5.13. Inspections.
- 5.13.1. Subcontractor shall notify Contractor when portions of its Work are ready for inspection. Subcontractor shall furnish the Contractor and its representatives adequate facilities for inspecting materials, equipment, and manufactured assemblies at the site or any place where the same may be in the course of preparation, process, manufacture, or treatment be located.
- 5.13.2. Subcontractor shall coordinate with Contractor for inspections by any required authority needing to inspect the work for permit and code compliance.
- 5.14. Protection.
- 5.14.1. Subcontractor shall pay Contractor the cost to repair all damage to the work of others that Subcontractor causes. Such damage includes ordinary and generally cosmetic damage (i.e., "trade damage"). The cost to repair trade damage that is not directly assessable to any subcontractor shall be prorated by Contractor to all subcontractors who had work in the affected area. The costs shall be prorated based on the number of hours worked in the area as indicated by the daily reports and/or certified payroll reports. When Subcontractor fails to provide daily reports, Subcontractor's total hours of work shall be used. Trade damage costs will be reconciled and charged to the involved subcontractors by way of a deductive change order.
- 5.14.1.1. Example of subcontractors in affected area: drywall is damaged in the hallway. Subcontractors working on the interior of the building were electrical, mechanical, painters, floor covering, and drywall/ACT subcontractors. Those subcontractors would be responsible for the non-assessable costs.
- 5.14.1.2. Example of hours calculation: Subcontractor "A" had 22 hours of work in the building. Resulting trade damage not directly assessable was \$1,000, and the total of all subcontractor hours within the building was 1,150 hours. The total cost of un-assessable trade damage for which Subcontractor "A" is responsible is 1.9% or \$19 dollars.
- 5.14.2. Once the permanent roofing installation has started, Subcontractor shall provide roofing protection at the areas of its work and the path from the access point to the work areas

that is sufficient to prevent damage to the roof. Subcontractor shall remove all debris and protection upon completion of its work at the roof.

5.14.3. Subcontractor shall provide and maintain protection during site Work for all existing lawns, trees, curbs, gutters, drives, walks, and buildings not noted for removal or repair/replace that is in the areas where Subcontractor's Work occurs.

5.15. Cleaning.

5.15.1. Subcontractor shall maintain the areas affected by Subcontractor's Work in a clean, safe, and orderly condition at all relevant times. Subcontractor shall provide its own labor, materials, and equipment to perform its cleanup activities. At the end of each shift, work areas shall be cleaned to a broom-clean condition with no accumulation of debris on floors or other work surfaces.

5.15.2. All work benches, cutting stations, toolboxes, tools, and equipment must be neatly organized and maintained in a good working condition at all times. Tools, equipment, cords, and materials shall be organized and properly stored at the end of each shift.

5.15.3. Contractor will provide recycling bins and dumpsters, which Subcontractor may use for debris that is non-hazardous provided that such use will be at the Contractor's Superintendent's sole and unfettered discretion.

5.15.4. Subcontractor is responsible for the proper handling, care, control, and disposal of hazardous materials it brings or allows onto the Project site in strict conformance with all laws that apply. Subcontractor shall also be responsible to promptly dispose of large and/or bulky debris generated by its Work.

5.15.5. Subcontractor shall control dust and airborne debris caused by its Work and shall not allow the same to contaminate the jobsite and/or the surrounding streets, properties, areas, and waterways.

5.15.6. Subcontractor is responsible for the cleaning, repair, remediation, and/or restoration of surrounding streets, properties, areas, and waterways that may be contaminated, dirtied, or otherwise negatively affected by Subcontractor's operations.

5.15.7. Subcontractor shall provide at least one laborer dedicated full time to clean up for the duration of Subcontractor's activities on site if Subcontractor has more than 5 persons (direct and tiered taken together) on site (averaged over the Subcontractor's time on-site).

5.15.8. Unless otherwise indicated in the Subcontract Documents, final cleaning will be performed by others.

5.15.9. Upon completion of its Work, Subcontractor shall remove from the site all excess materials, tools, equipment, and temporary structures and fully and completely clean up all areas affected by its Work.

6. TEMPORARY SITE SERVICES

6.1. Subcontractor is responsible for providing and maintaining its own field office(s) and infrastructure, which includes office space, phones, office supplies, radios, etc., off the Project site. Space is not available on the Project site.

6.2. Two-way radios are permitted onsite but must be a system approved by the Project Superintendent.

6.3. Temporary toilets and handwashing facilities shall be provided by Contractor. However, if these facilities are abused, then subcontractors shall be responsible to provide their own.

6.4. Temporary Water.

6.4.1. Temporary water for construction purposes shall be provided by Contractor.

- 6.4.2. Subcontractor is responsible to provide hoses needed for its Work. Hoses shall be hung off the ground and floors and labeled with Subcontractor's name at each connection point.
- 6.4.3. Subcontractor shall shut off hose bibs after use. Pressurized hoses shall not be left unattended at any time.
- 6.4.4. Subcontractor shall provide drinking water for its employees.
- 6.5. Temporary Fire Protection.
 - 6.5.1. The fire protection subcontractor shall provide temporary fire protection as required by code
 - 6.5.2. Fire extinguishers shall be provided by Contractor in accordance with applicable standards and regulations. Subcontractors who are performing work that creates sparks or fire hazards shall provide their own additional fire extinguishers and fire watch related to the activity. See above for further related requirements.
- 6.6. Temporary Electrical.
 - 6.6.1. The following temporary power shall be provided by the electrical subcontractor. Define voltage provided and frequency (every floor, how many access points). Items to consider:
 - 6.6.1.1. Temporary power service to the site including design and permit
 - 6.6.1.2. Tower crane
 - 6.6.1.3. Hoist
 - 6.6.1.4. Self-climbing formwork
 - 6.6.1.5. Concrete pumps
 - 6.6.1.6. Conveyors
 - 6.6.1.7. Dewatering systems
 - 6.6.1.8. Power distribution (skids, spider boxes, voltage and phase, etc.)
 - 6.6.1.9. Temporary lighting – interior and exterior
 - 6.6.1.10. Heating and dehumidification systems
 - 6.6.1.11. Welders
 - 6.6.1.12. Elevators
 - 6.6.1.13. Job shacks
 - 6.6.2. Subcontractor shall provide its own temporary power for items that cannot be powered by the temporary power defined in Section 6.6.1.
 - 6.6.3. Subcontractor shall provide its own cords, boxes, and other equipment to distribute power to its equipment.
 - 6.6.4. Cords shall be hung off the ground and floors and kept organized. If they cannot be maintained off the ground and floors, Subcontractor shall provide protection of its cords and covers to prevent the creation of a tripping hazard and to ensure they are not damaged.
 - 6.6.5. Cords shall be labeled with Subcontractor's name at each connection point. Cords shall be inspected regularly and marked with code compliance. Unused cords shall be neatly stored away from access, egress, and main pathways.
 - 6.6.6. Temporary lighting that meets OSHA minimum requirements shall be provided by the electrical subcontractor. Subcontractor shall provide task lighting.

- 6.7. Subcontractor shall provide temporary heat and dehumidification as required for proper installation of its Work.
- 6.8. Scaffolding will not be provided by Contractor. Subcontractor shall provide any scaffolding it requires and shall coordinate the scaffolding's installation, safety inspection(s) and certification(s), and use with Contractor.
- 6.9. Contractor will provide temporary fencing at the perimeter of the Project site (see the Site Logistics Plan). Removal of portions of the fence is not allowed unless approved by the Contractor's Superintendent prior to removal. Subcontractor will be responsible any removal and replacement required for its Work and shall post an attendant to guard, monitor, and control the open portion of the fence for the entire time the opening remains.
- 6.10. Contractor will provide temporary stairs and ladders for general and shared access to the work areas on the Project site. Subcontractors is responsible for providing its own ladders, lifts, hoists, and other means of access to complete its Work.
- 6.11. Contractor will provide temporary guardrails and barricades for general fall protection purposes. Such guardrails and barricades shall not be removed unless approved by the Contractor's Superintendent prior to removal. Subcontractor shall provide an attendant to guard, monitor, control, warn, and make safe the opening at all times. Guardrails and barricades must be replaced immediately upon cessation of use and in all cases at the end of each shift.
- 6.12. If hazardous safety conditions are created by Subcontractor, Subcontractor is responsible to provide guardrails, barricades, systems, caution tape, signage, and/or all other measures as may be necessary to protect persons and property from harm in these locations; maintain the measures during its; relocate them as the work progresses; and remove them upon completion of the activity. Subcontractor shall review the activities with Contractor before work such work begins to coordinate the necessary safety protection(s).
- 6.13. Subcontractor shall provide any equipment such as cranes, forklifts, elevated work platforms, scaffolding, lifts, swing stages, etc. required for the installation of its Work. Subcontractor is responsible to protect all surfaces, structures, work, and other property from damage that may be caused by the use, placement, or presence of its equipment and to fully and completely repair, replace if and as necessary, and/or clean the same back to its original condition of any impact resulting from use of the equipment. Subcontractor shall coordinate the use of such equipment with Contractor's Superintendent at least two (2) weeks prior to delivery to the Project site and installation/erection.
- 6.14. If Contractor's forklift is used by Subcontractor, it shall be billed to Subcontractor at \$350 per hour, including the operator.
- 6.15. Cranes and Hoists.
 - 6.15.1. Contractor shall / shall not provide a tower crane for the Project. If Contractor is providing a tower crane, the tower crane will be provided during regular working hours and the following shall apply:
 - 6.15.1.1. Make and model:
 - 6.15.1.2. See the Site Logistics Plan for planned location, radius, and capacities.
 - 6.15.1.3. See Attachment E Schedule for the erection and dismantling dates.
 - 6.15.1.4. Hook height:
 - 6.15.1.5. Tie-backs will be located on the following levels:
 - 6.15.1.6. Contractor shall provide the crane operator and bellman.
 - 6.15.1.7. Subcontractor shall provide its own certified rigger and rigging materials and equipment. The bellman will not provide rigging or rig loads but will have the authority to reject loads not properly rigged.
 - 6.15.1.8. Use of the crane shall be scheduled with the Project Superintendent.

- 6.15.1.9. Overtime or off-hours use of the crane will be charged to Subcontractor at \$XXX/hr along with the cost of the operator and bellman.
- 6.15.2. Contractor shall / shall not provide a man and material hoist for the Project. If Contractor is providing a man and material hoist, the hoist will be provided during regular working hours and the following shall apply.
 - 6.15.2.1. Make and model:
 - 6.15.2.2. See the Site Logistics Plan for location.
 - 6.15.2.3. See Attachment E Project Schedule, for erection and dismantling dates.
 - 6.15.2.4. Inside dimensions are:
 - 6.15.2.5. The maximum capacity is
 - 6.15.2.6. Tie-backs will be located on the following levels:
 - 6.15.2.7. Overtime and off-hours use of the hoist will be charged to Subcontractor at \$XXX/hr.
- 6.15.3. If persons, materials, equipment, assemblies, or otherwise cannot be accommodated by the hoisting facilities provided above, or will not arrive or otherwise be ready for hoisting before the hoisting facilities are removed, Subcontractor shall provide its own means of hoisting in coordination with the Contractor's Superintendent.

7. CLOSE OUT

- 7.1. Upon substantial completion of Subcontractor's Work, Subcontractor shall prepare a pre-punch list identifying those parts of its Work that are non-conforming and/or incomplete at least ten (10) working days before the Contractor's and architect's punch list, unless an earlier date is required by Contractor. The list shall be organized by room, location within a room, and by assembly or system. The list shall be updated every three (3) working days until all work is corrected or completed.
- 7.2. Subcontractor shall submit draft close-out submittals to Contractor either eight (8) weeks before the Project substantial completion or three (3) weeks before completion of Subcontractor's Work, whichever is earlier. Close-out submittals includes, at a minimum, warranties, operational and maintenance manuals and data, as-built drawings, and any other items required by the Subcontract Documents. Documents shall be submitted in the format, media, and quantities as required by Contractor. Subcontractor shall confirm submission requirements with Contractor prior to submission.
- 7.3. Subcontractor shall submit testing and training schedules ,by system or component, at least four (4) weeks prior to Project substantial completion.
- 7.4. Subcontractor shall submit final close out submittals at least four (4) weeks before Project substantial completion.
- 7.5. Subcontractor shall deliver any required attic stock materials to the Project site under a separate delivery at the Project's substantial completion. The delivery date shall be coordinated with Contractor. Except as may be provided otherwise under the Subcontract Documents, all attic stock material must be new and in unopened packaging and inventoried and accepted by Contractor.
- 7.6. All close out documentation and attic stock materials required under the Subcontract Documents shall be submitted and approved by Contractor and Owner as a condition precedent to Subcontractor's right to final payment.