03 Building Concrete Flatwork

I. Mobilization
    a. The work includes mobilization of trucks machinery, equipment and tools to construct building concrete flat work
    b. If onsite storage or parking is required this sub will work with the superintendent for accommodations
II. Material Handling
    a. The work includes ordering and receiving of materials and supplies that the sub or the General Contractor purchases for the work.
    b. The sub will provide all machinery for lifting and unloading materials and equipment
    c. The sub will order the materials and supplies it needs for a given module and avoid over-ordering and stockpile on site.
III. Material
    a. The sub will provide all “L” block and sand and mortar for its work when slab on grade construction is performed and “L” block is used to form the work
    b. The sub will provide all reinforcing steel and wire mesh for it’s work when required
    c. The sub will provide all sand fill under-slab cushion material
    d. The sub will provide all rigid insulation for it’s work
    e. The sub will provide all bituminous expansion material
    f. The sub will provide all visquene vapor barrier and visquene cover-up protection as required
    g. The sub will provide all concrete redi-mix for its work
    h. The sub will provide all wall anchors for the fastening of wall plates
    i. The sub will provide all misc. expendable materials such as nails, chalk, saw blades, finishing trowel blades
    j. The sub will provide all fuel and oil for equipment
IV. Concrete work
    a. The work includes cleaning strip footings of minor dirt for the installation of work
    b. The work includes installing open web ”L” shaped concrete “construction block forming” at the building perimeter when slab on grade work is performed
    c. The work includes digging, shaping and forming interior footings and piers and installation of reinforcing bar as required
    d. The work includes the shaping of the building under-slab sub-grade and the import and installation of the under-slab cushion material either sand or stone
    e. The work includes installing the perimeter foam insulation
    f. The work includes installing the visquene vapor barrier under the floor slab
    g. The work includes pouring the building floor as true to flat as possible.

i. The wall construction on this project is all pre-engineered and pre-constructed 2x4 wall construction. Deformed concrete affects wall panel construction where "humps" in the floor translate to humps in the roof. Floors have to be poured flat and true in order to utilize the non-custom wall panel systems.

h. The work includes curing of the concrete, and cutting of the control joints
i. The work includes forming and placing concrete on a compacted sand fill, all-exterior slabs that abut the building foundation. Constructing the patios and stoops and breezeways to include any post piers or exterior footings that are required for building construction.
j. The work includes compaction of any sand sub-slab material that is placed
k. The work includes filling and reshaping building site fill and sub-grades, repairing machinery tire ruts and ensuring that the dirt at the building periphery is smooth and sloped away from the building foundation.
l. The work includes cleaning up left over concrete spillage and wash out concrete residue
m. The work includes gathering left over rebar, mesh, forming lumber etc, and moving useable material to the next module of work and discarding dunnage to waste containers at the site

V. Cleaning
   a. Immediately after cutting the floor the concrete dust residue will be brushed or rinsed away leaving a smooth clean surface.
   b. The work area will be cleaned up daily; materials will be stacked in an organized manner to ensure that there are no trip hazards.
   c. At the conclusion of work at a given module, all form lumber and any debris generated by the concrete work will be discarded or salvaged and moved away from the work area to enable the next trade to mobilize and work.

VI. Protection of the work
   a. The installed work will be protected by placing barricades
   b. The materials will be protected from heat and rains and wintry conditions. On hot days concrete-curing agents must be used in order to prevent sprawling. In adversely wet or cold weather covering the work is a part of this scope.
   c. GC will not be responsible for the care of concrete work in place.

VII. Winter Protection
   a. The cost for winter protection is not known with any degree of certainty. It is the GC's policy for this subcontractor to furnish heaters and blankets and visquene as required to ensure that work in place is protected from damage and to also cover building sub-grades at modules where sub grades are not protected from freeze.
   b. GC will provide all power and fuel for winter protection, the sub is to provide the heaters and blankets needed to maintain thaw.

VIII. Safety
   a. The work includes workmen on site who have been trained in OSHA safety requirements and who have the ability to recognize and unsafe act

or condition and has the authority to stop work and make recommendations for improvements.

IX. Closeout
    a. There are no close out requirements for this subcontractor
X. Submittals
    a. As a part of the work this sub will make submittals on the following materials
        i. Reinforcing steel
        ii. Wire mesh
        iii. Embedded anchors
        iv. Under-slab insulation
        v. Visquene
        vi. Concrete mix designs
            1. Interior footers
            2. Interior slabs
            3. Exterior Building Concrete
XI. Project schedule
    a. The schedule is comprised or the number of workdays required to complete work at a given building module. The superintendent will inform this subcontractor well in advance that he is ready for this scope to begin. After-which time this subcontractor will perform work to completion within the time constraints contractually agreed to. In other words and as an example this Subcontractor agrees to complete scope in building number one in 10 days, he will be given notice to begin work and expected to be completed with that work within the given time constraint.
    b. The schedule shall be based on the enclosed duration schedule:
XII. Value engineering
    a. Submit all value engineering ideas as voluntary alternates to the bid