

Osceola County Iowa Sibley Truck Shop Specifications

September 20, 2023, 2023

- 1.0 The Contractor of the bid award is the general contractor responsible for the delivery of the building construction and will be responsible for assembling and managing all subcontractors for work not self-performed by the contractor.
 - 1.1 A licensed electrician is required for all electrical work
 - 1.2 A licensed plumber is required for all plumbing work
 - 1.3 A licensed mechanical contractor is required for all HVAC work
- 2.0 Contractor Supplied shop drawings:
 - 2.1 Contractor is to provide a shop drawing(s) of the proposed building envelope detailing the foundation, steel structure, outer steel sheeting, and fire sprinkler system. Shop drawing(s) are to be sealed by an Iowa registrant.
- 3.0 Due to the building being a replacement structure but upgraded from the original building, certain items are split in the bid tab to allow Osceola County to pay the difference in cost from the insurance settlement.
- 4.0 Foundation:
 - 4.1 Site had a shop building in the same location lost to fire. Entire shop and slab has been removed by separate contract and left generally at grade. Contractor responsible for final detail grading of site and compaction.
 - 4.2 Due to insurance settlement purposes, the shop slab and trench drain have been broken into separate areas/lengths. The foundation pads to support the prefabricated building are not broken into separate sections and are considered part of the cost of the prefabricated building.
 - 4.3 Foundation pads to support prefabricated steel building columns are a part of the contractor supplied shop drawings for the building.
 - 4.4 Balance of foundation is a minimum 8" reinforced concrete slab utilizing a minimum 4,000 psi concrete with a perimeter frost footing 48 inches deep. If shop drawings call for greater depth or concrete strength then shop drawing requirements will be used.
 - 4.5 A liquid and salt resistant coating is to be applied to the slab. Coating is SpecChem Specshield WB or other equivalent coating as approved by the county engineer.
 - 4.6 Trench drain as shown in plans to be minimum 12" deep with a 0.5% slope from north to south with a settling basin at the south end that then connects to the city sewer system. Cast iron grates to rest in a notched lip in the trench. Floor to be sloped to the trench drain.
 - 4.7 Steel bollards with 42" height above grade and 6" diameter are required at all garage door edges inside and outside. Bollards to be installed 1" inside of door track.
- 5.0 Building Envelope:
 - 5.1 The building is to be a 148ft x 60ft prefabricated steel building with metal exterior. Desired spacing of columns is 14ft at each end with the remaining interior columns spaced at 20ft. The exterior walls are to be minimum 16 feet high. Roof pitch can be per manufacturer but no less than 3:12. Building design is part of the contractor supplied shop drawings for the building.

- 5.2 Contractor to provide all purlins, girts, and other framing needed to affix building sheeting.
- 5.3 Building to be wrapped to prevent spray foam adhering to building sheeting
- 5.4 Building insulation is closed cell spray foam, 2 inches on walls and 3 inches on ceiling
- 5.5 Building is to be clad in white steel, minimum 24 gauge.
- 5.6 Roof is to be ribbed steel

6.0 Doors and Windows:

- 6.1 Exterior doors are commercial grade steel doors with commercial grade schlage locksets capable of being keyed to match existing Osceola County key.
- 6.2 Interior doors are commercial grade steel doors
 - 6.2.1 Interior door serving workshop to have window
- 6.3 Interior doors provided with commercial grade knob set (privacy set for bathroom)
- 6.4 Windows in workshop are to be fixed pane commercial grade aluminum frame windows.
- 6.5 Garage doors are segmented panel roll up garage doors on overhead tracks. The doors are to be 18 feet wide by 14 feet tall. One panel between 4 and 6 feet above grade to have windows. Doors are to be insulated.

- 6.5.1 Provide minimum 10,000 cycle springs
- 6.5.2 Micro-grooved sandwich style
- 6.5.3 Galvanized steel
- 6.5.4 26 gauge exterior skin with 27 gauge interior skin, polyurethane core sections
- 6.5.5 R value 17.54
- 6.5.6 Thickness: nominally 2 inches
- 6.5.7 Rails: tongue and groove
- 6.5.8 End caps: wrap around box style, 20 gauge galvanized steel, full height of section
- 6.5.9 Insulation: 95 percent close cell, foamed in place polyurethane with thermal break
- 6.5.10 Provide 3 inch wide track
- 6.5.11 Provide photoelectric sensor to detect obstruction and reverse door without requiring door to contact obstruction
- 6.5.12 Provide helper springs

6.6 Door opener

- 6.6.1 All doors are to use door mounted openers, 1HP. door is to be "fast" geared and wired to a switch at the door opening. Two remotes are to be provided for each door opener.

7.0 Interior treatments:

- 7.1 The interior walls and ceiling of the building will generally be lined with 26 gauge white steel.
- 7.2 The workshop, sign storage room, and bathroom will be sheathed with ½" AC plywood on the interior of these rooms and on the exterior of the rooms facing the inside of the shop. Building liner steel is omitted inside these rooms in favor of the plywood.
- 7.3 Wall studs are to be 2x6 no. 1 wood, 16" on center for the workshop, sign storage room, and bathroom.
- 7.4 The area above the work shop and sign storage will be used for storage. The joists are to be 2x12 no. 1 wood at 12" on center. Floor sheathing is to be ¾" tongue and groove plywood.

- 7.5 Staircase to serve upper storage area is to use a standard 11" run to 7" rise.
- 7.6 Safety railing is to be steel railing minimum 42 inches high and conform to OSHA standards.
- 7.7 A 48" gate consisting of 2-24" sections with a latch system is to be installed in the safety rail.
- 8.0 Electrical system:
 - 8.1 All electrical work to comply with the Iowa 2020 electrical code. All electrical work to be performed by a licensed electrician.
 - 8.2 Power to serve shop enters at north side of building from underground conduit to building to the north. Sub panel in shop to be 150 amp.
 - 8.3 All wiring is to use individual THHN conductors in EMT conduit.
 - 8.4 All receptacles and switches are to be 20 amp commercial grade, white.
 - 8.5 All lights are to be commercial grade LED fixtures
 - 8.5.1 The lights inside the sign storage room, above the sign storage room, and above the workshop will require guards
 - 8.6 All ceiling fans are to be commercial grade, outdoor rated
 - 8.7 Exhaust fan on south side of shop minimum 5000cfm
- 9.0 Mechanical system:
 - 9.1 All mechanical work to comply with Iowa State Plumbing Code. All mechanical work to be performed by a licensed mechanical professional.
 - 9.2 Gas service to serve shop enters at northwest corner of building from a meter.
 - 9.3 A main gas shut off valve is to be installed where gas line enters building.
 - 9.4 Gas line to be constructed of ¾" black iron pipe.
 - 9.5 All furnace locations to be served by a shut off valve and drip leg.
 - 9.6 Three shop furnaces are to be 200,000 BTU, controllable by a thermostat.
 - 9.7 Work shop furnace is to be 50,000 BTU, controlled by a thermostat
- 10.0 Water system:
 - 10.1 All potable water and wastewater work to comply with Iowa State Plumbing Code. All plumbing work to be performed by a licensed plumber.
 - 10.2 One water source enters shop at north side from northern building. A ball valve is to be installed at the location where the water line enters the building.
 - 10.3 One water source enters shop at south side from city water main. Contractor to coordinate installation of water meter with the city. A ball valve is to be installed at the location where the water line enters the building.
 - 10.4 Water line to be constructed of type L copper.
 - 10.4.1 Water line in bathroom to be 3/4" to serve wall spigots. Water lines to serve bathroom fixtures 1/2"
 - 10.4.2 Water line to serve water drops on east side of building to be 1"
 - 10.5 Each location where a water drop is shown on the plans is to be provided with a ball valve and water hose reel with a 100' commercial grade water hose.
 - 10.6 Bathroom sink is to be a commercial grade 24" porcelain sink with commercial grade faucet. Install 1/4 turn shut off valves to serve sink faucet with steel braided faucet lines.
 - 10.7 Toilet is to be residential grade toilet, elongated bowl, 16.5" bowl height, minimum 1.6 gallon per flush.
- 11.0 Air system:

- 11.1 From shop air compressor, install compressed air piping system to drop locations shown on plans. Maxline RAPIDAIR or equivalent as approved by the county engineer.
 - 11.2 Each location where an air drop is shown on plans, provide drip leg with ball valve and air hose reel with a 100' rubber air hose.
- 12.0 Sprinkler system:
- 12.1 Contractor to provide a sprinkler system shop drawing sealed by an Iowa registrant. Water service in street south of shop is 6" per city of Sibley.