

**COMPETITIVE CHANGE ORDER**

**WEST SIDE PUBLIC WORKS FACILITY SEVERE WEATHER SHELTER**

**PROJECT NUMBER 53W0681**

**STORM SEWER ACCOUNT NO. ESTM-54301-810381-00-53W0681**

It is the intent of these Special Provisions to set forth the final contractual intent as to the matter involved and shall prevail over the Standard Specifications and plans whenever in conflict therewith. In order that comparisons between the Special Provisions can be readily made. The numbering system for the Special Provisions is equivalent to that of the Specifications.

**SECTION 102.10 MINIMUM RATE OF WAGE SCALE**

The wages and benefits paid on this contract shall not be less than those specified in the Prevailing Wage Determination included with these contract documents for the following types of work:

- 1) Building and Heavy Construction
- 2) Sewer, Water, and Tunnel Construction
- 3) Local Streets and Miscellaneous Paving Operations
- 4) Residential and Agricultural Construction

**ARTICLE 104 SCOPE OF WORK**

The work consists of preparing and excavating the site per the attached site plan. Placing and compacting the gravel base. Placement of concrete box culverts, and finishing of the structure per the attached plans. Final backfilling and berming of the structure to include final grading and seeding of the berm and all disturbed soils.

**SECTION 105.5 INSPECTION OF WORK**

The contractor shall make arrangements with the assigned inspector(s) for this contract during the following phases of the work

- Site is cleared and structure location is laid out
- Culvert area is excavated
- Structure has been placed, constructed, and waterproofed per the attached plans
- Structure has been backfilled and bermed per plan
- Final acceptance

## **ARTICLE 106 – CONTROL OF MATERIALS**

### **SECTION 106.1 SOURCE OF SUPPLY AND QUALITY**

The city shall supply the following materials in quantities sufficient to complete the work. The contractor shall provide all labor and equipment necessary for the complete installation of these materials.

- RCP Storm Sewer Box Culverts, to include all pipe ties, pipe jointing materials, pipe joint sealers and wraps
- Backfill material to be used for the structure and berm
- Required signage for the structure

The contractor shall make arrangements for delivery of city provided materials with the assigned Engineer Representative/Inspector no less than 3 working days prior to the materials being needed on site.

The contractor shall provide all other materials required to complete this contract per these special provisions and plans.

### **SECTION 106.4 STORAGE OF MATERIALS**

The work site can accommodate the storage of raw materials (excavated materials, backfill and stone only). There is no storage facility available for any finish materials such as concrete block, mortar, doors, waterproofing.

### **SECTION 107.7 MAINTENANCE OF TRAFFIC**

The site is located along the access drive to the Public Works Facility. The access drive must be kept clean and clear of all equipment and materials so as not to obstruct traffic flow of city vehicles and customer vehicles to the yard waste site during facility operating hours.

### **SECTION 109.2 PROSECUTION OF WORK**

The contractor shall begin within seven (7) working days after written notice to proceed with this competitive change order.

### **SECTION 109.5 METHODS AND EQUIPMENT**

The contractor shall provide all equipment necessary for a complete installation of this contract. This shall include any equipment required for the lifting and placing of the box culverts from the culvert vendor's delivery vehicles. City vehicles shall deliver the back fill for the structure and berm. The contractor shall provide the equipment necessary for placing, spreading, and compacting the fill.

### **SECTION 109.7 TIME OF COMPLETION**

The contractor shall have completed the installation of all items related to this contract within thirty (30) days of the written notice to proceed with this competitive change order. This does not include the time required by Madison Standard Specifications for maintaining seeded areas through germination. If an extension is required the contractor shall contact the Engineers Representative/Inspector assigned to this contract.

## **ARTICLE 201 – EXCAVATION CUT**

### **SECTION 201.2(a) EXCAVATION CUT**

Excavation for this project shall be limited to providing a flat surface to start construction for this project as indicated on the site plan, and removing soils as needed to complete the construction of the shelter per plans and sections. All excavated soils shall be stockpiled in the area immediately north of the work site.

### **SECTION 201.5 MEASUREMENT**

Approximately 2200 CY of existing fill needs to be cut from the work site.

## **ARTICLE 202 – FILL**

### **SECTION 202.2(b) SELECT FILL**

Select fill shall be as noted in the detail drawings.

- Backfill for the exterior of the structure/berm shall be materials reused from excavation, the contractor shall be responsible for placing and compacting the backfill.
- Other select fills per Madison Standard Specifications.

### **SECTION 202.3 CONSTRUCTION METHODS**

No heavy vehicle compaction devices shall be used within 3 feet horizontally or over the structure at any time. Compaction shall be sufficient to remove voids and prevent uneven settling of the backfill material.

NOTE: 10' of 15" PVC drainpipe is incidental to the cost of the gravel path.

## **ARTICLE 207 – SEEDING**

### **SECTION 207.1 DESCRIPTION**

The contractor shall sow the seed specified below over all areas of soil disturbed by this contract. These areas shall include but not be limited to the structure berm, drainage swales, base working area, relocated existing backfill, and any disturbed areas accessing the work site. All tire ruts shall be filled, raked smooth, and seeded. The total estimated area of disturbed soil for this contract is 2500 square yards (1/2 acre).

### **SECTION 207.2 MATERIALS**

Seed and mix types shall be as per the Madison Standard Specifications. The cover crop shall be oats (10 lbs if seeded before July 15<sup>th</sup> or 48 lbs if planted after July 15<sup>th</sup>) mixed with Seed Mixture Type 5, Tall Grass Prairie Mix (4.0 lbs).

## **BID ITEM 90001 – RCP STORM SEWER BOX CULVERT INSTALLATION**

### **DESCRIPTION**

This work consists of placing five (5) pieces of RCP storm sewer box culvert in the configuration and orientations shown in the plans. The culvert pieces are being provided

by the City of Madison and delivered to the site. The contractor shall be responsible providing all necessary equipment and personnel required to off load and place the box culvert sections per plan.

### **MATERIALS**

All materials under this bid item are being provided by the City of Madison.

### **CONSTRUCTION**

Contractor shall be responsible for the complete installation of the box culverts per the attached plans. This shall include but not be limited to the placement of all required pipe ties and sealing/wrapping all joints and openings. The work performed under this bid item shall be inspected prior to backfilling the structure.

### **BID ITEM 90002 – MASONRY WALLS**

#### **DESCRIPTION**

This work shall consist of placing masonry walls as needed to finish enclosing the structure per the plan set. This work shall include but not be limited to placing all concrete masonry units (CMU), reinforcing materials, mortar, and grout.

#### **MATERIALS**

Standard CMU, mortar, and reinforcing materials shall be used for this bid item

#### **CONSTRUCTION**

Standard construction practices shall apply to the installation of all CMU's.

- Horizontal Reinforcing: All CMU courses shall be tied horizontally with standard duty horizontal joint reinforcing mesh.
- Vertical Reinforcing: The bottom two (2) courses shall be grouted solid to the culvert floors with #4 x24" rebar dowels at 8" OC. All other courses shall be grouted solid at 16" OC vertically with #4 rebar.

The work performed under this bid item shall be inspected prior to backfilling the structure.

### **BID ITEM 90003 – DAMP-PROOFING**

#### **DESCRIPTION**

This work shall consist of damp-proofing the exterior of the entire structure prior to backfilling.

#### **MATERIALS**

The contractor shall install a commercially available water based damp-proof coating over the entire structure prior to back filling the structure. The coating must comply with any local or federal environmental codes that may be applicable.

## **CONSTRUCTION**

The contractor shall apply the damp-proof coating in a manner consistent with the manufacturers recommended procedures and rates.

## **BID ITEM 90004 – CONCRETE FLOOR, RAMP & SIDEWALK**

### **DESCRIPTION**

This work shall consist of the contractor pouring a 4” thick concrete floor, ramp, and sidewalk pad.

### **MATERIALS**

All concrete shall comply with the City of Madison Standard Specifications.

### **CONSTRUCTION**

Install interior floors and transition ramp at elevations show in plan details and an exterior sidewalk ramp per plan. All poured concrete shall have a broom sweep finish.

## **BID ITEM 90005 – HOLLOW METAL DOOR, FRAME AND HARDWARE**

### **DESCRIPTION**

This work consists of the contractor providing a hollow metal door, frame and all associated hardware per this specification and detail drawings.

### **MATERIALS**

- **DOORS:** Standard 1-3/4” 16 GA 36” wide hollow metal door, swing as shown on plan. Primed and painted Medium Grey.
- **FRAME:** Standard 4-3/4” 16 GA equal rabbeted hollow metal door frame. Primed and painted Medium Grey
- **HINGES:** Hinges shall be none rusting with non-removable pin.
- **HANDLE:** Passage lever handle style, with satin nickel or stainless steel finish,
- **HASP & STAPLE:** 3-1/2” galvanized hasp & staple. Screws concealed when hasp is in latched position.
- **WINDOW:** 4” x 25” side lite.
- **LOUVER:** 18” x 14” inverted “V” louver insert. Primed and painted Medium Grey
- **MISC.:** Low profile threshold and door sweep,

### **CONSTRUCTION**

Frame shall be mounted to CMU jamb walls with 3 masonry ties on each jamb. Threshold and door sweep shall be sufficient to prevent rodents from entering structure. All screws shall have vandal proof type heads.

### **PAYMENT**

Payment of this item is LUMP SUM for a complete installation of all components listed above.

## **BID ITEM 90006 – ROOF CURB**

### **DESCRIPTION**

This work consists of the contractor constructing and installing a roof curb box for the ventilation pipes and tubular skylight.

### **MATERIALS**

Pressure treated 2x4, pressure treated 3/4" plywood, exterior grade construction glue, caulk, and any other materials necessary for a complete and water proof installation. Oil based primer and oil based paint (color = medium brown)

### **CONSTRUCTION**

Roof curb box construction is a 2x4 frame with 3/4" plywood sheathing per the plan details. Size and location must be field verified and is dependent on RCP Box Culvert lifting holes. The roof curb box shall be glued, and mechanically fastened to the roof of the box culvert. The base of the curb box shall be flashed and caulked per industry standards. All plywood sheathing shall be glued and mechanically fastened to the 2x4 frame. Any gaps in the plywood sheathing shall be caulked. The completed roof curb box shall be primed and painted with a minimum of two (2) coats of oil based paint. Roof curb box construction must be coordinated in conjunction with Roof Vent (Bid Item 90007), and Tubular Skylight (Bid Item 90008).

### **PAYMENT**

Payment of this item is LUMP SUM for a complete installation.

## **BID ITEM 90007 – ROOF VENT**

### **DESCRIPTION**

This work consists of the contractor installing all pipes, caps, and miscellaneous items for a complete roof vent installation per this specification and detail drawings.

### **MATERIALS**

- Vent pipes, 3 each, 6" diameter galvanized metal pipe
- 12" diameter turbine style attic vent, non motorized
  - Internally braced
  - Permanently lubricated ball bearings
- Flat roof flashing
- 6" diameter white soffit vents with insect screens
- Caulk

### **CONSTRUCTION**

Locate three (3) existing lifting holes as indicated on shelter plan. Enlarge holes to 6" diameter for duct pipes. Install ventilation pipes collars and caps per manufacturers instructions. Caulk vent pipes at outside of culvert box..

**PAYMENT**

Payment of this item is LUMP SUM for a complete installation of all components.

**BID ITEM 90008 – TUBULAR SKY LIGHT****DESCRIPTION**

This work consists of the contractor installing all pipes, caps, and miscellaneous items for a complete tubular skylight installation per this specification and detail drawings.

**MATERIALS**

- 10” diameter solar light tube by Natural Light Energy Systems or an approved equal
- Flat roof flashing
- High Impact Prismatic Diffuser
- Caulk

**CONSTRUCTION**

Locate one (1) existing lifting hole as indicated on shelter plan. Enlarge hole to 10” diameter for light tube. Install light tube, collars, lens, and caps per manufacturers instructions. Caulk tube at outside of culvert box.

**PAYMENT**

Payment of this item is LUMP SUM for a complete installation of all components.

**BID ITEM 90009 – WALL STORAGE CABINET****DESCRIPTION**

One (1) metal 30” x 30” x 15” wall storage cabinet. Sears item #00995232000 (Mfr model #23030) Geneva Wall Storage Cabinet or approved equal.

**CONSTRUCTION**

Install one wall storage cabinet as located in project plans. Top of cabinet shall be at box culvert ceiling. Mounting to CMU wall with four (4) anchor bolts.

**BID ITEM 90008 – METAL SIGNAGE****DESCRIPTION**

This work consists of the contractor installing two (2) city provided signs on the exterior of the shelter door.

**MATERIALS**

Two (2) 18” x 12” metal signs.

**CONSTRUCTION**

Mount signs to exterior side of hollow metal door using four (4) vandal resistant screws per sign. Location of signs as shown in plan details.