Town of East Hartford

ADDENDUM Nº. 03

Burnside Avenue Bus Shelters
Bid No. 16-23

Issued June 22, 2016

The following summarizes revisions to the Bid Documents included in Addendum Nº. 03 for the Burnside Avenue Bus Shelters (Bid No. 16-23):

- The Town has decided to allow Model AL7.5/02BVsp (by the Columbia Equipment Company) as an equivalent shelter, as allowed under item 15 of the *Instructions for Construction and/or Labor Service Bids* (Page 10 of 191).

The following documents & drawings are attached and included in Addendum Nº. 03:

Revised Bid Documents

- Replace Page 134 of 191 (part of Special Provision Section 9.47 *Bus Passenger Shelter*) with the attached page.

- Add Pages 186.1, 186.2, & 186.3 of 192 in Appendix C *Bus Shelter Manufacturer Specifications*

End of Addendum Nº. 03

SECTION 9.47 BUS PASSENGER SHELTER

Replace Section 9.47 with the following:

9.47.01 - Description:

This item shall consist of the furnishing and installation of bus passenger shelters in the locations as shown on the plans or directed by the Engineer. The bus passenger shelters must be either: Model 3-2B manufactured by Handi-Hut, Inc. or Model AL7.5/02BVsp by Columbia Equipment Company. Bus passenger shelters shall include a solar light (Model STH-1401), also by Handi-Hut.

9.47.02 - Materials:

1. The framework material shall conform to ASTM B221, alloy 6061-T6, or alloy 6063-T5 or T6 aluminum, and shall be anodized in accordance with the project plans or specifications.

2. The glazing shall be ¼" clear tempered glass.

3. The roof shall be ¼" bronze twin wall polycarbonate. The roof shall have sufficient strength for the purpose intended, and shall be fully weatherproof. Proper seals and drainage shall be provided to prevent water or ice from entering the shelter. All drains shall be directed away from the shelter and its entranceways.

4. The hardware shall either be aluminum conforming to ASTM B211, alloy 2024-T4, or stainless steel conforming to ASTM A167, alloy 304. Anchor bolts shall be stainless steel conforming to ASTM A167, alloy 304.

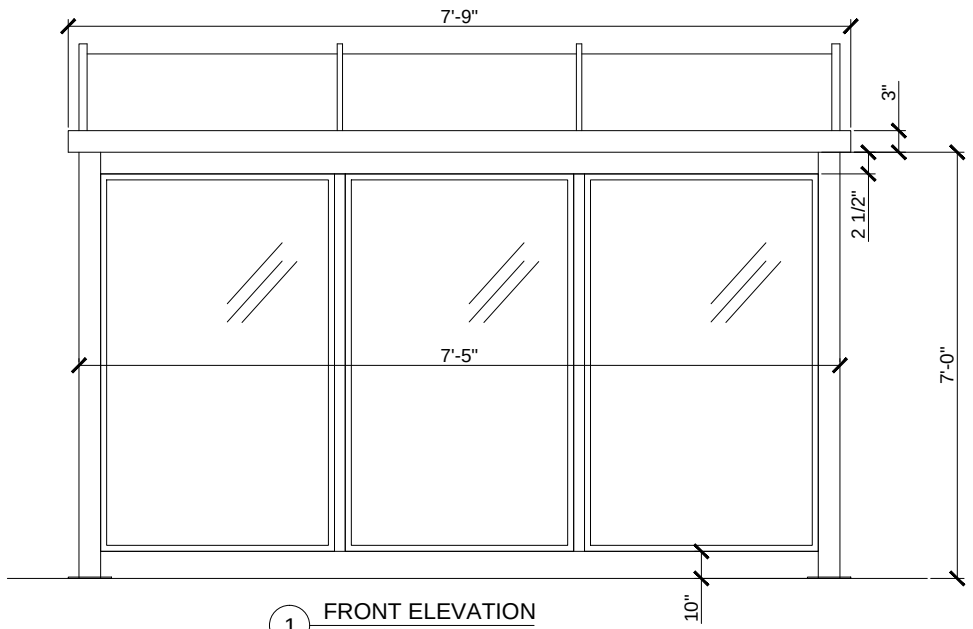
5. There shall be a seat in the shelter with a width of 12 to 15 inches. The seat shall include a backrest with a minimum width of 8 inches. The seat and backrest shall be constructed of extruded aluminum and may be built as an integral unit. The material utilized shall be limited as follows:

    a) Bare metal shall not be utilized. Provide plastic coated (bonded) aluminum. The rate of thermal conductance of the material shall be comparable to that of wood or molded fiberglass.

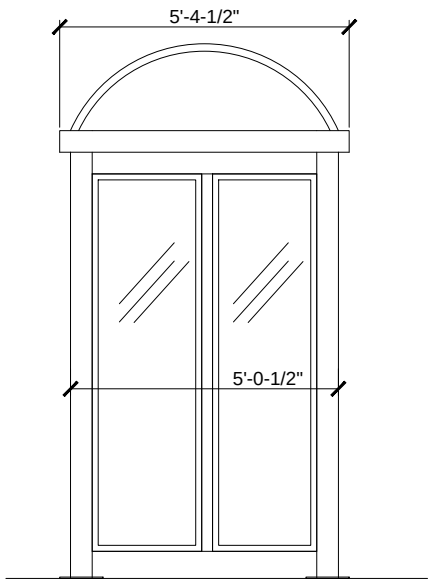
    b) The seat shall be vandal resistant and maintenance free; and it shall have no burrs, splinters, sharp edges or corners, nor any other shortcomings that will pose a hazard to personnel using the seat.

    c) The seat shall afford reasonable comfort to the user and shall be of such design as to allow for drainage of liquids that may be spilled on it. The color and design of the seat shall be consistent with other portions of the shelter.

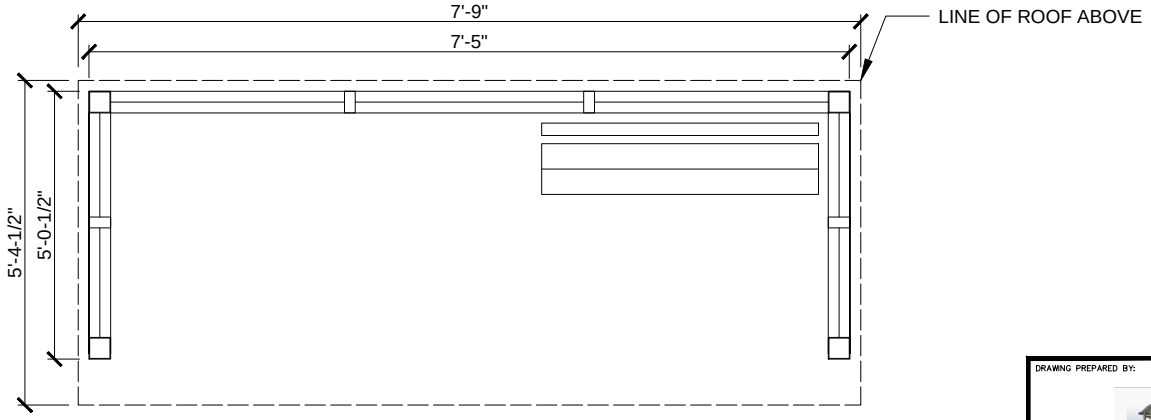
    d) The seat and its supports shall be designed to accommodate a load of 120 pounds per lineal foot without appreciable deflection. Appreciable deflection shall be considered to be any deflection over 1/8 inch in 3 feet in any direction. The supports shall be attached to the shelter frame at every vertical member, both posts and mullions, along the back wall panel. The support-to-frame



1 FRONT ELEVATION
NOT SCALE



2 SIDE ELEVATION
NOT SCALE



3 FLOOR PLAN
NOT SCALE

DRAWING PREPARED BY:

COLUMBIA EQUIPMENT COMPANY
72 Albany Avenue, Freeport, NY 11520
TEL # (516) 442-3340

PLAN & ELEVATION VIEWS OF MODEL
AL7.5/02BVSP PREFABRICATED SHELTER

KR DRAWN BY:	6-13-2016 DATE:	BB CHECKED BY:	6-13-2016 DATE:
SCALE:	MATERIAL:	DRAWING NO.	100

Addendum No. 3

COLUMBIA EQUIPMENT CO.
72 Albany Avenue Freeport, N.Y. 11520
516 442 3340 info@columbiaequipment.com
www.columbiaequipment.com

Sheltering people since 1961

SPECIFICATIONS

GENERAL: All shelters shall be AL7.5/02BVsp / Series, as manufactured by the Columbia Equipment Company, Inc. Freeport, NY. Dimensions shall be: 7' 9" minimum overall length (outside of fascia to outside of fascia) by 5'- 4 ½" minimum overall width (outside of fascia to outside of fascia) by 7'- 0" high to underside of fascia. Shelters shall be non-cantilevered. Shelters shall be open in front.

CONSTRUCTION MATERIALS: All structural frame and window frame members shall be extruded aluminum of 6061-T6 or 6063-T52 (for duranodic) alloy. Structural framing shall be one-piece seamless 2-½" x 2-½" hollow aluminum tubes of .125" minimum thickness. SNAP-TOGETHER OR TWO-PIECE CHANNELS WILL NOT BE ACCEPTED. Mullions shall be one-piece seamless 1-½" x 2-½" x .125" members. Window frames shall be separate extruded aluminum members with integral self-alignment lips and corner key slots. FRAMELESS GLAZING IN RECESSED POCKETS WILL NOT BE ACCEPTED. SNAP-ON GLAZING STOPS OR STOREFRONT GLAZING DETAILS WILL NOT BE ACCEPTED. Fascias shall be one-piece seamless extruded aluminum sections of .125 thicknesses with integral gutter, rain drip molding, weep holes – cantilevered beyond face of glazing panels below, with hidden corner keys and integral alignment lips. Each shelter shall be prefabricated in four preglazed sections (3 wall panels + 1 roof assembly), completely glazed (so that total erection time at site requires only about 1 to 2 hours/shelter with simple hand tools. Skylight barrel vault roofs shall be one-piece completely prefabricated units with curved glazing pre- mounted into fascias and caulked and gasketed before shipping. All joints shall be neat and clean and all edges shall be free of burrs. Window frame corners and roof "hold down" members shall be mechanically fastened and not snapped together or depend on a "pressure fit."

STANDARDS: All aluminum shall conform to the standards of the Aluminum Association, 750 3rd Avenue, New York, New York. Standards complied with in the design and construction of Columbia Shelters include AISC, Aluminum Association, ASTM, UL, ADA, etc, as applicable to the aluminum, steel, plastics and other parts. Shelter construction shall conform to construction standards of ASCE. Columbia Shelters are designed to withstand dead loads of 40 pfs min. and wind load over 85 mph.

STRUCTURAL FRAMING All framing, both vertical and horizontal, shall be the same size. Minimum size shall be 2-½" x 2½" x 1/8" structural tubes. Connections shall be concealed. Connections shall be means of ¼" thick minimum extruded aluminum channels, 2-1/4" x 2-1/4" high with tapered edges, or 1-1/4" x 2-1/4" x 2-1/4" high with tapered edges. Each main structural joint shall be fastened with two high strength stainless steel bolts of ¼" each joint. SELF-TAPPING CONNECTORS WILL NOT BE ACCEPTED. Base connections shall be designed to accept both internal and external base flanges. Where external flanges are used, they shall have same anodized or Duranodic (integral color anodized) finish as shelter. Shelter posts shall contain internal drainage weep holes to prevent condensation build-up.

WINDOW FRAMING: Windows shall be factory installed in window frame which shall be factory installed into the separate structural frame. Window frames shall have mitered corners and shall be connected internally by extruded aluminum corner keys or screw bosses with concealed stainless steel screws for positive tamper-proof fastening. Window frames shall be affixed to Shelter frame with 3/16" shallow head aluminum rivets, at approximately 13-¼" O.C. Rivets shall be on "inside of shelter." OUTSIDE RIVETS WILL NOT BE ACCEPTABLE. Rivets shall grip both surfaces being joined continuously for a full 360 degrees. RIVETS FASTENED INTO "SLOTS" WILL NOT BE PERMITTED. Window frames shall be independent so that windows with gasketing (mounted in frames) can be removed or installed as a complete unit without affecting any other member of the Shelters. FIN TUBE, SNAP-ON OR SCREW-ON GLAZING BEADS ARE NOT ACCEPTABLE. Where tempered glass, acrylic or polycarbonate windows are used, especially deep frames with ½" to ¾" edge engagement shall be used to prevent windows from being "popped out." In this case especially deep continuous PVC dry set splines shall be used for gasketing. Design of window framing shall be such that only authorized personnel may remove window units.

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Sheltering people since 1961

SPECIFICATIONS

FINISHES: All aluminum framing shall have a #313 Dark Bronze Anodized finish to conform to "Aluminum Association Standards for anodically Coated Aluminum Alloys for Architectural Applications." Fascias shall have a # 313 Dark Bronze Anodized Finish. Duranodic finishes shall conform to the standards of the Aluminum Company of America.

GLAZING: All glazing shall be ¼" Clear Tempered Safety Glass. Gasketing around windows shall be continuous specially extruded PVC dry set splines. Where tempered glass glazing is used, especially deep continuous PVC dry set splines shall be used, as shall deep window frames. Glazing shall be fully gasketed and framed in independent, interchangeable factory assembled units for ease of maintenance and repair. Maximum glazing panel widths shall be 25 1/2" and all same size.

ROOF: Roof shall be a Barrel Vault of 6mm bronze twin wall polycarbonate and shipped as one-piece. Roof glazing shall be completely enclosed – in a 3" high perimeter fascia. Roof shall have three top sections and (2) glazed end panels mounted into fascia/gutter assembly. All glazing joints to be gasketed with PVC splines and/or premium silicone sealant.

ROOF/FASCIA: Fascia member shall be 3" high minimum. Fascias shall be one-piece continuous extruded members with mitered corners; connection in fascias shall be with aluminum angle corner keys and threaded stainless steel Allen head set screws at each corner. FACIA MEMBERS SHALL HAVE NO EXPOSED FASTENINGS OF ANY SORT. Joints shall be mechanically fastened, NOT WELDED, to facilitate future maintenance. Fascia members shall have integral self-aligning lips for perfect alignment. Weep holes in fascia shall be located on a custom basis to prevent drainage from crossing through Shelter on sidewalk. Drainage shall take place through cantilevered weep holes to an external reveal inside the fascia but outside the Shelter, to prevent streaking on the exterior surface of the fascia. For safety, top edge of fascia shall be rounded. Roof assembly shall be attached to roof beams with ¼" minimum diameter stainless steel gasketed roof bolts approximately 13" o.c. Fascias to have integral Drip Molding.

BENCHES: All shelters to be furnished with part length aluminum benches – leaving ADA compliant 36" wheelchair space on one side and 4" space from shelter side wall on opposite side. Benches shall be "Independent" style with two "d" shaped aluminum support brackets, (2) 2"x6" seat planks and (1) 2"x6" backrest plank. Seat and backrest planks to be 1-piece seamless extrusions with flutted surfaces, curved edges, hidden stainless steel hardware and capped ends. Supports brackets shall be ¼" thick and fabricated from 3"x3" angles and 3" bar with prepunched bottom holes and furnished with expansion bolts for attaching to concrete sidewalk or slab Finish of bench to be electrostatically applied and oven baked polyester powder coat finish in choice of standard Tiger Drylac colors.

LIGHT FIXTURE: All shelters are available with a variety of solar and hardwired light fixtures with LED and other types of lamps.

ADDITIONAL: Design of Shelter shall be such that the structure is stable with all windows, roof, fascia and ground fastenings remove. Shelters shall be designed by Registered Architect and engineered by Licensed Engineers. Shelters shall be vandal-resistant, maintenance-free and completely weather-proof. All installation hardware and ground anchors shall be supplied with Shelter.