Attachment F

Scope of Work – Typical Shelter Plan Layout - CAT Bus Shelter at Hyatt Place – The Shops at Stonefield

Background: Refer to site location map. The Contractor shall base bid costs on the Typical Shelter Plan Layout for the CAT shelter installation at Hyatt Place Hotel presented in the Related Documents Attachment E. Work shall include total of three (3) shelter installations w/benches + side concrete art pad at the three different locations plus one (1) separate location of an installation of a concrete pad with bench only. Site layouts at locations other than the Hyatt Place base, may change slightly due to specific site conditions. Once sites are identified, any locational differences impacting layouts/costs will be by Change Order. Hyatt Place site is located on the EAST elevation of the Hyatt Place Hotel facing District Avenue. Location is adjacent to Bus Stop #19714, Route 8. Hyatt Place Hotel is located at 2100 Bond Street, Charlottesville, VA 22901. This location has high public visibility.

Typical Concrete Bus Shelter pad and Art pad. Contractor is to grub grass, excavate and clear immediate area of debris for soil retaining wall curb, new 13 ft. x 5ft x 6" depth concrete shelter pad, new 4ft. x 3ft. x 6" depth concrete pad for Sense of Place Art installation (art under separate contract). Allow for 4" depth compacted fill in all areas receiving new concrete. Form both pad areas and install in both areas 4" compacted aggregate base material size 21A or compacted fill. In both, set rebar reinforcing #4 bars @ 12" O.C. E.W. at mid. Depth and 3" edge clearance. Pour new 13'-0" x 5'-0" x 6" depth concrete bus shelter pad and new 4'-0" x 3'-0" x 6" depth Art pad with City mix. Slope of shelter and Art pads back to front at ¼" per foot. Separate shelter pad from soil retaining curb and Art pad by ½" premolded expansion joint filler. Dowel into soil retainment curb from new slabs with 8" #4 dowels.

Contractor is to remove all debris from site and maintain a clean site at all times. Contractor is to repair patch and/or replace any existing concrete that is damaged during construction activities, leaving the site clean of any and all defects. At all areas - Backfill all disrupted grass/soil areas with soil and replant w/grass seed, cover w/straw mulch. Provide initial watering.

All concrete is to be City Mix 3500psi with minimum compressive strength in psi at 28 days with broom finish. Refer to City of Charlottesville Standards and Design Manual.

Soil Retainment Wall Curb: New concrete soil retainment wall curb is as located on upslope side of the new shelter pad as shown on Page 2. Set #4 rebar as shown in section AA. Form and pour 18" deep by 6" wide concrete curb. Curb top is to be approx. 4" above surface of new shelter pad.

Attachment F Con't.

Park Style Bench Pad (not at typical shelter plan layout - Hyatt Place location): Meet w/CAT Project Manager to determine on exact location. Behind sidewalk, excavate and form for a 2'-6" wide x 6'-6" long x 6" depth concrete pad for the bench. In pad area allow depth for installation of 4" compacted aggregate base material size 21A or compacted fill. Set rebar reinforcing #4 bars @ 12" O.C. E.W. at mid. Depth and 3" edge clearance. Pour new 2'-6" wide x 6'-6" long x 6" depth concrete pad for bench with City mix 3500 psi concrete broom finish. Slope of bench pad back to front at ¼" per foot. Separate bench pad from existing sidewalk by ½" premolded expansion joint filler. Dowel into sidewalk from new bench slab with 8" #4 dowels.

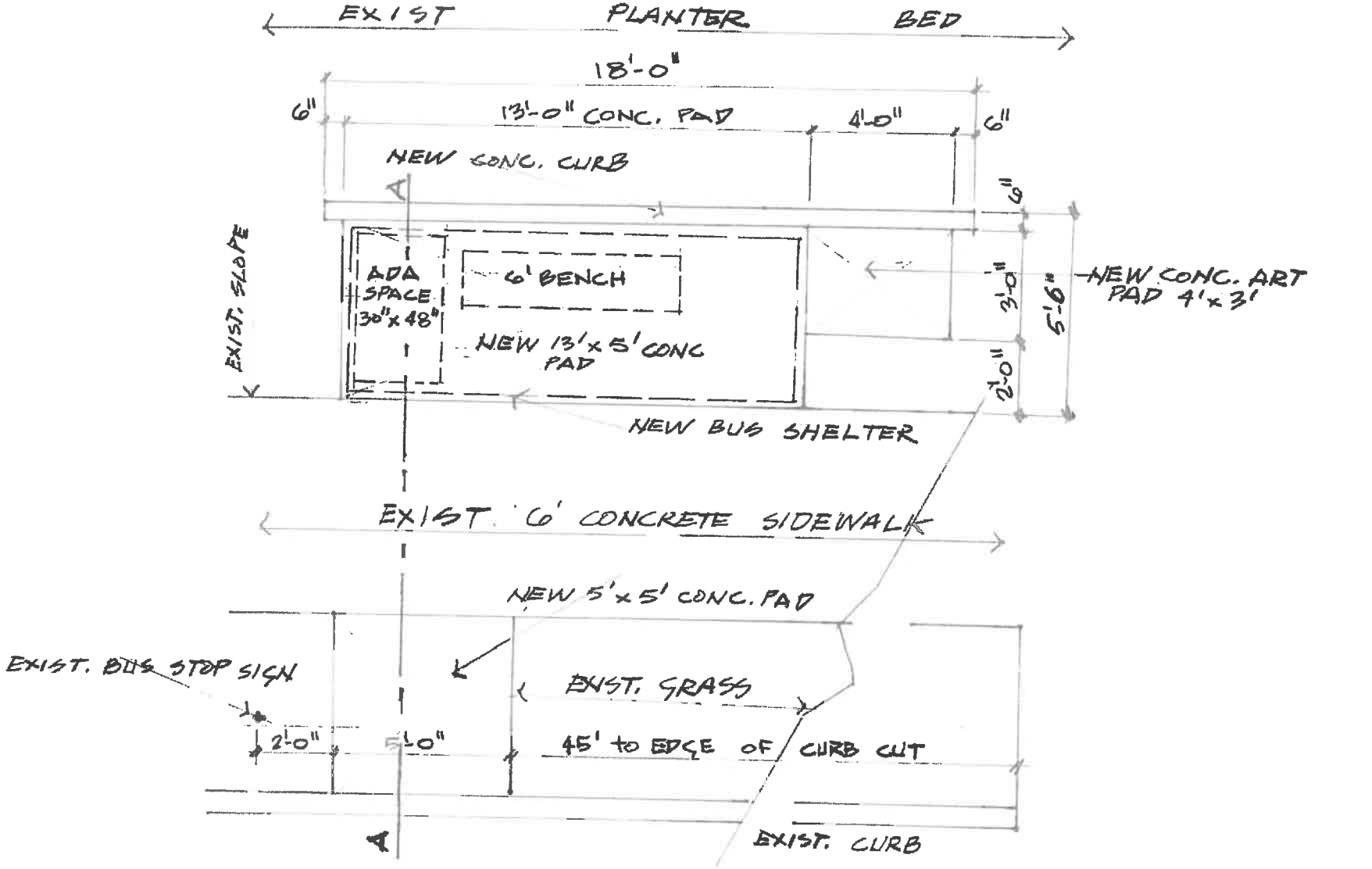
Sidewalk: Allowing depth for 4" compacted aggregate base material size 21A or compacted fill, form and pour new concrete sidewalk 5'-0" x 5'-0" x 4" depth in area between existing 6' wide sidewalk and back of existing curb. Finish shall match existing sidewalk. Separate new sidewalk from existing 6' wide sidewalk by ½" premolded expansion joint filler. Separate new sidewalk from existing 6" curb with ½" premolded expansion joint filler. Dowel into existing 6ft. wide sidewalk from new sidewalk with 8" #4 dowels. Ensure that edges of new sidewalk are level with curb, as well as level with existing sidewalk to prevent tripping hazards and provide good handicap accessibility.

At all areas - Backfill all disrupted grass/soil areas with soil and replant w/grass seed, cover w/straw mulch. Provide initial watering.

Assemble/install Bus Shelter with Bench: Shelter and bench amenities are stored at CAT Maintenance Center at 1545 Avon Street Extended, Charlottesville, VA 22902. Call 434-970-3351 to schedule pick-up from Stephen McNally, Senior Transit Project Manager or Kato Carter, Assistant Director of Transit Maintenance at 434-970-3872. Only scheduled pick-up of materials will be allowed as this is a secured access facility. It is the Contractors responsibility to ensure all shelter and bench parts are included. CAT has a forklift for CAT personal only, to use for lifting shelter materials onto Contractors vehicle at CAT Maintenance Center. Refer to MANUFACTURER'S assembly instructions for shelter and bench(Attachment F) . Contact CAT Senior Project Manager for final shelter positioning and layout on concrete pad before installation.

Install Park Style Bench: Pre-mark concrete pad at each of the bench mounting pads for ½" diameter holes, install park style metal bench by drilling the four holes in concrete placing ½" x 4-1/2" Hilti TZ anchors, stn. stl. Secure the benches to the anchors. Benches are available at CAT Maintenance Center by scheduled pick-up only.

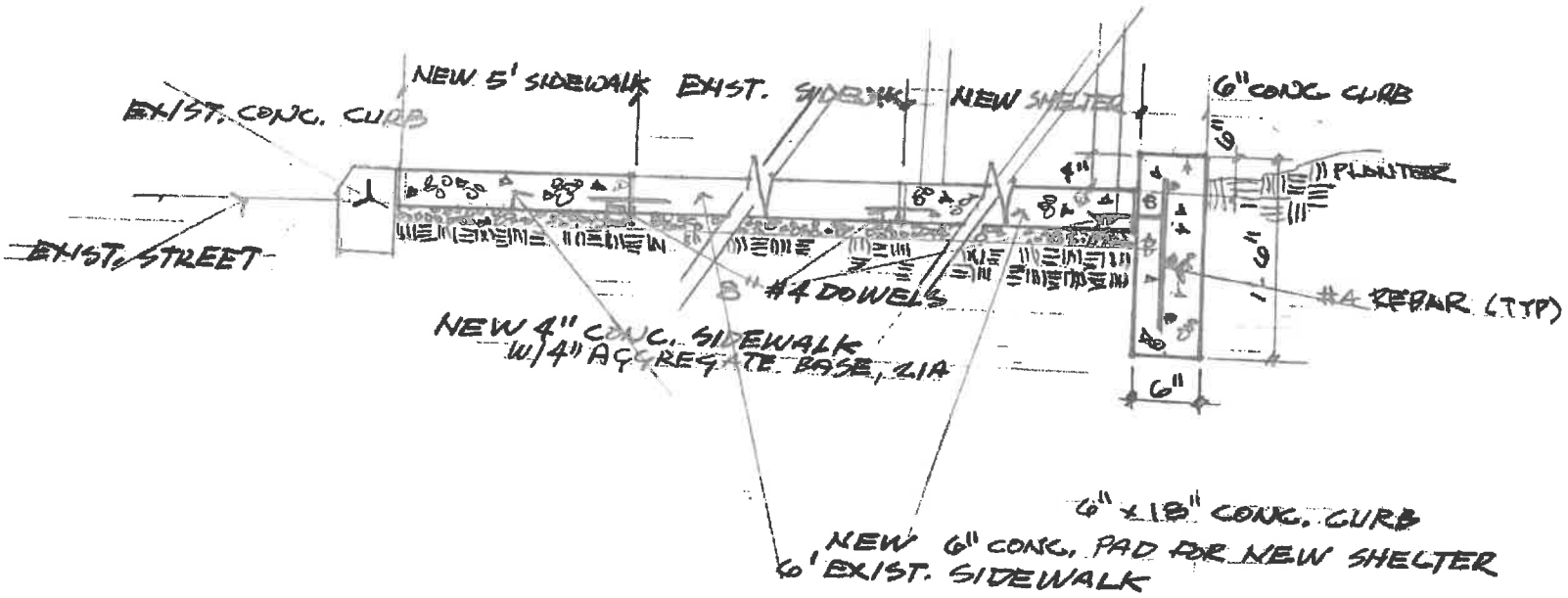
SITE LOCATION - CAT BUS SHELTER AT HYATT PLACE



NEW CAT BUS SHELTER - HYATT PLACE

03/22/21

SFM



SECTION A-A (REFER TO NARRATIVE FOR DETAILS)

N.T.S.

TABLE 2-1

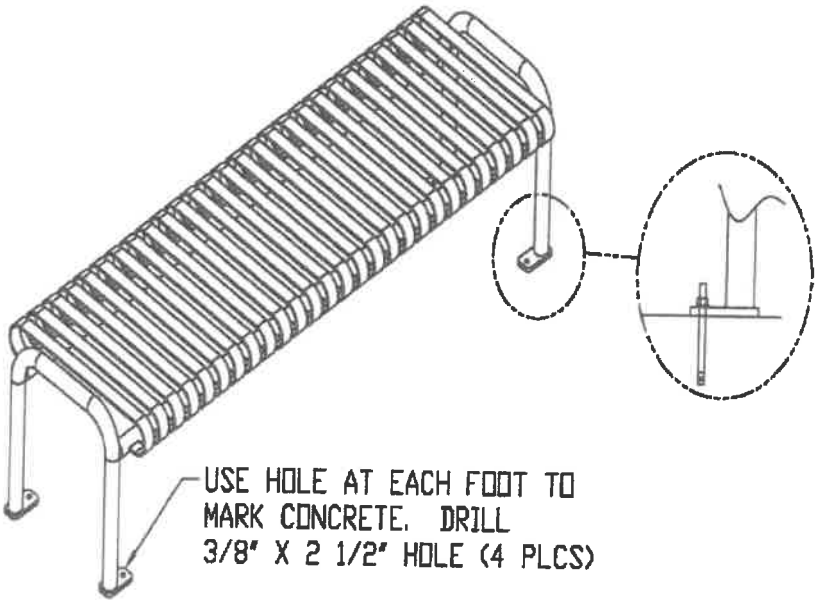
CONCRETE MIX REQUIREMENTS

Class	Design Strength (1)	Cement (2)	Fine Aggregate (3) (4)	Coarse Aggregate (3) (4)	Water
A3	3000 psi	588 lb/cu yd	1362 lb/cu yd	1811 lb/cu yd	33.5 gal/cu yd
City Mix (9)	3500 psi	588 lb/cu yd	1260 lb/cu yd	1811 lb/cu yd	33.5 gal/cu yd
A4	4000 psi	635 lb/cu yd	1219 lb/cu yd	1811 lb/cu yd	33.5 gal/cu yd
Flowable Fill	30 psi	(10)	(10)	--	(10)

Class	W/C Ratio (5)	Fly Ash	AE Range (6)	WR (7)	HRWR (8)	Slump Range Inches
A3	0.56	--	6 +/- 2%	--	--	1-5"
City Mix	0.49	Not allowed	6 +/- 2%	--	--	1-5"
A4	0.45	--	6 +/- 1%	--	--	2-4"
Flowable Fill	(10)	(10)	--	--	--	8-10"

NOTES:

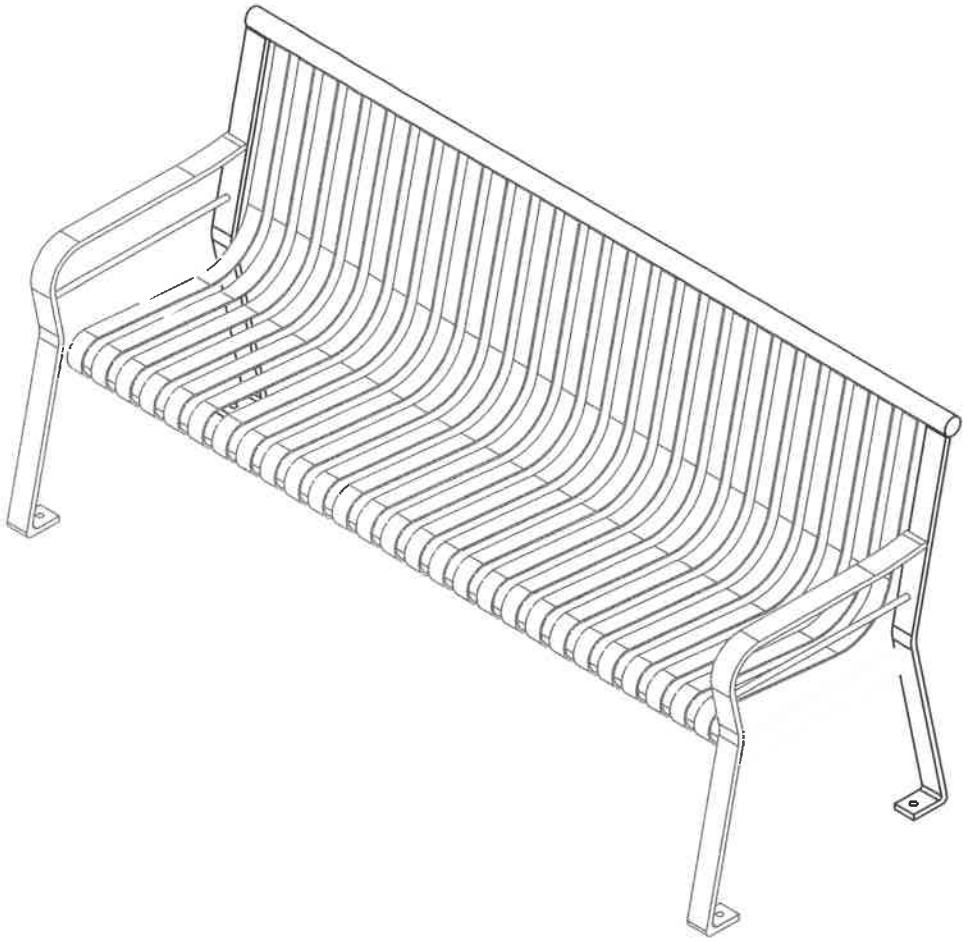
(1) Minimum compressive strength in psi at 28 days.
(2) Minimum amount of Type I or Type II Portland Cement per ASTM C-150.
(3) Saturated surface dry weight.
(4) #57 size manufactured and tested for acceptance by ASTM C33 and The Virginia Department of Transportation Road and Bridge Specifications.
(5) Maximum water - cementitious ratio by weight.
(6) AE is percent air-entrainment. AE admixtures to meet or exceed requirements of ASTM C-260 and AASHTO M-154.
(7) WR is water-reducer admixture. WR admixtures to meet or exceed requirements of ASTM C-494 and AASHTO M-194.
(8) HRWR is high-range water-reducer admixture. HRWR admixtures to meet or exceed requirements of ASTM C-494 Types A & F and AASHTO M-194 Types A & F.
(9) "City Mix" to be colored "Omaha Tan" using Rockwood Pigments/Davis Colors #5084. "City Mix" shall meet requirements of VDOT A3.5 concrete unless otherwise indicated.
(10) Mix design shall be submitted for approval with laboratory test data verifying compliance with 28-day compressive strength requirements. Mix design shall be approved by the City Engineer prior to placement.



1. PLACE THE 6' BENCH INSIDE THE SHELTER. iT SHOULD BE PLACED TOWARD ONE END OF THE SHELTER TO COMPLY WITH ADA STANDARDS.
2. MARK THE CONCRETE AT EACH OF THE MOUNTING PADS AND WITH A 3/8" DIAMETER MASONRY DRILL, MAKE THE HOLES IN THE CONCRETE FOR THE BENCH
3. PLACE THE 3/8" HILTI ANCHORS INTO THE HOLES. SECURE THE BENCHES TO THE ANCHORS.

BENCH INSTALLATION

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



CONFIGURATION A	
1	PLANT 1
2	PLANT 2

CONFIGURATION B – ANCHORS	
0	NO ANCHORS
1	1/2" X 3 3/4" SUP-R ANCHORS, ZINC
2	1/2" X 3 3/4" SUP-R ANCHORS, STN STL
3	1/2" X 4 1/4" SUP-R ANCHORS, ZINC
4	1/2" X 4 1/4" SUP-R ANCHORS, STN STL
5	1/2" X 3 3/4" HILTI TZ ANCHORS, ZINC
6	1/2" X 3 3/4" HILTI TZ ANCHORS, STN STL
7	1/2" X 4 1/2" HILTI TZ ANCHORS, ZINC
8	1/2" X 4 1/2" HILTI TZ ANCHORS, STN STL
9	SPECIAL – SPECIFIED ON SALES ORDER

CONFIGURATION C – FINISH	
0	NONE
1	STANDARD POWDER COAT
2	STANDARD POWDER COAT WITH CLEAR COAT
3	PREMIUM POWDER COAT
4	PREMIUM POWDER COAT WITH CLEAR COAT
5	TBD
6	TBD
7	TBD
8	TBD
9	SPECIAL – SPECIFIED ON SALES ORDER

EXAMPLE: 1 2 9 1 5 – 1 1 1

DRAWING NUMBER

CONFIGURATION A

CONFIGURATION B

CONFIGURATION C

TOLAR
Tolar Manufacturing Company, Inc
258 Mariah Circle,Corona,CA 92879

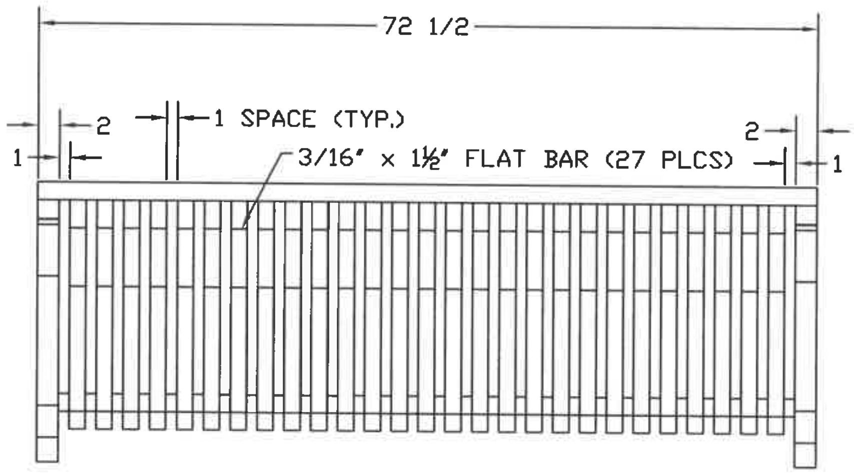
DESCRIPTION
BENCH, 6' STRAP BACK W/NO VAGRANT

CUSTOMER/VENDOR

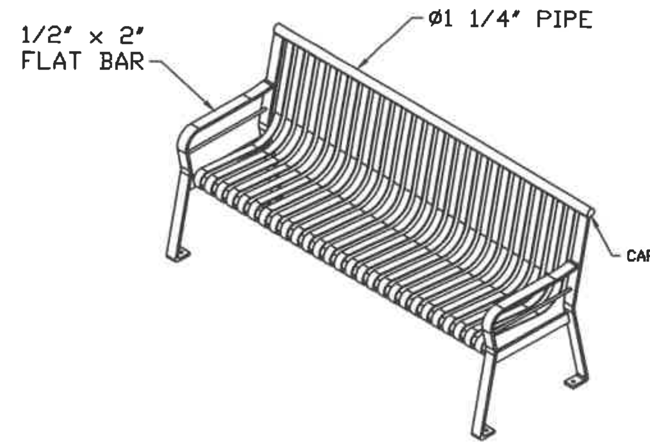
SIZE	MATL.	DWG NO.	REV
C	STEEL	12915	–

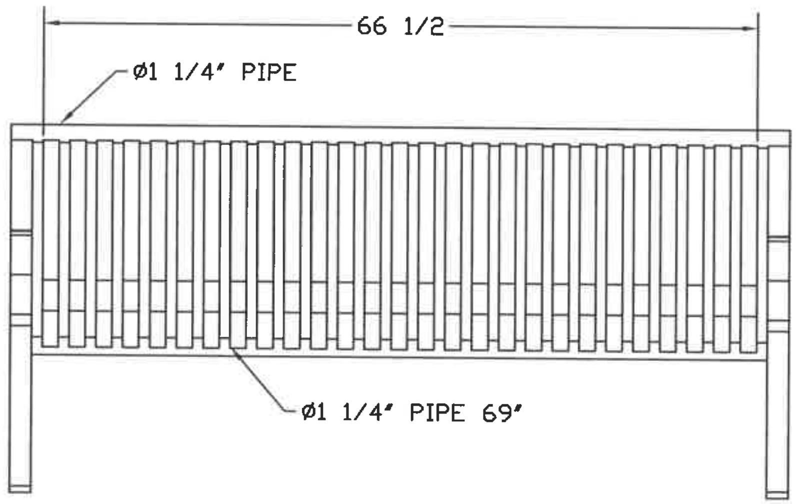
SCALE | DATE 06/15/10 | DRAWN BY: EM

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

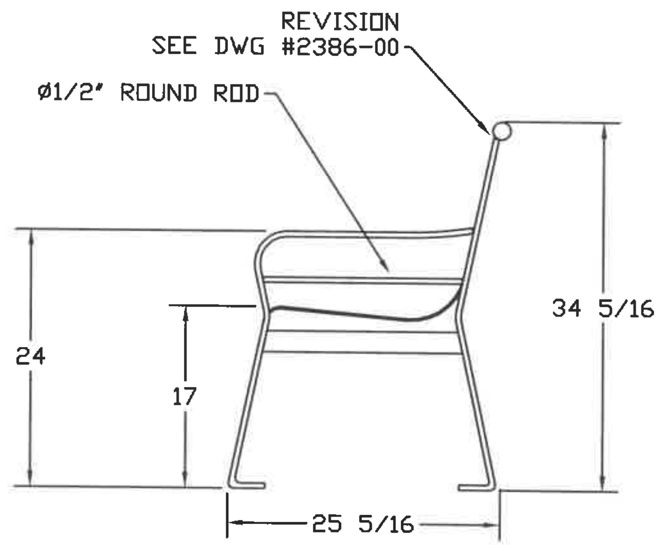


TOP VIEW





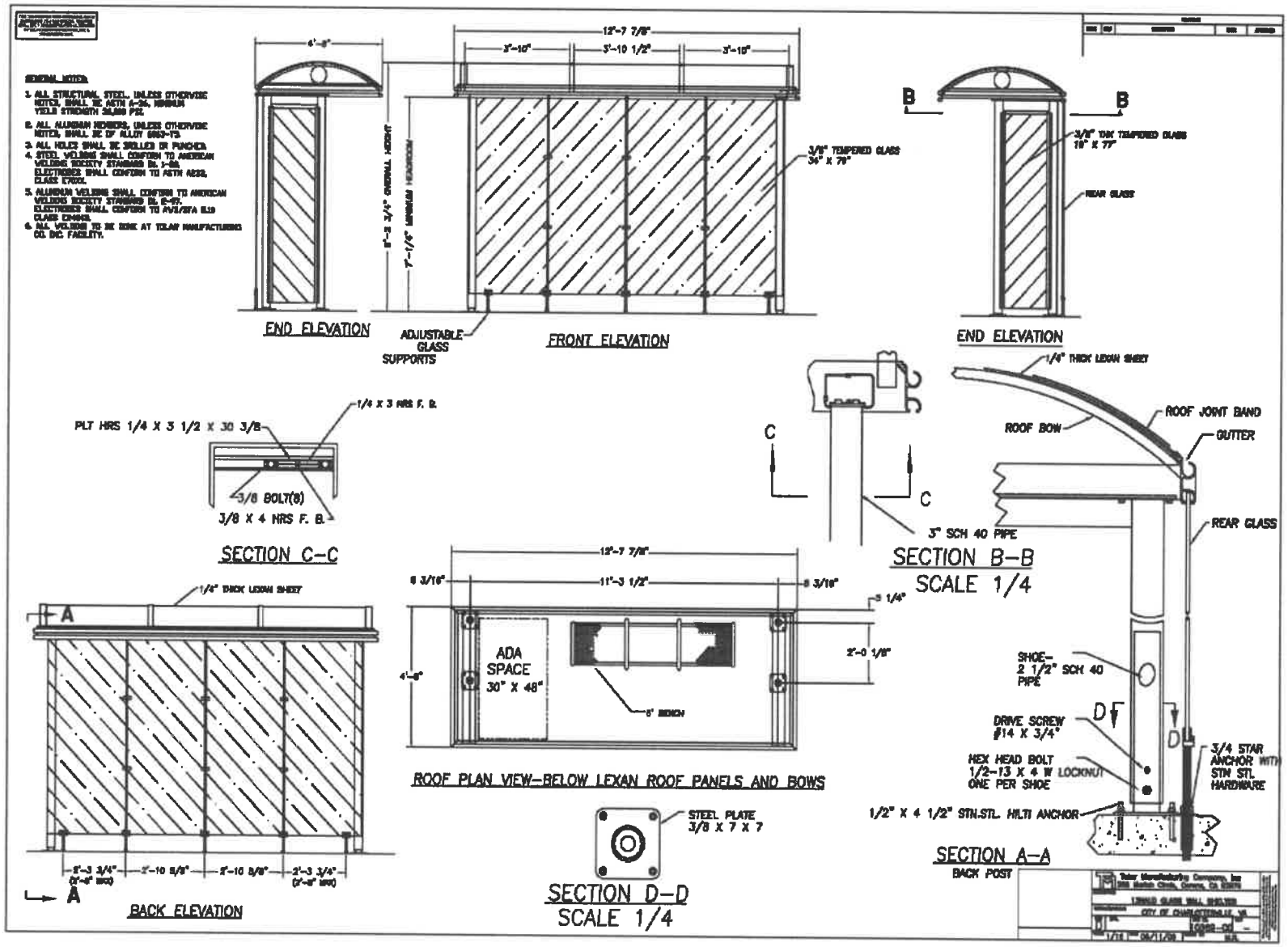
FRONT VIEW



END VIEW

SHEET 2 OF 2

	Tolar Manufacturing Company, Inc 258 Mariah Circle, Corona, CA 92879
DESCRIPTION	BENCH, 6' STRAP BACK W/NO VAGRANT
MATL.	STEEL
SIZE	C
DWG NO.	12915-00
REV	–
DATE	06/15/10
DRAWN BY	EM


GENERAL NOTES:
1. ALL STRUCTURAL STEEL, UNLESS OTHERWISE NOTED, SHALL BE ASTM A-36, MINIMUM YIELD STRENGTH 36,000 PSI.
2. ALL ALUMINUM MEMBERS, UNLESS OTHERWISE NOTED, SHALL BE OF ALLOY 6063-T5.
3. ALL HOLES SHALL BE DRILLED OR PUNCHED.
4. STEEL WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY STANDARD D1.1-98. ELECTRODES SHALL CONFORM TO ASTM A233, CLASS E7001.
5. ALUMINUM WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY STANDARD D1.2-97. ELECTRODES SHALL CONFORM TO AWS/SFA 5.10 CLASS ER4043.
6. ALL WELDING TO BE DONE AT TEXAS MANUFACTURING CO. INC. FACILITY.
6'-0"
12'-7 7/8"
3'-10"
3'-10 1/2"
3'-10"
3/8" TEMPERED GLASS 34" X 79"
3/8" THK TEMPERED GLASS 78" X 77"
REAR GLASS
B
B
END ELEVATION
ADJUSTABLE GLASS SUPPORTS
FRONT ELEVATION
END ELEVATION
1/4" THICK LEXAN SHEET
ROOF JOINT BAND
ROOF BOW
GUTTER
REAR GLASS
C
C
3" SCH 40 PIPE
SECTION B-B
SCALE 1/4
PLT HRS 1/4 X 3 1/2 X 30 3/8
1/4 X 3 HRS F. B.
3/8 BOLT(S)
3/8 X 4 HRS F. B.
SECTION C-C
1/4" THICK LEXAN SHEET
A
A
5'-3 3/4"
2'-10 5/8"
2'-10 5/8"
2'-3 3/4"
BACK ELEVATION
12'-7 7/8"
6 3/16"
11'-3 1/2"
6 3/16"
5 1/4"
2'-0 1/8"
4'-6"
ADA SPACE 30" X 48"
6" RISER
ROOF PLAN VIEW-BELOW LEXAN ROOF PANELS AND BOWS
STEEL PLATE 3/8 X 7 X 7
SECTION D-D
SCALE 1/4
SHOE-2 1/2" SCH 40 PIPE
DRIVE SCREW #14 X 3/4"
HEX HEAD BOLT 1/2-13 X 4 W LOCKNUT ONE PER SHOE
1/2" X 4 1/2" STN.STL. HILTI ANCHOR
3/4 STAR ANCHOR WITH STN STL HARDWARE
D
D
SECTION A-A
BACK POST