



# BIKE EXPO SALE

Wisc. Expo Center FREE  
ADMISSION



Wheel & Sprocket

APRIL 8-11



TREK

CLEAR CHANNEL





DIGITAL



**DIGITAL**





U.S. Department  
of Veterans Affairs

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CLEARCHANNEL

DIGITAL

46 46



CLEARCHANNEL

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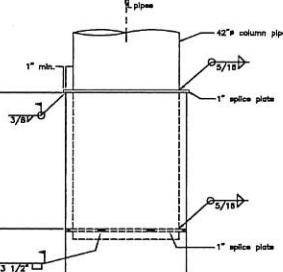
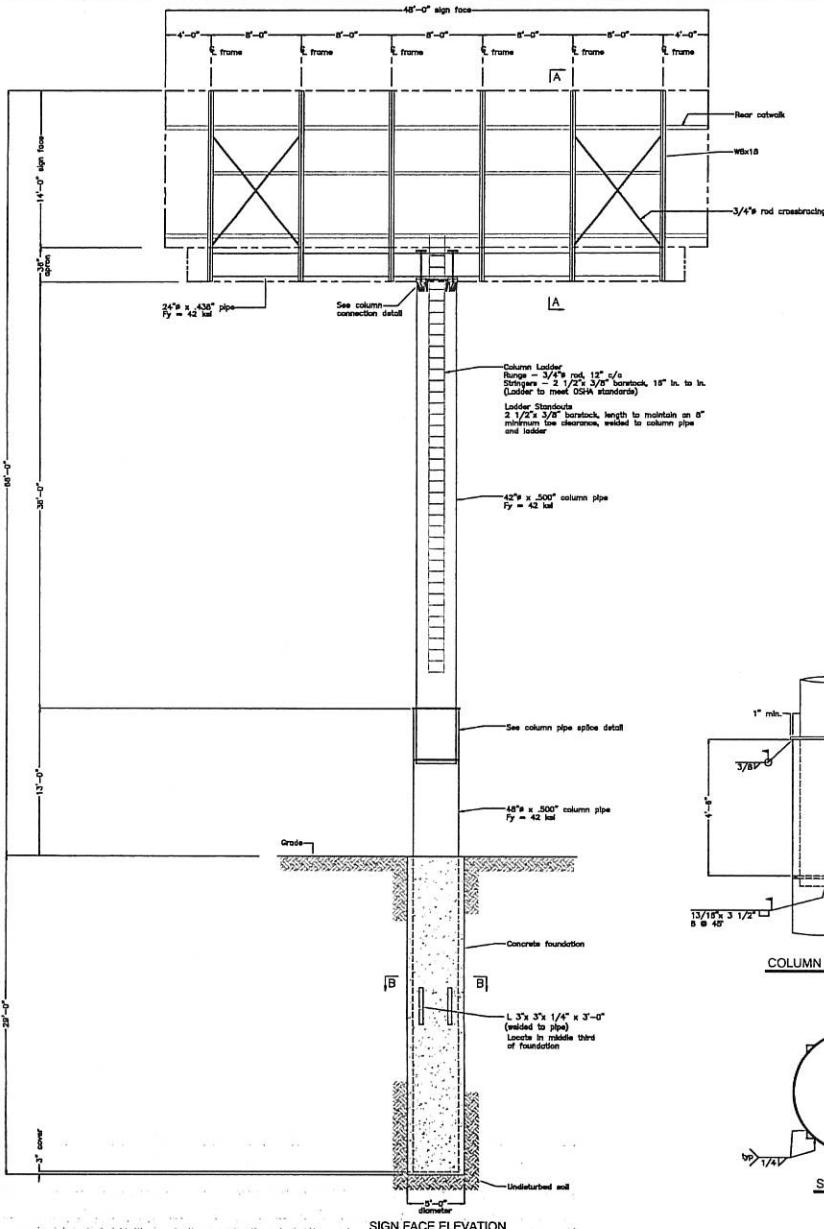
Defined Commissions  
LLC as low as

SAVING SET 3.25%

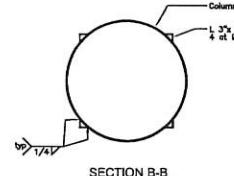


615.444.8663

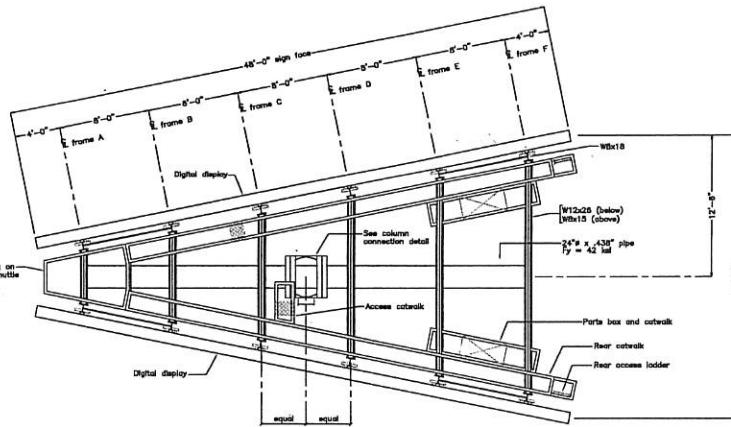
QUANTUM  
OUTDOOR



COLUMN PIPE SPLICING DETAIL



SECTION B-B



PLAN VIEW  
SIGN STRUCTURE

- NOTES:**  
• Structural detail conforms to the 2012 International Building Code.  
• Design standard is ASCE 7-10.  
• Design dead load of the superstructure without faces is 23,500 pounds.  
• Superstructure can accommodate two faces weighing up to 8,000 pounds each.

- WIND:**  
• Design winds = 105 mph. (3 sec. gust) Exposure C.  
• Structure is classified occupancy category 1.  
• Wind Importance factor = I = 1.0  
• Wind speed = 90.9 mph

- SEISMIC:**  
• Seismic load importance factor:  $I_s = 1.0$   
• Structure is classified occupancy category 1.  
• Mapped spectral response accelerations:  
    • Site class : D  
    •  $S_a = 0.225 g$   
    • Site class : D  
    • Spectral response coefficients:  
        • Site class : D  
        •  $S_a = 0.225 g$   
        • Site class : D  
    • Seismic design category is B.  
    • Seismic basic force reducing system:  
        • Design is building strength not similar to building - signs and billboards.  
    • Design force shear = 1.53 kips  
    • Response modification factor : R = 3.  
    • Analysis procedure used: Equivalent lateral force method.

- STEEL:**  
• Structural steel pipe shall conform to ASTM A252 or API 5L, with grade that corresponds to the specified yield stress.  
• All structural steel shall be hot rolled and channels shall conform to ASTM A36.  
• Structural steel flange shapes shall conform to ASTM A992.  
• High strength bolts shall conform to ASTM A325 (unless noted otherwise).  
• Nuts shall conform to ASTM A563.  
• High strength A325 bolts shall be in cadmium plated.  
• Bolt holes shall be the AISC standard size (unless noted otherwise).  
• All high strength bolts shall be fully pretensioned (unless noted otherwise).  
• Bolts shall be predrilled and countersunk, except for the embedded portions of members.  
• Steel welding shall be in accordance with AWS standards.  
• Steel members and elements of the structure shall be fabricated and erected according to the latest AISC specifications and standard practice.

- FOUNDATION & CONCRETE**  
• Concrete shall attain a 28-day compressive strength of  $f'_c = 3000 \text{ psi}$ .  
• Soil testing by Geo Hydro Engineers - Project No. 150229-21.

- GENERAL:**  
• The engineer shall verify all dimensions and conditions in the field and notify the engineer of any discrepancies.  
• GRC Engineering, Inc. will not be supervising or monitoring the erection/installation of this structure.

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14'-0" x 48'-0"  
MONOPOLE SIGN STRUCTURE  
CENTERMOUNT 25' V  
68'-0" OVERALL HEIGHT  
B455 HOLCOMB BRIDGE ROAD  
JOHNS CREEK, GA

CLIENT NO. 36-2115  
GRC NO. 15-017-218

DRAWING NO. 36-2115

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