



**R2BUILD dba R2B Engineering Inc**  
 23441 S. Pointe Dr., #280 Laguna Hills, CA 92653  
 License #1031564 A, B DIR 1000059338

**CHANGE ORDER REQUEST**

No. **003**

To: **City of Commerce**  
**2535 Commerce Way**  
**Commerce, CA 90040**  
**Attn:Chidi Ugwueze**

Date 11/19/2019  
 Project Name **Electrical for CNG**  
 Project # **190205**  
 Owner's Project #: \_\_\_\_\_  
 Contract Number: \_\_\_\_\_

**Proposed Change:**

Provide labor and material to construct a retaining wall as directed by the City, AOR & SCE

This cost proposal is based solely on the usual cost elements, such as labor, material, equipment and normal mark ups, and does not include any sum for changes in sequence of Work, delays, disruptions, rescheduling, extended overhead, acceleration and/or impact costs. CBEC expressly reserves the right to make claim for any and all of these and related items of cost prior to any final settlement of this contract.

	<i>QTY</i>	<i>UNIT</i>	<i>RATE</i>	<i>SUB TOTAL</i>
<i>Per the attached itemization</i>				
<i>Install Approx. 35' of retaining wall (not to exceed 5' high)</i>	<i>1</i>	<i>LS</i>	<i>\$ 18,254.74</i>	<i>18,254.74</i>
<i>Negotiated Credit</i>	<i>-1</i>	<i>LS</i>	<i>\$ 3,254.74</i>	<i>(3,254.74)</i>

Time Extensions Requested TBD (Work) Days

Net Add or Deducts \$ **15,000.00**

Submitted by: R2B Engineering

Accepted by: \_\_\_\_\_

By: Shiva KR

By: \_\_\_\_\_  
 Date

Title: \_\_\_\_\_

Reviewed & Approved by: \_\_\_\_\_

By: \_\_\_\_\_  
 Title: \_\_\_\_\_

Date \_\_\_\_\_

**R2BUILD**

23441 S. Pointe Dr., #280,

Laguna Hills, CA

Tel: (714) 609-7625 FAX: (714) 455-0712

Job Title: Power for CNG Fueling Station

Reference:

Additional Scope of work per the attached Sketch

Date: 6/21/19

Job#: CNG

File#:

Prepared by: Shiva

**COST BREAKDOWN****MATERIAL/ DIRECT EXPENSES**

Qty	Units	Description	Unit	Total
1	LS	Concrete	1650.00	\$1,650.00
1	LS	Rebar	440.00	\$440.00
1	LS	CMU	600.00	\$600.00
1	LS	Grout	300.00	\$300.00
1	LS	Misc	200.00	\$200.00
				\$0.00
		Tax (9.75%)	9.75%	\$311.03
		SUB-TOTAL		\$3,501.03

**LABOR**

Qty	Units	Classification	Rate	Total
0	MH	Superintendent/ Foreman	95.00	\$0.00
0	MH	Electrician	125.00	\$0.00
	MH	Pipe Fitter	108.75	\$0.00
112	MH	Laborer	87.75	\$9,828.00
		SUB-TOTAL		\$9,828.00

**EQUIPMENT**

Qty	Units	Description	Rate	Total
0	Wk	Skidsteer	2250.00	\$0.00
1	Wk	Excavator	1250.00	\$1,250.00
1	LS	Dumpsters	785.00	\$785.00
		Sales Tax	9.75%	\$198.41
		SUB-TOTAL		\$2,233.41

**SUBTOTAL (Material, Labor, Equipment)**

\$15,562.44

**Overhead & Construction Fee**

15%

\$2,334.37

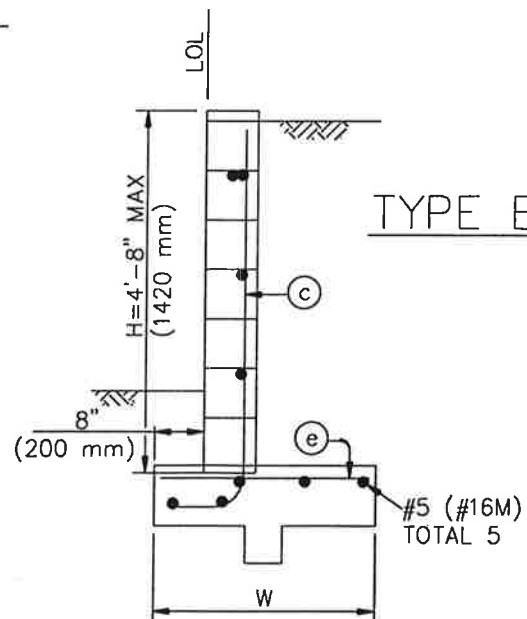
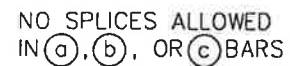
**Performance & Payment Bond**

2%

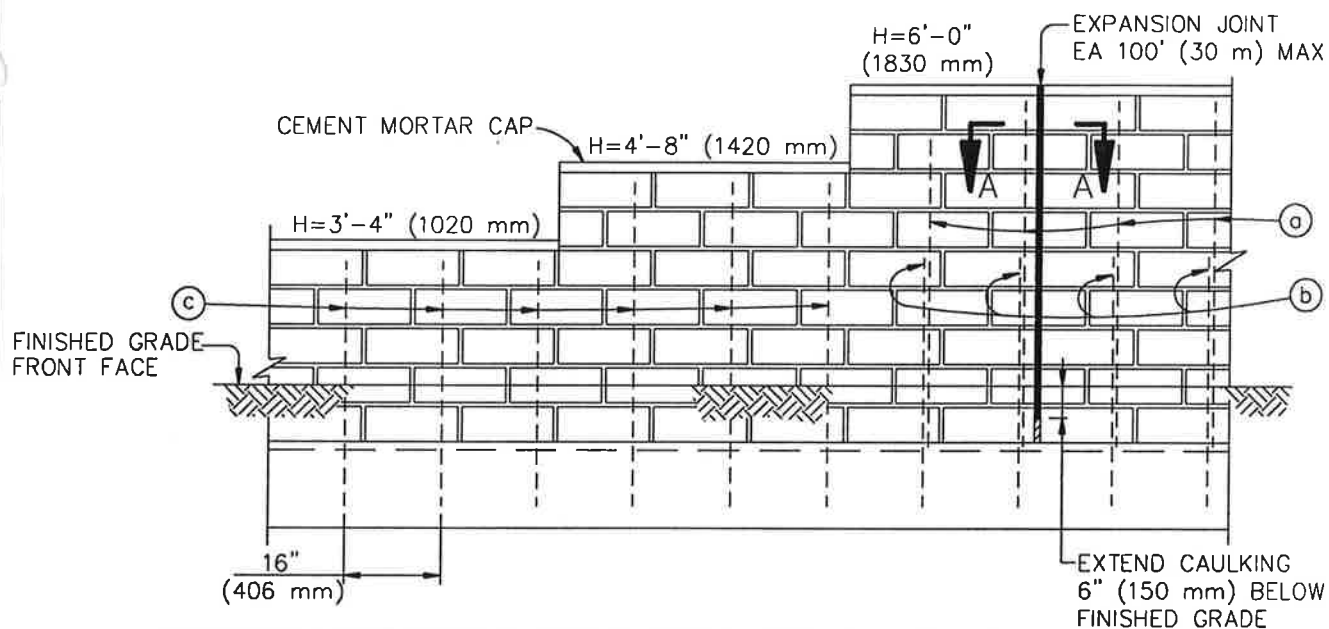
\$357.94

**Total**

\$18,254.74

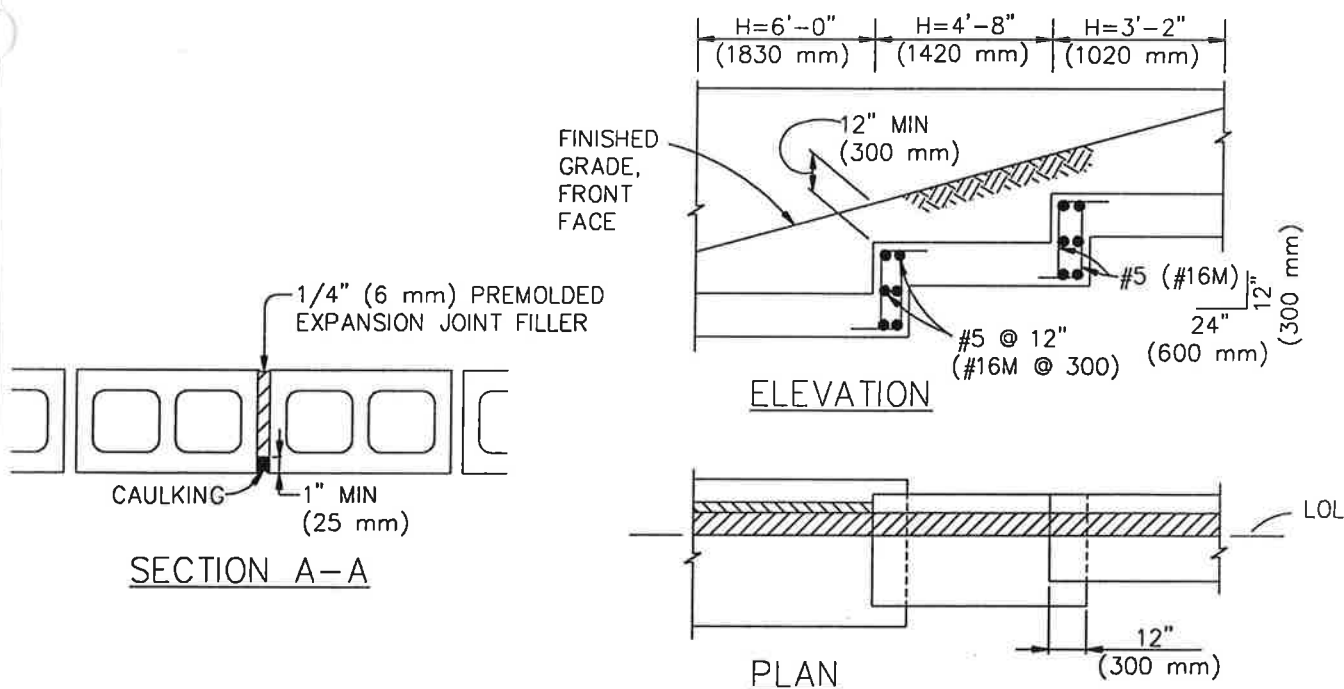


SHEET 1 OF 3



OMIT MORTAR FROM VERTICAL JOINT IN FIRST COURSE ABOVE FINISHED GRADE AT 2'-8" (813 mm) CENTERS FOR WEEP HOLES. FILL ALL CELLS WITH GROUT.

## ELEVATION



## FOOTING STEP DETAILS

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

**MASONRY RETAINING WALL**

STANDARD PLAN

**618-3**

SHEET 2 OF 3

TYPE A WALL

DESIGN H	3'-4" (1020)	4'-0" (1220)	4'-8" (1420)	5'-4" (1630)	6'-0" (1830)
W	3'-2" (1000 mm)	3'-6" (1100)	3'-10" (1200)	4'-2" (1300)	4'-6" (1400)
(a) BARS	_____	_____	_____	#5 @ 16" (#16M @ 406)	#5 @ 16" (#16M @ 406)
(b) BARS	_____	_____	_____	#5 @ 16" (#16M @ 406)	#5 @ 16" (#16M @ 406)
(c) BARS	#5 @ 16" (#16M @ 406)	#5 @ 16" (#16M @ 406)	#5 @ 16" (#16M @ 406)	_____	_____

TYPE B WALL

DESIGN H	3'-4" (1020 mm)	4'-0" (1220)	4'-8" (1420)	5'-4" (1630)	6'-0" (1830)
W	2'-8" (850)	3'-0" (950)	3'-4" (1050)	3'-8" (1150)	4'-0" (1250)
(a) BARS	_____	_____	_____	#5 @ 15" (#16M @ 375)	#5 @ 15" (#16M @ 375)
(b) BARS	_____	_____	_____	#5 @ 15" (#16M @ 375)	#5 @ 15" (#16M @ 375)
(c) BARS	#5 @ 15" (#16M @ 375)	#5 @ 15" (#16M @ 375)	#5 @ 15" (#16M @ 375)	_____	_____
(e) BARS	#5 @ 15" (#16M @ 375)	#5 @ 15" (#16M @ 375)	#5 @ 15" (#16M @ 375)	#5 @ 15" (#16M @ 375)	#5 @ 12" (#16M @ 300)

DESIGN DATA (SEE SPPWC 617 FOR PCC, STEEL, AND OTHER SOIL DATA)

$$f_m = 500 \text{ psi (3.5 MPa)} \quad f'_m = 1500 \text{ psi (10.5 MPa)}$$

REQUIRED SOIL BEARING CAPACITY 2000 psf (95 kPa)

NOTES:

1. SEE SPPWC 617 FOR STANDARD WALL DETAILS.
2. METRIC REINFORCING BAR SPACING IS IN MILLIMETERS.