



**ADDENDUM NO. 4**

**1904 / KVCC WHITNEY WING RENOVATIONS**

Lewis + Malm Architecture

**03FEB2020**

This Addendum forms a part of the contract documents. It modifies them as follows:

**DISCIPLINES:** Structural, Architecture, Mechanical, Electrical

**CLARIFICATIONS:**

BID DATE The bid date will not be extended.

LAST ADDENDUM ADDENDUM #4 is the final one for this project. Thank you to all of those who submitted questions to us. Your hard work preparing for this bidding opportunity is appreciated. We wish you all the best of luck!

**DRAWINGS:** NO ADJUSTMENTS

**ELECTRICAL QUESTIONS & RESPONSES:**

QUESTION 1) Is the uni-strut rack part of the welding booth assembly where the electrical items are mounted?

RESPONSE TO Q1: No, the uni-strut rack shall be provided by the Electrical Contractor, it is mounted to the welding booth assembly w/ suitable, heavy duty fasteners.

QUESTION 2) Panels LPA & P2 are existing and flush mounted in the wall. If my gear supplier is able to supply all new interior bus, panel, cover, and breakers to fit into existing panel tub, would this be accepted instead of demo of block wall to fit new tub?

RESPONSE TO Q2: Yes, see ADDENDUM #3.

QUESTION 3) Print E5.2 shows transformer DT-1 feeding panel DP1 with a 400 amp main breaker. The transformer DT-1 is 112.5 KVA which should only be rated for 300 amps maximum output, not 400 amps. On print E5.2, DT.9 transformer is feeding a 300 amp panel. DT.9 transformer is a 75 KVA, maximum output is only 200 amps. Can you verify that all other transformers are fused properly?

RESPONSE TO Q3: Yes they are protected properly. The rated output for a 112.5 kVA transformer is 312A. Per NEC Code, Table 450.3B, for secondary protection multiply the rated current by 125% which yields 390A. The next size breaker is 400. Likewise for the 75 kVA transformer, the rated output is 208A, multiplied by 125% yields 260A. The next size circuit breaker is 300A.



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QUESTION 4) Print E1 shows three #4 & one #8 conductors feeding a 200 amp welding disconnect for six pack welding rack. Also shows it in a 1 inch conduit. #4 copper is not rated for 200 amps.

RESPONSE TO Q4: Per NEC Code 630.11 regarding Arc Welders, the 2017 Handbook states, "Even under high-production conditions, the loads on transformer arc welders are considered intermittent. Therefore, the minimum ampacity of feeder conductors supplying several transformers (three or more) is permitted to be determined by applying the percentage values specified in 630.11(B)." Duty cycle multiplication factors from Table A were applied which yielded a value of 70A for the feeder size of each set of (6) welders.

**SPECIFICATIONS:** NO ADJUSTMENTS

**ATTACHMENTS:** NO ATTACHMENTS

END OF ADDENDUM NO. 4