

**Change Order No.** CO004

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**Date:** 17 February 2022

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**Project Name:** Radio System Replacement Project

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**Customer Name:** Humboldt County

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**Customer Project Mgr:** Bryan Quenell

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**The purpose of this Change Order is to:**

**Shelter Cove Site**

**ADD:**

**Shelter Cove – Tower analysis and Antenna & Line**

- Structural Analysis of Self Supported Towers
- Tower mapping
- Remediation engineering, drawing and procedure
- Omni stick (13' to 22' tall) antenna Installation
- Supply and install 6' side arm for antenna mount
- 7/8" coaxial transmission line Installation, connectorization & grounding
- Perform a Sweep test on all new transmission lines
- Hardware (round member/angle adapters, brackets etc.) to mount the transmission line to tower every three feet.
- Ground buss bar at each antenna for grounding of proposed mounts

**Shelter Cove – Foundation improvement**

- Construction Material Testing (Concrete, backfill, foundations)
- "Preparation, submission and tracking of application for local permit fees ( electrical, building etc.) and procurement of information necessary for filing
- Perform foundation reinforcements per tower remediation engineering, drawing and procedure

**REMOVE:**

- Use of combiner, multi-coupler and existing antenna at site.

**Horse Mountain site**

**ADD:**

**Horse Mountain – Generator & ATS**

- Construction Drawing Revision to include new generator, electrical, and grounding.
- Construction Material Testing (Concrete, backfill, foundations)
- "Preparation, submission and tracking of application for local permit fees ( electrical, building etc.) and procurement of information necessary for filing
- Utility coordination, Local permits and inspections required for site work (Construction, electrical etc.)
- Mobilization and demobilization of crews
- Guard Post (Bollard)
- Foundation for (2) 500 gallon above-ground LPG Fuel tanks with 12" perimeter (10'x12'x6") including excavation, rebar, concrete
- Foundations for 50KW Propane Generator (SG050 - 1650 lbs with 41"x111" footprint) and 12" wide perimeter and 12" wide perimeter including excavation, rebar, concrete
- Install (2) 500 gallon LP fuel tanks (37" dia x 9'11"L x 3'10"H) including bolting down, all necessary fuel, piping (with trenching up to 50' from generator), regulators, valves, gauges, testing of system for leakages.
- Install fuel tank monitor for fuel tank low alarm and wire to the building located within 50' of the fuel tank
- Offload and Install 50KW generator and connect to ATS, fuel tank located within 25' feet of the generator
- Furnish PGE required meter pan and connect to new 200amp wire, and then wire to disconnect, and then to ATS.
- Exterior grounding for fuel tank and generator and connect to shelter ground ring per R56
- Clamp on grounding test of the site.
- Install 20A single pole breakers in the existing MDP panel and wire to proposed twistlock outlets located on

an average within 35 cable feet

- Supply and install twistlock receptacles near equipment locations
- Install automatic transfer switch and connect to electric main, MDP(PP1) and connect to alarm panel
- Supply 50kw industrial grade Generac generator and ATS

**Horse Mountain – PG&E Trench**

- Utility coordination, Local permits and inspections required for site work (Construction, electrical etc.)
- Mobilization and demobilization of crews
- Clearing and grubbing of Site compound (Light Clearing- Clear light brush and grub roots)
- Remove 100 amp meter box and bypass and replace with 120 / 240 volt, 200 amp, single-phase meter pedestal & hookup on new H-frame for electrical service by the local utility
- 120 / 240 volt, 200 amp, single-phase underground electrical service including trenching and installation of appropriately sized electrical conductors buried 30 inches below grade from utility meter to the service disconnect located on the building.
- Rock busting, sand, and fill dirt

**Pierce Mountain site**

ADD:

**Mount Pierce – Generator & ATS**

- Construction Drawing Revision to include new generator, electrical, and grounding.
- Construction Material Testing (Concrete, backfill, foundations)
- "Preparation, submission and tracking of application for local permit fees ( electrical, building etc.) and procurement of information necessary for filing
- Utility coordination, Local permits and inspections required for site work (Construction, electrical etc.)
- Mobilization and demobilization of crews
- Guard Post (Bollard)
- Foundations for 50KW Propane Generator (SG050 - 1650 lbs with 41"x111" footprint) and 12" wide perimeter and 12" wide perimeter including excavation, rebar, concrete
- Install (2) 500 gallon LP fuel tank (37" dia x 9'11"L x 3'10"H) including bolting down, all necessary fuel, piping (with trenching up to 50' from generator), regulators, valves, gauges, testing of system for leakages.
- Install fuel tank monitor for fuel tank low alarm and wire to the building located within 50' of the fuel tank
- Offload and Install 50KW generator and connect to ATS, fuel tank located within 25' feet of the generator
- Furnish PGE required meter pan and connect to new 200amp wire, and then wire to disconnect, and then to ATS.
- Exterior grounding for fuel tank and generator and connect to shelter ground ring per R56
- Clamp on grounding test of the site.
- Install automatic transfer switch and connect to electric main, MDP(PP1) and connect to alarm panel
- Supply 50kw industrial grade Generac generator with optional louvers for generator and ATS

**Mount Pierce – PG&E Trench**

- Utility coordination, Local permits and inspections required for site work (Construction, electrical etc.)
- Mobilization and demobilization of crews
- Clearing and grubbing of Site compound (Light Clearing- Clear light brush and grub roots)
- SUBTOTAL
- Remove 100 amp pedestal and hookup and replace with 120 / 240 volt, 200 amp, single-phase meter pedestal & hookup for electrical service by the local utility
- 120 / 240 volt, 200 amp, single-phase underground electrical service including trenching and installation of appropriately sized electrical conductors buried 30 inches below grade from hand hole to the service disconnect located on the building.

**Pratt Mountain site**

ADD:

**Pratt Mountain – Generator & ATS**

- Construction Drawing Revision to include new generator, electrical, and grounding.
- Construction Material Testing (Concrete, backfill, foundations)
- "Preparation, submission and tracking of application for local permit fees ( electrical, building etc.) and procurement of information necessary for filing

- Utility coordination, Local permits and inspections required for site work (Construction, electrical etc.)
- Mobilization and demobilization of crews
- Foundation for (2) 500 gallon above-ground LPG Fuel tanks with 12" perimeter (10'x12'x6") including excavation, rebar, concrete
- Foundations for 50KW Propane Generator (SG050 - 1650 lbs with 41"x111" footprint) and 12" wide perimeter and 12" wide perimeter including excavation, rebar, concrete
- Install (2) 500 gallon LP fuel tanks (37" dia x 9'11"L x 3'10"H) including bolting down, all necessary fuel, piping (with trenching up to 50' from generator), regulators, valves, gauges, testing of system for leakages.
- Install fuel tank monitor for fuel tank low alarm and wire to the building located within 50' of the fuel tank
- Offload and Install 50KW generator and connect to ATS, fuel tank located within 25' feet of the generator
- Furnish PGE required meter pan and connect to new 200amp wire, and then wire to disconnect, and then to ATS.
- Exterior grounding for fuel tank and generator and connect to shelter ground ring per R56
- Clamp on grounding test of the site.
- Install twistlock receptacles near equipment locations
- Install automatic transfer switch and connect to electric main, MDP(PP1) and connect to alarm panel
- Supply 35kw industrial grade Generac generator and ATS

**Courthouse site**

ADD:

- Install 20A single pole breakers in the existing MDP panel and wire to proposed twistlock outlets located on an average within 35 cable feet
- Supply and install twistlock receptacles near equipment locations
- Install one additional MCC7500 console along with the MCC7500s in the current project.
- Supply one MCC7500 console

**Contract #** Motorola CSA, Dec 5, 2018

**Contract Date:** 18 Dec 2018

**Purchase Order #** PO-X70231

**Date:** 12/20/2018

In accordance with the terms and conditions of the contract identified above between Humboldt County and Motorola Solutions, Inc., the following changes are approved:

**Contract Price Adjustments**

	Price	Tax (estimate)	Total
Original Contract Value:	\$ 5,650,000.00	\$ 173,042.41	\$ 5,823,042.41
Previous Change Order amounts:	\$ 528,644.00	\$ (8,629.76)	\$ 520,014.23
This Change Order:	\$ 776,833.36	\$ 18,228.95	\$ 795,062.31
New Contract Value:	\$ 6,955,477.36	\$ 182,641.60	\$ 7,138,118.95

**Completion Date Adjustments**

Original Completion Date:	12 August 2020
Current Completion Date prior to this Change Order:	6 June 2022
New Completion Date:	6 November 2023

**Changes in Equipment: (additions, deletions or modifications)**
**ADD:**

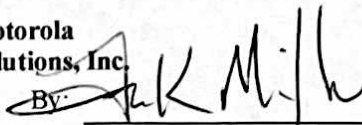
LINE	QTY	NOMENCLATURE	DESCRIPTION
1	1	DSBA4041DIN	OMNI, EXPOSED DIPOLE ARRAY, 3 DBD, 136-174 MHZ, PIM RATED
2	1	DSUC12	ANTENNA CLAMPS, KIT OF 2 FOR .75 IN TO 3.0 IN OD
3	6	DSAT012J50	AT012J50, 1/2" TRANSMISSION LINE,50OHM,BLACK POLYETHYLENE
4	2	DSDMA01250B	7/16 DIN MALE FOR 1/2 CABLE (USE WITH CT01250AIO-2)
5	5	DSWKU	WK-U, UNIVERSAL WEATHERPROOFING KIT
6	90	DSAT078J50	AT078J50, 7/8" TRANSMISSION LINE,50OHM,BLACK POLYETHYLENE
7	2	DSDFA07850B	7/16 DIN FEMALE FOR 7/8 CABLE (USE WITH CT07850AIO-2)
8	5	DSWKU	WK-U, UNIVERSAL WEATHERPROOFING KIT
9	4	DSGKS78AC	GK-S78AC, STD GROUND KIT FOR 7/8" AIRCELL COAX
10	1	DSHG78	HG-78, LACE-UP GRIP FOR 7/8 COAX
11	7	DSSHS78	STACKABLE SNAP-IN HANGER FOR 7/8IN AIRCELL COAX (PACKAGE
12	1	DSVHF50DMPGR	RF SPD, 100-512MHZ, DC BLOCK HIGH POWER DIN MALE ANT, DIN F
13	40	DSAT012J50	AT012J50, 1/2" TRANSMISSION LINE,50OHM,BLACK POLYETHYLENE
14	2	DSDMA01250B	7/16 DIN MALE FOR 1/2 CABLE (USE WITH CT01250AIO-2)
15	20	DSACC014J50	1/4" ULTRA FLEXIBLE, 50 OHM, CORRUGATED, COPPER OUTER CO
16	2	DSMUA01450	CONNECTOR MINI UHF FOR 1/4" ACC SERIES CABLE
17	2	DSNMA01450	N MALE FOR 1/4" ACC SERIES CABLE
18	20	DSAC012J50	1/2 IN-CONDUIT, 50 OHM, CORRUGATED, BLACK POLYETHYLENE JA
19	2	DSNMP01250	NMP01250, N MALE, PLENUM FOR 1/2" CABLE
20	1	DSDMP01250	DMP01250, DIN MALE FOR 1/2" CABLE
21	1	DS267021179LRHCU1	UHF Duplexer side of RF system
22	1	HE1U-5012-BMS	Power Supply, RU1, 50A, 12VDC, Battery Backup, Smart Charger LV disc
23	1	G-12V-34A	AGM Battery, 34 HA, 12V
24	1	DSGTS200ID	Automatic Transfer Switch; 200Amp; 2 Pole; 120/240VAC; 1PH
25	1	DQGENERAC20507620	50KW; LPV; Outdoor; 120 240 1PH; LVL 2 ; Cold Weather
26	1	DQGENERAC20507622	50KW;LPV; Outdoor; 120/240vac;1PH; 4.5L; Std Encl; upsize to 80KW
27	1	DQGENERAC20507625	35KW;LPV; Outdoor; 120/240vac;1PH; 4.5L; Std Encl
28	1	B1948	MCC 7500E DISPATCH POSITION LICENSES
29	1	UA00653AA	ADD: BASIC CONSOLE OPERATION
30	1	UA00249AA	ADD: 15 RADIO RESOURCES LICENSE
31	1	UA00661AA	ADD: ENHANCED IRR
32	1	B1949	MCC 7500E SOFTWARE DVD
33	1	DSTG221B	TECH GLOBAL EVOLUTION SERIES 22INCH NON TOUCH
34	1	DSY7B61AA	HP Z2 MINI ARM WALL VESA MOUNT
35	1	TT3903A	Z2 G5 MINI WORKSTATION NON RETURNABLE
36	4	B1952	SPEAKER, DESKTOP, USB

37	4	CA03405AA	ADD: POWER SUPPLY WITH DC CORD
38	4	CA03406AA	ADD: AC LINE CORD, NORTH AMERICA
39	4	CA03412AA	ADD: USB CABLE, TYPE C TO TYPE C, 4.5M
40	1	B1941	USB AUDIO INTERFACE MODULE
41	1	B1951	MICROPHONE, DESKTOP, USB
42	1	CA03412AA	ADD: USB CABLE, TYPE C TO TYPE C, 4.5M
43	2	B1913	MCC SERIES HEADSET JACK
44	1	RLN6098	HDST MODULE BASE W/PTT, 15 FT CBL
45	1	RMN5150A	OVER-THE-HEAD, MONAURAL, NOISE-CANCELING HEADSET
46	1	DSTWIN6328A	PROVIDES ONE DUAL PEDAL FOOTSWITCH
47	1	T8742	MCAFFEE FOR WINDOWS CLIENT, A2019.2
48	1	T8721	WINDOWS SUPP FULL CONFIG, A2019.2
49	1	DSUSB31000S	STARTECH USB 3.0 TO GIGABIT ETHERNET ADAPTER
50	1	DSF2B56AA	USB EXTERNAL DVD DRIVE
51	1	DSST7300U3M	STARTECH 7 PORT USB 3.0 HUB
53	190	G67	ADD: REMOTE MOUNT APXM
<b>Changes in Services:</b> (additions, deletions or modifications)			
Listed in purpose of change order section.			
<b>Schedule Changes:</b> (describe change or N/A)			
NA			
<b>Pricing Changes:</b> (describe change or N/A)			
This Change Order: \$ 776,833.36			
<b>Customer Responsibilities:</b> (describe change or N/A)			
<ul style="list-style-type: none"> <li>Contract with local propane providers as need to update service at Horse and Pratt.</li> <li>Contract with local propane provider to begin service at Pierce.</li> </ul>			
<b>Payment Schedule for this Change Order:</b>			
(describe new payment terms applicable to this change order)			
Execution of CO004 25% (\$ 198,765.58)			
Equipment Shipment 45% (\$ 357,778.04)			
Equipment Installation 10% (\$ 79,506.23)			
CO004 scope complete 20% (\$ 159,012.46)			

Unless amended above, all other terms and conditions of the Contract shall remain in full force. If there are any inconsistencies between the provisions of this Change Order and the provisions of the Contract, the provisions of this Change Order will prevail.

IN WITNESS WHEREOF the parties have executed this Change Order as of the last date signed below.

**Motorola Solutions, Inc.**

By: 

Printed Name: FRANK MILLER  
 Title: Western System Integrator  
 Date: 2/22/22

**Customer**

By: 

Printed Name: Elishia Hayes  
 Title: County Administrative Officer  
 Date: 3/2/22

Reviewed by: Brian White  
 Motorola Solutions Project Manager

Date: 17 Feb 2022