

# CHANGE ORDER

Change Order No. 05

Date: 12/06/2013

Project Name: Johnson County ASTRO 25 System

Customer Name: Johnson County, Texas

Customer Project Mgr: Lt Tim Jones

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

The purpose of this Change Order is to remove the VHF equipment from the 4th site (ASR) and change the scope to include electrical improvements to run the necessary power to the new proposed location on Double Diamond property designated as 'The Retreat". The additional electrical costs are being absorbed into original Change Order 04 budget which defined a 120' tower at the Fisherman's Paradise location. This site is in close proximity to that location and has a similar RF profile. In addition to responsibilities outlined in original scope, Johnson County is also responsible for any road improvement from the highway to the fenced compound entry. This is a No Cost Change Order.

Contract # 11-15211/RH Contract Date: 06/27/2011

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

#### **Contract Price Adjustments**

	Original Contract Value:	\$ 3,685,000.00
Previous Change numbers	Order amounts for Change Order  through 4	\$ 1,085,135.00
This Change Order:		\$0
	New Contract Value:	\$ 4,770,135.00

#### **Completion Date Adjustments**

Original Completion Date:	07/30/2012
Current Completion Date prior to this Change Order:	04/30/2013
New Completion Date:	05/31/2014



Changes	in Equipment	t: (additions	deletions of	r modifications)

Equipment to be Deleted:

Model	Qty	APC	Description
T5365	1	448	QUANTAR/QUANTRO FAMILY MODEL
X530	1	509	ADD: 125W QUANTAR, VHF (132-174MHZ)
X597 A	1	448	ENH: CONVENTIONAL ANALOG OPERATION
X580	1	509	ADD: REPEATER OPERATION
X153	1	509	ADD: HARDWARE, RACKMOUNT
X432	1	509	ADD: MANUAL, SERVICE
DSSC229SFXLDF	1	207	COLLINEAR OMNI, 6 DBD, LOW PIM, 138-225 MHZ
L1705	15	207	CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
DDN1090	2	207	7-16 DIN MALE PS FOR 1/2 IN LDF4-50A CABLE
TDN9289	2	207	CABLE WRAP WEATHERPROOFING
L3323	120	207	CABLE: 7/8" AVA HELIAX POLY JKT PER FOOT
DDN9496	2	207	7/8" 7-16 DIN FEMALE POSITIVE STOP CONNECTOR
DS1050125AA	1	207	REPLACED BY DSVHF50DMAPGR
L1705	25	207	CABLE: 1/2" LDF HELIAX POLY JKT PER FOOT
DDN1088	1	207	TYPE N MALE PS FOR 1/2 IN LDF4-50A CABLE
DDN1090	1	207	7-16 DIN MALE PS FOR 1/2 IN LDF4-50A CABLE
TDD6459	1	207	DUPLEXER, BASE STATION, Q-CIRCUIT, CABINET
TDN6110	4	207	CABLE BANDPASS FILTER INTERCONNECT

#### Changes in Services: (additions, deletions or modifications)

All services associated with the installation of VHF equipment and antennas are also deleted from this contract.

In addition, the electrical scope is modified from the original to include the installation of a power feed from the existing service in the Fisherman's Paradise subdivision to the proposed site at "The Retreat". This utility work is being contracted through HilCo Electric as the utility provider in that area and is being funded from the current budget for the 4<sup>th</sup> site tower defined in Change Order 04.

All other services and scope within the fenced compound for the site will be the same as defined in the original Change Order 04. The County will be responsible for any road improvement on the current dirt path to the site in order to facilitate access for installation and future maintenance.

The County is also responsible for pursuing easements for the electrical feed and any other usage agreements that need to be in place to properly utilize the location as a radio site.

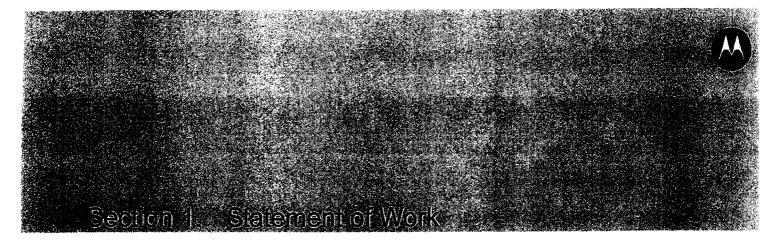
The attached State of Work captures those changes from the original Change Order 04 and should be considered a comprehensive description of the scope and a replacement for the scope defined in the original Fisherman's Paradise proposal.

Schedule Changes: (describe change or N/A)



## CHANGE ORDER

This Change Orde	er extends the completion date for	the fourth site to	05/31/2014.		
	describe change or N/A)				
N/A	Both control of the c				
Customer Respon	sibilities: (describe change or N/A)				
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Payment Schedule	for this Change Order: nent terms applicable to this change o	orderi			
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any inconsistencies	ove, all other terms and conditions o between the provisions of this Chan- nange Order will prevail.	f the Contract sha ge Order and the p	Il remain in full force. If there are provisions of the Contract, the		
IN WITNESS WHEREOF the parties have executed this Change Order as of the last date signed below.					
Motorola Solution		Cus	tomer		
By:	Michael Duch	Ву:	Sourset dupo 2		
Printed Name:	Michael Duke	Printed Name:	Roger Harmon		
Title:	Frances Director	Title:	County Judge		
Date:	12/31/2013	Date:	12 23 13		
Reviewed by:	Col Ord		Date: 12/39/2013		



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## 1.1 Civil Work

## 1.1.1 Site Development at Ranch Property w/120' Tower

### **Site Scope Summary**

- Engineering services for site drawings and regulatory approvals Included.
- Zoning Services Included
- New fenced compound/expansion size 45-foot x 45-foot.
- New power run 75 feet, Electrical service type Underground, 200-amp -120/240-volt, single-phase.
- New fuel tank size − 132 gallons-, Type − Diesel sub-base.
- New generator size 35 kW, Type Outdoor.
- ♦ New tower to be used for antennas 120-foot self-supported tower.
- New tower foundation size 30 cubic yards, Type Drilled Pier.

#### Motorola Will:

## Site Zoning

• If necessary coordinate zoning and permitting of the new tower site such that it is in full compliance with applicable jurisdictional requirements.

## Site Engineering

- Prepare site construction drawings showing the layout of various new and existing site components.
- Conduct site walks to collect pertinent information from the sites (e.g., location of Telco, power, existing facilities, etc.).
- Perform a boundary and topographic survey for the property on which the communication site is located or will be located.
- Prepare a lease exhibit sketch of the site to communicate to the property owner the proposed lease space and planned development at the particular site location.

Motorola Confidential Restricted Use or disclosure of this proposal is subject to the restrictions on the title page [Johnson county, Texas] [Fourth Site - The Retreat] 12/06/2013]

- Prepare zoning drawings that can be used to describe the proposed site installation in sufficient detail.
- Prepare record drawings of the site showing the as-built information.
- Perform construction staking around the site to establish reference points for proposed construction.
- Provide an expert witness for up to 2 day(s) to attend or testify at public meetings and/or hearings to provide expert testimony to assist in obtaining zoning approvals.
- If necessary, perform NEPA Threshold Screening, including limited literature and records search and brief reporting, as necessary to identify sensitive natural and cultural features referenced in 47 CFR Chapter 1, subsection 1.1307 that may potentially be impacted by the proposed construction activity. This does not include the additional field investigations to document site conditions if it is determined that the proposed communication facility "may have a significant environmental impact" and thus require additional documentation, submittals, or work. Regional Environmental Review (RER) report submittals if required by FEMA have not been included.
- If necessary, perform a cultural resource study, as needed to identify sensitive historical and archaeological monuments that might be impacted by proposed construction.
- Conduct up to 40-foot deep soil boring test at tower location and prepare geotechnical report of soil conditions at locations of the tower foundation. Grouting of boring holes or access by Automatic Traction Vehicle (ATV) mounted rig is not included.
- Conduct construction inspection of foundation steel prior to pour, materials testing of concrete and field density tests of backfill to ensure quality construction.
- Check tower erection for plumbness, linearity and alignment after installation.
- Perform inspection of the site and the work performed by the Contractor to document that the site is built in accordance with the "Site Plans" and document any deviations or violations.
- Research permit requirements (building, utility, construction and FAA permits) for the construction of the proposed site, and determine if the permits are required. If a permit is required, Motorola shall obtain the necessary permit forms and complete the necessary information on behalf of the Customer.
- Submit the completed application forms to the local jurisdiction and apply for applicable permits.

## Site Preparation

- Obtain the permits such as electrical, building, and construction permits, and any
  inspections that may need to be coordinated with the local authorities to complete
  site development work.
- Provide one-time mobilization costs for the construction crews. Any remobilization due to interruptions/delays that are out of Motorola's control will result in additional costs.

- Grade the site compound and 10-foot path around it to provide a level, solid, undisturbed surface for installation of site components (not to exceed 4900 square feet).
- Supply and install gravel surfacing to a depth of 6 inches, underlain with geotextile fabric within the fenced in site compound area, and a 3-foot path around it (not to exceed 3000 square feet).
- Supply and install up to 6 guard posts.
- Provide silt fence around the compound to control soil erosion (not to exceed 180 linear feet).
- Supply and install 8-foot high chain-link fencing with a ten-foot wide gate around the shelter compound (not to exceed 180 linear feet).
- Perform site touchup (fertilize, seed and straw) disturbed areas not covered with gravel after completion of construction work. Landscaping, decorative fencing or any other aesthetic improvement that may be required by local jurisdictions has not been included and will be handled through a negotiated contract change notice.
- Motorola will provide a power run from the adjacent Fisherman's Paradise site per the description and details in the HilCo proposal. All assumptions and conditions to implement that power run in the HilCo proposal will hold true for the scope of this statement of work. Any changes to those assumptions or requirements that impact the cost or prevent the execution of the plan as defined will be considered out of scope and will require a Change Order. This does not include any use or easement agreements which will wholly be the responsibility of Johnson County

### Site Components Installation

- Construct 1 foundation for the 35 kW generator with reinforcing steel necessary for foundations.
- Supply and install 1 standby power generator (35 kW) located within 20 feet of the ATS, including interconnection wiring between the generator, transfer switch, and site electrical service mains.
- Supply and install 1 120/240-volt, 200-amp, single-phase meter pedestal and hookup for electrical service by the local utility.
- Supply and install a perimeter grounding system around the compound and shelter. The ground system is to tie to the fence and all new metal structures within the compound to meet current Motorola's R56 standards.
- Supply and install 1 freestanding 24-inch-wide cable/ice bridge from the tower to the shelter (up to 15 linear feet).

#### **Tower Work**

- Construct drilled pier type tower foundations including excavation, rebar and concrete (not to exceed 33 cubic yards).
- Erect new 120-foot self-supported tower.

#### Antenna and Transmission Line Installation

- Install 3 antenna(s) for the RF system.
- Install 1 tower top amplifier(s).
- Install up to 150 linear feet of 1/2-inch transmission line.
- Install up to 300 linear feet of 7/8-inch transmission line.
- Install up to 150 linear feet of 1-1/4-inch transmission line.
- Perform sweep tests on transmission lines.
- Provide and install attachment hardware for supporting transmission lines on the antenna support structure every three feet.
- Supply and install 1 ground buss bar at the bottom of the antenna support structure for grounding RF cables before they make horizontal transition.

### **Existing Facility Improvement Work**

- Supply and install 1 100-amp breaker panel with capacity for 20 circuits.
- Supply and install 15 20-amp breakers in the distribution panel and wire to outlets located on an average within 35 cable feet.
- Install 1 8-outlet distribution-bar(s) and wire each outlet to individual breaker.
- Install 1 new single-phase UPS equipment and wire output to UPS distribution panel.
- Install 1 Type 2 surge protector on electrical service side of the ATS.
- Install 1 primary Type 1 surge protector on the room electrical feed to protect the equipment from surges.
- Install 1 automatic transfer switch and connect it to generator and electric main.
- Supply and install 18-inch-wide cable runway (up to 18 linear feet) inside the existing room.
- Supply and install 1 cable entry panel with 6 ports.
- Ground all metallic objects in the interior of the existing room, to meet current Motorola's Standards and Guidelines for Communications Sites (R56) requirements and terminate near equipment locations.
- Supply and install 1 copper ground buss bar(s).
- Supply 1 1-ton air-conditioning unit with low ambient and compressor anti-cycle controls, return and supply grilles, integral 5kW resistance heat strips, and washable dust filters.
- Install air-conditioning unit controls and wire to breaker panel located within 50 cable feet of the air-conditioning unit.

## Johnson County, Texas Will:

• If required, prepare and submit EME plans for the site (as a licensee) to demonstrate compliance with FCC RF Exposure guidelines. [Note: Should the customer desire guidance with this task, Motorola is able to recommend resources. Additionally, Appendix A of Motorola's Standards and Guidelines for Communication Sites (R56) discusses Electromagnetic Energy and provides a basic methodology for structuring an FCC compliant program. If the Johnson

- All utility installations shall be coordinated and paid for by the site owner and located at jointly agreed to location within or around the new communications shelter or equipment room.
- Pricing has been based on National codes such IBC or BOCA. Local codes or jurisdictional requirements have not been considered in this proposal.
- Site is being constructed at a location where hazardous materials are not present.
   Testing and removal of hazardous materials encountered during site investigations or construction will be the responsibility of the Customer.
- A maximum of 30 days will be required for obtaining approved building permits from time of submission, and a maximum of 60 days will be required for zoning approvals from time of submittal.
- Johnson County, Texas will provide road/access improvements required for concrete trucks, drill rigs, and crane access to the proposed location.
- If extremely harsh or difficult weather conditions delay the site work for more than a week, Motorola will seek excusable delays rather than risk job site safety.
- ◆ In absence of geotechnical reports, foundations and subsurface conditions for tower design are based on Normal Soil per Rev-F soil parameters, as defined by EIA-222-G. Also, rock coring, piling, extensive dewatering of foundations, permanent casings or hazardous material removal has not been included.
- For zoning approvals, a maximum of 60 days will be required from time of submittal with attendance at maximum of two (2) required planning meetings.
- The new tower location will pass the FAA hazard study, zoning, FCC and environmental permitting.
- ◆ The restoration of the site surroundings by fertilizing, seeding and strawing the disturbed areas will be adequate. Additional landscaping or aesthetic improvements (decorative fencing, tree plantings, stealth towers etc.) will not be required.
- Tower and foundation sizing is based on the tower loading requirements as a result of the RF Antenna System design and the Microwave Antenna System design (i.e. - dish sizes and locations obtained from paper path studies). If after physical path studies, the dish sizes and locations change, then Motorola will then review the impact to tower structure and foundations and revise applicable costs.
- ♦ If as a result of NEPA studies, any jurisdictional authority should determine that a proposed communications facility "may have a significant environmental impact", the environmental impact studies or field testing and evaluation related to such determination have not been included.
- A waiver to zoning requirements like setbacks, tower height limitations, etc. can be obtained.
- The soil resistivity at the site is sufficient to achieve resistance of ten (10) ohms or less. Communications site grounding will be designed and installed per Motorola's Standards and Guidelines for Communications Sites (R56).
- Underground utilities are not present in the construction area, and as such no relocation will be required.
- Spoils from the tower foundations can be dispersed on the property and will not be required to be transported to a dump location.
- Foundations for the shelter, generator and fuel tank are based "normal soil" conditions as defined by TIA/EIA 222-F. Footings deeper than 30 inches, raised

County, Texas does not have a copy of Motorola's Standards and Guidelines for Communication Sites (R56) v 2005, one will be provided.]

- Assist Motorola with permitting for sites as owner/lessee.
- As applicable, coordinate, prepare, submit, and pay for all required permits and inspections for the work that is the Customer's responsibility.
- Pay for all utility connection, pole or line extensions, and any easement or usage fees.
- Review and approve site design drawings within 7 calendar days of submission by Motorola or its subcontractor(s). Should a re-submission be required, the Johnson County, Texas shall review and approve the re-submitted plans within 7 calendar days from the date of submittal.
- Pay for the usage costs of power, leased lines and generator fueling both during the construction/installation effort and on an ongoing basis.
- Pay for application fees, taxes and recurring payments for lease/ownership of the property.
- Provide personnel to observe construction progress and testing of site equipment according to the schedule provided by Motorola.
- Provide a right of entry letter from the site owner for Motorola to conduct field investigations.
- Provide clear and stable access road to the site for heavy-duty construction vehicles, cement trucks and cranes. Sufficient space must be available at the site for these vehicles to maneuver under their own power, without assistance from other equipment.
- Secure power connection to the site, associated permitting and installation of a meter and disconnect within 50 feet of the proposed shelter location.
- Provide additional temporary space for the staging the construction equipment during the construction of new site facilities (tower, shelter, generator, fuel tank etc.).
- Provide labor for all trenching within the compound for power and grounds as a trade off on additional utility outlets, lighting and grounding within the shelter which Motorola will provide.
- Provide all foundations within the compound for the shelter and generator.
- Construct the shelter per the previously established design and the other Johnson County sites to house the equipment. The County will provide correctly size openings for the AC Unit and Cable Entry port which Motorola will provide.
- Johnson County will secure all use agreements and/or easements to facilitate both the path of the electrical power run by HilCo and the ongoing use of the proposed location as a Radio Site.

## Assumptions:

- No prevailing wage, certified payroll, mandatory union workers or mandatory minority workers are required for this work
- All work is assumed to be done during normal business hours as dictated by time zone (Monday thru Friday, 7:30 a.m. to 5:00 p.m.).
- All recurring and non-recurring utility costs [including, but not limited to, generator fuel (except first fill), electrical, Telco] will be borne by the Johnson County, Texas or site owner.

- piers, rock coring, dewatering, or hazardous material removal have not been included.
- ♦ Alarming at existing sites will be limited to new component installations and will have to be discussed and agreed to on a site-by-site basis.

## **Completion Criteria**

• Site development completed and approved by Johnson County.