



## COLLIN COUNTY

OFFICE OF THE SHERIFF  
4300 Community Avenue  
McKinney, Texas 75071

Jim Skinner, Sheriff

---

### MEMORANDUM

DATE: July 24, 2018  
TO: Commissioners Court  
FROM: Sheriff Jim Skinner  
RE: Approval of Amendment No. 2 to Contract 2016-020, P25 Trunked Radio System Replacement per the Attached Change Order No. 2 from Motorola Solutions Inc.

JCS 7/24/17

The following information details the items listed in the attached change order for the Public Safety Radio System and a brief explanation as to why each are needed.

- 1) Qty 4 Flash-Kits to upgrade pre-existing APX 7000 subscribers for Collin Co. The Sheriff's Office has four pre-existing radios that are capable of being upgraded to work on the new radio system. The costs of these Flash-Kits (Enhanced Data, Astro 25 OTAR w/ Multikey, AES Encryption, RMS) are \$3,717.65. The cost of replacing these radios would be \$21,696.20.
- 2) Qty 3 Flash-Kits to upgrade pre-existing APX 6000 subscribers for Collin Co. The Bailiff staff has three pre-existing radios that are capable of being upgraded to work on the new radio system. The costs of these Flash-Kits (Enhanced Data, RMS) are \$401.40. The cost of replacing these radios would be \$13,565.40.
- 3) Add Qty 3 APX6500 Flash-Kits for OTAR/NO for DA's Office. Three mobile radios were ordered for the DA's Office without Enhanced Astro 25 OTAR with Multikey (Encryption). The cost for these Flash-Kits is \$1,332.00.
- 4) Remove new UPSs from EQ orders for sites: Celina, Verona, and Copeville. We have confirmed through our service provider that our current units will remain supported for the next 7 – 9 years. We have not had any maintenance issues with these units besides a recent factory recall which has been addressed. This will give a credit back to the County of \$121,845.
- 5) Remove Central Plant Microwave Spur. Currently we have a monopole located at Central Plant that supports the microwave connects to our Wilmeth Road Tower (Prime Site). From Central Plant we use Fiber to connect to the Dispatch Center. We intend to change this to a direct connect from Wilmeth to the Dispatch Center because the monopole at Central Plant is not capable of supporting additional equipment that will be required with the new radio system. This will initially give a credit back to the County of \$86,037.79, but these funds will be redirected to preparing the fiber to do this connection. That cost will be seen in future change orders.

- 6) Verona, Wilmeth, and Celina Tower Remediation Costs and Design Report workup. Each of our existing towers will need remediation before they will be able to support the new radio system. Results of this work will determine the amount of remediation needed for each of these towers. The remediation cost will be reflected in upcoming Change Orders. This assessment work will include Geotechnical Investigations reports, Tower Remediation's Detail Design Drawings and adjusting the structural analysis from Class 3 to a Class 2. Due to the age of the Celina Tower, Foundation Mapping will also be completed. This work will add \$26,442 to the contract.
- 7) The following entries serve as documentation for decisions or changes made in the contract. They add no costs to the project

Modify tower spec from 120 mph for the new towers to 90 mph via TIA222G. This is the acceptable wind speed standard for this region.

Per email on 6 July from Bobby Jones, CC is requesting changing Structural Analysis to be ran at Class II for the pre-existing sites at Wilmeth, Celina, Verona, all work to comply with TIA-222 G Standards. Existing towers need to be remediated to a Class II standard instead of Class III.

Maintain the system design utilizing Diversity Antennas. We asked Motorola to run additional coverage maps without Diversity Antennas to see if there were significant coverage differences. This could have reduced the overall costs of the contract. After reviewing coverage maps it was decided to keep the Diversity Antennas.

The coverage designee updated with Pam /Bobby via Steve on 30 June accounts for Wilmeth Tower height correction, Anna Water Tower location clarification, and the West McKinney Water Tower Height. These changes did not cause any loss of coverage when compared to the original coverage maps submitted with the bid.

Re-baseline of schedule due to project timeline schedule due to project timeline impacts of ILA negotiations and site re-design to drive down cost impacts of tower failure analysis findings. New Final Acceptance date is 31 January 2019. The original completion date was June of 2018. The new Final Acceptance date is accepted by the Collin County Project Team.

New Generators are to be Cummins or Collin County approved equal. Laszlo Vadasz, Facilities Superintendent has requested that Cummins Generators be used at our radio towers.

The new contract cost with this change order will be \$10,540,160.06. This is a total savings of \$167,620.94 from the original contract costs of \$10,707,781.00.