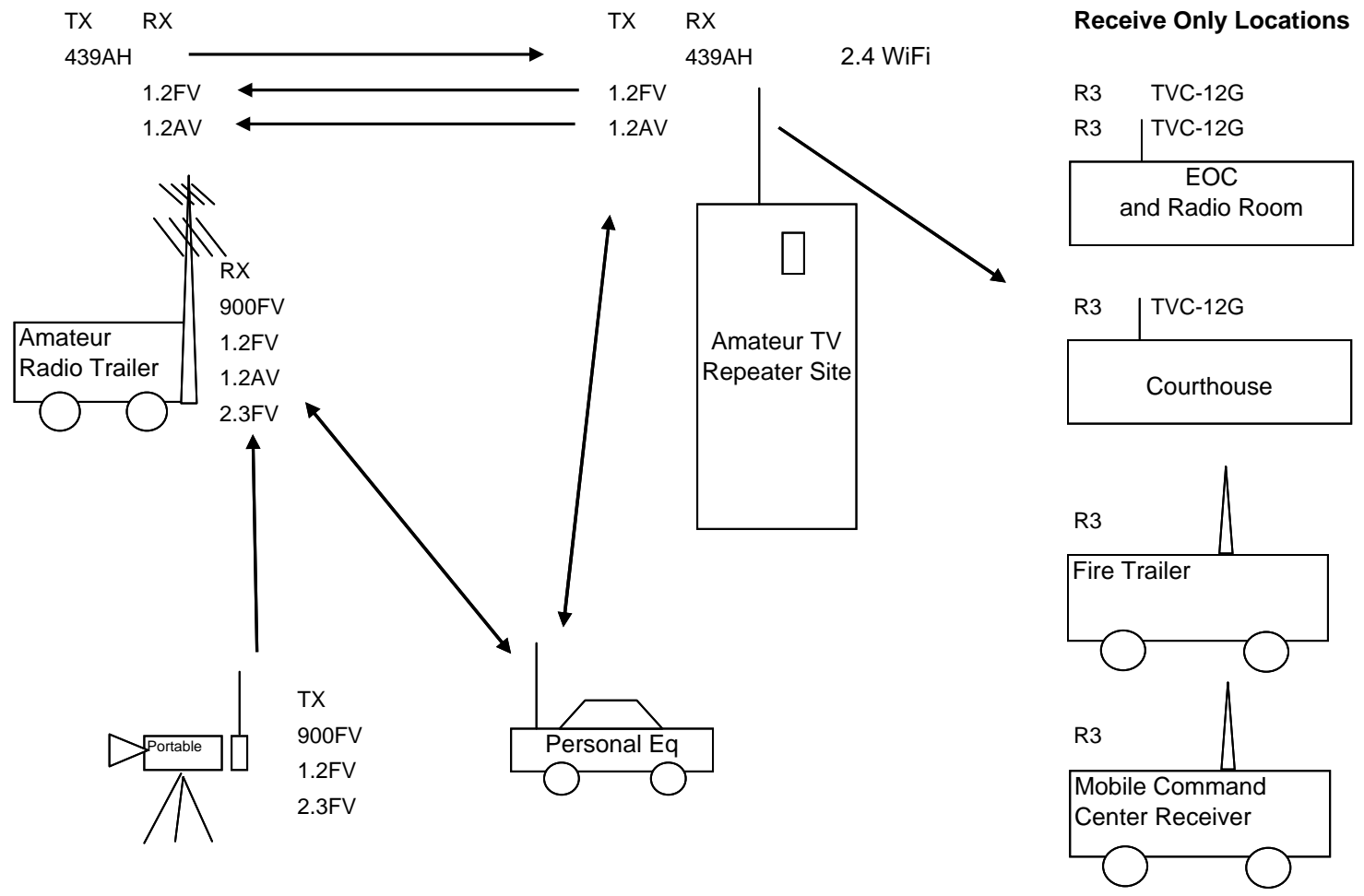


# Saginaw County Amateur Radio TV Consensus Band Plan



AH = AM Horizontal      AV = AM Vertical      FH = FM Horizontal      FV = FM Vertical

**Saginaw County ATV Repeater System**

**Consensus List**

1/5/2007

Main Site: 439 AM RX, 1.2 AM/FM TX, WiFi, Roof Cam -- Trailer TX 439 AM, RX 1.2 AM, RX 900, 1.2, 2.3 FM -- Portable TX 900, 1.2, 2.3 FM -- County Buildings/Trailers RX All

| Site                                    | Grp | Qty | Component Description                              | Use   | Bid | Suggested Vendor   | Cost | Ext | Totals      |
|---|-----|-----|--|---|-----|--------------------|------|-----|-------------|
| All Costs are Estimates and List Prices |     |     |  |   |     |                    |      |     |             |
| <b>AAAAAAAAAA</b>                       |     |     |  |   |     |                    |      |     |             |
| Main Site                               |     |     |  |   |     |                    |      |     |             |
|   |     |     | Repeater Controller                                |   |     |                    |      |     | <b>1289</b> |
|   |     | 1   | ATVC-4 Plus  | Repeater Controller for Main Repeater and Tower Cam                   |     | icircuits or HamTV | 350  | 350 |             |
|   |     | 1   | OSD-ID (SA)  | Video Overlay for ID  |     | icircuits or HamTV | 120  | 120 |             |
|   |     | 1   | DTMF-8 PLUS  | DTMF decoder board, 8 momentary & latching 1A Relays                  |     | icircuits or HamTV | 249  | 249 |             |
|   |     | 1   | OSD-SSM  | Video Signal Strength   |     | icircuits or HamTV | 140  | 140 |             |
|   |     | 1   | ENC-16   | Packaged DTMF Encoder & keypad  |     | icircuits or HamTV | 109  | 109 |             |
|   |     | 1   | Hammond 1590D Dicast Aluminum Box                  | For repeater controller   | g   | Mouser             | 21   | 21  |             |
|   |     | 1   | 19" EIA Rack Cabinet 10u - 14u                     | Cabinet for the repeater controllers                                  | x   |                    | 300  | 300 |             |
|   |     |     | Radio Controlled Access to Repeater Controller     |   |     |                    |      |     | <b>260</b>  |
|   |     | 1   | Yaesu FT-7800R                                     | 2m / 440 to receive Repeater Control Commands                         | x   |                    | 250  | 250 |             |
|   |     | 1   | LMR-240 with 2xPL-259 Male Connectors              | Plug in to FM Repeater Multicoupler for Receive (disable tx on radio) | a   |                    | 10   | 10  |             |
|   |     |     | 439.25 AM Receiver                                 |   |     |                    |      |     | <b>1470</b> |
|   |     | 1   | 439 MHz Receiver                                   | ATVR-4 439.25 Lower VSB Special Order                                 |     | HamTV              | 300  | 300 |             |
|   |     | 1   | 439 MHz Antenna                                    | Horizontally Polarized Vertical                                       |     | ** Handmade?       | 0    | 0   |             |
|   |     | 1   | Vertical Antenna Standoff                          | Stand-off Bracket 36" w 24" mounting pipe                             | x   |                    | 120  | 120 |             |
|   |     | 1   | 439 MHz Directional Antenna DSFO-25                | Directive Systems, 25 el beam, 16+ dBd, 17' boom, N jack.             |     | HamTV              | 175  | 175 |             |
|   |     | 1   | 439 MHz Preamp                                     | Down East Microwave 70LNAWP   |     | Down East          | 120  | 120 |             |
|   |     | 1   | 439 MHz Bias Tee for Preamp                        | Down East Microwave BTLM (Less than 1 GHz)                            |     | Down East          | 45   | 45  |             |
|   |     | 1   | 439 MHz Filter                                     | VSB Filter 8 Pole 439.25 LSB DCI-439.25-6-8pole-n                     |     | DCI                | 450  | 450 |             |
|   |     | 1   | Lightning Protector 440 MHz                        | DC Pass Receive   | x   |                    | 80   | 80  |             |
|   |     | 1   | RCA 3-Coax Video/L/R Cable                         | Video Connections to Repeater Controller                              | e   |                    | 15   | 15  |             |
|   |     | 1   | LMR-240 with 2-N Male Connectors                   | Filter Insertion Cable  | a   |                    | 10   | 10  |             |
|   |     | 1   | LMR-240 with SMA-Male N-Male Connectors            | Receiver to Bias Tee  | a   |                    | 10   | 10  |             |
|   |     | 1   | LMR-240 with 2-N Male Connectors                   | Bias Tee to Lightning Protector                                       | a   |                    | 10   | 10  |             |
|   |     | 1   | 50' Tower Run Coax 7/8 Helix                       | Lightning Protector to Preamp   | c   |                    | 125  | 125 |             |
|   |     | 1   | LMR-240 with 2-N Male Connectors                   | Preamp to Antenna   | a   |                    | 10   | 10  |             |
|   |     |     | 1.2 GHZ Transmitter AM                             |   |     |                    |      |     | <b>400</b>  |
|   | am  | 1   | 1.2 GHZ AM Transmitter Frequency Fixed             | Transmit 1.2 GHZ AM 3w RTX-23-3 - Frequency 1277.25                   |     | HamTV              | 400  | 400 |             |
|   |     |     | 1.2 GHZ Transmitter FM                             |   |     |                    |      |     | <b>148</b>  |
|   | fm  | 1   | 1.2 GHZ Transmitter Frequency Agile Digital Tuning | Transmit 1.2 GHZ FM Video 1w drive                                    |     | MobiCom            | 129  | 129 |             |
|   | fm  | 1   | Box for Transmitter                                | Bud CU-4476 Dicast aluminum box 6x3.25x1.84 inches w/bracket          | g   |                    | 19   | 19  |             |
|   |     |     | 1.2 GHZ Transmitter Common Items                   |   |     |                    |      |     | <b>1960</b> |
|   |     | 1   | 1.2 GHz Amplifier                                  | Down East 23120PA Linear with TRANS-OPT                               |     | Down East          | 950  | 950 |             |
|   |     | 1   | Lightning Protector 1200 MHz                       | DC Stop Transmit Max 150 watts  | x   |                    | 80   | 80  |             |
|   |     | 1   | 60 Amp 13.8v Astron Power RM-60A                   | Dedicated to Amplifier  | x   |                    | 300  | 300 |             |
|   |     | 2   | LMR-240 with SMA-Male N-Male Connectors            | Transmitter to Amplifier  | a   |                    | 10   | 20  |             |
|   |     | 1   | RCA 3-Coax Video/L/R Cable                         | Video Connections to Repeater Controller                              | e   |                    | 15   | 15  |             |
|   |     | 1   | 8' Red/Black 8 Gage                                | Battery Cables (From Power Supply to Amplifier)                       | x   |                    | 30   | 30  |             |
|   |     | 1   | 1.2 GHz Antenna                                    | Comet GP-21 Mono Band 1240-1300MHz (100watts 8' long)                 | x   |                    | 170  | 170 |             |
|   |     | 1   | Vertical Antenna Standoff                          | Stand-off Bracket 36" w 24" mounting pipe                             | x   |                    | 120  | 120 |             |
|   |     | 1   | 1.2 GHz Directional Antenna                        | Comet CYA-1216E 16ele 16.6dbi (100watts 5' long)                      | x   |                    | 150  | 150 |             |
|   |     | 1   | 50' Tower Run Coax 7/8 Helix                       | Lightning Protector to Antenna  | c   |                    | 125  | 125 |             |
|   |     |     | WiFi Control System                                | ]   |     |                    |      |     | <b>1190</b> |
|   |     | 1   | 2.4 GHz Wireless Router                            | LinkSys WRT54GL for TX / Receive - video / control logic              | x   |                    | 50   | 50  |             |
|   |     | 1   | DCI Digital DCI-BPF-2-8P-WPF                       | DCI Bandpass Filter channel 2 8 pole weatherproof                     |     | DCI                | 370  | 370 |             |
|   |     | 1   | 2.4 GHz Vertical                                   | GP-24 Comet Vert 13 dBd gain 2390-2450 (6' long) w/Tower Mount        | x   |                    | 170  | 170 |             |
|   |     | 1   | Vertical Antenna Standoff                          | Stand-off Bracket 36" w 24" mounting pipe                             | x   |                    | 120  | 120 |             |
|   |     | 1   | 2.4 GHz Bi-Directional 1 Watt                      | Outdoor Coaxial Amplifier 24COAXAMP with Bias Tee                     |     | Fleeman, Anderson  | 235  | 235 |             |
|   |     | 1   | Lightning Protector 2400 MHz                       | TX / RX DC Pass Transmit Max 5 watts                                  | x   |                    | 80   | 80  |             |
|   |     | 1   | LMR-240 with RP-TNC Male N-Male Connectors         | Router to Channel 2 Filter  | a   |                    | 10   | 10  |             |

|   |  |  |   |                     |      |      |
|---|--|--|---|---------------------|------|------|
|   | 1 LMR-240 with 2-N Male Connectors                     | Channel 2 Filter to Bias Tee                                     | a |                     | 10   | 10   |
|   | 1 LMR-240 with 2-N Male Connectors                     | Bias Tee to Lightning Protector                                  | a |                     | 10   | 10   |
|   | 1 50' tower Run Coax 7/8 Helix                         | Lightning Protector to Bi-Directional Amplifier                  | c |                     | 125  | 125  |
|   | 1 LMR-240 with 2-N Male Connectors                     | Bi-Directional Amplifier to Antenna                              | a |                     | 10   | 10   |
| <b>2-meter Transmitter, 433 Link Receiver, ARPS and 220 Repeater Protection</b> |  |  |   |                     |      |      |
|   | 2 Two Meter Bandpass Filter DCI-146-4H                 | Protect 147.240 Transmitter & APRS                               |   | DCI                 | 120  | 240  |
|   | 2 500 MHz Low Pass Filters DCI-500-LP                  | Filter out 900 / 1.2 Signals from hitting the 433 Link & APRS    |   | DCI                 | 200  | 400  |
|   | 1 500 MHz Low Pass Filters DCI-500-LP                  | Filter out 900 / 1.2 Signals from hitting the 220 Repeater       |   | DCI                 | 200  | 200  |
|   | 3 LMR-240 with Female-UHF N-Male                       | Connect Antennas to First Filter on 2m, 1.25m, 70cm              | a |                     | 10   | 30   |
|   | 2 LMR-240 with 2-N Male                                | Connect First Filter to Second Filter on 2m, 70cm                | a |                     | 10   | 20   |
|   | 3 LMR-240 with Male-UHF N-Male                         | Connect Filters to Receivers and Transmitters                    | a |                     | 10   | 30   |
| <b>Microwave Amp Safety System</b>  |  |  |   |                     |      |      |
|   | 2 SPDT NO/NC Magnet Door/Window Switch                 | Disconnect Amplifier Enable on 900 & 1.2 (all elect part# MS-7)  | x | All Electronics     | 5    | 10   |
|   | 1 12 VDC 2.6 Amp Switching Power Supply                | Power for Safety System (all elect part # PS-1226)               | x | All Electronics     | 14   | 14   |
|   | 2 12 VDC DPDT DIP Relay                                | (all elect part # RLY-622)                                       | x | All Electronics     | 2    | 4    |
|   | 2 Red Jumbo Round Pushbutton Switch Momentary 1"       | Push Button for Reactivation of lockout (all elect part# PB-211) | x | All Electronics     | 4    | 8    |
|   | 2 Standard Electrical Outlet box, 1 space, metal       | Wall box for switch  | x |                     | 3    | 6    |
|   | 2 Blank metal plate for Electrical box                 | Will be drilled for pushbutton switch                            | x |                     | 2    | 4    |
|   | 1 500 feet 14 Gauge Copper Wire Outdoor UV Safe jacket | Outdoor UV Safe jacket for Safety Switches                       | x |                     | 60   | 60   |
| <b>Roof City Cams and Security Cams</b>   |  |  |   |                     |      |      |
|   | 1 VSS-54N - Outdoor Video Camera Sys                   | 4 Cameras, Power, Networkable DVR, brackets, video cables        |   | Super Circuits      | 1100 | 1100 |
|   | 1 17" LCD Upgrade                                      | Video Display w/Composite, Svideo, and VGA inputs                |   | Super Circuits      | 200  | 200  |
|   | 1 Camera Power Supply                                  | AC24/9 24v 4amp Power System                                     |   | Super Circuits      | 70   | 70   |
|   | 1 RCA 3-Coax Video/L/R Cable                           | Video Connections to Repeater Controller                         | e |                     | 15   | 15   |
|   | 1 9" LCD Composit/Svideo Monitor                       | Video Display for ATV Signals                                    | x |                     | 100  | 100  |
| <b>Power Supply</b>   |  |  |   |                     |      |      |
|   | 1 60 Amp 13.8v Astron Power RM-60A                     | Power Supplies for Radio Equipment                               | x |                     | 300  | 300  |
|   | 1 45A. Powerpole Connector Bulk Pack 100 Pair          | PowerPole Power connectors                                       |   | West Mountain Radio | 79   | 79   |
|   | 2 PWRcrimp Crimp Tool                                  | Power Pole Crimp Tool  |   | West Mountain Radio | 50   | 100  |
|   | 4 MFJ-1129 - 40 Amp                                    | 12volt Power Strips  |   | MFJ Enterprises     | 109  | 436  |
|   | 200 Red/Black 12 Gage                                  | 12volt Electrical Cable  | x |                     | 0.4  | 80   |
| <b>Diagnostics</b>  |  |  |   |                     |      |      |
|   | 1 Icom R3 Receiver w/clone cable, computer cable       | Remote diagnostics and testing stored with repeater              | x |                     | 400  | 400  |
| <b>BBBBBBBBBB</b>   |  |  |   |                     |      |      |
| <b>Trailer Station</b>  |  |  |   |                     |      |      |
| <b>Repeater Controller</b>  |  |  |   |                     |      |      |
|   | 1 Datavideo SE-500 4 port video switcher               | Manual Controller for Scene Selection                            | x | B&H Photo           | 1055 | 1055 |
|   | 1 19" EIA Rack Cabinet 10u - 14u                       | Cabinet for the repeater controllers                             | x |                     | 300  | 300  |
| <b>439.25 MHz AM Transmitter (unique equipment)</b>                             |  |  |   |                     |      |      |
|   | 1 439.25 MHz Transmitter RTX70-1                       | Transmitter 1.5w   |   | HamTV               | 350  | 350  |
|   | 1 439.25 MHz Amplifier Mirage D26N                     | Amplifier (requires 13.8v 12a) 2w in, 60w out                    |   | Mirage Amplifiers   | 300  | 300  |
|   | 1 439 MHz Directional Antenna DSFO-25                  | Directive Systems, 25 el beam, 16+ dBd, 17' boom, N jack.        |   | HamTV               | 175  | 175  |
|   | 1 LMR-240 with 2-N Male Connectors                     | Transmitter to VSB Filter  | a |                     | 10   | 10   |
|   | 1 LMR-240 with 2-N Male Connectors                     | VSB Filter to Amplifier  | a |                     | 10   | 10   |
|   | 1 50' Coax - N-Male LMR 400 Flex                       | Amplifier to Antenna   | b |                     | 50   | 50   |
|   | 1 RCA 3-Coax Video/L/R Cable                           | Video Connections to Repeater Controller                         | e |                     | 15   | 15   |
| <b>900 MHz FM Receiver</b>  |  |  |   |                     |      |      |
| fm  | 1 900 MHz Receiver Frequency Agile Digital Tuning      | Receive Portable Camera and Mobile signals                       |   | MobiComm            | 70   | 70   |
| fm  | 1 Box for Receiver                                     | Bud CU-4476 Dicast aluminum box 6x3.25x1.84 inches w/bracket     |   | Mouser              | 19   | 19   |
|   | 1 900 MHz preamp                                       | Down East Microwave 33LNAWPQ                                     |   | Down East           | 120  | 120  |
|   | 1 900 MHz Bias Tee                                     | Down East Microwave BTLM (Less than 1 GHz)                       |   | Down East           | 45   | 45   |
|   | 1 900 MHz Omni Antenna                                 | Comet CFC-771 900 MHz 7.14 dBi 50w N-female                      | x |                     | 90   | 90   |
|   | 1 900 MHz Directional                                  | PYA-913 900 MHz 13ele 15.8db 5' boom                             |   |                     | 170  | 170  |
|   | 1 RCA 3-Coax Video/L/R Cable                           | Video Connections to Repeater Controller                         | e |                     | 15   | 15   |
|   | 1 LMR-240 with SMA-Male N-Male Connectors              | Receiver to Bias Tee   | a |                     | 10   | 10   |
|   | 1 50' Coax - N-Male LMR 400 Flex                       | Bias Tee to Preamp   | b |                     | 10   | 10   |

|   |  |   |                 |     |             |
|---|--|---|-----------------|-----|-------------|
| 1 LMR-240 with 2-N Male Connectors                          | Preamp to Antenna  | a | 50              | 50  |             |
| <b>1.2 GHz Receiver AM</b>                                  |  |   |                 |     | <b>810</b>  |
| am 1 1.2 GHz Receiver Frequency Fixed (AM)                  | ATVR-12 on 1277.25 MHz                                       |   | HamTV           | 300 | 300         |
| am 1 1.2 GHz Filter VSB Filter (AM only)                    | VSB Filter for 1277.25 MHz                                   |   | DCI             | 500 | 500         |
| am 1 LMR-240 with 2-N Male Connectors                       | Filter Insert Cable  | a |                 | 10  | 10          |
| <b>1.2 GHz Receiver FM</b>                                  |  |   |                 |     | <b>89</b>   |
| fm 1 1.2 GHz Receiver Frequency Agile Digital Tuning (FM)   | Receive Portable Camera and Mobile signals                   |   | MobiComm        | 70  | 70          |
| fm 1 Box for Reciever                                       | Bud CU-4476 Dicast aluminum box 6x3.25x1.84 inches w/bracket | g | Mouser          | 19  | 19          |
| <b>1.2 GHz Receiver Common Items</b>                        |  |   |                 |     | <b>690</b>  |
| 1 1.2 GHz Preamp  | Down East Microwave 23LNAWPQ ATV LNA weatherproof N          |   | Down East       | 120 | 120         |
| 1 1.2 GHz Bias Tee  | Down East Microwave BTM (greater than 1 GHz)                 |   | Down East       | 45  | 45          |
| 1 1.2 GHz Omni Antenna                                      | Commnet GP-21 Mono Band 1240-1300MHz (100watts 8' long)      | x |                 | 170 | 170         |
| 1 Vertical Antenna Standoff                                 | Stand-off Bracket 36" w 24" mounting pipe                    | x |                 | 120 | 120         |
| 1 1.2 GHz Directional Antenna                               | Comet CYA-1216E 16ele 16.6dbi (100watts 5' long)             | x |                 | 150 | 150         |
| 1 RCA 3-Coax Video/L/R Cable                                | Video Connections to Repeater Controller                     | e |                 | 15  | 15          |
| 1 LMR-240 with SMA-Male N-Male Connectors                   | Receiver to Bias Tee   | a |                 | 10  | 10          |
| 1 50' Coax - N-Male LMR 400 Flex                            | Bias Tee to Preamp   | b |                 | 10  | 10          |
| 1 LMR-240 with 2-N Male Connectors                          | Preamp to Antenna  | a |                 | 50  | 50          |
| <b>2.3 / 2.4 FM Agile Receiver</b>                          |  |   |                 |     | <b>589</b>  |
| 1 2.4 GHz Receiver Frequency Agile Digital Tuning           | Local 2.4 GHz camera receiver                                |   | MobiComm        | 70  | 70          |
| 1 Box for Reciever  | Bud CU-4476 Dicast aluminum box 6x3.25x1.84 inches w/bracket | g | Mouser          | 19  | 19          |
| 1 2.4 GHz preamp  | Down East Microwave 13ULNA 2.3-2.4 phemt LNA N-connectors    |   | Down East       | 120 | 120         |
| 1 2.4 GHz Bias Tee  | Down East Microwave BTM (greater than 1 GHz)                 |   | Down East       | 45  | 45          |
| 1 2.4 GHz Antenna Omni                                      | GP-24S Comet Vertical 8 dBd gain 2390-2450 (4' long)         | x |                 | 130 | 130         |
| 1 Vertical Antenna Standoff                                 | Stand-off Bracket 36" w 24" mounting pipe                    | x |                 | 120 | 120         |
| 1 RCA 3-Coax Video/L/R Cable                                | Video Connections to Repeater Controller                     | e |                 | 15  | 15          |
| 1 LMR-240 with SMA-Male N-Male Connectors                   | Receiver to Bias Tee   | a |                 | 10  | 10          |
| 1 50' Coax - N-Male LMR 400 Flex                            | Bias Tee to Preamp   | b |                 | 10  | 10          |
| 1 LMR-240 with 2-N Male Connectors                          | Preamp to Antenna  | a |                 | 50  | 50          |
| <b>ATV Signal Monitoring</b>                                |  |   |                 |     | <b>1350</b> |
| 2 15" LCD Display w/Composite, Svideo                       | Video Display for ATV Signals                                | x |                 | 250 | 500         |
| 4 RCA 3-Coax Video/L/R Cable                                | Video Connections to Repeater Controller                     | e |                 | 15  | 60          |
| 1 PC161WR Weather Proof Color Camera                        | Camera for Outside Trailer view                              |   | Super Circuits  | 90  | 90          |
| 2 Icom R3 Receivers   | Portable Video Displays stored in Trailer                    | x |                 | 350 | 700         |
| <b>Equipment Storage, Power, and Protection</b>             |  |   |                 |     | <b>1407</b> |
| 2 Pelican Case 1610 Pick Pluck Foam                         | For storage of Transmitter/Receiver/Amps                     | x |                 | 250 | 500         |
| 1 60 Amp 13.8v Astron Power RM-60A                          | Power Supply for equipment                                   | x |                 | 300 | 300         |
| 3 MFJ-1129 - 40 Amp   | 12volt Power Strips  |   | MFJ Enterprises | 109 | 327         |
| 200 Red/Black 12 Gage                                       | 12volt Electrical Cable                                      | x |                 | 0.4 | 80          |
| 2 LMR 240 Coax Stripper                                     |  | x |                 | 50  | 100         |
| 2 LMR 240 Crimp Tool  |  | x |                 | 50  | 100         |
| <b>EEEEEEEE</b>   |  |   |                 |     |             |
| <b>Portable Camera / Handheld</b>                           |  |   |                 |     | <b>2767</b> |
| 1 Video Camera - Hitachi DZGX3100A                          | Capture video  | x | B&H Photo       | 400 | 400         |
| 2 Impact CGA-DU21 Lilon 2400mAh                             | On Camera Battery  | x | B&H Photo       | 65  | 130         |
| 1 Impact CP-ADS AC/DC                                       | Battery Charger  | x | B&H Photo       | 50  | 50          |
| 2 Tripod  | Inexpensive  | x |                 | 20  | 40          |
| 1 IR Light - Sony HVL-IRM Nightshot                         | Infrared Video Light   | x | B&H Photo       | 40  | 40          |
| 1 IR Light - Battery for Sony HVL-IRM Nightshot             | Infrared Video Light Battery                                 | x | B&H Photo       | 40  | 40          |
| 1 Bescor PRB-154 14.4Ah                                     | Wearable battery Battery Belt w/Charger                      | x | B&H Photo       | 130 | 130         |
| 7 RCA 3-Coax Video/L/R Cable                                | Video Connections to Repeater Controller                     | e |                 | 15  | 105         |
| 2 900 MHz FM Transmitter Frequency Agile Digital Tune 2w    | Small Portable camera attached transmitter                   |   | MobiComm        | 130 | 260         |
| 2 900 MHz Omni Portable                                     | Flexible whip SMA Connector 1/4 or 5/8 wave                  | x |                 | 20  | 40          |
| 2 1.2 GHz FM Transmitter Frequency Agile Digital Tune 1w    | Small Portable camera attached transmitter                   |   | MobiComm        | 130 | 260         |
| 2 1.2 GHz MHz Omni Portable                                 | Flexible whip SMA Connector 1/4 or 5/8 wave                  | x |                 | 20  | 40          |
| 2 2.4 GHz FM Transmitter Frequency Agile Digital Tune 13dBm | Small Portable camera attached transmitter                   |   | MobiComm        | 80  | 160         |

|   |  |   |                   |     |     |
|---|--|---|-------------------|-----|-----|
| 2 2.4 GHz 1 Watt Amplifier - 15dB Gain OEM Module | Booster for 2.4 GHz Transmitter                              |   | Fleeman, Anderson | 130 | 260 |
| 2 2.4 GHz MHz Omni Portable                       | Flexible whip SMA Connector 1/4 or 5/8 wave                  | x |                   | 20  | 40  |
| 6 Boxes for Transmitters                          | Bud CU-476 Dicast aluminum box 6x3.25x1.84 inches no bracket | g | Mouser            | 12  | 72  |
| 6 LMR-240 with 2xSMA-Male Connectors              | Transmitters to Antennas / Helmet                            | a |                   | 10  | 60  |
| 2 Aluminum Hard Hat                               | For Antenna Mount  | x |                   | 70  | 140 |
| 2 Pelican Case 1610 Pick Pluck Foam               | Storage of Camera, Batteries, Charger, and Transmitter       | x |                   | 250 | 500 |
| <b>FFFFFFFFF</b>                                  |  |   |                   |     |     |
| <b>911 Center</b>                                 |  |   |                   |     |     |
| 1 Icom R3   |  | x |                   | 350 | 350 |
| 1 1.2 GHz Receiver TVC-12G                        |  |   | HamTV             | 110 | 110 |
| 1 1.2 GHz Tuner TVCS-12                           |  |   | HamTV             | 80  | 80  |
| 1 LMR-240 with BNC Male and N Male                |  | a |                   | 10  | 10  |
| 1 Channel 3/4 Video Modulator                     |  | x |                   | 20  | 20  |
| 1 Antenna Magmount w/N-connector pigtail          |  | x |                   | 20  | 20  |
| 1 440 MHz 1/4-wave whip                           |  | x |                   | 20  | 20  |
| <b>GGGGGGGGG</b>                                  |  |   |                   |     |     |
| <b>911 Center Radio Room</b>                      |  |   |                   |     |     |
| 1 Icom R3   |  | x |                   | 350 | 350 |
| 1 1.2 GHz Receiver TVC-12G                        |  |   | HamTV             | 110 | 110 |
| 1 1.2 GHz Tuner TVCS-12                           |  |   | HamTV             | 80  | 80  |
| 1 LMR-240 with BNC Male and N Male                |  | a |                   | 10  | 10  |
| 1 Channel 3/4 Video Modulator                     |  | x |                   | 20  | 20  |
| 1 Antenna Magmount w/N-connector pigtail          |  | x |                   | 20  | 20  |
| 1 440 MHz 1/4-wave whip                           |  | x |                   | 20  | 20  |
| 1 19" LCD Composite/Svideo/VGA Monitor            |  | x |                   | 350 | 350 |
| <b>CCCCCCCCC</b>                                  |  |   |                   |     |     |
| <b>Courthouse Command Center</b>                  |  |   |                   |     |     |
| 1 Icom R3   |  | x |                   | 350 | 350 |
| 1 1.2 GHz Receiver TVC-12G                        |  |   | HamTV             | 110 | 110 |
| 1 1.2 GHz Tuner TVCS-12                           |  |   | HamTV             | 80  | 80  |
| 1 LMR-240 with BNC Male and N Male                |  | a |                   | 10  | 10  |
| 1 Channel 3/4 Video Modulator                     |  | x |                   | 20  | 20  |
| 1 Antenna Magmount w/N-connector pigtail          |  | x |                   | 20  | 20  |
| 1 440 MHz 1/4-wave whip                           |  | x |                   | 20  | 20  |
| <b>DDDDDDDDD</b>                                  |  |   |                   |     |     |
| <b>Mobile Command Vehicle</b>                     |  |   |                   |     |     |
| 1 Icom R3   |  | x |                   | 350 | 350 |
| 1 LMR-240 with BNC Male and N Male                |  | a |                   | 10  | 10  |
| 1 Composite Video Switch                          |  | x |                   | 20  | 20  |
| 1 75 ohm 2 port cable splitter                    |  | x |                   | 20  | 20  |
| 1 Channel 3/4 Video Modulator                     |  | x |                   | 20  | 20  |
| 1 Antenna Magmount w/N-connector pigtail          |  | x |                   | 20  | 20  |
| 1 440 MHz 1/4-wave whip                           |  | x |                   | 20  | 20  |
| <b>IIIIIIIIII</b>                                 |  |   |                   |     |     |
| <b>Fire Trailer</b>                               |  |   |                   |     |     |
| 1 Icom R3   |  | x |                   | 350 | 350 |
| 1 LMR-240 with BNC Male and N Male                |  | a |                   | 10  | 10  |
| 1 Antenna Magmount w/N-connector pigtail          |  | x |                   | 20  | 20  |
| 1 440 MHz 1/4-wave whip                           |  | x |                   | 20  | 20  |
| 1 15" LCD Display w/Composite, Svideo             | Video Display for ATV Signals                                | x |                   | 250 | 250 |

**NOTES**

a LMR 240 Coax Purchased on a spool, cables cut to needed length

- b LMR 400 Flex Coax Purchased on a spool, cables cut to needed length
- c LMR 600 Coax in Standard 50' patch lengths with N-male connectors -- or spool where cables cut to length plus a ground kit for each cable
- d Numbers and types of connectors will be calculated from coax patch listings
- e Video/Audio RCA cables may need to be different lengths
- f no note
- g Qty 8 screws #6-32 flat head for each box

**Saginaw County ATV Repeater System**

**Combined Bidable Items List**

1/5/2007

Bidable Items Page 1

| Qty | Component Description                                     | Use  | Bidable | Suggested Vendor                           |
|-----|---|--|---------|--|
| 1   | 12 VDC 2.6 Amp Switching Power Supply                     | Power for Safety System (all elect part # PS-1226)               | yes     | All Electronics, Digikey, Mouser           |
| 2   | 12 VDC DPDT DIP Relay                                     | (all elect part # RLY-622)                                       | yes     | All Electronics, Digikey, Mouser           |
| 4   | Bud CU-4476 Dicast aluminum box 6x3.25x1.84 in w/bracket  | Boxes for FM Transmitters and Receivers                          | yes     | All Electronics, Digikey, Mouser           |
| 6   | Bud CU-476 Dicast aluminum box 6x3.25x1.84 in no bracket  | Boxes for FM Transmitters and Receivers                          | yes     | All Electronics, Digikey, Mouser           |
| 1   | Hammond 1590D Dicast Aluminum Box                         | For repeater controller  | yes     | All Electronics, Digikey, Mouser           |
| 2   | Red Jumbo Round Pushbutton Switch Momentary 1"            | Push Button for Reactivation of lockout (all elect part# PB-211) | yes     | All Electronics, Digikey, Mouser           |
| 2   | SPDT NO/NC Magnet Door/Window Switch                      | Disconnect Amplifier Enable on 900 & 1.2 (all elect part# MS-7)  | yes     | All Electronics, Digikey, Mouser           |
| 5   | 15" LCD TV with composite input                           | Video Display for ATV Signals (\$150-\$250 range)                | yes     | Circuit City, Best Buy, RadioShack         |
| 1   | 75 ohm 2 port TV coax cable splitter                      | Receivers for Buildings and Trailers                             | yes     | Circuit City, Best Buy, RadioShack         |
| 2   | Camera Tripod   | Inexpensive Tripod for video camera                              | yes     | Circuit City, Best Buy, RadioShack         |
| 4   | Channel 3/4 Video Modulator                               | Receivers for Buildings and Trailers                             | yes     | Circuit City, Best Buy, RadioShack         |
| 1   | Composite Video Switch 2-port                             | Receivers for Buildings and Trailers                             | yes     | Circuit City, Best Buy, RadioShack         |
| 3   | 60 Amp 13.8v Astron Power RM-60A                          | Power Supplies for Radio Equipment                               | yes     | HRO,Universal Radio,GigaParts              |
| 1   | Comet CFC-771 900 MHz 7.14 dBi 50w N-female               | 900 MHz Omni   | yes     | HRO,Universal Radio,GigaParts              |
| 2   | Comet CYA-1216E 16ele 16.6dbi (100watts 5' long)          | 1.2 GHz Directional  | yes     | HRO,Universal Radio,GigaParts              |
| 2   | Comet GP-21 Mono Band 1240-1300MHz (100watts 8' long)     | 1.2 GHz Vertical   | yes     | HRO,Universal Radio,GigaParts              |
| 5   | Comet MG-4N Magmounts                                     | Magmount for Building Receive Antennas                           | yes     | HRO,Universal Radio,GigaParts              |
| 1   | M2 Antenna Systems 902-17                                 | 900 MHz Directional (Comet PYA Discontinued)                     | yes     | HRO,Universal Radio,GigaParts              |
| 3   | Comet SB-123  | Building (inside) 1.2 GHz antennas                               | yes     | HRO,Universal Radio,GigaParts              |
| 2   | Diamond SRH999  | Sheriff / Fire Trailer Receive Antennas                          | yes     | HRO,Universal Radio,GigaParts              |
| 2   | Female SMA - Female SMA Bulkhead Adaptor                  | Portable Antennas  | yes     | HRO,Universal Radio,GigaParts              |
| 1   | GP-24 Comet Vert 13 dBd gain 2390-2450 (6') w/Tower Mount | 2.4 GHz Vertical   | yes     | HRO,Universal Radio,GigaParts              |
| 1   | GP-24S Comet Vertical 8 dBd gain 2390-2450 (4' long)      | 2.4 GHz Vertical   | yes     | HRO,Universal Radio,GigaParts              |
| 6   | Icom BC-135 Desk Charger                                  | Receivers for Buildings and Trailers                             | yes     | HRO,Universal Radio,GigaParts              |
| 1   | Icom CS-R3 Cloning Software                               | Receivers for Buildings and Trailers                             | yes     | HRO,Universal Radio,GigaParts              |
| 1   | Icom OPC-474 Cloning Cable                                | Receivers for Buildings and Trailers                             | yes     | HRO,Universal Radio,GigaParts              |
| 6   | Icom R3   | Receivers for Buildings and Trailers                             | yes     | HRO,Universal Radio,GigaParts              |
| 7   | MFJ-1129 - 40 Amp   | 12volt Power Strips  | yes     | HRO,Universal Radio,GigaParts              |
| 2   | N-Male to SMA Female Adaptor                              | Trailer Receive Antennas   | yes     | HRO,Universal Radio,GigaParts              |
| 1   | Yaesu FT-7800R  | 2m / 440 to receive Repeater Control Commands                    | yes     | HRO,Universal Radio,GigaParts              |
| 1   | 500 feet 14 Gauge Stranded Copper Wire Outdoor UV         | Outdoor UV Safe jacket for Safety Switches                       | yes     | Menards, Home Depot, Lowes                 |
| 2   | Aluminum Hard Hat   | For Antenna Mount  | yes     | Menards, Home Depot, Lowes                 |
| 2   | Blank metal plate for Electrical box                      | Will be drilled for pushbutton switch                            | yes     | Menards, Home Depot, Lowes                 |
| 1   | Red/Black 8 Gage (6 to 8 feet) Wire                       | Like Battery Jumper Cables (From Power Supply to Amplifier)      | yes     | Menards, Home Depot, Lowes                 |
| 100 | Screws #6-32 Flat Head Philips                            | Screws for Aluminum Boxes  | yes     | Menards, Home Depot, Lowes                 |
| 2   | Standard Electrical Outlet box, 1 space, metal            | Wall box for switch  | yes     | Menards, Home Depot, Lowes                 |
| 2   | 19" EIA Rack Cabinet 10u - 14u                            | Cabinet for the repeater controllers                             | yes     | Specialized Products, Full Compass, Global |
| 4   | Pelican Case 1610 Pick Pluck Foam                         | Storage of Camera, Batteries, Charger, and Transmitter           | yes     | Specialized Products, Full Compass, Global |
| 1   | 440 MHz Horizontally Polarized Vertical Antenna           | Horizontally Polarized Vertical                                  | yes     | Tessco, WinComm, Anderson Radio            |
| 5   | Andrews Heliac 1/2 N-Female Connectors                    | For Hardline patches   | yes     | Tessco, WinComm, Anderson Radio            |
| 5   | Andrews Heliac 1/2 N-Male Connectors                      | For Hardline patches   | yes     | Tessco, WinComm, Anderson Radio            |
| 200 | Andrews Heliac 7/8" Coax Cable                            | Main Repeater Antenna Runs                                       | yes     | Tessco, WinComm, Anderson Radio            |
| 10  | Andrews Heliac 7/8" N-Male Connectors                     | Main Repeater Antenna Runs                                       | yes     | Tessco, WinComm, Anderson Radio            |
| 1   | Lightning Protector 1200 MHz                              | DC Stop Transmit Max 150 watts                                   | yes     | Tessco, WinComm, Anderson Radio            |
| 1   | Lightning Protector 2400 MHz                              | TX / RX DC Pass Transmit Max 5 watts                             | yes     | Tessco, WinComm, Anderson Radio            |
| 1   | Lightning Protector 440 MHz                               | DC Pass Receive  | yes     | Tessco, WinComm, Anderson Radio            |
| 2   | LMR 240 Coax Stripper                                     | Short Patches between Components                                 | yes     | Tessco, WinComm, Anderson Radio            |
| 2   | LMR 240 Crimp Tool  | Short Patches between Components                                 | yes     | Tessco, WinComm, Anderson Radio            |
| 10  | LMR-240 BNC Male Connectors                               | Short Patches between Components                                 | yes     | Tessco, WinComm, Anderson Radio            |
| 500 | LMR-240 Coax Cable (units = feet)                         | Short Patches between Components                                 | yes     | Tessco, WinComm, Anderson Radio            |

5 LMR-240 Female SO-239 UHF Connectors  
 60 LMR-240 N-Male Connectors  
 10 LMR-240 PL-259 (Male) Connectors  
 2 LMR-240 RP TNC Male Connectors  
 25 LMR-240 SMA-Male Connectors  
 250 LMR-400 Flex Coax Cable (units = feet)  
 10 LMR-400 N-Male Connectors  
 5 Vertical Antenna Standoff  
 5 High Quality (Monster) RCA 3-Coax Video/L/R Cable 6'  
 15 High Quality RCA 3-Coax Video/L/R Cable 6'

Short Patches between Components  
 Short Patches between Components  
 Short Patches between Components  
 Short Patches between Components  
 Short Patches between Components  
 High Powered Patches and Flexible Longer Runs  
 High Powered Patches and Flexible Longer Runs  
 Stand-off Bracket 36" w 24" mounting pipe  
 Video Connections to Repeater Controller  
 Video Connections to Repeater Controller

|     |  |
|-----|--|
| yes | Tessco, WinComm, Anderson Radio            |
| yes | Tessco, WinComm, Anderson Radio            |
| yes | Tessco, WinComm, Anderson Radio            |
| yes | Tessco, WinComm, Anderson Radio            |
| yes | Tessco, WinComm, Anderson Radio            |
| yes | Tessco, WinComm, Anderson Radio            |
| yes | Tessco, WinComm, Anderson Radio            |
| yes | Tessco, WinComm, Anderson Radio            |
| yes | Tessco, WinComm, Anderson Radio, RS,CC, BB |
| yes | Tessco, WinComm, Anderson Radio, RS,CC, BB |



Saginaw County ATV Repeater System

Combined Single Source Items

1/5/2007

| Qty | Component Description                                    | Use   | Bidable | Suggested Vendor        |
|-----|--|---|---------|-------------------------|
| 1   | Bescor PRB-154 14.4Ah                                    | Wearable battery Battery Belt w/Charger                           | no      | B&H Photo               |
| 1   | Datavideo SE-500 4 port video switcher                   | Manual Controller for Scene Selection                             | no      | B&H Photo               |
| 2   | Impact CGA-DU21 Lilon 2400mAh                            | On Camera Battery   | no      | B&H Photo               |
| 1   | Impact CP-ADS AC/DC                                      | Battery Charger   | no      | B&H Photo               |
| 1   | IR Light - Battery for Sony HVL-IRM Nightshot            | Infrared Video Light Battery                                      | no      | B&H Photo               |
| 1   | IR Light - Sony HVL-IRM Nightshot                        | Infrared Video Light  | no      | B&H Photo               |
| 1   | LinkSys WRT54GL for TX / Receive - video / control logic | Exact Model Only  | no      | B&H Photo               |
| 1   | Video Camera - Hitachi DZGX3100A                         | Video Camera (Exact Model Only)                                   | no      | B&H Photo               |
| 3   | 500 MHz Low Pass Filters DCI-500-LP                      | Filter out 900 / 1.2 Signals from hitting the 433 Link, APRS, 220 | no      | DCI                     |
| 1   | DCI Digital DCI-BPF-2-8P-WPF                             | DCI Bandpass Filter channel 2 8 pole weatherproof                 | no      | DCI                     |
| 2   | Two Meter Bandpass Filter DCI-146-4H                     | Protect 147.240 Transmitter & APRS                                | no      | DCI                     |
| 1   | VSB Filter 8 Pole 1277.25 LSB DCI-1277.25-6-8-n          | VSB Filter for 1277.25 MHz  | no      | DCI                     |
| 1   | VSB Filter 8 Pole 439.25 LSB DCI-439.25-6-8pole-n        | VSB Filter for 439.25 MHz   | no      | DCI                     |
| 1   | Down East Microwave 13ULNA 2.3-2.4 phemt LNA N-con       | 2.4 GHz Preamp  | no      | Down East Microwave     |
| 1   | Down East Microwave 23LNAWPQ ATV LNA weatherproof N      | 1.2 GHz Preamp  | no      | Down East Microwave     |
| 1   | Down East Microwave 33LNAWPQ                             | 900 MHz Preamp  | no      | Down East Microwave     |
| 1   | Down East Microwave 70LNAWP                              | 439 MHz Preamp  | no      | Down East Microwave     |
| 2   | Down East Microwave BTLM (Less than 1 GHz)               | Bias-Tee  | no      | Down East Microwave     |
| 2   | Down East Microwave BTM (greater than 1 GHz)             | Bias-Tee  | no      | Down East Microwave     |
| 1   | Down East Microwave 23120PA Linear with TRANS-OPT        | 1.2 GHz Amplifier   | no      | Down East Microwave     |
| 2   | 2.4 GHz 1 Watt Amplifier - 15dB Gain OEM Module          | Booster for 2.4 GHz Transmitter                                   | no      | Fleeman Anderson & Bird |
| 1   | Outdoor Coaxial Amplifier 24COAXAMP with Bias Tee        | 2.4 GHz 1 watt bi-directional amplifier                           | no      | Fleeman Anderson & Bird |
| 1   | 439.25 MHz Amplifier Mirage D26N                         | Amplifier (requires 13.8v 12a) 2w in, 60w out                     | no      | Mirage Amplifiers       |
| 2   | 1.2 GHz MHz Omni Portable Straight                       | Flexible whip SMA Connector 1/4 or 5/8 wave                       | no      | MobiComm                |
| 2   | 2.4 GHz MHz Omni Portable Straight                       | Flexible whip SMA Connector 1/4 or 5/8 wave                       | no      | MobiComm                |
| 2   | 900 MHz Omni Portable Straight                           | Flexible whip SMA Connector 1/4 or 5/8 wave                       | no      | MobiComm                |
| 1   | MobiComm DFM1200RTIM                                     | 1.2 GHz Receiver Frequency Agile Digital Tuning (FM)              | no      | MobiComm                |
| 3   | MobiComm DFM1200TSIM1W                                   | 1.2 GHz FM Transmitter Frequency Agile Digital Tune 1w            | no      | MobiComm                |
| 1   | MobiComm DFM2400RTIM-B                                   | 2.4 GHz Receiver Frequency Agile Digital Tuning                   | no      | MobiComm                |
| 2   | MobiComm DFM2400TSIM-B                                   | 2.4 GHz FM Transmitter Frequency Agile Digital Tune 13dBm         | no      | MobiComm                |
| 1   | MobiComm DFM900RTIM                                      | 900 MHz Receiver Frequency Agile Digital Tuning                   | no      | MobiComm                |
| 2   | MobiComm DFM900TSIM2W                                    | 900 MHz FM Transmitter Frequency Agile Digital Tune 2w            | no      | MobiComm                |
| 3   | 1.2 GHz Receiver TVC-12G                                 | Building Receivers  | no      | PC Electronics          |
| 3   | 1.2 GHz Tuner TVCS-12                                    | Building Receiver Tuners  | no      | PC Electronics          |
| 2   | 439 MHz Directional Antenna DSFO-25                      | Directive Systems, 25 el beam, 16+ dBd, 17' boom, N jack.         | no      | PC Electronics          |
| 1   | 439.25 MHz Transmitter RTX70-1                           | Transmitter 1.5w  | no      | PC Electronics          |
| 1   | ATVC-4 Plus  | Repeater Controller for Main Repeater and Tower Cam               | no      | PC Electronics          |
| 1   | ATVR-12 on 1277.25 MHz                                   | 1.2 GHz AM Receiver   | no      | PC Electronics          |
| 1   | ATVR-4 439.25 Lower VSB Special Order                    | 439.25 AM Receiver  | no      | PC Electronics          |
| 1   | DTMF-8 PLUS  | DTMF decoder board, 8 momentary & latching 1A Relays              | no      | PC Electronics          |
| 1   | ENC-16   | Packaged DTMF Encoder & keypad                                    | no      | PC Electronics          |
| 1   | OSD-ID (SA)  | Video Overlay for ID  | no      | PC Electronics          |
| 1   | OSD-SSM  | Video Signal Strength   | no      | PC Electronics          |
| 1   | Transmit 1.2 GHZ AM 3w RTX-23-3 - Frequency 1277.25      | 1.2 GHz AM Transmitter  | no      | PC Electronics          |
| 250 | Red/Black Zip Cord 12 Gage (units = feet)                | For 12v Power Pole system   | no      | PowerWerx               |
| 1   | 17" LCD Upgrade  | Video Display w/Composite, Svideo, and VGA inputs                 | no      | Super Circuits          |
| 1   | Camera Power Supply                                      | AC24/9 24v 4amp Power System                                      | no      | Super Circuits          |
| 1   | PC161WR Weather Proof Color Camera                       | Camera for Outside Trailer view                                   | no      | Super Circuits          |
| 1   | VSS-54N - Outdoor Video Camera Sys                       | 4 Cameras, Power, Networkable DVR, brackets, video cables         | no      | Super Circuits          |
| 1   | 45A. Powerpole Connector Bulk Pack 100 Pair              | Power Connectors  | no      | West Mountain Radio     |
| 2   | PWRcrimp Crimp Tool                                      | Power Pole Crimp Tool   | no      | West Mountain Radio     |

**Saginaw County ATV Repeater System****Vendor Addresses**

1/5/2007

| <b>Company Name</b>          | <b>Address</b>                      | <b>CSZ</b>                      | <b>Phone</b>   | <b>FAX</b>   |
|------------------------------|-------------------------------------|---------------------------------|----------------|--------------|
| All Electronics Corp.        | 14928 Oxnard St.                    | Van Nuys, CA 91411-2610         | 818-997-1806   | 818-781-2653 |
| Anderson Radio Incorporated  | 6149 Westside Saginaw Road          | Bay City, MI 48706              | 989-684-9969   |              |
| B&H Photo Video              | 420 9th Avenue                      | New York, NY 10001              | 800-606-6969   | 800-947-7008 |
| Best Buy                     | 4406 Bay Road                       | Saginaw, MI 48603               | 989-799-8266   |              |
| Circuit City                 | 2970 Tittabawassee Road             | Saginaw, MI 48604               | 989-249-4200   |              |
| DCI                          | 20 South Plains Road                | Emeraled Park, SK S4L 1B7       | 800-563-5351   | 306-781-2008 |
| Digi-Key Corporation         | 701 Brooks Avenue South             | Thief River Falls, MN 56701     | 800-334-4539   | 218-681-3380 |
| Down East Microwave          | 954 Rt. 519                         | Frenchtown, NJ 08825            | 908-996-3584   | 908-996-3702 |
| Fleeman Anderson & Bird Corp | 6644 Rowan Road                     | New Port Richey, FL 34653       | 727-853-0256   | 727-841-7110 |
| Full Compass                 | 8001 Terrace Ave                    | Middleton, WI 53562             | 800-356-5844   |              |
| GigaParts, Inc.              | P.O. Box 11367                      | Huntsville, AL 35814            | 866-535-4442   |              |
| Global                       | 2505 Mill Center Parkway            | Buford, GA 30518                | 888-978-7759   |              |
| Ham Radio Outlet             | 14803 Build America Dr              | Woodbridge VA 22191             | 800-444-4799   | 703-643-1063 |
| Home Depot                   | 3132 N Bueker Drive                 | Saginaw, MI 48604               | 989-249-1440   |              |
| Menards                      | 2864 East Wilder Road               | Bay City, MI 48706              | 989-686-1764   |              |
| Mirage Amplifiers            | 300 Industrial Park Road            | Starkville, MS 39759            | 800-647-1800   | 662-323-6551 |
| MobiComm                     | Forellendaal 245                    | 2553 JJ, The Hague, Netherlands | +31-70-4041060 |              |
| Mouser Electronics, Inc.     | 1000 North Main Street              | Mansfield, TX 76063             | 800-346-6873   | 817-804-3899 |
| PC Electronics               | 2522 Paxson Lane                    | Arcadia CA 91007                | 626-447-4565   | 626-447-0489 |
| PowerWerx, Inc               | 555 W. Lambert Rd. #O               | Brea, CA 92821                  | 714-674-0073   | 714-674-4949 |
| RadioShack Comercial Sales   | 300 RadioShack Circle, MS EF-7.105  | Fort Worth, TX 76102            | 800-442-7221   | 800-291-6515 |
| Specialized Products Company | 1100 S Kimball Ave                  | Southlake TX 76092              | 800-866-5353   | 800-234-8286 |
| SuperCircuits, Inc           | 11000 N. Mopac Expressway Suite 300 | Austin, TX 78759                | 800-335-9777   |              |
| Tessco Technologies, Inc     | 11126 McCormick Road                | Hunt Valley, MD 21031           | 800-508-5444   | 410-527-0005 |
| Universal Radio, Inc         | 6830 Americana Pkwy                 | Reynoldsburg, OH 43068          | 800-431-3939   | 614-866-2339 |
| West Mountain Radio          | 18 Sheehan Ave                      | Norwalk, CT 06854               | 203-853-8080   | 203-299-0232 |
| Wincom Technolgies           | 30700 Carter Street, Suite A        | Solon, OH 44139                 | 888-946-6266   | 440-498-9511 |

Saginaw County ATV Repeater System

All Proposals Combined up to 12/27/06 Consensus Meeting  
(Obsolete after Consensus)

12/27/2006

| Site              | Grp | Qty | Component Description                                 | Use   | Bid | Suggested Vendor   | Cost | Ext | Totals      |
|-------------------|-----|-----|---|---|-----|--------------------|------|-----|-------------|
| <b>AAAAAAAAAA</b> |     |     |   |   |     |                    |      |     |             |
| <b>Main Site</b>  |     |     |   |   |     |                    |      |     |             |
|                   |     |     | <b>Repeater Controller</b>                            |   |     |                    |      |     | <b>1289</b> |
|                   |     | 1   | ATVC-4 Plus   | Repeater Controller for Main Repeater and Tower Cam                   |     | icircuits or HamTV | 350  | 350 |             |
|                   |     | 1   | OSD-ID (SA)   | Video Overlay for ID  |     | icircuits or HamTV | 120  | 120 |             |
|                   |     | 1   | DTMF-8 PLUS   | DTMF decoder board, 8 momentary & latching 1A Relays                  |     | icircuits or HamTV | 249  | 249 |             |
|                   |     | 1   | OSD-SSM   | Video Signal Strength   |     | icircuits or HamTV | 140  | 140 |             |
|                   |     | 1   | ENC-16  | Packaged DTMF Encoder & keypad  |     | icircuits or HamTV | 109  | 109 |             |
|                   |     | 1   | Hammond 1590D Dicast Aluminum Box                     | For repeater controller   | g   | Mouser             | 21   | 21  |             |
|                   |     | 1   | 19" EIA Rack Cabinet 10u - 14u                        | Cabinet for the repeater controllers                                  | x   |                    | 300  | 300 |             |
|                   |     |     | <b>Roof Cam Repeater Controller</b>                   |   |     |                    |      |     | <b>740</b>  |
|                   |     | 1   | ATVC-4 Plus   | Repeater Controller for Main Repeater and Tower Cam                   |     | icircuits or HamTV | 350  | 350 |             |
|                   |     | 1   | OSD-ID (SA)   | Video Overlay for ID  |     | icircuits or HamTV | 120  | 120 |             |
|                   |     | 1   | DTMF-8 PLUS   | DTMF decoder board, 8 momentary & latching 1A Relays                  |     | icircuits or HamTV | 249  | 249 |             |
|                   |     | 1   | Hammond 1590D Dicast Aluminum Box                     | For repeater controller   | g   | Mouser             | 21   | 21  |             |
|                   |     |     | <b>Radio Controlled Access to Repeater Controller</b> |   |     |                    |      |     | <b>260</b>  |
|                   |     | 1   | Yaesu FT-7800R  | 2m / 440 to receive Repeater Control Commands                         | x   |                    | 250  | 250 |             |
|                   |     | 1   | LMR-240 with 2xPL-259 Male Connectors                 | Plug in to FM Repeater Multicoupler for Receive (disable tx on radio) | a   |                    | 10   | 10  |             |
| opt               |     | 0   | Antenna for 2m/440 Control                            | Comet B-10  | x   |                    | 40   | 0   |             |
| opt               |     | 0   | Vertical Antenna Standoff                             | Stand-off Bracket 36" w 24" mounting pipe                             | x   |                    | 120  | 0   |             |
| opt               |     | 0   | SO-239 Mirror Clamp                                   | Clamp SO-239 to standoff  | x   |                    | 10   | 0   |             |
| opt               |     | 0   | Lightning Protector FM Transceiver Frequency          | DC Stop   | x   |                    | 80   | 0   |             |
| opt               |     | 0   | LMR-240 with PL-259 Male-N Male Connectors            | Tranceiver to Lightning Protector                                     | a   |                    | 10   | 0   |             |
| opt               |     | 0   | 50' Tower Run Coax LMR 600                            | Lightning Protector to Antenna  | c   |                    | 125  | 0   |             |
|                   |     |     | <b>439.25 AM Receiver</b>                             |   |     |                    |      |     | <b>1870</b> |
|                   |     | 1   | 439 MHz Receiver                                      | ATVR-4 LVSB Special Order   |     | HamTV              | 300  | 300 |             |
|                   |     | 1   | 439 MHz Antenna                                       | Horizontally Polarized Vertical                                       |     | ** Handmade?       | 400  | 400 |             |
|                   |     | 1   | Vertical Antenna Standoff                             | Stand-off Bracket 36" w 24" mounting pipe                             | x   |                    | 120  | 120 |             |
|                   |     | 1   | 439 MHz Directional Antenna DSFO-25                   | Directive Systems, 25 el beam, 16+ dBd, 17' boom, N jack.             |     | HamTV              | 175  | 175 |             |
|                   |     | 1   | 439 MHz Preamp  | Down East Microwave 70LNAWP   |     | Down East          | 120  | 120 |             |
|                   |     | 1   | 439 MHz Compatible Bias Tee for Preamp                | Down East Microwave BTLM (Less than 1 GHz)                            |     | Down East          | 45   | 45  |             |
|                   |     | 1   | 439 MHz Filter  | VSB Filter 8 Pole 439.25 LSB  |     | DCI                | 450  | 450 |             |
|                   |     | 1   | Lightning Protector 440 MHz                           | DC Pass Receive   | x   |                    | 80   | 80  |             |
|                   |     | 1   | RCA 3-Coax Video/L/R Cable                            | Video Connections to Repeater Controller                              | e   |                    | 15   | 15  |             |
|                   |     | 1   | LMR-240 with 2-N Male Connectors                      | Filter Insertion Cable  | a   |                    | 10   | 10  |             |
|                   |     | 1   | LMR-240 with SMA-Male N-Male Connectors               | Receiver to Bias Tee  | a   |                    | 10   | 10  |             |
|                   |     | 1   | LMR-240 with 2-N Male Connectors                      | Bias Tee to Lightning Protector                                       | a   |                    | 10   | 10  |             |
|                   |     | 1   | 50' Tower Run Coax LMR 600                            | Lightning Protector to Preamp   | c   |                    | 125  | 125 |             |
|                   |     | 1   | LMR-240 with 2-N Male Connectors                      | Preamp to Antenna   | a   |                    | 10   | 10  |             |
|                   |     |     | <b>900 Transmitter AM</b>                             |   |     |                    |      |     | <b>760</b>  |
| am                |     | 1   | 900 MHz Transmitter Frequency Fixed RTX33-.1          | Main ATV FM Transmitter - Frequency 910.250                           |     | HamTV              | 300  | 300 |             |
| am                |     | 1   | 900 MHz Filter  | VSB Filter for 910.250 MHz  |     | DCI                | 450  | 450 |             |
| am                |     | 1   | LMR-400 Flex with 2-N Male Connectors                 | Filter Insertion Cable  | b   |                    | 10   | 10  |             |
|                   |     |     | <b>900 Transmitter FM</b>                             |   |     |                    |      |     | <b>99</b>   |
| fm                |     | 1   | 900 MHz Transmitter Frequency Agile Digital Tuning    | Main ATV FM Transmitter 50mw or 2 watt drive (based on amp)           |     | MobiComm           | 80   | 80  |             |
| fm                |     | 1   | Box for Transmitter                                   | Bud CU-4476 Dicast aluminum box 6x3.25x1.84 inches w/bracket          | g   |                    | 19   | 19  |             |
|                   |     |     | <b>900 Transmitter Common Equipment</b>               |   |     |                    |      |     | <b>3230</b> |
|                   |     | 1   | 900 MHz Low Power Amplifier                           | Boost Transmitter drive to 10w 3310PA                                 |     | Down East          | 150  | 150 |             |
|                   |     | 1   | 900 MHz Amplifier w/circulator 300w                   | 300w Motorola ELPA with N-Connectors                                  |     | IT-Systems         | 175  | 175 |             |
|                   |     | 1   | Astron LS-35M   | Power Supply for 900 MHz Amplifier w/meter 28v 27/35A                 | x   |                    | 350  | 350 |             |
| opt               |     | 0   | 900 MHz Amplifier w/circulator 600w                   | 600w Custom Amplifier and Power Supply                                |     | N8OBU              | 1200 | 0   |             |
|                   |     | 1   | Lightning Protector 900 MHz                           | DC Stop Transmit Max 750 watts  | x   |                    | 80   | 80  |             |

|   |  |  |   |           |     |     |
|---|--|--|---|-----------|-----|-----|
|   | 1 8' Red/Black 8 Gage                                | Battery Cables (From Power Supply to Amplifier)              | x |           | 30  | 30  |
| v/h   | 1 900 MHz Vertical Omnidirectional                   | Amphenol Antel BCD87010NE 12dBi                              | x |           | 820 | 820 |
| v/h   | 1 900 MHz Vertical Antenna (Horizontal Pol)          | Amphenol Antel BCD-HP7WD 9dBi                                | x |           | 980 | 980 |
| v/h   | 2 Vertical Antenna Standoff                          | Stand-off Bracket 36" w 24" mounting pipe                    | x |           | 120 | 240 |
| v/h   | 1 High Power Coax Switch 2 Position                  | Must support 900 MHz at 500 watts.                           | x |           | 100 | 100 |
|   | 1 RCA 3-Coax Video/L/R Cable                         | Video Connections to Repeater Controller                     | e |           | 15  | 15  |
|   | 1 LMR-240 with SMA-Male N-Male Connectors            | Transmitter to Amplifier                                     | a |           | 10  | 10  |
|   | 1 LMR-400 Flex with 2-N Male Connectors              | Amplifier to Power Meter Module                              | b |           | 10  | 10  |
|   | 1 LMR-400 Flex with 2-N Male Connectors              | Power Meter to Antenna Switch                                | b |           | 10  | 10  |
|   | 1 LMR-400 Flex with 2-N Male Connectors              | Antenna Switch to Lightning Protector                        | b |           | 10  | 10  |
| v/h   | 2 Coax N-Male Patch Cable 50' LMR 600                | Lightning Protector to Antenna                               | c |           | 125 | 250 |
| <b>1.2 GHz Transmitter AM</b>   |  |  |   |           |     |     |
| am  | 1 1.2 GHz AM Transmitter Frequency Fixed             | Transmit 1.2 GHz AM 3w RTX-23-3 - Frequency 1277.25          |   | HamTV     | 400 | 400 |
| am  | 1 1.2 GHz Filter VSB Filter                          | VSB Filter for 1277.25 MHz                                   |   | DCI       | 500 | 500 |
| am  | 1 LMR-400 Flex with 2-N Male Connectors              | Filter Insertion Cable                                       | b |           | 10  | 10  |
| <b>1.2 GHz Transmitter FM</b>   |  |  |   |           |     |     |
| fm  | 1 1.2 GHz Transmitter Frequency Agile Digital Tuning | Transmit 1.2 GHz FM Video 1w drive                           |   | MobiCom   | 129 | 129 |
| fm  | 1 Box for Transmitter                                | Bud CU-4476 Dicast aluminum box 6x3.25x1.84 inches w/bracket | g |           | 19  | 19  |
| <b>1.2 GHz Transmitter Common Items</b>   |  |  |   |           |     |     |
|   | 1 1.2 GHz Amplifier                                  | Down East 23120PA Linear with TRANS-OPT                      |   | Down East | 950 | 950 |
|   | 1 Lightning Protector 1200 MHz                       | DC Stop Transmit Max 150 watts                               | x |           | 80  | 80  |
|   | 1 50 Amp 13.8v Astron Power RS-50M                   | Dedicated to Amplifier                                       | x |           | 300 | 300 |
|   | 1 LMR-240 with SMA-Male N-Male Connectors            | Transmitter to Amplifier                                     | a |           | 10  | 10  |
|   | 1 RCA 3-Coax Video/L/R Cable                         | Video Connections to Repeater Controller                     | e |           | 15  | 15  |
|   | 1 8' Red/Black 8 Gage                                | Battery Cables (From Power Supply to Amplifier)              | x |           | 30  | 30  |
|   | 0 Shared Antenna Chain With Receiver                 | (If separate run -- separate coax, VSB Filter, Antenna, etc) |   |           | 0   | 0   |
| <b>1.2 GHz Receiver AM</b>  |  |  |   |           |     |     |
| am  | 1 1.2 GHz Receiver Frequency Fixed                   | ATVR-12 on 1277.25 MHz                                       |   | HamTV     | 300 | 300 |
| am  | 1 1.2 GHz Filter VSB Filter                          | VSB Filter for 1277.25 MHz                                   |   | DCI       | 500 | 500 |
| am  | 1 LMR-240 Flex with 2-N Male Connectors              | Filter Insertion Cable                                       | b |           | 10  | 10  |
| <b>1.2 GHz Receiver FM</b>  |  |  |   |           |     |     |
| fm  | 1 1.2 GHz Receiver Frequency Agile Digital Tuning    | Receive 1.2 GHz FM Video                                     |   | MobiCom   | 70  | 70  |
| fm  | 1 Box For Receiver                                   | Bud CU-4476 Dicast aluminum box 6x3.25x1.84 inches w/bracket | g |           | 19  | 19  |
| <b>1.2 GHz Receiver Common</b>  |  |  |   |           |     |     |
|   | 1 1.2 GHz Antenna                                    | Comet GP-21 Mono Band 1240-1300MHz (100watts 8' long)        | x |           | 170 | 170 |
|   | 1 Vertical Antenna Standoff                          | Stand-off Bracket 36" w 24" mounting pipe                    | x |           | 120 | 120 |
|   | 1 1.2 GHz Directional Antenna                        | Comet CYA-1216E 16ele 16.6dbi (100watts 5' long)             | x |           | 150 | 150 |
|   | 1 1.2 GHz Preamp                                     | Down East Microwave 23LNAWPQ ATV LNA weatherproof N          |   | Down East | 120 | 120 |
|   | 1 1.2 GHz Bias Tee                                   | Down East Microwave BTM Bias Tee (Greater than 1 GHz)        |   | Down East | 45  | 45  |
|   | 1 Lightning Protector 1200 MHz                       | DC Pass Receive  | x |           | 80  | 80  |
|   | 1 RCA 3-Coax Video/L/R Cable                         | Video Connections to Repeater Controller                     | e |           | 15  | 15  |
|   | 1 LMR-240 with SMA-Male N-Male Connectors            | Receiver to Band Pass Filter                                 | a |           | 10  | 10  |
|   | 1 LMR-240 with 2-N Male Connectors                   | Band Pass Filter to Bias Tee                                 | a |           | 10  | 10  |
|   | 1 LMR-240 with 2-N Male Connectors                   | Bias Tee to Lightning Protector                              | a |           | 10  | 10  |
|   | 1 50' tower Run Coax LMR 600                         | Lightning Protector to Preamp                                | c |           | 125 | 125 |
|   | 1 LMR-240 with 2-N Male Connectors                   | Preamp to Antenna  | a |           | 10  | 10  |
| <b>1.2 GHz AM Flint Repeater Receiver (Capture the transmissions of the Flint Repeater)</b> |  |  |   |           |     |     |
|   | 1 1.2 GHz Receiver Frequency Fixed                   | ATVR-12 on 1253.25 MHz                                       |   | HamTV     | 300 | 300 |
|   | 1 1.2 GHz Filter VSB Filter                          | VSB Filter for 1253.25 MHz                                   |   | DCI       | 500 | 500 |
|   | 1 1.2 GHz Directional Antenna                        | Comet CYA-1216E 16ele 16.6dbi (100watts 5' long)             | x |           | 170 | 170 |
|   | 1 1.2 GHz Preamp                                     | Down East Microwave 23LNAWPQ ATV LNA weatherproof N          |   | Down East | 120 | 120 |
|   | 1 1.2 GHz Bias Tee                                   | Down East Microwave BTM Bias Tee (Greater than 1 GHz)        |   | Down East | 45  | 45  |
|   | 1 Lightning Protector 1200 MHz                       | DC Pass Receive  | x |           | 80  | 80  |
|   | 1 RCA 3-Coax Video/L/R Cable                         | Video Connections to Repeater Controller                     | e |           | 15  | 15  |
|   | 1 LMR-240 Flex with 2-N Male Connectors              | Filter Insertion Cable                                       | b |           | 10  | 10  |
|   | 1 LMR-240 with SMA-Male N-Male Connectors            | Receiver to Band Pass Filter                                 | a |           | 10  | 10  |

|  |  |   |                     |           |
|--|--|---|---------------------|-----------|
| 1 LMR-240 with 2-N Male Connectors   | Band Pass Filter to Bias Tee                                     | a | 10                  | 10        |
| 1 LMR-240 with 2-N Male Connectors   | Bias Tee to Lightning Protector                                  | a | 10                  | 10        |
| 1 50' tower Run Coax LMR 600   | Lightning Protector to Preamp                                    | c | 125                 | 125       |
| 1 LMR-240 with 2-N Male Connectors   | Preamp to Antenna  | a | 10                  | 10        |
| <b>WiFi Control System</b>   |  |   |                     |           |
| 1 2.4 GHz Wireless Router  | LinkSys WRT54GL for TX / Receive - video / control logic         | x | 50                  | 50        |
| 1 DCI Digital DCI-BPF-2-8P-WPF   | DCI Bandpass Filter channel 2 8 pole weatherproof                |   | DCI                 | 370 370   |
| 1 2.4 GHz Vertical   | GP-24 Comet Vert 13 dBd gain 2390-2450 (6' long) w/Tower Mount   | x | 170                 | 170       |
| 1 Vertical Antenna Standoff  | Stand-off Bracket 36" w 24" mounting pipe                        | x | 120                 | 120       |
| 1 2.4 GHz Bi-Directional 1 Watt  | Outdoor Coaxial Amplifier 24COAXAMP with Bias Tee                |   | Fleeman, Anderson   | 235 235   |
| 1 Lightning Protector 2400 MHz   | TX / RX DC Pass Transmit Max 5 watts                             | x | 80                  | 80        |
| 1 LMR-240 with RP-TNC Male N-Male Connectors                               | Router to Channel 2 Filter                                       | a | 10                  | 10        |
| 1 LMR-240 with 2-N Male Connectors   | Channel 2 Filter to Bias Tee                                     | a | 10                  | 10        |
| 1 LMR-240 with 2-N Male Connectors   | Bias Tee to Lightning Protector                                  | a | 10                  | 10        |
| 1 50' tower Run Coax LMR 600   | Lightning Protector to Bi-Directional Amplifier                  | c | 125                 | 125       |
| 1 LMR-240 with 2-N Male Connectors   | Bi-Directional Amplifier to Antenna                              | a | 10                  | 10        |
| <b>2-meter Transmitter, 433 Link Receiver, and 220 Repeater Protection</b> |  |   |                     |           |
| 2 Two Meter Bandpass Filter DCI-146-4H                                     | Protect 147.240 Transmitter from IMD                             |   | DCI                 | 120 240   |
| 2 500 MHz Low Pass Filters DCI-500-LP                                      | Filter out 900 / 1.2 Signals from hitting the 433 Link Receiver  |   | DCI                 | 300 600   |
| 1 500 MHz Low Pass Filters DCI-500-LP                                      | Filter out 900 / 1.2 Signals from hitting the 220 Repeater       |   | DCI                 | 200 200   |
| 3 LMR-240 with Female-UHF N-Male   | Connect Antennas to First Filter on 2m, 1.25m, 70cm              | a | 10                  | 30        |
| 2 LMR-240 with 2-N Male  | Connect First Filter to Second Filter on 2m, 70cm                | a | 10                  | 20        |
| 3 LMR-240 with Male-UHF N-Male   | Connect Filters to Receivers and Transmitters                    | a | 10                  | 30        |
| <b>Microwave Amp Safety System</b>   |  |   |                     |           |
| 2 SPDT NO/NC Magnet Door/Window Switch                                     | Disconnect Amplifier Enable on 900 & 1.2 (all elect part# MS-7)  | x | All Electronics     | 5 10      |
| 1 12 VDC 2.6 Amp Switching Power Supply                                    | Power for Safety System (all elect part # PS-1226)               | x | All Electronics     | 14 14     |
| 2 12 VDC DPDT DIP Relay  | (all elect part # RLY-622)                                       | x | All Electronics     | 2 4       |
| 2 Red Jumbo Round Pushbutton Switch Momentary 1"                           | Push Button for Reactivation of lockout (all elect part# PB-211) | x | All Electronics     | 4 8       |
| 2 Standard Electrical Outlet box, 1 space, metal                           | Wall box for switch  | x |                     | 3 6       |
| 2 Blank metal plate for Electrical box                                     | Will be drilled for pushbutton switch                            | x |                     | 2 4       |
| 1 500 feet 14 Gauge Copper Wire Outdoor UV Safe jacket                     | Outdoor UV Safe jacket for Safety Switches                       | x |                     | 60 60     |
| <b>Roof City Cams and Security Cams</b>                                    |  |   |                     |           |
| 2 VSS-54N - Outdoor Video Camera Sys                                       | 4 Cameras, Power, Networkable DVR, brackets, video cables        |   | Super Circuits      | 1100 2200 |
| 2 17" LCD Upgrade  | Video Display w/Composite, Svideo, and VGA inputs                |   | Super Circuits      | 200 400   |
| 1 Camera Power Supply  | AC24/9 24v 4amp Power System                                     |   | Super Circuits      | 70 70     |
| 2 RCA 3-Coax Video/L/R Cable   | Video Connections to Repeater Controller                         | e |                     | 15 30     |
| 1 9" LCD Composit/Svideo Monitor   | Video Display for ATV Signals                                    | x |                     | 100 100   |
| <b>Power Supply</b>  |  |   |                     |           |
| 1 50 Amp 13.8v Astron Power RS-50M   | Power Supplies for Radio Equipment                               | x |                     | 300 300   |
| 1 45A. Powerpole Connector Bulk Pack 100 Pair                              | 30 Amp Size  |   | West Mountain Radio | 79 79     |
| 2 PWRcrimp Crimp Tool  | Power Pole Crimp Tool  |   | West Mountain Radio | 50 100    |
| 4 MFJ-1129 - 40 Amp  | 12volt Power Strips  |   | MFJ Enterprises     | 109 436   |
| 200 Red/Black 12 Gage  | 12volt Electrical Cable  | x |                     | 0.4 80    |
| <b>Diagnostics</b>   |  |   |                     |           |
| 1 Icom R3 Receiver w/clone cable, computer cable                           | Remote diagnostics and testing stored with repeater              | x |                     | 400 400   |
| 1 Spectrum Analyzer  | Avcom 1 MHz to 4200 MHz PSA-37XP                                 | x |                     | 3700 3700 |
| <b>BBBBBBBBBB</b>  |  |   |                     |           |
| <b>Trailer Station</b>   |  |   |                     |           |
| <b>Repeater Controller</b>   |  |   |                     |           |
| 1 ATVC-4 Plus  | Repeater Controller  |   | icircuits or HamTV  | 350 350   |
| 1 Hammond 1590D Dicast Aluminum Box  | For repeater controller  | g | Mouser              | 21 21     |
| 1 OSD-ID (SA)  | Video Overlay for ID   |   | icircuits or HamTV  | 120 120   |
| 1 DTMF-8 PLUS  | DTMF decoder board, 8 momentary & latching 1A Relays             |   | icircuits or HamTV  | 249 249   |
| 1 Datavideo SE-500 4 port video switcher                                   | Manual Controller for Scene Selection                            | x | B&H Photo           | 1055 1055 |
| 1 19" EIA Rack Cabinet 10u - 14u   | Cabinet for the repeater controllers                             | x |                     | 300 300   |
| <b>Radio Controlled Access to Repeater Controller</b>                      |  |   |                     |           |

|   |   |   |   |                     |     |     |
|---|---|---|---|---------------------|-----|-----|
|   | 1 Yaesu FT-7800R  | 2m / 440 to receive Repeater Control Commands                         | x |                     | 250 | 250 |
|   | 1 LMR-240 with 2xPL-259 Male Connectors                   | Plug in to FM Repeater Multicoupler for Receive (disable tx on radio) | a |                     | 10  | 10  |
|   | 1 Antenna for 2m/440 Control                              | Comet B-10  | x |                     | 40  | 40  |
|   | 1 Vertical Antenna Standoff                               | Stand-off Bracket 36" w 24" mounting pipe                             | x |                     | 120 | 120 |
|   | 1 50' Coax - N-Male LMR 400 Flex                          | Amplifer to Antenna   | b |                     | 50  | 50  |
| <b>439.25 MHz AM Transmitter (unique equipment)</b>             |   |   |   |                     |     |     |
|   | 1 439.25 MHz Transmitter RTX70-1                          | Transmitter 1.5w  |   | HamTV               | 350 | 350 |
|   | 1 439.25 MHz Amplifier Mirage D26N                        | Amplifier (requires 13.8v 12a) 2w in, 60w out                         |   | Mirage Amplifiers   | 300 | 300 |
| <b>439.25 MHz AM Receiver (unique equipment)</b>                |   |   |   |                     |     |     |
|   | 1 439 MHz Receiver  | ATVR-4 LVSB Special Order   |   | HamTV               | 300 | 300 |
|   | 1 439 MHz Preamp  | Down East Microwave 70LNAWP   |   | Down East           | 120 | 120 |
|   | 1 439 MHz Compatible Bias Tee for Preamp                  | Down East Microwave BTLM (Less than 1 GHz)                            |   | Down East           | 45  | 45  |
|   | 1 LMR-240 with 2-N Male Connectors                        | Low Pass Filter to Bias-Tee   | a |                     | 10  | 10  |
|   | 1 LMR-240 with 2-N Male Connectors                        | Preamp to Antenna   | a |                     | 10  | 10  |
| <b>439.25 MHz AM -- Shared Transmitter / Receiver Equipment</b> |   |   |   |                     |     |     |
|   | 1 439 MHz Filter  | VSB Filter 8 Pole 439.25 LSB  |   | DCI                 | 450 | 450 |
|   | 1 439 MHz Antenna   | Horizontally Polarized Vertical                                       |   | Handmade ??         | 400 | 400 |
|   | 1 Vertical Antenna Standoff                               | Stand-off Bracket 36" w 24" mounting pipe                             | x |                     | 120 | 120 |
|   | 1 439 MHz Directional Antenna DSFO-25                     | Directive Systems, 25 el beam, 16+ dBd, 17' boom, N jack.             |   | HamTV               | 175 | 175 |
|   | 1 LMR-240 with 2-N Male Connectors                        | Transmitter to VSB Filter   | a |                     | 10  | 10  |
|   | 1 LMR-240 with 2-N Male Connectors                        | VSB Filter to Amplifier   | a |                     | 10  | 10  |
|   | 1 50' Coax - N-Male LMR 400 Flex                          | Amplifer to Antenna   | b |                     | 50  | 50  |
|   | 1 RCA 3-Coax Video/L/R Cable                              | Video Connections to Repeater Controller                              | e |                     | 15  | 15  |
| <b>900 MHz AM Receiver Boxes for ???</b>                        |   |   |   |                     |     |     |
| am  | 4 900 MHz down Converter Freqeucy Agile Analog Tuning     | ATV4-PKW Partial Kit  |   | Communications Cpts | 80  | 320 |
| am  | 4 Box for Reciever  | Bud CU-4476 Dicast aluminum box 6x3.25x1.84 inches w/bracket          | g | Mouser              | 19  | 76  |
| <b>900 MHz FM Receiver</b>                                      |   |   |   |                     |     |     |
| fm  | 1 900 MHz Receiver Frequency Agile Digital Tuning         | Receive Portable Camera and Mobile signals                            |   | MobiComm            | 70  | 70  |
| fm  | 1 Box for Reciever  | Bud CU-4476 Dicast aluminum box 6x3.25x1.84 inches w/bracket          | g | Mouser              | 19  | 19  |
|   | 1 900 MHz preamp  | Down East Microwave 33LNAWPQ  |   | Down East           | 120 | 120 |
|   | 1 900 MHz Bias Tee  | Down East Microwave BTLM (Less than 1 GHz)                            |   | Down East           | 45  | 45  |
|   | 1 900 MHz Omni Antenna                                    | Comet CFC-771 900 MHz 7.14 dBi 50w N-female                           | x |                     | 90  | 90  |
|   | 1 900 MHz Directional                                     | PYA-913 900 MHz 13ele 15.8db 5' boom                                  |   |                     | 170 | 170 |
|   | 1 RCA 3-Coax Video/L/R Cable                              | Video Connections to Repeater Controller                              | e |                     | 15  | 15  |
|   | 1 LMR-240 with SMA-Male N-Male Connectors                 | Receiver to Bias Tee  | a |                     | 10  | 10  |
|   | 1 50' Coax - N-Male LMR 400 Flex                          | Bias Tee to Preamp  | b |                     | 10  | 10  |
|   | 1 LMR-240 with 2-N Male Connectors                        | Preamp to Antenna   | a |                     | 50  | 50  |
| <b>1.2 GHZ Transmitter AM</b>                                   |   |   |   |                     |     |     |
| am  | 1 1.2 GHz AM Transmitter Frequency Fixed (AM)             | Transmit 1.2 GHZ AM 3w RTX-23-3 1277.25 MHz                           |   | HamTV               | 400 | 400 |
| am  | 1 1.2 GHz Filter VSB Filter (AM only)                     | VSB Filter for 1277.25 MHz  |   | DCI                 | 500 | 500 |
| am  | 1 LMR-400 Flex with 2-N Male Connectors                   | Filter Insert Cable   | a |                     | 10  | 10  |
| <b>1.2 GHZ Transmitter FM</b>                                   |   |   |   |                     |     |     |
| fm  | 1 1.2 GHz Transmitter Frequency Agile Digital Tuning (FM) | Transmitter to Main site - MobiComm 50mw TX                           |   | MobiComm            | 80  | 80  |
| fm  | 1 Box for Transmitter                                     | Bud CU-4476 Dicast aluminum box 6x3.25x1.84 inches w/bracket          | g | Mouser              | 19  | 19  |
| <b>1.2 GHZ Transmitter Common Items</b>                         |   |   |   |                     |     |     |
|   | 1 1.2 GHz Amplifier                                       | Down East Microwave 2330 PATV 30w 50mw input (Requires 10A)           |   | Down East           | 240 | 240 |
| opt   | 0 1.2 GHz Amplifier                                       | Down East 23120PA Linear with TRANS-OPT                               |   | Down East           | 950 | 0   |
| opt   | 0 50 Amp 13.8v Astron Power RS-50M                        | Dedicated to 120w Amplifier   | x |                     | 300 | 0   |
|   | 1 1.2 GHz Directional Antenna                             | Comet CYA-1216E 16ele 16.6dbi (100watts 5' long)                      | x |                     | 150 | 150 |
|   | 1 RCA 3-Coax Video/L/R Cable                              | Video Connections to Repeater Controller                              | e |                     | 15  | 15  |
|   | 1 LMR-400 Flex with SMA-Male N-Male Connectors            | Transmitter to Amplifer   | a |                     | 10  | 10  |
|   | 1 50' Coax - N-Male LMR 400 Flex                          | Amplifer to Antenna   | b |                     | 50  | 50  |
| <b>1.2 GHz Receiver AM</b>                                      |   |   |   |                     |     |     |
| am  | 1 1.2 GHz Receiver Frequency Fixed (AM)                   | ATVR-12 on 1277.25 MHz  |   | HamTV               | 300 | 300 |
| am  | 1 1.2 GHz Filter VSB Filter (AM only)                     | VSB Filter for 1277.25 MHz  |   | DCI                 | 500 | 500 |
| am  | 1 LMR-240 with 2-N Male Connectors                        | Filter Insert Cable   | a |                     | 10  | 10  |

|   |  |  |   |                   |     |             |
|---|--|--|---|-------------------|-----|-------------|
| <b>1.2 GHz Receiver FM</b>                      |  |  |   |                   |     | <b>89</b>   |
| fm  | 1 1.2 GHz Receiver Frequency Agile Digital Tuning (FM) | Receive Portable Camera and Mobile signals                     |   | MobiComm          | 70  | 70          |
| fm  | 1 Box for Receiver                                     | Bud CU-4476 Dicast aluminum box 6x3.25x1.84 inches w/bracket   | g | Mouser            | 19  | 19          |
| <b>1.2 GHz Receiver Common Items</b>            |  |  |   |                   |     | <b>540</b>  |
|   | 1 1.2 GHz Preamp                                       | Down East Microwave 23LNAWPQ ATV LNA weatherproof N            |   | Down East         | 120 | 120         |
|   | 1 1.2 GHz Bias Tee                                     | Down East Microwave BTM (greater than 1 GHz)                   |   | Down East         | 45  | 45          |
|   | 1 1.2 GHz MHz Omni Antenna                             | Commet GP-21 Mono Band 1240-1300MHz (100watts 8' long)         | x |                   | 170 | 170         |
|   | 1 Vertical Antenna Standoff                            | Stand-off Bracket 36" w 24" mounting pipe                      | x |                   | 120 | 120         |
|   | 1 RCA 3-Coax Video/L/R Cable                           | Video Connections to Repeater Controller                       | e |                   | 15  | 15          |
|   | 1 LMR-240 with SMA-Male N-Male Connectors              | Receiver to Bias Tee   | a |                   | 10  | 10          |
|   | 1 50' Coax - N-Male LMR 400 Flex                       | Bias Tee to Preamp   | b |                   | 10  | 10          |
|   | 1 LMR-240 with 2-N Male Connectors                     | Preamp to Antenna  | a |                   | 50  | 50          |
| <b>2.3 / 2.4 FM Agile Receiver</b>              |  |  |   |                   |     | <b>589</b>  |
|   | 1 2.4 GHz Receiver Frequency Agile Digital Tuning      | Local 2.4 GHz camera receiver                                  |   | MobiComm          | 70  | 70          |
|   | 1 Box for Receiver                                     | Bud CU-4476 Dicast aluminum box 6x3.25x1.84 inches w/bracket   | g | Mouser            | 19  | 19          |
|   | 1 2.4 GHz preamp                                       | Down East Microwave 13ULNA 2.3-2.4 phemt LNA N-connectors      |   | Down East         | 120 | 120         |
|   | 1 2.4 GHz Bias Tee                                     | Down East Microwave BTM (greater than 1 GHz)                   |   | Down East         | 45  | 45          |
|   | 1 2.4 GHz Antenna Omni                                 | GP-24S Comet Vertical 8 dBd gain 2390-2450 (4' long)           | x |                   | 130 | 130         |
|   | 1 Vertical Antenna Standoff                            | Stand-off Bracket 36" w 24" mounting pipe                      | x |                   | 120 | 120         |
|   | 1 RCA 3-Coax Video/L/R Cable                           | Video Connections to Repeater Controller                       | e |                   | 15  | 15          |
|   | 1 LMR-240 with SMA-Male N-Male Connectors              | Receiver to Bias Tee   | a |                   | 10  | 10          |
|   | 1 50' Coax - N-Male LMR 400 Flex                       | Bias Tee to Preamp   | b |                   | 10  | 10          |
|   | 1 LMR-240 with 2-N Male Connectors                     | Preamp to Antenna  | a |                   | 50  | 50          |
| <b>2.4 GHz Wifi</b>                             |  |  |   |                   |     | <b>1035</b> |
|   | 1 2.4 GHz Wireless Router                              | LinkSys WRT54GL for TX / Receive - video / control logic       | x |                   | 50  | 50          |
|   | 1 DCI Digital DCI-BPF-2-8P-WPF                         | DCI Bandpass Filter channel 2 8 pole weatherproof              |   | DCI               | 370 | 370         |
|   | 1 2.4 GHz Vertical                                     | GP-24 Comet Vert 13 dBd gain 2390-2450 (6' long) w/Tower Mount | x |                   | 170 | 170         |
|   | 1 Vertical Antenna Standoff                            | Stand-off Bracket 36" w 24" mounting pipe                      | x |                   | 120 | 120         |
|   | 1 2.4 GHz Bi-Directional 1 Watt                        | Outdoor Coaxial Amplifier 24COAXAMP with Bias Tee              |   | Fleeman, Anderson | 235 | 235         |
|   | 1 LMR-240 with RP-TNC Male N-Male Connectors           | Router to Channel 2 Filter                                     | a |                   | 10  | 10          |
|   | 1 LMR-240 with 2-N Male Connectors                     | Channel 2 Filter to Bias Tee                                   | a |                   | 10  | 10          |
|   | 1 LMR-240 with 2-N Male Connectors                     | Bias Tee to Lightning Protector                                | a |                   | 10  | 10          |
|   | 1 50' Coax - N-Male LMR 400 Flex                       | Lightning Protector to Bi-Directional Amplifier                | b |                   | 50  | 50          |
|   | 1 LMR-240 with 2-N Male Connectors                     | Bi-Directional Amplifier to Antenna                            | a |                   | 10  | 10          |
| <b>ATV Signal Monitoring</b>                    |  |  |   |                   |     | <b>1350</b> |
|   | 2 15" LCD Display w/Composite, Svideo                  | Video Display for ATV Signals                                  | x |                   | 250 | 500         |
|   | 4 RCA 3-Coax Video/L/R Cable                           | Video Connections to Repeater Controller                       | e |                   | 15  | 60          |
|   | 1 PC161WR Weather Proof Color Camera                   | Camera for Outside Trailer view                                |   | Super Circuits    | 90  | 90          |
|   | 2 Icom R3 Receivers                                    | Portable Video Displays stored in Trailer                      | x |                   | 350 | 700         |
| <b>Equipment Storage, Power, and Protection</b> |  |  |   |                   |     | <b>2057</b> |
|   | 2 Pelican Case 1610 Pick Pluck Foam                    | For storage of Transmitter/Receiver/Amps                       | x |                   | 250 | 500         |
|   | 1 50 Amp 13.8v Astron Power RS-50M                     | Power Supply for equipment                                     | x |                   | 300 | 300         |
|   | 3 MFJ-1129 - 40 Amp                                    | 12volt Power Strips  |   | MFJ Enterprises   | 109 | 327         |
|   | 200 Red/Black 12 Gage                                  | 12volt Electrical Cable  | x |                   | 0.4 | 80          |
|   | 2 LMR 240 Coax Stripper                                |  | x |                   | 50  | 100         |
|   | 2 LMR 240 Crimp Tool                                   |  | x |                   | 50  | 100         |
|   | 1 Times Microwave TK-01 Tool Kit                       | LMR400 and LMR600 Strip Tools, crimp & dies,debur, bag         | x |                   | 650 | 650         |
| <b>EEEEEEEEEE</b>                               |  |  |   |                   |     |             |
| <b>Portable Camera / Handheld</b>               |  |  |   |                   |     | <b>2086</b> |
|   | 1 Video Camera - Hitachi DZGX3100A                     | Capture video  | x | B&H Photo         | 400 | 400         |
|   | 2 Impact CGA-DU21 Lilon 2400mAh                        | On Camera Battery  | x | B&H Photo         | 65  | 130         |
|   | 1 Impact CP-ADS AC/DC                                  | Battery Charger  | x | B&H Photo         | 50  | 50          |
|   | 2 Tripod   |  | x |                   | 20  | 40          |
|   | 1 IR Light - Sony HVL-IRM Nightshot                    | Infrared Video Light   | x | B&H Photo         | 40  | 40          |
|   | 1 Bescor PRB-154 14.4Ah                                | Wearable battery Battery Belt w/Charger                        | x | B&H Photo         | 130 | 130         |
|   | 4 RCA 3-Coax Video/L/R Cable                           | Video Connections to Repeater Controller                       | e |                   | 15  | 60          |

|   |  |   |                    |     |     |             |
|---|--|---|--------------------|-----|-----|-------------|
| 1 900 MHz FM Transmitter Frequency Agile Digital Tune 2w      | Small Portable camera attached transmitter                   |   | MobiComm           | 130 | 130 |             |
| 1 900 MHz Omni Portable                                       | Flexible whip SMA Connector 1/4 or 5/8 wave                  | x |                    | 20  | 20  |             |
| 1 1.2 GHz FM Transmitter Frequency Agile Digital Tune 1w      | Small Portable camera attached transmitter                   |   | MobiComm           | 130 | 130 |             |
| 1 1.2 GHz MHz Omni Portable                                   | Flexible whip SMA Connector 1/4 or 5/8 wave                  | x |                    | 20  | 20  |             |
| 1 2.4 GHz FM Transmitter Frequency Agile Digital Tune 13dBm   | Small Portable camera attached transmitter                   |   | MobiComm           | 80  | 80  |             |
| 1 2.4 GHz 1 Watt Amplifier - 15dB Gain OEM Module             | Booster for 2.4 GHz Transmitter                              |   | Fleeman, Anderson  | 130 | 130 |             |
| 1 2.4 GHz MHz Omni Portable                                   | Flexible whip SMA Connector 1/4 or 5/8 wave                  | x |                    | 20  | 20  |             |
| 3 Boxes for Transmitters                                      | Bud CU-476 Dicast aluminum box 6x3.25x1.84 inches no bracket | g | Mouser             | 12  | 36  |             |
| 3 LMR-240 with 2xSMA-Male Connectors                          | Transmitters to Antennas / Helmet                            | a |                    | 10  | 30  |             |
| 2 Aluminum Hard Hat   | For Antenna Mount  | x |                    | 70  | 140 |             |
| 2 Large Size Pelican Case                                     | Storage of Camera, Batteries, Charger, and Transmitter       | x |                    | 250 | 500 |             |
| <b>Portable Camera - User Provided Camera</b>                 |  |   |                    |     |     | <b>257</b>  |
| 1 900 MHz FM Transmitter Frequency Agile Digital Tuning 2w    | Small Portable camera attached transmitter                   |   | MobiComm           | 130 | 130 |             |
| 1 900 MHz Omni Portable                                       | Flexible whip SMA Connector 1/4 or 5/8 wave                  | x |                    | 20  | 20  |             |
| 1 Boxes for Transmitter                                       | Bud CU-476 Dicast aluminum box 6x3.25x1.84 inches no bracket | g | Mouser             | 12  | 12  |             |
| 1 RCA 3-Coax Video/L/R Cable                                  | Video Connections to Repeater Controller                     | e |                    | 15  | 15  |             |
| 1 LMR-240 with 2xSMA-Male Connectors                          | Transmitters to Antennas / Helmet                            | a |                    | 10  | 10  |             |
| 1 Aluminum Hard Hat   | For Antenna Mount  | x |                    | 70  | 70  |             |
| <b>HHHHHHHHH</b>  |  |   |                    |     |     |             |
| <b>Mobile Configuration</b>                                   |  |   |                    |     |     | <b>3452</b> |
| 1 ATVC-4 Plus   | Repeater Controller  |   | icircuits or HamTV | 350 | 350 |             |
| 1 OSD-ID (SA)   | Video Overlay for ID   |   | icircuits or HamTV | 120 | 120 |             |
| 1 Hammond 1590D Dicast Aluminum Box                           | For repeater controller                                      | g | Mouser             | 21  | 21  |             |
| 1 900 MHz FM Agile receiver                                   | RX From Portable Cam, RX from Repeater                       |   | MobiComm           | 70  | 70  |             |
| 1 1.2 GHz FM Agile reciever                                   | RX From Portable Cam, RX from Repeater                       |   | MobiComm           | 70  | 70  |             |
| 1 2.4 GHz FM Agile receiver                                   | RX From Portable Cam, RX from Repeater                       |   | MobiComm           | 70  | 70  |             |
| 1 900 MHz FM Transmitter Frequency Agile Digital Tuning 2w    | TX to Trailer  |   | MobiComm           | 130 | 130 |             |
| 1 1.2 GHz FM Transmitter Frequency Agile Digital Tuning 1w    | TX to Trailer  |   | MobiComm           | 130 | 130 |             |
| 1 2.4 GHz FM Transmitter Frequency Agile Digital Tuning 13dBm | TX to Trailer  |   | MobiComm           | 80  | 80  |             |
| 1 2.4 GHz 1 Watt Amplifier - 15dB Gain OEM Module             | Booster for 2.4 GHz Transmitter                              |   | Fleeman, Anderson  | 130 | 130 |             |
| 1 900 MHz whip Antenna  | Flexible whip SMA Connector 1/4 or 5/8 wave                  | x |                    | 20  | 20  |             |
| 1 900 MHz Directional   | 9 to 12 dBi Yagi Antenna N-Female                            | x |                    | 100 | 100 |             |
| 1 1.2 GHz whip Antenna  | Flexible whip SMA Connector 1/4 or 5/8 wave                  | x |                    | 20  | 20  |             |
| 1 1.2 GHz Directional Antenna                                 | 9 to 12 dBi Yagi Antenna N-Female                            | x |                    | 100 | 100 |             |
| 1 2.4 GHz whip Antenna  | Flexible whip SMA Connector 1/4 or 5/8 wave                  | x |                    | 20  | 20  |             |
| 1 2.4 GHz Directional Antenna                                 | 9 to 12 dBi Yagi Antenna N-Female                            | x |                    | 100 | 100 |             |
| 6 Boxes for Transmitters and Receivers                        | Bud CU-476 Dicast aluminum box 6x3.25x1.84 inches no bracket | g | Mouser             | 12  | 72  |             |
| 2 Tripod  | For Antenna and Camera                                       | x |                    | 20  | 40  |             |
| 1 Video Camera - Hitachi DZGX3100A                            | Capture video  | x |                    | 400 | 400 |             |
| 4 RCA 3-Coax Video/L/R Cable                                  | Video Connections to Repeater Controller                     | e |                    | 15  | 60  |             |
| 6 LMR-240 with SMA-Male N-Male Connectors                     | Transmitters & Receivers to Antennas                         | a |                    | 10  | 60  |             |
| 2 50' Coax - N-Male LMR 400 Flex                              | For Transmitters/Receivers                                   | b |                    | 50  | 100 |             |
| 1 Icom R3 Receiver  | Portable Video Display                                       | x |                    | 350 | 350 |             |
| 1 9" LCD Composit/Svideo Monitor                              | Monitor repeater signals or portable video                   | x |                    | 200 | 200 |             |
| 100 Red/Black 12 Gage   | 12volt Electrical Cable                                      | x |                    | 0.3 | 30  |             |
| 1 MFJ-1129 - 40 Amp   | 12volt Power Strips  |   | MFJ Enterprises    | 109 | 109 |             |
| 2 Pelican Case 1610 Pick Pluck Foam                           | For storage of Transmitter/Receiver/Amps                     | x |                    | 250 | 500 |             |
| <b>FFFFFFFFF</b>  |  |   |                    |     |     |             |
| <b>911 Center</b>   |  |   |                    |     |     | <b>420</b>  |
| 1 Icom R3   |  | x |                    | 350 | 350 |             |
| 1 LMR-240 with BNC Male and N Male                            |  | a |                    | 10  | 10  |             |
| 1 Channel 3/4 Video Modulator                                 |  | x |                    | 20  | 20  |             |
| 1 Antenna Magmount w/N-connector pigtail                      |  | x |                    | 20  | 20  |             |
| 1 440 MHz 1/4-wave whip                                       |  | x |                    | 20  | 20  |             |
| <b>GGGGGGGGG</b>  |  |   |                    |     |     |             |
| <b>911 Center Radio Room</b>                                  |  |   |                    |     |     | <b>770</b>  |



|  |   |         |     |     |             |
|--|---|---------|-----|-----|-------------|
| 1 Icom R3                                |   | x       | 350 | 350 |             |
| 1 LMR-240 with BNC Male and N Male       |   | a       | 10  | 10  |             |
| 1 Channel 3/4 Video Modulator            |   | x       | 20  | 20  |             |
| 1 Antenna Magmount w/N-connector pigtail |   | x       | 20  | 20  |             |
| 1 440 MHz 1/4-wave whip                  |   | x       | 20  | 20  |             |
| 1 19" LCD Composite/Svideo/VGA Monitor   |   | x       | 350 | 350 |             |
| <b>ccccccccc</b>                         |   |         |     |     |             |
| <b>Courthouse Command Center</b>         |   |         |     |     | <b>420</b>  |
| 1 Icom R3                                |   | x       | 350 | 350 |             |
| 1 LMR-240 with BNC Male and N Male       |   | a       | 10  | 10  |             |
| 1 Channel 3/4 Video Modulator            |   | x       | 20  | 20  |             |
| 1 Antenna Magmount w/N-connector pigtail |   | x       | 20  | 20  |             |
| 1 440 MHz 1/4-wave whip                  |   | x       | 20  | 20  |             |
| <b>DDDDDDDDDD</b>                        |   |         |     |     |             |
| <b>Mobile Command Vehicle</b>            |   |         |     |     | <b>840</b>  |
| 1 Icom R3                                |   | x       | 350 | 350 |             |
| 1 LMR-240 with BNC Male and N Male       |   | a       | 10  | 10  |             |
| 1 Composite Video Switch                 |   | x       | 20  | 20  |             |
| 1 75 ohm 2 port cable splitter           |   | x       | 20  | 20  |             |
| 1 Channel 3/4 Video Modulator            |   | x       | 20  | 20  |             |
| 1 12v Bias Tee (400-2400 MHz)            |   |         |     |     |             |
| 1 WiNRADiO AX-37E Antenna                | <a href="http://www.grove-ent.com/product429.html">http://www.grove-ent.com/product429.html</a> | ** PART |     | 0   |             |
| 1 Antenna Magmount w/N-connector pigtail |   | Grove   | 380 | 380 |             |
| 1 440 MHz 1/4-wave whip                  |   | x       | 20  | 20  |             |
|  |   | x       | 20  | 20  |             |
| <b>IIIIIIIIII</b>                        |   |         |     |     |             |
| <b>Fire Trailer</b>                      |   |         |     |     | <b>1030</b> |
| 1 Icom R3                                |   | x       | 350 | 350 |             |
| 1 LMR-240 with BNC Male and N Male       |   | a       | 10  | 10  |             |
| 1 12v Bias Tee (400-2400 MHz)            |   |         |     |     |             |
| 1 WiNRADiO AX-37E Antenna                | <a href="http://www.grove-ent.com/product429.html">http://www.grove-ent.com/product429.html</a> | ** PART |     | 0   |             |
| 1 Antenna Magmount w/N-connector pigtail |   | Grove   | 380 | 380 |             |
| 1 440 MHz 1/4-wave whip                  |   | x       | 20  | 20  |             |
| 1 15" LCD Display w/Composite, Svideo    | Video Display for ATV Signals   | x       | 250 | 250 |             |

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**NOTES**

- a LMR 240 Coax Purchased on a spool, cables cut to needed length
- b LMR 400 Flex Coax Purchased on a spool, cables cut to needed length
- c LMR 600 Coax in Standard 50' patch lengths with N-male connectors -- or spool where cables cut to length plus a ground kit for each cable
- d Numbers and types of connectors will be calculated from coax patch listings
- e Video/Audio RCA cables may need to be different lengths
- f no note
- g Qty 8 screws #6-32 flat head for each box