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DRAWN BY: KJX CHECKED BY: AJK

PROJECT NOTES:

1. SITE INFORMATION OBTAINED FROM THE FOLLOWING:
   A. PLAN ENTITLED "10093833.AE201.FINAL_STAMPED_CDS.LTE 6C-5G-4T4R.COL01176.09.10.20" PREPARED BY TELCYTE INFRASTRUCTURE SERVICES LAST REVISED 09/10/2020.
2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES OR OTHER PUBLIC/GOVERNING AUTHORITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
4. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE AS A RESULT OF CONSTRUCTION OF THIS FACILITY AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
6. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
7. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING THE BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DRAWINGS.
8. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
9. SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY POTENTIALLY DANGEROUS EXPOSURE LEVELS.
10. THE PROPOSED FACILITY WILL CAUSE NO INCREASE IN STORM WATER RUNOFF, THEREFORE, NO DRAINAGE STRUCTURES ARE PROPOSED.
11. NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY AS TO CAUSE A NUISANCE.
12. THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED).
13. THE FACILITY DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
14. CONTRACTOR SHALL VERIFY ANTENNA ELEVATION AND AZIMUTHS WITH RF ENGINEERING PRIOR TO INSTALLATION.
15. THE TOWER, MOUNTS AND ANTENNAS SHALL BE DESIGNED TO MEET EIA/TIA-222-G AS PER IBC REQUIREMENTS.
16. ALL STRUCTURAL ELEMENTS SHALL BE HOT DIPPED GALVANIZED STEEL.
17. CONTRACTOR MUST FIELD LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION.
18. CONSTRUCTION SHALL NOT COMMENCE UNTIL COMPLETION OF A PASSING STRUCTURAL ANALYSIS CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER.
19. CONTRACTOR SHALL CONTACT STATE SPECIFIC ONE CALL SYSTEM THREE WORKING DAYS PRIOR TO ANY EARTH MOVING ACTIVITIES.

Battery Electrolytes Indicated on sheet 12 must be in compliance with the 2021 IFC chapter 12.

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: M. Apodaca
Date: May 16, 2022
2021 INTERNATIONAL CODES & 2020 NEC
FIRE/LIFE SAFETY REVIEW ONLY

Code violations that are found during inspection are required to be corrected. Permit issuance does not grant approval of a code violation.

City of Aurora Building Division
Project: *Antennae modifications*
Address: *1501 S. Potomac St.*
Occupancy Group: *U*
Construction Type: *V-B*
RSN: *1615733*
Permit: *22-2127528 LT*

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: nmartine
Date: May 11, 2022
2021 INTERNATIONAL CODES & 2020 NEC

SITE NAME: HUMANA
FA NUMBER: 10093833
SITE NUMBER: COL01176
ADDRESS: 1501 SOUTH POTOMAC
AURORA, CO 80045
SCOPE: 5G NR 1SR CBAND - MRUTH049238 (3755A12GGB)
5G NR 1SR CBAND - MRUTH049075 (3755A12GGA)

AERIAL MAP:



CODE COMPLIANCE:

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1. 2021 INTERNATIONAL BUILDING CODE
2. 2021 INTERNATIONAL RESIDENTIAL CODE
3. 2021 INTERNATIONAL MECHANICAL CODE
4. 2020 NATIONAL ELECTRICAL CODE
5. ADAPTED CITY/COUNTY ORDINANCES
6. ALL CODES SUBJECT TO LOCAL JURISCIVTION REQUIREMENTS. THESE DRAWINGS ARE DESIGNED TO THE LATEST CODES. THEY ALSO MEET THE ADAPTED CODE REQUIREMENTS OF THE JURISDICTION.

811 Know what's below. Call before you dig. www.call811.com

PROJECT INFORMATION:

SITE INFORMATION:
LATITUDE: 39.689694444°
LONGITUDE: -104.83166666°
JURISDICTION: CITY OF AURORA

APPLICANT/LESSEE:
COMPANY: AT&T
ADDRESS: 7670 S CHESTER ST
ENGLEWOOD, CO 80112

PROPERTY OWNER:
PROPERTY OWNER: HCA HEALTHONE LLC

REAL ESTATE:
COMPANY: SMARTLINK, LLC
ADDRESS: 1997 ANNAPOLIS EXCHANGE PARKWAY, SUITE 200
CITY, STATE, ZIP: ANNAPOLIS, MD. 21401
CONTACT: TAMARA SHIVELEY
E-MAIL: TAMARA.SHIVELEY@SMARTLINKGROUP.COM

CONSTRUCTION MANAGER:
COMPANY: SMARTLINK, LLC
ADDRESS: 1997 ANNAPOLIS EXCHANGE PARKWAY, SUITE 200
CITY, STATE, ZIP: ANNAPOLIS, MD. 21401
CONTACT: TROY HAYES
E-MAIL: TROY.HAYES@SMARTLINKGROUP.COM

RF ENGINEER:
COMPANY: AT&T
CONTACT: NITIN NANAGIRI
E-MAIL: NN399M@ATT.COM

ENGINEER:
COMPANY: RAMAKER & ASSOCIATES, INC.
ADDRESS: 855 COMMUNITY DRIVE
CITY, STATE, ZIP: SAUK CITY, WI 53583
CONTACT: ANGELA KVALHEIM
E-MAIL: AKVALHEIM@RAMAKER.COM

PROJECT DESCRIPTION/ SCOPE OF WORK

ROOFTOP
- REMOVE (3) EXISTING 7750 ANTENNAS (1 PER SECTOR)
- REMOVE (3) TMAs TT19-08BP111-001 (1 PER SECTOR)
- ADD (3) C-BAND AEQU IN TOP POSITION (1 PER SECTOR)
- ADD (3) C-BAND AEQK IN BOTTOM POSITION (1 PER SECTOR)
- ADD (3) DC9-48-60-24-PC16-EV SQUIDS (TYP. 1 PER SECTOR)

SHELTER
- ADD (3) #6 DC POWER TRUNK
- ADD (3) 24 PAIR FIBER TRUNK
- REMOVE (1)ABIL/(1)ASIK MODULES
- ADD (3)ABIO/(1)ASIL MODULES
- REMOVE (40) EXISTING 155aH BATTERIES
- ADD (16) 190aH BATTERIES

PROPOSED PROJECT SCOPE BASED ON RFDS ID# 4811886, VERSION 1.0, LAST UPDATED 10/30/2021.
CONTRACTOR TO VERIFY IN FIELD.

SHEET INDEX

SHEET NUMBER	SHEET DESCRIPTION
T-1	TITLE SHEET
GN-1	GENERAL NOTES
C-1	COMPOUND PLAN
C-2	EQUIPMENT LAYOUT PLAN
C-3	ELEVATION
C-4	ANTENNA LAYOUTS
C-5	ANTENNA LAYOUTS AND ANTENNA SCHEDULE
A-1	CONSTRUCTION DETAILS
A-2	CONSTRUCTION DETAILS
G-1	GROUNDING DETAILS
G-2	GROUNDING DETAILS

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Certification & Seal:
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Colorado.

COLORADO LICENSED MICHAEL L. PINSKE PE.0050800 PROFESSIONAL ENGINEER 3/22/2022

MARK	DATE	DESCRIPTION
1	03/22/22	FINAL CDS FOR REVIEW
0	02/17/22	PRELIMINARY CDS FOR REVIEW

ISSUE PHASE: REV 1 DATE ISSUED: 03/18/2022

PROJECT TITLE:
HUMANA
FA# 10093833
SITE# COL01176

PROJECT INFORMATION:
1501 SOUTH POTOMAC
AURORA, CO 80045
ARAPAHOE COUNTY

SHEET TITLE:
TITLE SHEET

SCALE: NONE

PROJECT NUMBER: 54003
SHEET NUMBER: T-1

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I:\54000\54003\CAD\54003_10093833_Humana_PRELIM_CDs_01-25-2022.dwg Printed by: khamm on Mar 22, 2022 - 10:21am

GENERAL NOTES:

1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND FOR GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5O HMS OR LESS.
4. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
5. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
6. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
7. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE EQUIPMENT GROUND RING WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
8. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
9. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
10. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
11. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED. ALL BENDS SHALL BE MADE WITH 12" RADIUS OR LARGER.
12. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
13. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS EXCEPT FOR GROUND BAR CONNECTION FROM MGB TO OUTSIDE EXTERIOR GROUND SHALL ALL BE CADWELD CONNECTIONS.
14. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
15. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED TO THE TOWER GROUND BAR.
16. APPROVED ANTIOXIDANT COATINGS (I.E. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
17. ALL EXTERIOR AND INTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
18. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
19. BOND ALL METALLIC OBJECTS WITHIN 6 FT OF MAIN GROUND WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.
20. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G. NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
21. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/4" IN. OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250.50.
22. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
    CONTRACTOR - SMARTLINK
    SUBCONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION)
    OWNER - AT&T (NEW CINGULAR WIRELESS PCS, LLC)
23. ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
24. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
25. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
26. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
27. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
28. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
29. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
30. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
31. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
32. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE RESPONSIBLE ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING & EXCAVATION.
33. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
34. THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY SHALL BE GRADED TO A UNIFORM SLOPE AND STABILIZED TO PREVENT EROSION.
35. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
36. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
37. THE SUBGRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
38. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
39. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
40. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE.
41. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
42. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR.
43. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.
44. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.
45. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS.
46. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (FY = 36 KSI) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E (FY = 35 KSI). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
47. CONSTRUCTION SHALL COMPLY WITH SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T MOBILITY SITES."
48. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
49. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION, ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
50. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN ALERT OF DANGEROUS EXPOSURE LEVELS.

This sheet of drawings has not been reviewed for code compliance.

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Certification & Seal:
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Colorado.

COLORADO LICENSED
MICHAEL L. PINSKE
PE.0050800
PROFESSIONAL ENGINEER
3/22/2022

MARK	DATE	DESCRIPTION
1	03/22/22	FINAL CDS FOR REVIEW
0	02/17/22	PRELIMINARY CDS FOR REVIEW

ISSUE PHASE: REV 1 DATE ISSUED: 03/18/2022

PROJECT TITLE:
HUMANA
FA# 10093833
SITE# COL01176

PROJECT INFORMATION:
1501 SOUTH POTOMAC
AURORA, CO 80045
ARAPAHOE COUNTY

SHEET TITLE:
NOTES

SCALE: NONE

PROJECT NUMBER: 54003

SHEET NUMBER: GN-1

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S WHEELING WAY

NORTH

EQUIPMENT ROOM LOCATION, GROUND FLOOR

13'-10"

36'-0"

55'-11"

(E) (2)#8 DC TRUNK
(E) (4)#6 DC TRUNK
(E) (3)18 PAIR FIBER
(E) (6) 2-1/4" COAX

(P) (3)#6 DC TRUNK
(P) (3)24 PAIR FIBER

EXISTING/PROPOSED ALPHA SECTOR, SEE C-4 FOR DETAILS

ALPHA SECTOR

10'-4"

47'-5"

117'-6"

EXISTING AT&T CABLE TRAY

61'-4"

48'-9"

12'-9"

BETA SECTOR

EXISTING/PROPOSED BETA SECTOR, SEE C-4 FOR DETAILS

EXISTING/PROPOSED GAMMA SECTOR, SEE C-5 FOR DETAILS

GAMMA SECTOR

COMPOUND PLAN 1
SCALE: 1" = 30'

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: nmartine
Date: May 11, 2022
2021 INTERNATIONAL CODES & 2020 NEC

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MICHAEL L. PINSKE
PE.0050800
PROFESSIONAL ENGINEER
3/22/2022

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ISSUE PHASE: REV 1 DATE ISSUED: 03/18/2022

PROJECT TITLE:
HUMANA
FA# 10093833
SITE# COL01176

PROJECT INFORMATION:
1501 SOUTH POTOMAC
AURORA, CO 80045
ARAPAHOE COUNTY

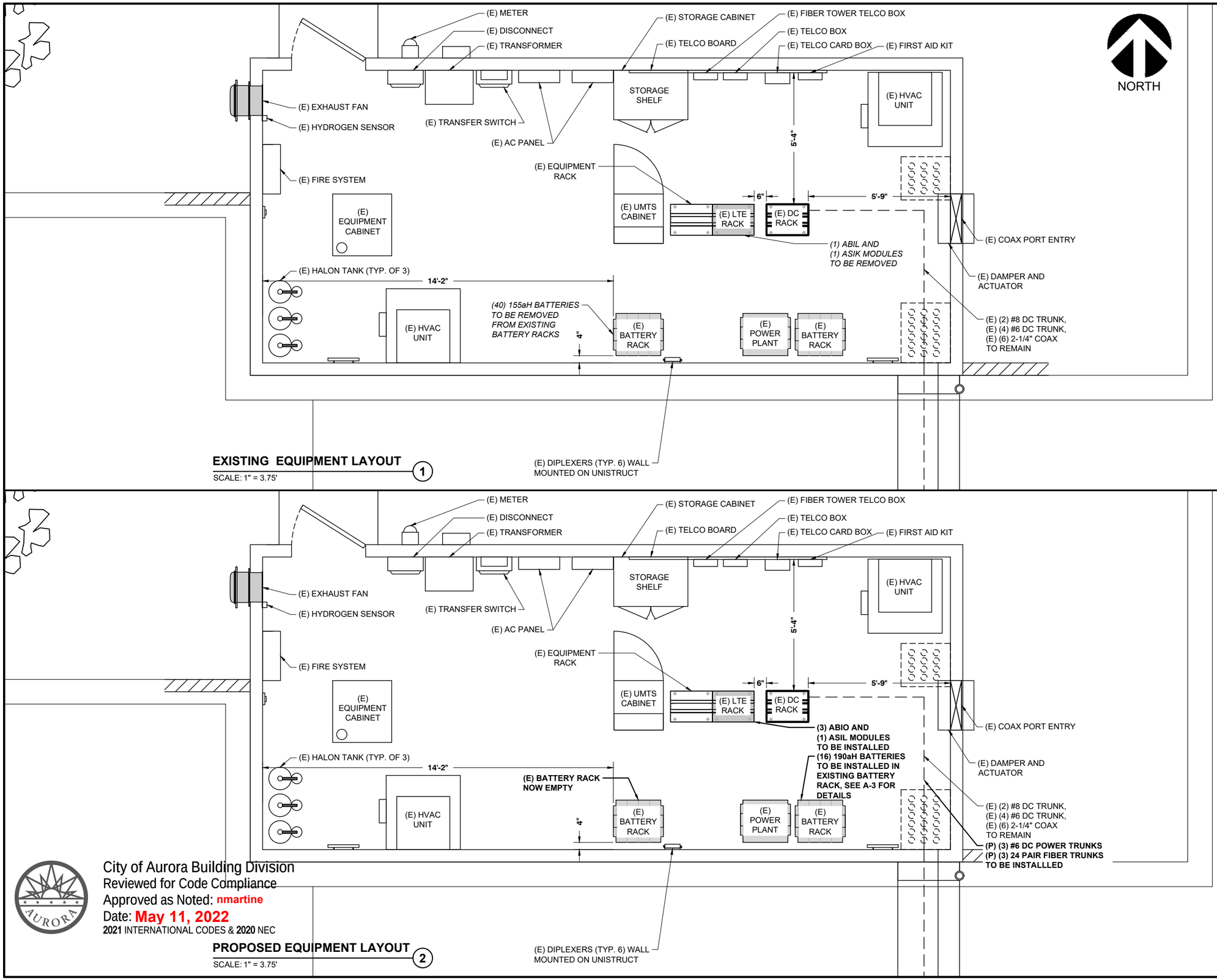
SHEET TITLE:
COMPOUND PLAN

0 15' 30' 60'
11" x 17" - 1" = 30'
22" x 34" - 1" = 15'

PROJECT NUMBER: 54003
SHEET NUMBER: C-1

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EXISTING EQUIPMENT LAYOUT (1)
SCALE: 1" = 3.75'

PROPOSED EQUIPMENT LAYOUT (2)
SCALE: 1" = 3.75'

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: nmartine
Date: May 11, 2022
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COLORADO LICENSED
MICHAEL L. PINSKE
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PROFESSIONAL ENGINEER
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ISSUE PHASE: REV 1
DATE ISSUED: 03/18/2022

PROJECT TITLE:
HUMANA
FA# 10093833
SITE# COL01176

PROJECT INFORMATION:
1501 SOUTH POTOMAC
AURORA, CO 80045
ARAPAHOE COUNTY

SHEET TITLE:
EQUIPMENT LAYOUT

0 1.25' 2.5' 5'
11" x 17" - 1" = 2.5'
22" x 34" - 1" = 1.25'

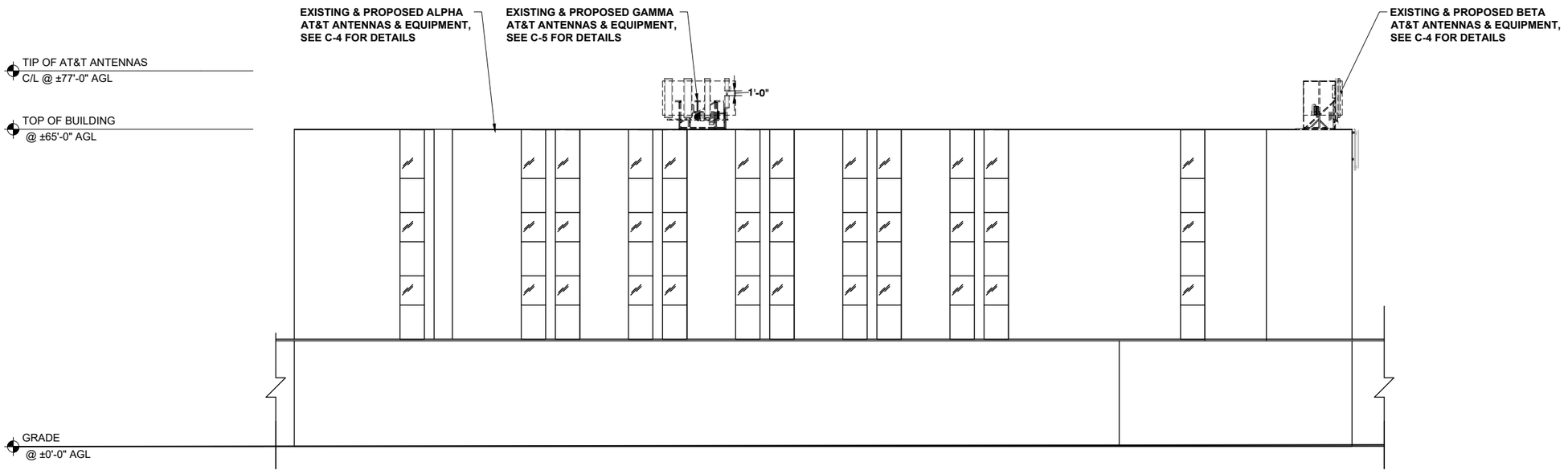
PROJECT NUMBER: 54003
SHEET NUMBER: C-2

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DRAWN BY: KJX CHECKED BY: AJK

NOTE:
A STRUCTURAL ASSESSMENT OF THE ANTENNA AND EQUIPMENT MOUNTING STRUCTURE HAS BEEN COMPLETED BY RAMAKER & ASSOCIATES, INC., DATED FEBRUARY 9, 2022.



SOUTH ELEVATION VIEW (1)
SCALE: 1" = 25'

Elevation changes require separate Zoning approval

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: **nmartine**
Date: **May 11, 2022**
2021 INTERNATIONAL CODES & **2020** NEC

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Certification & Seal:
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Colorado.

COLORADO LICENSED
MICHAEL L. PINSTE
PE.0050800
3/22/2022
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
1	03/22/22	FINAL CDS FOR REVIEW
0	02/17/22	PRELIMINARY CDS FOR REVIEW

ISSUE PHASE: REV 1
DATE ISSUED: 03/18/2022

PROJECT TITLE:
HUMANA
FA# 10093833
SITE# COL01176

PROJECT INFORMATION:
1501 SOUTH POTOMAC
AURORA, CO 80045
ARAPAHOE COUNTY

SHEET TITLE:
ELEVATION VIEW

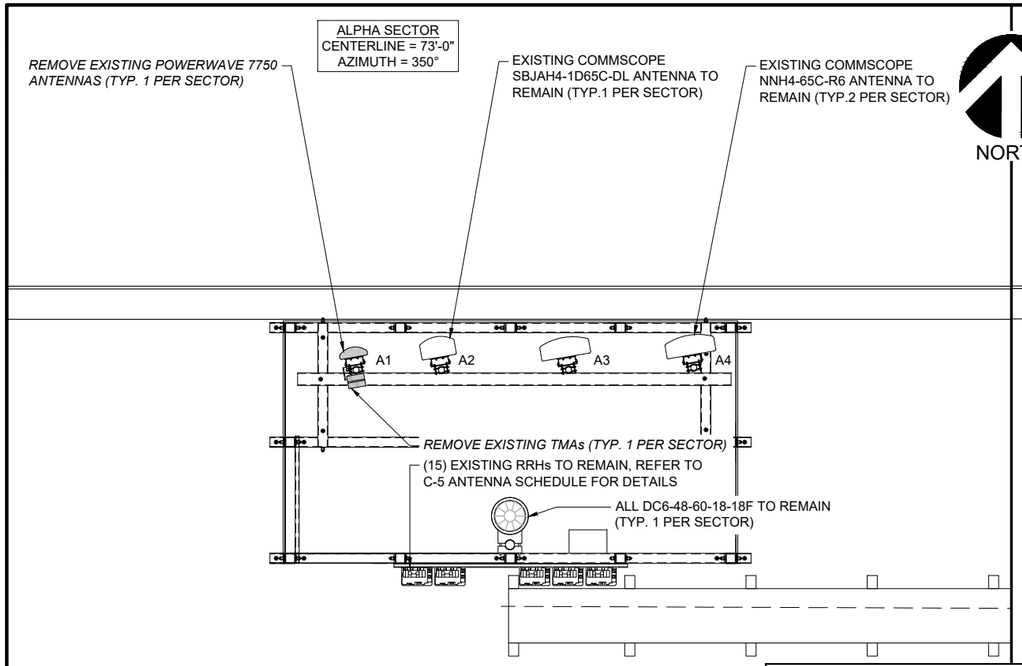
0 12.5' 25' 50'
11" x 17" - 1" = 25'
22" x 34" - 1" = 12.5'

PROJECT NUMBER: 54003
SHEET NUMBER: C-3

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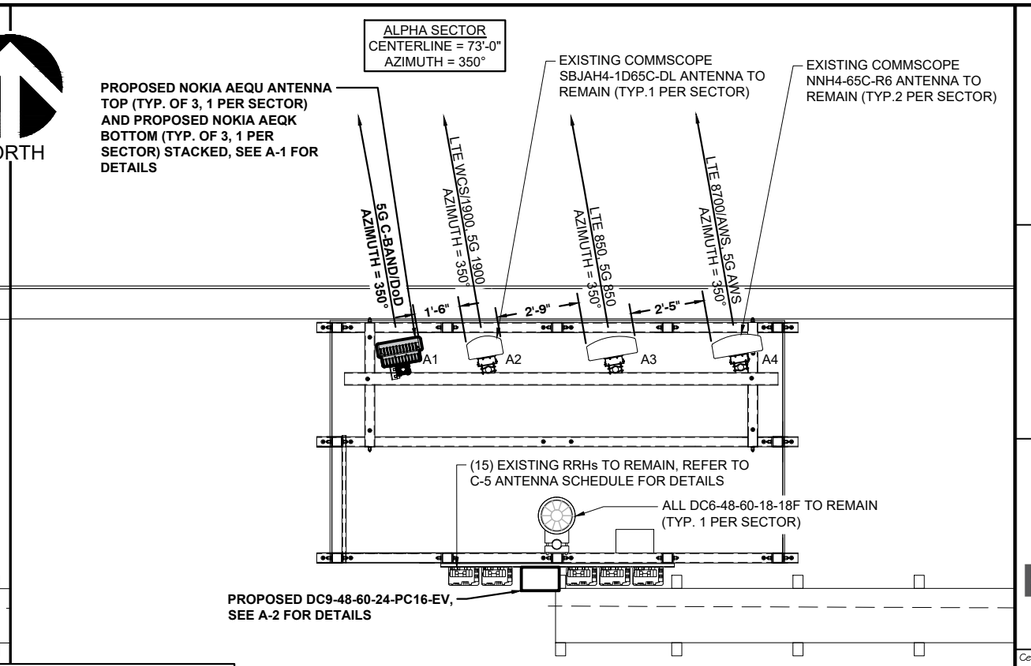
I:\54000\54003\CAD\54003_10093833_Humana_PRELIM_CDs_01-25-2022.dwg Printed by: khamm on Mar 22, 2022 - 10:21am

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EXISTING ALPHA SECTOR LAYOUT (1)

SCALE: NTS

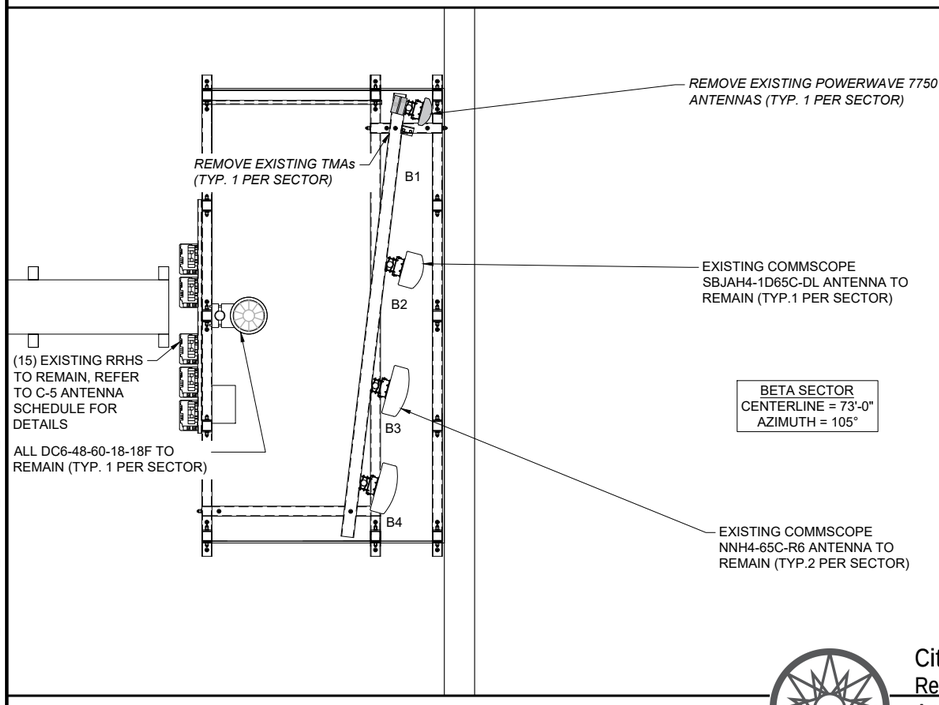


PROPOSED ALPHA SECTOR LAYOUT (2)

SCALE: NTS

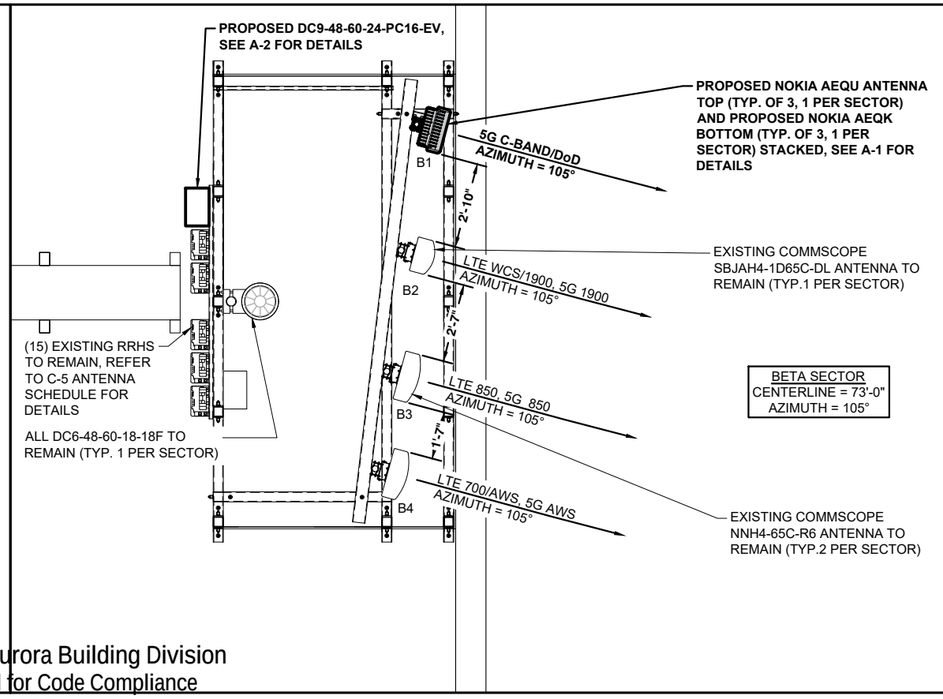
NOTES:
-3 FEET MINIMUM SEPARATION BETWEEN LTE ANTENNAS
-6 FEET MINIMUM SEPARATION BETWEEN 700 BC & 700 DE ANTENNAS
-8 INCH MINIMUM SEPARATION BETWEEN BACK OF PANEL ANTENNA AND EXISTING/PROPOSED EQUIPMENT

BASED ON: RF ENGINEERING DESIGN ENTITLED "CO-UT-WY-MT-SO.-ID_COLORADO_COL01176-HUMANA_2022-5G-NR-RADIO_5G-NR-1SR-CBAND_NN399M_3755A12GGA_10093833_10012_10-20-2021_PRELIMINARY-APPROVED_V1.00 (1)" LAST REVISED 10/30/2021.



EXISTING BETA SECTOR LAYOUT (3)

SCALE: NTS



PROPOSED BETA SECTOR LAYOUT (4)

SCALE: NTS

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: nmartine
Date: May 11, 2022
2021 INTERNATIONAL CODES & 2020 NEC

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COLORADO LICENSED
MICHAEL L. PINSKE
PE.0050800
PROFESSIONAL ENGINEER
3/22/2022

MARK	DATE	DESCRIPTION
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0	02/17/22	PRELIMINARY CDS FOR REVIEW

ISSUE PHASE: REV 1 — DATE ISSUED: 03/18/2022

PROJECT TITLE:
HUMANA
FA# 10093833
SITE# COL01176

PROJECT INFORMATION:
1501 SOUTH POTOMAC
AURORA, CO 80045
ARAPAHOE COUNTY

SHEET TITLE:
ANTENNA LAYOUTS

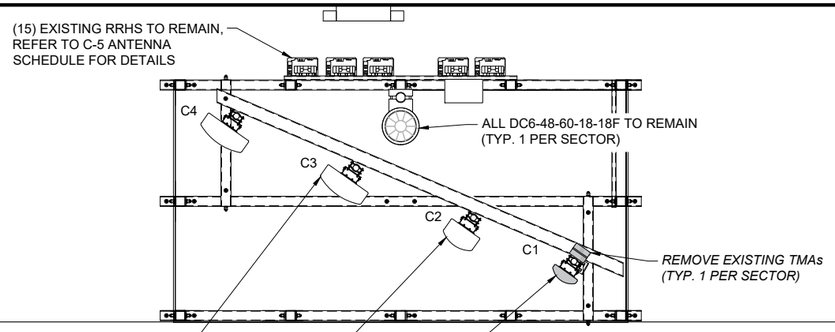
SCALE: NONE

PROJECT NUMBER: 54003
SHEET NUMBER: C-4

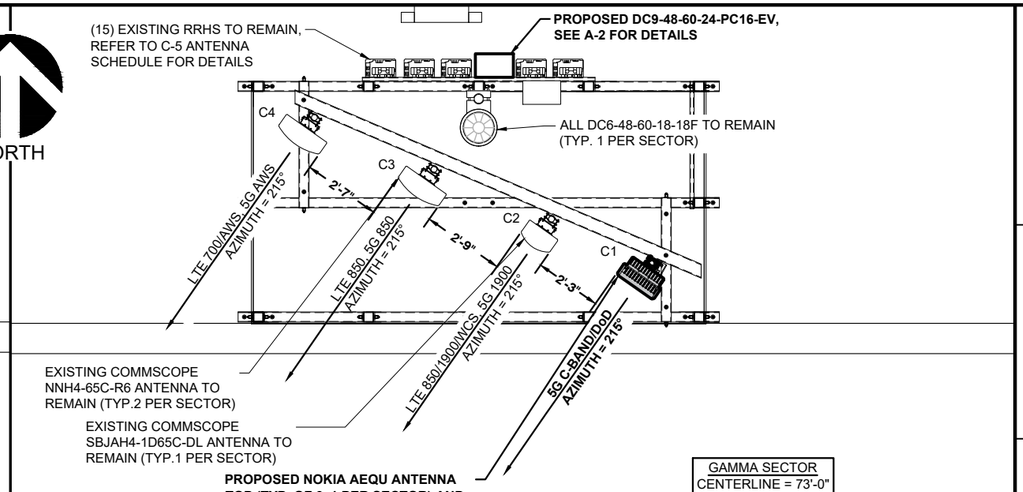
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DRAWN BY: KJX CHECKED BY: AJK







City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: nmartine
Date: May 11, 2022
2021 INTERNATIONAL CODES & 2020 NEC

GAMMA SECTOR
CENTERLINE = 73'-0"
AZIMUTH = 215°

GAMMA SECTOR
CENTERLINE = 73'-0"
AZIMUTH = 215°

NOTES:
-3 FEET MINIMUM SEPARATION BETWEEN LTE ANTENNAS
-6 FEET MINIMUM SEPARATION BETWEEN 700 BC & 700 DE ANTENNAS
-8 INCH MINIMUM SEPARATION BETWEEN BACK OF PANEL ANTENNA AND EXISTING/PROPOSED EQUIPMENT

EXISTING GAMMA SECTOR LAYOUT (1)
SCALE: NTS

PROPOSED GAMMA SECTOR LAYOUT (2)
SCALE: NTS

BASED ON: RF ENGINEERING DESIGN ENTITLED "CO-UT-WY-MT-SO.-ID_COLORADO_COL01176-HUMANA_2022-5G-NR-RADIO_5G-NR-1SR-CBAND_NN399M_3755A12GGA_10093833_10012_10-20-2021_PRELIMINARY-APPROVED_V1.00 (1)" LAST REVISED 10/30/2021.

SECTOR		EXISTING ANTENNA	PROPOSED ANTENNA	TECHNOLOGY	ANTENNA STATUS	HEIGHT (IN.)	WIDTH (IN.)	DEPTH (IN.)	WEIGHT (LBS.)	ANTENNA AZIMUTH (DEG.)	ANT. C/L ELEV. (FT.)	REMOTE RADIO/TMA CONFIGURATION	TRANSMISSION CABLE QUANTITY	TRANSMISSION CABLE TYPE	TRANSMISSION CABLE LENGTH	TRANSMISSION CABLE STATUS	RAYCAP UNIT
SECTOR 1	1	*POWERWAVE*	**NOKIA**	**5G C-BAND/DoD**	**PROPOSED**	**59.0**	**17.7**	**9.5**	**198**	**350**	**74**	-	**1**	**24 PAIR FIBER**	**250'**	**PROPOSED**	(3) EXISTING DC6-48-60-18-18F SQUIDS **(3) PROPOSED DC9-48-60/24-PC16-EV SQUIDS**
		7750	**AEQU + AEQK, STACKED**									-					
	2	COMMSCOPE	COMMSCOPE	LTE WCS/1900, 5G 1900	EXISTING	96.0	13.8	8.2	74.3	350	73	(1) B25 RRH4X30-4R	**1**	**#6 DC TRUNK**	**250'**	**PROPOSED**	
		SBJAH4-1D65C-DL	SBJAH4-1D65C-DL									(1) RRH4X25-WCS-4R	2	#6 DC TRUNK		EXISTING	
	3	COMMSCOPE	COMMSCOPE	LTE 850, 5G 850	EXISTING	96.0	19.6	7.8	99.2	350	73	(1) AHCA RRH 4T4R B5 160W	1	#8 DC TRUNK	-	EXISTING	
		NNH4-65C-R6	NNH4-65C-R6										1	18 PAIR FIBER			
	4	COMMSCOPE	COMMSCOPE	LTE 700/AWS, 5G AWS	EXISTING	96.0	19.6	7.8	99.2	350	73	(1) AHLBA RRH 4T4R B12/14 320W	2	2-1/4" COAX	-	EXISTING	
		NNH4-65C-R6	NNH4-65C-R6									(1) AHFIB RRH 4T4R B25/66 320W					
SECTOR 2	1	*POWERWAVE*	**NOKIA**	**5G C-BAND/DoD**	**PROPOSED**	**59.0**	**17.7**	**9.5**	**198**	**105**	**74**	-	**1**	**24 PAIR FIBER**	**375'**	**PROPOSED**	
		7750	**AEQU + AEQK, STACKED**									-					
	2	COMMSCOPE	COMMSCOPE	LTE WCS/1900, 5G 1900	EXISTING	96.0	13.8	8.2	74.3	105	73	(1) B25 RRH4X30-4R	**1**	**#6 DC TRUNK**	**375'**	**PROPOSED**	
		SBJAH4-1D65C-DL	SBJAH4-1D65C-DL									(1) RRH4X25-WCS-4R	1	#6 DC TRUNK		EXISTING	
	3	COMMSCOPE	COMMSCOPE	LTE 850, 5G 850	EXISTING	96.0	19.6	7.8	99.2	105	73	(1) AHCA RRH 4T4R B5 160W	1	#8 DC TRUNK	-	EXISTING	
		NNH4-65C-R6	NNH4-65C-R6										1	18 PAIR FIBER			
	4	COMMSCOPE	COMMSCOPE	LTE 700/AWS, 5G AWS	EXISTING	96.0	19.6	7.8	99.2	105	73	(1) AHLBA RRH 4T4R B12/14 320W	2	2-1/4" COAX	-	EXISTING	
		NNH4-65C-R6	NNH4-65C-R6									(1) AHFIB RRH 4T4R B25/66 320W					
SECTOR 3	1	*POWERWAVE*	**NOKIA**	**5G C-BAND/DoD**	**PROPOSED**	**59.0**	**17.7**	**9.5**	**198**	**215**	**74**	-	**1**	**24 PAIR FIBER**	**275'**	**PROPOSED**	
		7750	**AEQU + AEQK, STACKED**									-					
	2	COMMSCOPE	COMMSCOPE	LTE 850/WCS/1900, 5G 1900	EXISTING	96.0	13.8	8.2	74.3	215	73	(1) B25 RRH4X30-4R	**1**	**#6 DC TRUNK**	**275'**	**PROPOSED**	
		SBJAH4-1D65C-DL	SBJAH4-1D65C-DL									(1) RRH4X25-WCS-4R	1	#6 DC TRUNK		EXISTING	
	3	COMMSCOPE	COMMSCOPE	LTE 850, 5G 850	EXISTING	96.0	19.6	7.8	99.2	215	73	(1) AHCA RRH 4T4R B5 160W	1	18 PAIR FIBER	-	EXISTING	
		NNH4-65C-R6	NNH4-65C-R6														
	4	COMMSCOPE	COMMSCOPE	LTE 700/AWS, 5G AWS	EXISTING	96.0	19.6	7.8	99.2	215	73	(1) AHLBA RRH 4T4R B12/14 320W	2	2-1/4" COAX	-	EXISTING	
		NNH4-65C-R6	NNH4-65C-R6									(1) AHFIB RRH 4T4R B25/66 320W					

ANTENNA SCHEDULE (3)
SCALE: NTS

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COLORADO LICENSED MICHAEL L. PINSKE PE.0050800 PROFESSIONAL ENGINEER 3/22/2022

MARK	DATE	DESCRIPTION
1	03/22/22	FINAL CDS FOR REVIEW
0	02/17/22	PRELIMINARY CDS FOR REVIEW

ISSUE PHASE: REV 1 DATE ISSUED: 03/18/2022

PROJECT TITLE:
HUMANA
FA# 10093833
SITE# COL01176

PROJECT INFORMATION:
1501 SOUTH POTOMAC
AURORA, CO 80045
ARAPAHOE COUNTY

SHEET TITLE:
ANTENNA LAYOUTS AND ANTENNA SCHEDULE

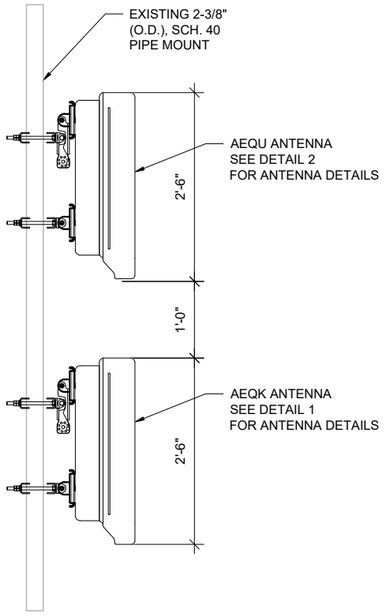
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PROJECT NUMBER: 54003
SHEET NUMBER: C-5

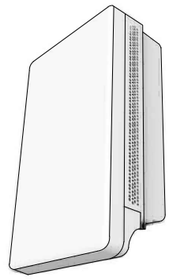
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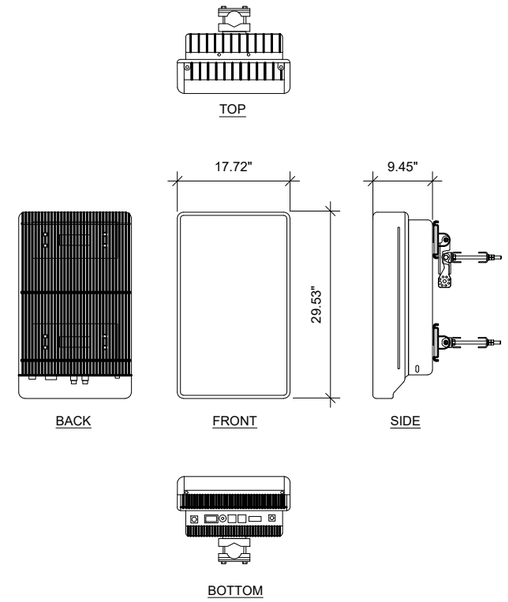
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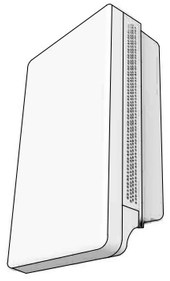
ANTENNA MOUNTING DETAIL (1)
SCALE: NTS



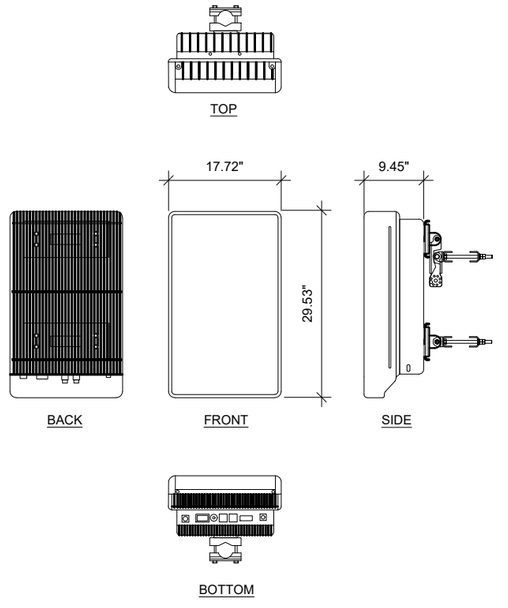
MANUFACTURER	NOKIA
MODEL #	AEQK
DIMENSIONS (HxWxD)	29.53" x 17.72" x 9.45"
NET WEIGHT	<99 lbs (WITHOUT MOUNTING BRACKETS)
OPTICAL PORTS	2 x SFP28, 10/25GE eCPRI
FREQUENCY	3700-3980MHz



ANTENNA DETAIL (2)
SCALE: NTS



MANUFACTURER	NOKIA
MODEL #	AEQU
DIMENSIONS (HxWxD)	29.53" x 17.72" x 9.45"
NET WEIGHT	<99 lbs (WITHOUT MOUNTING BRACKETS)
OPTICAL PORTS	2 x SFP28, 10/25GE eCPRI
FREQUENCY	3450-3550 MHz



ANTENNA DETAIL (3)
SCALE: NTS

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: nmartine
Date: May 11, 2022
2021 INTERNATIONAL CODES & 2020 NEC

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MICHAEL L. PINSKE
PE.0050800
PROFESSIONAL ENGINEER
3/22/2022

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ISSUE PHASE: REV 1 DATE ISSUED: 03/18/2022

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HUMANA
FA# 10093833
SITE# COL01176

PROJECT INFORMATION:
1501 SOUTH POTOMAC
AURORA, CO 80045
ARAPAHOE COUNTY

SHEET TITLE:
CONSTRUCTION DETAILS

SCALE: NONE

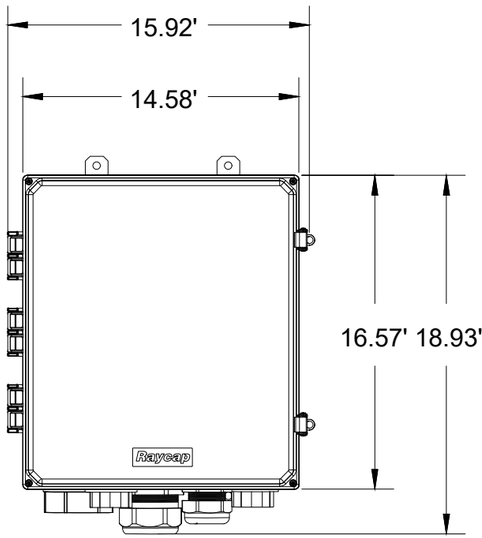
PROJECT NUMBER: 54003
SHEET NUMBER: A-1

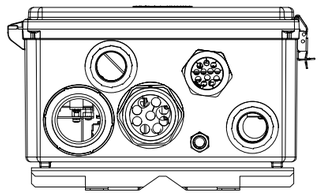
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DRAWN BY: KJX CHECKED BY: AJK

VENDOR: RAYCAP
MODEL: DC9-48-60-24-PC16-EV
DIMENSIONS: 16.57"Hx14.58"Wx8.15"D





DC9 SURGE SUPPRESSION BOX (1)
SCALE: NTS

This sheet of drawings has not been reviewed for code compliance.

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MICHAEL L. PINSKE
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PROFESSIONAL ENGINEER
3/22/2022

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HUMANA
FA# 10093833
SITE# COL01176

PROJECT INFORMATION:
1501 SOUTH POTOMAC
AURORA, CO 80045
ARAPAHOE COUNTY

SHEET TITLE:
CONSTRUCTION DETAILS

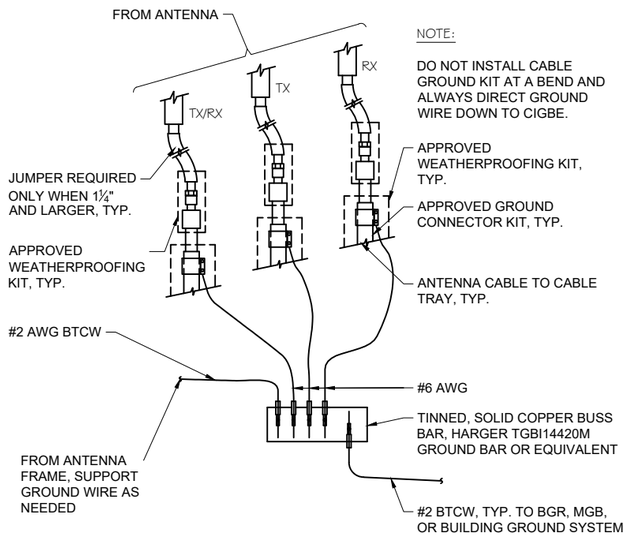
SCALE: NONE

PROJECT NUMBER: 54003
SHEET NUMBER: A-2

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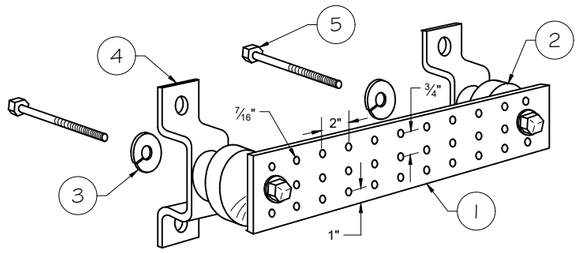


GROUND WIRE TO GROUND BAR DETAIL (1)

SCALE: NTS

NOTES:

1. ALL MOUNTING HARDWARE CAN BE USED ON 6", 12", 18", ETC. GROUND BARS.
2. ENTIRE ASSEMBLY AVAILABLE FROM NEWTON INSTRUMENT CO. CAT. NO. 2106060010 OR AS HARGER TGBI14420M.



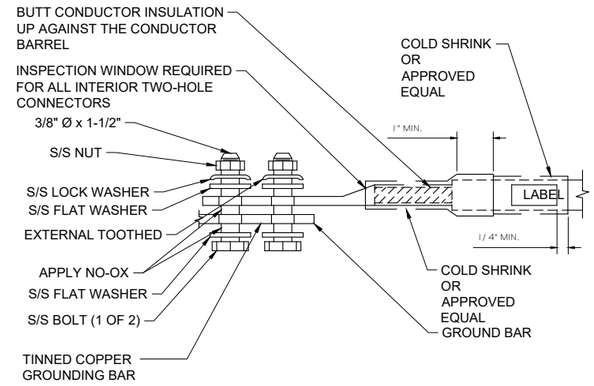
LEGEND

1. TINNED COPPER GROUND BAR, ¼" x 4" x 20", NEWTON CO., HARGER TGBI14420M, OR EQUIVALENT. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION.
2. INSULATORS. INSTRUMENT CO. CAT. NO. 3061-4 OR HARGER EQUIVALENT.
3. ⅝" LOCKWASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8 OR EQUIVALENT.
4. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT. NO. A-6056 OR HARGER EQUIVALENT.
5. ⅝" x 1" H.H.C.S. BOLTS, NEWTON INSTRUMENT CO. CAT. NO. 3012-1 OR HARGER EQUIVALENT.

TYPICAL GROUND BAR DETAIL (2)

SCALE: NTS

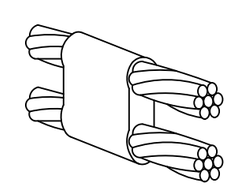
Provide a Grounding Electrode System bonded
To the service equipment enclosure, grounded
Conductors, and grounded electrode conductors
Per 2020 NEC 250.50 and 250.104



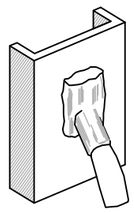
TYPICAL GROUND BAR CONNECTION DETAIL (3)

SCALE: NTS

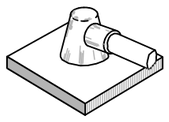
City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: nmartine
Date: May 11, 2022
2021 INTERNATIONAL CODES & 2020 NEC



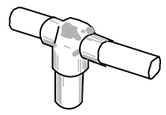
TYPE PT (PARALLEL HORIZ. COND.)
PARALLEL THROUGH CONNECTION OF HORIZONTAL CABLES



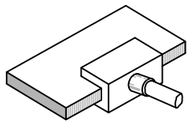
TYPE VS (VERT. STEEL SURFACE)
CABLE TAP DOWN AT 45° TO VERTICAL STEEL SURFACE INCLUDING PIPE



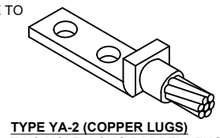
TYPE HS (HORIZ. STEEL SURFACE)
TO FLAT STEEL SURFACE OR HORIZONTAL PIPE



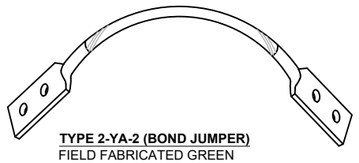
TYPE GT (THROUGH CABLE TO GROUND ROD)
THROUGH CABLE TO TOP OF GROUND ROD



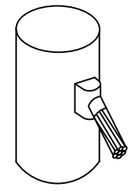
TYPE LJ (FLAT BUSBAR)
TAP OF HORIZONTAL CABLE TO EDGE OF HORIZONTAL



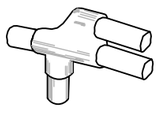
TYPE YA-2 (COPPER LUGS)
TWO HOLE- LONG BARREL LENGTH



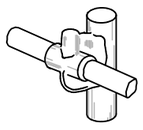
TYPE 2-YA-2 (BOND JUMPER)
FIELD FABRICATED GREEN STRANDED INSULATED



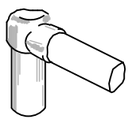
TYPE VS (VERTICAL PIPE)
CABLE TAP DOWN AT 45° TO RANGE OF VERTICAL PIPES



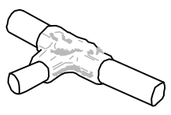
TYPE NC
THROUGH AND TAP CABLES TO GROUND ROD



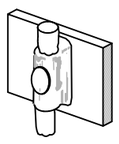
TYPE GY
THROUGH CABLE TO SIDE OF GROUND ROD



TYPE GR
CABLE TAP TO TOP OF GROUND ROD



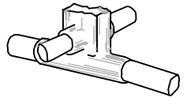
TYPE TA
TEE OF HORIZONTAL RUN AND TAP CABLES



TYPE W
THROUGH VERTICAL CABLE TO VERTICAL STEEL SURFACE OR TO THE SIDE OF EITHER HORIZONTAL OR VERTICAL PIPE



TYPE PC
PARALLEL TAP CABLES



TYPE XB
CROSS OF HORIZONTAL CABLES. LAPPED AND NOT CUT.

TYPICAL CADWELD TYPES DETAIL (4)

SCALE: NTS

at&t

smartlink

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employee-owned
(608) 643-4100 www.ramaker.com

Certification & Seal:
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Colorado.



MARK	DATE	DESCRIPTION
1	03/22/22	FINAL CDS FOR REVIEW
0	02/17/22	PRELIMINARY CDS FOR REVIEW

ISSUE PHASE: REV 1 — DATE ISSUED: 03/18/2022

PROJECT TITLE:
HUMANA
FA# 10093833
SITE# COL01176

PROJECT INFORMATION:
1501 SOUTH POTOMAC
AURORA, CO 80045
ARAPAHOE COUNTY

SHEET TITLE:
GROUNDING DETAILS

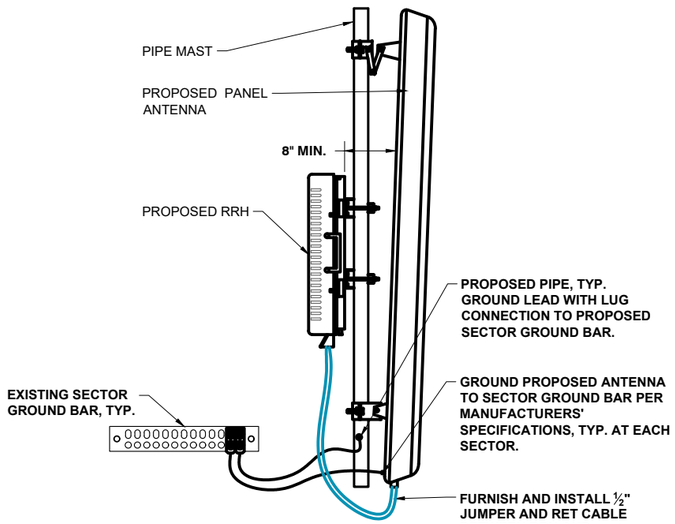
SCALE: NONE

PROJECT NUMBER: 54003
SHEET NUMBER: G-1

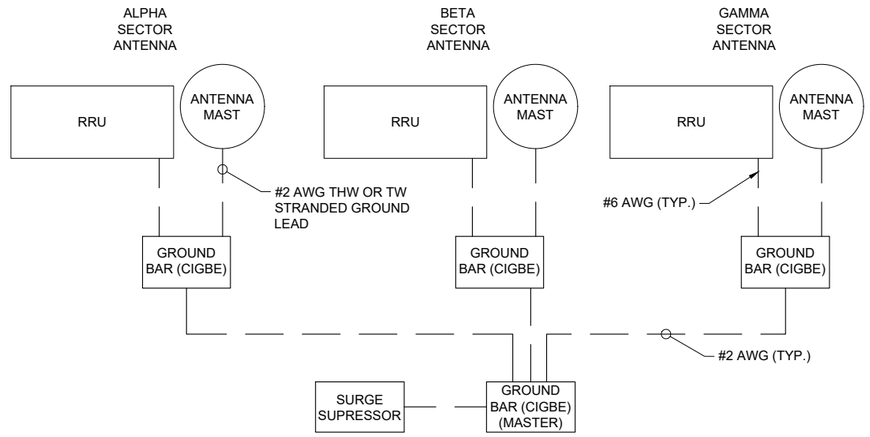
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I:\54000\54003\CAD\54003_10093833_Humana_PRELIM_CDs_01-25-2022.dwg Printed by: khamm on Mar 22, 2022 - 10:21am

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DRAWN BY: KJX CHECKED BY: AJK



ANTENNA & RRU GROUNDING DETAIL (1)
SCALE: NTS



SCHEMATIC DIAGRAM GROUNDING SYSTEM (2)
SCALE: NTS

Provide a Grounding Electrode System bonded
To the service equipment enclosure, grounded
Conductors, and grounded electrode conductors
Per 2020 NEC 250.50 and 250.104

City of Aurora Building Division
Reviewed for Code Compliance
Approved as Noted: **nmartine**
Date: **May 11, 2022**
2021 INTERNATIONAL CODES & **2020** NEC

at&t

smartlink

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Certification & Seal:
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Colorado.

COLORADO LICENSED
MICHAEL L. PINSKE
PE.0050800
PROFESSIONAL ENGINEER
3/22/2022

MARK	DATE	DESCRIPTION
1	03/22/22	FINAL CDS FOR REVIEW
0	02/17/22	PRELIMINARY CDS FOR REVIEW

ISSUE PHASE: REV 1
DATE ISSUED: 03/18/2022

PROJECT TITLE:
HUMANA
FA# 10093833
SITE# COL01176

PROJECT INFORMATION:
1501 SOUTH POTOMAC
AURORA, CO 80045
ARAPAHOE COUNTY

SHEET TITLE:
GROUNDING DETAILS

SCALE: NONE

PROJECT NUMBER: 54003
SHEET NUMBER: G-2

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Contracted to AT&T Mobility

April 21, 2022

Re: Type and electrolyte gallon quantity of new batteries

City of Aurora Planning Department
Atten: Nicholas Martinez
15151 E. Alameda Parkway, 2nd Floor
Aurora, Colorado 80012

RE: AT&T Site Modification
Project Site Info: COL01176 Humana FA 10093833, Project: 5G NR 1SR CBand, DoD
Site Address: 1501 South Potomac Aurora, CO

Dear City of Aurora Planning Department:

The following batteries contain 3.51 gallons per battery:
(16) 190aH batteries x 3.51 gal per battery = 56.16 gal total



PowerSafe® SBS EON Technology® Front Terminal

PowerSafe SBS Types	Nominal voltage (V)	Nominal Capacity (Ah) C10 / 1.80Vpc @ 20°C	Length (mm)	Width (mm)	Height (mm)
SBS B14	12	62	280	97	264
SBS B14F	12	62	303	97	264
SBS C11	12	92	395	105	264
SBS C11F	12	92	417	105	256
SBS 100	12	100	395	108	287
SBS 100F	12	100	395	108	287
SBS 170F	12	170	561	125	283
SBS 190F	12	190	561	125	316

Please let me know if you have any other questions.

Sincerely,

Cathi Peterson