Brett Vernon, President	Term to May 2027
Scott J. Plummer, Secretary	Term to May 2027
Jeff Cunningham, Treasurer	Term to May 2025
Christian Ardita, Assistant Secretary	Term to May 2025
Tanis Batsel Stewart, Assistant Secretary	Term to May 2025

NOTICE OF SPECIAL MEETING AND AGENDA

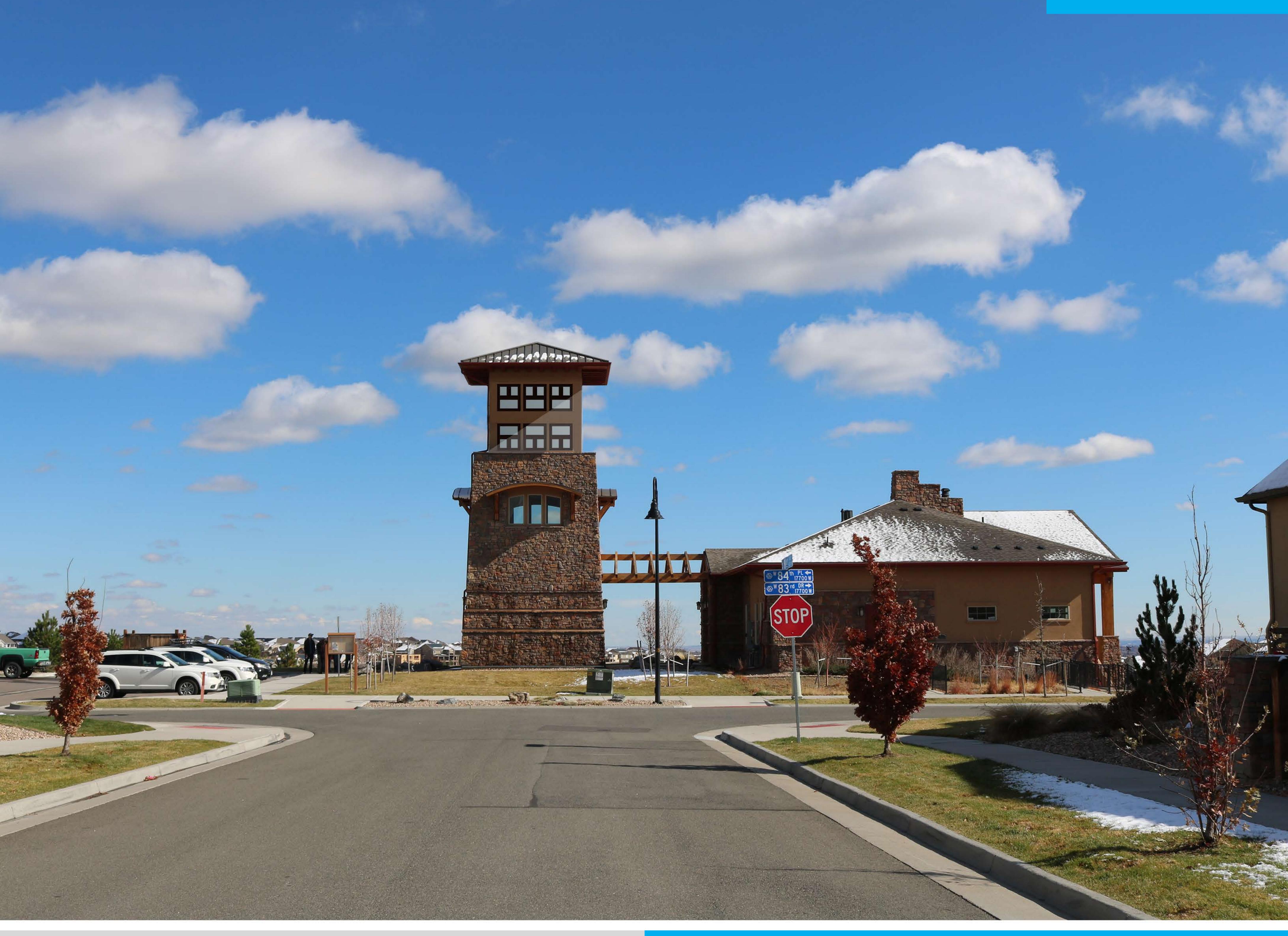
- 1. Call to Order/Declaration of Quorum
- 2. Director Conflict of Interest Disclosures
- 3. Approval of Agenda
- 4. Public Comment Members of the public may express their views to the Board on matters that affect the District on items not otherwise on the agenda. Comments will be limited to three (3) minutes per person.
- 5. Discussion Regarding Verizon Cell Tower (enclosure)
- 6. Director's Matters
- 7. Other Business
- 8. Adjourn

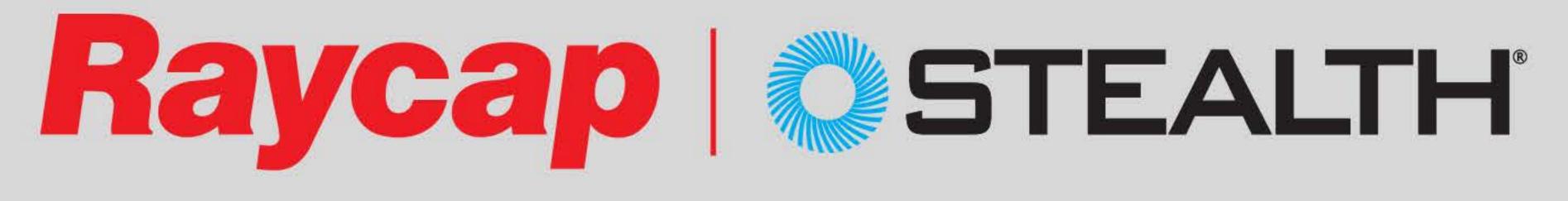
2023 Regular Meetings

January 17; February 21; March 21; April 18; May 16; June 20; July 18; August 15; September 19; October 17; November 21; and December 19 at 6:00 p.m. via teleconference.







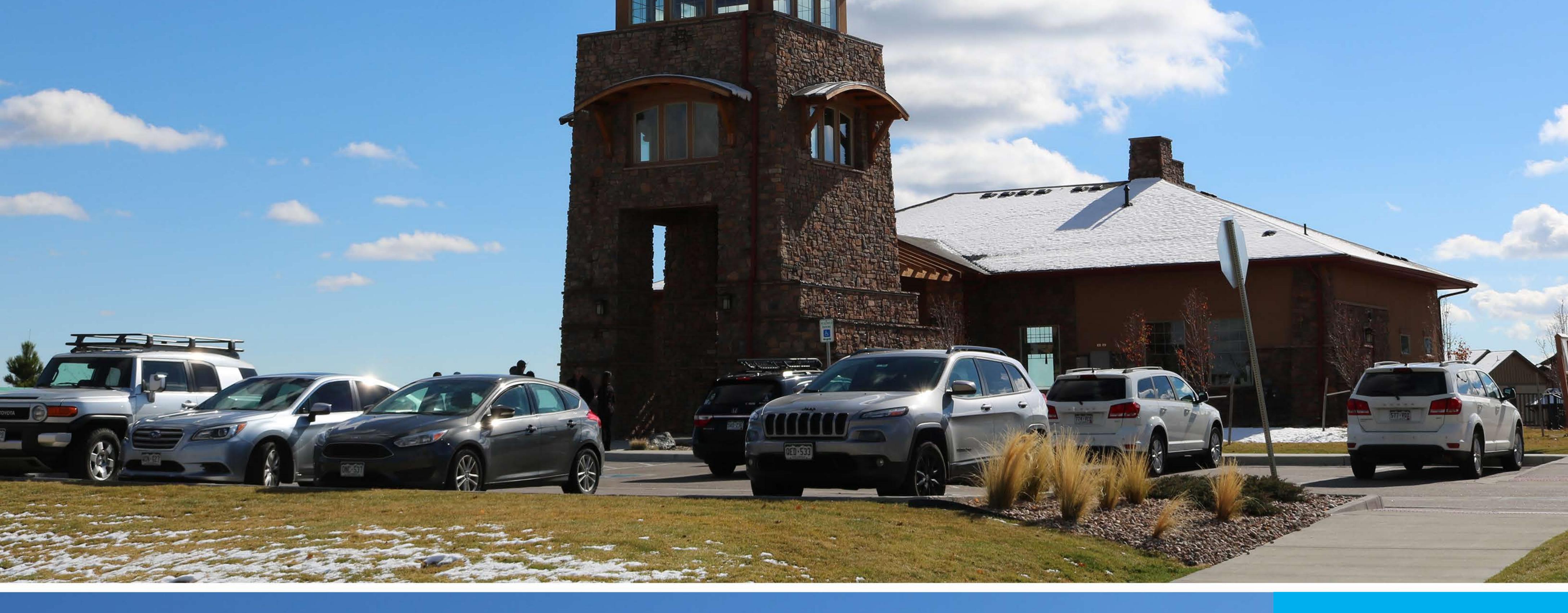


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VZ18-01521H-01 DEN Leyden

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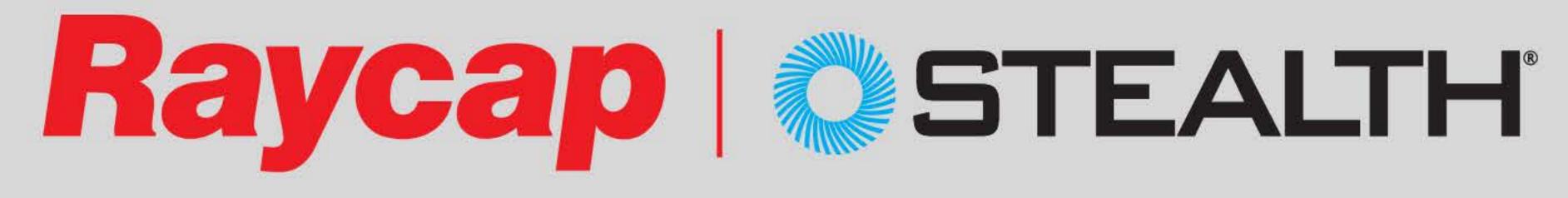


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PENETRATIONS

LEASE

verizon **DEN LEYDEN**

FIBER

ROOFTOP

17684 WEST 84TH PLACE ARVADA, CO 80007

APPRO THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT TH PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL BUILDING DEPARTMENT & MAY IMPOSE CHANGES OR MODIFIC CONSTRUCTION: REAL ESTATE: ZONING R.F.: NETWORK: PROPERTY OWNER:

SITE INFORMATION

VERIZON SITE NAME: DEN LEYDEN

SITE ADDRESS: 17684 WEST 84TH PLACE ARVADA, CO 80007

COUNTY: JEFFERSON

LATITUDE (NAD83): 39°50'58.64" N 39.849622

LONGITUDE (NAD83): 105°11'54.36" W 105.198433

AMSL: 5860'±

PROPERTY OWNER: LEYDEN ROCK METROPOLITAN DISTRICT 2154 E COMMONS AVE CENTENNIAL, CO 80122

STRUCTURE TYPE: ROOFTOP

POWER COMPANY: XCEL ENERGY (303) 573-4358 2506 W 13TH AVE **DENVER CO, 80204**

TELCO COMPANY: VERIZON WIRELESS (480) 629-5533 3131 S. VAUGHN WAY, SUITE 550 AURORA, CO 80014

SITE ACQUISITION MANAGER: COLLEEN NEBEL 4600 S. SYRACUSE STREET, SUITE 800 **DENVER, CO 80237** (303) 256-4079 NEBELC@BV.COM

CONTACT ENGINEER: NATHAN PETRY (952) 896-0774 PETRYN@BV.COM

	APPLICABLE CODES	PF	ROJECT DESCRIPTION	ZONING	INFORMATION		
#10	ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES: 2009 INTERNATIONAL BUILDING CODE OR LATEST ADOPTED EDITION 2014 NATIONAL ELECTRIC CODE OR LATEST ADOPTED EDITION TIA/EIA-222-G OR LATEST ADOPTED EDITION IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL GENERAL NOTES THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE. NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.	 INSTALL (1) CON INSTALL (2) PRO INSTALL (1) PRO INSTALL (1) PRO INSTALL (1) PRO INSTALL (2) PRO INSTALL (2) PRO INSTALL (4) PRO INSTALL (1) PRO INSTALL (8) PRO INSTALL (8) PRO INSTALL (2) PRO 	POSED CABINETS POSED METER POSED 200A AC PANEL POSED FIBER BOX POSED HYRBID CABLES POSED RF TRANSPARENT SCREEN WALLS POSED ANTENNA FRAME POSED ANTENNAS POSED RRHS POSED OVP BOXES POSED 200A SERVICE DISCONNECT	CONTRACTOR SHALL EXISTING DIMENSION JOB SITE & SHALL IN ENGINEER IN WRITIN BEFORE PROCEEDIN	CITY OF ARVADA PUD-R 2026212002 CALE DRAWINGS L VERIFY ALL PLANS, VS & CONDITIONS ON THE IMEDIATELY NOTIFY THE G OF ANY DISCREPANCIES IG WITH THE WORK.	SHEET NO: T-1 GN-1 GN-2 GN-3 GN-4 C-1 C-1.1 C-2 C-3 C-3.1 C-3.2 C-4 C-4.1 C-5	TITLE SH LEGEND GENERA GENERA GENERA EXISTINO PROPOS WEST SI NORTH S EAST SI TOWER I ANTENN EQUIPMI
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	n Ave f	and post and to be	17685 W 83rd D Arvada, CO 8000		cer Ave	11"x17"	' PLOT W
	W BOTH Ave W BOTH Ave W BOTH Ave W BOTH Ave	I Leyden W 82nd Ave		CALCELOR N. 1900 Arr	Arvada Markan Version Markan Mar	NATHAN PETF PE # 49852 BLACK & VEA	RY
	FROM 3131 S. VAUGHN WAY: TAKE I-225 N, I-70 W, I-270 W AND US-36 W TO S/SHERIDAN BOULEVARD EXIT TOWARD 92ND AVENUE W. TAKE W 88TH A'	CO-95 S/SHERIDAN BLVD I		DULEVARD EXIT FROM	US-36 W. TAKE THE CO-95		



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3 WORKING DAYS UTILITY NOTIFICATION PRIOR TO CONSTRUCTION

1-1

PENETRATIONS	RRH/BBU	NTENNAS	FIBER		POWER/GROUNDING	HYBRID & COAX CABLES	LEASE
EXOTHERMIC CONNECTION		AB	ANCHOR BOLT	IN	INCH		
	- -	ABV	ABOVE	INT	INTERIOR		
		AC	ALTERNATING CURRENT	LB(S)	POUND(S)		
		ADDL AFF	ADDITIONAL ABOVE FINISHED FLOOR	LF MAS	LINEAR FEET MASONRY		
TEST CHEMICAL ELECTROLYTIC GROUNDING SYSTE	EM 👽	AFG	ABOVE FINISHED GRADE	МАХ	MAXIMUM		
EXOTHERMIC WITH INSPECTION SLEEVE		AIC	AMPERAGE INTERRUPTION CAPACITY ALUMINUM	MB MECH	MACHINE BOLT MECHANICAL		
GROUNDING BAR		ALUM ALT		MECH	MANUFACTURER		
GROUND ROD		ANT	ANTENNA	MGB	MASTER GROUND BAR		
TEST GROUND ROD WITH INSPECTION SLEEVE	I	APPROX ARCH	APPROXIMATE ARCHITECTURAL	MIN MISC	MINIMUM MISCELLANEOUS		
SINGLE POLE SWITCH	\$	ATS	AUTOMATIC TRANSFER SWITCH	MISC	MISCELLANEOUS		
		AWG	AMERICAN WIRE GAUGE	MTS	MANUAL TRANSFER SWITCH		
DUPLEX RECEPTACLE	\bigcirc	BATT BLDG	BATTERY BUILDING	MW (N)	MICROWAVE NEW		
DUPLEX GFCI RECEPTACLE	(FC)	BLBC	BLOCK	NEC	NATIONAL ELECTRIC CODE		
	<u> </u>	BLKG	BLOCKING	NO.(#)	NUMBER		
FLUORESCENT LIGHTING FIXTURE (2) TWO LAMPS 48-T8	[] F	BM BTC	BEAM BARE TINNED COPPER CONDUCTOR	NTS OC	NOT TO SCALE ON CENTER		
(2) 100 EAU 0 40-10	Ĺj	BOF	BOTTOM OF FOOTING	OPNG	OPENING		
SMOKE DETECTION (DC)	SD	CAB	CABINET	(P)	PROPOSED		
		CANT CEC	CANTILEVERED CALIFORNIA ELECTRIC CODE	P/C PCS	PRECAST CONCRETE PERSONAL COMMUNICATION SERVICES		
EMERGENCY LIGHTING (DC)	<u>A</u> R	CHG	CHARGING	PCU	PRIMARY CONTROL UNIT		
SECURITY LIGHT W/PHOTOCELL LITHONIA ALXW LED-1-25A400/51K-SR4-120-PE-DDBTXD		CLG	CEILING	PRC	PRIMARY RADIO CABINET		
		CLR COL	CLEAR COLUMN	PP PSF	POLARIZING PRESERVING POUNDS PER SQUARE FOOT		
	A	COMM	COMMON	PSI	POUNDS PER SQUARE INCH		
WORKPOINT	•	CONC	CONCRETE	РТ	PRESSURE TREATED		
SECTION REFERENCE	$\left(\begin{array}{c} xx \\ x-x \end{array}\right)$	CONSTR DBL	CONSTRUCTION DOUBLE	PWR QTY	POWER CABINET QUANTITY		
	\sim	DC	DIRECT CURRENT	RAD	RADIUS		
DETAIL REFERENCE	$\begin{pmatrix} xx \\ x-x \end{pmatrix}$	DEPT	DEPARTMENT	RECT	RECTIFIER		
	\bigcirc	DF DIA	DOUGLAS FIR DIAMETER	REF	REFERENCE REINFORCEMENT		
CHAIN-LINK FENCE	x x x x	DIAG	DIAGONAL	REQ'D	REQUIRED		
WOOD/WROUGHT IRON FENCE		DIM	DIMENSION	RET	REMOTE ELECTRIC TILT		
WALL STRUCTURE		DWG DWL	DRAWING DOWEL	RMC RRH	RIGID METALLIC CONDUIT REMOTE RADIO HEAD		
LEASE AREA		(E)	EXISTING	RRU	REMOTE RADIO UNIT		
PROPERTY LINE (PL)		EA	EACH	RWY	RACEWAY		
SETBACKS		EC EL	ELECTRICAL CONDUCTOR ELEVATION	SCH SHT	SCHEDULE SHEET		
ICE BRIDGE		ELEC	ELECTRICAL	SIAD	SMART INTEGRATED DEVICE		
CABLE TRAY	+ + + + + + + + + + + + + + + + + + + +	EMT	ELECTRICAL METALLIC TUBING	SIM	SIMILAR		
WATER LINE	L + + + + + + + + + + + + + + + + + +	ENG EQ	ENGINEER EQUAL	SPEC SQ	SPECIFICATION SQUARE		
POWER		EXP	EXPANSION	SS	STAINLESS STEEL		
GROUNDING		EXT	EXTERIOR	STD	STANDARD		
FIBER		FAB FF	FABRICATION FINISH FLOOR	STL STRUCT	STEEL STRUCTURAL		
		FG	FINISH GRADE	ТЕМР	TEMPORARY		
HYBRID/COAX CABLES		FIF		тнк	THICKNESS		
EASEMENT		FIN FLR	FINISH(ED) FLOOR	TMA TN	TOWER MOUNTED AMPLIFIER TOE NAIL		
PENETRATIONS		FDN	FOUNDATION	ТОА	TOP OF ANTENNA		
		FOC FOM	FACE OF CONCRETE FACE OF MASONRY	TOC			
		FOM	FACE OF MASONRY	TOF TOP	TOP OF FOUNDATION TOP OF PLATE (PARAPET)		
		FOW	FACE OF WALL	TOS	TOP OF STEEL		
		FS	FINISH SURFACE	TOW	TOP OF WALL		
		FT FTG	FOOT FOOTING	TVSS TYP	TRANSIENT VOLTAGE SUPPRESSION SYSTEM TYPICAL		
		GA	GAUGE	UG	UNDERGROUND		
		GEN		UL			
		GFCI GLB	GROUND FAULT CIRCUIT INTERRUPTE GLUE LAMINATED BEAM	R UNO UMTS	UNLESS NOTED OTHERWISE UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM		
		GLV	GALVANIZED	UPS	UNITERRUPTIBLE POWER SYSTEM		
		GPS	GLOBAL POSITIONING SYSTEM GROUND				
		GND GSM	GLOBAL SYSTEM FOR MOBILE	VIF W	VERIFIED IN FIELD WIDE		
		HDR	HEADER	W /	WITH		
		HGR HVAC	HANGER HEAT/VENTILATION/AIR CONDITIONING	WD S W P			
		HT	HEIGHT	G W.P. WP	WORK POINT	1	

HT

IGR

HEIGHT

INTERIOR GROUND RING

LEGEND & ABBREVIATIONS

WP

wт

WEATHERPROOF

WEIGHT

ASE AREA





4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237

197068.0016
BTS
NCP

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Α	09/10/19	ISSUED FOR 90% CDs
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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



SHEET TITLE LEGEND AND ABBREVIATIONS

SHEET NUMBER

GN-1

 A. D. T. D.	PENETRATIONS RRH/BBU AN	ENNAS FIBER POWER/GROUNDING	HYBRID & COAX CABLES
 I. Summary and a standard standard	GENERAL CONSTRUCTION NOTES:	31. ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS	
 Handback and the second second		SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.	65. TYPES AND SIZES OF THE ANTENNA CABLE ARE BASED ON ESTIMATED CONTRACTOR SHALL VERIFY ACTUAL LENGTH BASED ON CONSTRUCT MANAGER IF ACTUAL LENGTHS EXCEED ESTIMATED LENGTHS.
 A. Handbard and A. Handbard and Handbard and Handbard and Handbard and Handbard and Handbard and	GENERAL CONTRACTOR - OVERLAND CONTRACTING INC. (B&V) CONTRACTOR: (CONSTRUCTION)	COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.	66. CONTRACTOR SHALL VERIFY THE DOWN-TILT OF EACH ANTENNA WITH
 A. Source of the standard standard		34. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS	67. CONTRACTOR SHALL CONFIRM COAX COLOR CODING PRIOR TO CONS LABELING STANDARD".
 H. S. S.		35. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY	 ALL JUMPERS TO THE ANTENNAS FROM THE MAIN TRANSMISSION LINE EXCEED 6'-0".
<list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item><list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item></list-item>	HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT		69. ALL COAXIAL CABLE SHALL BE SECURED TO THE DESIGNED SUPPORT DISTANCES NOT TO EXCEED 4'-0" OC.
 Harrison C. B. Schwart, B. Sc	4. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES,		70. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S RECOMMENDAT
 A. B. S. S.	WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING	IMMEDIATELY.	71. CONTRACTOR SHALL WEATHERPROOF ALL ANTENNA CONNECTORS W
 A. Mathematical and a second an		39. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE	
 A. How show the first sector show the structure show the	6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND		72. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ANTENNA, TMAS, DI AND MODELS PRIOR TO INSTALLATION.
<text></text>	7. PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS		73. ALL CONNECTIONS FOR HANGERS, SUPPORTS, BRACING, ETC. SHALL RECOMMENDATIONS
 B. Contraction and any model where a standard where a standar	EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR		74. CONTRACTOR SHALL REFERENCE THE TOWER STRUCTURAL ANALYSI
 Human Construction from the last prior that is a construct on that is a construct on the last prior that is a construct	SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH		CABLE DISTRIBUTION/ROUTING. 75. ALL OUTDOOR RF CONNECTORS/CONNECTIONS SHALL BE WEATHERP
 A. B. C. CONTROLLES MARKEN LESS AND AND MARKEN LESS A	WITH WORK.		BUTYL TAPE AFTER INSTALLATION AND FINAL CONNECTIONS ARE MAD ONE-HALF TAPE WIDTH OVERLAP ON EACH TURN AND EACH LAYER SH WEATHERPRODEING SHALL BE SMOOTH WITHOUT BUICKI ING. BUTYL
 In control in the second is in the second is	REPORT ANY PERCEIVED DEFICIENCIES TO INSTALLATION OF ANY NEW EQUIPMENT.	44. ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153	76. IF REQUIRED TO PAINT ANTENNAS AND/OR COAX:
 A. L. Contractions bal. L. M. C. Marter L. And C. Marter L. And C. Marter L. And C. Marter L. M. Contractions and C. M. Contractions and Contractions and Contractions and Contraction and Contra	CONTRACTOR'S RESPONSIBILITY TO PROVIDE NECESSARY INTERMEDIATE OR TEMPORARY SUPPORT DURING		B. PAINT COLOR MUST BE APPROVED BY BUILDING OWNER/LANDLORI
 1.1. Proceedings of the second process of the second proces of the second proces of the second process of the second pr		46. ALL ANTENNA MOUNTS SHALL BE INSTALLED WITH LOCK NUTS, DOUBLE NUTS AND SHALL BE TORQUED TO MANUFACTURER'S RECOMMENDATIONS.	D. DO NOT PAINT OVER COLOR CODING OR ON EQUIPMENT MODEL NU
 A. LUNCE TORT OF DAMAGE SEAL ALL CARE ALL SPECER TORT OF ALL SPECER ALL SPECER TORT OF ALL SPECER ALL SPECER	11. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL		77. ALL CABLES SHALL BE GROUNDED WITH COAXIAL CABLE GROUND KI RECOMMENDATIONS.
 Here To STRUCTOR PLANE DEVICES AND PLANE TO BE CONTRACT TO THE UNIT OF THE DEVICES AND PLANE TO DEVICE AND PLANE TO D	12. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS		B. GROUNDING AT MID LEVEL, TOWERS WHICH ARE OVER 200'-0", ADD
 B. ALL RECORD FOR ALL RECORD FOR ALL RECARD ALL RECORD FOR ALL RECARD ALL REPORT FOR THE RECARD ALL RECARD ALL REPORT FOR THE RECORD FOR THE RECOR	REQUIREMENTS AND THE LOCAL JURISDICTION.	49. PRIOR TO SETTING ANTENNA AZIMUTHS AND DOWNTILTS, ANTENNA CONTRACTOR SHALL CHECK THE ANTENNA MOUNT	D. GROUNDING OUTSIDE THE EQUIPMENT SHELTER AT ENTRY PORT.
 B. JURGER HOUSE INCLUDE THE ADDRESS INCLUE TO ADDRESS		ORIENTED WITHIN +/- 5% AS DEFINED BY THE RFDS. ANTENNA DOWNTILTS SHALL BE WITHIN +/- 0.5% AS DEFINED BY THE	
 DOTING TO BALL SERVICE STRUCT BULL SERVICE AND SERVICE ALL DESIGN AND ALL DESIGN AN		50. JUMPERS FROM THE TMAS MUST TERMINATE TO OPPOSITE POLARIZATION'S IN EACH SECTOR.	DOWNLEADS A MINIMUM DISTANCE OF 4'-0" BELOW GROUND BAR. TER
 Mont Personalizio Contractiones and Subtractiones And Subtractines And Subtractiones And Subtractiones And Subtractiones And			79. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ANTE
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 Minimum Contractions and a non-contractions and a mattern and and a mattern and and a mattern and and a mattern and a m			
11. In LCONTRACTOR SHALL PROCESS TORNETS, SURPENDENTS, CURRENTS, SURBAC, MURDA AND STRUCTURES, AND CONTRACTOR SHALLS CONTRACT			81. RADIO FREQUENCY SAFETY MEASURES: DUE TO THE SIDE EXCEEDING THRESHOLD, THE FOLLOWING RADIO FREQUENCY SAFETY MEASURES
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 ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RECOCATED AS DIRECTED BY THE RESIN RESA ROUND OR NEED SERVICE DI STURIED E VIEWE EXCAVATION. BE CONTRACTOR SHALL BE RECOVEDE DEVELOSATED AS DIRECTED BY THE RESINCE AS DIRECTED BY THE RESERVENCE DEVELOSATED AS DIRECTED BY THE OWNER, AND DISUBLECT TO THE OWNER ARADIO DISUBLECT TO THE OWNER ARADIO SUBJECT TO THE OWNER A	2-A:10-B:C AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING		
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 LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION. ALL EXISTING INACTIVE SEVER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFEERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWITH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, ASD DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE MORY, ASD DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE WORK AND NOT COLAU UTILITIES. THE AREAS OF THE OWNER ANDOR LOCAL UTILITIES. THE AREAS OF THE OWNER ANDOR LOCAL UTILITIES. THE AREAS OF THE OWNER ANDOR LOCAL UTILITIES. THE AREAS OF THE OWNER ANDOR DISLOPE, AND STALLED TO REVENT EROSION. THE AREAS OF THE OWNER SPROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OT DRIVEWAY, SHALL BE RAGUED TO A UNIFORM SLOPE, AND STRUCTION, EROSION CONTROL MEASURES, IR EQUIRED DUSTING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL UTILITIES. THE TYPE TO: EROSION AND SEDMENT CONTROL. THE SUBGRADE SHALL BE INSTRUCTION, EROZEN GROUNDING, FROZEN MATERIALS, SNOW OR ICE SHALL ARE LARYS, OR CABLE TRAY WHICH ARE SERVING UTILIZATION EQUIPMENT OR DEVICES A DISTANCE (6) SIX FEET. AND SECURED WITHOUT CONTINUOUS SUPPORTING. NFPA 70 (NEC) ARTICLES 36 AND 392 RULES SHALL BE BACKEDED WITHOUT CONTINUOUS SUPPORTING. NFPA 70 (NEC) ARTICLES 300 ROUNDIS, CHANNEL CABLE STALL BE BACKEDED WITHOUT CONTINUOUS SUPPORTING. NFPA 70 (NEC) ARTICLES 300 ROUNDIS, CHANNEL CABLE TRAYS, OR CABLE TRAY SUBCRICE (6) SIX FEET. AND STRUCTION EROXES AND OFTECENT STANDARD PROCTOR DENSITY IN OPEN SUPPORTING. NFPA 70 (NEC) ARTICLES 300 ROUNDI	EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR		
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 27. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL. 28. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUNDING. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT. 29. THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAS HALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION. 30. ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE 		APPLY.	
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PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION. 30. ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE		SIX FEET SHALL NOT BE EXCEEDED WITHOUT CONTINUOUS SUPPORTING. NFPA 70 (NEC) ARTICLES 336 AND 392 RULES SHALL APPLY.	
	PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL	RULES SHALL APPLY.	

FIBER

POWER/GROUNDING

HYBRID & COAX CABLES

RRH/BBU

PENETRATIONS

LEASE AREA

EASEMENT

MATED LENGTHS. PRIOR TO ORDERING CABLE, TRUCTION LAYOUT AND NOTIFY THE PROJECT

A WITH A DIGITAL LEVEL.

CONSTRUCTION. REFER TO "ANTENNA SYSTEM

IN LINE SHALL BE 1/2" DIA. LDF AND SHALL NOT

PPORT STRUCTURE, IN AN APPROVED MANNER, AT

ENDATIONS REGARDING BOTH THE INSTALLATION AND S, AND ALL OTHER EQUIPMENT.

ORS WITH SELF AMALGAMATING TAPE. ANCE WITH VERIZON STANDARDS.

IAS, DIPLEXERS, AND COAX CONFIGURATION, MAKE

HALL BE INSTALLED PER TOWER MANUFACTURER'S

ALYSIS/DESIGN DRAWINGS FOR DIRECTIONS ON

THERPROOFED, EXCEPT THE RET CONNECTORS, USING RE MADE. BUTYL TAPE SHALL HAVE A MINIMUM OF (FER SHALL BE WRAPPED THREE TIMES. UTYL BLEEDING IS NOT ALLOWED.

DLORD. QUIRED. EL NUMBERS.

IND KITS. FOLLOW THE MANUFACTURER'S

", ADDITIONAL CABLE GROUNDING REQUIRED. NTAL. ORT. PORT.

TED TO THE EXISTING ADJACENT GROUND BAR R. TERMINATIONS MAY BE EXOTHERMIC OR

ANTENNA AND THE COAX CONFIGURATION IS THE

HALL BE INSTALLED PER TOWER MANUFACTURER'S

EDING FEDERAL COMMUNICATIONS COMMISSION SURES MUST BE INCLUDED ON PLANS SUBMITTED FOR

RS (PAINT) MUST BE NOTED. SHALL BE NOTED. THE ROOF HAS RESTRICTED ACCESS.



3131 S. VAUGHN WAY, SUITE 550, AURORA, CO 80014



4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237

PROJECT NO:	197068.0016
DRAWN BY:	BTS
CHECKED BY:	NCP

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Α	09/10/19	ISSUED FOR 90% CDs
REV	DATE	DESCRIPTION
-		



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DEN LEYDEN 17684 WEST 84TH PLACE ARVADA, CO 80007 NEW SITE BUILD

SHEET TITLE

GENERAL CONSTRUCTION NOTES

SHEET NUMBER

PENETRATIONS RRH/BBU ANTEN	INAS FIBER POWER/GROUNDING	HYBRID & COAX CABLES
GENERAL SITE WORK & DRAINAGE NOTES:	E. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATIONS OF FEATURES INDICATED ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER ITEM NOT SHOWN THAT MIGHT INTERFERE WITH THE PROPOSED	D. THE AGGREGATE BASE AND SURFACE COURSES SHALL E INCH (COMPACTED) THICKNESS. AGGREGATE TO BE PLAC END-DUMPED ON THE FABRIC FROM THE FREE END OF TH
CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUBGRADE PREPARATION AND FINISH GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS.	CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.	AGGREGATE. THE FIRST LIFT SHALL BE BLADED DOWN T' COMPACTION. AT NO TIME SHALL EQUIPMENT, EITHER TR THE AGGREGATE, BE PERMITTED ON THE ROADWAY WIT
 1.1 REFERENCES: A. DOT (STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION-CURRENT EDITION). B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS). 	EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER. 3.2 BACKFILL: A. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING EXPIRATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST-IN-PLACE CONCRETE, BACKFILL THE EXCAVATION WITH	THE FABRIC. E. THE AGGREGATE SHALL BE IMMEDIATELY COMPACTED T MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED F ROLLER, OR WITH A PNEUMATIC-TIRED ROLLER, OR WITH OF THE ABOVE. THE TOP LAYER SHALL BE GIVEN A FINAL ROLLER.
 AND PHINES GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS. IN REFERENCES: O TESTATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION-CURRENT EDITOR. ASTEL (ARERICAN SOCIETY FOR TESTING AND MATERIALS). O SHA (OSCUPATION SAFETY AND HEALTH ADMINISTRATION). IMSPECTION AND TESTING: IMSPECTION AND TESTING: IMSPECTION AND TESTING: AFILE DETAIN OF EASTEMPT AND HEALTH ADMINISTRATION). AFILE DETMON OF CAMPACTED AND RELEAS THIS WORK TO BE CONFINATED BY THE SUBCONTRACTOR. ALL DETMON SMALL BE ADDRIVED TESTING LAB. THIS WORK TO BE CONFINATED BY THE SUBCONTRACTOR. ALL DON'S MALL BE ADDRIVET DA NOR RELEAD DI THE GORDEL ADORTACTOR WID SMALL CARP. TO THE ADMINISTRATION. ALL DON'S MALL BE ADDRIVET DA NOR RELEAD DI THE GORDEL ADORTACTOR WID MOUST ALL CARP. THE DAVINGS. IT THE SUBCONTRACTOR'S RESPONDABLE TO RESPONDE THE YORK AS SPECIFIED AND/OR CALLED FOR ON THE DOWN'S WITH SPECIFIC CONCERN TO PROVE PHYFICIDANACC OF THE WORK AS SPECIFIED ADDRIVED TO RESPONDE TO SUBCONTRACT. SITE MANTENANCE AND PROTECTION: PROVIDE ALL MECCESSARY YOB SITE MANTENANCE FROM COMMENCEMENT OF WORK UNTL'S COMPLETION OF THE SUBCONTRACT. AVCID DAMAGE TO THE STILE AND TO EXISTING FACLITIES STRUCTURES, TRUES, AND SHRUBS DESIGNATED TO REMAIN. RENO DAMAGED TO THE STILE AND TO REMAIN THEY THE WORK. KEEPS STEE FREE OF ALL PONDING WATER. PROVIDE ENGSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT AND EPA REQUIREMENTS. AVCID DAMAGED TO THE STILE AND TO CONTROL MEASURES IN ACCORDANCE WITH STATE DOT AND SHALLAR DEVOCES MUESCESARY TO PROTECT AGAINST THEFT FROM PROPERY YUNNIS THE ENTIRE PERIOD OF CONSTRUCTION REMOVE ALL BUDY DAMAGED BY THE WORK. FROMDE ENGSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT AND EPA REQUIREMENTS. PROVIDE ENGSION CONTOL	ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS. F. SEPARATE AND STOCK PILE ALL EXCAVATED MATERIALS SUITABLE FOR BACKFILL. ALL EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER. 3.2 BACKFILL: A. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING EXPIRATION	COMPACTION. AT NO TIME SHALL EQUIPMENT, EITHER TR THE AGGREGATE, BE PERMITTED ON THE ROADWAY WITH THE FABRIC. E. THE AGGREGATE SHALL BE IMMEDIATELY COMPACTED T MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED F ROLLER, OR WITH A PNEUMATIC-TIRED ROLLER, OR WITH OF THE ABOVE. THE TOP LAYER SHALL BE GIVEN A FINAL
WILL BE DRAINED AT ANY TIME. B. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING, ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK.		
 C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE WORK. C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE. REMOVE TREES, BRUSH, STUMPS, RUBBISH AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA TO BE CLEARED. 1. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STUMPS, AND OTHER DEBRIS, BRUSH, AND REFUSE EMBEDDED IN OR PROTRUDING THROUGH THE 		
GROUND SURFACE, RAKE, DISK OR PLOW THE AREA TO A DEPTH OF NO LESS THAN 6 INCHES, AND REMOVE TO A DEPTH OF 12 INCHES ALL ROOTS AND OTHER DEBRIS THEREBY EXPOSED. 2. REMOVE TOPSOIL MATERIAL COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION		
OF TOPSOIL. AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER UNDESIRABLE MATERIALS. 3. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM CLEARING, GRUBBING AND DEMOLITION WORK COMPLETELY WITH SUITABLE FILL.		
D. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL ALL DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS. BURNING WILL NOT BE PERMITTED.		

AREA

EASEMENT

ALL BE CONSTRUCTED IN LAYERS NOT MORE THAN 4 PLACED ON GEOTEXTILE FABRIC SHALL BE 9F THE FABRIC OR OVER PREVIOUSLY PLACED WN TO A THICKNESS OF 8 INCHES PRIOR TO R TRANSPORTING THE AGGREGATE OR GRADING WITH LESS THAN 4 INCHES OF MATERIAL COVERING

TED TO NOT LESS THAN 95 PERCENT OF THE TED PROCTOR TEST, ASTM D 1557 WITH A TAMPING WITH A VIBRATORY MACHINE OR ANY COMBINATION TINAL ROLLING WITH A THREE-WHEEL OR TANDEM

NAGE AWAY FROM STRUCTURES AND SMOOTH, HIN THE LIMITS OF CONSTRUCTION. GRADING SHALL PHY AND STRUCTURES.

ROM THE EXCAVATION WORK IN THE REPLACEMENT OF REMOVED UNSUITABLE

F 4 INCHES OF 1/2" - 3/4" CRUSHED STONE ON TOP

AS USED DURING THE COURSE OF THIS WORK TO

PORTATION FLEXIBLE PAVEMENT DESIGN GUIDE ROJECTS (DIB 79-03)



3131 S. VAUGHN WAY, SUITE 550, AURORA, CO 80014



4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237

PROJECT NO:	197068.0016
DRAWN BY:	BTS
CHECKED BY:	NCP

Α	09/10/19	ISSUED FOR 90% CDs
REV	DATE	DESCRIPTION



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DEN LEYDEN 17684 WEST 84TH PLACE ARVADA, CO 80007 NEW SITE BUILD

SHEET TITLE

GENERAL SITE WORK AND DRAINAGE NOTES

> SHEET NUMBER GN-3

PENETRATIONS

GENERAL ELECTRICAL NOTES:

PART 1 - GENERA

- 1.1 GENERAL CONDITIONS
- A. CONTRACTOR SHALL INSPECT THE EXISTING SITE CONDITIONS PRIOR TO SUBMITTING BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTORS FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS

RRH/BBU

- B. THE CONTRACTOR SHALL OBTAIN PERMITS, LICENSES, MAKE ALL DEPOSITS, AND PAY ALL FEES REQUIRED FOR THE CONSTRUCTION PERFORMANCE FOR THE WORK UNDER THIS SECTION.
- C. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL SYSTEMS AND COMPONENTS COVERED UNDER THIS SECTION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS. DRAWING SHALL NOT BE SCALED TO
- 1.2 LAWS. REGULATIONS. ORDINANCES. STATUTES AND CODES
- A. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, AND ALL APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES. CONDUIT BENDS SHALL BE THE RADIUS BEND FOR THE TRADE SIZE OF CONDUIT IN COMPLIANCE WITH THE LATEST EDITIONS OF NEC.
- 1.3 REFERENCES
- A. THE PUBLICATIONS LISTED BELOW ARE PART OF THIS SPECIFICATION. EACH PUBLICATION SHALL BE THE LATEST REVISION AND ADDENDUM IN EFFECT ON THE DATE. THIS SPECIFICATION IS ISSUED FOR CONSTRUCTION UNLESS OTHERWISE NOTED. EXCEPT AS MODIFIED BY THE REQUIREMENT SPECIFIED HEREIN OR THE DETAILS OF THE DRAWINGS, WORK INCLUDED IN THIS SPECIFICATION SHALL CONFORM TO THE APPLICABLE PROVISION OF THESE PUBLICATIONS.
- 1. ANSI/IEEE (AMERICAN NATIONAL STANDARDS INSTITUTE) 2. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS) 3. ICE (INSULATED CABLE ENGINEERS ASSOCIATION)
- 1. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
- NEMA (VATIONAL FILE PROTECTION ASSOCIATION)
 OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION)
 OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION)
 UL (UNDERWRITERS LABORATORIES.INC.)
 VERIZON GROUNDING AND BONDING STANDARDS TP-76416

- 1.4 SCOPE OF WORK
 - A. WORK UNDER THIS SECTION SHALL CONSIST OF FURNISHING ALL LABOR, MATERIAL, AND ASSOCIATED SERVICES REQUIRED TO COMPLETE REQUIRED CONSTRUCTION AND BE OPERATIONAL.
- B. ALL ELECTRICAL EQUIPMENT UNDER THIS CONTRACT SHALL BE PROPERLY TESTED, ADJUSTED, AND ALIGNED BY THE CONTRACTOR.
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATING, DRAINING, TRENCHES, BACKFILLING, AND REMOVAL OF EXCESS DIRT.
- D. THE CONTRACTOR SHALL FURNISH TO THE OWNER WITH CERTIFICATES OF A FINAL INSPECTION AND APPROVAL FROM THE INSPECTION AUTHORITIES HAVING JURISDICTION.
- E. THE CONTRACTOR SHALL PREPARE A COMPLETE SET OF AS-BUILT DRAWINGS, DOCUMENT ALL WIRING EQUIPMENT CONDITIONS, AND CHANGES WHILE COMPLETING THIS CONTRACT. THE AS-BUILT DRAWINGS SHALL BE SUBMITTED AT COMPLETION OF THE PROJECT.

PART 2 - PRODUCTS

- 2.1 GENERAL
- A. ALL MATERIALS AND EQUIPMENT SHALL BE UL LISTED, NEW, AND FREE FROM DEFECTS.
- B. ALL ITEMS OF MATERIALS AND EQUIPMENT SHALL BE ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION AS SUITABLE FOR THE USE INTENDED.
- C. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
- D. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 10,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PER THE GOVERNING JURISDICTION.
- 2.2 MATERIALS AND EQUIPMENT
- A. CONDUIT
- RIGID METAL CONDUIT (RMC) SHALL BE HOT-DIPPED GALVANIZED INSIDE AND OUTSIDE INCLUDING ENDS AND THREADS AND ENAMELED OR LACQUERED INSIDE IN ADDITION TO GALVANIZING.
- 2. LIQUIDTIGHT FLEXIBLE METAL CONDUIT SHALL BE UL LISTED
- 3. CONDUIT CLAMPS, STRAPS AND SUPPORTS SHALL BE STEEL OR MALLEABLE IRON. ALL FITTINGS SHALL BE COMPRESSION AND CONCRETE TIGHT TYPE. GROUNDING BUSHINGS WITH INSULATED THROATS SHALL BE INSTALLED ON ALL CONDUIT TERMINATIONS.
- 4. NONMETALLIC CONDUIT AND FITTINGS SHALL BE SCHEDULE 40 PVC. INSTALL USING SOLVENT-CEMENT-TYPE JOINTS AS RECOMMENDED BY THE MANUFACTURER.
- B. CONDUCTORS AND CABLE:
- CONDUCTORS AND CABLE SHALL BE FLAME-RETARDANT, MOISTURE AND HEAT RESISTANT THERMOPLASTIC, SINGLE CONDUCTOR, COPPER, TYPE THHN/THWN-2, 600 VOLT, SIZE AS INDICATED, #12 AWS SHALL BE THE MINIMUM SIZE CONDUCTOR USED.
- 2. #10 AWG AND SMALLER CONDUCTOR SHALL BE SOLID OR STRANDED AND #8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED.
- 3. SOLDERLESS, COMPRESSION-TYPE CONNECTORS SHALL BE USED FOR TERMINATION OF ALL STRANDED CONDUCTORS.
- 4. STRAIN-RELIEF SUPPORTS GRIPS SHALL BE HUBBELL KELLEMS OR APPROVED EQUAL. CABLES SHALL BE SUPPORTED IN ACCORDANCE WITH THE NEC AND CABLE MANUFACTURER'S RECOMMENDATIONS
- 5. ALL CONDUCTORS SHALL BE TAGGED AT BOTH ENDS OF THE CONDUCTOR, AT ALL PULL BOXES, J-BOXES, EQUIPMENT AND CABINETS AND SHALL BE IDENTIFIED WITH APPROVED PLASTIC TAGS (ACTION CRAFT, BRADY, OR APPROVED EQUAL).
- C. DISCONNECT SWITCHES
 - DISCONNECT SWITCHES SHALL BE HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, QUICK-BREAK, EXTERNALLY OPERABLE, HANDLE LOCKABLE AND INTERLOCK WITH COVER IN CLOSED POSITION, RATING AS INDICATED, UL LABELED FURNISHED IN NEMA 3R ENCLOSURE, SQUARE-D OR ENGINEERED APPROVED EQUAL.

D. CHEMICAL ELECTROLYTIC GROUNDING SYSTEM

FIBER

INSTALL CHEMICAL GROUNDING AS REQUIRED. THE SYSTEM SHALL BE ELECTROLYTIC MAINTENANCE FREE ELECTRODE CONSISTING OF RODS WITH A MINIMUM #2 AWG CU EXOTHERMALLY WELDED PIGTAIL, PROTECTIVE BOXES, AND BACKFILL MATERIAL. MANUFACTURER SHALL BE LYNCOLE XIT GROUNDING ROD TYPES K2-(?)CS (?) LENGTH AS REQUIRED

POWER/GROUNDING

- 2. GROUND ACCESS BOX SHALL BE A POLYPLASTIC BOX FOR NON-TRAFFIC APPLICATIONS, INCLUDING BOLT DOWN FLUSH COVER WITH "BREATHER" HOLES, XIT MODEL #XB-22, ALL DISCONNECT SWITCHES AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMICOID NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS ID NUMBERING, AND THE ELECTRICAL POWER SOURCE.
- 3. BACKFILL MATERIAL SHALL BE LYNCONITE AND LYNCOLE GROUNDING GRAVEL.
- E SYSTEM GROUNDING

ANTENNAS

- 1. ALL GROUNDING COMPONENTS SHALL BE TINNED AND GROUNDING CONDUCTOR SHALL BE #2 AWG BARE, SOLID, TINNED, COPPER. ABOVE GRADE GROUNDING CONDUCTORS SHALL BE INSULATED WHERE NOTED.
- 2. GROUNDING BUSES SHALL BE BARE, TINNED, ANNEALED COPPER BARS OF RECTANGULAR CROSS SECTION. STANDARD BUS BARS MGB, SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THEY SHALL NOT BE FABRICATED OR MODIFIED IN THE FIELD. ALL GROUNDING BUSES SHALL BE IDENTIFIED WITH MINIMUM 3/4" LETTERS BY WAY OF STENCILING OR DESIGNATION PLATE
- 3. CONNECTORS SHALL BE HIGH-CONDUCTIVITY, HEAVY DUTY, LISTED AND LABELED AS GROUNDING CONNECTORS FOR THE MATERIALS USED. USE TWO-HOLE COMPRESSION LUGS WITH HEAT SHRINK FOR MECHANICAL CONNECTIONS. INTERIOR CONNECTIONS USE TWO-HOLE COMPRESSION LUGS WITH INSPECTION WINDOW AND CLEAR HEAT SHRINK.
- 4. EXOTHERMIC WELDED CONNECTIONS SHALL BE PROVIDED IN KIT FORM AND SELECTED FOR THE SPECIFIC TYPES. SIZES, AND COMBINATIONS OF CONDUCTORS AND OTHER ITEMS TO BE CONNECTED.
- 5. GROUND RODS SHALL BE ERICO #615800, COPPER-CLAD STEEL WITH HIGH-STRENGTH STEEL CORE AND ELECTROLYTIC-GRADE COPPER OUTER SHEATH, MOLTEN WELDED TO CORE, 5/8"x10'-0". ALL GROUNDING RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES.
- INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS IN COMPLIANCE WITH THE VERIZON SPECIFICATIONS AND NEC. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULLBOXES, DISCONNECT SWITCHES, STARTERS, AND EQUIPMENT CABINETS.
- F. OTHER MATERIALS:
 - 1. THE CONTRACTOR SHALL PROVIDE OTHER MATERIALS, THOUGH NOT SPECIFICALLY DESCRIBED, WHICH ARE REQUIRED FOR A COMPLETELY OPERATIONAL SYSTEM AND PROPER INSTALLATION OF THE WORK.
 - 2. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR REQUIRED BY NEC.
- G. PANELS AND LOAD CENTERS
- 1. ALL PANEL DIRECTORIES SHALL BE TYPEWRITTEN.
- PART 3 EXECUTION
- 3.1 GENERAL
 - A. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS
- B. EQUIPMENT SHALL BE TIGHTLY COVERED AND PROTECTED AGAINST DIRT OR WATER, AND AGAINST CHEMICAL OR MECHANICAL INJURY DURING INSTALLATION AND CONSTRUCTION PERIODS.
- 3.2 LABOR AND WORKMANSHIP
 - A. ALL LABOR FOR THE INSTALLATION OF MATERIALS AND EQUIPMENT FURNISHED FOR THE ELECTRICAL SYSTEM SHALL BE INSTALLED BY EXPERIENCED WIREMEN, IN A NEAT AND WORKMAN-LIKE MANNER.
- B. ALL ELECTRICAL EQUIPMENT SHALL BE ADJUSTED, ALIGNED AND TESTED BY THE CONTRACTOR AS REQUIRED TO PRODUCE THE INTENDED PERFORMANCE.
- C. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED EQUIPMENT, REMOVE ALL LABELS AND ANY DEBRIS, CRATING OR CARTONS AND LEAVE THE INSTALLATION FINISHED AND READY FOR OPERATION
- A. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRICAL ITEMS WITH THE OWNER-FURNISHED EQUIPMENT DELIVERY SCHEDULE TO PREVENT UNNECESSARY DELAYS IN THE TOTAL WORK.
- 3.4 INSTALLATION
- - 1. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT AS SPECIFIED. NO CONDUIT OR TUBING OF LESS THAN 3/4 INCH TRADE SIZE.
- 2. PROVIDE RIGID PVC SCHEDULE 80 CONDUITS FOR ALL RISERS, RMC OTHERWISE NOTED. EMT MAY BE INSTALLED FOR EXTERIOR CONDUITS WHERE NOT SUBJECT TO PHYSICAL DAMAGE.
- INSTALL SCH. 40 PVC CONDUIT WITH A MINIMUM COVER OF 24" UNDER ROADWAYS, PARKING LOTS, STREETS, AND ALLEYS, CONDUIT SHALL HAVE A MINIMUM COVER OF 18" IN ALL OTHER NON-TRAFFIC APPLICATIONS (REFER TO 2008 NEC, TABLE 300.5).
- 4. USE GALVANIZED FLEXIBLE STEEL CONDUIT WHERE DIRECT CONNECTION TO EQUIPMENT WITH MOVEMENT, VIBRATION, OR FOR EASE OF MAINTENANCE. USE LIQUID TIGHT, FLEXIBLE METAL CONDUIT FOR OUTDOOR APPLICATIONS. INSTALL GALVANIZED FLEXIBLE STEEL CONDUIT AT ALL POINTS OF CONNECTION TO EQUIPMENT MOUNTED ON SUPPORT TO ALLOW FOR EXPANSION AND CONTRACTION.
- 5. A RUN OF CONDUIT BETWEEN BOXES OR EQUIPMENT SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF THREE QUARTER-BENDS. CONDUIT BEND SHALL BE MADE WITH THE UL LISTED BENDER OR FACTORY 90 DEGREE ELBOWS MAY BE USED.
- 6. FIELD FABRICATED CONDUITS SHALL BE CUT SQUARE WITH A CONDUIT CUTTING TOOL AND REAMED TO PROVIDE A SMOOTH INSIDE SURFACE.
- 7. PROVIDE INSULATED GROUNDING BUSHING FOR ALL CONDUITS.
- 8. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL CONDUITS DURING CONSTRUCTION. TEMPORARY OPENINGS IN THE CONDUIT SYSTEM SHALL BE PLUGGED OR CAPPED TO PREVENT ENTRANCE OF MOISTURE OR FOREIGN MATTER. CONTRACTOR SHALL REPLACE ANY CONDUITS CONTAINING FOREIGN MATERIALS THAT CANNOT BE REMOVED.
- 9. ALL CONDUITS SHALL BE SWABBED CLEAN BY PULLING AN APPROPRIATE SIZE MANDREL THROUGH THE CONDUIT BEFORE INSTALLATION OF CONDUCTORS OR CABLES. CONDUIT SHALL BE FREE OF DIRT AND DEBRIS.
- 10. INSTALL PULL STRINGS IN ALL CLEAN EMPTY CONDUITS. IDENTIFY PULL STRINGS AT EACH EI
- 11. INSTALL 2" HIGHLY VISIBLE AND DETECTABLE TAPE 12" ABOVE ALL UNDERGROUND CONDUITS AND CONDUCTORS.
- 12. CONDUITS SHALL BE INSTALLED IN SUCH A MANNER AS TO INSURE AGAINST COLLECTION OF TRAPPED CONDENSATION
- 13. PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS TO ALLOW FOR RACEWAYS AND CABLES TO BE ROUTED THROUGH THE BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS. SLEEVES AND/ORPENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE EFFECTIVELY SEALED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL OR STRUCTURE. FIRE STOPS AT FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE, FIRE, AND FUMES. ALL MATERIAL SHALL BE UL APPROVED FOR THIS PURPOSE.

GENERAL ELECTRICAL NOTES

PHASE C BLUE 2. SPLICES SHALL BE MADE ONLY AT OUTLETS, JUNCTION BOXES, OR ACCESSIBLE RACEWAY CONDULETS APPROVED FOR THIS PURPOSE.

3. PULLING LUBRICANTS SHALL BE UL APPROVED. CONTRACTOR SHALL USE NYLON OR HEMP ROPE FOR PULLING CONDUCTOR OR CABLES INTO THE CONDUIT.

208/240/120 VOLT SYSTEMS BLACK

RED

- 4. CABLES SHALL BE NEATLY TRAINED, WITHOUT INTERLACING, AND BE OF SUFFICIENT LENGTH IN ALL BOXES & EQUIPMENT TO PERMIT MAKING A NEAT ARRANGEMENT. CABLES SHALL BE SECURED IN A MANNER TO A VOID TENSION ON CONDUCTORS OR TERMINALS. CONDUCTORS SHALL BE PROTECTED FROM MECHANICAL INJURY AND MOISTURE. SHARP BENDS OVER CONDUIT BUSHINGS IS PROHIBITED. DAMAGED CABLES SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- C. DISCONNECT SWITCHES:

B. CONDUCTORS AND CABLE:

DESCRIPTION PHASE A

PHASE B

- 1. INSTALL DISCONNECT SWITCHES LEVEL AND PLUMB. CONNECT TO WIRING SYSTEM AND GROUNDING SYSTEM AS INDICATED.
- D GROUNDING

HYBRID & COAX CABLES

- 1. ALL METALLIC PARTS OF ELECTRICAL EQUIPMENT WHICH DO NOT CARRY CURRENT SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING MANUFACTURER, VERIZON GROUNDING AND BONDING STANDARDS TP-76416, ND-00135, AND THE NATIONAL ELECTRICAL CODE.
- 2. PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEM INDICATED WITH ASSEMBLY OF MATERIALS, INCLUDING GROUNDING ELECTRODES, BONDING JUMPERS AND ADDITIONAL ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.
- 3. ALL GROUNDING CONDUCTORS SHALL PROVIDE A STRAIGHT DOWNWARD PATH TO GROUND WITH GRADUAL BEND AS REQUIRED. GROUNDING CONDUCTORS SHALL NOT BE LOOPED OR SHARPLY BENT. ROUTE GROUNDING CONNECTIONS AND CONDUCTORS TO GROUND IN THE SHORTEST AND STRAIGHTEST PATHS POSSIBLE TO MINIMIZE TRANSIENT VOLTAGE RISES.
- CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOY, TOWERS, AND WATER TOWERS GROUND RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 AWG COPPER. ROOFTOP GROUND RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY). SEE STANDARD 6.3.2.2.
- 5. TIGHTEN GROUNDING AND BONDING CONNECTORS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WHERE MANUFACTUREN'S TORQUING REQUIREMENTS ARE NOT AVAILABLE, TIGHTEN CONNECTIONS T COMPLY WITH TIGHTENING TORQUE VALUES SPECIFIED IN UL TO ASSURE PERMANENT AND EFFECTIVE GROUNDING.
- 7. ALL GROUNDING CONNECTIONS SHALL BE INSPECTED FOR TIGHTNESS. EXOTHERMIC WELDED CONNECTIONS SHALL BE APPROVED BY THE INSPECTOR HAVING JURISDICTION BEFORE BEING PERMANENTLY CONCEALED.
- APPLY CORROSION-RESISTANCE FINISH TO FIELD CONNECTIONS AND PLACES WHERE FACTORY APPLIED PROTECTIVE COATINGS HAVE BEEN DESTROYED. USE KOPR-SHIELD ANTI-OXIDATION COMPOUND ON ALL COMPRESSION GROUNDING CONNECTIONS.
- 9. A SEPARATE, CONTINUOUS, INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUITS.

USING THE GREATER OF THE TWO DISTANCES.

3.5 ACCEPTANCE TESTING:

C TEST PROCEDURES

POLARITY CONNECTIONS.

10. BOND ALL INSULATED GROUNDING BUSHINGS WITH A BARE 6 AWG GROUNDING CONDUCTOR TO A GROUND BUS.

LEASE AREA

FASEMENT

1. ALL POWER WIRING SHALL BE COLOR CODED AS FOLLOWS:

4. BUILDINGS AND/OR NEW TOWERS GREATER THAN 75 FEET IN HEIGHT AND WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO

WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES FOR CONNECTORS AND BOLTS. WHERE MANUFACTURER'S TORQUING REQUIREMENTS ARE NOT AVAILABLE. TIGHTEN CONNECTIONS TO

6. CONTRACTOR SHALL VERIFY THE LOCATIONS OF GROUNDING TIE-IN-POINTS TO THE EXISTING GROUNDING SYSTEM. ALL UNDERGROUND GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

11. DIRECT BURIED GROUNDING CONDUCTORS SHALL BE INSTALLED AT A NOMINAL DEPTH OF 36" MINIMUM BELOW GRADE, OR 6" BELOW THE FROST LINE, USE THE GREATER OF THE TWO DISTANCES.

12. ALL GROUNDING CONDUCTORS EMBEDDED IN OR PENETRATING CONCRETE SHALL BE INSTALLED IN SCHEDULE 40 PVC CONDUIT.

13. THE INSTALLATION OF CHEMICAL ELECTROLYTIC GROUNDING SYSTEM IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REMOVE SEALING TAPE FROM LEACHING AND BREATHER HOLES. INSTALL PROTECTIVE BOX FLUSH WITH GRADE.

14. DRIVE GROUND RODS UNTIL TOPS ARE A MINIMUM DISTANCE OF 36" DEPTH OR 6" BELOW FROST LINE,

15. IF COAX ON THE ICE BRIDGE IS MORE THAN 6 FT. FROM THE GROUND BAR AT THE BASE OF THE TOWER, A SECOND GROUND BAR WILL BE NEEDED AT THE END OF THE ICE BRIDGE, TO GROUND THE COAX CABLE GROUNDING KITS AND IN-LINE ARRESTORS

16. CONTRACTOR SHALL REPAIR, AND/OR REPLACE, EXISTING GROUNDING SYSTEM COMPONENTS DAMAGED DURING CONSTRUCTION AT THE CONTRACTORS EXPENSE.

A. CERTIFIED PERSONNEL USING CERTIFIED EQUIPMENT SHALL PERFORM REQUIRED TESTS AND SUBMIT WRITTEN TEST REPORTS UPON COMPLETION.

B. WHEN MATERIAL AND/OR WORKMANSHIP IS FOUND NOT TO COMPLY WITH THE SPECIFIED REQUIREMENTS, THE NON-COMPLYING ITEMS SHALL BE REMOVED FROM THE PROJECT SITE AND REPLACED WITH ITEMS COMPLYING WITH THE SPECIFIED REQUIREMENTS PROMPTLY AFTER RECEIPT OF NOTICE FOR NON-COMPLIANCE.

1. ALL FEEDERS SHALL HAVE INSULATION TESTED AFTER INSTALLATION, BEFORE CONNECTION TO DEVICES. THE CONDUCTORS SHALL TEST FREE FROM SHORT CIRCUITS AND GROUNDS. TESTING SHALL BE FOR ONE MINUTE USING 1000V DC. PROVIDE WRITTEN DOCUMENTATION FOR ALL TEST RESULTS.

2. PRIOR TO ENERGIZING CIRCUITRY, TEST WIRING DEVICES FOR ELECTRICAL CONTINUITY AND PROPER

3. MEASURE AND RECORD VOLTAGES BETWEEN PHASES AND BETWEEN PHASE CONDUCTORS AND NEUTRALS. SUBMIT A REPORT OF MAXIMUM AND MINIMUM VOLTAGES

4. PERFORM GROUNDING TEST TO MEASURE GROUNDING RESISTANCE OF GROUNDING SYSTEM USING THE IEEE STANDARD 3-POINT "FALL-OF-POTENTIAL" METHOD. PROVIDE PLOTTED TEST VALUES AND LOCATION SKETCH. NOTIFY THE ENGINEER IMMEDIATELY IF MEASURED VALUE IS OVER 5 OHMS.

verizon

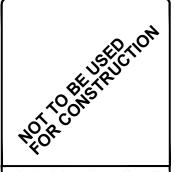
3131 S. VAUGHN WAY, SUITE 550. AURORA, CO 80014



4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237

PROJECT NO:	197068.0016
DRAWN BY:	BTS
CHECKED BY:	NCP

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A	09/10/19	ISSUED FOR 90% CDs
REV	DATE	DESCRIPTION



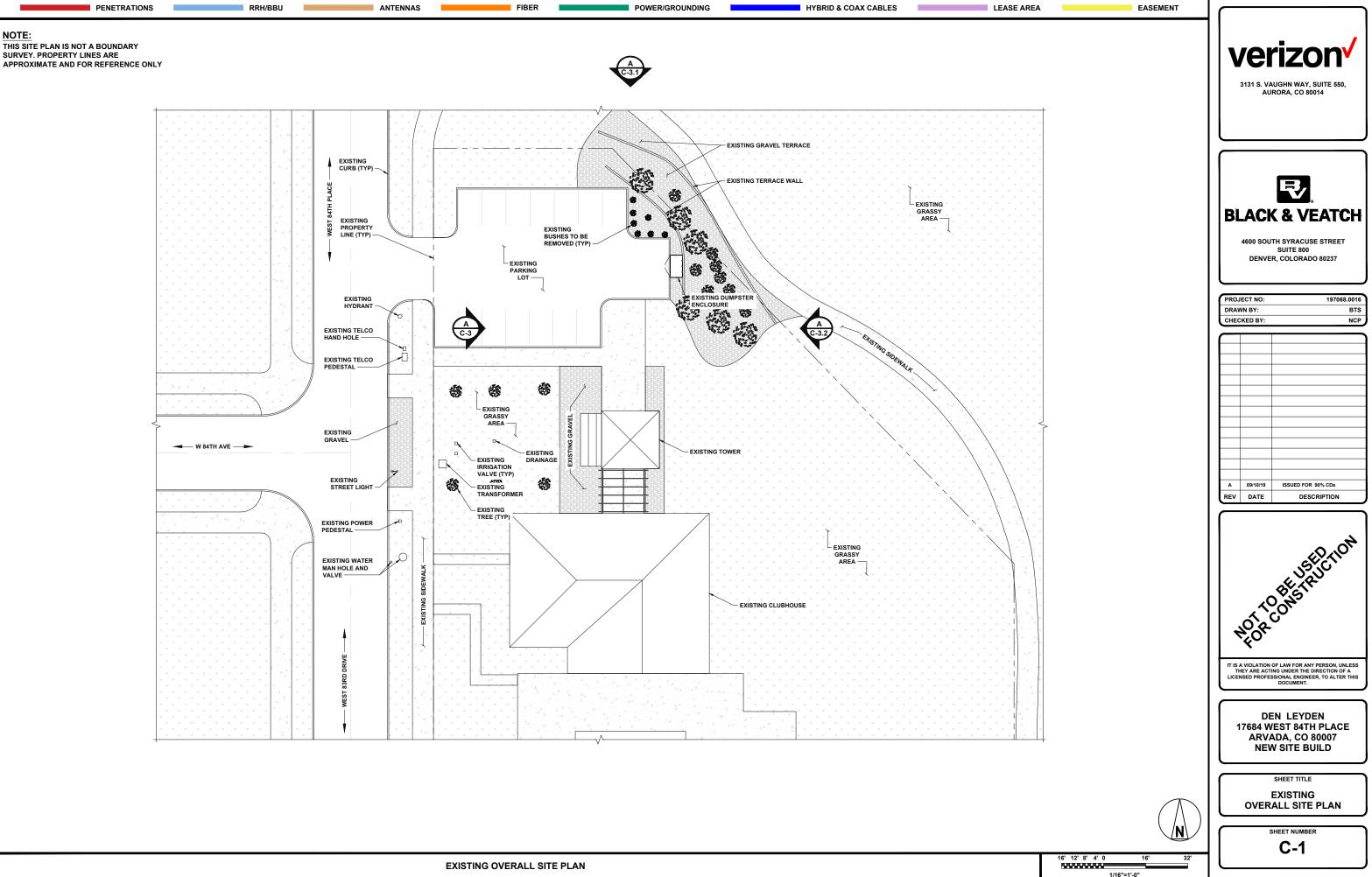
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

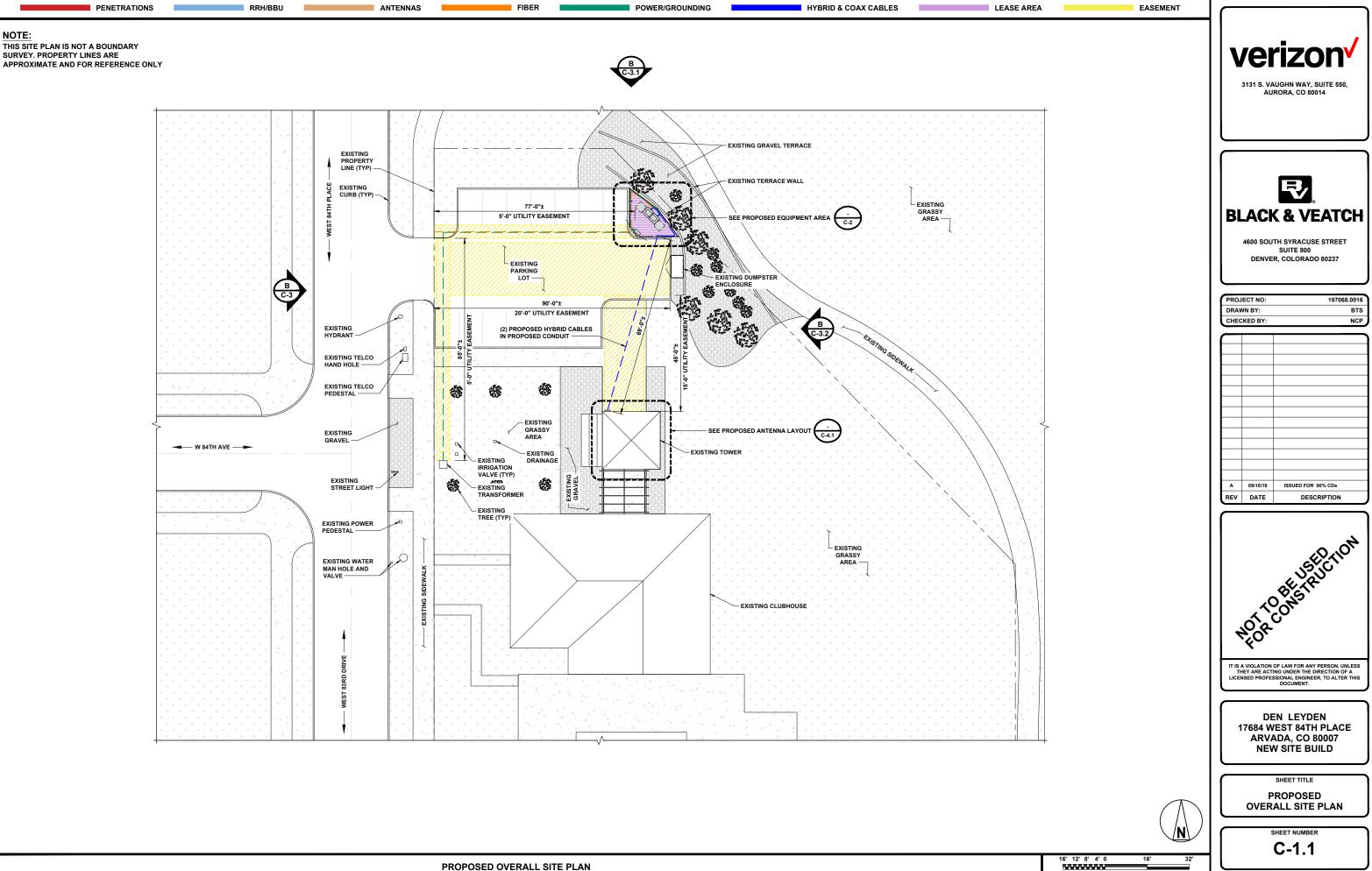
DEN LEYDEN 17684 WEST 84TH PLACE **ARVADA, CO 80007 NEW SITE BUILD**

SHEET TITLE

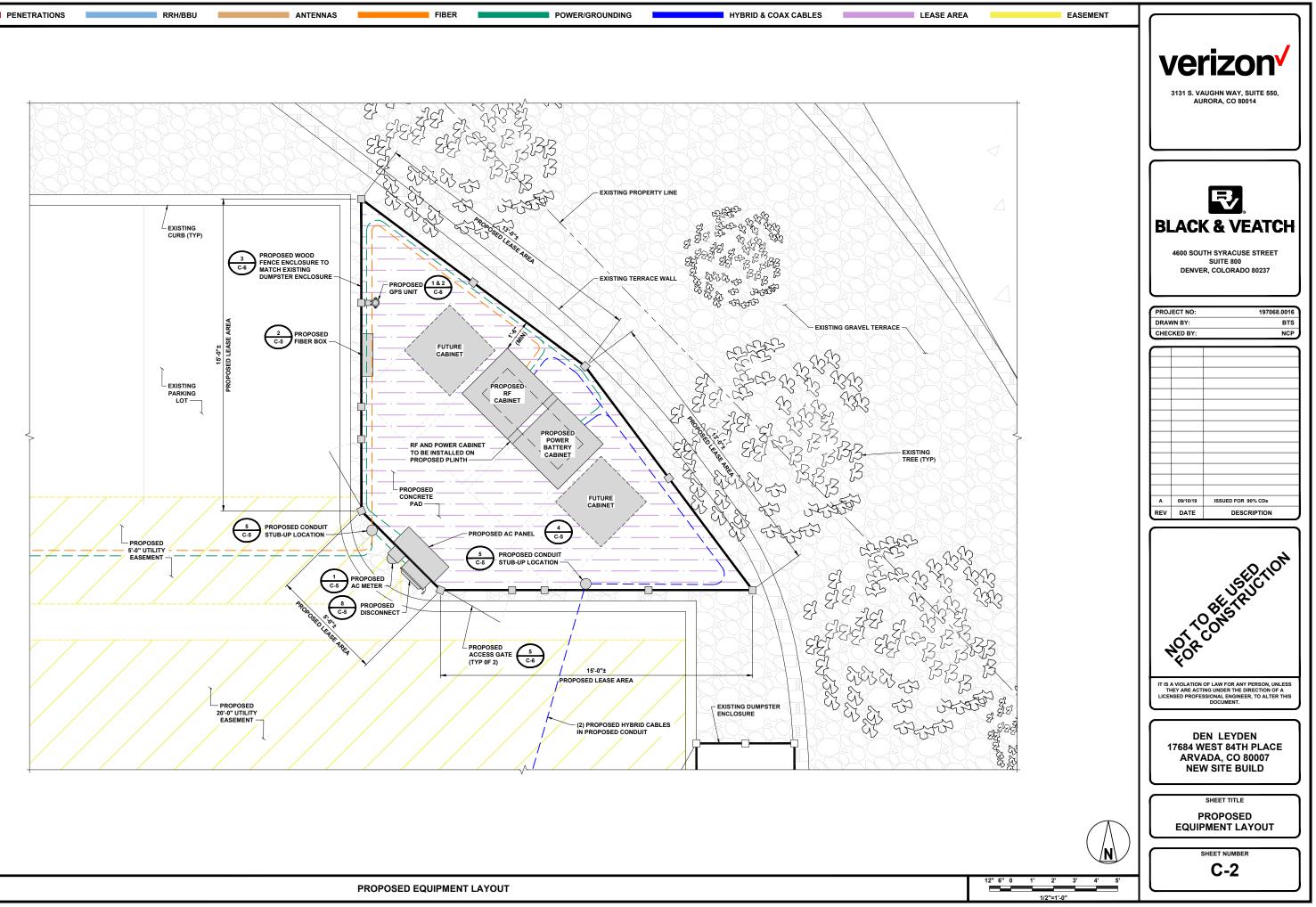
GENERAL ELECTRICAL WORK NOTES

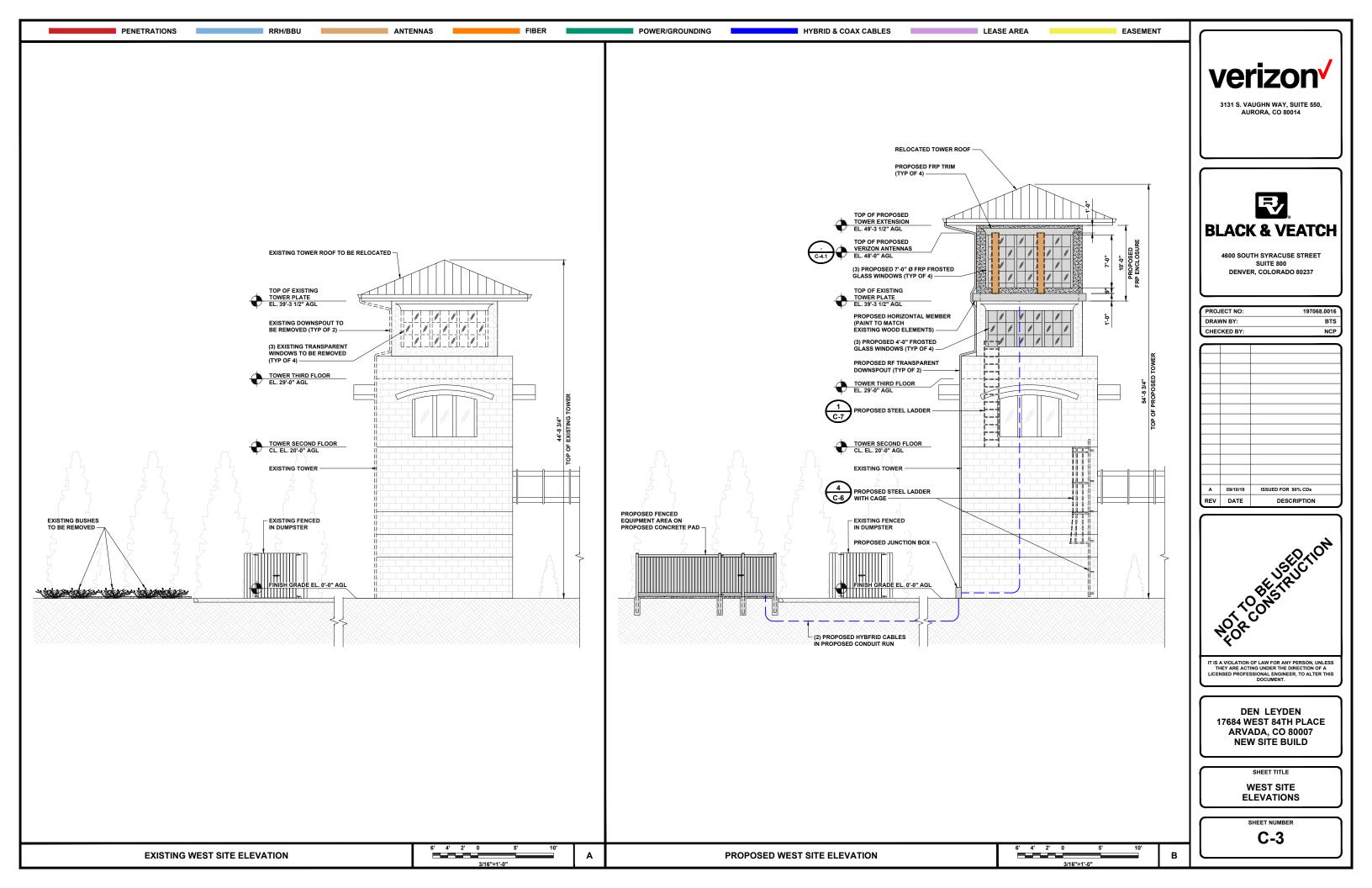
SHEET NUMBE GN-4

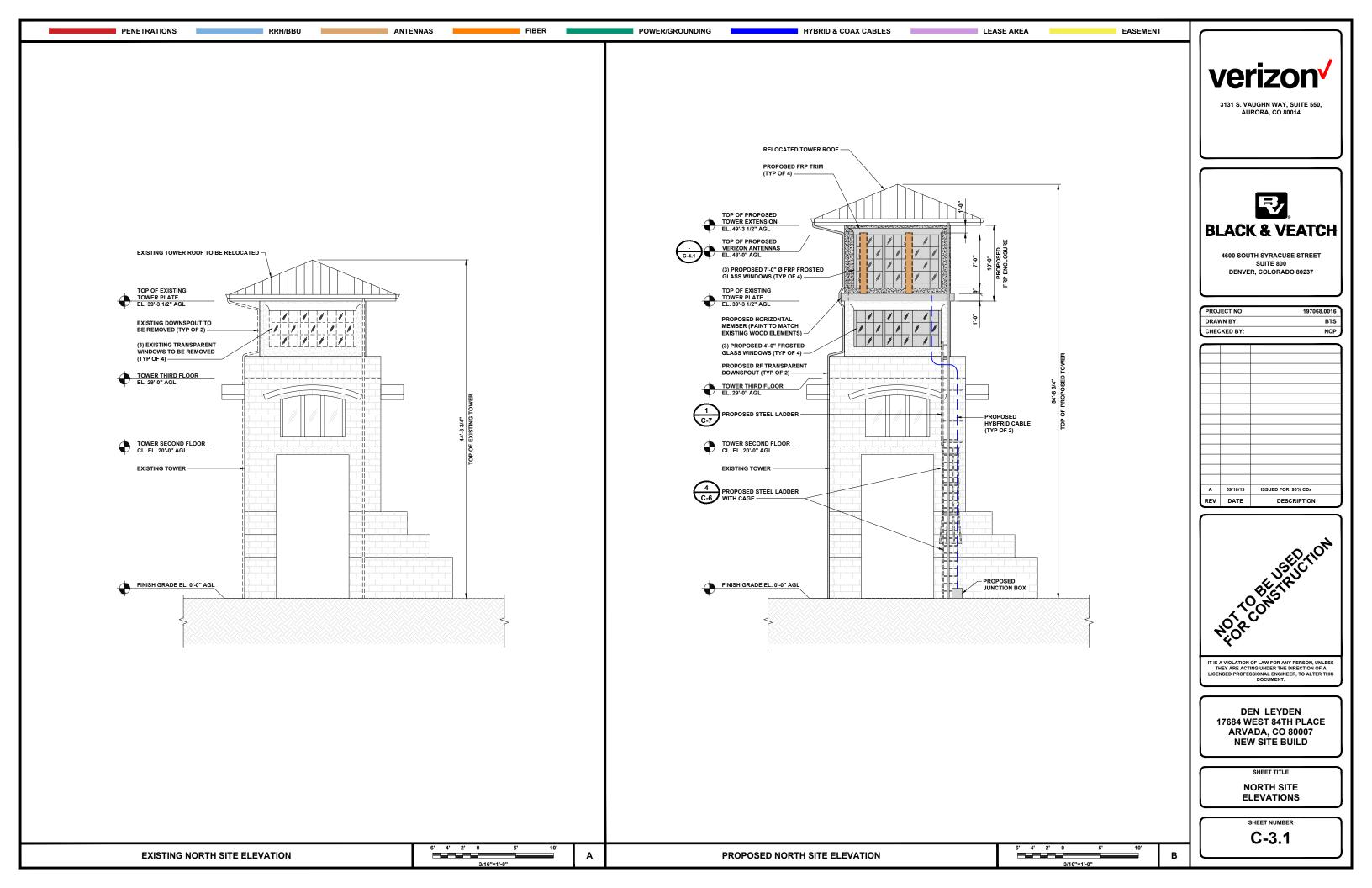


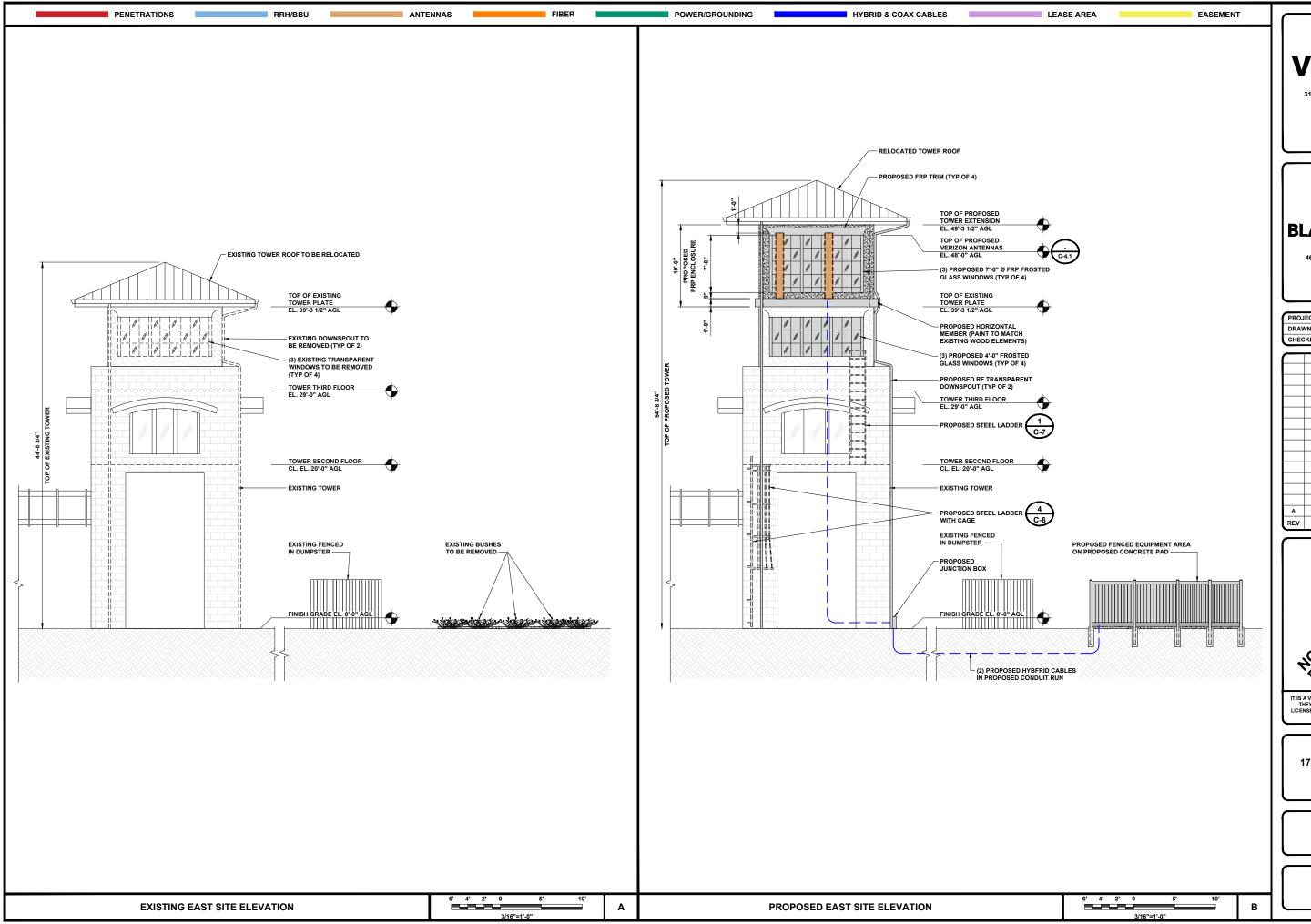


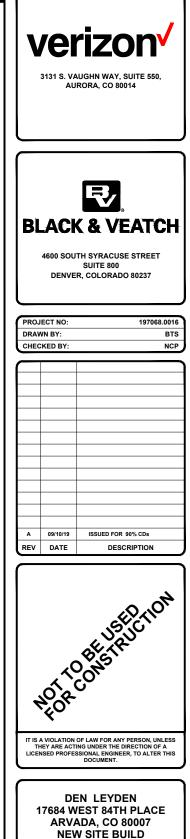
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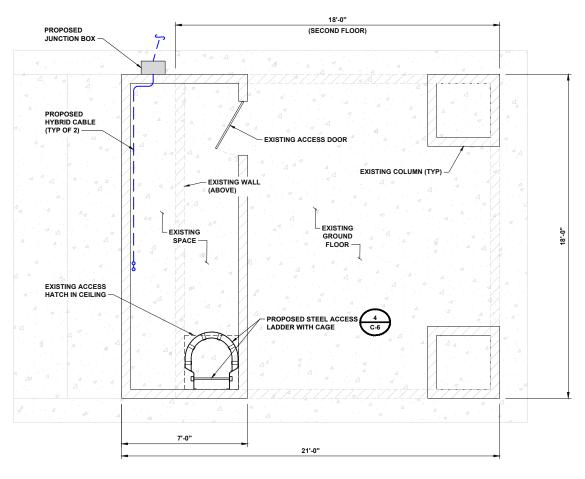




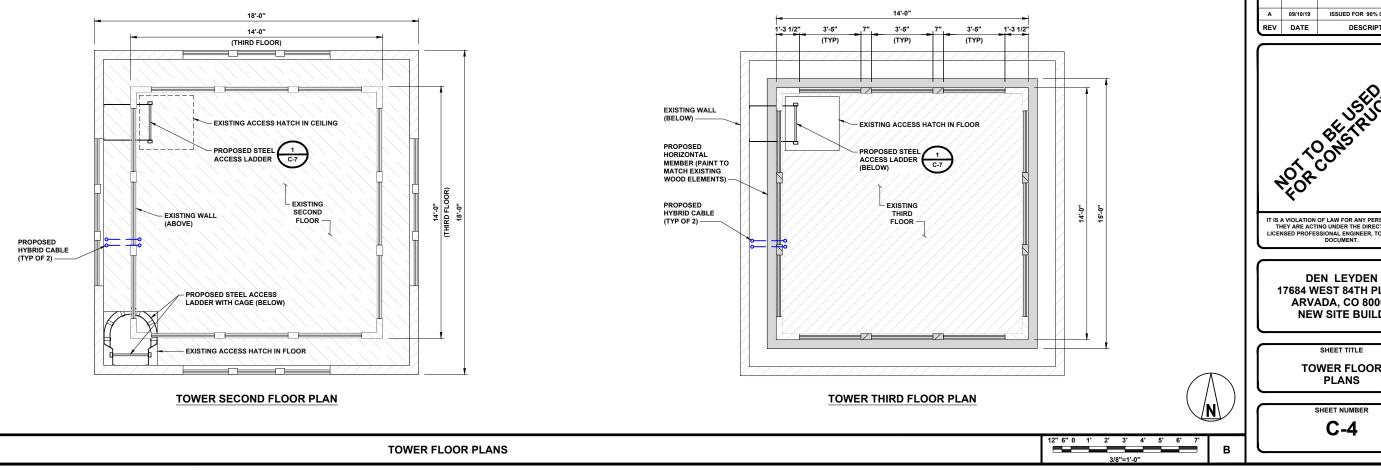
SHEET TITLE EAST SITE ELEVATIONS

> SHEET NUMBER C-3.2

FIBER



TOWER GROUND FLOOR PLAN



IENT			
		131 S. VA	UGHN WAY, SUITE 550, RORA, CO 80014
		1600 SOUT	EES & VEATCH TH SYRACUSE STREET SUITE 800 R, COLORADO 80237
	PROJE	CT NO:	197068.0016
	DRAW	N BY: (ED BY:	BTS NCP
	A	09/10/19	ISSUED FOR 90% CDs
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	THE	EY ARE ACTIN	DF LAW FOR ANY PERSON, UNLESS NG UNDER THE DIRECTION OF A SUGAL ENGINEER, TO ALTER THIS DOCUMENT.
	17	7684 W ARVA NEW	N LEYDEN EST 84TH PLACE IDA, CO 80007 / SITE BUILD
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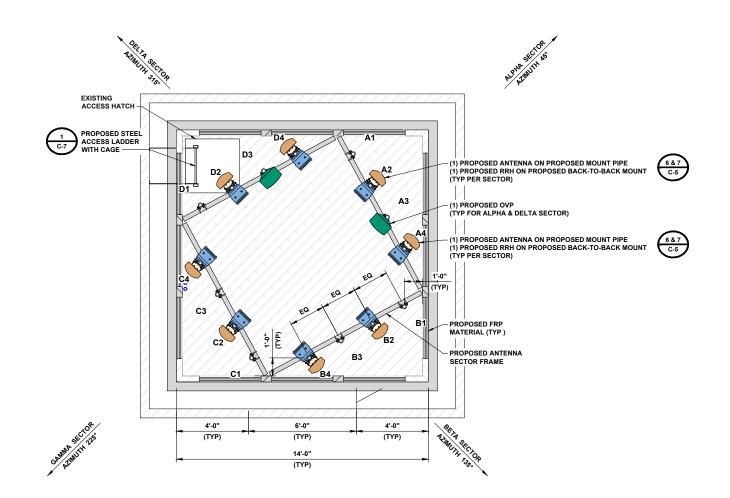
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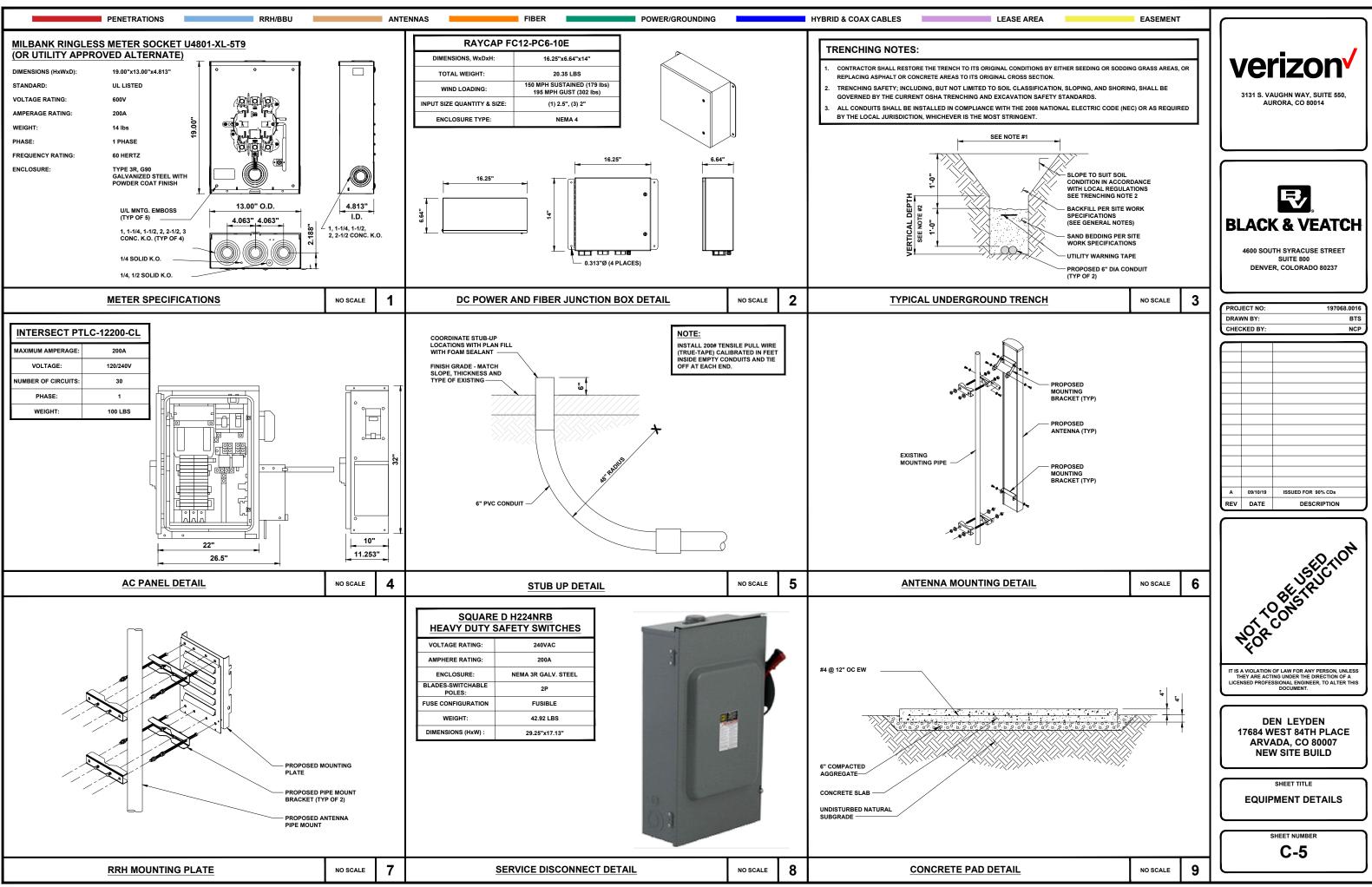
HYBRID & COAX CABLES

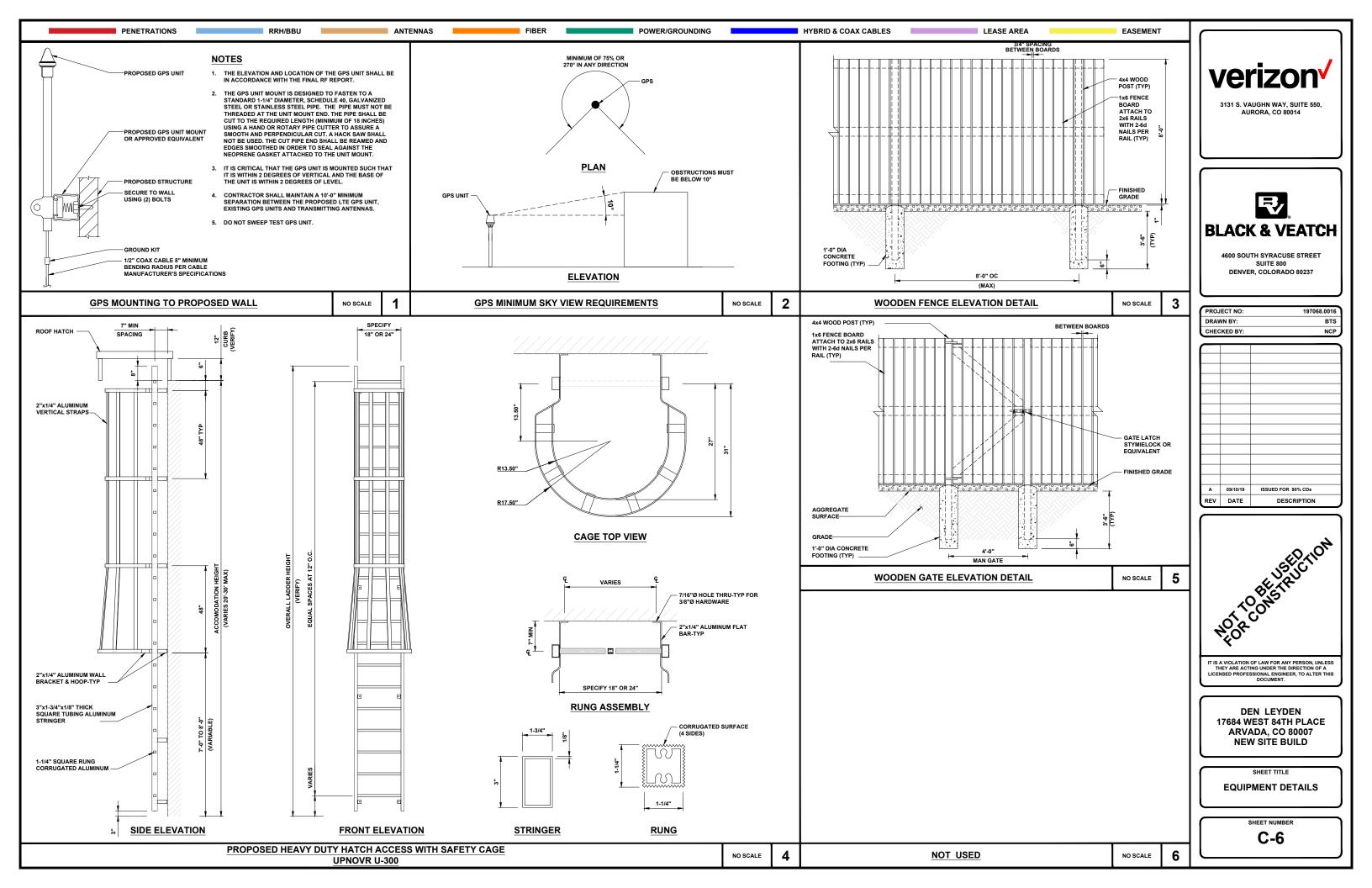
ANTENNA REQUIREMENTS (VERIFY WITH CURRENT RFDS)							
OVP	RRH's	ANTENNA SIZE	ANTENNA AZMUITH	ANTENNA	TECHNOLOGY	SECTOR	
	PROPOSED	PROPOSED	PROPOSED	ANTENNA	PROPOSED	SECTOR	
		-	-	-	-	A1	
(1) PROPOSED OVP	(2) RRH's	8'-0"	45°	PROPOSED	LTE	A2	
		-	-	-	-	A3	
		8'-0"	45°	PROPOSED	LTE	A4	
-		-	-	-	-	B1	
	(2) RRH's	8'-0"	135°	PROPOSED	LTE	B2	
		-	-	-	-	В3	
		8'-0"	135°	PROPOSED	LTE	B4	
		-	-	-	-	C1	
	(2) RRH's	8'-0"	225°	PROPOSED	LTE	C2	
-	(2) KKH S	-	-	-	-	C3	
		8'-0"	225°	PROPOSED	LTE	C4	
		-	-	-	-	D1	
(1) PROPOSED OVP	(2) RRH's	8'-0"	315°	PROPOSED	LTE	D2	
	(2) KKN S	-	-	-	-	D3	
		8'-0"	315°	PROPOSED	LTE	D4	

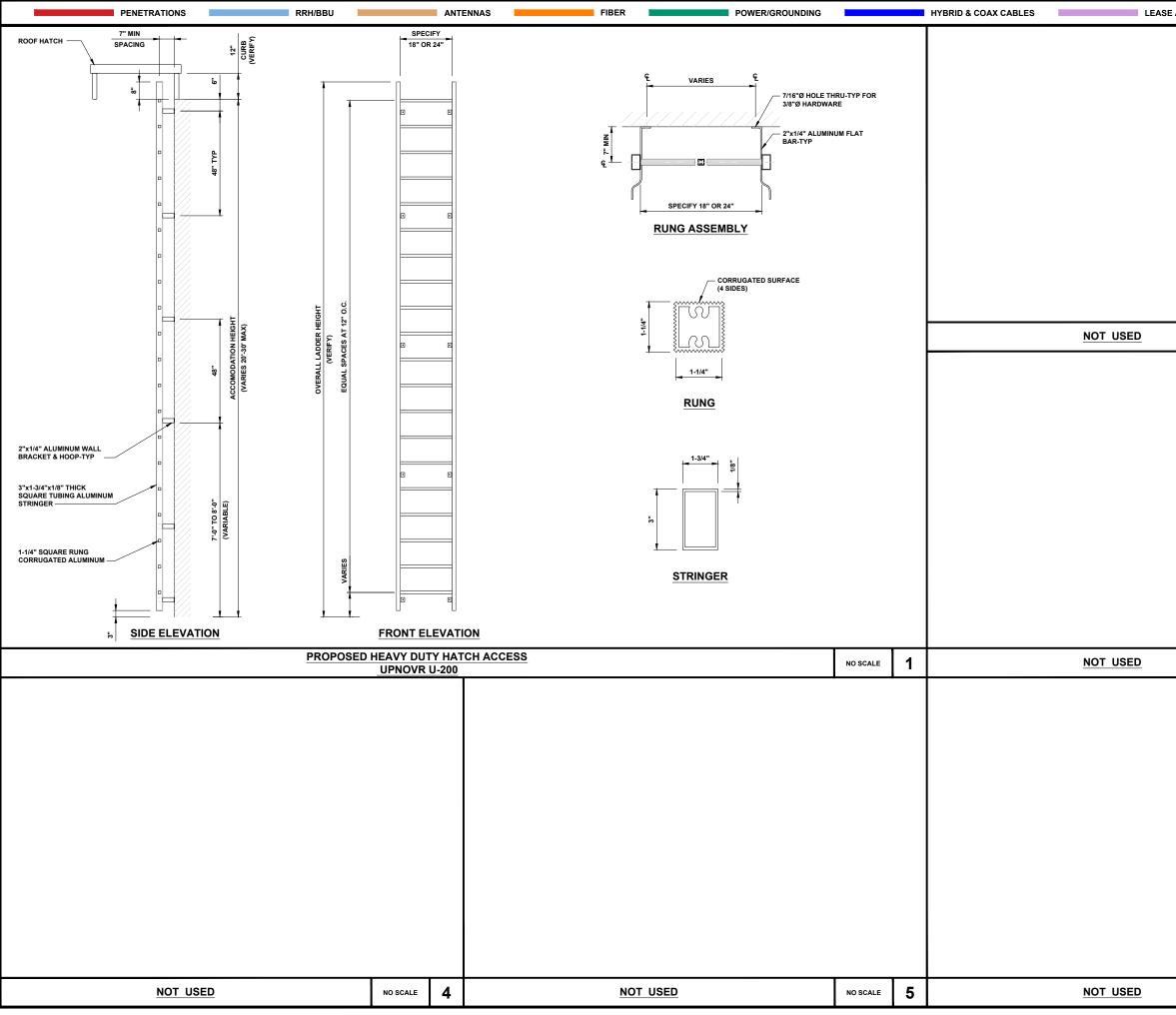
ANTENNA TABLE



E AREA EAS	EMENT		<u>ר</u>
		VERIZON 3131 S. VAUGHN WAY, SUITE 550, AURORA, CO 80014	
		BLACK & VEATCH 4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237	
		PROJECT NO: 197068.0016 DRAWN BY: BTS CHECKED BY: NCP	
	Α		
		A 09/10/19 ISSUED FOR 90% CDs REV DATE DESCRIPTION	
		IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS	
		DEN LEYDEN 17684 WEST 84TH PLACE ARVADA, CO 80007 NEW SITE BUILD)
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AREA	EASEMENT		
			VERIZON 3131 S. VAUGHN WAY, SUITE 550, AURORA, CO 80014
			EES BLACK & VEATCH 4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237
	NO SCALE	2	PROJECT NO: 197068.0016
			CHECKED BY: NCP
	NO SCALE	3	IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LUCENSED PROFESSIONAL ENGINEER, TO ALTER THIS
			DEN LEYDEN 17684 WEST 84TH PLACE ARVADA, CO 80007 NEW SITE BUILD
			SHEET TITLE EQUIPMENT DETAILS
			C-7
	NO SCALE	6	

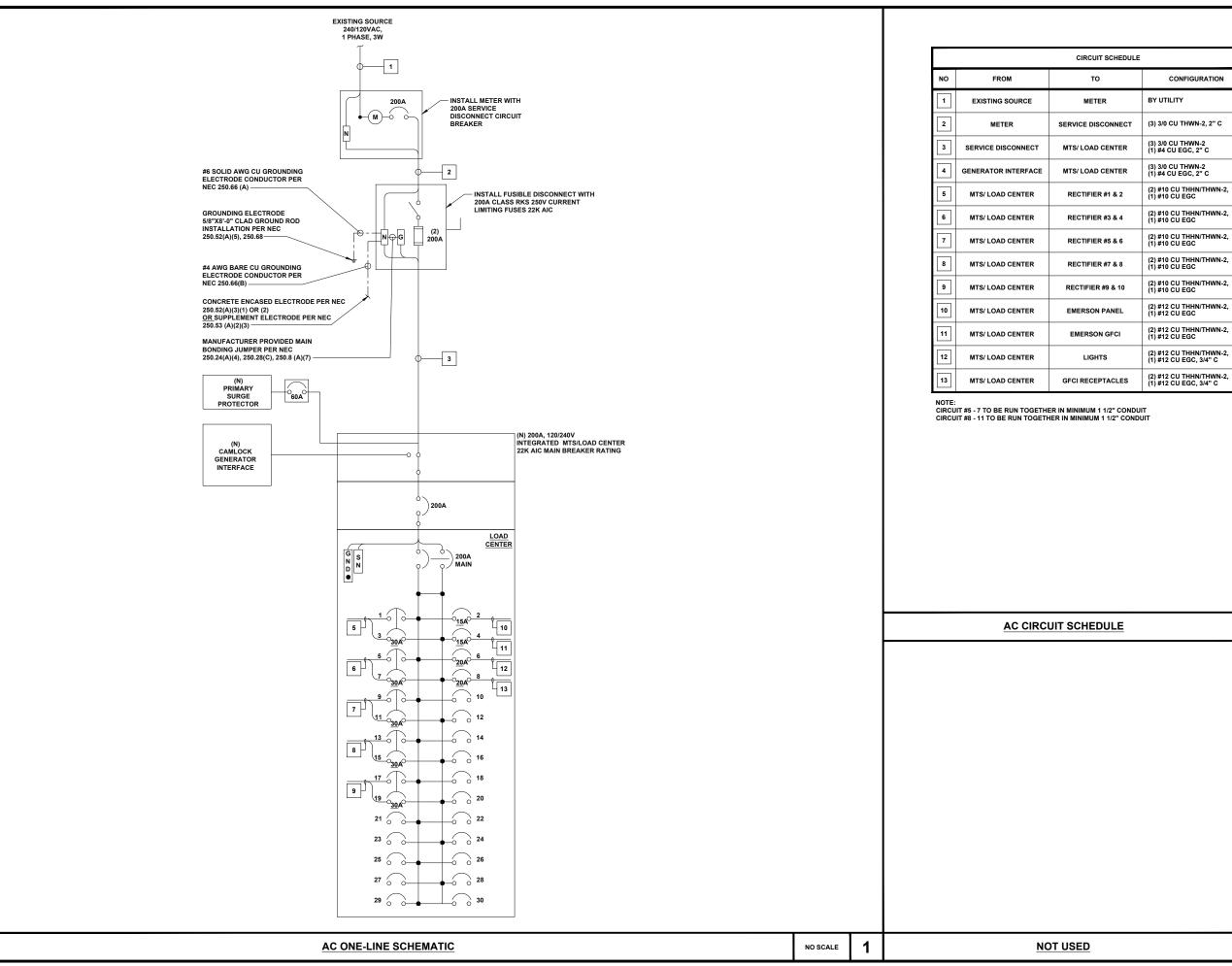
Name ENUMB		VERIZON	NSB - DEN	ILEYDEN			MODEL N PHASE:	UMBER:	NOTHERN	TECHNOL	OGIES	WIRE:			3			
TAGE:	_N.			Volts AC			BUSS RA	TING:	200	AMPS		AIC:			22K			3131 S. VAUGHN WAY, SUIT
BREA	KER:	200 SURFACE	AMPS															AURORA, CO 80014
	E TYPE:	NEMA 3R																
EL STA	TUS:	PROPOSE	D BREAKER	BREAKER	SERVICE	Demand	USAGE	PHASE A	PHASE B	USAGE	Demand	SERVICE	BREAKER	BREAKER	BREAKER			
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	RECTIFIER #1 & 2	30	2	NEW	2100	1.00	1.00		2280	1.00	1.00	180	NEW	1	15	EMERSON GFCI	4	
	RECTIFIER #3 & 4	30	2	NEW	2100	1.00	1.00	2200		1.00	1.00	100	NEW	1	20	LIGHT	6	
		50	2		2100	1.00	1.00		2280	1.00	1.00	180	NEW	1	20	GFCI RECEPTACLE	8	4600 SOUTH SYRACUSE S
	RECTIFIER #5 & 6	30	2	2 NEW		1.00	1.00	2100									10	SUITE 800 DENVER, COLORADO 80
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	RECTIFIER #7 & 8	30	2	NEW	2100	1.00	1.00	2100									14	PROJECT NO: DRAWN BY:
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	LL INSPECT THE EXISTING CONDITIONS PRIOR TO SUI EN AWARDED.	BMITTING A BID. A	NY QUESTIONS A	RISING DURING TH	IE BID PERIOD IN	REGARDS TO	O THE CONTRA	CTOR'S FUNCTIC	ONS, THE SCOPE O	F WORK, OR A	NY OTHER ISSU	IE RELATED TO	THIS PROJECT SH	ALL BE BROUGHT	UP DURING THE BID	PERIOD WITH THE PROJECT MANAGER FOR CLA	RIFICATION, NOT AFTER THE	1 NOR
RICAL	ORK SHALL BE DONE IN ACCORDANCE WITH CURRE	NT NATIONAL ELE	CTRICAL CODES	AND ALL STATE A	ND LOCAL CODE	S, LAWS, AND	ORDINANCES	. PROVIDE ALL C	OMPONENTS AND	WIRING SIZES	AS REQUIRED	TO MEET NEC ST	TANDARDS.					¥~
																		IT IS A VIOLATION OF LAW FOR ANY PER THEY ARE ACTING UNDER THE DIREC LICENSED PROFESSIONAL ENGINEER, T
	I SHALL BE COORDINATED WITH THE MECHANICAL E				WITH THE MECHA	INICAL EQUIP	MENT CONTRA	ICTOR AND COM	PLT AS REQUIRED									DOCUMENT.
	LL PROVIDE PULL BOXES AND JUNCTION BOXES AS F																	DEN LEYDEN
	LL PROVIDE ALL STRAIN RELIEF AND CABLE SUPPOR																	17684 WEST 84TH P ARVADA, CO 800
	AND CONTROLLING DEVICES SHALL BE PROVIDED W											IECT SWITCHES		CABINETS.				NEW SITE BUIL
	L SHALL HAVE A U.L. LABEL.		LO AND NEO Z							20720, AN				_,				
DULE	LOADING AND CIRCUIT ARRANGEMENTS REFLECT PC	ST-CONSTRUCTIO	N EQUIPMENT.															ELECTRICAL NOTES PANEL SCHEDU
OR SHA	LL BE RESPONSIBLE FOR AS-BUILT PANEL SCHEDUL	E AND SITE DRAW	INGS.															SHEET NUMBER



ANTENNAS

FIBER

POWER/GROUNDING



EASEMENT

3131 S. V	FIZON AUGHN WAY, SUITE 550, IRORA, CO 80014
4600 SOL	EE K & VEATCH TH SYRACUSE STREET SUITE 800 ER, COLORADO 80237
PROJECT NO:	197068.0016
DRAWN BY:	BTS
DRAWN BY: CHECKED BY:	NCP

NO SCALE	2	
		1
NO SCALE	3	



ISSUED FOR 90% CDs

DESCRIPTION

A 09/10/19

DATE

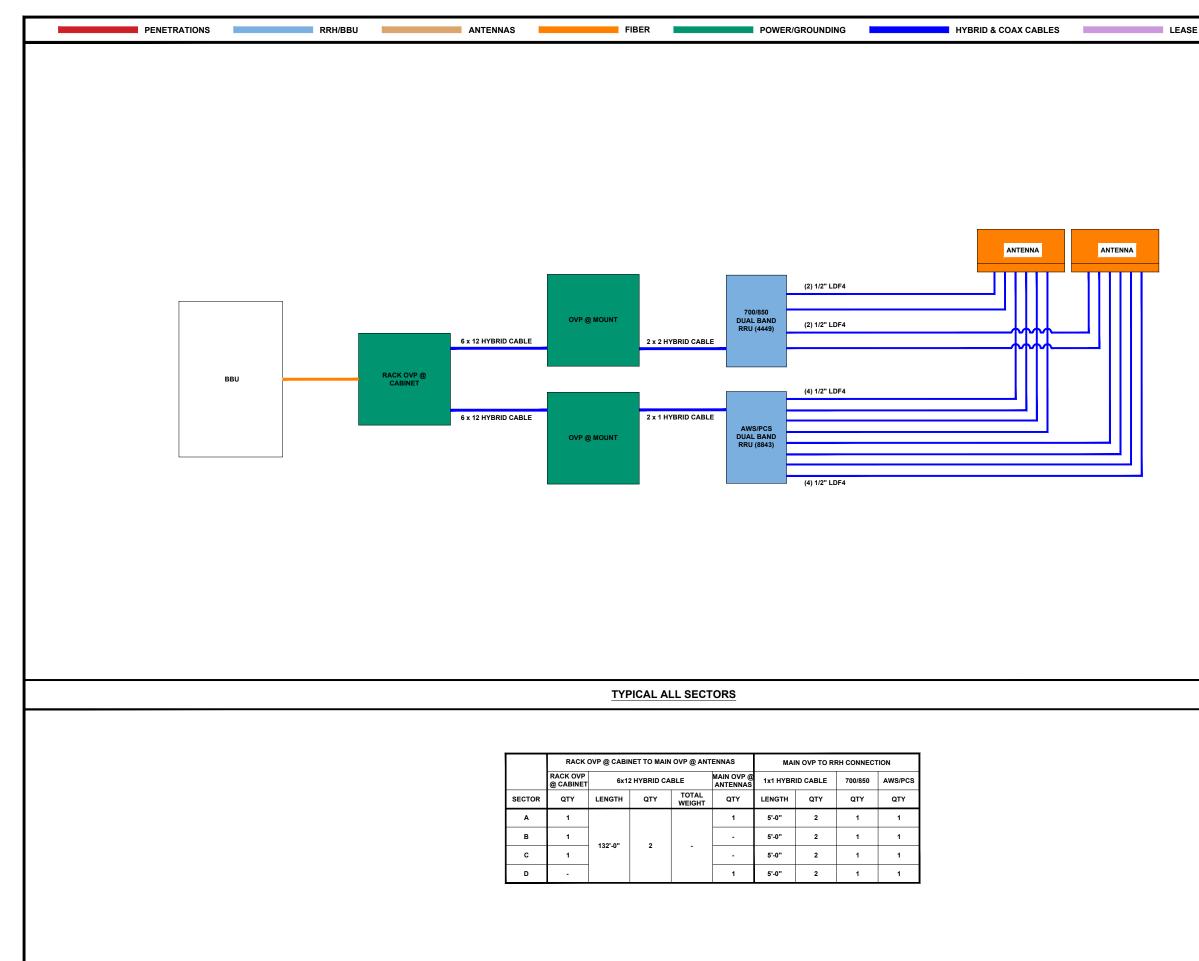
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DEN LEYDEN 17684 WEST 84TH PLACE **ARVADA, CO 80007 NEW SITE BUILD**

SHEET TITLE ELECTRICAL AC

ONE-LINE DIAGRAM SHEET NUMBER

E-2

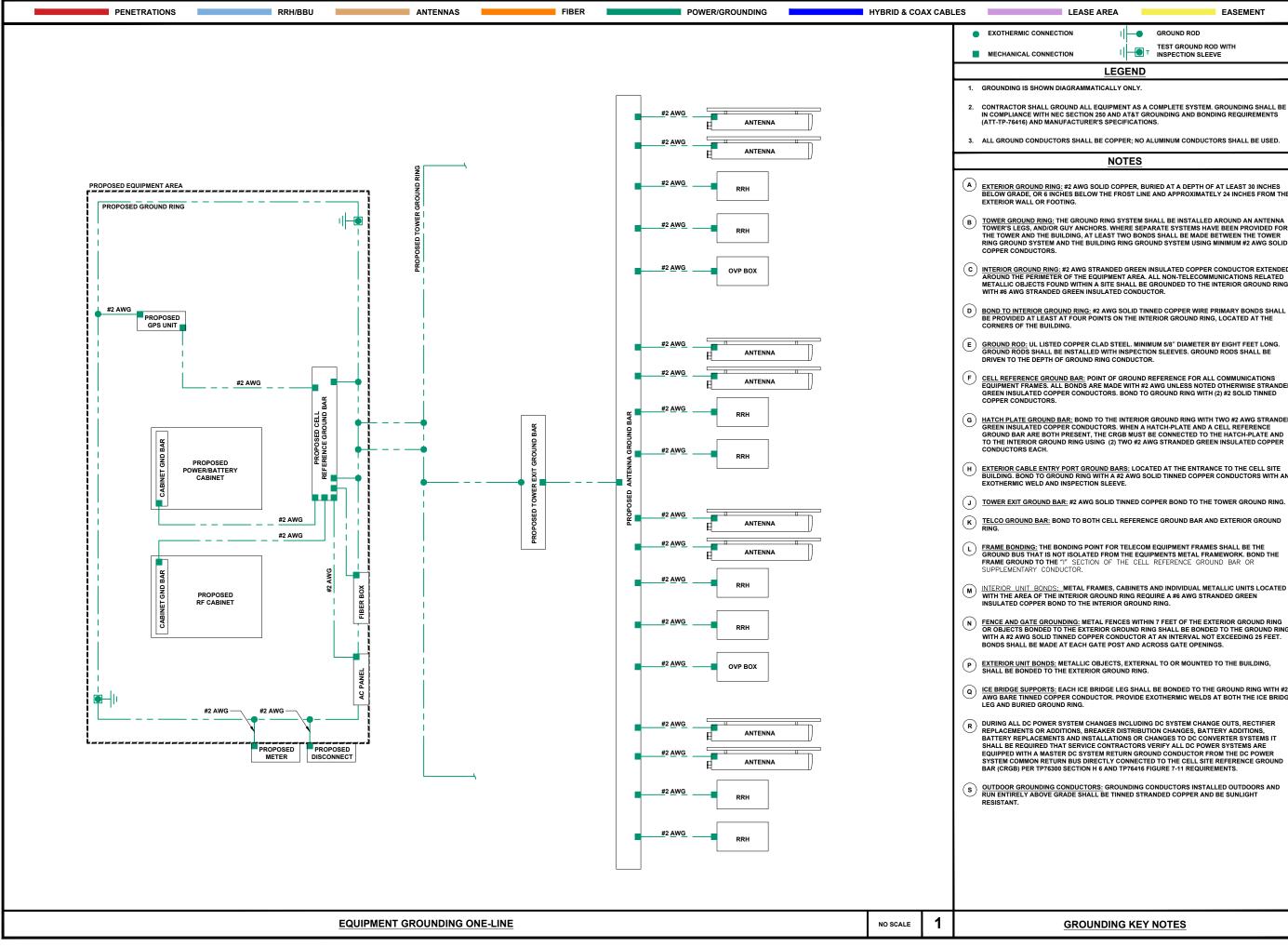


OVP SCHEDULE

AREA	EASEMENT		
		3131 S. VAUGHN	ZON WAY, SUITE 550, CO 80014
		BLACK &	VEATCH RACUSE STREET E 800 .ORADO 80237
		PROJECT NO: DRAWN BY:	197068.0016 BTS
		CHECKED BY:	NCP
		A 09/10/19 ISSL	JED FOR 90% CDs
		REV DATE	DESCRIPTION
	NO SCALE 1	IT IS A VIOLATION OF LAW	USEBERTION STRUCTION FOR ANY PERSON, UNLESS BY HE DIRECTION OF A
		LICENSED PROFESSIONAL	ER THE DIRECTION OF A ENGINEER, TO ALTER THIS MENT.
		17684 WEST ARVADA,	EYDEN 84TH PLACE CO 80007 'E BUILD
		ELECTR	ICAL DC DIAGRAM
			NUMBER

2

NO SCALE



AREA

FASEMENT

GROUND ROD TEST GROUND ROD WITH INSPECTION SLEEVE

LEGEND

2. CONTRACTOR SHALL GROUND ALL EQUIPMENT AS A COMPLETE SYSTEM, GROUNDING SHALL BE IN COMPLIANCE WITH NEC SECTION 250 AND AT&T GROUNDING AND BONDING REQUIREMENTS (ATT-TP-76416) AND MANUFACTURER'S SPECIFICATIONS.

3. ALL GROUND CONDUCTORS SHALL BE COPPER; NO ALUMINUM CONDUCTORS SHALL BE USED.

NOTES

A <u>EXTERIOR GROUND RING:</u> #2 AWG SOLID COPPER, BURIED AT A DEPTH OF AT LEAST 30 INCHES BELOW GRADE, OR 6 INCHES BELOW THE FROST LINE AND APPROXIMATELY 24 INCHES FROM THE

TOWER GROUND RING: THE GROUND RING SYSTEM SHALL BE INSTALLED AROUND AN ANTENNA TOWER'S LEGS, AND/OR GUY ANCHORS. WHERE SEPARATE SYSTEMS HAVE BEEN PROVIDED FOR THE TOWER AND THE BUILDING, AT LEAST TWO BONDS SHALL BE MADE BETWEEN THE TOWER RING GROUND SYSTEM AND THE BUILDING RING GROUND SYSTEM USING MINIMUM #2 AWG SOLID

C INTERIOR GROUND RING: #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTOR EXTENDED AROUND THE PERIMETER OF THE EQUIPMENT AREA. ALL NON-TELECOMMUNICATIONS RELATED METALLIC OBJECTS FOUND WITHIN A SITE SHALL BE GROUNDED TO THE INTERIOR GROUND RING WITHIN CALVIC OFFICIENT INCLUMENT OF DOWNLOT OF DOWNLOW TO THE INTERIOR GROUND RING

E <u>GROUND ROD:</u> UL LISTED COPPER CLAD STEEL. MINIMUM 5/8" DIAMETER BY EIGHT FEET LONG. GROUND RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES. GROUND RODS SHALL BE

CELL REFERENCE GROUND BAR: POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 AWG UNLESS NOTED OTHERWISE STRANDED GREEN INSULATED COPPER CONDUCTORS. BOND TO GROUND RING WITH (2) #2 SOLID TINNED COPPER CONDUCTORS.

G HATCH PLATE GROUND BAR: BOND TO THE INTERIOR GROUND RING WITH TWO #2 AWG STRANDE GREEN INSULATED COPPER CONDUCTORS. WHEN A HATCH-PLATE AND A CELL REFERENCE GROUND BAR ARE BOTH PRESENT. THE CRGB MUST BE CONNECTED TO THE HATCH-PLATE AND TO THE INTERIOR GROUND RING USING (2) TWO #2 AWG STRANDED GREEN INSULATED COPPER

(H) <u>EXTERIOR CABLE ENTRY PORT GROUND BARS:</u> LOCATED AT THE ENTRANCE TO THE CELL SITE BUILDING. BOND TO GROUND RING WITH A #2 AWG SOLID TINNED COPPER CONDUCTORS WITH AN EXOTHERMIC WELD AND INSPECTION SLEEVE.

FRAME BONDING: THE BONDING POINT FOR TELECOM EQUIPMENT FRAMES SHALL BE THE GROUND BUS THAT IS NOT ISOLATED FROM THE EQUIPMENTS METAL FRAMEWORK. BOND THE FRAME GROUND TO THE "I" SECTION OF THE CELL REFERENCE GROUND BAR OR

M <u>INTERIOR UNIT BONDS:</u> METAL FRAMES, CABINETS AND INDIVIDUAL METALLIC UNITS LOCATED WITH THE AREA OF THE INTERIOR GROUND RING REQUIRE A #6 AWG STRANDED GREEN INSULATED COPPER BOND TO THE INTERIOR GROUND RING.

(N) <u>FENCE AND GATE GROUNDING:</u> METAL FENCES WITHIN 7 FEET OF THE EXTERIOR GROUND RING OR OBJECTS BONDED TO THE EXTERIOR GROUND RING SHALL BE BONDED TO THE GROUND RING WITH A #2 AWG SOLID TINNED COPPER CONDUCTOR AT AN INTERVAL NOT EXCEEDING 25 FEET. BONDS SHALL BE MADE AT EACH GATE POST AND ACROSS GATE OPENINGS.

P EXTERIOR UNIT BONDS: METALLIC OBJECTS, EXTERNAL TO OR MOUNTED TO THE BUILDING, SHALL BE BONDED TO THE EXTERIOR GROUND RING.

Q ICE BRIDGE SUPPORTS: EACH ICE BRIDGE LEG SHALL BE BONDED TO THE GROUND RING WITH #2 AWG BARE TINNED COPPER CONDUCTOR. PROVIDE EXOTHERMIC WELDS AT BOTH THE ICE BRIDG

(R) DURING ALL DC POWER SYSTEM CHANGES INCLUDING DC SYSTEM CHANGE OUTS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTER SYSTEMS IT SHALL BE REQUIRED THAT SERVICE CONTRACTORS VERIFY ALL DC POWER SYSTEMS ARE EQUIPPED LINE A MARTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM COMMON RETURN BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR (CRGB) PER TP76300 SECTION H 6 AND TP76416 FIGURE 7-11 REQUIREMENTS.

(S) <u>OUTDOOR GROUNDING CONDUCTORS:</u> GROUNDING CONDUCTORS INSTALLED OUTDOORS AND RUNE ENTRELY ABOVE GRADE SHALL BE TINNED STRANDED COPPER AND BE SUNLIGHT

verizon

3131 S. VAUGHN WAY, SUITE 550. AURORA, CO 80014



4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237

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DRAWN BY:	BTS
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DEN LEYDEN 17684 WEST 84TH PLACE ARVADA, CO 80007 **NEW SITE BUILD**

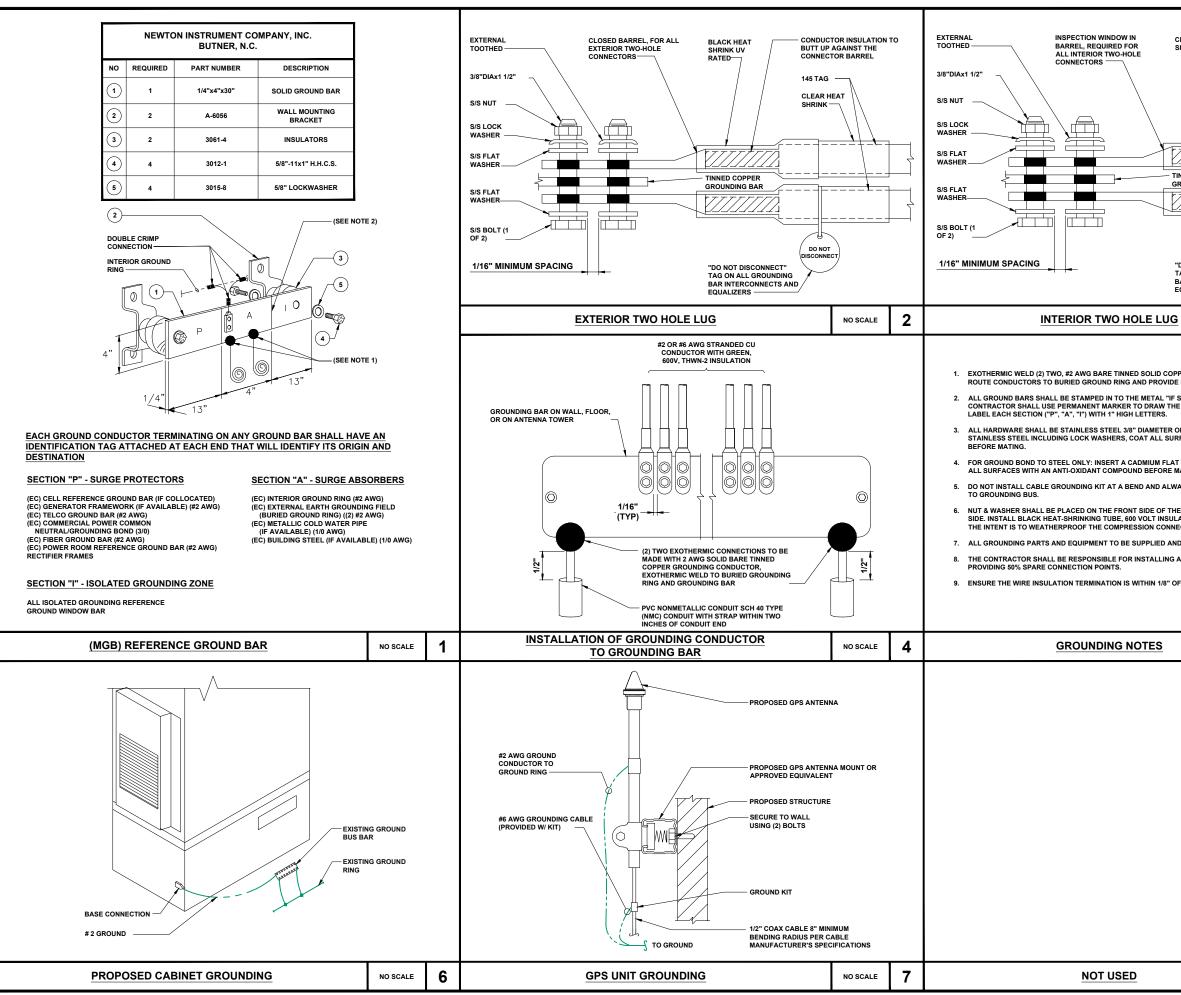
SHEET TITLE

EQUIPMENT GROUNDING PLAN

SHEET NUMBE

G-1

GROUNDING KEY NOTES



FIBER

POWER/GROUNDING

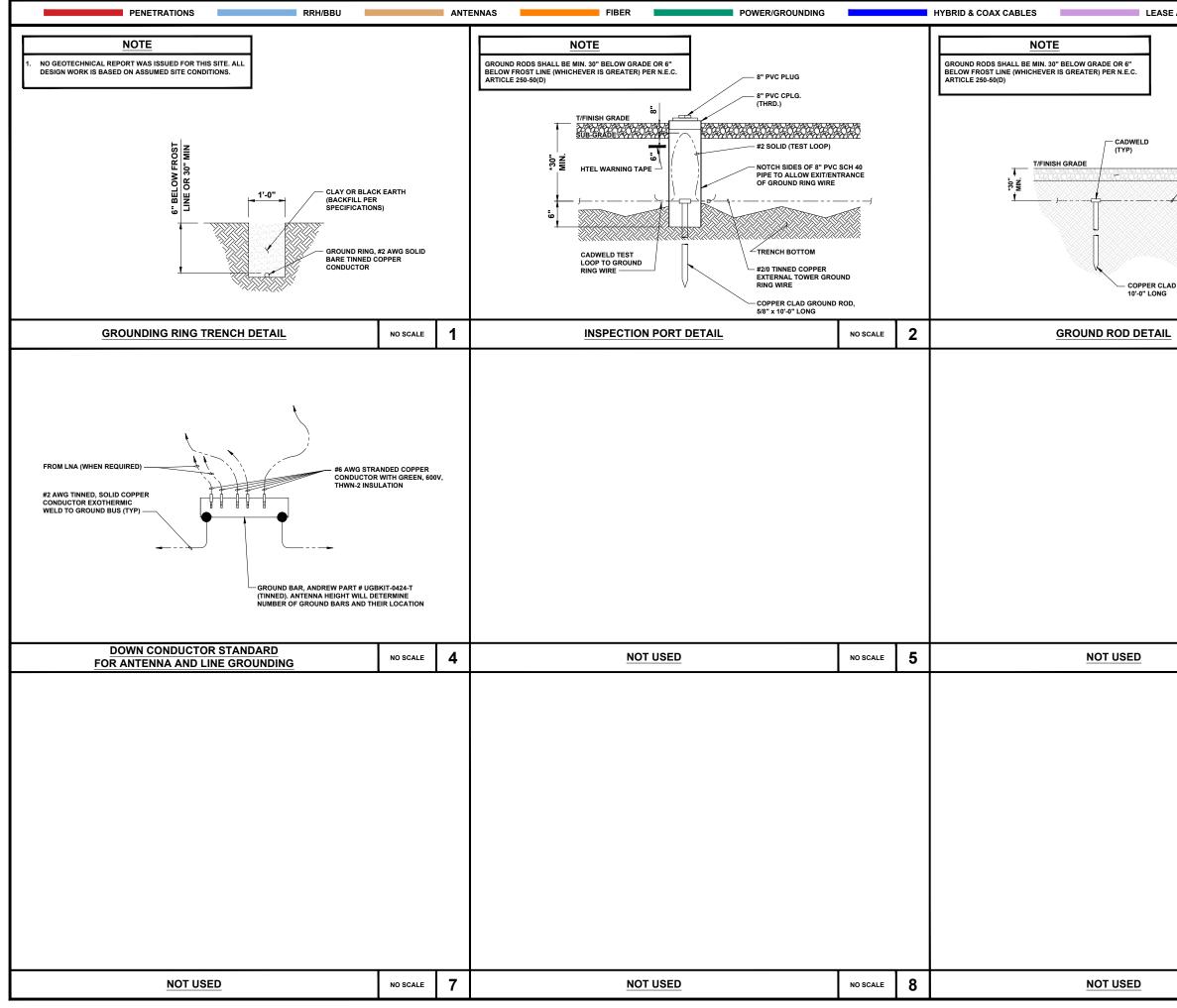
HYBRID & COAX CABLES

ANTENNAS

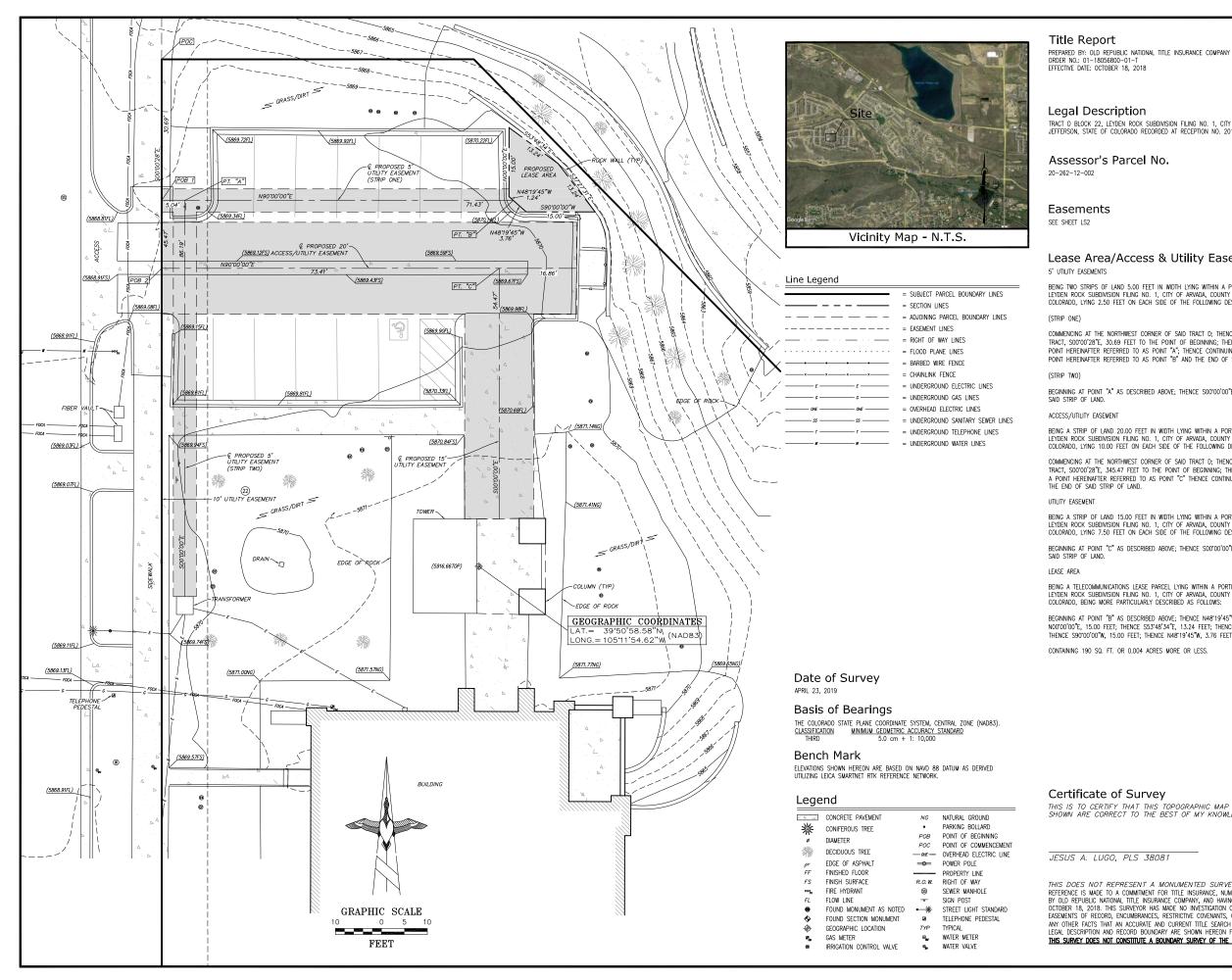
PENETRATIONS

RRH/BBU

LEASE AREA	EASEMENT		
FOR SHRINK BUTT UI		1TO	VERIZON
TINNED COPPER GROUNDING BAR "DO NOT DISCONNECT" TAG ON ALL GROUNDING BAR INTERCONNECTS AND EQUALIZERS	тест		EXAMPLE BLACK & VEATCH 4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237
HOLE LUG	NO SCALE	3	PROJECT NO: 197068.0016
NED SOLID COPPER CONDUCTORS TO GROUND BA G AND PROVIDE PARALLEL EXOTHERMIC WELD. THE METAL "IF STOLEN DO NOT RECYCLE." THE IF TO DRAW THE LINES BETWEEN EACH SECTION / SH LETTERS. W8" DIAMETER OR LARGER. ALL HARDWARE 18-8 , COAT ALL SURFACES WITH AN ANTI-OXIDANT CO CADMIUM FLAT WASHER BETWEEN LUG AND STE JUND BEFORE MATING. BEND AND ALWAYS DIRECT GROUND CONDUCTOR NAT SIDE OF THE GROUND BAR AND BOLTED ON T 600 VOLT INSULATION, ON ALL GROUNDING TERMI VESSION CONNECTION. E SUPPLIED AND INSTALLED BY CONTRACTOR. DR INSTALLING ADDITIONAL GROUND BAR AS REQ S WITHIN 1/8" OF THE BARREL (NO SHINERS).	AND MPOUND EL, COAT 2 DOWN HE BACK NATIONS.		CHECKED BY: NCP
NOTES	NO SCALE	5	HOLATION OF LAW FOR ANY PERSON, UNLESS
			THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT. DEN LEYDEN 17684 WEST 84TH PLACE ARVADA, CO 80007 NEW SITE BUILD SHEET TITLE GROUNDING DETAILS
			SHEET NUMBER
<u>ED</u>	NO SCALE	8	



AREA	EASEMENT		
COPPER WIRE	RE STRANDED TIN , ANIXTER CAT. IPPROVED EQUAL		VERIZON 3131 S. VAUGHN WAY, SUITE 550, AURORA, CO 80014
D GROUND ROD, 5/8" x			BLACK & VEATCH 4600 SOUTH SYRACUSE STREET SUITE 800 DENVER, COLORADO 80237
	NO SCALE	3	PROJECT NO: 197068.0016 DRAWN BY: BTS CHECKED BY: NCP
			A 09/10/19 ISSUED FOR 90% CDs REV DATE DESCRIPTION
	NO SCALE	6	NOT TO BEST RUCTION NOT CONSTRUCTION
			IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.
			DEN LEYDEN 17684 WEST 84TH PLACE ARVADA, CO 80007 NEW SITE BUILD
			SHEET TITLE GROUNDING DETAILS
			SHEET NUMBER G-3
	NO SCALE	9	



TRACT D BLOCK 22, LEYDEN ROCK SUBDIVISION FILING NO. 1, CITY OF ARVADA, COUNTY OF JEFFERSON, STATE OF COLORADO RECORDED AT RECEPTION NO. 2012078338.

Lease Area/Access & Utility Easements

BEING TWO STRIPS OF LAND 5.00 FEET IN WIDTH LYING WITHIN A PORTION OF TRACT D BLOCK 22, LEYDEN ROCK SUBDIVISION FILING NO. 1, CITY OF ARVADA, COUNTY OF JEFFERSON, STATE OF COLORADO, LYING 2.50 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINES:

COMMENCING AT THE NORTHWEST CORNER OF SAID TRACT D; THENCE ALONG THE WEST LINE OF SAID TRACT, S00'00'28"E, 30.69 FEET TO THE POINT OF BEGINNING; THENCE N90'00'00"E, 5.04 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "A"; THENCE CONTINUING N90'00'00"E, 71.43 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "B" AND THE END OF SAID STRIP OF LAND.

BEGINNING AT POINT "A" AS DESCRIBED ABOVE; THENCE S00'00'00"E, 86.19 FEET TO THE END OF SAID STRIP OF LAND.

BEING A STRIP OF LAND 20.00 FEET IN WIDTH LYING WITHIN A PORTION OF TRACT D BLOCK 22, LEYDEN ROCK SUBDIVISION FILING NO. 1, CITY OF ARVADA, COUNTY OF JEFFERSON, STATE OF COLORADO, LYING 10.00 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCING AT THE NORTHWEST CORNER OF SAID TRACT D; THENCE ALONG THE WEST LINE OF SAID TRACT, S00'00'28"E, 345.47 FEET TO THE POINT OF BEGINNING; THENCE N90'00'00"E, 73.41 FEET TO A POINT HEREINAFTER REFERRED TO AS POINT "C" THENCE CONTINUING N90'00'00"E, 16.86 FEET TO

BEING A STRIP OF LAND 15.00 FEET IN WIDTH LYING WITHIN A PORTION OF TRACT D BLOCK 22, LEYDEN ROCK SUBDIVISION FILING NO. 1, CITY OF ARVADA, COUNTY OF JEFFERSON, STATE OF COLORADO, LYING 7.50 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

BEGINNING AT POINT "C" AS DESCRIBED ABOVE; THENCE S00'00'00"E, 54.47 FEET TO THE END OF

BEING A TELECOMMUNICATIONS LEASE PARCEL LYING WITHIN A PORTION OF TRACT D BLOCK 22, LEYDEN ROCK SUBDIVISION FILING NO. 1, CITY OF ARVADA, COUNTY OF JEFFERSON, STATE OF

BEGINNING AT POINT "B" AS DESCRIBED ABOVE: THENCE N48 19'45"W. 1.24 FEFT: THENCE N00'00'00"E, 15.00 FEET; THENCE S53'48'34"E, 13.24 FEET; THENCE S37'27'31"E, 13.24 FEET; THENCE \$90'00'00"W. 15.00 FEET: THENCE N48'19'45"W. 3.76 FEET TO THE POINT OF BEGINNING.

THIS IS TO CERTIFY THAT THIS TOPOGRAPHIC MAP AND IMPROVEMENTS SHOWN ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

THIS DOES NOT REPRESENT A MONUMENTED SURVEY. REFERENCE IS MADE TO A COMMITMENT FOR TITLE INSURANCE, NUMBER 01-18056800-01-T, ISSUED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, AND HAVING AN EFFECTIVE DATE OF OCTOBER 18, 2018. THIS SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBERANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE. THE LESSOR'S LEGAL DESCRIPTION AND RECORD BOUNDARY ARE SHOWN HEREON FOR REFERENCE ONLY. THIS SURVEY DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE LESSOR'S PROPERTY.





6950 S. Tucson Way, Unit C Centennial, CO 80112 Phone: (720) 488-1303 Fax: (720) 488-1306

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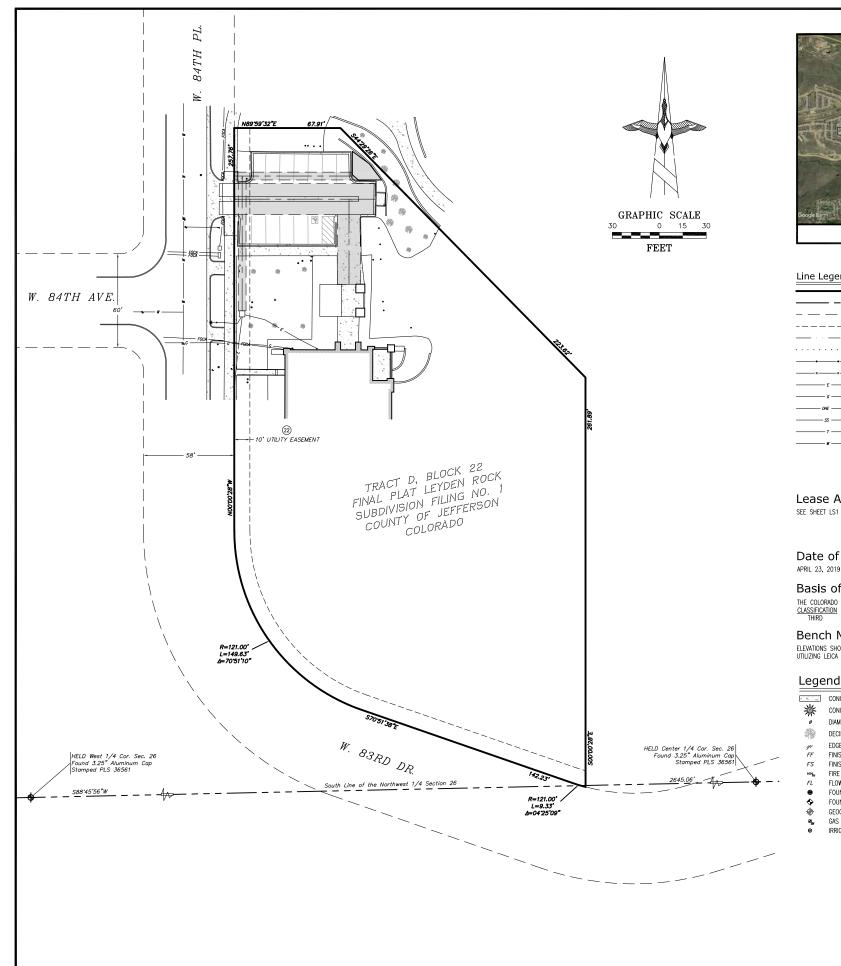
DEN LEYDEN 17864 W. 84TH PL. ARVADA, CO. 80007 CO-LO MONOPOLE

SHEET TITLE

LAND SURVEY

SHEET NUMBER

LS-1



Vicinity Map - N.T.S.

Line Legend

	= SUBJECT PARCEL BOUNDARY LINES
	= SECTION LINES
	= ADJOINING PARCEL BOUNDARY LINES
	= EASEMENT LINES
· · · · · · · · ·	= RIGHT OF WAY LINES
	= FLOOD PLANE LINES
****	= BARBED WIRE FENCE
xxx	= CHAINLINK FENCE
£	= UNDERGROUND ELECTRIC LINES
6	= UNDERGROUND GAS LINES
	= OVERHEAD ELECTRIC LINES
ss ss	= UNDERGROUND SANITARY SEWER LINES
rr	= UNDERGROUND TELEPHONE LINES
WW	= UNDERGROUND WATER LINES

Lease Area/Access & Utility Easements

Date of Survey APRIL 23, 2019

Basis of Bearings THE COLORADO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE (NAD83). CLASSIFICATION MINIMUM GEOMETRIC ACCURACY STANDARD 5.0 cm + 1: 10,000

Bench Mark ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 88 DATUM AS DERIVED UTILIZING LEICA SMARTNET RTK REFERENCE NETWORK.

Legend

-cgc	i i a		
5.4	CONCRETE PAVEMENT	NG	NATURAL GROUND
淼	CONIFEROUS TREE	•	PARKING BOLLARD
ø	DIAMETER	POB POC	POINT OF BEGINNING POINT OF COMMENCEMENT
貒	DECIDUOUS TREE	— оне —	OVERHEAD ELECTRIC LINE
11	EDGE OF ASPHALT	=0=	POWER POLE
FF	FINISHED FLOOR		PROPERTY LINE
FS	FINISH SURFACE	R.O.W.	RIGHT OF WAY
eoq,	FIRE HYDRANT	\$	SEWER MANHOLE
FL	FLOW LINE	-	SIGN POST
•	FOUND MONUMENT AS NOTED	• **	STREET LIGHT STANDARD
\$	FOUND SECTION MONUMENT	2	TELEPHONE PEDESTAL
٠	GEOGRAPHIC LOCATION	TYP	TYPICAL
Ц	GAS METER	•	WATER METER
0	IRRIGATION CONTROL VALVE	ଞ୍ଚ	WATER VALVE

Title Report PREPARED BY: OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY ORDER NO.: 01-18056800-01-T EFFECTIVE DATE: OCTOBER 18, 2018

Legal Description TRACT D BLOCK 22, LEYDEN ROCK SUBDIVISION FILING NO. 1, CITY OF ARVADA, COUNTY OF JEFFERSON, STATE OF COLORADO RECORDED AT RECEPTION NO. 2012078338.

Assessor's Parcel No. 20-262-12-002

Easements

1. SUBJECT TO THE RESERVATION SET FORTH IN THE DEED, RECORDED 03/25/1880, IN BOOK 26, PAGE 531, OF THE JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE). 2. SUBJECT TO THE RIGHT OF THE UNITED STATES OF AMERICA, AS RECITED IN THE PATENT,

RECORDED 03/19/1890, IN BOOK 32, PAGE 258, OF THE JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE). 3. SUBJECT TO THE RIGHT OF THE UNITED STATES OF AMERICA, AS RECITED IN THE PATENT,

IN NATURE).

6. SUBJECT TO THE RIGHT OF THE UNITED STATES OF AMERICA, AS RECITED IN THE PATENT, RECORDED 03/06/1904, IN BOOK 119, PAGE 362, OF THE JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE).

7. SUBJECT TO THE RIGHT OF THE UNITED STATES OF AMERICA, AS RECITED IN THE PATENT, RECORDED 02/08/1904, IN BOOK 119, PAGE 360, OF THE JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE).

JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE).

9. DEED FOR RIGHT OF WAY PURPOSES IN FAVOR OF THE DENVER AND NORTHWESTERN RAILWAY COMPANY, RECORDED 03/24/1914, IN BOOK 173, PAGE 417, OF THE JEFFERSON COUNTY RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY).

10. SUBJECT TO COVENANTS, RESTRICTIONS, RESERVATIONS, FASEMENTS, RIGHTS OF WAY AND BUILDING SETBACKS AS SHOWN ON THE PLAT OF STANLEY PARK, RECORDED IN PLAT BOOK 3, PAGE 64 OF THE JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE).

11. SUBJECT TO THE RESERVATIONS SET FORTH IN THE DEED, RECORDED 07/31/1950, IN BOOK 683, PAGE 375, OF THE JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE).

JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE).

13. ORDER OF COURT, RECORDED 10/23/1967, AS DOCUMENT NO. 257039, OF THE JEFFERSON COUNTY RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY).

14. SUBJECT TO THE RESERVATION SET FORTH IN THE DEED, RECORDED 06/12/1970, AS DOCUMENT NO. 376107, OF THE JEFFERSON COUNTY RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY).

15. SUBJECT TO THE RESERVATIONS SET FORTH IN THE DEED, RECORDED 04/14/1971, AS DOCUMENT NO. 414641, OF THE JEFFERSON COUNTY RECORDS

NOTE: RELEASE AND QUIT CLAIM DEED, RECORDED 11/23/1998, AS DOCUMENT NO. F0741256, OF THE JEFFERSON COUNTY RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY).

16. QUIT CLAIM DEED OF THE OIL, COAL, GAS, ROCK, CLAY AND OTHER AGGREGATES AND OTHER MINERALS TO PATTRIDGE LEYDEN, INC. RECORDED 12/06/1990, AS DOCUMENT NO. 90103378, OF THE JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE).

17. SUBJECT TO THE RESERVATION SET FORTH IN THE DEED, RECORDED 11/09/1993, AS DOCUMENT NO. 93184796, OF THE JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE).

18. ORDER OF INCLUSION, RECORDED 12/03/1998, AS DOCUMENT NO. F0748350, OF THE JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE).

19. REQUEST FOR NOTIFICATION OF SURFACE DEVELOPMENT, RECORDED 05/16/2002, AS DOCUMENT NO. F1483935, OF THE JEFFERSON COUNTY RECORDS. (DOES NOT AFFECT SUBJECT PROPERTY).

20. QUIT CLAIM DEED OF THE OIL, COAL, GAS, ROCK, CLAY AND OTHER AGGREGATES AND ALL OTHER MINERALS TO THE CITY OF ARVADA, COLORADO, RECORDED 01/27/2005, AS DOCUMENT NO. F2164505, OF THE JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE).

21. ORDER CHANGING NAME OF DISTRICT, RECORDED 10/25/2007, AS DOCUMENT NO. 2007120785, OF THE JEFFERSON COUNTY RECORDS. (NOT A PLOTTABLE ITEM).

(22) SUBJECT TO COVENANTS, RESTRICTIONS, RESERVATIONS, EASEMENTS, RIGHTS OF WAY AND BUILDING SETBACKS AS SHOWN ON THE PLAT OF LEYDEN ROCK SUBDIVISION FILING NO. 1, RECORDED AS DOCUMENT NO. 2012078338. OF THE JEFFERSON COUNTY RECORDS. (PLOTTED HEREON).

23. DEVELOPMENT AGREEMENT, RECORDED 07/27/2012, AS DOCUMENT NO. 2012078339, OF THE JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE).

24. ORDER DISSOLVING LEYDEN ROCK METROPOLITAN DISTRICT NOS. 1-9, RECORDED 11/13/2017, AS DOCUMENT NO. 2017116377, OF THE JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE).

25. ORDER NAME CHANGE TO LEYDEN ROCK METROPOLITAN DISTRICT, RECORDED 02/02/2018, AS DOCUMENT NO. 2018010607, OF THE JEFFERSON COUNTY RECORDS. (BLANKET IN NATURE).

RECORDED 10/13/1892, IN BOOK 32, PAGE 340, OF THE JEFFERSON COUNTY RECORDS. (BLANKET

4. DEED FOR RAILWAY PURPOSES, RECORDED 06/24/1903, IN BOOK 121, PAGE 290, OF THE JEFFERSON COUNTY RECORDS. (NOT A PLOTTABLE ITEM).

5. SUBJECT TO RIGHT OF WAY AND CONDEMNATION IN ORDER, RECORDED 12/02/1903, IN BOOK 141, PAGE 24, OF THE JEFFERSON COUNTY RECORDS. (NOT A PLOTTABLE ITEM).

8. DEED CONVEYING COAL RIGHTS, RECORDED 11/06/1908, IN BOOK 127, PAGE 553, OF THE

12. ANNEXATION AGREEMENT, RECORDED 04/19/1967, AS DOCUMENT NO. 234227, OF THE





10950 GRANDVIEW DRIVE OVERLAND PARK, KANSAS 66210 (913) 458–2000

PROJECT NO:

19097

JT

JAL

DRAWN BY: CHECKED BY:

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~		
1	5/6/19	ADDED LEASE AREA
0	5/6/19 4/26/19	SUBMITTAL
REV	DATE	DESCRIPTION



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DEN LEYDEN 17864 W. 84TH PL. ARVADA, CO. 80007 CO-LO MONOPOLE

SHEET TITLE

LAND SURVEY

SHEET NUMBER

LS-2