



SITE NAME: **CSP CHIPITA**

PROJECTNEW BUILD -CONSTRUCTION DOCUMENTS

SITE ADDRESS: 10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819

PHOTOSIMULATION



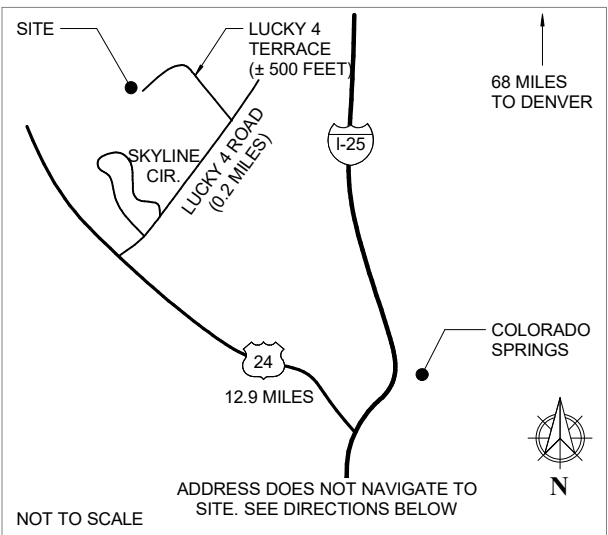
PROJECT DESCRIPTION

- (3) NEW COMMSCOPE CABINETS & 30 KW DIESEL GENERATOR ON CONCRETE SLAB
- (6) NEW VERIZON WIRELESS ANTENNAS ON EXISTING 60'H MONOPOLE
- NEW ELECTRICAL SERVICE
- NEW FIBER SERVICE

PROJECT TEAM

OWNER DEAN SMISCHNY 825 5TH STREET SOUTHEAST PELICAN RAPIDS, MN 56572	TOWER MANAGEMENT CROWN CASTLE CONTACT: JULIETTE HAMER 5350 N 48TH ST. SUITE 305 PHOENIX, AZ 85226 PHONE: 303.945.0708	CLIENT VERIZON WIRELESS CONSTRUCTION ENGINEER JASON SHELLEDY 3131 S. VAUGHN WAY SUITE 550 AURORA CO. 80014 CELL:970.646.1283	RF ENGINEER VERIZON WIRELESS JOE DAVIS 3131 S. VAUGHN WAY SUITE 550 AURORA, CO 80014 PHONE: 915.522.6807	SITE ACQUISITIONIST BLACK & VETCH SHAWN TURK 4600 S. SYRACUSE STREET SUITE 800 DENVER, CO 80237 PHONE:303.229.4681
---	---	--	---	---

VICINITY MAP



DIRECTIONS

- FROM DENVER
- I-25 SOUTH TO COLORADO SPRINGS (APPROXIMATELY 68 MILES)
 - EXIT 141 FOR US-24 WEST/CIMARRON STREET
 - LEFT ONTO US-24 WEST/CIMARRON STREET (12.9 MILES)
 - RIGHT ONTO LUCKY 4 ROAD (0.2 MILES)
 - LEFT ONTO LUCKY 4 TERRACE (APPROXIMATELY 500 FEET)
 - LEFT AT END OF ROAD; SITE AT END OF ROAD

PROJECT DATA

JURISDICTION	EL PASO COUNTY, PIKES PEAK REGIONAL
APN	8309200031
ZONING DESIGNATION	R-T
EXISTING SITE	
OCCUPANCY GROUP	U
CONSTRUCTION TYPE	V-B, NEMA 3R

NEW CONSTRUCTION	
OCCUPANCY GROUP	U
CONSTRUCTION TYPE	V-B NEMA 3R

GOVERNING CODES:
2009 IBC, 2009 IFC, 2009 IMC, 2009 IECC, 2014 NEC

A.D.A. COMPLIANCE
THIS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION

DRAWING INDEX

SHEET	DESCRIPTION
T1.00	TITLE SHEET
G1.00	GENERAL NOTES
G1.10	GENERATOR NOTES
G1.20	GENERATOR CLEARANCE SCHEMATICS
A1.00	SITE PLAN
A1.10	ENLARGED SITE PLAN
A1.20	FIBER MMP
A2.00	ANTENNA PLAN, HYBRID CABLE DIAGRAM & NOTES
A3.00	ELEVATIONS
A4.00	DETAILS
S1.00	STRUCTURAL NOTES
S2.00	FOUNDATION PLAN
S2.10	CANOPY ROOF FRAMING PLAN
S3.00	EQUIPMENT PLATFORM SETION AND DETAILS
E1.00	ELECTRICAL NOTES & SYMBOLS
E2.00	ELECTRICAL SITE PLAN
E3.00	PANEL SCHEDULE & ONE LINE DIAGRAM
E4.00	GROUNDING PLAN & DETAILS
E4.10	GROUNDING SCHEMATIC & DETAILS
E4.20	ELECTRICAL & GROUNDING DETAILS

ATTACHMENTS

- LAND SURVEY
BY: CROWN CASTLE
DATED: 01/30/15
- TOWER STRUCTURAL CALCS.
BY: CROWN CASTLE INTERNATIONAL
DATED: (PENDING)
- CANOPY STRUCTURAL CALCS.
BY: OTEGUI STRUCTURAL SERVICES, LLC
DATED: (PENDING)



VERIZON WIRELESS SERVICES
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO 80014

PROJECT INFORMATION
SITE NAME
CSP CHIPITA
SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819
CROWN CASTLE
TOWER SITE NAME
THIRD CREEK
SITE I.D.
877026
CONSULTANT

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEWERR2nd REVIEWSGP

CHARLES
STECKLY

ARCHITECTURE

5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

NOT FOR
CONSTRUCTION

TITLE SHEET

T1.00

BBU/RRH

HYBRID & COAX CABLES

MW/FIBER EQ.

FIBER

OV/PELEC. EQ.

POWER/GROUNDING

ACCESS/UTILITY EASEMENT

GEN. CONST. UTILITY EASEMENT

LEASE AREA

EXISTING EASEMENT

ANTENNAS

PENETRATIONS

ABBREVIATIONS

°@	AT	H.M.	HOLLOW METAL
∅	CENTERLINE	HORZ.	HORIZONTAL
	DEGREES	HR.	HOUR
	DIAMETER	HT.	HEIGHT
A/C	AIR CONDITIONER	ILC	INTEGRATED LOAD CENTER
APPROX.	APPROXIMATE	INT.	INTERIOR
ARCH.	ARCHITECTURAL		
A.F.F.	ABOVE FINISH FLOOR	L.F.	LINEAR FEET
A.F.G.	ABOVE FINISH GRADE	LTE	LIMIT TO EXTEND
ALU	ALCATEL LUCENT		
ATS	AUTOMATIC TRANSFER SWITCH	MAX.	MAXIMUM
AWS	ADVANCED WIRELESS SYSTEM	MECH.	MECHANICAL
		MFR.	MANUFACTURER
BBU	BASE BAND UNIT	MGB	MAIN GROUND BAR
BCEM	BASE CHANNEL ELEMENT	MIN.	MINIMUM
MODULE		MSDS	MATERIAL SAFETY DATA SHEET
BLDG.	BUILDING	MTL.	METAL
B.O.	BOTTOM OF	MTS	MANUAL TRANSFER SWITCH
CLG.	CEILING	N.T.S.	NOT TO SCALE
COL.	COLUMN		
CONC.	CONCRETE	O.C.	ON CENTER
		O.D.	OUTSIDE DIAMETER
		OVP	OVER VOLTAGE PROTECTION
DBL.	DOUBLE		
DIA.	DIAMETER		
DIM.	DIMENSION	PCS	PERSONAL COMMUNICATIONS
DISC.	DISCONNECT		SERVICE
DN.	DOWN		
DWG.	DRAWING	RAD.	RADIUS
		R.O.	ROUGH OPENING
		RRH	REMOTE RADIO HEAD
(E)	EXISTING		
EA.	EACH		
ELEV.	ELEVATION	SHTG.	SHEATHING
ELEC.	ELECTRICAL	SIM.	SIMILAR
EQ.	EQUAL	SPEC.	SPECIFICATION
EXT.	EXTERIOR	S.S.	STAINLESS STEEL
		STL.	STEEL
		STRUCT.	STRUCTURAL
F.E.	FIRE EXTINGUISHER		
FIN.	FINISH		
FLR.	FLOOR	T.C.	TEMPERATURE CONTROL
FUT.	FUTURE	TELCO	TELECOMMUNICATIONS
		T.O.	TOP OF
		TYP.	TYPICAL
GA.	GAUGE		
GALV.	GALVANIZED		
GEN.	GENERATOR	U.G.	UNDERGROUND
GPS	GLOBAL POSITIONING SYSTEM	U.N.O.	UNLESS NOTED OTHERWISE
GWB.	GYPSPUM WALLBOARD		
		VERT.	VERTICAL
		V.I.F.	VERIFY IN FIELD
		W/	WITH

SYMBOLS LEGEND

-----	EASEMENT		ENLARGED VIEW
-----	LEASE LINE		ELEVATION MARKER
-----	PROPERTY LINE		SPOT ELEVATION
	WOODEN FENCE		SECTION CUT
----- X -----	CHAIN LINK FENCE		EXTERIOR ELEVATION
----- OH -----	(E) OVERHEAD UTILITY		INTERIOR ELEVATION
----- OHE -----	(E) OVERHEAD ELEC.		REVISION NUMBER
----- SS -----	(E) SANITARY SEWER		
----- W -----	(E) WATER LINE		
----- T -----	(E) TELCO CABLE		
----- FIBER -----	(E) FIBER CABLE		
----- E -----	(E) ELECTRICAL		
----- COAX -----	(E) COAX CABLE		

NEW WORK COLOR LEGEND

HYBRID & COAX CABLES	
DC POWER	
FIBER	
ANTENNAS	
RRH/BBU	
PENETRATIONS	

4 - ABBREVIATIONS, SYMBOLS & LEGEND

BATTERY SPECIFICATION:

(DEKA UNIGY1 12AVR170ET) EACH CELL HAS AN IMMOBILIZE ELECTROLYTE CAPACITY OF 2.7 GALLONS EACH. (8) CELLS IN THIS OCCUPANCY RESULTING IN AN AGGREGATE ELECTROLYTE VOLUME OF 21.6 GALLONS.

A. STATIONARY LEAD-ACID BATTERY SYSTEM AND VALVE-REGULATED LEAD-ACID BATTERY SYSTEMS CONTAINING MORE THAN 50 GALLONS OF ELECTROLYTE SHALL COMPLY WITH IFC 608. THIS INSTALLATION IS BELOW 50 GALLONS.

CONTRACTOR TO PROVIDE HAZMAT REPORTING & ADDITIONAL PERMITS FOR BATTERY & GENERATOR SYSTEMS PER LOCAL REQUIREMENTS

3 - BATTERY HAZMAT REVIEW

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

THESE DRAWINGS ARE TO SCALE WHEN PLOTTED ON 11X17 SHEET.

CALL BEFORE YOU DIG - COLORADO LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE.

THESE DRAWINGS MAY NOT SHOW ALL UNDERGROUND PIPING AND UTILITIES. THE CONTRACTOR SHALL EXERCISE EXTREME CARE DURING ALL EXCAVATION AND OTHER CONSTRUCTION ACTIVITIES.

UTILITY NOTIFICATION CENTER OF COLORADO - 1-800-922-1987

THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY LOCATES AND UTILITY RELOCATIONS REQUIRED FOR THIS INSTALLATION. THE CONTRACTOR WILL SCHEDULE AND COORDINATE ALL WORK WITH THE OWNER TO ENSURE NO DISRUPTION TO OWNERS OPERATIONS.

SUBCONTRACTORS SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME

2 - GENERAL CONTRACTOR NOTES

1. DRAWINGS ARE NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE, AND THIS SET OF PLANS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY, UNLESS NOTED OTHERWISE. THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, AND ANYTHING ELSE DEEMED NECESSARY TO COMPLETE INSTALLATIONS AS DESCRIBED HEREIN. REFER TO BID PACKAGE FOR MORE DATA.

2. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT WITH THE CONSTRUCTION AND CONTRACT DOCUMENTS, FIELD CONDITIONS AND CONFIRM THAT THE PROJECT MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY ERRORS, OMISSIONS, OR DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/CONSTRUCTION ENGINEER IN WRITING.

3. THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.

4. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

5. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S, VENDOR'S, & VERIZON WIRELESS SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE NOTIFY CONSTRUCTION ENGINEER.

6. ALL WORK PERFORMED ON PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK.

7. THE STRUCTURAL COMPONENTS OF THIS PROJECT SITE/FACILITY ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE.

8. NEW TOWERS ARE UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION SUBCONTRACTOR IN TERMS OF COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF PERSONNEL AND PROPERTY FROM HAZARDOUS EXPOSURE TO OVERHEAD DANGERS.

9. GENERAL CONTRACTOR SHALL PROVIDE AT THE PROJECT SITE A FULL SET OF PERMITTED CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS AND ADDENDA OR CLARIFICATIONS FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.

10. DETAILS INCLUDED HEREIN ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS OR SITUATIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE SCOPE OF WORK.

11. THE FACILITY IS CELLULAR RADIO EQUIPMENT, ANTENNAS, & SUPPORTING UTILITIES.

12. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION UPON COMPLETION OF WORK. CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.

13. CONTRACTOR SHALL ENSURE THE GENERAL WORK AREA IS KEPT CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY, PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.

14. THE ARCHITECTS/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE CONSTRUCTION ENGINEER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL.

15. SPECIAL INSPECTION TESTING REQUIRING SPECIAL INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT SPECIAL INSPECTOR PER SECTION 1704 OF THE INTERNATIONAL BUILDING CODE (IBC) FOR ITEMS NOTED ON S1.00 IF INCLUDED IN CONSTRUCTION DOCUMENTS. THE INSPECTOR SHALL BE HIRED BY THE CONTRACTOR & COORDINATION SHALL BE ARRANGED BY THE CONTRACTOR FOR REQUIRED INSPECTIONS.



UNDERGROUND SERVICE ALERT
UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
WWW.UNCC.ORG

3 WORKING DAYS UTILITY NOTIFICATION PRIOR TO CONSTRUCTION

1 - GENERAL NOTES



VERIZON WIRELESS SERVICES
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO 80014

PROJECT INFORMATION

SITE NAME

CSP CHIPITA

SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819

CROWN CASTLE

TOWER SITE NAME

THIRD CREEK

SITE I.D.

877026

CONSULTANT

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP



5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

NOT FOR
CONSTRUCTION


GENERAL NOTES

G1.00

PERMIT & INSPECTION NOTES

1. CONTRACTOR SHALL PROVIDE ANY INSPECTIONS REQUIRED BY LOCAL JURISDICTION PRIOR TO FUELING THE GENERATOR.
2. LEGALLY REQUIRED EMERGENCY OR STANDBY GENERATORS SHALL BE ACCEPTANCE TESTED IN ACCORDANCE WITH NFPA 110. DOCUMENTATION SHALL BE PROVIDED BY CONTRACTOR TO THE LOCAL JURISDICTION OUTLINING THE NFPA 110 ACCEPTANCE TEST CONDUCTED AND RESULTS SHOWING CONFORMITY WITH NFPA 110 ACCEPTANCE TESTING REQUIREMENTS.
3. CONTRACTOR SHALL INQUIRE WITH LOCAL JURISDICTION FOR ANY ADDITIONAL ANNUAL PERMITS RELATING TO GENERATORS OR COMBUSTIBLE STORAGE.

2 - PERMIT NOTES



10. **INSPECTIONS:** CONTRACTOR SHALL VERIFY WITH LOCAL FIRE DEPARTMENT INSPECTION REQUIREMENTS INCLUDING
A. INSPECTION TEAM WITNESS FILLING OF THE DIESEL TANK.
B. INSPECTION TEAM WITNESS DEMONSTRATION OF FLOAT SWITCH SET POINTS OF 90% & 40 %.

11. **DIESEL SUB BASE TANK CONSTRUCTION:** (IFC 5704.2.7, NFPA 30-21.4.2.1.1, UL 142))
A. **FUEL CONTAINMENT BASIN:** SUB BASE TANK SHALL INCLUDE WELDED STEEL CONTAINMENT BASIN SIZED AT A MINIMUM OF 125% OF THE TANK CAPACITY TO PREVENT ESCAPE OF FUEL IN THE EVENT OF A TANK RUPTURE
B. **LEAK DETECTION SYSTEM:** A FUEL CONTAINMENT BASIN LEAK DETECTOR SHALL BE SUPPLIED AND WIRED FOR ALARM CONDITION VISIBLE FOR GENERATOR CONTROL PANEL
C. **SUB BASE TANK VENTING:** NORMAL EMERGENCY VENTING SHALL BE SIZED PER UL 142 SPECIFICATION FOR WETTED SURFACE AREA OF TANK.
D. **ENGINE ENVIRONMENTAL SPILL PROTECTION:** TOP OF FUEL TANK BASE SHALL INCLUDE SPILL CONTAINMENT TO CATCH ANY EXCESS SPILL OR LEAKS FROM ENGINE AND COOLING SYSTEM. THIS SHALL BE SIZED FOR 125% OF ENGINE FLUIDS AND FUEL SPILL CONTAINMENT.

12. **REMOTE MANUAL STOP:** (NFPA 110 5.6.5.6 & 5.6.5.6.1) ROTATING PRIME MOVER EQUIPMENT (DIESEL ENGINE) SHALL HAVE A REMOTE MANUAL STOP STATION LOCATED IN APPROVED LOCATION. REMOTE MANUAL STOP STATION SHALL BE CLEARLY LABELED.

13. **REMOTE STATUS PANEL:** (CITY & COUNTY OF DENVER) (DBC AMENDMENTS 604.1.2 & 907.2.13.8) CONTRACTOR IS TO COORDINATE WITH DENVER FIRE DEPARTMENT WITH GETTING FIELD APPROVAL OF FINAL LOCATION PRIOR TO INSTALLATION. ALL GENERATORS SHALL BE PROVIDED WITH A REMOTE STATUS PANEL THAT SHOWS THE FOLLOWING:
A. OPERATING STATUS (ON-OFF) AND MALFUNCTION INDICATION PANEL (PER NFPA 110)
B. INDICATION OF TRANSFER SWITCH POSITION (NORMAL-EMERGENCY)
C. INDICATION THAT GEN. IS IN AUTOMATIC MODE
D. MAIN FUEL OIL STORAGE TANK LOW FUEL LEVEL ALARM. THE LOW FUEL SENSING SWITCH SHALL INDICATE WHEN LESS THAN THE MINIMUM FUEL NECESSARY FOR FULL LOAD RUNNING AS PER NFPA 110 SECTION 5.5.2 OR A MINIMUM OF 75% OF THE TANK SIZE.

14. **GEN. TANK MAX STATIC HEAD** (IMC 1305.7) "IF THE STATIC HEAD WITH A VENT PIPE FILLED WITH OIL EXCEEDS 10 POUNDS PER SQUARE INCH (PSI) (69 KPA), THE TANK SHALL BE DESIGNED FOR THE MAXIMUM STATIC HEAD THAT WILL BE IMPOSED." VERIZON STANDARD MAX STATIC HEAD IS 5 PSI. GENERAC TANKS ARE DESIGNED TO RELEASE PRESSURE CAP LIMITING PRESSURE AT 2.5 PSI. REFER TO GENERAC TANK CUT SHEET.

15. **MAXIMUM ALLOWABLE QUANTITY HAZARDOUS MATERIALS** (IFC TABLE 5003.1.1(1), 5003.9.10, 903.3.1.1) MAXIMUM ALLOWABLE QUANTITY OF CLASS II LIQUID IS 240 GALLONS WHEN STORED IN EXHAUSTED ENCLOSURE. AMOUNT INCREASES TO 480 GAL WHEN ALSO INSTALLING APPROVED FIRE SUPPRESSION SYSTEM.

1 - GENERATOR NOTES

DIESEL GENERATOR: EXTERIOR
EMERGENCY BACKUP POWER
30KW GENERAC DIESEL GENERATOR ABOVE GROUND SUB-BASE TANK CONTAINING 210 GALLONS OF #2D FUEL

FUEL TANK LOAD DURATION CALC:
TANK SIZE = 210 PER MFR DATA
FUEL FILL ALARM @ 90% = 189 GALLONS
FUEL CONSUMPTION RATE = 6.3 GPH @ 100% PER MFR CUT SHEET
LOW FUEL ALARM SET @ 2HRs RUNTIME x 133% = 16.758 GALS
(6.3 GPHx 2HS x 133% = 16.758GALS)
210 GAL TANK PROVIDED/ 6.3GPH= 33 HR RUN TIME

1. **LOCATION OF EXTERIOR TANKS**
A. CLEARANCE (IFC 5704.2.9.6.1.1 & NFPA TABLE 22.4.1.1A & NFPA 37.4.1.4) GENERATOR TANKS WITH A CAPACITY LESS THAN 275 GALLONS MUST BE A MIN. OF 5' FROM A PROPERTY LINE, R.O.W, OPENINGS IN WALLS OR STRUCTURE WITH COMBUSTIBLE WALLS. TANKS WITH CAPACITY 276-750 MUST BE 10' FROM PROPERTY LINE
B. WORKING SPACE (NFPA 70 TABLE 110.26.A1) WORKING SPACE FOR ELECTRICAL EQUIPMENT OF 0-600 VOLTS SHALL BE A MIN. OF 3' ON FRONT/SERVICE SIDE
C. WORKING CLEARANCE (IFC 601.1.2 & NFPA 110 7.9.12.1) A MINIMUM CLEARANCE OF 3FT SHALL BE MAINTAINED ON ALL SIDES OF FUEL TANK.

2. **SIGNAGE**
A. **"NO SMOKING OR OPEN FLAME"** (IFC 5704.2.3.1) THE FOLLOWING SIGNS MADE OF DURABLE MATERIAL ARE REQUIRED ON THE GENERATOR ROOM DOOR (SEE EXAMPLE AT BOT. OF NOTES)
B. **NFPA HAZMAT PLACARD:** (IFC 5003.5 & NFPA 704) VISIBLE HAZARD IDENTIFICATION SIGNS AS SPECIFIED BY NFPA 704 SHALL BE PLACED ON GENERATOR ROOM DOOR REFLECTING THE HIGHEST HAZARD WITHIN THE COMPOUND (SEE EXAMPLE)
C. **FILLING INSTRUCTIONS:** (IFC 5704.2.9.7.6.1) A PERMANENT SIGN SHALL BE PROVIDED AT THE FILL POINT FOR THE TANK, DOCUMENTING THE FILLING PROCEDURE AND TANK CALIBRATION CHART.
D. **EMERGENCY SHUT DOWN PROCEDURES:** (NFPA 37.10.2.1) PROVIDE CLEAR EMERGENCY SHUTDOWN PROCEDURES FOR SAFELY DISABLING THE GENERATOR

3. **TANK VENTILATION** (IFC 5704.2.9.7.2 & IFC 5704.2.7.3. & NFPA 30 & DFC 5704.2.7.3.3)
A. **CLEARANCE:** STORAGE TANKS MUST BE EQUIPPED WITH NORMAL **AND** EMERGENCY VENTING. NORMAL TANK VENT PIPES MUST EXIT STRUCTURE & SHALL BE NO SHORTER THAN 12 FEET ABOVE FINISHED GROUND. VAPORS SHALL BE DISCHARGED AWAY FROM EAVES OR OBSTRUCTIONS. EMERGENCY VENT PIPES MUST EXIT STRUCTURE & SHALL COMPLY WITH NFPA 30/22.7.
a. **CITY & COUNTY OF DENVER:** VENT PIPES MUST ALSO TERMINATE A MIN. OF 5' FROM BUILDING OPENINGS AND A MIN. OF 10' FROM GENERATOR EXHAUST PIPE. VENT PIPES MUST NOT UTILIZE LOW MELTING POINT MATERIALS SUCH AS ALUMINUM, PLASTIC OR COPPER.
B. **WEATHER PROOF CAPS:** (IMC 1305.7) WEATHER PROOF CAPS SHALL BE PROVIDED ON ALL VENT PIPES WITH THE SAME FREE OPEN VENT AREA AS THE CROSS SECTION OF THE VENT PIPE. SCREENS SHALL NOT BE FINER THEN NO.4 MESH
C. **VENT PIPE STATIC HEAD** (IMC 1305.7) IF THE STATIC HEAD WITH A VENT PIPE FILLED WITH OIL EXCEEDS 10 PSI THE TANK SHALL BE DESIGNED FOR THE MAXIMUM STATIC HEAD THAT WILL BE IMPOSED. ALL VENT PIPES AT THIS SITE ARE 12' HIGH WHICH DO NOT EXCEED 10 PSI.
a. 1 PSI = 2.31 FT OF VENT RISE
b. 12FT H VENT / 2.31 FT = 5.19 PSI

4. **GENERATOR EXHAUST PIPE:** (IMC 501.3.1 & NFPA 37 8.2.3) GENERATOR EXHAUST MUST TERMINATE A MINIMUM OF 10' ABOVE GRADE, 10' FROM OPERABLE BUILDING OPENINGS, 10' FROM PROPERTY LINES AND 3' FROM EXTERIOR WALLS AND ROOFS.

5. **OVERFILL PREVENTION TANKS INSIDE BUILDINGS:** (5704.2.9.5.1) TANKS SHALL BE EQUIPPED WITH THE FOLLOWING:
A. A FLOAT VALVE
B. PRESET METER ON FILL LINE
C. A VALVE ACTUATED BY THE WEIGHT OF THE TANKS CONTENTS
D. LOW-HEAD PUMP WHICH IS INCAPABLE OF PRODUCING OVERFLOW OR A LIQUID TIGHT OVERFLOW PIPE AT LEAST ONE PIPE SIZE LARGER THAN THE FILL PIPE AND DISCHARGING BY GRAVITY BACK TO THE OUTSIDE SOURCE OF LIQUID OR TO A APPROVED LOCATION


6. **VEHICLE IMPACT PROTECTION:** (IFC 5703.64 & 312.2) GUARD POSTS/BOLLARDS MEETING THE FOLLOWING REQUIREMENTS SHALL BE PROVIDED TO PROTECT TANKS WITH COMBUSTIBLE/ FLAMMABLE LIQUIDS.
A. CONSTRUCTED OF MIN. 4"Ø STL PIPE IN FOOTING MIN. 15"Ø & MIN. 3' DEPTH
B. SPACED NO MORE THAN 4' APART BETWEEN POSTS ON CENTER
C. LOCATED NO LESS THAN 3' FROM PROTECTED OBJECT & STANDING MIN. 3'TALL

7. **HAZARDOUS MATERIALS INVENTORY STATEMENT:** (IFC APPENDIX H)
A. ALL HAZARDOUS CHEMICALS MUST BE REPORTED TO LOCAL COUNTY FIRE DEPARTMENT PRIOR TO INSPECTION.

8. **FIRE EXTINGUISHER:** (IFC 906.1, NFPA-10, NFPA-76, OSHA 29 CGR 1910.157)
A. FIRE EXTINGUISHER INSTALLED SHALL BE A MIN. RATING OF 4A:40B:C
B. **LOCATION:**(NFPA 10-6.1.3.1) A FIRE EXTINGUISHER SHALL BE CONSPICUOUSLY LOCATED WHERE IT IS READILY ACCESSIBLE AND IMMEDIATELY AVAILABLE IN THE EVENT OF A FIRE.
C. **LOCATION:** (NFPA 10-6.3.1.1) A FIRE EXTINGUISHER RATED 40-B MUST BE WITHIN 30' OF CLASS B LIQUID HAZARD. FIRE EXTINGUISHER RATED 80-B MUST BE WITHIN 50' OF CLASS B LIQUID HAZARD.
D. **HEIGHT:** (NFPA 10-6.1.3.8) FIRE EXTINGUISHER SHALL BE INSTALLED SO THAT THE TOP OF THE FIRE EXTINGUISHER IS BETWEEN 3.5 AND 5 FT A.F.F.

9. **SPILL CONTAINER KIT:** (IFC 5704.2.9.7.8 & IFC 5704.2.7.5.6) A SPILL CONTAINER WITH A CAPACITY OF AT LEAST 5 GALLONS SHALL BE PROVIDED WITH EACH FILL CONNECTION. FOR TOP FILL TANKS CONTAINER MUST BE NON-COMBUSTIBLE, FIXED TO TANK AND EQUIPPED WITH MANUAL DRAIN VALVE THAT DRAINS INTO PRIMARY TANK. A PORTABLE CONTAINER IS ALLOWED WITH REMOTE FILL TANKS. TANK MUST BE MAX 5' A.F.G. & MIN. 5' FROM BUILDING OPENINGS.

1 - GENERATOR NOTES (CONT.)



VERIZON WIRELESS SERVICES
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO 80014

PROJECT INFORMATION

SITE NAME

CSP CHIPITA

SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819

CROWN CASTLE

TOWER SITE NAME

THIRD CREEK


SITE I.D.

877026

CONSULTANT

A10/19/17CD REVIEWGOB
B12/13/17RF COMMENTSQDN
C01/29/18CILENT COMMENTGOB

1st REVIEWERR2nd REVIEWSGP



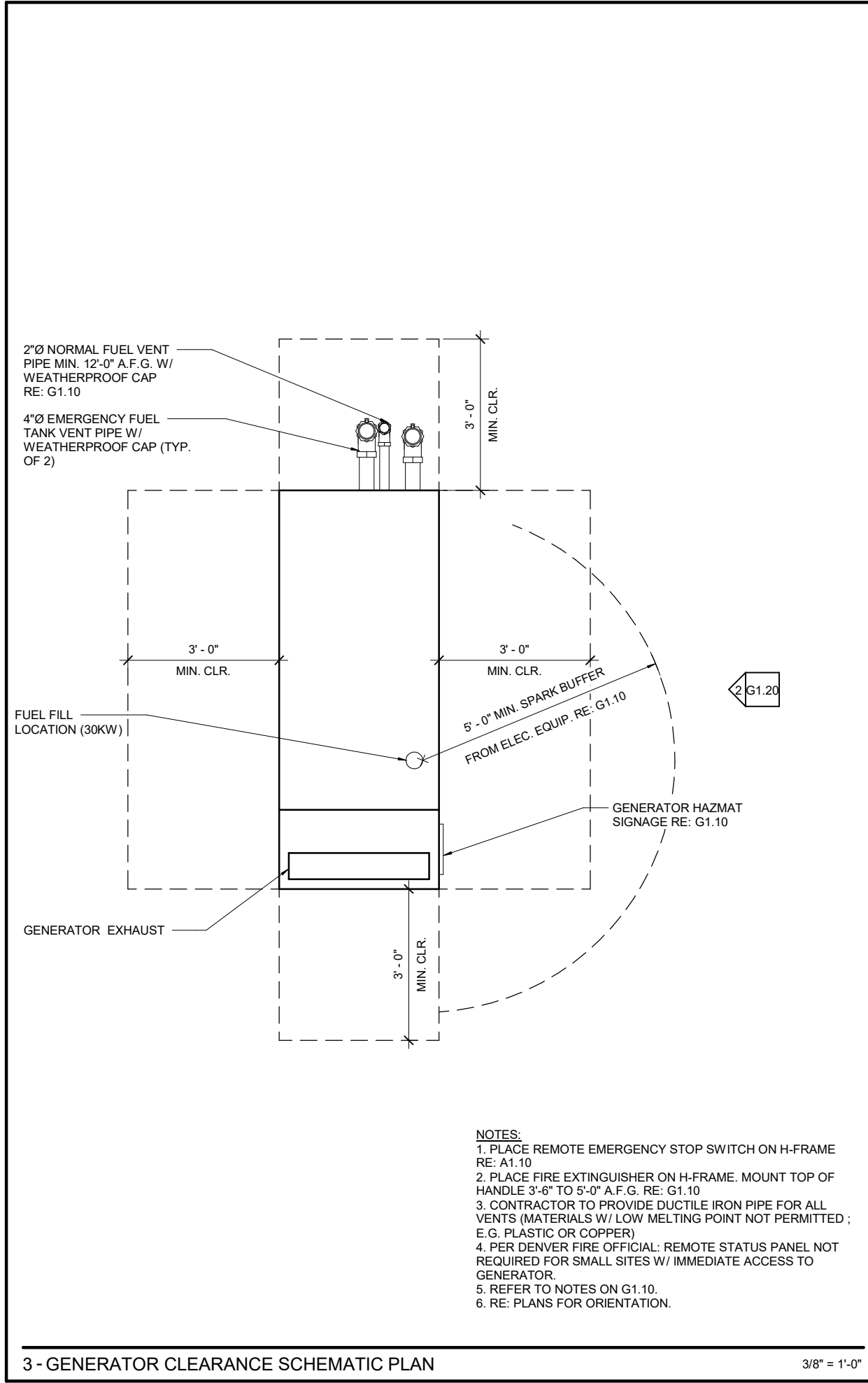
CHARLES
STECKLY
ARCHITECTURE

5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

NOT FOR
CONSTRUCTION

GENERATOR NOTES

G1.10



3 - GENERATOR CLEARANCE SCHEMATIC PLAN

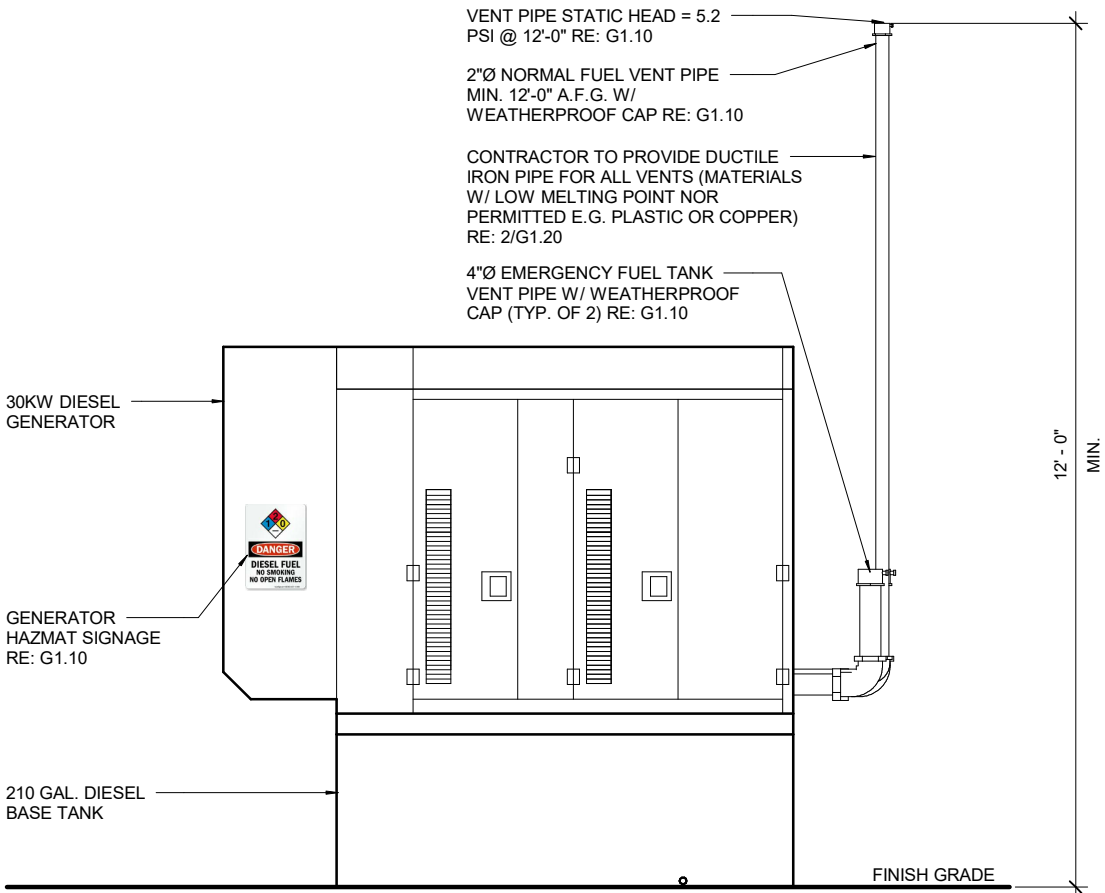
MANUFACTURER:	GENERAC
MODEL NUMBER:	SD030
TYPE:	30KW DIESEL
POWER RATING:	120/240VAC, 1Ø
BREAKER SIZE:	400/2P
UL 142 BASE TANK SIZE (USABLE):	210
REMOTE EMERGENCY STOP SWITCH	GENERAC PART# SG120*
REMOTE FUEL ALARM BOX:	GENERAC PART# OF2908*

*PARTS MAY VARY PER MANUFACTURER (GC TO VERIFY)

NOTE: REFER TO G1.10 FOR ADDITIONAL GENERATOR INFORMATION

VENT EXTENSION: BILL OF MATERIALS	
2	10' LENGTHS OF SCH 40 STEEL
2	2" 90 DEG. FITTING STEEL (FOR HORZ. RUN FROM TANK BUN NIPPLE & VERT. RUN OUTSIDE THE ENCLOSURE)
1	SHORT 2" MALE NIPPLE STEEL (FOR TANK BUNG)
1	SHORT 2" FEMALE NIPPLE STEEL (FOR VENT CAP)

2 - GENERATOR PART SPECIFICATION



1 - GENERATOR CLEARANCE SCHEMATIC ELEVATION

3/8" = 1'-0"

verizon

VERIZON WIRELESS SERVICES
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO 80014

PROJECT INFORMATION

SITE NAME

CSP CHIPITA

SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819

CROWN CASTLE

TOWER SITE NAME

THIRD CREEK

SITE I.D.

877026

CONSULTANT

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP

CHARLES
STECKLY

ARCHITECTURE

5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

NOT FOR
CONSTRUCTION

GENERATOR
CLEARANCE
SCHEMATICS

G1.20

BBU/RRH

HYBRID & COAX CABLES

MW/FIBER EQ.

FIBER

OV/PELEC. EQ.

POWER/GROUNDING

ACCESS/UTILITY EASEMENT

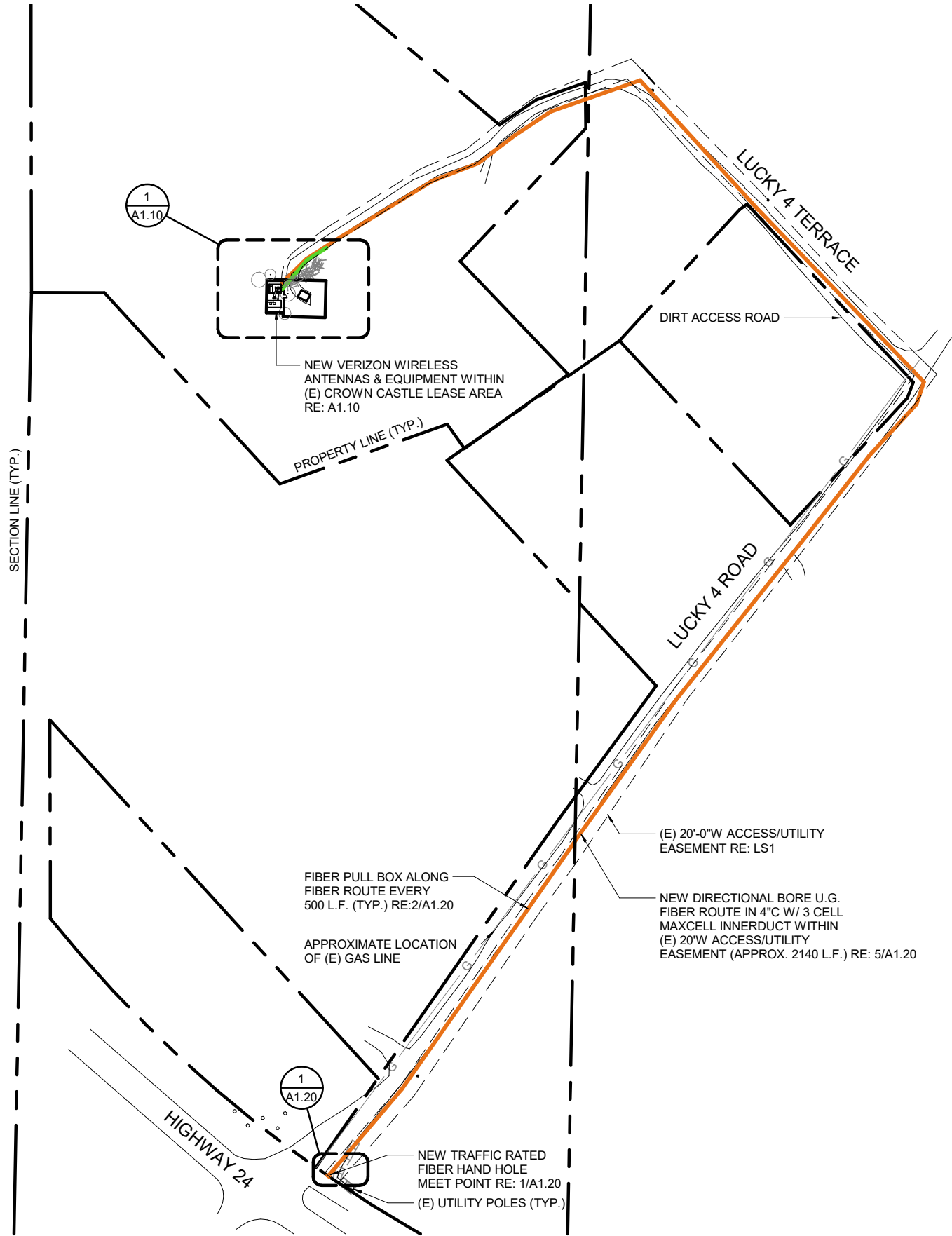
GEN. CONST./UTILITY EASEMENT

LEASE AREA

EXISTING EASEMENT

ANTENNAS

PENETRATIONS



VERIZON WIRELESS SERVICES
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO 80014

PROJECT INFORMATION

SITE NAME
CSP CHIPITA
SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819

CROWN CASTLE

TOWER SITE NAME
THIRD CREEK
SITE I.D.
877026

CONSULTANT

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP

CHARLES
STECKLY

ARCHITECTURE

5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

**NOT FOR
CONSTRUCTION**

SITE PLAN

A1.00



VERIZON WIRELESS SERVICES
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO 80014

PROJECT INFORMATION

SITE NAME

CSP CHIPITA

SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819

CROWN CASTLE

TOWER SITE NAME

THIRD CREEK

SITE I.D.

877026

CONSULTANT

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP

CHARLES
STECKLY

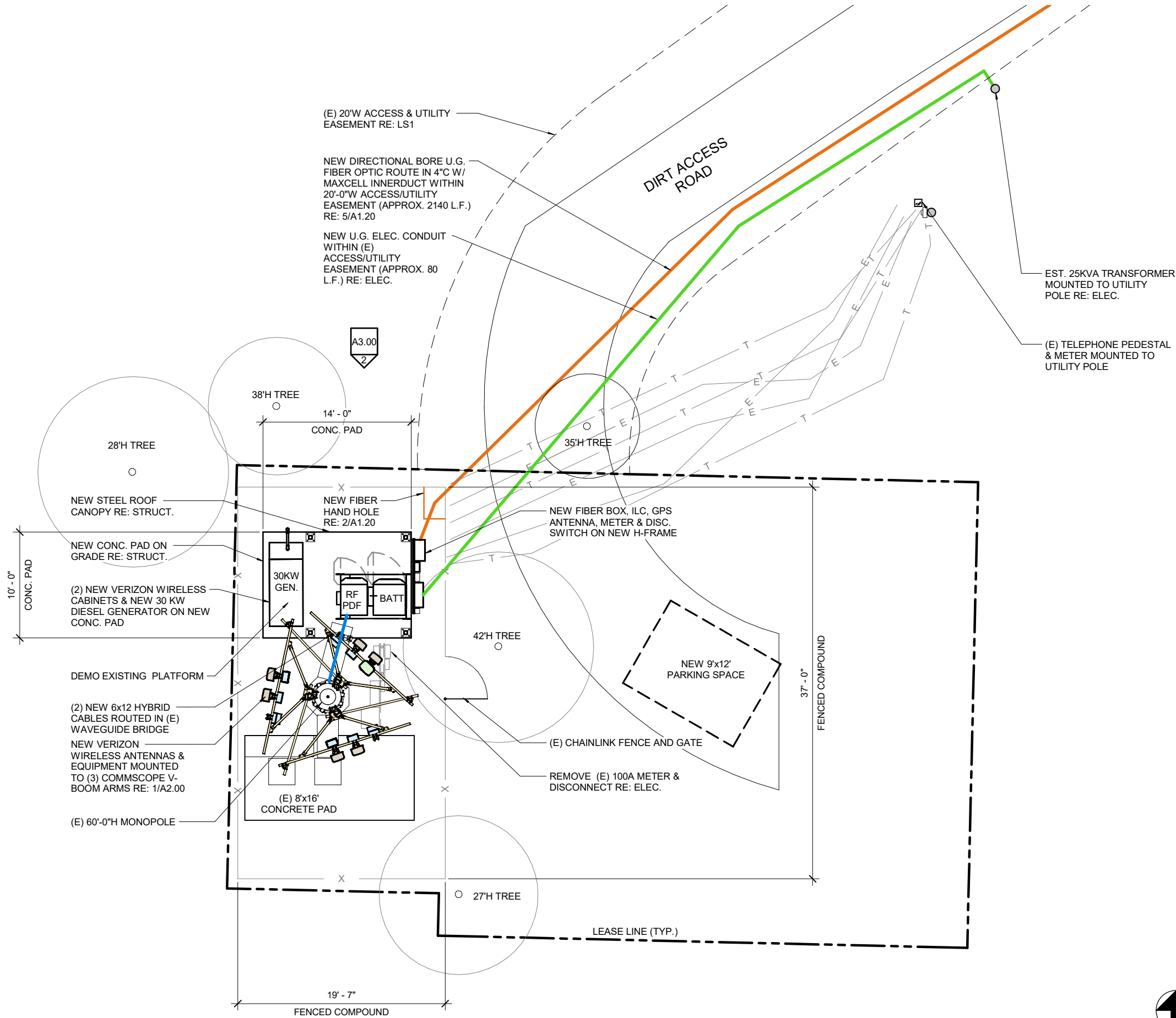
ARCHITECTURE

5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

NOT FOR
CONSTRUCTION

ENLARGED SITE PLAN

A1.10



1 - ENLARGED SITE PLAN



1" = 10'-0"



VERIZON WIRELESS SERVICES
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO 80014

PROJECT INFORMATION

SITE NAME

CSP CHIPITA

SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819

CROWN CASTLE

TOWER SITE NAME

THIRD CREEK

SITE I.D.

877026

CONSULTANT

A	10/19/17 CD REVIEW	GOB
B	12/13/17 RF COMMENTS	QDN
C	01/29/18 CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP

CHARLES
STECKLY

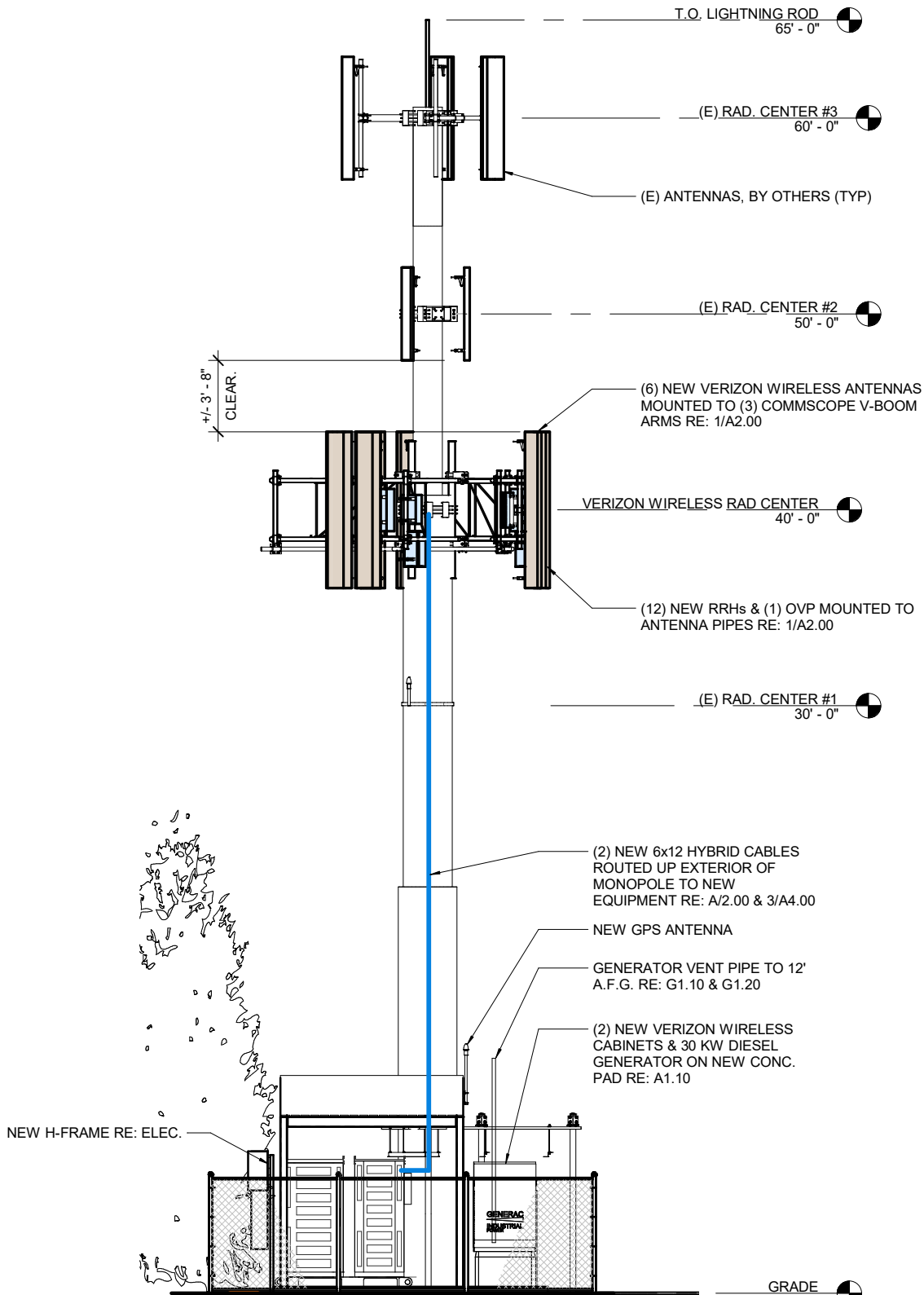
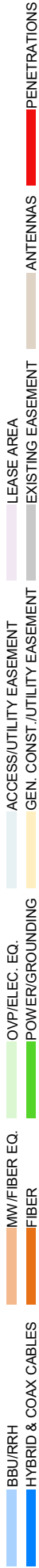
ARCHITECTURE

5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

NOT FOR
CONSTRUCTION

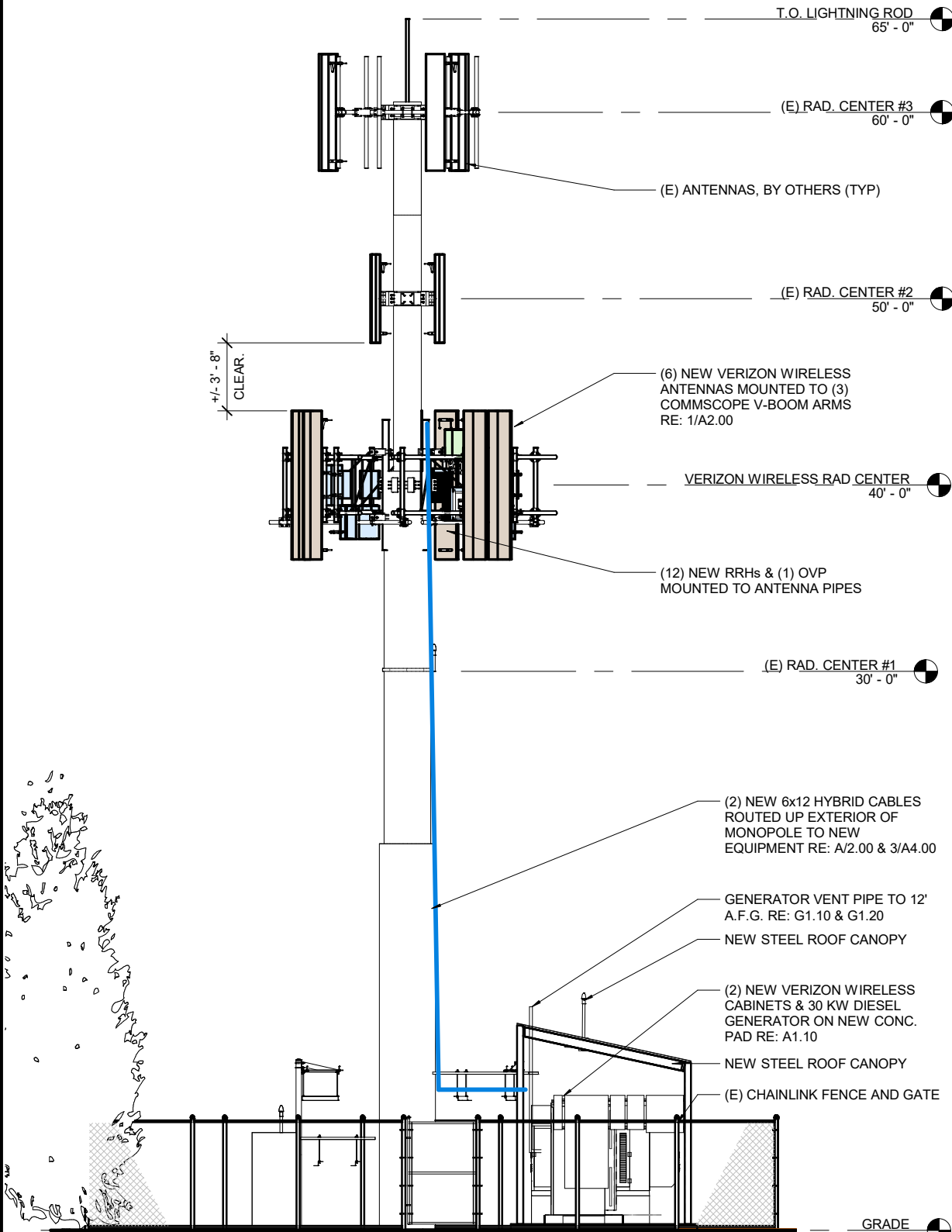
ELEVATIONS

A3.00



2 - NORTH ELEVATION

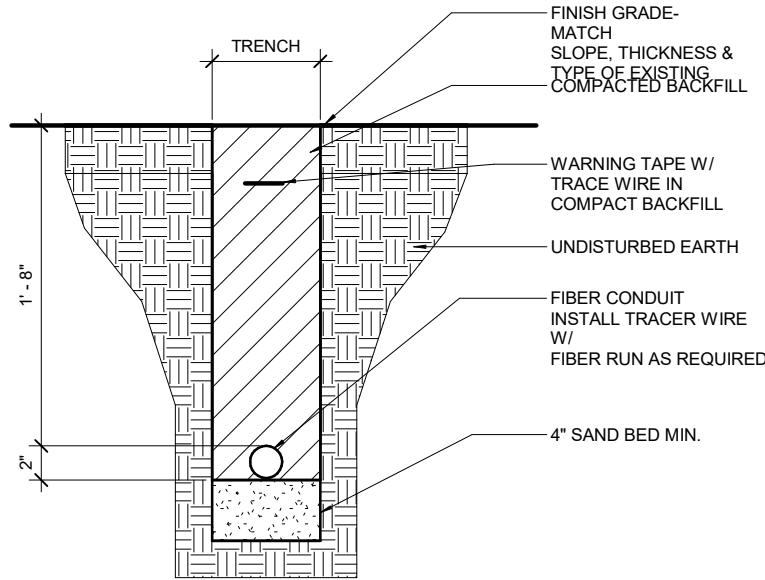
1/8" = 1'-0"



1 - EAST ELEVATION

1/8" = 1'-0"

BBU/RRH HYBRID & COAX CABLES
MW/FIBER EQ. FIBER
OV/PELEC. EQ. POWER/GROUNDING
ACCESS/UTILITY EASEMENT GEN. CONST./UTILITY EASEMENT
LEASE AREA
EXISTING EASEMENT
ANTENNAS
PENETRATIONS

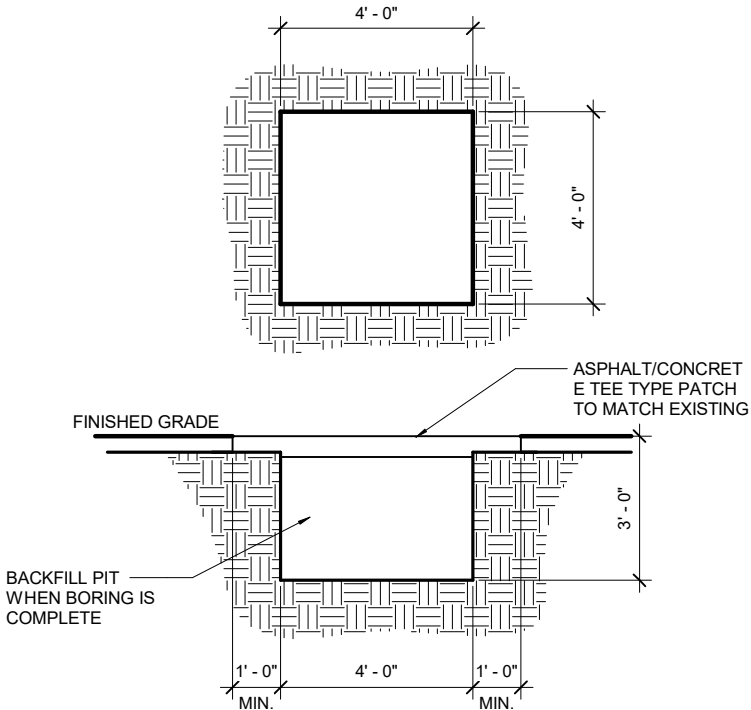


- NOTES:
1. INSTALL ALL UNDERGROUND UTILITIES PER LOCAL UTILITY REQUIREMENTS.
 2. LOCATE ALL UNDERGROUND UTILITIES PRIOR TO TRENCHING / EXCAVATION.
 3. COORDINATE SIZE AND TYPE WITH LOCAL UTILITY COMPANIES REQUIREMENTS.
 4. REFER TO ELECT PLAN FOR EXACT SIZE AND LOCATION.
 5. COMPACT BACKFILL TO 95% PROCTOR DENSITY AT ALL DRIVEWAY OR HARD SURFACED AREAS. COMPACT TO 90% PROCTOR DENSITY ALL OTHER AREAS UNLESS NOTED OTHERWISE, REFER TO GEOTECHNICAL REPORT.
 6. BACKFILL, WARNING TAPE, AND SAND BED NOT REQ'D WHEN BORING.
 7. HAND DIG UTILITY TRENCH WHERE REQUIRED.

5 - FIBER TRENCH DETAIL N.T.S.

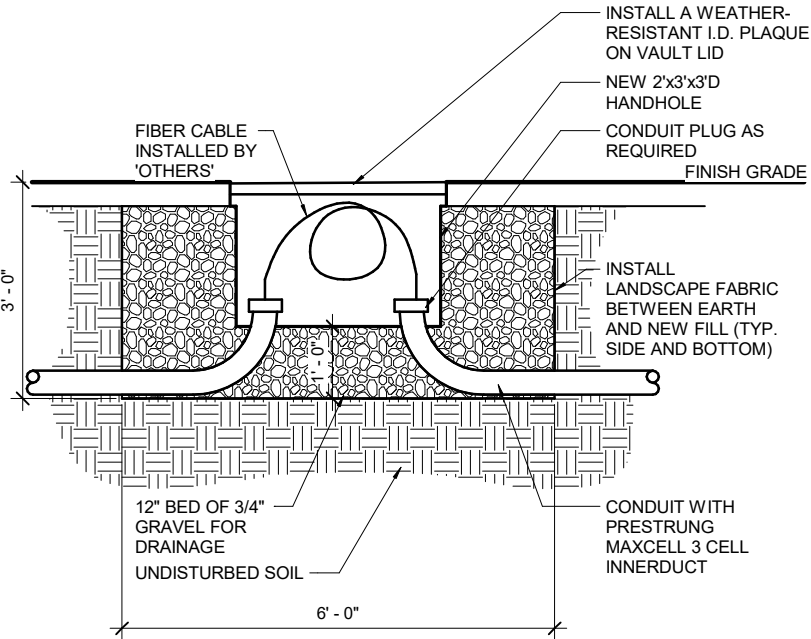


4 - FIBER MMP

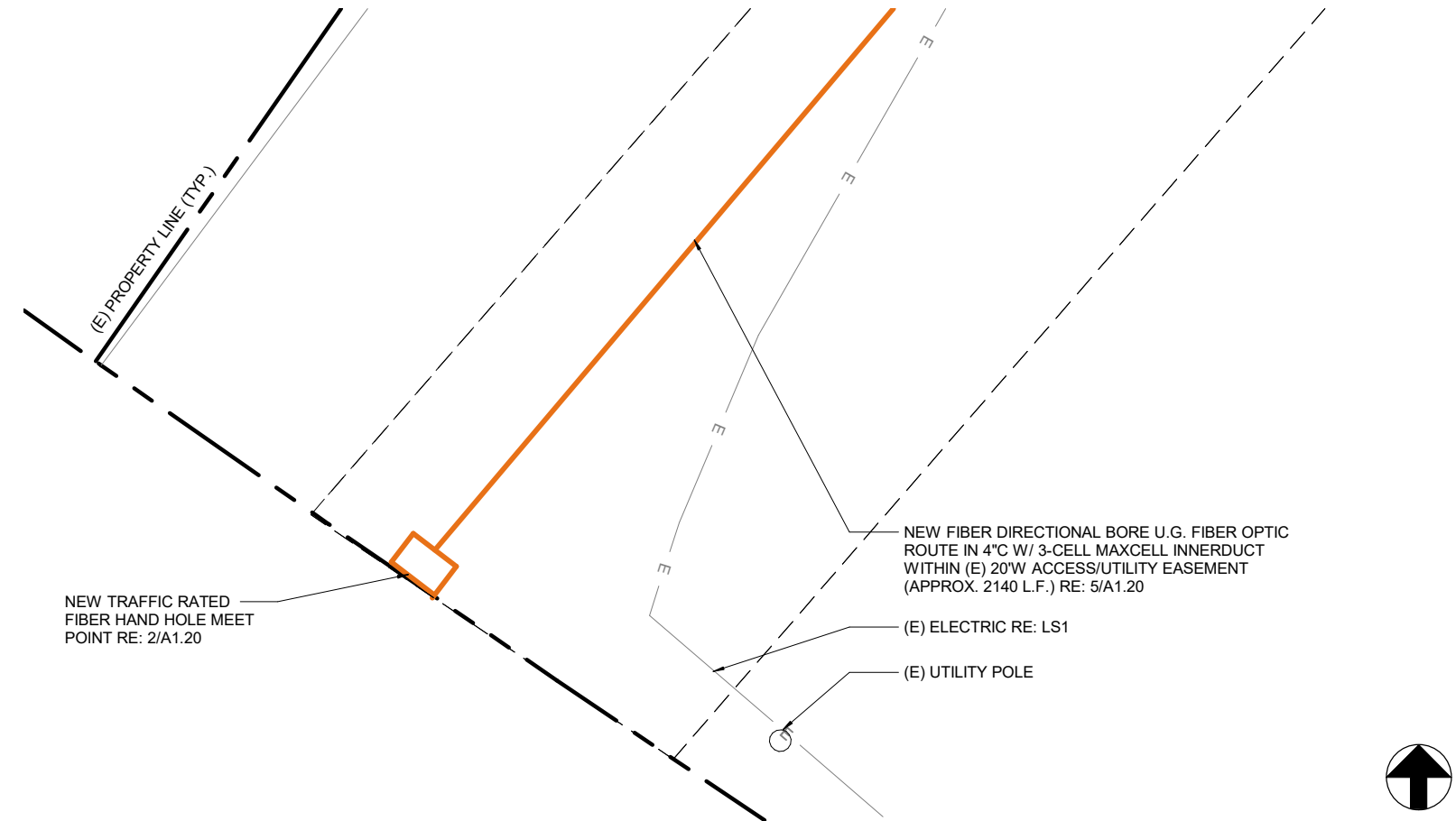


- NOTES:
1. EXCAVATION FOR HANDHOLES WILL ALSO BE USED FOR BORE PITS WHEN PRACTICAL TO MINIMIZE SITE DISTURBANCES
 2. ACTUAL DIMENSIONS MAY VARY DEPENDING ON IN FIELD SITE CONDITIONS.
 3. PROTECT NEARBY DOWNSTREAM STORM DRAIN INLETS FORM POTENTIAL CONTAMINATION DUE TO CONSTRUCTION.
 4. VACUUM SLURRY FROM BORING OPERATIONS AS NEEDED TO ELIMINATE SEEPAGE INTO STREETS AND DRAINS

3 - BORE PIT DETAIL N.T.S.



2 - HANDHOLE DETAIL N.T.S.



1 - FIBER MMP PLAN



1/8" = 1'-0"

verizon

VERIZON WIRELESS SERVICES
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO 80014

PROJECT INFORMATION

SITE NAME

CSP CHIPITA

SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819

CROWN CASTLE

TOWER SITE NAME

THIRD CREEK

SITE I.D.

877026

CONSULTANT

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP

CHARLES
STECKLY

ARCHITECTURE

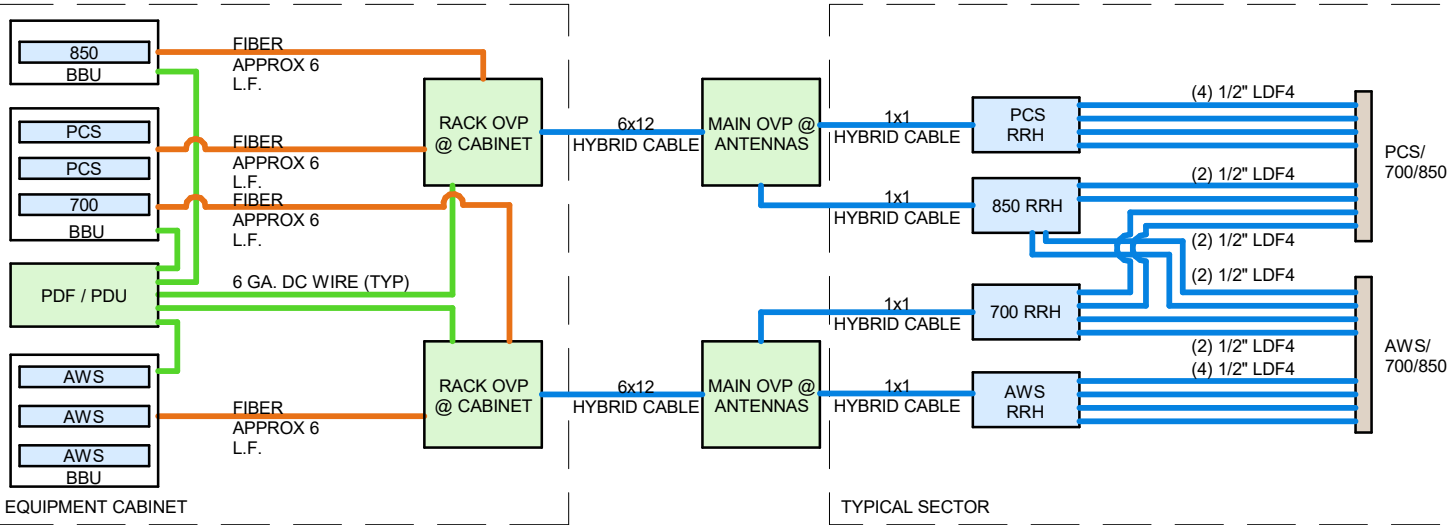
5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

NOT FOR
CONSTRUCTION

FIBER MMP

A1.20

LEASE AREA
ACCESS/UTILITY EASEMENT
GEN. CONST. UTILITY EASEMENT
POWER/GROUNDING
MW/FIBER EQ.
BBU/RRH
HYBRID & COAX CABLES
PENETRATIONS
ANTENNAS
EXISTING EASEMENT

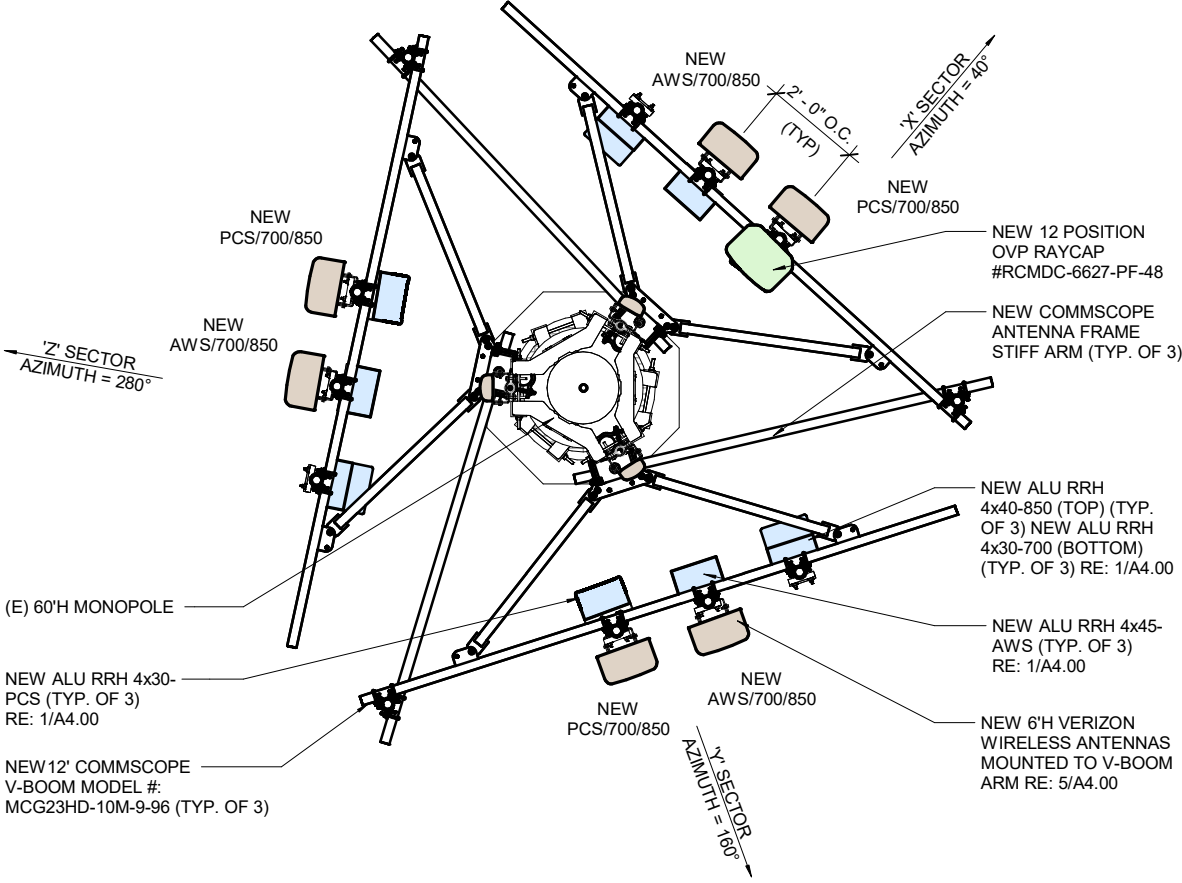


		RACK OVP @ CABINET TO MAIN OVP @ ANTENNAS				MAIN OVP TO RRH CONNECTION					
		RACK OVP @ CABINET	6x12 HYBRID CABLE		MAIN OVP @ ANTENNAS	1x1 HYBRID CABLE	AWS RRH	700 RRH	PCS RRH	850 RRH	
SECTOR	QTY.	LENGTH	QTY.	TOTAL WEIGHT	QTY.	LENGTH	QTY.	QTY.	QTY.	QTY.	
X	(2)	60 L.F. EACH	(2)	172.8 LB (1.44 LBS/L.F)	(2)	14'-0"	(4)	(1)	(1)	(1)	(1)
Y						14'-0"	(4)	(1)	(1)	(1)	(1)
Z						14'-0"	(4)	(1)	(1)	(1)	(1)

NOTES:
1. RE: 1/A2.00 FOR ANTENNA CONFIGURATION AND RRH AND MAIN OVP LOCATIONS.

2 - HYBRID CABLE DIAGRAM AND CHART

1. GENERAL:
PROVIDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY FOR RECEIVING, INSTALLING, TESTING AND ADJUSTING ANTENNA CABLES FROM THE ANTENNA TO THE CONNECTORS AT THE BASE TRANSMISSION SYSTEM (BTS). THIS SHALL INCLUDE ALL EQUIPMENT SHOWN OR REQUIRED FOR A COMPLETE OPERATING SYSTEM. ANTENNA, ANTENNA CABLES, CONNECTORS, AND FITTINGS SHALL BE THIRD PARTY FURNISHED COMPONENTS AS SHOWN ON THE BILL OF MATERIALS.
2. MATERIALS:
A. RE: HYBRID CABLE DIAGRAM FOR ADDITIONAL INFORMATION
B. CABLE HANGERS: INSTALLED AT MAXIMUM 4' SPACING
C. GROUND EQUIPMENT PER VERIZON WIRELESS SPECS
3. INSTALLATION:
A. ANTENNA CABLE LENGTHS SHALL BE FIELD MEASURED PRIOR TO PURCHASE OF CABLE. INSTALLER SHALL NOTIFY VERIZON WIRELESS OF THE OVERALL LENGTH REQUIRED.
B. CABLES SHALL BE LABELED IN ACCORDANCE WITH VERIZON WIRELESS SPECIFICATIONS.
C. ALL OUTSIDE CABLE CONNECTIONS SHALL BE COVERED WITH WEATHERPROOFING TAPE.
D. THE MINIMUM BENDING RADIUS FOR ALL ANTENNA CABLES SHALL BE AS SHOWN BELOW OR AS PER THE MANUFACTURER, WHICHEVER IS MORE CONSERVATIVE:
- | ANTENNAS CABLE | IN AIR/ CABLE TRAY | IN CONDUIT |
|----------------|--------------------|------------|
| 1/2" | 5" | 10" |
| 7/8" | 10" | 18" |
| 1 5/8" | 20" | 28" |
| 1X1 HYBRID | 5" | 10" |
| 6X12 HYBRID | 12" | 16" |
- | MW CABLE | WITHOUT REBENDING | WITH REBENDING |
|------------|-------------------|----------------|
| ELEIPTICAL | 6" E PLAN | 7" E PLAN |
| WAVEGUIDE | 13" H PLAN | 19" H PLAN |
- E. CABLES SHALL BE INSTALLED WITH THE MINIMUM NUMBER OF BENDS. CABLES SHALL NOT BE LEFT UNTERMINATED IN THE FIELD.
- F. GROUNDING KITS - AFTER INSTALLATION OF GROUND STRAPS, THE CONNECTION SHALL BE MADE WEATHER TIGHT USING WEATHERPROOFING KITS AS IDENTIFIED ABOVE. GROUND PIGTAILS SHALL BE BROUGHT OUT IN THE DOWNWARD DIRECTION FROM THE CONNECTIONS TO THE ANTENNA CABLE WITHOUT ANY SHARP BENDS (MINIMUM BEND RADIUS 10") AND CONNECTION SHALL BE MADE TO GROUNDING SYSTEM



3 - ANTENNA NOTES

1 - ANTENNA PLAN



1/4" = 1'-0"



VERIZON WIRELESS SERVICES
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO 80014

PROJECT INFORMATION
SITE NAME
CSP CHIPITA
SITE I.D.
10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819
CROWN CASTLE
TOWER SITE NAME
THIRD CREEK
SITE I.D.
877026
CONSULTANT

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP

CHARLES
STECKLY

ARCHITECTURE

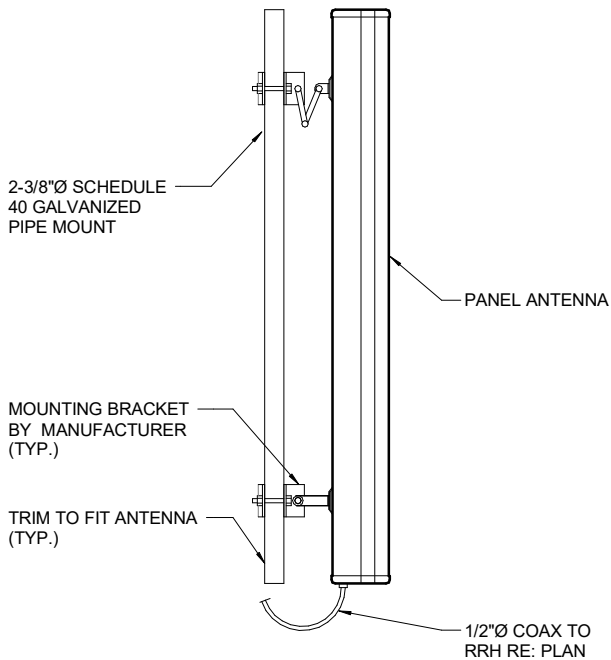
5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

NOT FOR
CONSTRUCTION

ANTENNA PLAN, HYBRID
CABLE DIAGRAM &
NOTES

A2.00

6 - NOT USED

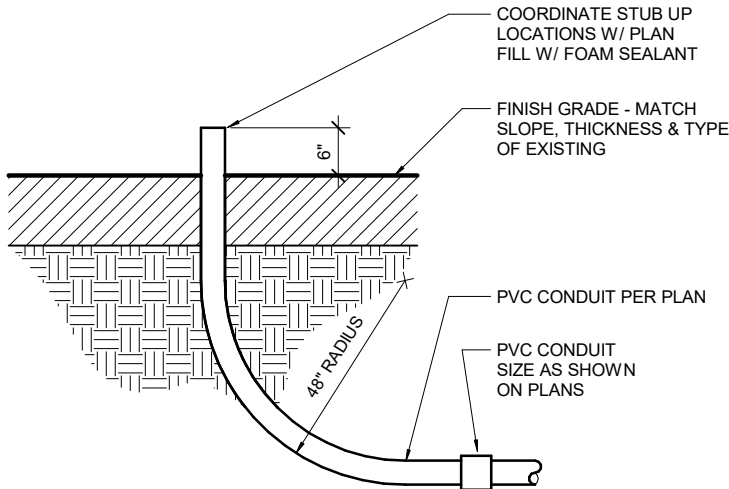


5 - ANTENNA MOUNTING DETAIL

N.T.S.

4 - CONDUIT STUB UP DETAIL

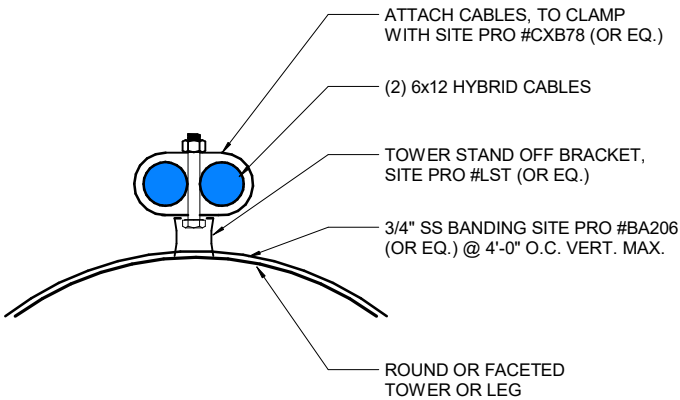
1" = 1'-0"



NOTE:
INSTALL 200# TENSILE PULL WIRE (TRUE-TAPE) CALIBRATED IN FEET INSIDE EMPTY CONDUITS & TIE OFF AT EACH END

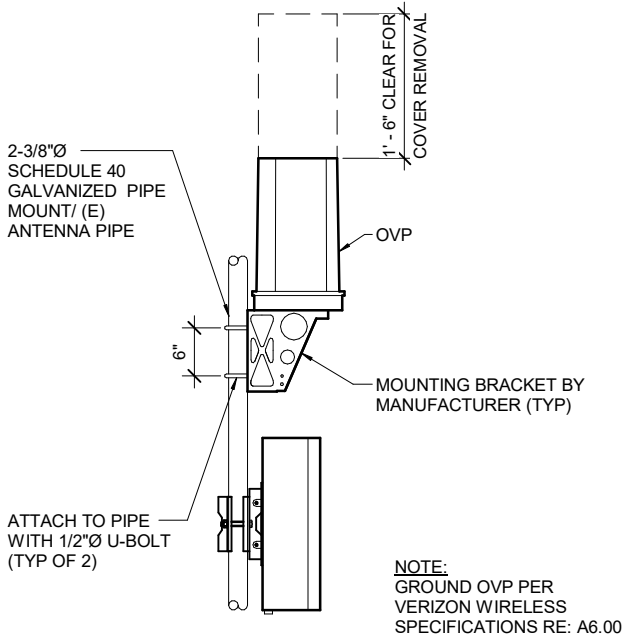
3 - COAX MOUNTING DETAIL

N.T.S.



2 - OVP MOUNTING DETAIL

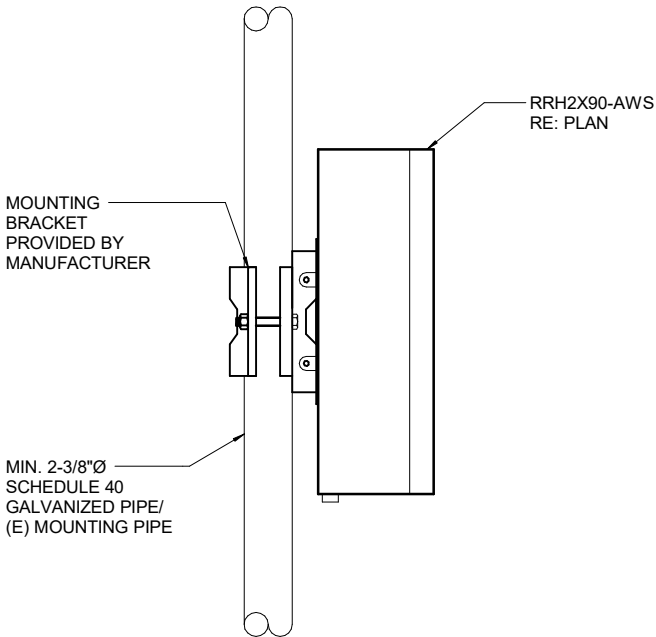
N.T.S.



NOTE:
GROUND OVP PER VERIZON WIRELESS SPECIFICATIONS RE: A6.00

1 - RRH MOUNTING DETAIL

N.T.S.



NOTES:
1. GROUND RRH PER VERIZON WIRELESS SPECIFICATIONS RE: A6.00
2. OTHER RRH MOUNTING SIMILAR



VERIZON WIRELESS SERVICES
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO 80014

PROJECT INFORMATION

SITE NAME

CSP CHIPITA

SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819

CROWN CASTLE

TOWER SITE NAME

THIRD CREEK

SITE I.D.

877026

CONSULTANT

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP

**CHARLES
STECKLY**

ARCHITECTURE

5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

**NOT FOR
CONSTRUCTION**

DETAILS

A4.00

PENETRATIONS
ANTENNAS
LEASE AREA
EXISTING EASEMENT
ACCESS/UTILITY EASEMENT
GEN. CONST./UTILITY EASEMENT
POWER/GROUNDING
OV/PELEC. EQ.
MW/FIBER EQ.
FIBER
BBU/RRH
HYBRID & COAX CABLES

GENERAL NOTES		
FIELD OBSERVATIONS	1. CONTRACTOR SHALL INFORM THE STRUCTURAL ENGINEER AT LEAST 48 HOURS PRIOR TO CASTING ANY CONCRETE SO AS TO ALLOW THE STRUCTURAL ENGINEER THE OPPORTUNITY TO REVIEW THE PLACEMENT OF REINFORCING AND EMBEDDED ITEMS.	
	2. CONTACT OTEGUI STRUCTURAL SERVICES, LLC AT 303-882-2211	
MEANS AND METHODS	1. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. 2. ALL TEMPORARY BRACING AND SHORING SHALL BE DESIGNED AND PROVIDED BY OTHERS.	
COORDINATION AND PROCESS	1. ALL DIMENSIONS ON THE STRUCTURAL DRAWINGS SHALL BE CHECKED AGAINST ARCHITECTURAL DRAWINGS AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY. 2. REFER TO MECHANICAL, ELECTRICAL AND ARCHITECTURAL DRAWINGS FOR OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS.	
SPECIAL INSPECTIONS AND TESTING	TYPE OF WORK	PERFORM TO IBC SECTION
	STEEL CONSTRUCTION	1704.3, TABLE 1704.3
	CONCRETE CONSTRUCTION	1704.4, TABLE 1704.4
	SOILS	1704.7

STEEL			
CODES	AISC SPECIFICATIONS AND CODE OF STANDARD PRACTICE MANUAL		
	LATEST EDITION		
STEEL SECTIONS	SECTION TYPE	MIN. YIELD STRENGTH	ASTM DESIGNATION
	PIPES	35 KSI	A35
	HSS ROUND	42KSI	A500-B
	HSS SQUARE/RECT	46 KSI	A500-B
	WIDE FLANGE / TEE	50 KSI	A992
	S, M, HP SHAPES	50 KSI	A572
	ANGLES & PLATES	36 KSI	A36
CONNECTIONS	USE STANDARD AISC FRAMED CONNECTIONS (U.N.O.)		
	TYPE	DESCRIPTION	
	BOLTS	A325N-3/4 in.DIA.(U.N.O.) OR WELDED EQUIV.	
		1. ALL BOLTED CONNECTIONS ARE TO BE "SNUG-TIGHT" (U.N.O.)	
		2. USE WASHERS AT SHORT SLOTTED AND 5/16" WASHER PLATES AT LONG SLOTS.	
	WELDS	1. MIN. OF 3/16" CONT. FILLET USING E70XX ELECTRODES (U.N.O.)	
		2. WELDING OF REBAR ANCHORS TO STEEL SECTIONS OR PLATES SHALL DEVELOP 1.5 TIMES THE REBAR YIELD STRENGHT.	
GALVANIZED	ALL EXPOSED STEEL TO BE GALVANIZED. PROVIDE GALVANIZED TOUCH UP PAINT FOR ALL AREAS THAT ARE WELDED OR HAVE DAMAGED GALVANIZED AREAS.		
NOTES	ALL EXTERIOR EXPOSED STEEL SHALL BE GALVANIZED. PROVIDE PROPER TOUCH UP PAINT FOR FIELD WELDING		

CONCRETE NOTES													
CODES		ACI 318-08 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONC. ACI 301-08 SPECIFICATIONS FOR STRUCTURAL CONCRETE											
AGGREGATE		STONE (UNLESS NOTED OTHERWISE)											
MIN. 28 DAY COMPRESSIVE STRENGTHS		CAISONS		3000 PSI									
		FOOTINGS		3000 PSI									
		WALLS		3000 PSI									
		SLAB ON GRADES		4000 PSI									
		TOPPING SLABS		3000 PSI									
REINFORCING STEEL		STEEL TYPE		NEW BILLET - ASTM A615									
		GRADE 60		ALL BARS (EXCEPT AS NOTED)									
		CORNER BARS		MATCH ALL ROWS OF HORIZONTAL BARS									
		OPENINGS		(2) #5 BARS ON ALL SIDES OF OPENINGS. BARS TO EXTEND 24" PAST EDGE OF OPENING.									
		WELDED WIRE FABRIC		ACCORDANCE WITH ASTM A185 1. (1) FULL MESH MIN. LAP; NO WELDING U.N.O.									
BAR PLACING SUPPORTS		1. PROVIDE CHARS, BOLSTERS, ADDITIONAL REINFORCING BARS, AND ACCESSORIES NECESSARY TO SUPPORT REINFORCEMENT AT POSITIONS SHOWN ON DRAWINGS 2. FORM TIES SHALL ONLY BE USED AS BAR SUPPORTS WHEN THEY LOCATE THE BARS AS SHOWN IN THE DETAILS 3. SUPPORTS NOT ALLOWED: WOOD, BRICK, BLOCK, STONE, ETC.											
MIN. CONCRETE COVER OVER REINFORCING		CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH						3 in.					
		CONCRETE EXPOSED TO EARTH OR WEATHER				#6 AND LARGER		2 in.					
						#5 AND SMALLER		1-1/2 in.					
		CONCRETE EXPOSED TO EARTH OR WEATHER						3/4 in.					
		BEAMS AND COLUMN TIES, STIRRUPS OR SPIRAL AROUND PRIMARY REINFORCING OR PRIMARY REINFORCING WITHOUT TIES						1-1/2 in.					
DEVELOPMENT LENGTHS		BAR SIZE		STD. Ld		CLASS B		BAR SIZE		STD. Ld		CLASS B	
				TYP. TOP		TYP. TOP				TYP. TOP		TYP. TOP	
		#4	22"	29"	29"	37"	#8	55"	72"	72"	93"		
		#5	28"	36"	36"	47"	#9	62"	81"	81"	105"		
		#6	33"	43"	43"	56"	#10	70"	91"	91"	118"		
		#7	48"	63"	63"	81"	#11	78"	101"	101"	103"		
		USE THE ABOVE TABLE U.N.O ON PLANS OR DETAILS											
STANDARD HOOKS		BAR SIZE		180° HOOKS		90°		BAR SIZE		180° HOOKS		90°	
				A OR G J A OR G		A OR G J A OR G							
		#4	3"	6"	4"	8"	#8	6"	11"	8"	16"		
		#5	3-3/4"	7"	5"	10"	#9	9-1/2"	15"	11-3/4"	19"		
		#6	4-1/2"	7"	6"	12"	#10	10-3/4"	17"	13-3/4"	22"		
		#7	5-1/4"	10"	7"	14"	#11	12"	19"	14-3/4"	24"		
		USE THE ABOVE TABLE U.N.O ON PLANS OR DETAILS											
DETAILS 180°													

FOUNDATION NOTES			
SPREAD FOOTINGS	MAXIMUM	MINIMUM	
	BEARING	DEAD LOAD	
	1500 PSF	0 PSF	
1. A BEARING CAPACITY OF 1500 CAPACITY HAS BEEN ASSUMED. ASSUMED VALUE TO BE VERIFIED IN FIELD BY GEOTECH DURING TOWER FOUNDATION CONSTRUCTION. 2. SPREAD FOOTINGS TO BE PLACED ON UNDISTURBED NATURAL SOILS OR SELECTED AND COMPACTED FILL.			

SPECIAL INSPECTION CHECKLIST			
INSPECTIONS		TESTING	
STRUCTURAL STEEL	Y/N	STRUCTURAL STEEL	Y/N
Visual insp. of material and member installation	Y	Non-Destructive Weld testing	NA
Visual insp. of bolts	Y	Bolt Pre-Tension testing	N/A
Visual insp. of welds	NA	Shear Stud Hammer test	NA
Visual insp. of shear studs	NA	CONCRETE	
CONCRETE		Slump Test	Y
Visual insp. of steel placement	Y	Air Entrainment	N
Visual insp. of embedded bolts and plates	Y	Temperature	Y
Verify mix design	Y	Compression Strength	Y
Visual insp. of placement methods	Y	Post Tension Elongation	NA
NOTES: 1) Special Inspections and Site Observations shall comply with section 1704 of the International Building Code and tables 1704.3, 1704.4, 1704.5.1,1704.5.3 as they apply. 2) Contractor shall coordinate with the Owner to hire a special inspection and testing agency. Contractor shall contact testing and inspection agency as often as required to meet the above inspection requirements. 3) RE: ACI 318 Section 5.6.2 for frequency of Concrete Testing			

DESIGN CRITERIA				
BUILDING CODE	2012 INTERNATIONAL BUILDING CODE			
	OCCUPANCY CATEGORY		II	TABLE 1604.5
DESIGN LOADS	ROOF LOADS	DEAD	TYPE FLAT	UNIFORM 20 PSF
		SNOW	GROUND SNOW (Pg)	30 PSF
		SNOW	FLAT ROOF SNOW (Pf)	25 PSF
			OCCUPANCY OR USE	
	FLOOR LOADS	DEAD	STORAGE	10 PSF
WIND IN ACCORDANCE WITH ASCE 7 CHAPTER 6		LIVE	STORAGE	125 PSF
				2,500 LBS
	DESIGN PROCEDURE		(2) ANALYTICAL METHOD	
	IMPORTANCE FACTOR (I)		1.0	
	EXPOSURE CATEGORY		C	
		BASIC WIND SPEED (3 sec GUST: Vasd, Vult)	100 MPH	120 MPH

ABBREVIATIONS	
A.B.	ANCHOR BOLTS
ARCH.	ARCHITECT
BOT.	BOTTOM
BRG.	BEARING
C.J.	CONTROL JOINT
CONC.	CONCRETE
CONT.	CONTINUOUS
DWN.	DOWN
(E)	EXISTING
ELEV.	ELEVATION
E.O.S.	EDGE OF SLAB
EXT.	EXTERIOR
G.L.	GLUE LAM
HORIZ.	HORIZONTAL
JST.	JOIST
MAX.	MAXIMUM
MIN.	MINIMUM
O.C.	ON CENTER
PL	PLATE
RE:	REFER TO
REINF.	REINFORCING
SIM.	SIMILAR
T.O.	TOP OF
T.O.S.	TOP OF STEEL
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
VERT.	VERTICAL
W/	WITH
W/O	WITH OUT

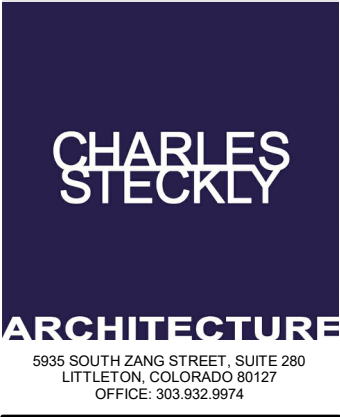


PROJECT INFORMATION
SITE NAME
CSP CHIPITA
SITE I.D.
10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819
CROWN CASTLE
TOWER SITE NAME
THIRD CREEK
SITE I.D.

CONSULTANT
OTEGUI STRUCTURAL SERVICES, LLC
P.O. BOX 620341
LITTLETON, CO 80162
PHONE: 720.981.5333
FAX: 720.922.7935

B 12/13/17 RF COMMENTS QDN
C 01/11/18 CLIENT COMMENTS SGP
C 01/29/18 CILENT COMMENT GOB

1st REVIEW ERR 2nd REVIEW SGP



NOT FOR CONSTRUCTION

STRUCTURAL NOTES

S1.00

PROJECT WILL NOT BE ACCEPTED WITHOUT THIRD PARTY SPECIAL INSPECTION



VERIZON WIRELESS SERVICES
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO 80014

PROJECT INFORMATION

SITE NAME

CSP CHIPITA

SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819

CROWN CASTLE

TOWER SITE NAME

THIRD CREEK

SITE I.D.

CONSULTANT

OTEGUI STRUCTURAL
SERVICES, LLC

P.O. BOX 620341
LITTLETON, CO 80162
PHONE: 720.981.5333
FAX: 720.922.7935

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP

CHARLES
STECKLY

ARCHITECTURE

5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

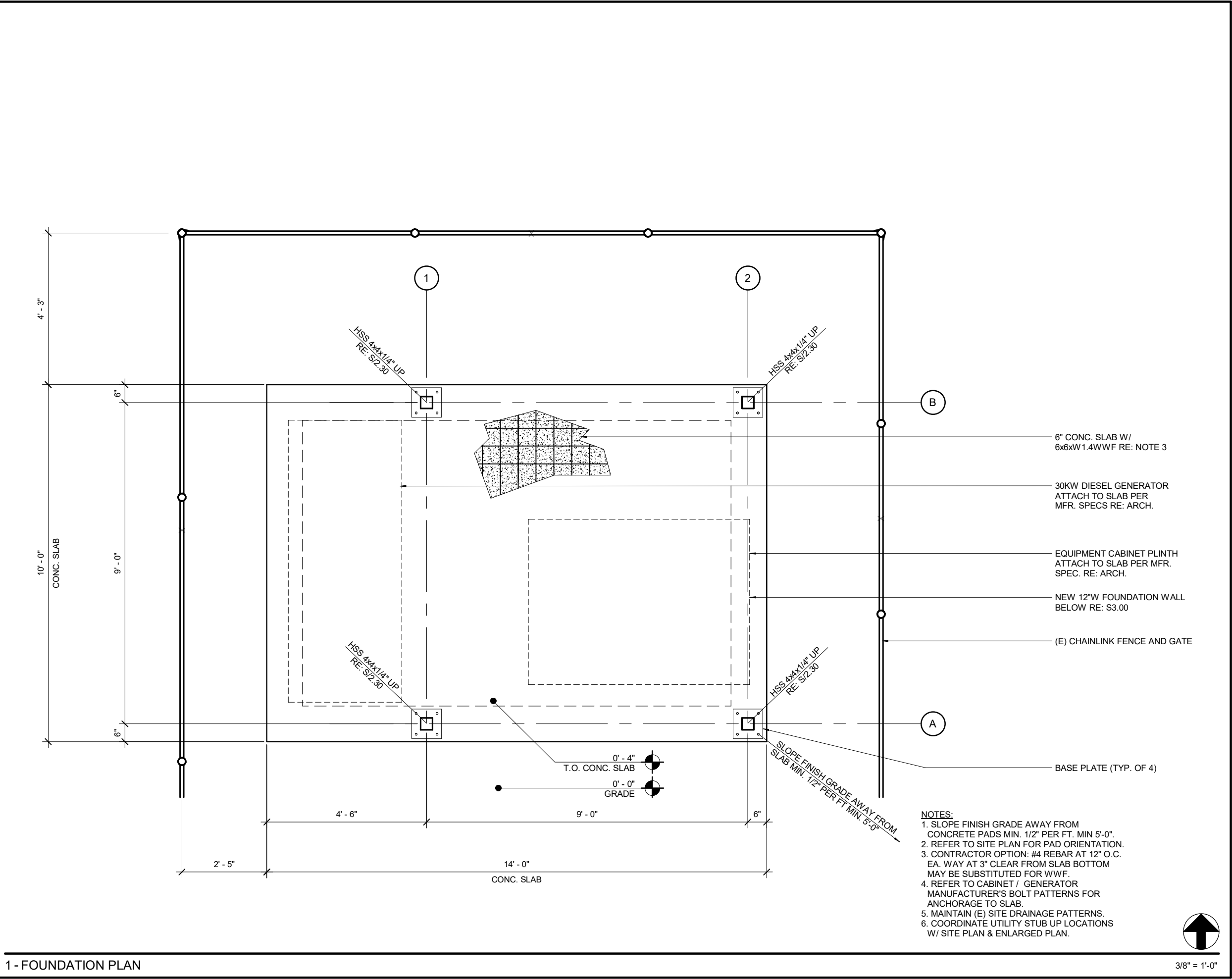
NOT FOR
CONSTRUCTION

FOUNDATION PLAN

S2.00



3/8" = 1'-0"



BBU/RRH HYBRID & COAX CABLES MW/FIBER EQ. FIBER OVP/IELEC. EQ. POWER/GROUNDING ACCESS/UTILITY EASEMENT GEN. CONST./UTILITY EASEMENT LEASE AREA EXISTING EASEMENT ANTENNAS PENETRATIONS

BBU/RRH
HYBRID & COAX CABLES

MW/FIBER EQ.
FIBER

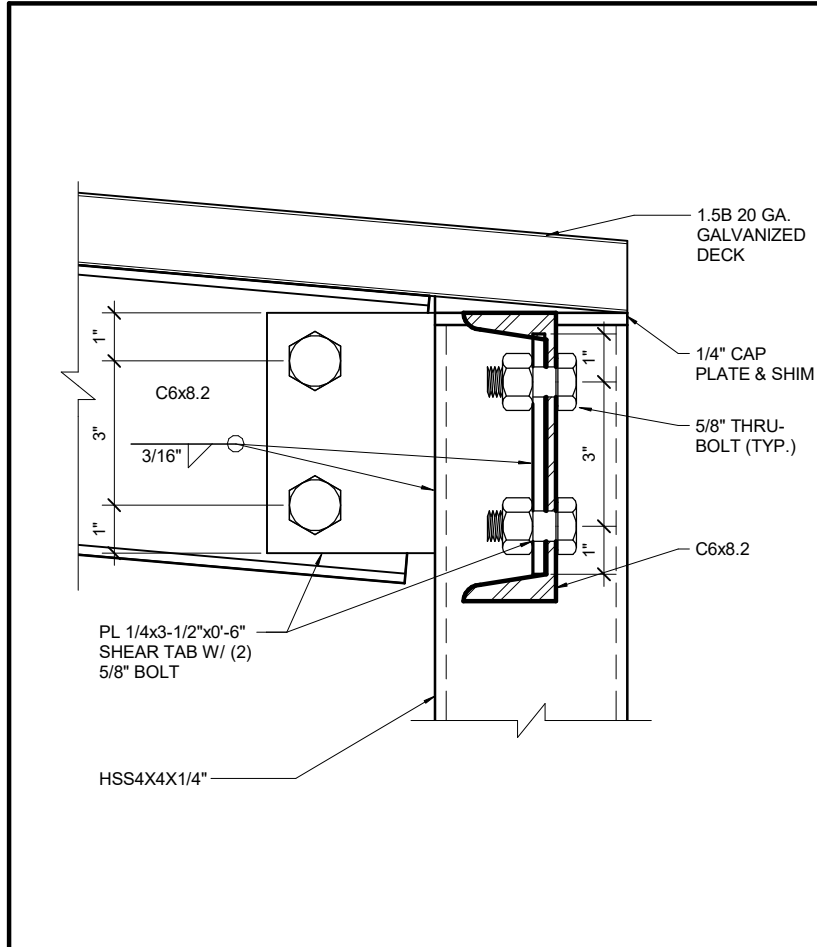
OV/PELEC. EQ.
POWER/GROUNDING

ACCESS/UTILITY EASEMENT
GEN. CONST./UTILITY EASEMENT

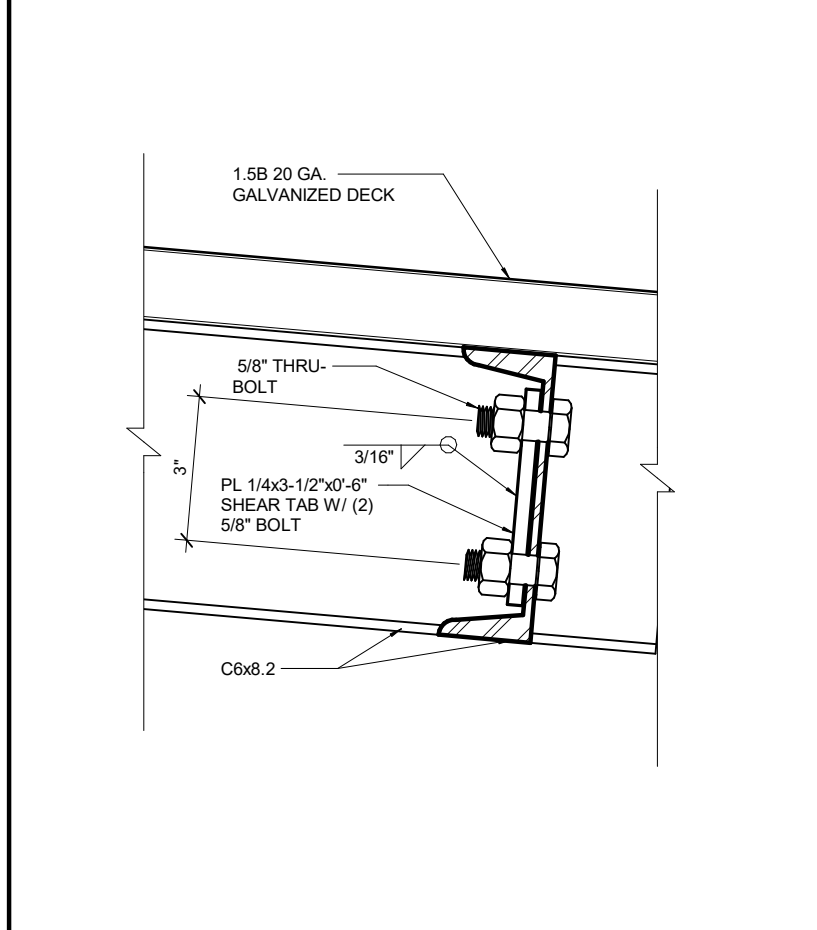
LEASE AREA
EXISTING EASEMENT

ANTENNAS

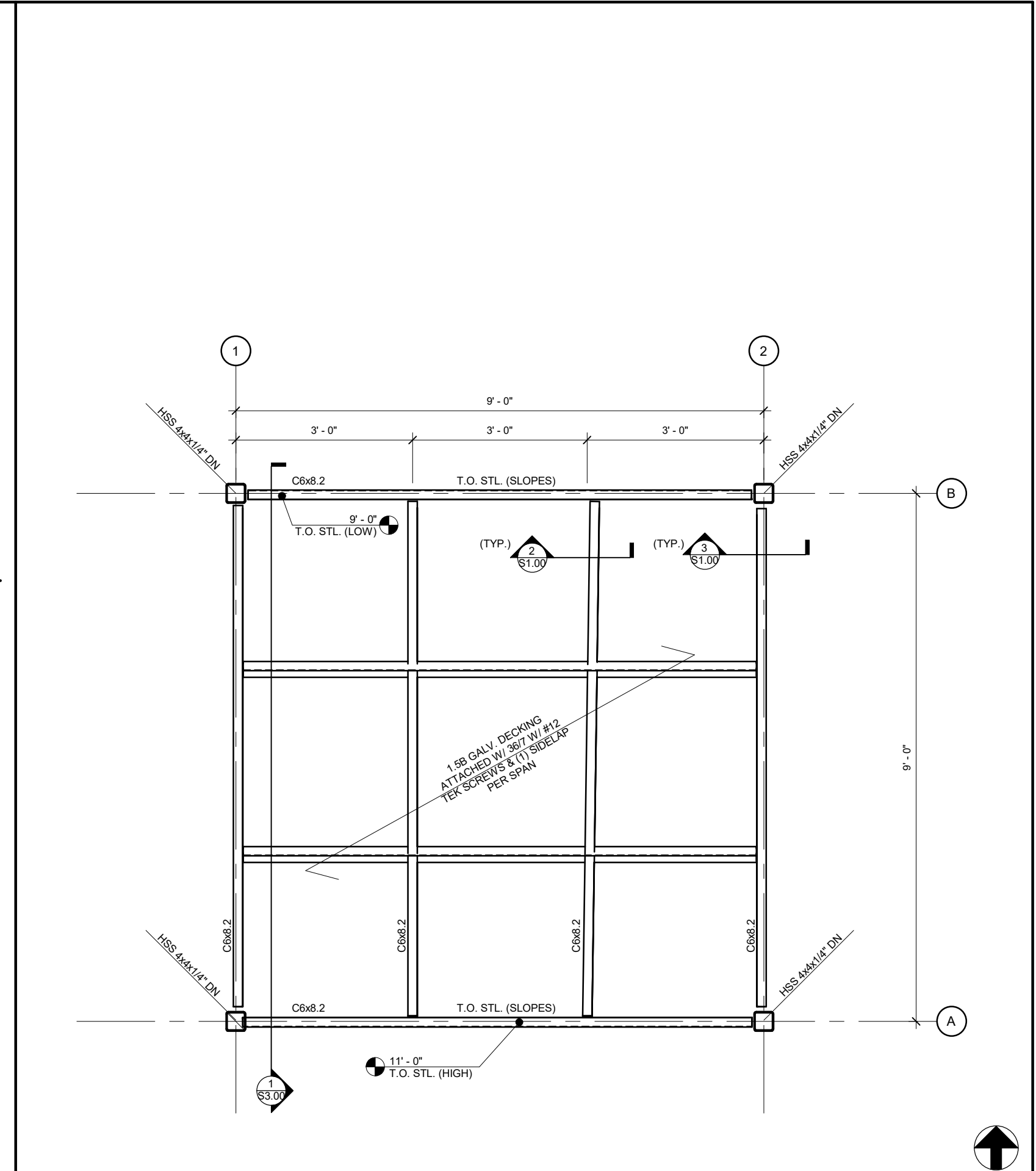
PENETRATIONS



3 - ROOF RAFTER/COL. CONNECTION END COL. 3" = 1'-0"



2 - ROOF JOIST CONNECTION DETAIL 3" = 1'-0"



1 - CANOPY ROOF FRAMING PLAN 1/2" = 1'-0"

verizon

VERIZON WIRELESS SERVICES
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO 80014

PROJECT INFORMATION

SITE NAME
CSP CHIPITA
SITE I.D.
10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819
CROWN CASTLE
TOWER SITE NAME
THIRD CREEK
SITE I.D.

CONSULTANT

OTEGUI STRUCTURAL SERVICES, LLC
P.O. BOX 620341
LITTLETON, CO 80162
PHONE: 720.981.5333
FAX: 720.922.7935

A 10/19/17 CD REVIEW GOB

B 12/13/17 RF COMMENTS QDN

C 01/29/18 CILENT COMMENT GOB

1st REVIEW ERR 2nd REVIEW SGP

CHARLES STECKLY
ARCHITECTURE
5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

NOT FOR CONSTRUCTION

CANOPY ROOF FRAMING PLAN

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP

CHARLES
STECKLY

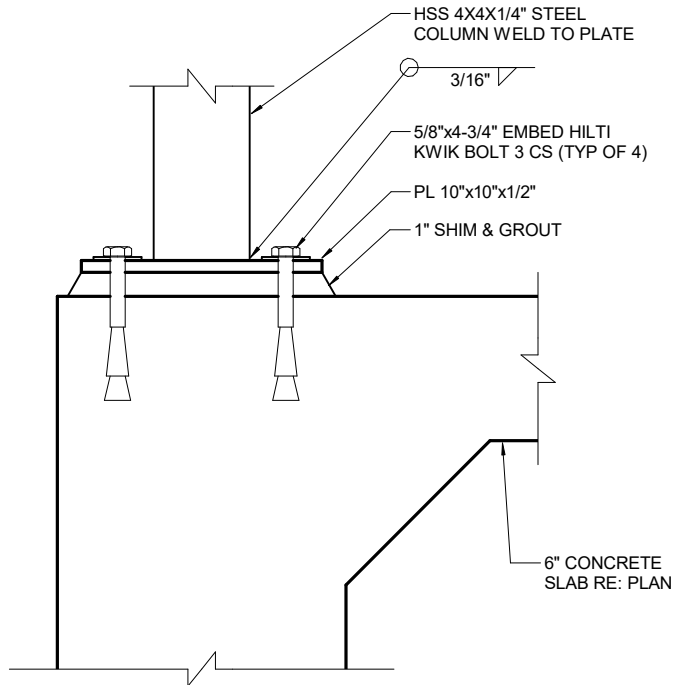
ARCHITECTURE

5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

NOT FOR
CONSTRUCTION

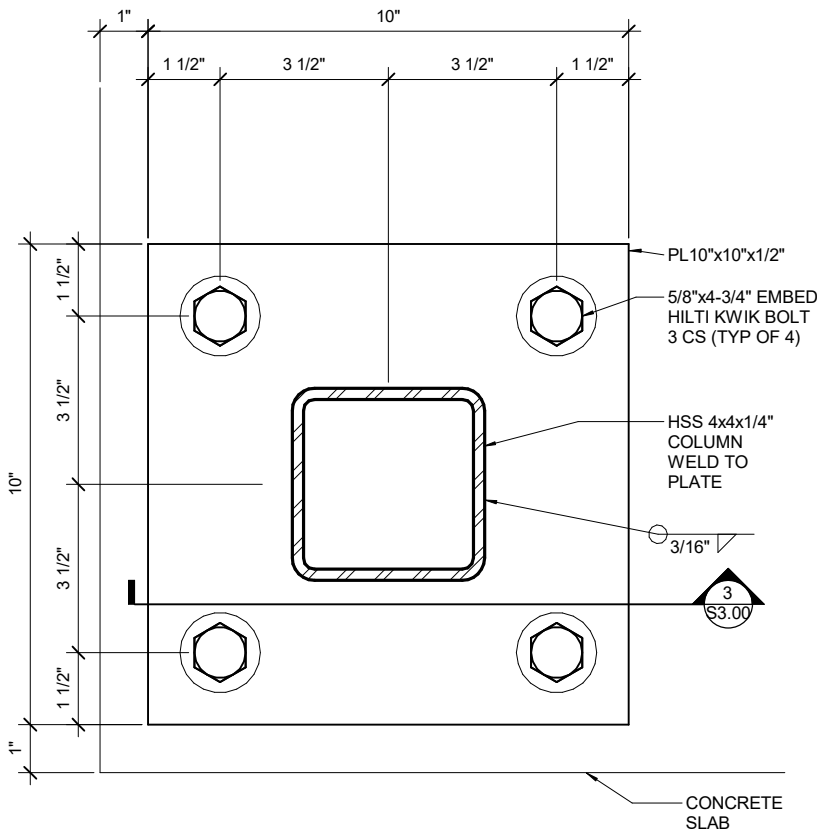
EQUIPMENT PLATFORM
SETION AND DETAILS

S3.00



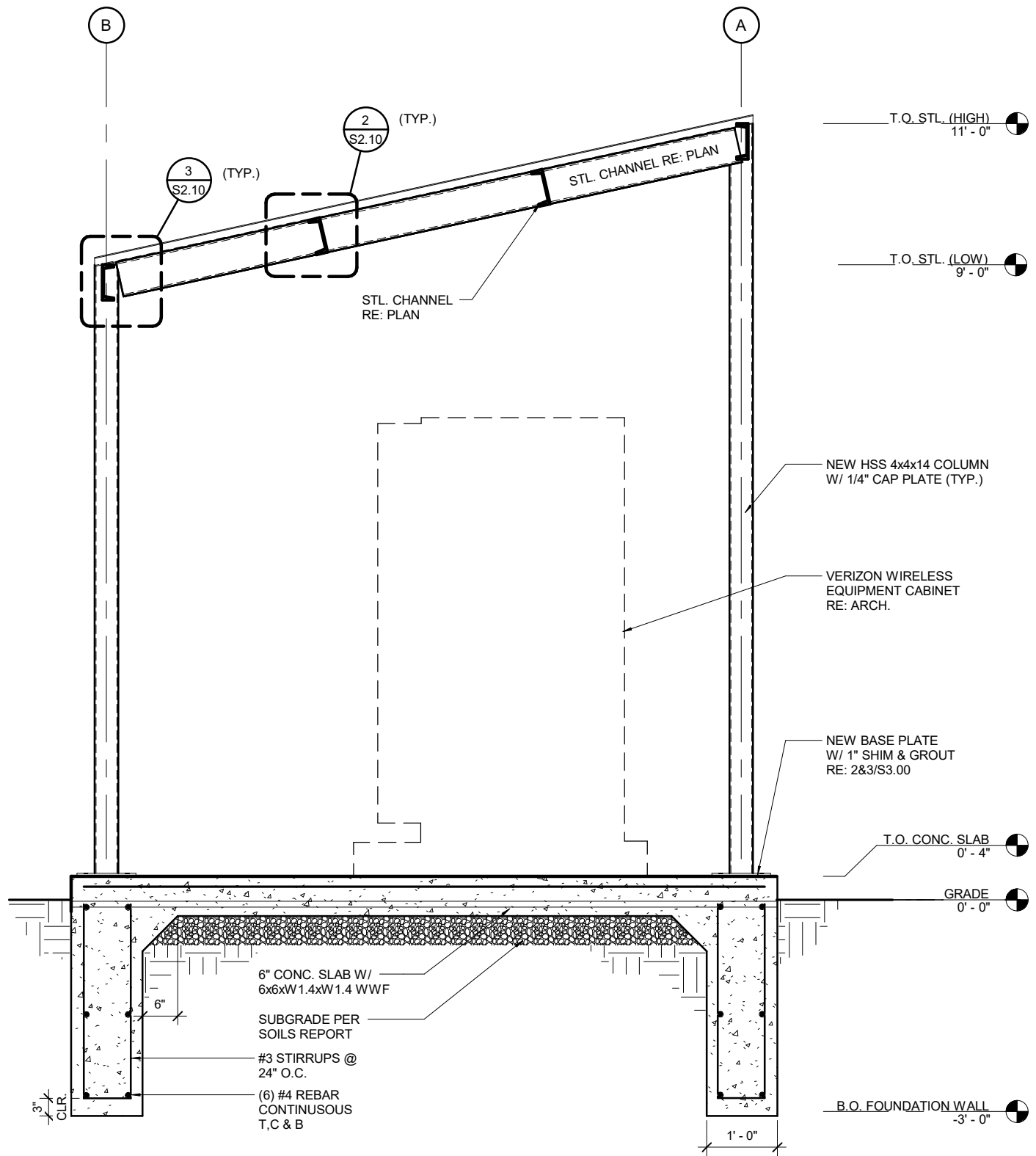
3 - BASE PLATE SECTION

1 1/2" = 1'-0"



2 - BASE PLATE PLAN DETAIL

3" = 1'-0"



1 - EQUIPMENT CANOPY SECTION

1/2" = 1'-0"

1. REFER TO VERIZON WIRELESS GROUNDING SPECIFICATIONS FOR ALL GROUNDING REQUIREMENTS.

2. BOND AND GROUND ANY PROPOSED STRUCTURAL STEEL, CONCRETE REINFORCING AND OTHER METALLIC BUILDING ELEMENTS, REFER TO VERIZON WIRELESS SPECIFICATIONS FOR EXACT REQUIREMENTS.

3. THE ELECTRICAL CONTRACTOR SHALL PERFORM ALL BONDING AND GROUNDING TO THE SITE'S OUTER GROUNDING SYSTEM DURING THE CONSTRUCTION PHASE OF THE BUILDING.

4. CONTRACTOR IS TO CONDUCT FREQUENT INSPECTIONS DURING THE CONSTRUCTION PHASE TO ENSURE THAT ALL GROUNDING ARRANGEMENTS ARE MADE ACCORDING TO THE GROUNDING DESIGN SPECIFICATIONS.

5. DO NOT RETROFIT (OR UPGRADE) ESTABLISHED SITES THAT DO NOT MEET ALL THE REQUIREMENTS OF VERIZON WIRELESS GROUNDING STANDARD UNLESS THERE ARE DOCUMENTED OCCURRENCES OF EQUIPMENT DAMAGES AND/OR SERVICE AFFECTING CONDITIONS.

6. USE ONLY VERIZON WIRELESS-APPROVED MATERIALS SUCH AS COPPER FOR MOST ELECTRICAL WORK AND ALUMINUM FOR CERTAIN APPLICATIONS FOR SITE GROUNDING SYSTEM, ELECTRICAL PROTECTION COMPONENTS AND AC WIRING.

7. USE THE SAME METAL THROUGHOUT THE GROUND SYSTEM WHEN POSSIBLE

8. IF DIFFERENT METALS MUST BE CONNECTED, BOND THEM BY EXOTHERMICALLY WELDING THEM TOGETHER.

9. USE TINNED COPPER WHEN CONNECTING TO GALVANIZED STEEL.

10. DO NOT BOND COPPER AND ALUMINUM TOGETHER UNLESS USING SPECIFICALLY DESIGNED EXOTHERMIC MATERIALS DESIGNED FOR THIS APPLICATION ARE USED OR A BIMETALLIC TRANSITIONAL CONNECTION IS UTILIZED.

11. MAKE ALL BONDING ATTACHMENTS TO CLEAN, UNPAINTED METAL SURFACES OR USE APPROVED PAINT PIERCING WASHERS.

12. PAINTED SURFACES MUST BE SCRAPED, CLEANED, AND LIGHTLY COATED WITH THE APPLICABLE COMPOUND.

13. ALL INDOOR OR OUTDOOR POWER OR GROUNDING CONNECTIONS SHALL BE PROTECTED AGAINST CORROSION BY USE OF A THIN COATING OF ANTI-OXIDATION COMPOUND. A COPPER COSMOLINE GREASE BASED COMPOUND (NO OX-ID) SHALL BE USED ON ALL COPPER TO COPPER CONNECTIONS. A ZINC BASED (GREY COLORED) COMPOUND SHALL BE USED ON ALL COPPER TO STEEL CONNECTIONS. WHERE OTHER COMPOUNDS SUCH AS KOPPER-SHIELD ETC EXIST, THEY MAY BE 'GRANDFATHERED' IN PLACE. PENTROX GREASE OR AN APPROVED EQUAL SHALL BE USED ON ALUMINUM CONNECTIONS.

14. DO NOT WELD GROUNDING CONDUCTORS TO THE STRUCTURAL MEMBERS OF TOWERS, INCLUDING DOWN GUYS AND ANCHOR RODS.

15. BOND ALL METALLIC OBJECTS (SUCH AS WATER PIPES, CONDUITS, METAL FUEL TANKS WITHOUT CATHODIC PROTECTION, METAL FENCES, HVAC, ETC.) THAT ARE WITHIN 6 FEET (1.8 M) OF THE GROUND RING, OR FROM ANY OTHER GROUNDED CONDUCTOR, TO GROUND RING OR TO THE GROUNDED CONDUCTOR. HARDWARE

16. ALL OUTDOOR HARDWARE (BOLTS, SCREWS, NUTS, WASHERS) SHALL BE 18-8 STAINLESS STEEL TYPE GRADE. INDOORS, GRADE 5 STEEL HARDWARE MAY BE USED. CHOOSE BOLT LENGTH TO ALLOW THE EXPOSURE OF AT LEAST TWO THREADS.

17. WHEN BONDING TO A METALLIC OBJECT WHERE ACCESS IS LIMITED TO ONLY ONE SURFACE, USE DRILLING & TAPPING OR SELF DRILLING SCREWS. DO NOT USE SHEET METAL SCREWS.

18. ALL GROUNDING CONDUCTORS SHOULD PRESERVE A DOWNWARD TO HORIZONTAL COURSE AND BE AS STRAIGHT AS POSSIBLE AND AVOID SHARP TURNS.

19. DO NOT USE U-SHAPED GROUNDING CONDUCTOR RUNS (U-TURNS IN THE WIRING) OR BONDING LAYOUTS TO REDUCE ARC-OVERS

20. ALL GROUNDING CONDUCTS MUST BE RUN IN NONMETALLIC CONDUIT. ROUTE ALL CONDUCTORS THROUGH NONMETALLIC SLEEVES WHEN PENETRATING FLOORS, CEILINGS, AND WALLS.

21. IF THE USE OF METALLIC CONDUIT CANNOT BE AVOIDED, BOND BOTH ENDS OF THE CONDUIT TO THE GROUNDING CONDUCTOR BEING ROUTED THROUGH THE CONDUIT

22. KEEP LENGTHS OF CONDUCTORS TO A MINIMUM

23. USE MULTIPLE CONDUCTING PATHS. PARALLEL PATHS ARE ONLY DESIRABLE WHEN SENSITIVE ELECTRONIC EQUIPMENT IS NOT PART OF THE CONDUCTOR PATH

24. KEEP BENDS IN CONDUCTORS TO A MINIMUM.

25. THE MINIMUM INSIDE BENDING RADIUS IS:

A. 6 INCHES (0.15M) FOR CONDUCTORS UP TO #6 GAUGE.

B. 12 INCHES (0.3M) FOR CONDUCTORS #6 TO #4/0 GAUGE.

C. 24 INCHES (0.6M) FOR CONDUCTORS #4/0 GAUGE AND LARGER

25. GROUND CONDUCTORS MUST NEVER BE ENCIRCLED WITH FERROUS METAL CLAMPS, PLACED THROUGH METAL WALLS, METAL PLATES, OR SHORT SECTIONS OF METAL CONDUIT, AND MUST NEVER BE PLACE IN THE SAME CABLE RACK AS DC POWER CABLES, HIGH FREQUENCY CABLES, ETC.

26. WHEN ATTACHING PVC CONDUITS TO ANY SURFACE UTILIZE NONCONDUCTIVE FASTENERS OR NONFERROUS FASTENERS ONLY.

27. IF CONNECTIONS BETWEEN ALUMINUM CONDUCTORS AND STEEL OBJECTS MUST BE MADE, TINNED LUGS AND PENTROX SHALL BE USED. WHERE THERE ARE CONCERNS THAT THE PENTROX MAY NOT PROVIDE ADEQUATE INTERFACING, THEN A BIMETAL SPLICE BETWEEN THE ALUMINUM CONDUCTOR AND A SHORT LENGTH OF COPPER CONDUCTOR MAY BE USED.

28. ALL OF THE BONDING AND GROUNDING CONDUCTORS SPECIFIED FOR ROOFTOP CELL AND MICROWAVE SYSTEMS IS BARE WIRE. INSULATED WIRE SHALL NOT BE SPECIFIED OR SUBSTITUTED FOR THE BONDING AND GROUNDING CONDUCTORS OF ROOFTOP INSTALLATIONS.

3 - GROUNDING NOTES

POWER PLAN SYMBOLS		GROUNDING PLAN SYMBOLS		ONE LINE DIAGRAM SYMBOLS	
	POWER CONDUCTOR		GROUND CONDUCTOR		TRANSFORMER
	PANELBOARD		COMPRESSION TYPE CONNECTION		STAND-BY GENERATOR
	DISCONNECT SWITCH		EXOTHERMIC WELD		METER
	METER		COPPER CLAD GROUND ROD (5/8" x10')		AUTOMATIC TRANSFER SWITCH
	ELECTRICAL EQUIPMENT ENCLOSURE		GROUND ROD WITH INSPECTION SLEEVE		INTEGRATED TRANSFER SWITCH
	GENERATOR RECEPTACLE		TEST WELL		FUSED DISCONNECT
	LIGHT SWITCH		PATH AND NUMBER OF CONDUCTORS		LOCAL DISCONNECT
	DUPLEX OUTLET		GEN. PLUG		CIRCUIT BREAKER
	QUADPLEX OUTLET				
	GFCI OUTLET				

2 - ELECTRIC SYMBOLS LEGEND AND CALCULATIONS

1. SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT. CONTRACTOR IS RESPONSIBLE FOR ALL FIELD VERIFICATION.

2. THESE PLANS ARE DIAGRAMMATIC ONLY, AND NOT TO BE SCALED.

3. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC. FOR A COMPLETE AND PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT AND AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.

4. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY UNDER- WRITER'S LABORATORY AND SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, AND NBFU.

5. ALL CONDUIT INSTALLED SHALL BE SURFACE MOUNTED UNLESS OTHERWISE NOTED.

6. ELECTRICAL CONTRACTOR SHALL CARRY OUT HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY, LOCAL CODES AND O.S.H.A.

7. ELECTRICAL CONTRACTOR SHALL SECURE ALL NECESSARY ELECTRICAL PERMITS, AND PAY ALL REQUIRED FEES.

8. COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF NO LESS THAN ONE YEAR AFTER THE DATE OF JOB COMPLETION. ANY WORK, MATERIAL, OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR.

9. ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE, AND TRUE TAPE.

10. PROVIDE THE OWNER WITH ONE SET OF COMPLETE DIMENSIONS AND CIRCUITS, WITHIN 10 WORKING DAYS OF PROJECT COMPLETION ELECTRICAL "AS BUILT" DRAWINGS, SHOWING ACTUAL

11. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO PROJECT MANAGER AT JOB COMPLETION.

12. USE T-TAP CONNECTIONS ON ALL MULTI-CIRCUITS WITH COMMON NEUTRAL CONDUCTOR FOR LIGHTING FIXTURE. ALL CONDUCTORS SHALL BE COPPER.

13. THE EXTERIOR GROUND RING SHALL BE TESTED PER VERIZON WIRELESS SPECIFICATIONS AND SHALL HAVE A RESISTANCE TO EARTH OF 5 OHMS OR LESS. IF NOT NOTIFY ENGINEER.

14. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THAN THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
15. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES.

16. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.

17. IN DRILLING HOLES INTO CONCRETE (WHETHER FOR FASTENING OR ANCHORING PURPOSES OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, PIPE RUNS, ETC.) IT MUST BE CLEARLY UNDERSTOOD THAT TENDONS AND REBARS WILL NOT BE DRILLED INTO, CUT, OR DAMAGED UNDER ANY CIRCUMSTANCES.

18. LOCATION OF TENDONS AND RE-BARS ARE NOT DEFINITELY KNOWN AND THEREFORE MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT VIA X-RAY, OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING STEEL TENDONS.

19. PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH APPLICABLE LOCAL BUILDING CODES. USING U.L. RATED MATERIALS

20. ELECTRICAL CONTRACTOR IS TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOK-UP COSTS SHALL BE PAID BY THE CONTRACTOR.

21. ELECTRICAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND/OR CATALOG CUT-SHEETS ON ALL NON-SPECIFIED ORIGINAL MATERIALS AND EQUIPMENT, TO PROJECT MANAGER PRIOR TO COMMENCEMENT OF THE WORK.

22. UPON COMPLETION OF WORK, CONDUCT CONTINUITY AND SHORT CIRCUIT, AS WELL AS, GROUNDING TEST. GROUNDING TEST SHALL BE PERFORMED BY INDEPENDENT TESTING AGENCY, WITH WRITTEN REPORT SUBMITTED TO THE PROJECT MANAGER FOR REVIEW AND APPROVAL.

23. CLEAN PREMISES DAILY OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK PREMISES IN A COMPLETE AND UNDAMAGED CONDITION.

24. ALL EXTERIOR WALL PENETRATIONS SHALL BE SEALED WITH POLYSEAM SEALANT.

25. ALL #2 TINNED BARE COPPER DOWNLEADS TO BE PROTECTED BY 1/2" P.V.C. PIPE AND SECURED.

26. COMPRESSION FITTINGS TO BE USED ON ALL CONDUITS (NO SET SCREWS).

27. ALL #6 STRANDED COPPER WITH GREEN INSULATION TO BE ATTACHED WITH CRIMPED DOUBLE LUG, ATTACHED WITH NUTS, BOLTS AND STAR WASHERS TYPICAL AND NO-OX GREASE BETWEEN LUG AND BUS BAR.

28. ALL ABOVE GROUND CONDUIT SHALL BE EMT GALVANIZED CONDUIT WITH WEATHERPROOF FITTINGS.

29. LABEL PANEL WITH AVAILABLE FAULT VALUE (PERMANENT LABEL).

* DATE OF JOB COMPLETION SHALL BE THE DATE ON THE CONTRACTOR'S "NOTICE OF COMPLETION" SUBMITTED TO THE OWNER.

1 - ELECTRICAL NOTES1



PROJECT INFORMATION

SITE NAME

CSP CHIPITA

SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819

CROWN CASTLE

TOWER SITE NAME

THIRD CREEK

SITE I.D.

877026

CONSULTANT

VERN WILLSON P.E.

3083 WHITE OAK ST.
HIGHLANDS RANCH, CO 80129
PHONE:303.883.2208

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP

CHARLES
STECKLY

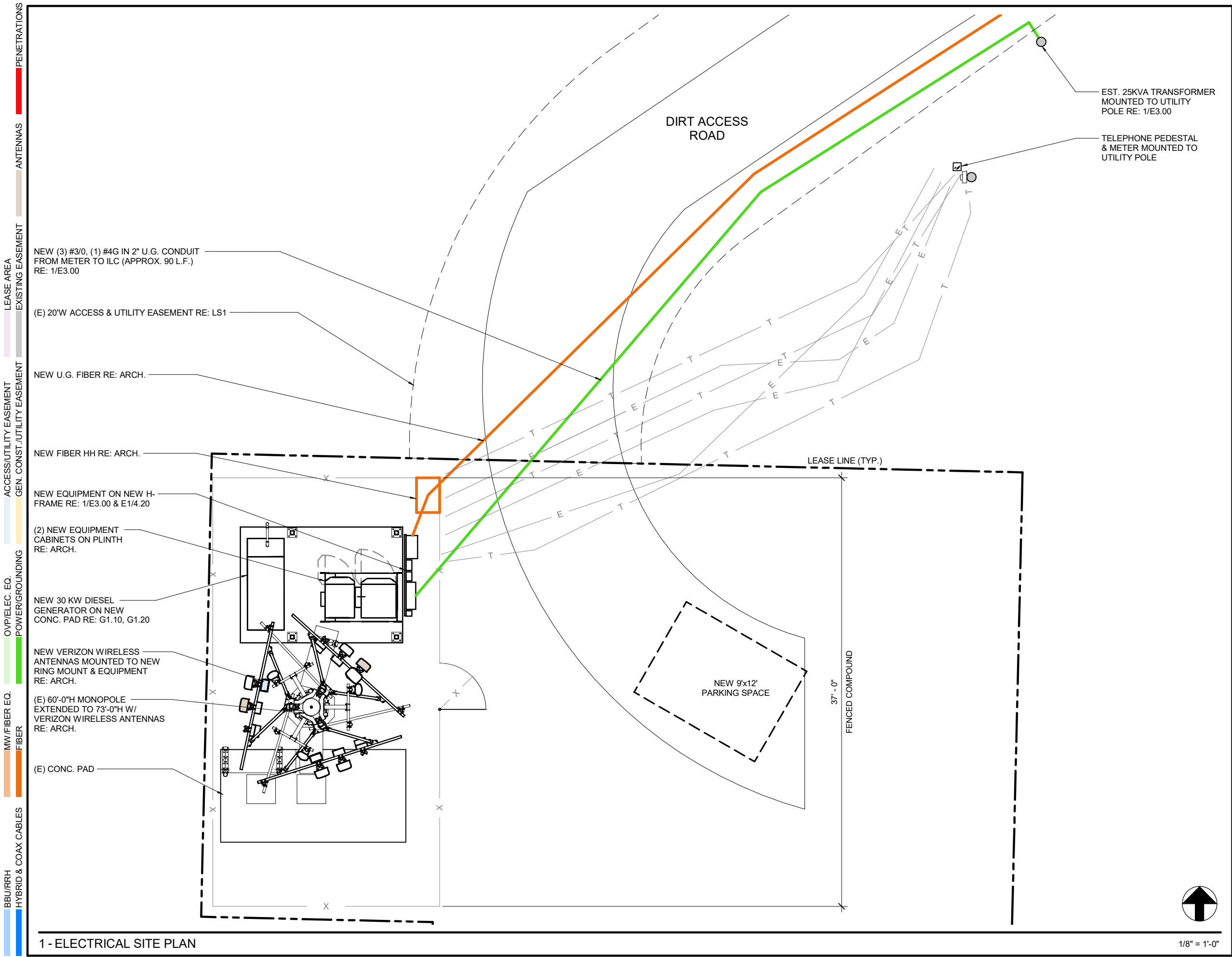
ARCHITECTURE

5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

NOT FOR
CONSTRUCTION

ELECTRICAL NOTES &
SYMBOLS

E1.00



VERIZON WIRELESS SERVICES
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO 80014

PROJECT INFORMATION

SITE NAME
CSP CHIPITA
SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819
CROWN CASTLE

TOWER SITE NAME
THIRD CREEK
SITE I.D.
877026

CONSULTANT
VERN WILLSON P.E.

3083 WHITE OAK ST.
HIGHLANDS RANCH, CO 80129
PHONE: 303.883.2208

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP

CHARLES STECKLY

ARCHITECTURE

5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

NOT FOR CONSTRUCTION

ELECTRICAL SITE PLAN

E2.00

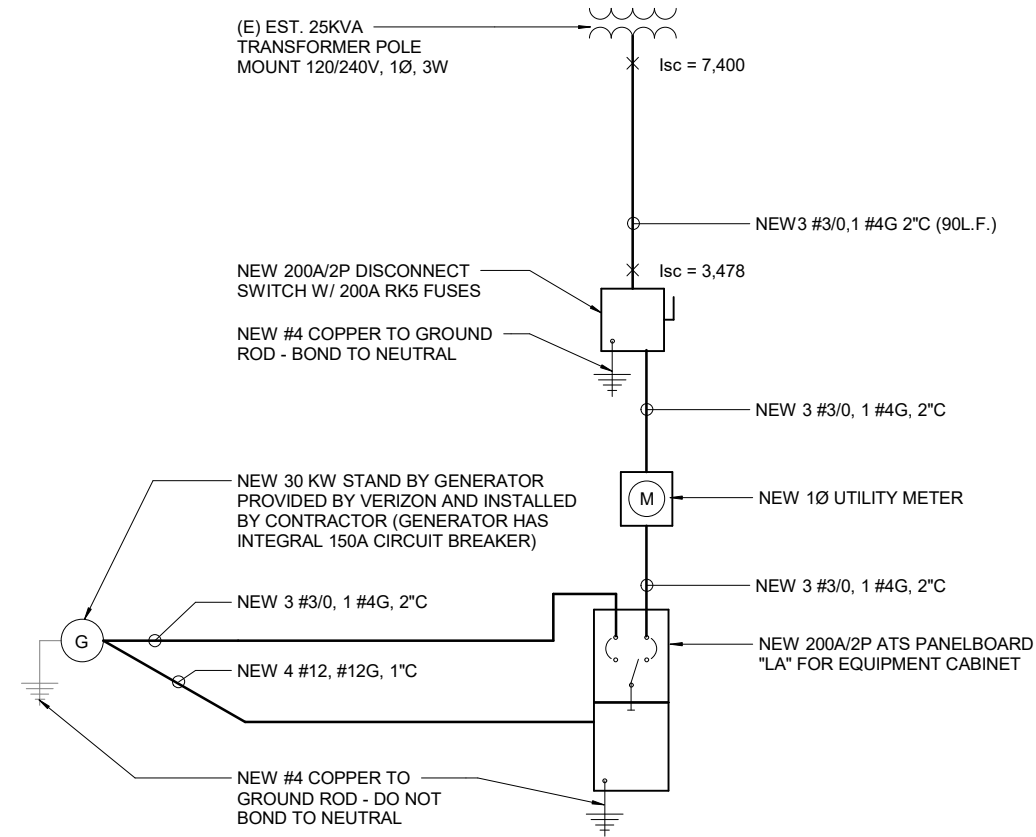
PANEL: LA
120/ 240 VOLTS 1 PHASE 3 WIRES, SN, 200 AMP BUS 200 AMP MAIN MCB
10,000 A.I.C. RATING (MINIMUM), NEMA 3R ENCLOSURE,SURFACE ENCLOSURE

DESCRIPTION	WIRE	BKR	POLE	CKT	VA	Ø	VA	CKT	POLE	BKR	WIRE	DESCRIPTION
BATTERY CAB RECEPTACLE	#12	15	1	1	360	A	720	2	2	60	#10	BATTERY CAB RECTIFIER 6
EXTERIOR LIGHTING	#12	20	1	3	900	B	720	4				
BATTERY CAB RECTIFIER 1	#10	30	2	5	720	A	720	6	2	60	#10	BATTERY CAB RECTIFIER 7
				7	720	B	720	8				
BATTERY CAB RECTIFIER 2	#10	30	2	9	720	A	720	10	2	30	#10	BATTERY CAB RECTIFIER 8
				11	720	B	720	12				
BATTERY CAB RECTIFIER 3	#10	30	2	13	720	A	180	14	2	30	#12	RF CABINET A GFCI
				15	720	B	1000	16	2	30	#12	RF CABINET A A/C UNIT
BATTERY CAB RECTIFIER 4	#10	30	2	17	720	A	1000	18				
				19	720	B	180	20	2	30	#12	RF CABINET B GFCI
BATTERY CAB RECTIFIER 5	#10	30	2	21	720	A	1000	22	2	30	#12	RF CABINET B A/C UNIT
				23	720	B	1000	24				
BLOCK HEATER	#12	20	1	25	1000	A	-	26	-	-	-	SPACE
BATTERY CHARGER	#12	20	1	27	1000	B	-	28	-	-	-	SPACE
SPACE	-	-	-	29	-	A	-	30	-	-	-	SPACE
SPACE	-	-	-	31	-	B	-	32	-	-	-	SPACE
SPACE	-	-	-	33	-	A	-	34	-	-	-	SPACE
SPACE	-	-	-	35	-	B	-	36	-	-	-	SPACE
SPACE	-	-	-	37	-	A	-	38	-	-	-	SPACE
SPACE	-	-	-	39	-	B	-	40	-	-	-	SPACE
SPACE	-	-	-	41	-	A	-	42	-	-	-	SPACE

PHASE A: 9300 VOLTAMPS PHASE B: 9840 VOLTAMPS

PANEL LOAD CALCULATIONS

LIGHTS	<u>900</u>	VOLTAMPS X 1.25 =	<u>1125</u>	VOLTAMPS
RECEPTACLES- 1ST 10KVA	<u>720</u>	VOLTAMPS X 1.00 =	<u>720</u>	VOLTAMPS
LARGEST MOTOR	<u>2000</u>	VOLTAMPS X 1.25 =	<u>2500</u>	VOLTAMPS
REMAINDER MOTORS	<u>2000</u>	VOLTAMPS X 1.00 =	<u>2000</u>	VOLTAMPS
RECTIFIER	<u>11520</u>	VOLTAMPS X 1.00 =	<u>11520</u>	VOLTAMPS
OTHER	<u>2000</u>	VOLTAMPS X 1.00 =	<u>2000</u>	VOLTAMPS
			<u>19865</u>	TOTAL DEMAND
			<u>83</u>	AMPS,1Ø, 3W



FAULT CALCULATIONS

A. SERVICE

$$f = \frac{2 \times 90\text{FT} \times 7400\text{A}}{4811 \times 240\text{V}} = 1.15$$
$$M = \frac{1}{1 + 1.15} = 0.47$$
$$I_{sc} = 0.47 \times 7400\text{A} = 3478\text{AIC}$$



PROJECT INFORMATION

SITE NAME

CSP CHIPITA

SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819

CROWN CASTLE

TOWER SITE NAME

THIRD CREEK

SITE I.D.

877026

CONSULTANT

VERN WILLSON P.E.

3083 WHITE OAK ST.
HIGHLANDS RANCH, CO 80129
PHONE: 303.883.2208

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP

CHARLES
STECKLY

ARCHITECTURE

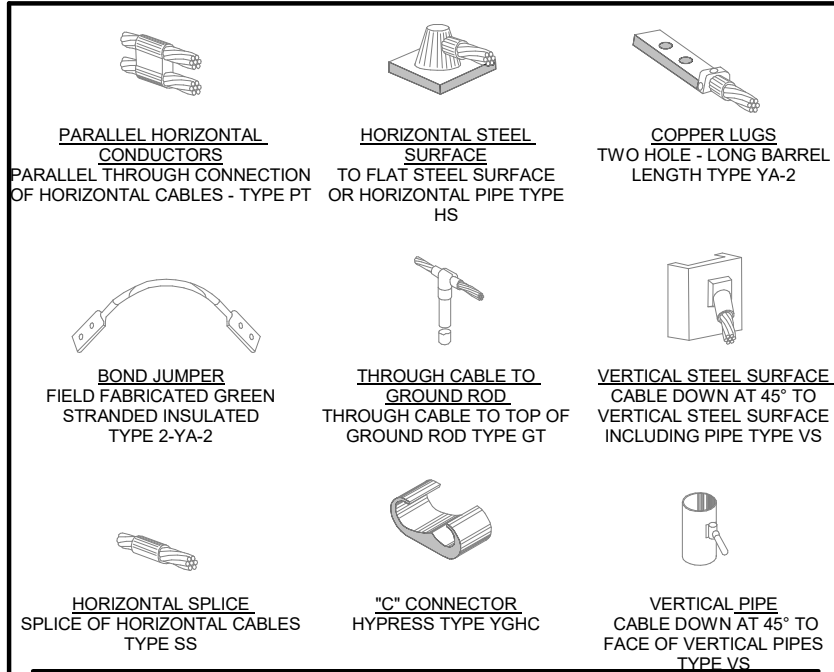
5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

**NOT FOR
CONSTRUCTION**

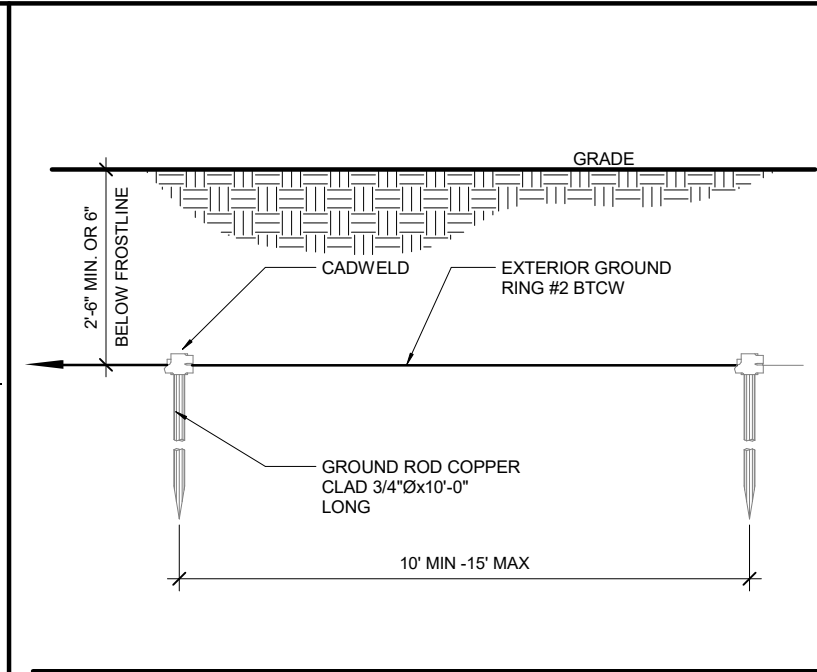
PANEL SCHEDULE &
ONE LINE DIAGRAM

E3.00

PENETRATIONS
ANTENNAS
LEASE AREA
EXISTING EASEMENT
ACCESS/UTILITY EASEMENT
GEN. CONST./UTILITY EASEMENT
POWER/GROUNDING
OV/PELEC. EQ.
MW/FIBER EQ.
FIBER
BBU/RRH
HYBRID & COAX CABLES

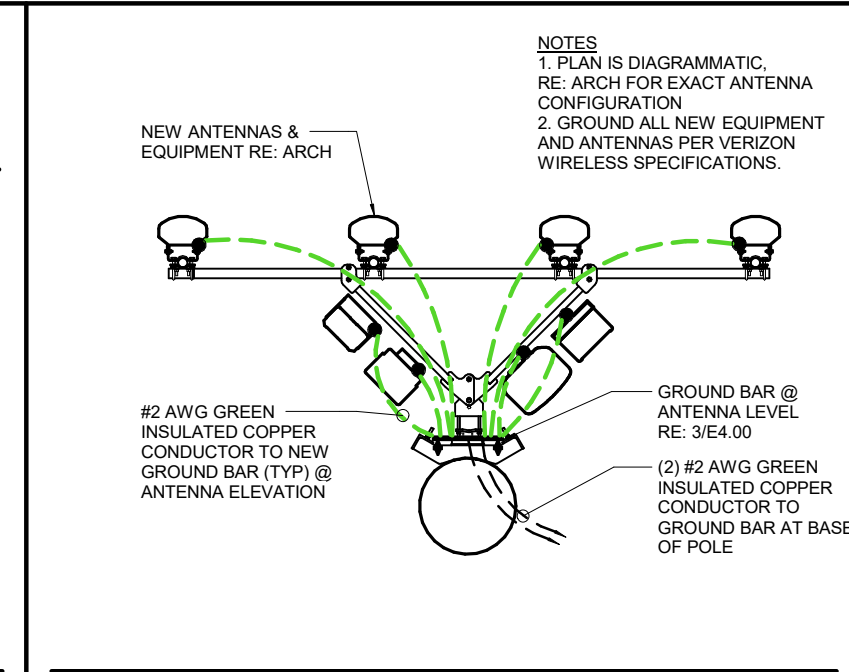


4 - CAD WELD DETAILS



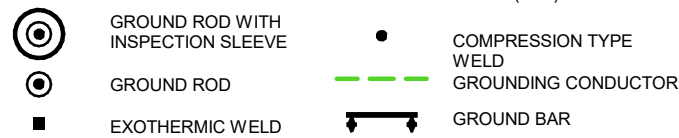
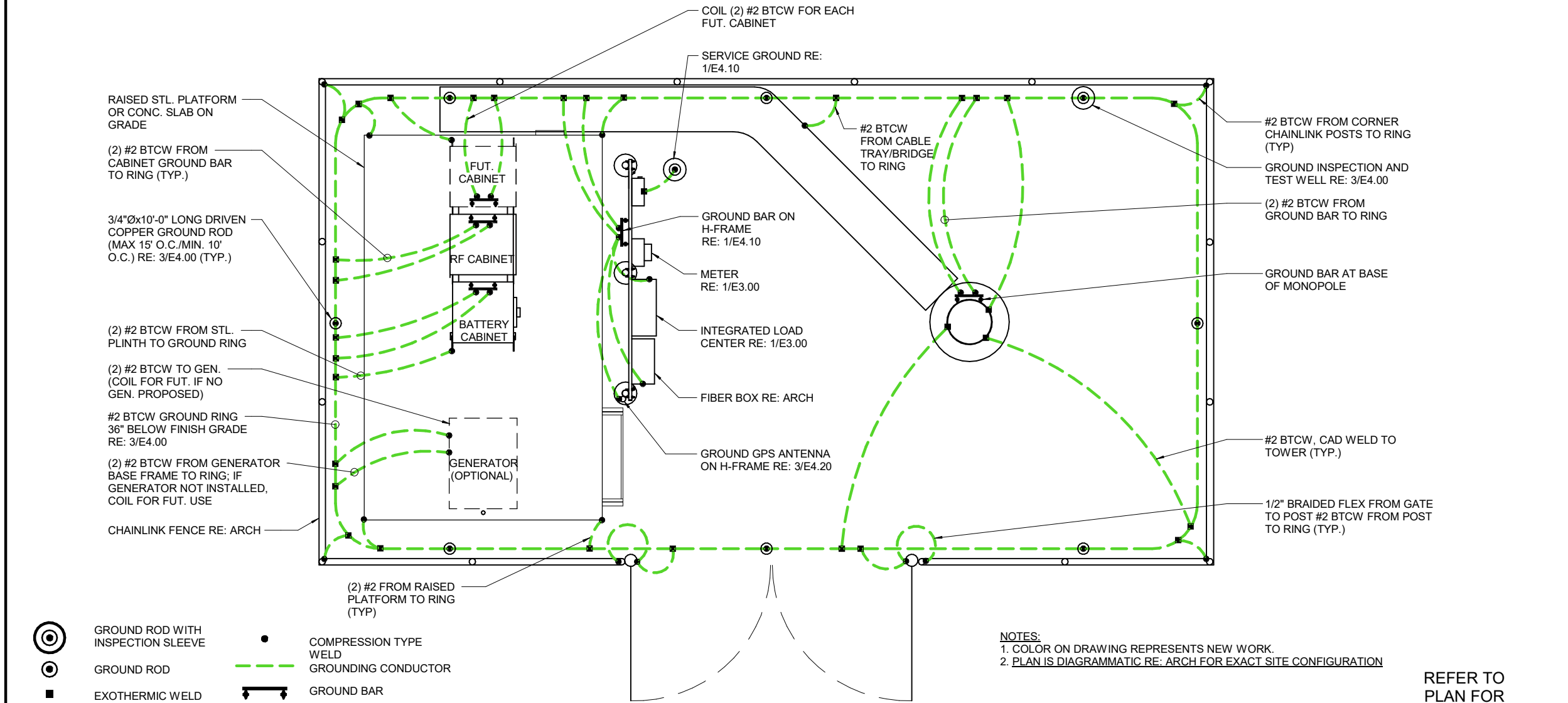
3 - GROUND ROD DETAIL

N.T.S.



2 - ANTENNA SECTOR GROUNDING PLAN

NOTES
1. PLAN IS DIAGRAMMATIC, RE: ARCH FOR EXACT ANTENNA CONFIGURATION
2. GROUND ALL NEW EQUIPMENT AND ANTENNAS PER VERIZON WIRELESS SPECIFICATIONS.



1 - GROUNDING PLAN

NOTES:
1. COLOR ON DRAWING REPRESENTS NEW WORK.
2. PLAN IS DIAGRAMMATIC RE: ARCH FOR EXACT SITE CONFIGURATION

REFER TO
PLAN FOR
NORTH

N.T.S.



VERIZON WIRELESS SERVICES
3131 S. VAUGHN WAY, SUITE 550
AURORA, CO 80014

PROJECT INFORMATION

SITE NAME

CSP CHIPITA

SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819

CROWN CASTLE

TOWER SITE NAME

THIRD CREEK

SITE I.D.

877026

CONSULTANT

VERN WILLSON P.E.

3083 WHITE OAK ST.
HIGHLANDS RANCH, CO 80129
PHONE: 303.883.2208

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP

**CHARLES
STECKLY**

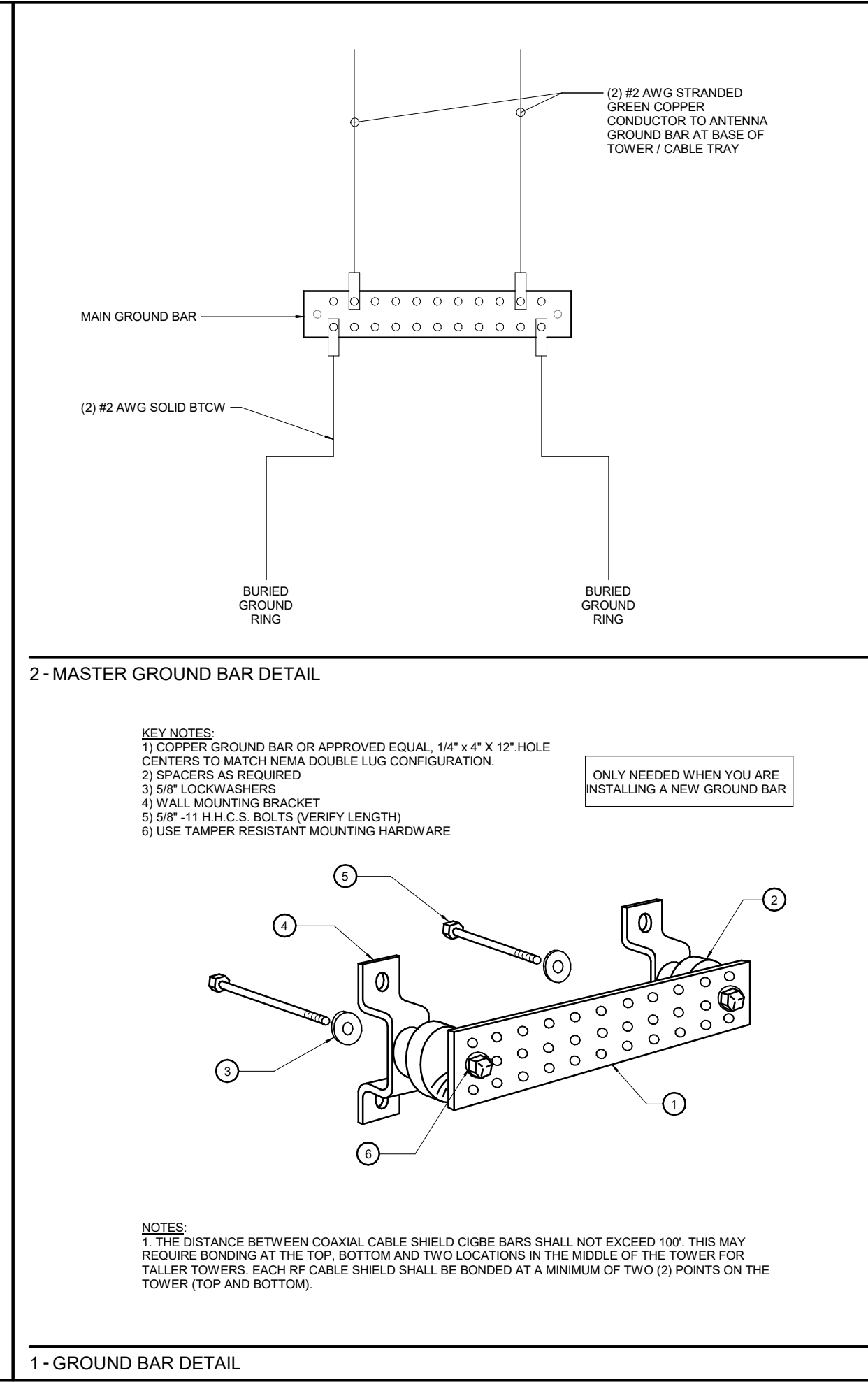
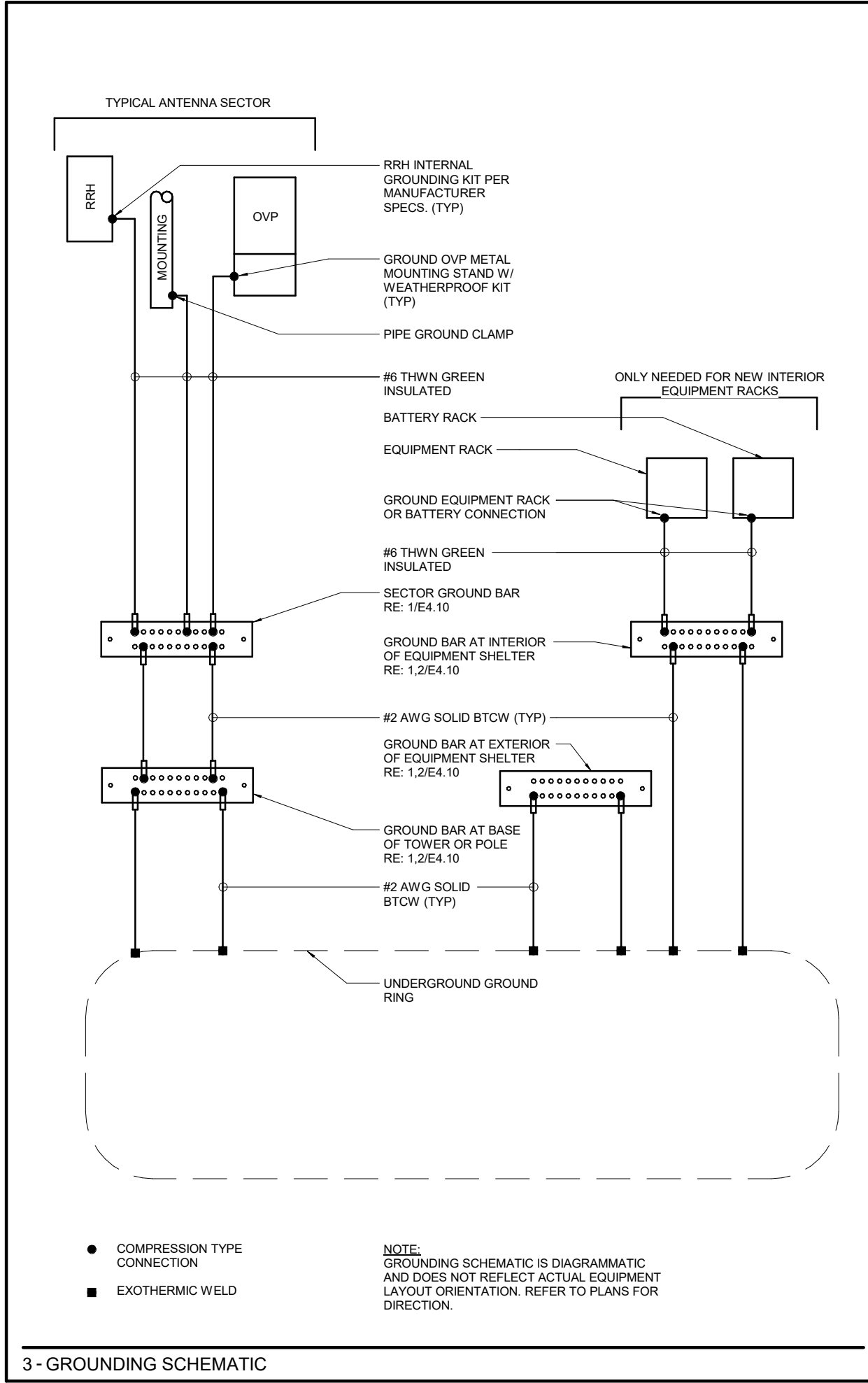
ARCHITECTURE

5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

**NOT FOR
CONSTRUCTION**

**GROUNDING PLAN &
DETAILS**

E4.00



A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

CHARLES STECKLY

ARCHITECTURE

5935 SOUTH ZANG STREET, SUITE 280
LITTLETON, COLORADO 80127
OFFICE: 303.932.9974

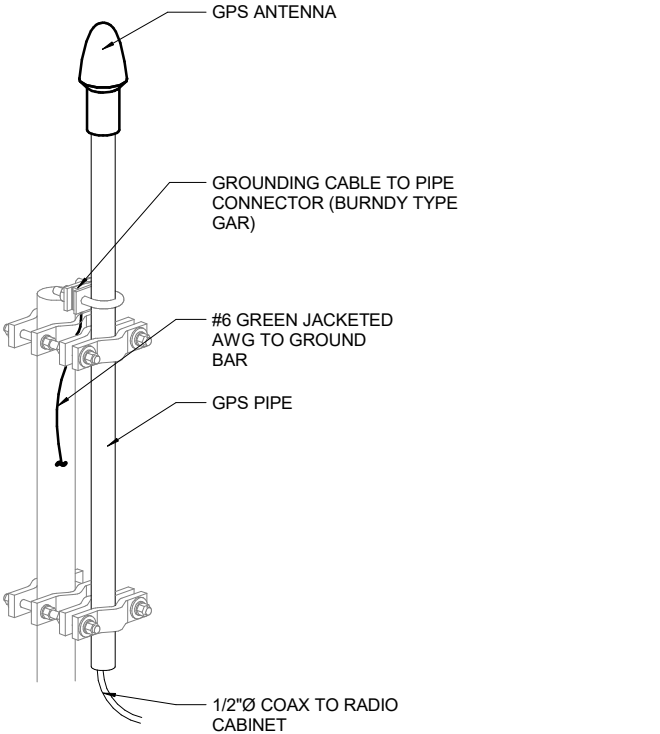
**NOT FOR
CONSTRUCTION**

5 - NOT USED

4 - NOT USED

3 - GPS ANTENNA GROUNDING DETAIL

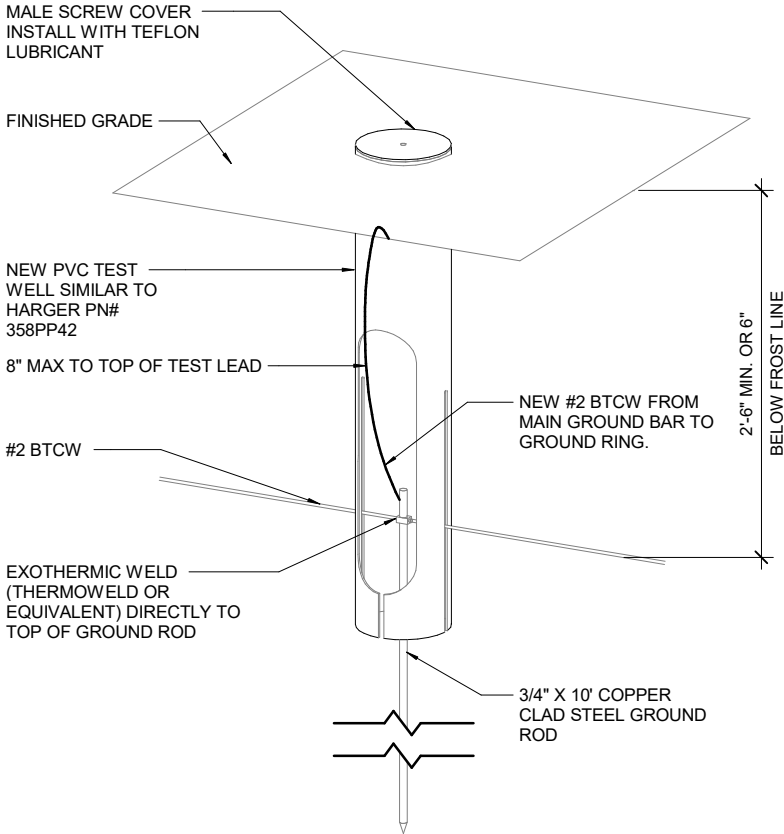
N.T.S.



NOTE:
RE: ARCH. FOR MOUNTING CONFIGURATION

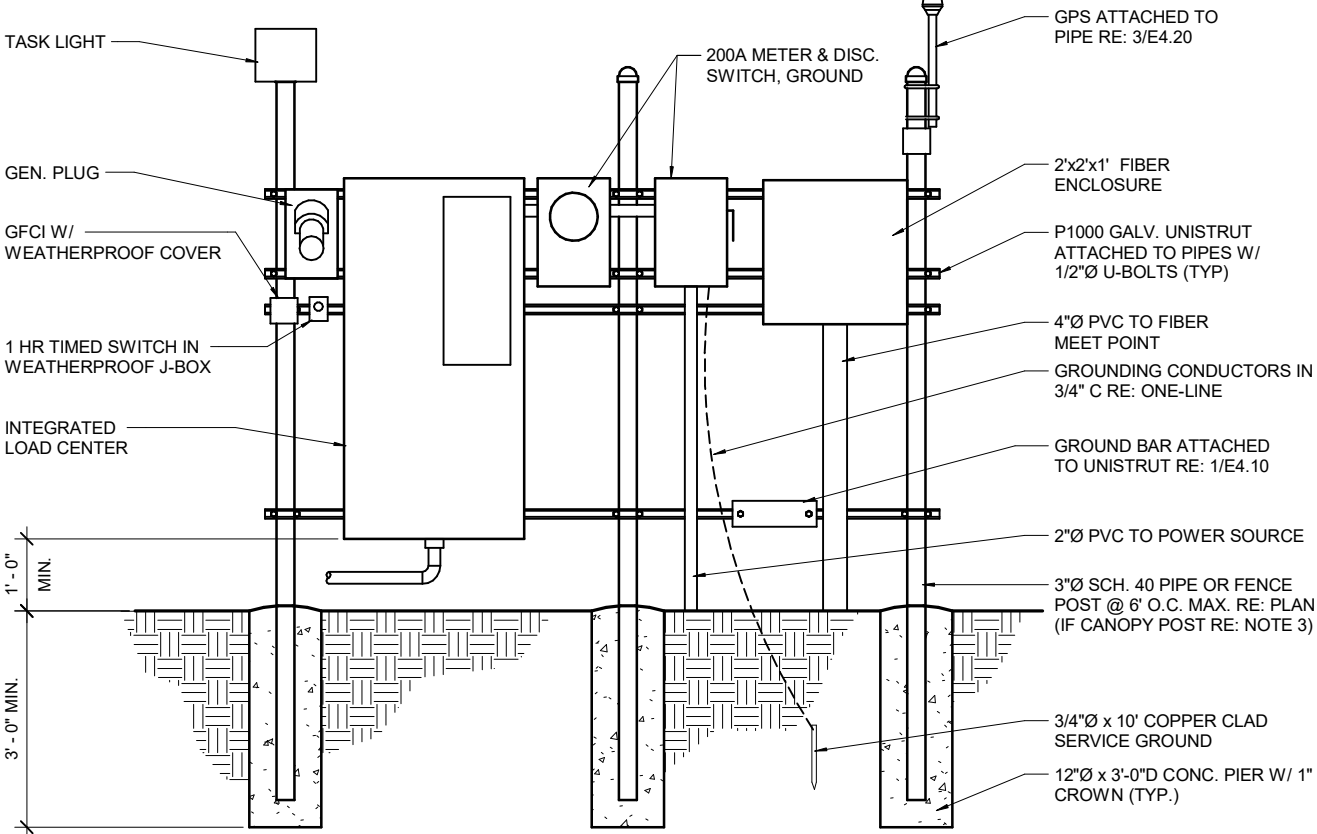
2 - INSPECTION WELL DETAIL

N.T.S.



1 - H-FRAME DETAIL

N.T.S.



NOTES:
1. LIGHT FIXTURES SHALL BE MOUNTED & ORIENTED SO DIRECT GLARE FROM THE LIGHT SOURCE WILL NOT BE VISIBLE OFF SITE.
2. VIEW IS DIAGRAMMATIC ONLY RE: ARCH FOR EXACT CONFIGURATION.
3. FOR CANOPY INSTALLATION, BOLT HORZ. UNISTRUT TO VERT. TS WITH 1/2" THRU-BOLTS.

PROJECT INFORMATION

SITE NAME

CSP CHIPITA

SITE I.D.

10005 LUCKY 4 ROAD
GREEN MOUNTAIN FALLS, CO 80819

CROWN CASTLE

TOWER SITE NAME

THIRD CREEK

SITE I.D.

877026

CONSULTANT

VERN WILLSON P.E.

3083 WHITE OAK ST.
HIGHLANDS RANCH, CO 80129
PHONE: 303.883.2208

A	10/19/17	CD REVIEW	GOB
B	12/13/17	RF COMMENTS	QDN
C	01/29/18	CILENT COMMENT	GOB

1st REVIEW ERR 2nd REVIEW SGP

**NOT FOR
CONSTRUCTION**

**ELECTRICAL &
GROUNDING DETAILS**

E4.20

SURVEYOR’S NOTES

1. SURVEYOR DOES NOT GUARANTEE THAT ALL UTILITIES ARE SHOWN OR THEIR LOCATIONS ARE DEFINITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND DEVELOPER TO CONTACT ANY INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. REMOVAL, RELOCATION AND/OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.

2. BUILDING SETBACK LINES, ZONING, FLOOD AREA ZONES, AND ADDRESSES THAT MAY BE SHOWN ARE SUPPLIED BY THE GOVERNING AGENCY OR TAKEN FROM THE BEST AVAILABLE RECORDS. THE SURVEYOR WILL NOT ACCEPT RESPONSIBILITY FOR THE ACCURACY OF ANY INFORMATION SUPPLIED BY OTHERS.

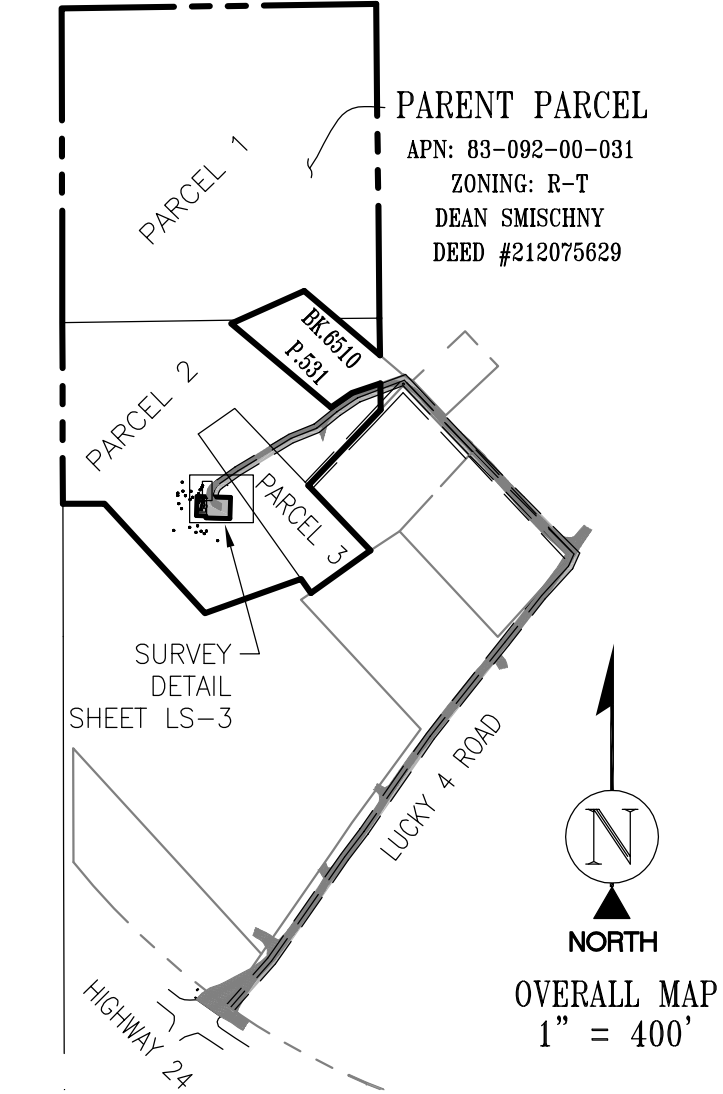
3. BEARINGS SHOWN HEREON ARE BASED UPON U.S. STATE PLANE NAD83 COORDINATE SYSTEM COLORADO STATE PLANE COORDINATE ZONE CENTRAL, DETERMINED BY GPS OBSERVATIONS.

4. THIS PROJECT APPEARS TO BE LOCATED WITHIN FLOOD ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP(S), COMMUNITY PANEL NO. 459, MAP NO. 08041C0459F, EFFECTIVE DATE MARCH 17, 1997.

5. PROJECT ELEVATIONS ESTABLISHED FROM GPS DERIVED ORTHOMETRIC HEIGHTS BY APPLICATION OF NGS "GEOID 12A" MODELED SEPARATIONS TO ELLIPSOID HEIGHTS DETERMINED BY OBSERVATIONS OF THE "SMARTNET" REAL TIME NETWORK. ALL ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD88.

6. THE PURPOSE OF THIS SURVEY IS TO ESTABLISH OR DETERMINE A CROWN CASTLE LEASE PARCEL & ASSOCIATED EASEMENTS. THE BOUNDARY SHOWN HEREON IS PLOTTED FROM RECORD INFORMATION PROVIDED BY TITLE AND DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE PROPERTY.

7. THE DESCRIPTION OF PROPERTY BOUNDARIES AND EASEMENTS SHOWN HEREON, REPRESENT THAT INFORMATION PROVIDED IN COMMITMENT FOR TITLE INSURANCE FILE NO. CRC-WC-366047-P, PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY. DATED DECEMBER 31, 2014. ANY INFORMATION SHOWN WHICH MAY VARY FROM THE CONTENTS OF THE REPORT(S) NOTED ABOVE, REPRESENTS INFORMATION AND MEASUREMENTS FOUND DURING THE COURSE OF THE SURVEY.

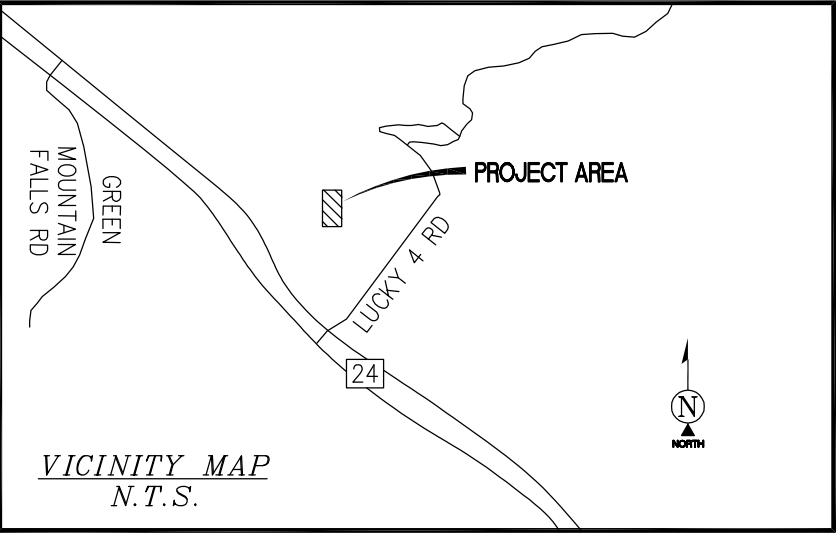


LEGEND

P.O.C. ASPHALT
P.O.B. TOP OF BUILDING
P.O.T. CHAIN LINK FENCE

TREES
 POWER POLE
 GM GAS METER

— GAS — GAS — GAS LINES
— O/H — O/H — OVERHEAD LINES
— E — E — ELECTRIC LINES
— F/O — F/O — FIBER OPTIC LINES
— — — — — SUBJECT PROPERTY LINE
— — — — — ADJACENT PROPERTY LINE
- - - - - EASEMENT LINES
- - - - - TIE LINES
— — — — — LEASE AREA LIMITS
- - - - - MAJOR CONTOUR INTERVAL
- - - - - MINOR CONTOUR INTERVAL



DIRECTIONS TO SITE

FROM DENVER INTERNATIONAL AIRPORT HEAD NORTH ON PEÑA BLVD.; START OUT GOING NORTH ON PENA BLVD TOWARD TERMINAL EAST. KEEP LEFT AT THE FORK TO CONTINUE ON PENA BLVD. TURN SLIGHT RIGHT TO STAY ON PENA BLVD. MERGE ONTO E-470 S VIA EXIT 6A TOWARD I-70 (PORTIONS TOLL). TAKE THE I-25 EXIT, EXIT 1A, TOWARD COLO SPRINGS/DENVER. MERGE ONTO I-25 S/US-87 S VIA THE RAMP ON THE LEFT TOWARD COLO SPGS. TAKE THE US-24 W/CIMARRON STREET EXIT, EXIT 141. KEEP LEFT TO TAKE THE RAMP TOWARD MANITOU SPGS/PIKES PEAK/WOODLAND PARK. TURN LEFT ONTO US-24 W/W US HIGHWAY 24. CONTINUE TO FOLLOW US-24 W. TURN RIGHT ONTO LUCKY 4 ROAD.

PROPERTY INFORMATION

10005 LUCKY 4 ROAD
WEST HIGHWAY 24
GREEN MOUNTAIN FALLS, CO 80819
EL PASO COUNTY
PARCEL ID # 83-092-00-031
ZONING CODE R-T

OWNER INFORMATION

DEAN SMISCHNY

SURVEY DATE

01/22/2015

CERTIFICATION

ALL VISIBLE SITE RELATED IMPROVEMENTS ARE CONTAINED WITHIN THE OVERALL LEASE AREA.

CERTIFIED TO:
CROWN CASTLE
FIDELITY NATIONAL TITLE INSURANCE COMPANY

WILLIAM C. STAMPADOS PLS DATE

PROJECT INFORMATION:

UTE PASS
BUN: 877034
10005 LUCKY 4 ROAD
WEST HIGHWAY 24
GREEN MOUNTAIN FALLS, CO 80819

ORIGINAL ISSUE DATE:

01/30/15

REV.: DATE: DESCRIPTION: BY:

A	02/02/15	SUBMITTAL	CK

PLANS PREPARED BY:

CONSULTANT:

412 EAST SOUTHERN AVENUE
TEMPE, ARIZONA 85282 (480)659-4072

DRAWN BY: CHK.: APV.:

CK	NS	WS
----	----	----

APPROVALS:

SHEET TITLE:

TITLE

SHEET NUMBER:

LS-1

PARENT PARCEL

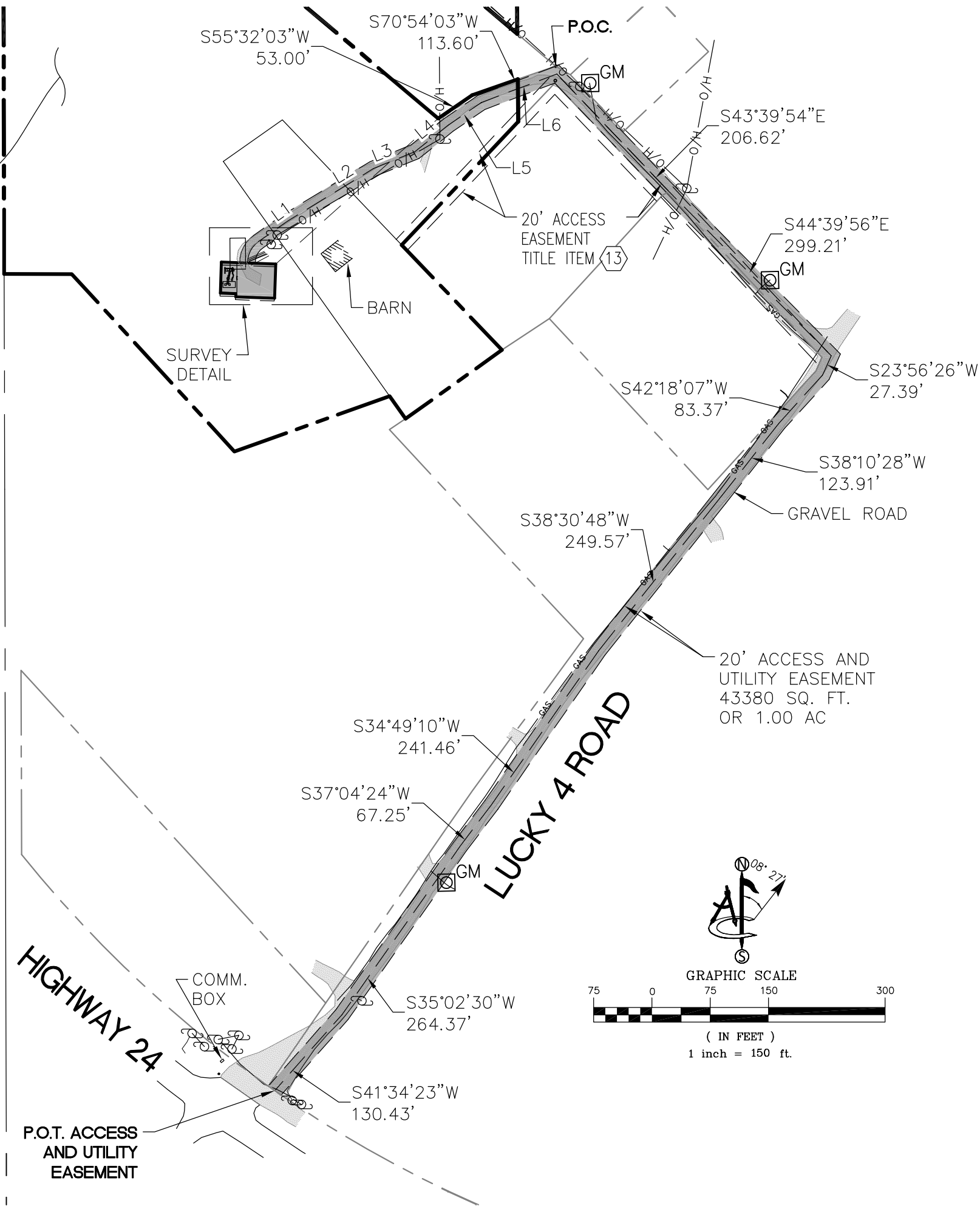
APN: 83-092-00-031

ZONING: R-T

DEAN SMISCHNY

DEED #212075629

LINE TABLE		
LINE#	LENGTH	DIRECTION
L1	45.73'	N54°51'32"E
L2	129.60'	N58°34'09"E
L3	57.89'	N67°51'07"E
L4	54.95'	N51°28'41"E
L5	51.31'	N55°28'43"E
L6	103.92'	N69°23'09"E



PROJECT INFORMATION:

UTE PASS
BUN: 877034
10005 LUCKY 4 ROAD
WEST HIGHWAY 24
GREEN MOUNTAIN FALLS, CO 80819

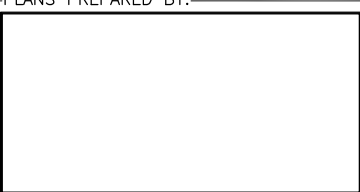
ORIGINAL ISSUE DATE:

01/30/15

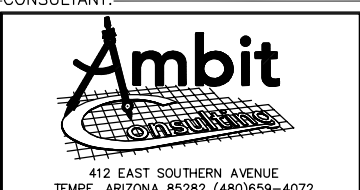
REV.: DATE: DESCRIPTION: BY:

A	02/02/15	SUBMITTAL	CK

PLANS PREPARED BY:



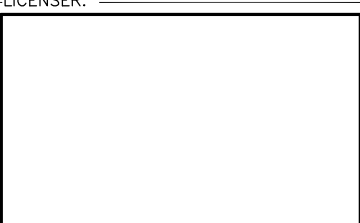
CONSULTANT:



DRAWN BY: CHK.: APV.:

CK	NS	WS
----	----	----

LICENSER:



SHEET TITLE:

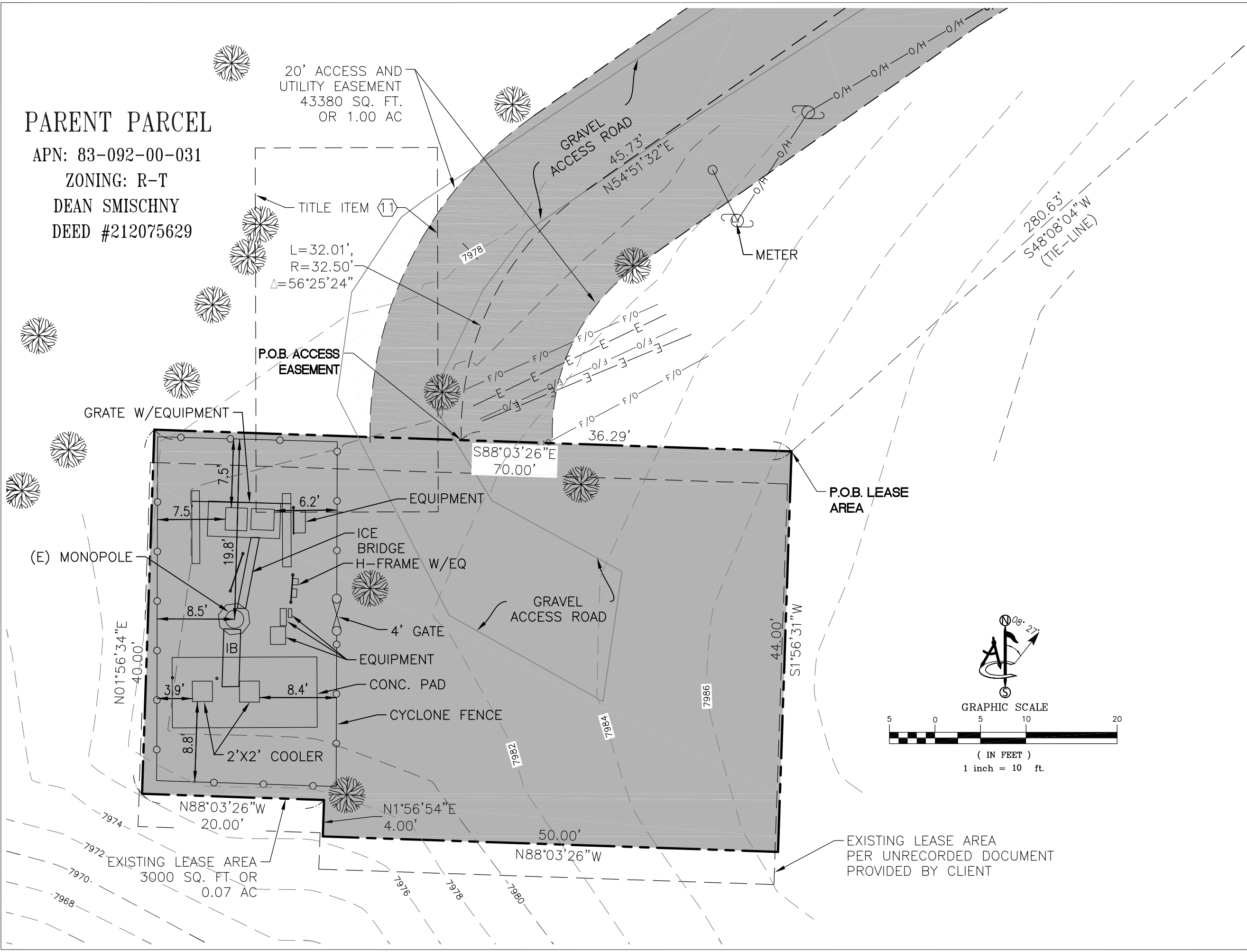
OVERALL DETAIL

SHEET NUMBER:

LS-2

PARENT PARCEL

APN: 83-092-00-031
ZONING: R-T
DEAN SMISCHNY
DEED #212075629

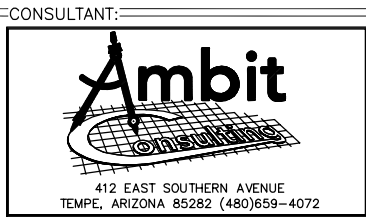


PROJECT INFORMATION:
UTE PASS
BUN: 877034
10005 LUCKY 4 ROAD
WEST HIGHWAY 24
GREEN MOUNTAIN FALLS, CO 80819

ORIGINAL ISSUE DATE:
01/30/15

REV.:	DATE:	DESCRIPTION:	BY:
A	02/02/15	SUBMITTAL	CK

PLANS PREPARED BY:



DRAWN BY: CK CHK.: NS APV.: WS

LICENSER:

SHEET TITLE:
SURVEY DETAIL

SHEET NUMBER:
LS-3

PARENT PARCEL LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF EL PASO, STATE OF COLORADO AND IS DESCRIBED AS FOLLOWS:
SECTION 9: SECTION 9, TOWNSHIP 13S, RANGE 68W OF THE 6TH P.M., EL PASO COUNTY COLORADO.
SURVEY: LAND SURVEY PLAT OF THE SMISCHNY PROPERTIES IN SECTIONS 4 AND 9, T 13S, R 68W OF THE 6TH P.M. EL PASO COUNTY, COLORADO, RECORDED WITH THE EL PASO COUNTY CLERK AND RECORDING DEPT ON 5 APRIL 2004, IN BOOK DPST OF THE COUNTY SURVEYORS LAND SURVEY PLATS/RIGHT-OF-WAY SURVEYS AT PAGE 83040, 83090 UNDER RECEPTION NUMBER 204900045 SURVEY PERFORMED BY TELLER COUNTY LAND SURVEYING.

PARCEL #1: NW 1/2 NW 1/4 NW 1/4 IN SECTION 9, AS SHOWN ON PAGE 1 OF THE ABOVE REFERENCED SURVEY, MINUS THE PROPERTY RECORDED IN BOOK 6510 PAGE 531 IN THE EL PASO COUNTY CLERK AND RECORDER OFFICE THAT LIES WITHIN NW 1/4 NW 1/4 NW 1/4 OF SECTION 9.

PARCEL #2: 5.2714+- ACRES PARCEL IN SW 1/4 NW 1/4 NW 1/4 OF SECTION 9 AS SHOWN ON PAGE 1 OF THE ABOVE REFERENCED SURVEY, INCLUDING THE TRIANGULAR PIECE THAT LIES NORTHEAST OF THE NORTHEASTERN BOUNDARY OF THE PARCEL RECORDED IN BOOK 6510 PAGE 531 IN THE EL PASO COUNTY CLERK AND RECORDER OFFICE HAVING 0.0792 +- ACRES.

PARCEL #3 THE 1.1418+ ACRES RECORDED IN BOOK 1462 PAGES 619-621 IN THE EL PASO COUNTY CLERK AND RECORDER OFFICE AND SHOWN ON PAGE 1 OF THE ABOVE REFERENCED SURVEY.

EXISTING LEASE AREA LEGAL DESCRIPTION

THAT PART OF THE 5.2714+- ACRES PARCEL IN SW 1/4 NW 1/4 NW 1/4 OF SECTION 9 AS SHOWN ON PAGE 1 OF THE ABOVE REFERENCED SURVEY, INCLUDING THE TRIANGULAR PIECE THAT LIES NORTHEAST OF THE NORTHEASTERN BOUNDARY OF THE PARCEL RECORDED IN BOOK 6510 PAGE 531 IN THE EL PASO COUNTY CLERK AND RECORDER OFFICE HAVING 0.0792 +- ACRES, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EASTERLY MOST CORNER OF THAT PARCEL OF LAND DESCRIBED IN BOOK 6510 AT PAGE 531, RECORDS OF EL PASO COUNTY, COLORADO, AND AS SHOWN ON PLAT RECORDED AS NO. 204900045; THENCE ALONG THE SOUTH LINE OF SAID PARCEL SOUTH 70°54'03" WEST, A DISTANCE OF 113.60 FEET; THENCE CONTINUING ALONG THE SOUTH LINE OF SAID PARCEL SOUTH 55°32'03" WEST, A DISTANCE OF 53.00 FEET; THENCE DEPARTING SAID SOUTH LINE SOUTH 48°08'04" WEST, A DISTANCE OF 280.63 FEET TO THE POINT OF BEGINNING;

THENCE THE FOLLOWING SEVEN (7) COURSES:

- 1. SOUTH 01°56'31"WEST, A DISTANCE OF 44.00 FEET;
- 2. NORTH 88°03'26"WEST, A DISTANCE OF 50.00 FEET;
- 3. NORTH 01°56'54"EAST, A DISTANCE OF 4.00 FEET;
- 4. NORTH 88°03'26"WEST, A DISTANCE OF 20.00 FEET;
- 5. NORTH 01°56'34"EAST, A DISTANCE OF 40.00 FEET;
- 6. SOUTH 88°03'26"EAST, A DISTANCE OF 70.00 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINING 3,000 SQUARE FEET (0.07 ACRES) MORE OR LESS.

ACCESS AND UTILITY EASEMENT LEGAL DESCRIPTION

A PARCEL OF LAND BEING A PART OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER IN SECTION 9, TOWNSHIP 13 SOUTH, RANGE 68 WEST OF THE 6TH P.M. CITY OF GREEN MOUNTAIN FALLS, COUNTY OF EL PASO, STATE OF COLORADO, BEING 20.00 FEET WIDE 10.00 FEET ON BOTH SIDES OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCING AT THE EASTERLY MOST CORNER OF THAT PARCEL OF LAND DESCRIBED IN BOOK 6510 AT PAGE 531, RECORDS OF EL PASO COUNTY, COLORADO, AND AS SHOWN ON PLAT RECORDED AS NO. 204900045; THENCE ALONG THE SOUTH LINE OF SAID PARCEL SOUTH 70°54'03" WEST, A DISTANCE OF 113.60 FEET; THENCE CONTINUING ALONG THE SOUTH LINE OF SAID PARCEL SOUTH 55°32'03" WEST, A DISTANCE OF 53.00 FEET; THENCE DEPARTING SAID SOUTH LINE SOUTH 48°08'04" WEST, A DISTANCE OF 280.63 FEET; THENCE NORTH 88°03'26" WEST A DISTANCE OF 36.29 FEET TO A POINT OF NON-TANGENT CURVE WHOSE CENTER POINT BEARS NORTH 88°26'09" EAST, 32.50 FEET, SAID POINT ALSO BEING THE POINT OF BEGINNING;

THENCE CLOCKWISE ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 56°25'24", AN ARC DISTANCE OF 32.01 FEET (CHORD NORTH 26°38'51" EAST, 30.73');

THENCE THE FOLLOWING SIXTEEN (16) COURSES:

- 1. NORTH 54°51'32" EAST, 45.73 FEET;
- 2. NORTH 58°34'09" EAST, 129.60 FEET;
- 3. NORTH 67°51'07" EAST, 57.89 FEET;
- 4. NORTH 51°28'41" EAST, 54.95 FEET;
- 5. NORTH 55°28'43" EAST, 51.31 FEET;
- 6. NORTH 69°23'09" EAST, 103.92 FEET;
- 7. SOUTH 43°39'54" EAST, 206.62 FEET;
- 8. SOUTH 44°39'56" EAST, 299.21 FEET;
- 9. SOUTH 23°56'26" WEST, 27.39 FEET;
- 10. SOUTH 42°18'07" WEST, 83.37 FEET;
- 11. SOUTH 38°10'28" WEST, 123.91 FEET;
- 12. SOUTH 38°30'48" WEST, 249.57 FEET;
- 13. SOUTH 34°49'10" WEST, 241.46 FEET;
- 14. SOUTH 37°04'24" WEST, 67.25 FEET;
- 15. SOUTH 35°02'30" WEST, 264.37 FEET;
- 16. SOUTH 41°34'23" WEST, 130.43 FEET TO A POINT ON THE NORTHERLY R/W OF US HIGHWAY 24 AS SHOWN ON PLAT NO. 204900045 AND THE POINT OF TERMINUS.

CONTAINING 43380 SQUARE FEET (1.00 ACRES) MORE OR LESS.



PROJECT INFORMATION:

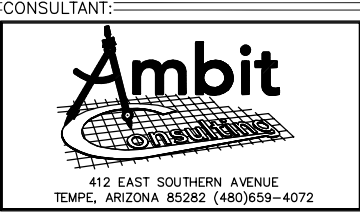
UTE PASS
BUN: 877034
10005 LUCKY 4 ROAD
WEST HIGHWAY 24
GREEN MOUNTAIN FALLS, CO 80819

ORIGINAL ISSUE DATE:

01/30/15

REV.:		DATE:	DESCRIPTION:	BY:
A		02/02/15	SUBMITTAL	CK

PLANS PREPARED BY:



DRAWN BY: CK CHK.: NS APV.: WS

LICENSER:

SHEET TITLE:

LEGAL DESCRIPTIONS

SHEET NUMBER:

LS-4

SCHEDULE "B" NOTE

REFERENCE IS MADE TO THE TITLE REPORT ORDER #CRC-WC-366047-P, ISSUED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, DATED DECEMBER 31, 2014. ALL EASEMENTS CONTAINED WITHIN SAID TITLE REPORT AFFECTING THE IMMEDIATE AREA SURROUNDING THE LEASE HAVE BEEN PLOTTED.

SCHEDULE "B" EXCEPTION ITEMS NO. 1-4, AND 14 ARE NOT SURVEY MATTERS AND ARE NOT PLOTTABLE.

5. PERMANENT EASEMENT BETWEEN RAY L. SMISCHNY AND GLEA SMISCHNY, J. T. AND STATE DEPARTMENT OF HIGHWAYS, DIVISION OF HIGHWAYS, STATE OF COLORADO, DATED JANUARY 19, 1972 RECORDED FEBRUARY 16, 1972, IN BOOK 2468 PAGE 76, IN EL PASO COUNTY, COLORADO. **DOES NOT AFFECT PARENT PARCEL**

6. RIGHT OF WAY DEED BETWEEN GLEA SMISCHNY AND GWYN D. SMISCHNY, DATED SEPTEMBER 6, 1985 RECORDED SEPTEMBER 6, 1985, IN VOLUME 5057 PAGE 1342, IN EL PASO COUNTY, COLORADO. **PORTIONS OF DOCUMENT ILLEGIBLE, MAY AFFECT ACCESS EASEMENT.**

7. RIGHT OF WAY DEED BETWEEN GLEA SMISCHNY AND GWYN D. SMISCHNY, DATED SEPTEMBER 6, 1985 RECORDED SEPTEMBER 6, 1985, IN VOLUME 5057 PAGE 1344, IN EL PASO COUNTY, COLORADO. **LOCATION INDETERMINATE, UNABLE TO PLOT.**

8. RIGHT OF WAY DEED BETWEEN GLEA SMISCHNY AND GWYN D. SMISCHNY, DATED SEPTEMBER 6, 1985 RECORDED SEPTEMBER 6, 1985, IN VOLUME 5057 PAGE 1345, IN EL PASO COUNTY, COLORADO. **LOCATION INDETERMINATE, UNABLE TO PLOT.**


9. TERMS AND PROVISIONS AS SET FORTH IN PROPERTY BOUNDARY LINE AGREEMENT BETWEEN CECIL D. SMISCHNY, G.D. SMISCHINY AND TPRT INVESTMENTS, LLC, REPRESENTED BY TOM FREZZA, WHO ARE THE OWNERS OF ADJOINING PROPERTIES SEPARATED BY COMMON BOUNDARY LINES, DATED NOVEMBER 19, 2003 RECORDED FEBRUARY. 19, 2004, AS INSTRUMENT NO. 204028584, IN EL PASO COUNTY, COLORADO. **DOES NOT AFFECT PARENT PARCEL**

10. UNRECORDED LEASE, DATED MAY 4, 2004.; AS EVIDENCED BY MEMORANDUM OF ASSIGNMENT AND ASSUMPTION AGREEMENT BETWEEN QWEST WIRELESS, L.L.C., A DELAWARE LIMITED LIABILITY COMPANY AND SPRINT SPECTRUM L.P., A DELAWARE LIMITED LIABILITY COMPANY, DATED MAY 14, 2004 RECORDED JULY 15, 2004, AS INSTRUMENT NO. 204118430, IN EL PASO COUNTY, COLORADO. **NOT PLOTTABLE**

11 SITE DESIGNATION SUPPLEMENT TO MASTER LEASE AND SUBLEASE AGREEMENT BETWEEN STC FIVE LLC, A DELAWARE LIMITED LIABILITY COMPANY AND GLOBAL SIGNAL ACQUISITIONS II LLC, A DELAWARE LIMITED LIABILITY COMPANY, DATED MAY 25, 2005 RECORDED NOVEMBER 7, 2005, AS INSTRUMENT NO. 205178439, IN EL PASO COUNTY, COLORADO. **PLOTTED**

12. AGREEMENT, RESERVATION OF RIGHTS AND COVENANTS BETWEEN LUCKY 4 BL72, LLC, A COLORADO LIMITED LIABILITY COMPANY PARTIES OF THE FIRST PART AND GWYN D. SMISCHNY, ALSO KNOWN AS G. DEAN SMISCHNY, ALSO KNOWN AS G. D. SMISCHNY, ALSO KNOWN AS DEAN SMISCHNY, ALSO KNOWN GWYN DEAN SMISCHNY, DATED JUNE 7, 2012 RECORDED JULY 2, 2012, AS INSTRUMENT NO. 212075064, IN EL PASO COUNTY, COLORADO. **NOT PLOTTABLE**

13 ALL MATTERS SHOWN ON PLATS RECORDED AS NO. 7639 AND 204900045. **PLOTTED AS PARENT PARCEL**



PROJECT INFORMATION:

UTE PASS
BUN: 877034
10005 LUCKY 4 ROAD
WEST HIGHWAY 24
GREEN MOUNTAIN FALLS, CO 80819

ORIGINAL ISSUE DATE:

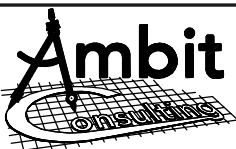
01/30/15

REV.:DATE:DESCRIPTION:BY:

A	02/02/15	SUBMITTAL	CK

PLANS PREPARED BY:

CONSULTANT:



412 EAST SOUTHERN AVENUE
TEMPE, ARIZONA 85282 (480)659-4072

DRAWN BY:CHK.:APV.:

CK	NS	WS
----	----	----

LICENSER:

SHEET TITLE:

NOTES

SHEET NUMBER:

LS-5