

# HUNTSVILLE FA#10088492



## MONOPOLE

### DO NOT SCALE DRAWINGS

CONTRACTOR 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

### ENGINEERING

2012 INTERNATIONAL BUILDING CODE  
2014 NATIONAL ELECTRIC CODE  
2009 TIA-222-G OR LATEST EDITION

### 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.

### PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE INSTALLATION AND OPERATION OF ANTENNAS AND ASSOCIATED EQUIPMENT CABINETS FOR AT&T'S WIRELESS TELECOMMUNICATIONS NETWORK.

### SITE INFORMATION

PROPERTY OWNER: FRANK WESSMAN CLAWSON  
ADDRESS: 7305 EAST 730 NORTH HUNTSVILLE, UT 84317

SITE NAME: HUNTSVILLE

SITE CONTACT:

COUNTY: WEBER

LATITUDE (NAD 83): 41° 16' 16.4" N

LONGITUDE (NAD 83): 111° 46' 17.4" W

ZONING JURISDICTION: WEBER

ZONING DISTRICT:

PARCEL #:

POWER COMPANY: ROCKY MTN POWER

TELEPHONE COMPANY: CENTURYLINK

SITE ACQUISITION CONTACT: RAQUEL COLLINS (385) 313-3004

RF ENGINEER: CHRIS LOO (801) 313-8356

CONSTRUCTION MANAGER: ALEX LAWSON (385) 226-0954

### CONTACT INFORMATION

ENGINEER: TECHNOLOGY ASSOCIATES, EC INC.  
5710 SOUTH GREEN ST.  
SALT LAKE CITY, UT 84123

CONTACT: JEFF VANDERVEEN  
PHONE: (801) 910-2565

UTL06045

LTE

LTE 2C

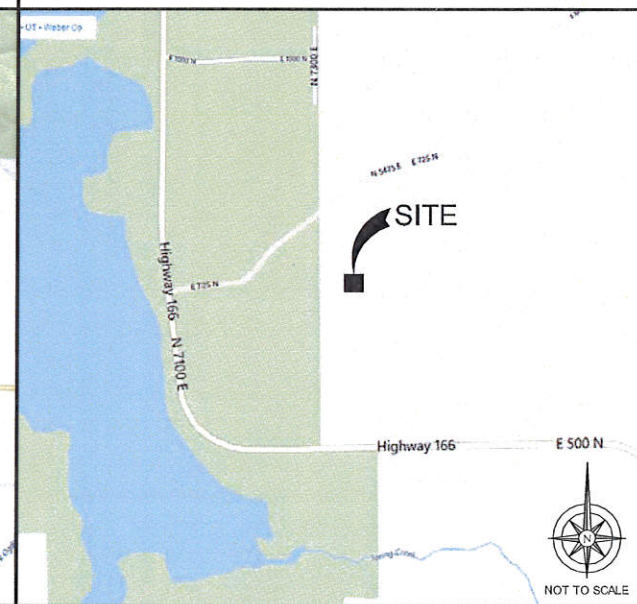
LTE 3C

SECTOR ADD

### VICINITY MAP



### LOCAL MAP



### DRIVING DIRECTIONS

STARTING FROM AT&T OFFICE: 4393 RIVERBOAT ROAD, TAYLORSVILLE, UT :

- DEPART RIVERBOAT RD TOWARD UT-206 W/ W 4700 S
- TURN LEFT ONTO UT-206 E/ W 4500 S
- BEAR RIGHT ONTO UT-206 W/ W 4200 S
- TAKE RAMP LEFT FOR 1.5N
- KEEP STRAIGHT ONTO US-89 W/ W 4000 S
- KEEP STRAIGHT ONTO US-89
- AT EXIT 324, TAKE RAMP RIGHT FOR US-89 NORTH TOWARD SQ. OGDEN
- BEAR RIGHT ONTO US-89 S/ HIGHWAY 89
- BEAR RIGHT ONTO US-89 N/ S HIGHWAY 89
- BEAR RIGHT ONTO US-89 S/ HIGHWAY 89
- BEAR RIGHT ONTO US-89 N/ S HIGHWAY 89
- BEAR RIGHT ONTO US-89
- BEAR RIGHT ONTO US-89
- TAKE RAMP RIGHT FOR I-84 E TOWARD MORGAN/ EVANSTON
- AT EXIT 92, TAKE RAMP RIGHT TOWARD HUNTSVILLE/ MNL GREEN
- TURN LEFT ONTO N HIGHWAY 166
- TURN RIGHT ONTO UT-167 W/ OLD HIGHWAY RD
- TURN LEFT TO STAY ON UT-167 W/ TRAPPERS LOOP RD
- TURN RIGHT ONTO UT-167 E/ 800 S
- KEEP STRAIGHT ONTO N 7800 E/ HIGHWAY 166
- KEEP LEFT TO STAY ON E 500 N/ HIGHWAY 166
- TURN RIGHT ONTO E 735 N/ W 6450 E
- GO STRAIGHT ONTO ACCESS ROAD
- ARRIVE AT SITE AT END OF ROAD (MONOPOLE)

### APPROVALS

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE SUBCONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND MAY IMPOSE CHANGES OR MODIFICATIONS.

AT&T WIRELESS COMPLIANCE REPRESENTATIVE: \_\_\_\_\_ DATE: \_\_\_\_\_

AT&T WIRELESS REPRESENTATIVE: \_\_\_\_\_ DATE: \_\_\_\_\_

AT&T WIRELESS RF ENGINEER: \_\_\_\_\_ DATE: \_\_\_\_\_

GENERAL DYNAMICS ACQUISITION: \_\_\_\_\_ DATE: \_\_\_\_\_

TAEC SITE ACQUISITION: \_\_\_\_\_ DATE: \_\_\_\_\_

PROPERTY OWNER: \_\_\_\_\_ DATE: \_\_\_\_\_

GENERAL DYNAMICS CONSTRUCTION MANAGER: \_\_\_\_\_ DATE: \_\_\_\_\_

THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY & CONFIDENTIAL. ANY USE OR DISCLOSURE OTHER THAN AS IT RELATES TO IS STRICTLY PROHIBITED.



4393 RIVERBOAT ROAD, SUITE #400  
TAYLORSVILLE, UTAH 84123

### GENERAL DYNAMICS Information Technology

1152 W 2400 S, SUITE C  
SALT LAKE CITY, UTAH 84119

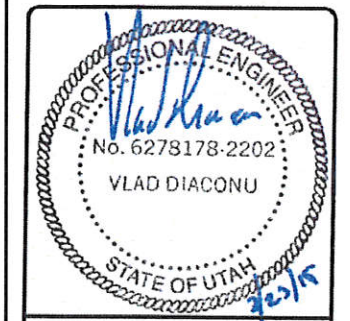


UTAH MARKET OFFICE  
5710 SOUTH GREEN ST.  
SALT LAKE CITY, UTAH 84123  
(801) 463-1020

### DRAWING INDEX

SHEET NO:	DESCRIPTION:
T-1	TITLE SHEET
T-2	GENERAL NOTES
T-3	GENERAL NOTES
T-4	NOTES & LEGEND
T-5	SIGNAGE & NOTES
C-1	OVERALL SITE PLAN
C-1.1	ENLARGED SITE PLAN
C-2	EQUIPMENT PLAN
C-2.1	ANTENNA PLANS
C-3	ELEVATIONS
C-4	ELEVATIONS
E-1	ELECTRICAL NOTES
E-2	ELECTRICAL ONE-LINE DIAGRAM
G-1	GROUNDING PLAN
G-2	GROUNDING DETAILS
RF-1	DETAILS

REV	DATE	DESCRIPTION	BY
0	3/05/2015	100% CONSTRUCTION	NSV



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.

HUNTSVILLE  
FA#10088492  
7305 EAST 730 NORTH  
HUNTSVILLE, UT 84317  
MONOPOLE

SHEET TITLE  
**TITLE SHEET**

SHEET NUMBER  
**T-1**



Know what's below.  
CALL before you dig.

CALL AT LEAST TWO WORKING  
DAYS BEFORE YOU DIG

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES





**GENERAL NOTES**

- THIS FACILITY IS EXEMPT FROM HANDICAP REQUIREMENTS PER 2010 CBC SECTION 1105B.3.4 EXCEPTION #1. THIS FACILITY IS NON-OCCUPIABLE SPACE AND ENTERED ONLY BY SERVICE PERSONNEL. THIS SPACE IS NOT FOR HUMAN OCCUPANCY.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO SUBMITTING HIS BID. ANY DISCREPANCIES, CONFLICTS OR OMISSIONS SHALL BE REPORTED TO THE ENGINEER PRIOR TO SUBMITTING BIDS, AND PROCEEDING WITH ANY WORK.
- THE CONTRACTOR SHALL NOTIFY ENGINEER OF ANY ERRORS, OMISSIONS, OR DISCREPANCIES AS THEY MAY BE DISCOVERED IN THE PLANS, SPECIFICATIONS, & NOTES PRIOR TO STARTING CONSTRUCTION, INCLUDING BUT NOT LIMITED BY DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY ERRORS, OMISSION, OR INCONSISTENCY AFTER THE START OF CONSTRUCTION WHICH HAS NOT BEEN BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER AND SHALL INCUR ANY EXPENSES TO RECTIFY THE SITUATION. THE METHOD OF CORRECTION SHALL BE APPROVED BY THE ARCHITECT OR THE ENGINEER RESPONSIBLE OF THE PROJECT.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR HAS THE RESPONSIBILITY TO LOCATE ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THE PLANS, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR OR SUBCONTRACTOR SHALL BEAR THE EXPENSE OF REPAIRING OR REPLACING ANY DAMAGE TO THE UTILITIES CAUSED DURING THE EXECUTION OF THE WORK. CONTACT USA DIG ALERT @ 811
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL PROTECT ALL AREAS FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW OR EXISTING SURFACES, STRUCTURES OR EQUIPMENT SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF THE PROPERTY OWNER. THE CONTRACTOR SHALL BEAR THE EXPENSE OF REPAIRING OR REPLACING ANY DAMAGED AREAS.
- A COPY OF THE APPROVED PLANS SHALL BE KEPT IN A PLACE SPECIFIED BY THE GOVERNING AGENCY, AND BY LAW SHALL BE AVAILABLE FOR INSPECTION AT ALL TIMES. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE ALL CONSTRUCTION SETS REFLECT THE SAME INFORMATION AS THE APPROVED PLANS. THE CONTRACTOR SHALL ALSO MAINTAIN ONE SET OF PLANS AT THE SITE FOR THE PURPOSE OF DOCUMENTING ALL AS-BUILT CHANGES, REVISIONS, ADDENDA, OR CHANGE ORDERS. THE CONTRACTOR SHALL FORWARD THE AS-BUILT DRAWINGS TO THE ARCHITECT OR THE ENGINEER RESPONSIBLE OF THE PROJECT AT THE CONCLUSION OF THE PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE SITE WHILE THE WORK IS IN PROGRESS UNTIL THE JOB IS COMPLETE.
- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY POWER, WATER, AND TOILET FACILITIES AS REQUIRED BY THE PROPERTY OWNER OR GOVERNING AGENCY.
- ALL CONSTRUCTION THROUGH THE PROJECT SHALL CONFORM TO THE LATEST C.B.C. AND ALL OTHER GOVERNING CODES, INCLUDING THE CALIFORNIA ADMINISTRATIVE CODES TITLE 8, 19, AND 24. THE MOST RESTRICTIVE CODE SHALL GOVERN.
- THE CONTRACTOR AND SUBCONTRACTOR SHALL COMPLY WITH ALL LOCAL AND STATE REGULATIONS INCLUDING ALL OSHA REQUIREMENTS.
- WHEN REQUIRED STORAGE OF MATERIALS OCCURS, THEY SHALL BE EVENLY DISTRIBUTED OVER THE FLOOR OR ROOF SO AS NOT TO EXCEED THE DESIGNED LIVE LOADS FOR THE STRUCTURE. TEMPORARY SHORING OR BRACING SHALL BE PROVIDED WHERE THE STRUCTURE OR SOIL HAS NOT ATTAINED THE DESIGN STRENGTH FOR THE CONDITIONS PRESENT.
- THE CONTRACTOR SHALL SUPERVISE AND COORDINATE ALL WORK, USING HIS PROFESSIONAL KNOWLEDGE AND SKILLS. HE IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES AND SEQUENCING AND COORDINATING ALL PORTIONS OF THE WORK UNDER THE PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS WITH RESPECT TO THE WORK TO COMPLETE THE PROJECT. BUILDING PERMIT APPLICATIONS SHALL BE FILED BY THE OWNER OR AUTHORIZED AGENT. CONTRACTOR SHALL OBTAIN THE PERMIT AND MAKE FINAL PAYMENT OF SAID DOCUMENT.
- ALL DIMENSIONS TAKE PRECEDENCE OVER SCALE. DRAWINGS ARE NOT TO BE SCALED UNDER ANY CIRCUMSTANCES.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING, BACKING, FRAMING, HANGERS, OR SUPPORTS FOR INSTALLATION OF ITEMS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR SHALL PROVIDE THE FIRE MARSHALL OR U.L. APPROVED MATERIALS TO FILL/SEAL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES.
- NEW CONSTRUCTION ADDED TO EXISTING CONSTRUCTION SHALL BE MATCHED IN FORM, TEXTURE, MATERIAL AND PAINT COLOR EXCEPT AS NOTED IN THE PLANS.
- THE CONTRACTOR IS TO PROVIDE PORTABLE FIRE EXTINGUISHERS HAVING A MINIMUM 2A:10-B:C RATINGS WITHIN 75FT. OF TRAVEL TO ALL PORTIONS OF THE CONSTRUCTION AREA. (2010 CFC SECTION 906-1.1 & 7 AND SECTION 906.3.1)
- MATERIALS TESTING SHALL BE TO THE LATEST STANDARDS AVAILABLE AS REQUIRED BY THE LOCAL GOVERNING AGENCY RESPONSIBLE FOR APPROVING THE RESULTS.
- ALL GENERAL NOTES AND STANDARD DETAILS ARE THE MINIMUM REQUIREMENTS TO BE USED IN CONDITIONS WHICH ARE NOT SPECIFICALLY SHOWN OTHERWISE.
- ALL DEBRIS AND REFUSE IS TO BE REMOVED FROM THE PROJECT. PREMISES SHALL BE LEFT IN A CLEAN BROOM FINISHED CONDITION AT ALL TIMES.
- BUILDING INSPECTORS AND/OR OTHER BUILDING OFFICIALS ARE TO BE NOTIFIED PRIOR TO ANY GRADING AND CONSTRUCTION EFFORT AS MANDATED BY THE GOVERNING AGENCY.
- ALL SYMBOLS AND ABBREVIATIONS ARE CONSIDERED CONSTRUCTION INDUSTRY STANDARDS. IF A CONTRACTOR HAS A QUESTION REGARDING THEIR EXACT MEANING THE ARCHITECT OR THE ENGINEER RESPONSIBLE OF THE PROJECT SHALL BE NOTIFIED FOR CLARIFICATIONS.

**GENERAL FIRE NOTES:**

- BUILDINGS UNDERGOING CONSTRUCTION, ALTERATION, OR DEMOLITION SHALL BE IN ACCORDANCE WITH 2010 CFC SECTION 1401 AND ALL GOVERNING CODES.
- ADDRESS SHALL BE PROVIDED FOR ALL NEW AND EXISTING BUILDINGS IN A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. (2010 CFC SECTION 505.1)
- DECORATIVE MATERIALS SHALL BE MAINTAINED IN A FLAME-RETARDANT CONDITION. (2010 CFC SECTION 807-1.2)
- PORTABLE FIRE EXTINGUISHERS: AT LEAST ONE FIRE EXTINGUISHER WITH A MINIMUM RATING OF 2-A:10-B:C SHALL BE PROVIDED WITHIN 75 FEET MAXIMUM TRAVEL DISTANCE FOR EACH 8,000 SQUARE FEET OR PORTION THEREOF ON EACH FLOOR. (2010 CFC SECTION 906.1.1 & 7 AND SECTION 906.3.1)

**ABBREVIATION**

ABBREVIATION	DEFINITION
A.B.	ANCHOR BOLT
ABV.	ABOVE
ACCA	ANTENNA CABLE COVER ASSEMBLY
ADDL.	ADDITIONAL
A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
ALUM.	ALUMINUM
ALT.	ALTERNATE
ANT.	ANTENNA
APPRX.	APPROXIMATELY
ARCH.	ARCHITECTURAL
AWG.	AMERICAN WIRE GAUGE
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
B.N.	BOUNDARY NAILING
BTC/W.	BARE TINNED COPPER WIRE
B.O.F.	BOTTOM OF FOOTING
BU.	BACK-UP CABINET
CAB.	CABINET
CANT.	CANTILEVERED
C.I.P.	CAST IN PLACE
CLG.	CEILING
CLR.	CLEAR
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION(OR)
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
Ø	PENNY (NAILS)
DBL.	DOUBLE
DEPT.	DEPARTMENT
D.F.	DOUGLAS FIR
DIA.	DIAMETER
DIAG.	DIAGONAL
DIM.	DIMENSION
DWG.	DRAWING(S)
DWL.	DOWEL(S)
EA.	EACH
EL.	ELEVATION
ELEC.	ELECTRICAL
ELEV.	ELEVATOR
EMT.	ELECTRICAL METALLIC TUBING
E.N.	EDGE NAIL
ENG.	ENGINEER
EQ.	EQUAL
EXP.	EXPANSION
EXST.(E)	EXISTING
EXT.	EXTERIOR

**ABBREVIATION**

ABBREVIATION	DEFINITION
FAB.	FABRICATION(OR)
F.F.	FINISH FLOOR
F.G.	FINISH GRADE
FIN.	FINISHED
FLR.	FLOOR
FDL.	FOUNDATION
F.O.C.	FACE OF CONCRETE
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD
F.O.W.	FACE OF WALL
F.S.	FINISH SURFACE
FT.(F)	FOOT(FEET)
FTG.	FOOTING
G.	GROWTH (CABINET)
GA.	GAUGE
GI.	GALVANIZED
G.F.I.	GROUND FAULT CIRCUIT INTERRUPTER
GLB. (GLU-LAM)	GLUE LAMINATED BEAM
GPS	GLOBAL POSITIONING SYSTEM
GRND.	GROUND
HDR.	HEADER
HGR.	HANGER
HT.	HEIGHT
ICGB.	ISOLATED COPPER GROUND BUS
IN.(I)	INCH(ES)
INT.	INTERIOR
LB.(#)	POUND(S)
L.B.	LAG BOLTS
L.F.	LINEAR FEET (FOOT)
L.	LONGITUDINAL
MAS.	MASONRY
MAX.	MAXIMUM
M.B.	MACHINE BOLT
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MTL.	METAL
(N)	NEW
NO.(#)	NUMBER
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OPNG.	OPENING
P/C	PRECAST CONCRETE
PCS	PERSONAL COMMUNICATION SERVICES
PLY.	PLYWOOD
PPC	POWER PROTECTION CABINET
PRC	PRIMARY RADIO CABINET
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
P.T.	PRESSURE TREATED

**ABBREVIATION**

ABBREVIATION	DEFINITION
PWR.	POWER (CABINET)
QTY.	QUANTITY
RAD.(R)	RADIUS
REF.	REFERENCE
REINF.	REINFORCEMENT(ING)
REDD.	REQUIRED
RGS.	RIGID GALVANIZED STEEL
RRU.	RADIO REMOTE UNIT
SCH.	SCHEDULE
SHT.	SHEET
SIM.	SIMILAR
SPEC.	SPECIFICATION(S)
SQ.	SQUARE
S.S.	STAINLESS STEEL
STD.	STANDARD
STL.	STEEL
STRUC.	STRUCTURAL
TEMP.	TEMPORARY
THK.	THICKNESS
TMA.	TOWER MOUNTED AMPLIFIER
T.N.	TOE NAIL
T.O.A.	TOP OF ANTENNA
T.O.C.	TOP OF CURB
T.O.F.	TOP OF FOUNDATION
T.O.P.	TOP OF PLATE (PARAPET)
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U.G.	UNDER GROUND
U.L.	UNDERWRITERS LABORATORY
U.N.O.	UNLESS NOTED OTHERWISE
V.I.F.	VERIFY IN FIELD
W.	WIDTH(WIDTH)
W.	WITH
WD.	WOOD
W.P.	WEATHERPROOF
WT.	WEIGHT
Ø	CENTERLINE
Ø	PLATE

**ABBREVIATIONS**

	NEW ANTENNA		GRID REFERENCE		CENTERLINE
	EXISTING ANTENNA		DETAIL REFERENCE		PROPERTY/LEASELINE
	GROUND ROD		ELEVATION REFERENCE		MATCH LINE
	GROUND BUS BAR		SECTION REFERENCE		WORK POINT
	MECHANICAL GRND. CONN.		GROUT OR PLASTER		GROUND CONDUCTOR
	CADWELD		(B) BRICK		TELEPHONE CONDUIT
	GROUND ACCESS WELL		(M) MASONRY		ELECTRICAL CONDUIT (POWER)
	ELECTRIC BOX		CONCRETE		COAXIAL CABLE
	TELEPHONE BOX		EARTH		OVERHEAD SERVICE CONDUCTORS
	LIGHT POLE		GRAVEL		CHAIN LINK FENCING
	FND. MONUMENT		PLYWOOD		
	SPOT ELEVATION		SAND		
	SET POINT		WOOD CONT.		
	REVISION		WOOD BLOCKING		
			STEEL		



4393 RIVERBOAT ROAD, SUITE #400  
TAYLORSVILLE, UTAH 84123

**GENERAL DYNAMICS**  
Information Technology

1152 W 2400 S, SUITE C  
SALT LAKE CITY, UTAH 84119



**UTAH MARKET OFFICE**  
5710 SOUTH GREEN ST.  
SALT LAKE CITY, UTAH 84123  
(801) 463-1020

REV	DATE	DESCRIPTION	BY
3	3/06/2015	100% CONSTRUCTION	NSV



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**HUNTSVILLE**  
FA#10088492  
7305 EAST 730 NORTH  
HUNTSVILLE, UT 84317  
MONOPOLE

SHEET TITLE  
**NOTES & LEGEND**

SHEET NUMBER  
**T-4**

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES

**NOTICE**

**Beyond This Point** you are entering a controlled area where RF emissions may exceed the FCC General Population Exposure Limits.

Follow all posted signs and site guidelines for working in RF environment.

Ref: FCC 1.1307 (b)

**CAUTION**

**Beyond This Point** you are entering a controlled area where RF emissions may exceed the FCC Occupational Exposure Limits.

Obey all posted signs and site guidelines for working in RF environment.

Ref: FCC 1.1307 (b)

**ALERTING SIGN**

**ALERTING SIGNS**

**WARNING!**

**DANGER DO NOT TOUCH TOWER!**

**SERIOUS "RF" BURN HAZARD!**

**MAINTAIN AN ADEQUATE CLEARANCE BETWEEN TOWER SUPPORTS AND GUY WIRES**

FAILURE TO OBEY ALL POSTED SIGNS AND SITE GUIDELINES FOR WORKING IN A RADIO FREQUENCY ENVIRONMENT COULD RESULT IN SERIOUS INJURY. CONTACT CURRENT MAY EXCEED LIMITS PRESCRIBED IN ANSIEEE C95.1-1992 FOR CONTROLLED ENVIRONMENTS.

**PROPERTY OF AT&T**

**AUTHORIZED PERSONNEL ONLY**

IN CASE OF EMERGENCY, OR PRIOR TO PERFORMING MAINTANANCE ON THIS SITE, CALL 800-638-2822 AND REFERENCE CELL SITE NUMBER \_\_\_\_\_

**ALERTING SIGN**

**INFO SIGN #5**

**INFORMATION**

AT&T operates telecommunication antennas at this location. Remain at least 3 feet away from any antenna and obey all posted signs.

Contact the owner(s) of the antenna(s) before working closer than 3 feet from the antenna.

Contact AT&T at \_\_\_\_\_ prior to performing any maintenance or repairs near AT&T antennas. This is Site# \_\_\_\_\_

Contact the management office if this door/hatch/gate is found unlocked.

**INFORMACION**

En esta propiedad se sitúan antenas de telecomunicaciones operadas por AT&T. Favor mantener una distancia de no menos de 3 pies y obedecer todos los avisos.

Comuníquese con el propietario o los propietarios de las antenas antes de trabajar o caminar a una distancia de menos de 3 pies de la antena.

Comuníquese con AT&T \_\_\_\_\_ antes de realizar cualquier mantenimiento o reparaciones cerca de las antenas de AT&T.

Esta es la estación base número \_\_\_\_\_

Favor de comunicarse con la oficina de la administración del edificio si esta puerta o compuerta se encuentra desbloqueada.

**INFO SIGN #1**

**INFORMATION**

ACTIVE ANTENNAS ARE MOUNTED

ON THE OUTSIDE OF THIS BUILDING

BEHIND THE PANEL

ON THIS STRUCTURE

**STAY BACK A MINIMUM OF 3 FEET FROM THESE ANTENNAS**

Contact AT&T at \_\_\_\_\_ and follow their instructions prior to performing any maintenance or repairs closer than 3 feet from the antenna.

Site # Site# \_\_\_\_\_

**INFO SIGN #2**

**INFO SIGN #4**

STAY BACK 3 FEET FROM ANTENNA

**GENERAL SIGNAGE GUIDELINES**

STRUCTURE TYPE	INFO SIGN #1	INFO SIGN #2	INFO SIGN #3	INFO SIGN #4	INFO SIGN #5	STRIPING	NOTICE SIGN	CAUTION SIGN
<b>TOWERS</b>								
MONOPOLE/MONOPINE/MONOPALM	ENTRANCE GATE SHELTER DOORS OR ON THE OUTDOOR CABINETS	CLIMBING SIDE OF THE TOWER	ON BACKSIDE OF ANTENNAS	ON THE SIDE OF ANTENNAS	ON THE SHELTER DOOR OR ON ONE OUTDOOR EQUIPMENT CABINET			AT THE HEIGHT OF THE FIRST CLIMBING STEP, MIN. 9FT ABOVE GROUND
SCE TOWERS/TOWERS WITH HIGH VOLTAGE	ENTRANCE GATE SHELTER DOORS OR ON THE OUTDOOR CABINETS	CLIMBING SIDE OF THE TOWER	ON BACKSIDE OF ANTENNAS	ON THE SIDE OF ANTENNAS	ON THE SHELTER DOOR OR ON ONE OUTDOOR EQUIPMENT CABINET			AT THE HEIGHT OF THE FIRST CLIMBING STEP, MIN. 9FT ABOVE GROUND
LIGHT POLES/FLAG POLES	ENTRANCE GATE SHELTER DOORS OR ON THE OUTDOOR CABINETS	ON THE POLE, NO LESS THAN 3FT BELOW THE ANTENNA	ON BACKSIDE OF ANTENNAS	ON THE SIDE OF ANTENNAS	ON THE SHELTER DOOR OR ON ONE OUTDOOR EQUIPMENT CABINET			
UTILITY WOOD POLES (JPA)	ENTRANCE GATE SHELTER DOORS OR ON THE OUTDOOR CABINETS	ON THE POLE, NO LESS THAN 3FT BELOW THE ANTENNA	ON BACKSIDE OF ANTENNAS	ON THE SIDE OF ANTENNAS	ON THE SHELTER DOOR OR ON ONE OUTDOOR EQUIPMENT CABINET		IF GP MAX VALUE OF MPE AT ANTENNA LEVEL IS: 0-99%: NOTICE SIGN; OVER 99%: CAUTION SIGN AT NO LESS THAN 3FT BELOW ANTENNA AND 9FT ABOVE GROUND	
MICROCELLS MOUNTED ON NON-JPA POLES	ENTRANCE GATE SHELTER DOORS OR ON THE OUTDOOR CABINETS	ON THE POLE, NO LESS THAN 3FT BELOW THE ANTENNA	ON BACKSIDE OF ANTENNAS	ON THE SIDE OF ANTENNAS	ON THE SHELTER DOOR OR ON ONE OUTDOOR EQUIPMENT CABINET		NOTICE OR CAUTION SIGN AT NO LESS THAN 9FT ABOVE GROUND, ONLY IF THE EXPOSURE EXCEEDS 90% OF THE GENERAL PUBLIC EXPOSURE AT 6FT ABOVE GROUND	
<b>ROOF TOPS</b>								
AT ALL ACCESS POINTS OF THE ROOF	X							
ON ANTENNAS	X		X	X				
CONCEALED ANTENNAS	X	X						
ANTENNAS MOUNTED FACING OUTSIDE THE BUILDING	X	X						
ANTENNAS ON SUPPORT STRUCTURE	X	X						
ROOFTOP GRAPH:								
RADIATION AREA IS WITHIN 3FT FROM ANTENNA	X	ADJACENT TO EACH ANTENNA						
RADIATION IS BEYOND 3FT FROM ANTENNA	X	ADJACENT TO EACH ANTENNA				DIAGONAL, YELLOW STRIPING AS TO ROOF VIEW GRAPH	EITHER NOTICE OR CAUTION SIGN (BASED ON ROOF VIEW RESULTS) AT ANTENNAS/BARRIER	
<b>CHURCH STEEPLES</b>	ACCESS TO STEEPLE	ADJACENT TO ANTENNAS IF ANTENNAS ARE CONCEALED	ON BACKSIDE OF ANTENNAS	ON THE SIDE OF ANTENNAS	ON THE SHELTER DOOR OR ON ONE OUTDOOR EQUIPMENT CABINET			CAUTION SIGN AT THE ANTENNAS
<b>WATER STATIONS</b>	ACCESS TO STEEPLE	ADJACENT TO ANTENNAS IF ANTENNAS ARE CONCEALED	ON BACKSIDE OF ANTENNAS	ON THE SIDE OF ANTENNAS	ON THE SHELTER DOOR OR ON ONE OUTDOOR EQUIPMENT CABINET			CAUTION SIGN AT THE ANTENNAS

NOTES FOR ROOFTOP SITES:  
 1. EITHER NOTICE OR CAUTION SIGNS NEED TO BE POSTED AT EACH SECTOR AS CLOSE AS POSSIBLE TO: THE OUTER EDGE OF THE STRIPED OFF AREA OR THE OUTER ANTENNAS OF THE SECTOR  
 2. IF ROOF VIEW SHOWS: ONLY BLUE= NOTICE SIGN, BLUE AND YELLOW= CAUTION SIGN, ONLY YELLOW= CAUTION SIGN TO BE INSTALLED.  
 3. SHOULD THE REQUIRED STRIPING ARE INTERFERE WITH ANY STRUCTURES OR EQUIPMENT (A/C, VENTS, ROOF HATCH, DOORS, OTHER ANTENNAS, DISHES, ETS.), PLEASE NOTIFY AT&T TO MODIFY THE STRIPING AREA, PRIOR TO STARTING THE WORK.

4393 RIVERBOAT ROAD, SUITE #400  
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**GENERAL DYNAMICS**  
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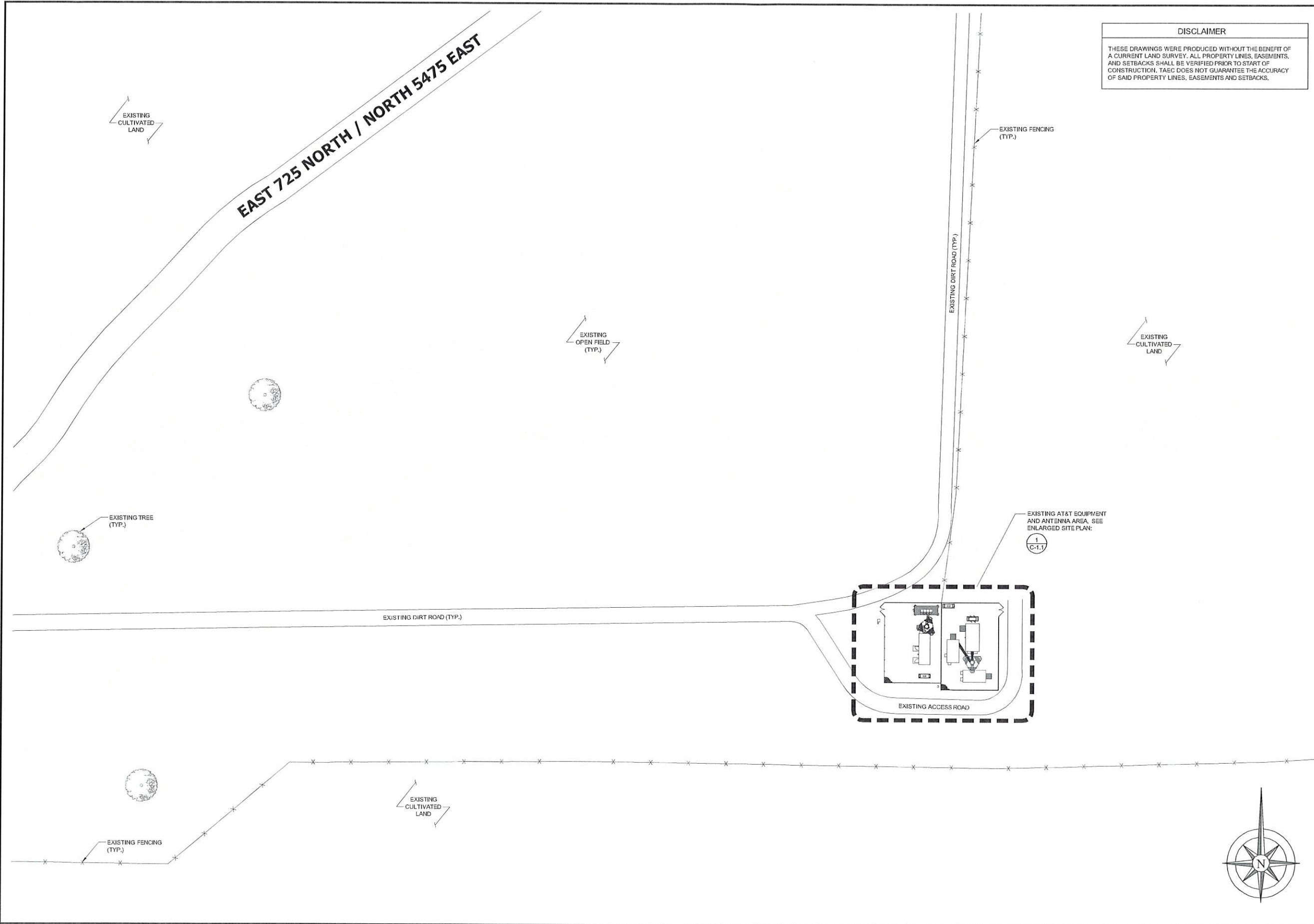
**HUNTSVILLE**  
FA#10088492  
7305 EAST 730 NORTH  
HUNTSVILLE, UT 84317  
MONOPOLE

SHEET TITLE  
**SIGNAGE & NOTES**

SHEET NUMBER  
**T-5**

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES

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**DISCLAIMER**  
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 MONOPOLE

SHEET TITLE  
**OVERALL SITE PLAN**

SHEET NUMBER  
**C-1**

**OVERALL SITE PLAN**

40' 0 20' 40' SCALE: 1" = 40'-0" (24x36)  
 (OR) 1/2" = 40'-0" (11x17)

EXISTING DIRT ROAD (TYP.)

DISCLAIMER

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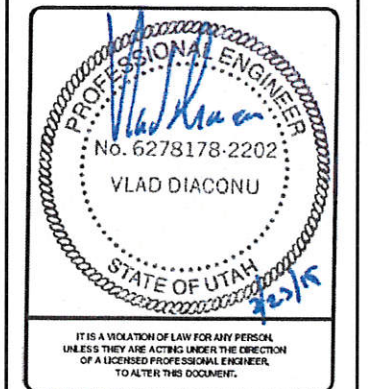
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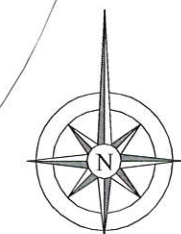
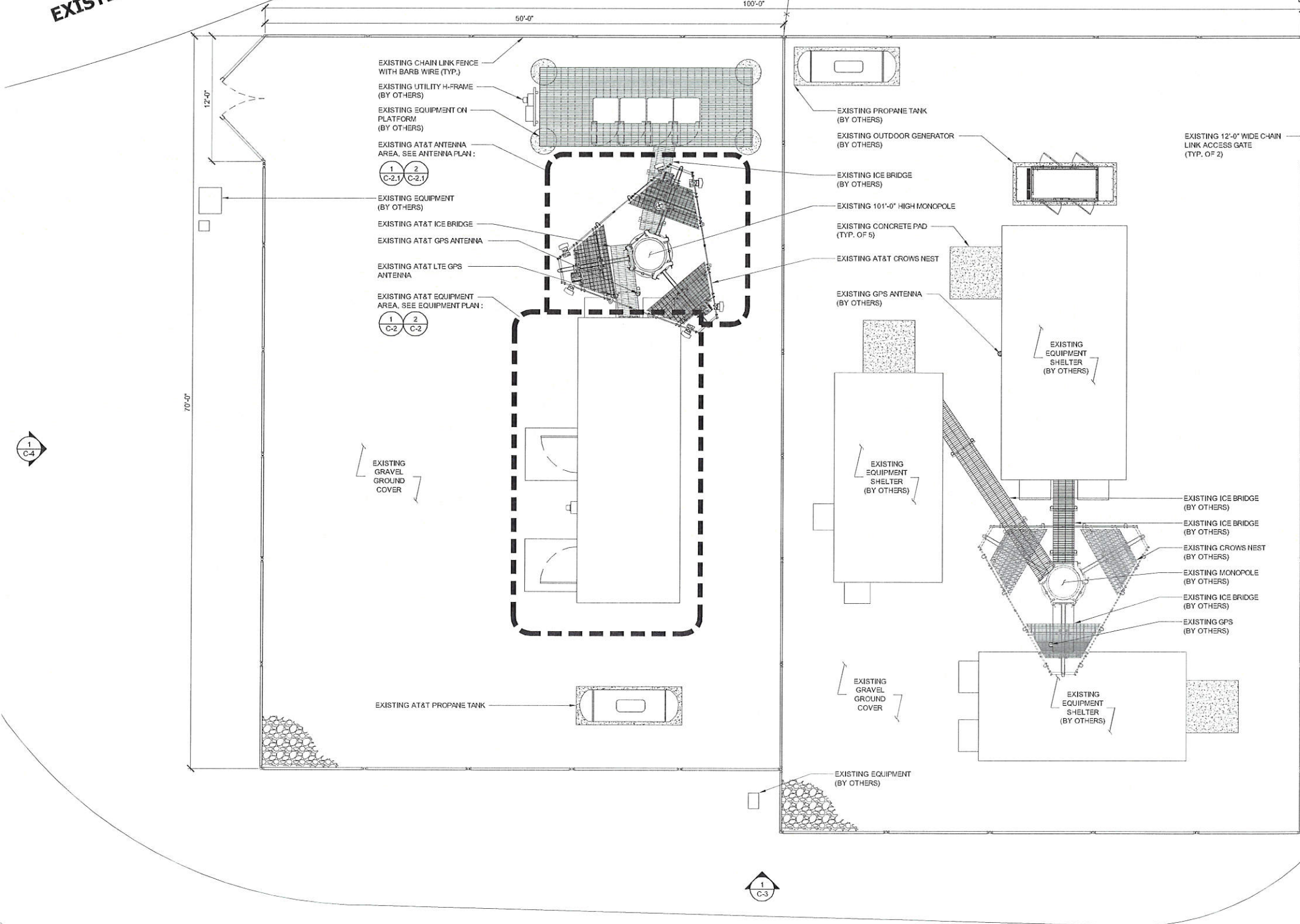


HUNTSVILLE  
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HUNTSVILLE, UT 84317  
MONOPOLE

SHEET TITLE  
**ENLARGED  
SITE PLAN**

SHEET NUMBER  
**C-1.1**

EXISTING ACCESS ROAD



EXISTING ACCESS ROAD

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES

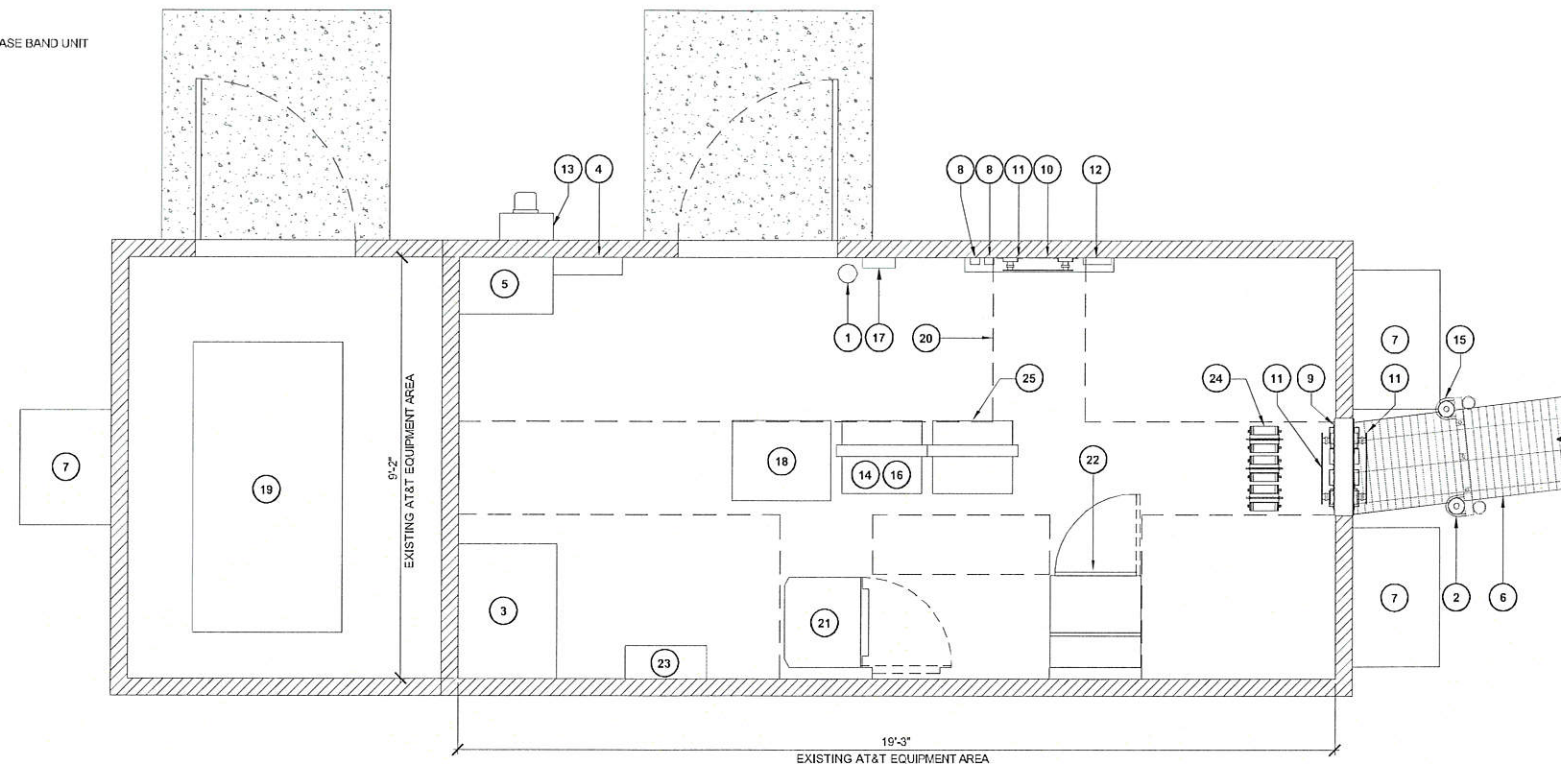
ENLARGED SITE PLAN

0 1.5' 3' 5' SCALE: 3/16" = 1'-0" (24x36)  
(OR) 3/32" = 1'-0" (11x17)

1

KEY NOTES:

- 1 EXISTING AT&T FIRE EXTINGUISHER
- 2 EXISTING AT&T GPS ANTENNA
- 3 EXISTING AT&T BATTERIES / GEL CELL
- 4 EXISTING AT&T AC MAIN BREAKER PANEL
- 5 EXISTING AT&T TRANSFER SWITCH (AUTOMATIC)
- 6 EXISTING AT&T ICE BRIDGE
- 7 EXISTING AT&T HVAC UNIT (TYP. OF 3)
- 8 EXISTING AT&T 66 / TELCO PUNCHDOWN BLOCK
- 9 EXISTING AT&T CABLE ENTRANCE PANEL
- 10 EXISTING AT&T TELCO EQUIPMENT
- 11 EXISTING AT&T GROUND BAR
- 12 EXISTING AT&T NIU (S)
- 13 EXISTING AT&T COMMERCIAL AC METER
- 14 EXISTING AT&T DSX PANEL ON EXISTING RACK
- 15 EXISTING AT&T LTE GPS ANTENNA MOUNTED TO EXISTING ICE BRIDGE
- 16 EXISTING AT&T CDPD ON EXISTING RACK
- 17 EXISTING AT&T ALARM DEMARCATION
- 18 EXISTING AT&T RECTIFIER
- 19 EXISTING AT&T INDOOR GENERATOR
- 20 EXISTING AT&T CABLE LADDER (ABOVE)
- 21 EXISTING AT&T GSM CABINET
- 22 EXISTING AT&T ALU MACRO NODE-B CABINET WITH UMTS EQUIPMENT
- 23 EXISTING AT&T DC PANEL
- 24 (6) EXISTING AT&T DIPLEXERS MOUNTED UNDER EXISTING CABLE LADDER
- 25 EXISTING AT&T 19" LTE FIF RACK & 9926 BASE BAND UNIT & LTE 1C EQUIPMENT



EQUIPMENT PLAN (EXISTING)

0 6" 1" 2" SCALE: 1/2" = 1'-0" (24x36)  
(OR) 1/4" = 1'-0" (11x17)

1

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SHEET TITLE  
**EQUIPMENT PLAN**

SHEET NUMBER

**C-2**

SCALE  
N.T.S.

2

NOT USED

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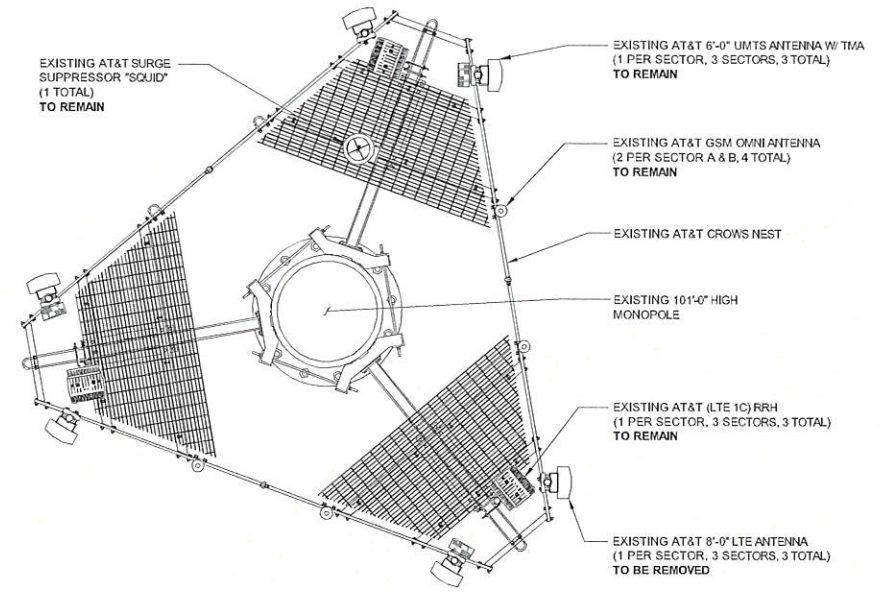
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NOTE TO ALL:  
CAPACITY OF THE TOWER TO SUPPORT PROPOSED LOADS IS TO BE DETERMINED BY OTHERS.



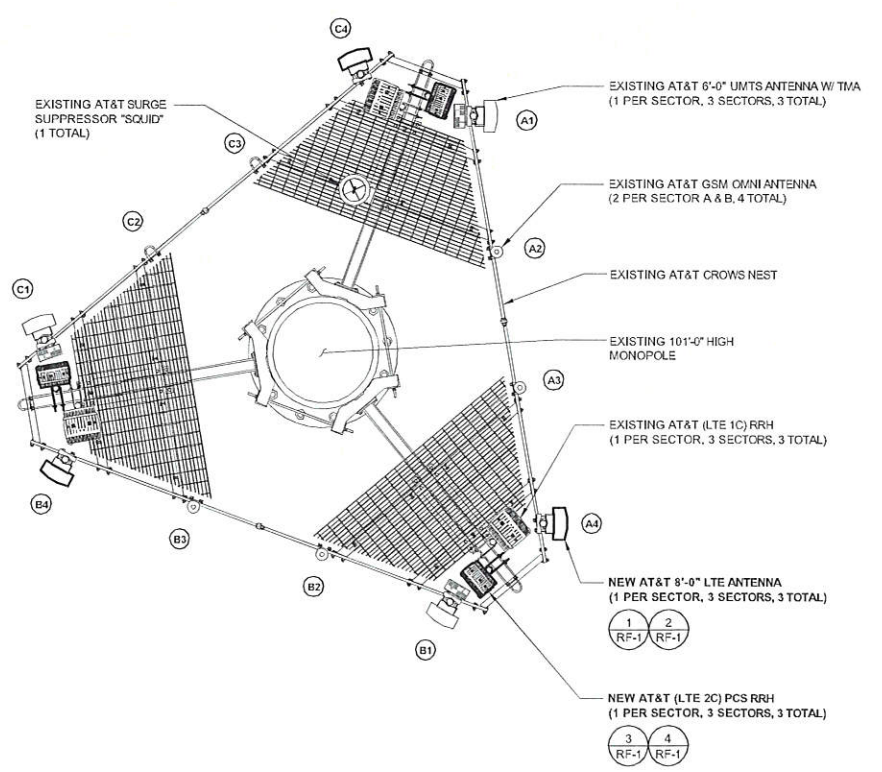
**ANTENNA PLAN (EXISTING)**

0 1' 2' 3' SCALE: 3/8" = 1'-0" (24x36)  
(OR) 3/16" = 1'-0" (11x17) **1**

NEW ANTENNA AND TRANSMISSION CABLE REQUIREMENT						
SECTOR	ANTENNA TYPE	TECHNOLOGY	ANTENNA AZIMUTH	TRANSMISSION CABLE		
				QTY.	LENGTH	TYPE
A1	EXISTING ANTENNA	UMTS	90°		NO CHANGES	
A2	EXISTING OMNI ANTENNA	GSM	0°		NO CHANGES	
A3	EXISTING OMNI ANTENNA	GSM	0°		NO CHANGES	
A4	NEW HEXPORT ANTENNA	LTE 1C / 2C	90°	1	115'	FIBER
B1	EXISTING ANTENNA	UMTS	210°		NO CHANGES	
B2	EXISTING OMNI ANTENNA	GSM	0°		NO CHANGES	
B3	EXISTING OMNI ANTENNA	GSM	0°		NO CHANGES	
B4	NEW HEXPORT ANTENNA	LTE 1C / 2C	210°	1	115'	FIBER
C1	EXISTING ANTENNA	UMTS	340°		NO CHANGES	
C2	EMPTY		TO BE DETERMINED			
C3	EMPTY		TO BE DETERMINED			
C4	NEW HEXPORT ANTENNA	LTE 1C / 2C	340°	1	115'	FIBER

NOTE TO CONTRACTOR:  
ANTENNA CLEARANCES AND MOUNTING TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE, AND RF DESIGN. ANTENNA PIPE MOUNT MODIFICATION MAY BE REQUIRED.

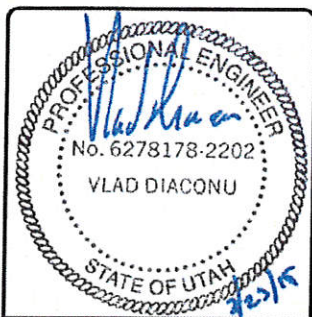
NOTE TO CONTRACTOR:  
RF JUMPERS NEED TO BE OF EQUAL LENGTH FOR LTE 1C AND LTE 2C. COIL EXCESS CABLE NEAR RRH.



**ANTENNA PLAN (FINAL)**

0 1' 2' 3' SCALE: 3/8" = 1'-0" (24x36)  
(OR) 3/16" = 1'-0" (11x17) **2**

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SHEET TITLE  
**ANTENNA PLANS**

SHEET NUMBER  
**C-2.1**

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES.



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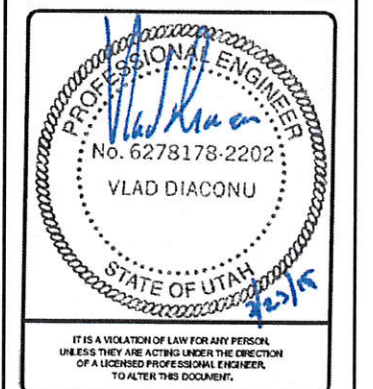
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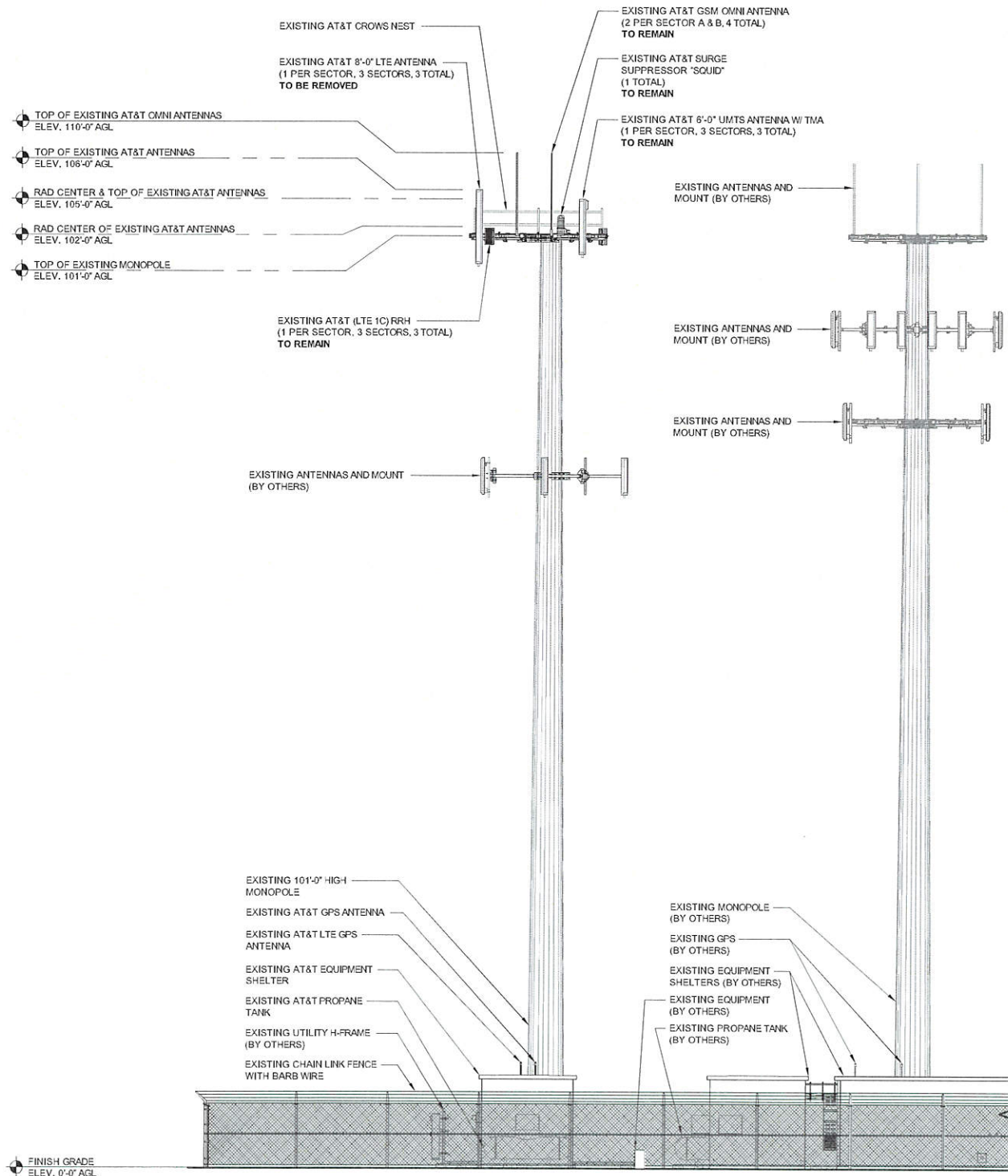


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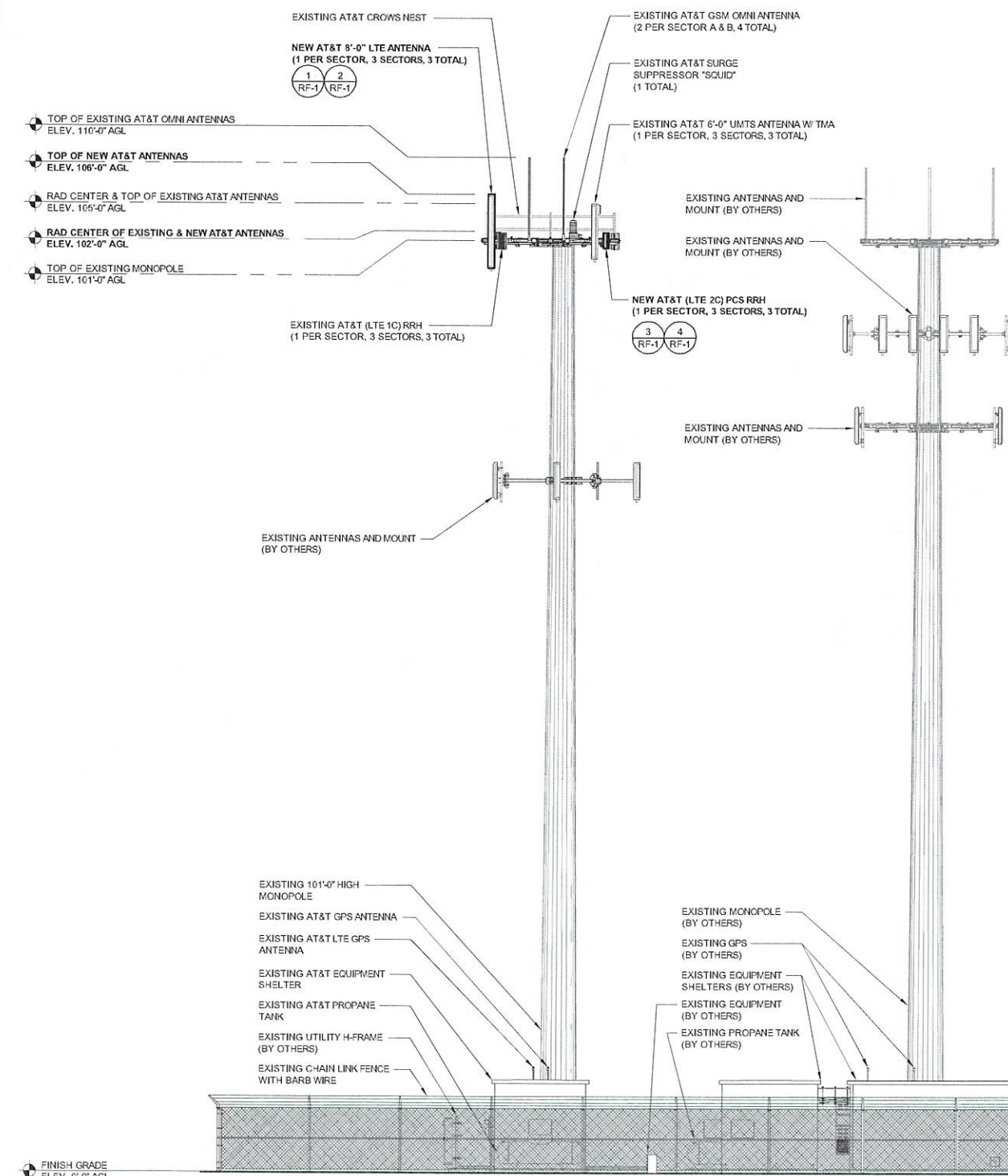
SHEET TITLE  
**ELEVATIONS**

SHEET NUMBER  
**C-3**



**SOUTH ELEVATION (EXISTING)**

0 2' 4' 8' SCALE: 1/8" = 1'-0" (24x36)  
(OR) 1/16" = 1'-0" (11x17) **1**

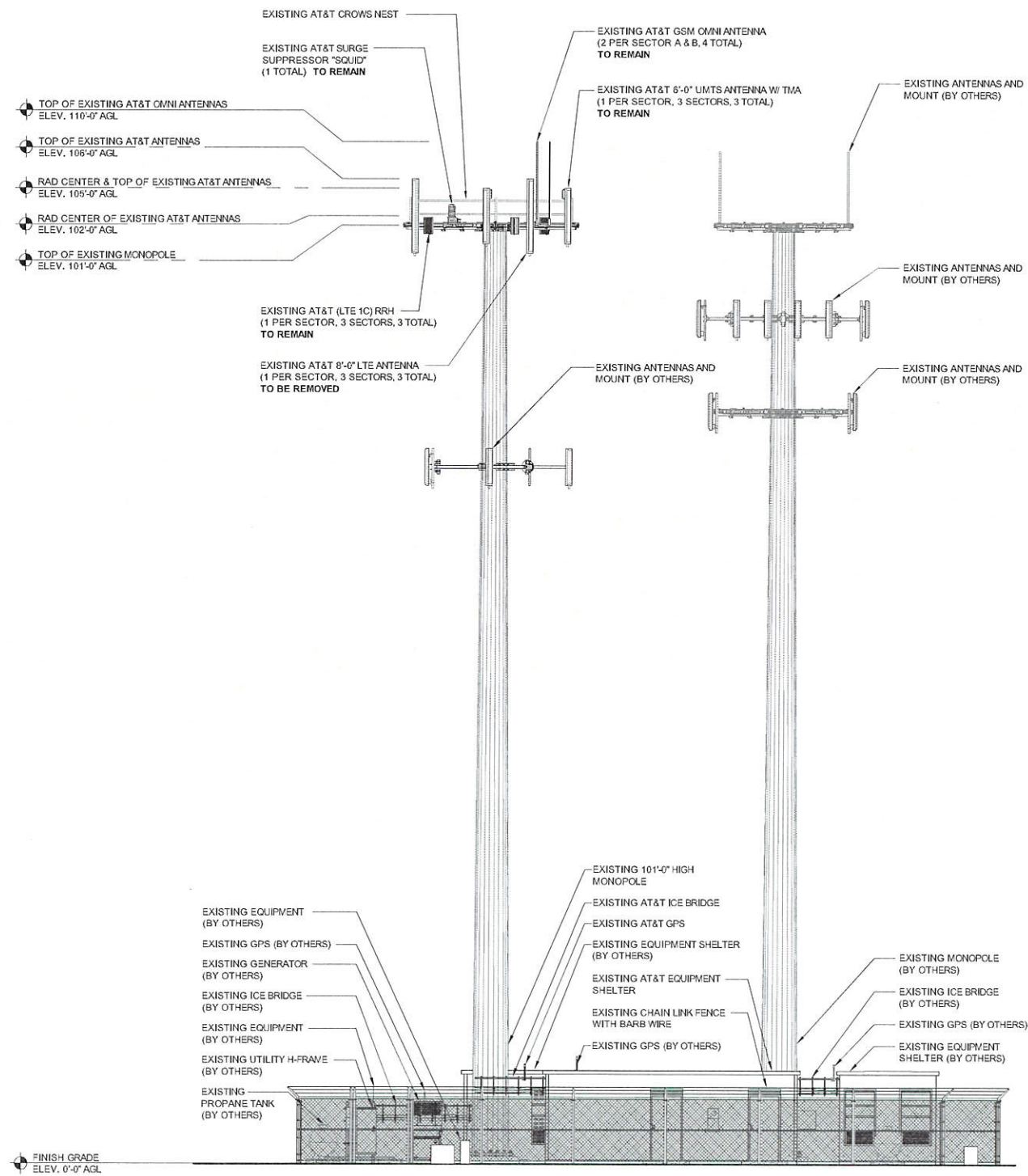


**SOUTH ELEVATION (FINAL)**

0 2' 4' 8' SCALE: 1/8" = 1'-0" (24x36)  
(OR) 1/16" = 1'-0" (11x17) **2**

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES

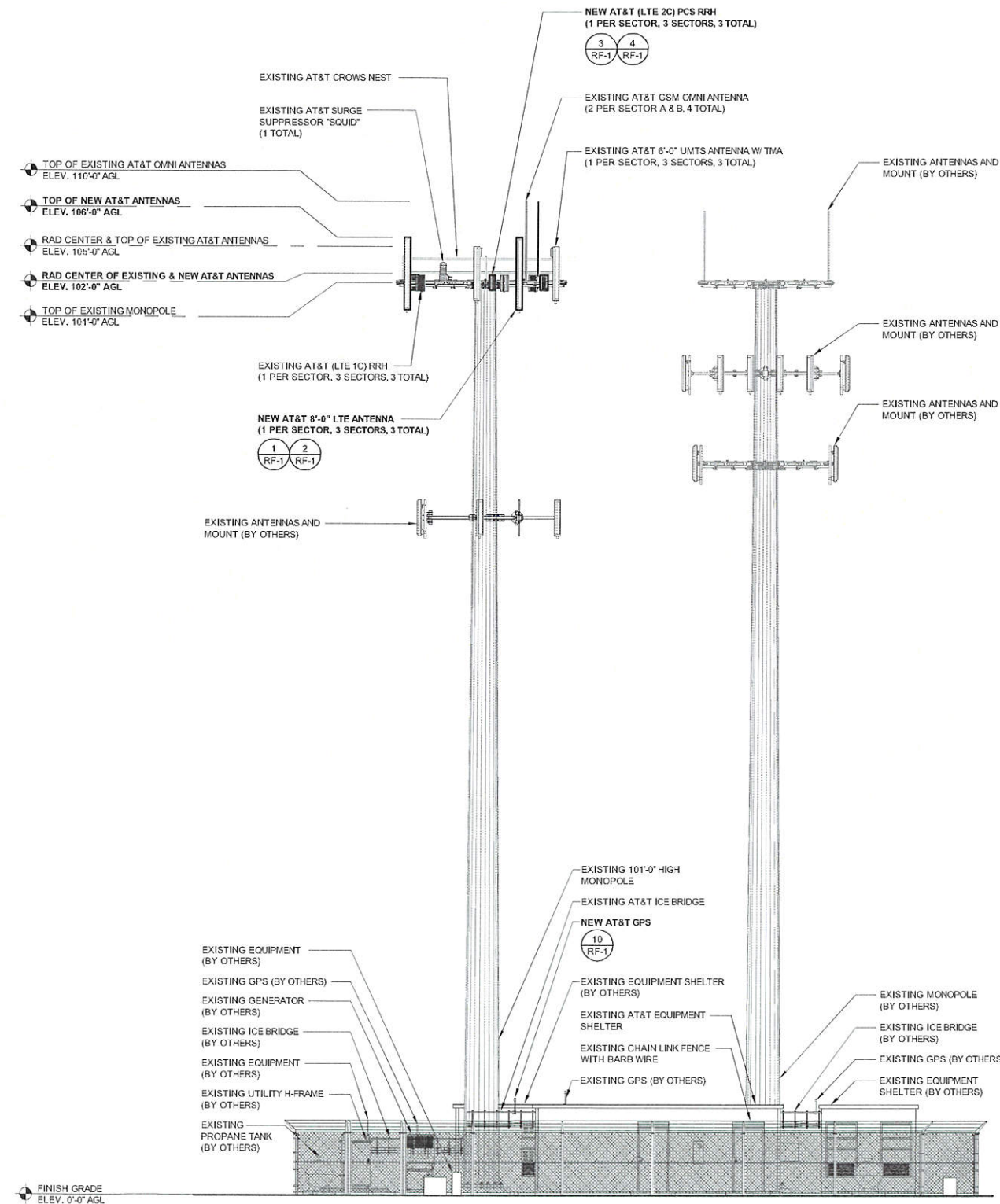
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**WEST ELEVATION (EXISTING)**

0 2' 4' 8' SCALE: 1/8" = 1'-0" (24x36)  
(OR) 1/16" = 1'-0" (11x17)

**1**



**WEST ELEVATION (FINAL)**

0 2' 4' 8' SCALE: 1/8" = 1'-0" (24x36)  
(OR) 1/16" = 1'-0" (11x17)

**2**



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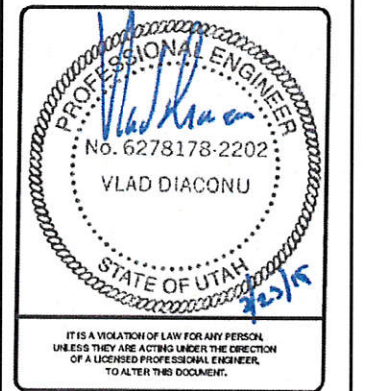
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MONOPOLE

SHEET TITLE  
**ELEVATIONS**

SHEET NUMBER  
**C-4**

1. GENERAL REQUIREMENTS

- A. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF THE NATIONAL ELECTRIC CODE AND ALL STATE AND LOCAL CODES. NOTHING IN THESE PLANS OR SPECIFICATIONS SHALL BE CONSTRUED AS TO PERMIT WORK NOT CONFORMING TO THE MOST STRINGENT OF THESE CODES. SHOULD CHANGES BE NECESSARY IN THE DRAWINGS OR SPECIFICATIONS TO MAKE THE WORK COMPLY WITH THESE REQUIREMENTS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING AND CEASE WORK ON PARTS OF THE CONTRACT WHICH ARE AFFECTED.
B. THE CONTRACTOR SHALL MAKE A SITE VISIT PRIOR TO BIDDING AND CONSTRUCTION TO VERIFY ALL EXISTING CONDITIONS AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY UPON DISCOVERY OF ANY DISCREPANCIES THE CONTRACTOR ASSUMES ALL LIABILITY FOR FAILURE TO COMPLY WITH THIS PROVISION.
C. THE EXTENT OF THE WORK IS INDICATED BY THE DRAWINGS, SCHEDULES, AND SPECIFICATIONS AND IS SUBJECT TO THE TERMS AND CONDITIONS OF THE CONTRACT. THE WORK SHALL CONSIST OF FURNISHING ALL LABOR, EQUIPMENT, MATERIALS AND SUPPLIES NECESSARY FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM. THE WORK SHALL ALSO INCLUDE THE COMPLETION OF ALL ELECTRICAL WORK NOT MENTIONED OR SHOWN WHICH ARE NECESSARY FOR SUCCESSFUL OPERATION OF ALL SYSTEMS.
D. THE CONTRACTOR SHALL PREPARE A BID FOR A COMPLETE AND OPERATIONAL SYSTEM, WHICH INCLUDES THE COST FOR MATERIAL AND LABOR.
E. WORKMANSHIP AND NEAT APPEARANCE SHALL BE AS IMPORTANT AS THE OPERATION. DEFECTIVE OR DAMAGED MATERIALS SHALL BE REPLACED OR REPAIRED PRIOR TO FINAL ACCEPTANCE IN A MANNER ACCEPTABLE TO OWNER AND ARCHITECT/ENGINEER.
F. COMPLETE THE ENTIRE INSTALLATION AS SOON AS THE PROGRESS OF THE WORK WILL PERMIT. ARRANGE ANY OUTAGE OF SERVICE WITH THE OWNER AND BUILDING MANAGER IN ADVANCE. MINIMIZE DOWNTIME ON THE BUILDING ELECTRICAL SYSTEM.
G. THE ENTIRE ELECTRICAL SYSTEM INSTALLED UNDER THIS CONTRACT SHALL BE DELIVERED IN PROPER WORKING ORDER. REPLACE WITHOUT ADDITIONAL COST TO THE OWNER. ANY DEFECTIVE MATERIAL AND EQUIPMENT WITHIN ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE.
H. ANY ERROR, OMISSION OR DESIGN DISCREPANCY ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR CLARIFICATION OR CORRECTION BEFORE CONSTRUCTION.
I. "PROVIDE": INDICATES THAT ALL ITEMS ARE TO BE FURNISHED, INSTALLED AND CONNECTED IN PLACE.
J. CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS AND PAY ALL REQUIRED FEES.

2. EQUIPMENT LOCATION

- A. THE DRAWINGS INDICATE DIAGRAMMATICALLY THE DESIRED LOCATIONS OR ARRANGEMENTS OF CONDUIT RUNS, OUTLETS, EQUIPMENT, ETC., AND ARE TO BE FOLLOWED AS CLOSELY AS POSSIBLE. PROPER JUDGMENT MUST BE EXERCISED IN EXECUTING THE WORK SO AS TO SECURE THE BEST POSSIBLE INSTALLATION IN THE AVAILABLE SPACE AND TO OVERCOME LOCAL DIFFICULTIES DUE TO SPACE LIMITATIONS OR INTERFERENCE OF STRUCTURE CONDITIONS ENCOUNTERED.
B. IN THE EVENT CHANGES IN THE INDICATED LOCATIONS OR ARRANGEMENTS ARE NECESSARY, DUE TO FIELD CONDITIONS IN THE BUILDING CONSTRUCTION OR REARRANGEMENT OF FURNISHINGS OR EQUIPMENT, SUCH CHANGES SHALL BE MADE WITHOUT COST. PROVIDING THE CHANGE IS ORDERED BEFORE THE CONDUIT RUNS, ETC., AND WORK DIRECTLY CONNECTED TO THE SAME IS INSTALLED AND NO EXTRA MATERIALS ARE REQUIRED.
C. LIGHTING FIXTURES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS ONLY. COORDINATE THE FIXTURE LOCATION WITH MECHANICAL EQUIPMENT TO AVOID INTERFERENCE. COORDINATE THE WORK OF THIS SECTION WITH THAT OF ALL OTHER TRADES. WHERE CONFLICTS OCCUR, CONSULT WITH THE RESPECTIVE CONTRACTOR AND COME TO AGREEMENT AS TO CHANGES NECESSARY. OBTAIN WRITTEN ACCEPTANCE FROM ARCHITECT/ENGINEER FOR THE NEW CHANGES BEFORE PROCEEDING.

3. SHOP DRAWINGS

- A. N/A UNLESS NOTED OTHERWISE.

4. SUBSTITUTIONS

- A. NO SUBSTITUTIONS ARE ALLOWED.

5. TESTS

- A. BEFORE FINAL ACCEPTANCE OF WORK, THE CONTRACTOR SHALL INSURE THAT ALL EQUIPMENT, SYSTEMS, FIXTURES, ETC., ARE WORKING SATISFACTORILY AND TO THE INTENT OF THE DRAWINGS.

6. PERMITS

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING OUT AND PAYING FOR ALL THE REQUIRED PERMITS, INSPECTION AND EXAMINATION WITHOUT ADDITIONAL EXPENSE TO THE OWNER.

7. GROUNDING

- A. THE CONTRACTOR SHALL PROVIDE A COMPLETE, AND APPROVED GROUNDING SYSTEM INCLUDING ELECTRODES, ELECTRODE CONDUCTOR, BONDING CONDUCTORS, AND EQUIPMENT CONDUCTORS AS REQUIRED BY ARTICLE 250 OF NATIONAL ELECTRICAL CODE.
B. CONDUITS CONNECTED TO EQUIPMENT AND DEVICES SHALL BE METALLICALLY JOINED TOGETHER TO PROVIDE AN EFFECTIVE ELECTRICAL CONTINUITY.
C. FEEDERS AND BRANCH CIRCUIT WIRING INSTALLED IN A NON-METALLIC CONDUIT SHALL INCLUDE A CODE SIZED GROUNDING CONDUCTOR HAVING GREEN INSULATION. THE GROUND CONDUCTOR SHALL BE PROPERLY CONNECTED AT BOTH ENDS TO MAINTAIN ELECTRICAL CONTINUITY.
D. REFER TO GROUND BUS DETAILS, PROVIDE NEW SYSTEM, COMPLETE WITH CONDUCTORS, GROUND ROD(S) AND DESCRIBED TERMINATIONS.
E. ALL GROUNDING CONDUCTORS SHALL BE SOLID LINED COPPER AND ANNEALED #2 UNLESS NOTED OTHERWISE.
F. ALL NON-DIRECT BURIED TELEPHONE EQUIPMENT CONDUCTORS SHALL BE #2 STRANDED, GROUND THIN (GREEN) INSULATION.
G. ALL GROUND CONNECTIONS SHALL BE MADE WITH "HYGROD" COMPRESSION SYSTEM BURNDY CONNECTORS EXCEPT WHERE NOTED OTHERWISE.
H. PAINT AT ALL GROUND CONNECTIONS SHALL BE REMOVED.
I. GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED 5 OHMS. IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE OWNER FOR FUTURE INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE. SUBMIT TEST REPORTS AND FURNISH TO SMART SMR ONE COMPLETE SET OF PRINTS SHOWING INSTALLED WORK.

8. UTILITY SERVICE

- A. TELEPHONE AND ELECTRICAL METERING FACILITIES SHALL CONFORM TO THE REQUIREMENTS OF THE SERVING UTILITY COMPANIES. CONTRACTOR SHALL VERIFY SERVICE LOCATIONS AND REQUIREMENTS. SERVICE INFORMATION WILL BE FURNISHED BY THE SERVING UTILITIES.
B. CONFORM TO ALL REQUIREMENTS OF THE SERVING UTILITY COMPANIES.

9. PRODUCTS

- A. ALL MATERIALS SHALL BE NEW, CONFORMING WITH THE NEC, ANSI, NEMA, AND THEY SHALL BE U.L. LISTED AND LABELED.
B. CONDUIT:
1. RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR, RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP ROCESS NO. 3.
2. ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL. FITTINGS SHALL BE COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.
3. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE. SEAL TIGHT FLEXIBLE CONDUIT. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL HAVE FULL SIZE GROUND WIRE.
4. CONDUIT RUNS MAY BE SURFACE MOUNTED IN CEILING OR WALLS UNLESS INDICATED OTHERWISE. CONDUIT INDICATED SHALL RUN PARALLEL OR AT RIGHT ANGLES TO CEILING, FLOOR OR BEAVS. VERIFY EXACT ROUTING OF ALL EXPOSED CONDUIT WITH ARCHITECT PRIOR TO INSTALLING.
5. ALL UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 40 (UNLESS NOTED OTHERWISE) AT A MINIMUM DEPTH OF 24" BELOW GRADE.
6. ALL CONDUIT ONLY (C.O.) SHALL HAVE PULL ROPE.
7. CONDUITS RUN ON ROOFS SHALL BE INSTALLED ON 4 X 4 SLEEPERS, 8'-0" ON CENTER, SET IN NON-HARDENING MASTIC.

- C. ALL WIRE AND CABLE SHALL BE COPPER, 600 VOLT, #12 AWG MINIMUM UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. CONDUCTORS #10 AWG AND SMALLER SHALL BE SOLID. CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED. TYPE THIN INSULATION USED UNLESS CONDUCTORS INSTALLED IN CONDUIT EXPOSED TO WEATHER, IN WHICH CASE TYPE THIN INSULATION SHALL BE USED.
D. PROVIDE GALVANIZED COATED STEEL BOXES AND ACCESSORIES SIZED PER CODE TO ACCOMMODATE ALL DEVICES AND WIRING.
E. DUPLEX RECEPTACLES SHALL BE SPECIFICATION GRADE WITH WHITE FINISH (UNLESS NOTED BY ARCHITECT/ENGINEER), 20 AMP, 125 VOLT, THREE WIRE GROUNDING TYPE, NEMA 5-20R. MOUNT RECEPTACLE AT +12" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED ON DRAWINGS OR IN DETAILS. WEATHERPROOF RECEPTACLES SHALL BE GROUND FAULT INTERRUPTER TYPE WITH SIERRA #WPD-8 LIFT COVERPLATES.
F. TOGGLE SWITCHES SHALL BE 20 AMP, 120 VOLT AC, SPECIFICATION GRADE WHITE (UNLESS NOTED OTHERWISE) FINISH. MOUNT SWITCHES AT +48" ABOVE FINISHED FLOOR.
G. PANELBOARDS SHALL BE DEAD FRONT SAFETY TYPE WITH ANTI-BURN SOLDERLESS CONNECTION SPALLER FOR COPPER CONDUCTORS, COPPER BUS BARS, FULL SIZE NEUTRAL BUS, GROUND BUS AND EQUIPPED WITH QUICK-MAKE QUICK-BREAK BOLT-IN TYPE THERMAL MAGNETIC CIRCUIT BREAKERS, MOUNT TOP OF THE PANELBOARDS AT 6'-3" ABOVE FINISHED FLOOR. PROVIDE TYPE WRITTEN CIRCUIT DIRECTORY.
H. ALL CIRCUIT BREAKERS, MAGNETIC STARTERS AND OTHER ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THAN MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED.
I. GROUND RODS SHALL BE COPPER CLAD STEEL, 5/8" ROUND AND 10' LONG, COPPERWELD OR APPROVED EQUAL.

10. INSTALLATION

- A. PROVIDE SUPPORTING DEVICES FOR ALL ELECTRICAL EQUIPMENT, FIXTURES, BOXES, PANEL, ETC., SUPPORT LUMINARIES FROM UNDERSIDE OF STRUCTURAL CEILING. EQUIPMENT SHALL BE BRACED TO WITHSTAND HORIZONTAL FORCES IN ACCORDANCE WITH STATE AND LOCAL CODE REQUIREMENTS. PROVIDE PRIOR ALIGNMENT AND LEVELING OF ALL DEVICES AND FIXTURES.
B. CUTTING, PATCHING, CHASES, OPENINGS: PROVIDE LAYOUT IN ADVANCE TO ELIMINATE UNNECESSARY CUTTING OR DRILLING OF WALLS, FLOORS CEILINGS, AND ROOFS. ANY DAMAGE TO BUILDING STRUCTURE OR EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR. OBTAIN PERMISSION FROM THE ARCHITECT/ENGINEER BEFORE CORING.
C. 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/OR REINFORCING STEEL WILL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES.
D. LOCATION OF TENDONS AND/OR REINFORCING STEEL 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 AND/OR STEEL TENDONS.
E. PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH THE REQUIREMENTS OF THE U.B.C.

11. PROJECT CLOSEOUT

- A. UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAAMAGED CONDITION.
B. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS AND CIRCUITS.
C. ALL BROCHURES, OPERATING MANUALS, CATALOG, SHOP DRAWINGS, ETC., SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.

ELECTRICAL NOTES

SCALE 2 N.T.S.

Table with 6 columns: A, ELEC, ELECTRICAL, MFR, MANUFACTURER, SAF, SAFETY. Rows include ACCA ANTENNA CABLE COVER ASSEMBLY, AIC AMPERE INTERRUPTING CAPACITY, APPROX APPROXIMATELY, AT AMPERE TRIP, AWG AMERICAN WIRE GAGE, BATT BATTERY, BD BOARD, BR BRANCH, BRKR BREAKER, BTCW BARE TINNED COPPER WIRE, BTS BASE TRANSMISSION SYSTEM, C CONDUIT, CAB CABINET, CB CIRCUIT BREAKER, CKT CIRCUIT, CONT CONTINUOUS, DEM DEMAND, (E) EXISTING, EGR EMERGENCY GEN. RECEPTACLE.

GENERAL ABBREVIATIONS

SCALE 3 N.T.S.

Table mapping symbols to abbreviations: Overhead Telephone/Overhead Power, Overhead Telephone Line, Overhead Power Line, Power Run, Telco Run, Power/Telco Run, Grounding Conductor, Grounding Conductor, Conduit Underground, Fuse, Safety Switch, Manual Transfer Switch, Lighting Fixture, Exit Sign, Emergency Lighting, Lighting Fixture, Lighting Fixture, Lighting Fixture, Lighting Fixture, Lighting Fixture, Lighting Fixture, Lighting Fixture, Lighting Fixture, Lighting Fixture, Utility Meter Base, Transformer, Stepdown Transformer, Receptacle, Toggle Switch, Toggle Switch, Ionization Smoke Detector, Pole, Pole Mounted XFMR, Pole Mounted XFMR, Pole Mounted XFMR, Pole Mounted XFMR.

ELECTRICAL GENERAL NOTES

GENERAL LEGEND

SCALE 4 N.T.S.



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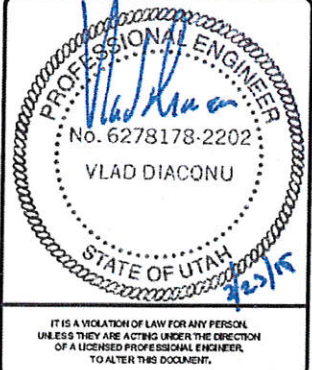
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Small table with 4 columns: REV, DATE, DESCRIPTION, BY. Row 1: 1, 3/05/2015, 100% CONSTRUCTION, MSV.



HUNTSVILLE FA#10088492 7305 EAST 730 NORTH HUNTSVILLE, UT 84317 MONOPOLE

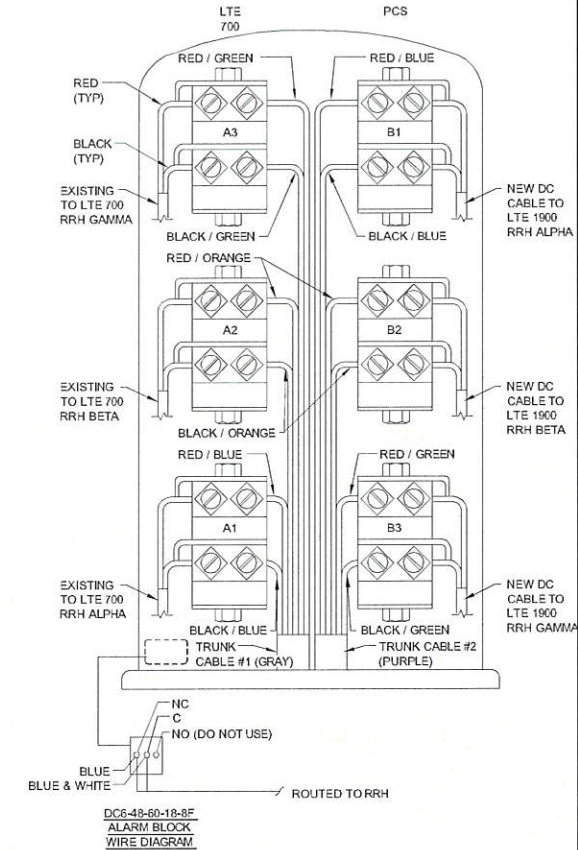
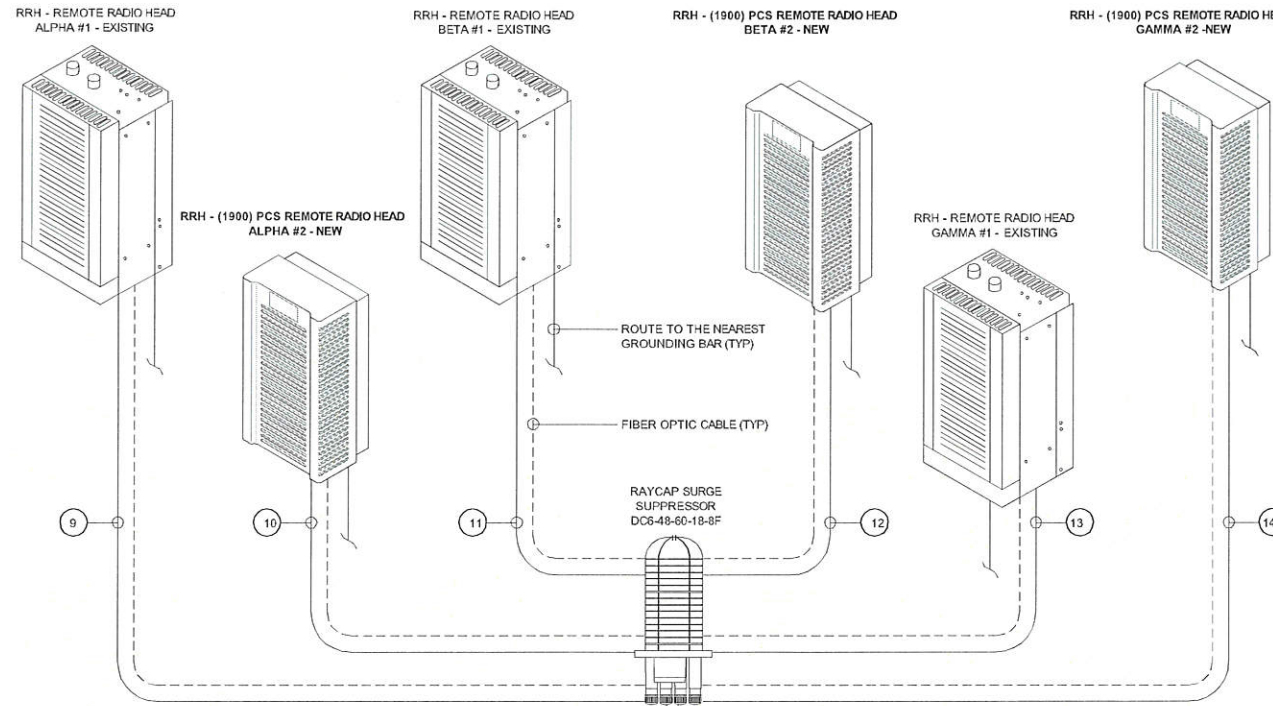
SHEET TITLE ELECTRICAL NOTES

SHEET NUMBER E-1

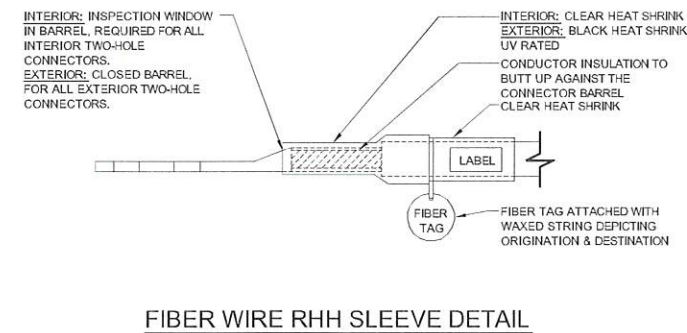
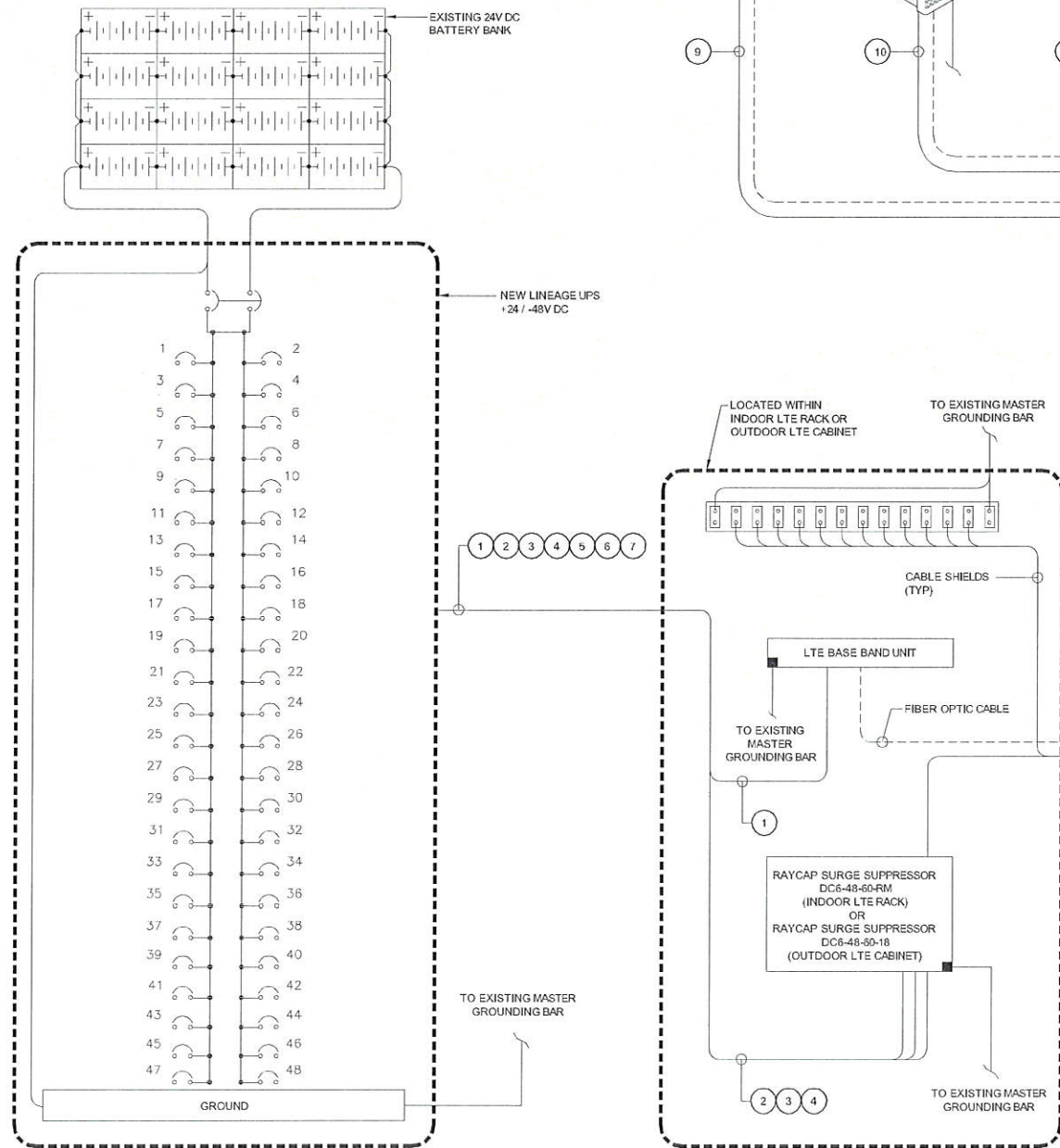
NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES

**NOTES**

1. INSTALL ADDITIONAL CIRCUITS TO RECTIFIERS AS REQUIRED, TO PROVIDE ADDITIONAL -48V DC POWER FOR LTE SYSTEM.
2. THE SCOPE OF WORK SHALL DICTATE THE EQUIPMENT TO BE INSTALLED. EQUIPMENT SHALL BE EQUAL TO OR BETTER THAN REFERRED VENDORS.
3. THE CONTRACTOR SHALL VERIFY THE LOAD CENTER SCHEDULE IS ACCURATE AND TRUE. IF THE LOAD CENTER SCHEDULE IS NOT TRUE THE CONTRACTOR SHALL NOTIFY THE ENGINEERING STAFF THE CORRECTIONS AS SOON AS PRACTICABLE.
4. CONTRACTOR SHALL VERIFY THE LOAD CENTER SCHEDULE IS ACCURATE AND TRUE. IF THE LOAD CENTER SCHEDULE IS NOT TRUE THE CONTRACTOR SHALL NOTIFY THE ENGINEERING STAFF THE CORRECTIONS AS SOON AS PRACTICABLE.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR AS-BUILT LOAD CENTER SCHEDULE AND SITE DRAWINGS.
6. THIS CIRCUIT SCHEDULE IS PULLED FROM LTE TEMPLATE FILE SUPPLIED BY GENERAL DYNAMICS. INDIVIDUAL CIRCUITS WERE NOT FIELD VERIFIED BY A&E VENDOR. CONTRACTOR IS TO VERIFY LOAD SCHEDULE.
7. ALL DC WIRE SHOULD BE RHH (OR OEM SUPPLIED) "LIST 3 CLASS B" OR "LIST 4 CLASS I" LIMITED SMOKE. ALL DC WIRE SHALL BE GRAY IN COLOR. COLOR CODE TAPE SHOULD BE USED TO IDENTIFY POLARITY AND CLEAR HEAT SHRINK SHALL COVER LUG CRIMP AND EXTEND OVER COLOR CODE. ENDS OF CABLES SHALL BE LABELED WITH FIBER TAGS ATTACHED WITH WAX STRING DEPICTING ORIGINATION TO DESTINATION.
8. CONTRACTOR SHALL VERIFY ADEQUATE CAPACITY EXISTS AT THE EXISTING DC POWER PLANT TO SUPPLY DC POWER TO THE NEW EQUIPMENT IN THE NEW RACK OR CABINET. IF SUFFICIENT RECTIFIERS ARE NOT AVAILABLE IN THE EXISTING DC POWER PLANT, THE CONTRACTOR SHALL COORDINATE WITH THE DESIGN ENGINEER (TA&C) TO PROVIDE A DESIGN FOR NEW CIRCUITS TO THE EXISTING DC POWER PLANT FOR ADDITIONAL RECTIFIERS. CONTRACTOR SHALL ROUTE NEW DC POWER FROM THE EXISTING DC POWER PLANT TO THE NEW RACK OR CABINET.



**DC6-48-60-18-8F DC SURGE SUPPRESSION WIRE DIAGRAM**



DC CIRCUIT SCHEDULE			
	FROM	TO	CONFIGURATION
1	-48V DC CIRCUIT	LTE BASE BAND UNIT	(1) 2-#10 RHH TC-RE DC CABLE
2	-48V DC CIRCUIT	RAYCAP SURGE SUPPRESSOR DC6-48-60-RM OR DC6-48-60-18	(1) 2-#10 RHH TC-RE DC CABLE
3	-48V DC CIRCUIT	RAYCAP SURGE SUPPRESSOR DC6-48-60-RM OR DC6-48-60-18	(1) 2-#10 RHH TC-RE DC CABLE
4	-48V DC CIRCUIT	RAYCAP SURGE SUPPRESSOR DC6-48-60-RM OR DC6-48-60-18	(1) 2-#10 RHH TC-RE DC CABLE
5	-48V DC CIRCUIT	RRH REMOTE RADIO HEAD ALPHA #2 - NEW	(1) 2-#10 RHH TC-RE DC CABLE
6	-48V DC CIRCUIT	RRH REMOTE RADIO HEAD BETA #2 - NEW	(1) 2-#10 RHH TC-RE DC CABLE
7	-48V DC CIRCUIT	RRH REMOTE RADIO HEAD GAMMA #2 - NEW	(1) 2-#10 RHH TC-RE DC CABLE
8	RAYCAP SURGE SUPPRESSOR DC6-48-60-RM OR DC6-48-60-18	RAYCAP SURGE SUPPRESSOR DC6-48-60-18-8F	(2) 6-#8 RHH TC-RE DC CABLE
9	RAYCAP SURGE SUPPRESSOR DC6-48-60-18-8F	RRH REMOTE RADIO HEAD ALPHA #1	(1) 6-#12 RHH TC-RE-DC CABLE - EXISTING
10	RAYCAP SURGE SUPPRESSOR DC6-48-60-18-8F	RRH REMOTE RADIO HEAD ALPHA #2 - NEW	(1) 6-#12 RHH TC-RE-DC CABLE
11	RAYCAP SURGE SUPPRESSOR DC6-48-60-18-8F	RRH REMOTE RADIO HEAD BETA #1	(1) 6-#12 RHH TC-RE-DC CABLE - EXISTING
12	RAYCAP SURGE SUPPRESSOR DC6-48-60-18-8F	RRH REMOTE RADIO HEAD BETA #2 - NEW	(1) 6-#12 RHH TC-RE-DC CABLE
13	RAYCAP SURGE SUPPRESSOR DC6-48-60-18-8F	RRH REMOTE RADIO HEAD GAMMA #1	(1) 6-#12 RHH TC-RE-DC CABLE - EXISTING
14	RAYCAP SURGE SUPPRESSOR DC6-48-60-18-8F	RRH REMOTE RADIO HEAD GAMMA #2 - NEW	(1) 6-#12 RHH TC-RE-DC CABLE

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**HUNTSVILLE**  
FA#10088492  
7305 EAST 730 NORTH  
HUNTSVILLE, UT 84317  
MONOPOLE

SHEET TITLE  
**ELECTRICAL**  
**ONE-LINE DIAGRAM**

SHEET NUMBER  
**E-2**

**ELECTRICAL GROUNDING SPECIFICATIONS**

- GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE CURRENTLY IN EFFECT FOR THE AUTHORITY HAVING JURISDICTION.
- ALL GROUNDING DEVICES SHALL BE U.L. LISTED FOR THEIR INTENDED USE.
- GROUND WIRES SHALL BE TINNED #2 AWG BARE SOLID COPPER UNLESS OTHERWISE NOTED.
- CONNECTIONS OF ALL GROUND WIRES TO THE GROUND RING SHALL BE EXOTHERMIC (CAD-WELDED), UNLESS OTHERWISE NOTED, AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AT&T WIRELESS BROADBAND STANDARDS.
- GROUNDING CONDUCTORS SHALL BE ROUTED ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. WHEN REQUIRED, GROUND LEADS SHALL BE BENT TO A MINIMUM OF 8" RADIUS.
- WHERE GROUND WIRES ARE ROUTED FROM ANY CONNECTION ABOVE GRADE TO THE GROUND RING, INSTALL WIRE IN 3/4" HEAVY WALL LIQUID TIGHT FLEXIBLE CONDUIT FROM CONNECTION POINT TO 5" BELOW GRADE AND SEAL THE TOP WITH SILICONE SEALANT.
- ALL GROUND BARS SHALL BE TINNED, 1/4" COPPER, SECTOR BARS 2", COLLECTOR AND MGB BARS 4", OF SUFFICIENT LENGTH TO ACCOMMODATE ALL REQUIRED CONNECTIONS WITHOUT DOUBLING LUGS, AND EACH INSTALLED WITH ISOLATORS. WHEN CONNECTING GROUND BARS (WITHIN 10 FEET OF GRADE) DIRECTLY TO THE GROUND RING, 2 EA. #2 SOLID DOWNLEADS SHALL BE CAD-WELDED TO THE GROUND BAR, 1 AT EACH OPPOSITE BOTTOM CORNER, AND EACH SHALL RUN IN 3/4" HEAVY WALL LIQUID TIGHT FLEXIBLE CONDUIT FROM GROUND BAR DOWN TO THE GROUND RING. WHEN CONNECTING SECTOR GROUND BARS, DAISY-CHAIN THE GROUND BARS AND RUN 1 EA. #2 AWG STRANDED COPPER WIRE WITH THIN INSULATION FROM THE MIDDLE GROUND BAR TO THE GROUND RING AND CAD-WELD TO THE RING.
- WHEN ATTACHING STRANDED GROUND LEADS TO THE GROUND BARS, 2 HOLE COMPRESSION LUGS SHALL BE USED, PROTECT WITH WEATHERPROOF HEAT SHRINK, AND WITH A THIN COAT OF "KOPR SHIELD" OR EQUIVALENT PROPERLY APPLIED AND ATTACHED ONLY WITH STAINLESS STEEL HARDWARE.
- WHEN GROUNDING EQUIPMENT ENCLOSURES, PANELS, FRAMES, AND OTHER METAL APPARATUS, A #6 AWG STRANDED COPPER WIRE WITH THIN INSULATION SHALL BE ATTACHED UTILIZING A 2 HOLE COMPRESSION TYPE LUG, PROTECTED WITH WEATHERPROOF HEAT A CLEAN AND CORROSION FREE METALLIC SURFACE UTILIZING STAINLESS STEEL SELF-TAPPING SCREWS AS NOTED IN NOTE 10 BELOW.
- PREPARE ALL BONDING SURFACES FOR GROUND CONNECTIONS BY REMOVING ANY AND ALL PAINT AND CORROSION TO SHINY METAL, FOLLOWING CAD-WELDED CONNECTIONS TO NON-COPPER SURFACES, APPLY ONE COAT OF ANY ANTI-OXIDIZING PAINT, "COLD GALV" OR EQUIVALENT.
- GROUND RODS SHALL BE COPPER-CLAD STEEL 5/8"x10', SPACED NO LESS THAN 10' ON CENTER.
- ALL GROUND SYSTEM CONDUCTORS AND CONDUITS SHALL BE SECURED UTILIZING ONLY NONMETALLIC, NON-CONDUCTIVE, UV RATED CLAMPS, BRACKET, AND OR SUPPORTS.
- WHEN REQUIRED, THE CONTRACTOR SHALL ENGAGE THE SERVICES OF AN INDEPENDENT TESTING FIRM TO VERIFY, UTILIZING A MEGGER TEST, THAT THE RESISTANCE TO EARTH OF THE NEW GROUND SYSTEM IS EQUAL TO OR LESS THAN 5 (OHMS), A COPY OF THE COMPLETE TESTING REPORT SHALL BE PROVIDED TO THE AT&T REPRESENTATIVE.
- ALL MATERIALS AND HARDWARE SHALL BE INSTALLED IN A WORKMAN-LIKE MANNER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, AND DEFINED IN NFPA-70 AND APPROVED BY A.H.J.



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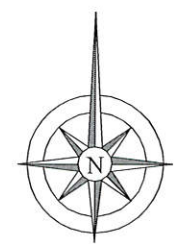
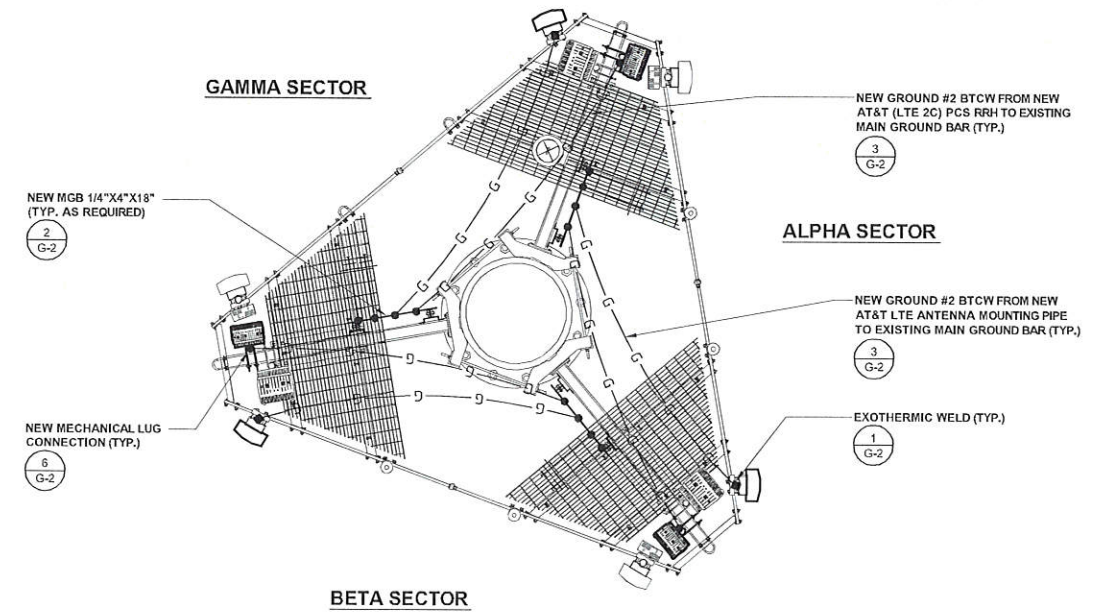
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SCALE  
N.T.S. **2**

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LEGEND	
■	EXOTHERMIC CONNECTION
●	MECHANICAL CONNECTION
—	EQUIPMENT GROUND BAR
—	ANTENNA GROUND BAR (AS REQUIRED)
—	#2 AWG GROUND LEAD (AS REQUIRED)

- NOTE:
- CONTRACTOR TO REPLACE ALL MISSING GROUND BARS AND GROUNDING CONNECTIONS AS REQUIRED.



PROFESSIONAL ENGINEER  
No. 6278178-2202  
VLAD DIACONU  
STATE OF UTAH  
3/25/15

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HUNTSVILLE  
FA#10088492  
7305 EAST 730 NORTH  
HUNTSVILLE, UT 84317  
MONOPOLE

SHEET TITLE  
**GROUNDING PLAN**

SHEET NUMBER  
**G-1**

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES.

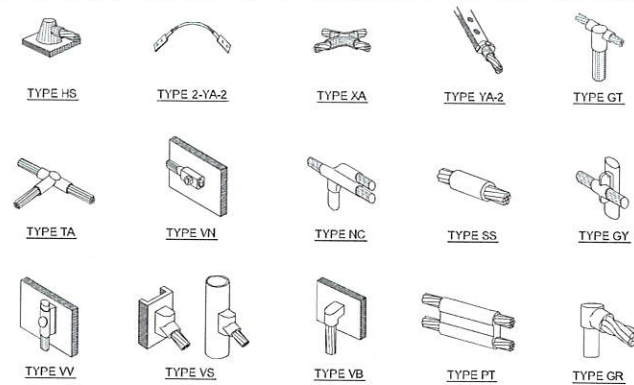
NOTES & LEGEND

SCALE  
N.T.S. **1**

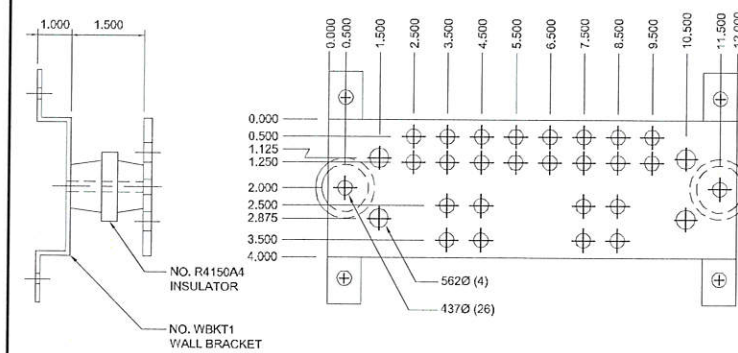
ANTENNA GROUNDING

SCALE  
N.T.S. **3**

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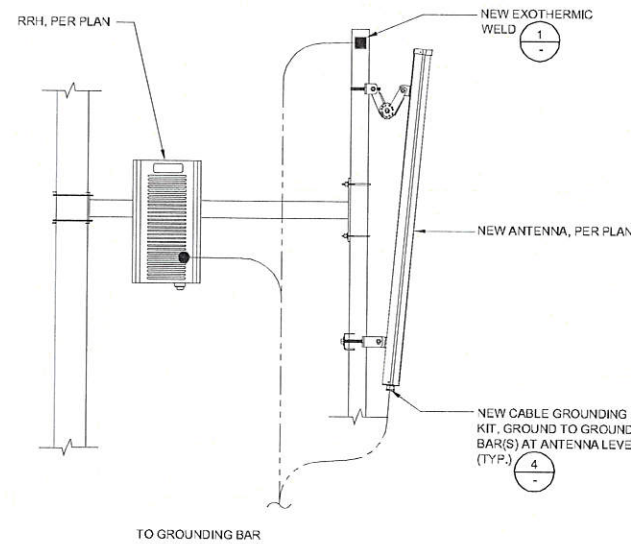


**NOTE:**  
ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.



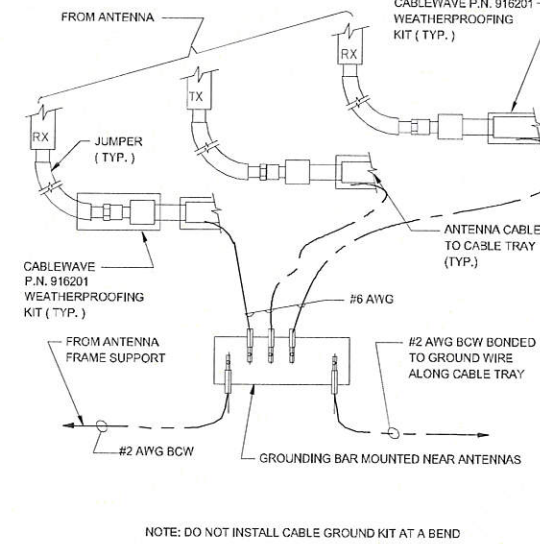
**EXOTHERMIC WELDING**

SCALE  
N.T.S. **1**



**12" & 18" GROUND BAR**

SCALE  
N.T.S. **2**



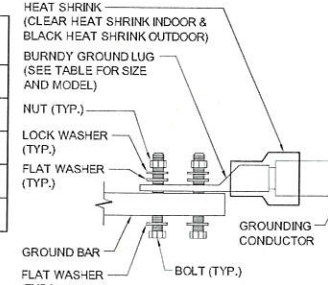
**ANTENNA & RRH GROUNDING**

SCALE  
N.T.S. **3**

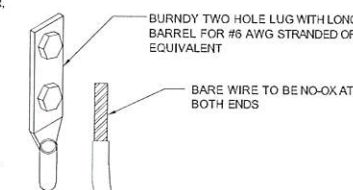
**ANTENNA GROUND KIT**

SCALE  
N.T.S. **4**

WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT



- NOTES:**
- ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER, LOCK WASHER AND NUT.
  - COPPER SHIELD, ANTI-OX, OR NO-OX OR EQUIVALENT SHALL BE PLACE WHERE ALL DISSIMILAR METALS CONNECT.
  - ALL LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
  - ALL LUGS MUST HAVE INSPECTION WINDOWS.



**NOT USED**

SCALE  
N.T.S. **5**

**MECHANICAL LUG CONNECTION**

SCALE  
N.T.S. **6**



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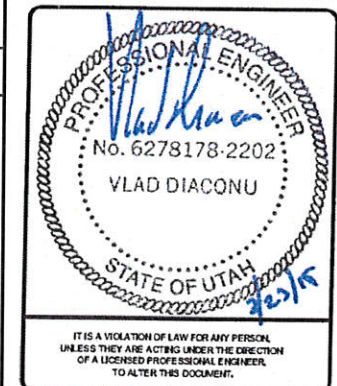
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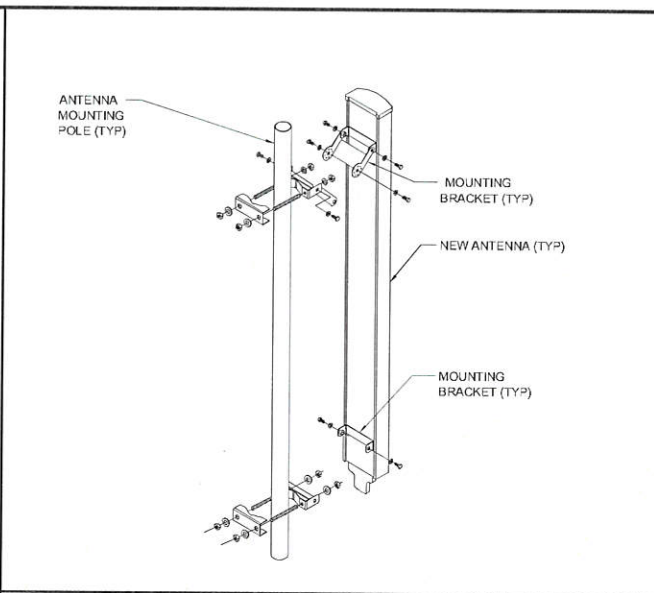


HUNTSVILLE  
FA#10088492  
7305 EAST 730 NORTH  
HUNTSVILLE, UT 84317  
MONOPOLE

SHEET TITLE  
**GROUNDING  
DETAILS**

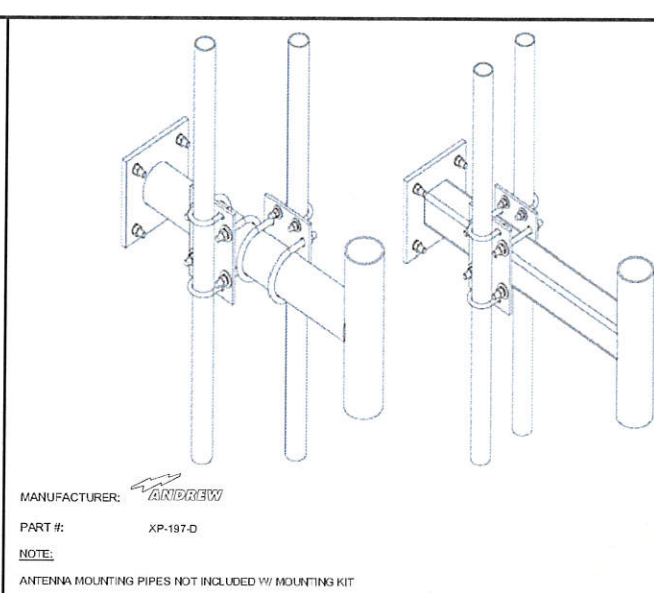
SHEET NUMBER  
**G-2**

RADOME MATERIAL: UV RESISTANT FIBERGLASS  
 RADOME COLOR: LIGHT GRAY  
 DIMENSIONS, HxWxD: 91.7" x 12" x 6.3"  
 WEIGHT, W/ PRE-MOUNTED BRACKETS: 51.8 lb



**ALCATEL - LUCENT RRH2X60-1900A-4R**

FREQUENCY BAND: 1900 (3GPP BAND 2)  
 TYPE OF OPTICAL FIBER: SINGLE-MODE (SM) & MULTI-MODE (MM) SFPs  
 POWER SUPPLY: -48V DC  
 WEIGHT: 46 LBS.  
 SIZE (HxWxD): 20.1"x11.25"x7.6"



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ANTENNA SPECIFICATIONS

SCALE  
N.T.S.

1

ANTENNA MOUNTING

SCALE  
N.T.S.

2

RRH SPECIFICATIONS

SCALE  
N.T.S.

3

RRH STAND-OFF ARM MOUNT

SCALE  
N.T.S.

4

NOT USED

SCALE  
N.T.S.

5

NOT USED

SCALE  
N.T.S.

6

NOT USED

SCALE  
N.T.S.

7

NOT USED

SCALE  
N.T.S.

8

NOT USED

SCALE  
N.T.S.

9

NOT USED

SCALE  
N.T.S.

10

NOT USED

SCALE  
N.T.S.

11

NOT USED

SCALE  
N.T.S.

12

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REV	DATE	DESCRIPTION	BY
0	3/09/2015	100% CONSTRUCTION	NSV

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.

HUNTSVILLE  
 FA#10088492  
 7305 EAST 730 NORTH  
 HUNTSVILLE, UT 84317  
 MONOPOLE

SHEET TITLE  
**DETAILS**

SHEET NUMBER  
**RF-1**

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES.