



at&t

LTE 2ND CARRIER

SITE #: SOH3164

SITE NAME: 31649-STATE RT 257 / ATC # 81552

AT&T FA #: 10011766

SITE ADDRESS: 4500 TULLER ROAD DUBLIN, OH 43017



IF YOU DIG IN ANY STATE
DIAL 811 FOR THE LOCAL
"ONE CALL CENTER" --
IT'S THE LAW

THE UTILITIES SHOWN HEREIN ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER/SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL THE UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO THE EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.



49357 Pontiac Trail, Ste 204
Wixom, Michigan 48393
PHONE: 248-705-9212

PROJECT

SITE #: SOH31649
SITE NAME:
31649-STATE RT 257
ATC #: 81552
AT&T FA #: 10011766
SITE ADDRESS:
4321 CLEVELAND
4500 TULLER ROAD
DUBLIN, OH 43017
COUNTY: FRANKLIN



NAME: PETER LICHOWSKI
LICENSE NO: 1416266
EXP DATE: 12/31/2016

DRAWN BY:	RC
CHECKED BY:	PL
REV. A	12.28.15
REV. 0	12.30.15
REV. 01	01.11.16

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T1

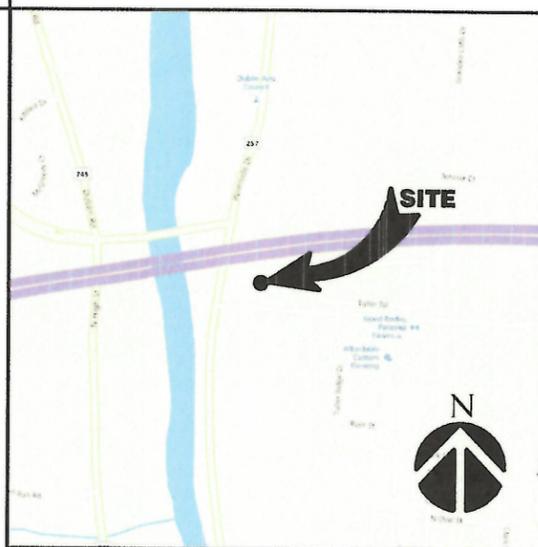
SITE INFORMATION

APPLICANT/LESSEE: AT&T MOBILITY
32255 NORTHWESTERN HIGHWAY
FARMINGTON HILLS, MI 48334
TEL: (800) 632-2822

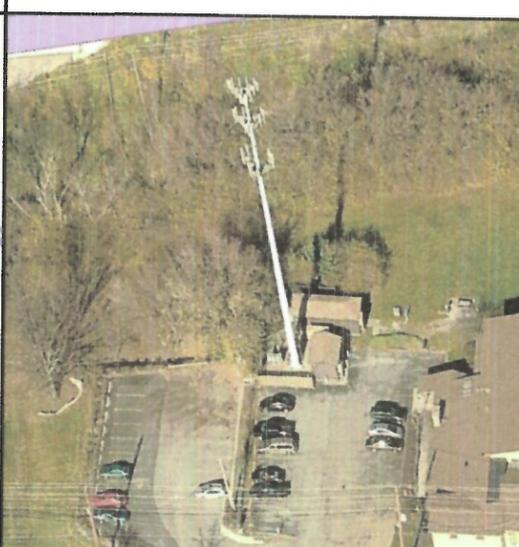
TOWER/SITE OWNER: AMERICAN TOWER CORPORATION
10 PRESIDENTIAL WAY
WOBURN, MA 01810
CONTACT: ATC NOC
TEL: (877) 518-6937

LATITUDE: 40° 6' 29.988" N
LONGITUDE: 83° 6' 38.016" W
COUNTY: FRANKLIN
JURISDICTION: TBD
TOWER TYPE: MONOPOLE

LOCATION MAP



AERIAL VIEW



CODE COMPLIANCE

DWELLING/BUILDING CODE IBC 2009 (INTERNATIONAL BUILDING CODE)
OBC 2011 (OHIO BUILDING CODE)

STRUCTURAL CODE IBC 2009 (INTERNATIONAL BUILDING CODE)
OBC 2011 (OHIO BUILDING CODE)

PLUMBING CODE IPC 2009 (INTERNATIONAL PLUMBING CODE)
OPC 2011 (OHIO PLUMBING CODE)

ELECTRICAL CODE NEC 2014 (NATIONAL ELECT. CODE OR LATEST)
NFPA 70 (NATIONAL FIRE PROTECTION ASSOC.)

FIRE/LIFE SAFETY CODE IFC 2012 (INTERNATIONAL FIRE CODE)

TELECOMMUNICATIONS INDUSTRY ASSOCIATION TIA-EIA-222-G OR LATEST EDITION

NATIONAL FIRE PROTECTION ASSOCIATION NFPA 780-LIGHTNING PROTECTION CODE

ACCESSIBILITY REQUIREMENTS:
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.
HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED
IN ACCORDANCE WITH THE 2009 IBC BUILDING CODE.

CONTRACTORS WORK SHALL COMPANY WITH ALL APPLICABLE NATIONAL,
STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY
HAVING JURISDICTION FOR THE LOCATION.

PROJECT TEAM

PROJECT CONTACT: AMERICAN TOWER CORP.
1101 PERIMETER DRIVE
SCHAUMBERG, IL 60173
CONTACT: SHANNON MURRAY
TEL: 724-713-2666
EMAIL: SHANNON.MURRAY@AMERICANTOWER.COM

ARCHITECTURE /ENGINEERING: PETER LICHOWSKI, ARCHITECT
49357 PONTIAC TRAIL, SUITE 204
WIXOM, MI 48393
CONTACT: PETER LICHOWSKI
TEL: (248) 705-9212
EMAIL: PLICHOWSKI@LABARCHITECTSLLC.COM

DRIVING DIRECTIONS

DIRECTIONS FROM AT&T OFFICE (8372 E BROAD ST, REYNOLDSBURG, OH 43068, UNITED STATES):

LEAVE OH-16 / E BROAD ST TOWARDS HALLOWELL DR	6.5 KM
TAKE SLIPROAD RIGHT TO I-270 NORTH TOWARDS CLEVELAND	14.7 KM
ROAD NAME CHANGES TO I-270 W	16.9 KM
AT JUNCTION 20, TAKE SLIP ROAD RIGHT AND FOLLOW SIGNS TO SAWMILL RD SOUTH	0.4 KM
BEAR LEFT ON TO SAWMILL RD	0.4 KM
TURN RIGHT ON TO DUBLIN CENTER RD	0.1 KM
TURN RIGHT ON TO TULLER RD	1.5 KM
TURN RIGHT TO STAY ON TULLER RD	0.1 KM

ARRIVE AT 4444 TULLER RD, DUBLIN, OH 43017

PROJECT DESCRIPTION (BASED ON RFDS V02, 10/16/2015)

UPGRADE TO AN EXISTING UNMANNED TELECOMM FACILITY. THE SCOPE INCLUDES THE FOLLOWING:

- ADD (3) NEW LTE 700/1900 ANTENNA (1 PER SECTOR)
- ADD (3) NEW LTE 1900 RRH (1 PER SECTOR)
- ADD (1) NEW DC CABLE

FILE COPY

RECEIVED

JAN 19 2016

16-007 ARTW

CITY OF DUBLIN
PLANNING

APPROVALS

AT&T REPRESENTATIVE: _____

RF ENGINEER: CHRIS CARPENTER

SITE ACQUISITION: _____

CONSTRUCTION MANAGER: _____

LANDLORD: AMERICAN TOWER CORPORATION

1. GENERAL REQUIREMENTS

A. PURPOSE AND INTENT

1. THE DRAWING AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY, HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED, OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED, OR SPECIFIED IN BOTH. SHOULD THERE BE ANY DISCREPANCIES BETWEEN REQUIREMENTS SHOWN IN BOTH, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.

2. THE INTENTION OF THE DOCUMENTS IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.

B. CONFLICTS

1. VERIFY ALL MEASUREMENTS AT THE SITE BEFORE ORDERING MATERIAL OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED DUE TO DIFFERENCES BETWEEN ACTUAL DIMENSIONS OR DIMENSIONS SHOWN ON PLANS. SUBMIT NOTICE OF ANY DISCREPANCY IN DIMENSIONS OR OTHERWISE TO CM FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.

2. CONTRACTOR SHALL COORDINATE WITH CM FOR COAX LINE SWEEPS TO VERIFY FEEDER CABLE DISTANCES.

3. NO PLEA OF IGNORANCE OF CONDITIONS THAT EXIST, OR OF DIFFICULTIES OF CONDITIONS THAT MAY BE ENCOUNTERED, OR OF ANY OTHER RELEVANT MATTER CONCERNING THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL EVERY DETAIL OF ALL THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS GOVERNING THE WORK.

C. CLEANING

KEEP THE SITE FREE FROM ACCUMULATION OF WASTE AND RUBBISH CAUSED BY EMPLOYEES. AT THE COMPLETION OF THE WORK, REMOVE ALL WASTE AND NON-CONSTRUCTION MATERIAL, INCLUDING ALL CONTRACTOR TOOLS, SCAFFOLDING, AND SURPLUS MATERIAL AND LEAVE SITE CLEAN AND READY FOR USE.

D. CODES

CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL LAWS, REGULATIONS, AND RULES PROMULGATED BY FEDERAL STATE AND LOCAL AUTHORITIES WITH JURISDICTION OVER THE PROJECT SITE. THIS RESPONSIBILITY IS IN EFFECT REGARDLESS OF WHETHER THE LAW, ORDINANCE, REGULATION OR RULE IS MENTIONED IN THESE SPECIFICATIONS.

E. LICENSING

CONTRACTOR SHALL HAVE AND MAINTAIN A VALID CONTRACTOR'S LICENSE FOR THE LOCATION IN WHICH THE WORK IS TO BE PERFORMED. FOR JURISDICTIONS THAT LICENSE INDIVIDUAL TRADES, THE TRADESMAN OR SUBCONTRACTOR PERFORMING THOSE TRADES SHALL BE LICENSED. RESEARCH AND COMPLY WITH THE LICENSING LAWS, PAY LICENSE FEES, AND SELECT AND INFORM SUBCONTRACTORS REGARDING THESE LAWS.

F. OSHA

FOLLOW ALL APPLICABLE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIONS AND STATE LAWS BASED IN THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT. THESE REGULATIONS INCLUDE, BUT ARE NOT LIMITED TO, REGULATIONS DEALING WITH TOWER CONSTRUCTION AND SAFETY, EXCAVATIONS AND TRENCHING, AND WORK IN CONFINED SPACES. ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AT ALL TIMES DURING CONSTRUCTION.

G. PHOTOS

PROVIDE PHOTOS OF THE ENTIRE LTE INSTALLATION, INCLUDING BUT NOT LIMITED TO EQUIPMENT INSTALLATION, GROUNDING, CABLING, AND ANTENNA WORK.

H. TOWER SECURITY

IF REQUIRED, TOWER MUST BE FENCED, TEMPORARILY OR PERMANENTLY WITHIN 24 HOURS OF ERECTION. DO NOT ALLOW THE GATE ACCESSING THE TOWER AREA TO REMAIN OPEN OR UNATTENDED ANY TIME FOR ANY REASON. KEEP THE GATE CLOSED AND LOCKED WHEN NOT IN USE.

I. SITE CONTROL

1. THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR CONTAINMENT OF SEDIMENT AND CONTROL OF EROSION AT THE SITE. ANY DAMAGE TO ADJACENT OR DOWNSTREAM PROPERTIES WILL BE CORRECTED BY THE CONTRACTOR AT NO EXPENSE TO AT&T.

2. THE CONTRACTOR IS TO MAINTAIN ADEQUATE DRAINAGE AT ALL TIMES. DO NOT ALLOW WATER TO STAND OR POND. ANY DAMAGE TO STRUCTURES OR WORK ON THE SITE CAUSED BY INADEQUATE MAINTENANCE OF DRAINAGE PROVISIONS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND ANY COST ASSOCIATED WITH REPAIRS FOR SUCH DAMAGE WILL BE AT THE CONTRACTOR'S EXPENSE.

3. ALL WASTE MATERIAL SHALL BE PROPERLY DISPOSED OF OFF-SITE OR AS DIRECTED BY THE CONSTRUCTION MANAGER AND IN ACCORDANCE WITH JURISDICTIONAL AUTHORITIES.

2. GENERAL NOTES:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS TO ENSURE THAT WORK PROGRESSION IS NOT INTERRUPTED.

2. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A NEAT AND ORDERLY SITE, YARD AND GROUNDS. CONTRACTOR SHALL REMOVE AND DISPOSE OFF SITE ALL RUBBISH, WASTE MATERIALS, LITTER AND ALL FOREIGN SUBSTANCES. REMOVE PETROCHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUNDS TO A SMOOTH EVEN-TEXTURED SURFACE.

3. THE PLANS SHOW SOME SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA. EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATIONS OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE SHOWN OR MAY NOT BE SHOWN AND IT SHALL BE HIS RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXCAVATION ANY WORK. 48 HOURS BEFORE YOU DIG, DRILL OR BLAST CALL LOCAL UTILITY LOCATOR COMPANY.

4. THE OWNER OR OWNERS'S REPRESENTATIVE SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE OWNER OR THE OWNER'S REPRESENTATIVE.

5. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT

6. THE CONTRACTOR SHALL RESTORE ALL DAMAGED, PUBLIC OR PRIVATE, PROPERTY TO AT LEAST AS GOOD OF CONDITION AS BEFORE DISTURBED AS DETERMINED BY THE OWNER OR OWNER'S REPRESENTATIVE

7. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.

8. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE REPLACED.

9. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH OSHA REGULATIONS FOR CONSTRUCTION.

10. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.

11. ALL UTILITY WORK INVOLVING CONNECTIONS TO EXISTING SYSTEMS SHALL BE COORDINATED WITH THE OWNER OR OWNER'S REPRESENTATIVE AND THE UTILITY OWNER BEFORE EACH AND EVERY CONNECTION TO EXISTING SYSTEMS IS MADE.

12. A 20-FOOT HORIZONTAL CLEARANCE SHALL BE MAINTAINED FROM ALL EXISTING POWER LINES.



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DUBLIN, OH 43017
COUNTY: FRANKLIN



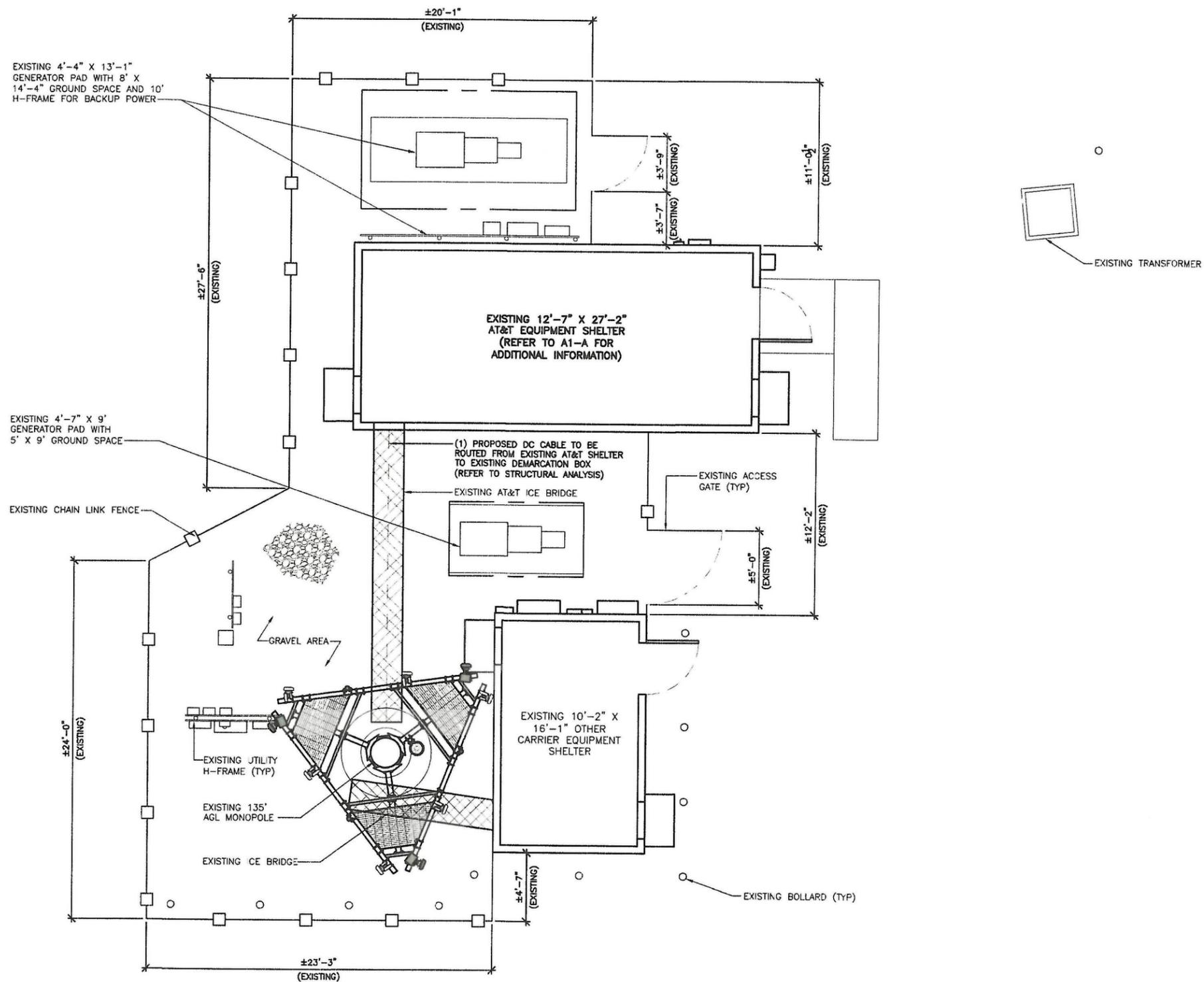
NAME: PETER LICHOWSKI
LICENSE NO: 1416286
EXP DATE: 12/31/2016

Table with 2 columns: Description, Value. Includes rows for DRAWN BY (RC), CHECKED BY (PL), REV. A (12.28.15), REV. 0 (12.30.15), REV. 01 (01.11.16)

SHEET TITLE
GENERAL
NOTES

SHEET NUMBER

NI



TYPICAL NOTES:

RESTORE AND REPLACE EXISTING SURFACES AS REQUIRED TO MATCH PRE-CONSTRUCTION CONDITIONS AFTER CONSTRUCTION IS COMPLETED. IF SURFACE IS ASPHALT OR CONCRETE THEN SAW CUT AND PATCHING IS REQUIRED.

ANY AND ALL LANDSCAPING DAMAGE INCURRED DURING CONSTRUCTION SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITION OR BETTER



COMPOUND PLAN

22"x34" SCALE: 1/4" = 1'-0"
 11"x17" SCALE: 1/8" = 1'-0"

1



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SHEET TITLE

COMPOUND PLAN

SHEET NUMBER

A1



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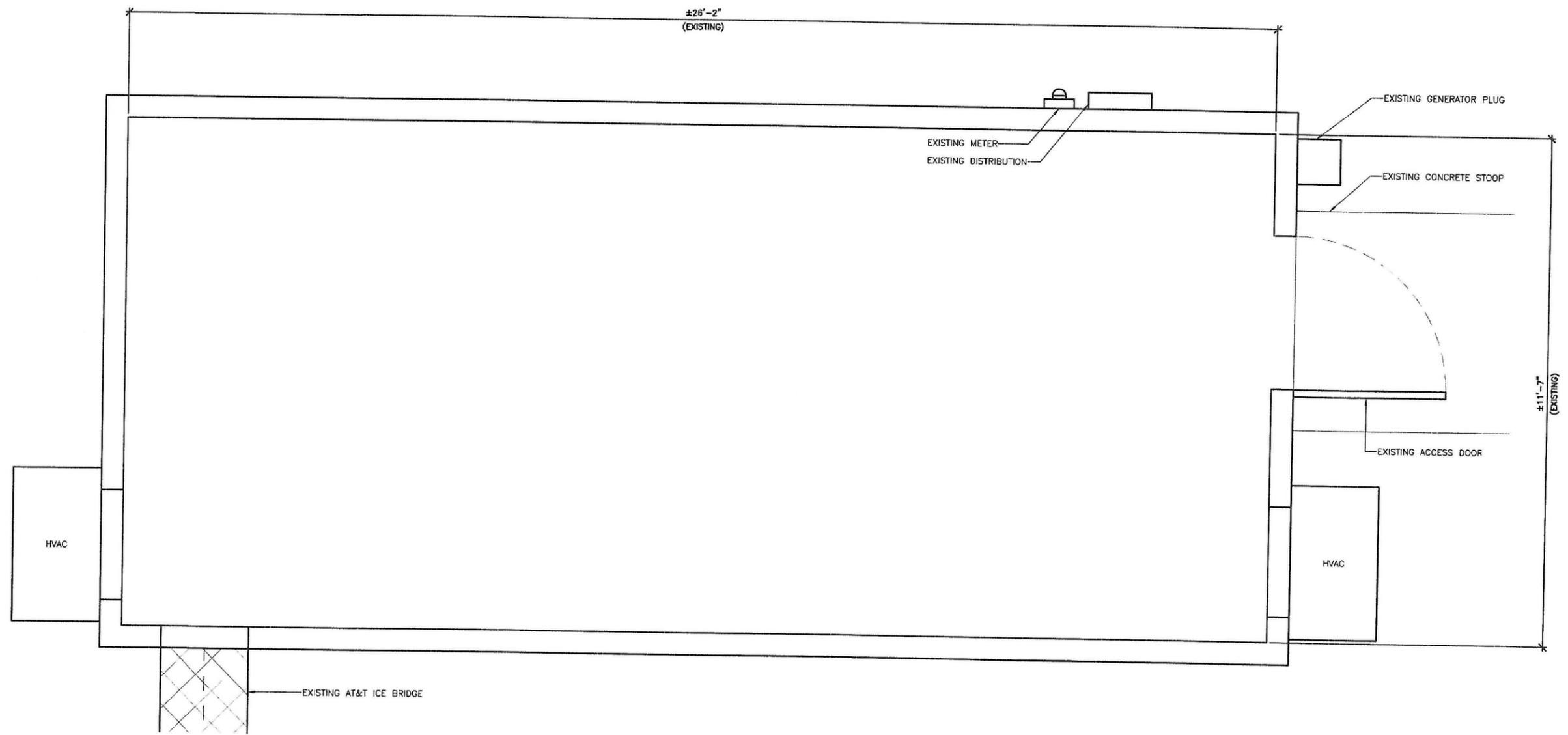


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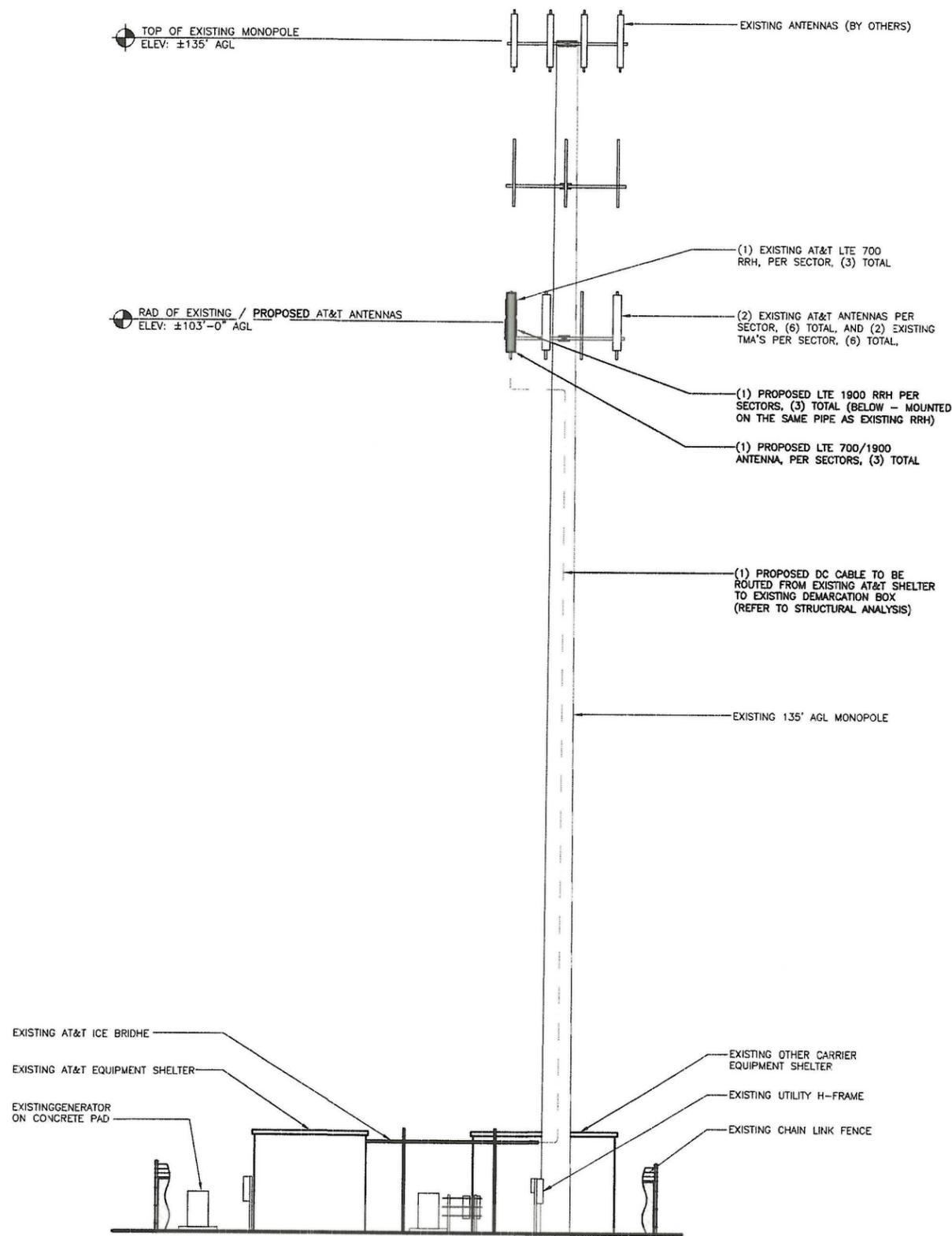
SHEET TITLE
EQUIPMENT
PLAN

SHEET NUMBER
A1-A



PROPOSED EQUIPMENT PLAN

22"x34" SCALE: 3/4" = 1'-0"
11"x17" SCALE: 3/8" = 1'-0"



STRUCTURAL NOTES:

1. STRUCTURAL CALCULATION FOR MONOPOLE AND ANTENNA MOUNTS ARE PREPARED BY OTHERS
2. CONTRACTOR MUST REFER TO MONOPOLE AND ANTENNA MOUNT ANALYSIS PRIOR TO INSTALLATION OF NEW ANTENNAS, ODU, COAX CABLES, ETC. NO ADDITIONAL PIPE MOUNTS OR MODIFICATION TO EXISTING PLATFORMS OR ANTENNA MOUNTS IS PERMITTED UNLESS LOADING IS APPROVED BY A STRUCTURAL ENGINEER.

ANTENNA NOTES:

1. CONTRACTOR SHALL VERIFY THE HEIGHT OF THE ANTENNA WITH THE PROJECT MANAGER.
2. ALL ANTENNA AZIMUTHS ARE FROM TRUE NORTH.



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SHEET TITLE
MONOPOLE ELEVATION

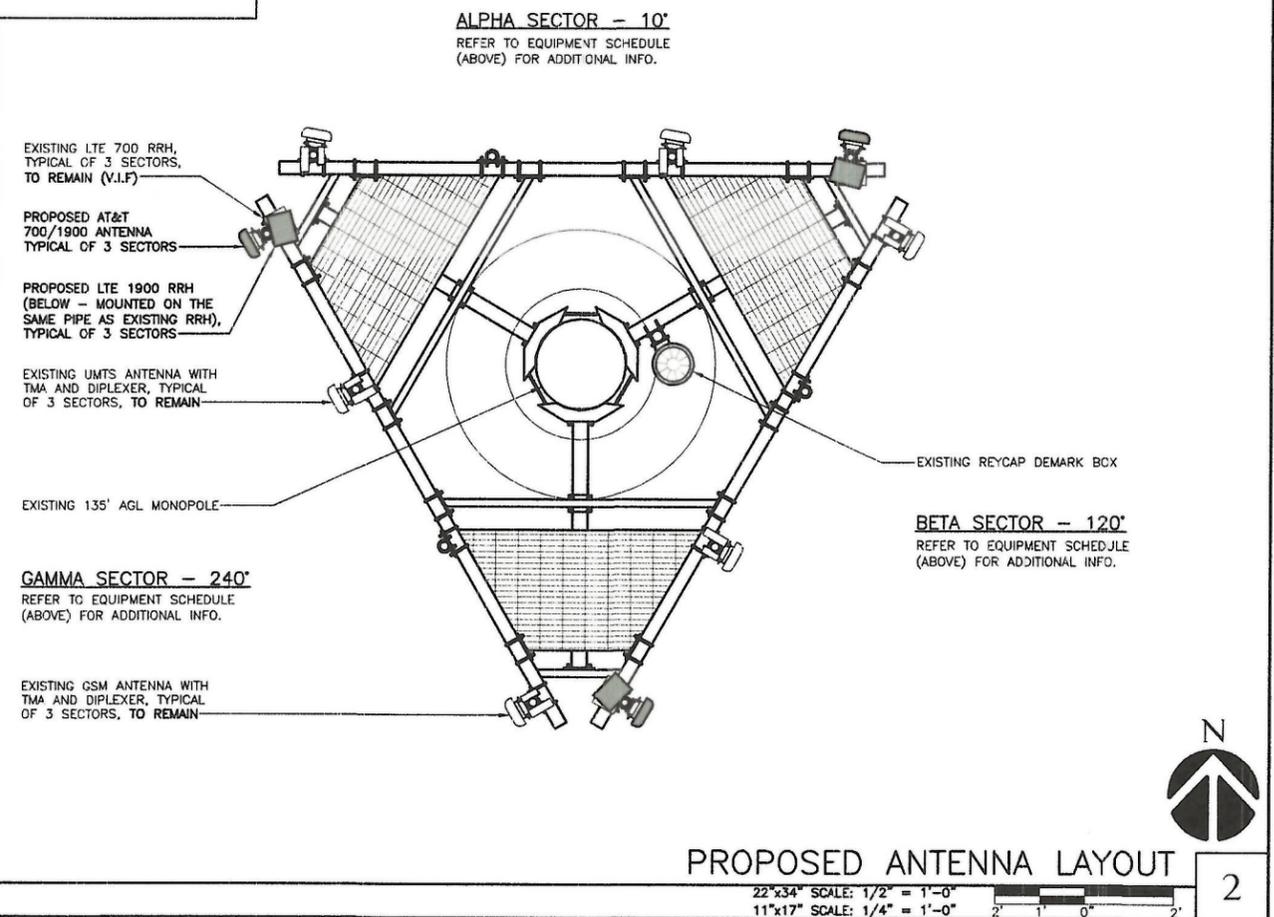
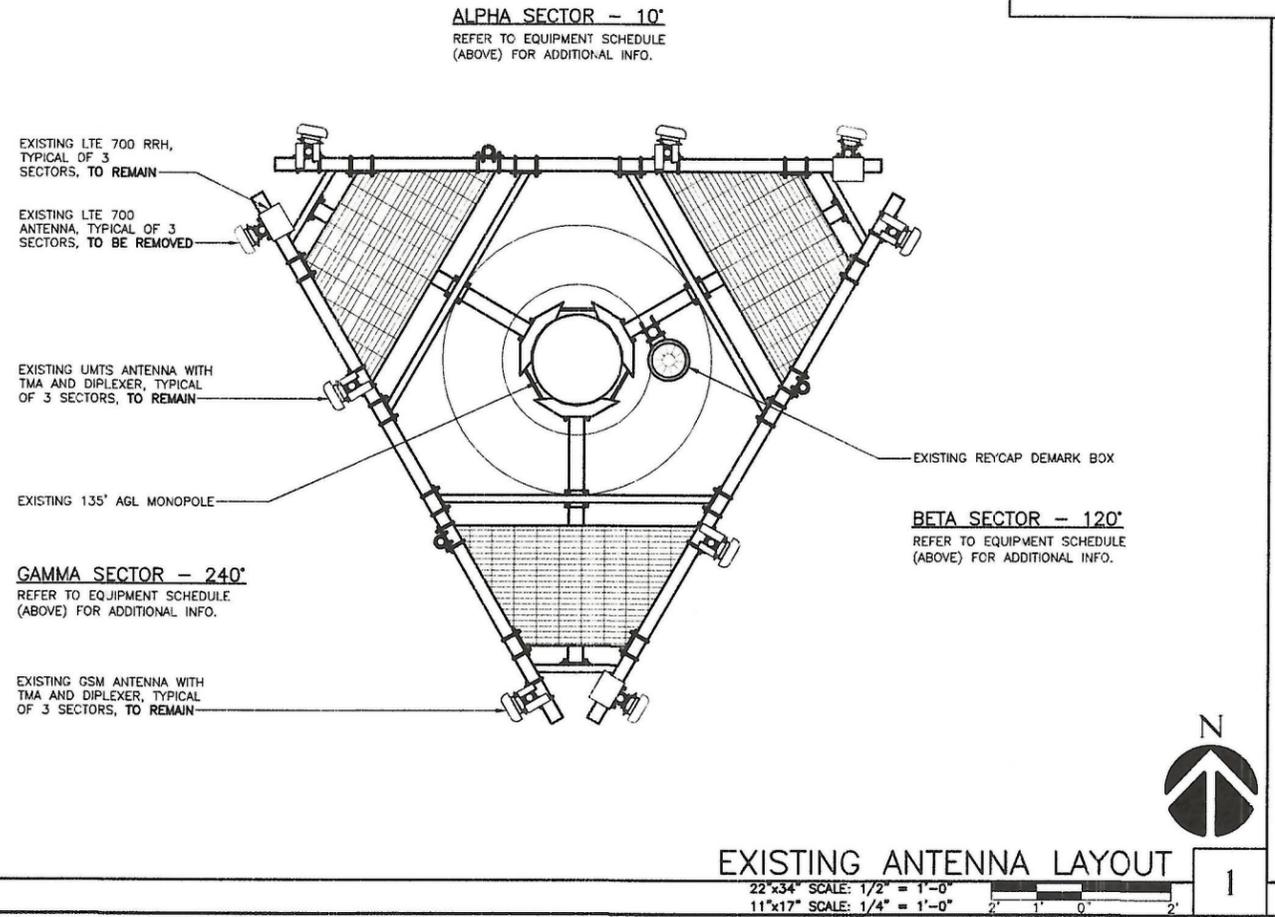
SHEET NUMBER

A2

EXISTING EQUIPMENT SCHEDULE							
EXISTING ANTENNAS (TO REMAIN)							
QTY PER SECTOR	QTY TOTAL	ANTENNA POSITION	ANTENNA MANUF.	ANTENNA TYPE	AZIMUTH	MODEL NUMBER	RAD CENTER
1	3	1	KATHREIN	GSM 850	10°, 120° & 240°	742265	103'-0"
1	3	3	KATHREIN	UMTS 850/1900		742265	103'-0"
EXISTING ADDITIONAL EQUIPMENT (TO REMAIN)							
EQUIPMENT	QTY PER SECTOR	QTY TOTAL	EQUIPMENT MANUFACTURER	MODEL NUMBER			
RRH	1	3	-	RRH2x40W-07L			
TMA	2	6	-	LGP17201			
DIPLEXER	6	18	-	LGP 13513			
PDU	-	1	-	LGP 18104			
DEMARC BOX	-	1	RAYCAP	DC6-48-60-18-8F (V.I.F.)			
DC CABLE	-	1	-	WR-VG86ST-BRD			
SNAP-IN HANGER	-	TBD	ROSENBERGER LEONI	TH495-DC-78			
DOUBLE CLAMP	-	TBD	ROSENBERGER LEONI	TH496-DC114			
ADAPTER GROMMET	-	TBD	ROSENBERGER LEONI	CX608-HA0711			

PROPOSED EQUIPMENT SCHEDULE								
PROPOSED ANTENNAS								
ANTENNA SECTOR	QTY	ANTENNA POSITION	ANTENNA MANUF.	ANTENNA TYPE	AZIMUTH	MODEL NUMBER	RAD CENTER	SIZE
ALPHA	1	4	ANDREW	LTE 700/1900	10°, 120° & 240°	SBNHH-1D65C	103'-0"	96.4"
BETA	1	4	ANDREW	LTE 700/1900		SBNHH-1D65C	103'-0"	96.4"
GAMMA	1	4	ANDREW	LTE 700/1900		SBNHH-1D65C	103'-0"	96.4"
ALPHA, BETA & GAMMA (FUTURE)	6	6	POWERWAVE	-	10°, 120° & 240°	P65-16-XLH-RR	103'-0"	72"
PROPOSED RRH'S								
ANTENNA SECTOR	QTY	RRH POSITION	RRH MANUFACTURER	RRH TYPE	MODEL NUMBER		RAD CENTER	
ALPHA	1	4	ALCATEL LUCENT	LTE 1900	RRH2x60-1900A-4R		103'-0"	
BETA	1	4	ALCATEL LUCENT	LTE 1900	RRH2x60-1900A-4R		103'-0"	
GAMMA	1	4	ALCATEL LUCENT	LTE 1900	RRH2x60-1900A-4R		103'-0"	
PROPOSED ADDITIONAL EQUIPMENT								
EQUIPMENT	QTY	EQUIPMENT MANUFACTURER		MODEL NUMBER				
DC CABLE	1	-		WR-VG86ST-BRD				
ADDITIONAL EQUIPMENT	1	-		T-25-DM				

(3) ADDITIONAL FUTURE ANTENNA IS RESERVED TO BE INSTALLED AT THIS RAD CENTER AS PER LEASE.



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NAME: PETER LICHOWSKI
 LICENSE NO: 1416268
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SHEET TITLE
ANTENNA SCHEDULE & LAYOUT

SHEET NUMBER
A3



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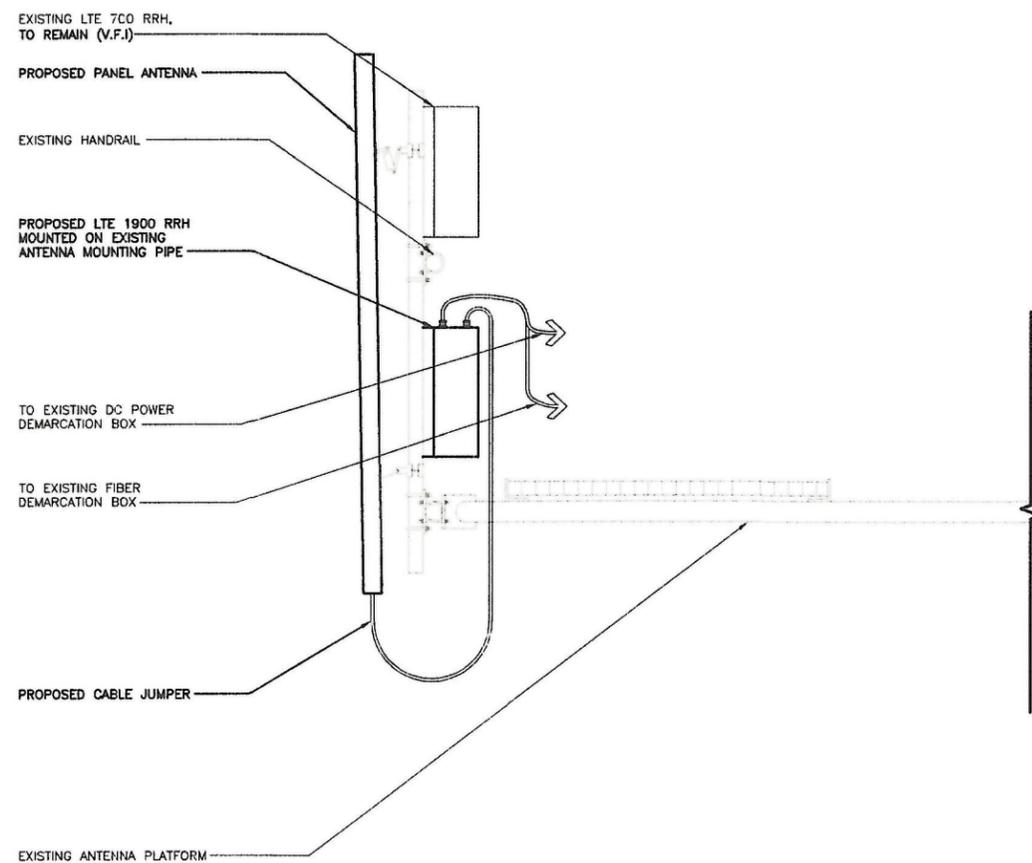
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SHEET TITLE
EQUIPMENT
MOUNTING DETAILS

SHEET NUMBER

A4



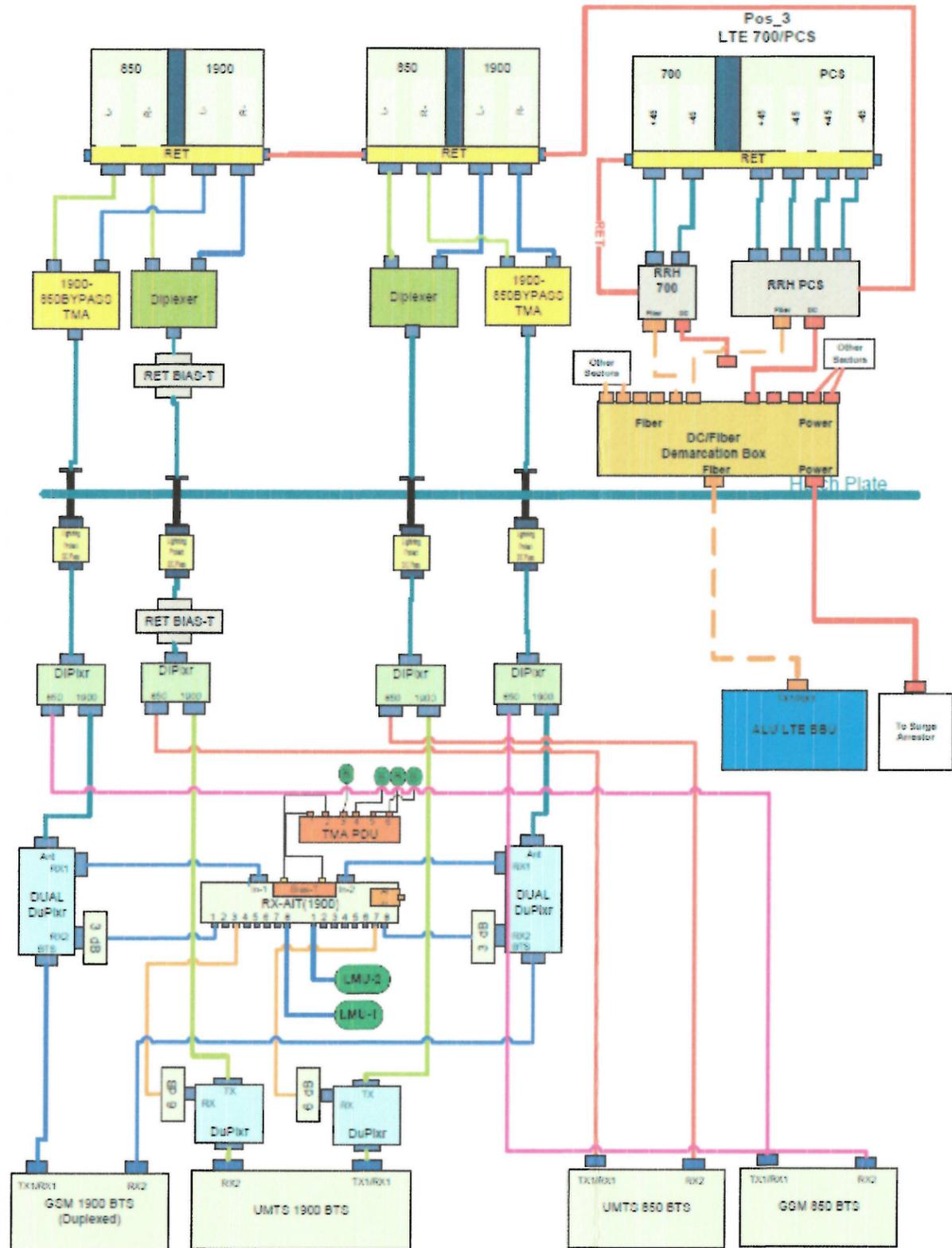
RRH MOUNTING DETAIL
NO SCALE

2

NOT USED
NO SCALE

1

Diagram - Sector A
 Diagram File Name - 3164_LTE_2C_A_vsd
 Atoll Site Name - OH3164
 Location Name - STATE RT 257
 Market - SOUTHERN OH
 Market Cluster - OHIO/WESTERN PENNSYLVANIA
 Comments:



PROPOSED CABLE ROUTING DIAGRAM (ALPHA SECTOR)

NO SCALE

1



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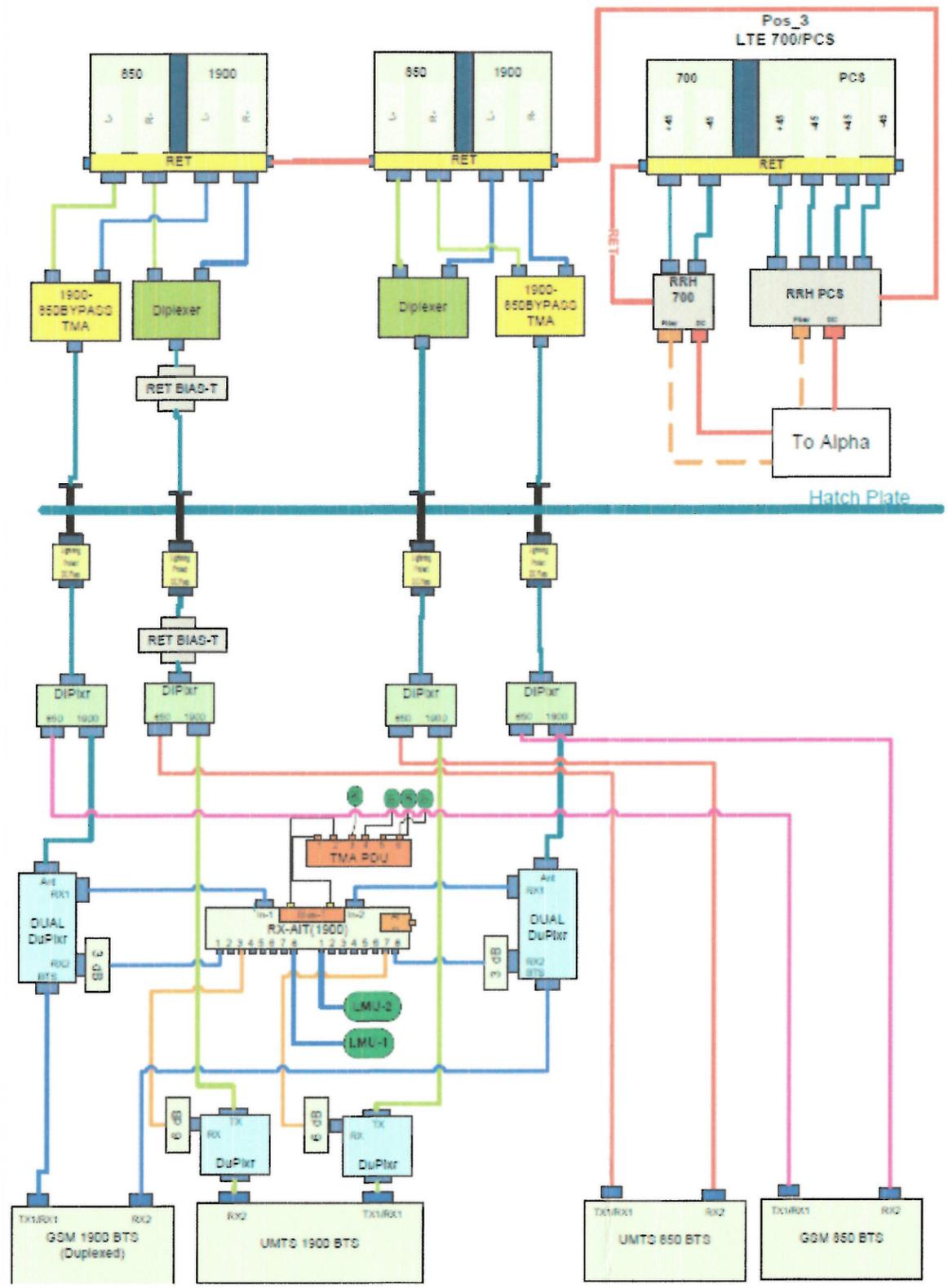


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SHEET TITLE
CABLE ROUTING DIAGRAM
 (ALPHA SECTOR)
 SHEET NUMBER
A5-A

Diagram - Sector B Diagram File Name - 3164_LTE 2G_B.vsd
 Atoll Site Name - OH3164 Location Name - STATE RT 257 Market - SOUTHERN OH Market Cluster - OHIO/WESTERN PENNSYLVANIA
 Comments:



PROPOSED CABLE ROUTING DIAGRAM (BETA SECTOR) 1
 NO SCALE



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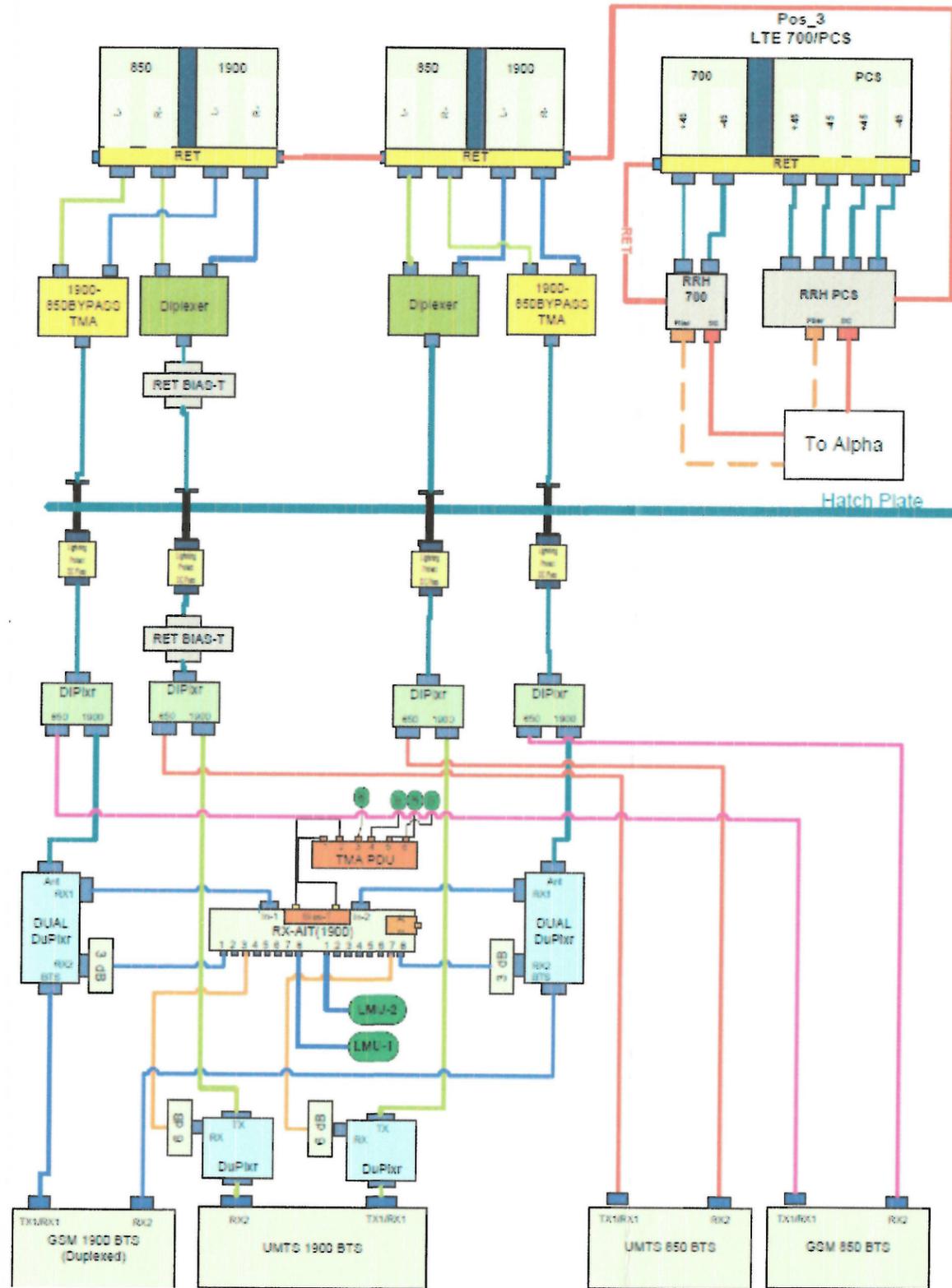


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 CABLE ROUTING
 DIAGRAM
 (BETA SECTOR)
 SHEET NUMBER
 A5-B

Diagram - Sector C
 Diagram File Name - 3164_LTE_2G_G.vsd
 Atoll Site Name - OH3164
 Location Name - STATE RT 257
 Market - SOUTHERN OH
 Market Cluster - OHIO/WESTERN PENNSYLVANIA
 Comments:



PROPOSED CABLE ROUTING DIAGRAM (GAMMA SECTOR)

NO SCALE

1



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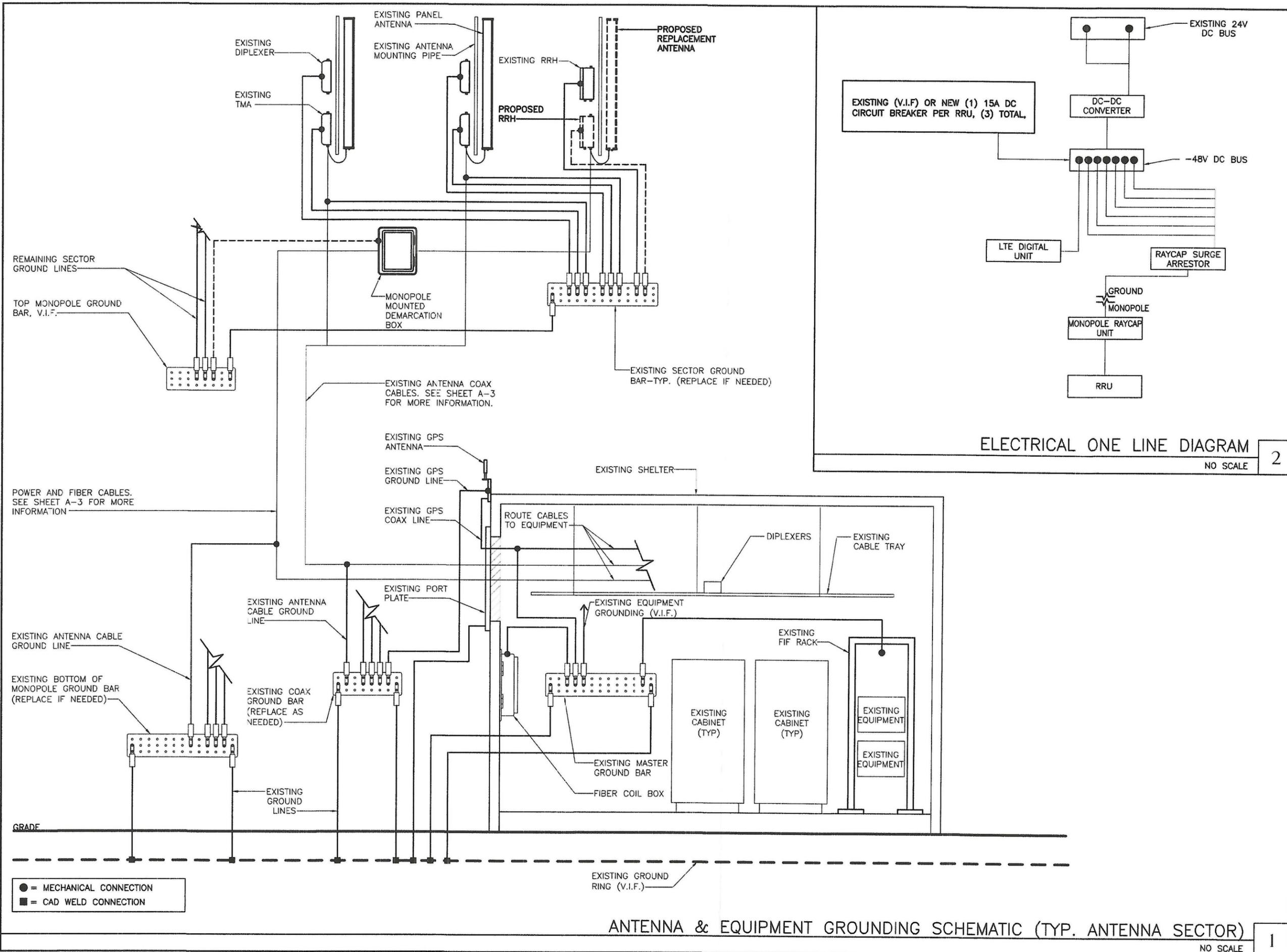


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 CABLE ROUTING
 DIAGRAM
 (GAMMA SECTOR)

SHEET NUMBER
 A5-C



ELECTRICAL ONE LINE DIAGRAM 2
NO SCALE

ANTENNA & EQUIPMENT GROUNDING SCHEMATIC (TYP. ANTENNA SECTOR) 1
NO SCALE



PROJECT
 SITE #: SOH31649
 SITE NAME:
 31649-STATE RT 257
 ATC #: 81552
 AT&T FA #: 10011766
 SITE ADDRESS:
 4321 CLEVELAND
 4500 TULLER ROAD
 DUBLIN, OH 43017
 COUNTY: FRANKLIN



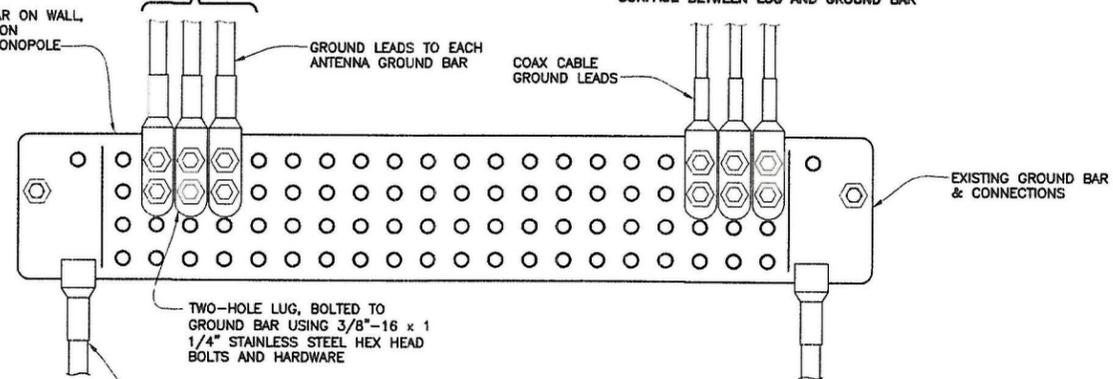
NAME: PETER LICHOWSKI
 LICENSE NO. 1416288
 EXP. DATE: 12/31/2016

DRAWN BY:	RC
CHECKED BY:	PL
REV. A	12.28.15
REV. 0	12.30.15
REV. 01	01.11.16

SHEET TITLE
 ANTENNA GROUNDING SCHEMATIC
 SHEET NUMBER
 G1

STRANDED CU WIRE WITH GREEN, 600V, THHN/THWN INSULATION. SIZE AS SPECIFIED

GROUND BAR ON WALL, FLOOR OR ON ANTENNA MONOPOLE



GROUND LEADS TO EACH ANTENNA GROUND BAR

COAX CABLE GROUND LEADS

NOTE:
*PROVIDE NO-OX GREASE AT CONTACT SURFACE BETWEEN LUG AND GROUND BAR

EXISTING GROUND BAR & CONNECTIONS

TWO-HOLE LUG, BOLTED TO GROUND BAR USING 3/8"-16 x 1/4" STAINLESS STEEL HEX HEAD BOLTS AND HARDWARE

* GROUND BARS AT BOTTOM OF TOWERS OR MONOPOLES SHALL USE EXOTHERMIC CONNECTION.

EXOTHERMIC WELD WITH #2 AWG SOLID TINNED BARE CU WIRE OR STRANDED CU WIRE WITH GREEN, 600V, THHN/THWN INSULATION TO ANTENNA STRUCTURE, BUILDING, RING GROUND OR MGB

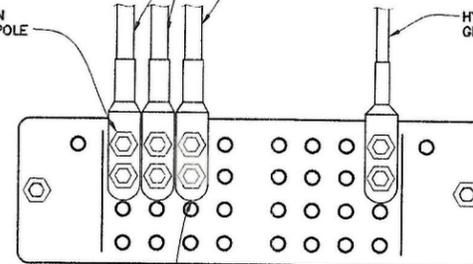
MONOPOLE MASTER GROUND BAR CONNECTIONS

NO SCALE

4

RRU GROUNDS STRANDED CU WIRE WITH GREEN, 600V, THHN/THWN INSULATION. SIZE AS SPECIFIED

GROUND BAR ON ANTENNA MONOPOLE



#2 TINNED GROUND FROM ANTENNA/RRU MOUNTING PIPE

HYBRID CABLE GROUND LEAD

EXISTING 4"x12"x1/4" THK., TINNED GROUND BAR & CONNECTIONS

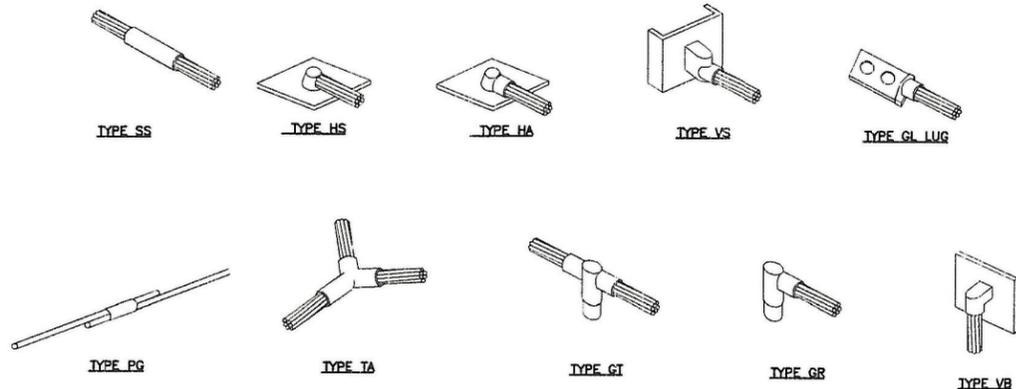
TWO-HOLE LUG, BOLTED TO GROUND BAR USING 3/8"-16 x 1 1/4" STAINLESS STEEL HEX HEAD BOLTS AND HARDWARE

NOTE:
*PROVIDE NO-OX GREASE AT CONTACT SURFACE BETWEEN LUG AND GROUND BAR
*CONTRACTOR WILL VERIFY BUSS BAR GROUNDING TO THE MONOPOLE OR RING.

ANTENNA GROUND BAR CONNECTIONS

NO SCALE

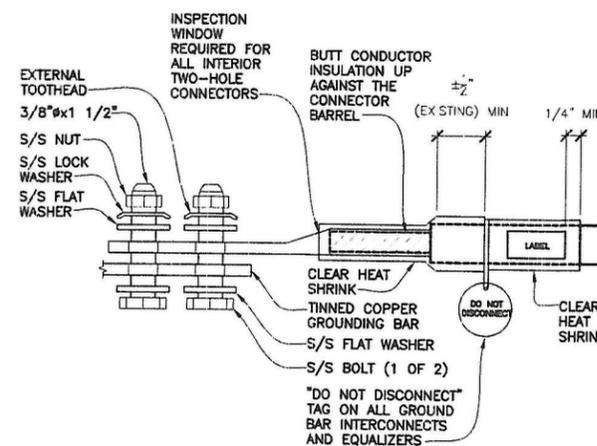
3



TYPICAL EXOTHERMIC WELD CONNECTIONS

NO SCALE

2



TWO HOLE LUG

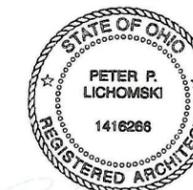
NO SCALE

1



PROJECT

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REV. A	12.28.15
REV. 0	12.30.15
REV. 01	01.11.16

SHEET TITLE
GROUNDING
DETAILS

SHEET NUMBER

G2