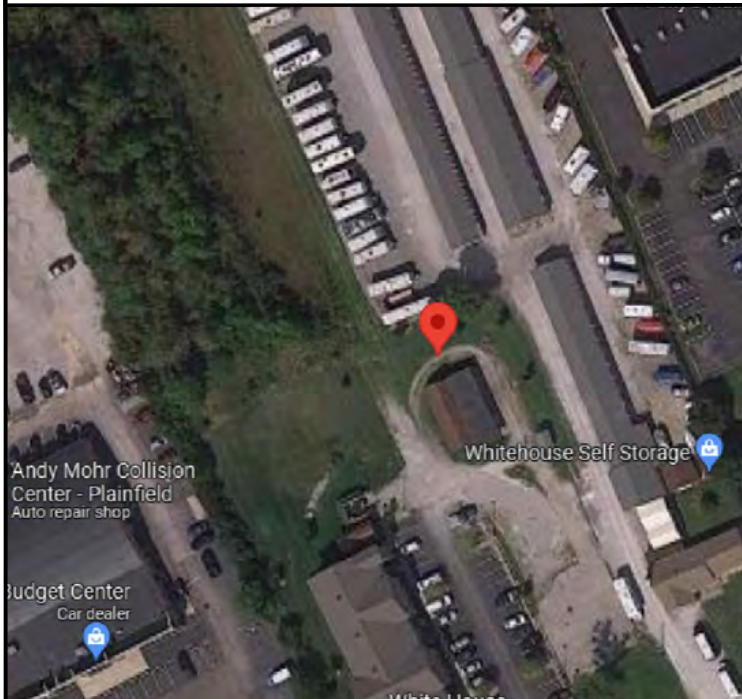


AERIAL PHOTO



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: NSB
AT&T SITE ID: IN1187
AT&T SITE NAME: IN1187
2688 EAST MAIN STREET
PLAINFIELD, IN 46168
HENDRICKS COUNTY

DRAWING INDEX

SHEET #:	SHEET TITLE	REV. #
TS-1	TITLE SHEET	A
-	SURVEY SHEET 1	-
-	SURVEY SHEET 2	-
C-1	OVERALL SITE PLAN	A
C-2	PROPOSED DETAILED COMPOUND PLAN	A
C-2.1	LANDSCAPE PLAN	A
C-2.2	COMPOUND DIMENSION PLAN	A
C-3	EQUIPMENT LAYOUT & WUC DETAILS	A
C-4	WUC PLATFORM DETAILS	A
C-5	GENERATOR DETAILS	A
C-6	EQUIPMENT SITE DETAILS	A
C-7	SIGNAGE DETAILS	A
C-8	CONCRETE WORK DETAILS	A
C-9	FENCE DETAILS	A
T-1	TOWER ELEVATION, ANTENNA & CABLE PLANS	A
T-2	TOWER EQUIPMENT DETAILS & NOTES	A
T-3	TOWER EQUIPMENT DETAILS	A
T-4	ALPHA PLUMBING DIAGRAM	A
T-5	BETA PLUMBING DIAGRAM	A
T-6	GAMMA PLUMBING DIAGRAM	A
P-1	PLATFORM DETAILS	A
P-2	PLATFORM DETAILS	A
P-3	PLATFORM DETAILS	A
P-4	PLATFORM DETAILS	A
P-5	PLATFORM DETAILS	A
E-1	UTILITY PLAN	A
E-2	ELECTRICAL AC ONE-LINE DIAGRAM, DETAILS & NOTES	A
E-3	ELECTRICAL DETAILS	A
E-4	ELECTRICAL NOTES	A
G-1	GROUNDING SITE PLAN & NOTES	A
G-2	ANTENNA GROUNDING PLAN	A
G-3	GROUNDING DETAILS	A
N-1	GENERAL CONSTRUCTION NOTES	A
N-2	GENERAL CONSTRUCTION NOTES	A
N-3	LEGENDS AND ABBREVIATIONS	A



FORTUNE WIRELESS INC.
 5511 WEST 79TH STREET
 INDIANAPOLIS, IN 46268
 (317) 532-1374

IN1187
 AT&T FA#: 15861975
 2688 EAST MAIN ST.
 PLAINFIELD,
 IN 46168
 HENDRICKS COUNTY

DRAWN BY: **ren**
 CHECKED BY: **AJB**

PROJECT INFORMATION

SITE ADDRESS: 2688 EAST MAIN STREET
 PLAINFIELD, IN 46168
 HENDRICKS COUNTY

SITE NAME: IN1187
 SITE NUMBER: IN1187
 FA NUMBER: 15861975
 USID NUMBER: 325894

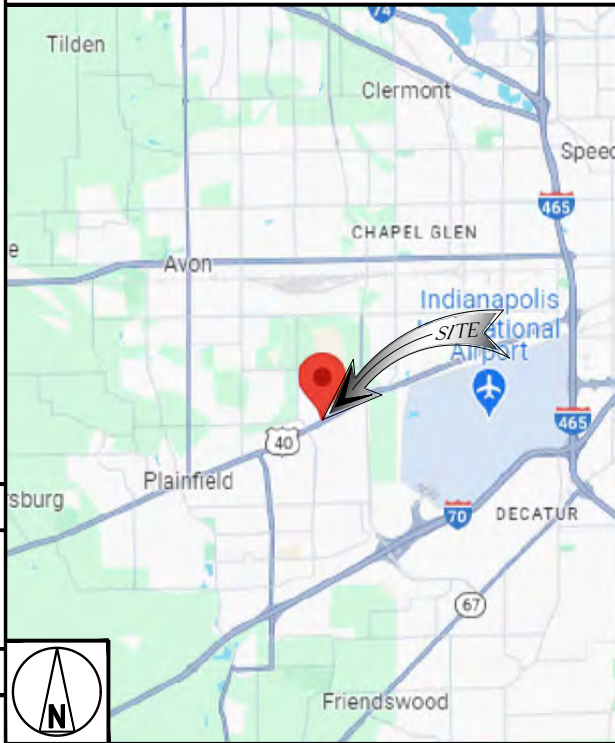
LATITUDE (NAD 83): 39° 43' 15.12" N (39.72086717)
 LONGITUDE (NAD 83): 86° 21' 09.61" W (-86.35266856)

GROUND OWNER: WHITEHOUSE MOTEL
 2688 E MAIN ST
 PLAINFIELD, IN 46168

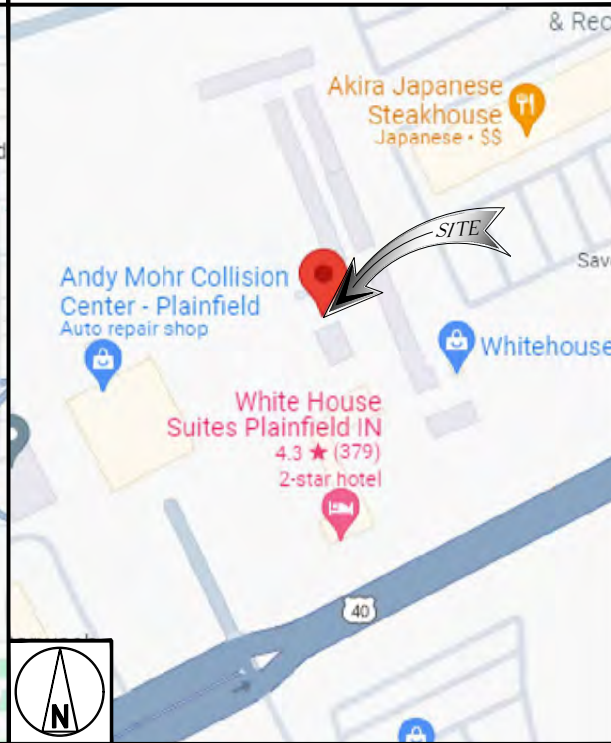
MOUNT ANALYSIS: REFERENCE REPORT COMPLETED BY FORESITE GROUP
 STRUCTURAL ANALYSIS: REFERENCE REPORT COMPLETED BY OTHERS
 TOWER MODIFICATIONS: NO TOWER MODIFICATIONS NEEDED
 LOCAL POWER COMPANY: DUKE ENERGY
 LOCAL FIBER COMPANY: TBD
 SITE ACQUISITION MANAGER: ERICSSON
 CONSTRUCTION MANAGER: ERICSSON
 LEAD ENGINEER: TBD

LOCATION MAPS

VICINITY MAP



LOCAL MAP



NO SCALE

DRIVING DIRECTIONS



PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO PROPOSE AN ANTENNA INSTALLATION ON AN PROPOSED WIRELESS SITE.

GROUND SCOPE OF WORK:

- INSTALL (1) AT&T 3-BAY WUC CABINET ON PLATFORM
- INSTALL 30KW DIESEL GENERATOR WITH 150 GALLON TANK ON PLATFORM
- INSTALL POWER SERVICE TO WUC, COORDINATE WITH UTILITY PROVIDER
- INSTALL FIBER SERVICE TO WUC, COORDINATE WITH UTILITY PROVIDER

TOWER SCOPE OF WORK:

- INSTALL (4) SABRE C10114002DP 2' STAND-OFF
- INSTALL (6) KMW EPBQ-654L8H8-HG ANTENNAS
- INSTALL (3) ERICSSON AIR6472 B77G ANTENNAS
- INSTALL (3) ERICSSON 4478 B14 RADIOS
- INSTALL (3) ERICSSON 4490 B5/B12 RADIOS
- INSTALL (3) ERICSSON 4890 B25/B66 RADIOS
- INSTALL (2) RAYCAP DC9-48-60-24-8C-EV DEMARC BOXES
- INSTALL (6) DC TRUNKS
- INSTALL (2) FIBER TRUNKS

11"x17" PLOT WILL BE HALF SCALE
 UNLESS OTHERWISE NOTED

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.

THESE SITE PLANS ADHERE TO ALL OF THE REQUIREMENTS CALLED OUT IN THE JURISDICTION PLANNING AND ZONING FOR ANTENNAS AND SUPPORT STRUCTURES WHERE SITE IS LOCATED.



UNDERGROUND SERVICE ALERT
INDIANA UTILITY PROTECTION SERVICE
1.800.382.5544
811

3 WORKING DAYS UTILITY NOTIFICATION PRIOR TO CONSTRUCTION

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
TS-1

DO NOT SCALE DRAWINGS

RADIO EQUIPMENT INFORMATION

OCCUPANCY LOAD: 0
 BUILDING HEIGHT: 10'-8"
 CONSTRUCTION TYPE: 3B
 OCCUPANCY GROUP: U

TOWER INFORMATION

OCCUPANCY LOAD: 0
 STRUCTURE HEIGHT: 120'
 CONSTRUCTION TYPE: 3B
 OCCUPANCY GROUP: U

A/E CONTACT INFORMATION

ENGINEER: FORTUNE WIRELESS INC
 5511 WEST 79TH STREET
 INDIANAPOLIS, IN 46268

CONTACT: DICK NOERR
 (317) 532-1374



BENCHMARK SERVICES, INC.
Consulting Engineers
Land Surveyors
318 North Main Street
Huntingburg, IN 47542
(812) 683-3049
benchmark@bmv.twcbs.com

FA CODE: 15861975

SITE NAME: IN1187

PARCEL ID NUMBER:
32-09-19-400-026.000-021
32-09-19-400-026.000-027
32-09-19-400-022.000-027

LANDOWNER:
WHITEHOUSE MOTEL INC
2688 E MAIN ST
Plainfield, IN 46168

SITE ADDRESS:
2688 E Main Street
PLAINFIELD, IN 48168

LEASE AREA:
2100 SQ. FT.

DEED BOOK-PAGE
INSTR#201427146

COUNTY:
HENDRICKS COUNTY

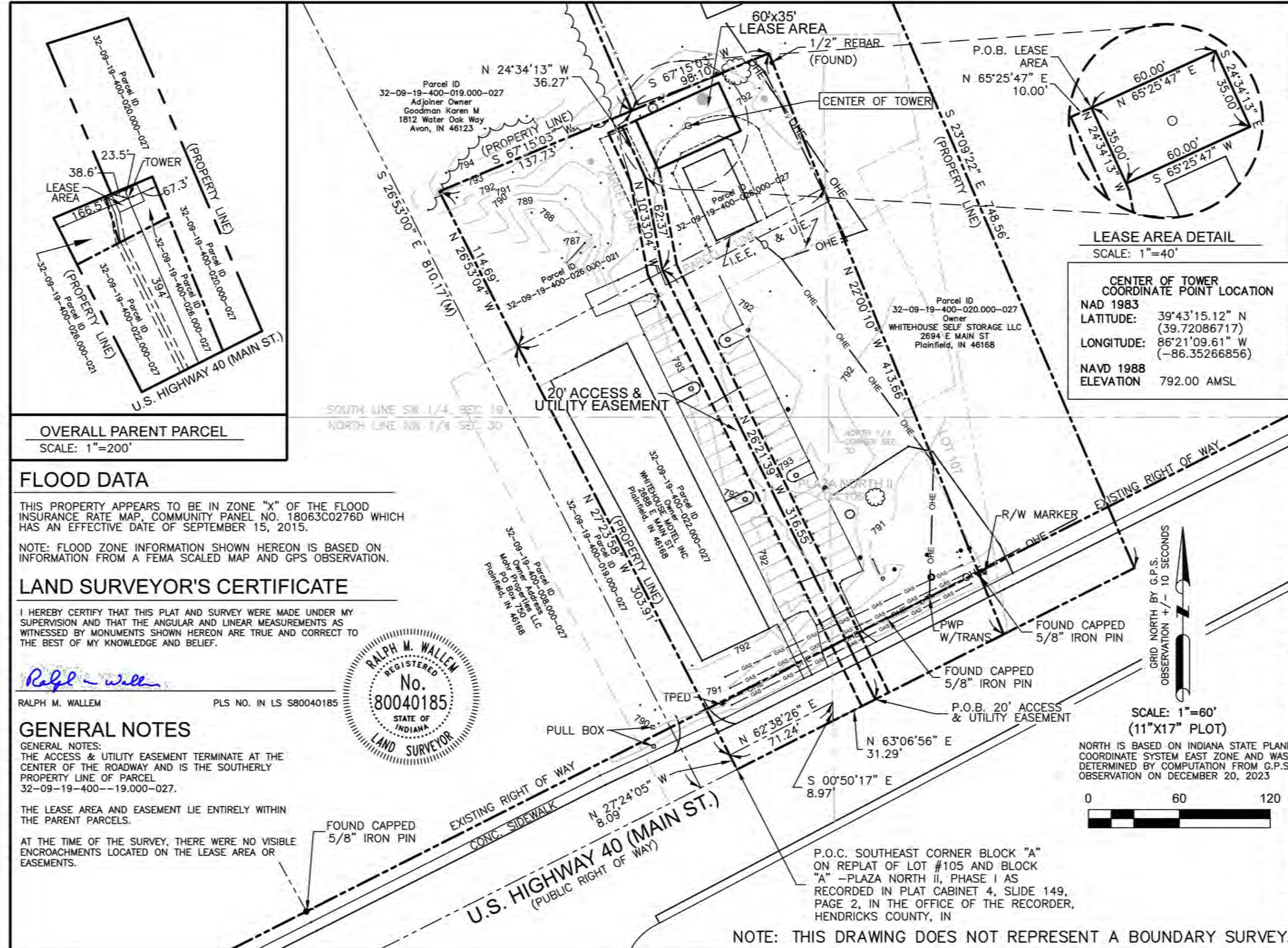
LATITUDE: 39°43'15.12" N
LONGITUDE: 86°21'09.61" W

DWG BY: GVV
CHKD BY: RMW
DATE: 1.4.24

NO.	REVISION/ISSUE	DATE:
1.	REVISE LEASE	1.11.24
2.	ADD TITLE	2.9.24
3.	ADDRESS EXCEPTIONS	2.13.24
4.	REQUESTED ITEMS	3.5.24
5.	SITE ADDRESS	5.6.24
6.	INSTRUMENT#	4.10.25

TITLE:
SURVEY PLAN

SHEET:
1 OF 2



LEASE AREA DETAIL
SCALE: 1"=40'

CENTER OF TOWER COORDINATE POINT LOCATION

NAD 1983
LATITUDE: 39°43'15.12" N
(39.72086717)
LONGITUDE: 86°21'09.61" W
(-86.35266856)
NAVD 1988
ELEVATION 792.00 AMSL

GRID NORTH BY G.P.S.
OBSERVATION +/- 10 SECONDS

SCALE: 1"=60'
(11"X17" PLOT)

NORTH IS BASED ON INDIANA STATE PLANE COORDINATE SYSTEM EAST ZONE AND WAS DETERMINED BY COMPUTATION FROM G.P.S. OBSERVATION ON DECEMBER 20, 2023

OVERALL PARENT PARCEL
SCALE: 1"=200'

FLOOD DATA

THIS PROPERTY APPEARS TO BE IN ZONE "X" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 18063C0276D WHICH HAS AN EFFECTIVE DATE OF SEPTEMBER 15, 2015.

NOTE: FLOOD ZONE INFORMATION SHOWN HEREON IS BASED ON INFORMATION FROM A FEMA SCALED MAP AND GPS OBSERVATION.

LAND SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT AND SURVEY WERE MADE UNDER MY SUPERVISION AND THAT THE ANGULAR AND LINEAR MEASUREMENTS AS WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Ralph M. Wallem
RALPH M. WALLEM
PLS NO. IN LS S80040185



GENERAL NOTES

GENERAL NOTES:
THE ACCESS & UTILITY EASEMENT TERMINATE AT THE CENTER OF THE ROADWAY AND IS THE SOUTHERLY PROPERTY LINE OF PARCEL 32-09-19-400--19.000-027.

THE LEASE AREA AND EASEMENT LIE ENTIRELY WITHIN THE PARENT PARCELS.

AT THE TIME OF THE SURVEY, THERE WERE NO VISIBLE ENCROACHMENTS LOCATED ON THE LEASE AREA OR EASEMENTS.

P.O.C. SOUTHEAST CORNER BLOCK "A" ON REPLAT OF LOT #105 AND BLOCK "A" -PLAZA NORTH II, PHASE I AS RECORDED IN PLAT CABINET 4, SLIDE 149, PAGE 2, IN THE OFFICE OF THE RECORDER, HENDRICKS COUNTY, IN

NOTE: THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY.

LIMITED TITLE REPORT

Report No: 01-23017768-01S
 This report covers the public records from: 01/1/1983 through 05/18/2023
 Prepared For:
 FORTUNE WIRELESS
 Client File No: IN1187
 Property Info: E MAIN ST, PLAINFIELD, IN 46168

Fee Simple Interest in the land described in this Report is owned, at the effective date by: WHITEHOUSE MOTEL, INC.

SURVEYOR CERTIFICATION

SCHEDULE B-SECTION II
 I CERTIFY THAT THIS PLAT AND SURVEY WERE MADE UNDER MY SUPERVISION, AND THAT THE ANGULAR AND LINEAR MEASUREMENTS, AS WITNESSED BY MONUMENTS SHOWN HEREON, ARE TRUE AND CORRECT TO THE BEST OF MY ABILITY AND BELIEF.
 THIS SURVEY AND PLAT MEETS OR EXCEEDS THE MINIMUM STANDARDS OF THE GOVERNING AUTHORITIES.

SURVEYOR STATEMENT-MY COMMENTS ARE BASED SOLELY ON THE TITLE DOCUMENT THAT HAVE BEEN SUPPLIED TO ME BY THE TITLE COMPANY. SINCE THE TITLE DOCUMENTS ARE FURNISHED FOR THE PARENT TRACT, OUR TOPOGRAPHIC SURVEY IS OF A PORTION OF THAT TRACT. MY COMMENTS ARE RESTRICTED TO EXCLUSIONS THAT I CAN DETERMINE AFFECT ONLY OUR PORTION OF THE PARENT TRACT. NO BOUNDARY SURVEY WAS PERFORMED ON THE PARENT TRACT, THUS IT IS NOT POSSIBLE TO DETERMINE WITH CERTAINTY EXCLUSIONS REFERENCING THE PARENT TRACT.

THERE ARE NO SCHEDULE B ITEMS.
 SCHEDULE "B" SECTION II EXCEPTIONS

OTHER ITEMS OF RECORD

3. PARKING EASEMENT AGREEMENT, BY AND BETWEEN DAVID A. JOHNSON AND BETTY JOHNSON, EQUITABLE OWNERS UNDER A LAND CONTRACT, AND EDWARD D. GOODMAN, AND RECORDED 05/23/1986 AS BOOK 108, PAGE 40 OF HENDRICKS COUNTY RECORDS. (APPEARS TO AFFECT THE ACCESS & UTILITY EASEMENT. DOES NOT AFFECT THE LEASE AREA, DOES AFFECT THE PARENT PARCEL)
4. NON-EXCLUSIVE INGRESS-EGRESS EASEMENT, BY AND BETWEEN EDWARD D. GOODMAN, AND DAVID A. JOHNSON AND BETTY JOHNSON, AND RECORDED 05/23/1986 AS BOOK 108, PAGE 42 OF HENDRICKS COUNTY RECORDS. (APPEARS TO AFFECT THE ACCESS & UTILITY EASEMENT. DOES NOT AFFECT THE LEASE AREA, AFFECTS THE PARENT PARCEL)
5. MAINTENANCE AGREEMENT, BY AND BETWEEN KAREN M. GOODMAN, AND SHAILESH V. PATEL AND CHETNA S. PATEL, AND RECORDED 01/22/2013 AS INSTRUMENT NO. 201302356 OF HENDRICKS COUNTY RECORDS. (AFFECTS THE LEASE AREA, AFFECTS THE ACCESS & UTILITY EASEMENT, AFFECTS THE PARENT PARCEL, MAINTENANCE AGREEMENT TAKES IN ALL OF PARCELS 32-09-19-400-026.000-021, 32-09-19-400-026.000-027, 32-09-19-400-022.000-027)
6. ELECTRIC LINE EASEMENT IN FAVOR OF PUBLIC SERVICE COMPANY OF INDIANA, INC., AN INDIANA CORPORATION, RECORDED 07/02/1987, AS BOOK 295, PAGE 593 OF HENDRICKS COUNTY RECORDS. (DOES NOT AFFECT THE ACCESS & UTILITY EASEMENT, DOES NOT AFFECT THE LEASE AREA, AFFECTS THE PARENT PARCEL ALONG THE WESTERLY BOUNDARY)
7. WATERLINE EASEMENT AGREEMENT IN FAVOR OF TOWN OF PLAINFIELD, RECORDED 05/17/1996, AS BOOK 349, PAGE 783 OF HENDRICKS COUNTY RECORDS. (AFFECTS THE ACCESS & UTILITY EASEMENT AS THE EASEMENT LIES ALONG THE NORTHERLY RIGHT OF WAY OF US HIGHWAY 40. DOES NOT AFFECT THE LEASE AREA, DOES AFFECT THE PARCENT PARCEL)
8. WATERLINE EASEMENT AGREEMENT IN FAVOR OF TOWN OF PLAINFIELD, RECORDED 05/17/1996, AS BOOK 349, PAGE 788 OF HENDRICKS COUNTY RECORDS. (AFFECTS THE ACCESS & UTILITY EASEMENT AS THE EASEMENT LIES ALONG THE NORTHERLY RIGHT OF WAY OF US HIGHWAY 40, DOES NOT AFFECT THE LEASE AREA, DOES AFFECT THE PARCENT PARCEL)



LAND SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT AND SURVEY WERE MADE UNDER MY SUPERVISION AND THAT THE ANGULAR AND LINEAR MEASUREMENTS AS WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Ralph M. Wallem

RALPH M. WALLEM

PLS NO. IN LS S80040185

DESCRIPTION OF LEASE AREA

A PART OF THE SOUTHWEST FRACTIONAL AND SOUTHEAST QUARTER OF SECTION 19, AND A PART OF THE NORTHWEST FRACTIONAL AND NORTHEAST QUARTER OF SECTION 30, ALL IN TOWNSHIP 15 NORTH, RANGE 2 EAST, HENDRICKS COUNTY, INDIANA AND FUTHER DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF BLOCK "A" ON THE REPLAT OF LOT No. 105 AND BLOCK "A" -PLAZA NORTH II, PHASE I AS RECORDED IN PLAT CABINET 4, SLIDE 149, PAGE 2, IN THE OFFICE OF THE RECORDER, HENDRICKS COUNTY, INDIANA AND MORE PARTICULARLY DESCRIBED: NORTH 27 DEGREES 24 MINUTES 05 SECONDS WEST 8.09 FEET; THENCE NORTH 62 DEGREES 38 MINUTES 26 SECONDS EAST 71.24 FEET; THENCE SOUTH 00 DEGREES 50 MINUTES 17 SECONDS EAST 8.97 FEET; THENCE NORTH 63 DEGREES 06 MINUTES 56 SECONDS EAST 31.29 FEET TO A POINT; THENCE NORTH 26 DEGREES 21 MINUTES 39 SECONDS WEST 316.55 FEET; THENCE NORTH 10 DEGREES 33 MINUTES 04 SECONDS WEST 62.37 FEET; THENCE NORTH 24 DEGREES 34 MINUTES 13 SECONDS WEST 36.27 FEET; THENCE NORTH 65 DEGREES 25 MINUTES 47 SECONDS EAST 10.00 FEET TO THE NORTHWEST LEASE CORNER AND BEING THE TRUE PLACE OF BEGINNING; THENCE CONTINUING NORTH 65 DEGREES 25 MINUTES 47 SECONDS EAST 60.00 FEET; THENCE SOUTH 24 DEGREES 34 MINUTES 13 SECONDS EAST 35.00 FEET; THENCE SOUTH 65 DEGREES 25 MINUTES 47 SECONDS WEST 60.00 FEET; THENCE NORTH 24 DEGREES 34 MINUTES 13 SECONDS WEST 35.00 FEET TO THE TRUE PLACE OF BEGINNING AND CONTAINING 2100 SQUARE FEET, (0.05 ACRES), MORE OR LESS.

DESCRIPTION OF NON-EXCLUSIVE 20' ACCESS & UTILITY EASEMENT

A PART OF THE SOUTHWEST FRACTIONAL AND SOUTHEAST QUARTER OF SECTION 19, AND A PART OF THE NORTHWEST FRACTIONAL AND NORTHEAST QUARTER OF SECTION 30, ALL IN TOWNSHIP 15 NORTH, RANGE 2 EAST, HENDRICKS COUNTY, INDIANA AND FUTHER DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF BLOCK "A" ON THE REPLAT OF LOT No. 105 AND BLOCK "A" -PLAZA NORTH II, PHASE I AS RECORDED IN PLAT CABINET 4, SLIDE 149, PAGE 2, IN THE OFFICE OF THE RECORDER, HENDRICKS COUNTY, INDIANA AND MORE PARTICULARLY DESCRIBED: NORTH 27 DEGREES 24 MINUTES 05 SECONDS WEST 8.09 FEET; THENCE NORTH 62 DEGREES 38 MINUTES 26 SECONDS EAST 71.24 FEET; THENCE SOUTH 00 DEGREES 50 MINUTES 17 SECONDS EAST 8.97 FEET; THENCE NORTH 63 DEGREES 06 MINUTES 56 SECONDS EAST 31.29 FEET TO THE CENTER OF THE 20' ACCESS AND UTILITY EASEMENT, SAID POINT BEING THE TRUE PLACE OF BEGINNING; THENCE ON AND ALONG A LINE 10 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED BEARING NORTH 26 DEGREES 21 MINUTES 39 SECONDS WEST 316.55 FEET; THENCE NORTH 10 DEGREES 33 MINUTES 04 SECONDS WEST 62.37 FEET; THENCE NORTH 24 DEGREES 34 MINUTES 13 SECONDS WEST 36.27 FEET TO THE TERMINUS, CONTAINING 8254 SQUARE FEET, (0.19 ACRES), MORE OR LESS.

THE ABOVE DESCRIBED PARCELS ARE SUBJECT TO ALL LEGAL RIGHTS OF WAYS AND EASEMENTS OF RECORD.

DESCRIPTION OF LEGAL DESCRIPTION-EXHIBIT "A" TITLE REPORT

SITUATED IN THE COUNTY OF HENDRICKS AND STATE OF INDIANA AND DESCRIBED AS FOLLOWS:
 TOWER PARCEL:

A PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 15 NORTH, RANGE 2 EAST, HENDRICKS COUNTY, INDIANA MORE PARTICULARLY DESCRIBED AS FOLLOWS, TO WIT:

COMMENCING AT A POINT IN THE CENTERLINE OF THE WEST BOUND LAND OF U.S. #40, WHICH IS 72.10 FEET NORTH AND 631.4 FEET EAST OF THE SOUTHWEST CORNER OF SAID QUARTER QUARTER SECTION; THENCE NORTH 63 DEGREES 06 MINUTES 59 SECONDS EAST ON AND ALONG SAID CENTER LINE 224.01 FEET; THENCE NORTH 22 DEGREES 00 MINUTES 10 SECONDS WEST 307.66 FEET TO THE BEGINNING POINT OF THIS DESCRIPTION; THENCE CONTINUE NORTH 22 DEGREES 00 MINUTES 10 SECONDS WEST 99.29 FEET; THENCE NORTH 72 DEGREES 48 MINUTES 28 SECONDS WEST 10.45 FEET; THENCE SOUTH 67 DEGREES 15 MINUTES 03 SECONDS WEST 112.50 FEET; THENCE SOUTH 22 DEGREES 00 MINUTES 10 SECONDS EAST 114.69 FEET; THENCE NORTH 63 DEGREES 07 MINUTES 57 SECONDS EAST 121.03 FEET TO THE BEGINNING POINT. CONTAINING 0.30 ACRES, MORE OR LESS.

TAX ID NO: 32-09-19-400-026.000-027 (TOWER PARCEL)

ACCESS PARCEL:

A PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 15 NORTH, RANGE 2 EAST, HENDRICKS COUNTY, INDIANA, MORE PARTICULARLY DESCRIBED AS FOLLOWS, TO-WIT:

COMMENCING AT A POINT IN THE CENTER LINE OF THE WEST BOUND LANE OF U.S. 40, WHICH IS 72.1 FEET NORTH AND 631.4 FEET EAST OF THE SOUTHWEST CORNER OF SAID QUARTER QUARTER SECTION; THENCE NORTH 63 DEGREES 06 MINUTES 59 SECONDS EAST ON AND ALONG SAID CENTERLINE 24.00 FEET TO THE BEGINNING POINT OF THIS DESCRIPTION; THENCE CONTINUE NORTH 63 DEGREES 06 MINUTES 59 SECONDS EAST ON AND ALONG SAID CENTER LINE 200.01 FEET; THENCE NORTH 22 DEGREES 00 MINUTES 10 SECONDS WEST 307.66 FEET; THENCE SOUTH 63 DEGREES 06 MINUTES 57 SECONDS WEST 226.19 FEET; THENCE SOUTH 26 DEGREES 53 MINUTES 04 SECONDS EAST 306.54 FEET TO THE BEGINNING POINT. CONTAINING 1.50 ACRES, MORE OR LESS.

TAX ID NO: 32-09-19-400-022.000-027 (ACCESS)

DERIVATION CLAUSE

BEING A PORTION OF THE SAME PROPERTY CONVEYED TO WHITEHOUSE MOTEL, INC., GRANTEE, FROM SHAILESH V. PATEL AND CHETNA S. PATEL, HUSBAND AND WIFE, GRANTOR BY WARRANTY RECORDED 12/29/2014, AS INSTRUMENT NO: 201427146 OF HENDRICKS COUNTY RECORDS.

FORTUNE WIRELESS IN
 5511 W 79TH ST
 INDIANAPOLIS, IN 46
 (317) 822-6222



BENCHMARK SERVICES, INC.
 Consulting Engineers
 Land Surveyors
 318 North Main Street
 Huntingburg, IN 47542
 (812) 683-3049
 benchmark@mw.twcbe.com

FA CODE:
 15861975

SITE NAME:
 IN1187

PARCEL ID NUMBER:
 32-09-19-400-026.000-
 32-09-19-400-026.000-
 32-09-19-400-022.000-

LANDOWNER:
 WHITEHOUSE MOTEL IN
 2688 E MAIN ST
 Plainfield, IN 46168

SITE ADDRESS:
 2688 E Main Street
 PLAINFIELD, IN 4816E

LEASE AREA:
 2100 SQ. FT.

DEED BOOK-PAGE
 INSTR#201427146

COUNTY:
 HENDRICKS COUNTY

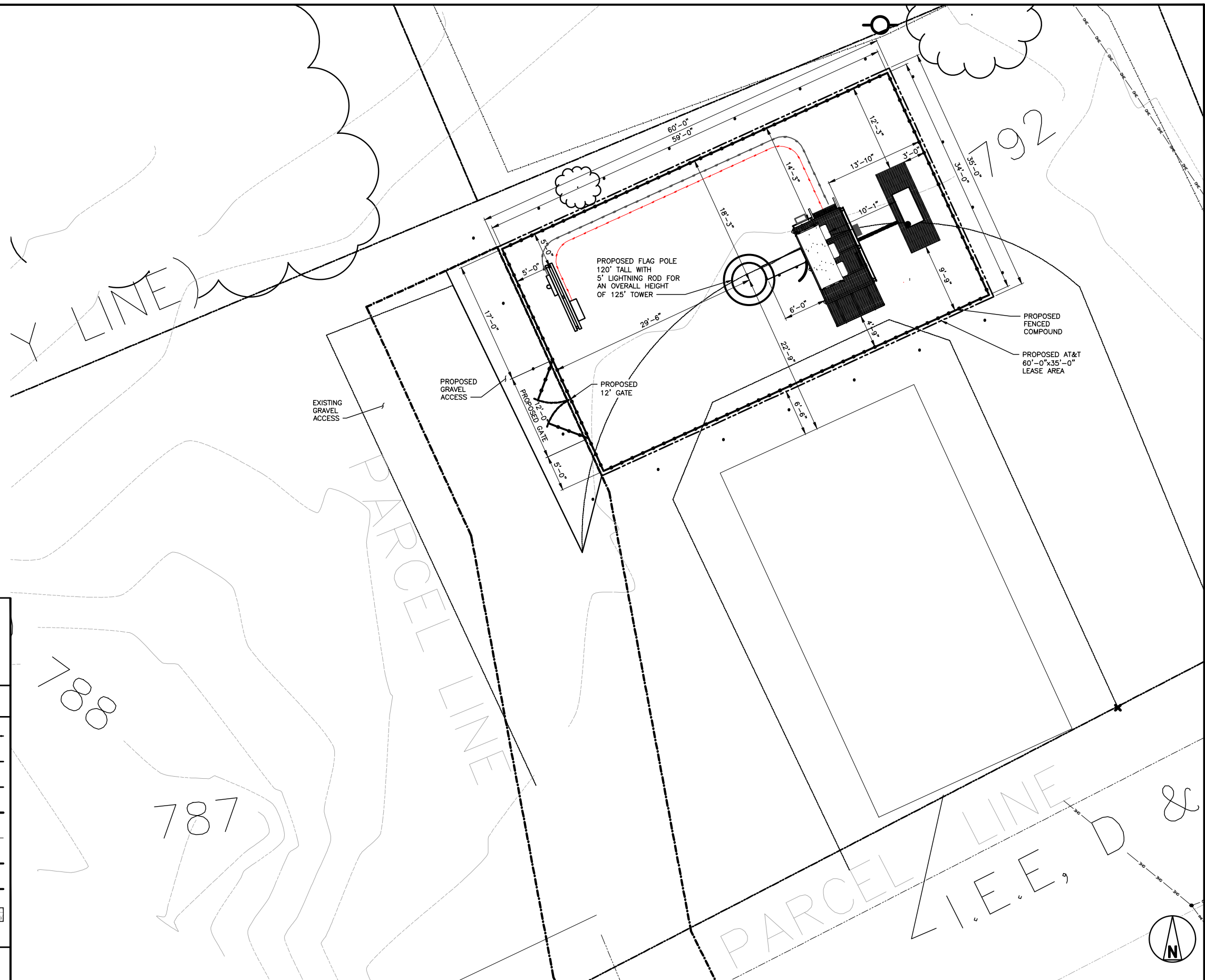
LATITUDE: 39°43'15.12"N
 LONGITUDE: 86°21'09.61"W

DWG BY:	CHKD BY:	DATE:
GVW	RMW	1.4.2

NO.	REVISION/ISSUE	DATE
1.	REVISE LEASE	1.11.2
2.	ADD TITLE	2.9.2
3.	ADDRESS EXCEPTIONS	2.13.
4.	REQUESTED ITEMS	3.5.2
5.	SITE ADDRESS	5.6.2
6.	INSTRUMENT#	4.10.

TITLE:
SURVEY PLA

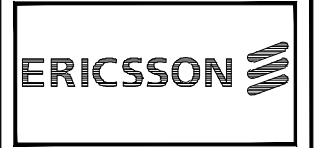
SHEET:
2 OF 2



1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. CONTRACTOR SHALL INSTALL A POST WITH NUMBERS AT LEAST 3" IN HEIGHT, AND PLACED ON BOTH SIDES OF POST. THE ADDRESS NUMBERS SHALL BE DISPLAYED AT LEAST 48" ABOVE THE GROUND AND BE VISIBLE FROM EITHER DIRECTION ON THE MAIN ROAD/STREET.
3. CONTRACTOR TO REMOVE TREES & VEGETATION WITHIN LEASED AREA.

NOTES	2
PROPOSED FENCE	-----
PROPOSED LEASE AREA	-----
PROPOSED EASEMENT	- - - - -
PROPOSED OVERHEAD UTILITIES	-----
EXISTING OVERHEAD UTILITIES	- - - - -
EXISTING PROPERTY LINE	-----
EXISTING RIGHT OF WAY	-----
PROPOSED ICE BRIDGE	-----

LEGEND	3
--------	---



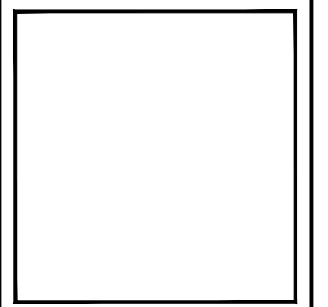
FORTUNE WIRELESS INC.
5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

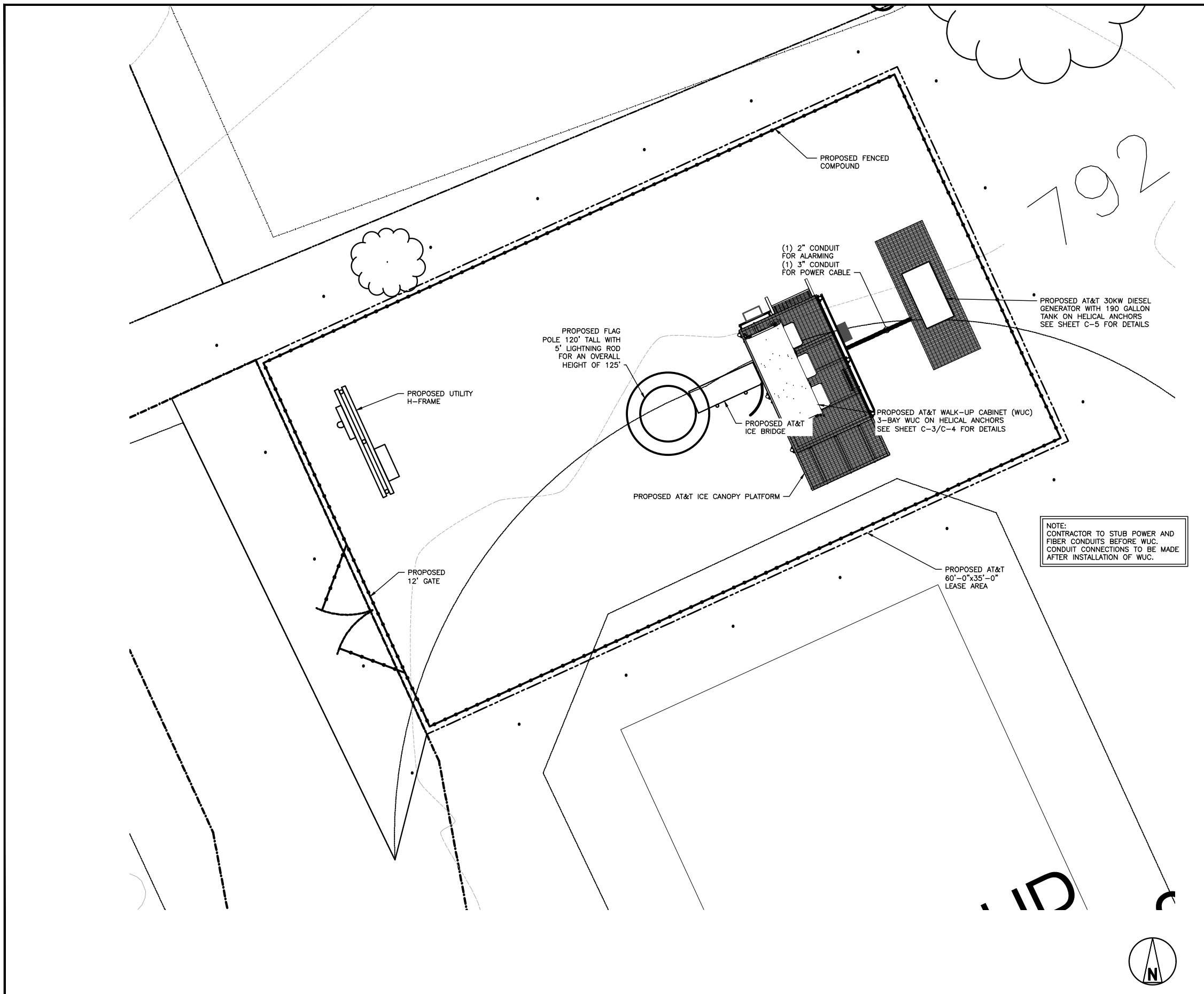
NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD



SHEET TITLE:
OVERALL SITE PLAN

SHEET NUMBER:
C-1

OVERALL SITE PLAN



NOTE:
CONTRACTOR TO STUB POWER AND
FIBER CONDUITS BEFORE WUC.
CONDUIT CONNECTIONS TO BE MADE
AFTER INSTALLATION OF WUC.

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. CONTRACTOR SHALL INSTALL A POST WITH NUMBERS AT LEAST 3" IN HEIGHT, AND PLACED ON BOTH SIDES OF POST. THE ADDRESS NUMBERS SHALL BE DISPLAYED AT LEAST 48" ABOVE THE GROUND AND BE VISIBLE FROM EITHER DIRECTION ON THE MAIN ROAD/STREET.
3. CONTRACTOR TO REMOVE TREES & VEGETATION WITHIN LEASED AREA.

NOTES		2
PROPOSED FENCE	_____	
PROPOSED LEASE AREA	_____	
PROPOSED EASEMENT	_____	
PROPOSED UNDERGROUND UTILITIES	_____	
EXISTING PROPERTY LINE	_____	
PROPOSED ICE BRIDGE	_____	

LEGEND		3
--------	--	---

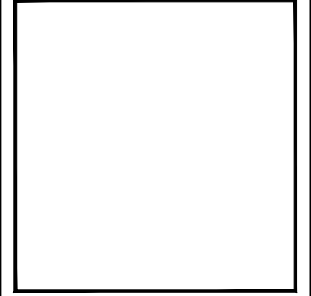


FORTUNE WIRELESS INC.
5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

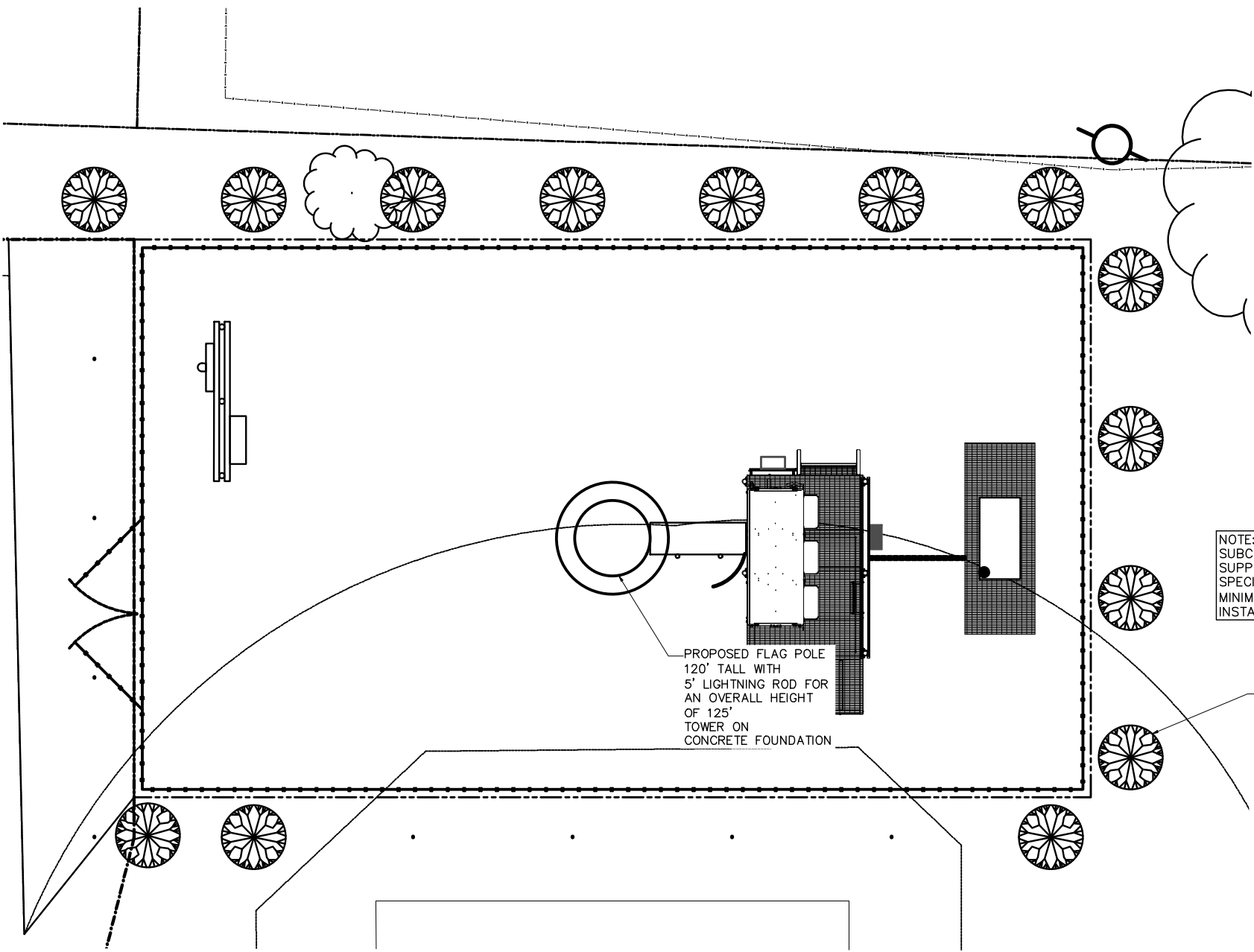
DRAWN BY: ren
CHECKED BY: AJB

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD



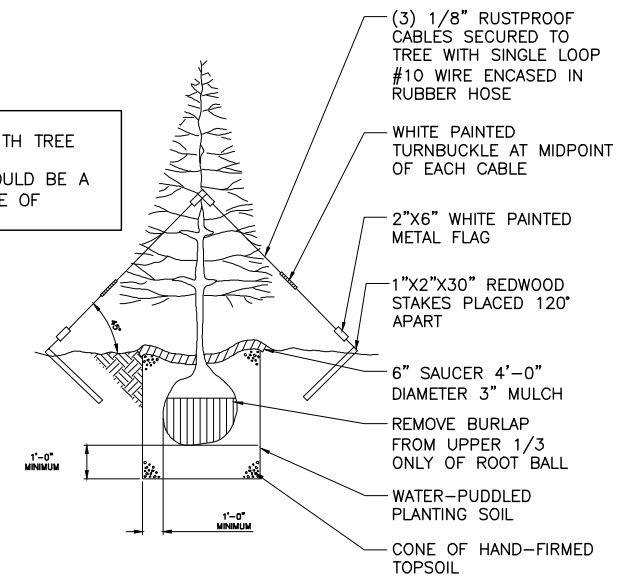
SHEET TITLE:
DETAILED COMPOUND PLAN

SHEET NUMBER:
C-2
DO NOT SCALE DRAWINGS



LANDSCAPE NOTES

1. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE.
2. ALL PLANTS MUST BE CONTAINER-GROWN OR BALLED AND BURLAPPED AS SPECIFIED.
3. ALL TREES MUST BE STRAIGHT TRUNKED, FULL HEADED AND MEET ALL REQUIREMENTS SPECIFIED.
4. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE CONSTRUCTION MANAGER BEFORE, DURING, AND AFTER INSTALLATION.
5. ALL TREES MUST BE GUYED OR STAKED AS SHOWN.
6. ALL PLANTS AND PLANTING AREAS MUST BE COMPLETELY MULCHED AS SPECIFIED.
7. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION.
8. THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING (INCLUDING, BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZATION, ETC.) OF PLANTING AREAS UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE CONSTRUCTION MANAGER.
9. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING AT THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD.
10. THE CONSTRUCTION MANAGER WILL APPROVE THE STAKED LOCATION OF ALL PLANT MATERIAL PRIOR TO INSTALLATION.
11. AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO (2) WEEKS UNDER A MIST SYSTEM PRIOR TO INSTALLATION.
12. ANY PLANT MATERIAL THAT DIES, TURNS BROWN OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, SIZE AND MEETING ALL SPECIFICATIONS.
13. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK", LATEST EDITION, REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.



WARRANTY: CONTRACTOR SHALL WARRANT ALL TREES AND SHRUBS FOR A PERIOD OF ONE YEAR AFTER DATE OF SUBSTANTIAL COMPLETION, AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH AND EXCEPT FOR DEFECTS RESULTING FROM NEGLIGENCE BY OWNER, ABUSE BY OTHERS OR NATURAL PHENOMENA. REPLACE UNSATISFACTORY PLANT MATERIAL AT THE END OF THE WARRANTY PERIOD AT NO ADDITIONAL EXPENSE TO THE OWNER. ONE REPLACEMENT IS REQUIRED. ANY PRECEDING AGREEMENT BY CONTRACTOR WITH OWNER SHALL SUPERSEDE THIS WARRANTY.

1 LANDSCAPE PLAN
SCALE: 1"=10'-0"



2 TREE PLANTING DETAIL
SCALE: N.T.S.



FORTUNE WIRELESS INC.
5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

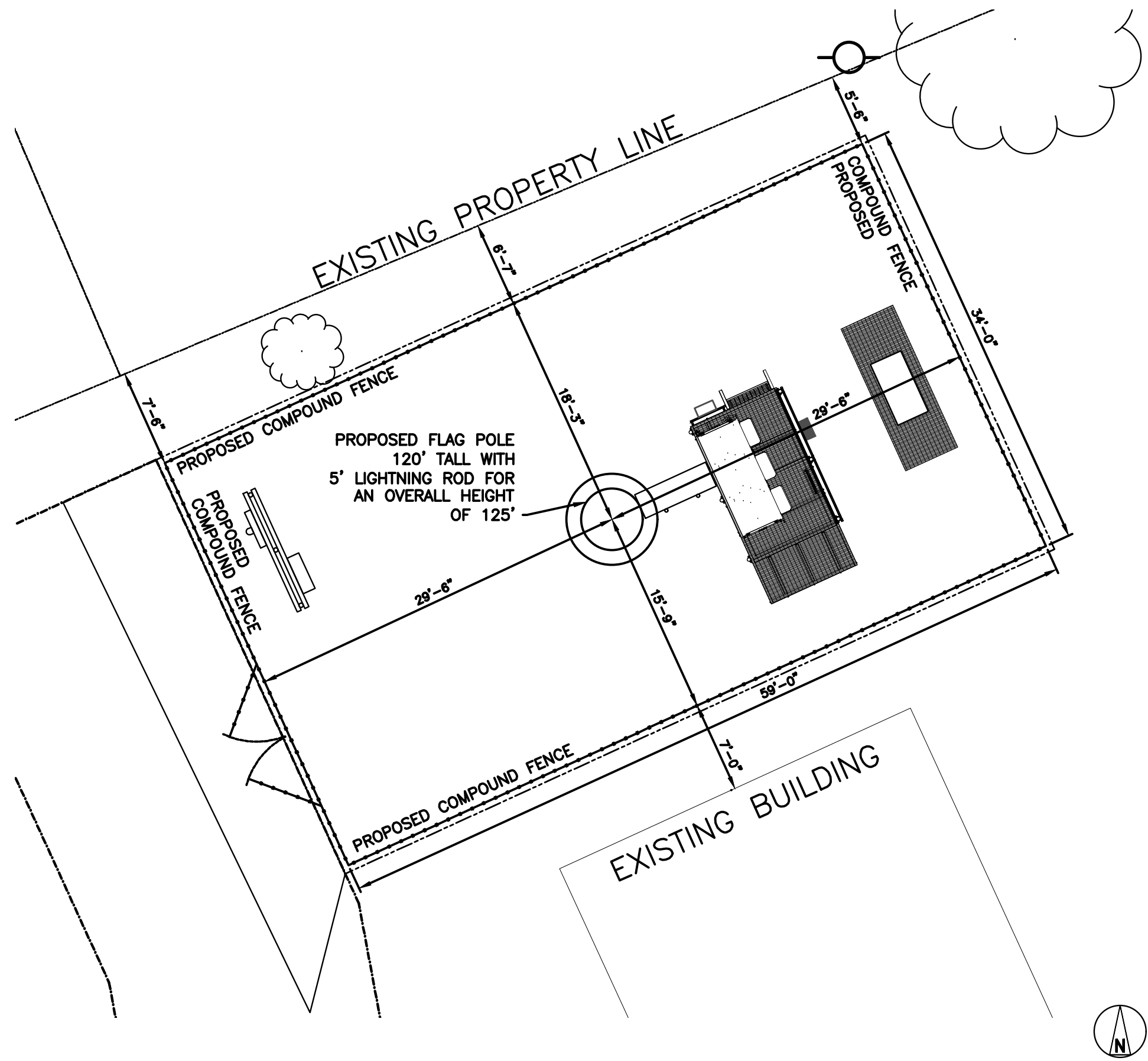
SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

C-2.1

DO NOT SCALE DRAWINGS



FORTUNE WIRELESS INC.
 5511 WEST 79TH STREET
 INDIANAPOLIS, IN 46268
 (317) 532-1374

IN1187
 AT&T FA#: 15861975
 2688 EAST MAIN ST.
 PLAINFIELD,
 IN 46168
 HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

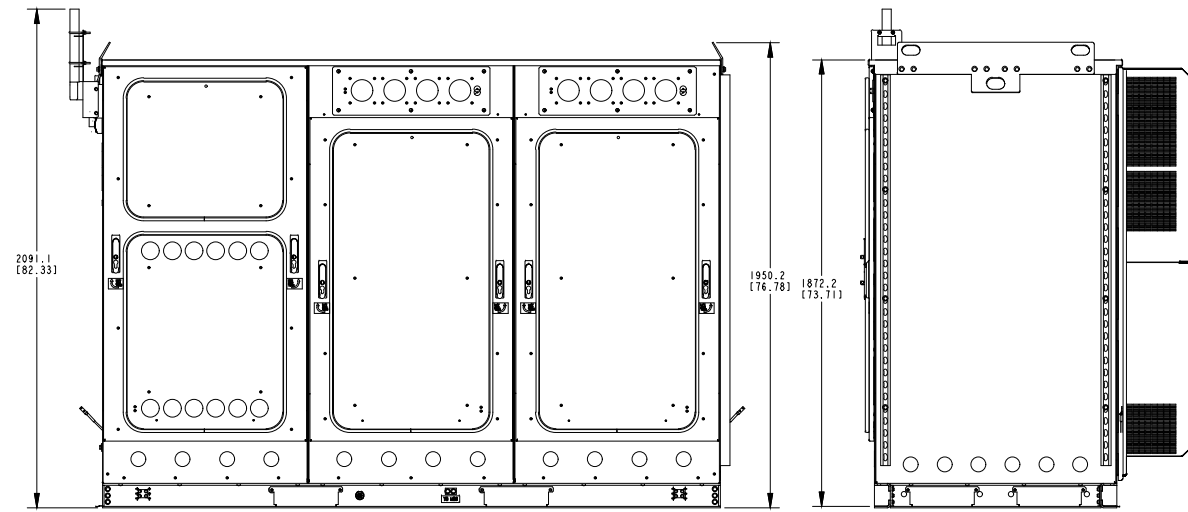
NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

SHEET TITLE:
COMPOUND DIMENSION PLAN

SHEET NUMBER:
C-2.2

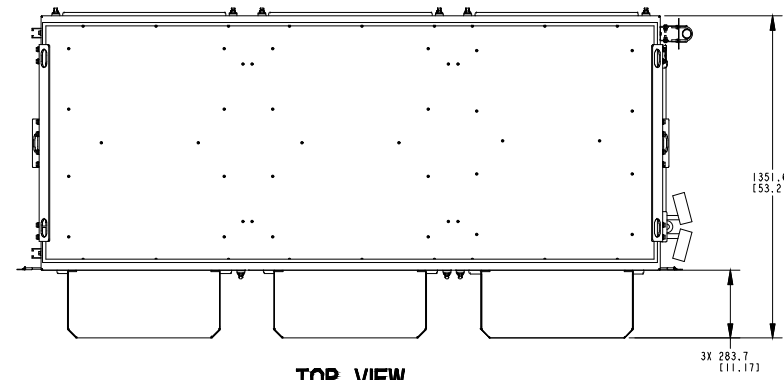
DO NOT SCALE DRAWINGS

SEE SHEET C-4
FOR PLATFORM
DETAILS

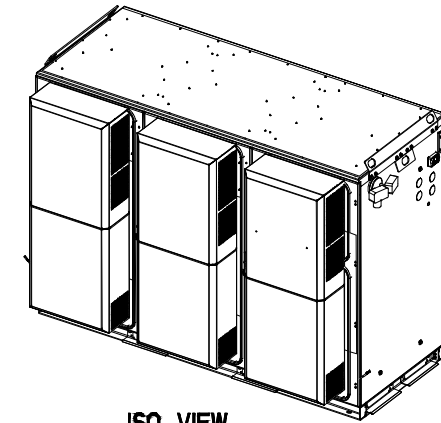


REAR VIEW

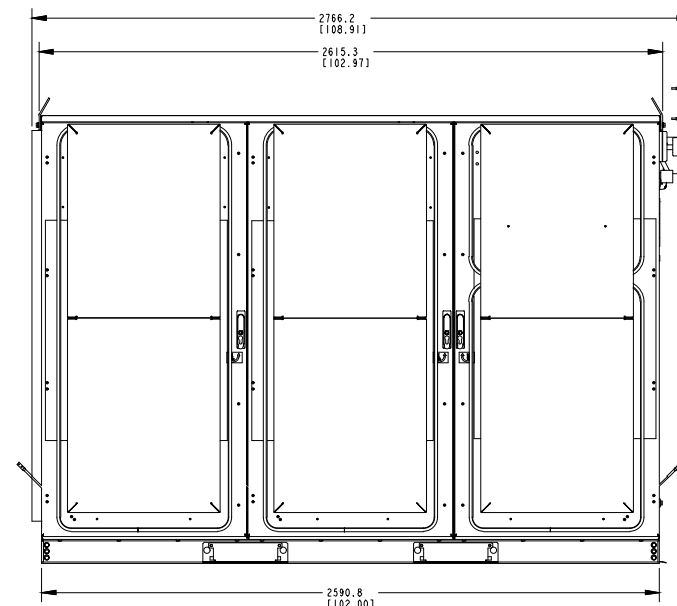
LEFT VIEW



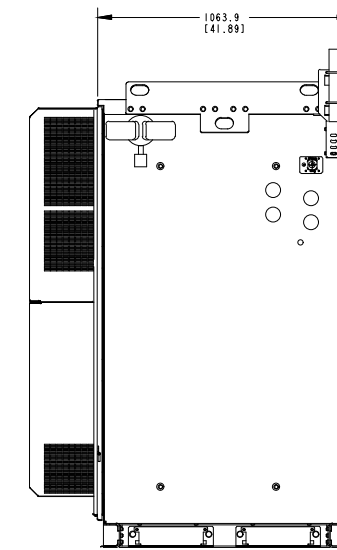
TOP VIEW



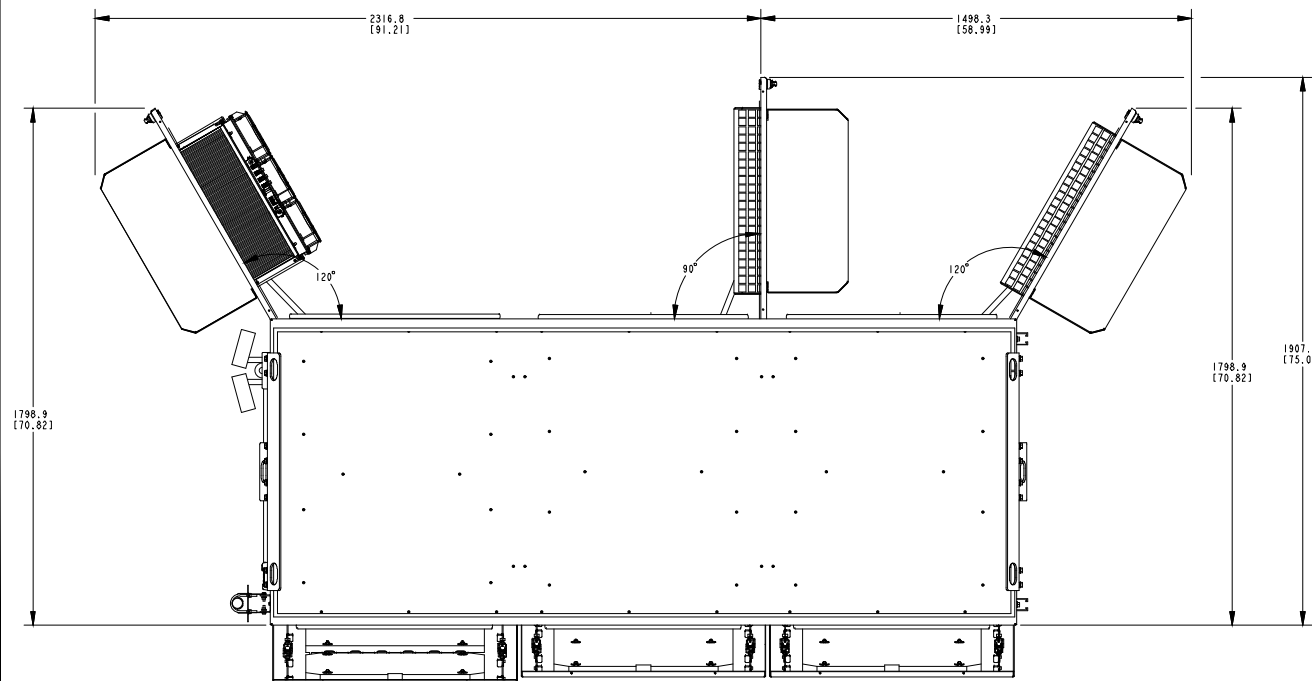
ISO VIEW



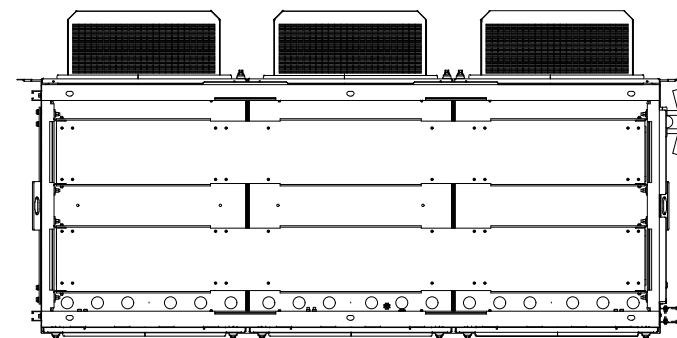
FRONT VIEW



RIGHT VIEW



TOP VIEW WITH OPEN DOOR



BOTTOM VIEW



**FORTUNE
WIRELESS INC.**
5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

**FOR AT&T
REFERENCE
ONLY**

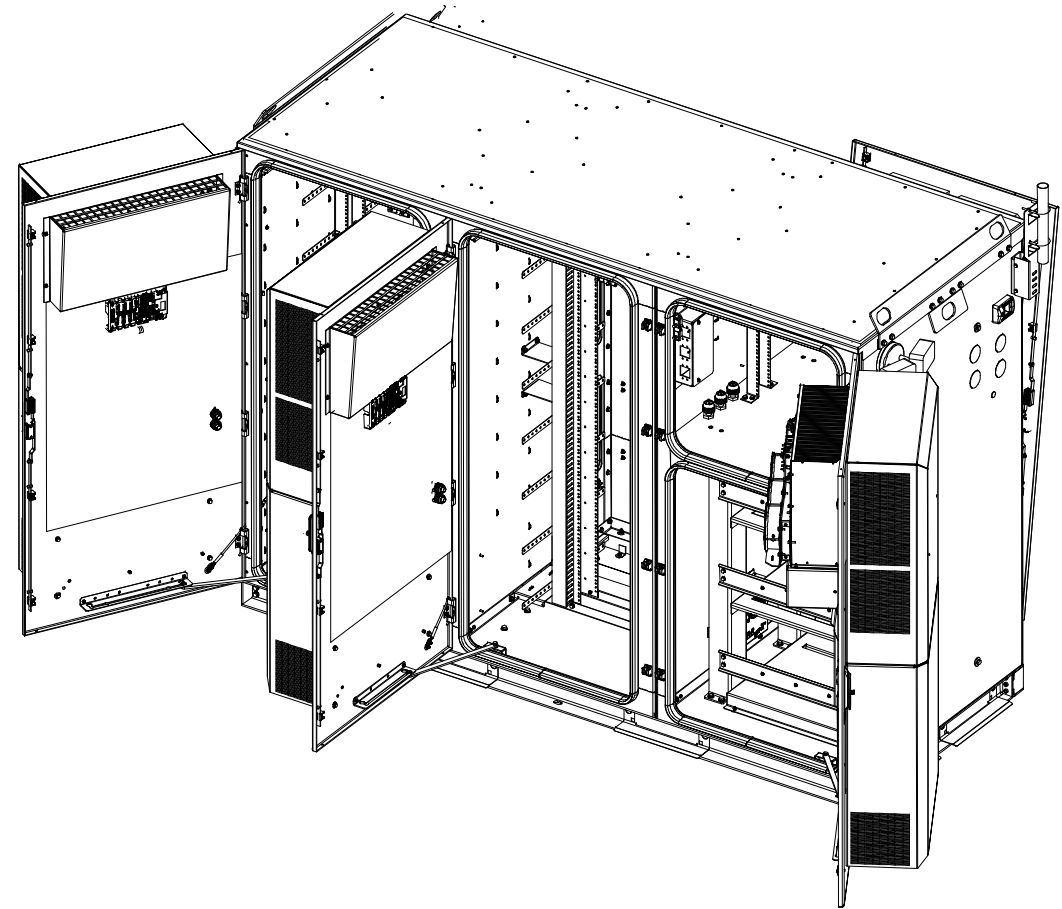
SHEET TITLE:

**EQUIPMENT LAYOUT
& WUC DETAILS**

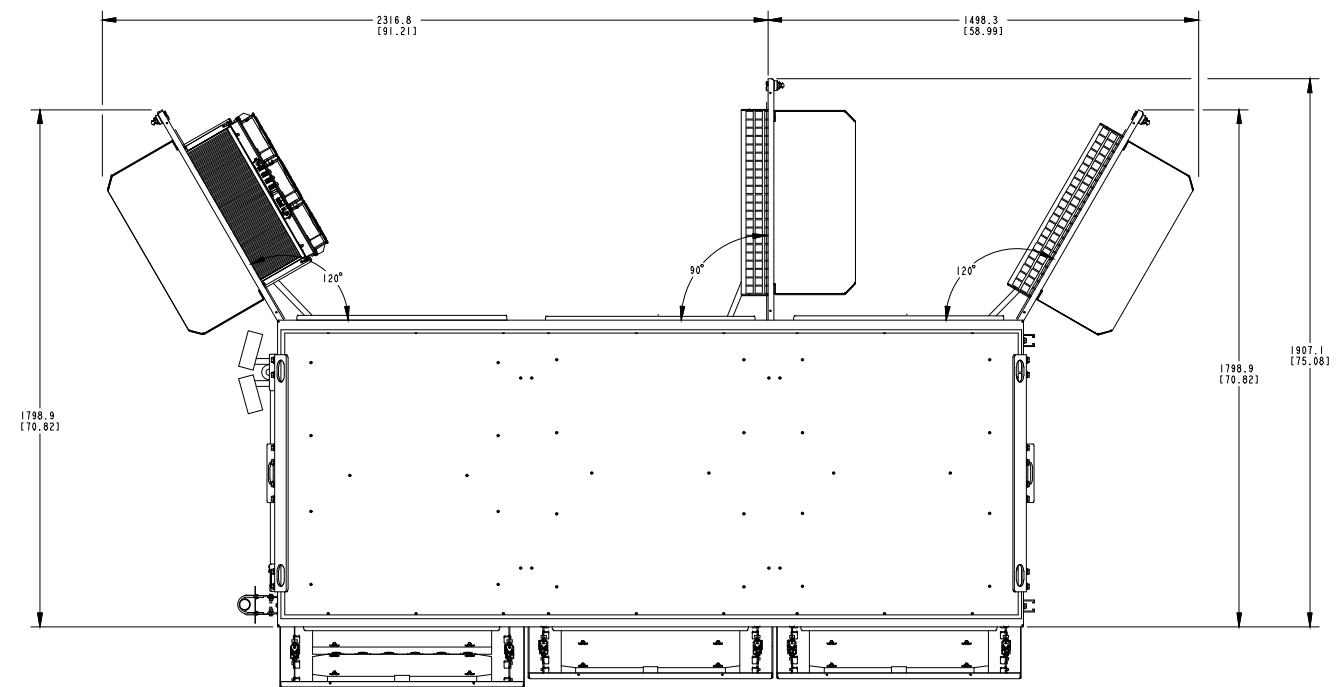
SHEET NUMBER:

C-3

DO NOT SCALE DRAWINGS



ISO VIEW WITH OPEN DOOR



TOP VIEW WITH OPEN DOOR



**FORTUNE
WIRELESS INC.**

5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

**FOR AT&T
REFERENCE
ONLY**

SHEET TITLE:

WUC DETAILS

SHEET NUMBER:

C-4

DO NOT SCALE DRAWINGS

ITEM: DIESEL SINGLE PHASE GENERATOR
 MANUFACTURER: GENERAC POWER SYSTEMS, INC.
 PART NO: SDCO30
 DESCRIPTION: 30kW; NON CALIFORNIA; DIESEL; OUTDOOR; 120/240VAC;
 1PH; 2.2L ENG; 145 GAL TANK; L2A STEEL ENCLOSURE
 AT&T NEQ: NEQ.20230



FORTUNE WIRELESS INC.
 5511 WEST 79TH STREET
 INDIANAPOLIS, IN 46268
 (317) 532-1374

IN1187
 AT&T FA#: 15861975
 2688 EAST MAIN ST.
 PLAINFIELD,
 IN 46168
 HENDRICKS COUNTY

DRAWN BY: ren
 CHECKED BY: AJB

NO: A	DATE: 07/01/25	ISSUE: REVIEW CD
----------	-------------------	---------------------

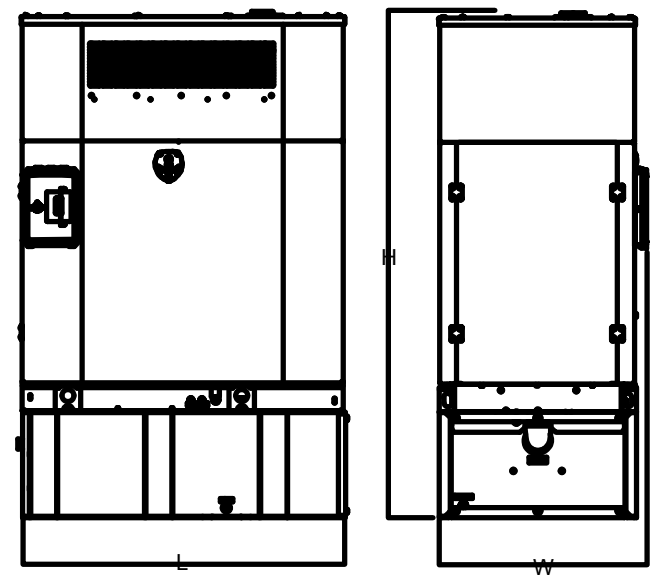
SHEET TITLE:

GENERATOR DETAILS

SHEET NUMBER:

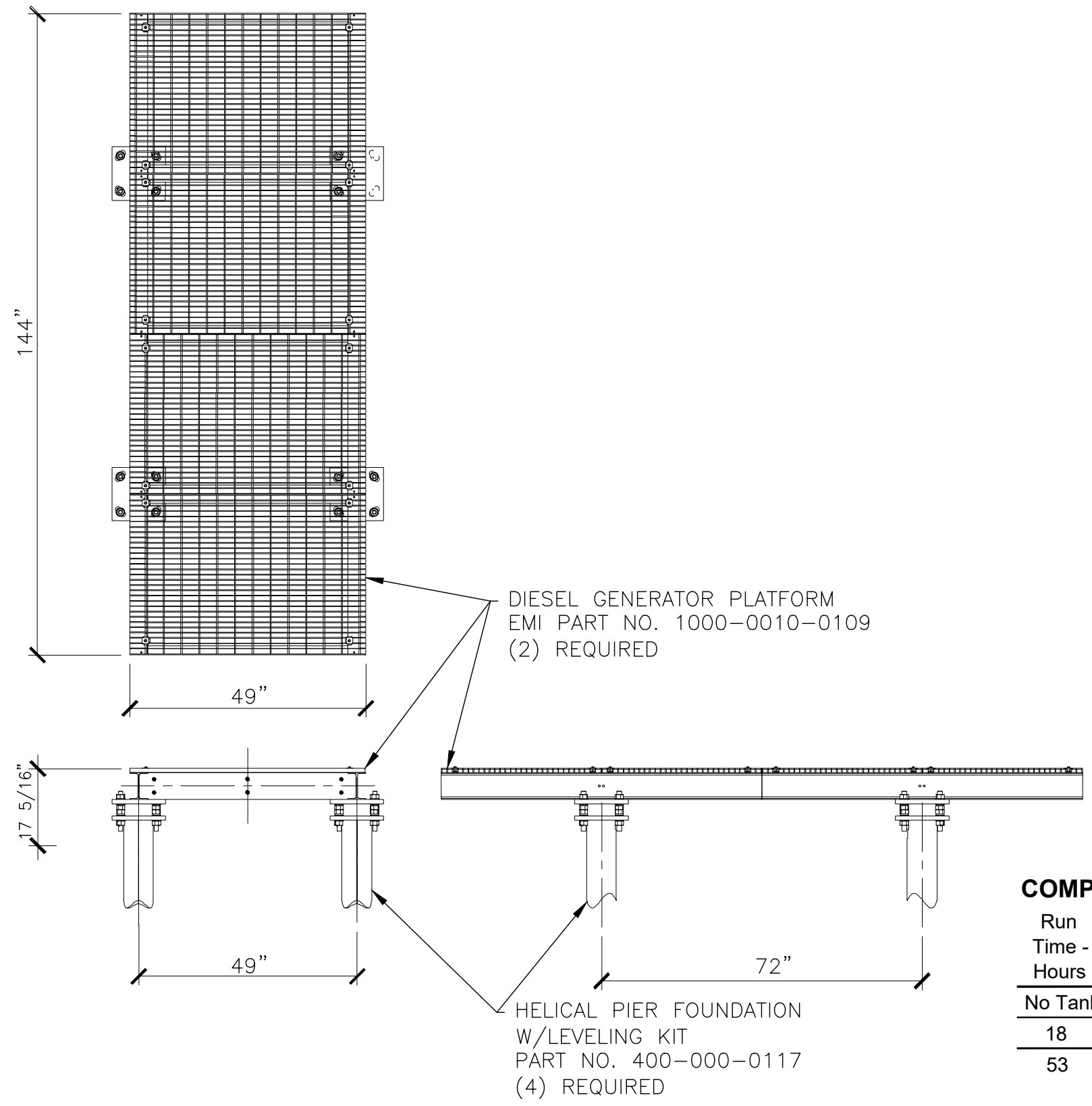
C-5

DO NOT SCALE DRAWINGS



COMPACT VARIANT

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)
No Tank	-	60.7 (1,542) x 36.1 (917) x 72.6 (1,844)	Contact Factory
18	50 (189)	60.7 (1,542) x 32.9 (836) x 90.9 (2,309)	Contact Factory
53	145 (549)	60.7 (1,542) x 32.9 (836) x 109.6 (2,784)	Contact Factory



DIESEL GENERATOR PLATFORM
 EMI PART NO. 1000-0010-0109
 (2) REQUIRED

HELICAL PIER FOUNDATION
 W/LEVELING KIT
 PART NO. 400-000-0117
 (4) REQUIRED

GENERATOR PLATFORM ①
 SCALE: N. T. S. C-5

GENERATOR SPECIFICATIONS ②
 SCALE: N. T. S. C-5



FORTUNE WIRELESS INC.
 5511 WEST 79TH STREET
 INDIANAPOLIS, IN 46268
 (317) 532-1374

IN1187
 AT&T FA#: 15861975
 2688 EAST MAIN ST.
 PLAINFIELD,
 IN 46168
 HENDRICKS COUNTY

DRAWN BY: **ren**

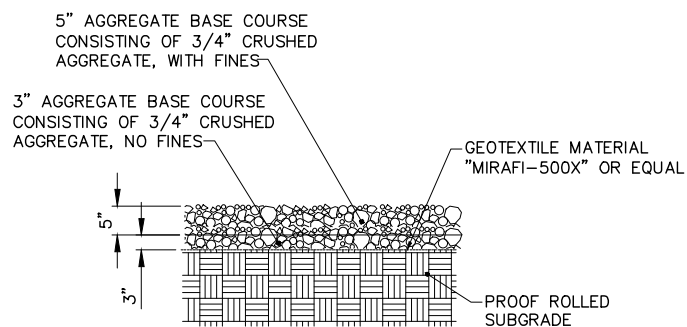
CHECKED BY: **AJB**

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

SHEET TITLE:
EQUIPMENT SITE DETAILS

SHEET NUMBER:
C-6

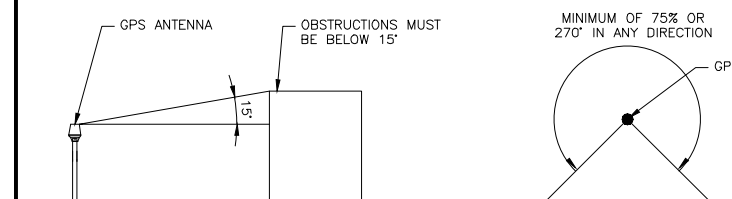
DO NOT SCALE DRAWINGS



NOTE:
 IT IS THE RESPONSIBILITY OF THE G.C. TO VERIFY THAT THE LIMESTONE IS UNIFORMLY WHITE IN COLOR AFTER PLACEMENT

NOTES

- IT IS CRITICAL THAT THE GPS ANTENNA IS MOUNTED SUCH THAT IT IS WITHIN 2 DEGREES OF VERTICAL AND THE BASE OF THE ANTENNA IS WITHIN 2 DEGREES OF LEVEL.
- DO NOT SWEEP TEST GPS ANTENNA.
- PLACE PROPOSED GPS ANTENNA A MIN. OF 10' (3 METER) HORIZONTALLY FROM ALL EXISTING TRANSMITTING ANTENNAS.
- THE GPS ANTENNA MOUNT IS DESIGNED TO FASTEN TO A STANDARD 3/4" DIAMETER, SCHEDULE 40, GALVANIZED STEEL OR STAINLESS STEEL PIPE. THE PIPE MUST NOT BE THREADED AT THE ANTENNA MOUNT END. THE PIPE SHALL BE CUT TO THE REQUIRED LENGTH (MINIMUM OF 18") USING A HAND OR ROTARY PIPE CUTTER TO ASSURE A SMOOTH AND PERPENDICULAR CUT. A HACK SAW SHALL NOT BE USED. THE CUT PIPE END SHALL BE DEBURRED AND SMOOTH EDGES IN ORDER TO SEAL AGAINST THE NEOPRENE GASKET ATTACHED TO THE ANTENNA MOUNT.



DETAIL NOT USED

NO SCALE

1

SITE SURFACING DETAIL

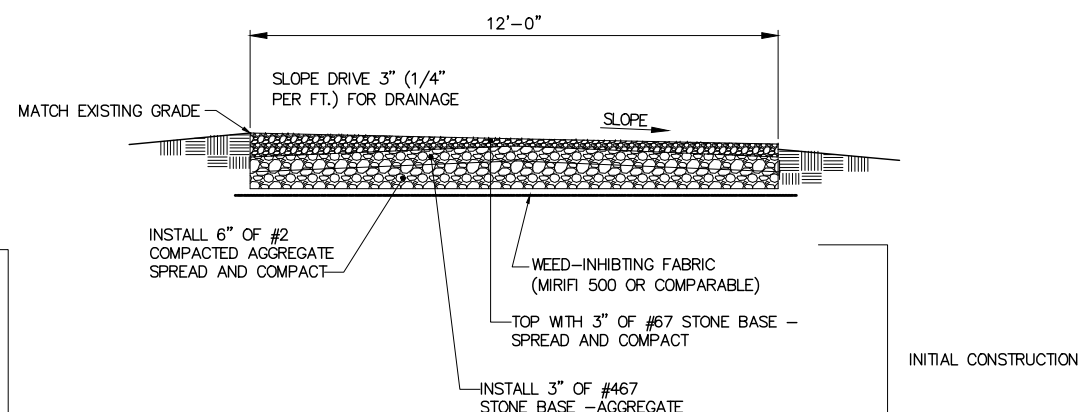
NO SCALE

2

GPS SPECIFICATIONS

NO SCALE

3



NOTES:

- ALL AGGREGATE SHALL BE COMPACTED PER PENNDOT SECTION 350.
- THE TURN-AROUND AREA SHALL BE CONSTRUCTED PER THE TYPICAL ACCESS DRIVE SECTION AS SHOWN ABOVE.
- SLOPE GRAVEL SURFACE TO PROVIDE POSITIVE DRAINAGE AND MATCH EXISTING GROUND SURFACE SLOPE.

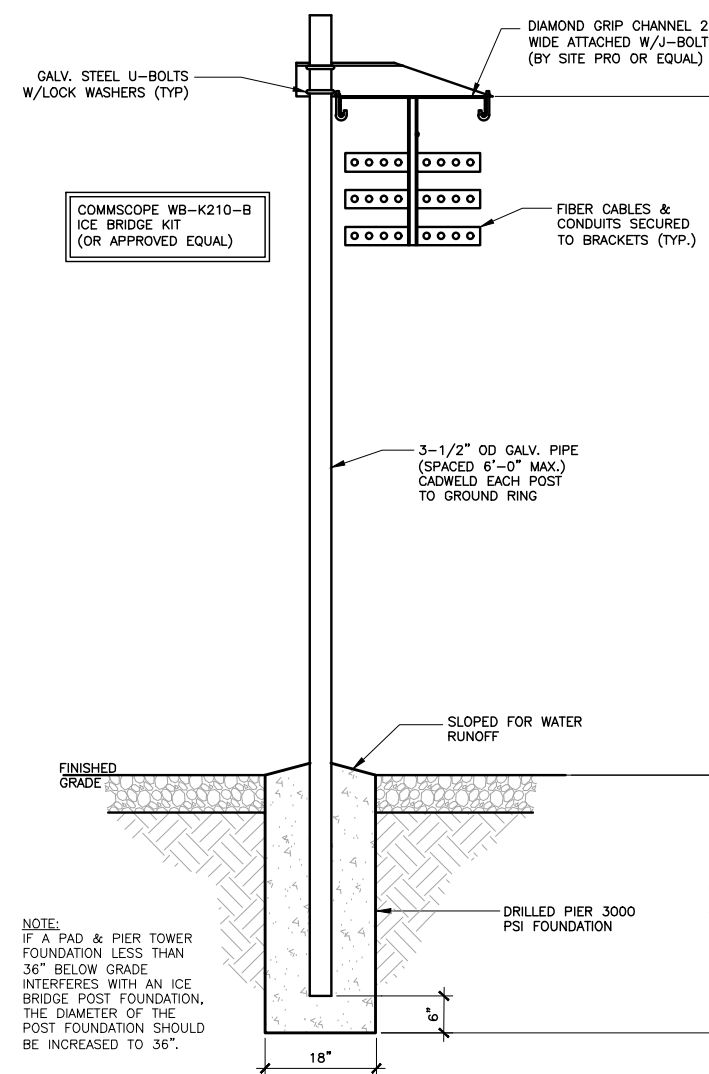
ACCESS DRIVE DETAIL

NO SCALE

4

NOTES

- CONTRACTOR SHALL CONFIRM THE DEPTH OF THE ICE BRIDGE DRILLED PIER FOUNDATION, IF THE TOWER PAD FOUNDATION DEPTH IS LESS THAN THE STANDARD SHOWN.



NOTE:
 IF A PAD & PIER TOWER FOUNDATION LESS THAN 36" BELOW GRADE INTERFERES WITH AN ICE BRIDGE POST FOUNDATION, THE DIAMETER OF THE POST FOUNDATION SHOULD BE INCREASED TO 36".

ICE BRIDGE DETAIL NOTES

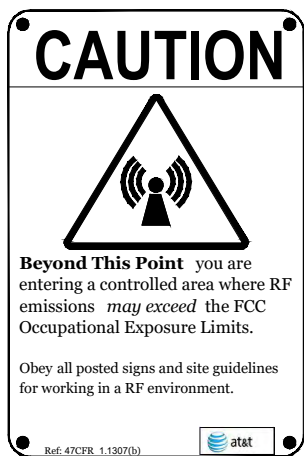
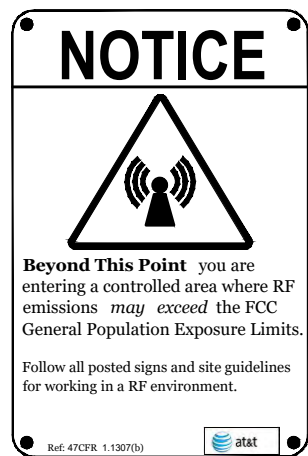
NO SCALE

5

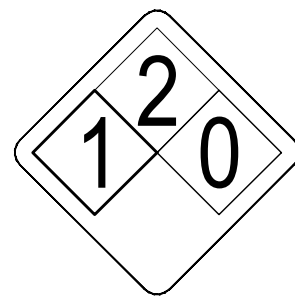
ICE BRIDGE DETAIL

NO SCALE

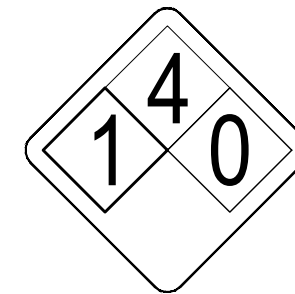
6



ALERTING SIGN
(FOR CELL SITE BATTERIES)



ALERTING SIGN
(FOR FUEL)



ALERTING SIGN
(FOR PROPANE)



FORTUNE WIRELESS INC.
5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

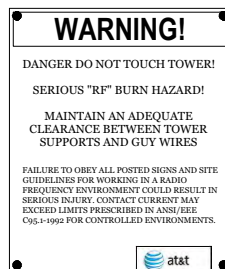
IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: **ren**

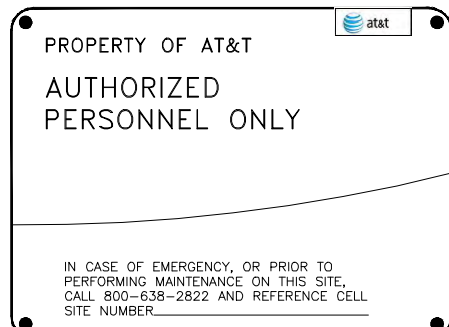
CHECKED BY: **AJB**

NO: **A** DATE: **07/01/25** ISSUE: **REVIEW CD**

ALERTING SIGN

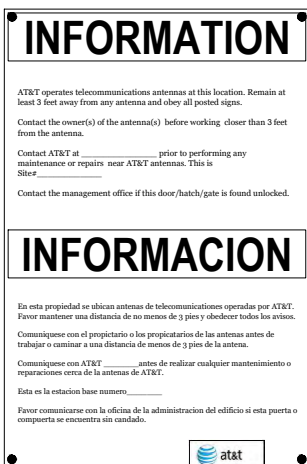


ALERTING SIGN
NO SCALE

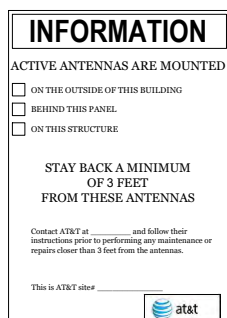


ALERTING SIGN

INFO SIGN #4



INFO SIGN #1



INFO SIGN #2

STAY BACK 3 FEET FROM ANTENNA



GENERAL SIGNAGE GUIDELINES

Structure Type	INFO SIGN #1	INFO SIGN #2	INFO SIGN #3	INFO SIGN #4	Striping	NOTICE SIGN	CAUTION SIGN
Towers							
Monopole/Monopine/Monopalm	entrance gates, shelter doors OR on the outdoor cabinets	climbing side of the Tower	On the side of Antennas	entrance gates, shelter doors OR on the outdoor cabinets			At the height of the first climbing step, min. 3ft above ground
SCE Towers/ Towers with high voltage	entrance gates, shelter doors OR on the outdoor cabinets	climbing side of the Tower	On the side of Antennas	entrance gates, shelter doors OR on the outdoor cabinets			At the height of the first climbing step, min. 9ft above ground
Light Poles / Flag Poles	entrance gates, shelter doors OR on the outdoor cabinets	on the pole, no less than 3ft below the Antenna and no less than 9ft above ground	On the side of Antennas	entrance gates, shelter doors OR on the outdoor cabinets			
Utility Wood Poles (JPA)	entrance gates, shelter doors OR on the outdoor cabinets	on the pole, no less than 3ft below the Antenna and no less than 9ft above ground	On the side of Antennas	entrance gates, shelter doors OR on the outdoor cabinets			
Microcells mounted on non-JPA poles	entrance gates, shelter doors OR on the outdoor cabinets	on the pole, no less than 3ft below the Antenna and no less than 9ft above ground	On the side of Antennas	entrance gates, shelter doors OR on the outdoor cabinets		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	Notice or Caution sign at no less than 9ft above ground; only if the exposure exceeds 90% of the General Public exposure at 8ft above ground or at outside surface of adjacent buildings
Roof Tops							
At all access points to the roof	X			X			
On Antennas	X		X	X			
Concealed Antennas	X	X		X			
antennas mounted facing outside the building	X	X		X			
antennas on support structure	X	X		X			
Roofview Graph:							
Radiation area is within 3ft from antenna	X	adjacent to each antenna		X			
Radiation area is beyond 3ft from antenna	X	adjacent to each antenna		X	diagonal, yellow striping as to Roofview graph		either Notice or Caution sign (based on Roofview results) at antennas/barrier
Church Steeples	Access to steeple	adjacent to antennas if antennas are concealed	On the side of Antennas	Access to steeple			Caution sign at the antennas
Water Stations	Access to ladder	adjacent to antennas if antennas are concealed	On the side of Antennas	Access to ladder			Caution sign beside Info sign #1, min. 9ft above ground

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 Roofview shows: only blue = Notice Sign, blue and yellow = Caution Sign, only yellow = Caution Sign to be installed.
- 3 Should the required striping area interfere with any structures or equipment (A/C, vents, roof hatch, doors, other antennas, dishes, etc.), please notify AT&T to modify the striping area, prior to starting the work

SIGNAGE GUIDELINES CHART

INFO SIGN #3

SHEET TITLE:

SIGNAGE DETAILS

SHEET NUMBER:

C-7

DO NOT SCALE DRAWINGS

PART 1 – GENERAL

1.1 SCOPE:

- A. FORM WORK, REINFORCING STEEL, ACCESSORIES, CAST-IN PLACE CONCRETE, FINISHING, CURING AND TESTING FOR STRUCTURAL CONCRETE FOUNDATIONS.

1.2 REFERENCES:

- A. ACI (AMERICAN CONCRETE INSTITUTE)
 - 1. ACI 301 SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS.
 - 2. ACI 304 RECOMMENDED PRACTICE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE.
 - 3. ACI 305 RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING.
 - 4. ACI 306 RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING.
 - 5. ACI 308 STANDARD PRACTICE FOR CURING CONCRETING.
 - 6. ACI 309 STANDARD PRACTICE FOR CONSOLIDATION OF CONCRETE.
 - 7. ACI 318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
 - 8. ACI 347 RECOMMENDED PRACTICE FOR CONCRETE FORMWORK DRILL PIERS.
- B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS), THE APPLICABLE STANDARDS OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS ARE LISTED IN THE ACI STANDARDS AND ARE A PART OF THIS SPECIFICATION.

PART 2 – PRODUCTS

2.1 REINFORCING MATERIALS:

- A. REINFORCING BARS: ASTM A615, GRADE 60, PROPOSED DEFORMED BILLET-STEEL BARS, PLAIN FINISH.
- B. FURNISH CHAIRS, BOLSTERS, BAR SUPPORTS, SPACERS AS REQUIRED FOR SUPPORT OF REINFORCING STEEL AND WIRE FABRIC.

2.2 CONCRETE MATERIALS:

- A. PORTLAND CEMENT SHALL BE TYPE II, CONFORMING TO ASTM C-150.
- B. AGGREGATE SHALL CONFORM TO ASTM C-33.
 - 1. FINE AGGREGATE SHALL BE UNIFORMLY GRADED, CLEAN SHARP, WASHED NATURAL, OR CRUSHED SAND, FREE FROM ORGANIC IMPURITIES.
 - 2. COARSE AGGREGATE SHALL BE NATURAL WASHED GRAVEL OR WASHED CRUSHED ROCK HAVING HARD, STRONG, DURABLE PIECES, FREE FROM ADHERENT COATINGS.
 - 3. MAXIMUM SIZE OF COARSE AGGREGATE SHALL BE 3/4 INCH IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM C-33 GRADATION SIZE NO. 67.
- C. WATER USED IN CONCRETE MIX SHALL BE POTABLE, CLEAN, AND FREE FROM OILS, ACIDS, SALTS, CHLORIDES, ALKALI, SUGAR, VEGETABLE, OR OTHER INJURIOUS SUBSTANCES.
- D. THE CONCRETE SHALL CONTAIN AN AIR-ENTRAINING ADMIXTURE COMPLYING WITH THE REQUIREMENTS OF ASTM C-260 AND ACI 212. 1R AND A WATER-REDUCING ADMIXTURE COMPLYING WITH THE REQUIREMENTS OF ASTM C-494 AND ACI 212. 1R. ADMIXTURES SHALL BE PURCHASED AND BATCHED IN LIQUID SOLUTION. THE USE OF CALCIUM CHLORIDE OR AN ADMIXTURE CONTAINING CALCIUM CHLORIDE IS PROHIBITED. ADMIXTURES SHALL BE OF THE SAME MANUFACTURER TO ASSURE COMPATIBILITY. ACCEPTABLE MANUFACTURERS ARE:
 - 1. W.R. GRACE
 - 2. SIKA CORP.
 - 3. MASTER BUILDERS
 - 4. EUCLID CHEMICAL CO.
 - 5. APPROVED EQUAL
- E. CURING COMPOUND SHALL CONFORM TO ASTM C309, TYPE I, ID, CLASS A AND B AND ASTM C171 AS APPLICABLE.

2.3 CONCRETE MIX:

- A. PROPORTION CONCRETE MIX IN ACCORDANCE WITH REQUIREMENTS OF ACI 301. THE STRENGTH OF CONCRETE SHALL BE AS INDICATED ON THE DRAWINGS. WHERE STRENGTH IS NOT CLEARLY INDICATED, CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
- B. THE CONCRETE MIX SHALL BE DESIGNED FOR A MAXIMUM SLUMP OF THREE INCHES (PLUS OR MINUS 1-INCH) AT THE POINT OF DISCHARGE. MIXES OF THE STIFFEST CONSISTENCY THAT CAN BE EFFICIENTLY PLACED SHALL BE USED.
- C. ALL CONCRETE SHALL BE TO SIX PERCENT (6%) AIR ENTRAINED (PLUS OR MINUS 1%).
- D. ALL STRUCTURAL CONCRETE SHALL CONTAIN A WATER-REDUCING AGENT.

PART 3 – EXECUTION

3.1 GENERAL:

- A. CONSTRUCT AND ERECT THE FORM WORK IN ACCORDANCE WITH ACI 301 AND ACI 347.
- B. COLD-WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 306.
- C. HOT-WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305.

3.2 INSERTS, EMBEDDED COMPONENTS AND OPENINGS:

- A. CONTRACTOR SHALL CHECK ALL CIVIL, ARCHITECTURAL, STRUCTURAL AND ELECTRICAL DRAWINGS FOR OPENINGS, SLEEVES, ANCHOR BOLTS, INSERTS AND OTHER ITEMS TO BE BUILT INTO THE CONCRETE WORK.
- B. COORDINATE THE WORK OF OTHER SECTION IN FORMING AND SETTING OPENINGS. RECESSES, SLOTS, CHASES, ANCHORS, INSERTS AND OTHER ITEMS TO BE EMBEDDED.
- C. EMBEDDED ITEMS SHALL BE SET ACCURATELY IN LOCATION, ALIGNMENT, ELEVATION AND PLUMBNESS, LOCATE AND MEASURE FROM ESTABLISHED SURVEYED REFERENCE BENCHMARKS.

- D. EMBEDDED ITEMS SHALL BE ANCHORED INTO PLACE IN A MANNER TO PREVENT MOVEMENT DURING CONCRETE PLACEMENT AND CONSOLIDATION. COMPONENTS FORMING A PART OF A COMPLETE ASSEMBLY SHALL BE ALIGNED BEFORE ANCHORING INTO PLACE. PROVIDE TEMPORARY BRACING, ANCHORAGE, AND TEMPLATES AS REQUIRED TO MAINTAIN THE SETTING AND ALIGNMENT.

3.3 REINFORCEMENT PLACEMENT:

- A. PLACE REINFORCEMENT ACCORDING TO CHECKED AND RELEASED DRAWINGS AND IN ACCORDANCE WITH ACI 301 AND ACI 318.
- B. ACCURATELY POSITION, SUPPORT AND SECURE REINFORCEMENT AGAINST DISPLACEMENT FROM FORM WORK CONSTRUCTION OR CONCRETE PLACEMENT AND CONSOLIDATION. SUPPORT REINFORCING ON METAL CHAIRS, RUNNERS, BOLSTERS, SPACERS AND HANGERS.
- C. SPLICES OF REINFORCING BARS SHALL BE CLASS B UNLESS SHOWN OTHERWISE ON THE DRAWINGS. SPLICES SHALL BE STAGGERED. FULL DEVELOPMENT LENGTH SHALL BE PROVIDED ACROSS JOINTS.
- D. LOCATE REINFORCING TO PROVIDE CONCRETE COVER AND SPACING SHOWN ON THE DRAWINGS. MINIMUM COVER SHALL BE AS REQUIRED BY ACI 318.
- E. WELDING OF AND TO ANY REINFORCING MATERIALS INCLUDING TACK WELDING OF CROSSING BARS IS STRICTLY PROHIBITED.

3.4 CONCRETE PLACEMENT:

- A. PRIOR TO PLACING CONCRETE, THE FORMS AND REINFORCEMENT SHALL BE THOROUGHLY INSPECTED; ALL TEMPORARY BRACING, TIES AND CLEATS REMOVED; ALL OPENINGS FOR UTILITIES PROPERLY BOXED; ALL FORMS PROPERLY SECURED IN THEIR CORRECT POSITION AND MADE TIGHT. ALL REINFORCEMENT AND EMBEDDED ITEMS SHALL BE SECURED IN THEIR PROPER LOCATIONS. ALL OLD AND DRY CONCRETE AND DIRT SHALL BE CLEANED OFF AND ALL STANDING WATER AND OTHER FOREIGN MATERIAL REMOVED.
- B. PLACING CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301 AND ACI 304 AND SHALL BE CARRIED OUT AT SUCH A RATE THAT THE CONCRETE PREVIOUSLY PLACED IS STILL PLASTIC AND INTEGRATED WITH THE FRESHLY PLACED CONCRETE. CONCRETING ONCE STARTED, SHALL BE CARRIED ON AS A CONTINUOUS OPERATION UNTIL THE SECTION IS COMPLETED. NO COLD JOINTS SHALL BE ALLOWED.
- C. ALL CONCRETE SHALL BE THOROUGHLY CONSOLIDATED AND COMPACTED BY VIBRATION SPACING, RODDING, OR FORKING DURING THE OPERATION OF PLACING AND DEPOSITING IN ACCORDANCE WITH ACI 309. THE CONCRETE SHALL BE THOROUGHLY WORKED AROUND REINFORCEMENT, EMBEDDED ITEMS, AND INTO THE CORNER OF THE FORMS SO AS TO ELIMINATE ALL AIR AND STONE POCKETS.

3.5 FINISHING:

- A. FINISHING OF THE FLOOR SLABS SHALL BE IN ACCORDANCE WITH ACI 302.1 SECTION 7.2 WITH A MINIMUM OF THREE TROWELINGS; THE SLAB FINISH TOLERANCE AS MEASURED IN ACCORDANCE WITH ASTM E 1155 SHALL HAVE AN OVERALL TEST NUMBER FOR FLATNESS, FF= 20 AND FOR LEVEL FL=15. THE MINIMUM LOCAL NUMBER FOR FLATNESS, FF= 15 AND FOR LEVEL FL=10.
- B. SURFACE OF FLOOR SLAB SHALL RECEIVE TWO COATS OF CLEAR SEALER/HARDENER.
- C. ABOVE GRADE WALL SURFACES SHALL HAVE A SMOOTH FORM FINISH AS DEFINED IN CHAPTER 10 OF ACI 301.

3.6 CURING:

- A. FRESHLY DEPOSITED CONCRETE SHALL BE PROTECTED FROM PREMATURE DRYING AND EXCESSIVELY HOT AND COLD TEMPERATURES AND SHALL BE MAINTAINED WITH MINIMUM MOISTURE LOSS AT A RELATIVELY CONSTANT TEMPERATURE FOR A PERIOD OF TIME NECESSARY FOR THE HYDRATION OF THE CEMENT AND PROPER HARDENING OF THE CONCRETE.
- B. CONCRETE SHALL BE KEPT CONTINUOUSLY MOIST AT LEAST OVERNIGHT, IMMEDIATELY FOLLOWING THE INITIAL CURING. BEFORE THE CONCRETE HAS DRIED, ADDITIONAL CURING SHALL BE ACCOMPLISHED BY ONE OF THE FOLLOWING MATERIALS OR METHODS:
 - 1. PONDING OR CONTINUOUS SPRINKLING.
 - 2. ABSORPTIVE MAT OR FABRIC KEPT CONTINUOUSLY WET.
 - 3. NON-ABSORPTIVE FILM (POLYETHYLENE) OVER PREVIOUSLY SPRINKLED SURFACE.
 - 4. SAND OR OTHER COVERING KEPT CONTINUOUSLY WET.
 - 5. CONTINUOUS STEAM (NOT EXCEEDING 150 F) OR VAPOR MIST BATH.
 - 6. SPRAYED-ON CURING COMPOUND APPLIED IN TWO COATS, SPRAYED IN PERPENDICULAR DIRECTION.
- C. THE FINAL CURING SHALL CONTINUE UNTIL THE CUMULATIVE NUMBER OF DAYS OR FRACTION THEREOF, NOT NECESSARILY CONSECUTIVE, DURING WHICH TEMPERATURE OF THE AIR IN CONTACT WITH CONCRETE IS ABOVE 50F HAS TOTALED SEVEN (7) DAYS; CONCRETE SHALL NOT BE PERMITTED TO FREEZE DURING THE CURING PERIOD. RAPID DRYING AT THE END OF THE CURING PERIOD SHALL BE PREVENTED.



**FORTUNE
WIRELESS INC.**
5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: **ren**

CHECKED BY: **AJB**

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

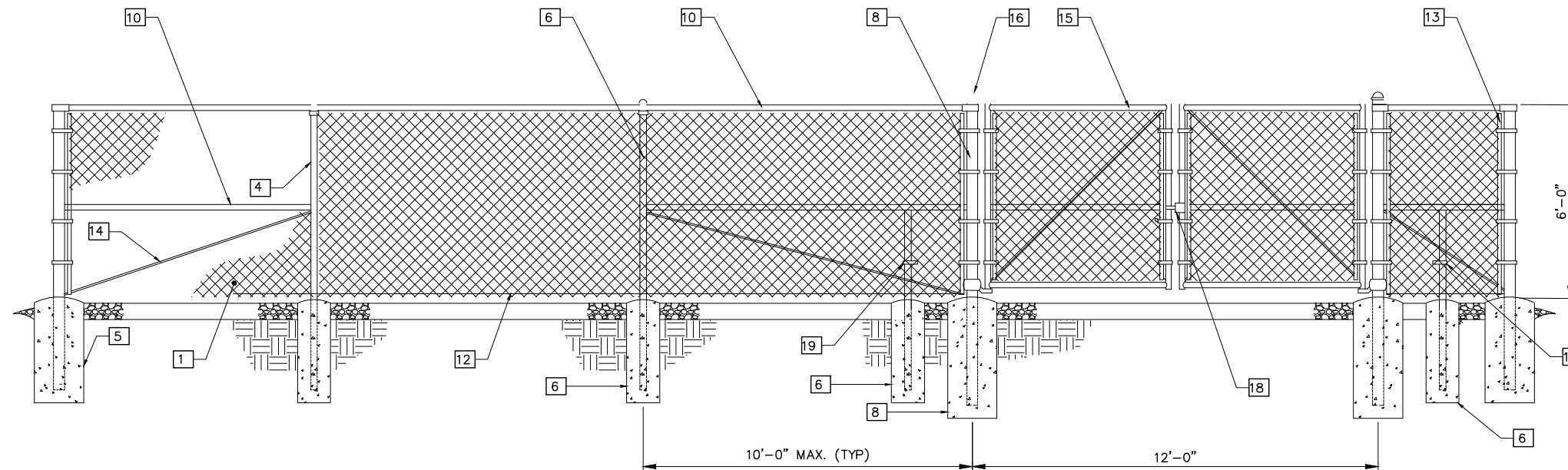
SHEET TITLE:

**CONCRETE WORK
NOTES**

SHEET NUMBER:

C-8

DO NOT SCALE DRAWINGS



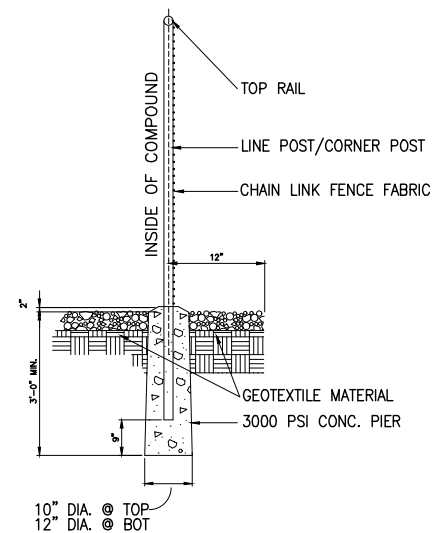
1 TYPICAL FENCE SECTION
SCALE: N.T.S.

KEYNOTE LEGEND:

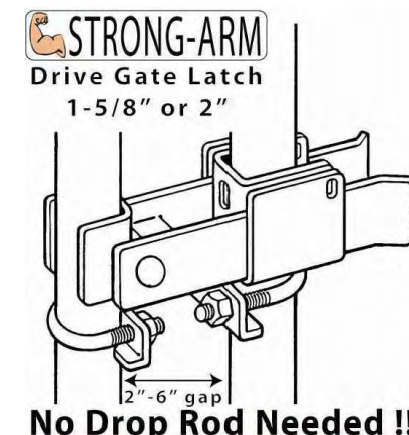
- | | |
|---|---|
| <p>1 FABRIC: 6FT. HEIGHT, 9 GAUGE, 2" MESH, ASTM A392.</p> <p>2 BARBED WIRE: 12 GAUGE WIRE, 4 POINT (3 RUNS), FINISH TO MATCH FABRIC, ASTM A121.</p> <p>3 EXTENSION ARMS: STAMPED STEEL WITH MALLEABLE IRON BASE, FINISH TO MATCH FENCE FRAMEWORK, ASTM F626.</p> <p>4 END AND CORNER POSTS: 3"Ø PIPE SCH. 40 (GALV.) ASTM F1083</p> <p>5 CONCRETE FOUNDATION: 36"x12"Ø (3000 PSI)</p> <p>6 LINE POSTS: 2"Ø PIPE SCH. 40 (GALV.) ASTM F1083</p> <p>7 CONCRETE FOUNDATION: 36"x10"Ø (3000 PSI)</p> <p>8 GATE POSTS: 4"Ø PIPE SCH. 40 (GALV.) ASTM F1083</p> <p>9 CONCRETE FOUNDATION: 48"x12"Ø (3000 PSI)</p> <p>10 TOP RAIL & BRACE RAIL: 1-1/2"Ø PIPE SCH. 40 (GALV.) ASTM F1083</p> | <p>11 MIDDLE RAILS: 1-1/2"Ø PIPE SCH. 40 (GALV.) ASTM F1083</p> <p>12 BOTTOM TENSION WIRE: 0.177"Ø METALLIC-COATED STEEL (GALV.), MARCELLED, ASTM A824</p> <p>13 TENSION BARS: 3/16"x3/4", FULL HEIGHT OF FABRIC, FINISH TO MATCH FENCE FRAMEWORK.</p> <p>14 TENSION ROD: 3/8"Ø WITH ADJ. TIGHTNER, FINISH TO MATCH FENCE FRAMEWORK.</p> <p>15 GATE FRAME: 2"Ø SCH. 40 (GALV.) ASTM F1083</p> <p>16 POST CAPS: PER POST DIAMETER.</p> <p>17 GATE HINGES: NON-LIFT-OFF TYPE, OFFSET TO PERMIT 180 DEGREE SWING.</p> <p>18 STRONG ARM GATE LATCH LOCK</p> <p>19 DUCK BILL OPEN GATE HOLDER. VERIFY LOCATION IN FIELD BEFORE INSTALLATION</p> |
|---|---|

FENCE NOTES:

- REFER TO PROJECT SPECIFICATIONS FOR INFORMATION NOT SHOWN IN THE DRAWING.
- FENCE FABRIC SHALL COMFORM TO CHAIN LINK FENCE MANUFACTURERS INSTITUTE (CLFMI) PRODUCT MANUAL.
- INSTALL FENCE IN COMPLIANCE WITH ASTM F 567.
- INSTALL SWING GATES IN COMPLIANCE WITH ASTM F 900.
- DO NOT BEGIN INSTALLATION AND ERECTION BEFORE FINAL GRADING IS COMPLETED, UNLESS OTHERWISE PERMITTED. INSTALL FENCING ON BOUNDARY LINES INSIDE OF PROPERTY LINE ESTABLISHED BY SURVEY.
- DRILL OR HAND-EXCAVATE (USING POST - HOLE DIGGER) HOLES FOR POSTS TO DIAMETERS AND SPACINGS INDICATED, IN FIRM, UNDISTURBED OR COMPACTED SOIL. IF NOT INDICATED ON DRAWINGS, EXCAVATE HOLES FOR EACH POST TO MINIMUM DIAMETER RECOMMENDED BY FENCE MANUFACTURER, BUT NOT LESS THAN (4) TIMES LARGEST GROSS-SECTION OF POST.
- REMOVE POST HOLE SPOILS FROM SITE. DO NOT SET SPOILS ON AGGREGATE WITHOUT ADEQUATE PROTECTION.
- PROTECT PORTION OF POSTS ABOVE GROUND FROM CONCRETE SPLATTER. PLACE CONCRETE AROUND POSTS AND VIBRATE OR TAMP FOR CONSOLIDATION. CHECK EACH POST FOR VERTICAL AND TOP ALIGNMENT AND HOLD IN POSITION DURING PLACEMENT AND FINISHING OPERATIONS, UNLESS OTHERWISE SHOWN, EXTEND CONCRETE FOOTING 1 INCH ABOVE GRADE AND TROWEL TO A CROWN TO SHED WATER.
- INSTALL BARBED WIRE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- APPLY FABRIC TO OUTSIDE OF FRAMEWORK.



2 FENCE DETAIL
SCALE: N.T.S.



No Drop Rod Needed !!!



3 STRONG ARM GATE LATCH
SCALE: N.T.S.



FORTUNE WIRELESS INC.
5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

SHEET TITLE:

FENCE DETAILS

SHEET NUMBER:

C-9

DO NOT SCALE DRAWINGS



FORTUNE WIRELESS INC.
5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: **ren**
CHECKED BY: **AJB**

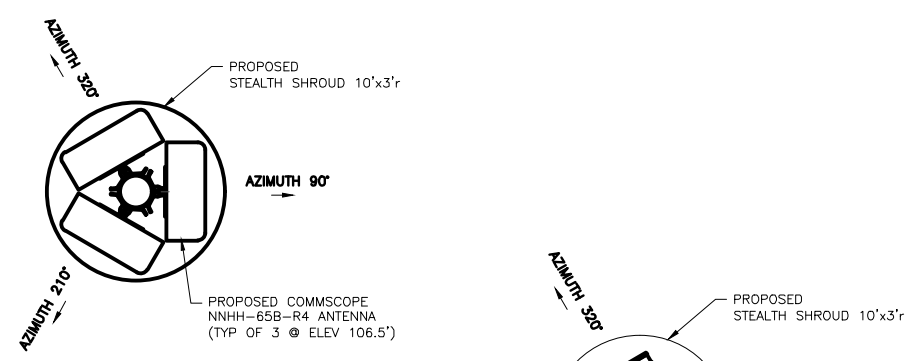
NO: A	DATE: 07/01/25	ISSUE: REVIEW CD
-----------------	--------------------------	----------------------------

SHEET TITLE:
**TOWER ELEVATION,
ANTENNA & CABLE PLANS**

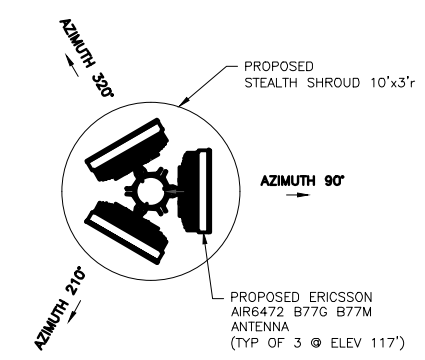
SHEET NUMBER:
T-1
DO NOT SCALE DRAWINGS

NOT USED 4

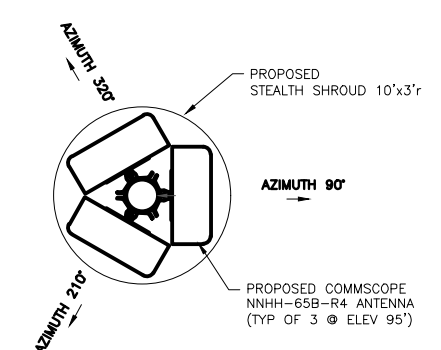
1. TYPES AND SIZES OF THE ANTENNA CABLE ARE BASED ON ESTIMATED LENGTHS. PRIOR TO ORDERING CABLE, CONTRACTOR SHALL VERIFY ACTUAL LENGTH BASED ON CONSTRUCTION LAYOUT AND NOTIFY THE PROJECT MANAGER IF ACTUAL LENGTHS EXCEED ESTIMATED LENGTHS.
2. CONTRACTOR SHALL VERIFY THE DOWN-TILT OF EACH ANTENNA WITH A DIGITAL LEVEL.
3. CONTRACTOR TO CONFIRM COAX COLOR CODING PRIOR TO CONSTRUCTION. REFER TO "ANTENNA SYSTEM LABELING STANDARD" ND-00027, REFER TO THE LATEST VERSION.
4. ALL JUMPERS TO THE ANTENNAS FROM THE MAIN TRANSMISSION LINE WILL BE 1/2" DIA. LDF AND SHALL NOT EXCEED 6'-0".
5. ALL COAXIAL CABLE WILL BE SECURED TO THE DESIGNED SUPPORT STRUCTURE, IN AN APPROVED MANNER, AT DISTANCES NOT TO EXCEED 4'-0" OC.
6. CONTRACTOR MUST FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS REGARDING BOTH THE INSTALLATION AND GROUNDING OF ALL COAXIAL CABLES, CONNECTORS, ANTENNAS, AND ALL OTHER EQUIPMENT.
7. WEATHERPROOF ALL ANTENNA CONNECTORS WITH SELF AMALGAMATING TAPE. WEATHERPROOFING SHALL BE COMPLETED IN STRICT ACCORDANCE WITH AT&T STANDARDS.
8. CONTRACTOR SHALL GROUND ALL EQUIPMENT, INCLUDING ANTENNAS, RET MOTORS, TMA'S, COAX CABLES, AND RET CONTROL CABLES AS A COMPLETE SYSTEM. GROUNDING SHALL BE EXECUTED BY QUALIFIED WIREMEN IN COMPLIANCE WITH MANUFACTURER'S SPECIFICATION AND RECOMMENDATION.
9. CONTRACTOR SHALL PROVIDE STRAIN-RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES, COAX CABLES, AND RET CONTROL CABLES. CABLE STRAIN-RELIEFS AND CABLE SUPPORTS SHALL BE APPROVED FOR THE PURPOSE. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
10. CONTRACTOR TO VERIFY THAT EXISTING COAX HANGERS ARE STACKABLE SNAP IN HANGERS. IF EXISTING HANGERS ARE NOT STACKABLE SNAP IN HANGERS THE CONTRACTOR SHALL REPLACE EXISTING HANGERS WITH NEW SNAP IN HANGERS IF APPLICABLE.



AT ELEVATION 106.5'

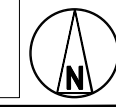


AT ELEVATION 117'



AT ELEVATION 95'

- NOTE:
1. CONTRACTOR SHALL INSTALL DC/FIBER DEMARCATION BOX WITHIN 30 FEET FROM ALL RRH'S WITHIN RESPECTIVE SECTOR.
 2. CONTRACTOR SHALL INSTALL RADIO MOUNT PIPE 12" FROM BASE OF MOUNT AT TOWER.
 3. CONTRACTOR SHALL INSTALL SURGE PROTECTION ON CROSSOVER PLATES

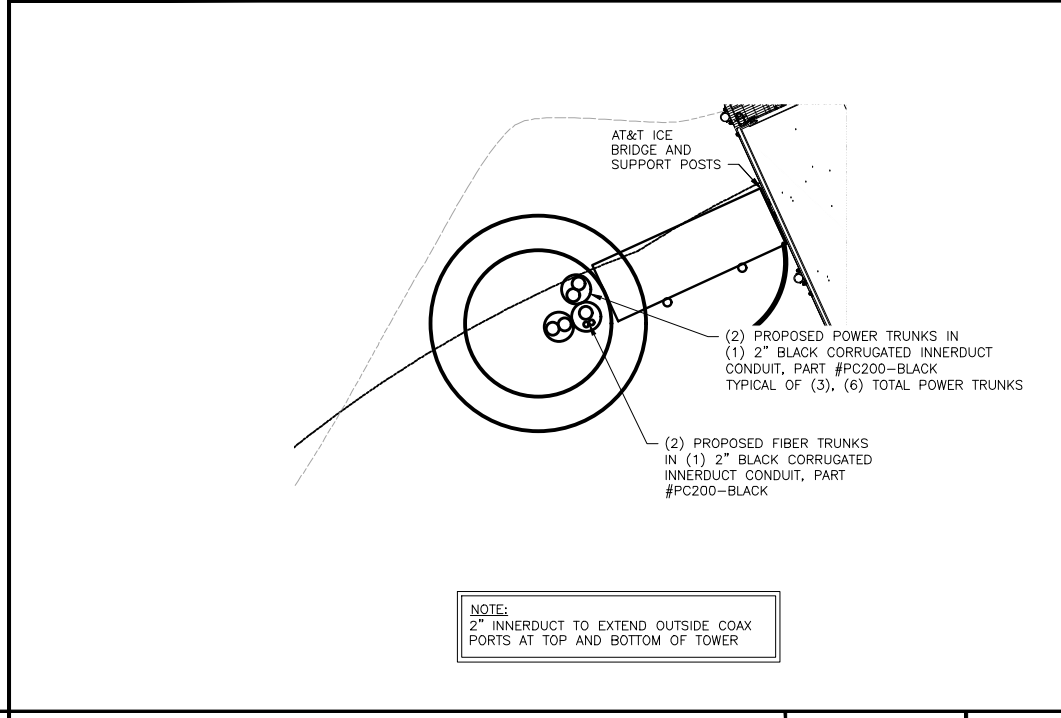


ANTENNA LAYOUT PLAN SCALE: 1/2"=1'-0" 2

ANTENNA CABLE NOTES 5

PROPOSED EQUIPMENT:

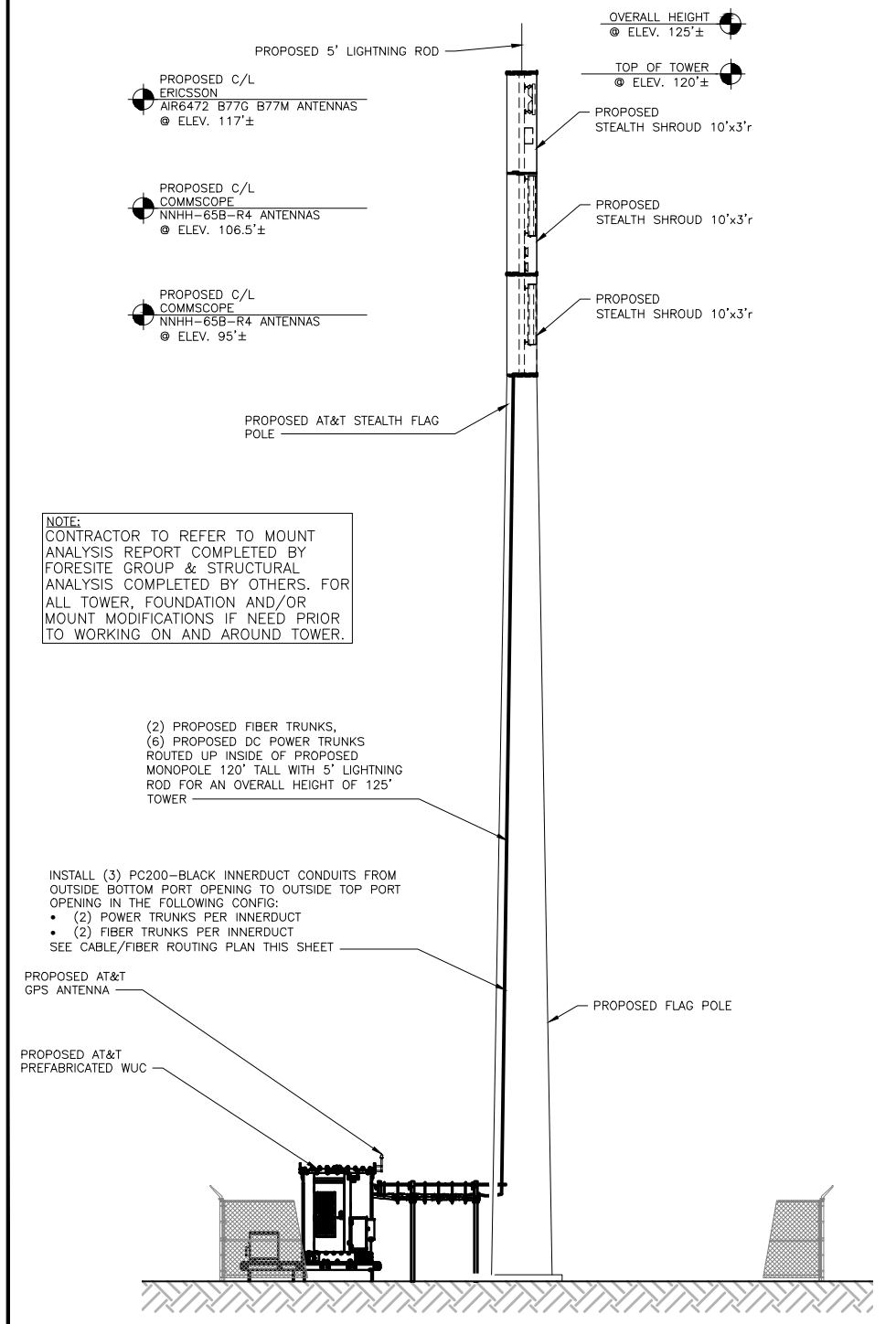
QTY	PART #	ITEM
6	KMW EPBQ-654LBH8-HG	ANTENNAS
3	ERICSSON AIR6419 B77D	ANTENNAS
3	ERICSSON 4478 B14	RRHs
3	ERICSSON 4490 B5/B12	RRHs
3	ERICSSON 4890 B25/B66	RRHs
2	RAYCAP DC9-48-60-24-8C-EV	DC/FIBER DEMARCATION BOX



- NOTE:
- 2" INNERDUCT TO EXTEND OUTSIDE COAX PORTS AT TOP AND BOTTOM OF TOWER

CABLE/FIBER ROUTING PLAN NO SCALE 3

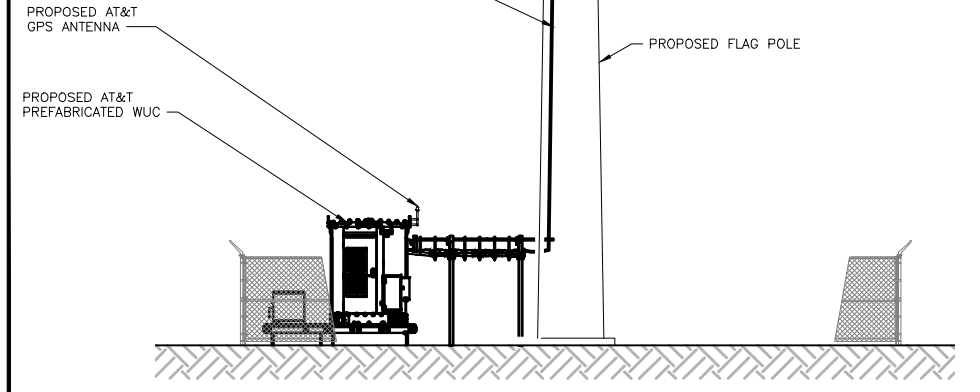
PROJECT DESCRIPTION 6



NOTE:
CONTRACTOR TO REFER TO MOUNT ANALYSIS REPORT COMPLETED BY FORESITE GROUP & STRUCTURAL ANALYSIS COMPLETED BY OTHERS. FOR ALL TOWER, FOUNDATION AND/OR MOUNT MODIFICATIONS IF NEED PRIOR TO WORKING ON AND AROUND TOWER.

(2) PROPOSED FIBER TRUNKS,
(6) PROPOSED DC POWER TRUNKS
ROUTED UP INSIDE OF PROPOSED
MONOPOLE 120' TALL WITH 5' LIGHTNING
ROD FOR AN OVERALL HEIGHT OF 125'
TOWER

INSTALL (3) PC200-BLACK INNERDUCT CONDUITS FROM
OUTSIDE BOTTOM PORT OPENING TO OUTSIDE TOP PORT
OPENING IN THE FOLLOWING CONFIG:
• (2) POWER TRUNKS PER INNERDUCT
• (2) FIBER TRUNKS PER INNERDUCT
SEE CABLE/FIBER ROUTING PLAN THIS SHEET



TOWER ELEVATION NO SCALE 1

ANTENNA REQUIREMENTS (VERIFY WITH CURRENT RFDS)										PROPOSED LTE/UMTS TRANSMISSION CABLES															
SECTOR	ANTENNA TYPE	ANTENNA AZIMUTH	FINAL NUMBER OF TMA'S	FINAL NUMBER OF RRH'S	TILT		CENTERLINE ELEVATION	DC9-48-60-24-8C-EV TO DC6 (DC POWER)			FROM DC6 TO RRH/TMA (DC POWER)			FROM LTE 9926 TO DC9-48-60-24-8C-EV (TELCO)			FROM DC6-48-60-18-8F TO RRH (TELCO)			FROM RRH TO ANTENNA (TELCO-CSR)			RET CABLES		
					MECH.	ELEC.		PART #	QTY.	LENGTH	PART #	QTY.	LENGTH	PART #	QTY.	LENGTH	PART #	QTY.	LENGTH	PART #	QTY.	LENGTH	PART #	QTY.	LENGTH
A1	COMMSCOPE NNHH-65B-R4	90°	-	1			95'	PWRT-604-S	3	150'	PWRT-208-LI	2	15'	RFFT-48SM-001	1	150'	FB-L98B-035-5000	2	15'	LDF4	8	5'/20'	ATCB-B01-005M	1	6.6'
A2	COMMSCOPE NNHH-65B-R4	90°	-	2			106.5'				PWRT-208-LI	2	15'				FB-L98B-035-5000	1	15'	LDF4	-	5'/20'	ATCB-B01-005M	1	6.6'
A3	ERICSSON AIR6472 B77G B77M	90°	-	-			117'				PWRT-208-LI	2	15'				FB-L98B-035-5000	1	15'	LDF4	-	5'/20'	ATCB-B01-005M	1	6.6'
A4																									
B1	COMMSCOPE NNHH-65B-R4	210°	-	1			95'	PWRT-604-S	3	150'	PWRT-208-LI	2	15'	RFFT-48SM-001	1	150'	FB-L98B-035-5000	2	15'	LDF4	8	5'/20'	ATCB-B01-005M	1	6.6'
B2	COMMSCOPE NNHH-65B-R4	210°	-	2			106.5'				PWRT-208-LI	2	15'				FB-L98B-035-5000	1	15'	LDF4	-	5'/20'	ATCB-B01-005M	1	6.6'
B3	ERICSSON AIR6472 B77G B77M	210°	-	-			117'				PWRT-208-LI	2	15'				FB-L98B-035-5000	1	15'	LDF4	-	5'/20'	ATCB-B01-005M	1	6.6'
B4																									
G1	COMMSCOPE NNHH-65B-R4	330°	-	1			95'				PWRT-208-LI	2	15'				FB-L98B-035-5000	2	15'	LDF4	8	5'/20'	ATCB-B01-005M	1	6.6'
G2	COMMSCOPE NNHH-65B-R4	330°	-	2			106.5'				PWRT-208-LI	2	15'				FB-L98B-035-5000	1	15'	LDF4	-	5'/20'	ATCB-B01-005M	1	6.6'
G3	ERICSSON AIR6472 B77G B77M	330°	-	-			117'				PWRT-208-LI	2	15'				FB-L98B-035-5000	1	15'	LDF4	-	5'/20'	ATCB-B01-005M	1	6.6'
G4																									

PER FINAL RFDS DATED 06/24/2025 VOL 2

REFER TO LATEST RFDS FROM AT&T PRIOR TO CONSTRUCTION

PROPOSED ANTENNA AND TRANSMISSION CABLES REQUIREMENT

1



FORTUNE WIRELESS INC.
 5511 WEST 79TH STREET
 INDIANAPOLIS, IN 46268
 (317) 532-1374

IN1187
 AT&T FA#: 15861975
 2688 EAST MAIN ST.
 PLAINFIELD,
 IN 46168
 HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

NO: A	DATE: 07/01/25	ISSUE: REVIEW CD
----------	-------------------	---------------------

SHEET TITLE:
**TOWER EQUIPMENT
 DETAILS & NOTES**

SHEET NUMBER:
T-2

DO NOT SCALE DRAWINGS

NO SCALE

2

3



FORTUNE WIRELESS INC.

5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

NO: A DATE: 07/01/25 ISSUE: REVIEW CD

**FOR AT&T
REFERENCE
ONLY**

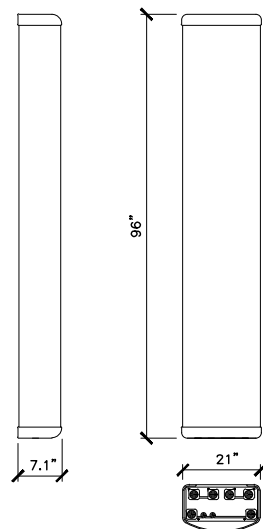
SHEET TITLE:
**DETAILED COMPOUND
DEMO PLAN**

SHEET NUMBER:
T-3

DO NOT SCALE DRAWINGS

KMW ANTENNAS EPBQ-654L8H8-HG

DIMENSIONS, HXWXD: 96"x21"x7.1"
SURVIVAL WIND SPEED: >150 MPH
WEIGHT, WITHOUT MOUNTING: 83.7 LBS.
CONNECTOR: (12) 4.3-10 DIN FEMALE
CONNECTOR POSITION: BOTTOM



DETAIL NOT USED

NO SCALE

1

PROPOSED ANTENNA SPECIFICATIONS

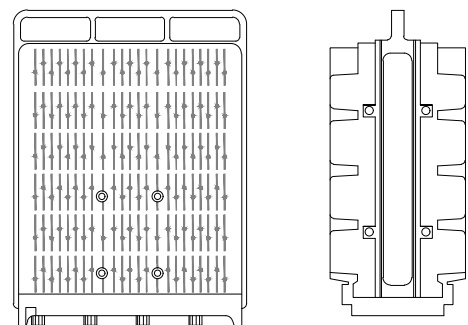
NO SCALE

2

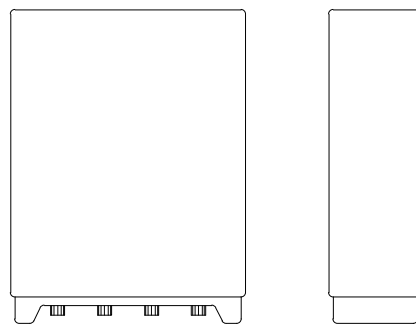
DETAIL NOT USED

NO SCALE

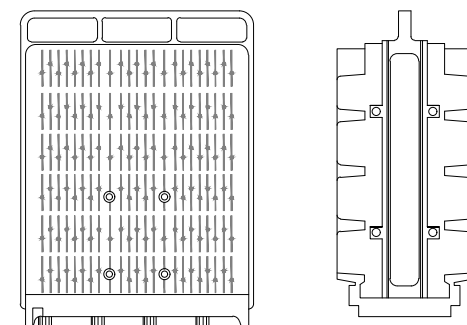
3



ERICSSON 4890 B25/B66
WEIGHT (WITHOUT MOUNTING HARDWARE): ±75 LBS
SIZE (HxWxD): 14.96x13.19x11.1 IN.



ERICSSON 4478 B14
WEIGHT (WITHOUT MOUNTING HARDWARE): 59.9 LBS
SIZE (HxWxD): 16.5x13.4x7.7 IN.



ERICSSON 4490 B5/B12
WEIGHT (WITHOUT MOUNTING HARDWARE): ±73 LBS
SIZE (HxWxD): 14.96x13.19x10.43 IN.

ERICSSON- RADIO 4890 B25/B66

NO SCALE

4

ERICSSON- RADIO 4478 B14

NO SCALE

5

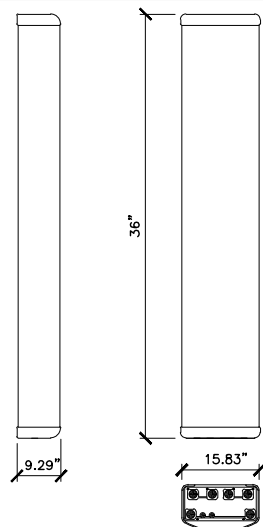
ERICSSON- RADIO 4490 B5/B12

NO SCALE

6

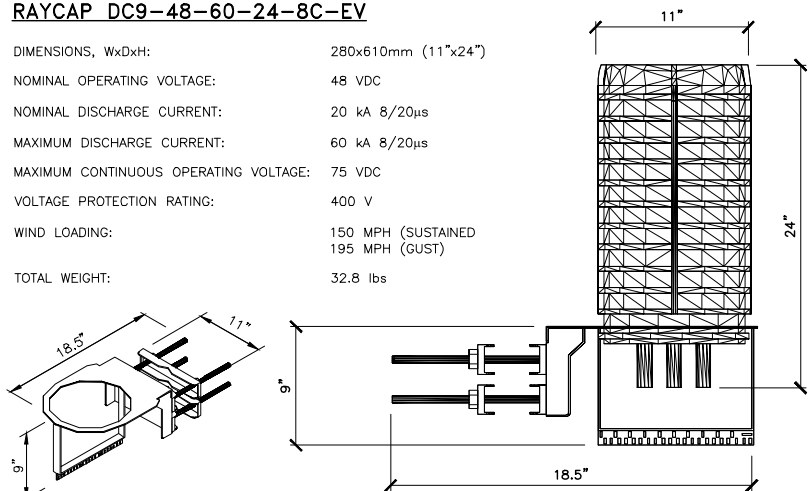
ERICSSON ANTENNA AIR6472 B77G B77M

DIMENSIONS, HXWXD: 36"x15.83"x9.29"
SURVIVAL WIND SPEED: >150 MPH
WEIGHT, WITHOUT MOUNTING: 75.6 LBS.



RAYCAP DC9-48-60-24-8C-EV

DIMENSIONS, WxDxH: 280x610mm (11"x24")
NOMINAL OPERATING VOLTAGE: 48 VDC
NOMINAL DISCHARGE CURRENT: 20 kA 8/20µs
MAXIMUM DISCHARGE CURRENT: 60 kA 8/20µs
MAXIMUM CONTINUOUS OPERATING VOLTAGE: 75 VDC
VOLTAGE PROTECTION RATING: 400 V
WIND LOADING: 150 MPH (SUSTAINED)
195 MPH (GUST)
TOTAL WEIGHT: 32.8 lbs



PROPOSED ANTENNA SPECIFICATIONS

NO SCALE

7

RAYCAP DC9-48-60-24-8C-EV

NO SCALE

8

DETAIL NOT USED

NO SCALE

9



FORTUNE WIRELESS INC.
 5511 WEST 79TH STREET
 INDIANAPOLIS, IN 46268
 (317) 532-1374

IN1187
 AT&T FA#: 15861975
 2688 EAST MAIN ST.
 PLAINFIELD,
 IN 46168
 HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

NO: A DATE: 07/01/25 ISSUE: REVIEW CD

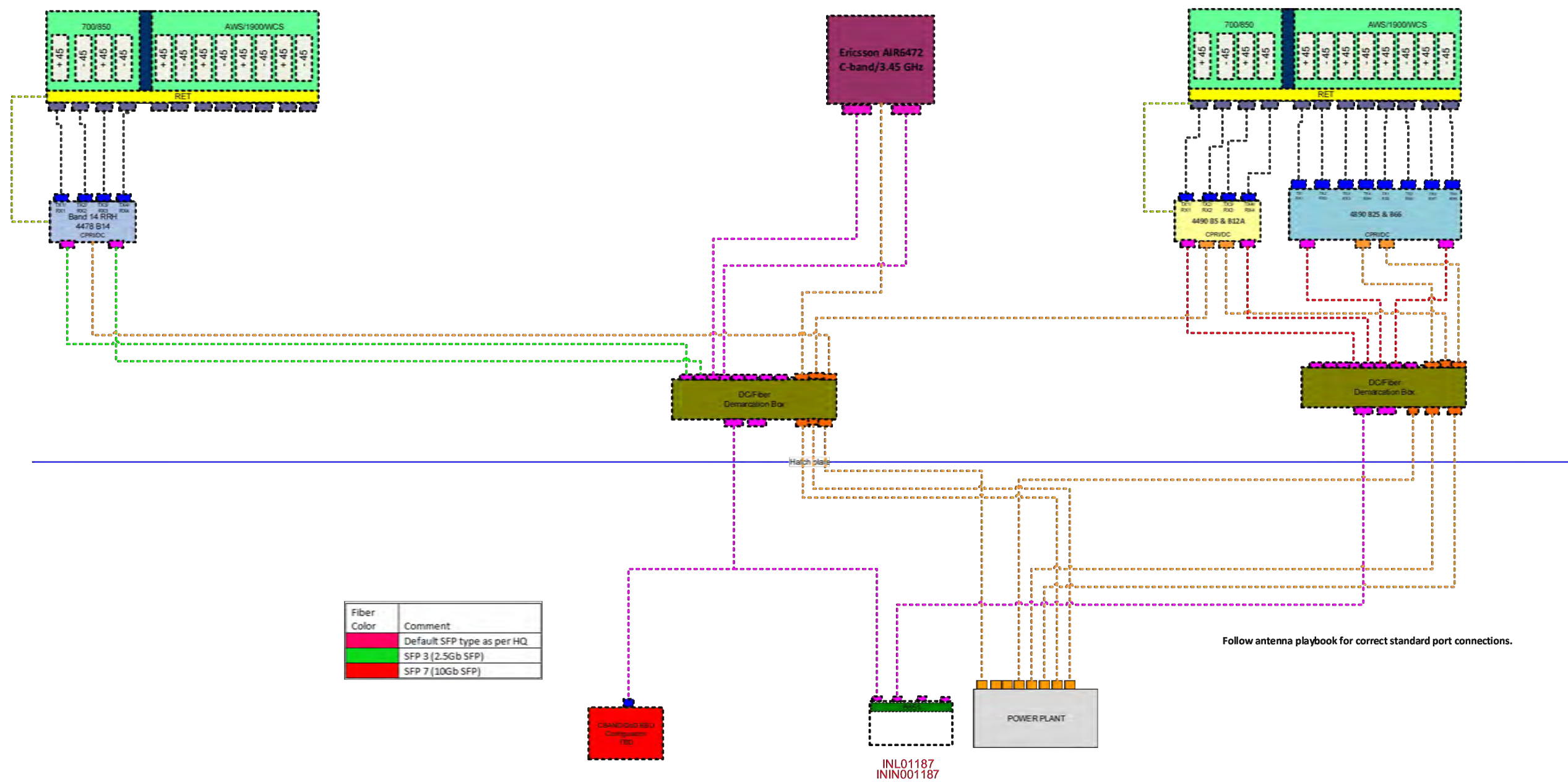
SHEET TITLE:
**PLUMBING DIAGRAM
 ALPHA SECTOR**

SHEET NUMBER:
T-4

DO NOT SCALE DRAWINGS

Diagram - Sector: D
 Roll Site Name: INL01187
 Diagram File Name: IN1187_PROPOSED_SECTOR_A.vsd
 Location Name: IN1187
 Market: INDIANAPOLIS
 Market Cluster: MICHIGAN/INDIANA

IN1187_PROPOSED_SECTOR_A



Fiber Color	Comment
Magenta	Default SFP type as per HQ
Green	SFP 3 (2.5Gb SFP)
Red	SFP 7 (10Gb SFP)



FORTUNE WIRELESS INC.
 5511 WEST 79TH STREET
 INDIANAPOLIS, IN 46268
 (317) 532-1374

IN1187
 AT&T FA#: 15861975
 2688 EAST MAIN ST.
 PLAINFIELD,
 IN 46168
 HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

SHEET TITLE:

**PLUMBING DIAGRAM
 BETA SECTOR**

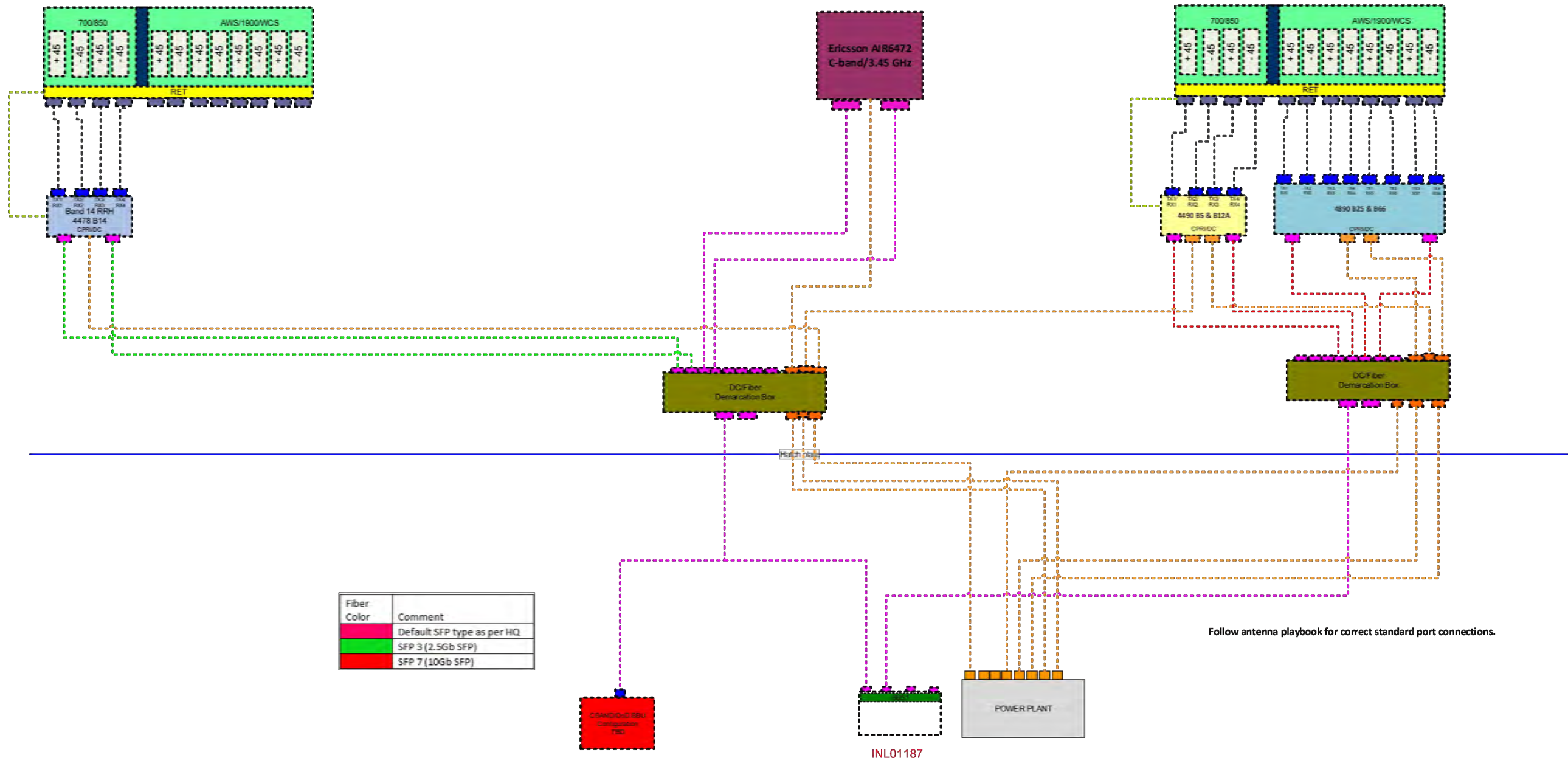
SHEET NUMBER:

T-5

DO NOT SCALE DRAWINGS

Diagram - Sector: E
 Roof Site Name: INL01187
 Comments:
 Diagram File Name: IN1187_PROPOSED_SECTOR_B.wpd
 Location Name: IN1187
 Market: INDIANAPOLIS
 Market Cluster: MICHIGAN/INDIANA

IN1187_PROPOSED_SECTOR_B



Fiber Color	Comment
Pink	Default SFP type as per HQ
Green	SFP 3 (2.5Gb SFP)
Red	SFP 7 (10Gb SFP)

Follow antenna playbook for correct standard port connections.



FORTUNE WIRELESS INC.
 5511 WEST 79TH STREET
 INDIANAPOLIS, IN 46268
 (317) 532-1374

IN1187
 AT&T FA#: 15861975
 2688 EAST MAIN ST.
 PLAINFIELD,
 IN 46168
 HENDRICKS COUNTY

DRAWN BY: **ren**

CHECKED BY: **AJB**

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

SHEET TITLE:

**PLUMBING DIAGRAM
 GAMMA SECTOR**

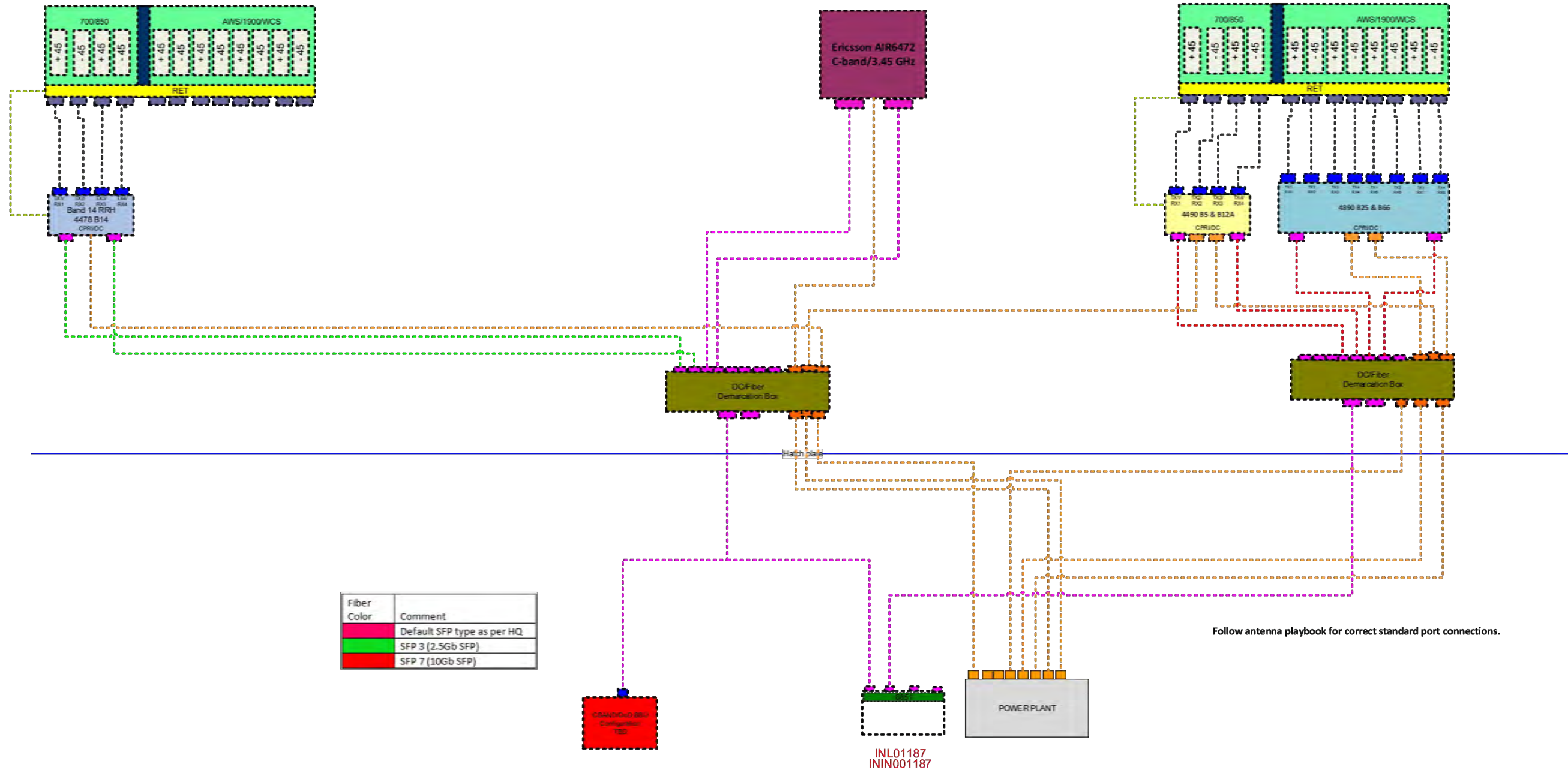
SHEET NUMBER:

T-6

DO NOT SCALE DRAWINGS

Diagram - Sector: F
 Diagram File Name - IN1187_PROPOSED_SECTOR_C.vsd
 Abol Site Name - INL01187
 Location Name - IN1187
 Market - INDIANAPOLIS
 Market Cluster - MICHIGAN/INDIANA

IN1187_PROPOSED_SECTOR_C



Fiber Color	Comment
Green	Default SFP type as per HQ
Pink	SFP 3 (2.5Gb SFP)
Red	SFP 7 (10Gb SFP)



FORTUNE WIRELESS INC.
5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

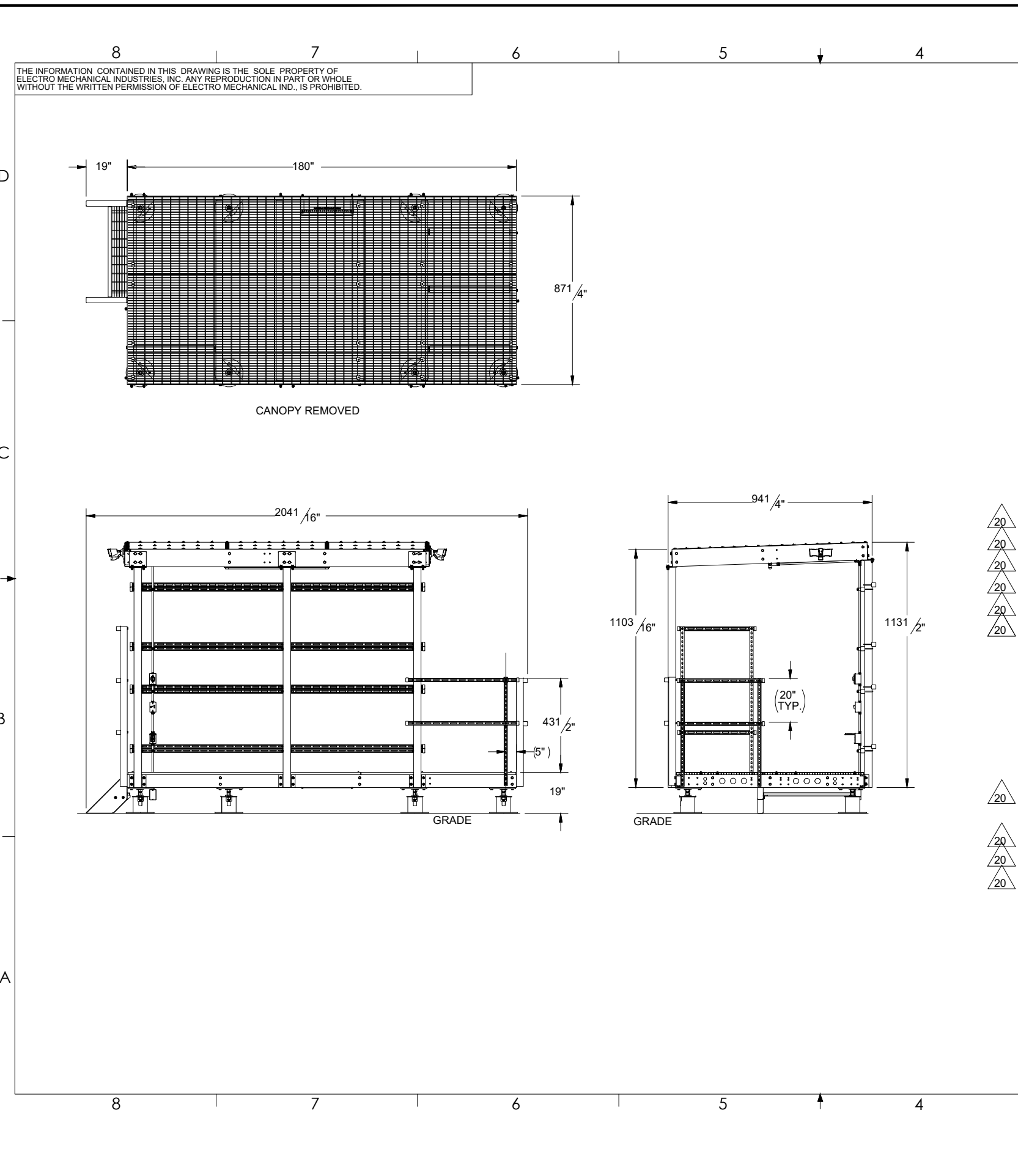
DRAWN BY: **ren**
CHECKED BY: **AJB**

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

SHEET TITLE:
**EQUIPMENT PLATFORM
DETAILS**

SHEET NUMBER:
P-1

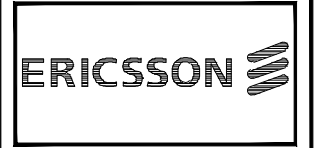
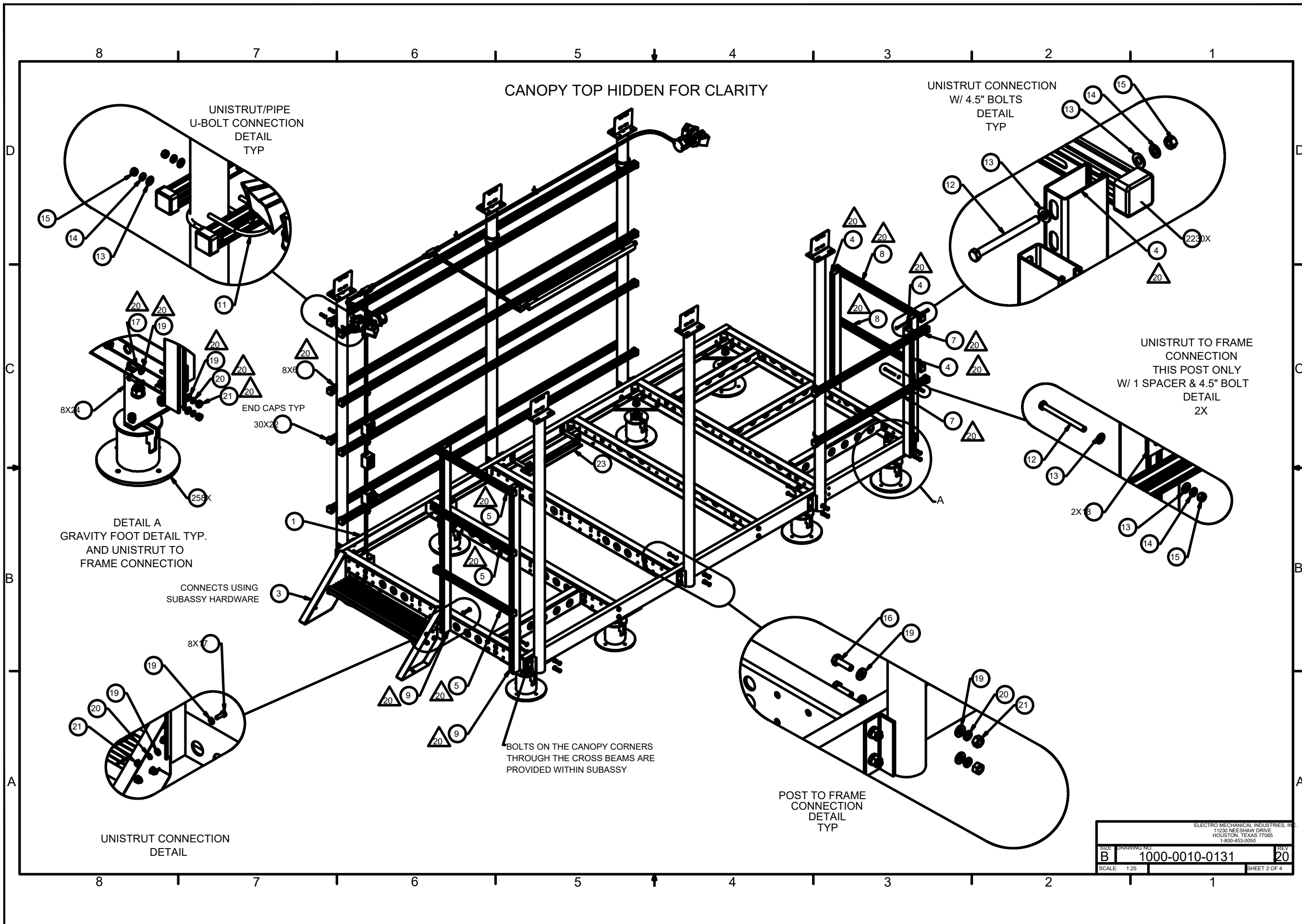
DO NOT SCALE DRAWINGS



REVISIONS					
REV.	DCN #	DESCRIPTION	DATE	BY	APPROVED
20	01182	VIRTUAL UNISTRUT CONVERTED TO INDIVIDUAL PARTS NO'S.	08/31/2022	JTR	JPB

ITEM NO.	QTY REQD	PART NUMBER	DESCRIPTION	LENGTH	WEIGHT
1	1	1001-0020-0056	EMERSON BOLT TOGETHER PLATFORM 87" X 180"		1600.8
2	1	1001-0030-0030	BOLT TOGETHER CANOPY W. EXPANDED METAL ROOF 140.875" X 87.1875"		1291.1
3	1	1003-0020-0002	1 TREAD STAIR ASS'Y (42" WIDE)		55.4
4	3	P-006-282	VERT. HANDRAIL, UNISTRUT	50"	12.2
5	3	P-006-283	SHORT SIDE MOUNTING RAIL, UNISTRUT	36"	4.1
6	8	P-006-284	LONG SIDE MOUNTING RAIL, UNISTRUT	136"	15.6
7	2	P-006-286	LONG SIDE HANDRAIL, UNISTRUT	52"	6.0
8	2	P-006-285	SHORT SIDE HANDRAIL, UNISTRUT	40"	4.6
9	2	P-006-281	VERT. MOUNTING RAIL, UNISTRUT	74"	18.0
10	1	1000-0000-0119	ELECTRICAL KIT		20.8
11	26	002-00U-G046	U-BOLT, .375-16 X 1.75 THD LNG., 3.625 I.D X 5.25 HT, GALV		0.052
12	12	002-0BG-0258	HB, .375-16 X 4.50 LG., PT X 1.00, GR. 5, HDG	4.50	0.159
13	76	002-0FW-G005	WASHER, FLAT, .375, GALV		0.01
14	64	002-0LW-G005	WASHER, SPLIT LOCK, .375 INCH, GALV.		0.01
15	64	002-0NG-0018	NUT, HEX, .375-16UNC, GR 5, GALV		0.02
16	12	002-0BG-0012	HFB, .500-13 X 1.75 LG., PT X 1.00, A325, HDG	1.75	0.2
17	10	002-0BG-0010	HFB, .500-13 X 1.50 LG., PT X 1.00, A325, HDG	1.50	0.14
18	2	002-0SW-H001	WASHER, SQUARE, .50" ID X 2" X .25"		0.27
19	44	002-0FW-G002	FW, .50, F436, HDG		0.02
20	22	002-0LW-G002	WASHER, SPLIT LOCK, .500", GALV		0.01
21	22	002-0NG-0010	NUT, HEX, .500-13UNC, GR 2H, GALV		0.06
22	30	309-000-0008	STRUT CHANNEL CAP 1.625" X 1.625"		0.05
23	1	1000-0000-0075	GROUND BAR KIT		8.83
24	8	A-000-250	CORNER FOOT MOUNT ASSY, 2 LEVELING WASHERS		14.1
25	8	1008-0010-0015	8" FOOT AND HARDWARE ASSY., 1" HARDWARE		35.1

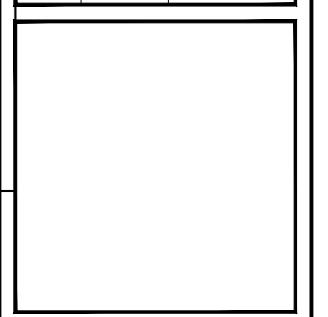
SURFACE FINISH UNLESS OTHERWISE SPECIFIED		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		APPROVALS	DATE	ELECTRO MECHANICAL INDUSTRIES, INC. 11230 NEESSAW DRIVE HOUSTON, TEXAS 77065 1-800-453-0050	
MATERIAL	SEE PARTS LIST	TOLERANCES	THIRD ANGLE PROJECTION	DRAWN J. CRITELLI	12/18/2018	TITLE: 87"X180" BOLT TOGETHER PLATFORM GRAVITY MOUNT W EXPANDED METAL CANOPY	
NEXT ASSY	USED ON	FRACTIONS ± 1/16		CHECKER J. BREEN	12/21/2018	SIZE B	DRAWING NO. 1000-0010-0131
APPLICATIONS		ANGLES ± .25°		ENGINEER J. BREEN	12/21/2018	REV 20	
		HOLES: DRILLED OR PUNCHED ± .002		PRODUCTION J. SUNDERLAND	12/26/2018	SCALE: 1:45	WEIGHT: 3614.7 lbs.
		BURNED ± .002				SHEET 1 OF 4	



IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: ren
CHECKED BY: AJB

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD



SHEET TITLE:
**EQUIPMENT PLATFORM
DETAILS**

SHEET NUMBER:
P-2
DO NOT SCALE DRAWINGS

ELECTRO MECHANICAL INDUSTRIES, INC.
11230 NEESEHAW DRIVE
HOUSTON, TEXAS 77065
1-800-453-0050

SIZE	DRAWING NO.	REV
B	1000-0010-0131	20
SCALE: 1:25	SHEET 2 OF 4	



FORTUNE WIRELESS INC.
 5511 WEST 79TH STREET
 INDIANAPOLIS, IN 46268
 (317) 532-1374

IN1187
 AT&T FA#: 15861975
 2688 EAST MAIN ST.
 PLAINFIELD,
 IN 46168
 HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

SHEET TITLE:

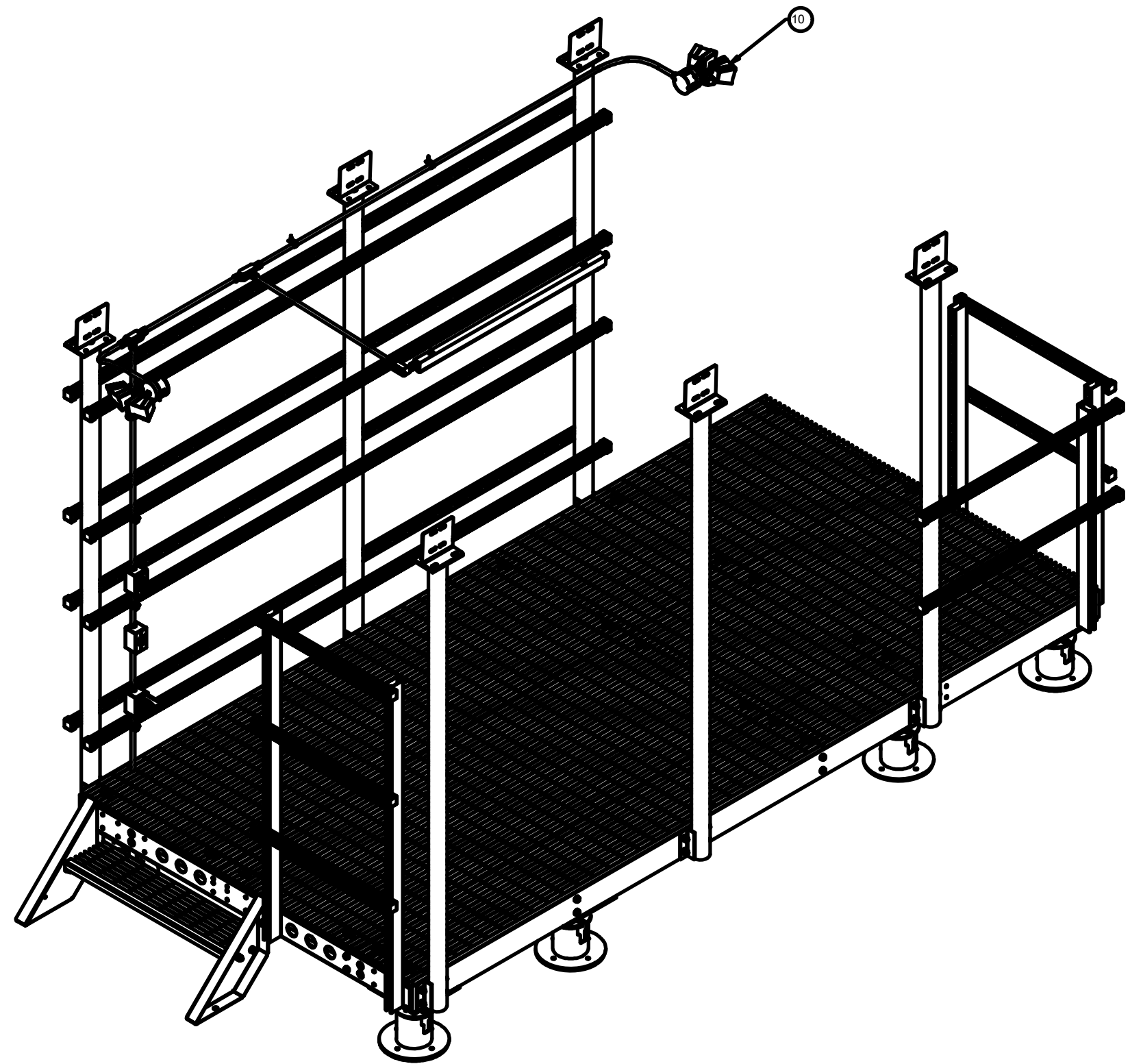
EQUIPMENT PLATFORM DETAILS

SHEET NUMBER:

P-3

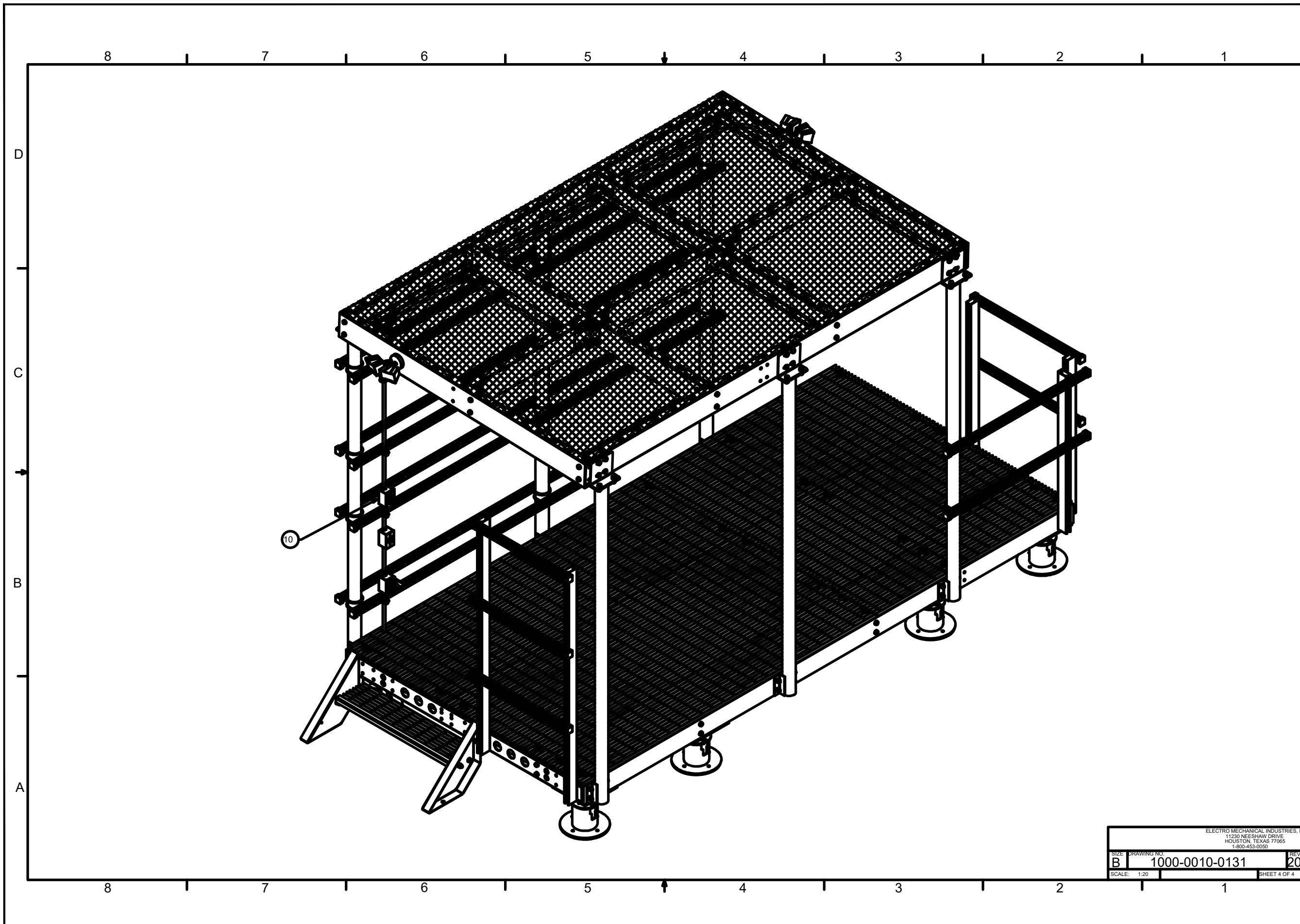
DO NOT SCALE DRAWINGS

CANOPY TOP HIDDEN FOR CLARITY



ELECTRO MECHANICAL INDUSTRIES, INC.
 11230 NEESEAW DRIVE
 HOUSTON, TEXAS 77065
 1-800-453-0050

SIZE: B	DRAWING NO: 1000-0010-0131	REV: 20
SCALE: 1/20	SHEET 3 OF 4	



**FORTUNE
WIRELESS INC.**
5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

ELECTRO MECHANICAL INDUSTRIES, INC.
11230 NEESESHAW DRIVE
HOUSTON, TEXAS 77065
1-800-453-0050

SIZE: B DRAWING NO: 1000-0010-0131 REV: 20
SCALE: 1:20 SHEET 4 OF 4

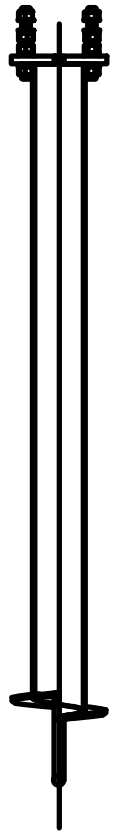
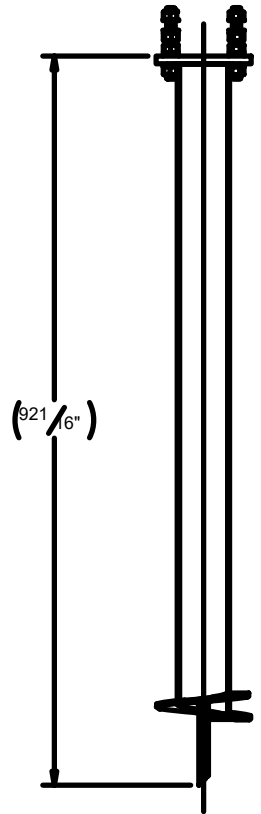
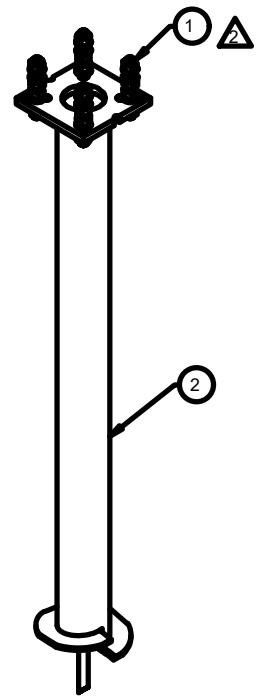
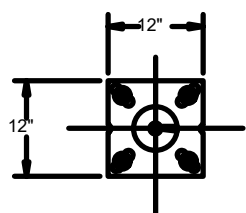
SHEET TITLE:
**EQUIPMENT PLATFORM
DETAILS**

SHEET NUMBER:
P-4

DO NOT SCALE DRAWINGS

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF ELECTRO MECHANICAL INDUSTRIES, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF ELECTRO MECHANICAL IND., IS PROHIBITED.

REVISIONS					
REV.	DCN #	DESCRIPTION	DATE	BY	APPROVED
2	01039	REMOVED 002-0AT-H000, 002-0NG-0000, 002-0NG-0008, 002-0LW-G008, 002-0GW-G009 ADDED 1000-0020-0077	8/30/2021	PCG	JPB



ITEM NO.	PART NUMBER	DESCRIPTION	LENGTH	WEIGHT
1	1000-0020-0077	QUAD MOUNT LEVELING HARDWARE KIT		15.2
2	400-000-1017	6" X 7", 1" HARDWARE- HELICAL PIER		173

SURFACE FINISH: UNLESS OTHERWISE SPECIFIED		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		APPROVALS		DATE		ELECTRO MECHANICAL INDUSTRIES, INC. 11200 NEESEHAW DRIVE HOUSTON, TEXAS 77065 1-800-453-0050	
MATERIAL: SEE PARTS LIST	TOLERANCES: .06, .015, .005	DRAWN: RLW/jf		DATE: 2/28/2019		TITLE: HELICAL 4-PACK, 400-000-1017, W/ HDW		REV: 2	
THIRD ANGLE PROJECTION	FRACTIONS: 1/2, 3/4	CHECKER: C. SANCHEZ		DATE: 6/19/2019		ENGINEER: J. BREEN		DATE: 6/19/2019	
NEXT ASSY: USED ON	ANGLES: .25°	PRODUCTION: JKS		DATE: 6/19/2019		DRAWING NO.: 1000-0020-0034		SCALE: 1:20	
APPLICATIONS:	HOLES: DRILLED OR PUNCHED	BURNED		WEIGHT: 753 lbs.		SHEET 1 OF 1			



FORTUNE WIRELESS INC.
5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

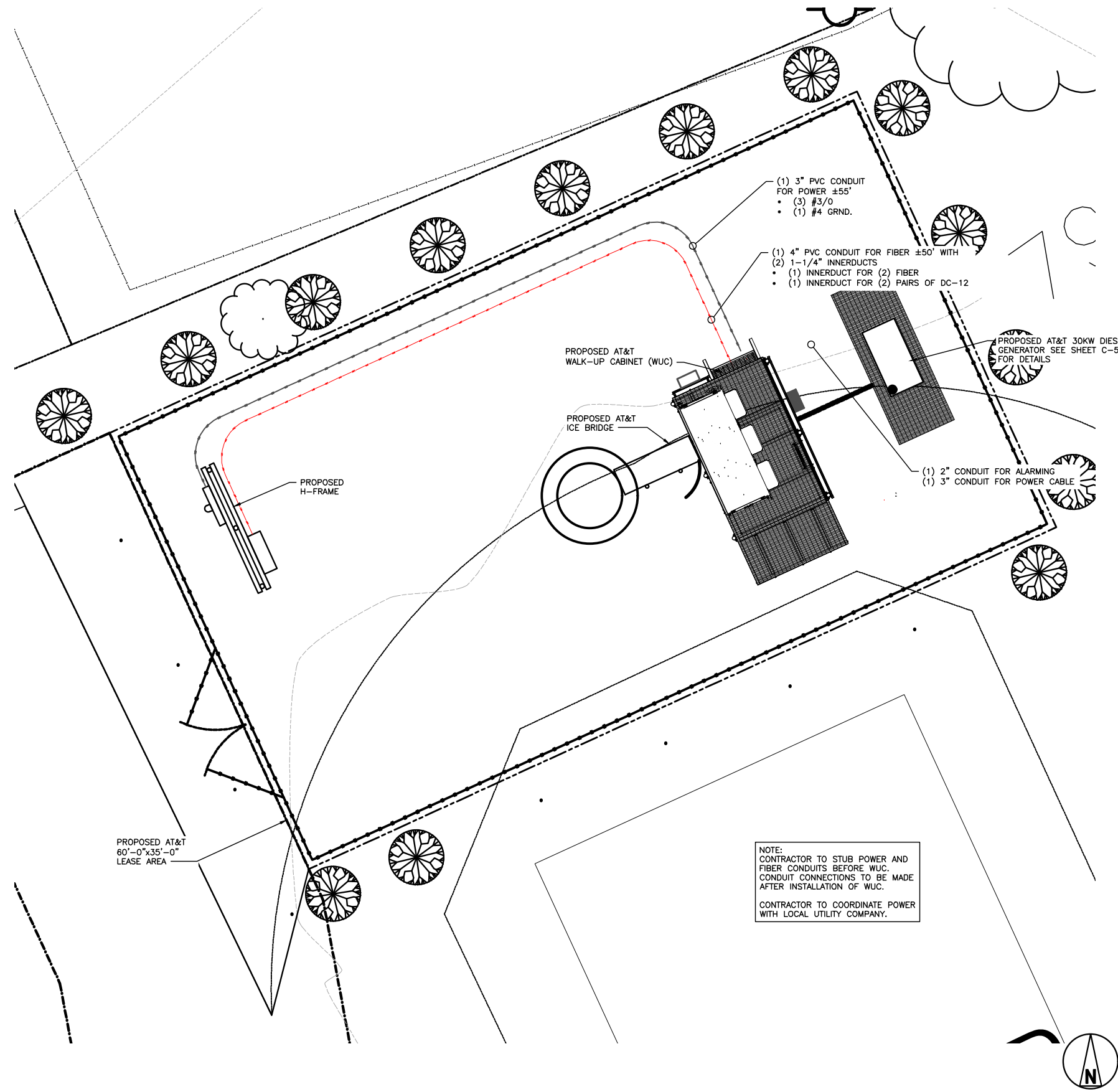
DRAWN BY: ren
CHECKED BY: AJB

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

SHEET TITLE:
EQUIPMENT PLATFORM DETAILS

SHEET NUMBER:
P-5

DO NOT SCALE DRAWINGS



NOTE:
 CONTRACTOR TO STUB POWER AND FIBER CONDUITS BEFORE WUC. CONDUIT CONNECTIONS TO BE MADE AFTER INSTALLATION OF WUC.
 CONTRACTOR TO COORDINATE POWER WITH LOCAL UTILITY COMPANY.

1. THE CONDUIT ROUTING IS DIAGRAMMATICALLY SHOWN ON THE PLANS AND ARE ONLY APPROXIMATIONS. THE EXACT LOCATION AND ROUTING SHALL BE FIELD VERIFIED.
2. ALL ELECTRICAL EQUIPMENT AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMICOID NAMEPLATES, INDICATING THE CIRCUITS ORIGINATION AND ALL EQUIPMENT TERMINATIONS.
3. CONTRACTOR SHALL PROVIDE STRAIN-RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES, COAX CABLES, AND RET CONTROL CABLES. CABLE STRAIN-RELIEFS, CABLE SUPPORTS SHALL BE APPROVED FOR THE PURPOSE. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
4. CONTRACTOR SHALL PROVIDE ALL BREAKERS, CONDUITS, AND CIRCUIT CONDUCTORS, AS REQUIRED FOR A COMPLETED SYSTEM AND SHALL BE IN COMPLIANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
5. ALL CONDUITS SHALL BE INSTALLED IN COMPLIANCE WITH THE CURRENT NATIONAL ELECTRIC CODE (NEC) OR AS REQUIRED BY THE LOCAL JURISDICTION, WHICHEVER IS THE MOST STRINGENT.
6. CONTRACTOR SHALL COORDINATE WITH POWER AND TELEPHONE COMPANIES, AND PROVIDE ALL MATERIALS REQUIRED, AND PROVIDE TRENCH, BACKFILL & SITE RESTORATION. DEPTH OF CONDUITS PER N.E.C., LOCAL JURISDICTION AND POWER & TELE COMPANY, WHICH EVER IS MORE STRINGENT.



FORTUNE WIRELESS INC.
 5511 WEST 79TH STREET
 INDIANAPOLIS, IN 46268
 (317) 532-1374

IN1187
 AT&T FA#: 15861975
 2688 EAST MAIN ST.
 PLAINFIELD,
 IN 46168
 HENDRICKS COUNTY

DRAWN BY: **ren**
 CHECKED BY: **AJB**

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

NOTES

2

ABOVE GROUND TELCO	-----
ABOVE GROUND POWER	-----
ABOVE GROUND TELCO/POWER	-----
OVERHEAD POWER	-----
OVERHEAD UTILITIES	-----
UNDERGROUND DUCT	-----
UNDERGROUND POWER	-----
UNDERGROUND TELCO	-----

UTILITY PLAN

1

LEGEND

3

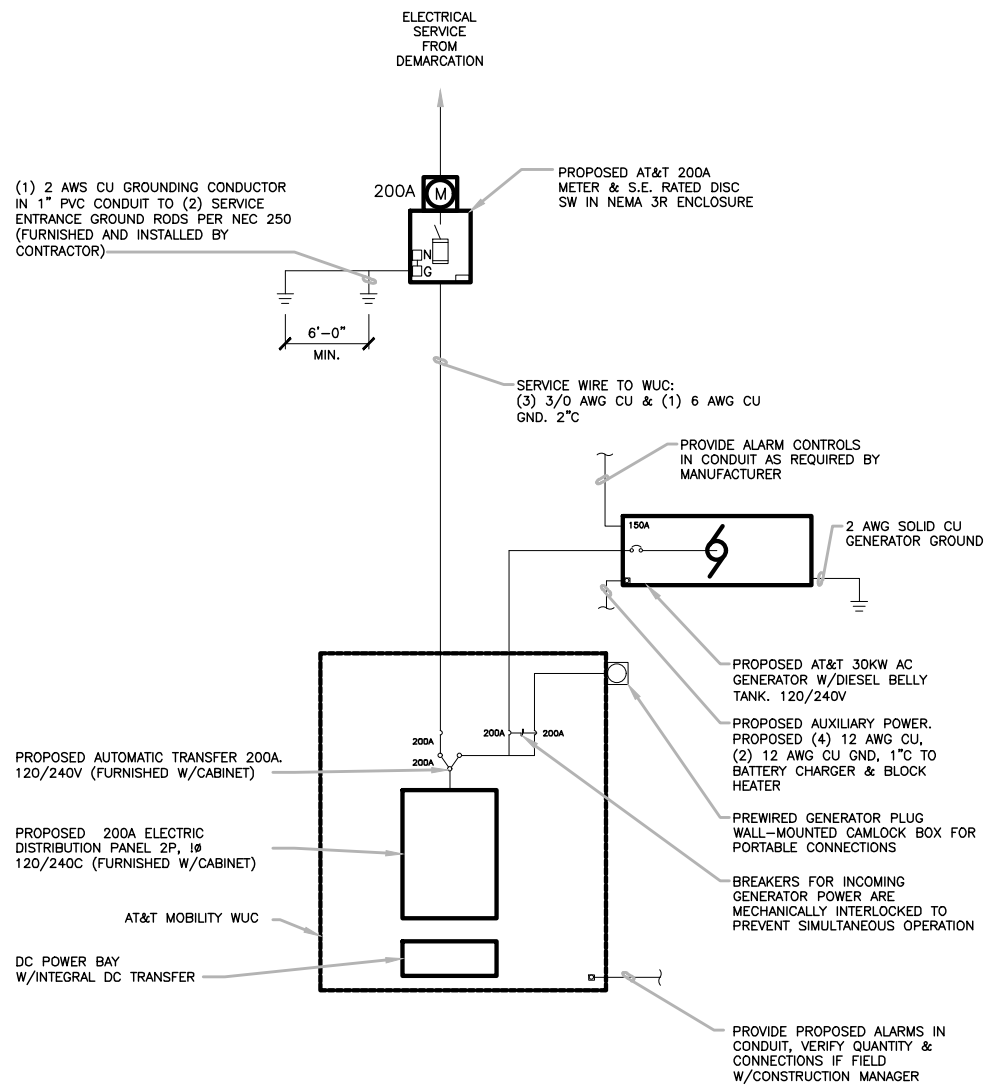
SHEET TITLE:

UTILITY PLAN

SHEET NUMBER:

E-1

DO NOT SCALE DRAWINGS



CONTRACTOR SHALL INSTALL PER LATEST EDITION OF THE NEC

CONTRACTOR SHALL COORDINATE CONTROLS AND ALARMS, CONDUITS, WIRES AND TERMINATIONS FROM DC GENERATOR AS REQUIRED BY MANUFACTURER

A. WORK INCLUDED:

THIS SPECIFICATION AND ACCOMPANYING DRAWING CONTEMPLATE THE PROVISIONS AND INSTALLATION, BY THE ELECTRICAL CONTRACTOR OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO INSTALL THE ELECTRICAL WORK COMPLETE IN CONNECTION WITH THIS AT&T MOBILITY SITE AND SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

1. THE PROVISIONS, INSTALLATION AND CONNECTION OF A GROUNDING ELECTRODE SYSTEM COMPLETE WITH A BUILDING AND SECONDARY GROUNDING, TOWER GROUNDING AND CONNECTIONS TO THE INCOMING ELECTRICAL DISTRIBUTION EQUIPMENT.
2. THE PROVISIONS AND INSTALLATION OF AN ELECTRICAL SERVICE AND ALL ASSOCIATED WIRE AND CONDUIT AS REQUIRED AND/OR INDICATED ON PLANS.
3. ALL UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC. (UNLESS OTHERWISE NOTED).
4. ALL CONDUITS SHALL BE LEFT WITH 200# TEST PULL WIRE. (UNLESS NOTED OTHERWISE) STUB & PLUG BOTH ENDS OF ALL SPARE CONDUITS UP AT 12" ABOVE GRADE.
5. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL THE ELECTRICAL SERVICE ENTRANCE CONDUCTORS AND CONDUIT AND MAKE THE CONNECTION TO THE SERVICE EQUIPMENT WITHIN THE BUILDING.
6. SUBCONTRACTOR SHALL NOTIFY ELECTRIC AND TELEPHONE SERVICES CONTACT AT START OF CONSTRUCTION (2 WEEKS MIN.):

POWER CO.:
CONTACT:
PHONE #:

ORDERED BY AT&T

TELEPHONE CO.:
CONTACT:
PHONE #:

ORDERED BY AT&T

7. ABOVE GRADE RISER CONDUIT SHALL BE GALVANIZED STEEL WITH MATCHING FITTINGS.
8. THE SUBCONTRACTOR SHALL PERFORM ALL WORK SHOWN ON THE BUILDING DRAWINGS NOTED "FIELD WORK" OR OTHERWISE NOTED AS WIRING TO BE COMPLETED IN THE FIELD.
9. ALL WIRE SHALL BE (COPPER, 600V THHW, 90°C) UNLESS NOTED OTHERWISE.

B. CODES, PERMITS AND FEES:

1. ALL REQUIRED PERMITS, LICENSES, INSPECTIONS AND APPROVALS SHALL BE SECURED AND ALL FEES FOR SAME PAID BY SUBCONTRACTOR.
2. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES; STATE, LOCAL AND NATIONAL, AND THE DESIGN, PERFORMANCE CHARACTERISTICS AND METHODS OF CONSTRUCTION OF ALL ITEMS AND EQUIPMENT, SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARD SPECIFICATIONS OF THE FOLLOWING RECOGNIZED AUTHORITIES:

- A.N.S.I. - AMERICAN NATIONAL STANDARDS INSTITUTE
- I.E.E.E. - INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
- N.E.C. - NATIONAL ELECTRIC CODE
- N.E.M.A. - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
- N.F.P.A. - NATIONAL FIRE PROTECTION ASSOCIATION
- U.L. - UNDERWRITERS LABORATORIES, INC.

3. THE SUBCONTRACTOR SHALL BE LICENSED TO PERFORM WORK IN THE STATE, CITY OR COUNTY OF THE PROJECT SITE AS REQUIRED.

4. **UTILITY COMPANY COORDINATION**
ELECTRICAL CONTRACTOR SHALL COMPLETE ALL WORK IN ACCORDANCE WITH THE RULES OF THE LOCAL UTILITY COMPANY. BEFORE SUBMITTING HIS BID, THE SUBCONTRACTOR SHALL CHECK WITH THE UTILITY COMPANIES SUPPLYING SERVICE TO THIS PROJECT AND SHALL DETERMINE FROM THEM ALL EQUIPMENT AND CHARGES WHICH THEY WILL REQUIRE AND SHALL INCLUDE THE COST IN HIS BID WHENEVER POSSIBLE.

5. UTILITIES:

THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE EXCAVATION AND PROPER BACKFILLING OF TRENCHES AND SUPPLY CONDUIT REQUIRED FOR UNDERGROUND TELEPHONE & ELECTRICAL UTILITIES. ALL TRENCHING SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE W/ASTM D-1557 IN 6" LIFTS.

THE ELECTRICAL TRENCH SHALL START AT THE NEW PREFABRICATED RADIO EQUIPMENT BUILDING AND END AT THE NEW METER BOARD STRUCTURE. THE SUBCONTRACTOR SHALL THEN STUB THE CONDUIT 5' OUTSIDE THE FENCE. THE ELECTRIC PROVIDER SHALL PROVIDE SERVICE TO THE NEW METER BOARD STRUCTURE. THE SUBCONTRACTOR SHALL PROPERLY BACKFILL THE TRENCHES AFTER SETTLEMENT AND RESTORE GRAVEL COMPOUND. CONTACT ELECTRIC PROVIDER SIX WEEKS PRIOR TO CONSTRUCTION FOR SERVICE AND COORDINATION OF ACCESS TO SITE.

THE SUBCONTRACTOR SHALL RUN THE TELEPHONE TRENCH AND CONDUIT FROM THE NEW PREFABRICATED RADIO EQUIPMENT BUILDING TO THE NEW TELCO METER BOARD STRUCTURE. THE SUBCONTRACTOR SHALL THEN RUN CONDUIT W/PULL STRING OUTSIDE THE FENCE IN THE UTILITY EASEMENT TO THE R.O.W. THE SUBCONTRACTOR SHALL STAKE THE LOCATIONS OF THE PULL BOXES. THE TELCO PROVIDER SHALL PROVIDE SERVICE TO THE METER BOARD STRUCTURE. THE SUBCONTRACTOR SHALL PROPERLY BACKFILL THE TRENCHES AFTER SETTLEMENT AND RESTORE THE GRAVEL COMPOUND.

2. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.

3. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

4. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.

5. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.

6. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.

7. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA.

8. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPICITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANEL BOARD AND CIRCUIT ID'S).

9. PANEL BOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.

10. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.

11. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

12. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

13. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.

14. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).

15. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.

16. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

17. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

18. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.

19. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.

20. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.

21. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.

22. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.

23. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

24. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

25. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

26. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

27. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

28. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.



FORTUNE WIRELESS INC.

5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

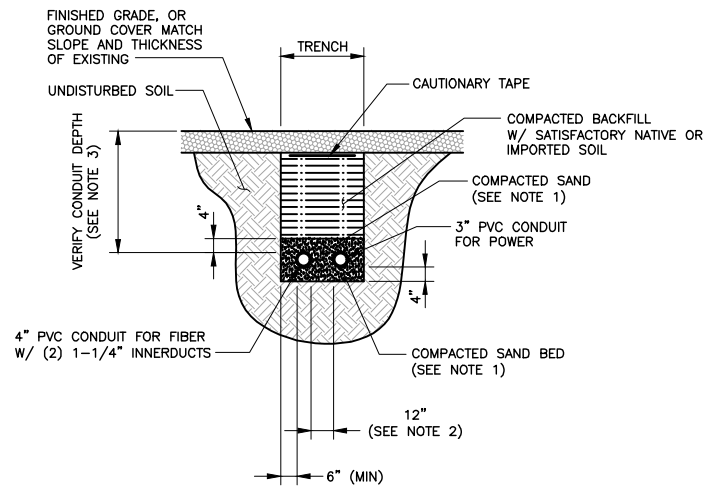
SHEET TITLE:

**ELECTRICAL AC ONE-LINE
DIAGRAM, DETAILS &
NOTES**

SHEET NUMBER:

E-2

DO NOT SCALE DRAWINGS

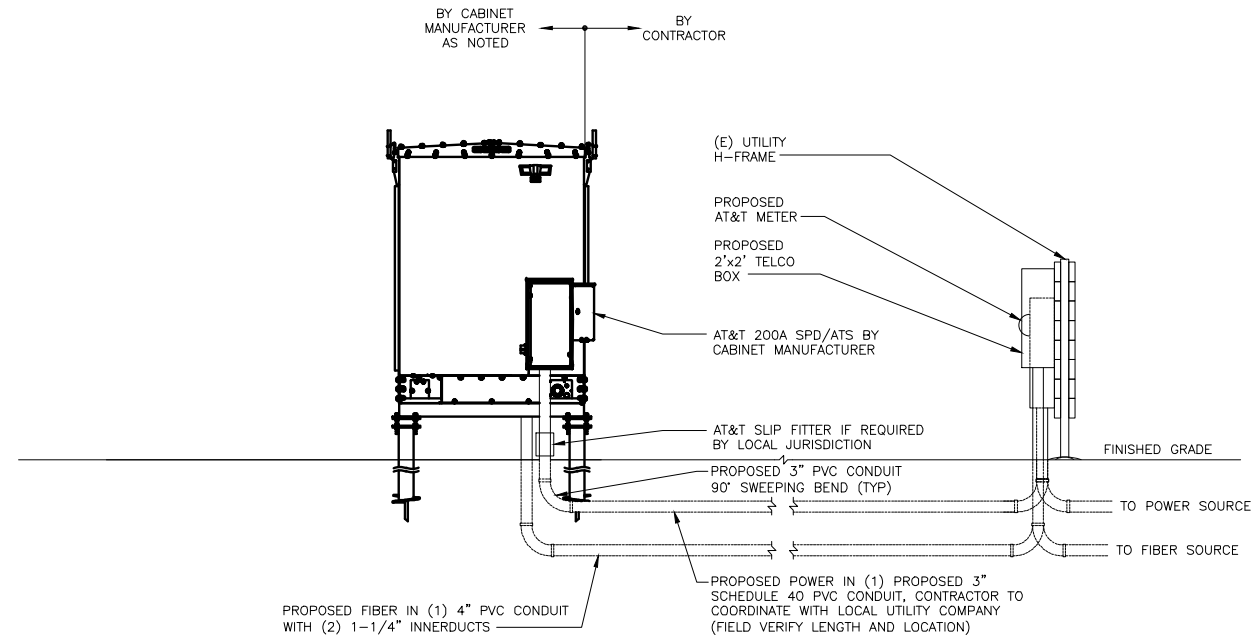


NOTES:

1. LEAN CONCRETE, RED-COLORED TOP, MAY BE USED IN PLACE OF COMPACTED SAND.
2. PROVIDE 12" MIN SEPARATION BETWEEN FIBER AND POWER CONDUITS.
3. CONDUIT DEPTH VARIES PER INSPECTION REQUIREMENTS:
INSIDE COMPOUND WITH NO INSPECTION: 24"
DEPTH WITH INSPECTIONS: 36"
4. CONDUIT SIZE, TYPE, QUANTITY, AND SEPARATION DIMENSIONS SHALL BE VERIFIED WITH LOCAL UTILITY PROVIDER REQUIREMENTS.

TYPICAL UTILITY TRENCH DETAIL

1



POWER RISER DIAGRAM

NO SCALE

2

1. ALL UNDERGROUND CONDUITS SHALL BE SCH 40 PVC, EXCEPT THAT ELBOWS AND RISERS SHALL BE RMC ALL UNDERGROUND ELBOWS SHALL BE SWEEPING BENDS. 2'-0" MINIMUM SHALL BE REQUIRED.
2. THE TELEPHONE SERVICE CABLES SHOULD BE INSTALLED IN RIGID METAL CONDUIT, (10'-0") TEN FEET IN LENGTH BEFORE ENTERING A SHELTER OR BUILDING PER AT&T STANDARD TP-76416.
3. TWO CONDUITS ARE SHOWN IN DETAIL 2, ALTHOUGH MULTIPLE CONDUITS CAN BE PLACED IN THE SAME TRENCH. A MINIMUM SEPARATION IS REQUIRED PER THE LOCAL JURISDICTIONS AND UTILITY COMPANIES. IN ALL OTHER CASES, USE THE TYP UTILITIES TRENCH DETAIL ON THIS SHEET TO MAINTAIN MINIMUM SPACING BETWEEN THE EXTERIOR WALL TO EXTERIOR WALL SEPARATION OF CONDUITS.
4. CONTRACTOR SHALL RESTORE THE TRENCH TO ITS ORIGINAL CONDITIONS BY EITHER SEEDING OR SODDING GRASS AREAS, OR REPLACING ASPHALT OR CONCRETE AREAS TO ITS ORIGINAL CROSS SECTION.
5. TRENCHING SAFETY: INCLUDING, BUT NOT LIMITED TO SOIL CLASSIFICATION, SLOPING, AND SHORING, SHALL BE GOVERNED BY THE CURRENT OSHA TRENCHING AND EXCAVATION SAFETY STANDARDS.
6. ALL CONDUITS SHALL BE INSTALLED IN COMPLIANCE WITH THE NATIONAL ELECTRIC CODE (NEC) OR AS REQUIRED BY THE LOCAL JURISDICTION.

NO SCALE

NOTES

3



FORTUNE WIRELESS INC.

5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

NO: A

DATE: 07/01/25

ISSUE: REVIEW CD

SHEET TITLE:

ELECTRICAL DETAILS

SHEET NUMBER:

E-3

DO NOT SCALE DRAWINGS

PART 1 - GENERAL

1.1 GENERAL CONDITIONS:

- A. CONTRACTOR SHALL INSPECT THE EXISTING SITE CONDITIONS PRIOR TO SUBMITTING BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTORS FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.
- B. THE CONTRACTOR SHALL OBTAIN PERMITS, LICENSES, MAKE ALL DEPOSITS, AND PAY ALL FEES REQUIRED FOR THE CONSTRUCTION PERFORMANCE FOR THE WORK UNDER THIS SECTION.
- C. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL SYSTEMS AND COMPONENTS COVERED UNDER THIS SECTION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS. DRAWING SHALL NOT BE SCALED TO DETERMINE DIMENSIONS.

1.2 LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES.

- A. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, AND ALL APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES. CONDUIT BENDS SHALL BE THE RADIUS BEND FOR THE TRADE SIZE OF CONDUIT IN COMPLIANCE WITH THE LATEST EDITIONS OF NEC.

1.3 REFERENCES:

- A. THE PUBLICATIONS LISTED BELOW ARE PART OF THIS SPECIFICATION. EACH PUBLICATION SHALL BE THE LATEST REVISION AND ADDENDUM IN EFFECT ON THE DATE. THIS SPECIFICATION IS ISSUED FOR CONSTRUCTION UNLESS OTHERWISE NOTED. EXCEPT AS MODIFIED BY THE REQUIREMENT SPECIFIED HEREIN OR THE DETAILS OF THE DRAWINGS, WORK INCLUDED IN THIS SPECIFICATION SHALL CONFORM TO THE APPLICABLE PROVISION OF THESE PUBLICATIONS.

- 1. ANSI/IEEE (AMERICAN NATIONAL STANDARDS INSTITUTE)
- 2. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)
- 3. ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)
- 4. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
- 5. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
- 6. OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION)
- 7. UL (UNDERWRITERS LABORATORIES INC.)
- 8. AT&T GROUNDING AND BONDING STANDARDS TP-76416

1.4 SCOPE OF WORK

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

PART 2 - PRODUCTS

2.1 GENERAL:

- A. ALL MATERIALS AND EQUIPMENT SHALL BE UL LISTED, NEW, AND FREE FROM DEFECTS.
- B. ALL ITEMS OF MATERIALS AND EQUIPMENT SHALL BE ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION AS SUITABLE FOR THE USE INTENDED.
- C. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
- D. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 10,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PER THE GOVERNING JURISDICTION.

2.2 MATERIALS AND EQUIPMENT:

- A. CONDUIT:
 - 1. RIGID METAL CONDUIT (RMC) SHALL BE HOT-DIPPED GALVANIZED INSIDE AND OUTSIDE INCLUDING ENDS AND THREADS AND ENAMELED OR LACQUERED INSIDE IN ADDITION TO GALVANIZING.
 - 2. LIQUIDTIGHT FLEXIBLE METAL CONDUIT SHALL BE UL LISTED.
 - 3. CONDUIT CLAMPS, STRAPS AND SUPPORTS SHALL BE STEEL OR MALLEABLE IRON. ALL FITTINGS SHALL BE COMPRESSION AND CONCRETE TIGHT TYPE. GROUNDING BUSHINGS WITH INSULATED THROATS SHALL BE INSTALLED ON ALL CONDUIT TERMINATIONS.
 - 4. NONMETALLIC CONDUIT AND FITTINGS SHALL BE SCHEDULE 40 PVC. INSTALL USING SOLVENT-CEMENT-TYPE JOINTS AS RECOMMENDED BY THE MANUFACTURER.
- B. CONDUCTORS AND CABLE:
 - 1. CONDUCTORS AND CABLE SHALL BE FLAME-RETARDANT, MOISTURE AND HEAT RESISTANT THERMOPLASTIC, SINGLE CONDUCTOR, COPPER, TYPE THHN/THWN-2, 600 VOLT, SIZE AS INDICATED, #12 AWG SHALL BE THE MINIMUM SIZE CONDUCTOR USED.
 - 2. #10 AWG AND SMALLER CONDUCTOR SHALL BE SOLID OR STRANDED AND #8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED.
 - 3. SOLDERLESS, COMPRESSION-TYPE CONNECTORS SHALL BE USED FOR TERMINATION OF ALL STRANDED CONDUCTORS.
 - 4. STRAIN-RELIEF SUPPORTS GRIPS SHALL BE HUBBELL KELLEMS OR APPROVED EQUAL. CABLES SHALL BE SUPPORTED IN ACCORDANCE WITH THE NEC AND CABLE MANUFACTURER'S RECOMMENDATIONS.
 - 5. ALL CONDUCTORS SHALL BE TAGGED AT BOTH ENDS OF THE CONDUCTOR, AT ALL PULL BOXES, J-BOXES, EQUIPMENT AND CABINETS AND SHALL BE IDENTIFIED WITH APPROVED PLASTIC TAGS (ACTION CRAFT, BRADY, OR APPROVED EQUAL).
- C. DISCONNECT SWITCHES:
 - 1. DISCONNECT SWITCHES SHALL BE HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, QUICK-BREAK, EXTERNALLY OPERABLE, HANDLE LOCKABLE AND INTERLOCK WITH COVER IN CLOSED POSITION, RATING AS INDICATED, UL LABELED FURNISHED IN NEMA 3R ENCLOSURE, PROVIDE IF SHOWN ON PLANTS, SQUARE-D OR ENGINEER APPROVED EQUAL.
- D. CHEMICAL ELECTROLYTIC GROUNDING SYSTEM: PROVIDE ONLY IF SHOWN ON DRAWINGS
 - 1. INSTALL CHEMICAL GROUNDING AS REQUIRED. THE SYSTEM SHALL BE ELECTROLYTIC MAINTENANCE FREE ELECTRODE CONSISTING OF RODS WITH A MINIMUM #2 AWG CU EXOTHERMICALLY WELDED PIGTAIL, PROTECTIVE BOXES, AND BACKFILL MATERIAL. MANUFACTURER SHALL BE LYNCOLE XIT GROUNDING ROD TYPES K2-(*)CS OR K2L-(*)CS (*) LENGTH AS REQUIRED.

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

E. SYSTEM GROUNDING:

- 1. ALL GROUNDING COMPONENTS SHALL BE TINNED AND GROUNDING CONDUCTOR SHALL BE #2 AWG BARE, SOLID, TINNED, COPPER. ABOVE GRADE GROUNDING CONDUCTORS SHALL BE INSULATED WHERE NOTED.
 - 2. GROUNDING BUSES SHALL BE BARE, TINNED, ANNEALED COPPER BARS OF RECTANGULAR CROSS SECTION. STANDARD BUS BARS MGB, SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THEY SHALL NOT BE FABRICATED OR MODIFIED IN THE FIELD. ALL GROUNDING BUSES SHALL BE IDENTIFIED WITH MINIMUM 3/4" LETTERS BY WAY OF STENCILING OR DESIGNATION PLATE.
 - 3. CONNECTORS SHALL BE HIGH-CONDUCTIVITY, HEAVY DUTY, LISTED AND LABELED AS GROUNDING CONNECTORS FOR THE MATERIALS USED. USE TWO-HOLE COMPRESSION LUGS WITH HEAT SHRINK FOR MECHANICAL CONNECTIONS. INTERIOR CONNECTIONS USE TWO-HOLE COMPRESSION LUGS WITH INSPECTION WINDOW AND CLEAR HEAT SHRINK.
 - 4. EXOTHERMIC WELDED CONNECTIONS SHALL BE PROVIDED IN KIT FORM AND SELECTED FOR THE SPECIFIC TYPES, SIZES, AND COMBINATIONS OF CONDUCTORS AND OTHER ITEMS TO BE CONNECTED.
 - 5. GROUND RODS SHALL BE COPPER-CLAD STEEL WITH HIGH-STRENGTH STEEL CORE AND ELECTROLYTIC-GRADE COPPER OUTER SHEATH, MOLTEN WELDED TO CORE, 5/8"x10'-0". ALL GROUNDING RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES.
 - 6. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS IN COMPLIANCE WITH THE AT&T SPECIFICATIONS AND NEC. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULLBOXES, DISCONNECT SWITCHES, STARTERS, AND EQUIPMENT CABINETS.
- F. OTHER MATERIALS:
- 6. THE CONTRACTOR SHALL PROVIDE OTHER MATERIALS, THOUGH NOT SPECIFICALLY DESCRIBED, WHICH ARE REQUIRED FOR A COMPLETELY OPERATIONAL SYSTEM AND PROPER INSTALLATION OF THE WORK.
 - 7. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR REQUIRED BY NEC.
- G. PANELS AND LOAD CENTERS:
- 1. ALL PANEL DIRECTORIES SHALL BE TYPEWRITTEN.

PART 3 - EXECUTION

3.1 GENERAL:

- A. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- B. EQUIPMENT SHALL BE TIGHTLY COVERED AND PROTECTED AGAINST DIRT OR WATER, AND AGAINST CHEMICAL OR MECHANICAL INJURY DURING INSTALLATION AND CONSTRUCTION PERIODS.

3.2 LABOR AND WORKMANSHIP:

- A. ALL LABOR FOR THE INSTALLATION OF MATERIALS AND EQUIPMENT FURNISHED FOR THE ELECTRICAL SYSTEM SHALL BE INSTALLED BY EXPERIENCED WIREMEN, IN A NEAT AND WORKMAN-LIKE MANNER.
- B. ALL ELECTRICAL EQUIPMENT SHALL BE ADJUSTED, ALIGNED AND TESTED BY THE CONTRACTOR AS REQUIRED TO PRODUCE THE INTENDED PERFORMANCE.
- C. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED EQUIPMENT, REMOVE ALL LABELS AND ANY DEBRIS, CRATING OR CARTONS AND LEAVE THE INSTALLATION FINISHED AND READY FOR OPERATION.

3.3 COORDINATION:

- A. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRICAL ITEMS WITH THE OWNER-FURNISHED EQUIPMENT DELIVERY SCHEDULE TO PREVENT UNNECESSARY DELAYS IN THE TOTAL WORK.

3.4 INSTALLATION:

- A. CONDUIT:
 - 1. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT AS SPECIFIED. NO CONDUIT OR TUBING OF LESS THAN 3/4 INCH TRADE SIZE.
 - 2. PROVIDE RIGID PVC SCHEDULE 80 CONDUITS FOR ALL RISERS, RMC OTHERWISE NOTED. EMT MAY BE INSTALLED FOR EXTERIOR CONDUITS WHERE NOT SUBJECT TO PHYSICAL DAMAGE.
 - 3. INSTALL SCHEDULE 40 PVC CONDUIT WITH A MINIMUM COVER OF 24" UNDER ROADWAYS, PARKING LOTS, STREETS, AND ALLEYS. CONDUIT SHALL HAVE A MINIMUM COVER OF 18" IN ALL OTHER NON-TRAFFIC APPLICATIONS.
 - 4. USE GALVANIZED FLEXIBLE STEEL CONDUIT WHERE DIRECT CONNECTION TO EQUIPMENT WITH MOVEMENT, VIBRATION, OR FOR EASE OF MAINTENANCE. USE LIQUID TIGHT, FLEXIBLE METAL CONDUIT FOR OUTDOOR APPLICATIONS. INSTALL GALVANIZED FLEXIBLE STEEL CONDUIT AT ALL POINTS OF CONNECTION TO EQUIPMENT MOUNTED ON SUPPORT TO ALLOW FOR EXPANSION AND CONTRACTION.
 - 5. A RUN OF CONDUIT BETWEEN BOXES OR EQUIPMENT SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF THREE QUARTER-BENDS. CONDUIT BEND SHALL BE MADE WITH THE UL LISTED BENDER OR FACTORY 90 DEGREE ELBOWS MAY BE USED.
 - 6. FIELD FABRICATED CONDUITS SHALL BE CUT SQUARE WITH A CONDUIT CUTTING TOOL AND REAMED TO PROVIDE A SMOOTH INSIDE SURFACE.
 - 7. PROVIDE INSULATED GROUNDING BUSHING FOR ALL CONDUITS.
 - 8. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL CONDUITS DURING CONSTRUCTION. TEMPORARY OPENINGS IN THE CONDUIT SYSTEM SHALL BE PLUGGED OR CAPPED TO PREVENT ENTRANCE OF MOISTURE OR FOREIGN MATTER. CONTRACTOR SHALL REPLACE ANY CONDUITS CONTAINING FOREIGN MATERIALS THAT CANNOT BE REMOVED.
 - 9. ALL CONDUITS SHALL BE SWABBED CLEAN BY PULLING AN APPROPRIATE SIZE MANDREL THROUGH THE EQUIPMENT BEFORE INSTALLATION OF CONDUCTORS OR CABLES. CONDUIT SHALL BE FREE OF DIRT AND DEBRIS.
 - 10. INSTALL PULL STRINGS IN ALL CLEAN EMPTY CONDUITS. IDENTIFY PULL STRINGS AT EACH END.
 - 11. INSTALL 2" HIGHLY VISIBLE AND DETECTABLE TAPE 12" ABOVE ALL UNDERGROUND CONDUITS AND CONDUCTORS.
 - 12. CONDUITS SHALL BE INSTALLED IN SUCH A MANNER AS TO INSURE AGAINST COLLECTION OF TRAPPED CONDENSATION.
 - 13. PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS TO ALLOW FOR RACEWAYS AND CABLES TO BE ROUTED THROUGH THE BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS. SLEEVES AND/OR PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE EFFECTIVELY SEALED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL OR STRUCTURE. FIRE STOPS AT FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE, FIRE, AND FUMES. ALL MATERIAL SHALL BE

UL APPROVED FOR THIS PURPOSE.

B. CONDUCTORS AND CABLE:

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

DESCRIPTION	208/240/120 VOLT SYSTEMS
PHASE A	BLACK
PHASE B	RED
PHASE C	BLUE
NEUTRAL	WHITE
GROUNDING	GREEN

- 2. SPLICES SHALL BE MADE ONLY AT OUTLETS, JUNCTION BOXES, OR ACCESSIBLE RACEWAY CONDUITS APPROVED FOR THIS PURPOSE.
- 3. PULLING LUBRICANTS SHALL BE UL APPROVED. CONTRACTOR SHALL USE NYLON OR HEMP ROPE FOR PULLING CONDUCTOR OR CABLES INTO THE CONDUIT.

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

C. DISCONNECT SWITCHES:

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

D. GROUNDING:

- 1. ALL METALLIC PARTS OF ELECTRICAL EQUIPMENT WHICH DO NOT CARRY CURRENT SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING MANUFACTURER, AT&T GROUNDING AND BONDING STANDARDS TP-76416, ND-00155, AND THE NATIONAL ELECTRICAL CODE.
 - 2. PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEM INDICATED WITH ASSEMBLY OF MATERIALS, INCLUDING GROUNDING ELECTRODES, BONDING JUMPERS AND ADDITIONAL ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.
 - 3. ALL GROUNDING CONDUCTORS SHALL PROVIDE A STRAIGHT DOWNWARD PATH TO GROUND WITH GRADUAL BEND AS REQUIRED. GROUNDING CONDUCTORS SHALL NOT BE LOOPED OR SHARPLY BENT. ROUTE GROUNDING CONNECTIONS AND CONDUCTORS TO GROUND IN THE SHORTEST AND STRAIGHTEST PATHS POSSIBLE TO MINIMIZE TRANSIENT VOLTAGE RISES.
 - 4. BUILDINGS AND/OR NEW TOWERS GREATER THAN 75 FEET IN HEIGHT AND WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM. THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 AWG COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY). SEE STANDARD 6.3.2.2.
 - 5. TIGHTEN GROUNDING AND BONDING CONNECTORS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES FOR CONNECTORS AND BOLTS. WHERE MANUFACTURER'S TORQUING REQUIREMENTS ARE NOT AVAILABLE, TIGHTEN CONNECTIONS TO COMPLY WITH TIGHTENING TORQUE VALUES SPECIFIED IN UL TO ASSURE PERMANENT AND EFFECTIVE GROUNDING.
 - 6. CONTRACTOR SHALL VERIFY THE LOCATIONS OF GROUNDING TIE-IN-POINTS TO THE EXISTING GROUNDING SYSTEM. ALL UNDERGROUND GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
 - 7. ALL GROUNDING CONNECTIONS SHALL BE INSPECTED FOR TIGHTNESS. EXOTHERMIC WELDED CONNECTIONS SHALL BE APPROVED BY THE INSPECTOR HAVING JURISDICTION BEFORE BEING PERMANENTLY CONCEALED.
 - 8. APPLY CORROSION-RESISTANT FINISH TO FIELD CONNECTIONS AND PLACES WHERE FACTORY APPLIED PROTECTIVE COATINGS HAVE BEEN DESTROYED. USE KOPR-SHIELD ANTI-OXIDATION COMPOUND ON ALL COMPRESSION GROUNDING CONNECTIONS.
 - 9. A SEPARATE, CONTINUOUS, INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUITS.
 - 10. BOND ALL INSULATED GROUNDING BUSHINGS WITH A BARE #6 AWG GROUNDING CONDUCTOR TO A GROUND BUS.
 - 11. DIRECT BURIED GROUNDING CONDUCTORS SHALL BE INSTALLED AT A NOMINAL DEPTH OF 36" MINIMUM BELOW GRADE, OR 6" BELOW THE FROST LINE, USE THE GREATER OF THE TWO DISTANCES.
 - 12. ALL GROUNDING CONDUCTORS EMBEDDED IN OR PENETRATING CONCRETE SHALL BE INSTALLED IN SCHEDULE 40 PVC CONDUIT.
 - 13. THE INSTALLATION OF CHEMICAL ELECTROLYTIC GROUNDING SYSTEM IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REMOVE SEALING TAPE FROM LEACHING AND BREATHING HOLES. INSTALL PROTECTIVE BOX FLUSH WITH GRADE.
 - 14. DRIVE GROUND RODS UNTIL TOPS ARE A MINIMUM DISTANCE OF 36" DEPTH OR 6" BELOW FROST LINE, USING THE GREATER OF THE TWO DISTANCES.
 - 15. IF COAX ON THE ICE BRIDGE IS MORE THAN 6 FT. FROM THE GROUNDING BAR AT THE BASE OF THE TOWER, A SECOND GROUNDING BAR WILL BE NEEDED AT THE END OF THE ICE BRIDGE, TO GROUND THE COAX CABLE GROUNDING KITS AND IN-LINE ARRESTORS.
 - 16. CONTRACTOR SHALL REPAIR, AND/OR REPLACE, EXISTING GROUNDING SYSTEM COMPONENTS DAMAGED DURING CONSTRUCTION AT THE CONTRACTORS EXPENSE.
- 3.5 ACCEPTANCE TESTING:
- A. CERTIFIED PERSONNEL USING CERTIFIED EQUIPMENT SHALL PERFORM REQUIRED TESTS AND SUBMIT WRITTEN TEST REPORTS UPON COMPLETION.
 - B. WHEN MATERIAL AND/OR WORKMANSHIP IS FOUND NOT TO COMPLY WITH THE SPECIFIED REQUIREMENTS, THE NON-COMPLYING ITEMS SHALL BE REMOVED FROM THE PROJECT SITE AND REPLACED WITH ITEMS COMPLYING WITH THE SPECIFIED REQUIREMENTS PROMPTLY AFTER RECEIPT OF NOTICE FOR NON-COMPLIANCE.
 - C. TEST PROCEDURES:
 - 1. ALL FEEDERS SHALL HAVE INSULATION TESTED AFTER INSTALLATION, BEFORE CONNECTION TO DEVICES. THE CONDUCTORS SHALL TEST FREE FROM SHORT CIRCUITS AND GROUNDS. TESTING SHALL BE FOR ONE MINUTE USING 1000V DC. PROVIDE WRITTEN DOCUMENTATION FOR ALL TEST RESULTS.
 - 2. PRIOR TO ENERGIZING CIRCUITRY, TEST WIRING DEVICES FOR ELECTRICAL CONTINUITY AND PROPER POLARITY CONNECTIONS.
 - 3. MEASURE AND RECORD VOLTAGES BETWEEN PHASES AND BETWEEN PHASE CONDUCTORS AND NEUTRALS. SUBMIT A REPORT OF MAXIMUM AND MINIMUM VOLTAGES.
 - 4. PERFORM GROUNDING TEST TO MEASURE GROUNDING RESISTANCE OF GROUNDING SYSTEM USING THE IEEE STANDARD 3-POINT "FALL-OF-POTENTIAL" METHOD. PROVIDE PLOTTED TEST VALUES AND LOCATION SKETCH. NOTIFY THE ENGINEER IMMEDIATELY IF MEASURED VALUE IS OVER 5 OHMS.



FORTUNE WIRELESS INC.
 5511 WEST 79TH STREET
 INDIANAPOLIS, IN 46268
 (317) 532-1374

IN1187
 AT&T FA#: 15861975
 2688 EAST MAIN ST.
 PLAINFIELD,
 IN 46168
 HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

SHEET TITLE:

ELECTRICAL NOTES

SHEET NUMBER:

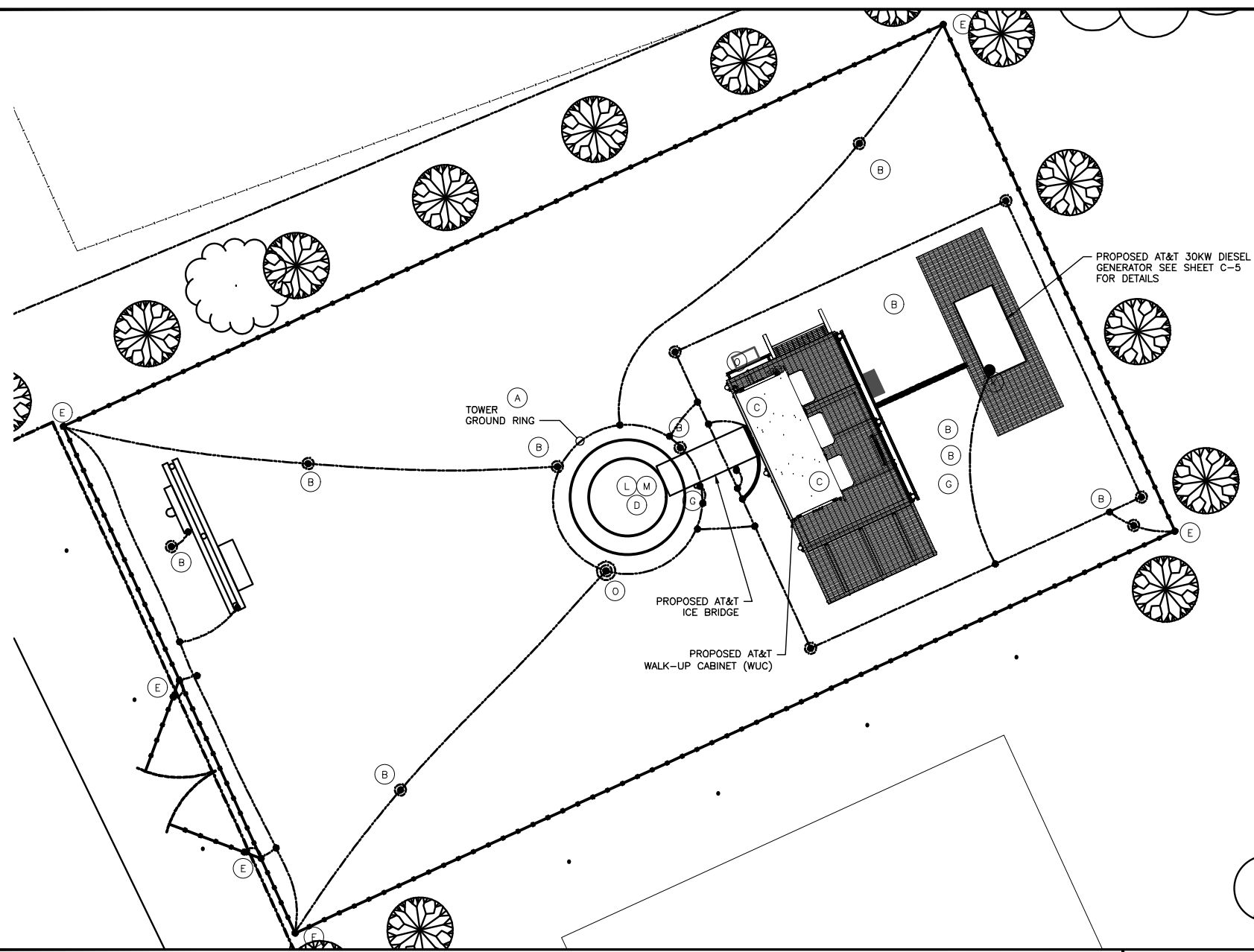
E-4

DO NOT SCALE DRAWINGS

- GROUNDING IS SHOWN DIAGRAMMATICALLY ONLY. FOR GROUNDING DETAILS SEE DRAWINGS G-3
- TESTING SHALL BE PERFORMED AT ALL SITES WHERE MODIFICATIONS OR ADDITIONS ARE MADE TO THE EXISTING GROUNDING SYSTEM AND SHALL BE IN ACCORDANCE WITH AT&T GROUNDING AND BONDING STANDARDS TP-76416. THE CONTRACTOR SHALL SUPPLY AT&T WITH RESULTS FROM PRE-CONSTRUCTION AND POST-CONSTRUCTION OHM TESTING (GROUNDING) RESULTS AND BE IN COMPLIANCE WITH AT&T GROUNDING AND BONDING STANDARDS TP-76416.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A "FALL OF POTENTIAL" TEST ON THE PROPOSED SUPPLEMENTAL GROUNDING FIELD PRIOR TO FINAL CONNECTION OF THE GROUNDING SYSTEM TO EQUIPMENT. THE TEST SHALL BE PERFORMED BY A QUALIFIED AND CERTIFIED TESTING AGENT. PROVIDE INDEPENDENT TEST RESULTS TO THE PROJECT MANAGER FOR REVIEW. THE GROUNDING SYSTEM RESISTANCE TO EARTH GROUNDING SHALL NOT EXCEED (5) OHMS. IF THE GROUNDING TEST EXCEEDS THE MAXIMUM OF (5) OHMS, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL GROUNDING RODS AND CONNECTIONS AS REQUIRED TO MEET THE (5) OHMS' MAXIMUM.
- THE INSPECTOR HAVING JURISDICTION SHALL INSPECT ALL GROUNDING CONNECTIONS FOR TIGHTNESS. EXOTHERMIC WELDED CONNECTIONS SHALL BE APPROVED BEFORE BEING PERMANENTLY CONCEALED.
- FOR ALL CONNECTIONS TO THE GROUNDING RING, SEE THE SHELTER MANUFACTURER'S DRAWINGS.
- WHEN AN EXISTING METER RACK IS BEING UTILIZED AND A NEW METER IS INSTALLED IN THE EXISTING METER RACK, THE GROUNDING RODS, AND GROUNDING CONDUCTORS OF THE EXISTING GROUNDING RING, SHALL BE EXTENDED TO THE PROPOSED GROUNDING RING AND BECOME A COMPLETE GROUNDING SYSTEM.
- CONTRACTOR SHALL GROUND ALL EQUIPMENT INCLUDING ANTENNAS, RET MOTORS, TMA'S, COAX CABLES AND RET CONTROL CABLES AS A COMPLETE SYSTEM. GROUNDING SHALL BE EXECUTED BY QUALIFIED WIREMEN IN COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
- FOR GROUNDING INSTALLATIONS WHICH HAVE A LIMITED AREA AND IS BEING REQUIRED TO BE INSTALLED WITHIN THE LEASE AREA ONLY, THE GROUNDING RING CONDUCTORS CAN BE INSTALLED UNDER THE CABINET FOOTINGS.
- MAIN GROUNDING CONDUCTORS SHALL BE ROUTED AND BONDED TO ALL EFFECTIVE GROUNDING PATHS IN ACCORDANCE WITH AT&T GROUNDING AND BONDING SPECIFICATION 6.8.2 STATED IN TP-76416. THE NEW GROUNDING SYSTEM SHALL BE BONDED (2 PLACES) TO ALL EXISTING GROUNDING SYSTEMS, INCLUDING BUT NOT LIMITED TO BUILDING STEEL STRUCTURE, LIGHTNING PROTECTION SYSTEMS, BUILDING MAIN GROUNDING SYSTEM AND/OR MAIN WATER SUPPLY IF APPLICABLE.
- BUILDINGS AND/OR NEW TOWERS GREATER THAN 75 FEET IN HEIGHT AND THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 AWG COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY). SEE AT&T GROUNDING AND BONDING STANDARDS TP-76416 SPECIFICATION 6.3.2.2.
- CONNECTIONS TO THE BURIED GROUND RING SHALL BE EXOTHERMICALLY WELDED BY A CERTIFIED TECHNICIAN. CONNECTIONS TO ABOVE GROUND UNITS SHALL BE MADE WITH EXOTHERMIC WELD, WHERE PRACTICAL, OR WITH 2 HOLE CONNECTIONS.
- GROUND WIRE SHALL HAVE A MINIMUM BEND RADIUS OF 8" AND >90°.
- ALL MECHANICAL GROUND CONNECTION SHALL HAVE AN ANTIOXIDANT COMPOUND APPLIED PRIOR TO INSTALLATION.

NOTES

1



GROUNDING SITE PLAN

NOT TO SCALE

3

- TOWER GROUND RING:** THE GROUND RING SYSTEM SHALL BE INSTALLED AROUND AN ANTENNA TOWER'S LEGS, AND/OR GUY ANCHORS. WHERE SEPARATE SYSTEMS HAVE BEEN PROVIDED FOR THE TOWER AND THE BUILDING, AT LEAST TWO BONDS SHALL BE MADE BETWEEN THE TOWER RING GROUND SYSTEM AND THE BUILDING RING GROUND SYSTEM USING MINIMUM #2 AWG SOLID COPPER CONDUCTORS. (ATT-TP-76416 7.5.1)
- GROUND ROD:** UL LISTED COPPER CLAD STEEL, MINIMUM 3/4" DIAMETER BY EIGHT FEET LONG. ALL GROUND RODS MAY BE INSTALLED WITH INSPECTION SLEEVES. GROUND RODS SHALL BE DRIVEN TO THE DEPTH OF GROUND RING CONDUCTOR. (ATT-TP-76416 1.4 / 2.2.3.10)
- WALK UP CABINET GROUND BAR:** POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTORS. BOND TO TOWER GROUND RING WITH (2) #2 SOLID TINNED COPPER CONDUCTORS AND TO HELICAL ANCHORS WITH (2) #2 SOLID TINNED COPPER CONDUCTORS. (ATT-TP-76416 7.6.7)
- TOWER EXIT GROUND BAR:** MECHANICALLY SECURE THE GROUND BAR DIRECTLY TO TOWER WITH STAINLESS STEEL MOUNTING MATERIAL. CONTRACTOR TO VERIFY THAT THE STRUCTURE IS PROPERLY GROUNDING TO THE TOWER GROUND RING. (ATT-TP-76416 7.5.5)
- FENCE AND GATE GROUNDING:** METAL FENCES WITHIN 7 FEET OF THE EXTERIOR GROUND RING OR OBJECTS BONDED TO THE EXTERIOR GROUND RING SHALL BE BONDED TO THE GROUND RING WITH A #2 AWG SOLID TINNED COPPER CONDUCTOR AT AN INTERVAL NOT EXCEEDING 25 FEET. BONDS SHALL BE MADE AT EACH GATE POST AND ACROSS GATE OPENINGS. (ATT-TP-76416 7.12.2.2)
- EXTERIOR UNIT BONDS:** METALLIC OBJECTS, EXTERNAL TO OR MOUNTED TO THE BUILDING, SHALL BE BONDED TO THE TOWER GROUND RING. (ATT-TP-76416 7.12.2)
- ICE BRIDGE SUPPORTS:** EACH ICE BRIDGE LEG SHALL BE BONDED TO THE GROUND RING WITH #2 AWG BARE TINNED COPPER CONDUCTOR. PROVIDE EXOTHERMIC WELDS AT BOTH THE ICE BRIDGE LEG AND BURIED GROUND RING. (ATT-TP-76416 7.4.2.6)
- DURING ALL DC POWER SYSTEM CHANGES** INCLUDING DC SYSTEM CHANGE OUTS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTER SYSTEMS IT SHALL BE REQUIRED THAT SERVICES CONTRACTORS VERIFY ALL DC POWER SYSTEMS ARE EQUIPPED WITH A MASTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM COMMON RETURN BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR (CRGB) PER AT&T-TP-76300 SECTION H 6 AND AT&T-TP-76416 FIGURE 7-11 REQUIREMENTS.
- GENERATOR GROUND BAR:** EXTEND (2) #2 AWG SOLID TINNED BOND FROM GENERATOR GROUND BAR TO WUC GROUND BAR.
- TOWER TOP GROUNDING BAR:** MECHANICALLY BOND GROUND BAR TO STRUCTURE.
- ANTENNA GROUND BAR:** #2 AWG SOLID TINNED COPPER BOND TO TOWER TOP GROUND BAR.
- ICE CANOPY SUPPORTS:** EACH ICE CANOPY LEG SHALL BE BONDED TO THE GROUND RING WITH #2 AWG BARE TINNED COPPER CONDUCTOR. PROVIDE EXOTHERMIC WELDS AT BOTH THE ICE CANOPY LEG AND BURIED GROUND RING.
- INSPECTION TEST WELL:** SEE DETAIL 3, SHEET G-3

CONDUIT NOTE:
ALL CONDUIT RUNS SHALL BE INSTALLED IN A NEAT AND ORDERLY FASHION AS DICTATED BY EXISTING CONDITIONS

VERTICAL GROUND LEADS IN PVC SLEEVES NOTE:
ALL VERTICAL #2 GROUND LEADS SHALL BE SLEEVED IN PVC CONDUIT (OR FLEX CONDUIT PER MARKET REQUIREMENTS) FROM BUS BARS AND ALL GROUNDING ITEMS DOWN TO EXTERIOR GROUND RING/HALO. PROVIDE WATER SEALTIGHT AT TOP OF CONDUIT.

GROUNDING KEYED NOTES

2

SYMBOL	DESCRIPTION
	3/4" x 10' COPPER CLAD STEEL GROUND ROD
	3/4" x 10' COPPER CLAD TEST WELL GROUND ROD W/INSPECTION SLEEVE
	EXOTHERMIC WELD (CADWELD) (UNLESS OTHERWISE NOTED)
	EXOTHERMIC WELD (CADWELD) WITH INSPECTION SLEEVE

LEGEND

4



FORTUNE WIRELESS INC.
5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: **ren**

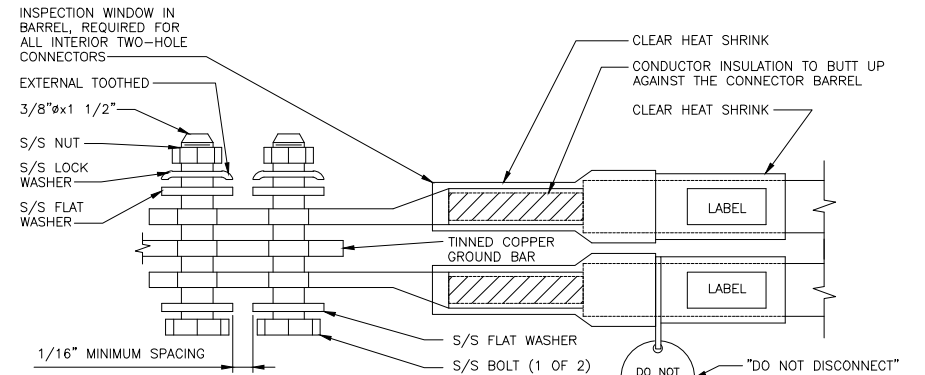
CHECKED BY: **AJB**

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

SHEET TITLE:
GROUNDING SITE PLAN & NOTES

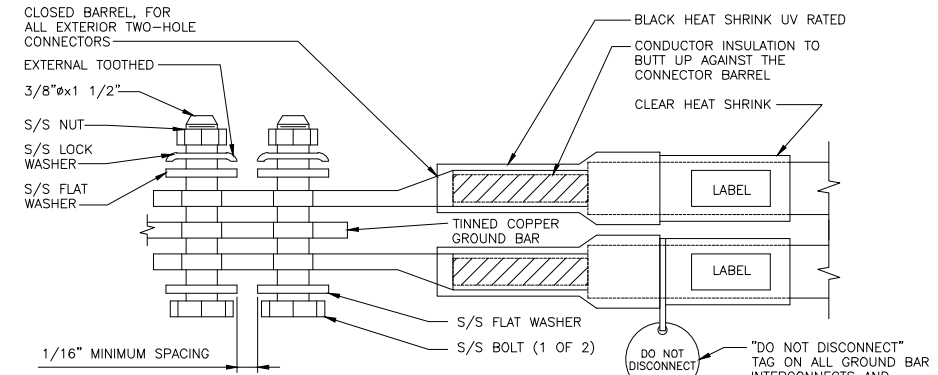
SHEET NUMBER:
G-1

DO NOT SCALE DRAWINGS



NOTES:

- EXOTHERMIC WELD (2) TWO, #2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUND BAR. ROUTE CONDUCTORS TO BURIED GROUND RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
- ALL GROUND BARS SHALL BE STAMPED IN TO THE METAL "IF STOLEN DO NOT RECYCLE." THE CONTRACTOR SHALL USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P", "A", "N", "I") WITH 1" HIGH LETTERS.
- ALL HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
- FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND CONDUCTOR DOWN TO GROUND BUS.
- NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUND BAR AND BOLTED ON THE BACK SIDE. INSTALL BLACK HEAT-SHRINKING TUBE, 600 VOLT INSULATION, ON ALL GROUND TERMINATIONS. THE INTENT IS TO WEATHERPROOF THE COMPRESSION CONNECTION.
- SUPPLIED AND INSTALLED BY CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL GROUND BAR AS REQUIRED, PROVIDING 50% SPARE CONNECTION POINTS.
- ENSURE THE WIRE INSULATION TERMINATION IS WITHIN 1/8" OF THE BARREL (NO SHINERS).
- BOLTS SHALL BE MADE "SNUG-TIGHT" PLUS 1/4 TURN.



NOTES:

- EXOTHERMIC WELD (2) TWO, #2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUND BAR. ROUTE CONDUCTORS TO BURIED GROUND RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
- ALL GROUND BARS SHALL BE STAMPED IN TO THE METAL "IF STOLEN DO NOT RECYCLE." THE CONTRACTOR SHALL USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P", "A", "N", "I") WITH 1" HIGH LETTERS.
- ALL HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
- FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND CONDUCTOR DOWN TO GROUND BUS.
- NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUND BAR AND BOLTED ON THE BACK SIDE. INSTALL BLACK HEAT-SHRINKING TUBE, 600 VOLT INSULATION, ON ALL GROUND TERMINATIONS. THE INTENT IS TO WEATHERPROOF THE COMPRESSION CONNECTION.
- SUPPLIED AND INSTALLED BY CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL GROUND BAR AS REQUIRED, PROVIDING 50% SPARE CONNECTION POINTS.
- ENSURE THE WIRE INSULATION TERMINATION IS WITHIN 1/8" OF THE BARREL (NO SHINERS).
- BOLTS SHALL BE MADE "SNUG-TIGHT" PLUS 1/4 TURN.

INTERIOR TWO HOLE LUG DETAIL

NO SCALE

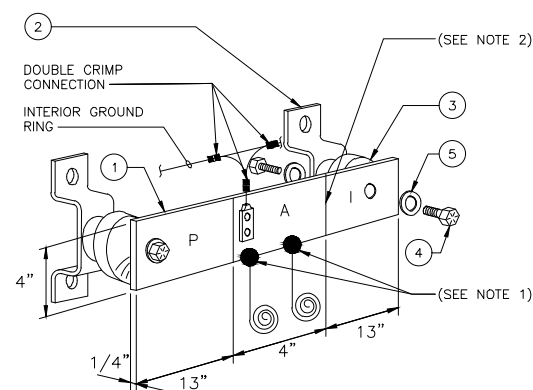
1

EXTERIOR TWO HOLE LUG DETAIL

NO SCALE

2

NEWTON INSTRUMENT COMPANY, INC. BUTNER, N.C.			
NO	REQUIRED	PART NUMBER	DESCRIPTION
①	1	1/4"x4"x30"	SOLID GROUND BAR
②	2	A-6056	WALL MOUNTING BRACKET
③	2	3061-4	INSULATORS
④	4	3012-1	5/8"-11x1" H.H.C.S.
⑤	4	3015-8	5/8" LOCKWASHER



(MGB) REFERENCE GROUNDING BAR DETAIL

NO SCALE

3

EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION

SECTION "P" - SURGE PROTECTORS

- (EC) CELL REFERENCE GROUND BAR (IF COLLOCATED)
- (EC) GENERATOR FRAMEWORK (IF AVAILABLE) (#2 AWG)
- (EC) TELCO GROUND BAR (#2 AWG)
- (EC) COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (3/0)
- (EC) FIBER GROUND BAR (#2 AWG)
- (EC) POWER ROOM REFERENCE GROUND BAR (#2 AWG)
- (AT&T) RECTIFIER FRAMES

SECTION "A" - SURGE ABSORBERS

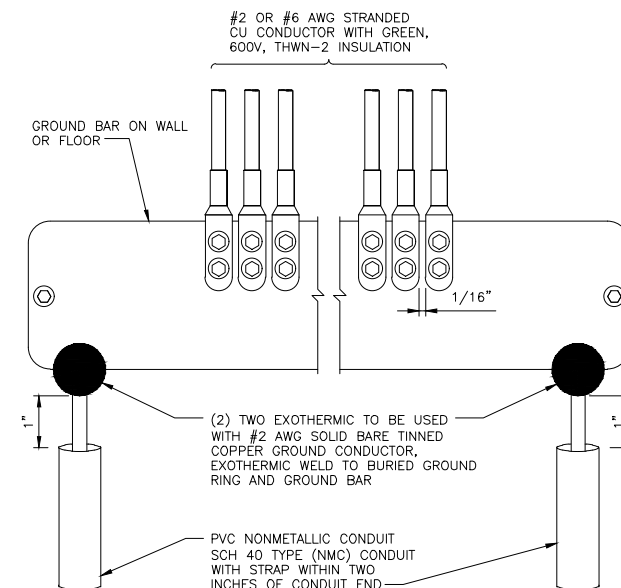
- (EC) INTERIOR GROUND RING (#2 AWG)
- (EC) EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2 AWG)
- (EC) METALLIC COLD WATER PIPE (IF AVAILABLE) (1/0 AWG)
- (EC) BUILDING STEEL (IF AVAILABLE) (1/0 AWG)

SECTION "I" - ISOLATED GROUND ZONE

- (AT&T) ALL ISOLATED GROUND REFERENCE
- (AT&T) GROUND WINDOW BAR

DETAIL NOTES:

- EXOTHERMICALLY WELD #2 AWG BARE TINNED SOLID COPPER CONDUCTOR TO GROUND BAR. ROUTE CONDUCTOR TO BURIED GROUND RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
- THE INSTALLER SHALL USE PERMANENT MARKER TO DRAW THE LINE BETWEEN SECTION AND LABEL EACH SECTION ("P", "A", "I") WITH 1" HIGH LETTERS



GROUNDING BAR DETAIL

NO SCALE

4



FORTUNE WIRELESS INC.

5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: ren

CHECKED BY: AJB

NO: A DATE: 07/01/25 ISSUE: REVIEW CD

SHEET TITLE:

GROUNDING DETAILS

SHEET NUMBER:

G-2

DO NOT SCALE DRAWINGS

GENERAL CONSTRUCTION

- FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
GENERAL CONTRACTOR — GC AS ASSIGNED BY OWNER
CONTRACTOR: (CONSTRUCTION)
OWNER — AT&T
- ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND AT&T PROJECT SPECIFICATIONS.
- GENERAL CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORK.
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS. SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER PRIOR TO PROCEEDING.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFIRM TO ALL OSHA REQUIREMENTS AND THE LOCAL JURISDICTION.
- GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.
- ERECTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE. ALL MEMBERS SHALL BE LAID PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.
- SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH UL LISTED MATERIALS APPROVED BY LOCAL JURISDICTION. CONTRACTOR SHALL KEEP AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DEBRIS.
- WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES. CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND CONTRACTORS TO THE SITE AND/OR BUILDING.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.
- THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.
- THE GENERAL CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A, 10-B, OR 2-A10-B, AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION.
- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
- THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUNDING. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.
- ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.
- ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.
- CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.

- CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.
- THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS NOT FOR HUMAN HABITAT (NO HANDICAP ACCESS REQUIRED).
- OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY AT&T TECHNICIANS.
- NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.
- ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION AT&T MOBILITY GROUNDING STANDARD "TECHNICAL SPECIFICATION FOR CONSTRUCTION OF GSM/GPRS WIRELESS SITES" AND "TECHNICAL SPECIFICATION FOR FACILITY GROUNDING". IN CASE OF A CONFLICT BETWEEN THE CONSTRUCTION SPECIFICATION AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.
- CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF CONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY.
- CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
- INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- NO WHITE STROBE LIGHTS ARE PERMITTED. LIGHTING IF REQUIRED, WILL MEET FAA STANDARDS AND REQUIREMENTS.
- ALL COAXIAL CABLE INSTALLATIONS TO FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

ANTENNA MOUNTING

- DESIGN AND CONSTRUCTION OF ANTENNA SUPPORTS SHALL CONFORM TO CURRENT ANSI/TIA-222 OR APPLICABLE LOCAL CODES.
- ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS NOTED OTHERWISE.
- ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS NOTED OTHERWISE.
- DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED BY COLD GALVANIZING IN ACCORDANCE WITH ASTM A780.
- ALL ANTENNA MOUNTS SHALL BE INSTALLED WITH LOCK NUTS, DOUBLE NUTS AND SHALL BE TORQUED TO MANUFACTURER'S RECOMMENDATIONS.
- CONTRACTOR SHALL INSTALL ANTENNA PER MANUFACTURER'S RECOMMENDATION FOR INSTALLATION AND GROUNDING.
- ALL UNUSED PORTS ON ANY ANTENNAS SHALL BE TERMINATED WITH A 50-OHM LOAD TO ENSURE ANTENNAS PERFORM AS DESIGNED.
- PRIOR TO SETTING ANTENNA AZIMUTHS AND DOWNTILTS, ANTENNA CONTRACTOR SHALL CHECK THE ANTENNA MOUNT FOR TIGHTNESS AND ENSURE THAT THEY ARE PLUMB. ANTENNA AZIMUTHS SHALL BE SET FROM TRUE NORTH AND BE ORIENTED WITHIN +/- 5% AS DEFINED BY THE RFDS. ANTENNA DOWNTILTS SHALL BE WITHIN +/- 0.5% AS DEFINED BY THE RFDS. REFER TO ND-00246.
- JUMPERS FROM THE TMA'S MUST TERMINATE TO OPPOSITE POLARIZATION'S IN EACH SECTOR.
- CONTRACTOR SHALL RECORD THE SERIAL #, SECTOR, AND POSITION OF EACH ACTUATOR INSTALLED AT THE ANTENNAS AND PROVIDE THE INFORMATION TO AT&T.
- TMA'S SHALL BE MOUNTED ON PIPE DIRECTLY BEHIND ANTENNAS AS CLOSE TO ANTENNA AS FEASIBLE IN A VERTICAL POSITION.
- ANTENNAS SHALL HAVE A 4'-0" MIN CENTER TO CENTER HORIZONTAL SEPARATION.

TORQUE REQUIREMENTS

- ALL RF CONNECTIONS SHALL BE TIGHTENED BY A TORQUE WRENCH.
- ALL RF CONNECTIONS, GROUNDING HARDWARE AND ANTENNA HARDWARE SHALL HAVE A TORQUE MARK INSTALLED IN A CONTINUOUS STRAIGHT LINE FROM BOTH SIDES OF THE CONNECTION.
A. RF CONNECTION BOTH SIDES OF THE CONNECTOR.
B. GROUNDING AND ANTENNA HARDWARE ON THE NUT SIDE STARTING FROM THE THREADS TO THE SOLID SURFACE. EXAMPLE OF SOLID SURFACE: GROUND BAR, ANTENNA BRACKET METAL.
- ALL 8M ANTENNA HARDWARE SHALL BE TIGHTENED TO 9 LB-FT (12 NM).
- ALL 12M ANTENNA HARDWARE SHALL BE TIGHTENED TO 43 LB-FT (58 NM).
- ALL GROUNDING HARDWARE SHALL BE TIGHTENED UNTIL THE LOCK WASHER COLLAPSES AND THE GROUNDING HARDWARE IS NO LONGER LOOSE.
- ALL DIN TYPE CONNECTIONS SHALL BE TIGHTENED TO 18-22 LB-FT (24.4 - 29.8 NM).
- ALL N TYPE CONNECTIONS SHALL BE TIGHTENED TO 15-20 LB-IN (1.7 - 2.3 NM).

FIBER & POWER CABLE MOUNTING

- THE FIBER OPTIC TRUNK CABLES SHALL BE INSTALLED INTO CONDUITS, CHANNEL CABLE TRAYS, OR CABLE TRAY. WHEN INSTALLING FIBER OPTIC TRUNK CABLES INTO A CABLE TRAY SYSTEM, THEY SHALL BE INSTALLED INTO AN INTER DUCT AND A PARTITION BARRIER SHALL BE INSTALLED BETWEEN THE 600 VOLT CABLES AND THE INTER DUCT IN ORDER TO SEGREGATE CABLE TYPES. OPTIC FIBER TRUNK CABLES SHALL HAVE APPROVED CABLE RESTRAINTS EVERY (60) SIXTY FEET AND SECURELY FASTENED TO THE CABLE TRAY SYSTEM. NFPA 70 (NEC) ARTICLE 770 RULES SHALL APPLY.
- THE TYPE TC-ER CABLES SHALL BE INSTALLED INTO CONDUITS, CHANNEL CABLE TRAYS, OR CABLE TRAY AND SHALL BE SECURED AT INTERVALS NOT EXCEEDING (6) SIX FEET, AN EXCEPTION; WHERE TYPE TC-ER CABLES ARE NOT SUBJECT TO PHYSICAL DAMAGE, CABLES SHALL BE PERMITTED TO MAKE A TRANSITION BETWEEN CONDUITS, CHANNEL CABLE TRAYS, OR CABLE TRAY WHICH ARE SERVING UTILIZATION EQUIPMENT OR DEVICES, A DISTANCE (6) SIX FEET SHALL NOT BE EXCEEDED WITHOUT CONTINUOUS SUPPORTING. NFPA 70 (NEC) ARTICLES 336 AND 392 RULES SHALL APPLY.
- WHEN INSTALLING OPTIC FIBER TRUNK CABLES OR TYPE TC-ER CABLES INTO CONDUITS, NFPA 70 (NEC) ARTICLE 300 RULES SHALL APPLY.

COAXIAL CABLE NOTES

- TYPES AND SIZES OF THE ANTENNA CABLE ARE BASED ON ESTIMATED LENGTHS. PRIOR TO ORDERING CABLE, CONTRACTOR SHALL VERIFY ACTUAL LENGTH BASED ON CONSTRUCTION LAYOUT AND NOTIFY THE PROJECT MANAGER IF ACTUAL LENGTHS EXCEED ESTIMATED LENGTHS.
- CONTRACTOR SHALL VERIFY THE DOWN-TILT OF EACH ANTENNA WITH A DIGITAL LEVEL.
- CONTRACTOR SHALL CONFIRM COAX COLOR CODING PRIOR TO CONSTRUCTION. REFER TO "ANTENNA SYSTEM LABELING STANDARD" ND-00027 LATEST VERSION.
- ALL JUMPERS TO THE ANTENNAS FROM THE MAIN TRANSMISSION LINE SHALL BE 1/2" DIA. LDF AND SHALL NOT EXCEED 6'-0".
- ALL COAXIAL CABLE SHALL BE SECURED TO THE DESIGNED SUPPORT STRUCTURE, IN AN APPROVED MANNER, AT DISTANCES NOT TO EXCEED 4'-0" OC.
- CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS REGARDING BOTH THE INSTALLATION AND GROUNDING OF ALL COAXIAL CABLES, CONNECTORS, ANTENNAS, AND ALL OTHER EQUIPMENT.
- CONTRACTOR SHALL WEATHERPROOF ALL ANTENNA CONNECTORS WITH SELF AMALGAMATING TAPE. WEATHERPROOFING SHALL BE COMPLETED IN STRICT ACCORDANCE WITH AT&T STANDARDS.

GENERAL CABLE AND EQUIPMENT NOTES

- CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ANTENNA, TMAS, DIPLEXERS, AND COAX CONFIGURATION, MAKE AND MODELS PRIOR TO INSTALLATION.
- ALL CONNECTIONS FOR HANGERS, SUPPORTS, BRACING, ETC. SHALL BE INSTALLED PER TOWER MANUFACTURER'S RECOMMENDATIONS.
- CONTRACTOR SHALL REFERENCE THE TOWER STRUCTURAL ANALYSIS/DESIGN DRAWINGS FOR DIRECTIONS ON CABLE DISTRIBUTION/ROUTING.
- ALL OUTDOOR RF CONNECTORS/CONNECTIONS SHALL BE WEATHERPROOFED, EXCEPT THE RET CONNECTORS, USING BUTYL TAPE AFTER INSTALLATION AND FINAL CONNECTIONS ARE MADE. BUTYL TAPE SHALL HAVE A MINIMUM OF ONE-HALF TAPE WIDTH OVERLAP ON EACH TURN AND EACH LAYER SHALL BE WRAPPED THREE TIMES. WEATHERPROOFING SHALL BE SMOOTH WITHOUT BUCKLING. BUTYL BLEEDING IS NOT ALLOWED.
- IF REQUIRED TO PAINT ANTENNAS AND/OR COAX:
A. TEMPERATURE SHALL BE ABOVE 50° F.
B. PAINT COLOR MUST BE APPROVED BY BUILDING OWNER/LANDLORD.
C. FOR REGULATED TOWERS, FAA/FCC APPROVED PAINT IS REQUIRED.
D. DO NOT PAINT OVER COLOR CODING OR ON EQUIPMENT MODEL NUMBERS.
- ALL CABLES SHALL BE GROUNDED WITH COAXIAL CABLE GROUND KITS. FOLLOW THE MANUFACTURER'S RECOMMENDATIONS.
A. GROUNDING AT THE ANTENNA LEVEL.
B. GROUNDING AT MID LEVEL, TOWERS WHICH ARE OVER 200'-0", ADDITIONAL CABLE GROUNDING REQUIRED.
C. GROUNDING AT BASE OF TOWER PRIOR TO TURNING HORIZONTAL.
D. GROUNDING OUTSIDE THE EQUIPMENT SHELTER AT ENTRY PORT.
E. GROUNDING INSIDE THE EQUIPMENT SHELTER AT THE ENTRY PORT.

- ALL PROPOSED GROUND BAR DOWNLEADS ARE TO BE TERMINATED TO THE EXISTING ADJACENT GROUND BAR DOWNLEADS A MINIMUM DISTANCE OF 4'-0" BELOW GROUND BAR. TERMINATIONS MAY BE EXOTHERMIC OR COMPRESSION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ANTENNA AND THE COAX CONFIGURATION IS THE CORRECT MAKE AND MODELS, PRIOR TO INSTALLATION.
- ALL CONNECTIONS FOR HANGERS, SUPPORTS, BRACING, ETC. SHALL BE INSTALLED PER TOWER MANUFACTURER'S SPECIFICATION & RECOMMENDATIONS.

SAFETY ENFORCEMENT

- SAFETY IS OF PARAMOUNT CONCERN TO BOTH SITE WORKERS AND THE PUBLIC.
- CONSTRUCTION WORK PRESENTS UNIQUE THREATS TO HEALTH AND SAFETY. THE CONTRACTOR IS RESPONSIBLE TO EDUCATE THEIR WORK FORCE OF THESE DANGERS AND LIMIT THEIR EXPOSURE TO HAZARDS. THIS EDUCATION SHALL INCLUDE BUT NOT BE LIMITED TO APPLICABLE TRAINING COURSES AND CERTIFICATIONS, PROPER PERSONAL PROTECTIVE EQUIPMENT USAGE, DAILY TAILGATE MEETINGS AND ANY OTHER PREVENTATIVE MEASURES WHICH MAY BE REASONABLY EXPECTED. THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK AREA, ADJACENT AREAS AND ANY PROPERTY OCCUPANTS WHO MAY BE AFFECTED BY THE WORK UNDER CONTRACT. THE CONTRACTOR SHALL REVIEW ALL LANDOWNER, PRIME CONTRACTOR, CARRIER, OSHA, AND LOCAL SAFETY GUIDELINES AND AT ALL TIMES SHALL CONFORM TO THE MOST RESTRICTIVE OF THESE STANDARDS TO ENSURE A SAFE WORKPLACE.
 - ALL SAFETY EQUIPMENT SHALL BE INSPECTED ACCORDING TO ALL OSHA AND INDUSTRY SCHEDULED INTERVALS AND ALL INSPECTIONS SHALL BE DOCUMENTED PER APPLICABLE CODES AND STANDARDS.
 - TOWER WORK PRESENTS ADDITIONAL THREATS TO HEALTH AND SAFETY. ALL TOWER WORKERS WORKING ON A TOWER MUST BE ADEQUATELY TRAINED AND MONITORED TO ENSURE THAT SAFE WORK PRACTICES ARE LEARNED AND FOLLOWED. AS REQUIRED BY OSHA, WHEN WORKING ON EXISTING COMMUNICATION TOWERS, EMPLOYEES MUST BE PROVIDED WITH APPROPRIATE FALL PROTECTION, TRAINED TO USE THIS FALL PROTECTION PROPERLY, AND THE USE OF FALL PROTECTION MUST BE CONSISTENTLY SUPERVISED AND ENFORCED BY THE CONTRACTOR.
 - ELECTRICAL WORK PRESENTS SPECIFIC THREATS TO THE HEALTH AND SAFETY OF WORKERS ON SITE. SPECIFICALLY ELECTROCUTIONS ARE THE FOURTH LEADING CAUSE OF DEATH ON CONSTRUCTION SITES. ALL ELECTRICAL WORKERS SHALL HAVE CURRENT CERTIFICATIONS WHICH SATISFY ALL TRAINING REQUIREMENTS FOR THE ELECTRICAL WORK THEY ARE PERFORMING PER OSHA STANDARDS. ALL ELECTRICAL WORKERS SHALL ADHERE TO ALL SAFETY RULES AND REGULATIONS FOR WORKER AND PUBLIC SAFETY. ALL WORK SHALL BE PERFORMED BY QUALIFIED ELECTRICIANS TRAINED FOR THE TYPE OF WORK AND THE VOLTAGES PRESENT FOR EACH TASK. THE CONTRACTOR SHALL REVIEW ALL LANDOWNER, PRIME CONTRACTOR, CARRIER, OSHA, NFPA 70, AND LOCAL SAFETY GUIDELINES AND AT ALL TIMES SHALL CONFORM TO THE MOST RESTRICTIVE OF THESE STANDARDS TO ENSURE A SAFE WORKPLACE.



FORTUNE WIRELESS INC.
5511 WEST 79TH STREET
INDIANAPOLIS, IN 46268
(317) 532-1374

IN1187
AT&T FA#: 15861975
2688 EAST MAIN ST.
PLAINFIELD,
IN 46168
HENDRICKS COUNTY

DRAWN BY: **ren**

CHECKED BY: **AJB**

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

SHEET TITLE:

GENERAL CONSTRUCTION NOTES

SHEET NUMBER:

N-1

DO NOT SCALE DRAWINGS

PART 1 – GENERAL

CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUBGRADE PREPARATION AND FINISH GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS.

1.1 REFERENCES:

- A. DOT (STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION—CURRENT EDITION).
- B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS).
- C. OSHA (OCCUPATION SAFETY AND HEALTH ADMINISTRATION).

1.2 INSPECTION AND TESTING:

- A. FIELD TESTING OF EARTHWORK COMPACTION AND CONCRETE CYLINDERS SHALL BE PERFORMED BY CONTRACTORS INDEPENDENT TESTING LAB. THIS WORK TO BE COORDINATE BY THE CONTRACTOR.
- B. ALL WORK SHALL BE INSPECTED AND RELEASED BY THE GENERAL CONTRACTOR WHO SHALL CARRY OUT THE GENERAL INSPECTION OF THE WORK WITH SPECIFIC CONCERN TO PROPER PERFORMANCE OF THE WORK AS SPECIFIED AND/OR CALLED FOR ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REQUEST TIMELY INSPECTIONS PRIOR TO PROCEEDING WITH FURTHER WORK THAT WOULD MAKE PARTS OF WORK INACCESSIBLE OR DIFFICULT TO INSPECT.

1.3 SITE MAINTENANCE AND PROTECTION:

- A. PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OF WORK UNTIL COMPLETION OF THE SUBCONTRACT.
 - B. AVOID DAMAGE TO THE SITE AND TO EXISTING FACILITIES, STRUCTURES, TREES, AND SHRUBS DESIGNATED TO REMAIN. TAKE PROTECTIVE MEASURES TO PREVENT EXISTING FACILITIES THAT ARE NOT DESIGNATED FOR REMOVAL FROM BEING DAMAGED BY THE WORK.
 - C. KEEP SITE FREE OF ALL PONDING WATER.
 - D. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT AND EPA REQUIREMENTS.
 - E. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.
 - F. EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE ENGINEER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.
1. PROVIDE A MINIMUM 48 HOURS NOTICE TO THE ENGINEER AND RECEIVE WRITTEN NOTICE TO PROCEED BEFORE INTERRUPTING ANY UTILITY SERVICE.

PART 2 – PRODUCTS

- 2.1 SUITABLE BACKFILL: ASTM D2321 (CLASS I, II, III OR IVA) FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.2 NONPOROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS III, IVA OR IVB) COARSE AGGREGATE. FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.3 POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS IA, IB OR II) COARSE AGGREGATE FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.4 SELECT STRUCTURAL FILL: GRANULAR FILL MATERIAL MEETING THE REQUIREMENTS OF ASTM E650-95. FOR USE AROUND AND UNDER STRUCTURES WHERE STRUCTURAL FILL MATERIAL ARE REQUIRED.
- 2.5 GRANULAR BEDDING AND TRENCH BACKFILL: WELL-GRADED SAND MEETING THE GRADATION REQUIREMENTS OF ASTM D2487 (SE OR SW-SM).
- 2.6 COARSE AGGREGATE FOR ACCESS ROAD SUBBASE COURSE SHALL CONFORM TO ASTM D2940.
- 2.7 UNSUITABLE MATERIAL: HIGH AND MODERATELY PLASTIC SILTS AND CLAYS (LL>45). MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION, AND DEBRIS AS DETERMINED BY THE CONSTRUCTION MANAGER. TYPICAL THESE WILL BE SOILS CLASSIFIED BY ASTM AS PT, MH, CH, OH, ML, AND OL.
- 2.8 GEOTEXTILE FABRIC: MIRAFI 500X OR ENGINEER APPROVED EQUAL.
- 2.9 PLASTIC MARKING TAPE: SHALL BE ACID AND ALKALI RESISTANT POLYETHYLENE FILM SPECIFICALLY MANUFACTURED FOR MARKING AND LOCATING UNDERGROUND UTILITIES, 6 INCHES WIDE WITH A MINIMUM THICKNESS OF 0.004 INCH. TAPE SHALL HAVE MINIMUM STRENGTH OF 1500 PSI IN BOTH DIRECTIONS AND MANUFACTURED WITH INTEGRAL CONDUCTORS, FOIL BACKING OR OTHER MEANS TO ENABLE DETECTION BY A METAL DETECTOR WHEN BURIED UP TO 3 FEET DEEP. THE METALLIC CORE OF THE TAPE SHALL BE ENCASED IN A PROTECTIVE JACKET OR PROVIDED WITH OTHER MEANS TO PROTECT IT FROM CORROSION. TAPE COLOR SHALL BE RED FOR ELECTRIC UTILITIES AND ORANGE FOR TELECOMMUNICATION UTILITIES.

PART 3 – EXECUTION

3.1 GENERAL:

- A. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ANY TIME.
 - B. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK.
 - C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE. REMOVE TREES, BRUSH, STUMPS, RUBBISH AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA TO BE CLEARED.
1. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STUMPS, AND OTHER DEBRIS, BRUSH, AND REFUSE EMBEDDED IN OR PROTRUDING THROUGH THE GROUND SURFACE, RAKE, DISK OR PLOW THE AREA TO A DEPTH OF NO LESS THAN 6 INCHES, AND REMOVE TO A DEPTH OF 12 INCHES ALL ROOTS AND OTHER DEBRIS THEREBY EXPOSED.
2. REMOVE TOPSOIL MATERIAL COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL. AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER UNDESIRABLE MATERIALS.

- 3. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM CLEARING, GRUBBING AND DEMOLITION WORK COMPLETELY WITH SUITABLE FILL.
- D. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL ALL DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS. BURNING WILL NOT BE PERMITTED.
- E. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATIONS OF FEATURES INDICATED ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER ITEM NOT SHOWN THAT MIGHT INTERFERE WITH THE PROPOSED CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.
- F. SEPARATE AND STOCK PILE ALL EXCAVATED MATERIALS SUITABLE FOR BACKFILL. ALL EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.

3.2 BACKFILL:

- A. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING EXPIRATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST-IN-PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.
1. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL BE REMOVED AND THE EXCAVATION CLEANED OF ALL TRASH, DEBRIS, AND UNSUITABLE MATERIALS.
2. BACKFILL BY PLACING AND COMPACTING SUITABLE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 8 INCHES LOOSE THICKNESS AND COMPACTED. WHERE HAND OPERATED COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4 INCHES IN LOOSE DEPTH AND COMPACTED.
3. WHENEVER THE DENSITY TESTING INDICATES THAT THE CONTRACTOR HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE SPECIFICATION REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY, SUCH AS DISKING AND DRYING, ADDING WATER, OR INCREASING THE COMPACTIVE EFFORT TO MEET THE MINIMUM COMPACTION REQUIREMENTS.
- B. THOROUGHLY COMPACT EACH LAYER OF BACKFILL TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

3.3 TRENCH EXCAVATION:

- A. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE GENERAL CONTRACTOR. PROVIDE SHORING, SHEETING AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE TRENCH WALLS.
- B. EXTEND THE TRENCH WIDTH A MINIMUM OF 6 INCHES BEYOND THE OUTSIDE EDGE OF THE OUTERMOST CONDUIT.
- C. WHEN SOFT YIELDING, OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, BACKFILL AT THE REQUIRED TRENCH TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE REQUIRED ELEVATION AND BACKFILL WITH GRANULAR BEDDING MATERIAL.

3.4 TRENCH BACKFILL:

- A. PROVIDE GRANULAR BEDDING MATERIAL IN ACCORDANCE WITH THE DRAWINGS AND THE UTILITY REQUIREMENTS.
- B. NOTIFY THE GENERAL CONTRACTOR 24 HOURS IN ADVANCE OF BACKFILLING.
- C. CONDUCT UTILITY CHECK TESTS BEFORE BACKFILLING. BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.
- D. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6 INCH UNCOMPACTED LIFTS UNTIL 12 INCHES OVER THE CONDUITS. SOLIDLY RAM AND TAMP BACKFILL INTO SPACE AROUND CONDUITS.
- E. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE, OR UNBALANCED LOADING.
- F. ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 8 INCH MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.
- G. COMPACT FINAL TRENCH BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE EXISTING UNDISTURBED MATERIAL IMMEDIATELY ADJACENT TO THE TRENCH BUT NO LESS THAN A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

3.5 AGGREGATE ACCESS ROAD:

- A. CLEAR, GRUB, STRIP AND EXCAVATE FOR THE ACCESS ROAD TO THE LINES AND GRADES INDICATED ON THE DRAWINGS. SCARIFY TO A DEPTH OF 6 INCHES AND PROOF-ROLL. ALL HOLES, RUTS, SOFT PLACES AND OTHER DEFECTS SHALL BE CORRECTED.
 - B. THE ENTIRE SUBGRADE SHALL BE COMPACTED TO NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D 1557.
 - C. AFTER PREPARATION OF THE SUBGRADE IS COMPLETE THE GEOTEXTILE FABRIC (MIRAFI 500X) SHALL BE INSTALLED TO THE LIMITS INDICATED ON THE DRAWINGS BY ROLLING THE FABRIC OUT LONGITUDINALLY ALONG THE ROADWAY. THE FABRIC SHALL NOT BE DRAGGED ACROSS THE SUBGRADE. PLACE THE ENTIRE ROLL IN A SINGLE OPERATION, ROLLING OUT AS SMOOTHLY AS POSSIBLE.
1. OVERLAPS PARALLEL TO THE ROADWAY WILL BE PERMITTED AT THE CENTERLINE AND AT LOCATIONS BEYOND THE ROADWAY SURFACE WIDTH (I.E. WITHIN THE SHOULDER WIDTH) ONLY. NO LONGITUDINAL OVERLAPS SHALL BE LOCATED BETWEEN THE CENTERLINE AND THE SHOULDER. PARALLEL OVERLAPS SHALL BE A MINIMUM OF 3 FEET WIDE.
2. TRANSVERSE (PERPENDICULAR TO THE ROADWAY) OVERLAPS AT THE END OF A ROLL SHALL OVERLAP IN THE DIRECTION OF THE AGGREGATE PLACEMENT (PREVIOUS ROLL ON TOP) AND SHALL HAVE A MINIMUM LENGTH OF 3 FEET.
3. ALL OVERLAPS SHALL BE PINNED WITH STAPLES OR NAILS A MINIMUM OF 10 INCHES LONG TO INSURE POSITIONING DURING PLACEMENT OF AGGREGATE. PIN LONGITUDINAL SEAMS AT 25 FOOT CENTERS AND TRANSVERSE SEAMS EVERY 5 FEET.
- D. THE AGGREGATE BASE AND SURFACE COURSES SHALL BE CONSTRUCTED IN LAYERS NOT MORE THAN 4 INCH (COMPACTED) THICKNESS. AGGREGATE TO BE PLACED ON GEOTEXTILE FABRIC SHALL BE END-DUMPED ON THE FABRIC FROM THE FREE END OF THE FABRIC OR OVER PREVIOUSLY PLACED AGGREGATE. THE FIRST LIFT SHALL BE BLADED DOWN TO A THICKNESS OF 8 INCHES PRIOR TO COMPACTION. AT NO TIME SHALL EQUIPMENT, EITHER TRANSPORTING THE AGGREGATE OR GRADING THE AGGREGATE, BE PERMITTED ON THE ROADWAY WITH LESS THAN 4 INCHES OF MATERIAL COVERING THE FABRIC.
 - E. THE AGGREGATE SHALL BE IMMEDIATELY COMPACTED TO NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D 1557 WITH A TAMPING ROLLER, OR WITH A PNEUMATIC-TIRED ROLLER, OR WITH A VIBRATORY MACHINE OR ANY COMBINATION OF THE ABOVE. THE TOP LAYER SHALL BE GIVEN A FINAL ROLLING WITH A THREE-WHEEL OR TANDEM ROLLER.

3.6 FINISH GRADING:

- A. PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.
- B. UTILIZE SATISFACTORY FILL MATERIAL RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF FILLS, EMBANKMENTS AND FOR REPLACEMENT OF REMOVED UNSUITABLE MATERIALS.
- C. ACHIEVE FINISHED GRADE BY PLACING A MINIMUM OF 4 INCHES OF 1/2" – 3/4" CRUSHED STONE ON TOP SOIL STABILIZER FABRIC.
- D. REPAIR ALL ACCESS ROADS AND SURROUNDING AREAS USED DURING THE COURSE OF THIS WORK TO THEIR ORIGINAL CONDITION.

3.7 ASPHALT PAVING ROAD:

- A. SECTION 400 – STATE DOT FLEXIBLE PAVEMENT.
- B. SECTION 400 – STATE DOT BITUMINOUS CONCRETE COURSES.
- C. DIVISION 400 – STATE DOT BITUMINOUS PAVEMENTS.

APPLICABLE BUILDING CODES AND STANDARDS

CONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODES:
 INTERNATIONAL BUILDING CODE (IBC 2018), LATEST ADDITION ADOPTED BY STATE
 NATIONAL ELECTRICAL CODE (NEC 2017), LATEST ADDITION AS ADOPTED BY LOCAL BUILDING AUTHORITY AND BY STATE
 NFPA 70 – NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) – (2017 EDITION),
 NFPA 101 – LIFE SAFETY CODE – (2017 EDITION),
 NFPA 780 – LIGHTNING PROTECTION CODE – (2017 EDITION)

CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:
 AMERICAN CONCRETE INSTITUTE (ACI) 318-08, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE & COMMENTARY
 AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), STEEL CONSTRUCTION MANUAL, THIRTEENTH EDITION
 TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES:
 TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM
 IEEE 1100 (LATEST EDITION) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT

IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")

TELCORDIA GR-1275, GENERAL INSTALLATION REQUIREMENTS

TELCORDIA GR-1503, COAXIAL CABLE CONNECTIONS

ANSI T1.311, FOR TELECOM – DC POWER SYSTEMS – TELECOM, ENVIRONMENTAL PROTECTION

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.



FORTUNE WIRELESS INC.
 5511 WEST 79TH STREET
 INDIANAPOLIS, IN 46268
 (317) 532-1374

IN1187
 AT&T FA#: 15861975
 2688 EAST MAIN ST.
 PLAINFIELD,
 IN 46168
 HENDRICKS COUNTY

DRAWN BY: **ren**

CHECKED BY: **AJB**

NO:	DATE:	ISSUE:
A	07/01/25	REVIEW CD

SHEET TITLE:
GENERAL CONSTRUCTION NOTES

SHEET NUMBER:
N-2

DO NOT SCALE DRAWINGS



FORTUNE WIRELESS INC.
 5511 WEST 79TH STREET
 INDIANAPOLIS, IN 46268
 (317) 532-1374

IN1187
 AT&T FA#: 15861975
 2688 EAST MAIN ST.
 PLAINFIELD,
 IN 46168
 HENDRICKS COUNTY

DRAWN BY: **ren**

CHECKED BY: **AJB**

NO: A	DATE: 07/01/25	ISSUE: REVIEW CD
-----------------	--------------------------	----------------------------

SHEET TITLE:

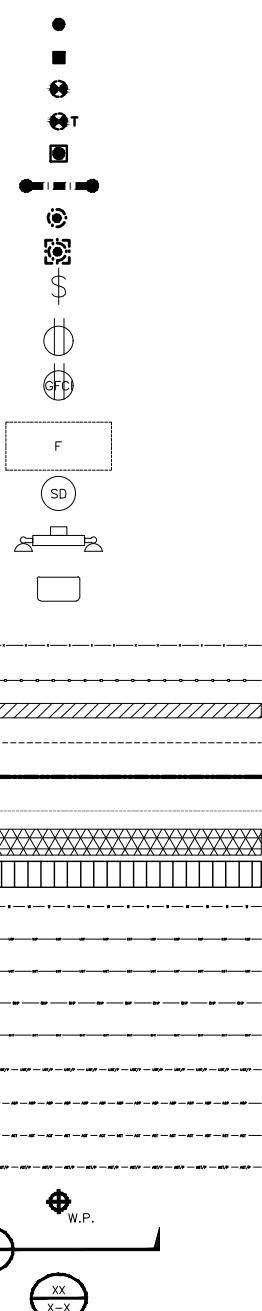
LEGENDS & ABBREVIATIONS

SHEET NUMBER:

N-3

DO NOT SCALE DRAWINGS

- EXOTHERMIC CONNECTION
- MECHANICAL CONNECTION
- CHEMICAL ELECTROLYTIC GROUNDING SYSTEM
- TEST CHEMICAL ELECTROLYTIC GROUNDING SYSTEM
- EXOTHERMIC WITH INSPECTION SLEEVE
- GROUNDING BAR
- GROUND ROD
- TEST GROUND ROD WITH INSPECTION SLEEVE
- SINGLE POLE SWITCH
- DUPLEX RECEPTACLE
- DUPLEX GFCI RECEPTACLE
- FLUORESCENT LIGHTING FIXTURE
(2) TWO LAMPS 48-T8
- SMOKE DETECTION (DC)
- EMERGENCY LIGHTING (DC)
- SECURITY LIGHT W/PHOTOCELL LITHONIA ALXW
LED-1-25A400/51K-SR4-120-PE-DBBTXD
- CHAINLINK FENCE
- WOOD/WROUGHT IRON FENCE
- WALL STRUCTURE
- LEASE AREA
- PROPERTY LINE (PL)
- SETBACKS
- ICE BRIDGE
- CABLE TRAY
- WATER LINE
- UNDERGROUND POWER
- UNDERGROUND TELCO
- OVERHEAD POWER
- OVERHEAD TELCO
- UNDERGROUND TELCO/POWER
- ABOVE GROUND POWER
- ABOVE GROUND TELCO
- ABOVE GROUND TELCO/POWER
- WORKPOINT
- SECTION REFERENCE
- DETAIL REFERENCE



AB ANCHOR BOLT	INT INTERIOR
ABV ABOVE	LB(S) POUND(S)
AC ALTERNATING CURRENT	LF LINEAR FEET
ADDL ADDITIONAL	MAS MASONRY
AFF ABOVE FINISHED FLOOR	MAX MAXIMUM
AFG ABOVE FINISHED GRADE	MB MACHINE BOLT
AIC AMPERAGE INTERRUPTION CAPACITY	MECH MECHANICAL
ALUM ALUMINUM	MFR MANUFACTURER
ALT ALTERNATE	MGB MASTER GROUND BAR
ANT ANTENNA	MIN MINIMUM
APPROX APPROXIMATE	MISC MISCELLANEOUS
ARCH ARCHITECTURAL	MTL METAL
ATS AUTOMATIC TRANSFER SWITCH	MTS MANUAL TRANSFER SWITCH
AWG AMERICAN WIRE GAUGE	MW MICROWAVE
BATT BATTERY	(N) NEW
BLDG BUILDING	NEC NATIONAL ELECTRIC CODE
BLK BLOCK	NO.(#) NUMBER
BLKG BLOCKING	NTS NOT TO SCALE
BM BEAM	OC ON CENTER
BTC BARE TINNED COPPER CONDUCTOR	OPNG OPENING
BOF BOTTOM OF FOOTING	(P) PROPOSED
CAB CABINET	P/C PRECAST CONCRETE
CANT CANTILEVERED	PCS PERSONAL COMMUNICATION SERVICES
CEC CALIFORNIA ELECTRIC CODE	PCU PRIMARY CONTROL UNIT
CHG CHARGING	PRC PRIMARY RADIO CABINET
CLG CEILING	PP POLARIZING PRESERVING
CLR CLEAR	PSF POUNDS PER SQUARE FOOT
COL COLUMN	PSI POUNDS PER SQUARE INCH
COMM COMMON	PT PRESSURE TREATED
CONC CONCRETE	PWR POWER CABINET
CONSTR CONSTRUCTION	QTY QUANTITY
DBL DOUBLE	RAD RADIUS
DC DIRECT CURRENT	RECT RECTIFIER
DEPT DEPARTMENT	REF REFERENCE
DF DOUGLAS FIR	REINF REINFORCEMENT
DIA DIAMETER	REQ'D REQUIRED
DIAG DIAGONAL	RET REMOTE ELECTRIC TILT
DIM DIMENSION	RMC RIGID METALLIC CONDUIT
DWG DRAWING	RRH REMOTE RADIO HEAD
DWL DOWEL	RRU REMOTE RADIO UNIT
(E) EXISTING	RWY RACEWAY
EA EACH	SCH SCHEDULE
EC ELECTRICAL CONDUCTOR	SHT SHEET
EL ELEVATION	SIAD SMART INTEGRATED DEVICE
ELEC ELECTRICAL	SIM SIMILAR
EMT ELECTRICAL METALLIC TUBING	SPEC SPECIFICATION
ENG ENGINEER	SQ SQUARE
EQ EQUAL	SS STAINLESS STEEL
EXP EXPANSION	STD STANDARD
EXT EXTERIOR	STL STEEL
FAB FABRICATION	STRUCT STRUCTURAL
FF FINISH FLOOR	TEMP TEMPORARY
FG FINISH GRADE	THK THICKNESS
FIF FACILITY INTERFACE FRAME	TMA TOWER MOUNTED AMPLIFIER
FIN FINISH(ED)	TN TOE NAIL
FLR FLOOR	TOA TOP OF ANTENNA
FDN FOUNDATION	TOC TOP OF CURB
FOC FACE OF CONCRETE	TOF TOP OF FOUNDATION
FOM FACE OF MASONRY	TOP TOP OF PLATE (PARAPET)
FOS FACE OF STUD	TOS TOP OF STEEL
FOW FACE OF WALL	TOW TOP OF WALL
FS FINISH SURFACE	TVSS TRANSIENT VOLTAGE SUPPRESSION SYSTEM
FT FOOT	TYP TYPICAL
FTG FOOTING	UG UNDERGROUND
GA GAUGE	UL UNDERWRITERS LABORATORY
GEN GENERATOR	UNO UNLESS NOTED OTHERWISE
GFCI GROUND FAULT CIRCUIT INTERRUPTER	UMTS UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
GLB GLUE LAMINATED BEAM	UPS UNINTERRUPTIBLE POWER SYSTEM (DC POWER PLANT)
GLV GALVANIZED	VIF VERIFIED IN FIELD
GPS GLOBAL POSITIONING SYSTEM	W WIDE
GND GROUND	W/ WITH
GSM GLOBAL SYSTEM FOR MOBILE	WD WOOD
HDR HEADER	W.P. WORK POINT
HGR HANGER	WP WEATHERPROOF
HVAC HEAT/VENTILATION/AIR CONDITIONING	WT WEIGHT
HT HEIGHT	
IGR INTERIOR GROUND RING	
IN INCH	

LEGEND

1

ABBREVIATIONS

2

NOT USED

3