



**GPD GROUP**  
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

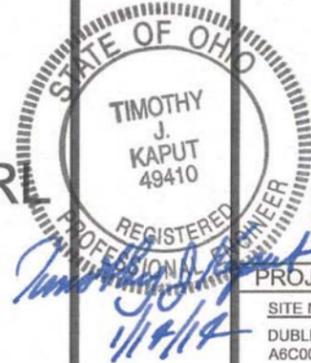
520 South Main Street; Suite 2531 330-572-2100  
Akron, OH 44311 Fax 330-572-2101



**DUBLIN / STATION AEP RL**

**A6C0010A**

5721 SHIER RINGS ROAD  
DUBLIN, OH 43016  
FRANKLIN COUNTY



**SITE DRAWINGS**

SHEET NUMBER	DESCRIPTION
T-1	TITLE SHEET
C-1	COMPOUND PLAN
C-2	OVERALL SITE PLAN
C-3	NOT USED
E-1	ONE LINE DIAGRAM AND PANEL SCHEDULES
E-2	CONDUIT PLUMBING & ELECTRICAL NOTES
G-1	GROUNDING DETAILS
G-2	GROUNDING DETAILS
RF-1	ANTENNA SCHEDULE, TOWER ELEVATION, AND MOUNT DETAILS
RF-2	PROPOSED NSN CONFIGURATION
RF-3	COLOR CODING
RF-4	EQUIPMENT PORTS
RF-5	NOT USED
RF-6	PORT MATRIX

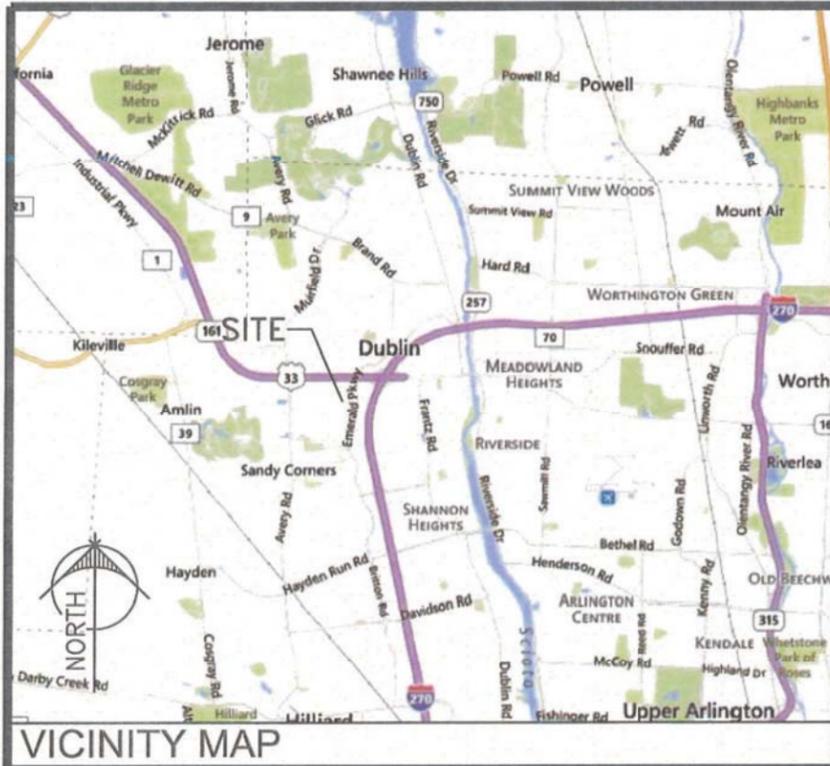
**PROJECT SUMMARY**

<b>SITE NAME</b>	DUBLIN / STATION AEP RL A6C0010A	<b>SBA#</b>	02759
<b>SITE ADDRESS</b>	5721 SHIER RINGS ROAD DUBLIN, OH 43016 FRANKLIN COUNTY	<b>COORDINATES</b>	LATITUDE: 40° 5' 40.33"N LONGITUDE: 83° 8' 34.14"W
<b>JURISDICTION:</b>	FRANKLIN COUNTY	<b>CONSTRUCTION TYPE:</b>	COLO
<b>OCCUPANCY:</b>	UNMANNED	<b>HANDICAPPED REQ.:</b>	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAP ACCESS IS NOT REQUIRED.
<b>PLUMBING REQ.:</b>	FACILITY HAS NO PLUMBING REQUIREMENTS.	<b>BUILDING CODE:</b>	OBC 2011 (2009 IBC)
<b>ELECTRICAL CODE:</b>	NEC 2011	<b>STRUCTURAL CODE:</b>	TA/IEA 222-REVISION G (INCLUDES ADDENDUM NO. 1)
<b>TOWER LANDLORD INFORMATION</b>	COLUMBUS & SOUTHERN OHIO ELECTRIC CO. PO BOX 16428 COLUMBUS, OHIO 43216	<b>APPLICANT INFORMATION</b>	T-MOBILE 6215 MORENCI TRAIL INDIANAPOLIS, IN 46268 CONTACT: WILL ROBINETTE CONTACT PHONE: 317-347-7031

**CONSULTANT TEAM**

**ENGINEERING**  
GPD GROUP  
520 SOUTH MAIN STREET; SUITE 2531  
AKRON, OH 44311  
(330) 572-2100  
CONTACT: MARK MCDONOUGH

**PROPERTY**  
COLUMBUS & SOUTHERN OHIO ELECTRIC CO.  
PO BOX 16428  
COLUMBUS, OHIO 43216



**DIRECTIONS:**

DIRECTIONS FROM 6215 MORENCI TRAIL, INDIANAPOLIS, INDIANA: HEAD SOUTH ON MORENCI TRAIL TOWARD W 62ND ST; TURN LEFT ONTO W 62ND ST; TURN RIGHT ONTO GUION RD; TURN RIGHT ONTO W 38TH ST; TAKE THE INTERSTATE 65 S RAMP ON THE LEFT; MERGE ONTO I-65 S; TAKE EXIT 112A ON THE LEFT FOR INTERSTATE 70 E TOWARD COLUMBUS OH; MERGE ONTO I-70E; TAKE EXIT 93B TO MERGE ONTO I-270 N TOWARD CLEVELAND; TAKE EXIT 15 FOR TUTTLE CROSSING BLVD, TURN LEFT ONTO TUTTLE CROSSING BLVD, TURN RIGHT AT THE 2ND CROSS STREET ONTO EMERALD PKWY; AT THE TRAFFIC CIRCLE, CONTINUE STRAIGHT TO STAY ON EMERALD PKWY; TURN LEFT ONTO SHIER RINGS RD; DESTINATION WILL BE ON THE LEFT.

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PROJECT INFORMATION	EQUIPMENT MANAGER	CONSTRUCTION MANAGER	PROJECT MANAGER	UNDERGROUND UTILITIES
THIS PROJECT INCLUDES THE INSTALLATION OF A SITE SUPPORT CABINET, LTE/GSM EQUIPMENT ON TOP OF NEW SSC CABINET, COVP, AND ANTENNA/LINE WORK ON THE EXISTING T-MOBILE RAD CENTER.	NAME: _____ DATE: _____	NAME: _____ DATE: _____	NAME: _____ DATE: _____	<p>2 Working Days Before You Dig Call 800-362-2764 (Toll Free) Ohio Utilities Protection Service</p> <p>Non-members Must Be Called Directly Call 800-925-0988 (Toll Free) Oil &amp; Gas Producers Utility Protection Service</p>



T-MOBILE WIRELESS CORP.  
312 ELM STREET, SUITE 1000  
CINCINNATI, OH 45202  
Office: 513-381-0774

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NO.	DATE	DESCRIPTION	BY
1	01/09/14	ISSUED FOR 90% REVIEW	GEB
2	01/14/14	ISSUED FOR CONSTRUCTION	GEB

DRAWN BY: GEB  
CHECKED BY: TAS  
DRAWING DATE: 01/14/14  
GPD JOB NO: 2013778.02759.03

**T-MOBILE SITE INFO**

SITE NAME: DUBLIN / STATION AEP RL  
SITE NUMBER: A6C0010A

**SITE ADDRESS**

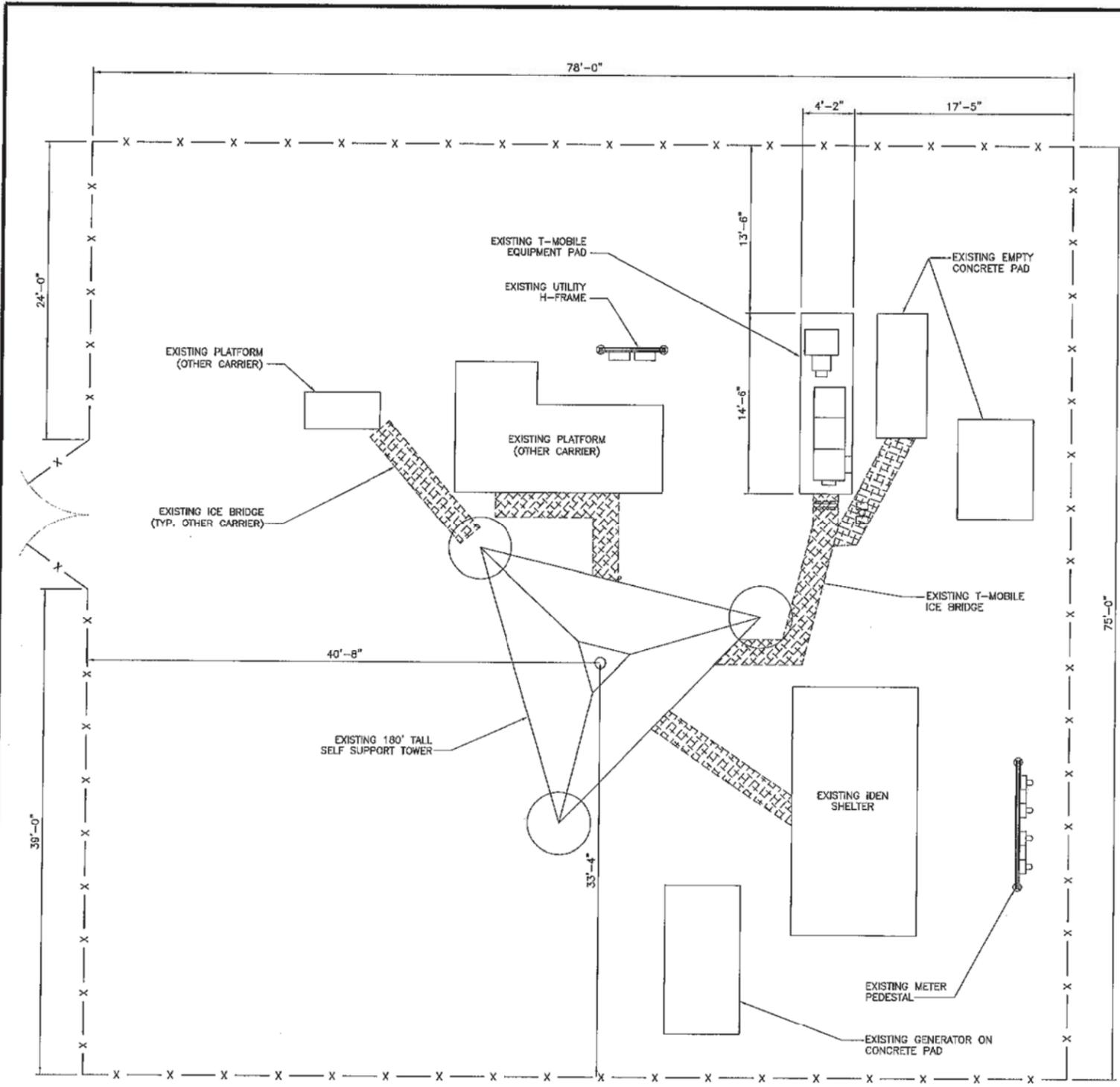
5721 SHIER RINGS ROAD  
DUBLIN, OH 43016  
FRANKLIN COUNTY

**SHEET TITLE**

**TITLE SHEET**

**SHEET NUMBER**

T-1



NOTE: EXISTING T-MOBILE BTS CABINET TO BE REMOVED

CIVIL NOTES:

- CONTRACTOR TO INSURE THAT NO CONFLICTS OCCUR IN THE FIELD WITH THE LOCATION OF THE PROPOSED T-MOBILE SITE SUPPORT CABINET OR SIMILAR EQUIPMENT. ANY CONFLICTS SHOULD BE REPORTED TO THE T-MOBILE CONSTRUCTION MANAGER IMMEDIATELY PRIOR TO FINAL PLACEMENT.



COMPOUND PLAN

SCALE: 3/16" = 1'

1



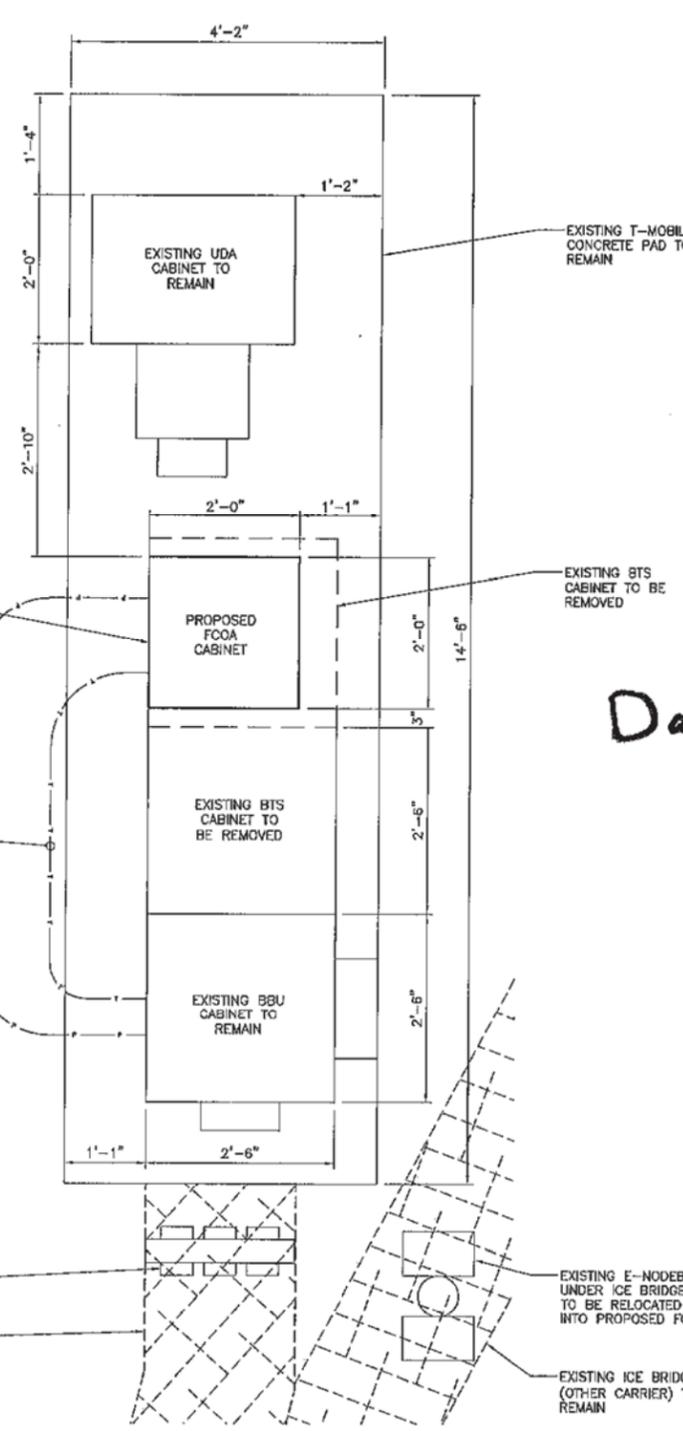
T-MOBILE PAD PLAN

INSTALL  
 (1) PROPOSED LTE FSMF MODULAR UNIT  
 (1) PROPOSED GSM ESMB MODULAR UNIT  
 (1) PROPOSED UMTS FSME MODULAR UNIT  
 IN PROPOSED MODULE RACK

(2) CONDUITS FOR POWER & TELCO  
 (1) 1" CONDUIT FROM BBU TO RACK (TELCO)  
 (1) 2" CONDUIT FROM BBU TO RACK (DC POWER)  
 PROVIDE 6#10 AWG (VERIFY WITH CONSTRUCTION MANAGER)

(6) EXISTING DIPLEXERS UNDER ICE BRIDGE TO BE REMOVED

EXISTING T-MOBILE ICE BRIDGE TO REMAIN



NOTE:

- REFER TO SHEET E-2 FOR CONDUIT PLUMBING DIAGRAM AND SCHEDULE

**T-Mobile**

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**SBA**

**GPD GROUP**  
 Glass, Pyle, Schomer, Burns & Dettlert, Inc.  
 520 South Main Street, Suite 2531  
 Akron, OH 44311  
 330-572-2100 Fax 330-572-2101

STATE OF OHIO  
**DARRIN KOTECKI**  
 57418  
 REGISTERED PROFESSIONAL ENGINEER

*Darrin Kotecki*

REVISIONS	NO.	DATE	DESCRIPTION	BY	CHK	APP
	1	01/29/14	ISSUED FOR BOX REVIEW			
	2	01/14/14	ISSUED FOR CONSTRUCTION			

DRAWN BY: GEB  
 CHECKED BY: TAS  
 DRAWING DATE: 01/14/14  
 GPD JOB NO: 2013778.02759.03

T-MOBILE SITE INFO  
 SITE NAME: DUBLIN / STATION AEP F  
 SITE NUMBER: A6C0010A  
 SITE ADDRESS

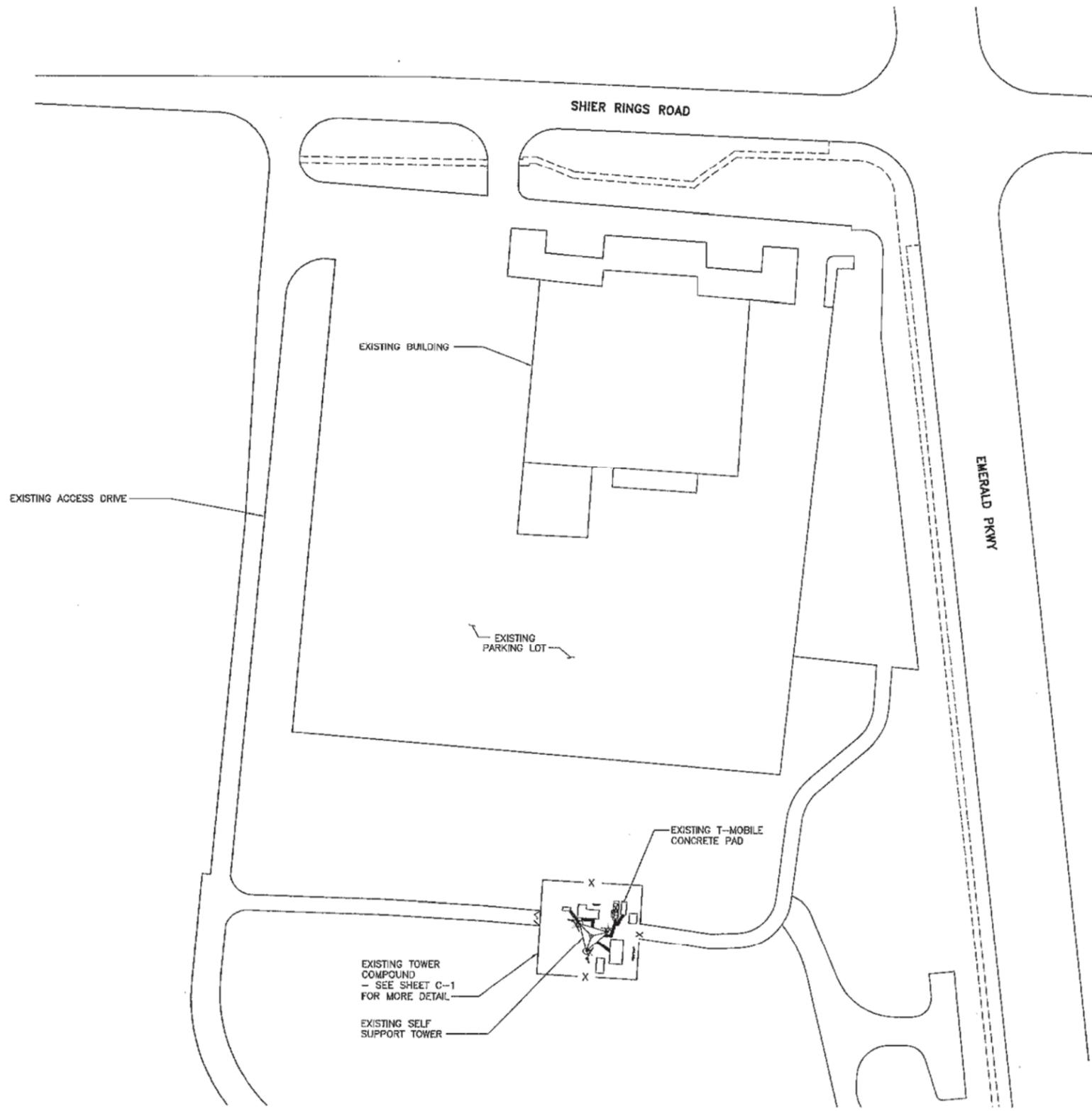
5721 SHIER RINGS ROAD  
 DUBLIN, OH 43016  
 FRANKLIN COUNTY

SHEET TITLE  
**COMPOUND PLAN**  
 SHEET NUMBER

C-1

N.T.S.

2



**OVERALL SITE PLAN**

SCALE: 1" = 100'-0"



NOTE:  
THE INFORMATION SHOWN IS NOT BASED  
ON AN ACTUAL FIELD SURVEY AND IS FOR  
INFORMATIONAL PURPOSES ONLY.  
CONTRACTOR TO VERIFY ALL EXISTING FIELD  
CONDITIONS.

**T-Mobile**  
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330-572-2100 Fax 330-572-2101



*Darrin Kotecki*

REVISIONS	NO.	DATE	DESCRIPTION	BY	CHKD	DATE
				UBB	GEB	
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		01/14/14	ISSUED FOR CONSTRUCTION			

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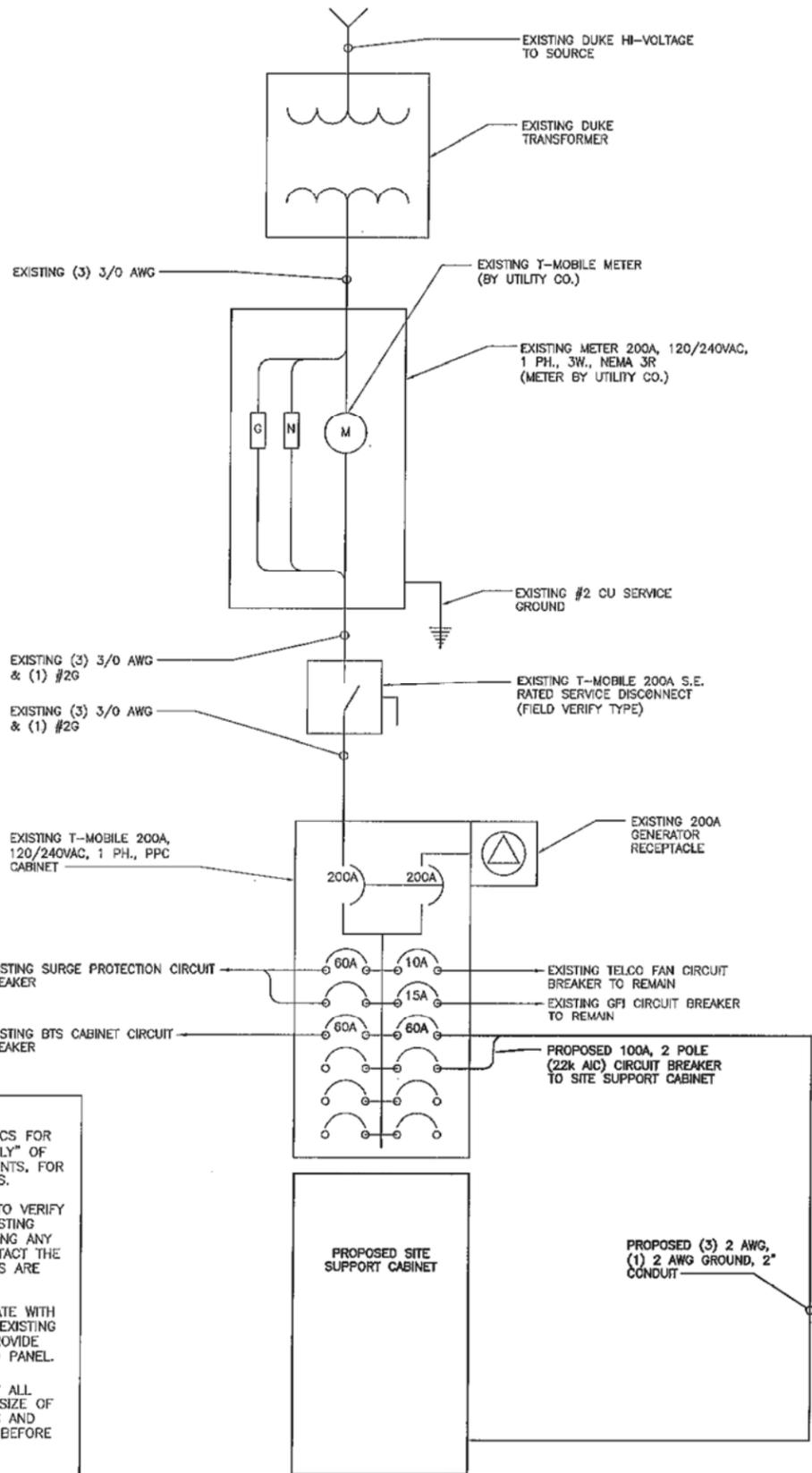
**SITE ADDRESS**

5721 SHIER RINGS ROAD  
DUBLIN, OH 43016  
FRANKLIN COUNTY

**SHEET TITLE**

OVERALL SITE PLAN

**SHEET NUMBER**



- NOTES**
- CG SHALL REFERENCE ALL SPECS FOR "CONNECTING THE POWER SUPPLY" OF THE NEW INSTALLATION DOCUMENTS, FOR ALL CONNECTION SPECIFICATIONS.
  - CONTRACTOR IS RESPONSIBLE TO VERIFY ALL LOADS, BREAKERS AND EXISTING EQUIPMENT PRIOR TO PERFORMING ANY WORK. CONTRACTOR IS TO CONTACT THE ENGINEER IF ANY DISCREPANCIES ARE FOUND.
  - CONTRACTOR SHALL CO-ORDINATE WITH POWER COMPANY AND REMOVE EXISTING 100A FEEDER & METER AND PROVIDE NEW 200A FEEDER, METER, AND PANEL.
  - THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN FIELD, SIZE OF EQUIPMENT & SIZE OF FEEDERS AND REPORT RESULTS TO ENGINEER BEFORE START OF WORK.
  - INSTALL ACCORDING TO THE INSTALLATION METHOD OF PROCEDURE

ONE LINE DIAGRAM

SCALE: N.T.S.

1

PROPOSED PANEL SCHEDULE

SCALE: N.T.S.

3

SITE NUMBER:	A6C0010A	MODEL NUMBER:	N/A
VOLTAGE:	120/240V	PHASE:	1
MAIN BREAKER:	100 AMP	BUSS RATING:	100 AMPS
MOUNT:	H-FRAME	NEUTRAL BAR:	YES
ENCLOSURE TYPE:	NEMA 3R	WIRE:	3
PANEL STATUS:	EXISTING	AIC RATING:	22000

CKT	LOAD DESCRIPTION	BREAKER R AMPS	BREAKER POLES	BREAKER STATUS	SERVICE LOAD VA	USAGE FACTOR	PHASE A VA	PHASE B VA	USAGE FACTOR	SERVICE LOAD VA	BREAKER STATUS	BREAKER POLES	BREAKER AMPS	LOAD DESCRIPTION	CKT
1	SURGE	60	2	ON	0	1.00	240		1.00	240	ON	1	10	TELCO FAN	2
3	---	60	2	ON	0	1.00		240	1.00	240	ON	1	15	TELCO GFI	4
5	BTS 1 CABINET	60	2	ON	4200	1.00	8400		1.00	4200	ON	2	100	BTS 2 CABINET	6
7	---	60	2	ON	4200	1.00		8400	1.00	4200	ON	2	100	---	8
9	SPARE	---	---	OFF	0	1.00	0		1.00	0	OFF	---	---	SPARE	10
11	SPARE	---	---	OFF	0	1.00	0		1.00	0	OFF	---	---	SPARE	12
										8540	8540	VA	TOTAL KVA	17.28	
												AMPS	72.60		

EXISTING PANEL SCHEDULE

SCALE: N.T.S.

2

SITE NUMBER:	A6C0010A	MODEL NUMBER:	N/A
VOLTAGE:	120/240V	PHASE:	1
MAIN BREAKER:	200 AMP	BUSS RATING:	200 AMPS
MOUNT:	H-FRAME	NEUTRAL BAR:	YES
ENCLOSURE TYPE:	NEMA 3R	WIRE:	3
PANEL STATUS:	EXISTING	AIC RATING:	22000

CKT	LOAD DESCRIPTION	BREAKER R AMPS	BREAKER POLES	BREAKER STATUS	SERVICE LOAD VA	USAGE FACTOR	PHASE A VA	PHASE B VA	USAGE FACTOR	SERVICE LOAD VA	BREAKER STATUS	BREAKER POLES	BREAKER AMPS	LOAD DESCRIPTION	CKT
1	SURGE	60	2	ON	0	1.00	240		1.00	240	ON	1	10	TELCO FAN	2
3	---	60	2	ON	0	1.00		240	1.00	240	ON	1	15	TELCO GFI	4
5	BTS 1 CABINET	60	2	ON	4200	1.00	8200		1.00	5000	ON	2	60	SFCCA CABINET	6
7	---	60	2	ON	4200	1.00		8200	1.00	5000	ON	2	60	SFCCA CABINET	8
9	SPARE	---	---	OFF	0	1.00	0		1.00	0	OFF	---	---	SPARE	10
11	SPARE	---	---	OFF	0	1.00	0		1.00	0	OFF	---	---	SPARE	12
										9440	9440	VA	TOTAL KVA	18.88	
												AMPS	78.67		

- NOTE:
- EXISTING CIRCUITS TO BE RELOCATED INTO PROPOSED 200A PPC.
  - EXISTING EQUIPMENT TO BE REMOVED
  - EXISTING 100A PPC TO BE REMOVED.
  - INSTALL ACCORDING TO THE INSTALLATION METHOD OF PROCEDURE

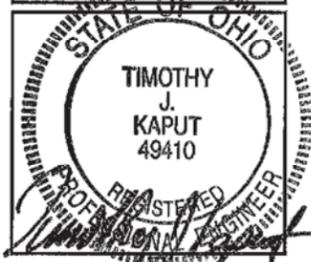
**T-Mobile**

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CINCINNATI, OH 45202  
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Akron, OH 44311  
330-572-2100



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	1	01/09/14	ISSUED FOR 90% REVIEW			
	2	01/14/14	ISSUED FOR CONSTRUCTION			

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GPD JOB NO: 2013778.02759.03

T-MOBILE SITE INFO

SITE NAME: DUBLIN / STATION AEP  
SITE NUMBER: A6C0010A

SITE ADDRESS

5721 SHIER RINGS ROAD  
DUBLIN, OH 43016  
FRANKLIN COUNTY

SHEET TITLE

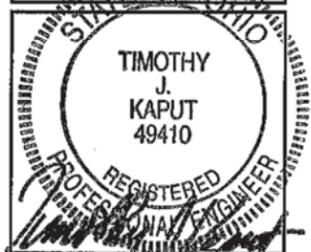
ONE LINE DIAGRAM & PANEL SCHEDULES

SHEET NUMBER

E-1

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NOT USED

SCALE: N.T.S.

1

NOT USED

SCALE: N.T.S.

2

CONDUIT SCHEDULE												
	TAG	FROM	TO	CONDUIT SIZE	SERVICE TYPE	WIRE TYPE	WIRE QTY	CONDUCTOR COLOR				COMMENTS
								BLACK	RED	WHITE	GREEN	
POWER	P-4	PPC	SSC	2"	AC	2 AWG	4	---	---	---	---	
	P-5	SSC	FCOA/ NODE B	2"	DC	6 AWG (41 STD)	2	BLUE	BLACK	---	---	
	P-6	SSC	AAV	1"	DC	12 AWG	2	BLUE	BLACK	---	---	
COMM	C-2	AAV	SSC	2"	COMM	CAT 6	3	---	---	---	---	
	C-6	SSO	FCOA/ NODE B	2"	COMM	CAT 6	3	---	---	---	---	
HYBRID JUMPERS	H-1	LTE	COVP	2"	DC			---	---	---	---	

**GENERAL NOTES (ELECTRICAL):**

- PRIOR TO INSTALLING ANY ELECTRICAL WORK, THE CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY EXISTING SITE LOCATIONS AND CONDITIONS AND UTILITY SERVICE REQUIREMENTS OF THE JOB.
- IN THE EVENT OF ANY CONFLICT OR INCONSISTENCY BETWEEN ITEMS SHOWN ON THE PLANS AND/OR SPECIFICATIONS, THE MORE RESTRICTIVE NOTE, SPECIFICATION OR CODE SHALL PREVAIL.
- ALL THINGS WHICH, IN THE OPINION OF THE CONTRACTOR, APPEAR TO BE DEFICIENCIES, OMISSIONS, CONTRADICTIONS AND AMBIGUITIES, IN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. PLANS AND/OR SPECIFICATIONS WILL BE CORRECTED, OR A WRITTEN INTERPRETATION OF THE ALLEGED DEFICIENCY, OMISSION, CONTRADICTIONS OR AMBIGUITY WILL BE MADE BY THE ENGINEER BEFORE THE AFFECTED WORK PROCEEDS.
- ELECTRICAL WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL LABOR MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE POWER AND LIGHTING SYSTEMS, TELEPHONE AND COMMUNICATION SYSTEMS, PANEL BOARDS, CONDUITS, GROUNDING, ETC. AS INDICATED ON ELECTRICAL DRAWINGS OR AS REQUIRED BY CODE.
- ALL WORK SHALL COMPLY WITH THE N.E.C. (NATIONAL ELECTRICAL CODE) AND ANY LOCAL ORDINANCES, CODES, AND ALL OTHER ADMINISTRATIVE AUTHORITIES HAVING JURISDICTION.
- ALL EQUIPMENT AND MATERIALS FURNISHED AND INSTALLED UNDER THIS CONTRACT SHALL BE (U.L.) LISTED, NEW, FREE FROM DEFECTS, AND SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE BY OWNER. SHOULD ANY TROUBLE DEVELOP DURING THIS PERIOD DUE TO FAULTY WORKMANSHIP, MATERIAL OR EQUIPMENT, THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS AND LABOR TO CORRECT THE TROUBLE WITHOUT COST TO THE OWNER.
- ALL WORK SHALL BE EXECUTED IN A WORKMANLIKE MANNER AND SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING RELATED TO ELECTRICAL WORK, AND SHALL RESTORE ALL EXISTING LANDSCAPE, SPRINKLER SYSTEMS, CONDUITS, WIRING, PIPING, ETC. DAMAGED BY THE ELECTRICAL WORK TO ORIGINAL OR BETTER CONDITION.
- ALL WIRES SHALL BE COPPER THHN/THWN. GROUND WIRES SHALL BE BARE, TIN-COATED OR STRANDED.
- CONDUCTORS SHALL BE INSTALLED IN GALVANIZED RIGID STEEL CONDUIT, SCHEDULE 40 PVC, OR FLEXIBLE LIQUIDTIGHT CONDUIT AS INDICATED.
- OBTAIN ALL PERMITS, PAY PERMIT FEES, AND SCHEDULE INSPECTIONS.
- OBTAIN LOCAL POWER AND TELEPHONE COMPANY APPROVAL AND COORDINATE WITH UTILITY COMPANIES SERVICE ENTRANCE REQUIREMENTS.
- ALL ELECTRICAL EQUIPMENT SHALL BE ANCHORED TO WITHSTAND 80 M.P.H. WIND SPEED, EXPOSURE C.
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT UV STABLE, WEATHER PROOF, ENGRAVED PLASTIC LABELS.
- REPAIR ANY EQUIPMENT PAINT SURFACE THAT HAS BEEN DAMAGED IN THE COURSE OF INSTALLATION.

REVISIONS	NO.	DATE	DESCRIPTION	BY	CHK
				ISSUED FOR S&K REVIEW	ISSUED FOR CONSTRUCTION

DRAWN BY: GEB  
CHECKED BY: TAS  
DRAWING DATE: 01/14/14  
GPD JOB NO: 2013778.02759.03

**T-MOBILE SITE INFO**

SITE NAME: DUBLIN / STATION AEP F  
SITE NUMBER: A6C0010A

**SITE ADDRESS**

5721 SHIER RINGS ROAD  
DUBLIN, OH 43016  
FRANKLIN COUNTY

**SHEET TITLE**

**CONDUIT PLUMBING & ELECTRICAL NOTES**

**SHEET NUMBER**

CONDUIT SCHEDULE

SCALE: N.T.S.

3

NOT USED

SCALE: N.T.S.

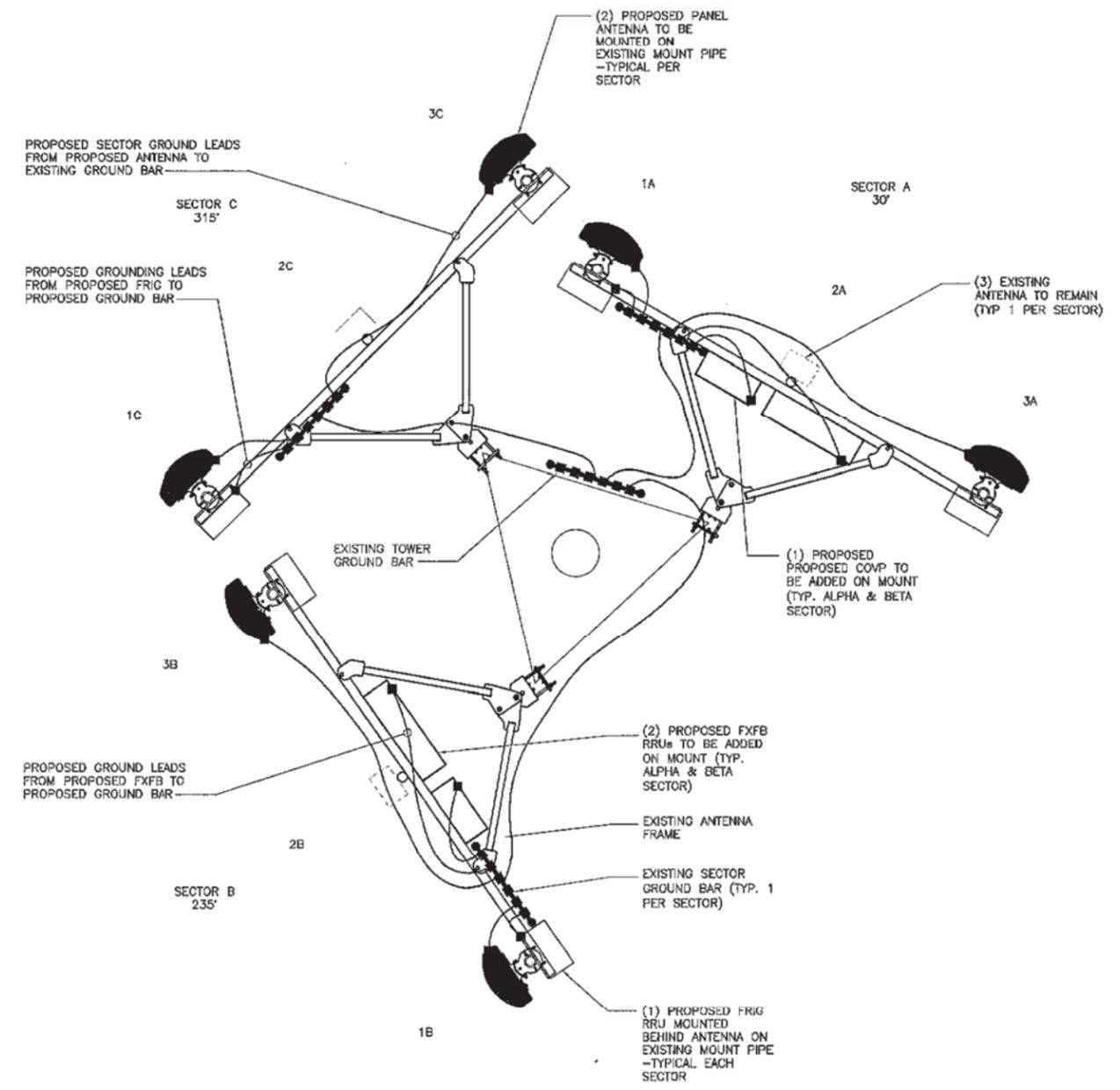
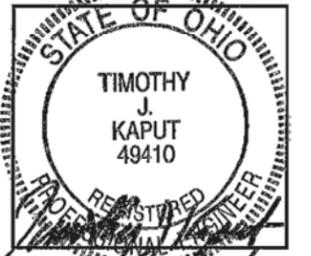
4

ELECTRICAL NOTES

SCALE: N.T.S.

5





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	1	01/09/14	ISSUED FOR 90% REVIEW			
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FRANKLIN COUNTY

**SHEET TITLE**

**GROUNDING DETAILS**

**SHEET NUMBER**

RF/TOWER TOP EQUIPMENT SCHEDULE											
SECTOR	ANTENNA POSITION	TECHNOLOGY	ANTENNA MODEL	COAXIAL CABLE FEED LOCATION	MECH DOWN - TILT	ELEC DOWN - TILT	AZIMUTH	ANTENNA RAD CENTER	TMA MODEL #	DIPLEXERS	ADDITIONAL EQUIPMENT
A	1A	GSM PCS	CMA-BDHH/6520/E0-8	BOTTOM	0°	2°	30°	162'			RAYCAP LARGE COVP ASU9338TYP01 (2 TOTAL)
A	2A	AWS UMTS	RFS APX16DW-16DWVS-C-A20	BOTTOM	0°	2°	30°	162'	(1) RFS ATMAA1412D-1A20		
A	3A	AWS LTE	CMA-BDHH/6520/E0-8	BOTTOM	0°	2°	30°	162'			
B	1B	GSM PCS	CMA-BDHH/6520/E0-8	BOTTOM	0°	3°	235°	162'			FXFB RRU (2 TOTAL)
B	2B	AWS UMTS	RFS APX16DW-16DWVS-C-A20	BOTTOM	0°	3°	235°	162'	(1) RFS ATMAA1412D-1A20		
B	3B	AWS LTE	CMA-BDHH/6520/E0-8	BOTTOM	0°	3°	235°	162'			
C	1C	GSM PCS	CMA-BDHH/6520/E0-8	BOTTOM	0°	2°	315°	162'			FRIG RRU (3 TOTAL)
C	2C	AWS UMTS	RFS APX16DW-16DWVS-C-A20	BOTTOM	0°	2°	315°	162'	(1) RFS ATMAA1412D-1A20		
C	3C	AWS LTE	CMA-BDHH/6520/E0-8	BOTTOM	0°	2°	315°	162'			

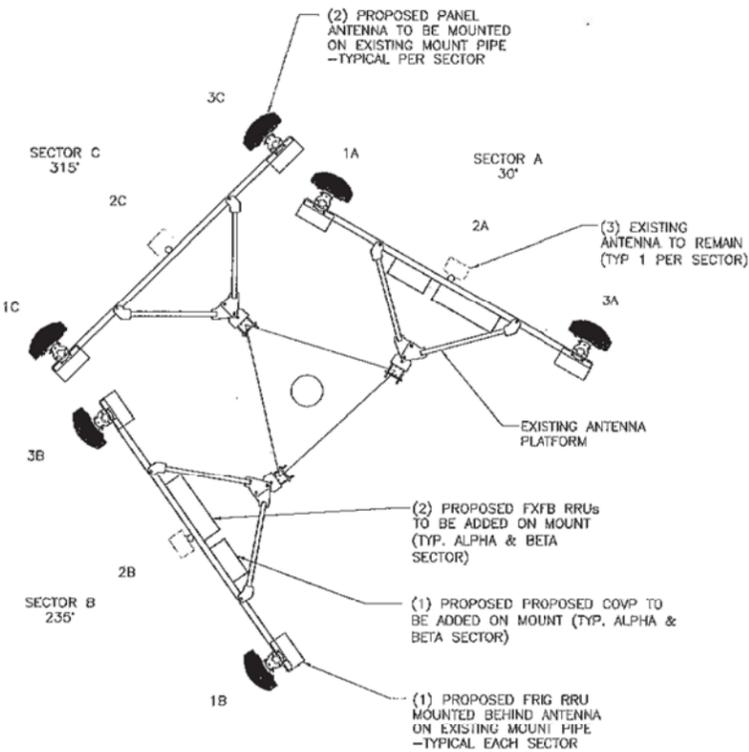
**NOTES:**

- CONTRACTOR SHALL VERIFY ANTENNA TYPE AND AZIMUTH WITH PROJECT MANAGER PRIOR TO CONSTRUCTION.
- ALL ANTENNAS SHALL BE FURNISHED WITH DOWNTILT BRACKETS.
- ANTENNA RAD CENTER HEIGHT IS IN REFERENCE TO ELEVATION 0.0'.
- ALL TOP JUMPERS SHALL BE SECURED 3"-0" O.C. MAXIMUM.
- ALL COAXIAL CABLES, ALL RET CABLES AND ALL OPEN SOCKETS SHALL BE WEATHERPROOFED.
- THE CONTRACTOR SHALL SET THE ELECTRICAL DOWNTILTS PRIOR TO INSTALLATION.

**RF/TOWER TOP EQUIPMENT SCHEDULE**

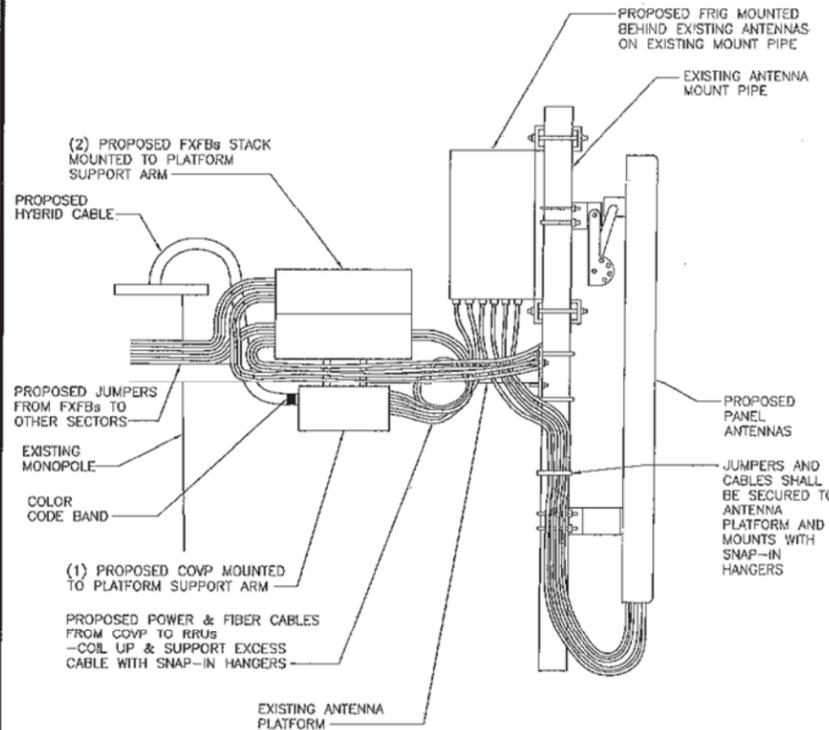
N.T.S.

1



CONTRACTOR SHALL REVIEW LATEST STRUCTURAL ANALYSIS FOR METHOD OF PLACEMENT OF COAX CABLE AND ANTENNAS

HYBRID CABLE SCHEDULE				
LOCATION	HYBRID CABLE LENGTH	HYBRID CABLE SIZE (INCHES)	HYBRID CABLE MANUFACTURER	HYBRID CABLE TYPE
MAIN	200'	1-1/4"	NOKIA	LOW CAPACITY HCS



**ANTENNA LOCATION PLAN**

N.T.S.

2

**ANTENNA MOUNTING DETAIL**

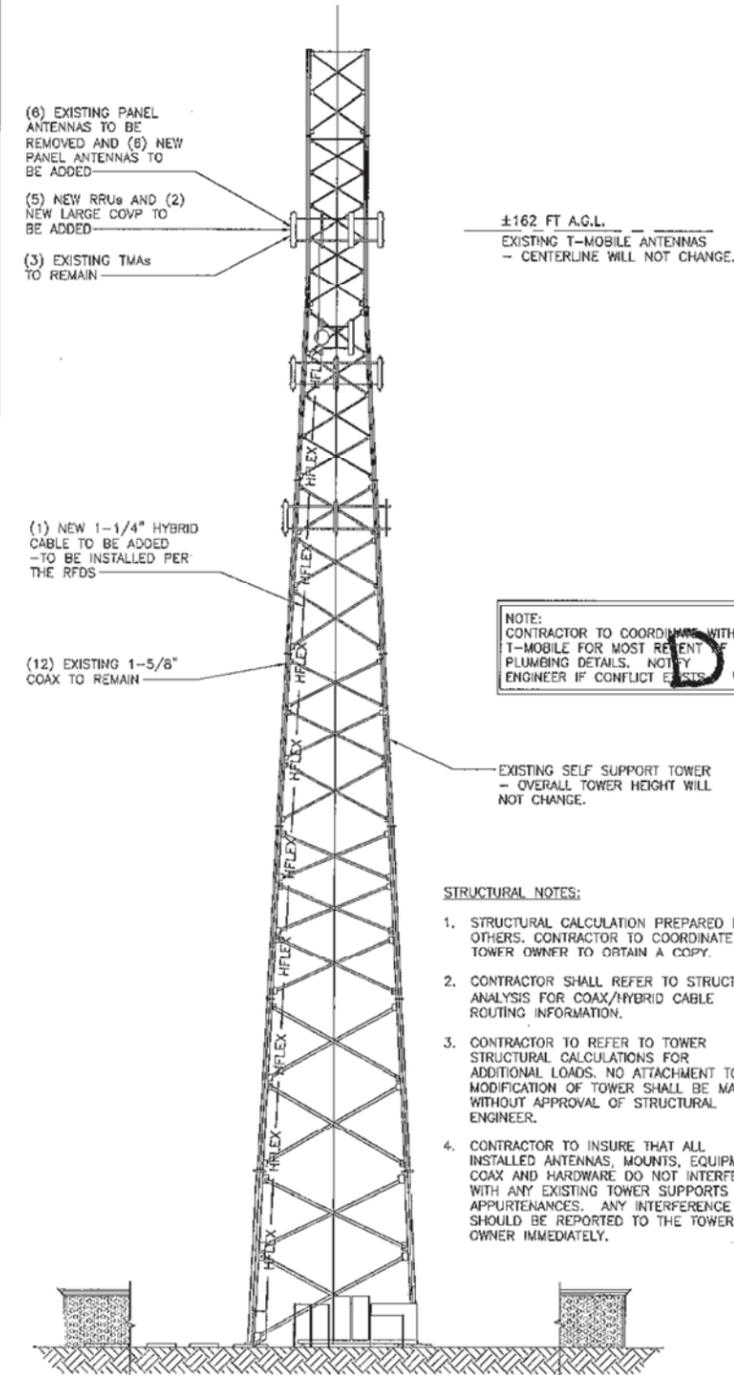
N.T.S.

3

**EXISTING TOWER ELEVATION**

SCALE: N.T.S.

4



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CINCINNATI, OH 45202  
Office: 513-381-0774

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**GPD GROUP**  
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Akron, OH 44311  
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NO.	DATE	DESCRIPTION	BY	CEB
1	01/09/14	ISSUED FOR 90% REVIEW	CEB	CEB
2	01/11/14	ISSUED FOR CONSTRUCTION	CEB	CEB

DRAWN BY: GEB  
CHECKED BY: TAS  
DRAWING DATE: 01/14/14  
GPD JOB NO: 2013778.02759.03

**T-MOBILE SITE INFO**

SITE NAME: DUBLIN / STATION AEP  
SITE NUMBER: A6C0010A

**SITE ADDRESS**

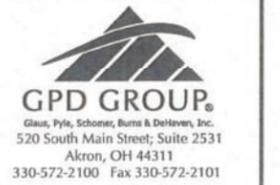
5721 SHIER RINGS ROAD  
DUBLIN, OH 43016  
FRANKLIN COUNTY

**SHEET TITLE**

ANTENNA SCHEDULE, TOWER ELEVATION AND MOUNT DETAILS

**SHEET NUMBER**

RF-1



FOR REFERENCE ONLY

NO.	DATE	DESCRIPTION	BY	REB	GEB
1	01/09/14	ISSUED FOR 90% REVIEW			
2	01/14/14	ISSUED FOR CONSTRUCTION			

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T-MOBILE SITE INFO

SITE NAME: DUBLIN / STATION AEP F  
SITE NUMBER: A6C0010A

SITE ADDRESS

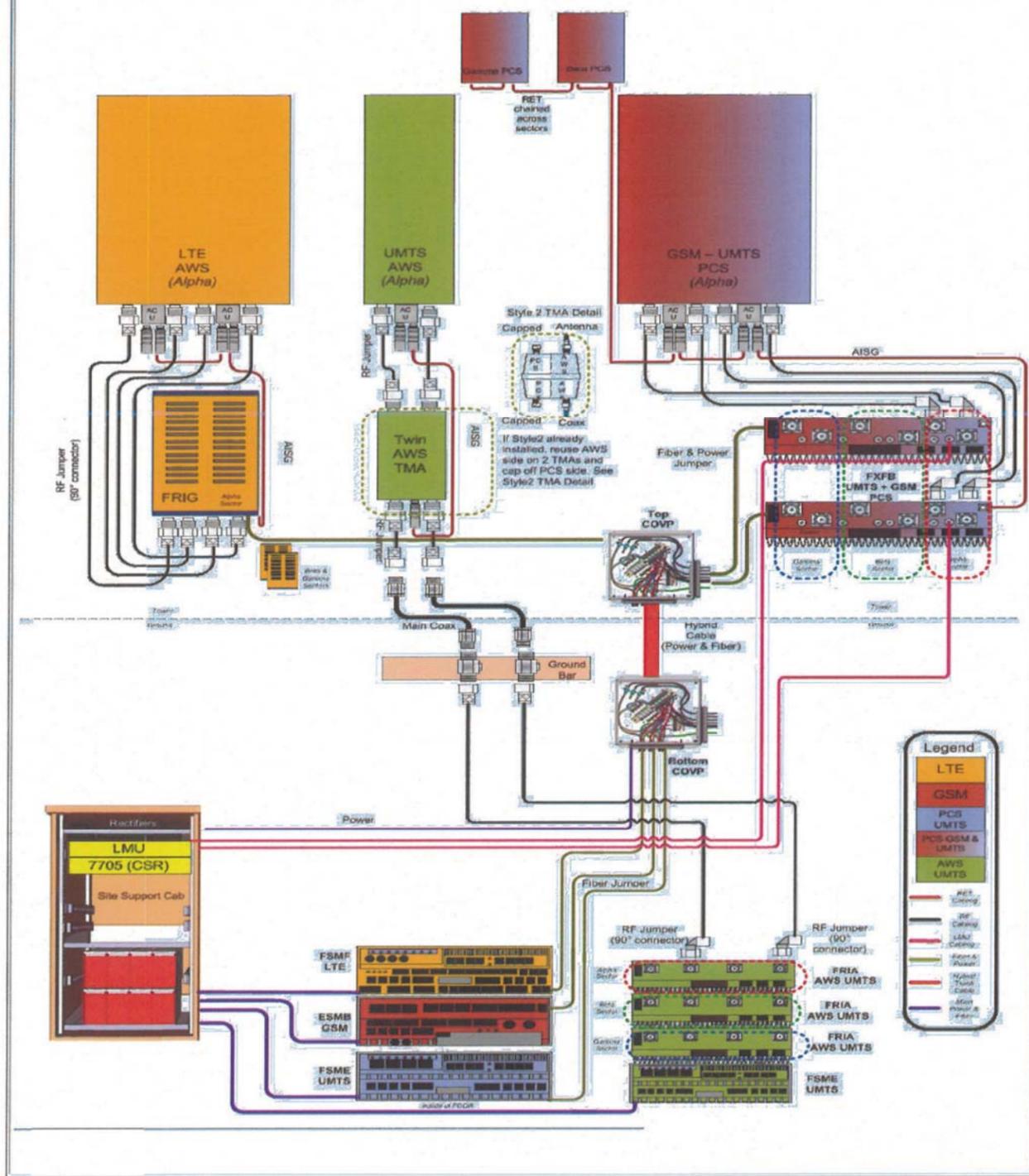
5721 SHIER RINGS ROAD  
DUBLIN, OH 43016  
FRANKLIN COUNTY

SHEET TITLE

PROPOSED NSN CONFIGURATION

SHEET NUMBER

**NSN Configuration 1A**  
Tower-Top RRU for Contiguous Spectrum Markets  
(Antenna and cabling for only one sector shown)



**COLOR CODING SCHEDULE**  
(SEE SHEET RF-3 FOR DETAILS)

DESIGNATION	COLOR
SECTOR A	RED
SECTOR B	GREEN
SECTOR C	BLUE
SECTOR D	YELLOW
SECTOR E	WHITE
SECTOR F	PURPLE
LMU	BROWN + SECTOR COLOR
FIBER ID	GRAY
UNUSED COAX	PINK
MICROWAVE	ORANGE
PWE T-1'S & GPS DOWNLINK CABLE	ID W/ LABEL MAKER

**NOTES:**

1. THIS PLUMBING DIAGRAM IS FOR DIAGRAMMATICAL PURPOSES ONLY. THIS DIAGRAM IS NOT MEANT TO CONVEY ATTACHMENT, CABLE ROUTING, OR EQUIPMENT PLACEMENT.
2. ANTENNA POSITIONS ARE PRELIMINARY. CONTRACTOR SHALL REFER TO THE LATEST RFDS (NO MORE THAN 48 HOURS OLD) AND VERIFY WITH THE T-MOBILE CONSTRUCTION MANAGER PRIOR TO INSTALLATION.





Sector	Color	Antenna	Port	Bands	Technology	RF Module	RF Port	AISG*	DC*	Commision Passive MHA	2nd RF Module (duplex)	2nd RF Port (duplex)	AISG*	DC*	Commision Passive MHA	RET Name	RET ID	Input Port	Output Port	Mech Tilt	Elec Tilt	
A	Red	1	1	1	PU	FRIA1	1	No	Yes	No	FXFB1(UMTS)	1	Yes	No	No	CI12053A_A11PU	RET 1	FXFB1 RET Port	RET 2	0	-4	
A	Red	1	2	2	PU	FRIA1	3	No	Yes	No	FXFB1(UMTS)	2	No	No	No							
A	Red	1	3	3	G	FXFB2	1	No	No	No	NA	NA	NA	NA	NA	CI12053A_A12G	RET 2	RET 1	Sector 2 RET 1		-4	
A	Red	1	4	4	G	FXFB2	2	No	No	No	NA	NA	NA	NA	NA							
A	Red	2	5	5	L	FRIG1	1	Yes	No	No	NA	NA	NA	NA	NA	CI12053A_A23L	RET 3	FRIG1 RET Port	RET4		-4	
A	Red	2	6	6	L	FRIG1	2	No	No	No	NA	NA	NA	NA	NA							
A	Red	2	7	7	L	FRIG1	3	No	No	No	NA	NA	NA	NA	NA	CI12053A_A24L	RET 4	RET3	NA		-4	
A	Red	2	8	8	L	FRIG1	4	No	No	No	NA	NA	NA	NA	NA							
B	Green	1	1	1	PU	FRIA2	1	No	Yes	No	FXFB1(UMTS)	3	No	No	No	CI12053A_B11PU	RET 1	Sector 1 RET 2	RET 2		-4	
B	Green	1	2	2	PU	FRIA2	3	No	Yes	No	FXFB1(UMTS)	4	No	No	No							
B	Green	1	3	3	G	FXFB2	3	No	No	No	NA	NA	NA	NA	NA	CI12053A_B12G	RET 2	RET 1	sector 3 RET 1		-4	
B	Green	1	4	4	G	FXFB2	4	No	No	No	NA	NA	NA	NA	NA							
B	Green	2	5	5	L	FRIG2	1	Yes	No	No	NA	NA	NA	NA	NA	CI12053A_B23L	RET 3	FRIG2 RET Port	RET4		-4	
B	Green	2	6	6	L	FRIG2	2	No	No	No	NA	NA	NA	NA	NA							
B	Green	2	7	7	L	FRIG2	3	No	No	No	NA	NA	NA	NA	NA	CI12053A_B24L	RET 4	RET3	NA		-4	
B	Green	2	8	8	L	FRIG2	4	No	No	No	NA	NA	NA	NA	NA							
C	Blue	1	1	1	PU	FRIA3	1	No	Yes	No	FXFB1(UMTS)	5	No	No	No	CI12053A_C11PU	RET 1	Sector 2 RET 2	RET 2		-4	
C	Blue	1	2	2	PU	FRIA3	3	No	Yes	No	FXFB1(UMTS)	6	No	No	No							
C	Blue	1	3	3	G	FXFB2	5	No	No	No	NA	NA	NA	NA	NA	CI12053A_C12G	RET 2	RET 1	NA		-4	
C	Blue	1	4	4	G	FXFB2	6	No	No	No	NA	NA	NA	NA	NA							
C	Blue	2	5	5	L	FRIG3	1	Yes	No	No	NA	NA	NA	NA	NA	CI12053A_C23L	RET 3	FRIG3 RET Port	RET4		-4	
C	Blue	2	6	6	L	FRIG3	2	No	No	No	NA	NA	NA	NA	NA							
C	Blue	2	7	7	L	FRIG3	3	No	No	No	NA	NA	NA	NA	NA	CI12053A_C24L	RET 4	RET3	NA		-4	
C	Blue	2	8	8	L	FRIG3	4	No	No	No	NA	NA	NA	NA	NA							

\*NOTE: WHEN TMA<sub>s</sub> ARE INSTALLED, ASSUMED IT IS A TWIN TMA. IF DUAL TMA, THEN AISG AND DC IS ON FOR BOTH TMA<sub>s</sub>.

ANTENNA PORT MAPPING MATRIX

1

Fiber port on junction box	Top of tower		Bottom of tower		Comment
	RF Module	Port	System module	Port	
1	FXFB 2	OPT1	ESMB/C	OPT-RF1	GSM
2					
3	FXFB 1	OPT1	FSME-PCS	OPT-RF1	U1900
4					
5	FRIG 1	OPT1	FSMF	OPT-RF1	LTE
6					
7					
8					
9					
10					
11	FRIG 2	OPT1	FSMF	OPT-RF2	LTE
12					
13					
14					
15					
16					
17	FRIG 3	OPT1	FSMF	OPT-RF3	LTE
18					

FIBER PORT MAPPING MATRIX

2



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REFERENCE  
ONLY

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5721 SHIER RINGS ROAD  
DUBLIN, OH 43016  
FRANKLIN COUNTY

SHEET TITLE

PORT MATRIX

SHEET NUMBER

RF-6