

**Department of Planning & Public Works**  
**City of Chesterfield**  
**Public Hearing Summary Report**

**T.S.P. 34-2011 AT&T (16141 Swingley Ridge Road)**: A request to obtain approval for a Telecommunication Facility Siting Permit for a collocation of additional antennas and equipment on an existing high structure in a “C2” Shopping District – zoned property located on the northeast corner of the intersection of Swingley Ridge Road and Nardin Drive (18S230181).

**Summary**

The above-referenced project is a request for a Telecommunications Siting Permit (T.S.P.). AT&T proposes to locate three (3) additional antennas to a roof mounted high structure at the above referenced location. The additional antennas will be utilized to offer LTE 4G data service.

The existing antennas at this site are located on the roof of a three-story office building. The current antenna array on this office building was approved administratively under the conditions of City of Chesterfield Ordinance 1214. City of Chesterfield Ordinance 2391, which now governs telecommunications and facilities siting, requires a public hearing before the City of Chesterfield Planning Commission for initial granting of a T.S.P. Note, the Commission does not provide a recommendation to the City Council, but rather a list of issues generated during the hearing. City Council is the decision-making body for all requests for Telecommunications Siting Permits. A public hearing further addressing the request will be held at the September 26, 2011 City of Chesterfield Planning Commission meeting.



TSP 34-2011 AT&T (16141 Swingley Ridge Road)  
09/26/2011

Attached please find a copy of the Public Hearing Notice and an application packet detailing the request.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Seymour', with a horizontal line extending to the right.

Shawn Seymour, AICP  
Senior Planner

Cc: Michael G. Herring, City Administrator  
Rob Heggie, City Attorney  
Michael O. Geisel, Director of Planning and Public Works  
Aimee Nassif, Planning and Development Services Director



## NOTICE OF PUBLIC HEARING CITY OF CHESTERFIELD PLANNING COMMISSION

NOTICE IS HEREBY GIVEN that the Planning Commission of the City of Chesterfield will hold a Public Hearing on Monday, September 26, 2011 at 6:30 PM in the Council Chambers at the City Hall, 690 Chesterfield Parkway West, Chesterfield, Missouri 63017.

Said hearing will be as follows:

T.S.P. 34-2011 AT&T (16141 Swingley Ridge Road): A request to obtain approval for a Telecommunication Facility Siting Permit for collocation of additional antennas and equipment on an existing high structure in a "C2" Shopping District-zoned property located on the northeast corner of the intersection of Swingley Ridge Road and Nardin Drive (18S230181).

A tract of land being Lot 11 and part of Lot 10 of Pickwick Shopping Center according to the plat thereof recorded in Plat Book 64, Page 30 of the St. Louis County Records in U.S. Survey 415, Township 45 North, Range 4 East, St. Louis County Missouri.



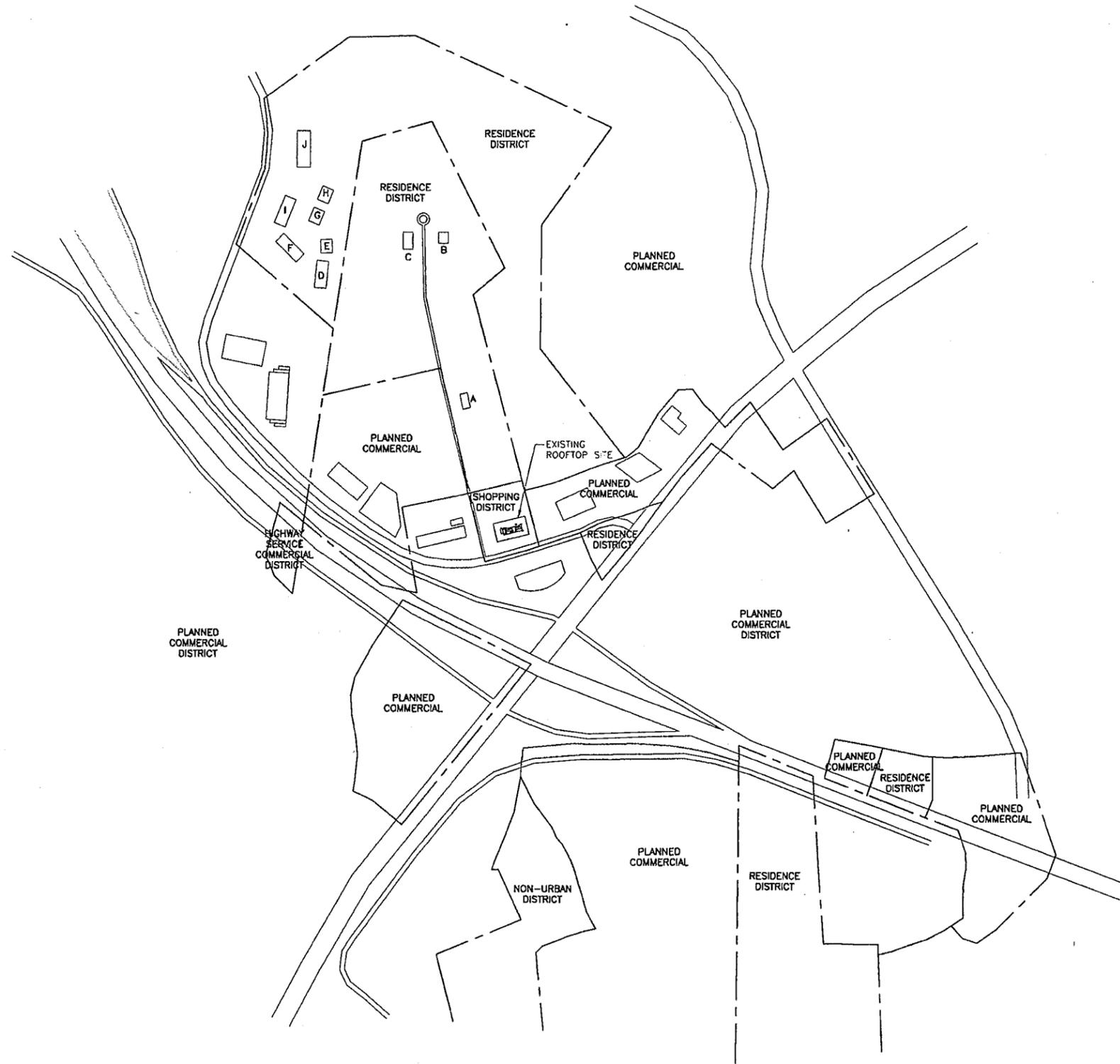
City of Chesterfield  
690 Chesterfield Parkway West  
Chesterfield, MO 63017



Information on this Public Hearing may be found on the City's website at <http://www.chesterfield.mo.us/public-notice.html> or by contacting Shawn Seymour Senior Planner at 636.537.4741 or via e-mail at [sseymour@chesterfield.mo.us](mailto:sseymour@chesterfield.mo.us). All interested parties will be given an opportunity to be heard at the Public Hearing.







**OVERALL SITE PLAN**  
SCALE: 1" = 300'-0"

RESIDENCE	DISTANCE FROM CL OF SELF SUPPORT TOWER
A	595'-0"±
B	1430'-0"±
C	1440'-0"±
D	1460'-0"±
E	1590'-0"±
F	1660'-0"±
G	1745'-0"±
H	1820'-0"±
I	1835'-0"±
J	2025'-0"±

LEGEND	
FENCE	— x — x — x —
LEASE AREA	— — — — —
ICE BRIDGE	XXXXXXXXXXXXXXXXXXXX
OVERHEAD POWER	— OHP — OHP — OHP —
UNDERGROUND POWER	— UGP — UGP — UGP —
OVERHEAD UTILITIES	— OHU — OHU — OHU —
UNDERGROUND TELCO	— UGT — UGT — UGT —



13075 MANCHESTER RD, SUITE 100  
ST LOUIS, MO 63131



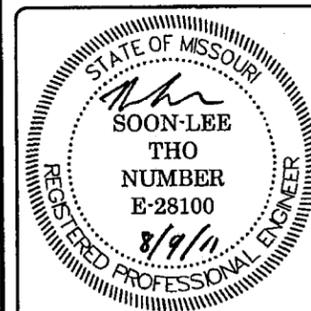
**BLACK & VEATCH**

10950 GRANDVIEW DRIVE  
OVERLAND PARK, KANSAS 66210  
(913) 458-2000

BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION  
MISSOURI STATE CERTIFICATE OF AUTHORITY # 001844

PROJECT NO: 168986  
DRAWN BY: RCC  
CHECKED BY: GPX

REV	DATE	DESCRIPTION
0	08/09/11	ISSUED FOR ZONING



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

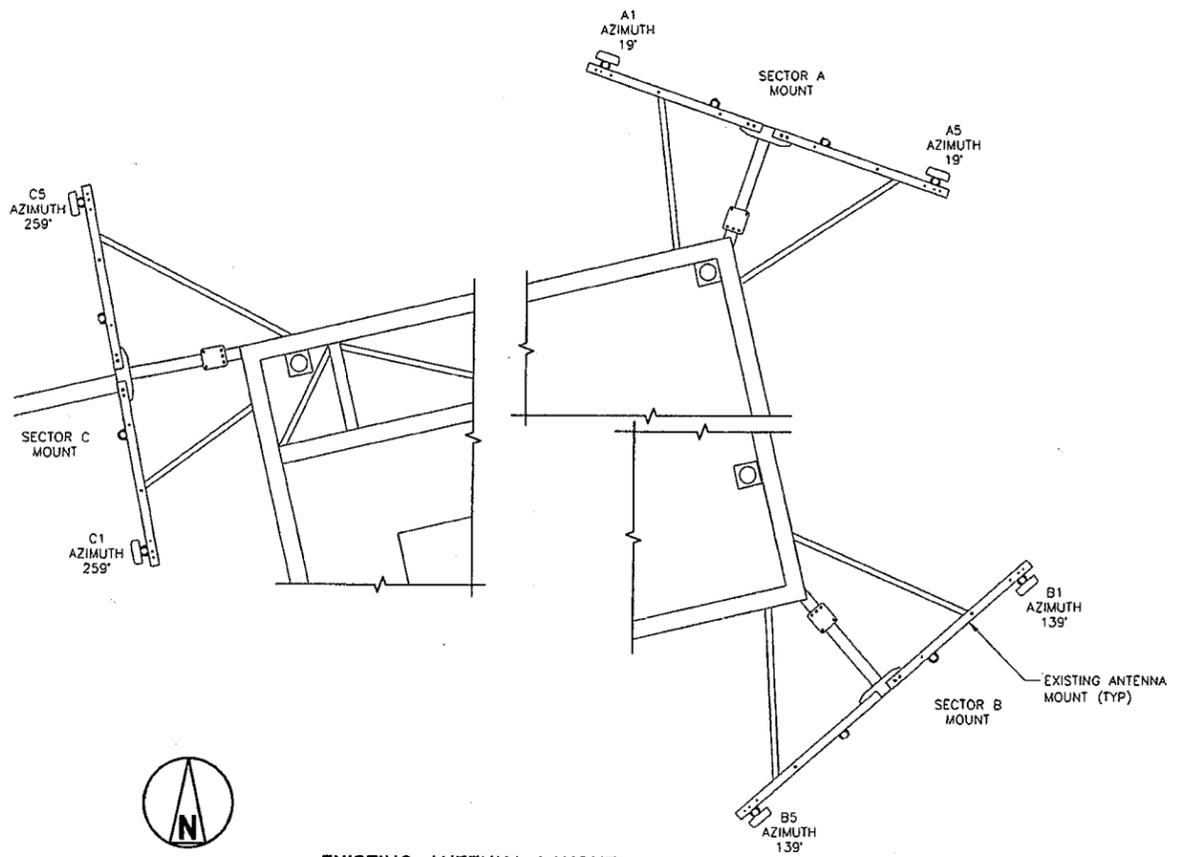
M03139  
CHESTERFIELD 2  
16141 NORTH OUTER 40  
CHESTERFIELD, MO 63017  
LTE - ROOFTOP

SHEET TITLE  
**OVERALL SITE PLAN**

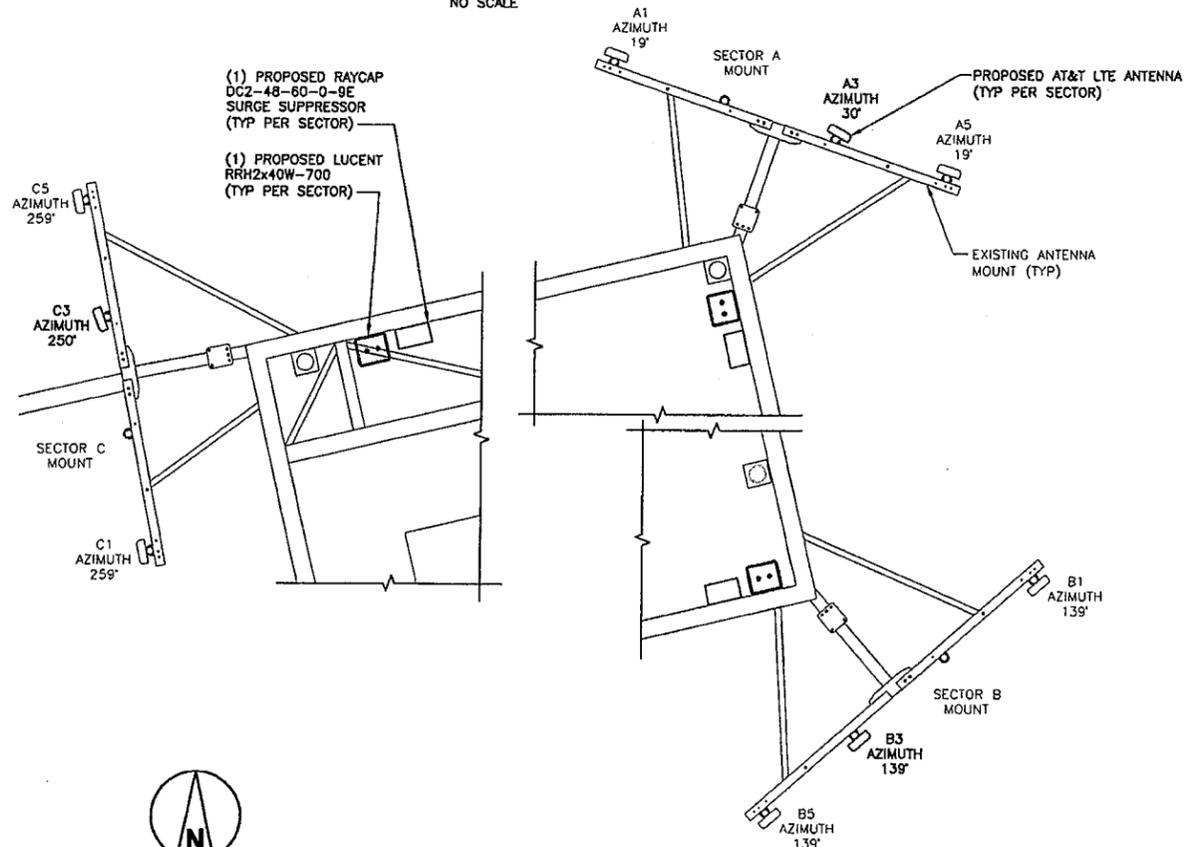
SHEET NUMBER  
**Z-2**







**EXISTING ANTENNA LAYOUT**  
NO SCALE



**PROPOSED ANTENNA LAYOUT**  
NO SCALE

- (1) PROPOSED RAYCAP DC2-48-80-0-9E SURGE SUPPRESSOR (TYP PER SECTOR)
- (1) PROPOSED LUCENT RRH2x40W-700 (TYP PER SECTOR)

**NOTES**

1. ALL MAIN CABLES WILL BE GROUNDED W/ COAXIAL CABLE GROUNDING KITS AT:
  - A. THE ANTENNA LEVEL.
  - B. MID LEVEL IF TOWER IS OVER 200'.
  - C. BASE OF TOWER PRIOR TO TURNING HORIZONTAL.
  - D. OUTSIDE THE EQUIPMENT SHELTER AT ENTRY PORT.
  - E. INSIDE THE EQUIPMENT SHELTER AT THE ENTRY PORT.
2. ALL PROPOSED GROUNDING BAR DOWNLEADS ARE TO BE TERMINATED TO THE EXISTING ADJACENT GROUNDING BAR DOWNLEADS A MINIMUM DISTANCE OF 4'-0" BELOW GROUNDING BAR. TERMINATIONS MAY BE EXOTHERMIC OR COMPRESSION.
3. THE SUB CONTRACTORS SHALL BE RESPONSIBLE FOR VERIFYING THE ANTENNA AND THE COAX CONFIGURATION, MAKE AND MODELS, PRIOR TO INSTALLATION.
4. ALL CONNECTIONS FOR HANGERS, SUPPORTS, BRACING, ETC. SHALL BE INSTALLED PER TOWER MANUFACTURER'S STANDARD DETAILS.
5. THE EXISTING TOWER IS CURRENTLY BEING ANALYZED BY OTHERS TO DETERMINE ITS STRUCTURAL CAPACITY TO CARRY THE PROPOSED NEW COAX AND ANTENNAS. THESE DRAWINGS HAVE BEEN CREATED BASED ON THE ASSUMPTION THE STRUCTURAL ANALYSIS WILL SHOW THAT THE TOWER HAS SUFFICIENT CAPACITY TO SUPPORT THE PROPOSED NEW LOADS. INSTALLATION OF THE COAX AND ANTENNAS SHALL NOT COMMENCE UNTIL AN APPROVED STRUCTURAL ANALYSIS HAS BEEN RECEIVED BY THE OWNER OR AT&T AND HAS BEEN REVIEWED BY BLACK AND VEATCH.
6. SUBCONTRACTOR SHALL REFERENCE THE TOWER STRUCTURAL ANALYSIS/DESIGN DRAWINGS FOR DIRECTIONS ON CABLE DISTRIBUTION/ROUTING.

**COAXIAL ANTENNA CABLE NOTES**

1. TYPES AND SIZES OF THE ANTENNA CABLE ARE BASED ON ESTIMATED LENGTHS. PRIOR TO ORDERING CABLE, SUBCONTRACTOR SHALL VERIFY ACTUAL LENGTH BASED ON CONSTRUCTION LAYOUT AND NOTIFY THE PROJECT MANAGER IF ACTUAL LENGTHS EXCEED ESTIMATED LENGTHS.
2. SUB 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.

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BLACK & VEATCH PROFESSIONAL ENGINEERING CORPORATION  
MISSOURI STATE CERTIFICATE OF AUTHORITY # 001848

PROJECT NO:	168986
DRAWN BY:	RCC
CHECKED BY:	GPX

REV	DATE	DESCRIPTION
0	08/09/11	ISSUED FOR ZONING

STATE OF MISSOURI  
SOON-LEE  
THO  
NUMBER  
E-28100  
8/19/11  
REGISTERED PROFESSIONAL ENGINEER

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

M03139  
CHESTERFIELD 2  
16141 NORTH OUTER 40  
CHESTERFIELD, MO 63017  
LTE - ROOFTOP

SHEET TITLE  
SITE DETAILS

SHEET NUMBER  
**Z-4**





June 24, 2011



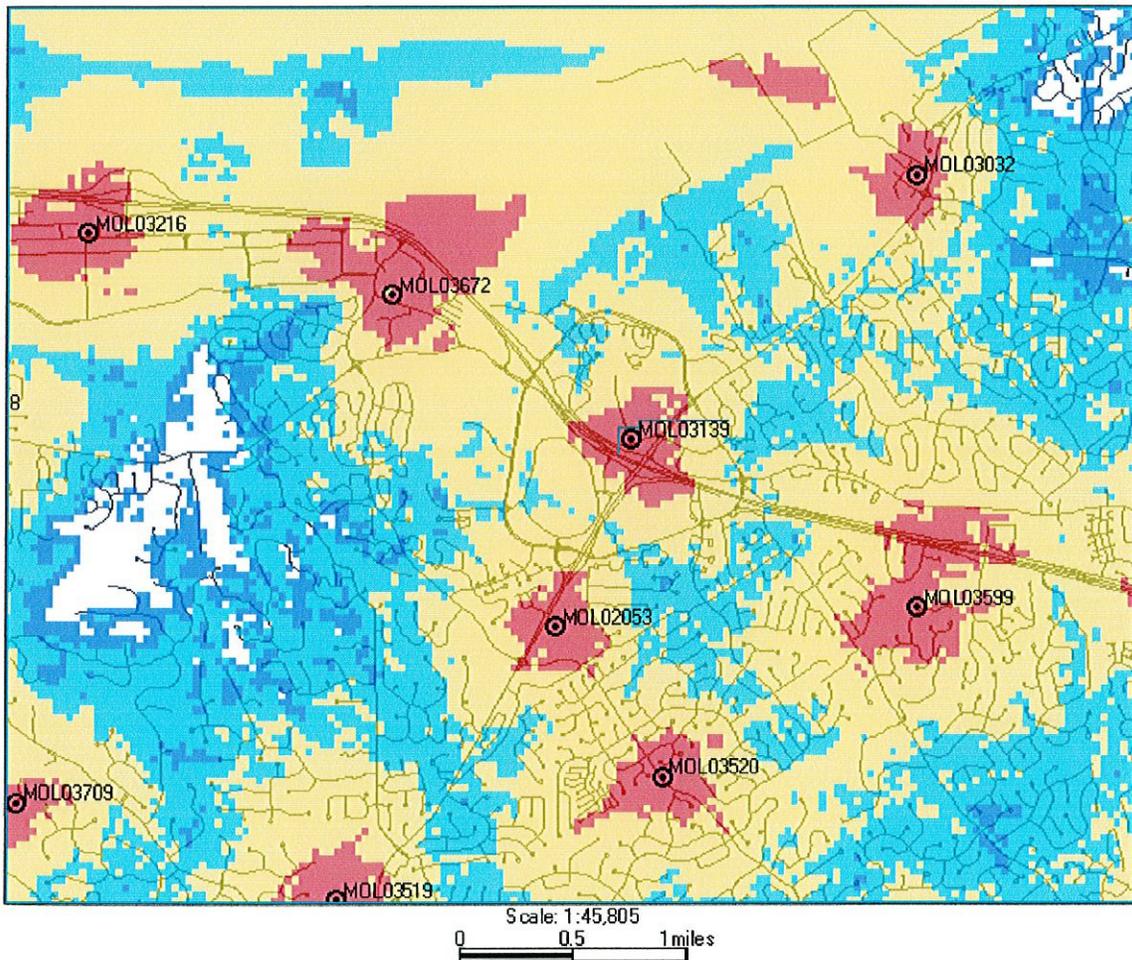
The following is a brief explanation of why AT&T Mobility is proposing to have the current wireless communication facility at 16141 North Outer 40 modified. This facility is labeled as MOL03139 on Map 1. Currently this facility is only capable of broadcasting our older technologies.

This facility currently is broadcasting our “2G” technology (called GSM) and our “3G” technology (called UMTS). Each technology uses its own antennas and equipment. The modification we are proposing is to add our “4G” technology (called LTE). Perhaps you have seen all the television commercials from various wireless carriers talking about their 4G systems. 4G, short for 4<sup>th</sup> generation of wireless technology, allows wireless carriers to provide much faster data speeds than our current networks. 4G is only for data at this point. All voice calls will still be served on older technologies. Currently AT&T still has the fastest data network. Although as other carriers implement and optimize their 4G networks we expect to lose that advantage and eventually fall behind other carriers unless we also launch our 4G network. The proposed modifications will allow us to implement our 4G technology by using additional antennas and equipment.

Because of national E911 requirements, this site needs to run all technologies. The 4G technology is not capable of handling voice calls at this time and all 911 calls made from a wireless device will be routed through our older technologies. These technologies require that we use a total of 3 antennas for each direction covered. This site, like most of our locations, serves three directions creating a need for 9 antennas. This requires us to add 3 additional antennas for this location.

This plan will have no effect on our coverage for current technologies. Map 1 below shows the proposed coverage for our 4G network in the area. AT&T Mobility has acceptable coverage in most of the surrounding area. Because 4G is a data only service the different signal levels don't indicate whether service exists or not. In general on 4G the stronger the signal (to a point) the faster the data rates will be. It is expected that red, yellow and light blue will have data speeds faster than our 3G technology. The dark blue will likely have data speeds nearly identical to the 3G technology.

Map 1 Proposed AT&T "4G" coverage



Ron Humphrey

Radio Frequency Design Engineer  
AT&T Mobility Division