



CITY OF DOVER

ZONING BOARD OF ADJUSTMENT - AGENDA

Meeting Type: Regular Meeting
Meeting Location: Room 306, McConnell Center – 61 Locust St., Dover, NH 03820
Meeting Date: Thursday, July 19, 2018
Meeting Time: 7:00 pm

1. ATTENDANCE

2. APPROVAL OF MEETING MINUTES OF JUNE 21, 2018

3. HEARINGS

- A. Z18-13 Applicant Charles Robbins and Owner Fred E. & Ruth K. Riley Trust 1991, 64 Littleworth Road (Tax Map G, Lot 2), located in the Rural Restricted Industrial (I-2) Zoning District, request a special exception per **Section 170-12.A** of the Zoning Ordinance to permit a vehicle refueling and recharging station with an accessory retail store.
- B. Z18-07 Applicant Industrial Tower and Wireless, LLC and Owners Peter and Susan Rousseau, 200 Henry Law Avenue (Tax Map K, Lot 1), located in the Rural Residential (R-40) Zoning District, request a variance from **Section 170-22.C(1)** of the Zoning Ordinance to permit the construction of a new, 180-foot tall telecommunications tower on the above referenced property, where the construction of new telecommunications towers is only permitted on 15 parcels specified by the Zoning Ordinance.

4. OTHER BUSINESS

5. ADJOURN

Persons with questions or interested in reviewing the meeting materials are invited to visit the Planning Department located in City Hall, open Monday-Thursday from 8:30 am to 5:30 pm and Friday from 8:30 am to 4:00 pm. The meeting materials are also available online at www.dover.nh.gov. Follow us on Twitter @DoverNHPlanning and find us on Facebook at <https://www.facebook.com/DoverNHPlanning>.



CITY OF DOVER

ZONING BOARD OF ADJUSTMENT - MINUTES

Meeting Type: Regular Meeting
Meeting Location: Council Chambers, City Hall – 288 Central Avenue, Dover, NH 03820
Meeting Date: **Thursday, June 21, 2018**
Meeting Time: **7:00 pm**

1. ATTENDANCE

Members Present: Chris Prior (Chair), Bob Hall (Vice Chair), Frank Landford, George Reagan, Nick Couturier (Alternate), Rich Onufry (Alternate), Anthony Sillitta (Alternate)

Members Absent: Otis Perry

Staff Present: Elena Piekut (Assistant City Planner, Zoning Administrator)

The Chair called the meeting to order at 7:00 p.m. He introduced the Board and staff present to the audience and explained the process used to hear cases.

2. APPROVAL OF MEETING MINUTES OF MAY 17, 2018

Motion: George Reagan moved to approve the meeting minutes of April 19, 2018 as written. Bob Hall seconded.
Vote: U/A

3. HEARINGS

- A. Z18-11 Applicant/Owner Robyn Thompson, 321 Back Road (Tax Map M, Lot 105), located in the Rural Residential (R-40) Zoning District, requests a variance from **Section 170-12.A** of the Zoning Ordinance to permit the keeping of a horse in a barn set back approximately 95 feet and 72 feet from the two closest lot lines, on a 1.24 acre (54,014-square-foot) lot, where the keeping of farm animals in the R-40 Zoning District is only permitted on a lot of 100,000 square feet (2.3 acres) or more, and where any shelter used to contain said animals is no less than 100 feet from any property boundary.

Robyn Thompson provided an overview of the request and presented information supporting her application. The Board had no questions.

Public hearing opened.

STAFF RECOMMENDATION:

Assistant City Planner Elena Piekut stated that the Planning Department supports the variance request as the intent to maintain proper density and prevent impacts to abutters is met and the Applicant has supplied supporting information from abutters and experts on the care of her horse.

Public hearing closed.

Motion: Bob Hall moved to grant the variance with the condition that only one horse be allowed. Frank Landford seconded. Chair Chris Prior asked Nick Couturier to vote on the case. Vote: U/A.

- B. Z18-12 Applicant/Owner Aramis Black/Real McKoy Properties, LLC, 301 Durham Road (Tax Map H, Lot 1), located in the Hotel/Retail (B-4) Zoning District, requests a variance from **Section 170-12.A** of the Zoning Ordinance to permit an assisted living facility, where assisted living facilities are not permitted in the B-4 Zoning District.



CITY OF DOVER

ZONING BOARD OF ADJUSTMENT - MINUTES

Meeting Type: Regular Meeting
Meeting Location: Council Chambers, City Hall – 288 Central Avenue, Dover, NH 03820
Meeting Date: **Thursday, June 21, 2018**
Meeting Time: **7:00 pm**

Attorney FX Bruton, Bruton & Berube, represented the applicant and provided an overview of the request and how it meets the five variance criteria, as well as its differences from the previously approved variance for an elderly assisted care home.

Chair Chris Prior appointed Rich Onufry to vote on the case.

Rich Onufry asked what was compromised in order to double the number of beds in the facility. FX Bruton explained that the included floor plan was tentatively approved by the State agency that licenses these facilities. Chris Prior asked about the difference between the previous type of facility and requested type of facility with regard to vehicles and Atty. Bruton explained that residents of the proposed facility will not be driving. Rich Onufry asked for clarification about operations and staffing, and Atty. Bruton explained there will be 24-hour staff.

Public hearing opened.

STAFF RECOMMENDATION:

Assistant City Planner Elena Piekut said that staff does not oppose granting the variance, as the increase in intensity will result in minor site plan changes that will be reviewed by the Planning Board. She noted that the use is similar to that of a hotel, which is allowed in this zoning district.

Public hearing closed.

Rich Onufry moved to grant the variance. George Reagan seconded. Vote: U/A

- C. Z18-07 Applicant Industrial Tower and Wireless, LLC and Owners Peter and Susan Rousseau, 200 Henry Law Avenue (Tax Map K, Lot 1), located in the Rural Residential (R-40) Zoning District, request a variance from **Section 170-22.C(1)** of the Zoning Ordinance to permit the construction of a new, 180-foot tall telecommunications tower on the above referenced property, where the construction of new telecommunications towers is only permitted on 15 parcels specified by the Zoning Ordinance.

Chair Chris Prior recused himself from hearing the case and left the table.

Vice Chair Bob Hall explained the process used to review the case and its progression to this point.

Nick Couturier also recused himself from hearing the case, as he had engaged in discussion on the case on social media.

George Reagan moved to remove the case from the table. Rich Onufry seconded. Vote: U/A

Attorney Steve Grill represented the applicant. He addressed the additional information requested at the previous meeting and the response he submitted. He clarified that negotiations had occurred to erect a tower at 101 Back Road, and that a tower of 205 feet in height exists at 286 Middle Road. He noted that most of the information that the Board is asking about will be subject to peer review and that the Applicant provided data to the peer review consultant today. Atty. Grill acknowledged that the Dover Heritage Commission had met as requested and agreed with the Applicant's consultant, Public Archaeology Laboratory. He addressed the request for information about T-Mobile's method of prioritizing coverage gaps and said that he has been told T-Mobile does not divulge that information. He addressed the balloon test held June 9 and said that the Applicant did their best to obtain as many



CITY OF DOVER

ZONING BOARD OF ADJUSTMENT - MINUTES

Meeting Type: Regular Meeting
Meeting Location: Council Chambers, City Hall – 288 Central Avenue, Dover, NH 03820
Meeting Date: **Thursday, June 21, 2018**
Meeting Time: **7:00 pm**

photos as possible from the sites identified by staff the previous afternoon. He said the Applicant agrees with notifying all abutting municipalities of potential impact as suggested by staff. He said he would defer addressing the five variance criteria until the end of the process.

Vice Chair Bob Hall asked for clarification about the negotiations with the owner of 101 Back Road and whether a tower at that location would have addressed the coverage gap. Atty. Grill said that the location was close enough that a tower at a sufficient height would have worked, but the landlord's terms were not commercially viable. He added that T-Mobile already has an antenna at 286 Middle Road and an additional tower would not have helped.

Frank Landford moved to reopen the public hearing. George Reagan seconded. Vote: U/A

Public hearing opened.

Bob Hall noted that the forthcoming peer review will address much of the information the Board and public still need. He read a letter into the record at the request of Norm Fracassa, 1 Penny Lane:

“Ms. Piekut and Mr. Parker-

Here is my letter we discussed yesterday regarding the application for variance on Henry Law Avenue. Thank you for distributing it to the members of the ZBA and please have it read into the minutes of tonight's meeting as I am unable to attend.

Thank you.

-Norm Fracassa

1 Penny Lane

To: Dover Zoning Board of Adjustment

I am a resident at 1 Penny Lane in Dover and attended the Zoning Board site walk on Saturday, June 9 regarding the application for a variance to install a 15 story cell tower on land that is not zoned for this activity.

I wanted to write you to convey my concerns that took place that day that play a role in the decision process.

1) When I arrived with my neighbor we saw cars but no people. I did see the property owner and when I asked where people were meeting he replied there was no meeting and indicated that we were to view the balloon from where I was standing at the entrance to his property. It was not until city staff and ZBA members came walking down from the site that my neighbor and I felt comfortable taking part in the site walk. Frustrating at the least. Deceptive.

2) Was the height of the balloon set exactly at 180'? I posed this question to city staff and ZBA staff on site that day so I made my concerns known at that time. I'd like the city to confirm whether it was at 180' and if so, what is the basis for knowing this? I do not believe the balloon was anywhere close to 180' and many others also voiced their concerns regarding the portrayal of the potential cell tower height. All I could do that day was compare the balloon to the electrical lines side by side. It is my understanding the electrical lines are at 40' in height. I generously estimate the balloon at another 80' above that which would still put it at least 60' short if it's planned height.



CITY OF DOVER

ZONING BOARD OF ADJUSTMENT - MINUTES

Meeting Type: Regular Meeting
Meeting Location: Council Chambers, City Hall – 288 Central Avenue, Dover, NH 03820
Meeting Date: **Thursday, June 21, 2018**
Meeting Time: **7:00 pm**

The upcoming June 21 ZBA meeting will be the third time this applicant will have to make its case which is quite frustrating. I am not sure if this is typical but it seems incredibly accommodating to allow an applicant multiple opportunities to state their case and answer questions they should have been prepared to answer the first time.

As is probably very clear from this email, I (along with many of my fellow neighbors) am against the ZBA granting a variance for this use. I would have seriously reconsidered purchasing my property if I knew that this was possible just as I made sure surrounding property was not zoned for gas stations, restaurants, industrial, etc... The applicant has not provided facts (only vague opinion) as to the need, priority level, what is adequate coverage, current coverage, post coverage, or how that is measured for this project. Their own graphics showed that this project won't even achieve their goal of full coverage in this area.

In addition to the multiple reasons to deny this variance, equally important, if not more, is the precedent setting that if approved this will make. Months from now another company can find a land owner to accept their money offer to erect a tower and when the city says no they will point to this situation and say, you allowed them, now you have to allow us.

Thank you for taking the time to listen and to consider my concerns.

Sincerely,

Norm Fracassa

1 Penny Lane Dover"

Tom Hackett, 43 Samuel Hanson Avenue, stated that there are now 80 signatures on a petition opposing the tower and that that indicates it is not in the public interest. He criticized the Applicant's assumption that 1/3 of the people in the coverage area could be T-Mobile customers, as T-Mobile only represents 17 percent of market share. He suggested that if none of the 15 permitted new tower locations will satisfy the coverage need, that the Applicant be required to review industrially and commercially zoned lots before requesting a variance in a residential zoning district. He noted that 45 Littleworth is listed as an existing tower location but that it is not shown on coverage maps and that T-Mobile's Garrison Hill facility is not on the provided table. He brought up the possibility of a Distributed Antenna System (DAS) and asked why it won't work. He said that he also took photos of the balloon and that it was visible from George's Marina, the veterans' memorial at Pine Hill Cemetery, and the steps of City Hall. He noted that an antenna will be larger than the balloon and that it will be more visible in the fall and suggested renderings of fall conditions. He addressed the Applicant's statement that power lines and AM radio towers render the property "already compromised," suggesting that a tower would also compromise the property and cause further harm. He addressed property values, saying that the risk that they will be negatively affected is borne by the abutting property owners.

Eric Borrin, 117 Back Road, stated his concern that the applicant is "peppering the record" with variations of an argument and citing examples of different definitions. He is concerned that they have represented that a tower at 101 Back Road would have worked although the site is 120 feet lower in elevation than the proposed site. He believes their figures are a misrepresentation of customers and that there is no proof that property values won't be reduced. He suggested the Applicant offer a bond for a guaranteed period to compensate any property owners who suffer a loss in a sale.



CITY OF DOVER

ZONING BOARD OF ADJUSTMENT - MINUTES

Meeting Type: Regular Meeting
Meeting Location: Council Chambers, City Hall – 288 Central Avenue, Dover, NH 03820
Meeting Date: **Thursday, June 21, 2018**
Meeting Time: **7:00 pm**

Atty. Grill responded to comments about the number of customers available to T-Mobile, saying that the number presented is not relative to market share. He said it was intended to exclude children and those who don't use mobile services, and that 1/3 was a conservative estimate of potential customers, as federal law is intended to provide equal opportunity to provide wireless service. Discussion ensued regarding clarifying these numbers and what they intend to represent.

Kevin Delaney of Industrial Tower and Wireless, LLC said he would be happy to have the company they hired for the balloon test prepare a letter certifying the height of the balloon. He said that he watched it go up and that they counted to 18, 10-foot intervals on the line used. He also noted that the balloon was in addition to 180 feet of height.

George Reagan asked the Applicant to address Mr. Hackett's concerns about missing existing towers. Radiofrequency engineer Ryan Monte de Ramos said that the data has been provided to the peer review consultant, and he will be able to show them.

Jason Clough, 41 Samuel Hanson Avenue, stated that the wind moved the balloon significantly so that it didn't represent 180 feet in height, and that AT&T is sufficient so T-Mobile should be able to provide the same.

STAFF RECOMMENDATION:

Assistant City Planner Elena Piekut explained the procedural recommendations made in the staff memo regarding notification to abutting municipalities per RSA 12-K:7 and a determination regarding a development of regional impact per RSA 36:55. She read the definition in state law and suggested that it is not a development of regional impact. She explained that the Board should recess the public hearing and table the case to the July 19th meeting, which will be held in Room 306 of the McConnell Center.

George Reagan moved to notify all abutting New Hampshire municipalities. Anthony Sillitta seconded. Vote: U/A

Bob Hall asked Ms. Piekut for clarification about the determination of regional impact, and she explained and provided an example from the Strafford region where a proposed gravel pit on a town line was declared by a Planning Board to be a development of regional impact. Frank Landford stated that he believes this project would have very minor impact.

Anthony Sillitta made a motion that the proposal does not meet the definition of a development of regional impact. Rich Onufry seconded. Vote: U/A

George Reagan moved to table the case and recess the public hearing to the July 19, 2018 meeting. Frank Landford seconded. Vote: U/A

Public hearing recessed.

4. OTHER BUSINESS

None.

5. ADJOURN



CITY OF DOVER

ZONING BOARD OF ADJUSTMENT - MINUTES

Meeting Type: Regular Meeting
Meeting Location: Council Chambers, City Hall – 288 Central Avenue, Dover, NH 03820
Meeting Date: **Thursday, June 21, 2018**
Meeting Time: **7:00 pm**

Motion: Anthony Sillitta moved to adjourn. George Reagan seconded. Vote: U/A. Adjourned: 8:13 p.m.

DRAFT



CITY OF DOVER

ZONING BOARD OF ADJUSTMENT – STAFF MEMO

Meeting Type: Regular Meeting
Meeting Location: Room 306, McConnell Center – 61 Locust St. Dover, NH 03820
Meeting Date: Thursday, July 19, 2018
Meeting Time: 7:00 pm

INTENT: The applicant requests a special exception to permit a vehicle refueling and recharging station.

UNITS PROPOSED: N/A

AGENDA ITEM #: 3-A

ZONING DISTRICT: Rural
Restricted Industrial (I-2)

FILE: Z18-13

APPLICANT/OWNER:
Charles Robbins/Fred E. & Ruth
K. Riley Trust 1991

LOCATION: 64 Littleworth Road
(Tax Map G, Lot 2)

ACREAGE: 85 acres

EXISTING LAND USE: Farm
with single-family dwelling

PROPOSED LAND USE:
Vehicle refueling and recharging
station with accessory store

SURROUNDING LAND USE:
Industrial, railroad, electric
substation, single-family dwellings,
large solar installation

PREVIOUS ZBA ACTION:
None

**PLANNING BOARD
APPROVAL REQUIRED:** Yes

ATTACHMENTS: Application,
plans

STAFF RECOMMENDATION:
Staff does not oppose granting the
special exception.

BACKGROUND INFORMATION AND SUMMARY OF REQUEST

The property subject to this variance request is an 85-acre parcel located on the south side of Littleworth Road. It is primarily an open hayfield with some wetlands, and was formerly a dairy farm. The lot is surrounded by I-2 zoned land, with the R-40 Zoning District across Littleworth Road.

The applicant proposes the development of a vehicle refueling and recharging station, which is permitted by special exception in the I-2 Zoning District, and its accessory convenience store. The development will occur on a 120,000-square-foot lot to be divided from the 85-acre parcel. After being granted a special exception for the use, the applicant will appear before the Planning Board for minor subdivision and site plan review and approval.

The Board must grant the special exception if it finds that the general criteria for special exceptions, per **Section 170-52.C(3)** and the criteria specific to the I-2 district, found on the reverse of the Table of Uses and Dimensional Regulations. These are as follows.

From 170-52.C(3):

1. The requested use is essential or desirable to the public convenience or welfare.
2. The requested use will not create undue traffic congestion, or unduly impair pedestrian safety.
3. The requested use will not overload any public water, drainage or sewerage system or any other municipal system to such an extent that the requested use or any developed use in the immediate area or in any other area of the City will be unduly subjected to hazards affecting health, safety, or the general welfare.

Specific to I-2:

1. The use of land for a vehicle refueling and recharging and auto service station may only be permitted upon the determination that the property values of adjacent land will not be compromised. Any vehicle refueling and recharging and auto service station which discontinues operations for a period in excess of ninety (90) days shall be required to file a new application for a special exception with the Zoning Board of Adjustment. Such conditions may include but need not be limited to the provision of adequate and properly maintained screening around land so used.
2. The minimum lot size shall be sixty thousand (60,000) square feet, the minimum lot width shall be one hundred fifty (150) feet. Twenty-five percent (25%) of the subject parcel shall be open/green space. The total permitted sign area shall not exceed one hundred (100) square feet.

REASON FOR STAFF RECOMMENDATION

The applicant has demonstrated that dimensional criteria are met. Traffic, water, sewer, and drainage impacts will be addressed by the site plan review process. Traffic will also be addressed by the NHDOT driveway permitting process. The



CITY OF DOVER

ZONING BOARD OF ADJUSTMENT – STAFF MEMO

Meeting Type:	Regular Meeting
Meeting Location:	Room 306, McConnell Center – 61 Locust St. Dover, NH 03820
Meeting Date:	Thursday, July 19, 2018
Meeting Time:	7:00 pm

applicant's narrative does not address property values. The Board should use its judgment regarding this criterion in the same way that it judges variance applications.

STAFF RECOMMENDATION

Staff recommends the Board hold a public hearing, evaluate and make findings on the special exception criteria. Staff does not oppose granting the special exception.

64 Littelworth Road

**Property Information**

Property ID G0002-000000
Location 64 LITTELWORTH RD
Owner RILEY FRED E TRUST 1991

**MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT**

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated 03/29/2018
Properties updated 07/08/2018



City of Dover, New Hampshire
ZONING BOARD OF ADJUSTMENT APPLICATION

[Revised April 7, 2017]

RECEIVED
Planning Office

Office Use Only

Case #:

Z18-13

Date Received:

JUN 28 2018

Amount Paid: \$

Time Received:

Dover, New Hampshire

APPLICANT/PROPERTY OWNER INFORMATION

APPLICANT: CHARLES ROBBINS Phone # 603 473 2000

Address of Applicant: 271 WALSH RD. SANBORNVILLE NH 03872

E-Mail Address: CPR55@ROADRUNNER.COM

PROPERTY OWNER (if different from applicant): FRED E. + RUTH K. RILEY TRUST

Address: 201 TOLEND RD BARRINGTON 03825 Phone # 603-742 5690

E-Mail Address: CAROLIE CASH @ AOL.COM

PROPERTY/PARCEL INFORMATION

Address: 64 LITTLEWORTH ROAD

Brief Directions: 85 ACRE FIELD and FARM BETWEEN
CROSBY ROAD + INDUSTRIAL PARK ROAD

Zoning District: I-2 Assessor's Map # G Lot(s) # 2-0-0

TYPE OF APPEAL: (Please check one)

☐ Variance

from Section _____ of the Zoning Ordinance

☐ Physical Disability Variance (RSA 674:33-V)

from Section _____ of the Zoning Ordinance

☒ Special Exception

per Section _____ of the Zoning Ordinance

☐ Appeal of Administrative Decision

regarding Section _____ of the Zoning Ordinance

☐ Equitable Waiver

per Section _____ of the Zoning Ordinance

DESCRIBE BRIEFLY YOUR PLANS FOR THE PROPERTY:

SEE ATTACHED

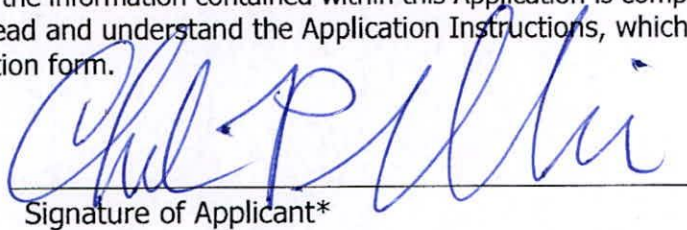
SIGNATURE PAGE

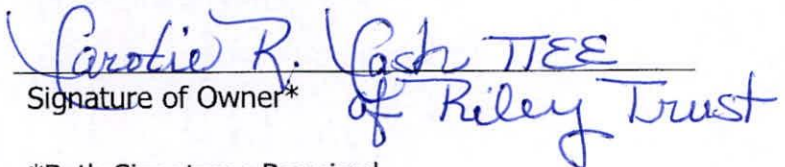
THIS SECTION OF THE APPLICATION MUST BE COMPLETED BY ALL APPLICANTS

I, the undersigned Applicant, hereby certify that the information contained within this Application is complete and accurate, and I acknowledge that I have read and understand the Application Instructions, which are set forth on the first two pages of this Application form.

IMPORTANT

PROPERTY IDENTIFICATION SIGN
MUST BE POSTED ON THE PROPERTY
FOR THE 5 DAYS PRIOR TO HEARING.
FAILURE TO POST MAY RESULT IN
APPLICATION NOT BEING ACCEPTED.


Signature of Applicant*

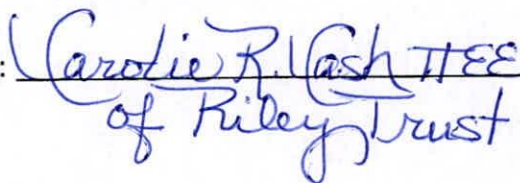

Signature of Owner*

*Both Signatures Required

AUTHORIZATION TO ENTER SUBJECT PROPERTY

I, and my successors, hereby authorize members of the Dover Zoning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner:

 Date: 6/26/18

SEE
ATTACHED

SPECIAL EXCEPTION REQUIREMENTS

THIS SECTION TO BE COMPLETED BY SPECIAL EXCEPTION APPLICANTS ONLY

A. General Special Exception Requirements (as set forth in §170-52.C.3 of the Zoning Ordinance)

1. Explain how the requested use would be essential or desirable to the public convenience or welfare.

2. Detail how the requested use would not create undue traffic congestion or unduly impair pedestrian safety.

3. Describe how the requested use would not overload any public water, drainage or sewerage system or any other municipal system to such an extent that the requested use or any developed use in the immediate area or in any other area of the City will be unduly subjected to hazards affecting health, safety or the general welfare.

B. Specific Special Exception Requirements (as may be set forth in the applicable Table of Use)

Explain how the proposal meets the specific special exception requirements as may be set forth in the Table of Use for the zoning district in which the subject property is located:

A. _____

B. _____

C. _____

D. _____

E. _____

F. _____

Plans for Property

A Refueling/Recharging station with retail store. To be created from an 85 acre parcel on 64 Littleworth Road

A) Requirements for Special Exception

1) Littleworth Road has evolved into an approximately 10,000 vehicle a day commuter road with residential homes located on side roads off of Littleworth Road. These 2 factors lend this location to be helpful to reducing the need for people to travel other roads in Dover for the conveniences available in this area, especially at peak travel times.

2) There is very little pedestrian traffic along this area of Littleworth Road. The state of NH DOT will require road improvements for this overall project that will insure safety and continued free flow of traffic.

3) The amount of water and sewer required for project is limited in comparison to other uses allowed in this zone, such as hotel/motel or eating and drinking establishments.

B) The project meets specific special exceptions requirements as set forth in this zoning district by being close to twice the required lot size and twice the required minimum road frontage. It also will exceed the 25% minimum required green area. The area is zoned I-2 bordering on each side of property and although there are 2 homes across the road from this 340 foot road lot, there is a large PSNH/Eversource transformer substation directly across from this to be created lot. Also, the homes mentioned have the I-4 district adjacent to their back property lines.

Z1813		64 Littleworth Road				
Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State Zip
F0026-000000	LITTLEWORTH RD	PUBLIC SERV CO OF N H		PO BOX 330	MANCHESTER	NH 03105-0330
F0026-A00000	69 LITTLEWORTH RD	NUGENT LISA A		69 LITTLEWORTH RD	DOVER	NH 03820
F0027-000000	67 LITTLEWORTH RD	RAVELING DAVID L		16 FORD DR	BARRINGTON	NH 03825
F0028-000000	75 LITTLEWORTH RD	BOVEE DAVID G & CAROL A TRUSTEES	BOVEE FAMILY REVOCABLE TRUST OF 2014	75 LITTLEWORTH ROAD	DOVER	NH 03820
F0028-A00000	73 LITTLEWORTH RD	PELLETIER DAVID G		73 LITTLEWORTH ROAD	DOVER	NH 03820
F0029-000000	77 LITTLEWORTH RD	FAIRCHILD JOANNE M TRUSTEE	FAIRCHILD JOANNE M 1999 TRUST	77 LITTLEWORTH ROAD	DOVER	NH 03820
F0030-000000	81 LITTLEWORTH RD	CUTCHIN SANDRA		81 LITTLEWORTH ROAD	DOVER	NH 03820
G0001-C00001	CROSBY RD	AYER PAUL JR & DUSTON ROBERT &	GROSS HOWARD	PO BOX 1715	DOVER	NH 03821-1715
G0001-C00002	207 CROSBY RD	AYER PAUL JR & DUSTON ROBERT &	GROSS HOWARD	PO BOX 1715	DOVER	NH 03821-1715
G0001-C00003	211 CROSBY RD	COLBATH WILLIAM C		211 CROSBY RD	DOVER	NH 03820
G0001-E00000	5 FARADAY DR	VIRTUOUS REALTY LLC	C/O TURBOCAM INC	607 CALEF HIGHWAY #200	BARRINGTON	NH 03825-7237
G0001-L00000	15 FARADAY DR	CHAUVIN ARNOUX INC		15 FARADAY DR	DOVER	NH 03820
G0003-A00000	74 INDUSTRIAL PARK RD	JUMAJA SEACOAST LLC		74 INDUSTRIAL PARK RD	DOVER	NH 03820
G0003-A00001	INDUSTRIAL PARK RD	74 INDUSTRIAL PARK LLC		273 CORPORATE DR STE 150	PORTSMOUTH	NH 03801
G0003-C00000	44 INDUSTRIAL PARK RD	SOLVETTA SALES INC		655 POST RD	WELLS	ME 04090
G0003-D00002	62 LITTLEWORTH RD	IWORX REAL ESTATE LLC		62 LITTLEWORTH RD	DOVER	NH 03820
G0004-E00000	92 INDUSTRIAL PARK RD	WILLMANCH CORP	% TAX DEPT	PO BOX 28606	ATLANTA	GA 30358-0606
G0005-000000	LITTLEWORTH RD	BOSTON & MAINE RR	IRON HORSE PARK	HIGH STREET	NORTH BILLERICA	MA 01862
G0031-000000	66 LITTLEWORTH RD	CASWELL BRUCE		68 LITTLEWORTH RD	DOVER	NH 03820-4330
G0031-001000	50 CROSBY RD	MCGUIRE A ROBERT JR TRUSTEE	HORIZON TRUST OF NEW HAMPSHIRE	PO BOX 988	DOVER	NH 03821-0988
G0041-000000	LITTLEWORTH RD	BT-NEWYO LLC		PO BOX 28606	ATLANTA	GA 30358-0606
H0031-000000	30 LITTLEWORTH RD	SOUSANE RUTH K &	QUINLAN NANCY K	30 LITTLEWORTH RD	DOVER	NH 03820
H0036-004000	8 PROGRESS DR	PROGRESS OF DOVER LLC		PO BOX 1409	DOVER	NH 03821-1409
H0036-005000	10 PROGRESS DR	10 PROGRESS DRIVE LLC		P O BOX 926	DOVER	NH 03821
H0036-B00001	221 KNOX MARSH RD	NSA OPTIVEST ACQUISITION HOLDINGS LLC		24901 DANA POINT HARBOR DR STE 200	DANA POINT	CA 92629
H0036-C00000	KNOX MARSH RD	PUBLIC SERV CO OF N H		PO BOX 330	MANCHESTER	NH 03105-0330
H0037-A00000	239 KNOX MARSH RD	MCCRONE IRREVOCABLE TRUST	MCCRONE GREGORY AND HERGOTT LISA TF	PO BOX 14	DOVER	NH 03820
H0038-000000	289 KNOX MARSH RD	CRAGIN PATRICK J TRUSTEE	CRAGIN PATRICK J LIVING REV TRUST	PO BOX 250	DOVER	NH 03820
		CHARLES ROBBINS		271 WASH ROAD	SANBORNVILLE	NH 03872
		FRED E. & RUTH K. RILEY TRUST		201 TOLEND ROAD	BARRINGTON	NH 03825
		TRITECH ENGINEERING CORPORATION		755 CENTRAL AVENUE	DOVER	NH 03820



SHEET NO. **ZBA-1**

ZONING BOARD OF ADJUSTMENT
APPLICATION PLAN
FRED E. RILEY TRUST 1991
& RUTH K. RILEY TRUST 1991
64 LITTLEWORTH ROAD
DOVER, NEW HAMPSHIRE
JUNE 26, 2018 JOB No. 18128
SCALE: 1" = 200'

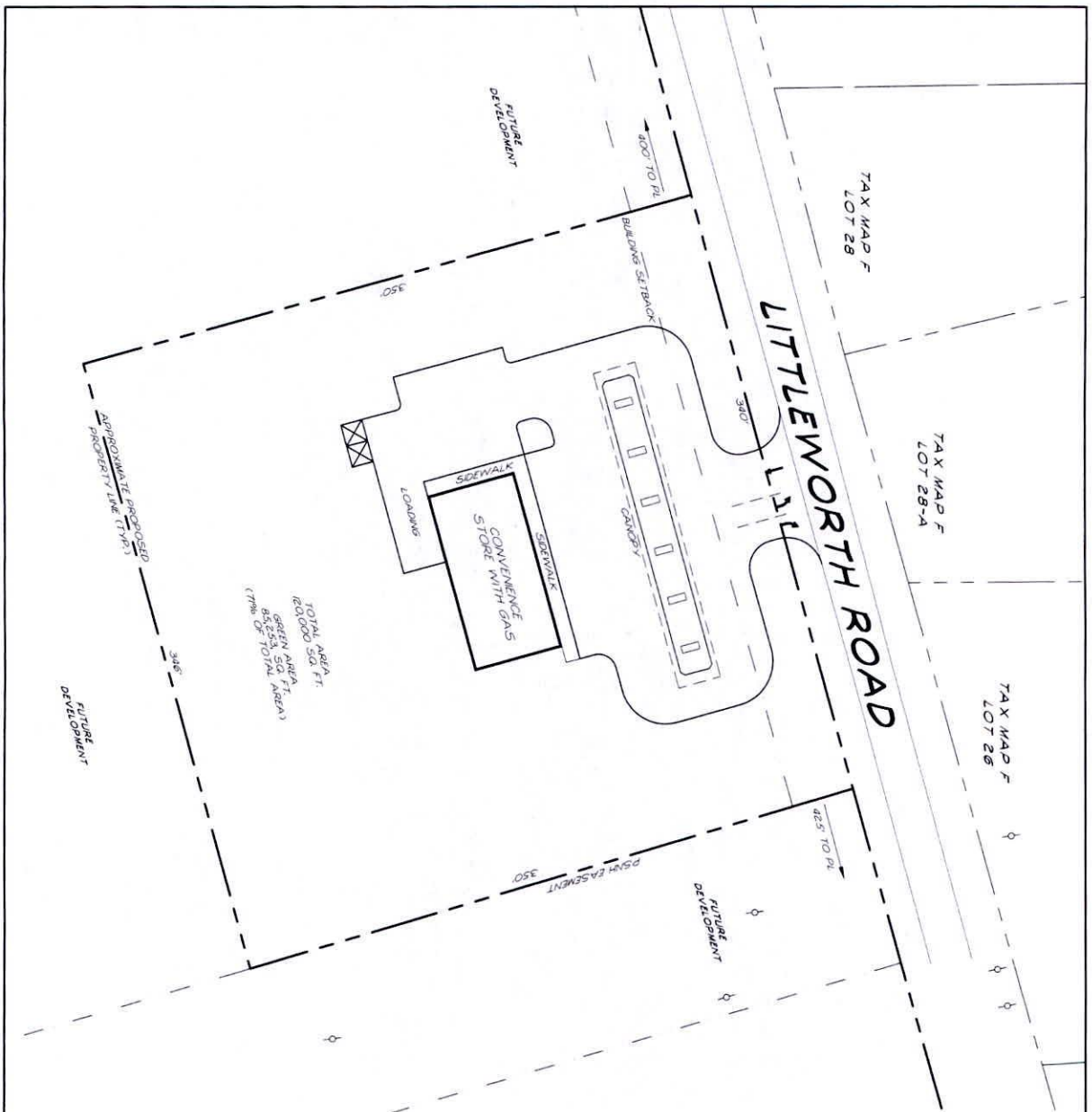
REVISIONS	DATE	DESCRIPTION
1	06-28-18	ADDED PROPERTY LINES

TRITECH
ENGINEERING CORPORATION

705 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE: 603.742.8107
FAX: 603.742.3800

RECEIVED
Planning Office
JUN 28 2018

Dover, New Hampshire



TRITECH
ENGINEERING CORPORATION



NOTES

1) THE PLANS OF THIS PROJECT TO SUBMIT TO THE BOARD OF ZONING ADJUSTMENT FOR REVIEW AND APPROVAL ARE BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE ENGINEER HAS NOT CONDUCTED A FIELD SURVEY OF THE PROJECT SITE.

2) THE CLIENT OWNS THE SITE AND HAS THE RIGHT TO DEVELOP THE SITE FOR THE PURPOSES OF THE PROJECT.

3) THE CLIENT HAS OBTAINED ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL GOVERNMENT.

4) THE TOTAL AREA OF THE SITE IS 60,000 SQ. FT.

5) THE PROJECT SITE IS LOCATED ON THE CORNER OF LITTLEWORTH ROAD AND BENTLEY ROAD.

6) THE PROJECT SITE IS ZONED COMMERCIAL (C-1) AND THE PROPOSED DEVELOPMENT IS CONSISTENT WITH THE ZONING REGULATIONS.

7) THE PROJECT SITE IS NOT WITHIN A HISTORICALLY SIGNIFICANT AREA.

8) THE PROJECT SITE IS NOT WITHIN A FLOOD PRONE AREA.

9) THE PROJECT SITE IS NOT WITHIN A SEISMICALLY ACTIVE AREA.

10) THE PROJECT SITE IS NOT WITHIN A WETLAND AREA.

11) THE PROJECT SITE IS NOT WITHIN A CULTURAL RESOURCE AREA.

12) THE PROJECT SITE IS NOT WITHIN A VISUAL QUALITY SENSITIVE AREA.

13) THE PROJECT SITE IS NOT WITHIN A SCENIC OVERLOOK AREA.

14) THE PROJECT SITE IS NOT WITHIN A HISTORIC DISTRICT.

15) THE PROJECT SITE IS NOT WITHIN A NATIONAL HISTORIC LANDMARK.

16) THE PROJECT SITE IS NOT WITHIN A NATIONAL MONUMENT.

17) THE PROJECT SITE IS NOT WITHIN A NATIONAL RECREATION AREA.

18) THE PROJECT SITE IS NOT WITHIN A NATIONAL SCENIC AREA.

19) THE PROJECT SITE IS NOT WITHIN A NATIONAL HISTORIC SITE.

20) THE PROJECT SITE IS NOT WITHIN A NATIONAL MONUMENT.

21) THE PROJECT SITE IS NOT WITHIN A NATIONAL RECREATION AREA.

22) THE PROJECT SITE IS NOT WITHIN A NATIONAL SCENIC AREA.

23) THE PROJECT SITE IS NOT WITHIN A NATIONAL HISTORIC SITE.

24) THE PROJECT SITE IS NOT WITHIN A NATIONAL MONUMENT.

25) THE PROJECT SITE IS NOT WITHIN A NATIONAL RECREATION AREA.

26) THE PROJECT SITE IS NOT WITHIN A NATIONAL SCENIC AREA.

27) THE PROJECT SITE IS NOT WITHIN A NATIONAL HISTORIC SITE.

28) THE PROJECT SITE IS NOT WITHIN A NATIONAL MONUMENT.

29) THE PROJECT SITE IS NOT WITHIN A NATIONAL RECREATION AREA.

30) THE PROJECT SITE IS NOT WITHIN A NATIONAL SCENIC AREA.

31) THE PROJECT SITE IS NOT WITHIN A NATIONAL HISTORIC SITE.

32) THE PROJECT SITE IS NOT WITHIN A NATIONAL MONUMENT.

SHEET NO. ZBA-2	ZONING BOARD OF ADJUSTMENT APPLICATION PLAN		REVISIONS DATE DESCRIPTION 06-28-18 ADDED PROPERTY LINES	TRITECH ENGINEERING CORPORATION 705 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03800 TELEPHONE 603 745 9107 FAX 603 742 3630
	FRED E. RILEY TRUST 1991 & RUTH K. RILEY TRUST 1991 64 LITTLEWORTH ROAD DOVER, NEW HAMPSHIRE JUNE 26, 2018 JOB NO. 18128 SCALE: 1" = 30'			



CITY OF DOVER

ZONING BOARD OF ADJUSTMENT – STAFF MEMO

Meeting Type: Regular Meeting
Meeting Location: Room 306, McConnell Center – 61 Locust St. Dover, NH 03820
Meeting Date: Thursday, July 19, 2018
Meeting Time: 7:00 pm

INTENT: The Applicant requests a variance to permit a new telecommunications tower, where telecommunications facilities are not permitted on this lot.

UNITS PROPOSED: N/A

AGENDA ITEM #: 4-B

ZONING DISTRICT: Rural Residential (R-40)

FILE: Z18-07

APPLICANT: Industrial Tower and Wireless, LLC

OWNER: Peter & Susan Rousseau

LOCATION: 200 Henry Law Avenue (Tax Map K, Lot 1)

ACREAGE: 55.18 acres

EXISTING LAND USE: Single-family dwelling/farm

PROPOSED LAND USE: Single-family dwelling/farm, with telecommunications tower

SURROUNDING LAND USE: Single-family dwellings, Cochecho River Wildlife Management Area, conserved open space, WTSN radio

PREVIOUS ZBA ACTION:
None

PLANNING BOARD APPROVAL REQUIRED: Yes

ATTACHMENTS: Application, site plans

STAFF RECOMMENDATION: See Staff Recommendations

TABLE OF CONTENTS

To aid the Board, a list of all materials submitted to date follows (new submissions since June meeting in **bold**):

1. From Applicant:

- a. 3/23/2018 – Initial bound Application for Variance
- b. 4/13/2018 – Letter from Atty. Grill of 4/11/2018
- c. 4/17/2018 – FAA Determination of No Hazard to Air Navigation Letter of 11/13/2017
- d. 4/17/2018 – NH Natural Heritage Bureau Review issued 4/6/2018
- e. 4/17/2018 – US District Court for Rhode Island *Industrial Tower and Wireless, LLC v. Town of Foster Zoning Board of Review*
- f. 5/2/2018 – Letter from Atty. Grill of 4/26/2018 including answers to questions and computer model coverage maps (and cover letter of 5/1/2018)
- g. 5/9/2018 – Letter from Atty. Grill of 5/8/2018 and Real Estate Consultants of New England, Inc. Market Study dated 5/4/2018
- h. 6/1/2018 – Letter to Atty. Hilson in response to Board's request for more information
- i. 6/8/2018 – Letter and two maps: Existing L2100 Coverage, LTE Best Server Coverage with Primary Candidate
- j. 6/8/2018 – Email to Atty. Hilson regarding peer review, regional notice, and regional impact finding
- k. 6/13/2018 – Email response to Andrew Nanaa's email of 6/13/2018
- l. 6/14/2018 – Email response to Andrew Nanaa's email of 6/14/2018
- m. 6/15/2018 – Email and PDF of photo simulations; included in online meeting materials (<http://www.dover.nh.gov/government/boards-and-commissions/zoning-board/index.html>), hard copies to be distributed
- n. 6/28/2018 – Letter from Virtual Site Simulations, LLC regarding balloon test**
- o. 7/9/2018 – Peer Review Letter and Maps from IDK Communications**
- p. 7/12/2018 – Letter from Atty. Grill of 7/12/2018**

2. From the Public:

- a. 4/16/2018 – Email from Daniel Spuches, 40 Samuel Hanson Avenue
- b. 4/19/2018 – Email and petition from Thomas Hackett, 43 Samuel Hanson Avenue



CITY OF DOVER

ZONING BOARD OF ADJUSTMENT – STAFF MEMO

Meeting Type:	Regular Meeting
Meeting Location:	Room 306, McConnell Center – 61 Locust St. Dover, NH 03820
Meeting Date:	Thursday, July 19, 2018
Meeting Time:	7:00 pm

- c. 4/19/2018 – Letter from Andrew Nanaa, 5 Industrial Park Drive, on behalf of Burson/Chalifour, 3 Mulligan Drive
- d. 4/23/2018 – Letter from Colleen and Matt Walker, 45 Samuel Hanson Drive
- e. 4/30/2018 – Photographs of materials submitted to Dover Heritage Commission Chairman and Dover Planning Department, submitted by Andrew Nanaa
- f. 5/18/2018 – Email from Thomas Hackett with questions and updated petition
- g. 6/13/2018 – Email and photos of DAS installation from Andrew Nanaa
- h. 6/14/2018 – Letter and photos of DAS installation from Andrew Nanaa
- i. **6/19/2018 – Letter and photos of balloon rest from Andrew Nanaa, presented at meeting**
- j. **6/21/2018 – Email from Norm Fracassa, read into record at meeting**
- k. **6/21/2018 – Letter from Andrew Nanaa, presented at meeting.**
- l. **Letter from Wendi Tremblay, 42 Samuel Hanson Ave.**

one lot. Assessing records indicate the home dates to 1790. The property is located in the Rural Residential (R-40) Zoning District.

The Telecommunication Facilities section of the Zoning Ordinance, **Section 170-22**, permits the construction of new telecommunications towers on 15 specific lots around the City. This section also permits co-location, or the placement of facilities on existing towers or alternative tower structures, much more broadly, throughout the City. “Towers” include not only dedicated telecommunications towers, but also alternative structures such as steeples and smokestacks.

The Applicant requests a variance to permit construction of a new, 180-foot tall tower on a lot where the use is not permitted. The Applicant is a tower developer who has identified a specific tenant, T-Mobile, but who has also expressed an intent to lease space on the tower for other wireless service providers’ facilities.

The proposed tower height of 180’, on land at an elevation of approximately 145’, creates a total elevation of 325’. For comparison, the highest point in Dover, Garrison Hill, is at elevation 291’.

In addition to Section 170-22 of the Zoning Ordinance, the City of Dover, in its permitting processes, must also adhere to the requirements of the federal Telecommunications Act of 1996 (TCA), as well as NH RSA 12-K, Deployment of Personal Wireless Facilities, if the Applicant/Co-Applicant is a wireless service provider. Staff has been advised by the NH Municipal Association that sections of the TCA do not apply to developers of tower structures unless a licensed wireless carrier is a co-applicant. If the variance to permit this use is granted, Planning Board review and approval will also be required per Section 170-22.

At the April 19, 2018 meeting of the Zoning Board of Adjustment, the Applicant provided a brief overview of the variance request and responded to questions from the Board. The Board held a public hearing, which it then recessed to May 17, 2018. The Board indicated its desire to schedule a site walk and balloon test, and to obtain a third-party review of the submitted radiofrequency analysis, and directed Assistant City Planner Elena Piekut to arrange all three. The Board continued the application to the May 17 meeting.

At the May 17, 2018 meeting of the Zoning Board of Adjustment, the Applicant and their radiofrequency engineer provided additional information. The Board reopened the public hearing, received additional testimony, and recessed it to the June 21, 2018 meeting. The Board scheduled a site walk/balloon test for 8:00 am to 12:00 pm on Saturday, June 9, 2018 (with a rain date of June 16). The Board provided a list of additional requested information. Assistant City

The Board also received minutes from the Dover Heritage Commission meeting June 18.

BACKGROUND INFORMATION AND SUMMARY OF REQUEST

New information in this memo is underlined.

The property subject to this variance request is an approximately 55-acre cattle farm located on the east side of Henry Law Avenue, north side of Back Road, and on both sides of McKone Lane. Although McKone Lane divides the property, it is



CITY OF DOVER

ZONING BOARD OF ADJUSTMENT – STAFF MEMO

Meeting Type:	Regular Meeting
Meeting Location:	Room 306, McConnell Center – 61 Locust St. Dover, NH 03820
Meeting Date:	Thursday, July 19, 2018
Meeting Time:	7:00 pm

Planner Piekut provided an update on obtaining a peer review. The item was continued to the June 21 meeting.

Staff provided the Applicant with a list of locations for photo simulations based on the balloon test. The balloon test/site walk was held June 9 and members of the Board and staff also viewed the balloon from several locations around Dover and at the Rollinsford line.

At its June 21 meeting, the Board heard additional testimony from the Applicant and public. The Board voted to notify all abutting NH municipalities under RSA 12-K:7 and voted that the proposal is not a development of regional impact under RSA 36:55. The public hearing and case were continued to the July 19 meeting.

Additional information received from the Applicant and the public since June 21 is included with this packet.

REASONS FOR STAFF RECOMMENDATION

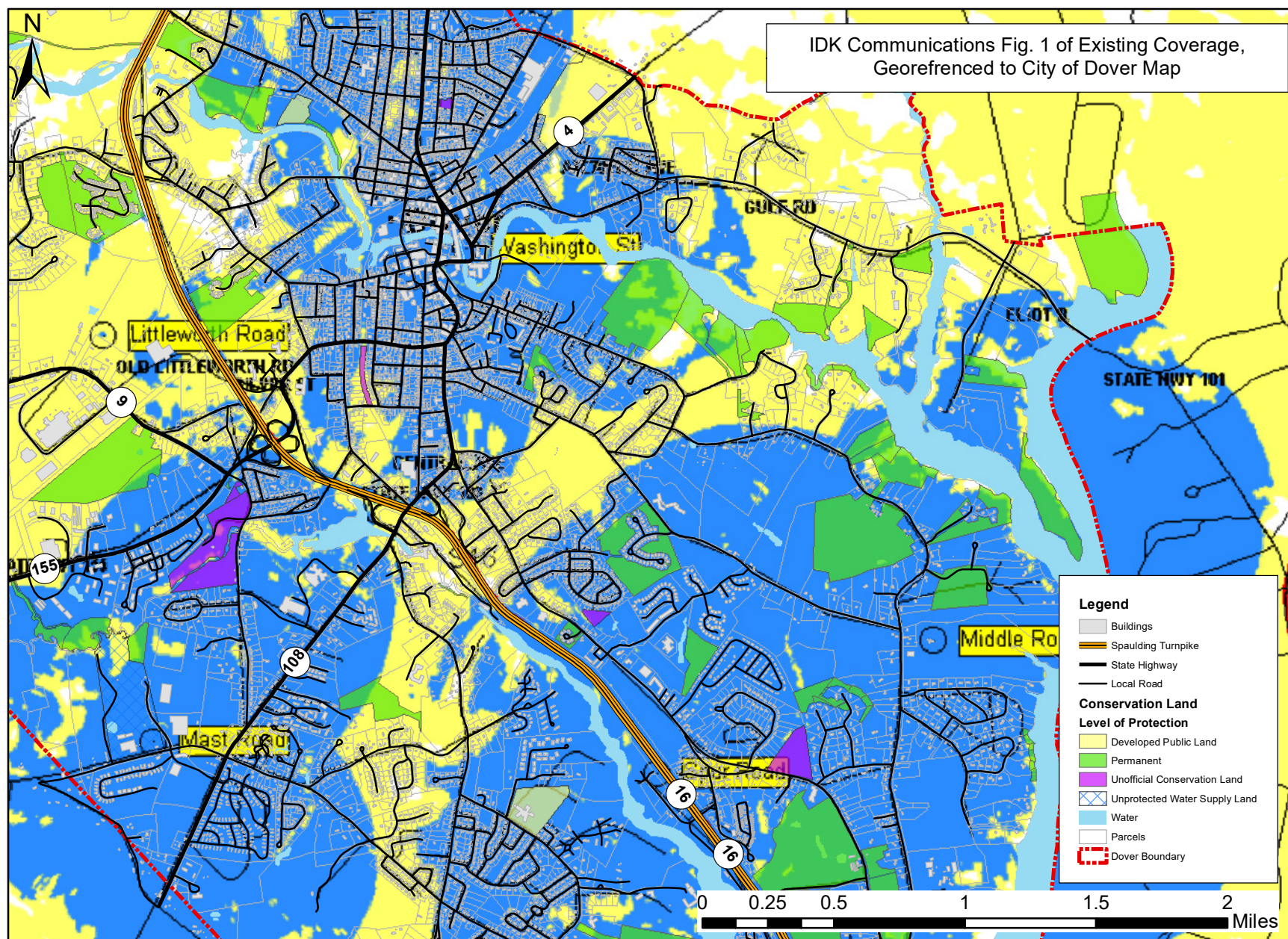
Please see memorandum from Attorney Christopher Hilson dated July 13, 2018.

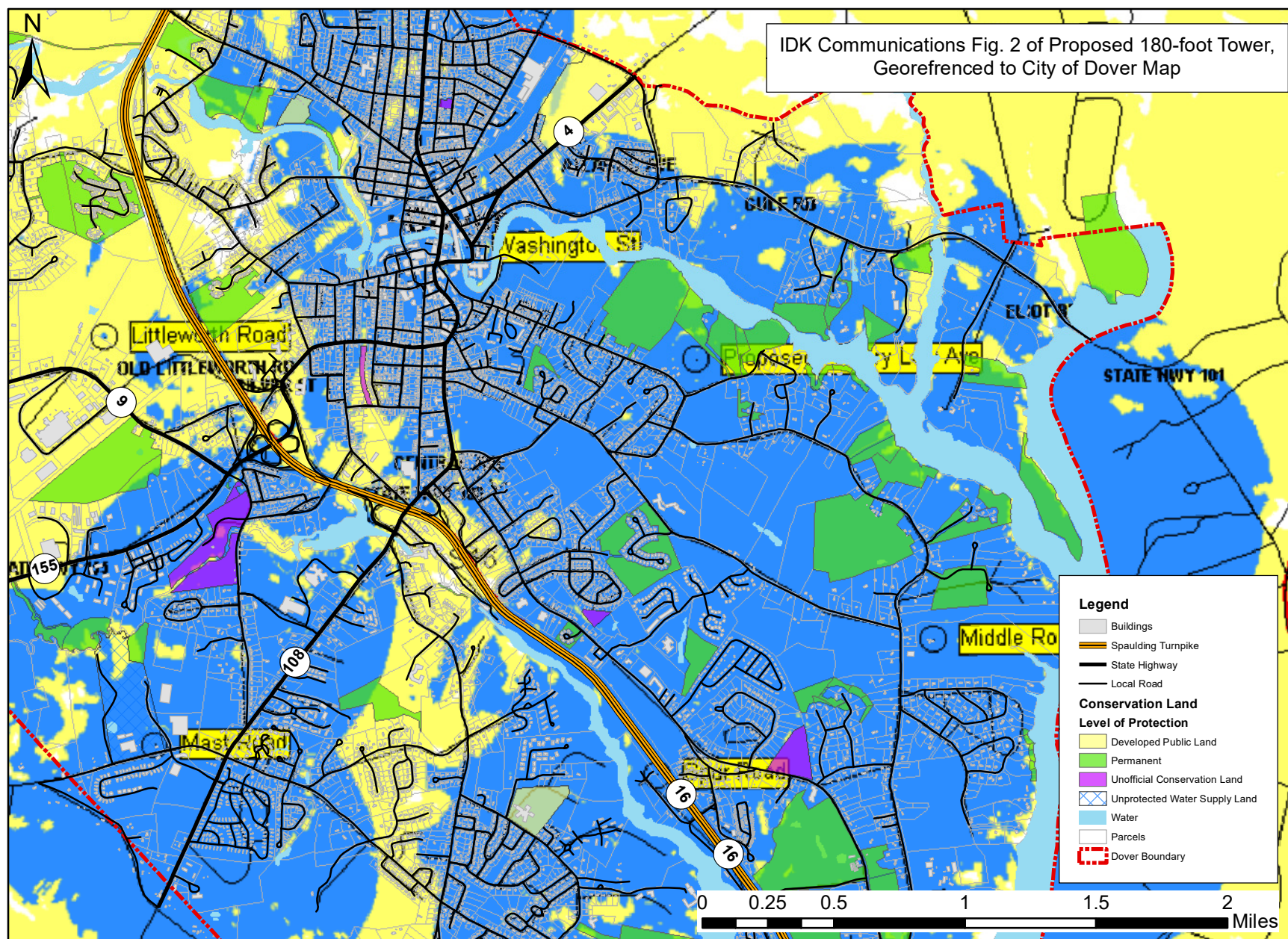
STAFF RECOMMENDATION

Staff recommends the Board:

- 1) Remove case Z18-07 from the table.
- 2) Provide the Applicant an opportunity to present additional information and review how the request meets each of the variance criteria.
- 3) Hear report from peer review consultant IDK Communications.
- 4) Reopen the public hearing.
- 5) Close the public hearing.
- 6) Deliberate on each of the five variance criteria and vote on the variance request.

Special counsel is available by phone should the Board wish to recess for consultation at any point.





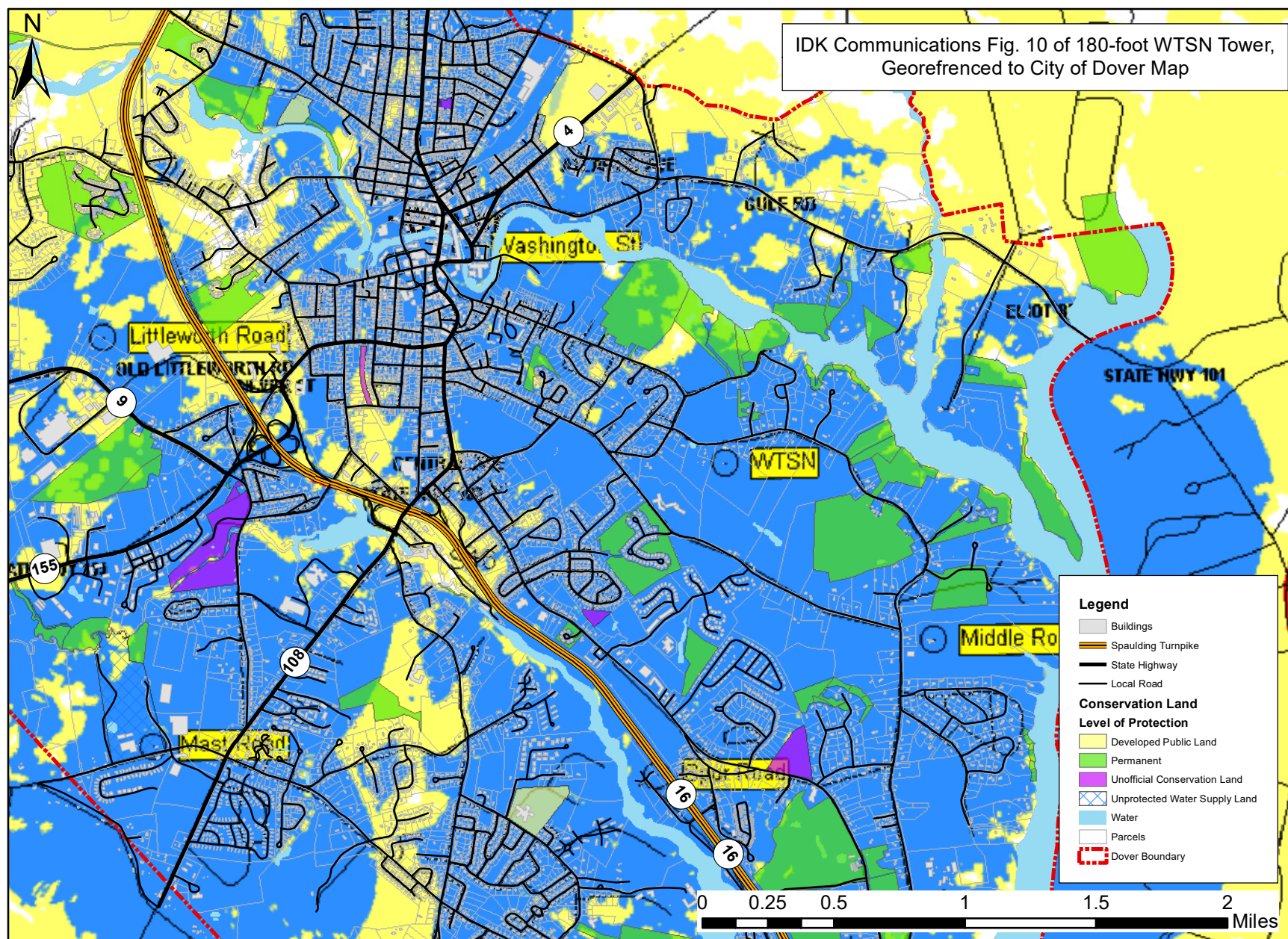


FIGURE 1 - Existing T-Mobile Coverage

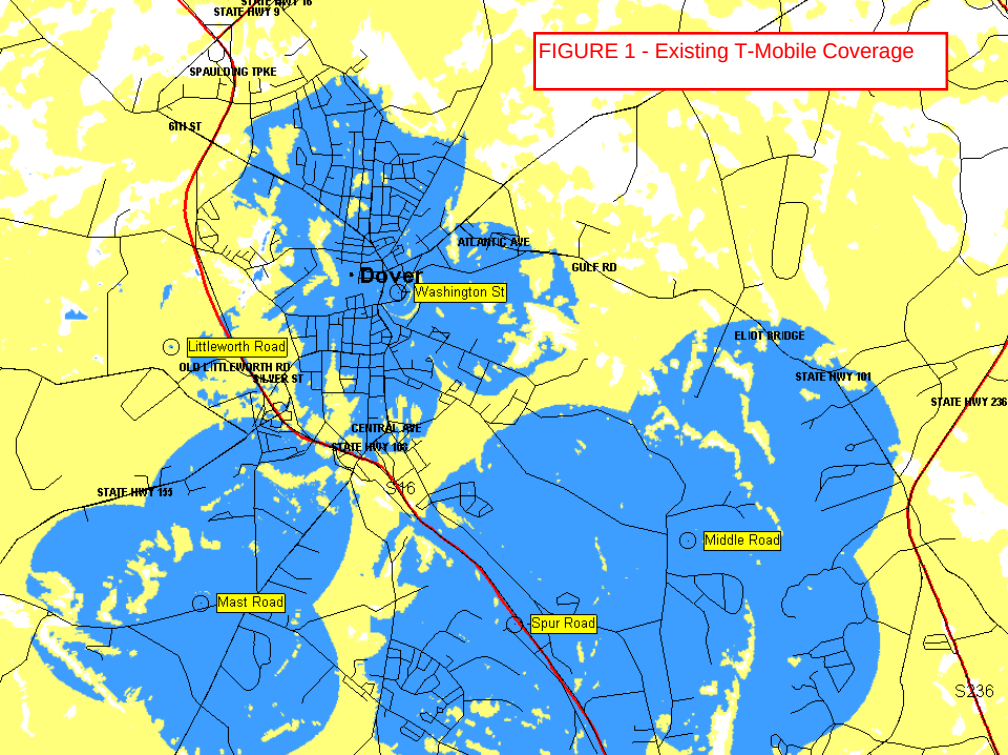


FIGURE 2 - Existing T-Mobile Coverage with
Proposed at 180 feet

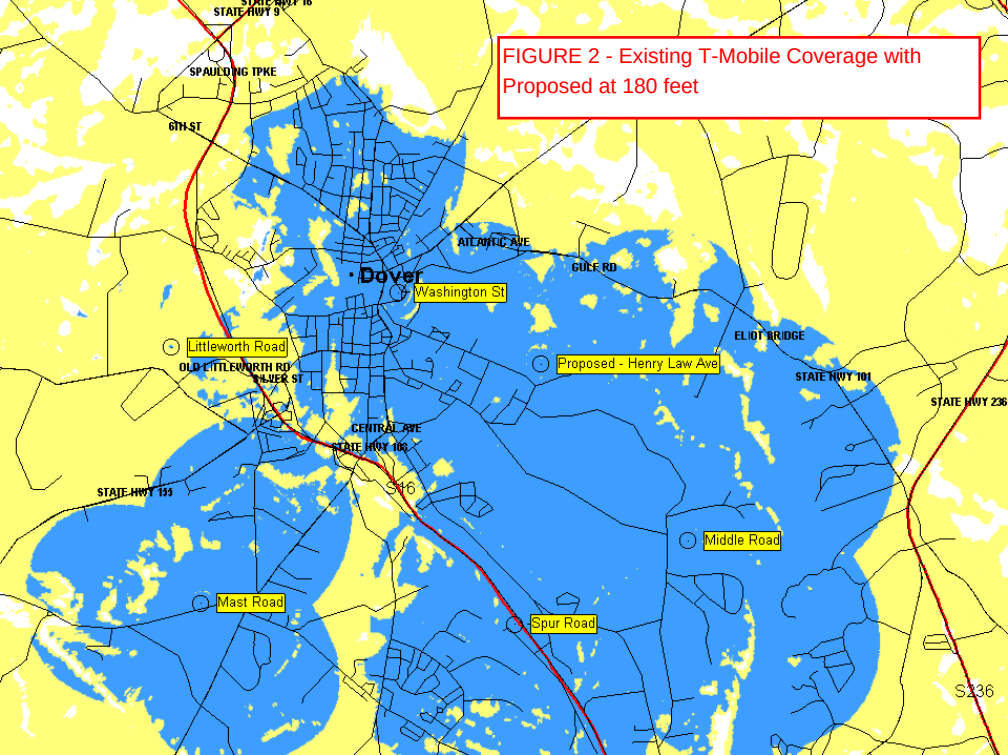


FIGURE 3 - Existing T-Mobile Coverage with
Proposed at 170 feet

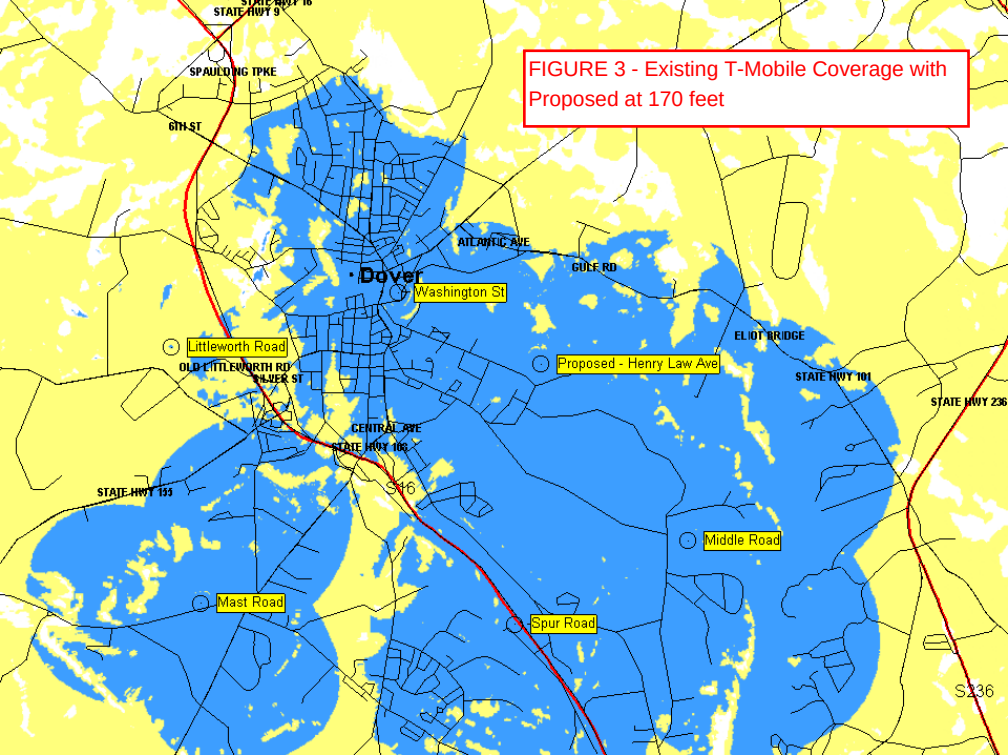


FIGURE 4 - Existing T-Mobile Coverage with
Proposed at 160 feet

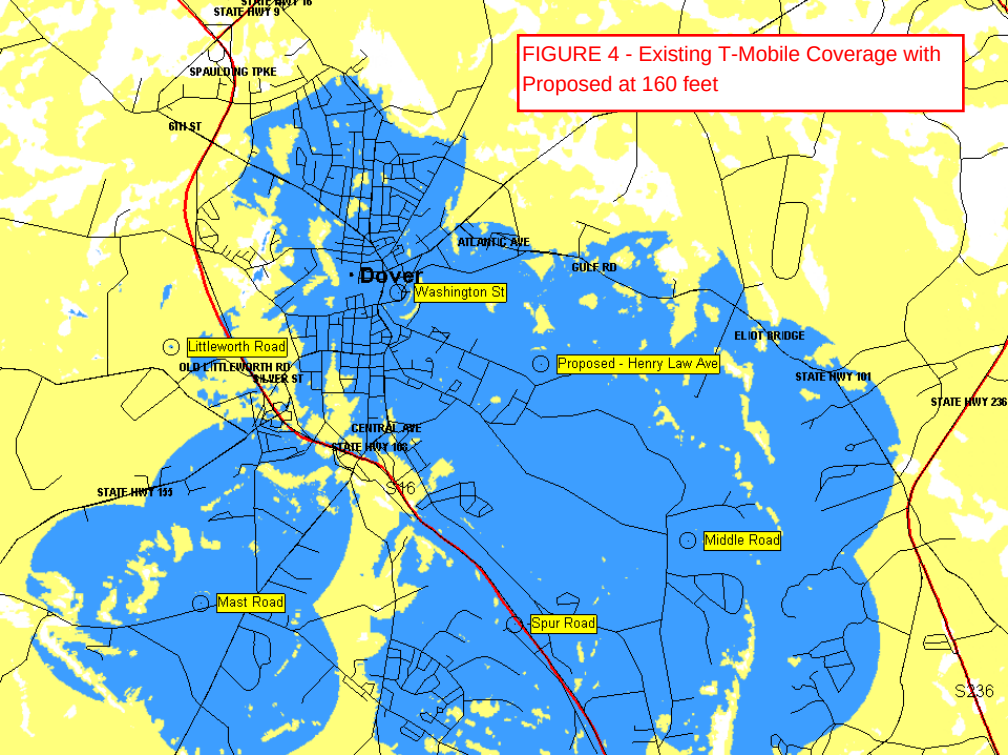


FIGURE 5 - Existing T-Mobile Coverage
with Proposed at 150 feet

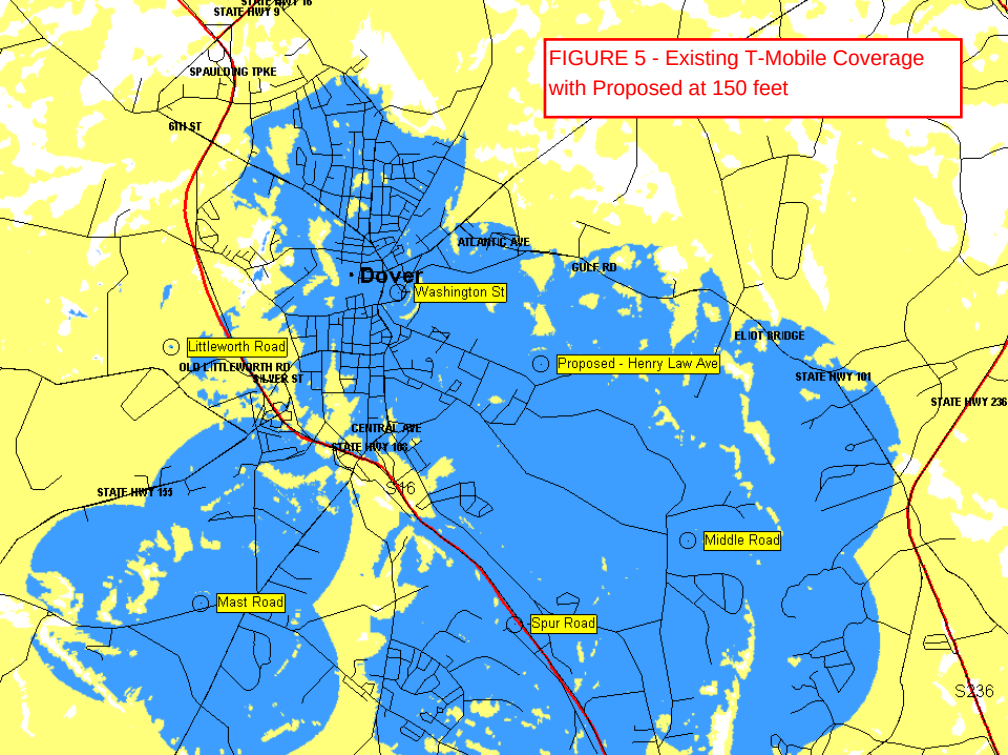


FIGURE 6 - Existing T-Mobile Coverage with
Proposed at 140 feet

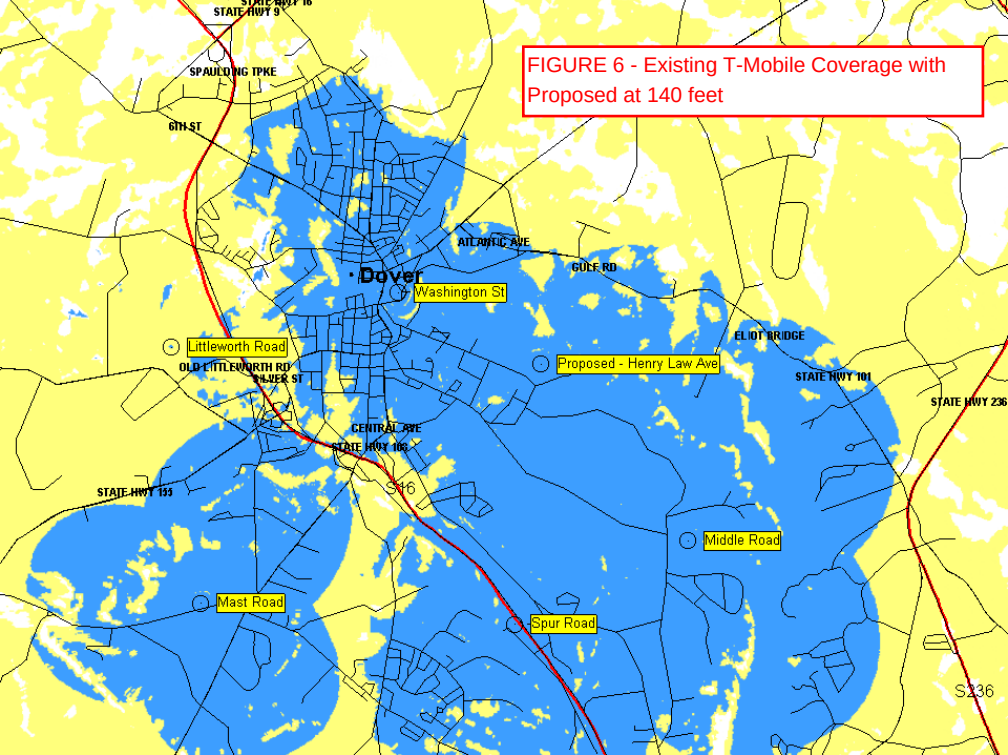


FIGURE 7 - Existing T-Mobile Coverage with
Proposed at 130 feet

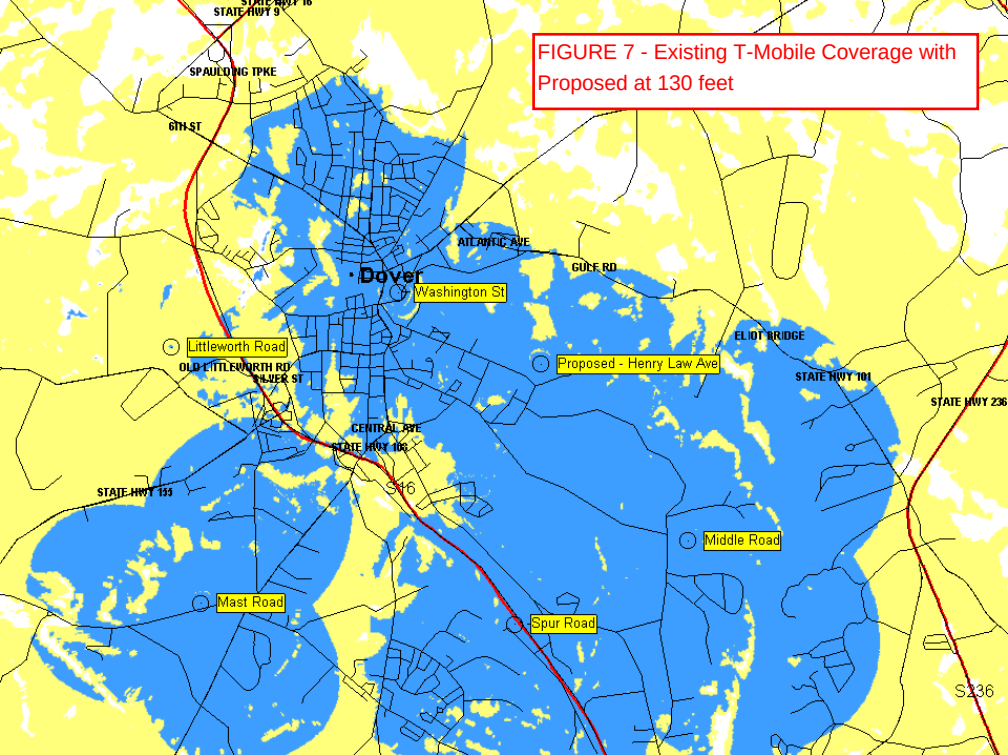


FIGURE 8 - Existing T-Mobile Coverage with
Proposed at 120 feet

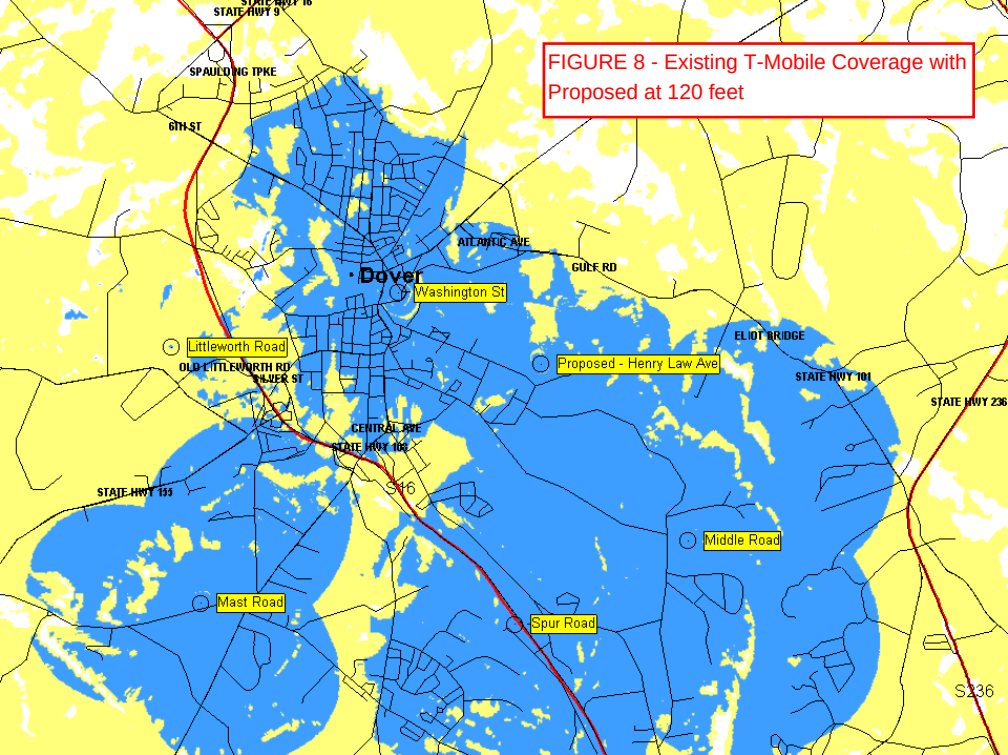


FIGURE 9 - Existing T-Mobile Coverage with
Proposed at 110 feet

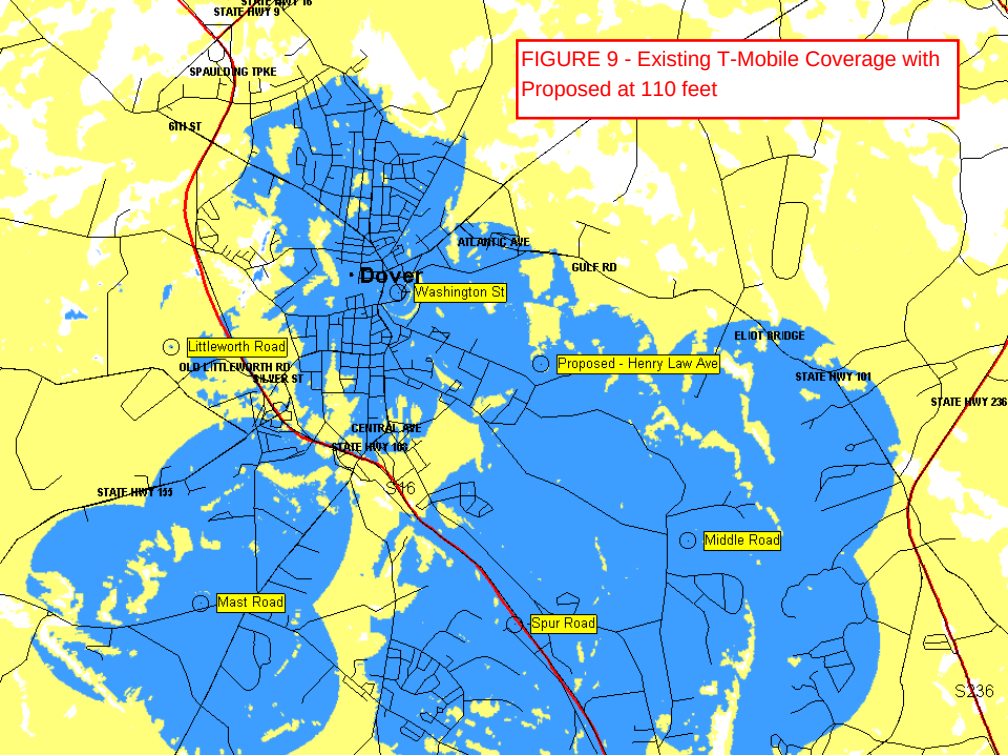
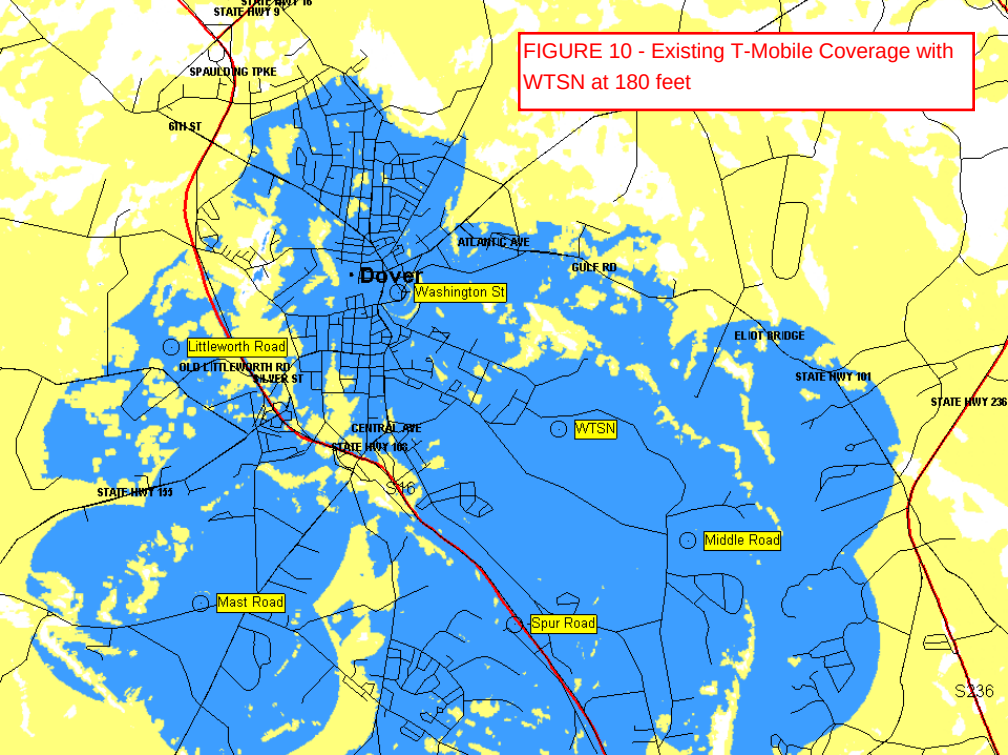


FIGURE 10 - Existing T-Mobile Coverage with WTSN at 180 feet



To The City Of Dover,

June 26, 2018

RECEIVED
Planning Office

JUL 06 2018

Dover, New Hampshire

I would like to voice my opposition to the proposed cell tower at the farm along Hanson Avenue in Dover.

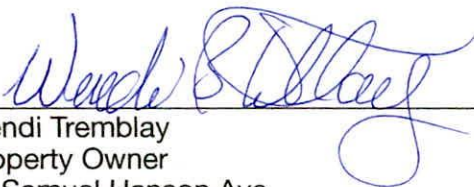
Due to my work/travel schedule, I am unable to make either of the hearings on June 26th or July 24th.

Although the tower would not be totally visible from my property located at 42 Samuel Hanson Ave, I have spoken with several realtors who claim that its presence would lower the property values of those residents nearby. We are included in that area. This is not fair to us, as we do not stand to profit from it's presence. And it is doubtful that the owner of the property where the tower would be located would share any of his income from it with those of us whose properties are not of lesser value because of it.

In the event that we lose, and this tower be built, I would like to absolutely insist that it, at LEAST, be disguised to look like a tree. These packages are available to be put on cell towers. While it is the tallest "tree" around, at least it would not be the eye sore that a regular cell tower is. There is one I have seen along HWY 684 in New York State. The cost of this should be shouldered by either T-Mobile, (who wants the space in the first place), or the property owner on Hanson Ave where the tower will be located, (since he intends to profit from it), or a combination of both. None of this, nor any road upgrades to get equipment in, should ever be paid for with tax dollars of Dover citizens.

But ideally, this tower should be built somewhere else.

Thank you for your time.



Wendi Tremblay
Property Owner
42 Samuel Hanson Ave
Dover, NH. 03825
(603)767-2543



VSS

Your Visual Data Partner

Kevin Delaney
Industrial Tower and Wireless, LLC
40 Lone Street
Marshfield, MA 02050

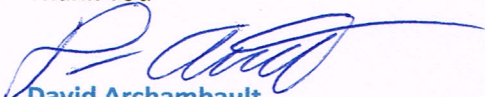
Dear Mr. Delaney

Virtual Site Simulations (VSS) was hired as a 3rd party vender to perform a "Balloon Test" and prepare a "Photo Simulation Package". VSS has completed hundreds of these items over the last almost 5 years, for many Carriers, Site Acquisition companies, Private Citizens and Municipalities. VSS's goal is to give an accurate overall representation of the proposed communication facility's predicted visibility. VSS is not claiming to show all possible visible views or all possible locations where no visibility is available.

This letter also confirms that on 6-9-18 from 8:00 am to 12:00 pm Virtual Site Simulations conducted a "Balloon Test" (test) at 200 Henry Law Ave, Dover, NH 03820, approximately located at 43-11-22.50N 70-51-18.90W. The weather the day of the test was partly cloudy with a wind of approximately 5-9 mph in the morning and increasing as the day went on. The balloon was flown at a height of 180 feet, to the base of the balloon.

This Balloon Test consisted of floating a red 3.5 foot diameter red balloon at the end of a measured line made out of a synthetic braided non-stretch material. The line is measured with a standard tape measuring tool and clearly marked for confirmation.

Thank You


David Archambault
Virtual Site Simulations, LLC.
Vice President
Business Development



Office: (401) 229-5885
Mobile: (401) 207-1088
www.virtualsitesimulations.com

Thursday, June 14, 2018



IDK Communications

July 9, 2018

Ms. Elena Piekut
Dover Planning Department
City of Dover
288 Central Avenue
Dover, NH 03820

RE: Industrial Tower and Wireless Application – 200 Henry Law Avenue

Dear Ms. Piekut,

IDK Communications (“IDK”) has been tasked with the following scope pertaining to the above referenced subject.

- 1.) Review the technical information for existing and proposed sites provided by the applicant along with T-Mobile’s RF Report and coverage maps dated March 20, 2018
- 2.) Review the application provided by the applicant
- 3.) Perform an independent coverage analysis
- 4.) Provide a written summary report with outputs

Radio Frequency (RF) Coverage Analysis:

When analyzing a site for radio frequency propagation several factors contribute to the overall performance. Of great importance are factors such as height above average terrain, tree density, building density and construction, frequency and equipment performance specifications.

The following paragraphs identify characteristics of each item used in determining overall performance.

Equipment specifications:

It is important to first determine whether a candidate site is limited by the radio path from the handset in a vehicle or building to the radio base station at the tower or by the radio path from the base station at the tower to the handset in a vehicle. In most cases because of the limited output power of the handset the path from the vehicle or inside a building to the radio base station at the tower is your limiting factor. Once this is known input parameters for both the base station and the handset are used to calculate the overall receive parameter used in the propagation modeling.

Height above average terrain:

Another important factor in determining a site's viability is how high the antennas will be in relation to the surrounding terrain. In the cellular/PCS world being at a maximum height above the average terrain is not necessarily a good thing since the systems are designed to provide handoffs to adjacent sites. Cellular/PCS carriers will re-use frequencies at different sites so it is important not to create interference with themselves. This philosophy differs from that of older wireless paging systems for example where sites were picked for their greater heights above average terrain. Cellular/PCS sites are picked by how they relate to the area that requires coverage. These areas are where the general population lives and commutes. A site that provides for coverage within a geographical area does not need to be on the highest point for that area but rather an area that provides enough clearance above the average terrain.

Tree Density:

Going along with height above average terrain is tree density. This factor is important because where the height of the antennas just clears the overall tree canopy in the surrounding area there may be additional losses associated with foliage. This loss can vary depending on types of trees and the density of the area. These losses are taken into account when determining propagation. It is also important to note that tree losses at the PCS frequencies of 2100 MHz are greater than the cellular frequencies of 700/800 MHz. Industrial/T-Mobile's application is for operating in the 2100 MHz frequency range.

Building Density and Construction:

Another factor in the determination of propagation is the building density and construction. Buildings can exhibit different types of losses depending on the construction material. Appropriate RF parameters for building density can be used when modeling coverage for areas such as Dover.

Input parameter values are chosen and then used in statistical calculations to determine if a viable signal is available for a particular area. In some cases coverage deficient areas are caused by shadows from particularly high terrain. Elimination of the deficient area may sometimes only be accomplished by increasing antenna height or by selecting an alternative site if the heights become too great.

Site Configuration Options

Antenna Support Structures

When designing an antenna site there are several options with respect to the structure that supports the antennas. Two of the most basic structures are lattice and monopole towers.

The lattice tower consists of three or four legs with interconnecting braces and is capable of heights in excess of 300 feet. The lattice towers can be either guyed with wires or self-supporting. With structural capacity being equal the self-supporting structures are wider than the guyed counterpart version.

The monopole structures are possible to heights of 190 feet. As their heights increase so does the complexity of the foundations used to support the structure. Antennas can be either mounted on the exterior of the pole with the transmission lines inside the pole or they can be mounted inside the pole with the transmission lines. Mounting the antennas inside the pole creates a more stealth design and they can also be disguised as flagpoles or trees. Mounting antennas within a pole however will cause the carriers to take up more vertical space and thus the amount of co-location will decrease. If antennas are mounted outside the pole they can be flush mounted to the exterior of the pole to reduce the visual impact. Doing this would also have the same result as mounting the antennas inside with respect to the co-location opportunities. The pictures below offer three types of antenna installations outside of a monopole.



Non-Flush Mount
Install



Flush Mount Install



Monopine Stealth

Equipment Powering

Typically a cell/PCS carrier constructs a site with an electrical feed and a backup option in the event of an AC failure. The electrical feed to a site is either supported overhead by utility poles or is trenched underground through conduits.

The backup power option can consist of various options such as a propane or diesel generator, or batteries. Out of all these options the generator would be the loudest when activated. Typically for maintenance purposes the generators are run once a week for a short duration.

Coverage Analysis:

IDK was tasked to validate the radio frequency performance of the T-Mobile data that was supplied to the Planning Board. T-Mobile provided proposed and existing system information for its radio sites along with proposed signal level thresholds for providing in-building and in vehicle coverage. The site data together with GIS information from the City were used in IDK's RF analysis. The output of these analyses is a map or plot that depicts the radio frequency propagation prediction for each site. IDK has presented an analysis using the 2100 MHz frequency band currently used by T-Mobile.

The sites used by IDK in the analysis are as follows:

- 1.) Existing and planned T-Mobile radio sites in Dover and adjoining municipalities
- 2.) Proposed site at 200 Henry Law Avenue
- 3.) Alternative site at WTSN

The City also requested an analysis of using heights from 110 to 180 feet for the proposed location.

Results:

Propagation analysis was performed using the existing and proposed T-Mobile radio sites. Maps are included at the end of this report that depict the results with the coverage areas for each site in yellow and blue. Areas with yellow represent reliable LTE coverage for in vehicle. Areas in blue represent reliable LTE coverage for in building. IDK confirms the signal level thresholds used by the applicant in the analysis as typical for the region. Areas with less than reliable coverage are depicted in white. The following paragraphs identify each scenario with the associated results:

FIGURE 1

IDK ran LTE coverage for all existing and planned T-Mobile sites to determine if a coverage gap existed in the City of Dover, specifically in the targeted area of Henry Law Ave, Court Street, East Watson Ave and the adjoining roads. The results show that indeed there exist gaps in coverage in those areas of the City for in building coverage.

FIGURES 2 thru 9

The City requested that heights from 110 thru 180 feet be analyzed for the proposed location on Henry Law Avenue. Figures 2 thru 9 show T-Mobile existing coverage with the proposed site starting at 180 feet and moving to 110 feet. At the 180 foot level the site provides in building coverage to the targeted areas of Henry Law Ave, Court Street, East Watson Ave and the adjoining roads. The site provides fill in between the existing sites at Washington Street and Middle Road. At the 140 foot level we see in building coverage start to be diminished along Gulf Road and East Watson Ave. At 130 feet and lower noticeable loss of in building coverage is realized in the East Watson Ave and adjoining roads areas.

FIGURE 10

The City also requested an analysis of the WTSN property. Figure 10 identifies the T-Mobile coverage with the addition of site at this property at a height of 180 feet. The site provides similar in building coverage to the Henry Law Avenue location minus a few spots around adjoining roads off Court Street.

Wireless Facilities on Permitted Parcels

IDK reviewed the fifteen locations that are approved as a matter of right under the City's Zoning Ordinance and agrees with the analysis by the applicant in not providing coverage to the targeted areas. The location of these parcels are to distant from the targeted coverage area and cannot satisfy the requirements.

Coverage Summary

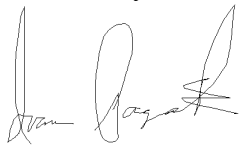
The following summarizes the findings of the coverage scenarios:

- Today there exist LTE in building coverage gaps in the City of Dover in the Henry Law Ave, Court Street and East Watson Street areas for T-Mobile.
- The proposed site at 200 Henry Law Avenue at 180 feet provides in building coverage to those areas identified to have gaps.
- Reducing the height of the structure will start to affect in building coverage at the 140 foot level.

- The location at WTSN provides similar in building coverage to the proposed location at 180 feet.
- The City's fifteen approved locations under the Zoning Ordinance will not satisfy the targeted in building coverage requirement.

IDK has no other additional comments regarding the referenced application and find that standard engineering practice was used in their coverage analysis. If you have any questions please feel free to contact me at (978) 375-7914.

Yours truly,

A handwritten signature in black ink, appearing to read 'Ivan Pagacik', with a stylized flourish at the end.

Ivan Pagacik

LAW OFFICE OF STEVEN E. GRILL
PO Box 10186
Bedford, NH 03110
603.488.2371
sgrill@stevegrill.com

July 12, 2018

BY EMAIL

Zoning Board of Adjustment
City of Dover, NH
City Hall - 288 Central Avenue
Dover, NH 03820
ATT: Ms. Elena Piekut, Assistant Planner/Zoning Administrator

Re: Case No. Z18-07
Application of Industrial Tower and Wireless, LLC, for a Variance for a Wireless
Telecommunications Facility proposed to be installed at 200 Henry Law Avenue, Dover,
NH

Dear Members of the Board:

I am writing on behalf of the Applicant in the above matter. Because this has been a fairly lengthy and complex process, we believe a summation might be useful and we thus respectfully submit this letter as the Applicant's closing memorandum in order to call the Board's attention to certain evidence and certain legal issues.

As we noted in the "Supplement" to the Application which was submitted on or about March 23, 2018, pursuant to Article XIII, Section 170-52.C (4) of the Dover Zoning Ordinance, the Dover Zoning Board of Adjustment ("ZBA") is empowered to grant a variance "where unusual difficulty or special hardship would be imposed by the literal application and rigorous enforcement of this Chapter." This criterion appears to be less restrictive – that is, more flexible – than the relevant New Hampshire statute, which is RSA 674:33. Under that statute, the Applicant is entitled to a variance if it establishes that (a) denial of the variance would result in unnecessary hardship to the applicant; (b) no diminution in value of surrounding property would occur; (c) the proposed use would not be contrary to the spirit of the Ordinance; (d) granting the variance would benefit the public interest; and (e) granting the variance would do substantial justice.

For the purposes of this Application, the Applicant has assumed (without conceding) that all of the statutory criteria must be met and will address each of them. The Applicant respectfully submits that it meets all of these criteria, as well as the “unusual difficulty or special hardship” criterion of the Ordinance.

1. Denial of the variance would result in unnecessary hardship.

In cases involving wireless telecommunications facilities, “hardship” has a special meaning under a federal statute known as Section 704 of the Telecommunications Act of 1996. In this regard, municipalities have a duty to adopt and apply regulations in a manner which affords builders of wireless facilities, such as the Applicant, and providers, of wireless services, such as T-Mobile, a reasonable opportunity to build the facilities necessary to provide adequate and reliable wireless services to their customers.¹ If there is no such opportunity, then the regulations will be deemed to “effectively prohibit” the provision of wireless services, and this would be a violation of federal law. This issue was explored by the federal court in *Nextel v. Wayland*, 231 F. Supp. 2d 396, 406-07 (D. Mass. 2002), which held that “the general law in Massachusetts regarding variances” gives way to federal law in the “special case” of wireless communications facilities. The court explained that a zoning board cannot deny a variance if in so doing it would have the effect of prohibiting wireless services. *See id.* at 406. When a wireless carrier needs to close a significant gap in coverage, there is a “unique circumstance” which warrants a finding of a hardship; thus, a grant of a zoning variance is required “in order to avoid an effective prohibition of wireless services,” *See id.* In addition, the possibility that a zoning decision might violate the TCA is evidence which a local zoning authority must take into account. *See id.* Although *Wayland* involved Massachusetts zoning law, the same principles apply in New Hampshire cases. *See, e.g., Indus. Communs. & Elecs, Inc. v. Town of Alton*, 2012 U.S. Dist. LEXIS 135158 (D.N.H. 2012) (where evidence established that zoning regulations made it impossible to provide adequate coverage without a variance, ZBA's decision to deny a variance had the effect of prohibiting the provision of wireless services in violation of federal law.) The New Hampshire Supreme Court has expressly recognized this interplay between federal law and New Hampshire law. *See Daniels v. Town of Londonderry*, 157 N.H. 519 (2008) (local land use officials must consider federal law when deciding applications for permission to construct wireless facilities, because federal telecommunications law acts like an “umbrella” over

¹ There has been some discussion regarding whether or not the Applicant in this case is entitled to the benefit of this statute because it is not proposing to provide wireless services itself, but rather only to build a “personal wireless service facility” as that term is defined by Section 704, *see* 47 U.S.C. §332(c)(7)(C)(ii), which would be utilized by T-Mobile and, eventually, by other licensed carriers. The Applicant believes it is now settled law that builders of “personal wireless service facilities” are entitled to the full benefits of Section 704, whether or not they are actually going to be providing services. Please see my letter to the ZBA dated April 16, 2018, and the case of *Industrial Tower and Wireless, LLC v. Town of Foster*, which was cited and included therewith. It is important to note, moreover, that T-Mobile representatives appeared with the Applicant at each hearing in this matter and expressed the need to fill a significant gap in coverage. In addition, the Applicant has stated that it would agree to a condition of approval, pursuant to which it will not begin construction unless and until it has a legally binding commitment from T-Mobile to deploy antennas on the facility. We respectfully submit that on these facts there can be no question that the Applicant is entitled to a variance if it can show that a variance is necessary in order for T-Mobile to close a significant gap in its wireless network.

otherwise applicable state law). *See also, Omnipoint Holdings, Inc. v. City of Cranston*, 586 F.3d 38 (1st Cir. 2009); *Cellular Telephone Co. v. Town of Oyster Bay*, 166 F.3d 490, 495 (2nd Cir. 1999); *Nextel v. Manchester-by-the Sea*, 115 F. Supp.2d 65, 66-67 (D. Mass. 2000).

In our case, the record plainly establishes that T-Mobile has a significant gap in coverage. Any doubt in this regard is resolved by the conclusion of the Town's independent expert, who found that T-Mobile does have "LTE in-building coverage gaps in the...Henry Law Ave., Court Street and East Watson Street areas." *See* Report of IDK Communications dated July 9, 2018 ("IDK Report") at 5. Moreover, the record is undisputed that more than 1,500 people live in the area where the coverage gap exists. *See* letter from Steven E. Grill, Esq. dated June 7, 2018, and attached exhibits. T-Mobile needs the proposed facility to provide adequate "in building" coverage not only any of the more than 1,500 people who are already customers, but also to have an opportunity to serve any of the remaining businesses or individuals in this area who are not already customers but who may become customers.

The record also establishes that the proposed facility is the only feasible way to provide the required coverage. IDK Communications found, as T-Mobile had reported, that the fifteen parcels on which wireless facilities can be built as a matter of right "are to[o] distant from the targeted coverage area and cannot [be utilized to] satisfy the [coverage] requirements." *See* IDK Report at 5.

There also are no existing structures available in the vicinity which are tall enough to accommodate T-Mobile's antennas. Although there has been discussion about utilizing 101 Back Road, where radio station WTSN has four tall AM radio antenna towers, T-Mobile explained that these towers are not structurally capable of supporting wireless telecommunications antennas, so a new tower would have to be built. This, of course, would require a use variance and, more importantly, it would require the permission of the landowner. Although the landowner expressed some willingness to consider building a new tower, he ultimately stated that even if he built such a facility, he would not grant a lease to T-Mobile unless it was terminable on no more than one year's notice, which is not commercially reasonable. Thus, as a practical matter, the WTSN site is not available for construction of a new antenna tower.

This leaves the subject parcel as the only feasible alternative. There are no other parcels in the vicinity which have the unique features of the subject parcel, such as size and topography, that would allow a tower to be built. Thus, unless the requested variance is granted, T-Mobile will be effectively prohibited from closing a significant gap in its wireless network.

The Applicant notes that IDK Communications found that the required coverage could be provided at a lower height than the 180-foot height requested. *See* IDK Report at 5. T-Mobile's engineer Ryan Monte de Ramos had previously testified that T-Mobile could probably achieve its coverage objective with a height of 170 feet, ten (10) feet lower than the requested height of 180 feet. IDK suggests that a noticeable degradation in coverage begins to occur at 140 feet. The Applicant has been informed that T-Mobile is in the process of reviewing this data, as well as its own data, in order to determine what it believes is the absolute minimum acceptable height.

Please note that this minimum height will necessarily include a margin of error, consistent with T-Mobile's network design principles. We will present this information at the hearing next week.

Although restricting the height of the facility to 170 feet (and perhaps even less) would allow T-Mobile to meet its objectives, the Applicant respectfully asks the ZBA to consider whether the additional height requested should be allowed in order to make sure there is adequate room for future co-locators.

In any event, since T-Mobile has a significant gap in coverage and since there are no other light of the locations from which it would be feasible to provide the necessary coverage, the Applicant respectfully submits that a "hardship" exists (within the meaning of the law as it applies to the special case of wireless antenna facilities) and that the grant of a variance is warranted.

2. No diminution in value of surrounding properties would be suffered.

Federal law also has an important role to play in determining what weight can be given to the concerns expressed by residents regarding the impact upon their property values. First, the law does not generally allow weight to be given to generalized concerns regarding property values, particularly where, as in this case, those concerns are rebutted by an expert report. *See, e.g., Oyster Bay, supra*. The concerns of residents, without more, do not amount to "substantial evidence" which might be used as the basis for a denial of a variance. *See, e.g., Manchester-by-the-Sea, supra*. Second, the law does not allow concerns about property values to be the basis for a denial of a variance where, as in this case, the same concerns will be present at any other possible location. If this were not the case, then municipalities would be allowed to administer a set of criteria that no applicant could ever meet (such as finding a site where no one in the neighborhood expressed any concern about property values). Federal law does not allow this type of criteria to be imposed. *See generally, Town of Amherst v. Omnipoint Communications*, 176 F.3d 9 (1st Cir. 1999).²

In any event, the evidence submitted by the Applicant establishes that granting the requested variance and allowing the construction of the Facility will not diminish the value of surrounding properties. The report of Real Estate Consultants of New England, Inc., submitted on or about May 10, 2018, contains a detailed analysis of the effects of antenna towers on neighboring residential properties, and sets forth extensive data which establishes that there simply is no impact on property values.

² Of course, in this case there are no other feasible locations, but even if there were, they would necessarily be in the same or approximately the same neighborhood, and would thus raise all of the same concerns and issues that residents have brought forward in this case.

In addition, the balloon test conducted on July 9 demonstrated that at least some of the concerns expressed by residents were overstated, since the facility will not create a significant visual impact on most properties in the neighborhood, or on most other locations in the area.

What is more, since it is likely that T-Mobile and the Applicant will be able to live with a tower that is somewhat shorter than the 180-foot height originally proposed, any visual impacts will be even less than what was revealed by the balloon test.

In short, there is no substantial evidence that the value of neighboring properties will be diminished by allowing the Facility to be built as proposed by the Applicant. There also is no basis to conclude that any visual impacts could be minimized by finding a different location for the facility, even if it were possible to do so (which it is not.)

3. The use is not contrary to the spirit of the Ordinance.

The Dover Zoning Ordinance was adopted to:

promote the health, safety, and the general welfare of Dover's residents by serving to facilitate the adequate provision of transportation, water, sewer, schools, parks and other public requirements; to encourage the maintenance of Dover's economic and aesthetic quality of life; and to encourage the most appropriate use of land throughout the City of Dover.

See Ordinance, Article 1, Section 170-3. Similarly, the City's Master Plan, which has been undergoing review since 2012, and the documents which set forth recommendations resulting from that review, express desires for orderly economic growth, strong infrastructure and excellent municipal services.

Plainly, in today's world, wireless services are an essential part of any economic development plan, in that such services are considered necessary by both businesses and individuals. Wireless antenna facilities are more than just a convenience to City residents but are an essential part of life. In fact, more and more people are doing away with land lines all together and relying on wireless devices (including not only phones but also tablets and computers) for voice and data communications. This trend will certainly continue into the foreseeable future.

Wireless services are also an essential component of municipal safety and first response plans. In the event of accidents or other catastrophes, people expect that that their mobile devices will allow them to communicate quickly with the appropriate authorities as well as with their loved ones. Adequate coverage is thus essential.

Given the importance of adequate wireless communications and the limited area which each antenna site can serve, deployment of additional wireless antenna sites is consistent with the City's overall planning goals. Moreover, at the location proposed, the Applicant can build a site from which several carriers can close gaps in coverage, which will minimize the need for multiple sites in this part of the City. In addition, the facility proposed by the Applicant will meet

all of the dimensional requirements and other Performance Standards set forth in Section 170-22.E of the Ordinance. The Applicant believes that there is only one other site in this part of Dover where it is possible to locate a new freestanding wireless antenna facility on which will meet the City's standards for such facilities. That other site, the WTSN property, is not available.

The Applicant submits that, except for the fact that the parcel in question is not on the list of fifteen (15) enumerated parcels set forth in the Ordinance, the proposed Facility will comply in all respects with the letter and the spirit of the Ordinance.

4. Granting the variance would be of benefit to the public interest.

Advanced wireless telecommunications services, such as those provided by T-Mobile, and by the other providers that the Applicant expects will want to co-locate their antennas on the proposed facility, are an essential part of the communications infrastructure in today's world. Increasingly, families, businesses, public safety officials and government agencies rely upon mobile communications and mobile computing. Devices such as smartphones and tablets are used everywhere, and many families no longer have land line phones at all. What is more, essential public safety services such as E-911 require a fully-developed mobile network. It is precisely because of this increased public demand and public need that the Applicant must build the Facility. For example, if a fire, serious crime, or other catastrophe were to occur in this part of Dover, the lack of network coverage could cause delays in notifying public safety authorities. During the hearing process, other concerns of general interest were raised, such as the potential adverse impact on historic properties in Dover. After careful review, however, neither the New Hampshire Division of Historic Resources nor the Dover Heritage Commission found that any such impacts would be created. Similarly, area residents raised the possibility of impacts on wildlife. Once again, however, the matter was considered by the New Hampshire Natural Heritage Bureau, which found there was no cause for concern.

In short, the Facility that the Applicant proposes to construct is entirely consistent with the public interest.

5. By granting the variance substantial justice would be done.

The Applicant recognizes that its proposal is controversial. However, after learning that T-Mobile had a significant gap in coverage which required a facility in this vicinity, the Applicant searched the entire area and selected what is not only the best possible location, but also the only feasible location. The parcel already includes agricultural and electric transmission uses, and is in close proximity to four (4) existing radio transmission towers. In fact, many homes have been built in this area despite the existence of the four large AM antenna towers, and the existence of those antenna towers does not appear to have been a factor in either the value or the marketability of any of those homes.

Even more important, unless it obtains the requested variance is granted, T-Mobile (and likely other wireless carriers, as well) will be unable to fulfill their obligations under federal law to provide reliable wireless services to their customers. Thus, substantial losses will be suffered by the Applicant and by T-Mobile (and potentially other wireless carriers) if the request for a variance is denied. Even more important, members of the general public will also be harmed, in that they will be unable to obtain the level of wireless services required by individuals, businesses and public safety officials.

Accordingly, substantial justice will be done by granting this request for variance and permitting Industrial Communications to construct the Facility.

Conclusion

The thoughtful deployment of wireless facilities in a city such as Dover is essential in order for people who work, live and travel through the City to enjoy the safety, convenience and business benefits which only reliable wireless services can provide.

The City's Zoning Ordinance goes a good deal of the way in providing a reasonable opportunity for such services to be provided in some parts of the City. Unfortunately, however, the very limited number of parcels where a new freestanding facility can be located makes it impossible to provide adequate coverage in all parts of the City. This problem has grown more acute with the explosive growth of wireless devices, which have become a primary means of communication for citizens and businesses, and which now provide vital links to the Internet. More sites are needed, and more flexibility is thus required with respect to the restrictions imposed by the Ordinance.

Here, the Applicant has selected a site on which a facility can be built which complies with the Performance Standards of the Ordinance. The adverse impacts of the Facility have been minimized as much as possible, and the proposal thus honors the objectives expressed in the Ordinance while allowing a critical need in the City to be addressed. Unfortunately, the facility cannot be invisible, but there simply is no better solution to the problem of inadequate coverage than the solution which the Applicant has proposed.

The Applicant thanks the Board for its patience and for its careful consideration of the issues raised by this Application and by the submissions made by others.

Very truly yours,

Steven E. Grill

cc: Christopher T. Hilson, Esquire (By email)