

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051 Phone: (860) 827-2935 Fax: (860) 827-2950 E-Mail: siting.council@ct.gov www.ct.gov/csc

April 3, 2009

Steven L. Levine Real Estate Consultant New Cingular Wireless PCS, LLC 500 Enterprise Drive Rocky Hill, CT 06067-3900

RE: **EM-CING-069-090213** - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 43 Connecticut Mills Avenue, Killingly, Connecticut.

Dear Mr. Levine:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- The replacement antennas shall be painted to match the tower if technically feasible; and
- The Council shall be notified in writing that the replacement antennas were painted to match the tower or in the alternative to explain why painting the antennas was not technically feasible.

The proposed modifications are to be implemented as specified here and in your notice dated February 11, 2009, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.



Thank you for your attention and cooperation.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/MP/laf

c: The Honorable Janice Thurlow, Chairman Town Council, Town of Killingly Bruce E. Benway, Town Manager, Town of Killingly Roger Gandolf, Zoning Officer, Town of Killingly Mountaintop Services



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Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

Internet: ct.gov/csc

February 18, 2009

The Honorable Janice Thurlow Chairman Town Council Town of Killingly Town Office Building 172 Main Street P. O. Box 6000 Danielson, CT 06239-6000

RE: EM-CING-069-090213 - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 43 Connecticut Mills Avenue, Killingly, Connecticut.

Dear Ms. Thurlow:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by March 4, 2009.

Thank you for your cooperation and consideration.

1. Phelps

Very truly yours,

S. Derek Phelps Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Roger Gandolf, Zoning Officer, Town of Killingly Bruce E. Benway, Town Manager, Town of Killingly



EM-CING-069-090213





New Cingular Wireless PCS, LLC 500 Enterprise Drive Rocky Hill, Connecticut 06067-3900 Phone: (860) 513-7636 Fax: (860) 513-7190

Steven L. Levine Real Estate Consultant

HAND DELIVERED

February 11, 2009

Honorable Daniel F. Caruso, Chairman, and Members of the Connecticut Siting Council Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051

ORIGINAL DECENTION
FEB 13 2009

Connecticut
Siting Council

Connecticut
SITING COUNCIL

Re: New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 43 Connecticut Mills Avenue, Killingly (manager, Mountaintop Services)

Dear Chairman Caruso and Members of the Council:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("AT&T") plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and attachments is being sent to the chief elected official of the municipality in which the affected cell site is located.

UMTS technology offers services to mobile computer and phone users anywhere in the world. Based on the Global System for Mobile (GSM) communication standard, UMTS is the planned worldwide standard for mobile users. UMTS, fully implemented, gives computer and phone users high-speed access to the Internet as they travel. They have the same capabilities even when they roam, through both terrestrial wireless and satellite transmissions.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in AT&T's operations at the site. Also included is documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

The changes to the facility do not constitute modifications as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2).

- 1. The height of the overall structure will be unaffected.
- 2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound other than some enlarged equipment pads as may be noted in the attachments.
- 3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.
- 4. Radio frequency power density may increase due to use of one or more GSM channel for UMTS transmissions. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons, New Cingular Wireless respectfully submits that the proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 513-7636 with questions concerning this matter. Thank you for your consideration.

Sincerely,

Steven L. Levine

Real Estate Consultant

Attachments

NEW CINGULAR WIRELESS

Equipment Modification

43 Connecticut Mills Avenue, Killingly

Site Number 5462 Former AT&T Site

Local P&Z Approval 9/2003 (see attached documentation)

Tower Owner/Manager:

Town of Killingly

Geographic Coordinates:

N41° 49' 02" and W71° 53' 03" (see attached location map)

Equipment Configuration:

Water Tank (dry)

Current and/or Approved: Three panel antennas @ 121 ft AGL

Six 11/4 inch coax cables

6 x 10 ft concrete pad with outdoor cabinets

Planned Modifications:

Install six Powerwave 7770 antennas @ 121 ft

Install six TMA's and six diplexers @ 121 ft Install six additional runs 11/4 inch coax

Remove one outdoor cabinet

Install one new outdoor cabinet for UMTS

Power Density:

Worst-case calculations for existing wireless operations at the site indicate a radio frequency electromagnetic radiation power density, measured at ground level beside the tower, of approximately 4.6 % of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density following proposed modifications would be approximately 9.1% of the standard.

Existing

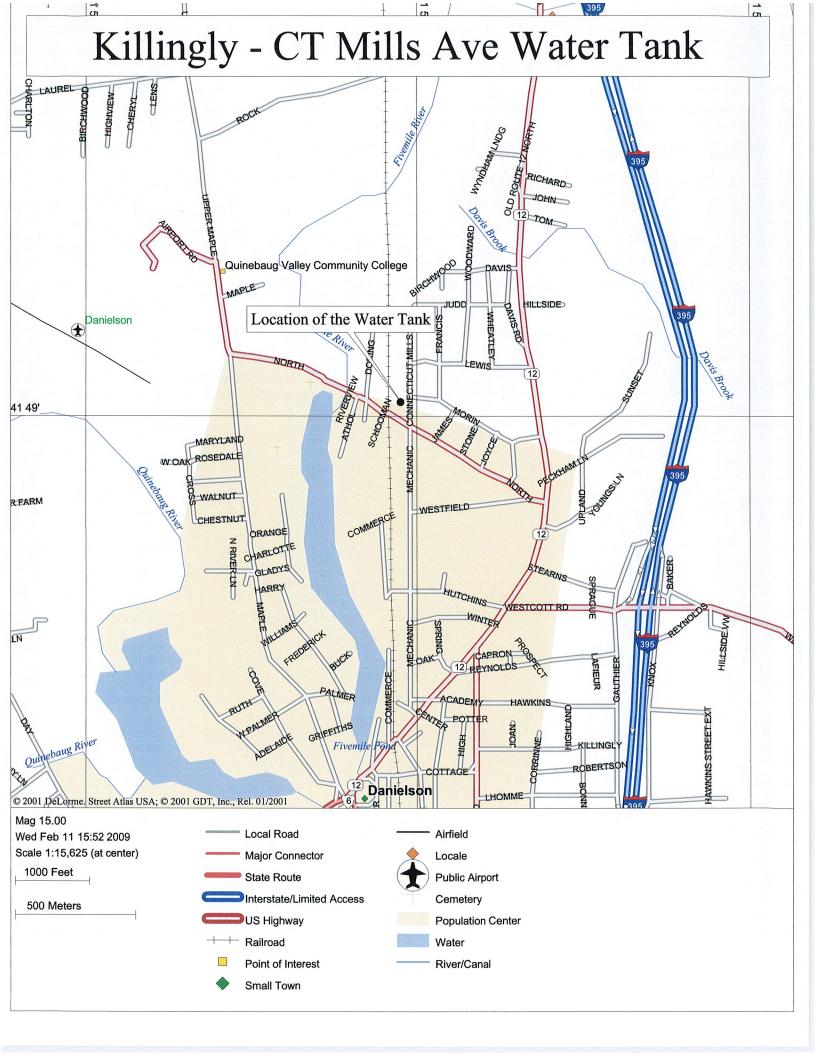
Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm²)	Standard Limits (mW/cm²)	Percent of Limit
Other Users							0.00
Cingular GSM	121	1900 Band	2	427	0.0210	1.0000	2.10
Cingular GSM	121	880 - 894	2	296	0.0145	0.5867	2.48
Total				1.4			4.6%

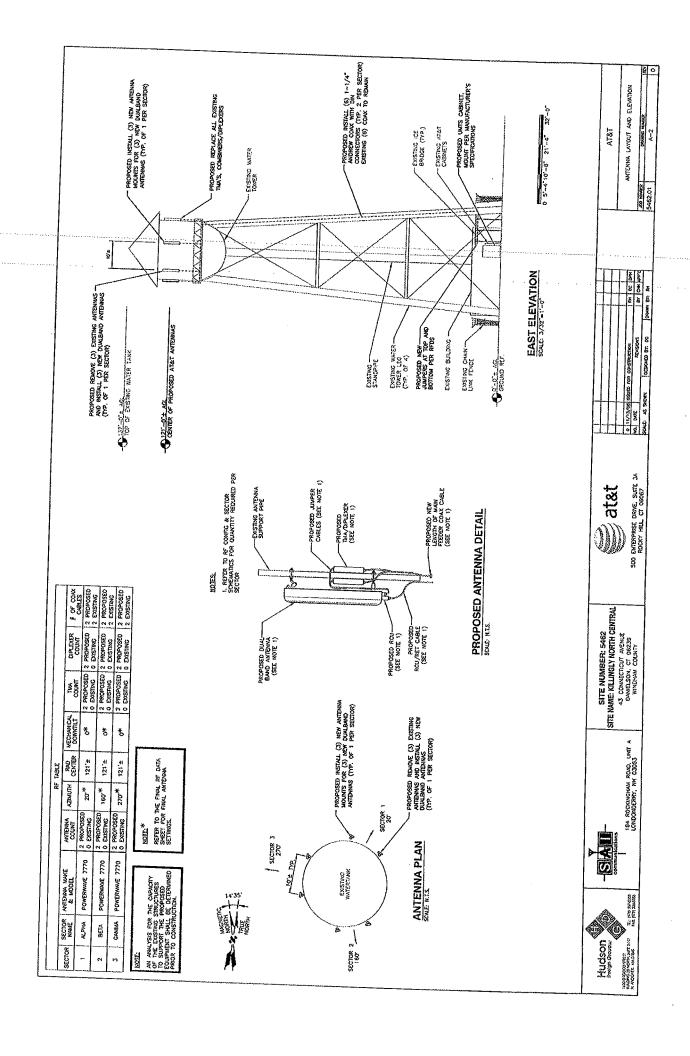
Proposed ·

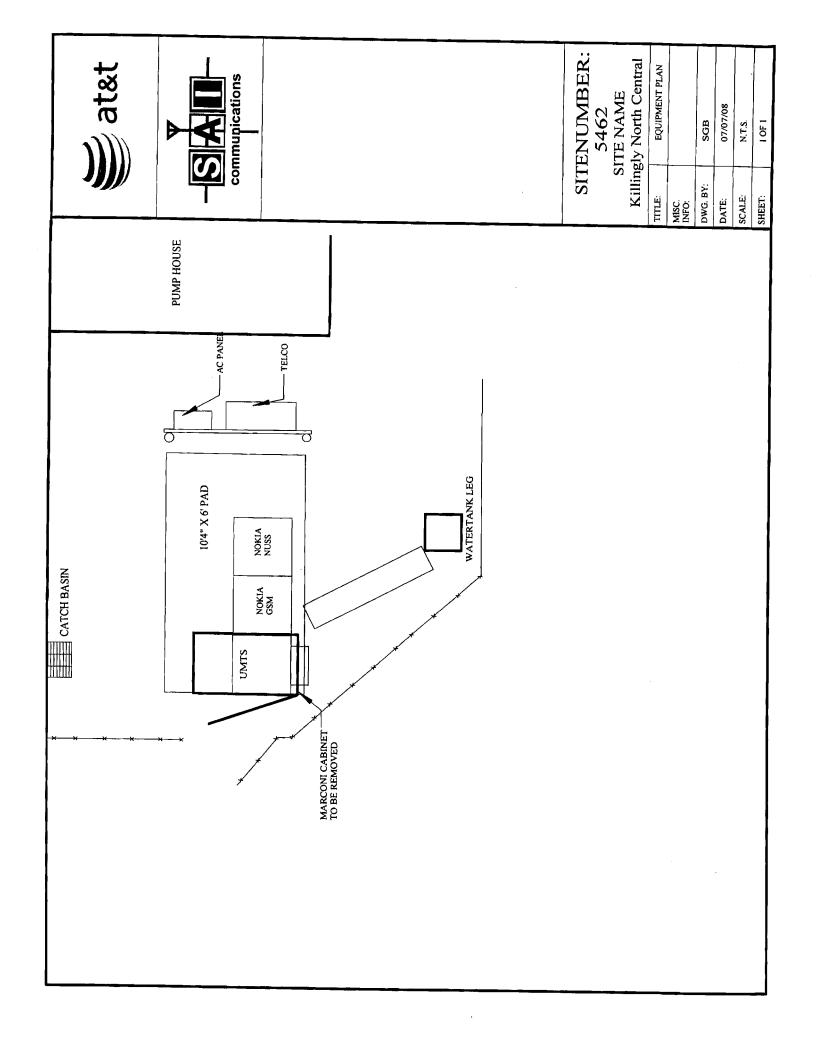
Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm²)	Standard Limits (mW/cm²)	Percent of Limit
Other Users							0.00
Cingular UMTS	121	880 - 894	1	500	0.0123	0.5867	2.09
Cingular GSM	121	1900 Band	2	· 427	0.0210	1.0000	2.10
Cingular GSM	121	880 - 894	4	296	0.0291	0.5867	4.96
Total				-50	/	0.0007	9.1%

Structural information:

The attached structural analysis demonstrates that the water tank has sufficient structural capacity to accommodate the proposed modifications. (Hudson Design Group, 12/19/08)







BOOK 858 PAGE 212

CT-462 1844,620

TOWN OF KILLINGLY

The Killingly Planning and Zoning Commission, in accordance with the provisions of Public Act Number 75-317. State of Connecticut, took the following action on September 9, 2002:

Approved with conditions Special Permit Application #02-804 - AT &T (Cuddy & Feder & Worby)

said action is hereby submitted to the Office of the Killingly Town Clerk for recording within the Killingly Land Records (and indexing within the grantor's index).

- 1. Description of premises:
 - 43 Connecticut Mills Avenue; GIS Map 176 Lot 95; Industrial Zone.
- 2. Nature of the special permit:

for six panel antennae on existing water tank

- 3. Conditions of Approval: -
 - 1. There is to be discussion with staff and a compromise reached, with painting of the water tank expected to occur. {Staff note: Staff believes the intent of this conditions is to ensure that the tank is painted and antennae matched to it to make the tank and antennae as unobtrusive aesthetically as possible. Staff further believes that discussion/agreement between the applicant and property owner as to who is responsible for cost is the intent.]
 - 2. Security fencing of the equipment cabinet and tank is to be provided and is to be black PVC dipped chain link fencing (posts and fencing).
 - 3. Lundscaping of the equipment cabinet area satisfactory to staff is to be provided.
 - 4. Demonstration of the structural analysis of the water tank tower and its existing integrity and then suitability to hold the antennae is to be provided to the town prior to the issuance of permits (particularly building permits).
- Zoning by law, ordinances or regulation which is varied, altered, or to which special permit is granted:

Date

Section 430.1.2d - Public Service Corporation

5. Name(s) of Owner:

Cuddy & Feder & Worby LLP

Attn: Lucia Chiocchio 90 Maple Avenue

White Plains, NY 10601-5196

RECEIVED

02 NOV 26 AM 10: 46

Willer of Halder

This information is certified by

Authorized Signature

Denise O. Allen

Edsis.

osition

DATE: 10/29/02

TOWN OF KILLINGLY, CONNECTICUT ZONING PERMIT

CT-467 Nº 008184

- KECPT. 7041

Complete Items #1-9 and the plot plan on the reverse side of the top sheet.	
1. Location of Property House # & Street	<u>_</u>
Tax Map Number 17 6 Block Lot 95 Zoning District MD	/olume 38) Page 23/ List 1/93
2. Property Owner's Name MORGAN WHITNGY INC.	Phone <u>860-674-7772</u>
3. Property Owner's Address if different from property location	
	BECHTEN CORP.
210 POMERDY AVE. MERTIEW, CT 06450	Phone 860-630-9042
5. Lot Size 7.4 AC Lot Frontage	8. Property Use:
6. This permit is applied for in accordance with the requirements of the Town of Killingly and/or Borough of Danielson Zoning Regulations for:	single family residential
new construction excavating/filling/earth removal	two-family residential
addition Sign	mobile home — residential
accessory structure (sheds, Change of use	multi-family — residential
satellite dishes, etc.)	☐ Industrial
swimming pool	specify
7. Proposed structure or project—	Commercial specify Communitations
Provide description and dimensions:	Professional and Business
INSTALL AUTEMA'S ON EXISTENC WATERTANK	specify
\$ COMMUNICATION EGICLE ON COME SLAD	•
	representation or omission, or failure to comply on of Killingly and/or Borough of Danielson
FOR OFFICE USE ONLY: NA 72001 to Driveway Permit	NIA
Inland Wetlands Wetlando ref 6-15 map Special Permit ne	cessary? (Yes) No
PG/s 501/c Applicant's	Name $AT+T$ No. $O_{0}2-804$
Historic District? Yes (No D) P&Z Comm	ussion Approval Date 9-9-02
Slope greater than 15%? Yes Subdivision neces Flood Hazard Zone? Ves No Applicant's	
Aguiter-Protection Zone? Application	No
Public Sewer On-Site Septic Pan Review Necessary? Yes No Variance Necessary	ission Approval Date
Applicant's Name Applicant's	Name
Application No. Application P&Z Commission Apporval Date ZBA Approv	
Approved Disapproved Date 1/26/05 Reason for Disapproval:	A
Comments: Where to all condition of	mont formed
appeared + Eliquite ment	was fill the same
Jogn What C	The
Theridal Dukanaman Offilm	•

TOWN OF KILLINGLY CONNECTICUT

172 Main St., Danielson, CT 06239 Joseph A. Pajak, Building Official

CERTIFICATE OF COMPLETION

Owner/Applicant BECHTEL CORPORATION

this is

Connecticat Basis Building Code and is hereby approved for use/occupancy as conforms substantially to the requirements of the , Use Group to certify that Building Permit No. 15621 indicated below. construction

43 CONNECTICUT MILLS AVINUE

Je 18, 2003

Joseph Pajalg/ Building Official

Date



December 19, 2008

Tim Burks AT&T 500 Enterprise Drive Rocky Hill, CT 06067

RE:

Structural Assessment

Site Number: 5462

Site Name: Killingly North Central

To whom it concerns:

Hudson Design Group LLC (HDG) has been authorized by AT&T to assess the structural capability of this referenced site with regard to the existing structure's ability to support the following field changes: 1.) replace three existing antennas with six new Powerwave 7770 antennas, TMA's and Diplexers. 2.) Design three new custom steel mounts secured to the existing water tank.

Hudson Design Group performed a visual survey of the above structure and has completed a review of photos and referenced as-built documents prepared by Tectonic/Keyes Associates dated 11-21-2002. The existing equipment locations are referenced in HDG's drawings dated 11-13-2008 (attached).

Based on our evaluation, we have determined that the EXISTING ANTENNA MOUNTS ANS SUPPORTING STRUCTURE ARE ADEQUATE TO SUPPORT THE ABOVE FIELD CHANGES. This evaluation is based on the requirements of the requirements of the TIA/EIA-222-F in conjunction with the International Building Code, with the 2005 Connecticut Supplement. Calculations and referenced documents submitted upon request.

This determination was based on the following limitations and assumptions:

- 1. Equipment and locations should not deviate from the construction drawings without written approval of the engineer.
- HDG is not responsible for any modifications completed prior to and hereafter which HDG was not directly involved.
- 3. This conclusion is based upon the assumption that the existing antenna support structure(s) was/were constructed per the referenced plans and its components are free from damage or defects at this time.
- 4. New custom steel support mounts for the three new antennas will be designed and furnished in the Construction Drawings.

If you have any questions about this project, please contact our office.

Respectfully Submitted,

Hudson Design Group LLC

Michael Cabral Project Engineer Approved by: Hudson Design Group

Daniel P. Hamm, P.

Principal

2.3.5	Structure Force Coefficients (Reference	Table 1	,
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Site Name KILUNALY NORTH CONTRACT

Site No.

3462

Done by:

MC

Checked by:

Date:

12/19/2008



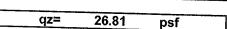
Proposed Lower Antennas

=Input Values

V= 85 (mph) z= 121 (ft)

 $K_z = 1.45$

Velocity Pressure:



[2.3.3]

Is member analyzing a tube pole structure?

If yes, then: Gh= 1.69

If no, then use value below:

Gh= 1.15

[2.3.4.1]

Gh= 1.69

Determine Cf:

If lattice structure see manual...

If cantlevered tube pole, then:

Use Correct Value form Table 1 Below:

		Table 1			
-	Force Coef	ficients (C _F) for Cantileve	ered Tubular Pol	e Structures	
(mph ft)	Round	16 Sided r < 0,26	16 Sided r > 0.26	12 Sided	8 Sided
< 32	1.20	1.20	1.20	1.20	1.20
32 to 64	130 (C) ^{1.3}	$1.78 + 1.40r - \frac{C}{91.5} - \frac{C(r)}{22.9}$.72 + (64 - C)	12.5 (C) ·6	1.20
> 64	.59	1.08 - 1.40r	.72	1.03	1.20

Derivation of Structure Coefficient (Cf):

Dp = Avg. Diam. or Avg. Least width of Tubular Pole Structure:

0.2 feet

C= $\sqrt{K_Z}$ V D_P for D_P in ft [m]

C= 20.47

1

C (mph ft)	Round Only Member			
<32	1.2			
32 < 64	2.57			
> 64	0.59			
		(Max Cf= 1.2) (Min Cf= 0.59)	Cf= 1,2	
Determine A	Ae:			[2.3.6]
If tube struct	structure, then see manua	al.		········
			Ae= 0.00 sf	

2.3.7 The force coefficient (C_A) applied to the projected area (ft²) [m²] of a linear appurtenance (A_A) not considered as a structural component shall be determined from Table 3.

Determine Ca:

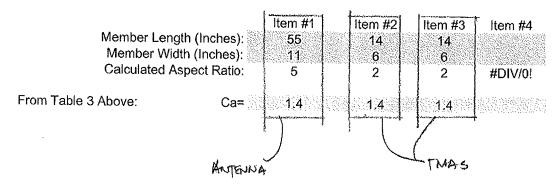
The force coefficient for cylindrical members may be applied to the additional projected area of radial ice when specified. (Refer to Figure 1.)

[2.3.7]

Aspect Ratio = Overall length/width ratio in plane normal to wind direction. (Aspect ratio is not a function of the spacing between support points of a linear appurtenance, nor the section length considered to have a uniformly distributed force.)

Note: Linear interpolation may be used for aspect ratios other than shown.

- 2.3.8 Regardless of location, linear appurtenances not considered as structural components in accordance with 2.3.6.3 shall be included in the term $\sum C_A A_A$.
- 2.3.9 The horizontal force (F) applied to a section of the structure may be assumed to be uniformly distributed based on the wind pressure at the mid-height of the section.



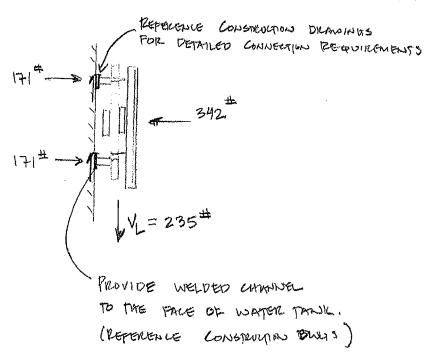
Determine Aa: (sf)

Item #1 Item #2 Item #3 Item #4 From above: Aa≔ 4.20 0.58 0.58 0.00 Calculated Ca*Aa: 5.88 0.82 0.82 0.00 Calculated Sums of Ca*Aa: 7.52 sf

Wind Force F= qz*Gh [Cf*Ae+∑(Ca*Aa)]

F= 340.51 Pounds

Item 1 calculated force F: 266.5053
Item 2 calculated force F: 37.00239
Item 3 calculated force F: 37.00239
Item 4 calculated force F: 0



ICE WEIGHT CALCULATIONS

Project: 3462 Killing	y North Central		5.5 5.6 7.6	
Thickness of ice:	1.25			
Weight of ice based on t	total radial SF area:			Antenna
Depth (in):	6			
height (in):	55			
Width (in):	11			
Total weight of ice on ol	oject:	76	pounds ice	
Weight of object:	40 poun		•	
Combined weight of ice	and object:	116	pounds	
Per foot weight of ice:				Pipe
pipe weight per foot:	3.65			•
pipe length (ft):	8			
diameter (in):	2.375			
Per foot weight of ice on	object:	4	pounds ice	/ft
Total weight of ice on ob	ject:		pounds	•
Total weight of pipe:	_	29.2	pounds	
Combined weight of pipe	e and ice:	58	pounds	:
Weight of ice based on t	otal radial SF area:			TMA (2)
Depth (in):	4			
height (in):	13			
Width (in):	6			
Total weight of ice on ob	ject:	11	pounds ice	
Weight of object:	20 pound	ds		
Combined weight of ice a	and object:	61	pounds	
TOTAL VERTICAL LOAD:		235	pounds	

^{*} Density of ice used = 56 PCF

