

479 ROUTE 17 NORTH 2nd Floor Mahwah, NJ 07430

PHONE: 201.684.005 FAX: 201.684.0060

EM-SPRINT-NEXTEL-015-080303

VIA OVERNIGHT DELIVERY

February 28, 2008

Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051
Attn: Mr. S. Derek Phelps, Executive Director

Re: <u>Sprint Nextel Corporation – exempt modification</u>

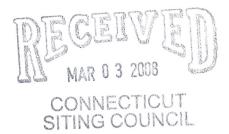
623 Pine Street, Bridgeport, Connecticut

Dear Mr. Phelps:

On or about December 12, 2007, Sprint Nextel Corporation ("Sprint") submitted an exempt modification for proposed changes to the existing facility at 623 Pine Street in Bridgeport (coordinates 41°09'49.2" N, 73°12'56.4" W). This letter and attachments, submitted on behalf of Sprint, address a further modification to be undertaken in connection with Sprint's implementation of WiMAX technology, and constitute notification 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 Mayor of Bridgeport.

The changes to the panel antennas described in the December 12, 2007 filing will be implemented as described previously. However, the 1' microwave dish planned for installation at the 85' level will instead be installed at the 240' level on the existing 250' tower. Attached is an elevation drawing depicting the planned change, documentation of the structural sufficiency of the tower to accommodate the dish at the higher level, and a power density calculation reflecting the modification to Sprint's operations at the site.

The changes to the facility do not constitute a modification 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. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50i-72(b)(2).



ORIGINAL

- 1. The height of the overall structure will be unaffected. The location of the iDEN and WiMAX antennas will remain at 85' AGL, and the dish will be installed at 240' AGL, below the top of the 250' tower.
- 2. The addition of the dish will not have any effect on the site boundaries. No additional equipment space is required for the microwave dish.
- 3. The proposed changes will not increase the noise level at the existing facility by six decibels or more. The incremental effect of the dish will be negligible.
- 4. The changes to the facility 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. As indicated on the attached power density calculation, Sprint's operations at the site will result in a power density of 20.28%; the combined site operations will result in a total power density of 60.90%.

Please feel free to call me at (860) 798-7454 with questions concerning this matter. Thank you for your consideration.

Respectfully yours,

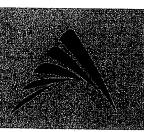
Jennifer Young Gaudet

Genarger Chang Gandet

cc: Honorable Bill Finch, Mayor, City of Bridgeport

Attachments

Sprint Nextel



TRANSCEND WIRELESS, ILC 479 ROUTE 17 NORTH, 2ND FLOOR MAHWAH, NJ 07430

1 INTERNATIONAL BLVD., SUITE BOO MAHWAH, NJ 07495

Sprint Nextel

BRIDGEPORT WEST Corp.

BRIDGEPORT, CT 06605

CT01YC057/NCT3612

623 PINE STREET

DRIVIN SC-2 TOP SC-2 TOP
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SITE ME
7, 0

	description Tile Sheet – General Notes and Legends Compound Plan
SC-2 TOWER ELEVATION	ATION
ONOITO DAINING	0101010

IG DIRECTIONS

Merge onto 1-85 S / GOVERNOR JOHN DAVIS LODGE TURNPIKE via the exit on the LEFT, 20.0 miles ORPORATE PLACE, ROCKY HILL, CT.: Ing SOUTH on CORPORATE PL toward WEST ST. 0.1 miles -81 S toward NEW HAVEN, 29.1 miles to WEST ST. < 0.1 miles

furn LEFT onto FAIRFIELD AVE. <0.1 miles Turn LEFT anto PINE STREET. <0.1 miles

Take the FAIRFIELD AVENUE exit — EXIT 25— toward CT-130 0.1 miles

Total Est. Time: 55 minutes Total Est. Distance: 49.57 miles End at 623 Pine Street, Bridgeport, CT 06605-2322, US

PROJECT INDEX

NOT TO SCALE DESIGNED BY: PJS DRAWN BY: KAP

500 ENTERPRISE DRIVE, SUITE 38 ROCKY HILL, CONNECTICUT 1-(860)-529-8882

URS CORPORATION AES

A&E FIRM

ANOS SON A LINE OF THE STATE OF SPRINT NEXTE, CORP. 1 INTERNATIONAL BLVD, SUITE 800 MAHWAH, NJ 07495 JASON DEIBERT (347) 284-8617 623 PINE STREET BRIDGEPORT, CT 06605 SRIDGEPORT WEST SITE ADDRESS: SITE NUMBER SITE NAME: APPLICANT: CONTACT:

BRIDGEPORT WEST

CONNECTICUT SITING COUNCIL

JURISDICTION:

73'-12'-56.4"

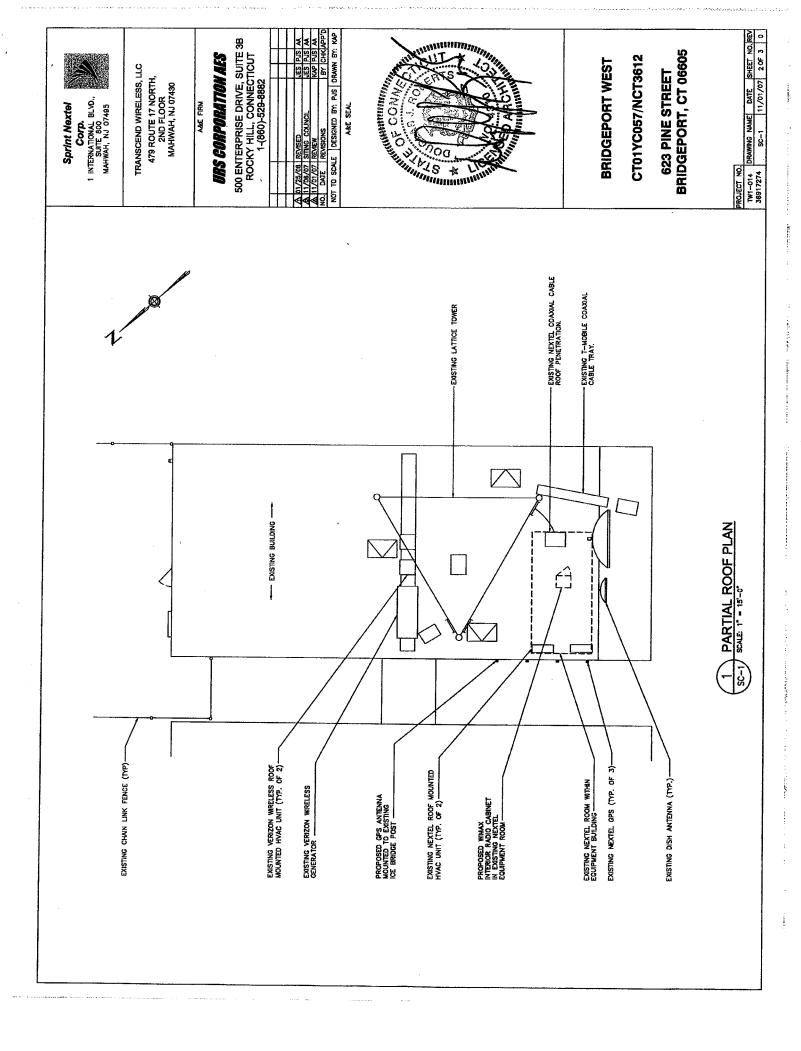
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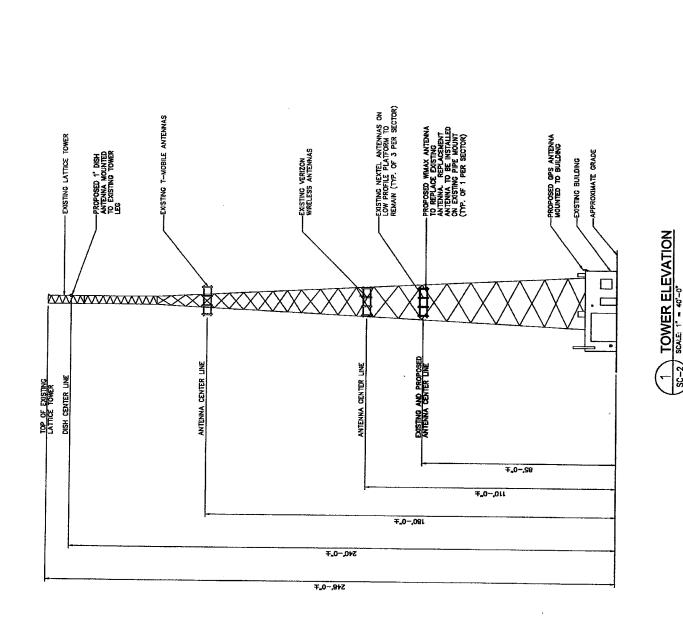
LATITUDE:

CT01YC057/NCT3612

BRIDGEPORT, CT 06605 **623 PINE STREET**

TW1-014 36917274





Corp.
1 INTERNATIONAL BLVD.,
SUITE 800
MAHWAH, NJ 07485 Sprint Nextel

TRANSCEND WIRELESS, LLC

479 ROUTE 17 NORTH, 2ND FLOOR MAHWAH, NJ 07430

A&E FIRM

UBS CORPORATION AES

500 ENTERPRISE DRIVE, SUITE 3B ROCKY HILL, CONNECTICUT 1-(860)-529-8882

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BRIDGEPORT WEST

CT01YC057/NCT3612

623 PINE STREET BRIDGEPORT, CT 06605

TW1-014 36917274 PROJECT NO.

DRAWING NAME DATE SHEET NO. REV SC-2

30F 3 11/01/02

STRUCTURAL ANALYSIS AND REPORT

FOR

TRANSCEND WIRELESS

PINE STREET BRIDGEPORT BRIDGEPORT WEST TOWER PROJECT NO. CT01YC057

BRIDGEPORT, CONNECTICUT

250 FT. SELF-SUPPORTED TRIANGULAR TOWER

Prepared By:



CONSULTING ENGINEERS, INC.

32 West Upper Ferry Road Ewing, New Jersey 08628-0829 Phone: (609) 538-0400 Fax (609) 538-8858

February 18, 2008 REVISED February 28, 2008

M. Loby

Prepared to EIA/TIA-222-F June 1996 Structural Standards for Steel Antenna Towers and Antenna Supporting Structures

Structural wind & ice: 85 MPH and 74 MPH with ½ radial ice

1.0 EXECUTIVE SUMMARY

Structure

- 250 ft. Self-Support Communications Tower
- Owner RCI
- Location -Bridgeport, CT

Equipment

Proposed at 240 AGL elev - installation of proposed HLPI Microwave antenna and associated coax.

Synopsis

The tower as it exists and with the proposed equipment installation does meet the EIA/TIA-F standards. The maximum tower utilization with proposed and existing antenna is 90.6%.

Information on the existing foundations has been reviewed. Utilizing the proposed loading reactions of the tower, a foundations analysis indicates that the existing capacity of the foundation will meet the EIA/TIA-F and IBC standards.

- End of Executive Summary -

2.0 APPURTENANCE LISTING

DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Omni antenna	276.5	(2) APL866513 w/Mount Pipe	116
yaggi in radom	264	(Verizon)	
Beacon	264	(2) APL196516 (Verizon)	116
Omni antenna	264	mounting frames w/stable bar	116
Omni antenna	264	(Verizon)	
Top Platform	264	(2) APL866513 w/Mount Pipe (Verizon)	116
Omni antenna	256 - 239		
VHLP1	240	mounting frames w/stable bar (Verizon)	116
Omni antenna	238	(2) APL196516 (Verizon)	116
(2) APX16PV-16VL	184	(2) APL196516 (Verizon)	116
(2) APX16PV-16VL	184	(2) APL866513 w/Mount Pipe	116
(2) APX16PV-16VL	184	(Verizon)	1110
mounting frames w/stable bar	184	mounting frames w/stable bar	116
mounting frames w/stable bar	184	(Verizon)	4
mounting frames w/stable bar	184	TV 65 antenna	108
amplifier	184	TV 65 antenna	108
amplifier	184	mounting frames (Nextel)	85
amplifier	184	(4) sector antenna (Nextel)	85
(2) MetroPCS Antenna (MetroPCS)	126	(4) sector antenna (Nextel)	85
(2) MetroPCS Antenna (MetroPCS)	126	(4) sector antenna (Nextel)	85
(2) MetroPCS Antenna (MetroPCS)	126	mounting frames (Nextel)	85
mounting frames (Nextel)	126	mounting frames (Nextel)	85
mounting frames (Nextel)	126		
mounting frames (Nextel)	126		

^{*} Proposed Transcend antenna with mounting frames at 240 ft. AGL.

3.0 COMMENTARY

A tower climb was performed by KM Consulting Engineers Inc. (KMCE) in September 2005 in order to ascertain tower inventory, antenna configurations, tower member sizes and general condition of the tower. The structure is a Rohn self-supported tower located at 623 Pine Street, Bridgeport, CT.

The tower is a 250 ft. structure with a triangular platform located at the top of the tower. Our scope of work is to determine if the existing structure is capable of withstanding additional stresses/forces imposed by the addition of microwave dish at 240 ft. AGL.

The following report will provide analytical calculations and commentary regarding the capacity of the existing tower and subsequent recommendations.

4.0 ANALYSIS PROCEDURE

KM Consulting Engineers, Inc. carried out their structural analysis by correlating an inventory/field inspection and processing the retrieved data into RISATower analytical program.

This program runs in conjunction with the guidelines set down in the EIA/TIA-222-F June 1996 Standard "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures."

The existing Tower is analyzed by placing wind forces on the structure in 30° positional increments around the tower (ie. forces directly onto the tower corners, faces and parallel to the faces). This enables the user to "create" a three-dimensional representation, yielding results for maximum worst case scenarios.

In effect, the production of these results allows the user to study the structural integrity of the tower when influenced by wind forces from any direction.

The proceeding report includes analysis for the tower with the addition of a microwave antenna in the scenario previously stated. For clarity, the analysis shall include worst case loadings and a typical elevation view with maximum foundation loads tabulated.

5.0 WIND AND ICE LOADING

The existing 250 ft. self-supported tower is located at 623 Pine Street, Bridgeport, CT.

Structural wind speed has been taken as 85 MPH (concurrent with listings applicable for Fairfield County, CT) for EIA/TIA-222-F.

Additionally, the tower has been analyzed for ½" radial ice loading with a reduced wind speed of 74 MPH, for EIA/TIA-222-F.

6.0 EQUIPMENT LOADING

The preceding analytical data has been formulated for the following:

<u>Load Case #1:</u> Existing 250 ft. self-supported tower with existing inventory.

Capacity utilization is LC1 - 90.5% for EIA/TIA 222-F.

<u>Load Case #2:</u> Existing 250 ft. self-supported tower with existing inventory and

adding 1 microwave antenna at 240 ft. Capacity utilization is LC2 -

90.6% for the EIA/TIA-222-F.

The tower foundation has adequate capacity for the Load Case 2 in the EIA/TIA 222-F analysis.

7.0 TOWER ANALYSIS AND RESULTS

The tower was analyzed for the existing inventory plus the proposed loading condition

For Load Cases #1 & 2: The existing tower meets the standards of EIA/TIA 222 F.

The tower foundation has adequate capacity to meet the EIA/TIA-222-F and IBC standards. The IBC requires that the foundation resist two time the wind load.

8.0 RECOMMENDATIONS

Further to our calculations, we conclude that the tower structure and foundation meets the standards of EIA/TIA 222 F and the IBC.

We recommend the following:

The antenna be mounted as per this report at rad center 240' AGL.

Prepared By:

Michael L. Bohlinger, PE

Principal

CT License No. 20405

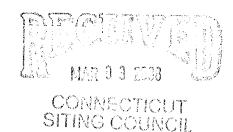
Bridgeport West, CT01YC057 (623 Pine Street, Bridgeport, C	623 Pine Stre	et, Bridgeport, CT)	- Siting Counc	T) - Siting Council Power Density Calculations	Calculations			
Sprint Nextel Directional Antennas ESMR - 2657 MHz 88'	SMR - 2657 MH	z 88'						
						Note: Power den	Note: Power densities are in mW/ cm²	
					Centerline of	Power density		
Transmitters:	Frequency	CT Standard	Number of	ERP (W)	Tx antennas	calculated at		To a second seco
	in MHz	mW/ cm²	Channels	per channel	AGL (ft.)**	base of tower	% of CT Standard	
WiMAY	2867	4 0000		000				
Value of the second of the sec		0000-	0	286	65	0.0838683	8.39%	
IDEN	851	0.5673	12	100	85	0.0596927	10.52%	
Microwave	22500	1.0000	2	1096	240	0.0136772	1.37%	
From previous filings:per CSC power density data base	r density data b	ase						
Verizon							9 12%	
Verizon							2 54%	
VoiceStream							2.25%	
Unknown							1.22%	
Unknown							8.54%	
Unknown							5.32%	
Metro PCS							11.64%	
Total % of CT Standard							%06'09	

Transcend Wireless

EM-SPRINT-NEXTEL-015-080303

VIA OVERNIGHT DELIVERY

February 28, 2008



Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051
Attn: Mr. S. Derek Phelps, Executive Director

Re: <u>Sprint Nextel Corporation – exempt modification</u>

623 Pine Street, Bridgeport, Connecticut

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Respectfully yours,

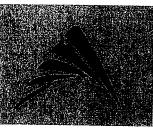
Jennifer Young Gaudet

Jennifer Young Gaudet

cc: Honorable Bill Finch, Mayor, City of Bridgeport

Attachments

Sprint Nextel Corp.



TRANSCEND WIRELESS, LLC 478 ROUTE 17 NORTH, 2ND FLOOR MAHWAH, NJ 07430

COTD.

1 INTERNATIONAL BLVD.,
SUITE 600
MAHWAH, NJ 07495

Sprint Nextel

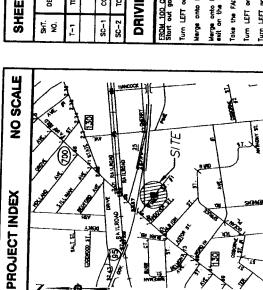
BRIDGEPORT WEST

500 ENTERPRISE DRIVE, SUITE 38 ROCKY HILL, CONNECTICUT 1-(860)-529-8882

DESIGNED BY: PJS

URS CORPORATION ALS

CT01YC057/NCT3612 623 PINE STREET BRIDGEPORT, CT 06605



HS	SHEET INDEX
SHT.	DESCRIPTION
1-1	TITLE SHEET - GENERAL NOTES AND LEGENDS
SC-1	COMPOUND PLAN
SC-2	TOWER ELEVATION
OR.	DRIVING DIRECTIONS
Start	EROM 100 CORPORATE PLACE, ROCKY, HILL, CT.: Shart out going SOUTH on CORPORATE PL toward WEST ST. 0.1 miles
Tum LEI	Turn LEFT anto WEST ST. <0.1 miles
Merge	Merge anto I-B1 S toward NEW HAVEN, 29.1 miles
Merge of	Merge onto 1–95 S / GOVERNOR JOHN DAVIS LODGE TURNPIKE via the sait on the LEFT, 20.0 miles
Toke the	Take the FARFIELD AVENUE exit - EXIT 25- toward CT-130 0.1 miles
Tum LEF	Tum LEFT onto FAIRFIELD AVE. <0.1 miles
Turn LEF	Turn LEFT anto PINE STREET. <0.1 miles
End of	End at 823 Pins Street, Bridgeport, CT 08605-2322, US
Total Eal	Total Eat. Time: 55 minutes Total Eat. Distance: 49.67 miles

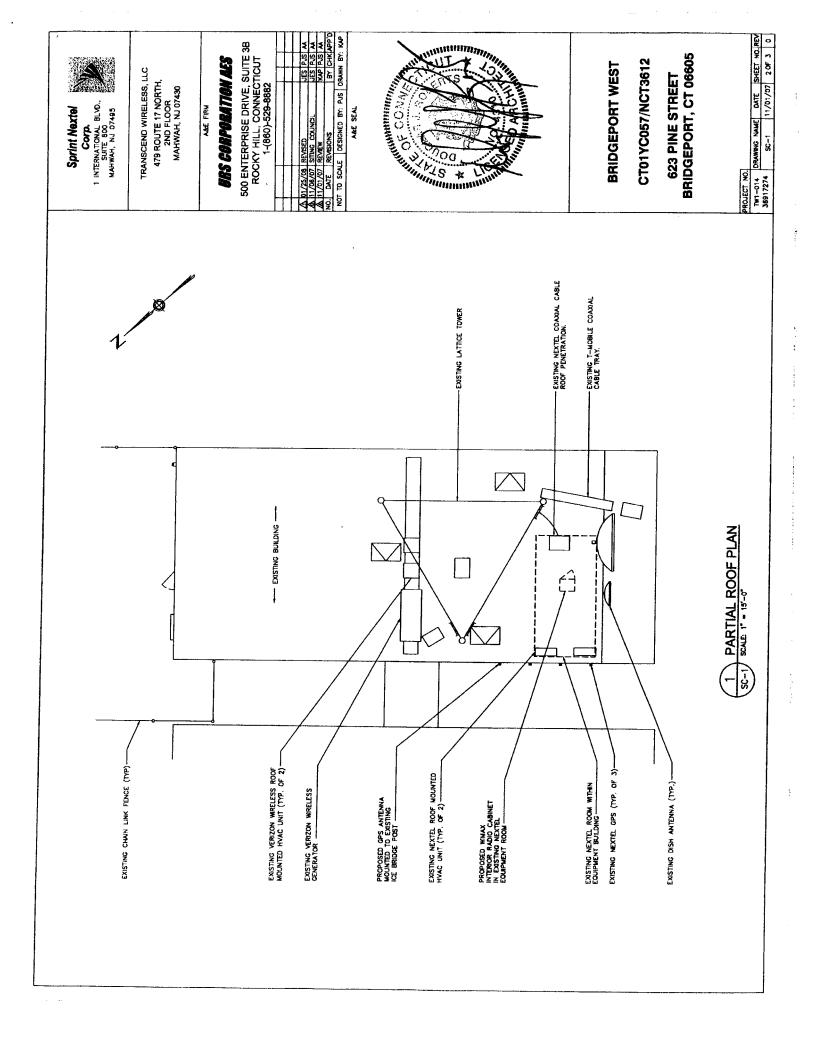
PROJECT INDEX	EX
SITE NUMBER: SITE NAME:	CT01YCO57/NCT3612 BRIDGEPORT WEST
SITE ADDRESS:	823 PINE STREET BRIDGEPORT, CT 06605
APPLICANT:	SPRINT NEXTEL CORP. 1 INTERNATIONAL BLVD. SUITE 8: MAHWAH, NJ 07495
CONTACT:	JASON DEIBERT (347) 284–5817
 JURISDICTION:	CONNECTICUT SITING COUNCIL
 LATITUDE: LONGITUDE:	41'-09'-49.2" 73'-12'-56.4"

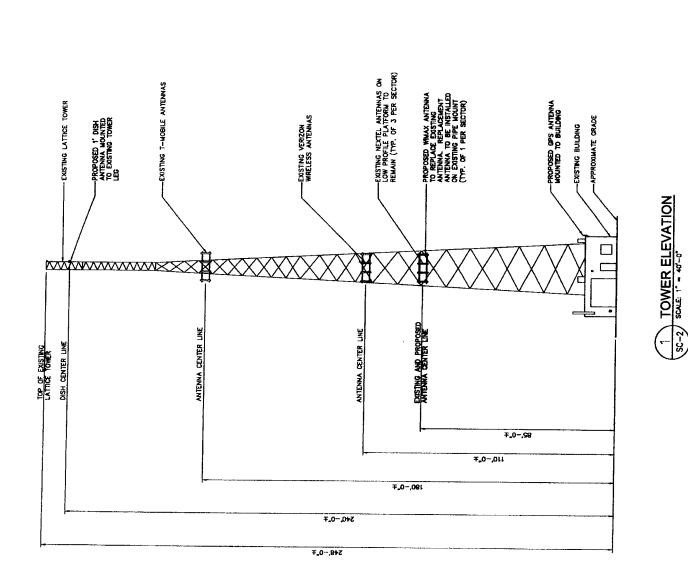
BRIDGEPORT WEST

CT01YC057/NCT3612

BRIDGEPORT, CT 06605 **623 PINE STREET**

PROJECT NO.					
TW1-014	DRAWING	NAME	DATE	SHEET NO	SO, RE
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Sprint Nextel

Corp.
1 INTERNATIONAL BLVD.,
SUITE 800
MAHWAH, NJ 07485

TRANSCEND WIRELESS, LLC 479 ROUTE 17 NORTH, 2ND FLOOR MAHWAH, NJ 07430

A&E FIRM

ubs corporation aes

500 ENTERPRISE DRIVE, SUITE 38 ROCKY HILL, CONNECTICUT 1-(860)-529-8882

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♠ 01/25/00 REVISED	-	▲ 11/01/07 REVIEW	NO. DATE REVISIONS	NOT TO SCALE DESIGNED BY: PJS	TO SON WILLIAM SEAL AND SON

BRIDGEPORT WEST

CT01YC057/NCT3612

623 PINE STREET BRIDGEPORT, CT 06605

	DRAWING N	SC-2
PROJECT NO.	TW1-014	38917274

WING NAME DATE SHEET NO. REV SC-2 11/01/07 3 0F 3 0

STRUCTURAL ANALYSIS AND REPORT

FOR

TRANSCEND WIRELESS

PINE STREET BRIDGEPORT BRIDGEPORT WEST TOWER PROJECT NO. CT01YC057

BRIDGEPORT, CONNECTICUT

250 FT. SELF-SUPPORTED TRIANGULAR TOWER

Prepared By:



CONSULTING ENGINEERS, INC.

32 West Upper Ferry Road Ewing, New Jersey 08628-0829 Phone: (609) 538-0400 Fax (609) 538-8858

February 18, 2008 REVISED February 28, 2008

W. Foly

Prepared to EIA/TIA-222-F June 1996 Structural Standards for Steel Antenna Towers and Antenna Supporting Structures

Structural wind & ice: 85 MPH and 74 MPH with 1/2 radial ice

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- Owner RCI
- Location -Bridgeport, CT

Equipment

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Synopsis

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Omni antenna	264	(Verizon)	
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(2) APX 16PV-16VL	184	(2) APL866513 w/Mount Pipe	116
(2) APX 16PV-16VL	184	(Verizon)	1.19
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amplifier	184	(4) sector antenna (Nextel)	85
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(2) MetroPCS Antenna (MetroPCS)	126	(4) sector antenna (Nextel)	85
(2) MetroPOS Antenna (MetroPOS)	126	mounting frames (Nextel)	35
mounting frames (Nextel)	126	mounting frames (Nextel)	85
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nounting frames (Nexter)	126		

^{*} Proposed Transcend antenna with mounting frames at 240 ft. AGL.

3.0 COMMENTARY

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<u>Load Case #1:</u> Existing 250 ft. self-supported tower with existing inventory.

Capacity utilization is LC1 - 90.5% for EIA/TIA 222-F.

Load Case #2: Existing 250 ft. self-supported tower with existing inventory and

adding 1 microwave antenna at 240 ft. Capacity utilization is LC2 -

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The tower foundation has adequate capacity for the Load Case 2 in the EIA/TIA 222-F analysis.

7.0 TOWER ANALYSIS AND RESULTS

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For Load Cases #1 & 2: The existing tower meets the standards of EIA/TIA 222 F.

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8.0 RECOMMENDATIONS

Further to our calculations, we conclude that the tower structure and foundation meets the standards of EIA/TIA 222 F and the IBC.

We recommend the following:

1. The antenna be mounted as per this report at rad center 240' AGL.

Prepared By:

W. Loby

Michael L. Bohlinger, PE

Principal

CT License No. 20405

				School School Successions			
Sprint Nextel Directional Antonnas Estab 2007 1887	140 2007 141						
Salara Antonia Antonias Es	HW /CO7 - YW	Z 88					
						Note: Power den	Power densities are in mW/ cm²
Transmitters	Freduonov	7.50	-		Centerline of	Power density	
	in Mul-	C Standard	Number of	ERP (W)	Tx antennas	calculated at	
	ZLIW ())	mw/ cm²	Channels	per channel	AGL (ft.)**	base of tower	% of CT Standard
WiMAX	1100						
	/697	1.0000	es	562	85	0.0000000	
DEN	851	0.5673	12	100	100	0.0020002	8.39%
Microwave	22500	1 0000	,	33,	Co	0.0596927	10.52%
		2000:	7	1096	240	0.0136772	1.37%
From previous filings:per CSC power density data hase	density data h	986					
Verizon							
Verizon							9.12%
VoiceStream							2.54%
Unknown							2.25%
Unknown							1.22%
Unknown							8.54%
Metro PCS							5.32%
							11.64%
			1				
Total % of CT Standard							
							, OO 09