1. During your September 15, 2015 presentation to the RPCC, you did not mention anything about the antenna you were about to install on the CH2M Hill building. During your January 11, 2016 presentation to the RPCC, you mentioned that you installed an antenna on the CH2M building and that you were surprised by how much it increased power levels in RPCC. **What else have you not told us about your plans for antennas on our area? Why was your computer modeling not able to predict the increase in power (or the supposedly poor signal to noise ratios, which you are now using to justify the new antenna)? Although we were relatively surprised with the coverage we received from the new CH2M Hill site, within the Rogers Park target coverage area, it still did not produce the desired coverage that we need. So even though the result was better than expected, the data still supported what we predicted; that CH2M Hill, along with the other sites of interest could not provide the desired level of coverage in the Rogers Park area. A review of other wireless cellular deployment projects in Anchorage have revealed that there are no other projects or future cellular sites currently underway or planned that could bolster the RSCP to a desirable level, within the Rogers Park target coverage area.**

2. **What are the approximate initial and recurring costs for antenna installation at your preferred location?** Initial costs would include construction, installation, permits, etc. Recurring costs would include "lease" payments to ML&P. **Also, what would the initial and recurring costs be for an installation at the other locations, if the antennas were at sufficient height and with sufficient power to provide the required coverage? Operational expenses (recurring costs), regardless of whether the installation was a collocation or a new site build would be roughly the same. Examples of some of these recurring costs are as follows: Municipal antenna admin permits, lease rates, annual Ericsson (Wireless Radio Vendor) maintenance fees and power costs. These costs typically range from $1200 - $2200 a month. Capital expenses (Initial costs) have been estimated as follows: New site build – specifically Rogers Park ($575 K), New Roof Top Site Build (485 K), New Colocation on existing tower (385 K)**

3. The bottom line: it appears that you have selected the preferred location because it provides the coverage you want while minimizing your costs. It also appears that you have no regard for community opinion. Lacking a copy of your computer input/output (much less the ability to understand it), for all we know, in your computer model you could have used more efficient antennas and higher power levels at your preferred location than at any of the other location. And, you could have put the antennas as low as possible at the other locations you evaluated, to make them look less attractive. And, certainly, it seems you have not considered actually building a tall camouflaged tower at any of the other locations. We do not have the resources to check your work. **Why should we trust your analyses? Given the cost for the proposed new site build, like the Rogers Park utility pole, you can see that it is the most expensive build plan in comparison to a roof-top build or a collocation. As set out in the presentation GCI delivered to the Rogers Park Community Council, GCI considered nine other alternative sites, all of which were either unable to provide the service needed or unavailable for use by GCI. These alternatives included four rooftop locations, one collocation on an existing tower, and one other alternate location for a camouflaged power pole extension, in addition to three potential new-build sites. Recently during a community council meeting for a new tower build in Chugiak we moved the site location to another area and parcel that was amenable to most of the area residents. The new site location met our needs for coverage as well as most of the residents needs for concealment. This is evidence that we do work with communities to come up with a best fit solution for our wireless projects. We believe we have**

put forth a very good proposal with the Rogers Park Utility pole collocate, utilizing industry standards and tools that support our claim that this new cellular site deployment is the best fit to cover the target coverage area in Rogers Park.

4. Please provide the following information for each cell tower that is causing the interference referenced in you presentation at the Rogers Park Community council presentation on January 11, 2016. Provide the same information for the new CH2M Hill Tower, your proposed tower on Northern Lights BLVd (the subject of the conditional use application an this issue), as well as for the tower you used in your analysis of placement of an antenna on the CIRI Building. **Response pending.**

    a. For each Tower:
        i. The above ground line (AGL) height of each tower
        ii. The GPS Location of each tower.
    b. For each antenna on each tower:
        i. The Beam Width
        ii. Orientation and Azimuth
        iii. Effective Radiated Power
        iv. Antenna Model, Serial Number and FCC license number

5. Any of your formal or informal written standards regarding:
    a. The minimum required signal strength for satisfactory cell phone operation and interference between cell tower locations. If these do not exist what is the required minimum radiated power satisfactory cell phone operation. **RSCP> -85 dBm,**
        i. and the Maximum allowable interference for satisfactory cell phone service. **Ec/Io> -15 dB in the case of multiple servers but no dominant sector**
    b. The name vendor and version of any Central Self Organizing Network (C-SON) Optimization platform you currently utilize. We don't use any C-SON currently. **A C-SON would implement automatic cellular neighbors for the purpose of mobility to address dropped calls handing from one cellular site to another, adjust power levels and divert overloaded cell sites traffic to other less loaded cell sites. We use TEM's and Scanner data to reveal deficient neighbor relations, identify power level deficiencies and we use Ericsson ENIQ Stats to produce statistics to identify overloaded cell sites (call congestion) currently; then we update those neighbors, power levels and add UMTS carriers manually to solve mobility problems, power level problems and call congestion.**
    c. Any cost estimate data you used to evaluate the proposed CIRI tower, or integration of small cell technology into the GCI system. **See ROM cost estimate for Roof-top Colocation above.**

Reference attached matrix

Follow-ups from original questions:

21. ORIGINAL QUESTION: You evaluated a number of other tower locations. For each of those alternatives, please include the height of the tower above ground and the distance to the nearest residence. GCI RESPONSE: Each of the alternate sites considered were assessed at either the height of the building i.e CIRI, or the next available height available on an existing tower which is 10' below existing antennas. The fall zones for these sites were not calculated because they did not meet the technical requirements for the coverage.**FOLLOW-UP**: You did not provide the requested information. Please provide the height of the *tower* above ground. Please provide the height of the *antennas* above ground and above mean sea level. **Reference attached matrix of location information. Distance from the surrounding homes from each location was not calculated as the location didn't warrant additional investigation and expense.**

23. ORIGINAL QUESTION: Baptist Church, Nana, and Rogers Park Elementary alternatives appear to provide coverage almost as good as that from the proposed location. Can the coverage from those areas be increased enough to be completely equivalent to the proposed coverage by increasing the transmitting power to the antennas and/or using different antennas? GCI RESPONSE: RF engineering considered different antenna types and power levels when these sites were considered and tested many different combinations to get the best possible coverage, that coverage is depicted in the presentation that was provided. **FOLLOW-UP**: Please provide a list of the antenna types and power levels considered for these locations, and provide the antenna type and power level for your preferred location. **Response pending.**

27. ORIGINAL QUESTION: During your September 14, 2015 presentation to the RPCC, you said that the tower would be structurally designed to a TIA standard. Which standard? TIA-222-G-2? Are there any other industry structural standards (such as ASCE, ANSI, NESC) that the tower will be designed to? GCI RESPONSE: Our antenna support structures are engineered to the following standards and are stamped by an Alaskan PE ANSI/EIA/TIA-222-G. The electrical is engineered to NESC and is also stamped by an Alaskan EE. The ASCE is the American Society of Civil Engineers it is an organization that Engineers join for continuing education, they do not publish standards, they do however advocate for changes to standards. **FOLLOW-UP**: Please provide a copy of the TIA-222-G structural calculations and the electrical calculations for our review. By the way, ASCE does, in fact, publish engineering standards. *Many* engineering standards. One of their standards, ASCE 7, is referenced in the International Building Code (IBC) for design loads on buildings *and other structures*. The Municipality of Anchorage requires compliance with the IBC. **Response pending.**

Model data: (to include GPS Coordinates, antenna beam width (65°) and Minimal Required RSCP (-90 dBm outdoor) and EC/IO(-12 dB outdoor):

Site name	RAD-Center (feet)	Azimuths (True North)	Down tilts	Antenna Model	PA Power	Frequency
Siri Building (61.198472°, -149.872264°)	125	0,94,160	4,3,4	APX17DWV-17DWVS-E-A20	2X40 Watts	2010Mhz
Rogers Park Elementary School (61.194614°, -149.854547°)	35	0,65,195	1,1,1	APX17DWV-17DWVS-E-A20	2X40 Watts	2010Mhz
Saint Church(61.198808°, -149.844136°)	65	50,150,250	3,3,2	APX17DWV-17DWVS-E-A20	2X40 Watts	2010Mhz
Purposed Site(61.195719°, -149.850556°)	76	45,280,340	2,1,0	APX17DWV-17DWVS-E-A20	2X40 Watts	2010Mhz
Original from Design(61.195567°, -149.852528°)	79	60,290,355	3,3,3	APX17DWV-17DWVS-E-A20	2X40 Watts	2010Mhz
Nana Building(61.194161°, -149.861786°)	45	50,105,345	0,1,2	APX17DWV-17DWVS-E-A20	2X40 Watts	2010Mhz
Loaf Apartments(61.205697°, -149.861331°)	46	90,155,220	1,1,3	APX17DWV-17DWVS-E-A20	2X40 Watts	2010Mhz
Chugach Manor(61.203925°, -149.857939°)	30	90,155,220	0,0,2	APX17DWV-17DWVS-E-A20	2X40 Watts	2010Mhz
Baptist Church(61.195717°, -149.859606°)	55	22,87,317	1,0,2	APX17DWV-17DWVS-E-A20	2X40 Watts	2010Mhz
Altas Tower(61.194711°, -149.841183°)	82.5	33,155,280	2,3,3	APX17DWV-17DWVS-E-A20	2X40 Watts	2010Mhz