

**VILLAGE OF LAKE BLUFF
JOINT PLAN COMMISSION & ZONING BOARD OF APPEALS
MEETING**

**Wednesday, October 21, 2015
Village Hall Board Room
40 East Center Avenue
7:00 P.M.**

A G E N D A

- 1. Call to Order and Roll Call**
- 2. Consideration of the August 19 and September 16, 2015 PCZBA Regular Meeting Minutes and September 12, 2015 PCZBA Special Workshop Meeting Minutes**
- 3. Non-Agenda Items and Visitors (Public Comment Time)**

The Joint Plan Commission & Zoning Board of Appeals Chair and Board Members allocate fifteen (15) minutes during this item for those individuals who would like the opportunity to address the Board on any matter not listed on the agenda. Each person addressing the Joint Plan Commission & Zoning Board of Appeals is asked to limit their comments to a maximum of three (3) minutes.
- 4. A Public Hearing to Consider: (i) an Amendment to the Existing Special Use Permit Pursuant to Ordinance #2012-27 and Install Additional Antennae on the Existing Monopole and Related Equipment; and (ii) Any Other Zoning Relief as Required to Continue the Operation of Cellular Antennae Facilities at 45 E. Center Avenue**
- 5. A Public Hearing to Consider: i) an Amendment to the Text of the Zoning Regulations to Establish "Liquor Stores (SIC 5921)" as a Special Use in the Light Industry District (L-1); ii) a Special Use Permit to Operate a Liquor Store at 910 Sherwood Drive, Unit #20; and iii) Any Other Zoning Relief as Required to Permit the Operation of a Liquor Store at the Property**
- 6. A Workshop Discussion with the Architectural Board of Review to Consider Preliminary Plans for the Proposed Changes to the Lake Bluff Middle School Building (31 E. Sheridan Place)**
- 7. A Continued Discussion Regarding the Review of Regulations Concerning the Subdivision of Lots and the Village's Bulk Regulations**
- 8. An Update and Continued Discussion Regarding Updates to the Village's Comprehensive Plan**
- 9. Commissioner's Report**
 - Regular PCZBA Meeting Scheduled for November 18, 2015
- 10. Staff Report**
- 11. Adjournment**

The Village of Lake Bluff is subject to the requirements of the Americans with Disabilities Act of 1990. Individuals with disabilities who plan to attend this meeting and who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting or the facilities, are requested to contact R. Drew Irvin, Village Administrator, at (847) 234-0774 or TDD number (847) 234-2153 promptly to allow the Village of Lake Bluff to make reasonable accommodations.

**VILLAGE OF LAKE BLUFF
JOINT PLAN COMMISSION & ZONING BOARD OF APPEALS
MEETING**

AUGUST 19, 2015

REVISED DRAFT MINUTES

1. Call to Order & Roll Call

Chair Kraus called to order the regular meeting of the Joint Plan Commission and Zoning Board of Appeals (PCZBA) of the Village of Lake Bluff on Wednesday, August 19, 2015, at 7:00 p.m. in the Village Hall Board Room (40 E. Center Avenue).

The following members were present:

Members: Sam Badger
Leslie Bishop
Mary Collins
Michael Goldsberry
Elliot Miller
Gary Peters
Steven Kraus, Chair

Also Present: Andrew Fiske, Village Attorney
Michael Croak, Buildings Codes Supervisor (BCS)

2. Approval of the June 17, 2015 Meeting Minutes

Member Goldsberry moved to approve the minutes of the June 17, 2015 meeting with comments from Members Bishop and Goldsberry. Member Miller seconded the motion. The motion passed on a unanimous voice vote.

3. Non-Agenda Items and Visitors

Chair Kraus stated the PCZBA allocates 15 minutes for those individuals who would like the opportunity to address the PCZBA on any matter not listed on the agenda.

There were no requests to address the PCZBA.

4. A Public Hearing to Consider: (i) a Variation from the Maximum Gross Floor Area Requirements of Section 10-5-6 of the Village's Zoning Regulations; and (ii) any Other Relief as Required to Convert the Existing Attic into an Office and Recreation Space for the Property Located at 403 E. Center Avenue

Chair Kraus introduced the agenda item and requested an update from Staff.

BCS Croak reported the Village received a zoning application from Gregory and Barbara Sebolt (Petitioners), property owners of 403 E. Center Avenue, to construct two dormers on the rear elevation, as well as a stairway to the third story, to allow for the conversion of existing attic space to an office and recreation area. BCS Croak stated pursuant to the current zoning code the lack of a staircase, natural light and ventilation meant the existing attic did not meet the criteria to be counted as floor area. The proposed improvements will cause the remodeled attic to meet the criteria as floor area, thereby adding 398.25 square feet to the gross floor area of the house.

Chair Kraus administered the oath to those in attendance and opened the public hearing regarding the matter.

Chair Kraus reviewed the public hearing process and invited the Petitioner to the podium.

Gregory Sebolt thanked the PCZBA and provided background information regarding their relocation to the area and noted they were attracted to the character and walkability of Lake Bluff. Mr. Sebolt stated the plan is to utilize the space within the home as an office and recreation space and noted the proposed option would protect the integrity of the house without causing any impact to the front of the home. Mr. Sebolt expressed his appreciation to the PCZBA for their consideration.

Edward Deegan, architect representing the Petitioners, reviewed the current conditions and proposed improvements and noted the proposed modifications would not be visible from E. Center Avenue. Mr. Deegan stated there are no proposed changes to the site plan or the first floor plan. He revised the proposed changes for the second floor and noted the stairway will be constructed over the existing stairs into the proposed attic space. Currently, in the existing attic space, the only major adjustment in addition to the dormers is the relocation of the mechanical room to the rear. Mr. Deegan showed a photo of the existing condition and a photo illustrating proposed dormers on the rear elevation.

Member Badger asked if there is a basement in the house. BCS Croak confirmed there is a basement and further noted basements do not count toward floor area if it is less than three feet from the grade to the top of the first floor.

Mr. Deegan confirmed the house was constructed with a basement that does not exceed three feet from the ground to the top of the first floor.

Member Peters stated the house was constructed with a floor area that exceeds the maximum floor area allowed and asked if building out the attic would circumvent the Zoning Code and if it would be considered a special privilege. Mr. Deegan stated the request would not be considered a special privilege as the space already exists and the changes do not require any structural changes except the addition of the dormers to allow ventilation and egress in the space.

Member Goldsberry expressed his opinion the design is a good design since the increase in floor area being requested doesn't increase the bulk of the house. He stated the proposal is in keeping with the spirit of the regulations.

Member Miller asked if the basement had been considered as an alternative. Mr. Sebolt stated the basement is used during the winter months as a recreational space for the children.

Member Miller asked if the neighbors located to the south have been contacted. Mr. Sebolt stated they have not contacted the neighbors to the south. He stated trees are located at the rear of the property and the neighbors only see the rear of the house during the winter season.

Member Badger stated the request does not require any additional impervious surface or the removal of trees. He noted the Petitioners are utilizing the existing space and further noted he does not have any concern with the concept.

Member Bishop stated the Petitioners have done their best to ensure the addition is not visible from the street. She inquired if the PCZBA would be doing the wrong thing by approving a house that will be over the limits of the bulk ordinance.

Chair Kraus expressed his agreement with Member Bishop and stated the attic should have been included in the existing Village regulations. He stated the plan presented tonight is reasonable and will accommodate a growing family. He stated the PCZBA needs to discuss what bulk means for the Village.

Member Collins stated the tradition in Lake Bluff has been that any new construction after the adoption of the bulk ordinance is expected to stay within the limits of the bulk ordinance. We have had a lot of petitioners with older homes come to the PCZBA and we have looked at them and if it is an older home it usually does not have a basement and if this was an older home we would not struggle with the request because we usually try to help people preserve older homes and not get demolished. She stated the struggle is not so much the concept it is just this is a very large house and that a 10.9% variation is a large request. The materials presented in the packet were well done and easy to understand. She expressed her belief the dormers are a bit overpowering and expressed a desire that they were not so bulky and massive in appearance. Member Collins commented on her personal experience and stated the Village needs more consistency on how it addresses these requests and establish one rule for everyone.

Mr. Deegan stated he and his clients reviewed a number of dormer styles and he noted the proposed improvement is important to his clients, although they would be happy to make adjustments and be open to any comments.

Member Collins expressed her preference to see a revised plan with smaller dormers.

Chair Kraus stated the PCZBA has three courses of action: (i) defer the matter for another month to look at alternatives and have the Petitioners reach out to the property owner to the south, (ii) approve as presented; or (iii) deny the request.

Member Miller expressed his agreement with the group and stated the Petitioners are not at fault for wanting to improve the useable space in their house. He expressed his agreement with Member Collins regarding the size of the proposed dormers. He expressed his concern for not having input from the neighbors to the south and further expressed his preference for the Petitioners to seek feedback on the proposal.

Member Goldsberry expressed his opinion the Petitioners are presenting a fair solution to provide additional space in their house. The proposed dormers on the rear of the house are not impacting the streetscape. Also, Member Goldsberry stated he appreciates when neighbors show support for projects and noted none of the neighbors are present. He noted neighbors tend to come and go and what is important to one neighbor may not be important to the other. He further expressed his belief the request is within the spirit of the Code and stated that 10.5% is a large variation, however, the additional floor area is not noticeable from the outside.

Member Badger expressed his understanding of the issues being raised by the PCZBA as: (i) counting attic space as usable space; and (ii) having dormers that are acceptable. He stated the

PCZBA should avoid architectural design matters and address if building out the existing attic space is acceptable. He expressed his support for the project if the improvements are made to the rear of the house and don't affect a majority of the neighbors.

Member Collins stated additional floor area is created with the installation of the dormers. Mr. Deegan stated the floor area of the attic currently exists; however, the interior space of the dormers will be less than six feet in height and does not qualify as floor area. In addition, Mr. Deegan noted the dormers satisfy another means of egress from the third story.

Member Miller expressed his support for the improvements if the neighbors support the proposal. He noted his preference to change the dormers doesn't matter if the neighbors are in support of the project.

Chair Kraus suggested the Petitioners provide the PCZBA with letters of support from surrounding neighbors as well as seek to mitigate the visual impact of the proposed dormers. Chair Kraus also suggested the PCZBA revise the Village's bulk standards to avoid this type of situation where useable space, such as a third story attic, is not counted toward floor area during the time of construction.

Member Collins stated the dormer height is being kept at less than six feet so it does not count toward the total gross floor area. There is plenty of volume with the dormers to achieve a higher ceiling height, but the dormers have an artificially low ceiling height which decreases the floor area calculation. Member Collins noted, as this is the case, the actual increase is more than 10.5%. She noted a technicality in the Code has been used to create a more favorable floor area calculation. A discussion ensued regarding the proposed dormers.

Member Bishop stated she would like more information on why this isn't a special privilege. She further questioned how many more houses are built like this where the PCZBA would be asked for variations based on special privilege.

Mr. Sebolt stated a lot of thought has been given to the design of the dormers to get to this point. He requested the PCZBA to make a decision during tonight's meeting and not delay the process.

Member Peters asked how far away is the neighbor to the south. Mr. Deegan expressed his uncertainty regarding the actual distance between the houses.

Village Attorney Andrew Fiske noted this is an application the PCZBA has the authority to approve. He noted a vote by the PCZBA tonight would be a final decision regarding the matter.

Member Collins stated the PCZBA is very interested in what the neighbors think because it's always good if they are in support; however, at times PCZBA Members must use professional judgment.

As there were no further comments, Chair Kraus closed the public hearing.

Member Miller moved to approve the petition with the condition that support is received from the neighbor to the south. Village Attorney Fiske stated that is an acceptable condition; however, the

PCZBA cannot compel a neighbor to provide any information. There was no second on the motion and the motion failed.

Member Collins moved to defer the matter to allow time to receive feedback from the neighbors and allow the Petitioners additional time to review other alternatives. Member Bishop seconded the motion. The motion failed on the following roll call vote:

Ayes: (3) Peters, Bishop and Collins
Nays: (4) Miller, Goldsberry, Badger and Chair Kraus
Absent: (0)

Member Badger moved to approve the petition as submitted. Member Bishop seconded the motion. The motion failed on the following roll call vote:

Ayes: (3) Goldsberry, Badger and Chair Kraus
Nays: (4) Peters, Bishop, Miller and Collins
Absent: (0)

Village Attorney Fiske stated that there was a 4 to 3 vote not to approve and he recommended a resolution of denial. If the Board wished to continue the consideration of the request, the PCZBA would need to make a motion to reconsider.

A discussion regarding feedback from the neighbors ensued.

Member Miller moved to reconsider the vote to deny approval. Member Badger seconded the motion. The motion passed on the following roll call vote:

Ayes: (5) Badger, Bishop, Miller, Goldsberry and Chair Kraus
Nays: (2) Collins and Peters
Absent: (0)

Following additional discussion, Member Collins moved to continue the public hearing to its next meeting. Member Peters seconded the motion. The motion passed on the following roll call vote:

Ayes: (7) Badger, Bishop, Collins, Peters, Miller, Goldsberry and Chair Kraus
Nays: (0)
Absent: (0)

5. A Continued Discussion Regarding the Review of Regulations Concerning the Subdivision of Lots and the Village's Bulk Requirements

Chair Kraus introduced the item and stated the Village Board expressed a desire for the PCZBA to evaluate if the Village's historic preservation regulations are truly achieving the purpose of promoting historic and architectural preservation in the Village. He stated the Historic Preservation Commission (HPC) has suggested extending the demolition delay to 365 days. Chair Kraus stated the PCZBA has been asked to review bulk and massing regulations and the Village's subdivision regulations. He stated the ABR is reviewing whether to implement architectural review requirements for new single-family homes.

Chair Kraus stated the purpose of tonight's discussion is to generate ideas to submit to the Village Board for consideration.

Chair Kraus stated it is the inherent right of a property owner to subdivide his or her land in the event it satisfies the Village's standards for subdivision. Currently the Village does not require a public hearing with the PCZBA if the subdivision does not create more than one additional buildable lot. He suggested that the streamlined process of not requiring PCZBA review of subdivisions that do not create more than one additional lot be eliminated.

Chair Kraus also suggested the Village may consider limiting the amount of floor area a new house that replaces a teardown within a certain percentage of the floor area of the house that was replaced.

Member Goldsberry expressed interest in Chair Kraus' suggestions and asked what tools the PCZBA has to help accomplish its objective of preserving Lake Bluff's character, which is a goal of the Comprehensive Plan.

Chair Kraus inquired if the Village can require properties be publicly marketed before demolition.

Member Badger expressed his support for listing properties on the open market to solicit the highest price; however, he expressed doubt if the Village would be able to require owners to publically market their homes. He noted the east side of Lake Bluff is different and has a diverse set of styles and lot sizes, which may make it difficult to achieve the right look and feel. He expressed his support for a review process for teardowns and noted this may deter some people from preserving homes.

Member Goldsberry stated the Village's Comprehensive Plan encourages rehabilitation and the ability to control development in an orderly manner compatible with neighboring properties. He expressed his feeling this is not happening. He further stated preservation is an important element and thinks it important to identify tools needed to encourage preservation. He also stated prospective buyers should know upfront what type of property they are purchasing in the Village.

Chair Kraus suggested the Village consider a zoning overlay district in certain areas that would increase the minimum lot size required in order to deter subdividing lots.

Member Miller suggested the PCZBA start with considering changes to garage size regulations.

A discussion followed.

Chair Kraus stated the same could apply to porches as they were not part of the original Lake Bluff streetscape. He stated the proposal in 2000 was to provide an incentive to encourage additions versus teardowns.

Member Bishop expressed concern for what is really meant by preserving Lake Bluff. She stated the Village is really the people and we should consider what the community wants.

Member Collins stated the other matter to consider is property values and eliminating smaller lot sizes will not be popular in the Village as this would decrease property value. Member Collins stated there should be a balance between Village character and property value.

A discussion ensued.

Member Bishop noted her previous comments are more about tearing down older homes and encouraging preservation than changing subdivision regulations.

Member Badger asked if there were any proactive tools available to the Village. BCS Croak stated Highland Park adopted the lakefront overlay zone and ordinance in 2000, which doubled the required lot area for subdivisions that create new buildable lots.

Member Bishop inquired of amending the zoning regulations regarding setback restrictions for teardown and new homes.

Chair Kraus stated there have been a couple of tools discussed, such as changing side yard setbacks, creating overlay zoning districts, and the concept of tearing a house down and the bulk of the new house cannot exceed a certain percentage of what existed before.

Chair Kraus inquired of the Board how comfortable it is in reviewing subdivisions, determining appropriate bulk and mass and to slow down the building process to ensure the Village has appropriate control and sense of what the redevelopment of a particular parcel should look like. He expressed his preference to see some modern style houses pop up and some sense of a street wall and how to maintain the continuity of character with new construction.

Member Bishop asked how long it would take to change the regulations. Chair Kraus explained the process.

Member Collins stated that the question of teardowns is a struggle everywhere and inquired if there were any existing ideas to solve the problem. She suggested the PCZBA identify regulations in the Zoning Code that may allow inappropriately sized homes to be built in specific areas.

Chair Kraus stated the review process should be completed as soon as possible and suggested each Commissioner provide Staff with their ideas before the September PCZBA meeting. The concepts will then be shared with the Village Board.

Member Bishop stated we have been looking at the older historic area of Lake Bluff and asked if the PCZBA should also review the Terrace areas. She recommended the PCZBA consider the entire Village. A discussion regarding subdivisions followed.

Member Peters inquired of any issues if the Village were to change the subdivision or zoning regulations that would prevent the further subdivision of a lot that can currently be subdivided.

Village Attorney Fiske stated if an application to legally subdivide a lot was submitted prior to any changes, the subdivision would proceed under existing regulations. Once any changes to the subdivision become effective the new regulations would apply.

In response to a comment from Member Collins, Village Attorney Fiske stated tax parcels and zoning lots are different. There can be a property located on multiple tax parcels, but it is a single zoning lot. In order to build two homes a property owner would have to subdivide it into two lots.

A discussion ensued regarding multiple buildable lots.

Chair Kraus expressed interest in the Village reviewing houses that replace teardowns to ensure it is consistent with the streetscape.

Chair Kraus stated that property owned by the Village, Park District or School District has underlying zoning of residential districts (as shown on the zoning map) which means if one of those entities should sell property it would revert to the underlying zoning without going through a rezoning process. Chair Kraus recommended the creation of a public use or institutional zoning district and process to allow the community an opportunity to comment on any potential land use changes resulting from an institutional use.

6. An Update and Continued Discussion Regarding Updates to the Village’s Comprehensive Plan

It was the consensus of the PCZBA to continue this matter to the next meeting.

7. Commissioner’s Report

Chair Kraus stated the next regular PCZBA meeting will be September 16, 2015.

8. Staff’s Report

There was no Staff report.

9. Adjournment

As there was no further business to come before the PCZBA, Member Goldsberry moved to adjourn the meeting. Member Collins seconded the motion. The motion was approved on a unanimous voice vote. The meeting adjourned at 9:29 p.m.

Respectfully submitted,

Mike Croak
Building Codes Supervisor

Brandon J. Stanick
Asst. to the Village Administrator

**VILLAGE OF LAKE BLUFF
JOINT PLAN COMMISSION & ZONING BOARD OF APPEALS
SPECIAL MEETING**

SEPTEMBER 12, 2015

DRAFT MINUTES

1. Call to Order & Roll Call

Chair Kraus called to order a special meeting of the Joint Plan Commission and Zoning Board of Appeals (PCZBA) of the Village of Lake Bluff on Saturday, September 12, 2015, at 9:05 a.m. in the Village Hall Conference Room (40 E. Center Avenue).

The following members were present:

Members: Leslie Bishop
 Mary Collins
 Elliot Miller
 Gary Peters
 Steven Kraus, Chair

Absent: Sam Badger
 Michael Goldsberry

Also Present: Brandon J. Stanick, Assistant to the Village Administrator (A to VA)

2. Non-Agenda Items and Visitors

Chair Kraus stated the PCZBA allocates 15 minutes for those individuals who would like the opportunity to address the PCZBA on any matter not listed on the agenda.

There were no requests to address the PCZBA.

3. A Continued Workshop Discussion Regarding the Review of Regulations Concerning the Subdivision of Lots and the Village's Bulk Regulations

Chair Kraus introduced the item and noted the purpose of the PCZBA discussion is to begin to formulate concepts and ideas to address the subdivision of lots and the bulk of home in the Village to forward to the Village Board for discussion purposes.

At the request of Chair Kraus, A to VA Stanick provided an update regarding the progress made by the Historic Preservation Commission (HPC) and the Architectural Board of Review (ABR). He noted the HPC would like to lengthen the demolition delay period from a maximum of 120 days to 365 days and allow the Village Board to continue the delay indefinitely (for structures at least 50 years old demolishing at least 50% of the gross floor area). He also noted the HPC's desire to require an applicant to address several questions regarding the purpose of demolishing a house; this would be required to qualify as a complete building permit application. Additionally, he noted the ABR has discussed, and not reached a consensus to date, concerning the review of any new single-family residential construction, or a review of new single-family construction resulting from a teardown. This review would be in addition to the ABR's current responsibility of reviewing commercial construction.

A general discussion regarding preferences for additional process and review for residential redevelopment ensued.

Chair Kraus reviewed the comments submitted by the Members prior to the meeting.

The PCZBA discussed the following:

1. Definitions for “bulk” and “subdivision”;
2. Consider requiring PCZBA review and recommendation to Village Board of all proposed subdivisions (any action that is moving a property line);
3. Consider requiring an advisory board review site plans and building elevations of a new house at a public hearing prior to the consideration of a subdivision request;
4. Consider allowing the HPC and ABR (at their discretion) to hold a public hearing on any proposed subdivision to review the proposal from their areas of expertise;
5. Consider creating standards for subdivisions that maintain scale and character of an existing neighborhood;
6. Consider requiring advisory board review of all site plans and building elevations of any new residence proposed for a vacant lot;
7. Consider requiring the PCZBA, HPC and ABR (at their discretion) to hold a public hearing on the infill housing request from their areas of expertise and forward a recommendation to the Village Board;
8. Prior to issuing a demolition permit for any existing house, consider requiring the site plan and buildings elevations for a new house be reviewed by an advisory board. Property owner must have Village approval to build the new house prior to receiving a demolition permit;
9. Consider allowing the HPC to conduct demolition reviews for the demolition of homes that are less than 50 years in age. Consider allowing the ABR to review at a public hearing the site plan and building elevations of the new house;
10. Consider limiting the size of new houses that are built following a teardown. Consider determining size of new house by: floor area allowed per the Zoning District, no larger than the size of the teardown, 1.xx times the size of the teardown, etc.;
11. Consider creating new zoning classification for governmental/institutional uses such as Village Hall, Public Works facility, Park District Rec Center, Schools, Churches, etc. Currently, these types of facilities are located in residential districts which is not reflective of the activities (or intensity) of institutional uses;
12. Consider encouraging rehabilitation of existing structures through zoning bonuses;
13. Consider developing regulations limiting bulk and encouraging historical/architectural continuity with surrounding properties;
14. Consider limiting the allowable floor area of homes on “deep” lots based on the amount of street frontage of the lot. Refer to 709 Birch as an example;
15. Given the variety of lot sizes in the R-4 District, and the mix of large and small houses that result, consider reducing the floor area allowed on larger lots;
16. Reconsider the amount of floor area bonus given for front porches and rear yard garages;
17. Consider larger setbacks on small lots;
18. Consider adding restrictions on the percentage of surface land that is covered on small lots;
19. Consider counting all attic space as floor area regardless of ceiling height;
20. Consider excluding ravine slopes from the lot area calculation and only use the table land to determine lot area; and

21. Consider creating a universal parking lot standard(s) to use in all Zoning Districts.

Following its discussion, the PCZBA requested a summary of the discussion points be shared during the regular meeting on September 16, 2015.

4. Commissioner's Report

Chair Kraus noted the next meeting is scheduled for September 16, 2015.

5. Adjournment

As there was no further business to come before the PCZBA, the group adjourned at 11:45 a.m.

Respectfully submitted,

Brandon J. Stanick
Assistant to the Village Administrator

**VILLAGE OF LAKE BLUFF
JOINT PLAN COMMISSION & ZONING BOARD OF APPEALS
MEETING**

SEPTEMBER 16, 2015

DRAFT MINUTES

1. Call to Order & Roll Call

Chair Kraus called to order the regular meeting of the Joint Plan Commission and Zoning Board of Appeals (PCZBA) of the Village of Lake Bluff on Wednesday, September 16, 2015, at 7:00 p.m. in the Village Hall Board Room (40 E. Center Avenue).

The following members were present:

Members: Sam Badger
Leslie Bishop
Mary Collins
Michael Goldsberry
Elliot Miller
Gary Peters
Steven Kraus, Chair

Also Present: Andrew Fiske, Village Attorney
Brandon J. Stanick, Asst. to the Village Administrator (A to VA)

2. Approval of the August 19, 2015 Meeting Minutes

Following a brief discussion, it was the consensus of the PCZBA to defer consideration of the August 19, 2015 draft minutes to the next meeting.

3. Non-Agenda Items and Visitors

Chair Kraus stated the PCZBA allocates 15 minutes for those individuals who would like the opportunity to address the PCZBA on any matter not listed on the agenda.

There were no requests to address the PCZBA.

4. Continuation of a Public Hearing to Consider: (i) a Variation from the Maximum Gross Floor Area Regulations of Section 10-5-6 of the Village's Zoning Regulations; and (ii) any Other Relief as Required to Convert the Existing Attic into an Office and Recreation Space for the Property Located at 403 E. Center Avenue

Chair Kraus introduced the agenda item and requested an update from Staff.

A to VA Stanick stated this is a continued discussion regarding the zoning application from Gregory and Barbara Sebolt (Petitioners), property owners of 403 E. Center Avenue, to allow for conversion of existing attic space to an office and recreation area, as well as the construction of a stairway. The proposed improvements add 398.25 square feet to the gross floor area of the house. The PCZBA discussed the matter at its meeting on August 19th and moved to defer the matter to allow the Petitioner additional time to review other alternatives and receive feedback from the neighbors. He noted feedback from the neighbors was provided through an email as well as transmitted in this evening's packet.

Chair Kraus stated the discussion last month considered whether to grant a variation for the build out of an attic where if the attic was included in the gross floor area calculation when the house was built the footprint would have been smaller. The situation has arisen where a new owner would like to build out the attic space and exceed the floor area allowed. This is something the group has struggled with for some time and discussed over the past months.

Chair Kraus invited the Petitioner to the podium.

Mr. Gregory Sebolt stated at the August meeting the PCZBA had expressed concerns regarding the neighbors support of the proposed dormers at the rear of the house, specifically the neighbor to the south. He stated the neighbors have reviewed the proposed plans and have no issues with the request. He asked the PCZBA to consider approving the requested zoning relief.

Chair Kraus requested comments from the PCZBA.

Member Badger stated he liked the concept of utilizing existing space rather than building additional space that would be noticeable from the exterior of the house. He expressed his support for this type of zoning variance.

Member Peters stated concerns were addressed by the PCZBA and the Petitioners reached out to the neighbors and obtained their support. The PCZBA now has to address at some point whether this issue needs addressed. Member Peters stated he is no longer opposed to the petition.

Member Collins stated she feels confident there is no hardship because there is a large basement that can be used to satisfy the need for space. She stated she does worry about the precedence that would be set should the PCZBA approve this request because the house is currently over bulk. There are too many houses that maximize the allowable bulk and noted she does not think the PCZBA should be setting this precedent as it could be considered a special privilege.

Member Miller expressed his agreement with Member Peters and stated he has no objection to the request as it will not increase the footprint of the house. He stated the fault is with the existing zoning regulations.

Chair Kraus stated the Zoning Code does not adequately address the issue and this type of request should not come back to the PCZBA, but should be planned into the home.

Member Miller moved to approve the 10.59% variation from the R-4 District maximum floor area regulations to allow 420.21 sq. ft. of additional floor area for the conversion of an existing attic to an office and recreation space. Member Goldsberry seconded the motion. The motion passed on the following roll call vote:

Ayes: (6) Badger, Bishop, Goldsberry, Miller, Peters and Chair Kraus
Nays: (1) Collins
Absent: (0)

- 5. A Public Hearing to Consider a Request by Lake Effect Holdings, LLC for an Amendment to an Existing Special Use Permit to Operate a Brewery Located at 16 E. Scranton Avenue**
Chair Kraus introduced the agenda item and requested an update from Staff.

Member Goldsberry recused himself and took a seat in the audience.

A to VA Stanick reported the Village received a zoning application from Lake Effect Holdings, LLC to operate a brewery/brew pub at 16 E. Scranton Avenue. Currently the Lake Brewing Company operates at this location pursuant to a Special Use Permit (SUP); however, the establishment will soon change ownership and will require a new SUP under the name of the new owner. The present owners are comfortable with allowing the property owner to take control of the SUP which would make it specific to the space and not the owner. A to VA Stanick stated the Petitioner notes that employee parking will remain the same; however, there is insufficient detail regarding the manner by which employee parking will be addressed. It is recommended the PCZBA consider a condition requiring the business owner to obtain an adequate number of parking permits (for parking at the Train Station) for the employees at this location. A to VA Stanick reported on the existing authorized hours of operation compared to new proposed hours of operation.

A to VA Stanick further stated no traffic demands or safety hazards are foreseen with this type of use. The Petitioner advises deliveries will not change from the current method; however, there is insufficient detail regarding the method by which the establishment currently receives deliveries and/or distributes product from the establishment. It is recommended the PCZBA consider a condition requiring that deliveries to and distribution from the establishment be made from the rear of the building and during early morning hours to limit the impact on traffic in the CBD.

Village Attorney Fiske commented on an example of an SUP specific to restaurant use and noted each time ownership changes the new owners must apply for a new SUP. The proposed action would tie the use to the space and not the owner.

Chair Kraus administered the oath to those in attendance and opened the public hearing regarding the matter.

Mr. Robert Douglass, Managing Member of Lake Effect Holdings, LLC, explained a similar streamlined process that was done with the Lake Forest Bank and Trust space at the corner of E. Scranton Ave. and Sheridan Rd. He noted this structure will provide some ease for the tenants without having to come back to the Village. Mr. Douglass stated he would consult the business owners regarding the number of parking permits needed. He stated the spaces at the rear of the building have traditionally used from public parking after 5:00 p.m.

In response to a comment from the PCZBA, Mr. Dave Burns, Co-Owner of the Lake Bluff Brewing Company, clarified the hours of operation for the establishment and noted their intent to keep the hours of operation the same. He stated their desire is to help support the vitality in the downtown and conform to the existing parking regulations. He stated they are willing to purchase parking permits as the establishment normally has three employees working at any one time.

Chair Kraus stated he does not have any problem with the request. He suggested the crowded outdoor dining area can make it difficult for pedestrians to use the sidewalk. Chair Kraus encouraged them to rethink the outdoor dining configuration to better manage sidewalk use without interfering with public access which is a violation of the SUP.

Member Collins concurred with Chair Kraus regarding the public access around the outdoor dining area.

Mr. Burns expressed his understanding with sidewalk access around the outdoor dining area. He expressed his opinion it is a benefit to the Lake Bluff brand to have a sense of vitality. Mr. Burns stated special events are held on Friday and Saturday nights to minimize impacts of big crowds and noted there is adequate staffing for large events such as block parties to manage the crowds. The majority of the sidewalk is on the adjacent side of the public right-of-way so it makes it challenging to set up anything structural to enforce patrons to remain in the designated area. He stated the situation is definitely on their radar and he is open to having a continued conversation to create a workable solution. Mr. Burns expressed his support for using parklets to create more public space and improve access along the sidewalk.

Member Bishop stated she has witnessed some customers extending the space by moving tables around. Mr. Burns stated the tables are within their designated store frontage.

Member Miller asked if the train station parking lot could be used on the weekend as this would allow more parking spaces. Member Miller stated there have been many delivery vehicles parked in front of Wisma and Mavery’s creating a difficult situation when driving along E. Scranton Avenue. He questioned if deliveries should occur in the rear of the building. Mr. Douglass stated there are authorized loading zones on Scranton and Walnut to accommodate.

Following a brief discussion, the PCZBA expressed their desire for the Village to address and enhance the walkability in the downtown, as well as enforce the use of loading zones.

Members Collins and Peters expressed their support for the new proposed hours of operation:

Authorized Hours:	New Proposed Hours:
Monday through Thursday, 12:00 pm to 11:00 pm	Monday through Thursday, 11:00 am to 11:00 pm
Friday and Saturday, 12:00 pm to 12:00 am	Friday and Saturday, 11:00 am to 12:00 am
Sunday, 12:00 pm to 10:00 pm	Sunday, 11:00 am to 11:00 pm

Member Collins moved to recommended the Village Board approve the request for a SUP to operate a brewery/brew pub at 16 E. Scranton Avenue with the condition: i) the business owner obtain an adequate number of parking permits (for parking at the Train Station) for the employees at this location, ii) authorize the new proposed hours of operation and iii) require deliveries to and distribution from the establishment be made from the rear of the building and during early morning hours to limit the impact on traffic in the CBD. Member Bishop seconded the motion. The motion passed on the following roll call vote:

Ayes: (6) Bishop, Collins, Miller, Peters, Badger and Chair Kraus
Nays: (0)
Abstain: (0)

Member Goldsberry returned to his position at the dais.

6. A Continued Discussion Regarding the Review of Regulations Concerning the Subdivision of Lots and the Village’s Bulk Requirements

Chair Kraus stated the PCZBA has been asked to review bulk and massing regulations and the Village's subdivision regulations. He noted he would like to move this matter along to the Village Board for consideration. He advised the Historic Preservation Commission (HPC) has proposed increasing the demolition delay to 365 days and the Architectural Board of Review (ABR) has not completed their review, but are looking at requiring residential design review.

Chair Kraus stated the PCZBA held a workshop meeting on September 12th and provided an update on the concepts discussed during the workshop.

Chair Kraus stated while he served on the HPC, it would consider extending delays for the demolition of older homes without knowing the plans for redevelopment. The PCZBA should consider creating a delay which would allow residents to go through a site plan review process.

Chair Kraus stated there was a consensus during the workshop that any and all subdivisions should come before the PCZBA for a recommendation.

Member Miller stated the PCZBA should work on what would be allowed on a lot and not appearance which can be addressed by the ABR.

Member Goldsberry stated the PCZBA has been following the Comprehensive Plan and noted he does not feel the PCZBA is doing anything new than what it is charged with. Member Goldsberry inquired how the PCZBA can bring the Lake Bluff brand into this conversation. These are all good tools that allow us to do what is needed without creating undue burdens for homeowners.

Chair Kraus stated the HPC demolition delay is for homes at least 50 years old and there have been discussions regarding amending the review process for buildings less than 50 years old. He stated during the discussion he suggested a provision to determine if a new house should be proportional to the house that is torn down. The current trend in the Village has the builders building to the maximum allowable size for the lot and not in context of what was initially there or the existing streetscape. Chair Kraus inquired to what degree is the Village interested in having dialogue regarding managing streetscapes.

Chair Kraus stated new zoning classifications were also discussed because currently the Village, Lake Bluff Park District and the School District are not zoned for their particular use. Each entity is zoned with the underlying residential zoning. He also noted the Church properties could be subdivided into several buildable lots without Village review.

Member Goldsberry expressed his concern for larger basements that may be built in the future as this could affect the mature trees and canopy in the Village. He expressed his opinion the Village is not doing enough to protect the mature canopy. Chair Kraus advised of the Village Tree Preservation Ordinance and stated there are currently no regulations that address building too close to trees.

Member Badger expressed his agreement with Member Goldsberry. He stated he likes the concept of the institutional zoning district for the various public agencies, but expressed concern for some of the other concepts because of their impact on property rights.

Member Bishop expressed her agreement with Member Miller that focus should be on what is causing large homes to be built and focus on the regulations that manage the bulk. There are

currently regulations now that need addressed to accomplish the PCZBA’s goal of minimizing bulk.

Member Collins expressed her support for “right-sizing” the bulk ordinance and new homes should be built to an acceptable scale.

Members Collins and Miller expressed support for reviewing the regulation concerning attic space as gross floor area. A discussion followed and it was the consensus of the PCZBA to review this provision.

Chair Kraus stated he would like to get something to the Village Board, ABR, and HPC so that they can see what we are doing and the direction of the PCZBA’s conversations. He stated the attic space and ravine should be added to the list as priority.

Member Badger expressed his agreement with Members Miller and Bishop regarding a review of the regulations that currently exist. He noted his preference to keep review processes as standardized as possible.

Following a discussion it was the consensus of the PCZBA to finalize the list at the next meeting and forward to the Village Board for discussion.

7. An Update and Continued Discussion Regarding Updates to the Village’s Comprehensive Plan

Chair Kraus stated he would like to schedule a workshop to review the documents of the former Plan Commission. Chair Kraus stated the PCZBA needs to finalize and submit a recommendation to the Village Board on the Business Park and asked it be added to next October PCZBA meeting.

8. Commissioner’s Report

Chair Kraus stated the next regular PCZBA meeting will be October 21, 2015. Chair Kraus recommended rescheduling the November meeting approximately one week sooner so as not to conflict with the Holiday. It was the consensus of the PCZBA to reschedule the November meeting.

9. Staff’s Report

A to VA Stanick provided an update on the Stonebridge Development.

10. Adjournment

As there was no further business to come before the PCZBA, Member Miller moved to adjourn the meeting. Member Goldsberry seconded the motion. The motion was approved on a unanimous voice vote. The meeting adjourned at 8:55 p.m.

Respectfully submitted,

Brandon J. Stanick
Assistant to the Village Administrator

RECEIVED
OCT 18 2015

BY:

To whom it may concern:

T-Mobile is applying for a SUP from the Village of Lake Bluff in order to co-locate their antennas onto the existing cell tower located at 45 E. Center Dr. T-Mobile simply needs more coverage in this area and this is the most efficient way to go about this. T-Mobile is not building a new tower or structure, but simply adding equipment to the existing tower located at 45 E. Center Dr., in Lake Bluff, IL. The additions to this tower will not affect the height or to the width of the structure, but will simply be mounted onto the outside of the tower. This tower is 164' tall and these antennas will be very much like the existing antennas, but will be located at 123', which will blend into the tower with the rest of the existing antennas. The antennas are the means of transmission for telecommunications carriers such as T-Mobile and these antennas are necessary for T-Mobile to gain coverage in this area. These are the only changes that T-Mobile will make to the tower and the reasons why they need the changes. I hope that this clarifies T-Mobile's position and explains why they need these antennas as well as how they will go about it.

Thank you for your time,

Elton Manion, Esq.

FEE PAID:
RECEIPT NUMBER:

DATE RECEIVED
BY VILLAGE:

VILLAGE OF LAKE BLUFF
APPLICATION FOR ZONING VARIATION, SPECIAL USE PERMIT, REZONING, OR PRD

SUBJECT PROPERTY

Address: 45 E. Center Ave, Lake Bluff, IL 60044 Zoning District: R-3
(Property address for which application is submitted)

Current Use: Telecommunications Facility
(Residential, Commercial, Industrial, Vacant, Etc.)

PIN Number: 12-21-100-003

APPLICANT

Applicant: T-Mobile USA

Address: 8550 Bryn Mawr Ave, Suite 100, Chicago, IL 60631
(Address if different than subject property)

Relationship of Applicant to Property: Lessee
(Owner, Contract Purchaser, Etc.)

Home Telephone: _____ Business Telephone: 773-444-5400

OWNER

Owner - Title Holder Name:	<u>Village of Lake Bluff</u>	If Joint Ownership	Joint Owner:	_____
Address:	<u>40 E. Center Ave</u>		Address:	_____
	<u>Lake Bluff, IL</u>			_____
Daytime Phone:	<u>847 234 0774</u>		Daytime Phone:	_____

If ownership is other than individual and/or joint ownership, please check appropriate category and provide all additional ownership information as an attachment.

- Corporation
- Land Trust
- Other: _____
- Partnership
- Trust

Are all real estate taxes, special assessments and other obligations on the subject property paid in full?
 Yes No If No, Explain: _____

ACTION REQUESTED

To provide time for legal notification requirements, any application requiring a Public Hearing before the Zoning Board of Appeals must be received at least 25 days prior to the next meeting date.

- Zoning Variation
- Special Use Permit
- Text Amendment
- Rezoning
- Planned Residential Development
- Other: _____

Applicable Section(s) of Zoning Ordinance, if known: _____

Narrative description of request: We request to co-locate antennas onto
the existing telecommunications tower in Lake Bluff.

STANDARDS FOR VARIATIONS AND SPECIAL USE PERMITS

The Zoning Board is required by the Illinois State Statutes to apply the following standards in reviewing requests for Variations and Special Use Permits. The Board may only grant a variation or recommend that the Village Board grant a variation in cases where there are practical difficulties and particular hardships brought about by the strict application of the Zoning Ordinance and not by any persons, presently or formerly, having an interest in the property. **The applicant has the burden of establishing each of these standards both in writing and at the Public Hearing.** Please attach additional materials if necessary.

STANDARDS FOR VARIATIONS:

1. **Practical Difficulty or Hardship:** Describe the practical difficulty or particular hardship that would result from the strict application of the Zoning Ordinance.
If the ordinance is strictly applied we will be unable
to co-locate our antennas

2. **Unique Physical Condition:** Describe the unique characteristics of the lot or structures on the subject property which are exceptional, such as: a) existing unique structures or uses, b) irregular lot shape, size, or location, c) exceptional topographical features, or d) other extraordinary physical conditions.
This lot is home to an existing telecommunications
facility where T-mobile wants to co-locate their
antennas

3. **Special Privilege:** Describe how the request will not simply provide the applicant with a special privilege that other property owners do not enjoy. The request must be for relief from the regulations due to hardship, and not simply to reduce inconvenience or to provide for financial gain.

This will not provide T-Mobile with a special privilege. Other carriers are already present on site and there are no other facilities to collocate or build a new site. This is necessary to provide needed coverage in Lake Bluff.

4. **Code Purposes:** Describe how the request does not violate the intentions of the regulations. The applicant must show that the request does not adversely impact surrounding properties or the general welfare.

5. **Public Health and Safety:** Describe how the request will not: a) adversely impact the supply of light and air to adjacent properties, b) increase traffic congestion, c) increase the hazard of fire, d) endanger public safety, e) diminish the value of property within the surrounding area, or f) impair the public health, safety, comfort, morals, and welfare of the people.

STANDARDS FOR SPECIAL USE PERMITS:

1. **General Standard:** Describe how the proposed use will not adversely impact adjacent properties.

We are simply collocating antennas onto the existing tower & will not add to height or width. This will be a very minimal addition.

2. **No Interference with Surrounding Development:** Describe how the proposed use will not hinder or interfere with the development or use of surrounding properties.

This is only adding antennas to the existing tower & will not further interfere with development or use of surrounding properties.

3. **Adequate Public Facilities:** Describe how the proposed use will be served by streets, public utilities, police and fire service, drainage, refuse disposal, parks, libraries and other public services.

This facility is pre-existing and is located behind the police/fire building in Lake Bluff with the same access procedures.

4. **No Traffic Congestion:** Describe how the proposed use will not cause undue traffic and traffic congestion.

This facility is already existing and basic maintenance will not cause undue traffic or congestion. Construction does not take long & they will stay in rear of building, at the existing facility

5. **No Destruction of Significant Features:** Describe how the proposed use will not destroy or damage natural, scenic or historic features.

We are only adding antennas to the existing tower which will not destroy or damage natural, scenic or historic features. The tower already exists and this will not add to height or width.

STANDARDS FOR TEXT AMENDMENTS

The wisdom of amending the Village Zoning Map or the text of the Zoning Code is a matter committed to the sound legislative discretion of the Village Board of Trustees and is not dictated by any set standard. In determining whether a proposed amendment will be granted or denied the Board of Trustees may be guided by the principle that its power to amend this title should be exercised in the public good.

TEXT AMENDMENT GUIDING PRINCIPLES:

In considering whether the principle is satisfied in amending the text of the Zoning Code, the Board of trustees may weigh, among other factors, the following:

1. The consistency of the proposed amendment with the purposes of this title:

2. The community need for the proposed amendment and any uses or development it would allow:

3. The conformity of the proposed amendment with the village's comprehensive plan and zoning map, or the reasons justifying its lack of conformity:

APPLICATION MATERIALS

LEGAL DESCRIPTION - MUST BE PROVIDED

Required*

- Plat of survey including legal description.
- Evidence of title to property for which relief is sought or written documentation of contractual lease.
- Scale site plan showing building locations and dimensions.
- Scale site plan showing addition, new construction, modification, etc.
- Schematic drawings showing floor plan, elevations, and exterior mechanical equipment.
- Floor Area Calculation Table (if applicable)
- Other: _____

Optional

- Landscape Plan
- Photographs of subject property and surrounding properties.
- Testimony from neighbors is strongly encouraged.

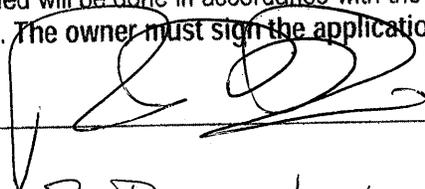
*15 copies, no larger than 11x17, must be submitted

SIGNATURES

The undersigned hereby represent, upon all of the penalties of the law, for the purpose of inducing the Village of Lake Bluff to take the action herein requested, that all statements herein and on all related attachments are true and that all work here mentioned will be done in accordance with the ordinances of the Village of Lake Bluff and the laws of the State of Illinois. ~~The owner must sign the application.~~

Owner

Signature: _____



Date: _____

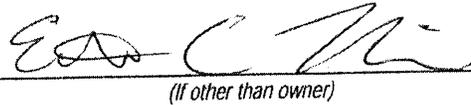
10/16/15

Print Name: _____

R. Drew Ivich

Applicant

Signature: _____


(If other than owner)

Date: _____

7-9-15

Print Name: _____

Elton Manion

GENERAL REQUIREMENTS:

1.1 INTENT

- THESE SPECIFICATIONS AND CONSTRUCTION DRAWINGS ACCOMPANYING THEM DESCRIBE THE WORK TO BE DONE AND THE MATERIALS TO BE FURNISHED FOR CONSTRUCTION.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND SUPPLEMENTARY. HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE DONE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED IN BOTH.
- THE INTENTION OF THE DOCUMENTS IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS STIPULATED IN THE CONTRACT.
- THE PURPOSE OF THE SPECIFICATIONS IS TO INTERPRET THE INTENT OF THE DRAWINGS AND TO DESIGNATE THE METHOD OF THE PROCEDURE, TYPE AND QUALITY OF MATERIALS REQUIRED TO COMPLETE THE WORK.
- MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED AS PART OF THE WORK. NO CHANGES THAT ALTER THE CHARACTER OF THE WORK WILL BE MADE OR PERMITTED BY THE OWNER WITHOUT ISSUING A CHANGE ORDER.

1.2 CONFLICTS

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL MEASUREMENTS AT THE SITE BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION DRAWINGS. ANY SUCH DISCREPANCY IN DIMENSION WHICH MAY BE FOUND SHALL BE SUBMITTED TO THE OWNER FOR CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREAS.
- THE BIDDER, IF AWARDED THE CONTRACT, WILL NOT BE ALLOWED ANY EXTRA COMPENSATION BY REASON OF ANY MATTER OR THING CONCERNING WHICH SUCH BIDDER MIGHT HAVE FULLY INFORMED THEMSELVES PRIOR TO THE BIDDING.
- NO PLEA OF IGNORANCE OF CONDITIONS THAT EXIST, OR OF DIFFICULTIES OR CONDITIONS THAT MAY BE ENCOUNTERED BY OTHER RELEVANT MATTER CONCERNING THE WORK TO BE PERFORMED IN THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL EVERY DETAIL OF ALL THE REQUIREMENTS OF THE CONTRACT DOCUMENTS GOVERNING THE WORK.

1.3 CONTRACTS AND WARRANTIES

- CONTRACTOR IS RESPONSIBLE FOR APPLICATION AND PAYMENT OF CONTRACTOR LICENSES AND BONDS.

1.4 STORAGE

- ALL MATERIALS MUST BE STORED IN A LEVEL AND DRY FASHION AND IN A MANNER THAT DOES NOT NECESSARILY OBSTRUCT THE FLOW OF OTHER WORK. ANY STORAGE METHOD MUST MEET ALL RECOMMENDATIONS OF THE ASSOCIATED MANUFACTURER
- THE BITS MUST BE STORED INSIDE UNTIL THERE IS POWER ON SITE.

1.5 CLEAN UP

- THE CONTRACTORS SHALL AT ALL TIMES KEEP THE SITE FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY THEIR EMPLOYEES AT WORK AND AT THE COMPLETION OF THE WORK THEY SHALL REMOVE ALL RUBBISH FROM AND ABOUT THE BUILDING AREA INCLUDING ALL THEIR TOOLS, SCAFFOLDING AND SURPLUS MATERIALS AND SHALL LEAVE THEIR WORK CLEAN AND READY FOR USE
- EXTERIOR: VISUALLY INSPECT EXTERIOR SURFACES AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER.
 - REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
 - IF NECESSARY TO ACHIEVE A UNIFORM DEGREE OF CLEANLINESS, HOSE DOWN THE EXTERIOR OF THE STRUCTURE.
- INTERIOR: VISUALLY INSPECT INTERIOR SURFACE AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER FROM WALLS/FLOOR/CEILING
 - REMOVE ALL TRACES OF SPLASHED MATERIAL FROM ADJACENT SURFACES
 - REMOVE PAINT DROPPINGS, SPOTS, STAINS AND DIRT FROM FINISHED SURFACES.

1.6 CHANGE ORDER PROCEDURE

- CHANGE ORDERS MAY BE INITIATED BY THE OWNER AND/OR THE CONTRACTOR INVOLVED. THE CONTRACTOR, UPON VERBAL REQUEST FROM THE OWNER SHALL PREPARE A WRITTEN PROPOSAL DESCRIBING THE CHANGE IN WORK OR MATERIALS AND ANY CHANGES IN THE CONTRACT AMOUNT AND PRESENT TO THE OWNER WITHIN 72 HRS FOR APPROVAL. SUBMIT REQUESTS FOR SUBSTITUTIONS IN THE FORM AND IN ACCORDANCE WITH PROCEDURES REQUIRED FOR CHANGE ORDER PROPOSALS. ANY CHANGES IN SCOPE OF WORK OR MATERIALS WHICH ARE PERFORMED BY THE CONTRACTOR WITHOUT A WRITTEN CHANGE ORDER AS DESCRIBED AND APPROVED BY THE OWNER SHALL PLACE FULL RESPONSIBILITY OF THESE ACTIONS ON THE CONTRACTOR

1.7 RELATED DOCUMENTS AND COORDINATION

- GENERAL CARPENTRY, ELECTRICAL AND ANTENNA DRAWINGS ARE INTERRELATED. IN PERFORMANCE OF THE WORK, THE CONTRACTOR MUST REFER TO ALL DRAWINGS. ALL COORDINATION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

1.8 SHOP DRAWINGS

- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AS REQUIRED AND LISTED IN THESE SPECIFICATIONS TO THE OWNER FOR APPROVAL.
- ALL SHOP DRAWINGS SHALL BE REVIEWED, CHECKED AND CORRECTED BY CONTRACTOR PRIOR TO SUBMITTAL TO THE OWNER.

1.9 PRODUCTS AND SUBSTITUTIONS

- SUBMIT 3 COPIES OF EACH REQUEST FOR SUBSTITUTION IN EACH REQUEST IDENTIFY THE PRODUCT OR FABRICATION OR INSTALLATION METHOD TO BE REPLACED BY THE SUBSTITUTION. INCLUDE RELATED SPECIFICATION SECTION AND DRAWING NUMBERS AND COMPLETE DOCUMENTATION SHOWING COMPLIANCE WITH THE REQUIREMENTS FOR SUBSTITUTIONS.
- SUBMIT ALL NECESSARY PRODUCT DATA AND CUT SHEETS WHICH PROPERLY INDICATE AND DESCRIBE THE ITEMS, PRODUCTS AND MATERIALS BEING INSTALLED. THE CONTRACTOR SHALL, IF DEEMED NECESSARY BY THE OWNER SUBMIT ACTUAL SAMPLES TO THE OWNER FOR APPROVAL IN LIEU OF CUT SHEETS.

1.10 QUALITY ASSURANCE

- ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THESE SHALL INCLUDE BUT NOT BE LIMITED TO THE LATEST VERSION OF THE COOK COUNTY BUILDING CODE

1.11 ADMINISTRATION

- BEFORE THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR WILL ASSIGN A PROJECT MANAGER WHO WILL ACT AS A SINGLE POINT OF CONTACT FOR ALL PERSONNEL INVOLVED IN THIS PROJECT THIS PROJECT MANAGER WILL DEVELOP A MASTER SCHEDULE FOR THE PROJECT WHICH WILL BE SUBMITTED TO THE OWNER PRIOR TO THE COMMENCEMENT OF ANY WORK
- SUBMIT A BAR TYPE PROGRESS CHART NOT MORE THAN 3 DAYS AFTER THE DATE ESTABLISHED FOR COMMENCEMENT OF THE WORK ON THE SCHEDULE. INDICATING A TIME BAR FOR EACH MAJOR CATEGORY OR UNIT OF WORK TO BE PERFORMED AT SITE, PROPERLY SEQUENCED AND COORDINATED WITH OTHER ELEMENTS OF WORK AND SHOWING COMPLETION OF THE WORK SUFFICIENTLY IN ADVANCE OF THE DATE ESTABLISHED FOR SUBSTANTIAL COMPLETION OF THE WORK.
- PRIOR TO COMMENCING CONSTRUCTION, THE OWNER SHALL SCHEDULE AN ON-SITE MEETING WITH ALL MAJOR PARTIES. THIS WOULD INCLUDE (THOUGH NOT LIMITED TO) THE OWNER, PROJECT MANAGER, CONTRACTOR, LAND OWNER REPRESENTATIVE, LOCAL TELEPHONE COMPANY, TOWER ERECTION FOREMAN (IF SUBCONTRACTED).
- CONTRACTOR SHALL BE EQUIPPED WITH SOME MEANS OF CONSTANT COMMUNICATIONS, SUCH AS A MOBILE PHONE OR A BEEPER. THIS EQUIPMENT WILL NOT BE SUPPLIED BY THE OWNER. NOR WILL WIRELESS SERVICE BE ARRANGED.
- DURING CONSTRUCTION, CONTRACTOR MUST ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AT ALL TIMES. CONTRACTOR WILL COMPLY WITH ALL SAFETY REQUIREMENTS IN THEIR AGREEMENT.
- PROVIDE WRITTEN DAILY UPDATES ON SITE PROGRESS TO THE OWNER.
- COMPLETE INVENTORY OF CONSTRUCTION MATERIALS AND EQUIPMENT IS REQUIRED PRIOR TO START OF CONSTRUCTION.
- NOTIFY THE OWNER / PROJECT MANAGER IN WRITING NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, TOWER ERECTIONS, AND EQUIPMENT CABINET PLACEMENTS

1.12 INSURANCE AND BONDS

- CONTRACTOR SHALL AT THEIR OWN EXPENSE CARRY AND MAINTAIN FOR THE DURATION OF THE PROJECT ALL INSURANCE AS REQUIRED AND LISTED AND SHALL NOT COMMENCE WITH THEIR WORK UNTIL THEY HAVE PRESENTED AN ORIGINAL CERTIFICATE OF INSURANCE STATING ALL COVERAGES TO THE OWNER REFER TO THE MASTER AGREEMENT FOR REQUIRED INSURANCE LIMITS
- THE OWNER SHALL BE NAMED AS AN ADDITIONAL INSURED ON ALL POLICIES.
- CONTRACTOR MUST PROVIDE PROOF OF INSURANCE.

TOWER & ANTENNA INSTALLATION:

1.1 WORK INCLUDED

- IF REQUIRED, ERECT FURNISHED TOWER.
- GROUND TOWER TEMPORARILY DURING ERECTION. GROUNDING SHALL INCLUDE BASE(S) AND ANCHORS.
- IF REQUIRED, INSTALL THREE (3) SIDE ARMS, CONSISTING OF THREE (3) 6"-6" AS INDICATED ON DRAWINGS - CONFIRM WITH OWNER REPRESENTATIVE
- INSTALL ANTENNAS AS INDICATED ON DRAWINGS AND OTHER SPECIFICATIONS.
- INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS.
- INSTALL FURNISHED GALVANIZED STEEL WAVEGUIDE LADDER.
- INSTALL WAVEGUIDE BRIDGE AS INDICATED ON DRAWING
- SUPPLY AND INSTALL ONE INSULATED GROUND BAR AT EQUIPMENT CABINET
- SUPPLY AND INSTALL GROUNDING STRAP KITS WITH LONG BARREL COMPRESSION LUGS (SIL TO ANDREW-223700BD OR APPROVED EQUAL) ATOP TOWER BASE BEFORE ENTERING THE EQUIPMENT. GROUNDING STRAPS TO BE CONNECTED TO INSULATED GROUND BAR.
- ASSIST OTHER TECHNICIANS IN PERFORMING SWEEP TEST OF INSTALLED COAX.
- CONCRETE PIERS FOR FOUNDATIONS SHALL BE DRILLED AND Poured ON THE SAME DAY.

1.2 REQUIREMENTS OF REGULATOR AGENCIES

- FURNISH U.L. LISTED EQUIPMENT WHERE SUCH LABEL IS AVAILABLE, INSTALL IN CONFORMANCE WITH U.L. STANDARDS WHERE APPLICABLE.
- INSTALL ANTENNA, ANTENNA CABLES, GROUNDING SYSTEM IN ACCORDANCE WITH DRAWINGS AND SPECIFICATION IN EFFECT AT PROJECT LOCATION AND RECOMMENDATIONS OF STATE AND LOCAL BUILDING CODES, SPECIAL CODES HAVING JURISDICTION OVER SPECIFIC PORTIONS OF WORK. THIS INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING
 - TIA - TELECOMMUNICATIONS INDUSTRY ASSOCIATION TIA-222-G, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.
 - FAA - FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR AC 70/7460-1H, OBSTRUCTION MARKING AND LIGHTING
 - FCC - FEDERAL COMMUNICATIONS COMMISSION RULES AND REGULATIONS FORM 715, OBSTRUCTION MARKING AND LIGHTING SPECIFICATIONS FOR ANTENNA STRUCTURES AND FORM 715A, HIGH INTENSITY OBSTRUCTION LIGHTING SPECIFICATIONS FOR ANTENNA STRUCTURES.
 - AISC - AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.
 - NEC - NATIONAL ELECTRICAL CODE - ON TOWER LIGHTING KITS.
 - UL - UNDERWRITER'S LAB OR TERA APPROVED ELECTRICAL PRODUCTS.
- IN ALL CASES, PART 77 OR THE FAA RULES AND PARTS 17 AND 22 OF THE FCC RULES ARE APPLICABLE AND IN THE EVENT OF CONFLICT, SUPERSEDE ANY OTHER STANDARDS OR SPECIFICATIONS.
- 2012 LIFE SAFETY CODE NFPA -101.

GENERAL ELECTRIC PROVISIONS:

- SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
- CONTRACTOR SHALL PERFORM ALL VERIFICATION OBSERVATIONS TEST, AND EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
- HEIGHTS SHALL BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.
- THESE PLANS ARE DIAGRAMMATIC ONLY. FOLLOW AS CLOSELY AS POSSIBLE
- ELECTRICAL SERVICE 120 /208 VAC 3-PHASE 4-WIRE 100 AMP SERVICE 120 / 240 VAC SINGLE PHASE 3-WIRE 200 AMP SERVICE
- EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANEL BOARD, PULL BOX, J-BOX, SWITCH BOX, ETC., IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ACT (O.S.H.A)
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC., FOR A COMPLETE AND PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT AND AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
- ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED "X" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA AND NBFU
- ALL CONDUIT INSTALLED SHALL BE SURFACE MOUNTED OR DIRECT BURIAL UNLESS OTHERWISE NOTED
- CONTRACTOR SHALL CARRY OUT THEIR WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND O.S.H.A.
- CONTRACTOR TO OBTAIN ALL PERMITS, PAY PERMIT FEES, AND BE RESPONSIBLE FOR SCHEDULING INSPECTIONS.
- COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONDUIT SHALL HAVE A PULL WIRE OR ROPE.
- PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS AND CIRCUITS.
- ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC., SHALL BE TURNED OVER TO THE OWNER AT JOB COMPLETION.
- USE T-TAP CONNECTIONS ON ALL MULTIL-CIRCUITS WITH COMMON NEUTRAL CONDUCTOR FOR LIGHTING FIXTURES
- ALL CONDUCTORS SHALL BE COPPER
- ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES.
- PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
- PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH APPLICABLE LOCAL BUILDING CODES
- WIRE AND CABLE CONDUCTORS SHALL BE COPPER #12 AWG MINIMUM UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS.
- GROUNDING CONDUCTORS SHALL BE SOLID TINNED COPPER UNLESS OTHERWISE NOTED
- METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE AS NOTED ON THE DRAWINGS, MANUFACTURED BY "SQUARE D COMPANY", OR APPROVED EQUAL
- ALL MATERIALS SHALL BE U L LISTED
- CONDUIT
 - RIGID CONDUIT SHALL BE U.L LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR AND SHALL BE USED IM-1EN INSTALLED IN OR UNDER CONCRETE SLABS IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3
 - ELECTRICAL METALLIC TUBING SHALL HAVE U.L LABEL. FITTING SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.
 - FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE, SEAL TIGHT FLEXIBLE CONDUIT. ALL CONDUIT SHALL HAVE FULL SIZE EQUIPMENT GROUND WIRE.
 - CONDUIT RUNS SHALL BE SURFACE MOUNTED IN CEILING OR WALLS UNLESS INDICATED OTHERWISE. CONDUIT INDICATED SHALL RUN PARALLEL OR AT RIGHT ANGLES TO CEILING, FLOOR OR BEAMS. VERIFY EXACT ROUTING OF ALL EXPOSED CONDUIT WITH THE OWNER PRIOR TO INSTALLING. NO HORIZONTAL CONDUITS SHALL BE BELOW 7'-6" A.F.F. NO BX OR ROMEX CABLE IS PERMITTED
 - PARALLEL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 (UNLESS NOTED OTHERWISE) AT A MINIMUM DEPTH OF 30" BELOW GRADE - STACKED UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 (UNLESS NOTED OTHERWISE) AT A MINIMUM DEPTH OF 24" BELOW GRADE
 - ABOVE GROUND CONDUIT SHALL BE P.V.C. SCHEDULE 80 (UNLESS NOTED OTHERWISE).
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS
- CONTRACTOR TO PROVIDE DAILY UPDATES TO PM UNTIL FINAL ELECTRICAL SERVICE IS EFFECTED.
- UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL OF POTENTIAL GROUND TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAWAGED CONDITION
- CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS TO BE PAID BY CONTRACTOR

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

REV	DATE	BY	DESCRIPTION
0	06/29/15	RA	PERMIT/CONSTRUCTION
1	07/10/15	RA	REV. PERMIT/CONSTRUCTION

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SHEET TITLE
GENERAL NOTES & SPECIFICATIONS

SHEET NUMBER
T-2

GROUNDING STANDARDS:

1.0 DEFINITIONS

- AGB: ANTENNA GROUND BAR
- AWG: AMERICAN -RE GAUGE
- CADWELDING: AN EXOTHERMIC WELDING PROCESS WHICH CREATES POSITIVE CONTACT OF POSITIVE CONTACT OF GROUNDING CONDUCTORS
- EMT: ELECTRICAL METAL TUBING (LIGHT GAUGE METALLIC CONDUIT) MGB MASTER GROUND BAR
- MGB: MASTER GROUND BAR
- PVC: POLYVINYL CHLORIDE CONDUIT
- RFI: RADIO FREQUENCY INTERFERENCE
- THWN: LETTER TYPE DESIGNATION FOR CONDUCTOR INSULATION THAT IS A MOISTURE AND HEAT RESISTANT THERMOPLASTIC WITH A MAXIMUM OPERATING TEMPERATURE OF 75 DEGREES CELSIUS OR 167 DEGREES FAHRENHEIT
- T /1: TENANT IMPROVEMENT

2.0 BACKGROUND

2.1 AREAS OF CONCERN: WHEN DESIGNING A GROUNDING SYSTEM FOR A MOBILE RADIO FACILITY THERE ARE FOUR INTERRELATED AREAS OF CONCERN. THE BASIC OBJECTIVE FOR EACH IS:

1. LIGHTNING PROTECTION -TO MAINTAIN ALL EQUIPMENT AT THE SAME POTENTIAL DURING A LIGHTNING IMPULSE
2. RFI FOR NOISE INDUCTION CONTROL -TO ESTABLISH THE LOWEST POSSIBLE IMPEDANCE AMONG ALL EQUIPMENT.
3. ELECTROSTATIC CONTROL -TO REDUCE ELECTROSTATIC DISCHARGE PROBLEMS.
4. PERSONNEL SAFETY -TO MAINTAIN A MINIMUM VOLTAGE DIFFERENCE BETWEEN ANY TWO METALLIC OBJECTS WHICH PERSONNEL MIGHT CONTACT SIMULTANEOUSLY.

2.2 A/C GROUNDING: IN N115 GROUNDING SYSTEM THE A/C SERVICE GROUND SHALL BE KEPT ISOLATED FROM THE EQUIPMENT FRAME WORK AND LIGHTNING PROTECTION GROUND SYSTEMS EXCEPT FOR ONE SPECIFIC POINT. THIS POINT IS THE MAIN GROUNDING POINT OF TL-1E SYSTEM. THIS WOULD TYPICALLY BE CONNECTING THE A/C SERVICE GROUND AT TL-1E COMMERCIAL POWER RISER POLE DISCONNECT /METER BASE TO THE EXTERNAL GROUND RING. ALL GROUNDING CONNECTIONS INSIDE OF CABINETS SHALL BE SCRAPED TO BARE METAL AND COATED WITH NOALOX.

2.3 LIGHTNING CONSIDERATIONS: LIGHTNING DAMAGE OCCURS FROM EITHER INDUCTION OR FROM AN ACTUAL DIRECT STRIKE TO THE BUILDING, USUALLY TAKEN THROUGH THE TOWER AND/OR ANTENNAS. STRIKES TO OTHER NEARBY OBJECTS INDUCE HIGH ENERGY INTO POWER OR TELEPHONE CABLES ENTERING THE BUILDING. THIS TYPE OF EFFECT HISTORICALLY CAUSES MOST OF THE DAMAGE TO THE BUILDING AND ITS CONTENTS.

3.0 STATION GROUNDING SYSTEM

3.1 MATERIALS:

1. #2 AWG, BARE SOLID TINNED COPPER WIRE, FOR ALL EXTERIOR CONDUCTORS AND TOWER GROUND BAR CONDUCTORS OR AS OTHERWISE SPECIFIED. GROUNDS TO THE LNAS SHALL BE NO. 6 STANDARD GREEN INSULATED JUMPERS. THE GROUND WIRE TO TL-1E MGB SHALL BE GREEN JACKETED STRANDED #2 TINNED WIRE BURNDY CONNECTED TO THE BUSS BAR AND CONNECTED TO TL-1E GROUND RING ON A GROUND ROD
2. #2 AWG, INSULATED STRANDED COPPER CABLE IS ACCEPTABLE FOR INTERIOR GROUND BAR CONDUCTORS ON TENANT IMPROVEMENT SITES.
3. 5/8" X 10" GROUND RODS OF SOLID COPPER, STAINLESS STEEL OR COPPER CLAD HIGH STRENGTH STEEL.
4. ABOVE GRADE CONNECTIONS SHALL BE BURNDY HYDROGEN COMPRESSION, BELOW GRADE CONNECTIONS SHALL BE CAD WELD OR OTHER APPROVED EXOTHERMIC WELDING SYSTEM FOR BONDING AS SPECIFIED.
5. XIT OR ADVANCED GROUNDING ELECTRODE (AGE), ALL CHEMICAL GROUND RODS SHALL BE UL APPROVED
6. SOLID COPPER PLATES OF MINIMUM 3"x3"x1/4" SIZE AS SPECIFIED.
7. NOALOX OR APPROVED EQUAL CONDUCTIVE MEDIUM MATERIAL SHALL BE USED IN ALL MECHANICAL CONNECTIONS.
8. #6 AWG STRANDED INSULATED (GREEN) FOR ALL INTERNAL EQUIPMENT GROUNDING
9. MECHANICAL FASTENERS (IE. DOUBLE LUGS, SPLIT BOLTS PARALLEL CONNECTORS) SHALL BE BRONZE, BRASS, COPPER OR STAINLESS STEEL AND HAVE NOALOX BETWEEN CONDUCTOR AND CONNECTION
10. BOLTS, NUTS AND SCREWS USED TO FASTEN MECHANICAL CONNECTORS SHALL BE STAINLESS STEEL WITL-1 STAR TYPE STAINLESS STEEL LOCK WASHERS
11. ALL LUG TUBE FASTENERS SHALL PROVIDE TWO HOLES TO ALLOW A DOUBLE BOLT CONNECTION

3.2 MASTER GROUND BAR (MGB): THE PURPOSE OF THE MASTER GROUND BAR IS TO GROUND THE BTS AND ANY OTHER METALLIC OBJECTS AROUND TL-1E BTS. IF AN MGB IS NOT PROVIDED WITH THE BTS, THE MGB SHALL BE AS FOLLOWS: THE MGB IS A COPPER BAR MEASURING 4" X 24" X 1/4" LOCATED AS CLOSE TO THE BTS AS POSSIBLE. THE MGB SHALL HAVE A MINIMUM NUMBER OF (28) 3/8" HOLES. GROUND BAR SHALL BE SUPPORTED BY MOUNTING BRACKETS WITH INSULATOR STANDOFFS. (2) #2 TINNED SHALL BE MECHANICALLY ATTACHED (2-HOLE COMPRESSION LUG 3/8" HOLES, 1" CENTER TO CENTER SPACING) TO THE MGB AND DOWN LEADS THEN TAKEN THROUGH CONDUIT TO THE GROUND RING. THIS CONDUCTOR SHALL BE KEPT SEPARATE AND ISOLATED UNTIL TERMINATING AT THE MAIN GROUNDING POINT, (I.E. EXTERIOR GROUND RING OR BUILDING STEEL).

3.3 ANTENNA GROUND BAR (AGB): THE PURPOSE OF THE ANTENNA GROUND BAR IS PRIMARILY FOR LIGHTNING PROTECTION. COAXIAL CABLE IS USUALLY THE ONLY ITEM GROUND TO THIS BAR, HOWEVER IT IS ACCEPTABLE TO BOND EXTERIOR; CABLE TRAY, WAVE GUIDE PORTS AND CANTILEVERED WAVE GUIDE BRIDGES TO THE AGB. THE AGB IS A COPPER BAR MEASURING 4" X 24" X 1/4". THERE SHALL BE TWO AGBS, ONE LOCATED AT THE TOP OF THE TOWER AT THE START OF THE VERTICAL RUN OF COAX, THE OTHER AT THE BOTTOM OF THE VERTICAL RUN OF COAX BEFORE IT MAKES ITS BEND. (IF THE TOWER IS OVER 200' THERE SHALL BE A THIRD AGB LOCATED AT THE MIDDLE OF THE TOWER).THE AGB SHALL HAVE A MINIMUM OF (28) 3/8" HOLES. GROUND BARS SHALL BE SUPPORTED BY MOUNTING BRACKETS WITH-1 INSULATOR STANDOFFS. USE #2 AWG SOLID TINNED WIRE W/ 2-HOLE SHORT BARREL COMPRESSION LUGS 3/8" HOLES, 1" CENTER TO CENTER SPACING). THIS CONDUCTOR SHALL BE KEPT SEPARATE AND ISOLATED UNTIL TERMINATING AT THE MAIN GROUNDING POINT (I.E. EXTERIOR GROUND RING, OR BUILDING STEEL)

GROUNDING STANDARDS (CONT.):

3.4 SURGE ARRESTOR GROUND BAR: THE PURPOSE OF THE SURGE ARRESTOR GROUND BAR IS FOR LIGHTNING PROTECTION. THE SURGE ARRESTOR GROUND BAR IS A BENT (3" X 3" X 1/4" X 24" COPPER BAR. IT IS LOCATED ON THE WAVEGUIDE BRIDGE SUPPORT CLOSEST TO THE EQUIPMENT. ONE FACE OF THE BAR SHALL HAVE A MINIMUM (28) 3/8" DIA. HOLES. HOLES SHALL BE IN PAIRS THAT ARE 1" CENTER TO CENTER. THE OTHER FACE SHALL HAVE 3/8" DIA. HOLES AS REQUIRED TO ATTACH AND GROUND COAXIAL SURGE ARRESTORS. THE GROUND BAR SHALL BE SUPPORTED BY MOUNTING BRACKETS WITH INSULATOR STANDOFFS.

3.5 GROUND ROD AND GROUND RING PLACEMENT: THE OUTSIDE GROUND RING SHALL BE PLACED AROUND THE BTS AT A DISTANCE OF TWO (2) FEET FROM THE BTS AT A DEPTH OF 2'-6" OR 6" BELOW THE FROST LINE, WHICHEVER IS DEEPER. RODS SHALL BE DRIVEN TO DEPTH SUCH THAT THE TOP OF THE RODS IS AT THE LEVEL OF THE GROUND RING CONDUCTOR. THE RODS SHALL BE PLACED MINIMALLY ALONG THE RING AT THE FOLLOWING LOCATIONS:

- A. BELOW THE AREA OF THE INTERNAL MASTER GROUND BAR FOR CONNECTION TO THE MGB.
- B. BELOW THE UTILITY RACK FOR CONNECTION TO THE MAIN BUILDING COMMERCIAL POWER DISCONNECT.
- C. BELOW THE CORNERS OF THE BTS.
- D. AS REQUIRED TO ACHIEVE A RECOMMENDED SPACING OF TWENTY (20) FEET BETWEEN GROUND RODS ALONG THEIR RING PERIMETER.
- E. AS REQUIRED ALONG THE RING PERIMETER TO ACHIEVE 5 OHMS OR LESS RESISTANCE WHEN TESTED.
- F. TWO RODS LOCATED ON OPPOSITE SIDES AT EACH TOWER LEG OR MONOPOLE.
- G. ONE ROD LOCATED BENEATH EACH END OF THE WAVE GUIDE BRIDGE OR CABLE TRAY.
- H. ONE ROD LOCATED ADJACENT TO THE STANDBY GENERATOR, AND IF SEPARATED BY MORE THAN TEN (10) FEET, ONE LOCATED ADJACENT TO THE FUEL TANK.
- I. ONE ROD LOCATED AT THE BASE OF THE TOWER FOR THE AGB.

3.6 TOWER GROUNDING: ALL MONOPOLES SHALL HAVE TWO GROUND RODS (MINIMUM). ALL OTHER TOWERS SHALL HAVE TWO GROUND RODS PLACED AT THE BASE OF EACH TOWER LEG. EACH MONOPOLE OR TOWER LEG SHALL BE BONDED TO THE SYSTEM VIA TWO #2 BARE TINNED SOLID COPPER CONDUCTORS. BURNDY CONNECT THE CONDUCTORS TO ONLY STRUCTURAL BASE PLATE OR LUGS OR EARS AS MAY BE PROVIDED. NO BURNDY CONNECTIONS SHALL BE MADE TO THE VERTICAL WALLS OF THE STRUCTURE. NEVER GROUND TO HOLLOW LEG MEMBERS.

3.7 ANTENNA GROUNDING: EACH ANTENNA COAXIAL CABLE SHALL TYPICALLY BE GROUND AT THREE POINTS USING A HARD-SHEATH COAXIAL CABLE KIT FROM THE MANUFACTURER OF THE ANTENNA CABLE. A TYPICAL INSTALLATION SHALL BE AS FOLLOWS:

- A. THE FIRST GROUND CONNECTION SHALL OCCUR AS CLOSE TO THE ANTENNA AS POSSIBLE, BELOW THE FIRST POINT THE COAX CABLE BEINGS TO RUN VERTICAL DOWN THE TOWER. THIS GROUND SHALL TERMINATE DIRECT TO THE TOP AGB. ON A T/1, GROUND TO THE AGB AT THE ANTENNA MOUNTS.
- B. THE SECOND GROUND SHALL BE MADE AT THE BOTTOM OF THE VERTICAL RUN OF THE COAXIAL CABLE AS IT TURNS OUT AWAY FROM THE TOWER TOWARDS THE BTS. THIS GROUND SHALL BE TERMINATED AT THE AGB. THE AGB SHALL HAVE TWO (2) LEADS OF #2 AWG BARE TINNED SOLID COPPER WIRE, AND SHALL TERMINATED AT THE TOWER GROUND RING. THESE SHALL BE ENCASED IN PVC PIPE.
- C. THE THIRD GROUND SHALL BE ON THE SURGE ARRESTOR. GROUND TO BE ATTACHED TO THE CABLE ON STRAIGHT RUNS (NOT WITHIN BENDS) AND BE WEATHERPROOFED PER THE MANUFACTURER'S SPECIFICATIONS. THE SURGE ARRESTORS SHALL BE GROUND TO THE GROUND WIRE, AND SHALL TERMINATE AT THE TOWER GROUND RING. THESE SHALL BE ENCASED IN PVC PIPE.

3.8 PERIMETER FENCE GROUNDING:

- A. ALL FENCE CORNER AND END POSTS (MINIMUM OF TWO) SHALL HAVE ONE #2 SOLID TINNED COPPER GROUND WIRE CONNECTED TO A 5/8" X 10" SOLID COPPER CLAD GROUND ROD NEXT TO THE POST. THESE POSTS SHALL BE CONNECTED TO THE GROUND RING WITH A #2 SOLID TINNED COPPER GROUND WIRE AND INTERMEDIATE GROUND RODS IF THE DISTANCE FROM THE POST TO THE GROUND RING EXCEEDS 10 FEET. IN NO CASE SHALL ANY PORTION OF THE SAME FENCE REMAIN DISCONNECTED FROM THE GROUND RING
- B. GATE POSTS SHALL BE GROUND TO EACH OTHER TO ENSURE THE ENTIRE FENCE HAS ELECTRICAL CONTINUITY. CONNECTIONS SHALL BE DRILL AND TAP WITH BURNDY TYPE KC22 TP THE POST WITH A #2 AWG BARE SOLID TINNED COPPER WIRE.
- C. GATES SHALL BE BONED TO GATE POSTS WITH 18" BRAIDED STRAP TYPE B018G92. THE CONNECTIONS SHALL BE BURNDY 2-HOLE LUGS (3/8" HOLES, 1" CENTER TO CENTER) BOLTED THROUGH EACH POST.
- D. ALL DOWN LEADS TO EARTH WILL BE ENCASED IN 3/4 INCH PVC NON-METALLIC AND SEALED WITH SILICONE.

3.9 GENERATOR FUEL TANK GROUNDING: THE GENERATOR FUEL TANK, IF REQUIRED, SHALL BE CONNECTED IN AT LEAST ONE PLACE TO THE MAIN EXTERIOR GROUND RING. #2 AWG BARE SOLID TINNED COPPER WIRE SHALL BE BURNDY CONNECTED TO ONE SUPPORT LEG OF THE FUEL TANK AND CAD WELD TO THE NEAREST EXTERIOR GROUND RING/GROUND ROD.

3.10 EQUIPMENT ROOM GROUNDING: THE MASTER GROUND BAR (MGB) SERVES AS THE COLLECTION POINT FOR THE BTS AS WELL AS ALL INTERIOR NON-ELECTRICAL GROUNDING METAL MATERIALS (HVAC GRILLS, DOOR FRAMES/DOORS, TELCOBOARD, UNISTRUTS, CABLE TRAYS, ALARM JUNCTION BOX, ETC.) SHALL BE GROUND WITH #6 AWG STRANDED (GREEN) GROUND WIRES WITH INDIVIDUAL RUNS BACK TO THE MGB. (THE CABLE TRAY, DOOR/FRAME AND UNISTRUT MAY BE JUMPERED TOGETHER AND HAVE A SINGLE GROUND WIRE CONNECTION TO THE MGB.)

3.11 WALL PENETRATIONS SLEEVES: INSTALL PER CONSTRUCTION DRAWINGS.

3.12 A/C COMMERCIAL POWER GROUNDING CONNECTIONS: AT THE ON-SITE RISER POLE LOCATION OR UNDERGROUND SERVICE ENTRANCE LOCATION, THE A/C SERVICE SHALL BE MECHANICALLY BONDED TO THE A/C SERVICE ENTRANCE GROUND AS SPECIFIED BY THE NATIONAL ELECTRIC CODE, ARTICLE 250, AND/OR APPROPRIATE LOCAL CODES. A SEPARATE GROUND ROD SHALL BE PROVIDED AT THIS POINT, AND SHALL BE CONNECTED TO THE EXTERIOR GROUND RING A SEPARATE A/C SERVICE GROUND AND NEUTRAL SHALL THEN BE ROUTED TO AND CONNECTED TO THE MAIN DISCONNECT INSIDE THE BUILDING OR AS REQUIRED BY LOCAL AUTHORITY.

3.13 GENERATOR RECEPTACLE GROUNDING: THE GENERATOR RECEPTACLE (HUBBLE PLUG) SHALL BE GROUND TO THE EGR.

3.14 COAX BRIDGE / CABLE TRAY GROUNDING: BOND THE COAX BRIDGE OR CABLE TRAY TO THE AGB WITH #2 SOLID TINNED GROUND WIRE. THESE CONNECTIONS SHALL BE DOUBLE LUG BOLTED / SCREWED MECHANICAL CONNECTIONS WITH STAR LOCK WASHERS AND NOALOX. ALL BRIDGE SPLICES SHALL HAVE JUMPERS OF #2 SOLID WITH COMPRESSION LUGS.

3.15 SURGE ARRESTOR GROUND BAR: CAD WELDS (EXOTHERMIC WELDS) AND BURNDY CONNECTIONS SHALL BOND ALL UNDERGROUND AND DAMP LOCATION CONNECTIONS, SHELTER SKID GROUNDS, TOWER OR MONOPOLE GROUNDS, FENCING CORNER AND GATE POSTS, ANTENNA GROUND BAR, (AGB) SURGE ARRESTOR GROUND BAR, AND THE MASTER GROUND BAR (MGB). MECHANICAL CONNECTIONS SHALL BE TYPICALLY USED TO BOND ALL INTERIOR EQUIPMENT, COAX BRIDGES AND COAXIAL CABLE GROUND KITS. ALL LUG TYPE MECHANICAL CONNECTORS TO THE MGB OR AGB SHALL BE TWO HOLE TYPE CONNECTED WITH STAINLESS STEEL BOLTS AND NUTS WITH STAINLESS STEEL LOCK WASHERS AND NOALOX ON EITHER SIDE OF THE BUSS BAR.

3.16 CHEMICAL GROUND RODS: CHEMICAL GROUND RODS SHALL NOT BE INSTALLED ON GROUND RING INSTALLATIONS WITH NORMAL SOIL. CHEMICAL GROUND RODS SHALL BE INSTALLED ONLY FOR SPECIAL DESIGN APPLICATIONS THAT REQUIRE SINGLE POINT GROUND DUE TO SPECIFIC SITE CONDITIONS.

3.17 TENANT IMPROVEMENT SITE GROUNDING: FOR ROOF TOP ANTENNA INSTALLATIONS ADDITIONAL ANTENNA GROUND BARS MAY HAVE TO BE INSTALLED AT EACH ANTENNA MOUNT LOCATION. ALL ANTENNA MOUNTS SHALL BE GROUND WITH A #2 AWG CONDUCTOR CONNECTED TO THE NEAREST BUILDING STEEL OR THE AGB INSTALLED AT THE MOUNT. ALL BUSS BARS, BOTH MGB AND AGB(S), SHALL BE INDEPENDENTLY TIED TO THE NEAREST BUILDING STEEL OR DESIGNATED GROUNDING SYSTEM. NO GROUND WIRE IS TO CONNECT THE BUSS BAR TOGETHER. AGB(S) MAY BE HOME RUN BACK TO THE MGB WHERE NO BUILDING STEEL IS AVAILABLE.

3.18 LIMITS OF BEND RADIUS: IT IS IMPORTANT THAT THE GROUNDING CONDUCTOR CONNECTING THE INSIDE AND OUTSIDE GROUND SYSTEMS BE AS STRAIGHT AS POSSIBLE, WITH NO TURN OR BEND SHORTER THAN ONE FOOT RADIUS WITH A THREE FOOT RADIUS PREFERRED, NO RIGHT ANGLE OR SHARP BENDS SHALL BE ALLOWED.

3.19 BONDING PREPARATION & FINISH: ALL SURFACES REQUIRE PREPARATION PRIOR TO BONDING OF EITHER CAD WELD OR BURNDY FASTENERS. GALVANIZED SURFACES SHALL BE GROUND OR SANDED TO THE POINT OF EXPOSING THE STEEL SURFACE BELOW, PRIOR TO BONDING THE GROUND CONDUCTOR. FOR OTHER SURFACES INCLUDING COPPER BUSS BARS ALL PAINT, RUST TARNISH AND GREASE SHALL BE REMOVED PRIOR TO BONDING THE GROUND CONDUCTOR. CAD WELD TYPE BONDS SHALL BE FINISHED WITH THE APPLICATION OF COLD GALVANIZATION AND WHEN APPLICABLE, FINISH PAINTED WITH AN APPROPRIATE COLOR AS REQUIRED. MECHANICAL TYPE BONDS ON BUSS BARS SHALL BE FINISHED WITH THE APPLICATION OF NOALOX OR OTHER APPROVED CONDUCTIVE MEDIUM MATERIAL BETWEEN CONNECTOR AND BUSS BAR. MECHANICAL TYPE BONDS ON ALL OTHER SURFACES BE SHALL BE FINISHED WITH THE APPLICATION OF COLD GALVANIZATION AND/OR THE APPROPRIATE PAINT TO MATCH AS REQUIRED.

3.20 TESTING: THE OUTSIDE GROUND RING SHALL BE TESTED AFTER INSTALLATION BUT PRIOR TO BACKFILLING THE GROUND RING TRENCH THE GROUND FIELD RESISTANCE SHALL MEASURE 5 OHMS OR LESS TO GROUND. ANY DIFFICULTY IN ACHIEVING THIS LEVEL OF RESISTANCE MUST BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER. THE RESISTANCE TO GROUND SHALL BE MEASURED USING THE FALL OF POTENTIAL METHOD. TESTING SHALL BE PERFORMED BY AN OWNER PROVIDED INDEPENDENT TESTING LABORATORY FROM WHICH A WRITTEN REPORT SHALL BE PRODUCED FOR REVIEW BY THE PROJECT MANAGER.

3.21 SPECIAL CONDITIONS: WHEN SOIL CONDITIONS EXIST (I.E., NON-COMPACTABLE ROCK GRAVEL SHALE, ETC.) THAT PREVENTS THE INSTALLATION OF THE STANDARD GROUNDING SYSTEM AND PROCEDURES, AND THEN VERBAL PROCEDURES SHALL BE REQUESTED BY THE PM.

3.22 EXTERNAL GROUND RING: THE EXTERNAL GROUND RING SHALL EXTEND TO THE MAXIMUM ALLOWABLE DEPTH IN 95% COMPACTED SOIL.

3.23 GROUND RODS (REPLACEMENT): WHEN GROUND RODS CANNOT BE DRIVEN INTO THE SOIL VERTICALLY TO A DEPTH DESCRIBED IN PARAGRAPH 3.5 AND REMAIN 95% COMPACTED SOIL, THEN THE FOLLOWING METHODS OF SUBSTITUTION MAY BE USED. THESE ARE SUGGESTED METHODS ONLY, AND EACH CASE SHOULD BE REVIEWED BY THE T-MOBILE PROJECT MANAGER. THE PURPOSED IS TO ACHIEVE THE LOWEST IMPEDANCE TO GROUND IN ANY CASE EQUAL TO OR LESS THAN 5 OHMS.

3.24 ROCK WITH SOME OR NO SOIL COVER: FOR SITES WHICH HAVE SOIL CONDITIONS WHICH CONSIST OF SOLID OR SEMI SOLID ROCK BELOW ABOUT THREE FEET OF COMPATIBLE SOIL, A COMBINATION OF METHODS MAY BE USED:

- A. COMBINATION OF SHORT GROUND RODS MAY BE USED WITH 3' SQUARE 1/4" COPPER PLATES. A MINIMUM OF TWO PLATES SHOULD BE USED AND SHOULD REPLACE GROUND RODS ON AN EQUIVALENCY OF TWO GROUND ROD LENGTHS PER COPPER PLATE. THE COPPER PLATE SHOULD BE PLACED IN A MINIMUM 3" BENTONITE BASE AND COVERED WITH 3" OF BENTONITE FILL PRIOR TO BACKFILL.
- B. AN ACTIVE TYPE CHEMICAL ROD SYSTEM MAY BE USED. THIS IS AN ENGINEERING JUDGMENT AND SHOULD BE USED ONLY WHERE NECESSARY, DUE TO EXPENSE. IN ALL CASES, THE STANDARD PRACTICES OUTLINED IN THE DOCUMENT SHOULD BE FOLLOWED TO THE EXTENT THAT IS APPLICABLE, AND SHOULD BE MODIFIED AS TO THE QUANTITY OF GROUND RODS AND CONDUCTOR SIZE ONLY AS RECOMMENDED BY THE MANUFACTURER OF THE GROUND ROD SYSTEM
- C. A SYSTEM UTILIZING CORED SHAFTS, STANDARD GROUND RODS ON A TYPICAL LAYOUT, WITH A BENTONITE (CLAY) BACKFILL. IN THIS CASE EACH GROUND ROD SHOULD BE TESTED INDIVIDUALLY, AND EACH ROD SHOULD HAVE AN ACCESS BOX PLACED FOR FUTURE TESTING.

3.25 HIGH RISE BUILDING:

- A. HIGH RISE BUILDINGS PRESENT A UNIQUE PROBLEM IN GROUNDING. A FACILITY INVESTIGATION SHOULD BE MADE INTO THE STRUCTURE OF THE BUILDING, AND AS TO THE POSSIBLE PRESENCE OF AN EXISTING LIGHTNING PROTECTION SYSTEM. IF ONE IS IN PLACE AND APPEARS ADEQUATE IN DESIGN, IT WILL BE NECESSARY TO CONNECT THE ANTENNA SYSTEM TO THE EXISTING SYSTEM, WITH A TEST TO THE SYSTEM AFTER INSTALLATION TO ENSURE THAT IT HAS NOT CAUSED THE SYSTEM TO EXCEED 5 OHMS.
- B. STRUCTURAL STEEL BUILDING: IF THE BUILDING IS BUILT OF STRUCTURAL STEEL, IT MAY BE POSSIBLE TO GROUND THE ANTENNAS TO THE BUILDING SITE. IT IS PREFERABLE TO GROUND THE ANTENNAS AND THE SITE TO A DIRECT EARTH CONNECTION, BY USE OF SEPARATE DOWN LEADS OF CONSIDERABLE SIZE (250 MCM OR LARGER) COMING FROM GROUND BUSS BARS TO COLLECT THE GROUND INPUT, AND RUN DOWN A VERTICAL SHAFT OR STAIRWELL TO A PATTERN OF NO LESS THAN FOUR GROUND RODS. WHERE PRACTICAL, THE BUILDING STEEL SHOULD BE BONDED TO THE GROUND RING WITH A SEPARATE LEAD TO THE GROUND ROD FIELD.
- C. A SYSTEM STRUCTURAL CONCRETE BUILDINGS ARE MORE DIFFICULT TO GROUND PROPERLY. THE ANTENNAS SHOULD BE GROUND TO A SEPARATE BUSS BAR AND DOWN LEAD WHERE THE COAXIAL CABLES ENTER THE BUILDING. THE DOWN LEAD SHOULD BE RUN IN A SIMILAR FASHION AS IN THE STRUCTURAL STEEL EQUIPMENT ROOM. THE DOWN LEADS SHOULD BE PROTECTED IN CONDUIT AND SHOULD BE INSTALLED AS FAR APART AS IS PRACTICAL FROM EACH OTHER. THE SEPARATE DOWN LEADS SHOULD NOT CONTACT EACH OTHER UNTIL CONNECTION WITH THE FIRST GROUND ROD.



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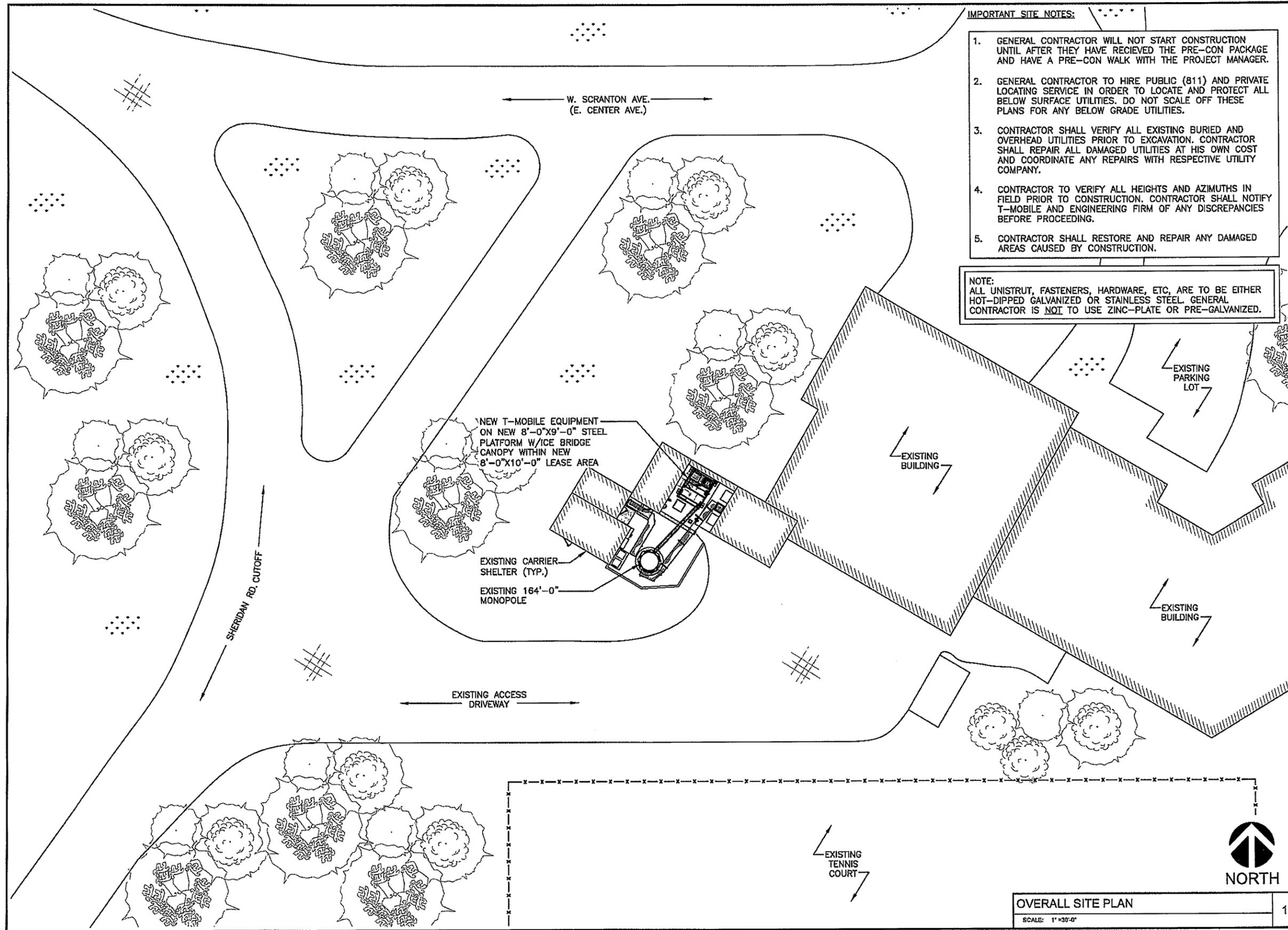
SHEET TITLE
GENERAL NOTES & SPECIFICATIONS

SHEET NUMBER
T-3

IMPORTANT SITE NOTES:

1. GENERAL CONTRACTOR WILL NOT START CONSTRUCTION UNTIL AFTER THEY HAVE RECEIVED THE PRE-CON PACKAGE AND HAVE A PRE-CON WALK WITH THE PROJECT MANAGER.
2. GENERAL CONTRACTOR TO HIRE PUBLIC (811) AND PRIVATE LOCATING SERVICE IN ORDER TO LOCATE AND PROTECT ALL BELOW SURFACE UTILITIES. DO NOT SCALE OFF THESE PLANS FOR ANY BELOW GRADE UTILITIES.
3. CONTRACTOR SHALL VERIFY ALL EXISTING BURIED AND OVERHEAD UTILITIES PRIOR TO EXCAVATION. CONTRACTOR SHALL REPAIR ALL DAMAGED UTILITIES AT HIS OWN COST AND COORDINATE ANY REPAIRS WITH RESPECTIVE UTILITY COMPANY.
4. CONTRACTOR TO VERIFY ALL HEIGHTS AND AZIMUTHS IN FIELD PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY T-MOBILE AND ENGINEERING FIRM OF ANY DISCREPANCIES BEFORE PROCEEDING.
5. CONTRACTOR SHALL RESTORE AND REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION.

NOTE:
ALL UNISTRUT, FASTENERS, HARDWARE, ETC. ARE TO BE EITHER HOT-DIPPED GALVANIZED OR STAINLESS STEEL. GENERAL CONTRACTOR IS NOT TO USE ZINC-PLATE OR PRE-GALVANIZED.



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SHEET TITLE
OVERALL SITE PLAN

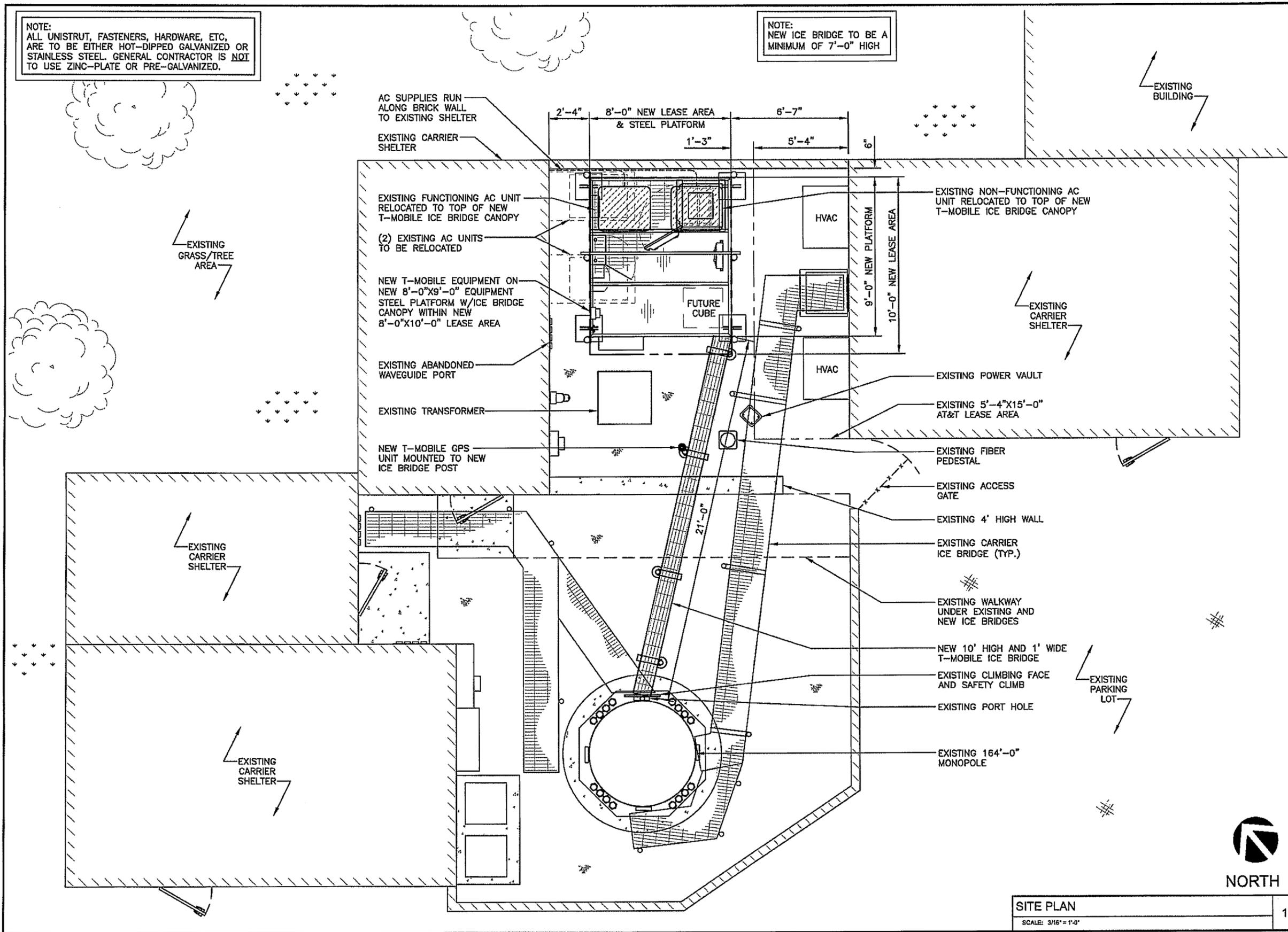
SHEET NUMBER
C-1

OVERALL SITE PLAN
SCALE: 1"=30'-0"
1



NOTE:
ALL UNISTRUT, FASTENERS, HARDWARE, ETC,
ARE TO BE EITHER HOT-DIPPED GALVANIZED OR
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NOTE:
NEW ICE BRIDGE TO BE A
MINIMUM OF 7'-0" HIGH



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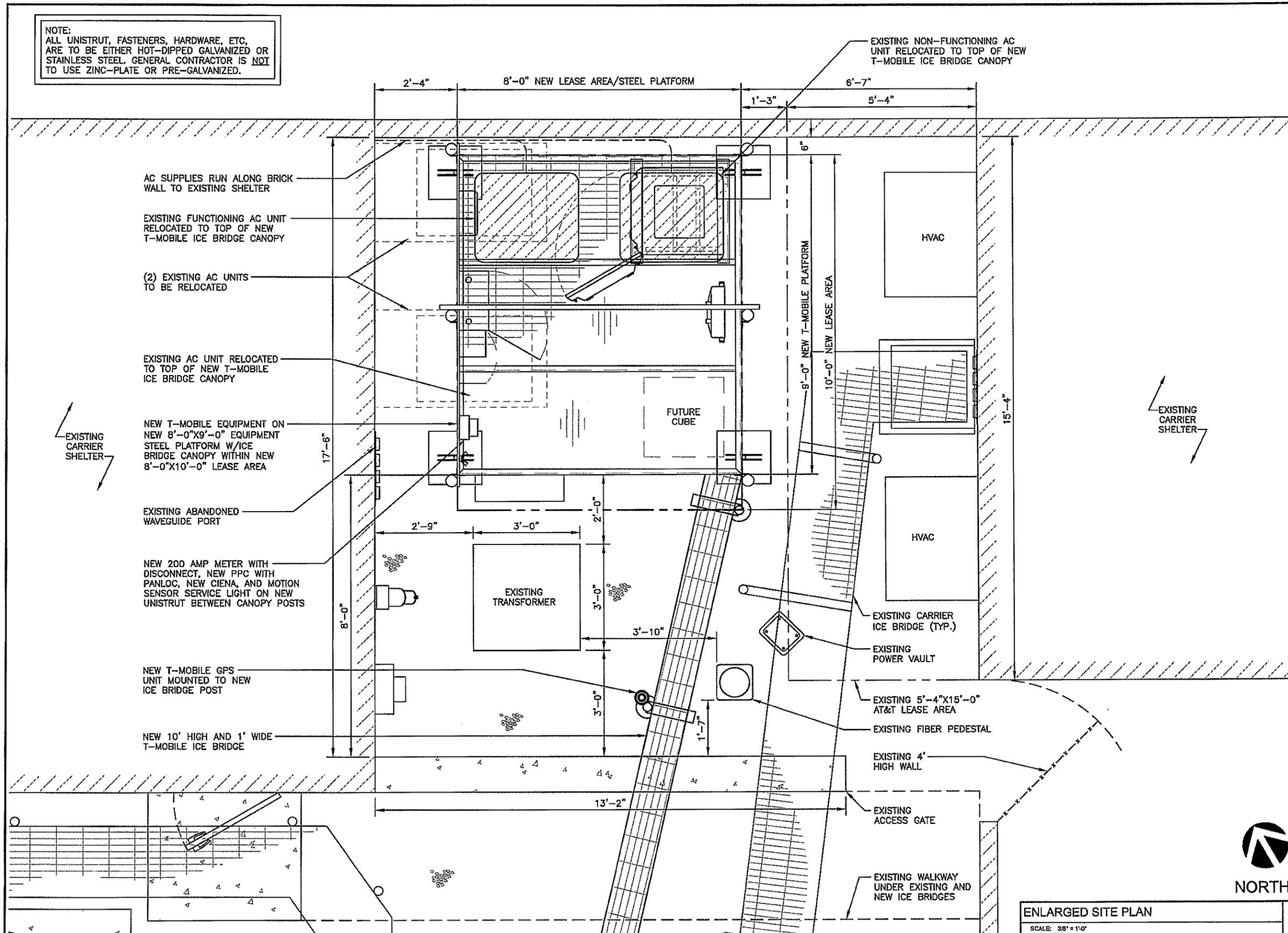
SHEET TITLE
SITE PLAN

SHEET NUMBER
C-2



SITE PLAN
SCALE: 3/16" = 1'-0"
1

NOTE:
ALL UNISTRUT, FASTENERS, HARDWARE, ETC.
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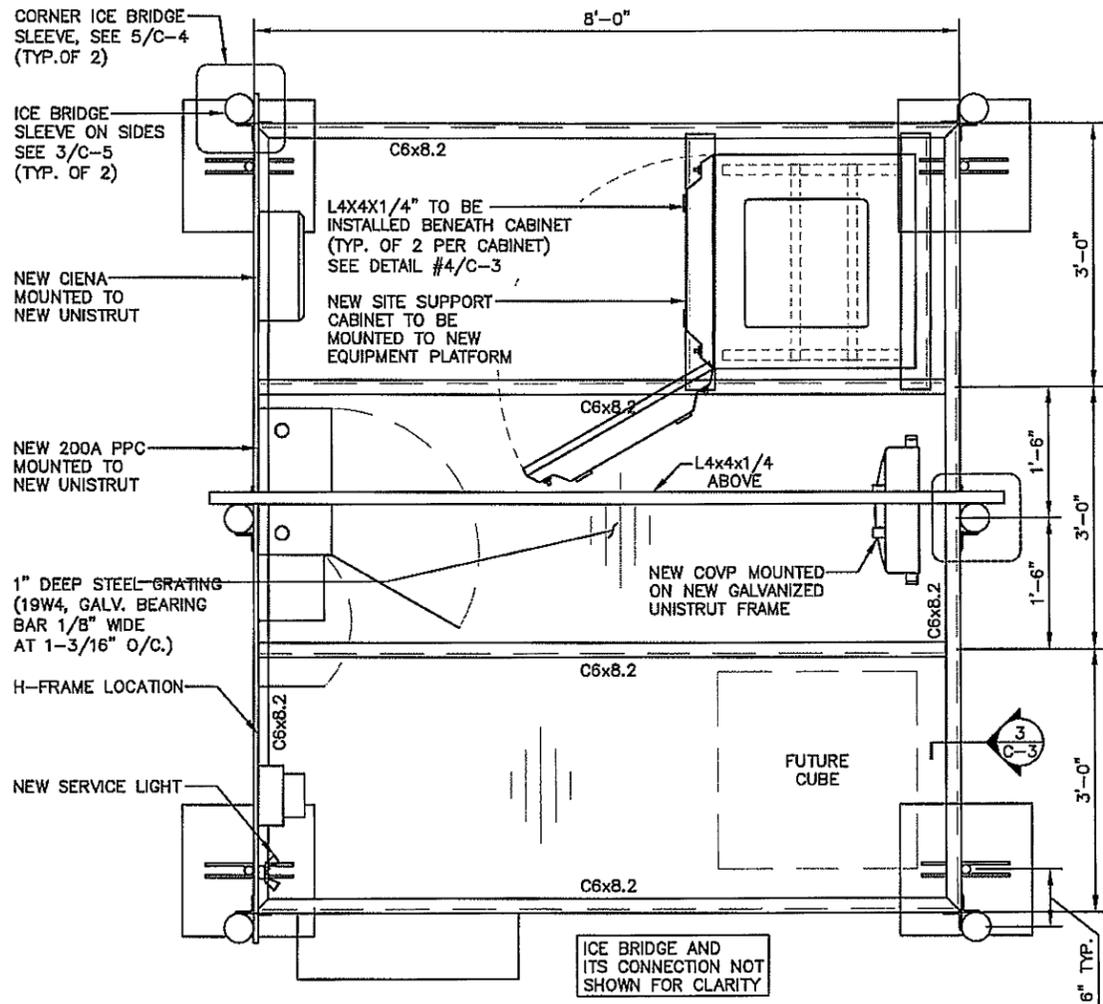
CH464321
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LAKE BLUFF, IL 60044

SHEET TITLE
ENLARGED SITE PLAN

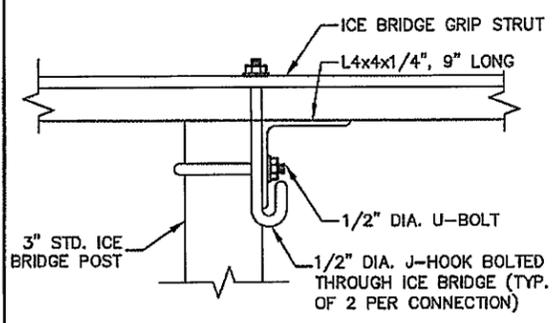
SHEET NUMBER
C-3

ENLARGED SITE PLAN
SCALE: 3/8" = 1'-0"
1

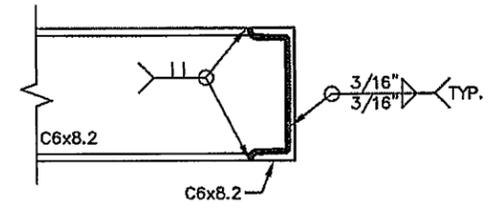




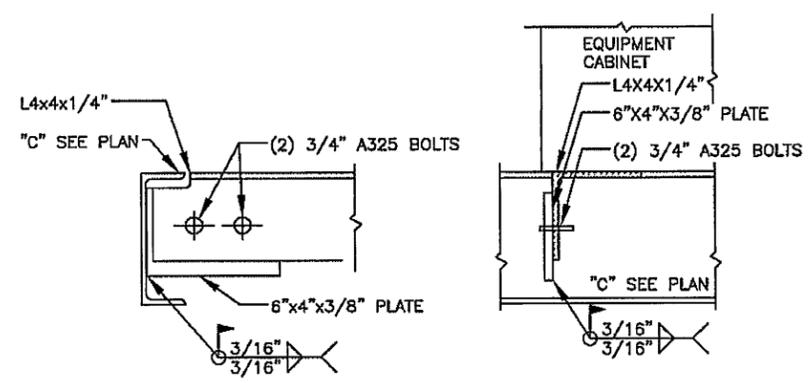
8'-0"x9'-0" PLATFORM PLAN
SCALE: 1/2" = 1'-0"
1



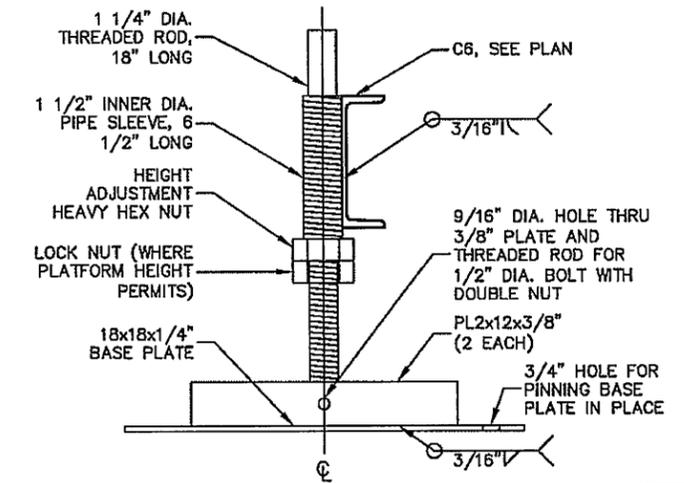
CONNECTION DETAIL 2
SCALE: 1-1/2" = 1'-0"
2



CONNECTION DETAIL 3
SCALE: 1-1/2" = 1'-0"
3



CABINET SUPPORT CONNECTION DETAIL 4
SCALE: 1-1/2" = 1'-0"
4



PLATFORM LEG DETAIL 5
SCALE: 1-1/2" = 1'-0"
5

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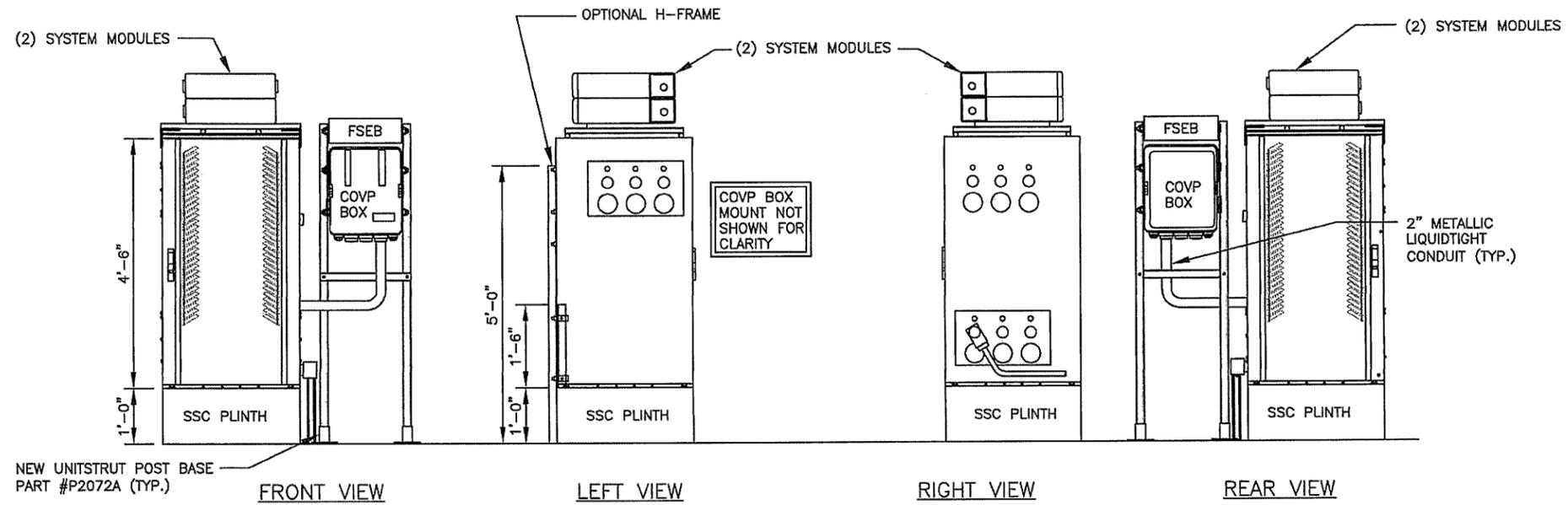
STATE OF ILLINOIS
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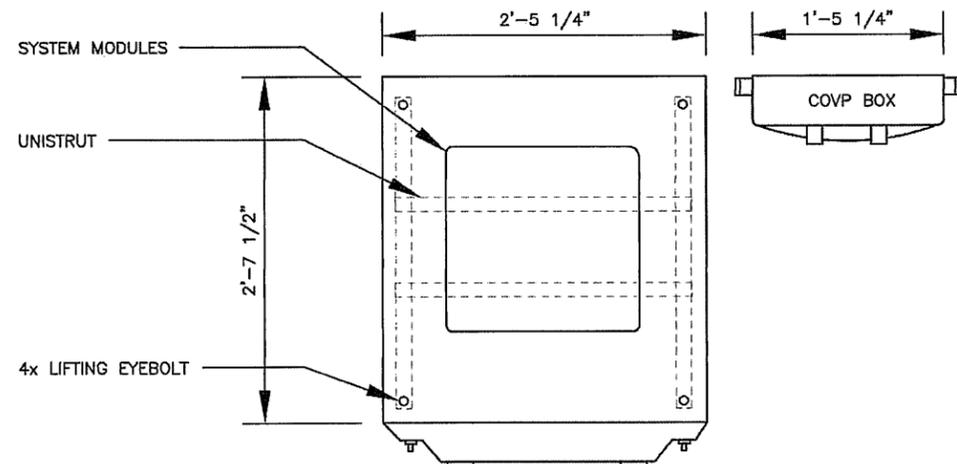
SHEET TITLE
PLATFORM DETAILS

SHEET NUMBER
C-4

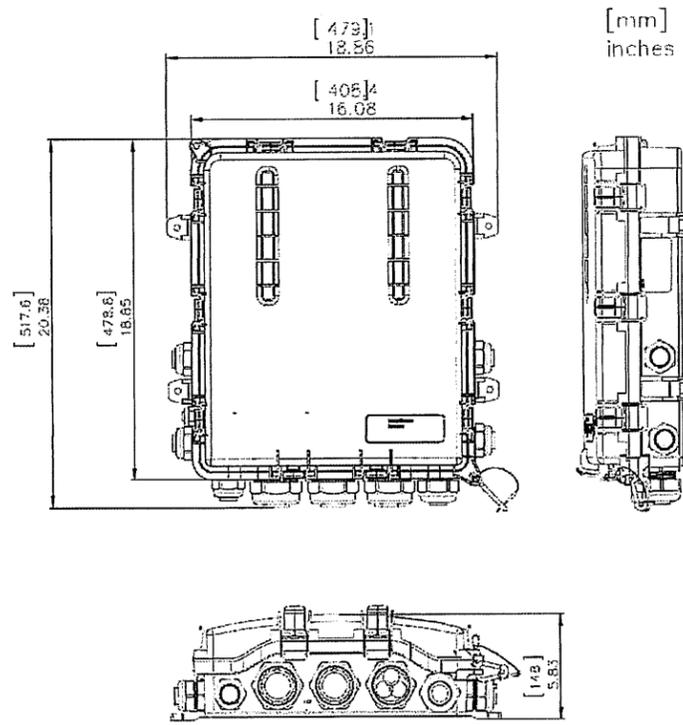


NEW UNITSTRUT POST BASE
PART #P2072A (TYP.)

SITE SUPPORT CABINET LAYOUT
SCALE: NONE



TOP VIEW SITE SUPPORT CABINET
SCALE: NONE



MODEL: ASU9338TYP01
LARGE COVP
SCALE: NONE

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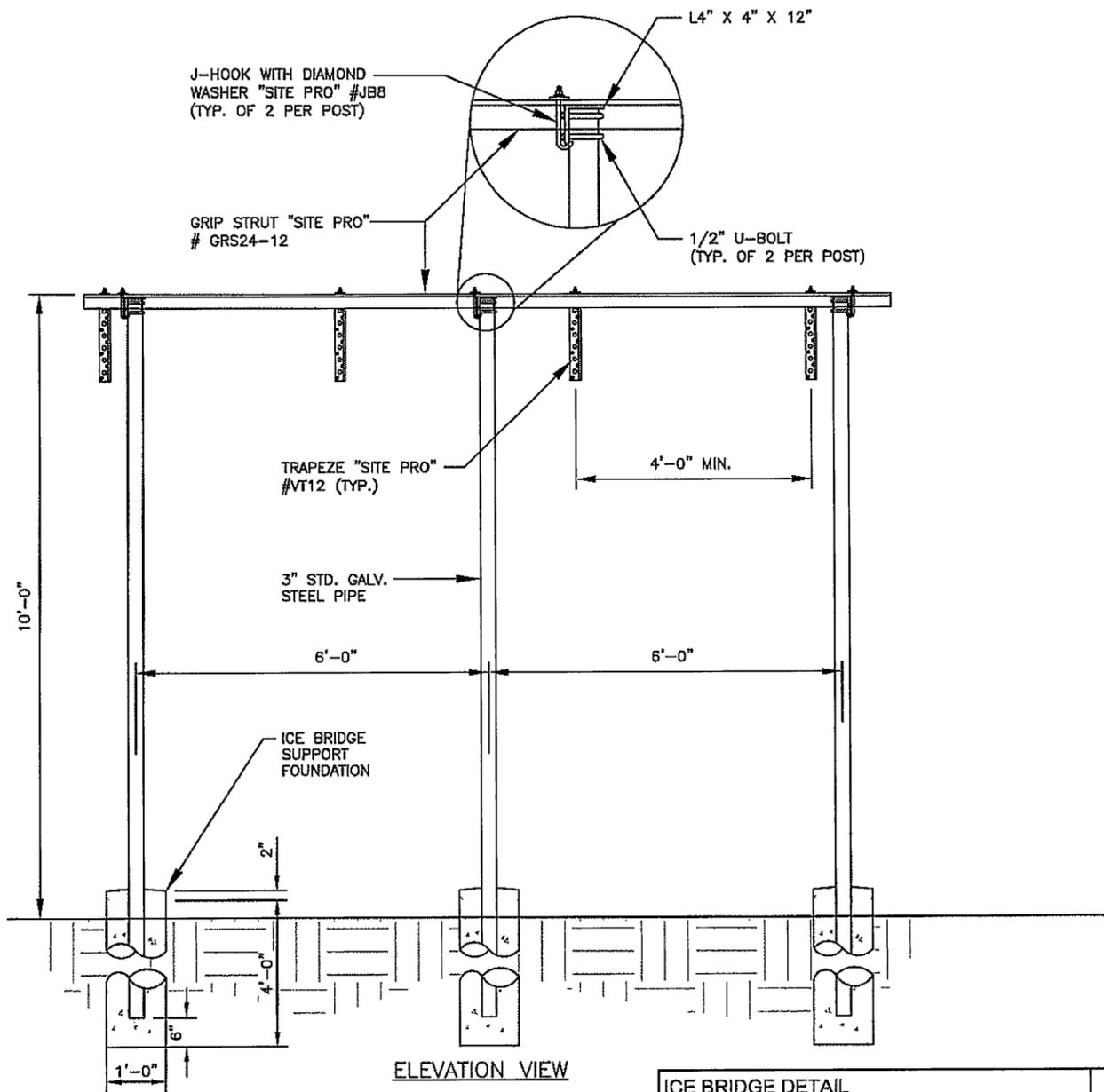
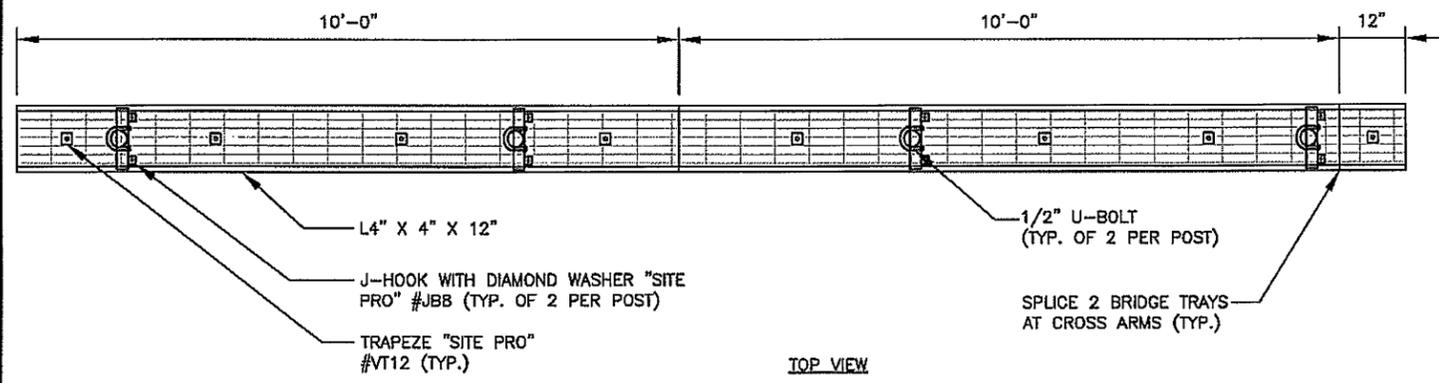
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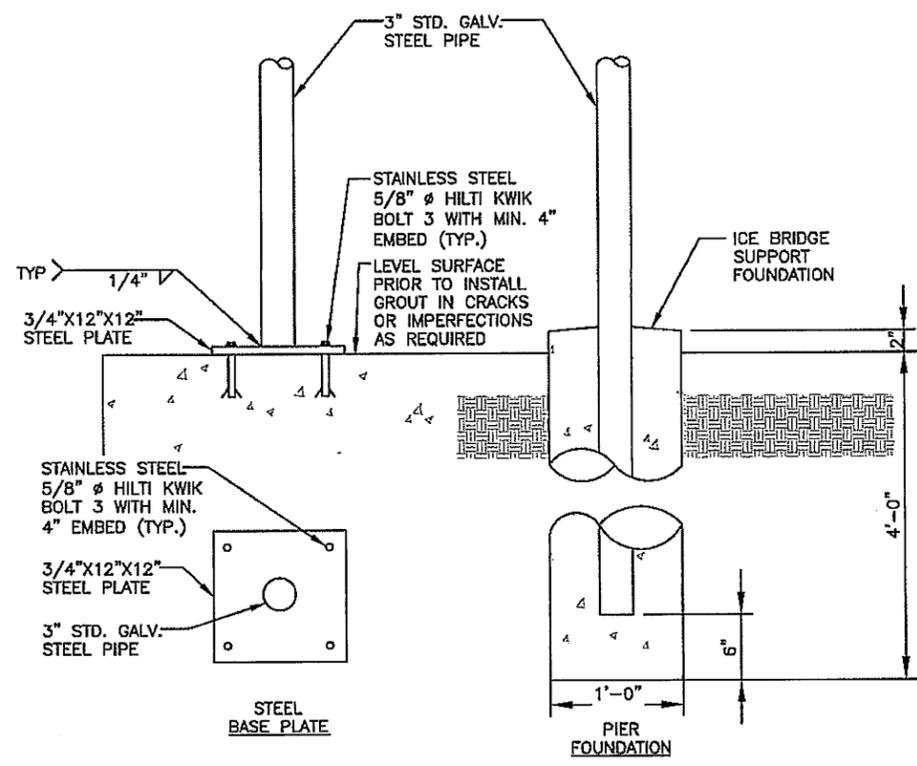
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SHEET TITLE
EQUIPMENT
ELEVATION

SHEET NUMBER
C-6



ICE BRIDGE DETAIL 1
SCALE: 3/8" = 1'-0"



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SHEET TITLE
ICE BRIDGE
DETAILS

SHEET NUMBER
C-7

NOTE:
REFER TO STRUCTURAL ANALYSIS FOR MOUNTING INSTRUCTIONS
OF ALL ANTENNA SYSTEMS.

NOTE:
CONTRACTOR TO VERIFY ALL HEIGHTS AND AZIMUTHS IN FIELD
PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY T-MOBILE
AND ENGINEERING FIRM OF ANY DISCREPANCIES BEFORE
PROCEEDING.

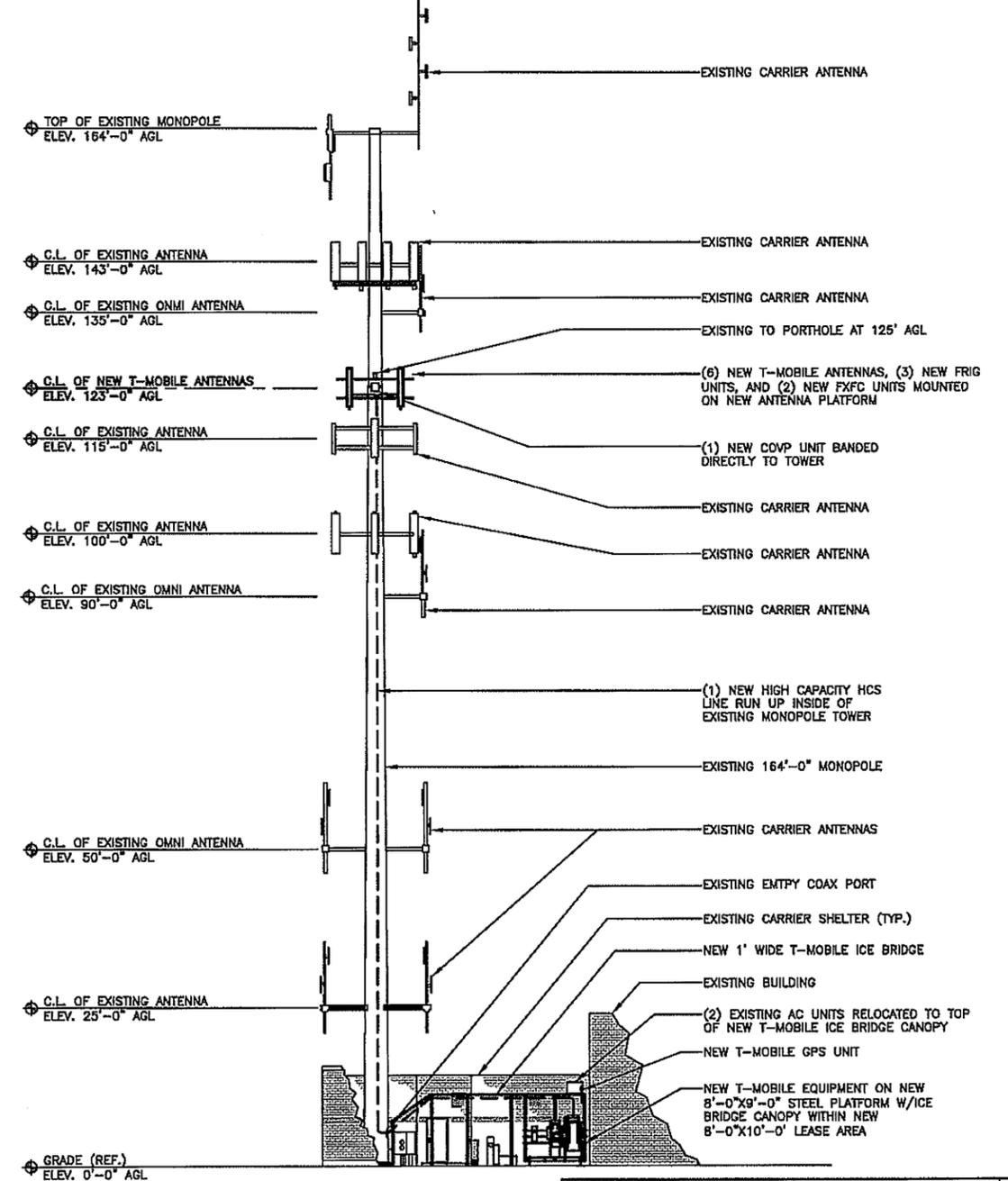
NOTE:
CONTRACTOR TO USE PROPER TORQUE WRENCH WHEN INSTALLING
AND TIGHTENING CONNECTORS TO INSURE PROPER FIT.

NOTE:
ALL INSTALLED EQUIPMENT MUST NOT INTERFERE WITH CLIMBING
FACE OR SAFETY CLIMB.

TOWER CAPACITY UNDER PENDING STRUCTURAL EVALUATION OF
PROPOSED IMPROVEMENTS BY OTHERS. CONTRACTOR TO VERIFY
NEW ANTENNA LOADING WITH STRUCTURAL ANALYSIS PRIOR TO
ANY ANTENNA WORK.

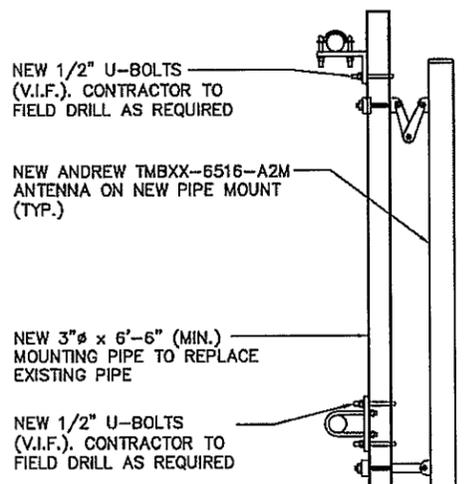
NOTE:
CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING FINAL RF
CONFIGURATION AND NOTIFY T-MOBILE AND ENGINEERING FIRM
WITH ANY DISCREPANCIES.

NOTE:
CONTRACTOR SHALL VERIFY ALL FINAL CONNECTION LOCATIONS
WITH T-MOBILE ENGINEER, RF ENGINEER, AND NET-OPS PRIOR
TO INSTALLATION.



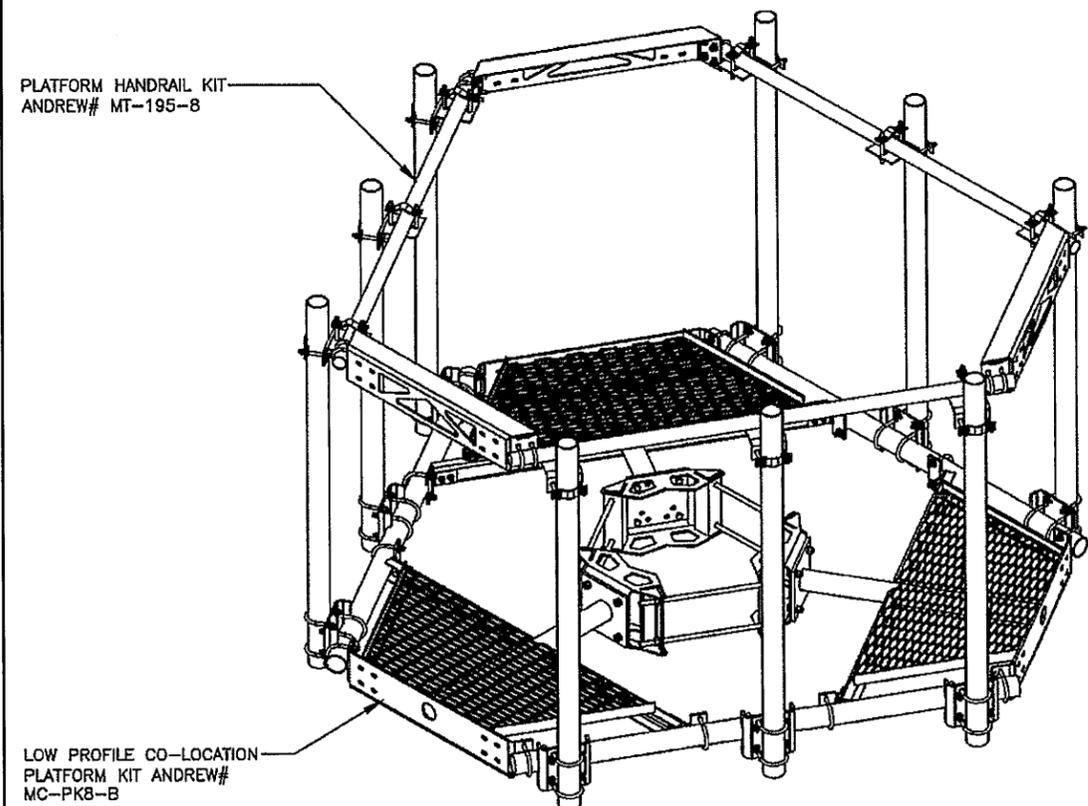
ELEVATION
SCALE: 1" = 25'-0"

1



ANTENNA MOUNTING DETAIL
SCALE: NONE

2



ANTENNA PLATFORM DETAIL
SCALE: NONE

3

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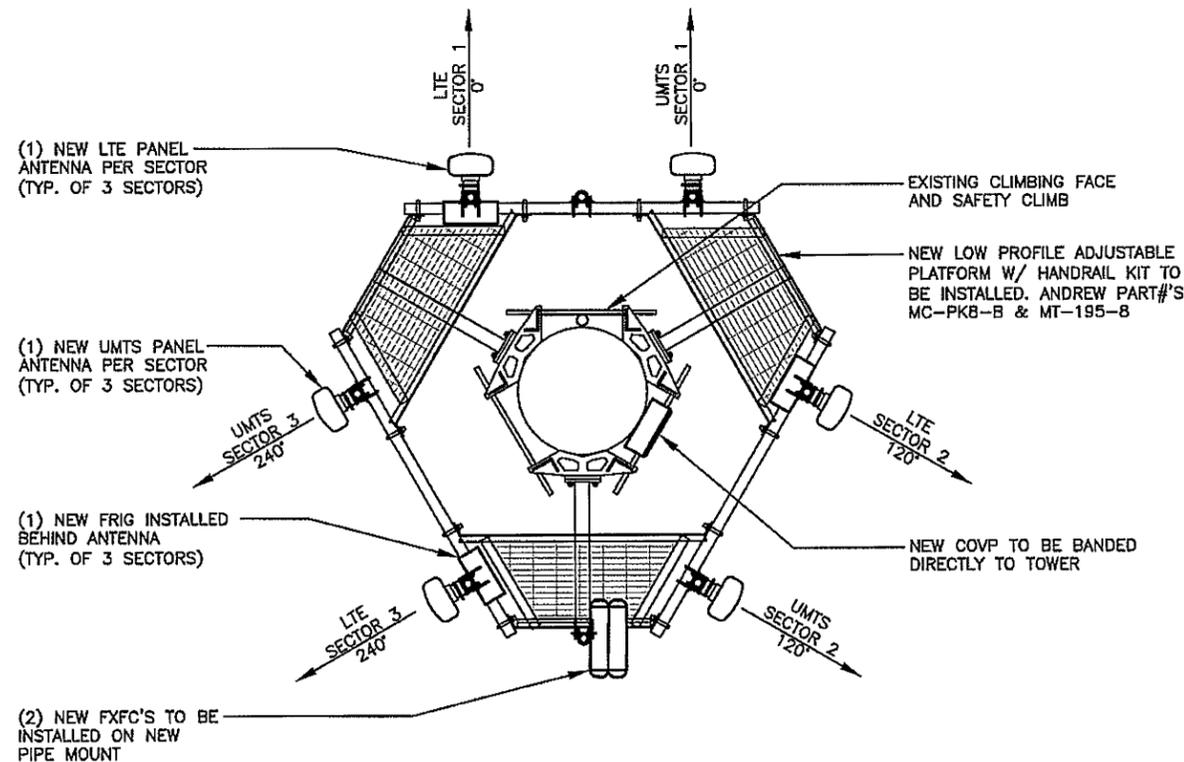
SHEET TITLE
ELEVATION

SHEET NUMBER
A-1

ANTENNA & CABLE SCHEDULE						
SECTOR	ALPHA		BETA		GAMMA	
LOCATION	A-2	A-1	B-2	B-1	C-2	C-1
TECHNOLOGY	LTE	UMTS	LTE	UMTS	LTE	UMTS
AZIMUTH	0°		120°		240°	
RAD CENTER	123'-0"		123'-0"		123'-0"	
COLOR CODING	RED (5-8)	RED (1-4)	GREEN (5-8)	GREEN (1-4)	BLUE (5-8)	BLUE (1-4)
MODEL #	ANDREW TMBXX-6516-A2M	ANDREW TMBXX-6516-A2M	ANDREW TMBXX-6516-A2M	ANDREW TMBXX-6516-A2M	ANDREW TMBXX-6516-A2M	ANDREW TMBXX-6516-A2M
MECHANICAL DOWNTILT	0'	0'	0'	0'	0'	0'
ELECTRICAL DOWNTILT	2'	2'	2'	2'	2'	2'
RRU TYPE	FRIG	(2) FXFC'S	FRIG	SHARED FXFC	FRIG	SHARED FXFC
HCS DIA. & TYPE	1.584" HIGH CAPACITY	SHARED	SHARED	SHARED	SHARED	SHARED
HCS ACTUAL LENGTH	±155'-0"	SHARED	SHARED	SHARED	SHARED	SHARED
HCS FACTORY LENGTH	175'-0"	SHARED	SHARED	SHARED	SHARED	SHARED
JUMPER TYP FROM COVP TO RRU	POWER & FIBER JUMPERS					
JUMPER LENGTH	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"
JUMPER TYPE FROM RRU TO ANTENNA	AISG	AISG	AISG	AISG	AISG	AISG
JUMPER LENGTH	4'-0"	12'-0"	4'-0"	6'-0"	4'-0"	12'-0"

TOWER CAPACITY UNDER PENDING STRUCTURAL EVALUATION OF NEW IMPROVEMENTS BY OTHERS. CONTRACTOR TO VERIFY NEW ANTENNA LOADING WITH STRUCTURAL ANALYSIS PRIOR TO ANY ANTENNA WORK.

NOTE:
ANTENNA INFORMATION OBTAINED FROM T-MOBILE RF DATA CONFIGURATION SHEET DATED 05/11/15



ANTENNA PLAN

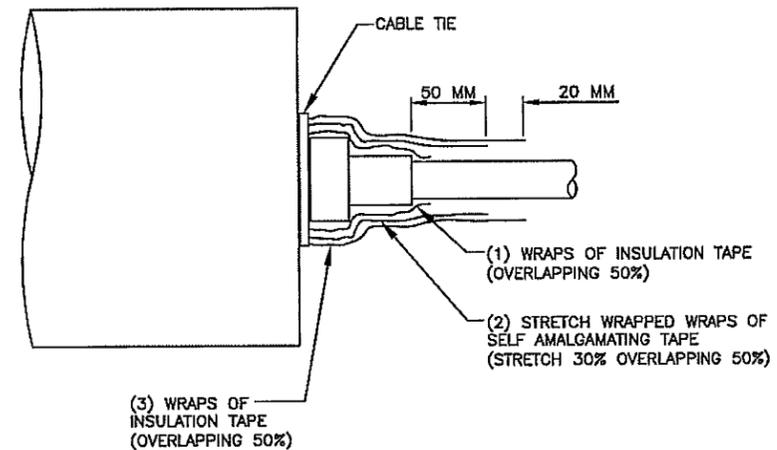
SCALE: 1/4" = 1'-0"

1

NOT USED

SCALE: NONE

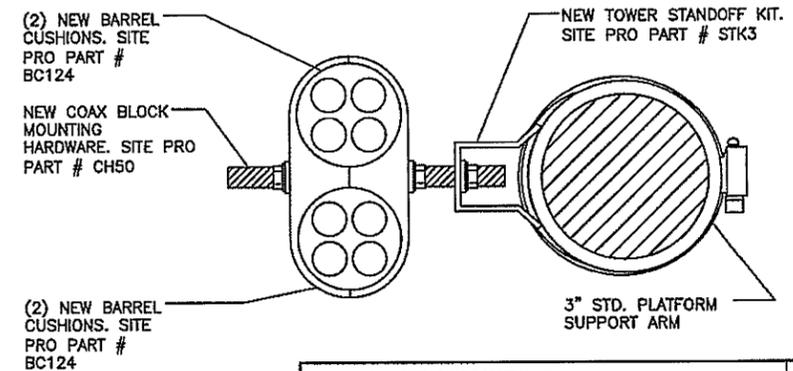
2



RF JUMPER CONNECTION DETAIL

SCALE: NONE

3



RF JUMPER MOUNTING DETAIL

SCALE: NONE

4

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LAKE BLUFF, IL 60044

SHEET TITLE
ANTENNA PLAN

SHEET NUMBER
A-2



[Back to RFDS Search](#)

Modernization RFDS Data Configuration Sheet

Date: 6/3/2015

[Print RFDS](#)

Site Information:

Market: CH Radio Vendor: NSN Plan Year: NLP Desc: NLP1
 Site Id: CH464321 Site Name: Lake Bluff CCI 839926 Structural Owner:
 Type/Class: Structure (Non-Building) / Monopole
 Address: 45 East Center Avenue City: Lake Bluff State: IL Zip: 60344
 Latitude: 42.278467 Longitude: -87.845022 Created Date: Jun 25 2014
 RF Manager: Alex Lefter RF Engineer: Ahmaad Brunson Last Save Date: Jun 3 2015 1:48PM Last Modified By: PMCCULL
 Project Type: NSD RFDS Upgraded? Template? Standard

Spectrum Information

PCS Spectrum:

Classification: Contiguous Ownership:

AWS Spectrum:

Classification: Ownership: EF1F2

Cell Site Configuration

Configuration Type: Configuration 1G

Final Configuration (Antenna/Line/TMA/RRU): 6/0/0/5

Solution Type: Tower Top

RFDS Status: Preliminary

Final Sector Count: 3

Design Type: Final

Drawing Type: Default

Sector Information

PCS UMTS Design	A	B	C	D	E	F
Antenna RAD Center:	123	123	123			
Antenna Azimuth:	0	120	240			
Mechanical Tilt:	0	0	0			
Electrical Tilt:	2	2	2			
L2100 Design	A	B	C	D	E	F
Antenna RAD Center:	123	123	123			
Antenna Azimuth:	0	120	240			
Mechanical Tilt:	0	0	0			
Electrical Tilt:	2	2	2			
Antenna Configuration (Site Level)	Antenna ReUse Existing?/Qty	Antenna Model	Antenna Qty	Antenna and (or) Ports Shared		
PCS UMTS	/	Andrew - TMBXX-6516-A2M	3	No		
L2100	/	Andrew - TMBXX-6516-A2M	3	No		
TMA Configuration (Site Level)	TMA (ReUse existing TMA/New/Not Needed)	TMA Model	TMA Qty	TMA Location		
PCS UMTS			0			
L2100			0			
Diplexer/Combiner Configuration	A	B	C	D	E	F
Diplexer Model (1):						
Diplexer Qty (1):						
Diplexer Model (2):						
Diplexer Qty (2):						
Combiner/Duplexer Model:						
Combiner/Duplexer Qty:						
Antenna Fiber/ Coax Solution (Site Level)						
Use HCS (Yes/No)?	Yes					

Use NSN Fiber & OVP for Rooftop (Yes/No)? No
 Use Coax Cable (Yes/No)? No
 Hybrid Cable Configuration (Site Level)
 Hybrid Cable Type: High Capacity HCS - 1.584
 Hybrid Cable Length: 175
 Hybrid Cable Qty: 1
 Hybrid Cable Config(Sector Level) A B C D E F
 HCS run between Sectors (e.g. Rooftop/ Watertank etc.)
 Hybrid Cable Length (ft):
 COVP Configuration (Site Level)
 COVP Type (1): Large COVP COVP Qty (1): 2
 COVP Type (2): COVP Qty (2):
 Coax Configuration A B C D E F
 Existing Coax Qty:
 Existing Coax Size:
 Re-use existing coax for TDOA (Yes/No)?
 Qty. of excess coax lines to remove?
 New Coax Type:
 New Coax Length/Line:
 New Coax Qty:
 RET Home-Run Cable:
 RET Home-Run Cable Length(ft):

System Modules (Site Level)	System Module Type(1)	System Module Qty(1)	System Module Type(2)	System Module Qty(2)	System Sub Module Type	System Sub Module Qty
PCS UMTS	FSMF	1				
LTE	FSMF	1				
RF Modules (Site Level)	RF Module Type(1)	RF Module Qty(1)	RF Module Type(2)	RF Module Qty(2)		
PCS UMTS	FXFC	2				
L2100	FRIG	3				
Sector/BTS/Node-B (Site Level)	Sector Count:	BTS/Node-B Count:				
PCS UMTS	3	1				
L2100	3	1				

Comments

02/17/15 rad center changed from 123' to 146'
 05/11/15 The city of Lake Bluff has installed their MW dishes at the 142' RAD. Crown originally thought that the city had installed the MW's at the 123' RAD. rad center changed from 146' to 123'

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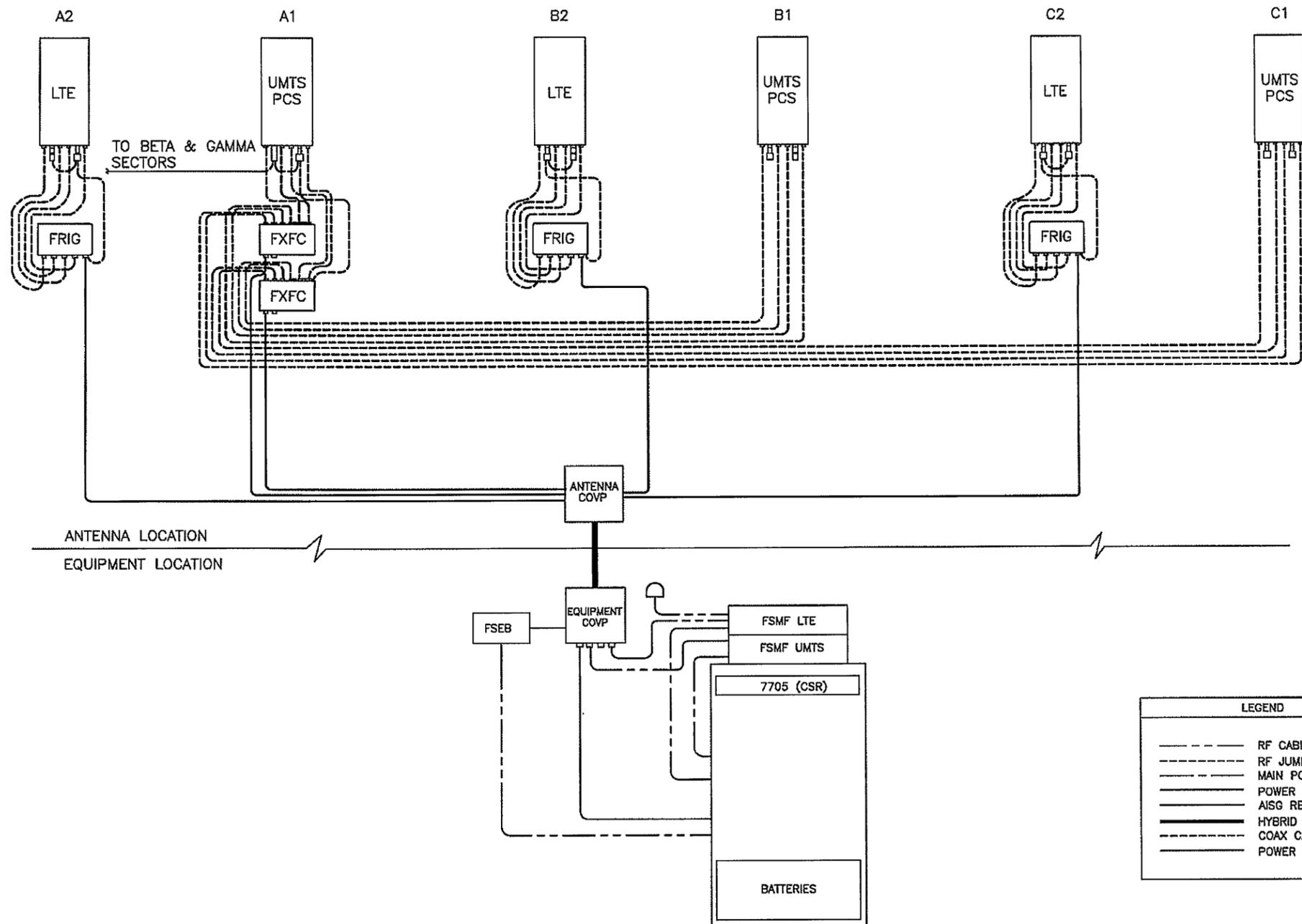
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 LAKE BLUFF, IL 60044

SHEET TITLE
 RF DATA SHEET

SHEET NUMBER
 A-4

PROPOSED ANTENNA CONFIGURATION SHEET

SCALE: NONE



LEGEND

- RF CABLE
- - - RF JUMPER
- ==== MAIN POWER & FIBER
- ==== POWER & FIBER JUMPER
- ==== AISG RET CABLE
- ==== HYBRID CABLE
- COAX CABLE
- POWER

PROPOSED EQUIPMENT LAYOUT
SCALE: NONE

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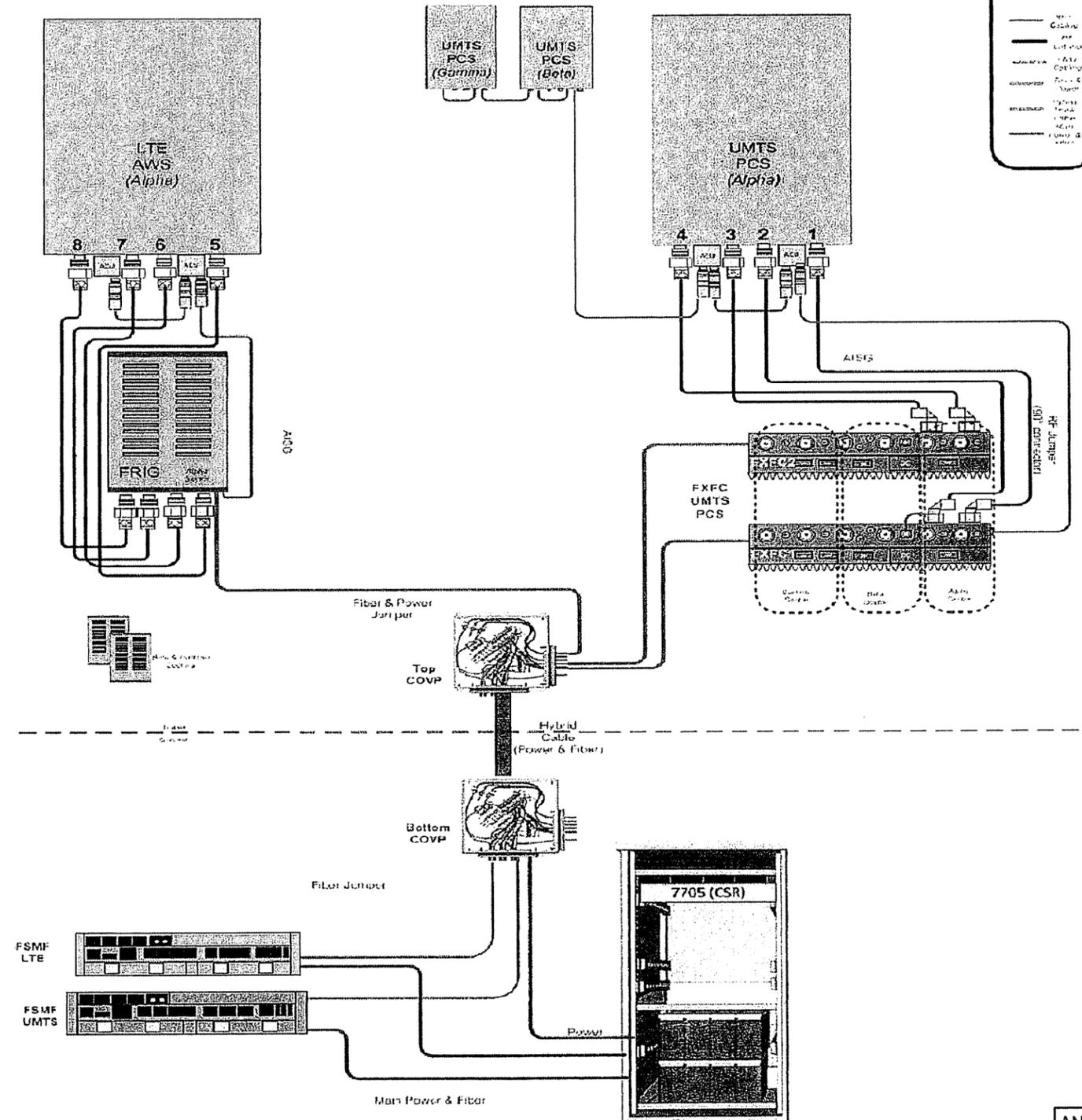
SHEET TITLE
RISER DIAGRAM

SHEET NUMBER
A-5

Drawing (1) Comments:

Configuration 1G for greenfield sites with UMTS1900 and LTE AWS

Drawn Date: 6/12/2014



Legend

- LTE
- PCS
- UMTS

--- Cable
 --- Fiber
 --- Power
 --- Antenna
 --- Cable
 --- Power
 --- Antenna
 --- Cable
 --- Power
 --- Antenna

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SHEET TITLE
ANTENNA CONFIGURATION SHEET

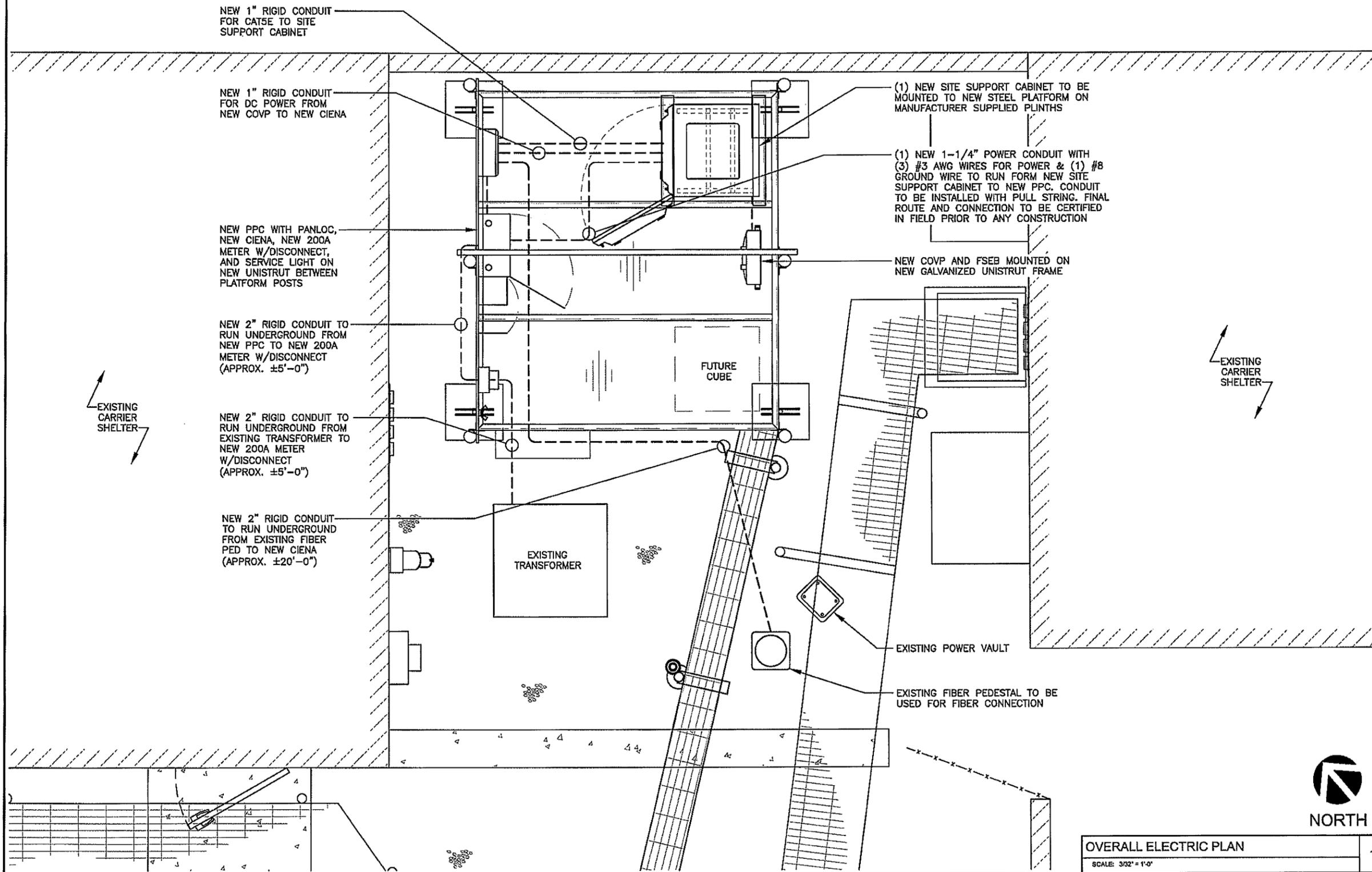
SHEET NUMBER
A-6

EXISTING/RELOCATED AC UNITS
& NEW ICE BRIDGE CANOPY
NOT SHOWN FOR CLARITY

VOLTAGE DROP FROM UTILITY POLE TO H-FRAME			
LENGTH OF RUN	WIRE SIZE	VOLTAGE DROP (VOLTS)	PERCENTAGE OF VOLTAGE
±5'-0"	3/0	0.1594V	0.06%

POWER/FIBER LENGTHS	
UTILITY	LENGTH OF RUN
POWER	±5'-0"
FIBER	±20'-0"

NOTE:
ALL UNISTRUT, FASTENERS, HARDWARE, ETC, ARE TO BE EITHER
HOT-DIPPED GALVANIZED OR STAINLESS STEEL. GENERAL
CONTRACTOR IS NOT TO USE ZINC-PLATE OR PRE-GALVANIZED.



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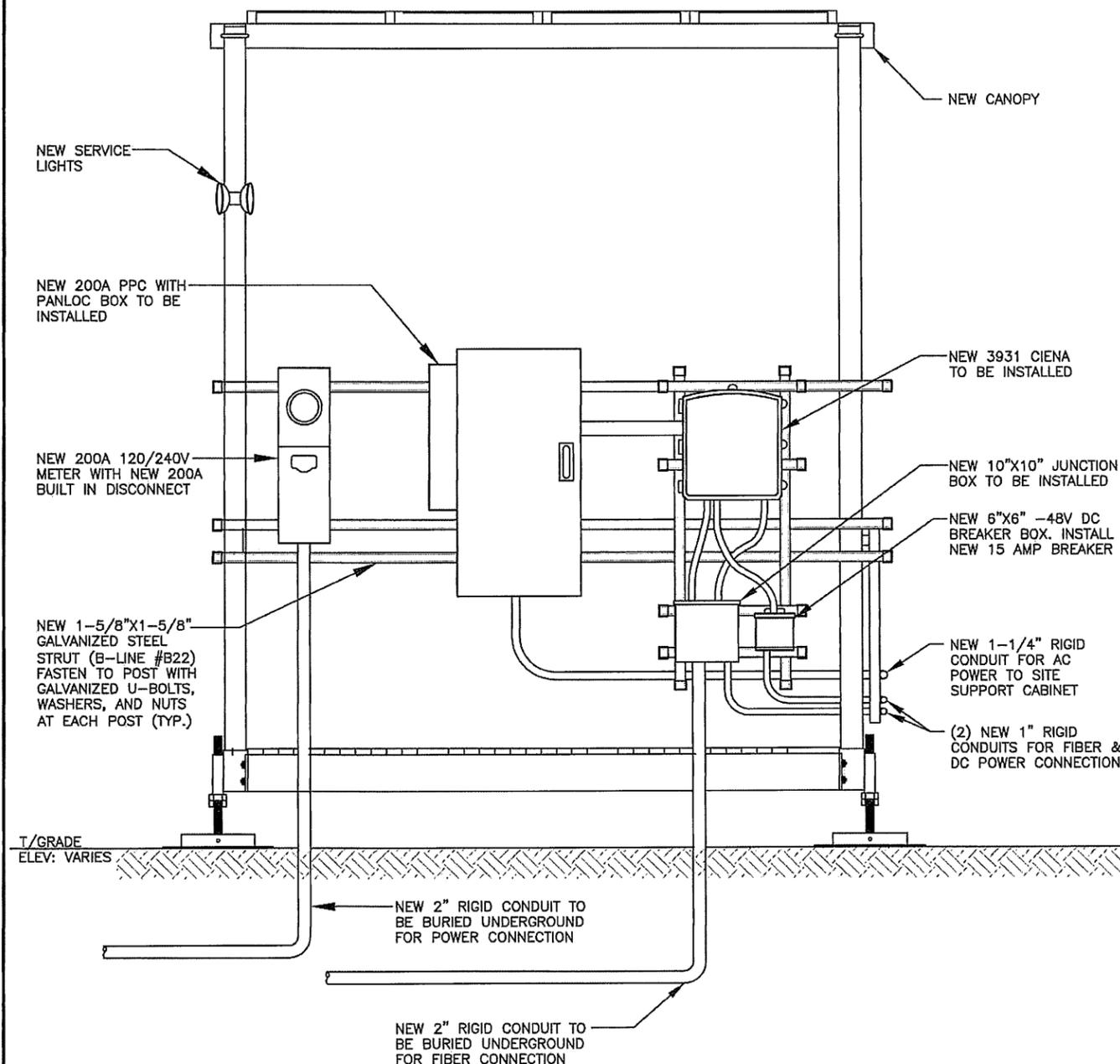
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SHEET TITLE
**ENLARGED
ELECTRIC PLAN**

SHEET NUMBER
E-1

OVERALL ELECTRIC PLAN
SCALE: 3/32" = 1'-0" 1



H-FRAME DETAIL

SCALE: NONE

1



EXISTING TRANSFORMER TO BE USED FOR NEW POWER CONNECTION

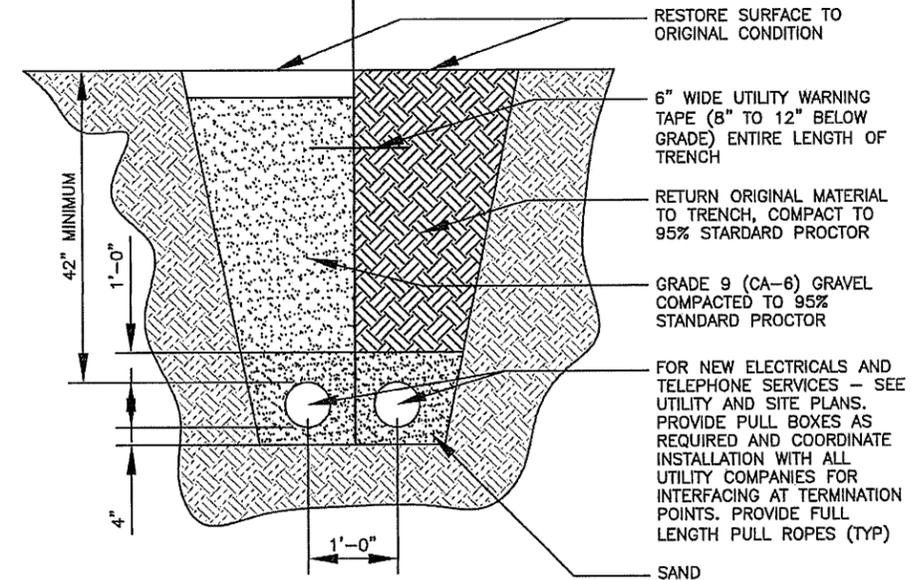
POWER AND FIBER LOCATION PHOTO

SCALE: NONE

2

USE THIS SECTION UNDER PAVEMENT OR VEHICLE TRAFFIC AREA

USE THIS SECTION UNDER GRASS OR LAWN AREA



BURIED CONDUIT DETAIL

SCALE: NONE

3

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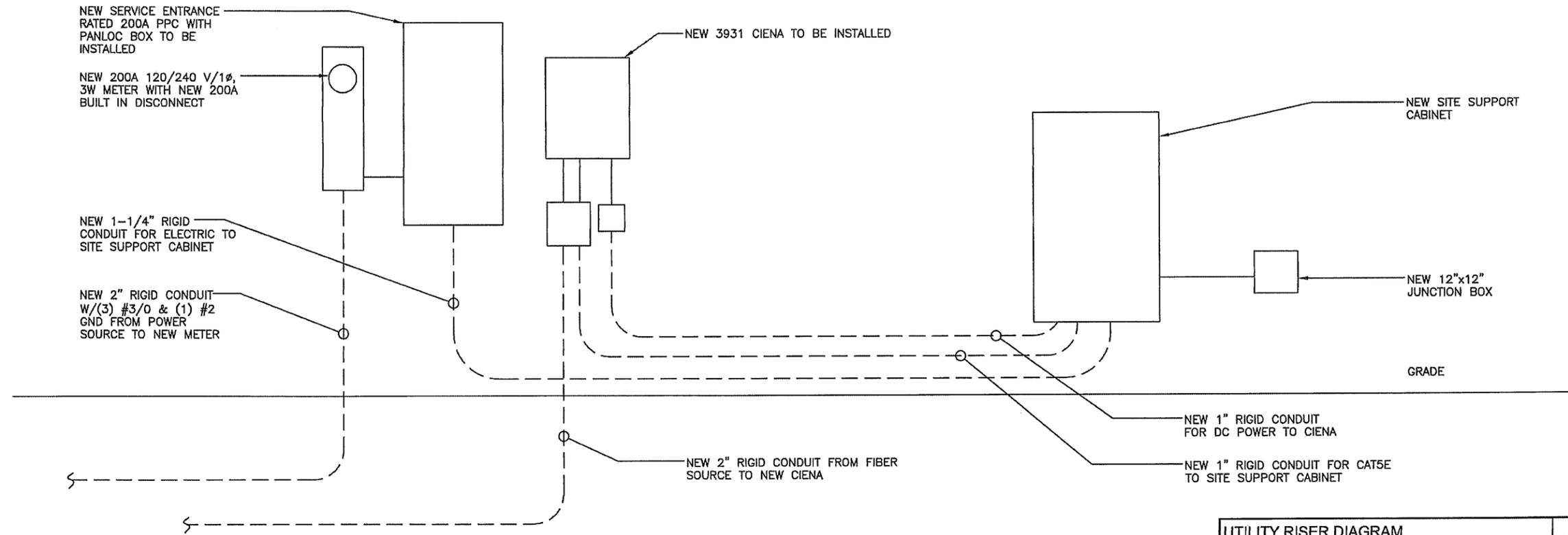
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LAKE BLUFF, IL 60044

SHEET TITLE
H-FRAME & UTILITY DETAILS

SHEET NUMBER
E-2



UTILITY RISER DIAGRAM 1
SCALE: NONE

T-MOBILE PROJECT NAME:		NSD		MODEL NUMBER:		TBD		WIRE:		3			
VOLTAGE:		240V/120		PHASE:		1		AIC:		22,000			
MAIN BREAKER:		200 AMP		BUSS RATING:		200 AMPS		GROUND BAR		YES			
MOUNT:		H-FRAME		NEUTRAL BAR:		YES							
ENCLOSURE TYPE:		NEMA 3R		N TO GROUND BOND		YES							
PANEL STATUS:		NEW		INTERNAL TVSS:		YES							
CKT	LOAD DESCRIPTION	BREAKER AMPS	BREAKER POLES	BREAKER STATUS	SERVICE LOAD VA	USAGE FACTOR	PHASE A VA	PHASE B VA	USAGE FACTOR	SERVICE LOAD VA	BREAKER STATUS	BREAKER POLES	BREAKER AMPS
1	SITE SUPPORT CABINET	100	2	ON	4200	1.25	5250		0	0	N/A	-	-
3	-	-	-	ON	4200	1.25		5250	0	0	N/A	-	-
5	SERVICE LIGHT	20	1	ON	500	1	500		0	0	N/A	-	-
7	-	-	-	N/A	0	0		0	0	0	N/A	-	-
9	-	-	-	N/A	0	0	0		0	0	N/A	-	-
11	-	-	-	N/A	0	0		0	0	0	N/A	-	-
13	-	-	-	N/A	0	0	0		0	0	N/A	-	-
15	-	-	-	N/A	0	0		0	0	0	N/A	-	-
17	-	-	-	N/A	0	0	0		0	0	N/A	-	-
19	-	-	-	N/A	0	0		0	0	0	N/A	-	-
21	-	-	-	N/A	0	0	0		0	0	N/A	-	-
23	GFCI OUTLET	20	1	ON	180	1		180	0	0	N/A	-	-
							5750	5430	VA			TOTAL KVA	11.18
												AMPS	46.58

PANEL SCHEDULE 2
SCALE: NONE

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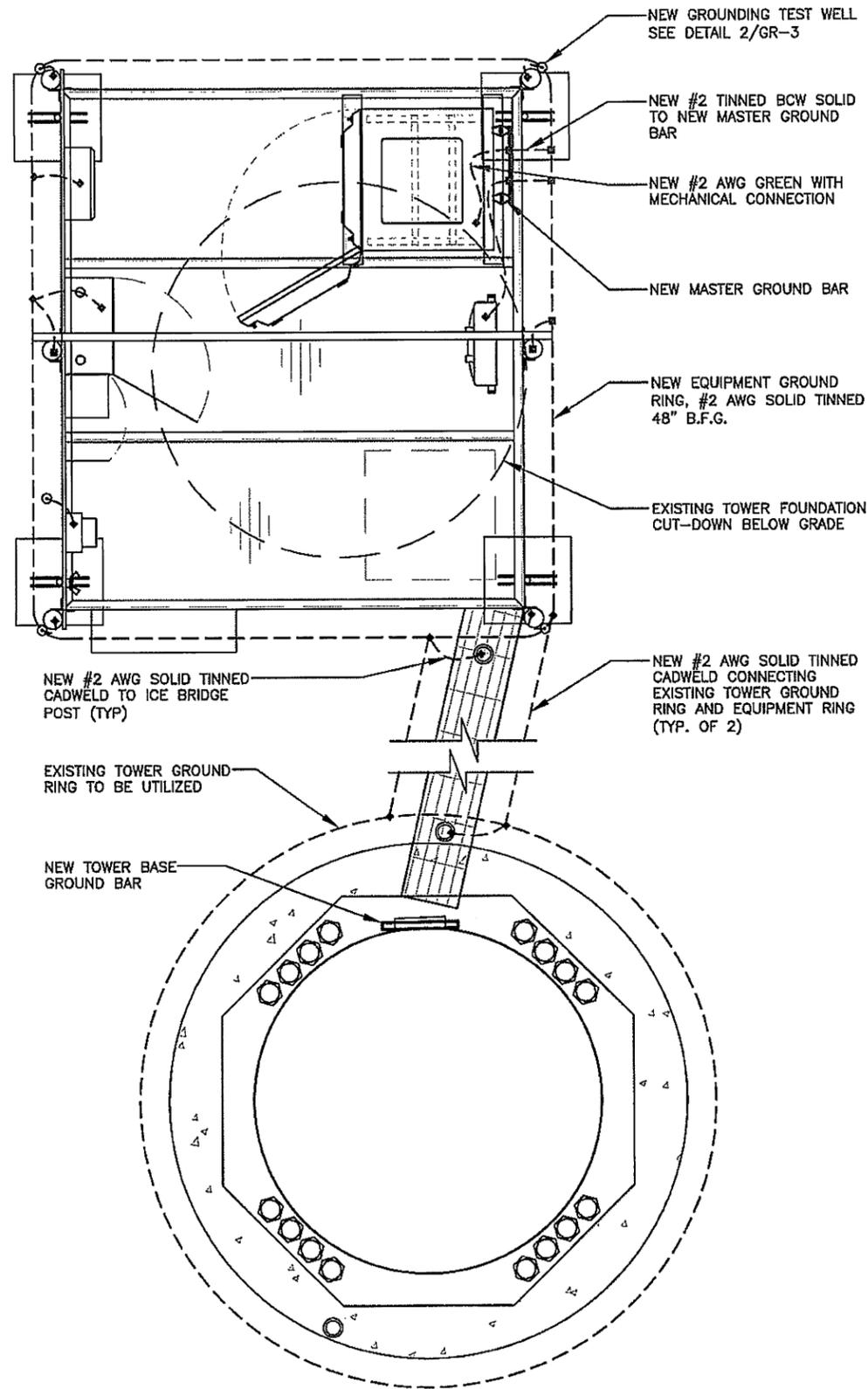
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SHEET TITLE
UTILITY RISER DIAGRAM
& PANEL SCHEDULE

SHEET NUMBER
E-3

EXISTING/RELOCATED AC UNITS
& NEW ICE BRIDGE CANOPY
NOT SHOWN FOR CLARITY



LEGEND		
■	CADWELD	
□	MECHANICAL CONNECTION	
▲	COMPRESSION FITTING	



GROUNDING PLAN
SCALE: 1/4" = 1'-0"

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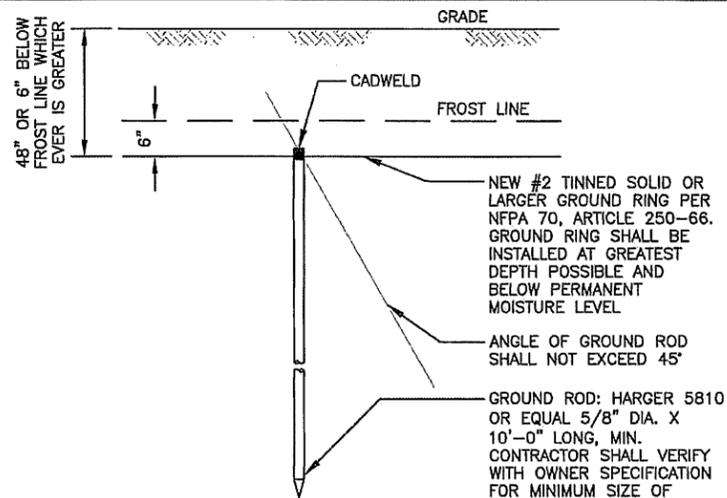
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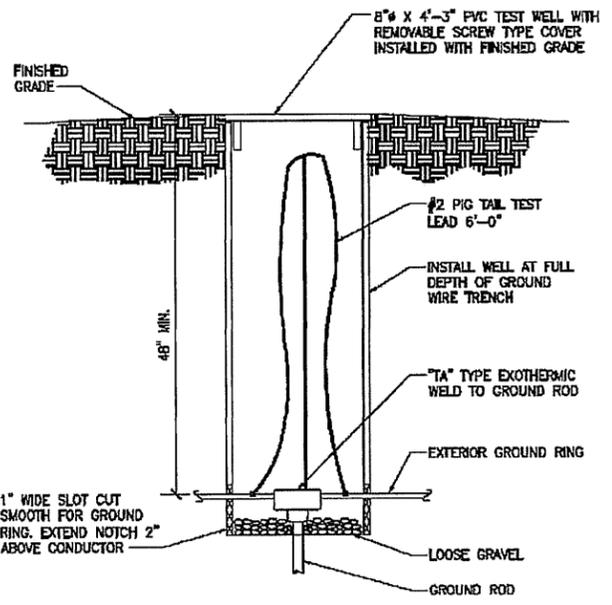
SHEET TITLE
GROUNDING PLAN

SHEET NUMBER
GR-1

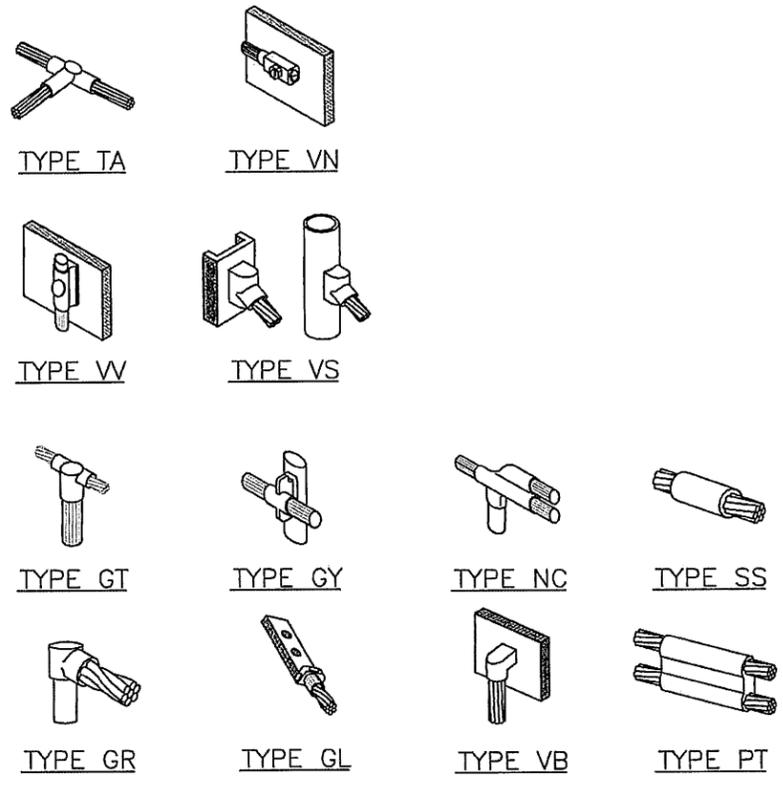


- NOTE: A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL
- NOTE: GROUND RODS MAY BE COPPER CLAD STEEL OR SOLID COPPER
- NOTE: GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF THE ROD
- NOTE: SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE
- NOTE: GROUND RODS INSTALLED WITHIN CLOSE PROXIMITY TO TOWER OR WHEN SOIL IS AT OR BELOW 2,000 OHM-CM, SHALL BE GALVANIZED TO PREVENT GALVANIC CORROSION OF TOWER, (SEE ANSI/TIA-EIA-222)

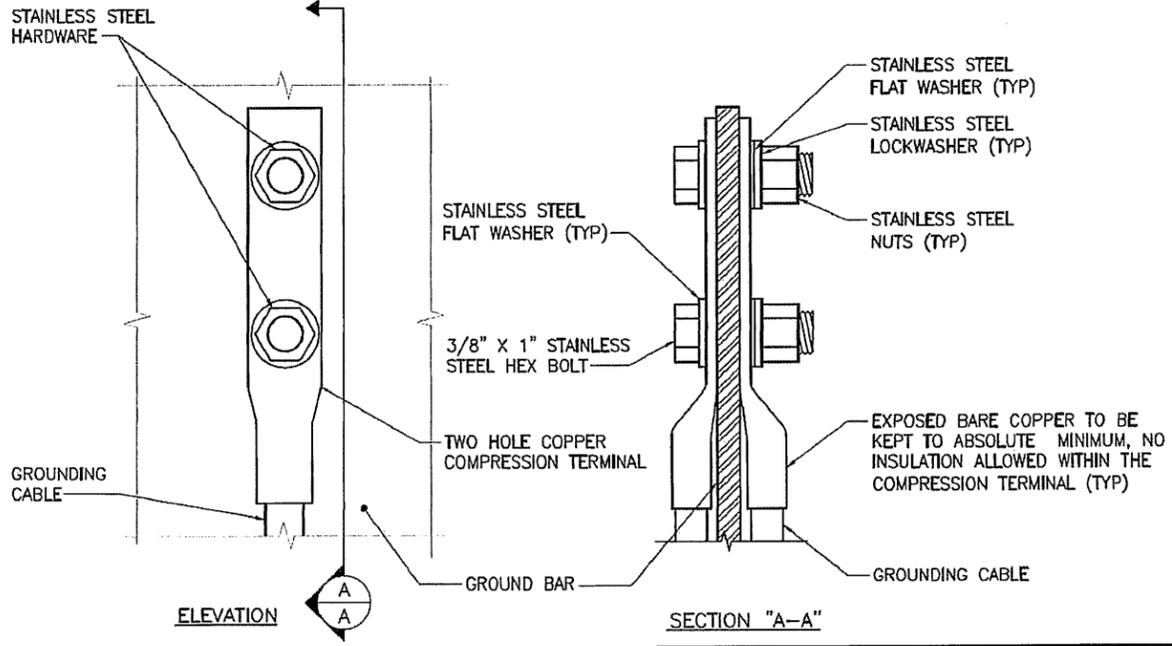
GROUND ROD DETAIL 1
SCALE: NONE



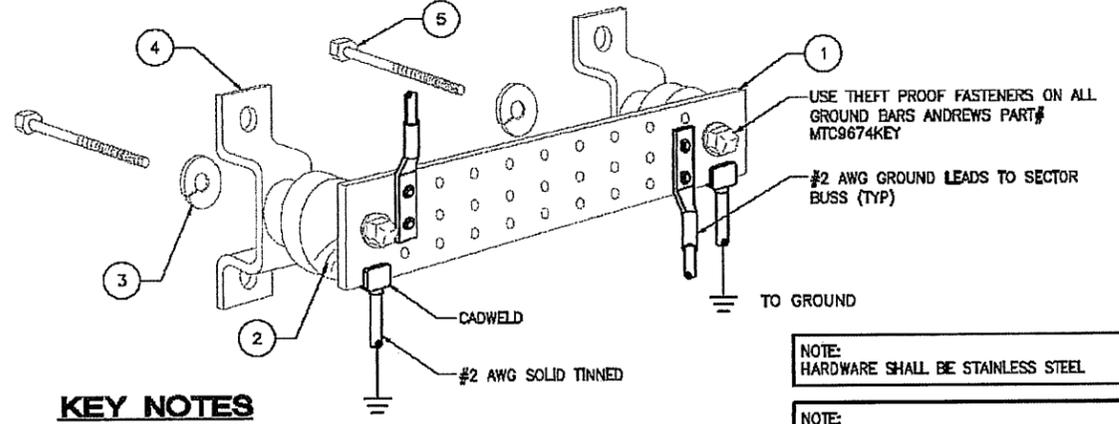
TEST WELL DETAIL 2
SCALE: NONE



EXOTHERMIC WELD TYPES 3
SCALE: NONE



GROUND BAR CONNECTION DETAIL 4
SCALE: NONE



KEY NOTES

- 1/4" THK ELECTRICAL TINNED GROUND BAR HARGER OR APPROVED EQUAL HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION
- INSULATORS
- 3/8" STAINLESS STEEL LOCKWASHERS
- WALL MOUNTING BRACKET
- 3/8" STAINLESS STEEL BMLF BOLTS

- NOTE: HARDWARE SHALL BE STAINLESS STEEL
- NOTE: CONTRACTOR SHALL GROUP INCOMING WIRES
- NOTE: CONTRACTOR TO APPLY 'KOPR-SHIELD' TO ALL CONNECTIONS

GROUND BAR DETAIL 5
SCALE: NONE

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SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
GR-3

(A) Each medical cannabis dispensary must provide security and video surveillance as required by the state rules and regulations.

(14) Conduct On Site:

(A) Loitering is prohibited on the dispensary property.

(B) It shall be prohibited to smoke, inhale or consume cannabis products in the medical cannabis dispensary or anywhere on the property occupied by the dispensary.



Personal wireless services antennas and facilities.

(1) Statement Of Purpose: The purpose of this subsection is to provide specific regulations and standards for the placement and siting of personal wireless services antennas and related facilities that are meant to provide personal wireless services in the village. The goal of this subsection is to provide regulations that will facilitate the location of various types of personal wireless services antennas and facilities in permitted locations so that they are consistent with the character of the village. The sizable areas of open space, the extensive natural landscaping, and the relatively low scale of structures in the village all contribute to this unique and distinctive setting. Minimizing the adverse visual impact of personal wireless services antennas and facilities within the village, and especially within the residential core of the village, is one of the primary objectives of this section, and the village encourages providers of personal wireless services to be creative in designing personal wireless services antennas and facilities that minimally impact the unique and distinctive character of the village. This subsection is intended to allow personal wireless services antennas and facilities that are sufficient to allow adequate personal wireless services to citizens, the traveling public, and others within the village, while maintaining the unique character of the village as described in the comprehensive plan.

(2) Separation From Residential Districts And Properties: Personal wireless services antennas, antennas support structures, and personal wireless services facilities shall not be located within five hundred feet (500') from the nearest outside wall of any single-family dwelling in existence prior to the commencement of construction of such personal wireless services antennas, antenna support structures, or personal wireless services facilities; provided, however, that the personal wireless services antennas, antenna support structures, or personal wireless services facilities that are located on property owned by the village may be located within five hundred feet (500'), but not less than one hundred fifty feet (150'), from the nearest outside wall of any single-family dwelling.

(3) Design Of Antenna Support Structure: Every newly constructed antenna support structure for a personal wireless services antenna, other than an existing structure that is designed primarily for a purpose other than supporting a

personal wireless services antenna, shall:

- (A) Be constructed at the minimum height required to adequately serve the antennas placed thereon;
 - (B) Be a monopole, unless otherwise authorized by the board of trustees for good cause shown;
 - (C) Not be illuminated or have any signs installed thereon (other than private warning signs) unless otherwise required by federal law or regulations or authorized by the board of trustees;
 - (D) Be separated from any building on an adjoining lot by a distance that is not less than one hundred ten percent (110%) of the height of the antenna support structure and be designed to withstand a wind force of one hundred twenty (120) miles per hour without the use of supporting guywires. For the purposes of this requirement, this distance shall be measured horizontally from the center of the base of the antenna support structure to the point where the ground meets a vertical wall of such building; and
 - (E) Be adequately screened from view by the natural tree landscaping or otherwise designed in such a manner that the antenna support structure itself is minimally intrusive to the visual landscape.
- (4) Location:
- (A) Unavailability Of Village Sites: No personal wireless services antenna or antenna support structure shall be permitted on any lot that is not owned or occupied by the village unless the applicant is able to demonstrate that no village owned or occupied property is available, on commercially reasonable terms, and sufficient for the location of an antenna necessary for the provision of personal wireless services.
 - (B) Existing Structures: Personal wireless services antennas shall be mounted on existing antenna support structures or other lawfully existing buildings, unless otherwise provided in this section. No more than one antenna support structure shall be permitted on any one zoning lot.
- (5) Collocation: Unless otherwise authorized by the board of trustees for good cause shown, every newly constructed antenna support structure for the provision of personal wireless services shall be designed, constructed and installed to be of a sufficient size and capacity to allow the commercially feasible location of personal wireless services antennas for additional providers of personal wireless services on such structure in the future. Any permit for such an

antenna support structure may be conditioned on the agreement of the applicant to allow collocation of another provider of personal wireless services on commercially reasonable terms specified in such permit.

(6) Height: Personal wireless services antennas, antenna support structures, or personal wireless services facilities may extend to the following heights:

(A) Antennas And Antenna Support Structures:

(i) Monopoles: Antenna support structures for personal wireless services antennas may be a monopole that extends to a height of not more than one hundred eighty feet (180'). Any deck on such a monopole shall be centered on the monopole and the radius from the center of the monopole to the outside of the deck shall not exceed six feet (6'). No side of any such deck shall exceed six feet (6') vertically.

(ii) Antenna Support Structures Attached To Existing Buildings:

(a) Omnidirectional Or "Whip" Antennas: Omnidirectional or "whip" antennas may extend not more than twelve feet (12') above the highest point of the antenna support structure on which it is mounted.

(b) Directional Or Panel Antennas: Directional or "panel" antennas may not extend above the highest point of the antenna support structure on which it is mounted.

(B) Personal Wireless Services Facilities: Personal wireless services facilities located in a separate structure shall be limited by the applicable height limitations for accessory structures in the zoning code. Personal wireless services facilities located in, or mounted on, an antenna support structure shall not exceed the height of such antenna support structure.

(7) Color: Every personal wireless services antenna and antenna support structure shall be of neutral colors that are harmonious with, and that blend with, the natural features, buildings and structures surrounding such antenna and antenna support structures; provided, however, that directional or "panel" antennas and omnidirectional or "whip" antennas mounted on the exterior of a building serving as an antenna support structure shall be of colors that match, and cause the antenna to blend with, the exterior of the building.

(8) Buffering And Screening: Ground mounted antennas and antenna support structures shall be buffered and screened by a perimeter landscaped open space equal in width to the applicable required yard or ten feet (10'), whichever is more, and consisting of an opaque fence, wall, or densely planted trees, hedges, or other landscaping materials. Such screening shall be provided

between any such ground mounted antenna or antenna support structure and each lot line of the property on which such antenna or antenna support structure is located so as to provide the maximum reasonably achievable screening, as determined by the village, of such antenna or antenna support structure from ground level view from adjacent properties and public or private streets. Notwithstanding the foregoing, no such screening is required to extend more than ten feet (10') in height. Alternatively, for a roof mounted personal wireless services antenna and antenna support structure, the maximum reasonably achievable screening shall be provided between such personal wireless services antenna and antenna support structure and the view from adjoining properties and public or private streets.

- (9) Protection Against Climbing: Every personal wireless services antenna and antenna support structure shall be protected against unauthorized climbing or other access by the public with fencing or by other means approved by the building commissioner.
- (10) Equipment Enclosures: All electronic and other related equipment and appurtenances necessary for the operation of any personal wireless services antenna shall, whenever possible, be located within a lawfully preexisting structure or completely below grade. Where the architectural board of review determines that the location of personal wireless facilities within an existing structure or below grade cannot be achieved in a reasonably cost effective manner, a new structure having not more than one hundred fifty (150) square feet in gross floor area may be constructed to house such equipment, provided that such structure shall be harmonious with, and blend with, the natural features, buildings, and structures surrounding such structure. In granting a special use permit, the village may waive the one hundred fifty (150) square feet in order to permit construction of enclosures that provide additional space allowing for future installation of additional personal wireless services facilities.
- (11) Architectural Review: Any location of a personal wireless services antenna, antenna support structure, or personal wireless services facility, as a permitted use or pursuant to a special use permit, shall be subject to review by the architectural board of review to confirm that such personal wireless services antenna, support structure, or personal wireless services facility meets or exceeds the standards and requirements set forth in this section, or any other applicable section of this title, and otherwise complies with the procedures and standards set out in this section.
- (12) Licenses And Permits: The operator of every personal wireless services antenna shall submit to the village copies of all licenses and permits required by other agencies and governments with jurisdiction over the design, construction, location, and operation of such antenna and shall maintain such licenses and permits and provide evidence of renewal or extension thereof when granted. In addition, no personal wireless services antenna may be installed, nor may any antenna support structure or personal wireless services facility be constructed or

altered, without a building permit issued therefor by the village.

- (13) Abandonment And Removal: When any personal wireless services antenna, antenna support structure, or personal wireless services facilities are not operated for the provision of personal wireless services for a continuous period of twelve (12) months or more, such personal wireless services antenna, antenna support structure, or personal wireless services facilities may be deemed to be abandoned by the village. The owner of such personal wireless services antenna, antenna support structure, or personal wireless services facilities shall remove such abandoned items within ninety (90) days following the mailing of written notice by the village that removal is required. Such notice shall be sent by certified or registered mail, return receipt requested, by the village to such owner at the last known address of such owner. If two (2) or more providers of personal wireless services use an antenna support structure or personal wireless services facility to provide personal wireless services, then the period of nonuse under this provision for any antenna support structure or personal wireless services facilities shall be measured from the cessation of operation by all such providers of the antenna support structure or personal wireless services facilities.

Subterranean garages. Garages shall be permitted to be constructed below the first floor of a single-family dwelling, provided, however, that subterranean garages shall be subject to the following conditions and restrictions:

- (1) Garage Doors: The vehicle access doors on the subterranean garage shall not be visible from the front or corner side lot line.
- (2) Driveway Setback: No portion of the driveway entrance to any subterranean garage shall be located within five feet (5') of any side or rear lot line.
- (3) Stormwater Drainage: Stormwater shall discharge directly from the subterranean garage and driveway entrance into a public storm sewer system.
- (4) Additional Conditions: A subterranean garage may be subject to such additional regulations as the village board deems necessary, including, without limitation, regulations pertaining to landscaping, screening, and stormwater drainage.

Wind energy systems (WES).

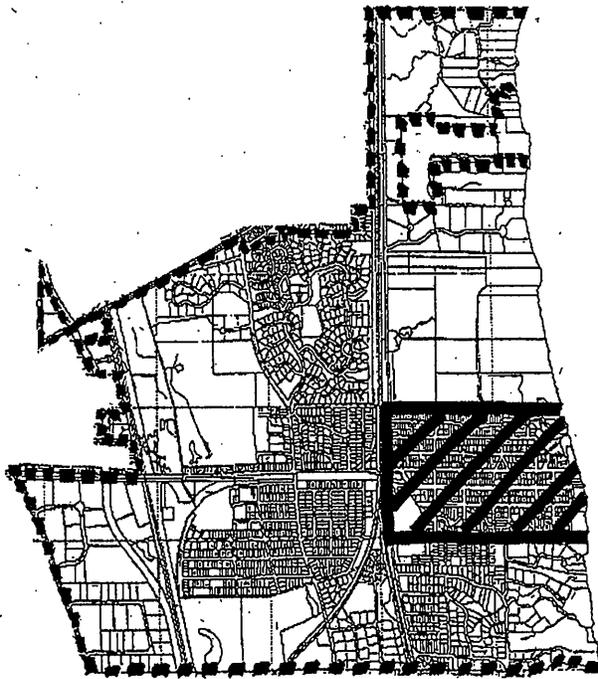
- (1) Purpose: The purpose of this use is to:

(A) Establish reasonable and uniform regulations for the location, installation, operation, maintenance, and decommissioning of building mounted wind energy systems (BWES);

(B) Assure that any development and production of wind generated electricity in the village is safe and to minimize any potentially adverse effects on adjoining

Objectives - Land Use Area 2

- LU2. A) Promote orderly redevelopment of the Central Business District.
B) Preserve the unique residential character of the area.
C) Encourage rehabilitation and control redevelopment of property in an orderly manner compatible with neighboring properties.



East of Sheridan Road, north of East Sheridan Place and Ravine Avenue and south of Blodgett Avenue.

Policies - Land Use Area 2

- LU2-1. Pursue a comprehensive review of the Central Business District as a Special Study Area. The future land use map outlines the proposed area. A moratorium on changes in use, or significant alterations to existing structures and/or uses, should be considered as part of a Special Study of the Central Business District. The Study should be completed within one year of the adoption of the Plan. See "Economic Development" for a map of the study area. See policies ED1-1 and H3-2.
- LU2-2. Maintain the existing zoning classifications for the area considering the following special features:
- a) Develop an ordinance regulating development of properties near or in ravines. See policy PO3-2.
 - b) Inventory and then vacate and dispose of surplus public alleys.
 - c) Consider an ordinance pertaining to architectural preservation/conservation or a historic district designation.
- LU2-3. Review the creation of, and subsequent rezoning to, a public use zoning classification where appropriate.
- LU2-4. Retain, and expand as possible, the open space buffer areas along Sheridan Road, outside of the Central Business District.
- LU2-5. As a general policy, retain existing public rights-of-way throughout the Village. Inventory and categorize existing Village rights-of-way. Develop a process, standards and criteria for identifying rights-of-way which, if vacated, sold or otherwise disposed of, would not adversely impact the character of the Village.

VILLAGE OF LAKE BLUFF

Memorandum

TO: Chair Kraus and Members of the Joint Plan Commission & Zoning Board of Appeals
FROM: Brandon J. Stanick, Assistant to the Village Administrator
DATE: October 16, 2015
SUBJECT: **Agenda Item #5** - Liquor Stores Text Amendment & Special Use Permit for Wine Brokers of Illinois, LLC (910 Sherwood Dr., Unit #20)

Applicant Information:	Wine Brokers of Illinois, LLC (Petitioner)
Location:	910 Sherwood Drive, Unit #20
Requested Action:	Request for a text amendment and a special use permit
Public Notice:	<i>Lake County News Sun</i> – October 6, 2015
Existing Zoning:	Light Industry District (L-1)
Purpose:	Amend Zoning Code to allow liquor stores to operate as a special use in the L-1 District and request for a special use permit to operate a liquor store at 910 Sherwood Dr., Unit #20.
Tenant Space:	2,488 sq. ft.
Existing Land Use:	L-1 District – multi-tenant office
Surrounding Land Use:	<ul style="list-style-type: none">• North: Office and Warehouse• East: Office and Vacant parcel• South: Office, Medical Office and Auto Sales• West: Office
Comprehensive Plan Land Use Objective:	Enhance and maximize economic return to the Village in a manner compatible with existing uses.
Zoning History:	Not available
Applicable Land Use Regulations:	<ul style="list-style-type: none">• Section 10-2-9: Text amendments• Section 10-4-2E: Special Use Permits

Background and Summary

On September 17, 2015 (full resubmittal on October 15th) the Village received a zoning application from Wine Brokers of Illinois, LLC (Petitioner) requesting the following: (i) a text amendment to the

Zoning Code to allow Liquor Stores (SIC 5921) as a special use in the L-1 District; and (ii) a Special Use Permit (SUP) to allow the operation of a liquor store at 910 Sherwood Dr., Unit #20.

Zoning Analysis

The business will operate in a multi-tenant building mainly comprised of commercial office uses. The Petitioner will conduct retail sales of pre-packaged alcohol (liquor and wine) for consumption off-site with limited scheduled tastings. This type of business activity will require a liquor license from the Village's Liquor Control Commissioner (Village President) prior to beginning operations. According to the Petitioner's transmittal letter much of the business is generated online, by phone order and accommodates clients by appointment. The business hours are from 9:00 a.m. to 4:00 p.m.

The Petitioner advises that five to ten customers per week (will vary) will come on site and the business operates with two employees. Deliveries will occur three to five times per week and will be accommodated using an existing delivery bay/dock. The Petitioner owns one refrigerated truck that will be used for deliveries to local clients. For the PCZBA's information, the outdoor storage of vehicles in the L-1 Zoning District is prohibited.

According to the Petitioner, tastings will occur to allow clients to sample the product. It is anticipated that tastings will occur once per month with 20 to 25 clients in attendance per event.

There will be minimum impact to public utilities as adequate water and sewer services are currently available.

Sanitation service will be provided by the property owner's contractor. Village Staff does not anticipate any irregular police and/or fire service impacts.

PCZBA Authority

The PCZBA has authority to:

- Recommend the Village Board approve or deny the request for:
 - a text amendment to establish liquor stores as a special use in the L-1 District; and
 - a SUP to operate a liquor store at 910 Sherwood Drive, Unit #20.

Recommendation

Following the public hearing to consider the requests, the PCZBA should take one of the following actions:

- If more information is required, continue the public hearing to a date certain to allow the Petitioner to provide additional information.
- If more information is not required, vote to:
 - Recommend the Village Board approve or deny the request for:
 - i. a text amendment to establish liquor stores as a special use in the L-1 District; and

ii. a SUP to operate a liquor store at 910 Sherwood Drive, Unit #20.

Attachments

- Zoning application with supporting documentation.

If you should have any questions concerning the information provided in this memorandum please feel free to contact me at 847-283-6889.

WINE BROKERS OF ILLINOIS, LLC

October 15, 2015

Via Email

Village of Lake Bluff

40 E. Center Avenue

Lake Bluff, IL 60044

Attn: Mr. Brandon Stanick

bstanick@lakebluff.org

To whom it may concern:

WINE BROKERS OF ILLINOIS, LLC BUSINESS INTRODUCTION

Established in 2007 originally in Lake Forest, Wine Brokers of Illinois presents non-traditional concept of wine and spirits retail. Although we carry retail license like other liquor stores, our business is based on online, phone orders and by appointments only.

Wine Brokers of Illinois specializes in fine and investments grade wines including First growth Bordeaux, Burgundies, California Cult Wines as well as high-end spirits: cognacs, whiskies, scotches etc.

Throughout the years we have established strong relationships with private clients and corporate companies both domestically and internationally.

Currently we are conducting business from Green Oaks warehouse/office location at 13885 W. Polo Trail Dr. since 2011.

Plans for Wine Brokers of Illinois are to move to a larger facility with a dock access, which 910 Sherwood Dr., unit 20 in Lake Bluff is equipped with and to expand more of our business on a local level using our well-proven concept.

WINE BROKERS OF ILLINOIS, LLC BUSINESS OPERATIONS

The proposed liquor store use will not adversely impact adjacent properties or interfere with day to day operations of neighboring businesses because the business generates a very limited number of customers on a weekly basis (varies 5-10), has a very limited number of employees

(2 owners) and deliveries from our wholesale suppliers range from 3 to 5 per week with orders, that vary from 1-500 cases. The suppliers trucks will be delivering the product in an inside dock, which will not block any traffic for the existing businesses.

Clients typically make appointments and walk-ins are not taken. Orders for wine and liquor are taken in person at the location during the scheduled appointment or over the phone or online, where about 90% of our business comes from. Once orders have been placed, the product is received by the customer at an alternate location. Sometimes it is next day, but most of the time it is on the scheduled day and time in the future- within few days to 2-3 weeks, depending on what the client requested. Local deliveries are being made with company's refrigerated truck, 1 in possession at this time, which will be parked inside the dock area after hours. Some orders are being shipped out via third party vendors like UPS or thru other forwarders. Business hours are 9am-4pm.

Some tasting activities will be prearranged for clients looking to sample product- once a month with anticipated 20-25 people per tasting event.

In advance, thank you for considering our application.

Wine Brokers of Illinois, LLC

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

Mark Miara
Manager

FEE PAID: _____
RECEIPT NUMBER: _____

RECEIVED
SEP 17 2015

RECEIVED
OCT 15 2015
DATE RECEIVED BY VILLAGE: _____
BY: Resubmitted

VILLAGE OF LAKE BLUFF

APPLICATION FOR ZONING VARIATION, SPECIAL USE PERMIT, REZONING, OR PRD

SUBJECT PROPERTY

Address: 910 Sherwood Drive, Unit 20, Lake Bluff, IL Zoning District: L-1
(Property address for which application is submitted)

Current Use: Industrial/Vacant
(Residential, Commercial, Industrial, Vacant, Etc.)

PIN Number: _____

APPLICANT

Applicant: Wine Brokers of Illinois, LLC

Address: 13885 W. Polo Trail Dr., Lake Forest, IL 60045
(Address if different than subject property)

Relationship of Applicant to Property: Lessee
(Owner, Contract Purchaser, Etc.)

Home Telephone: 312-513-9799 Business Telephone: 312-513-9799

OWNER

Owner - Title Holder	If Joint Ownership
Name: _____	Joint Owner: _____
Address: _____	Address: _____
Daytime Phone: _____	Daytime Phone: _____

If ownership is other than individual and/or joint ownership, please check appropriate category and provide all additional ownership information as an attachment.

- Corporation
- Land Trust
- Other: _____
- Partnership
- Trust

Are all real estate taxes, special assessments and other obligations on the subject property paid in full?
 Yes No If No, Explain: _____

111 Associates, LLC
PO Box 54574
Atlanta, GA 30308
Attn: Barry Zgonena
404-550-3390

ACTION REQUESTED

To provide time for legal notification requirements, any application requiring a Public Hearing before the Zoning Board of Appeals must be received **at least 25 days** prior to the next meeting date.

- Zoning Variation
- Special Use Permit
- Text Amendment
- Rezoning
- Planned Residential Development
- Other: _____

Applicable Section(s) of Zoning Ordinance, if known: 10-2-9 Text amendments
10-4-26 Special use permits

Narrative description of request: _____

Text Amendment to allow for the retail sale of pre-packaged goods (wine and liquor) to the public
by appointment only, no public walk in traffic, as a special use permit and to issue a special use
permit to the applicant, Wine Brokers of Illinois, LLC.

STANDARDS FOR VARIATIONS AND SPECIAL USE PERMITS

The Zoning Board is required by the Illinois State Statutes to apply the following standards in reviewing requests for Variations and Special Use Permits. The Board may only grant a variation or recommend that the Village Board grant a variation in cases where there are practical difficulties and particular hardships brought about by the strict application of the Zoning Ordinance and not by any persons, presently or formerly, having an interest in the property. The applicant has the burden of establishing each of these standards both in writing and at the Public Hearing. Please attach additional materials if necessary.

STANDARDS FOR VARIATIONS:

1. **Practical Difficulty or Hardship:** Describe the practical difficulty or particular hardship that would result from the strict application of the Zoning Ordinance.

N/A

2. **Unique Physical Condition:** Describe the unique characteristics of the lot or structures on the subject property which are exceptional, such as: a) existing unique structures or uses, b) irregular lot shape, size, or location, c) exceptional topographical features, or d) other extraordinary physical conditions.

N/A

3. **Special Privilege:** Describe how the request will not simply provide the applicant with a special privilege that other property owners do not enjoy. The request must be for relief from the regulations due to hardship, and not simply to reduce inconvenience or to provide for financial gain.

N/A

4. **Code Purposes:** Describe how the request does not violate the intentions of the regulations. The applicant must show that the request does not adversely impact surrounding properties or the general welfare.

N/A

5. **Public Health and Safety:** Describe how the request will not: a) adversely impact the supply of light and air to adjacent properties, b) increase traffic congestion, c) increase the hazard of fire, d) endanger public safety, e) diminish the value of property within the surrounding area, or f) impair the public health, safety, comfort, morals, and welfare of the people.

N/A

STANDARDS FOR SPECIAL USE PERMITS:

1. **General Standard:** Describe how the proposed use will not adversely impact adjacent properties.

Retail sale of pre-packaged goods wine and liquor to the public only, no walk in public traffic. Orders are submitted on-line/by telephone and delivered to the customer.

2. **No Interference with Surrounding Development:** Describe how the proposed use will not hinder or interfere with the development or use of surrounding properties.

All deliveries are made during business hours - both incoming and outgoing.

3. **Adequate Public Facilities:** Describe how the proposed use will be served by streets, public utilities, police and fire service, drainage, refuse disposal, parks, libraries and other public services.

N/A

4. **No Traffic Congestion:** Describe how the proposed use will not cause undue traffic and traffic congestion.

2-3 deliveries per week via semitruck trailer. Deliveries to clients will be made through applicant's refrigerated van (1-2).

5. **No Destruction of Significant Features:** Describe how the proposed use will not destroy or damage natural, scenic or historic features.

N/A

STANDARDS FOR TEXT AMENDMENTS

The wisdom of amending the Village Zoning Map or the text of the Zoning Code is a matter committed to the sound legislative discretion of the Village Board of Trustees and is not dictated by any set standard. In determining whether a proposed amendment will be granted or denied the Board of Trustees may be guided by the principle that its power to amend this title should be exercised in the public good.

TEXT AMENDMENT GUIDING PRINCIPLES:

In considering whether the principle is satisfied in amending the text of the Zoning Code, the Board of trustees may weigh, among other factors, the following:

1. **The consistency of the proposed amendment with the purposes of this title:**

The proposed amendment would allow for the retail sale of prepackaged wine and liquor to customers by appointment only, no public walk-in traffic. This amendment is not inconsistent with the purpose of this title as it does not detract from the the promotion of the public safety, health, convenience, comfort, morals, prosperity and general welfare.

2. **The community need for the proposed amendment and any uses or development it would allow:**

The proposed amendment promotes and fosters to growth and development of quality businesses in the community; increasing the tax base.

3. **The conformity of the proposed amendment with the village's comprehensive plan and zoning map, or the reasons justifying its lack of conformity:**

The village's comprehensive plan and zoning map is intended to control the development of the community and regulate certain activities. This amendment is consistent with this intention as it is not a broad sweeping special use, but rather a discrete and limited modification.

APPLICATION MATERIALS

LEGAL DESCRIPTION - MUST BE PROVIDED

LOT 5, EXCEPT THE WESTERLY 213 FEET THEREOF, OF UNIT ONE OF NORTH SHORE
INDUSTRIAL AND RESEARCH CENTRE, ACCORDING TO THE PLAT THEREOF RECORDED AS
DOCUMENT NO. 1354992 ON OCTOBER 11, 1967, IN THE SOUTH EAST ¼ OF SECTION 19,
TOWNSHIP 44 NORTH, RANGE 12 EAST OF THE 3RD PRINCIPAL MERIDIAN, VILLAGE OF
LAKE BLUFF, LAKE COUNTY, ILLINOIS

Required*

- Plat of survey including legal description.
- Evidence of title to property for which relief is sought or written documentation of contractual lease.
- Scale site plan showing building locations and dimensions.
- Scale site plan showing addition, new construction, modification, etc.
- Schematic drawings showing floor plan, elevations, and exterior mechanical equipment.
- Floor Area Calculation Table (if applicable)
- Other: Building Plot Plan

Optional

- Landscape Plan
- Photographs of subject property and surrounding properties.
- Testimony from neighbors is strongly encouraged.

*15 copies, no larger than 11x17, must be submitted

SIGNATURES

The undersigned hereby represent, upon all of the penalties of the law, for the purpose of inducing the Village of Lake Bluff to take the action herein requested, that all statements herein and on all related attachments are true and that all work here mentioned will be done in accordance with the ordinances of the Village of Lake Bluff and the laws of the State of Illinois. **The owner must sign the application.**

Owner Signature:  Date: 10/15/15

Print Name: Barry Zgonena

Applicant Signature:  Date: 9/17/15
(If other than owner)

Print Name: MARK MIRRA



Description for 5921: Liquor Stores

Division G: Retail Trade | Major Group 59: Miscellaneous Retail

Industry Group 592: Liquor Stores

5921 Liquor Stores

Establishments primarily engaged in the retail sale of packaged alcoholic beverages, such as ale, beer, wine, and liquor, for consumption off the premises. Stores selling prepared drinks for consumption on the premises are classified in Industry 5813.

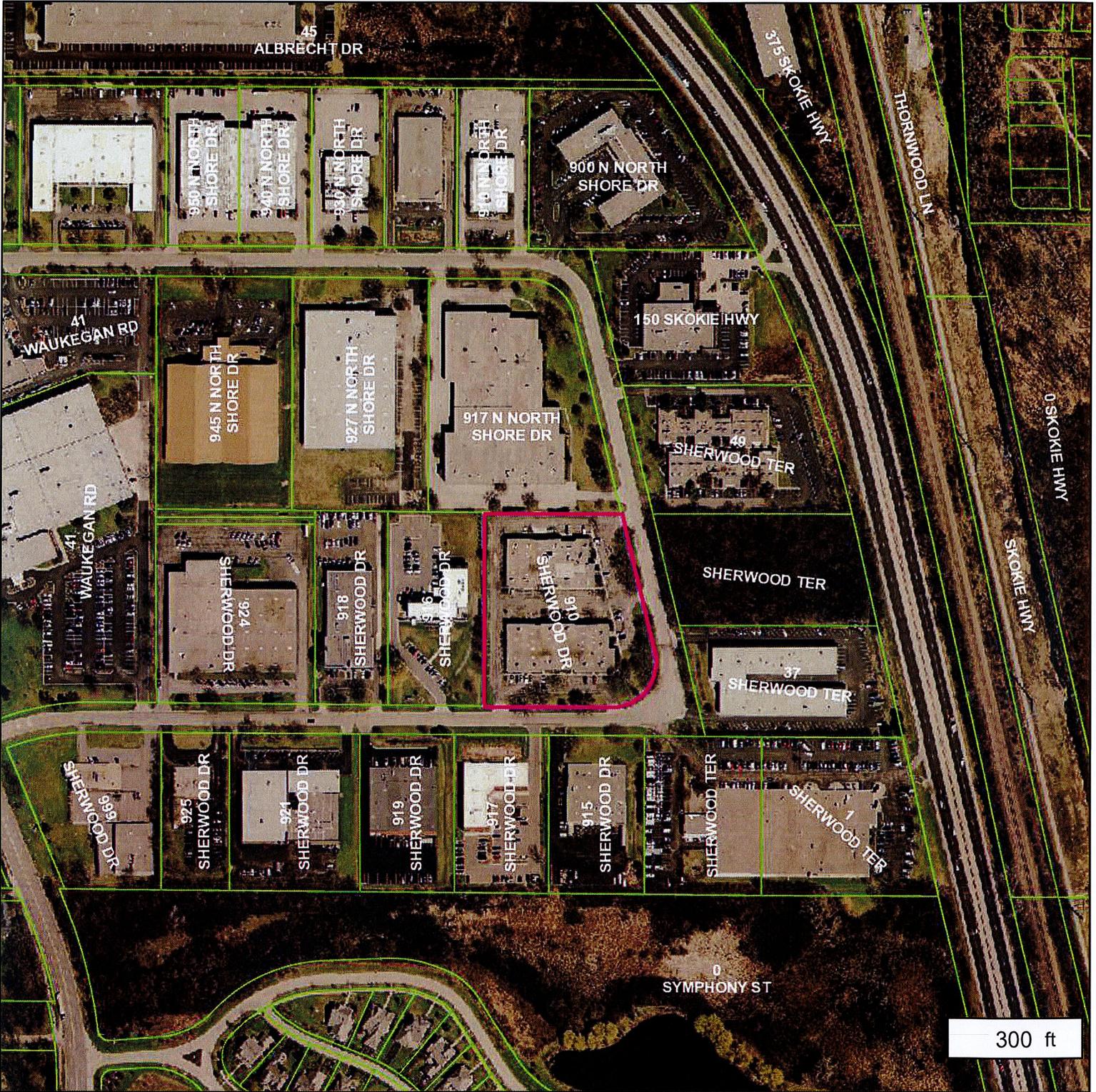
- Beer, packaged-retail
- Liquor, packaged-retail
- Wine, packaged-retail

[SIC Search](#)

[Division Structure](#)

[Major Group Structure](#)

Lake County, Illinois

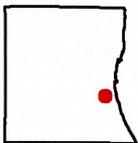


Lake County
 Department of Information Technology
 18 N County St
 Waukegan IL 60085
 (847) 377-2373



Map Printed on 10/16/2015
 Parcel 1219404011 is outlined.

— Tax Parcels

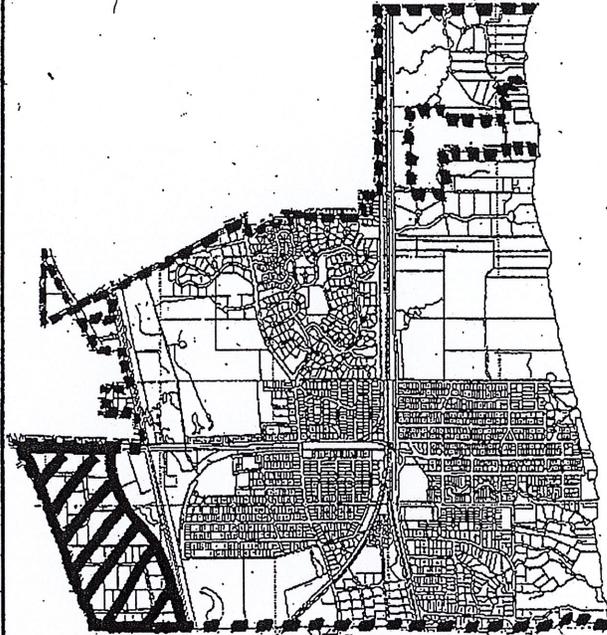


Disclaimer:

The selected feature may not occur anywhere in the current map extent. A Registered Land Surveyor should be consulted to determine the precise location of property boundaries on the ground. This map does not constitute a regulatory determination and is not a base for engineering design. This map is intended to be viewed and printed in color.

Objective - Land Use Area 8

LU8. Enhance and maximize economic return to the Village in a manner compatible with existing uses.



West of Route 41, south of Route 176, east of Route 49.

Policies - Land Use Area 8

- LU8-1. Maintain existing zoning classifications for the area except with reference to the area south of Route 176 and north of Carriage Park Avenue and east of the Carriage Way Shopping Center, to be rezoned to promote an automobile district or other retail development. See policy ED2-2.
- LU8-2. Inventory and control existing uses that pose environmental hazards.
- LU8-3. Maintain the appearance, setback requirements and controls regulating development in the area.
- LU8-4. As a general policy, retain existing public rights-of-way throughout the Village. Inventory and categorize existing Village rights-of-way. Develop a process, standards and criteria for identifying rights-of-way which, if vacated, sold or otherwise disposed of, would not adversely impact the character of the Village.

VILLAGE OF LAKE BLUFF

Memorandum

TO: Chair Kraus and Members of the Joint Plan Commission & Zoning Board of Appeals
Chair Hunter and Members of the Architectural Board of Review

FROM: Brandon J. Stanick, Assistant to the Village Administrator
Michael Croak, Building Codes Supervisor

DATE: October 16, 2015

SUBJECT: **Agenda Item #6** - Workshop - Lake Bluff Middle School (31 E. Sheridan Pl.)

Background and Summary

On October 1, 2015 School District #65 Officials (Petitioner) and representatives from Wight & Company (Petitioner's project design consultant) met with Village Staff to review the proposed renovations to the Lake Bluff Middle School located at 31 E. Sheridan Place. The renovations include a new fine arts addition (4,300 sq. ft.), a new classroom addition (5,400 sq. ft.) providing for five new classrooms, a new storage building (1,200 sq. ft.) placed near the westerly property line, as well as a new parking/circulation lot along E. Sheridan Place.

As you may know the Middle School property currently operates pursuant to a special use permit (Ord. #2008-07 as amended) that also grants the following zoning relief: (i) a 278.50% variation from the maximum gross floor area regulations (for the Middle School and East School); and (ii) a 120% variation from the maximum fence height regulations (for a sound attenuation wall).

The intent of this workshop meeting is to give the Petitioner the opportunity to review the general concept for the Middle School renovations with the PCZBA and the Architectural Board of Review (ABR) prior to a formal public hearing (scheduled on November 18th) with the PCZBA. The project is not required to undergo formal site plan review with the ABR because the Lake Bluff Zoning Code does not have a requirement for ABR review in the R-4 zoning district. However, the Petitioner has expressed interest in participating in an "advisory" review with the ABR prior to the Village Board's consideration of the petition.

Recommendation

It is recommended the PCZBA and the ABR conduct an informal workshop and ask questions of the Petitioner in preparation for a public hearing with the PCZBA on November 18, 2015.

Attachments

- Preliminary Plans Proposed for the Lake Bluff Middle School.

If you should have any questions concerning the information provided in this memorandum please feel free to contact Asst. to the Village Administrator Brandon Stanick (847-283-6889) or Building Codes Supervisor Mike Croak (847-283-6885).



LAKE BLUFF ELEMENTARY SCHOOL

DISTRICT 65

LAKE BLUFF SCHOOL DISTRICT 65

31 E Sheridan Pl, Lake Bluff, IL
60044

Lake Bluff Middle School
Schematic Design Plan

PLAN COMMISSION AND ZONING BOARD OF APPEALS AND ARCHITECTURAL BOARD OF REVIEW WORKSHOP

PROJECT TEAM

CLIENT
LAKE BLUFF MIDDLE SCHOOL
31 E Sheridan Pl
Lake Bluff, IL 60044

CIVIL ENGINEER:
WIGHT & COMPANY
2500 NORTH FRONTAGE ROAD
DARIEN IL. 60561
PHONE: (630)969-7000
FAX: (630)969-7979
Design Firm Registration #184-000451

LANDSCAPE ARCHITECT:
WIGHT & COMPANY
2500 NORTH FRONTAGE ROAD
DARIEN IL. 60561
PHONE: (630)969-7000
FAX: (630)969-7979
CONTACT:
Design Firm Registration #184-000451

ARCHITECT:
WIGHT & COMPANY
2500 NORTH FRONTAGE ROAD
DARIEN IL. 60561
PHONE: (630)969-7000
FAX: (630)969-7979
CONTACT:
Design Firm Registration #184-000451

PLUMBING ENGINEER:
WIGHT & COMPANY
2500 NORTH FRONTAGE ROAD
DARIEN IL. 60561
PHONE: (630)969-7000
FAX: (630)969-7979
Design Firm Registration #184-000451

ELECTRICAL ENGINEER:
WIGHT & COMPANY
2500 NORTH FRONTAGE ROAD
DARIEN IL. 60561
PHONE: (630)969-7000
FAX: (630)969-7979
Design Firm Registration #184-000451

STRUCTURAL ENGINEER:
WIGHT & COMPANY
2500 NORTH FRONTAGE ROAD
DARIEN IL. 60561
PHONE: (630)969-7000
FAX: (630)969-7979
Design Firm Registration #184-000451

MECHANICAL ENGINEER:
WIGHT & COMPANY
2500 NORTH FRONTAGE ROAD
DARIEN IL. 60561
PHONE: (630)969-7000
FAX: (630)969-7979
Design Firm Registration #184-000451

FIRE PROTECTION ENGINEER:
WIGHT & COMPANY
2500 NORTH FRONTAGE ROAD
DARIEN IL. 60561
PHONE: (630)969-7000
FAX: (630)969-7979
Design Firm Registration #184-000451

INDEX OF DRAWINGS

BUILDING CODE DATA

1. APPLICABLE CODES
BUILDING CODE:
MECHANICAL CODE:
ELECTRICAL CODE:
PLUMBING CODE:
ACCESSIBILITY CODE:
ENERGY CODE:

2. GENERAL BUILDING DESCRIPTION
GROSS BUILDING AREA, EXISTING: 49233 SF
GROSS BUILDING AREA, TOTAL (NEW & EXISTING): 58873 SF

3. BUILDING OCCUPANCY TYPE SECTION 302
OCCUPANCY CLASSIFICATION: E

4. CONSTRUCTION TYPE SECTION 503, 602
CONSTRUCTION TYPE: IIB
FIRE RESISTANCE RATING REQUIREMENTS: TABLE 601
STRUCTURAL FRAME: 0 HR
BEARING WALLS (EXTERIOR) (ALSO SEE TABLE 602): 0 HR
BEARING WALLS (INTERIOR): 0 HR
NON-BEARING WALLS (EXTERIOR): SEE TABLE 602
NON-BEARING WALLS (INTERIOR): 0 HR
FLOOR CONSTRUCTION: 0 HR
ROOF CONSTRUCTION: 0 HR
EXTERIOR WALL FIRE SEPARATION DISTANCE: TABLE 602
LESS THAN 5': 1 HR
LESS THAN OR EQUAL TO 5' TO LESS THAN 10': 1 HR
LESS THAN OR EQUAL TO 10' TO LESS THAN 30': 0 HR
GREATER THAN OR EQUAL TO 30': 0 HR

5. ALLOWABLE HEIGHT AND AREA LIMITATIONS SECTION 503
BASE ALLOWABLE AREA: 14500 SF
BASE ALLOWABLE HEIGHT (FEET): 55' - 0"
BASE ALLOWABLE HEIGHT (STORIES): 2 STORIES
HEIGHT MODIFICATIONS: SECTION 504
AUTOMATIC SPRINKLER SYSTEM INCREASE (FEET): 55' - 0"
AUTOMATIC SPRINKLER SYSTEM INCREASE (STORIES): 2 STORY
AREA MODIFICATIONS: SECTION 506
FRONTAGE INCREASE
FORMULA: $I_f = 100 \times (F/P - 0.25) \times W/30$
BUILDING PERIMETER (P): 1284' - 0"
BUILDING FRONTAGE (F): 1220' - 0"
FRONTAGE WIDTH (W): 29' - 4 3/4"
TOTAL FRONTAGE INCREASE (If): .688
AUTOMATIC SPRINKLER SYSTEM INCREASE:
TOTAL ALLOWABLE BUILDING AREA
FORMULA: $A_a = A_t + [(A_t \times I_f)/100] + [(A_t \times I_s)/100]$
TOTAL ALLOWABLE AREA: 67976 SF
TOTAL ACTUAL AREA: 58873 SF
TOTAL ALLOWABLE HEIGHT: 55' - 0"
TOTAL ACTUAL HEIGHT: 28' - 0"
TOTAL ALLOWABLE STORIES: 2 STORIES
TOTAL ACTUAL STORIES: 1 STORY

6. FLOOR AREA RATIO
NEW FLOOR AREA RATIO: .205

LOCATION MAP



31 E Sheridan Pl.
Lake Bluff, IL 60044

FOR UNDERGROUND UTILITY LOCATIONS,
CALL J.U.L.I.E.
TOLL FREE TEL. 1-800-892-0123

- JULIE SUBURBS & DIGG CHICAGO
- o YELLOW _____ GAS
 - o RED _____ ELECTRICAL
 - o ORANGE _____ PHONE / TV COMMUNICATION
 - o BLUE _____ WATER
 - o GREEN _____ SEWERS
 - o WHITE _____ SAFE TO DIG

STATEMENT OF COMPLIANCE
I HAVE PREPARED OR CAUSED TO BE PREPARED UNDER MY DIRECT SUPERVISION, THE ATTACHED PLANS AND SPECIFICATIONS AND STATE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF AND TO THE EXTENT OF MY CONTRACTUAL OBLIGATION, THEY ARE IN COMPLIANCE WITH THE ENVIRONMENTAL BARRIERS ACT (IL. REV. STAT. 1985, CH. 111 1/2, PARS. 3711 ET SEQ AS AMENDED) AND THE ILLINOIS ACCESSIBILITY CODE, 71 IL ADM. CODE 400.

SIGNED: _____
ARCHITECT/ENGINEER

ILLINOIS REGISTRATION NO.: _____

DATE: _____

REV	DESCRIPTION	DATE

50% Progress Set 09/30/15
DESCRIPTION DATE

LAKE BLUFF SCHOOL DISTRICT 65

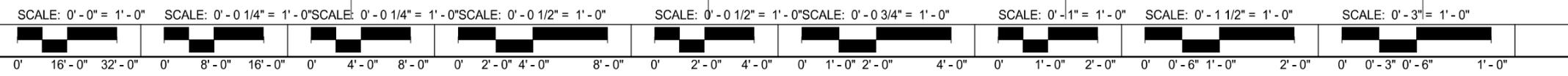
31 E Sheridan Pl, Lake Bluff, IL 60044

COVER SHEET, INDEX, TEAM, LOCATION MAP

Project Number:
02-5079-05
Drawn By:
Author
Sheet:

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10/15/2015 3:17:52 PM
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ALTA/ACSM LAND TITLE SURVEY

PIN: 12-21-301-035
12-21-300-003

G:\704\009\MAPS\LOCMAP.JPG
PROJECT SITE

ABBREVIATIONS	
000.00' M	MEASURED DATA
000.00' C	COMPUTED DATA
000.00' R.	RECORD DATA
P.U. & D.E.	PUBLIC UTILITY & DRAINAGE EASEMENT
R=	RADIUS
A=	ARC LENGTH
PIN	PERMANENT INDEX NUMBER
P.U. & D.E.	PUBLIC UTILITY & DRAINAGE EASEMENT
L.E. & S.E.	LANDSCAPE & SIDEWALK EASEMENT

LINETYPE LEGEND	
---	BOUNDARY LINE
---	ADJOINER LOT LINE
---	CENTER LINE
---	RIGHT OF WAY
---	EASEMENT LINE
---	BUILDING LINE
---	SECTION LINE
---	UNDERLYING LOT LINE

SURVEYOR'S NOTES CONT.

- THE SURVEYED PROPERTY IS LOCATED IN ZONE X AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAN ACCORDING TO MAP NO. 17097C0188 K WITH EFFECTIVE DATE OF SEPTEMBER 18, 2013.
- THE UNDERSIGNED DID NOT OBSERVE EVIDENCE OF CURRENT EARTH MOVING, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.
- THE UNDERSIGNED HAS NO KNOWLEDGE OF PROPOSED CHANGES IN STREET RIGHT OF WAY LINES, THERE IS NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIR.
- THE UNDERSIGNED HAS OBSERVED NO EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
- ADDRESS: 121 E. SHERIDAN PLACE LAKE BLUFF, ILLINOIS

TOTAL LOT AREA SUMMARY	
287,088 S.F. OR 6.59 ACRES	



LEGAL DESCRIPTION OF PROPERTY

LOTS 1 THROUGH 12 IN BLOCK 6 OF LAKE BLUFF HEIGHTS, BEING A SUBDIVISION OF PART OF THE SOUTHWEST 1/4 OF SECTION 21, TOWNSHIP 44 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN THE VILLAGE OF LAKE BLUFF, THE PLAT OF WHICH IS RECORDED IN PLAT BOOK C PAGE 23, LAKE COUNTY, ILLINOIS.

ALSO ALL THAT PART OF THE NORTH/SOUTH VACATED 12 FOOT WIDE ALLEY LYING WEST OF AND ADJACENT TO SAID LOTS 1 THROUGH 6 OF SAID BLOCK 6, LYING NORTH OF THE SOUTH LINE OF SAID LOT 6 EXTENDED AND SOUTH OF THE NORTH LINE OF SAID LOT 1 EXTENDED.

ALSO ALL THAT PART OF VACATED WARREN COURT LYING WEST OF ADJACENT TO SAID LOTS 7 THROUGH 12 OF SAID BLOCK 6, LYING NORTH OF THE SOUTH LINE OF SAID LOT 7 EXTENDED AND SOUTH OF THE NORTH LINE OF SAID LOT 12 EXTENDED.

LOTS 1 THROUGH 12 IN BLOCK 7 OF LAKE BLUFF HEIGHTS, BEING A SUBDIVISION OF PART OF THE SOUTHWEST 1/4 OF SECTION 21, TOWNSHIP 44 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN THE VILLAGE OF LAKE BLUFF, THE PLAT OF WHICH IS RECORDED IN PLAT BOOK C PAGE 23, LAKE COUNTY, ILLINOIS.

ALSO ALL THAT PART OF THE NORTH/SOUTH VACATED 12 FOOT WIDE ALLEY LYING WEST OF AND ADJACENT TO SAID LOTS 1 THROUGH 6 OF SAID BLOCK 7, LYING NORTH OF THE SOUTH LINE OF SAID LOT 6 EXTENDED AND SOUTH OF THE NORTH LINE OF SAID LOT 1 EXTENDED.

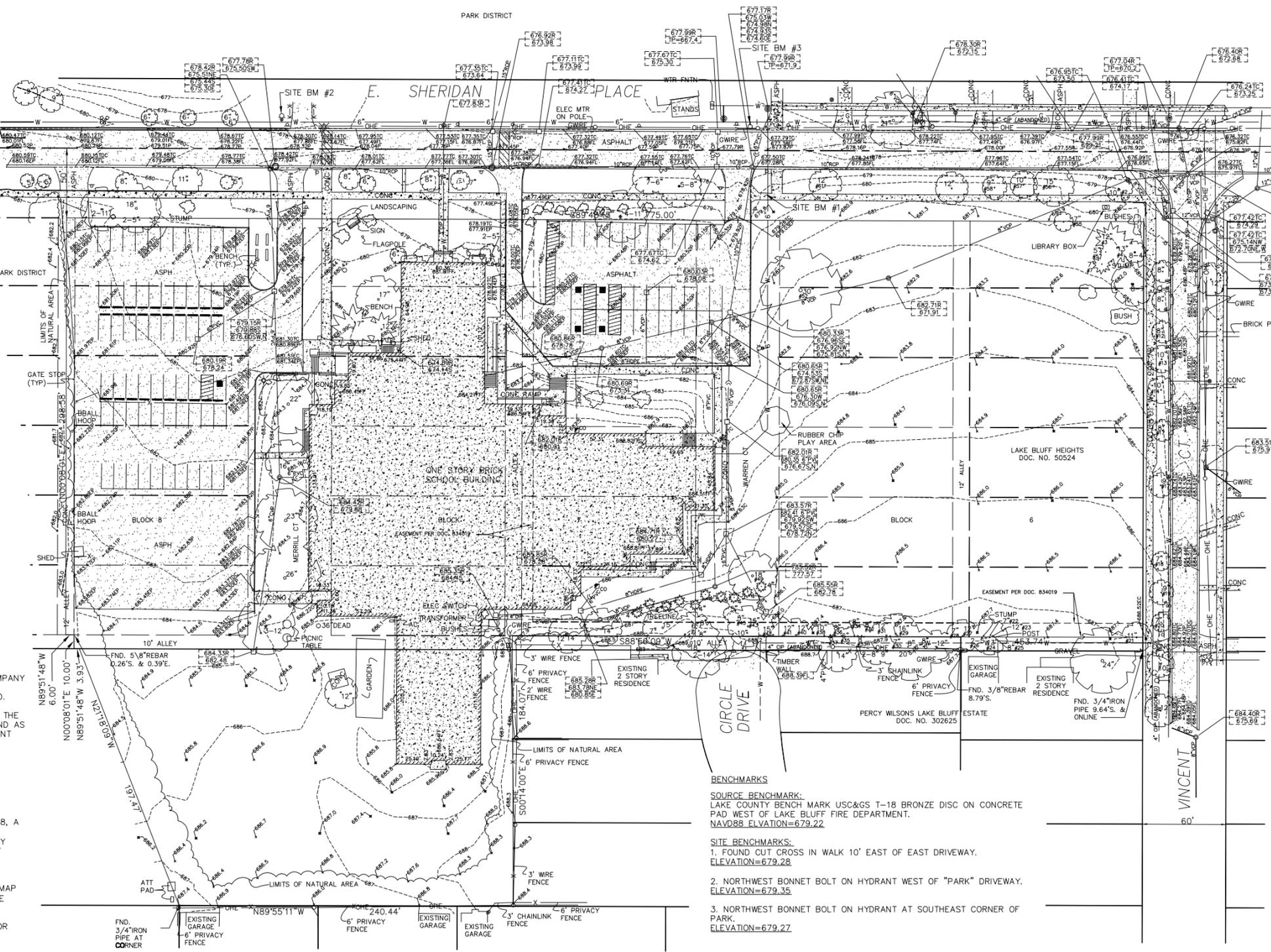
ALSO ALL THAT PART OF THE 10 FOOT WIDE EAST/WEST VACATED ALLEY LYING SOUTH OF SAID BLOCKS 7 AND 8, LYING WEST OF THE EAST LINE OF SAID LOT 7 OF BLOCK 7 EXTENDED SOUTH, AND EAST OF THE WEST LINE OF LOT 6 OF BLOCK 8 IN SAID LAKE BLUFF HEIGHTS, EXTENDED SOUTH.

ALSO ALL THAT PART OF VACATED MERRILL COURT LYING WEST OF ADJACENT TO SAID LOTS 7 THROUGH 12 OF SAID BLOCK 7, NORTH OF THE SOUTH LINE OF SAID LOT 7 EXTENDED AND SOUTH OF THE NORTH LINE OF SAID BLOCK 12 EXTENDED.

LOTS 1 THROUGH 6 IN BLOCK 8 OF LAKE BLUFF HEIGHTS, BEING A SUBDIVISION OF PART OF THE SOUTHWEST 1/4 OF SECTION 21, TOWNSHIP 44 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN THE VILLAGE OF LAKE BLUFF, THE PLAT OF WHICH IS RECORDED IN PLAT BOOK C PAGE 23, LAKE COUNTY, ILLINOIS.

ALSO ALL THAT PART OF EASTERLY 1/2 OF THE NORTH/SOUTH VACATED 12 FOOT WIDE ALLEY LYING WEST OF AND ADJACENT TO SAID LOTS 1 THROUGH 6 OF SAID BLOCK 8, LYING NORTH OF THE SOUTH LINE OF SAID LOT 6 EXTENDED AND SOUTH OF THE NORTH LINE OF SAID LOT 1 EXTENDED.

AND BEGINNING AT A POINT 355.74 FEET SOUTH AND 1936 FEET WEST OF THE NORTHEAST CORNER OF THE SOUTHWEST QUARTER, SECTION 21, TOWNSHIP 44 NORTH, RANGE 12, EAST OF THE THIRD PRINCIPAL MERIDIAN, THENCE WEST 477.2 FEET TO THE EASTERLY LINE OF WAUKEGAN ROAD, THENCE SOUTHERLY ALONG THE EASTERLY LINE OF SAID ROAD PARALLEL TO RIGHT-OF-WAY OF CHICAGO & NORTH WESTERN RAILWAY CO., 188.1 FEET; THENCE EAST 439.7 FEET; THENCE NORTH 183.8 FEET TO THE PLACE OF BEGINNING (EXCEPT THAT PART THEREOF CONVEYED BY WARRANTY DEED FROM MARGARET J. HIGGINSON GURNEA, A WIDOW TO THE LAKE BLUFF PARK DISTRICT, DATED APRIL 18, 1938 AND RECORDED APRIL 22, 1938 AS DOCUMENT NO. 448571) IN LAKE BLUFF, LAKE COUNTY, ILLINOIS.



N.T.S.

LEGEND

- ⊙ MANHOLE
- CATCH BASIN
- INLET
- ⊕ VALVE & VALT
- ⊕ VALVE & BOX
- ⊕ FIRE HYDRANT
- ⊕ STREET LIGHT
- ⊕ POWER POLE
- SIDEWALK
- CURB
- STORM SEWER
- SANITARY SEWER
- WATERMAIN
- HEADWALL
- END SECTION
- CORRUGATED METAL PIPE
- E ELECTRIC LINE
- G GAS LINE
- T TELEPHONE LINE
- FO FIBER OPTIC CABLE
- OHE OVERHEAD POWER LINES
- TV CABLE TELEVISION
- X FENCE LINE

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS }
COUNTY OF DUPAGE } SS

TO:

- THE BOARD OF EDUCATION OF LAKE BLUFF ELEMENTARY SCHOOL DISTRICT 65
- WHEATLAND TITLE GUARANTY COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2,3,4,5,7(0),8,11(0),16,17 AND 18 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON JUNE 5, 2015.

THIS PLAT HAS BEEN PREPARED BY ROAKE AND ASSOCIATES, INC., ILLINOIS LICENSED PROFESSIONAL DESIGN FIRM NO. 807, LICENSE EXPIRES APRIL 30, 2017, UNDER MY PERSONAL DIRECTION FOR THE EXCLUSIVE USE OF THE CLIENT NOTED HEREON. REPRODUCTION OR USE BY THIRD PARTIES IS STRICTLY PROHIBITED WITHOUT THE WRITTEN PERMISSION OF THE UNDERSIGNED.

DATED THIS _____ DAY OF _____ A.D., 2015.

ILLINOIS LICENSED PROFESSIONAL LAND SURVEYOR NO. 2992
LICENSE VALID THROUGH NOVEMBER 30, 2016



- SURVEYOR'S NOTES**
- REFERENCE IS MADE TO WHEATLAND TITLE GUARANTY COMPANY COMMITMENT NO. LBS-2015LK-2021.0 EFFECTIVE DATE SEPTEMBER 14, 2015, FROM WHICH THIS SURVEY IS BASED. THIS PROPERTY IS SUBJECT TO ALL COVENANTS AND RESTRICTIONS RELATING TO THE USE AND CHARACTER OF THE LAND AS ALL MATTERS APPEARING OF PUBLIC RECORD AND AS MAY BE DISCLOSED BY A MORE CURRENT TITLE COMMITMENT OR REPORT.
 - 12' ALLEY ON BLOCK 6 IS VACATED PER DOC. 5537052
12' ALLEY ON BLOCK 7 IS VACATED PER DOC. 574741
WARREN COURT IS VACATED PER DOC. 256750
MERRILL COURT IS VACATED PER DOC. 5537052
12' ALLEY ON BLOCK 8, A VACATION WAS NOT FOUND IN SEARCH.
10' ALLEY ALONG THE SOUTH LINE OF BLOCKS 6, 7 AND 8, A VACATION WAS NOT FOUND.
A 10' AND 20' EASEMENT FOR STREET, ALLEY OR HIGHWAY PURPOSES PER DOC. 834019 ALONG THE SOUTH LINES OF BLOCK 6 AND BLOCK 7 RUN THROUGH THE BUILDING AS SHOWN ON THE SURVEY.
 - BASIS OF BEARING: THE BEARINGS SHOWN ON THE PLAT MAP ARE BASED ON NAD 83 (2011 ADJ.) ILLINOIS STATE PLANE EAST ZONE
 - TO THE BEST OF OUR KNOWLEDGE THERE ARE NO GAPS OR OVERLAPS.

PREPARED FOR:
WIGHT & COMPANY
2500 N. FRONTAGE ROAD
DARIEN, ILLINOIS 60561
PH. (630) 969-7000

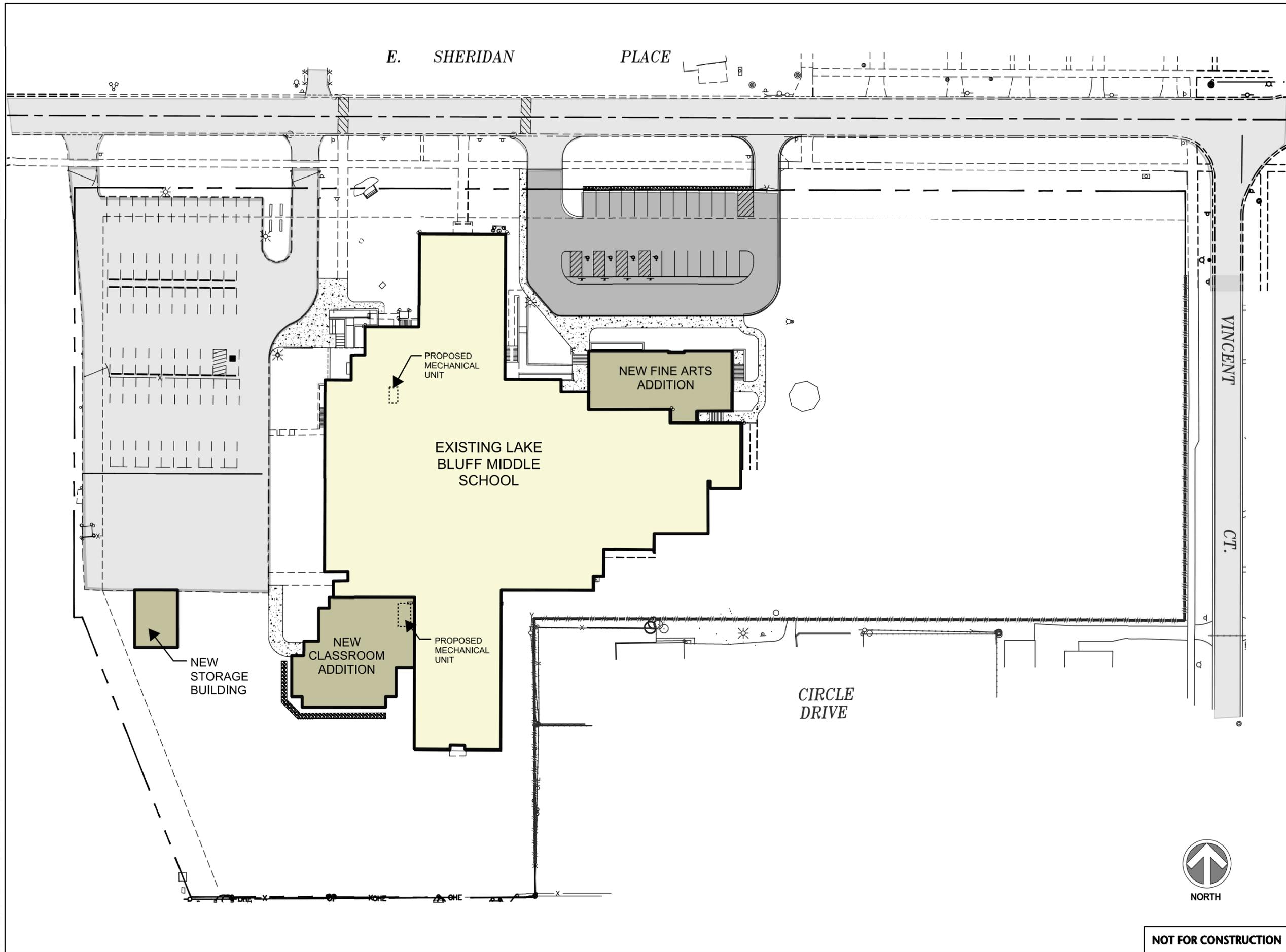
ROAKE AND ASSOCIATES, INC.
CONSULTING ENGINEERS LAND SURVEYORS PLANNERS
1684 QUINCY AVENUE, SUITE 100A NAPERVILLE, ILLINOIS 60540
TEL (630) 355-3232 FAX (630) 355-3267

NO.		DATE		DESCRIPTION	

LAKE BLUFF MIDDLE SCHOOL	
ALTA/LAND TITLE SURVEY	
DRN./CKD. BY: DM/SH	FILE: 7049ALTA
SCALE: 1"=40'	DATE: 06/09/15
F.LD. BK./PG: 256/32-41	JOB NO.: 704.009
SHEET NO. 1	OF 1

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REV	DESCRIPTION	DATE
		10-13-2015

LAKE BLUFF SCHOOL
DISTRICT 65

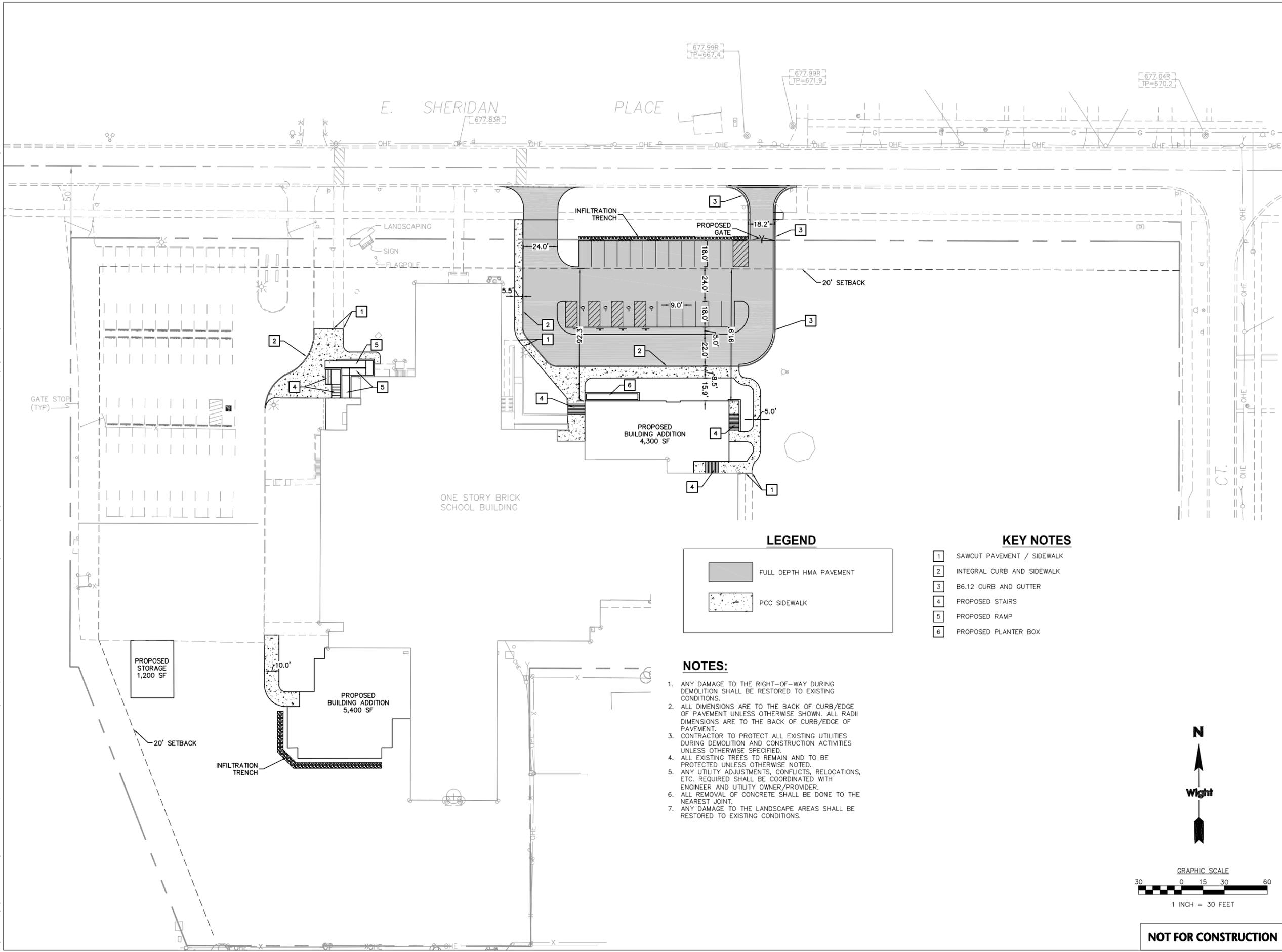
31 E SHERIDAN PLACE
LAKE BLUFF, IL 60044

Project Number:
02-5074-05
Drawn By:

Sheet:

NOT FOR CONSTRUCTION

\\nasumi-dar\integrated Services\Darien\Lake Bluff SD_65\01-5079-05_Lake Bluff MS Additions-Alterations\DWG\GD\C2.00 SITE PLAN.dwg devans Oct 13, 2015 11:51:51 am
 Wight © Copyright 2015 All rights reserved. No part of these documents may be reproduced, stored, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written consent of Wight.



LEGEND

	FULL DEPTH HMA PAVEMENT
	PCC SIDEWALK

KEY NOTES

1	SAWCUT PAVEMENT / SIDEWALK
2	INTEGRAL CURB AND SIDEWALK
3	B6.12 CURB AND GUTTER
4	PROPOSED STAIRS
5	PROPOSED RAMP
6	PROPOSED PLANTER BOX

- NOTES:**
1. ANY DAMAGE TO THE RIGHT-OF-WAY DURING DEMOLITION SHALL BE RESTORED TO EXISTING CONDITIONS.
 2. ALL DIMENSIONS ARE TO THE BACK OF CURB/EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN. ALL RADII DIMENSIONS ARE TO THE BACK OF CURB/EDGE OF PAVEMENT.
 3. CONTRACTOR TO PROTECT ALL EXISTING UTILITIES DURING DEMOLITION AND CONSTRUCTION ACTIVITIES UNLESS OTHERWISE SPECIFIED.
 4. ALL EXISTING TREES TO REMAIN AND TO BE PROTECTED UNLESS OTHERWISE NOTED.
 5. ANY UTILITY ADJUSTMENTS, CONFLICTS, RELOCATIONS, ETC. REQUIRED SHALL BE COORDINATED WITH ENGINEER AND UTILITY OWNER/PROVIDER.
 6. ALL REMOVAL OF CONCRETE SHALL BE DONE TO THE NEAREST JOINT.
 7. ANY DAMAGE TO THE LANDSCAPE AREAS SHALL BE RESTORED TO EXISTING CONDITIONS.

N
↑
Wight
↓

GRAPHIC SCALE
30 0 15 30 60
1 INCH = 30 FEET

NOT FOR CONSTRUCTION



LAKE BLUFF ELEMENTARY
SCHOOL DISTRICT 65

Wight

Wight & Company
wightco.com
2500 North Frontage Road
Darien, IL 60561
P 630.969.7000
F 630.969.7979

50% SUBMITTAL	9-30-2015
REV	DESCRIPTION DATE

LAKE BLUFF SCHOOL
DISTRICT 65

31 E SHERIDAN PLACE
LAKE BLUFF, IL 60044

SITE PLAN

Project Number:
01-5079-05
Drawn By:
DE
Sheet:

C2.00

PCZBA MEETING – October 21, 2015

SUMMARY OF COMMUNITY CHARACTER DISCUSSION POINTS

Definitions for Reference

- **Bulk:** Regulations that establish the maximum size of buildings on a lot and the area in which buildings can be located. Pursuant to the Lake Bluff Zoning Code the following are controls that comprise “bulk”: building coverage, height, building setbacks, daylight plane, floor area and impervious surfaces
- **Subdivision:** Generally, any movement of a lot line. The Lake Bluff Subdivision Code defines subdivision as any change, division, resubdivision or rearrangement of any piece or parcel of land, block, lot, or any part thereof into two or more lots or parcels of land for the purpose, whether immediate or future, of transferring ownership or building development; or any change in existing street lines or public easement, or if a new street is involved any division of land.

PCZBA Priority Issues

- Consider counting all attic space as floor area regardless of ceiling height.
- Consider amending Zoning Code to exclude ravine slopes from the lot area calculation and only use the table land to determine lot area.

Subdivisions

- Consider requiring PCZBA review and recommendation to Village Board of all proposed subdivisions (any action that is moving a property line).
- Consider requiring an advisory board review site plans and building elevations of a new house at a public hearing prior to the consideration of a subdivision request.
- In addition to PCZBA review of any proposed subdivision, consider allowing the HPC and ABR (at their discretion) to hold a public hearing on any proposed subdivision to review the proposal from their areas of expertise.
- Consider creating standards for subdivisions that maintain scale and character of an existing neighborhood.

Infill housing

- Consider requiring advisory board review of all site plans and building elevations of any new residence proposed for a vacant lot.

- Consider requiring the PCZBA, HPC and ABR (at their discretion) to hold a public hearing on the infill housing request from their areas of expertise and forward a recommendation to the Village Board.

Teardowns and rebuilds not involving a subdivision

- Prior to issuing a demolition permit for any existing house, consider requiring the site plan and buildings elevations for a new house be reviewed by an advisory board. Property owner must have Village approval to build the new house prior to receiving a demolition permit.
- Consider allowing the HPC to conduct demolition reviews for the demolition of homes that are less than 50 years in age. Consider allowing the ABR to review at a public hearing the site plan and building elevations of the new house.
- Consider limiting the size of new houses that are built following a teardown. Consider determining size of new house by: floor area allowed per the Zoning District, no larger than the size of the teardown, 1.xx times the size of the teardown, etc.

New Zoning Classification

- Consider creating new zoning classification for governmental/institutional uses such as Village Hall, Public Works facility, Park District Rec Center, Schools, Churches, etc. Currently, these types of facilities are located in residential districts which is not reflective of the activities (or intensity) of institutional uses.

Miscellaneous Zoning Regulations

- Consider encouraging rehabilitation of existing structures through zoning bonuses.
- Consider developing regulations limiting bulk and encouraging historical/architectural continuity with surrounding properties.
 - Floor Area
 - Consider limiting the allowable floor area of homes on “deep” lots based on the amount of street frontage of the lot. Refer to 709 Birch as an example.
 - Given the variety of lot sizes in the R-4 District, and the mix of large and small houses that result, consider reducing the floor area allowed on larger lots.
 - Reconsider the amount of floor area bonus given for front porches and rear yard garages.
 - Setbacks
 - Consider larger side yard setbacks on bigger lots.
 - Lot coverage
 - Consider adding restrictions on the percentage of surface land that is covered on small lots.
- Consider creating a universal parking lot standard(s) to use in all Zoning Districts.