

AGENDA
Regularly Scheduled Meeting
Tulsa County Board of Adjustment
Tuesday, December 17, 2019, 1:30 p.m.
Ray Jordan Tulsa County Administration Building
500 South Denver, Room 119

Meeting No. 477

CONSIDER, DISCUSS AND/OR TAKE ACTION ON:

1. Approval of **Minutes** of November 19, 2019 (Meeting No. 476).

UNFINISHED BUSINESS

None.

NEW APPLICATIONS

2. **2785—Tiffany Rosales**
Variance to allow more than one dwelling unit on a single lot of record (Section 208) in an AG-R District. **LOCATION:** 11423 East 177th Street North
3. **2786—Tanner Bermies**
Special Exception to permit Use Unit 24, Mining and Mineral Processing, to allow native soils to be mined (Section 1224) in an AG District (Section 310, Table 1). **LOCATION:** East of the NE/c of East 161st Street South & South Mingo Road
4. **2787—Eller & Detrich – Lou Reynolds**
Special Exception to permit Use Unit 24, Mining and Mineral Processing, to allow soil mining (Section 1224) in an IM District (Section 910, Table 1). **LOCATION:** 4802 South 49th West Avenue
5. **2788—USCOC of Greater Oklahoma, LLC**
Special Exception to permit a Communication Tower, Use Unit 4, in the AG District (Section 310, Table 1); Special Exception to reduce the required tower setback (110% of the tower height) from the adjoining RS District (Section 1204.C.7). **LOCATION:** 6050 North Johnstown Avenue East

OTHER BUSINESS

NEW BUSINESS

BOARD MEMBER COMMENTS

ADJOURNMENT

Website: www.tulsaplanning.org

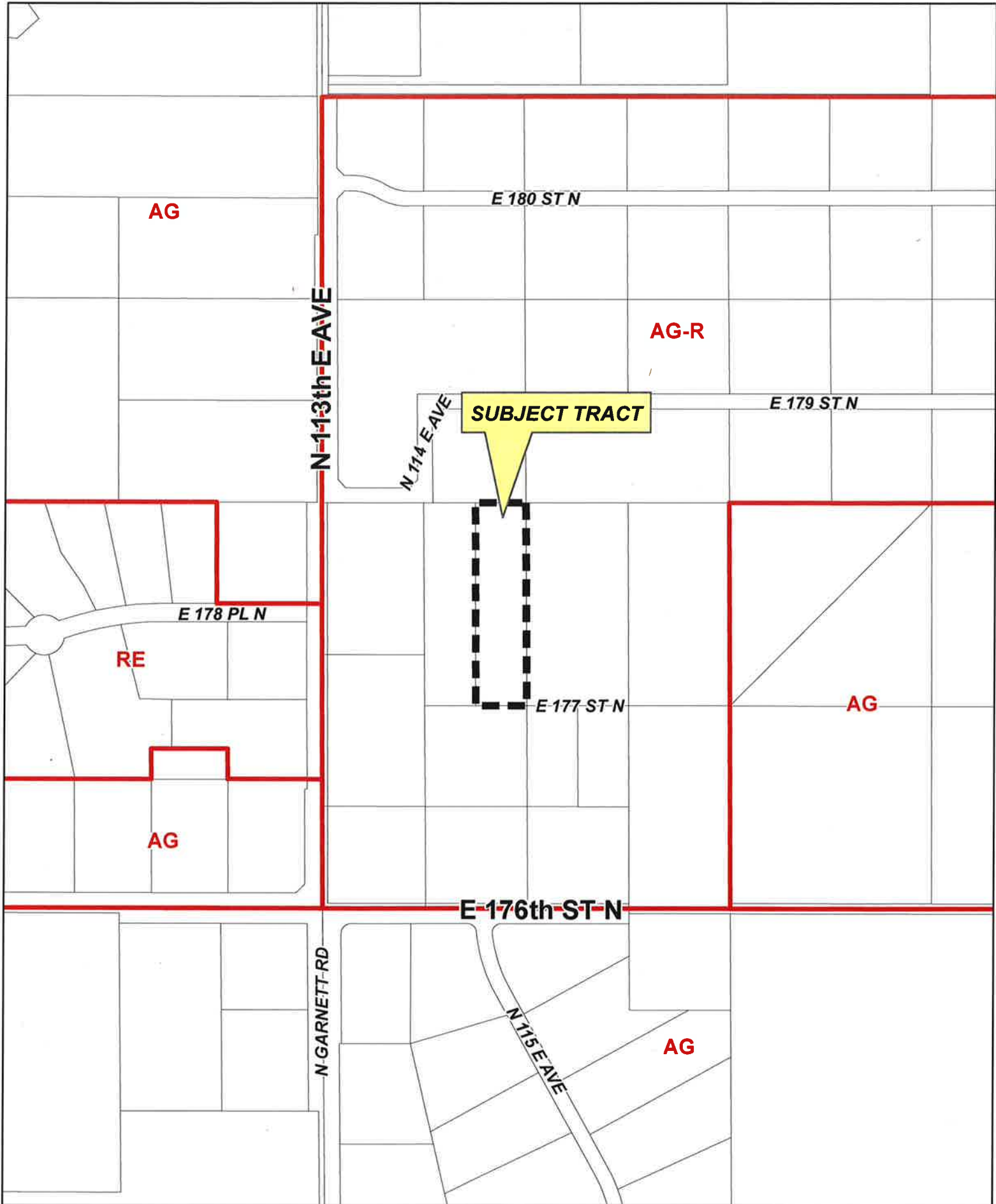
E-mail: esubmit@incog.org

If you require special accommodations pursuant to the Americans with Disabilities Act, please call (918) 584-7526.

NOTE: Exhibits, Petitions, Pictures, etc., presented to the Board of Adjustment may be received and deposited in case files to be maintained at Tulsa Planning Office at INCOG. Ringing/sound on all electronic devices must be turned off during the Board of Adjustment meeting.

NOTE: This agenda is for informational purposes only and is not an official posting. Please contact the Tulsa Planning Office at (918) 584-7526, if you require an official posted agenda.

**THIS PAGE
INTENTIONALLY
LEFT BLANK**



CBOA-2785

2.1

22-14 05



**BOARD OF ADJUSTMENT
CASE REPORT**

STR:2405
CZM:4
PD:

Case Number: CBOA-2785

HEARING DATE: 12/17/2019 1:30 PM

APPLICANT: Tiffany Rosales

ACTION REQUESTED: Variance to allow more than one dwelling unit on a single lot of record (Sec. 208) in an AG-R District.

LOCATION: 11423 E 177 ST N

ZONED: AG-R

PRESENT USE: Residential

TRACT SIZE: 2.5 acres

LEGAL DESCRIPTION: E/2 E/2 NW SW SW SEC 5 22 14 2.50ACS, NORTH MEADOWS II

RELEVANT PREVIOUS ACTIONS: None relevant

ANALYSIS OF SURROUNDING AREA: The subject tract is surrounded by large lot residential uses within an AG-R district.

STAFF COMMENTS:

The applicant is before the Board requesting a Variance to allow a second dwelling unit on a single lot of record (Section 208) in an AG-R district. Section 208 states: *No more than one single-family dwelling or mobile home may be constructed or otherwise placed on a lot, except in the case of a lot which is within an approved PUD, in an RMH district, or in an AG district, with the exception in the AG district that there be no more than two dwellings per lot.*

The Bulk and Area requirements in an AG-R district are described in the following table:

| | AG-R District | Subject Property |
|-----------------------------|----------------------|-------------------------|
| Lot Width | Minimum 150 feet | Approx. 165 feet |
| Lot Area | Minimum 1 acre | 2.5 acres |
| Land Area per Dwelling Unit | Minimum 1.1 acres | 1.25 acres if approved |
| Side Yard | Minimum 15 feet | 15 feet (see site plan) |
| Rear Yard | Minimum 40 feet | |

The attached drawing illustrates that the homeowner intends to add a 45' x 85' (3,825 SF) building northwest of the existing home on the subject lot. According to the applicant, the building will be used as a garage, storage area, and living space for son(s). Staff has requested more information about the appearance of the building and a basic floor plan to gain a better understanding of the structure.

The applicant has provided the following statement: *“Clean up my land and giving my older son’s a place of your own and for car to be out of weather. Storage area. I just want land to look good for us and everyone around to take care of it.”*

If inclined to approve the request, the Board may consider any condition it deems necessary and reasonably related to the requests to ensure the proposed use is compatible with and non-injurious to the surrounding area.

Sample Motion:

“Move to _____ (approve/deny) a Variance to allow more than one dwelling unit on a single lot of record (Sec. 208) in an AG-R District.

Per the Conceptual Plan(s) shown on *page(s)* _____ of the agenda packet.

Subject to the following conditions, if any: _____.

Finding the hardship to be _____.

Finding by reason of extraordinary or exceptional conditions or circumstances, which are peculiar to the land, structure or building involved, the literal enforcement of the terms of the Code would result in unnecessary hardship; that such extraordinary or exceptional conditions or circumstances do not apply generally to other property in the same use district; and that the variance to be granted will not cause substantial detriment to the public good or impair the purposes, spirit, and intent of the Code, or the Comprehensive Plan.”



Looking east at subject property from E. 177th St. N.



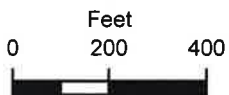
Looking northeast at subject property from E. 177th St. N.



Looking north at subject property from E. 177th St. N.



Looking northwest at subject property from E. 177th St. N.



 Subject Tract

CBOA-2785

Note: Graphic overlays may not precisely align with physical features on the ground.

22-14 05

Aerial Photo Date: February 2018

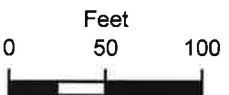


2.6



N 114 E AVE

E 177 STN



Subject Tract

CBOA-2785

22-14 05

Note: Graphic overlays may not precisely align with physical features on the ground.

Aerial Photo Date: February 2018



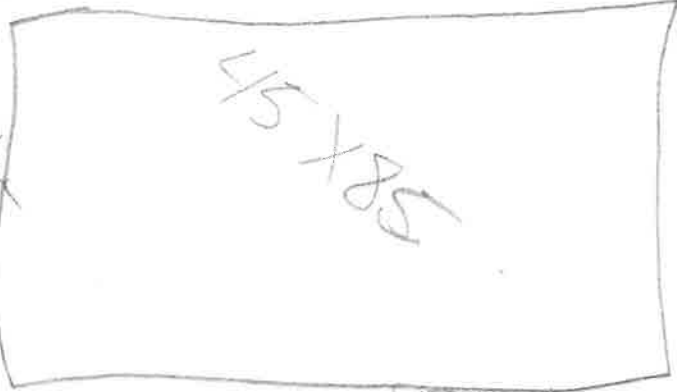
2.7

Pressure 3500 PSI
Rebar # 4 1/2 inch 2 feet o/c
Boxes 2x2 every 15 feet
Roof 4/12

rod.

15 feet
trans side

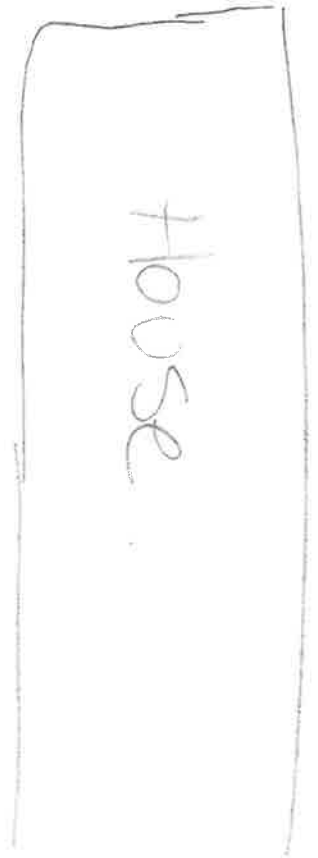
15 feet
Back



4/6

85 long

East



no feet
Back

177th St N

SUBJECT TRACT

AG

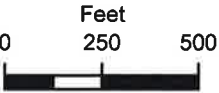
AG

S MINGO RD

E-161st ST S

LEGEND

 Bixby Corporate Limits



CBOA-2786

17-14 19

3.1



BOARD OF ADJUSTMENT CASE REPORT

STR:7419

Case Number: CBOA-2786

CZM:68

PD:

HEARING DATE: 12/17/2019 1:30 PM

APPLICANT: Tanner Bemies

ACTION REQUESTED: Special Exception to permit Use Unit 24, Mining and Mineral Processing, to allow native soils to be mined (Sec. 1224) in an AG District (Sec. 310, Table 1).

LOCATION: E. of the NE/c of E. 161st St. S. & S. Mingo Rd. **ZONED:** AG

PRESENT USE: Agriculture **TRACT SIZE:** 68.99 acres

LEGAL DESCRIPTION: E/2 SW LESS BEG 378.63N SECR SW TH SW42.76 SW114.71 SW357.80 SW366.16 W298.35 NW244.12 N285.31 E120.93 SE164.88 SE113.29 ELY117.49 NE124.84 NE62.80 E105.02 NE547.81 NLY483.99 NE25.40 S833.78 TO POB SEC 19 17 14 68.990ACS,

RELEVANT PREVIOUS ACTIONS:

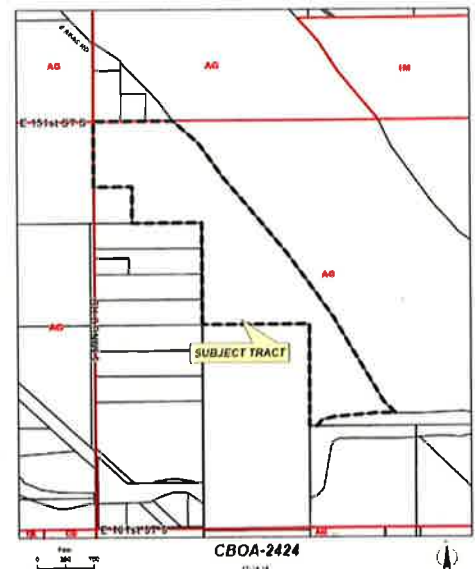
Subject Property: None relevant

Surrounding Property:

CBOA-2424 May 2012: The Board **approved** a *Special Exception* to permit sand extraction within Use Unit 24, Mining & Mineral Processing, in an AG district (Section 310) with the following conditions:

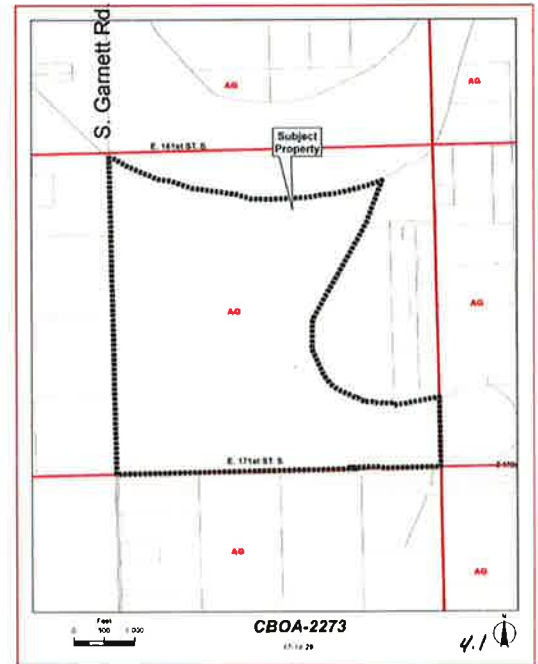
- Statements contained in the letter from Mr. Frazier dated April 25, 2012 will be applicable. (See Exhibit A, pages 3.5 and 3.6.)
- No more than 100 loads of sand to be exported from this mining operation per year.
- The applicant will ensure that the road used to access the property, 151st Street, shall be maintained, whether it is through private efforts or through efforts with Tulsa County, for reasonable and appropriate use for truck and suitable for standard automobile traffic.
- This special exception will have a time limit of one year from today's date, May 15, 2012.
- The debris on the property is to be depleted or removed.

on property located at the southeast corner of 151st Street South and South Mingo Road.



CBOA-2273 July 2007: The Board **approved** a *Special Exception* to permit sand and gravel mining in the AG district (Section 301), with the following conditions:

- As submitted by the applicant, in accordance with the data submitted, and the plan of operation
- Subject to all of the permitting required, including environmental and quality, mining
- Hours of operation: truck traffic and pit operations from 7:00 a.m. to 7:00 p.m. and dredging as needed
- With conditions provided by the applicant to stay away from the banks in excavation
- To take necessary steps to minimize erosion, specifically, dredging no closer than 50 ft. from the shore except when the equipment is moved to the working site
- Placement of rip rap in areas that appear to be adversely affected from erosion by the operation
- The applicant to contribute to the cost and upkeep of Garnett Road South to Highway 164
- A watering plan that is consistently administered, authored by the applicant and posted for the inspector should they wish to see it
- The applicant to provide a \$250,000 bond to be posted in the event that certain remedial cure to public works is deemed necessary by the inspector's office for actions inconsistent with various permits on property located southeast of 161st Street and South Garnett Road.



ANALYSIS OF SURROUNDING AREA: The subject tract is located in an agricultural area just west of the Arkansas River. The abutting property to the west appears to be a sod farm. There are limited residential uses on nearby properties. Bixby Creek runs through the property on the south side which separates the parcel. The City of Bixby manages Bixby Creek.

STAFF COMMENTS:

The applicant is before the Board requesting a **Special Exception** to permit Use Unit 24, Mining and Mineral Processing, to allow native soils to be mined (Section 1224) in an AG District (Section 310, Table 1).

A special exception is required as the proposed soil mining operation is a use which is not permitted by right in the AG district because of potential adverse affect, but which if controlled in the particular instance as to its relationship to the surrounding area and to the general welfare, may be permitted. The use must be found to be compatible with the surrounding area.

The applicant contacted the City of Bixby and included a statement from Jason C Mohler, P.E., Development Services Director, in the application. In summary, the statement says "The existing low water crossing provides access (to) the agricultural land north of the creek. I am not aware of any limitations on that access."

The Tulsa County Land Use Plan and the Bixby Comprehensive Plan designate this area as Rural Residential. Rural Residential is defined below:

The Rural Agriculture designation denotes areas within the City of Bixby's fenceline, but not within the City limits, that have large tracts of land for agricultural purposes. Agricultural uses may also include large-lot detached residential, accessory agricultural uses and structures to support agricultural uses. Improvements in this designation should be low impact and retain the rural character of the area.

The portion of the parcel north of Bixby Creek is located in the 100 Year Floodplain.

The Board of Adjustment, in granting a mining and mineral processing use by Special Exception, should consider potential environment influences, such as dust and vibration. If inclined to approve, the Board may consider establishing appropriate protective conditions such as setbacks, screening, and hours of operation, as will mitigate the adverse affect on proximate land uses.

The applicant will be required to obtain all relevant permits including those from the Tulsa County Inspectors Office/Building Permits Department and the Oklahoma Department of Mines.

If inclined to approve, the Board may consider any condition it deems necessary and reasonably related to the request to ensure the proposed soil mining operation is compatible with and non-injurious to the surrounding area.

Sample Motion:

“Move to _____ (approve/deny) a Special Exception to permit Use Unit 24, Mining and Mineral Processing, to allow native soils to be mined (Sec. 1224) in an AG District (Sec. 310, Table 1).

Approved per conceptual plan on page(s) _____ of the agenda packet.

Subject to the following condition(s) (if any): _____.

Finding the Special Exception will be in harmony with the spirit and intent of the Code, and will not be injurious to the neighborhood or otherwise detrimental to the public welfare.”

protect the animals that are around the property. The track is for everyone, and if they want to play on the track they must sign a waiver. It was designed for everyone to have a safe place to play. There is nothing in Sperry for the children to do other than sports and not all children are interested in sports.

Mr. Draper stated that according to the plan that was presented to the Board, there is a general admission parking area with an overflow parking area designated. What is the count for these proposed areas? Ms. Weathers stated there is plenty of pasture to park in. There is ten acres and the track utilizes about a quarter of an acre. Mr. Draper asked how many vehicles is the general admission parking designed to hold. Ms. Weathers stated that parking would hold about 100 vehicles but there would probably only be about 50 vehicles in the lot. Ms. Weathers stated that she has no intention of making the area a concrete world. Once the club house is built it would only be used as a concession with bathrooms for participants.

Mr. Draper asked how many people were anticipated in the four hour racing window. Mr. Huff stated there would probably be about 75 people, because it depends on people's schedules. Sometimes there would a few more, other times a few less.

Comments and Questions:

Mr. Charney stated that he respects and appreciates the alternative means to get children off the couch and away from the video games. He thinks that the entire Board is respectful of the mission of Ms. Weathers and Mr. Huff for young people. However, the Board's focus is confined to land use planning. Whether the request is of the most noble of causes or a cause the Board may not agree with, the Board must determine and analyze the request in terms of land usage. The Board must determine that there is no adverse or injurious effect to the neighborhood.

Board Action:

On **MOTION** of **WALKER**, the Board voted 5-0-0 (Charney, Dillard, Draper, Osborne, Walker "aye"; no "nays"; no "abstentions") to **DENY** the request for a Special Exception to permit a Go-Kart Track within Use Unit 20 in an AG district, finding that the proposed use does not fit into the agricultural zoning. The use would not be harmony and spirit of the code, and it would be injurious and detrimental to the neighborhood; for the following property:

**TR BEG SECR SE SE TH W326.7 N333.5 W229.2 N TO PT ON NL S/2 SE SE E555.9
S POB SEC 17 21 13 6.668ACS, OF TULSA COUNTY, STATE OF OKLAHOMA**

Case No. 2424—Phil Frazier

FILE COPY

Action Requested:

Special Exception to permit sand extraction within Use Unit 24 – Mining & Mineral Processing – in an AG District (Section 310). **Location:** SE/c of 151st Street South and South Mingo Road

CBDA-2424

FILE COPY

Mr. Sansone stated that this case is a continuation from the last Board of Adjustment meeting on April 17th. Since that continuation a letter has been received from the applicant that changes the operation. In the letter it was stated that there is not enough sand located in the river at the point of extraction to allow the sale of the sand to the public. The applicant will address this change today.

Presentation:

Phil Frazier, 1424 Terrace Drive, Tulsa, OK; after the hearing on the 17th of April there were four issues that the protestants raised and that the Board had questions about. The original application was filed to extract sand, and at that time he had advised the Board that the sand is a special type of sand; there are only a few places where this type of sand can be found. The sand is used in the growing and the placement of sod. The Easton family has operated the sod farm for the past 35 years, and since they have been growing the Patriot Sod they have been buying their sand. The purchase of that sand meant there were trucks hauling in sand and leaving empty, thus increasing traffic on the road. Since the last meeting it has been discovered that there is not the depth of sand that was anticipated, so no sand will be sold to public entities. The only sand trucks hauling sand will be when the sand is being hauled out because it is required for a specific job.

Mr. Frazier went on to address issues that were raised in the last meeting. As to the road condition, Mr. Easton has already improved the road by installing an asphalt composition on the road. As to the traffic and dust, the asphalt composition will curtail the dust significantly. The traffic will be reduced because there will no longer be trucks hauling in sand nor will there be commercial sand trucks leaving. Noise was also a concern raised at the last meeting. The reduction of traffic will reduce the noise, and there will not be diesel powered barge equipment used for the sand extraction as planned. There will be a drag and the drag line will be used when the river is low; when the river is up there will be no mining. In regards to the debris, Mr. Easton allowed the City of Tulsa and Tulsa County to dump massive amounts tree limbs that had been broken out of trees during the ice storm a few years ago. Most of the tree debris will be ground up or burned, but most of it will be ground into mulch. Mr. Easton will continue to deplete the tree debris regardless of the decision on his application. Mr. Frazier believes this operation will enhance the neighborhood, as opposed to the last previous plan presented, with less truck traffic, the road improvements, and debris removal.

John Easton, 11225 South 90th East Avenue, Bixby, OK; stated that is not that sand will be hauled out to other projects; this business venture is getting into athletic turf business. Athletic turf fields have sub-drains installed underneath the fields and they want a sand based sod. He will be building sand based fields and growing the sod on that field. There will be a few instances where the sand will be required to be brought in, because some people like to keep the sand the same as what was originally installed, and he does not anticipate but 100 loads or less a year leaving his property. This process is done a football field at a time.

CBOA-2424

Mr. Draper asked Mr. Frazier if the applicant was proposing to improve the road with the same type of materials as it is currently built with. Mr. Frazier stated the road is an asphalt composition.

Mr. Osborne asked what an asphalt composition consisted of, i. e., black top, granular, or something else. Mr. Easton stated that the composition was made from asphalt that has recycled. Most of the road had an asphalt surface but there was an area that the road had eroded and it was gravel. But he has taken the recycled asphalt, rolled it, and blended it in to the existing road and looks good. There is no dust.

Interested Parties:

Gloria Cravens, 9723 East 151st Street South, Bixby, OK; stated she lives at the corner of 151st Street and Mingo about 50 feet from the road. The road has large black top composition clumps right up to her yard. She believes that Mr. Easton will be using the road for more than he is saying today; for example, when the elementary school was built he supplied sand to the contractors for the school. Then Mr. Easton allows dumping on his land; for example, when the tennis court was taken out the tennis court debris was hauled onto his land by large trucks. All of those trucks were using that road. Today the traffic has been reduced but she does not believe it will last.

Mr. Charney stated that there are a couple of things the interested parties and the Board need to keep in mind with this case. What is being examined today is a request to mine sand from the river, and that is the special exception that is before the Board today. There are means by which an interested party can complain about wrongful uses or for noxious activity on a piece of property, and that is to contact the County. Today the Board is here to only examine the ability to extract sand from the river, and the sand that will be exported. Some of the complaints in this case cannot be addressed by this Board.

Ms. Cravens stated that the residents of the area have tried. There have been calls to the County and even calls to the EPA. There is nothing done.

Mr. Walker asked Ms. Cravens about the trucks she has seen hauling sand out, where does she think the sand is coming from since Mr. Easton has stated that he does not have enough sand. Ms. Cravens stated that she assumed it was coming from the river because that is the direction the trucks are coming from when they are using that road.

Mr. Frazier asked Ms. Cravens if she understood that Mr. Easton could haul out sod from his property if he chose to do so. Ms. Cravens nodded in affirmation, and stated that the trucking of sod is fine.

Mr. Osborne asked Ms. Cravens if she had seen sand trucks coming into the property and leaving the property. Are they loaded when they are coming in or going out? Ms. Cravens stated that the trucks are usually loaded with junk or trash when they are coming in. Mr. Osborne asked if she had seen sand being brought into the property.

CBOA-2424

Ms. Cravens stated that she had not seen sand brought in lately, but the sand is leaving the property.

Rebuttal:

Mr. Frazier came forward for a rebuttal.

Mr. Charney stated that the Board has heard some concern that there has been a fair amount of sand extraction thus far and that is the current operation. Mr. Charney asked Mr. Frazier to present his client's prospective on that view. Mr. Frazier stated that there has been one instance where there was a composite of sand that was removed from the property, not the river. That composite was not mined, there was a hole dug and the composite was hauled out. In regards to the debris from the elementary school, that was a one-time episode and that was in conjunction with the composite material. The rock was brought in and it was used for riffraff along the riverbank to keep the bank from washing away. The EPA did come to investigate that incident, and they gave Mr. Easton a "clean bill of health".

Mr. Charney stated that if the Board were to approve this less intrusive mining application, if volume were an important factor in that decision and based on the roadway that exists, would his client understand a restriction on the volume of sand extraction. Mr. Easton stood and stated that he did not have a problem with a volume restriction because there is not enough sand available at his spot on the river to operate a commercial business.

Mr. Draper asked staff if the proposals being voted on today need to have criteria added to them by the Board, i.e., limiting it to what has been presented today or has the application been revised. Mr. Alberty stated that when a presentation has been made, and an applicant offers conditions, if the Board agrees to those conditions they need to be stated in the motion. Of course, there is always the possibility of making the motion more restrictive or adjust the conditions to the Board's motion. Mr. Draper asked if the application before the Board is based on Mr. Frazier's last letter, the letter contents should be included in the motion. Mr. Alberty gave affirmation.

Comments and Questions:

Mr. Walker stated that he is pleased with the reduced intensity of the application. He believes Mr. Easton has shown good faith by attempting to address some of the complaints prior to this meeting.

Board Action:

On **MOTION** of **CHARNEY**, the Board voted 5-0-0 (Charney, Dillard, Draper, Osborne, Walker "aye"; no "nays"; no "abstentions") to **APPROVE** the request for a **Special Exception** to permit sand extraction within Use Unit 24 – Mining & Mineral Processing – in an AG District (Section 310), with the following conditions. Statements contained in the letter from Mr. Frazier dated April 25, 2012 will be applicable, see attached Exhibit A, pages 3.5 and 3.6. No more than 100 loads of sand to be exported from this mining operation per year. The applicant will ensure the road that is used to access the

COOA-2424

property, 151st Street, shall be maintained, whether it is through private efforts or through efforts with Tulsa County, for reasonable and appropriate use for truck and suitable for standard automobile traffic. This special exception will have a time limit of one year from today's date, May 15, 2012. The debris on the property is to be depleted or removed. Finding that the approval of the special exception, the Special Exception will be in harmony with the spirit and intent of the Code, and will not be injurious to the neighborhood or otherwise detrimental to the public welfare; for the following property:

GOV LTS 3 4 6 & 8 & 27AC ACCRETED LAND LESS BEG SWC GOV LT 4 TH N466.69 E466.69 S466.69 W466.69 POB & LESS BEG 1322.52N & 92.15E SWC SE TH NE103.37 NE163.69 E280.39 E255.57 E501.27 ELY572.66 SE157.78 S154.42 W1991.50 TO POB SEC 19 17 14 119.08ACS, OF TULSA COUNTY, STATE OF OKLAHOMA

NEW APPLICATIONS

Case No. 2429—Ronnie VanLandingham

Action Requested:

Variance to permit a detached accessory structure in an RS District larger than 750 square feet (Section 240.2.E); Variance to permit a detached accessory structure in the side yard (Section 420.2.A.s). **Location:** 1325 South 214th West Avenue

Presentation:

Ronnie VanLandingham, 13255 South 214th West Avenue, Sand Springs, OK; stated he has joined two lots together. He has visited with all the neighbors and explained to them what he wants to do and why he wants to do it. The side yard variance request is because he has a GRDA non-active power line in the back yard with a 145'-0" easement so he cannot build anything in the back yard. The reason he wants to build a larger building, larger than 750 square feet, the building will have the appearance of a house in the middle of the lot instead of a small out-building in the middle of the lot. The building will be a steel building on a steel frame, with a four foot brick wall around three sides. There will also be vinyl siding across the front of the building. Eleven out of the twelve neighbors within the 300'-0" radius are in favor of his request being approved, and the twelfth neighbor lives about 250'-0" away from the subject property. The home owners association has also seen his proposed plan and they have given their approval for the building pending the approval from the Board of Adjustment.

Mr. Walker asked what Mr. VanLandingham planned to do with the carport and the additional storage building in the backyard. Mr. VanLandingham stated that he had installed the carport to protect his boat but they are still deteriorating, and that is one of the reasons for the proposed building. The additional storage building was on the property when he purchased the house and he plans to demolish that building.

FILE COPY

UNFINISHED BUSINESS

Case No. 2424—Phil Frazier

Action Requested:

Special Exception to permit sand extraction within Use Unit 24 – Mining & Mineral Processing – in an AG District (Section 310). Location: SE/c of 151st Street South and South Mingo Road

Presentation:

Phil Frazier, Attorney, 1424 Terrace Drive, Tulsa, OK; stated he represents Mr. John Easton, the property owner. The property is bounded on the north side by 151st Street, bounded on the south side by 161st Street, bounded on the east side by the Arkansas River, and bounded on the west side by Mingo Road. The location is approximately a half mile from East 151st Street, approximately a half mile from 161st Street and a half mile east of Mingo Road. The interest in this special exception is that Easton Sod is a sod farm that has been on this land for years. In recent years they have developed a particular type of sod which is called Patriot Sod. Easton Sod is one of five sod companies in the world that has developed this particular sod and producing this sod, thus creating a commercial necessity to continue with the operation. Patriot sod requires a five to six inch sand base. Up to this point the sand has been purchased to produce this sod. Mr. Easton would like to utilize his property on the river, which is presently a sod farm, to mine his own sand and use it in his sod farm operation. This is the basis for the special exception request before the Board of Adjustment today.

Mr. Charney stated that there have been several letters received from surrounding people of the neighborhood stating that if the request were approved, it would be injurious to the neighborhood and not consistent with the agricultural use. They see the sand extraction and mining as a different venue from the sod farming. Mr. Frazier was asked to express his thoughts on that matter and whether he thought there was a distinction between sand extraction and sod farming.

Mr. Frazier stated there is no distinction because it is two different operations but the sand is used as a part of the agricultural use of the sod farming. Sod farming is an agricultural use and the sand is utilized in the production of the sod. This operation will be at least a half mile from any residence. Any reference to the detriment of the neighborhood would not be accelerated because the requirements the sand extraction will have placed upon them will be far more stringent than what exists today. There are several licensing authorities that would be involved, and their regulations are very strict. The roadway would be the only contact with the neighborhood, and there are only a couple of houses in the immediate vicinity. There would be no dust raised from the obtaining of the sand from the river because the sand would be wet. Mr. Frazier stated that he believed there would no adverse effect on the neighborhood.

CBOA-02424

Mr. Walker asked Mr. Frazier if the half mile distance was measured from the dredging point. Mr. Frazier stated the operation would be a half mile from the residences, because the closest residences are on 151st Street and Mingo. The operation is half mile away from 151st Street and a half mile away from Mingo Road.

Mr. Osborne asked Mr. Frazier if the subject tract was owned by the same person who wants to operate and utilize the sand extraction. Mr. Frazier confirmed that statement. Mr. Osborne asked if the sand would be dredged from the river and taken to the sod plot locations. Mr. Frazier confirmed that was exactly what would happen in the operation.

Mr. Charney stated that he understood the sand extraction operation would be largely in the center of the section, half mile from 151st and 161st Streets, and he wanted to know if the dredging process limited the operation to that particular area or if it will be a broader application allowing it anywhere along the property. Mr. Charney also asked if the Board were inclined to approve this request if the client would be willing to limit the dredging operation to center section not allowing the operation to spread. Mr. Frazier stated that if the Board were to approve this request his client would certainly be willing to operate under the limitation that the operation would be in that particular area, because he does not want to be farther away from the river than necessary. The closer the operation can stay the better, and it will also be necessary to receive approval by the Bureau of Mines and the Corp of Engineers.

Mr. Charney stated that the Board has been provided many pieces of information from the opponents of the application. There was significant theme among the many objections and that is the poor condition of the roadway of 151st Street along where the trucks will need to exit in front of the homes. Even though the mining operation will be a half mile away from homes the truck traffic will be increased significantly, and the already decimated road will have even more traffic. That traffic is what the neighbors are saying would be detrimental to the neighborhood.

Mr. Frazier stated there would be more traffic but not much more, than and not as many as the sod farm has because there will not be very much sand trucked off the property. Mr. Frazier showed Mr. Charney on a case map where a road could be located. It would be a road that would turn west out of the property and located farther south than 151st Street by a few hundred feet. This proposed road would not impact East 151st Street residences. Mr. Frazier stated that in the one mile section of Mingo Road between 151st and 161st Streets there is only one residence and one office.

Mr. Charney asked Mr. Frazier if there was activity on the property today, i.e., dumping or other non-agricultural uses. Mr. Frazier stated that over the years that his client's father has left broken down equipment on the property. The client is working with his father to clear the property of the useless equipment. Also there has been top soil sold from the property.

C60A-02424

Interested Parties:

Yolanda Hiatt, 9723 East 151st Street South, Bixby, OK; stated she lives on the corner of 151st Street and Mingo Road. She is opposed to the special exception request because of the heavy traffic that currently exists. The truck traffic delivers a variety of items to the area and has been heavy for approximately the last five years. The 151st road was once paved and now it is pothole infested due to the heavy traffic. The traffic also creates a large amount of dust. The trucks start at 7:00 A.M., especially the construction trucks for the Bixby Public Schools. Ms. Hiatt stated that recently the truck traffic has been so heavy that her in-ground pool has started cracking. A few years ago a horse was hit by a truck and had to be euthanized because the truck was traveling so fast that it could not stop for the animal. All the trucks travel faster than they should, and this is a dead end street. Ms. Hiatt does not want to have this request approved.

Melinda Stone, 9909 East 151st Street South, Bixby, OK; stated that she is strongly opposed to this request. Ms. Stone stated that she lives in the very last house on a dead end street. Mr. Charney asked Ms. Stone to come forward and point out her house on the case map provided the Board in their agenda packet. She is not against the sod trucks or the sod farm because it is agriculture, but this is more than a sod farm. Since the ice storm of 2007, when the destroyed trees were being hauled away in Tulsa, those trees were dumped on Mr. Easton's property. The large trucks drove up and down the street, 24 hours a day, two and a half minutes apart; she stated timed the trucks. For three weeks the dust was horrendous and they sped up and down the road. The drivers did not care if they hit a pothole. There are pets and children in the area. Ms. Stone stated that she stopped many of the truck drivers and asked them to slow down, and when she did not receive any help from the drivers she called several supervisors to no avail. There are several acres of tree debris, still today, and those huge tree debris mounds catch fire due to instantaneous combustion. They are smoldering today. Last year the fire spread toward her property line, and she was prepared to evacuate her home because the fire was up to her property line. It was that close. Ms. Stone stated that her husband is in very poor health. She also stated that because of the smoldering fires he has developed emphysema, which she can document with medical records. If this request is approved the residents of the neighborhood will not be able to spend time outside and they won't be able to open the windows of their homes due to the dust. She does not object to the sod farm because she enjoys agriculture, but what is proposed today is not agriculture. There is more than tree debris dumped on Mr. Easton's property, and that is his business, but the truck traffic is horrific. Also no one wants to repair the road, not the city, not the county and not Mr. Easton. Ms. Stone stated that if the sand extraction is allowed to go in, the property values will plummet, because no one wants to buy a house across the street from a sandpit. The other sand extraction companies in the area do not have anyone living close to the operation, i.e., Holiday Sand.

Gloria Cravens, 9723 East 151st Street South, Bixby, OK; stated that she opposes the approval of this special exception. There is sand in the air all the time, because once the wet sand extracted it dries out and blows in the wind. The cement is breaking off her house and around her pool because of the shaking the truck traffic causes. She

CBOA-02424

has been awakened early in the morning because her house is shaking so much from the uncovered dump trucks going up and down the street so fast. A supervisor from one of the trucking companies came to speak to her about her complaints and he told her to call her county commissioner. The reason she bought her home is because it is located on a dead-end road in what used to be a peaceful area.

Mr. Osborne asked Ms. Cravens to describe what type of trucks leaving the area other than the empty dump trucks. For the past two years there have been trucks with sand using the road to leave. Mr. Osborne asked Ms. Cravens where the blowing sand that has been referred to be coming from; he wanted to know, in particular, if the blowing sand was coming from the sod farm. Ms. Cravens stated that the sand was not coming from the sod farm because they water the sod to keep it moist so it will grow. The blowing sand is coming from the road that the uncovered dump trucks, the cars, and the pickups pulling trailers that are speeding up and down the road.

Rebuttal:

Mr. Frazier stated that the opponents are correct, in that there have been some fires in the area. The City of Bixby, the City of Tulsa, and the County of Tulsa did not have enough space to dispose of all the tree debris from the 2007 ice storm, and Mr. Easton allowed them bring the debris to his property and dump it. Most of the debris has been burned and has burned over the years. There are still some times when the debris mounds flare up, and Mr. Easton is in the process of extinguishing or smothering the fires as best as he can. Mr. Easton intends to grind the debris into mulch to use in his agricultural use. As to the concrete, there have been loads of broken concrete brought in which has been used along the river to alleviate the erosion. As to the dust, it is coming from the river. Because of the extremely dry year last year, the wind picked up dry sand and dirt distributing it everywhere. As to the road repair, Mr. Easton has brought in gravel for the road in an attempt to fix the pothole problem because the city nor the county would do anything about the road. Mr. Easton is willing to move the road down and away from 151st Street in order to receive approval for his special exception request.

John Easton, 11225 South 90th East Avenue, Bixby, OK; stated that if he is allowed to have his mining operation it will be mandated by the State of Oklahoma. The road in front of the homes used to be a good road until the massive amount of timber was hauled in by the City of Tulsa. There was so much timber hauled in that it covered 16 acres and was approximately eight feet deep. Mr. Easton stated that one of the reasons he allowed the tree debris to be dumped on his property was because he wanted the debris to create compost, mix that with sand creating top soil. That was a long-term goal. The people who were hauling in the timber were contracted to repair the road after they were done, but it was not done. Spontaneous combustion does start fires in the area, and there is a man constantly digging out the fires and dousing them with water, especially in the summer.

Mr. Charney asked Mr. Easton if the Board decided it was important to provide an ingress and egress point from his property to the south, would he be willing to provide

CBOA-02424

that. Also, if the Board decided that it was important to have the area watered for dust control, as part of the mining operation program, would he be willing to do that. Mr. Easton stated that he would, and that it would be mandated by the state.

Mr. Charney stated that it would be important for Mr. Easton and his counsel to hear the Board's standard of review. In granting such an operation, or use by special exception, the Board should consider the environmental influences, such as dust or vibration. The Board should establish, when appropriate, protective conditions such as setbacks, screening, dust control as will mitigate the adverse effects of the nearby uses. This is something the Board is charged to do at this level, given that the roadway operation is one of significant truck traffic immediately in front of their homes is an adverse use.

Mr. Walker asked Mr. Easton about his plans for the mulch or tree limbs. Mr. Easton stated there were a couple of ideas that he would like to implement. One is the mulch that has been composted. He wants to manufacture that and bag it. His business is drifting more into the athletic field with the sod, and it requires 75% to 90% sand base. There is a small amount of mulch mixed with the sand base to grow this specific athletic grass on clay or anything else. Mr. Easton stated that if he cannot grow and harvest his own sod he finds it necessary to bring in sand from an outside supplier. Mr. Walker asked Mr. Easton where the burning tree debris was located and how close it is to the neighbor's property. Mr. Easton stated that he thought there was a portion of the debris that does touch a neighbor's property on one end at the north, but most of the debris is in the center. The drivers who were dumping the debris extended a little beyond their parameters, and it was hard to control because there were approximately 50 trucks an hour coming and going.

Mr. Charney called each of the opponents to the head table to ask them a question. Ms. Melinda Stone was called forward. Mr. Charney stated that currently the egress for the truck traffic is right in front of her home. There has been an offer made to move the egress about a quarter mile to the south. Mr. Charney asked if she would see that as having less of a negative impact on her home. Ms. Stone the proposed egress site is not a quarter of a mile away, and there are several houses in the immediate area of the proposed site. Ms. Yolanda Hiatt and Ms. Gloria Cravens were called forward and asked the same question as was asked of Ms. Stone regarding the proposed egress site. Ms. Hiatt stated there are at least six houses in the immediate vicinity of the egress site, and Ms. Craven concurred.

Mr. Charney asked Mr. Easton to come forward. Mr. Charney stated that the Board has been looking at the case map provided them, and have asked the opponents to locate their properties and explain the area around the proposed egress site. The Board has now been told there are several houses in the proposal site. Mr. Easton stated that he knew there were several houses in the proposed area but the house that would be right on the corner of Mingo is not protesting the project. There are five houses within an eighth of a mile south of the proposed site. The proposed egress site would be closer to one house and about the same distance as it is to the opponent's houses.

Comments and Questions:

Mr. Ron Walker stated that he could support the special exception request if there could be a good relocation of the ingress and egress to the sod farm. If he were to make a motion it would be contingent upon the restoration of 151st Street and the moving of the tree debris away from the neighboring property.

Mr. Gene Dillard stated that Mr. Easton should have been building a relationship with his neighbors before he appeared before the Board, but he could support this request with the condition that the land be cleaned of the "collectibles" that have been allowed to lay deteriorating for years.

Mr. Osborne stated that this is a very difficult case, because he likes to be and wants to be an advocate for the individual to use their property as they wish. But when the individual fails to be a good neighbor that is when it becomes an issue. The Board is being asked if sand extraction is a good use and permitted by-right in an AG district because of potential adverse effect. If the sand extraction is controlled, it is one thing, but when it is not controlled then the sand extraction affects the general welfare; that is something that no longer follows the guidelines of being a good use, and falls outside the spirit of the code. That is why the code exists. Mr. Osborne stated that today he could not support this request because he sees it is a detriment by Mr. Easton's actions.

Mr. Charney stated that the increased truck traffic makes this a difficult request to consider. Mr. Charney stated that he would like to find a way for the land owner to do with their land within the spirit of co-operative efforts, but he does not see a way of arriving to that conclusion so he could not support an approval of this request.

Mr. Charney asked staff if it would be wise to ask the applicant and his counsel to bring the Board a plan on the location of the ingress and egress point, and continue this case to the next meeting in May. There are various issues to be considered in this case. Those issues are past actions, clean up, the mulch that is still burning, and the ingress and egress; but if there were a plan brought to the Board to address those issues a motion could be made to continue this case.

Mr. Alberty agreed with Mr. Charney. There has been a lot of abstract discussion today. Typically whenever there is a request of this magnitude before the Board, there are more specifics presented, not only specifics on how the sand operation is going to operate, but is the sand operation only going to provide sand for Mr. Easton's use or will it be sold and trucked out. The Board can make a motion on one or the other, if the motion for support the Board can list a series of conditions that Mr. Easton would need to comply with. Mr. Alberty thinks Mr. Easton would be better served, because he heard concerns of nearby neighbors and the Board, if the applicant were allowed to come back with a specific plan. The plan should stipulate how the issues will be addressed. If the applicant is not willing to come back then the Board can definitely take action today.

CBOA-02424

FILE COPY

Mr. Walker stated that he could support the sand operation because it will not be a problem on the river; the problem is the trucking. That is why he would like to see the ingress and egress moved and 151st Street be restored. Mr. Easton is in the business so he will be trucking the sand in from an outside entity, so by granting the use of his own sand plant it helps the situation by possibly lowering the truck traffic.

Mr. Charney asked Mr. Frazier if he would like to continue this matter to the meeting in May, as opposed to taking a vote today. Mr. Frazier stated that he has not heard anyone complain about the mining proposition but has heard many complaints about the truck traffic. Mr. Frazier welcomed the opportunity to present an alternative to the Board in regards to the truck traffic, but he does have concerns over the conversation regarding restoring 151st Street to its original condition. That street was not in very good condition prior to this, and Mr. Easton has attempted to fix the road a couple of times but it still keeps deteriorating. Mr. Easton would be glad to help in some of the restoration of 151st Street.

Board Action:

On **MOTION** of **CHARNEY**, the Board voted 4-0-0 (Charney, Dillard, Osborne, Walker "aye"; no "nays"; no "abstentions") to **CONTINUE** the request for a Special Exception to permit sand extraction within Use Unit 24 – Mining & Mineral Processing – in an AG District (Section 310), to the meeting of May 15, 2012; for the following property:

GOV LTS 3 4 6 & 8 & 27AC ACCRETED LAND LESS BEG SWC GOV LT 4 TH N466.69 E466.69 S466.69 W466.69 POB & LESS BEG 1322.52N & 92.15E SWC SE TH NE103.37 NE163.69 E280.39 E255.57 E501.27 ELY572.66 SE157.78 S154.42 W1991.50 TO POB SEC 19 17 14 119.08ACS, OF TULSA COUNTY, STATE OF OKLAHOMA

NEW APPLICATIONS

Case No. 2428—Billy Frazier

Action Requested:

Special Exception to permit dirt extraction (borrow fill pit) within Use Unit 24 – Mining & Mineral Processing – in an AG District. **Location:** South of the SE/c of West 51st Street South & South 85th West Avenue

Presentation:

Billy Frazier, 7798 West 51st Street, Tulsa, OK; stated he wants to develop the property; this is not just a mining proposition. Mr. Frazier stated that he had a meeting with Mr. Terry West about two years ago, because Mr. West had seen him digging out an existing pond to make it deeper and working on the property. At that time Mr. West informed Mr. Frazier that he needed to obtain a development permit, which Mr. Frazier

Mr. Walker explained to the applicants that there were only three board members present at this meeting, and if an applicant would like to postpone his or her hearing until the next meeting he or she could do so. If the applicant wanted to proceed with the hearing today it would be necessary for him to receive an affirmative vote from all three board members to constitute a majority and if one board member voted no today the application would be denied. Mr. Walker asked the applicants if they understood and asked the applicants what they would like to do. Two of the applicants stated that they would like to continue their cases to another meeting.

NEW APPLICATIONS

Case No. 2425—Zelda Weathers

Action Requested:

Special Exception to permit a Go-Kart Track within Use Unit 20 in an AG District.

Location: 9600 North Harvard Avenue

Presentation:

Zelda Weathers, 10210 North Harvard, Sperry, OK; requested to have her hearing rescheduled to the May 15th meeting.

Interested Parties:

There was one interested party present; he agreed to the rescheduling of the hearing.

Comments and Questions:

None.

Board Action:

On **MOTION** of **DILLARD**, the Board voted 3-0-0 (Dillard, Osborne, Walker "aye"; no "nays"; no "abstentions") to **CONTINUE** the request for a Special Exception to permit a Go-Kart Track within Use Unit 20 in an AG District, to the meeting of May 15, 2012; for the following property:

**TR BEG SECR SE SE TH W326.7 N333.5 W229.2 N TO PT ON NL S/2 SE SE E555.9
S POB SEC 17 21 13 6.668ACS, OF TULSA COUNTY, STATE OF OKLAHOMA**

Case No. 2424—Phil Frazier

FILE COPY

Action Requested:

Special Exception to permit sand extraction within Use Unit 24 - Mining & Mineral Processing - in an AG District (Section 310). **Location:** SE of the SE/c 151st Street South and South Mingo Road

FILE COPY

Presentation:

CBOA-2424
Phil Frazier, 1424 Terrace Drive, Tulsa, OK; requested to have his hearing rescheduled to the April 17, 2012 meeting.

Interested Parties:

There were no interested parties present.

Comments and Questions:

None.

Board Action:

On **MOTION** of **DILLARD**, the Board voted 3-0-0 (Dillard, Osborne, Walker "aye"; no "nays"; no "abstentions") to **CONTINUE** the request for a Special Exception to permit sand extraction within Use Unit 24 - Mining & Mineral Processing - in an AG District (Section 310), to the meeting of April 17, 2012; for the following property:

GOV LTS 3 4 6 & 8 & 27AC ACCRETED LAND LESS BEG SWC GOV LT 4 TH N466.69 E466.69 S466.69 W466.69 POB & LESS BEG 1322.52N & 92.15E SWC SE TH NE103.37 NE163.69 E280.39 E255.57 E501.27 ELY572.66 SE157.78 S154.42 W1991.50 TO POB SEC 19 17 14 119.08ACS, OF TULSA COUNTY, STATE OF OKLAHOMA

Case No. 2416—Ronald L. Hall

Action Requested:

Variance to permit a second dwelling unit on one lot of record (Section 208); and a Variance of the minimum required land area per dwelling unit (Section 330).
Location: 12612 North 143rd Avenue East

Presentation:

Ronald L. Hall, 12612 North 143rd East Avenue, Collinsville, OK; would like to move a second mobile home onto his acreage for his step-daughter to live in. There have been two mobile homes on the land since 1973 until March 2010, when the second mobile home was removed. The new mobile home will have a separate legal address, its own private utilities, and a separate septic system.

Interested Parties:

There were no interested parties present.

Comments and Questions:

None.

PHIL FRAZIER
pfrazlaw@swbell.net

Frazier & Phillips
Attorneys at Law
A Professional Association

SHARON PHILLIPS
sharon.phillips@swbell.net

1424 Terrace Drive • Tulsa, Oklahoma 74104-4626
Phone (918) 744-7200 • FAX (918) 744-7210

April 25, 2012



Mr. Chris Sansone
Senior Planner
Board of Adjustment
2 West 2, Suite 800
Tulsa, OK 74103

Dear Chris:

Re: Case No. CBOA-2424

This will confirm my telephone conversation with you April 25, 2012, regarding the Special Exception case now pending before the Board of Adjustment.

Mr. Easton has discovered that although the sand is ideal for the intended use, unfortunately, the sand base is not near as deep as it had been expected. Accordingly, there will not be enough sand for a commercial operation. The original plan to use the sand for the growth and placing of the sod as well as a commercial sand operation is no longer feasible.

If granted the Special Exception, Easton Sod Farms will remove sand from the river for their own use. That use will include the growth of sod on site as well as the use of sand for placement of sod.

There will be a reduction in truck traffic which was the main concern of the protestants. The mining of sand on site will curtail use of the sand trucks coming in and out.

With the reduction of truck traffic, Mr. Easton proposes to leave the road where it is; however, he has already made arrangements to place an asphalt composite on the road to improve the surface.

The sand will be removed from the river by a scraper near the Bixby Creek site. It will not be necessary to utilize the barge and there will be no noise, odor or vibration from the extraction of sand. Sand will be extracted when the river is low and stockpiled for spreading during the planting and growing season.

Exhibit A
3.19

Mr. Chris Sansone
Senior Planner
Board of Adjustment
April 25, 2012
Page Two

Some concern was expressed regarding the presence of tree limbs and other storm debris which Mr. Easton allowed the City of Bixby as well as Tulsa County to place on his property during cleanup of the ice storm. Mr. Easton will utilize the material for mulch and it will be mixed with the sand during the preparation process. He will begin at the north end which is nearest 151st Street and continue to monitor the area for any spontaneous combustion.

In summary, if the Special Exception request is allowed, it will result in less truck traffic, a reduction of the dust and debris problem the protestants mentioned, and improvement of the road (151st Street) which the protestants requested. This substantial lessening in the scope of sand mining activity and the corresponding decrease in truck traffic should satisfy the concerns expressed by the protestants at our previous meeting.

As always, we appreciate your cooperation and assistance in this matter and invite you to contact me should you have any further questions regarding this matter.

Yours truly,



Phil Frazier
Attorney at Law

aal

Copy to John Easton

Case No. 2273

Action Requested:

Special Exception to permit sand and gravel mining in the AG district (Section 301), located: Southeast of 161st Street and South Garnett Road.

Presentation:

Mike O'Dell, 9660 Lakewood Road, Lenexa, Kansas, submitted applicant exhibits (Exhibit B-1). They proposed to mine sand and gravel from the Arkansas river and the adjacent floodplain at the location indicated by the submitted plans. He informed the Board that the demand is growing and the local supply has diminished. The site has not been earmarked for any development in the county land use plan; it has been identified as an agricultural reserve.

Comments and Questions:

Mr. Charney asked for clarification of Mr. O'Dell's last statement. Mr. Cuthbertson responded that he is probably referring to the Arkansas River Corridor Master Plan, which was provided to the Board. He added it covers the river from the Keystone Dam all the way to Wagner County.

Mr. O'Dell continued, stating the site is close to the existing users, within a mile to the main haul-route, Highway 64 to the south on Garnett Road. They have a written agreement and some verbal agreements with the County that Holliday Sand & Gravel would supply the materials and the County would supply the labor. It would be a cost share for the Garnett Road widening and improvements. He explained that the property cannot be developed for other uses than AG because the bulk of the property is in the floodplain. There would be a minimal clearing of habitat vegetation. They propose the operation to run from 7:00 a.m. to 7:00 p.m., Monday through Friday and 8:00 a.m. to 12:00 p.m. on Saturdays, mainly during construction season. The projected life of the project is 15 years. Environmental impacts are supplied in the exhibits. There are about five homes nearby, one within ¼ mile west of the Garnett frontage of the subject property and four within ½ mile west off of 161st Street. There are approximately another 24 residences about one mile away. Local schools are 1 ½ to 2 miles away and not on the haul-route. They estimate 100 trucks per day but there could be up to 200 trucks per day equaling 400 trips per day. They would contract for a traffic study. They are planning for dust control of the plant roads with recycled asphalt. The primary operation would be river dredging on approximately 105 acres. They would use silencers on the dredgers. Mr. O'Dell stated the plant would be on twelve acres in the northwest corner and screened to the east and south by the treed corridors on Snake Creek and Snake Creek tributary. They would agree to plant evergreens along Garnett. He submitted photographs (Exhibit B-2). They talked with the neighbor across the street and he did not have any objection. They would direct

lighting down. They plan for a hydrology study for the project and permits. The sand pond and pit is on about eighty-three acres.

Mr. Hutson asked how many permits they must obtain before they build a plant and begin operations. Mr. O'Dell estimated there are about six permits from DEQ, State of Oklahoma, the County, and Corp of Engineers. Mr. Hutson wanted the interested parties to understand they have to meet many requirements for these permits. Mr. Cuthbertson also mentioned that once this project is over it does not open up the way for commercial development, as the land is zoned agricultural.

Interested Parties:

Joe Davidson, P.O. Box 686, Bixby, Oklahoma, stated his land adjoins on the east side along Snake Creek. He owns 50 acres with a residence. He asked if the trucks run seven to seven or are those hours for the dredging or is that 24 hours per day. He expressed concern about the widening of Garnett and the bridge as a big project. He added this is a school bus route. Mr. Davidson stated he made phone calls randomly to 15 of the 27 sand supply companies listed in the phonebook and everyone of them informed him they had excess capacity in sand at that time. He indicated that the Department of Mining does not do a lot of engineering review once the County gives approval. The Army Corp of Engineers informed him today that because of a Supreme Court ruling they no longer have authority to issue a 404 Permit.

Teresa McLain, 16614 South 128th East Avenue, stated a family member owns property on east Snake Creek. She opposed because before the 1986 flood the creek was cutting off the family property. She informed the Board that if the flow of the river is changed it would take out a small wood culvert at 129th that would cut off eight people from their properties. She also asked if the culvert washes out, who would they call. She asked if they planned to use the cutterhead in the river or on the banks.

Jerry Martin, 12926 East 161st Street South, expressed concern of the river washing out the banks and culvert. He complained of dust and truck traffic from such a plant.

George Roberts, P.O. Box 905, Bixby, Oklahoma, stated he owns property east of the subject property. He was concerned that not all of the neighbors were notified of this case. He also mentioned that it would devalue their property.

Glenn Koenig, 16312 South 128th East Avenue, stated opposition of such a project on the river that could cause loss of land.

Ray Bowen, Mayor of the City of Bixby, stated that Holliday Sand and Gravel has been a good corporate citizen.

(name inaudible), 12925 East 161st Street South, opposed the application for the noise of the proposed plant.

Teresa McLain-Bean, asked if this plant would mine silica sand, which is a very fine sand.

Applicant Rebuttal:

Mr. O'Dell stated that Holliday Sand and Gravel is an employee-owned property. He responded to neighbor's concerns that they plan do a hydrology study. They will not proceed if they believe it will do damage to streets or anyone's property downstream. Mr. Charney asked about the hours of operation mentioned, if that was for the trucking and/or the mining. Mr. O'Dell replied that the hours of seven to seven would be the hours they would be open, loading trucks. He added there will be times when they would need to dredge 24 hours per day. Mr. Charney asked if they could agree to the Board imposing certain hours of operation. He replied that they could if they built a larger production rate plan. Mr. Hutson assumed that would mean more noise and larger equipment. Mr. O'Dell replied that he did not know that it would be noisier, but a little more of a presence. He stated they are aware a bus goes by the proposed plant, but the trucks would not haul past the school on residential streets. He informed the Board that river dredging is not regulated if there is only incidental fall-back into the river, with an EPA 404 permit. The Corp. of Engineers are very involved with this site and have jurisdiction there. He commented that the dredge is about 20 ft. x 40 ft. in size and might be used in the pit if there was enough water. The cutter-head is about 24 inches in diameter and is like a rotating head with teeth on it that loosens the sand. They would not want to dredge within 50-100 ft. of the bank and cave the bank. They could post a quarter million dollar bond payable to a homeowners' association or the county, in the case of unforeseen erosion. Mr. Charney asked if other Departments and/or agencies that do more technical studies and reviews after a Board of Adjustment approval.

Janet Meshack, with Meshack Associates, replied that Holliday Sand and Gravel contacted them in advance to see if this was even possible. It is nearly all in a floodway. She stated Snake Creek actually overflows around 181st Street. They advised the Holliday company that they would have to lower some of the areas affected in order to have compensatory floodplain storage and conveyance not to cause any rise in the water surface or floodway. Mr. Charney asked if there is a process to follow to prevent erosion of the bank. She did not think there was any real process that would eliminate the possibility of erosion. The Keystone Dam has a big impact on the water level.

Mr. Hutson asked how they selected this site. Mr. O'Dell replied they selected this site because it is convenient, close to the market. Less transportation time decreases the cost of delivery. The distance from residential homes makes this a good site and they will not be hauling past houses.

David Iski, Assistant District Attorney, encouraged the Board to address the concerns within Section 1224.3 and Section 1680.3 in their findings.

In discussion, Mr. Walker had concerns for possible occurrences of erosion. Mr. Charney was relieved to know that the dredging site, which might be around the clock, is farther away from residences. Mr. Hutson noted that sod farms are all over the area and recognized dust as a characteristic of a farming area during certain seasons. Mr. Tyndall found the proposal to be appropriate subject to the hours and road usage. Mr. Charney stated the Board has considered dust, vibration, traffic and the applicant's offer to do watering to control dust. They road improvement plan would assist the vibration. The haul route seems to be the best and shortest distance to users. The applicant would have significant setbacks and berming. They have addressed the hours of operations.

Board Action:

On **Motion of Hutson**, the Board voted 5-0-0 (Walker, Tyndall, Dillard, Hutson, Charney "aye"; no "nays"; no "abstentions"; no "absences") to **APPROVE** a Special Exception to permit sand and gravel mining in the AG district (Section 301), as submitted by the applicant, in accordance with the data submitted and the plan of operation, subject to all of the permitting required, including environmental and quality, mining; hours of operation: truck traffic and pit operations from 7:00 a.m. to 7:00 p.m. and dredging as needed; with conditions provided by the applicant to stay away from the banks in excavation; to take necessary steps to minimize erosion, specifically, dredging no closer than 50 ft. from the shore, except when the equipment is moved to the working site; placement of rip rap in areas that appear to be adversely affected from erosion by the operation; the applicant to contribute to the cost and upkeep of Garnett Road south to Highway 164; a watering plan that is consistently administered, authored by the applicant and posted for the inspector should they wish to see it; and the applicant to provide a \$250,000 bond to be posted in the event that certain remedial cure to public works is deemed necessary by the inspector's office for actions inconsistent with various permits; finding it will be in harmony with the spirit and intent of the code and will not be injurious to the neighborhood, or otherwise detrimental to the public welfare; finding the Board has made an effort to address the issues raised in Section 1608; on the following described property:

"That portion of the Arkansas River lying South of the centerline, upstream of the confluence of Snake Creek, in the South ½ of Section 20, and in the North ½ of Section 29 all in Township 17N, Range 14E of the Indian Base and Meridian, in Tulsa County, Oklahoma, and more particularly the South half of the Arkansas River, beginning at the extension of S. Garnett Road, easterly and downstream along the south bank of the Arkansas River approximately 4600 feet to the mouth of Snake Creek, containing 105 acres more or less; AND certain real property in Tulsa County, Oklahoma, in the North ½ of Section 29, Township 17 North, Range 14 East of the Indian Base and Meridian and lying north of Little Snake

Creek, less the south 1000 feet (containing 23.6 acres), containing 160 acres, more or less."

NEW BUSINESS

There was no new business.

OTHER BUSINESS

Interpretation of the Zoning Code to determine the classification of a pond in a platted residential district.

BOARD ACTION:

On **Motion of Charney**, the Board voted 5-0-0 (Walker, Tyndall, Dillard, Hutson, Charney "aye"; no "nays"; no "abstentions"; no "absences") to **CONTINUE** this business to the meeting on August 21, 2007.

There being no further business, the meeting adjourned at 3:49 p.m.

Date approved: 8/21/07

David E. Charney
Chair



Looking north at subject property entrance from E. 161st St. S.



Looking north toward the creek crossing on the subject property



Looking east across property near entrance on E. 161st St. S.



Looking west across property near entrance on E. 161st St. S.



Looking northeast at Bixby Creek crossing



Looking northwest at Bixby Creek crossing



Looking south across E. 161st St. S.



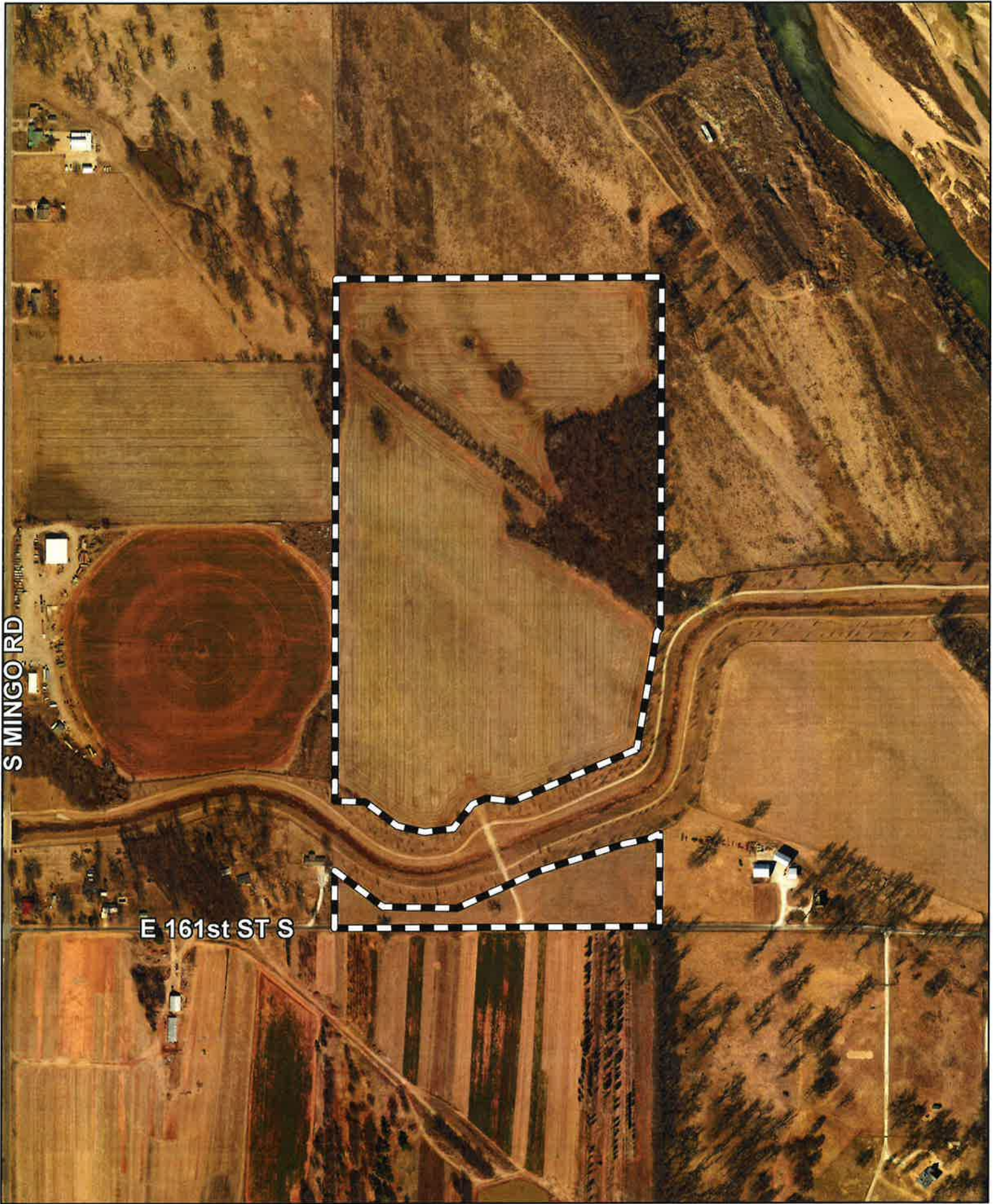
Looking west down E. 161st St. S.



Close-up of creek crossing

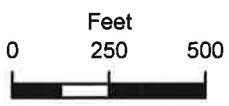


Real Estate sign on subject property



S MINGO RD

E 161st ST S



Subject Tract

CBOA-2786

17-14 19

Note: Graphic overlays may not precisely align with physical features on the ground.

Aerial Photo Date: February 2018

3.31



8/20/2019

Gmail - RE: [Non-DoD Source] Tanner Bemies - 10335 E 161st St, Bixby, OK (UNCLASSIFIED)



Tanner Bemies <tbermies@gmail.com>

RE: [Non-DoD Source] Tanner Bemies - 10335 E 161st St, Bixby, OK (UNCLASSIFIED)

1 message

Holmes, Jordan L CIV USARMY CESWT (USA) <Jordan.L.Holmes@usace.army.mil>
To: "tbermies@gmail.com" <tbermies@gmail.com>
Cc: "jcottle@bixby.com" <jcottle@bixby.com>

Mon, Aug 5, 2019 at 2:13 PM

CLASSIFICATION: UNCLASSIFIED

Mr. Bemies,

Good afternoon, The Bixby Creek Channel project is a federally constructed project but is locally operated and maintained by the City of Bixby. You would need to coordinate with the City on access to this property. As a suggestion, I would verify that the low water crossing is rated for the loads the trucks would potential carry.

The contact for the local sponsor is listed below for your information.

Mr. Jarrod Cottle, P.E.
City of Bixby
City Engineer
jcottle@bixby.com

If you have any additional questions or concerns, please let me know.

Very respectfully,

Jordan Holmes, P.E.
Levee Safety Program Manager
USACE, Tulsa District
jordan.j.holmes@usace.army.mil
918-668-7338 (Office)
918-438-8352 (Mobile)

—Original Message—

From: Tanner Bemies (<mailto:tbermies@gmail.com>)
Sent: Thursday, July 25, 2019 4:25 PM
To: CESWT-RO SWT <ceswt-ro@usace.army.mil>
Subject: [Non-DoD Source] Tanner Bemies - 10335 E 161st St, Bixby, OK

Hello,

My name is Tanner Bemies, I am inquiring into the low water access located at 10335 E 161st St in Bixby, OK.

I currently am in the process of purchasing the property and would like to ascertain some form of confirmation that I will be allowed to move my trucks through the low water access to the property because with out such access the property will be land locked preventing me from being able to reach the land.

my phone # is 918-688-2058

Thank you,
Tanner Bemies
918-688-2058

CLASSIFICATION: UNCLASSIFIED
CLASSIFICATION: UNCLASSIFIED
CLASSIFICATION: UNCLASSIFIED
CLASSIFICATION: UNCLASSIFIED



Tanner Bemies <tbemies@gmail.com>

Tanner Bemies - Inquiry into 10335 E 161st St

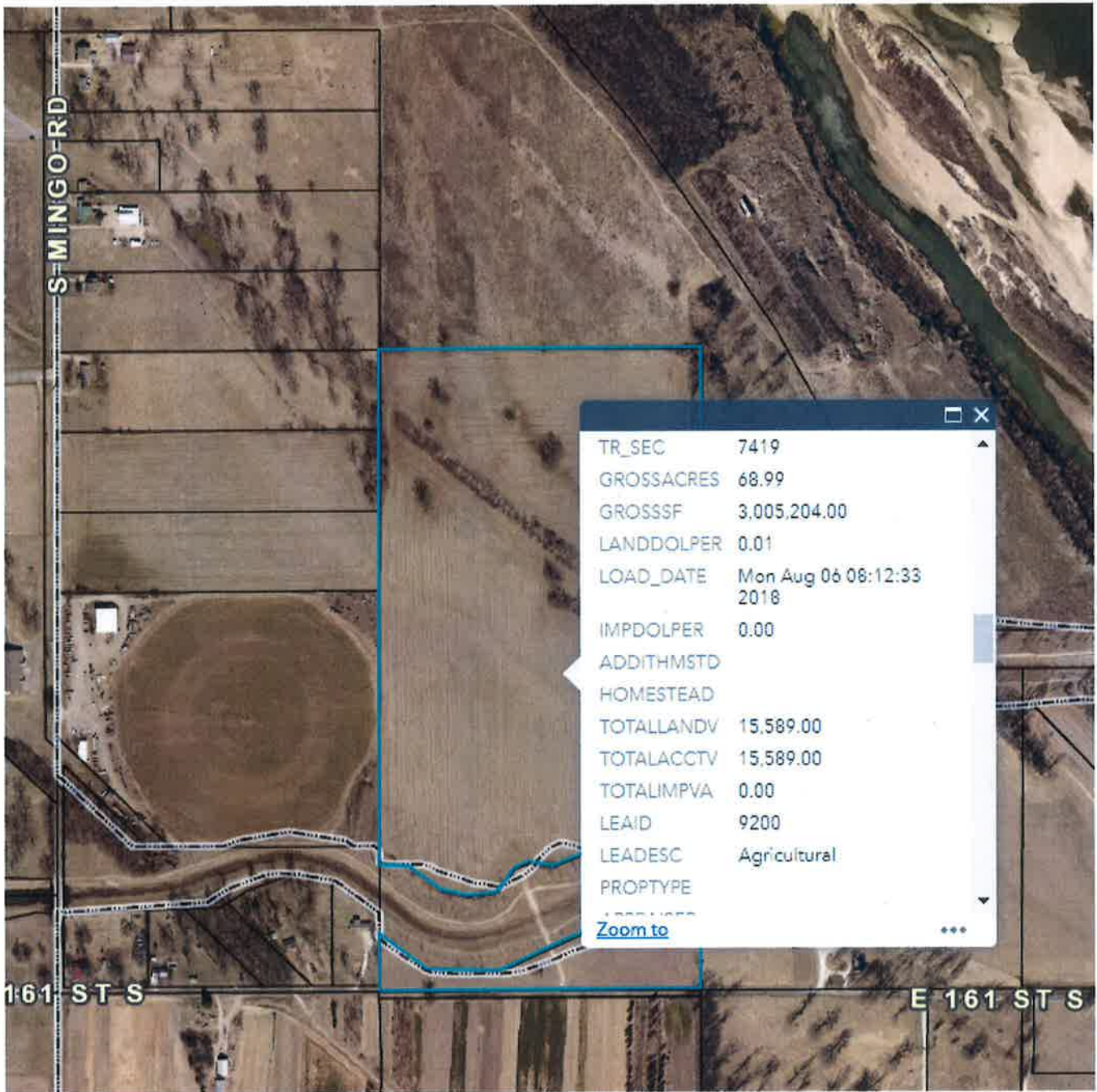
Jason Mohler <jmohler@bixbyok.gov>
To: Tanner Bemies <tbemies@gmail.com>

Wed, Jul 31, 2019 at 10:00 AM

10355 E 161st St lies within Tulsa County jurisdiction. Below is clip from the GIS map.

Attached are a few sheets from the Record Drawings for Bixby Creek. As discussed on the phone, Bixby Creek was a Corp of Engineers project. The City of Bixby owns and maintains Bixby Creek. The site does lie within the City fenceline. However, annexation is typically requested by property owners or developers (i.e. the City would not pursue annexation of this property unless requested or some other reason develops).

The existing low water crossing provides access the agricultural land north of the Creek. I am not aware of an limitations on that access.



Jason C. Mohler, P.E.
 Development Services Director
 City of Bixby

From: Tanner Bemies [mailto:tbemies@gmail.com]
Sent: Thursday, July 25, 2019 9:47 AM
To: Jason Mohler <jmohler@BixbyOK.gov>
Subject: Tanner Bemies - Inquiry into 10335 E 161st St

STATE OF OKLAHOMA
DEPARTMENT OF MINES
2915 N. CLASSEN, SUITE 213
OKLAHOMA CITY, OKLA. 73106

LEGAL ESTATE

Name of Legal Estate Owner: Francis, Jerry Calvin & Mary Ann
Address: 15625 S Harvard, Bixby, OK, 74008
Telephone Number: _____

Section(s) 19 Township 17N Range 14E County Tulsa

Is the permit application area owned _____ or leased X by the Applicant?

I, (Legal Estate Owner) Francis, Jerry Calvin & Mary Ann certify that I am the owner of the legal estate of the property being represented in this Application for a Non-Coal Mining Permit, and that the (Company, Corporation, Individual (s)) Tanner Bernies have the right to mine this property.

Signature of Legal Estate Owner *Mary Ann*

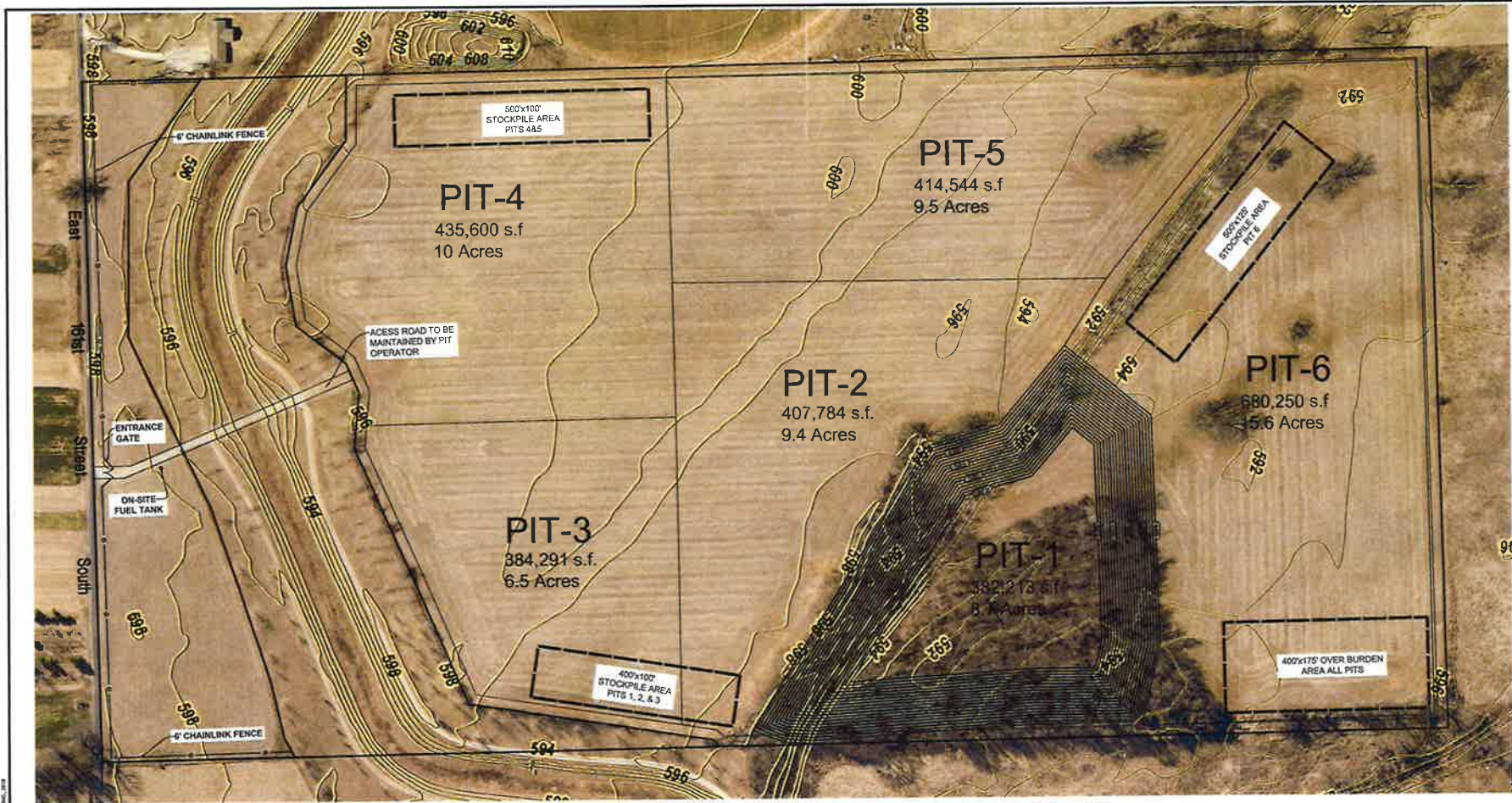
Subscribed and sworn to before me this 10 day of September 2019

My Commission expires 10-5-2020 Notary Public



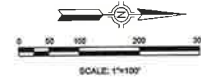
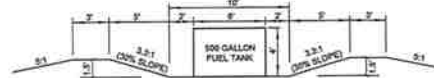
* IF THE OWNER OF THE LEGAL ESTATE OF THE PROPERTY CHANGES, A NEW LEGAL ESTATE FORM MUST BE SIGNED BY THE NEW OWNER OF THE LEGAL ESTATE. IF THERE ARE MULTIPLE OWNERS OF THE PROPERTY ON THIS APPLICATION, A SEPARATE LEGAL ESTATE FORM MUST BE EXECUTED FOR EACH OWNER.

NOTE: THE DEPARTMENT OF MINES DOES NOT HAVE THE AUTHORITY TO ADJUDICATE PROPERTY TITLE DISPUTES.



Pit Volumes

| Pit | Area (Sq Ft) | Area (Ac) | Average Depth (Ft) |
|-------|--------------|-----------|--------------------|
| PIT-1 | 382,273 | 8.77 | 15.90 |
| PIT-2 | 407,784 | 9.36 | 15.25 |
| PIT-3 | 384,291 | 8.82 | 17.40 |
| PIT-4 | 435,600 | 10.00 | 15.82 |
| PIT-5 | 414,544 | 9.52 | 15.28 |
| PIT-6 | 680,250 | 15.62 | 15.90 |



ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH CURRENT TULSA COUNTY PUBLIC WORKS DEPARTMENT SPECIFICATIONS INCLUDING O.S.E.T., 2008 EDITION SPECIFICATIONS CALL OKIE!

EXISTING UNDERGROUND LINES HAVE BEEN SHOWN TO THE EXTENT KNOWN AND PLANS HAVE BEEN SENT TO THE EFFECTED UTILITY OWNERS FOR VERIFICATION OF EXISTING LINES. BEFORE YOU DIG, CONTACT OKLAHOMA ONE-CALL: 1-800-922-6243. SOUTHWESTERN BELL TELEPHONE COMPANY, SON COMMUNICATIONS, OKLAHOMA NATURAL GAS COMPANY, AMERICAN ELECTRIC POWER COMPANY.



| DATE | REVISIONS |
|------|-----------|
| | |
| | |



County OF TULSA



Stamora Weisz & Associates, Inc.
 600 EAST 20th PLACE
 TULSA, OKLAHOMA 74109
 O.A. NO. 0000000000
 PHONE: 918-585-3000
 FAX: 918-585-3000
 EXP. DATE: 6/30/21

| | | | |
|---|-------------------------|----------------------|-----------------------|
| PLAN SCALE: 1"=100' | WORK ORDER NO. 10383 | TYPE OF WORK: N/A | DATE: 10/16/19 |
| PROFILE SCALE: HORIZ: N/A VERT: N/A | FILE: 1714.19 | PHASE: N/A | DRAFTED BY: LAD |
| | ATLAS PAGE NO. | | SHEET OF 1 1 |

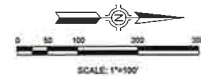
THIS DOCUMENT IS PRELIMINARY IN NATURE AND IS NOT A FINAL, SIGNED AND SEALED DOCUMENT.

Bemies Mining Project
SWP3 SITE PLAN

3.36



Location Map
SCALE: 1"=2000'



THIS DOCUMENT IS PRELIMINARY IN NATURE AND IS NOT A FINAL, SIGNED AND SEALED DOCUMENT.

ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH CURRENT TULSA COUNTY PUBLIC WORKS DEPARTMENT SPECIFICATIONS, INCLUDING D.D.O.T. 2009 EDITION SPECIFICATIONS. CALL OKIE!

EXISTING UNDERGROUND LINES HAVE BEEN SHOWN TO THE EXTENT KNOWN AND PLANS HAVE BEEN SENT TO THE EFFECTED UTILITY OWNERS FOR VERIFICATION OF EXISTING LINES. BEFORE YOU DIG, CONTACT OKLAHOMA ONE CALL: 1-800-622-6263. SOUTHWESTERN BELL TELEPHONE COMPANY, COX COMMUNICATIONS, OKLAHOMA NATURAL GAS COMPANY, AMERICAN ELECTRIC POWER COMPANY.



County of TULSA



Sisemore Weisz & Associates, Inc.
111 EAST ONE PLACE
TULSA, OKLAHOMA 74103
CA. 10

PHONE: (918) 960-3000
FAX: (918) 960-8608
EXP. DATE: 6/30/21

| | | | |
|---|-------------------------|---------------------|-----------------------|
| PLAN SCALE: 1"=100' | WORK ORDER NO. 18383 | TYPE OF WORK N/A | DATE: 10/19/18 |
| PROFILE SCALE: HORIZ. N/A VERT. N/A | FILE: 1714.10 | PHASE: N/A | DRAFTED BY: LAD |
| | ATLAS PAGE NO. | | SHEET OF 1 1 |

Bemies Mining Project
RECLAMATION MAP

3.37



116 West Needles
P.O. Box 70
Bixby, OK 74008
www.BixbyOK.gov

December 10, 2019

Robi Jones
Tulsa County
Board of Adjustment
rjones@incog.org

RE: Case Number CBOA-2786

Board of Adjustment:

The City of Bixby has received the Notice of Hearing for Tulsa County Board of Adjustment Case Number CBOA-2786. We recognize that regulation of the allowable uses for that property lies with Tulsa County and do not object to the proposed Special Exception allowing Use Unit 24.

With that said, access to the property is somewhat unique. The US Army Corp of Engineers constructed the Bixby Creek Local Flood Protection Project and the City owns and maintains the completed project. A portion of the Special Exception property is south of Bixby Creek with the remainder being north of Bixby Creek. The Corp constructed a low water crossing for access to the north side of Bixby Creek. The City is not opposed to use of the low water crossing as part of the mining operation with an understanding that the Applicant is responsible of any crossing upgrades necessary to handling loading in excess of the original design and must repair any damages to the low water crossing resulting from the proposed Use.

Additionally, the City is concerned that the proposed Use may generate significant truck traffic on County and City streets. Damages to City streets caused by the mining operation must be repaired by the Applicant.

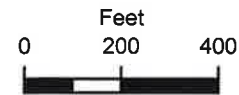
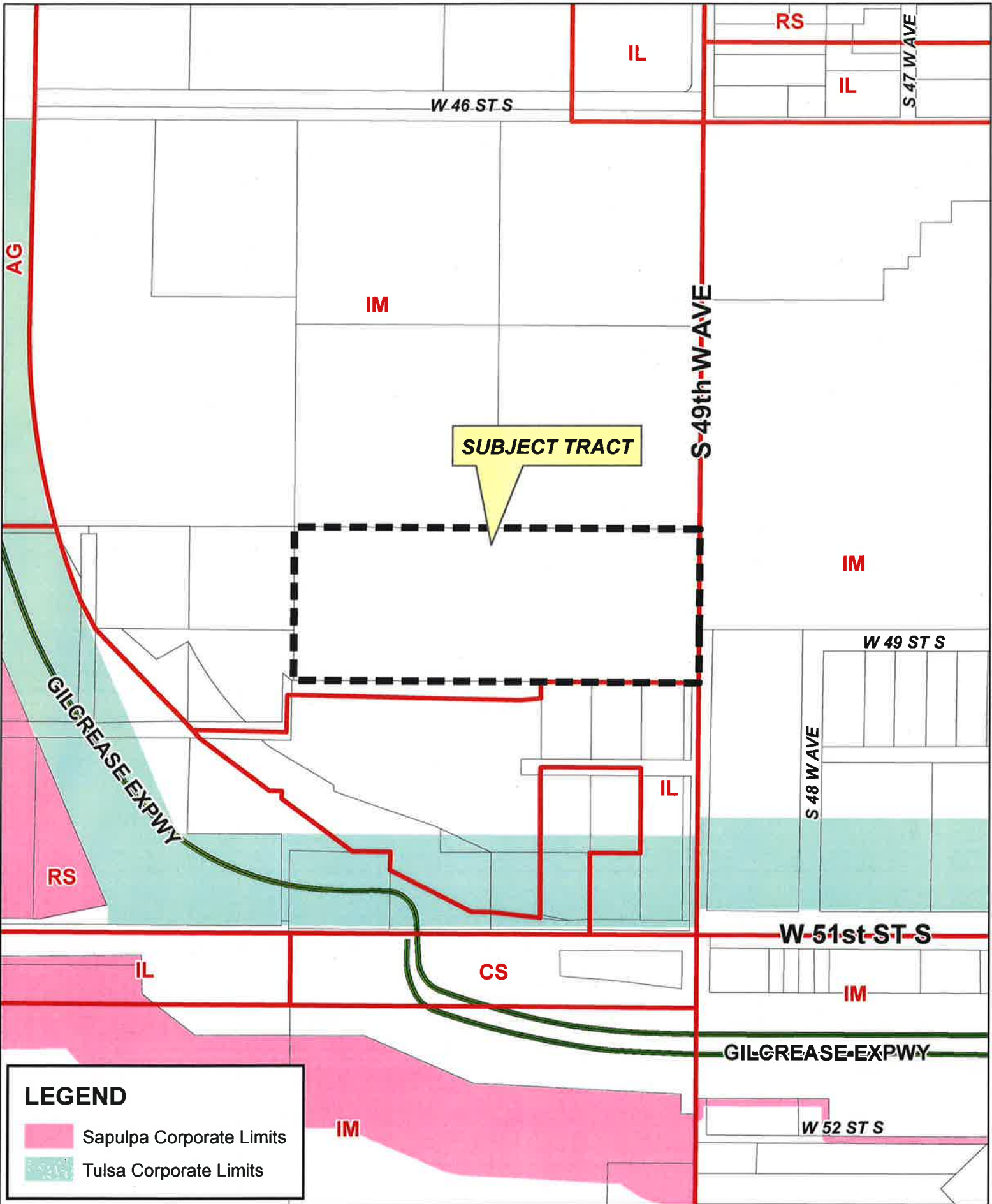
If you have any questions or need additional information, please reach out to me at 918-366-0417 or jmohler@bixbyok.gov. Thank you in advance for including this letter in the Case file for CBOA-2786.

Regards,

A handwritten signature in blue ink that reads "Jason C. Mohler".

Jason C. Mohler, P.E.
Development Services Director

CC: Jared Cottle, City Manager
Marcae' Hilton, City Planner



CBOA-2787

4.1



BOARD OF ADJUSTMENT CASE REPORT

STR:9229
CZM:45
PD:

Case Number: CBOA-2787

HEARING DATE: 12/17/2019 1:30 PM

APPLICANT: Lou Reynolds

ACTION REQUESTED: Special Exception to permit Use Unit 24, Mining and Mineral Processing, to allow soil mining (Sec.1224) in an IM District (Sec. 910, Table 1).

LOCATION: 4802 S 49 AV W

ZONED: IM

PRESENT USE: Industrial

TRACT SIZE: 15 acres

LEGAL DESCRIPTION: N495 SE SE SEC 29 19 12, 15ACS

RELEVANT PREVIOUS ACTIONS:

Subject Property:

CZ-462 December 2017: All concurred in **approval** of a request for *rezoning* a 23± acre tract of land from AG/RS to IM, to permit the development of an industrial park, on property located north and west of the northwest corner of West 51st Street and South 49th West Avenue.



ANALYSIS OF SURROUNDING AREA: The subject tract is surrounded by industrial uses and industrial zoning. It is just northeast of the Gilcrease Expressway in the Berryhill area. See Exhibit "B" for further details as described by the applicant.

STAFF COMMENTS:

The applicant is before the Board requesting a **Special Exception** to permit Use Unit 24, Mining and Mineral Processing, to allow soil mining (Sec. 1224) in an IM District (Sec. 910, Table 1).

A special exception is required as the proposed soil mining operation is a use which is not permitted by right in the AG district because of potential adverse affect, but which if controlled in the particular instance as to its relationship to the surrounding area and to the general welfare, may be permitted. The use must be found to be compatible with the surrounding area.

The Board of Adjustment, in granting a mining and mineral processing use by Special Exception, should consider potential environment influences, such as dust and vibration. If inclined to approve, the Board may consider establishing appropriate protective conditions such as setbacks, screening, and hours of operation, as will mitigate the adverse affect on proximate land uses.

4.2

The applicant supplied the following information: "The proposed mining use will be for dirt and gravel extraction in conjunction with the Gilcrease Expressway expansion project."

The applicant will be required to obtain all relevant permits including those from the Tulsa County Inspectors Office/Building Permits Department and the Oklahoma Department of Mines.

If inclined to approve, the Board may consider any condition it deems necessary and reasonably related to the request to ensure the proposed soil mining operation is compatible with and non-injurious to the surrounding area.

Sample Motion:

"Move to _____ (approve/deny) a Special Exception to permit Use Unit 24, Mining and Mineral Processing, to allow soil mining (Sec.1224) in an IM District (Sec. 910, Table 1).

Approved per conceptual plan on page(s) _____ of the agenda packet.

Subject to the following condition(s) (if any): _____.

Finding the Special Exception will be in harmony with the spirit and intent of the Code, and will not be injurious to the neighborhood or otherwise detrimental to the public welfare."

Staff recommends **approval** of the plat waiver with the following conditions:

- A. The approved optional development plan standards be filed of record with the Tulsa County Clerk's office.
- B. The regulatory floodplain existing on the property be placed in the recommended easement.

The applicant indicated his agreement with staff's recommendation.

There were no interested parties wishing to speak.

TMAPC Action; 9 members present:

On **MOTION** of **DIX**, the TMAPC voted 9-0-0 (Adams, Covey, Dix, Doctor, Fretz, Krug, Reeds, Shivel, Walker, "aye"; no "nays"; none "abstaining"; Carnes, Millikin, "absent") to **APPROVE** Z-7395 Plat Waiver per staff recommendation.

12. CZ-462 Lou Reynolds (CD 2) Location: North and west of the northwest corner of West 51st Street and South 49th West Avenue requesting rezoning from **AG/RS** to **IM** to permit an Industrial Park.

STAFF RECOMMENDATION:

SECTION I: CZ-462

DEVELOPMENT CONCEPT: Rezone from AG and RS to IM in order to permit the development of an industrial park. Current planned uses include storage and warehousing, however other, compatible uses may be included when the park becomes fully developed.

DETAILED STAFF RECOMMENDATION:

CZ-462 is non injurious to the existing proximate properties and;

CZ-462 is consistent with the anticipated future development pattern of the surrounding property therefore;

Staff recommends Approval of CZ-462 to rezone property from AG, RS to IM.

SECTION II: Supporting Documentation

RELATIONSHIP TO THE COMPREHENSIVE PLAN:

Staff Summary: The subject lots are located within Special District 6 of the Tulsa County District 9 Plan. The plan states that industrial development should be encouraged to locate within this district, provided they do not have external impacts such as noise, smoke, fumes, etc.

Land Use Vision:

Land Use Plan map designation: N/A

Areas of Stability and Growth designation: N/A

Transportation Vision:

Major Street and Highway Plan: S 49th W Ave is designated as a secondary arterial.

Trail System Master Plan Considerations: The site is located within ¼ mile of the Gilcrease West

Small Area Plan: Tulsa County District 9 Plan

Special District Considerations: Tulsa County District 9 Plan, Special District 6. Industrial uses encouraged.

Historic Preservation Overlay: None

DESCRIPTION OF EXISTING CONDITIONS:

Staff Summary: The site is elevated above the surrounding area. Two single-family homes and a barn structure currently exist on the site.

Environmental Considerations: Tulsa County District 9 plan states that industry in this area not have external impacts such as noise, smoke, fumes, etc.

Streets:

| <u>Exist. Access</u> | <u>MSHP Design</u> | <u>MSHP R/W</u> | <u>Exist. # Lanes</u> |
|---------------------------------|--------------------|-----------------|-----------------------|
| South 49 th West Ave | Secondary Arterial | 100 feet | 2 |

Utilities:

The subject tract has municipal water and sewer available.

Surrounding Properties:

| Location | Existing Zoning | Existing Land Use Designation | Area of Stability or Growth | Existing Use |
|----------|-----------------|-------------------------------|-----------------------------|-----------------------------|
| North | IM | N/A | N/A | Concrete Plant |
| South | IL / RS | N/A | N/A | Self-Storage / Machine Shop |
| East | IM | N/A | N/A | Manufacturing |
| West | RS | N/A | N/A | Gilcrease Expressway |

SECTION III: Relevant Zoning History

ZONING ORDINANCE: Ordinance number 98254 dated September 15, 1980, established zoning for the subject property.

Subject Property: No relevant history

Surrounding Property:

CZ-291 October 22, 2001: All concurred in **approval** of a request for rezoning a 9.8± acre tract of land from RS to IL on property located west of the northwest corner of West 51st Street South and South 49th West Avenue.

CZ-240 February 1998: All concurred in **approval** of a request for rezoning a 1± acre tract of land from IL to RS for residential use on property located north and west of the northwest corner of West 51st Street South and South 49th West Avenue.

CBOA-1117 November 1992: The Board of Adjustment **approved** a *special exception* to allow a manufactured home in an RS-zoned district for three years and subject to the manufactured home being removed when the single-family dwelling construction is completed. The property is located west of the southwest corner of West 50th Street and South 49th West Avenue.

CBOA-0632 January 1986: The Board of Adjustment **approved** a *variance* of the required 75' setback from an R-zoned district to allow for a building in an IL-zoned district. The property is located west of the northwest corner of West 51st Street and South 49th West Avenue.

Z-5375 April 8, 1980: All concurred in **approval** of a request for rezoning a 2.8± acre tract of land from RS-1 to IL on property located north of the northwest corner of West 51st Street South and South 49th West Avenue.

Z-4105 March 30, 1972: All concurred in **approval** of a request for rezoning a 80± acre tract of land from AG to IM on the NE/4 of the NW/4, and the NW/4 of the NE/4, LESS the North 250' in Section 32, Township 19 North, Range 12 East, Tulsa County, Oklahoma; and to IL on the north 250' of the NE/4 of the NW/4, and the NW/4 of the NE/4 in Section 32, township 19 North, Range 12 East, Tulsa County, Oklahoma on property located west of the southwest corner of West 51st Street South and South 49th West Avenue.

The applicant indicated his agreement with staff's recommendation.

Mr. Dix asked applicant if the application included the triangle tract of land next to the Gilcrease Expressway.

The applicant stated "yes".

There were no interested parties wishing to speak.

TMAPC Action; 9 members present:

On **MOTION** of **DIX**, the TMAPC voted 9-0-0 (Adams, Covey, Dix, Doctor, Fretz, Krug, Reeds, Shivel, Walker, "aye"; no "nays"; none "abstaining"; Carnes, Millikin, "absent") to **APPROVE** CZ-462 per staff recommendation.

Legal Description of CZ-462:

Lot One (1), Block Two (2), LESS Highway Right-of-Way to the State of Oklahoma, and Lots Three (3) and Four (4), Block One (1), all in BRIDGES HEIGHTS ADDITION, Tulsa County, State of Oklahoma, according to the recorded Plat thereof, LESS AND EXCEPT the following described property to-wit: BEGINNING at the Southwest corner of said Lot Three (3); thence North along the West line of said Lot Three (3) a distance of 305.88 feet to the Northwest corner of said Lot Three (3); thence South 44°29'22" East a distance of 422.91 feet to a point on the South line of said Lot Three (3); thence West along said South line a distance of 292.23 feet to the POINT OF BEGINNING; AND The North Half of the North Half of the North Half of the Southeast Quarter of the Southeast Quarter (N/2 N/2 N/2 SE/4 SE/4) and the North Half of the South Half of the North Half of the North Half of the Southeast Quarter of the Southeast Quarter (N/2 S/2 N/2 N/2 SE/4 SE/4) and the South Half of the South Half of the North Half of the North Half of the Southeast Quarter of the Southeast Quarter (S/2 S/2 N/2 N/2 SE/4 SE/4) and the North Half of the South Half of the South Half of the Southeast Quarter of the Southeast Quarter (N/2 S/2 N/2 SE/4 SE/4), all in Section Twenty-Nine (29), Township Nineteen (19) North, Range Twelve (12) East of the Indian Base and Meridian, Tulsa County, State of Oklahoma, according to the U.S. Government survey thereof; AND Lot One (1)

and Lot Two (2) of Block One (1) of BRIDGES HEIGHTS, according to the last Government Survey thereof.

13. Z-7415 Helen Barbre-Stephens (CD 2) Location: West of the southwest corner of West 51st Street and South Union Avenue requesting rezoning from **RS-3 to CS**

STAFF RECOMMENDATION:

SECTION I: Z-7415

DEVELOPMENT CONCEPT:

The property is zoned RS-3 and has never been rezoned for commercial uses. The request is to allow commercial uses on this highway frontage property.

DETAILED STAFF RECOMMENDATION:

Z-7415 requesting CS zoning is consistent with the Comprehensive Plan for the City of Tulsa and,

Use categories allowed in a CS zoning district are consistent with the expected development pattern in the area and,

Use categories allowed in a CS zoning district are non-injurious to the surrounding property therefore,

Staff recommends Approval of Z-7415 to rezone property from RS-3 to CS.

SECTION II: Supporting Documentation

RELATIONSHIP TO THE COMPREHENSIVE PLAN:

Staff Summary: CS zoning allows building placement as recognized in the Mixed-Use Corridor however it does not require building placement as recognized in the comprehensive plan. The uses allowed in CS district are consistent with the anticipated uses in a the Mixed-Use corridor areas.

Land Use Vision:

Land Use Plan map designation: Mixed-Use Corridor

A Mixed-Use Corridor is a plan category used in areas surrounding Tulsa's modern thoroughfares that pair high capacity transportation facilities with housing, commercial, and employment uses. The streets



W 46 ST S

S 47 W AVE

S 49th W AVE

W 49 ST S

GILCREASE EXPWY

S 48 W AVE

W 51st ST S

GILCREASE EXPWY

W 52 ST S



 Subject Tract

CBOA-2787

Note: Graphic overlays may not precisely align with physical features on the ground.

19-12 29

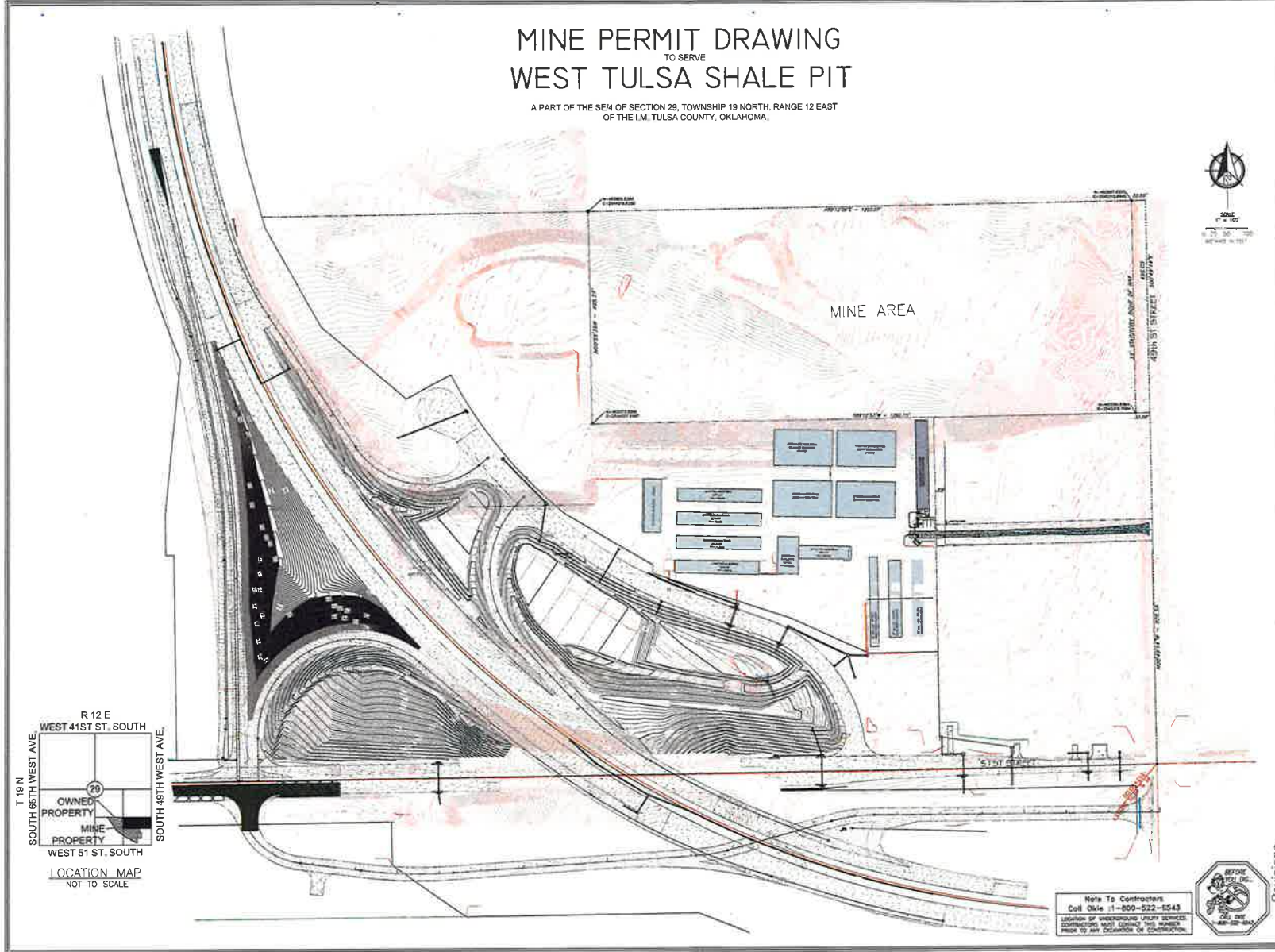
Aerial Photo Date: February 2018



EXHIBIT "C"

MINE PERMIT DRAWING TO SERVE WEST TULSA SHALE PIT

A PART OF THE SE4 OF SECTION 29, TOWNSHIP 19 NORTH, RANGE 12 EAST
OF THE 1.M. TULSA COUNTY, OKLAHOMA.



Note To Contractors
Call Okla 1-800-522-6543
SOURCE OF UNDERGROUND WATER SERVICES
CONTRACTORS MUST CONTACT THIS NUMBER
PRIOR TO ANY EXCAVATION OR CONSTRUCTION.



| | |
|--|--|
| <p>LANDES ENGINEERING LLC. www.landesengineering.net 903 E. 35th Street • P.O. Box 1032 Shawnee, OK 74802-1032 (405) 275-5388 • Fax (405) 275-9047 CA # 2260 EXP. 6-30-21</p> | |
| Client | |
| Project | |
| Sheet No. | |
| Scale | |
| Date | |
| Drawn | |
| Checked | |
| Approved | |
| Revised | |
| No. | |
| Date | |
| By | |
| Check | |
| Date | |

4.10

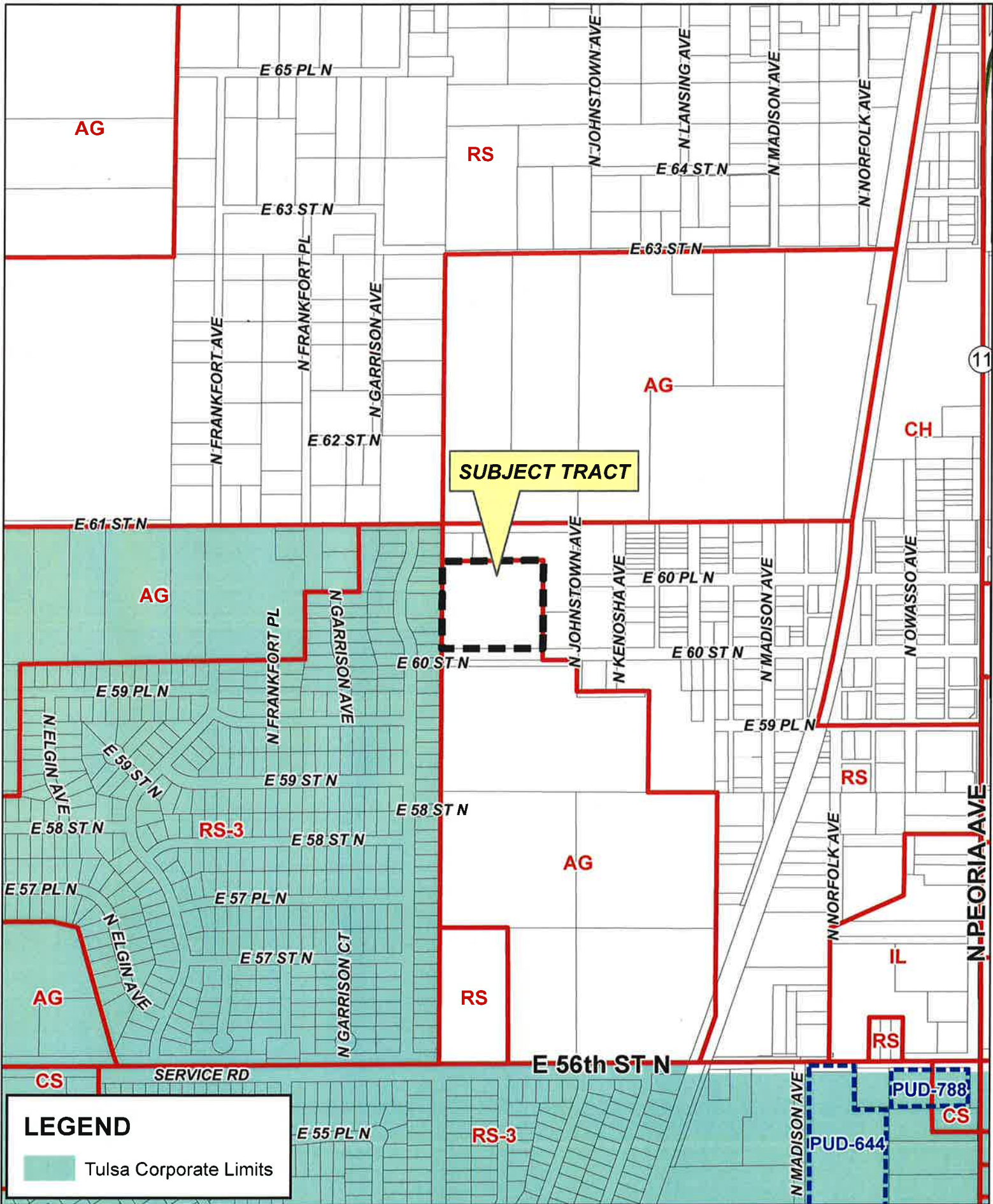
Exhibit "B"

Applicant requests a Special Exception, pursuant to Section 1680 of the Tulsa County Zoning Code (the "Code") to permit Use Unit 24 (Mining and Mineral Processing) in an IM-zoned district for property located at 4802/4810 S. 49th West Avenue, Tulsa, OK 74107 (the "Property").

The Property is located north of the northwest corner of S. 49th W. Ave. and W. 51st St. S. and just northeast of the Gilcrease Expressway. A conceptual site plan of the Property is attached hereto as **Exhibit "C"**. The surrounding area consists of industrial uses. North of the Property is the Eagle Redi Mix Concrete plant – which has similar moderate to heavy environmental influences as the proposed mining use; east of the Property are various industrial manufacturing facilities, including Norris, Bronco Manufacturing, and Hydrotex; and south of the Property is an auto shop and self-storage facility. There is also a quarry site southwest of the Expressway.

The proposed mining use will be for dirt and gravel extraction in conjunction with the Gilcrease Expressway expansion project. The use is in harmony with the spirit and intent of the Code as a permitted use by special exception in the IM District. Further, because the area is heavily industrialized, the use will not be injurious to the neighborhood or otherwise detrimental to the public welfare.

**THIS PAGE
INTENTIONALLY
LEFT BLANK**

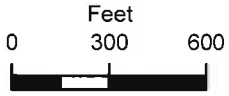


LEGEND

Tulsa Corporate Limits

CBOA-2788

5.1



20-12 01



BOARD OF ADJUSTMENT CASE REPORT

STR:129

Case Number: CBOA-2788

CZM:21

PD:

HEARING DATE: 12/17/2019 1:30 PM

APPLICANT: USCOC of Greater Oklahoma, LLC

ACTION REQUESTED: Special Exception to permit a Communication Tower, Use Unit 4, in the AG district. (Section 310 Table 1); and a Special Exception to reduce the required tower setback (110% of the tower height) from the adjoining RS zoned district. (Section 1204.C.7)

LOCATION: 6050 N JOHNSTOWN AV E

ZONED: AG

PRESENT USE: Church

TRACT SIZE: 4.87 acres

LEGAL DESCRIPTION:

Landlord Parcel Description:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF TULSA, TOWNSHIP OF DAWSON, STATE OF OKLAHOMA, AND IS DESCRIBED AS FOLLOWS: THE SOUTH 487 FEET OF THE WEST 497 FEET OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE SECTION 1 TOWNSHIP 20 NORTH, RANGE 12 EAST, DAWSON TOWNSHIP, TULSA COUNTY, STATE OF OKLAHOMA

Leasehold Parcel Description:

BEING A TRACT OF LAND SITUATED IN THE NORTHWEST 1/4 OF SECTION 1, TOWNSHIP 20 NORTH, RANGE 12 EAST OF THE INDIAN MERIDIAN, TULSA COUNTY, OKLAHOMA AND BEING PART OF A TRACT OF LAND DESCRIBED IN DEED TO TURLEY METHODIST CHURCH, INCORPORATED, RECORDED IN BOOK 2690, PAGE 411 OF THE DEED RECORDS OF TULSA COUNTY, OKLAHOMA (D.R.S.C.O.) AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT A 5/8-INCH IRON ROD WITH CAP STAMPED "SAM" SET FOR CORNER, FROM WHICH A PK NAIL FOUND AT THE SOUTH 1/4 CORNER OF SAID SECTION 1 BEARS SOUTH 06 DEGREES 04 MINUTES 21 SECONDS WEST, A DISTANCE OF 2,305.38 FEET; THENCE NORTH 07 DEGREES 48 MINUTES 39 SECONDS WEST, A DISTANCE OF 80.00 FEET TO A 5/8-INCH IRON ROD WITH CAP STAMPED "SAM" SET FOR CORNER; THENCE NORTH 82 DEGREES 11 MINUTES 21 SECONDS EAST, A DISTANCE OF 80.00 FEET TO A 5/8-INCH IRON ROD WITH CAP STAMPED "SAM" SET FOR CORNER; FROM WHICH A 1/2-IRON ROD FOUND AT THE NORTHEAST CORNER OF SAID SECTION 1 BEARS NORTH 36 DEGREES 57 MINUTES 54 SECONDS EAST, A DISTANCE OF 3,714.11 FEET; THENCE SOUTH 07 DEGREES 48 MINUTES 39 SECONDS EAST, A DISTANCE OF 80.00 FEET TO A 5/8-INCH IRON ROD WITH CAP STAMPED "SAM" SET FOR CORNER; THENCE SOUTH 82 DEGREES 11 MINUTES 21 SECONDS WEST, A DISTANCE OF 80.00 FEET, BACK TO THE POINT OF BEGINNING, CONTAINING 6,400.00 SQUARE FEET, OR 0.15 OF AN ACRE OF LAND, MORE OR LESS.

RELEVANT PREVIOUS ACTIONS:

BOA-3343 April 1960: The Board of Adjustment **approved** a church use, on the subject property located at 6050 North Johnstown Avenue East.

ANALYSIS OF SURROUNDING AREA: The subject tract abuts RS zoning to the north and west; all but one parcel is also owned by Turley Methodist Church and uses include the church and some residential. The property to the south is agricultural and the properties to the west are within the City of Tulsa; they are zoned RS-3 and have residential uses.

STAFF COMMENTS:

The applicant is before the Board requesting a *Special Exception* to permit a communication tower, Use Unit 4, in the AG district. (Section 310); and a *Special Exception* to reduce the required tower setback (110% of the tower height) from the adjoining RS. (Section 1204.C.7)

5.2

Communications towers are classified under Use Unit 4, Public Protection and Utility Facilities, and are permitted in the AG district by Special Exception. A *Special Exception* is required as the proposed cell tower is a use which is not permitted by right in the AG district because of potential adverse affect, but if controlled in the particular instance as to its relationship to the area, may be permitted.

The applicant has included a site plan. The proposed monopole tower has a height of 130 feet. Zoning Code requires towers to be set back a distance equal to at least on hundred ten percent (110%) of the height of the tower from any adjoining lot line of a residential, office or agricultural zoned lot. The distance from the proposed cell tower to the adjoining property to the north is 136 feet. The requirement would be 143 feet so the applicant is requesting a Special Exception to reduce the required tower setback (110% of the tower height) from the adjoining RS zoned district. (Section 1204.C.7) The distances to the east, west, and south meet the setback requirements.

Section 1204.3.C & E of the Code provides general standards for locating communication towers in any district. Some of the more notable requirements include:

1204.3.C.2.a: Towers and antennas shall be designed to blend into the surrounding environment through the use of color, galvanizing, or camouflaging architectural treatment, except in instances where the color is dictated by federal or state authorities such as the FAA.

“The pole will be designed to blend through galvanizing materials.”

1204.3.C.4.: Towers shall not be illuminated by artificial means and shall not display strobe lights unless such lighting is specifically required by the FAA or other federal or state authority for a particular tower. When incorporated into the approved design of the tower, light fixtures used to illuminate ball fields, parking lots, or similar areas may be attached to the tower.

“The tower is not proposed to be lit.”

1204.3.C.6: All utility buildings and structures accessory to a tower shall meet all the requirements of the underlying zoning district. Exterior ground mounted equipment occupying more than 50 square feet, if visible from ground level, shall be screened from view from property within 150 ft. used for residential purposes.

“No equipment shelter is proposed. The ground equipment will be contained within cabinets. Natural vegetation and prior existing trees will provide screening to the west.”

1204.3.C.7.a: Towers must be set back a distance equal to at least one hundred ten percent (110%) of the height of the tower from any adjoining lot line of a residential, office, or agricultural zoned lot, excluding expressway rights of way zoned residential.

“Please see the certified pole structural letter provided by the pole manufacturer....”

1204.3.C.8: Towers shall be enclosed by security fencing not less than six (6) feet in height or shall be equipped with an appropriate anti-climbing device; provided however the Board may modify of waive the requirements by special exception

“A six-foot security fence with three strands of barbed wire is planned.”

Additionally, **Section 1204.3.E.1** provides the following:

- 1. Factors to be considered in granting a special exception. In addition to any other requirement of this section, the following factors shall be considered in the determination to grant or deny a special exception for an antenna or tower:**
 - a. Height of the proposed tower;**
 - b. Proximity of the tower to residential structures, residential district boundaries and existing towers;**
 - c. Nature of uses on adjacent and nearby properties;**
 - d. Surrounding topography;**
 - e. Surrounding tree coverage and foliage;**
 - f. Design of the tower, with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness;**
 - g. The total number and size of antennas proposed and the ability of the proposed tower to accommodate collocation;**
 - h. Architectural design of utility buildings and accessory structures to blend with the surrounding environment;**
 - i. Proposed ingress and egress;**
 - j. The need of the applicant for a communications tower within the immediate geographic area to provide an acceptable level of communications service to the area;**
 - k. The size of the tract and the most likely future development as indicated by the Comprehensive Plan, planned infrastructure, topography and other physical facts.**
 - l. Landscaping**

1204.3.E.2

- 2. Collocation of facilities should be encouraged wherever practical by allowing reasonable extra height or tower diameter necessary to support multiple antennas.**

1204.3.E.3

- 3. The findings of the Board of Adjustment as to each of these factors shall be made on the record and contained in the written minutes of the meeting.**

If inclined to approve the Board may consider any condition it deems necessary and reasonably related to the request to ensure the proposed communications tower will be non-injurious to the surrounding area.

Sample Motion:

“Move to _____ (approve/deny) a Special Exception to permit a Communication Tower, Use Unit 4, in the AG district. (Section 310 Table 1); and a Special Exception to reduce the required tower setback (110% of the tower height) from the adjoining RS zoned district. (Section 1204.C.7)

Read the following statement so it can be on record and recorded in the minutes of the meeting.

The Board considered each of the following stated factors in Section 1204.3.E. 1 & 2 of the Code and finds that the application complies / does not comply with the requirements to the Boards satisfaction.

“Section 1204.3.E provides the following:

- 1. Factors to be considered in granting a special exception. In addition to any other requirement of this section, the following factors shall be considered in the determination to grant or deny a special exception for an antenna or tower:**
 - a. Height of the proposed tower;**
 - b. Proximity of the tower to residential structures, residential district boundaries and existing towers;**
 - c. Nature of uses on adjacent and nearby properties;**
 - d. Surrounding topography;**
 - e. Surrounding tree coverage and foliage;**
 - f. Design of the tower, with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness;**
 - g. The total number and size of antennas proposed and the ability of the proposed tower to accommodate collocation;**
 - h. Architectural design of utility buildings and accessory structures to blend with the surrounding environment;**
 - i. Proposed ingress and egress;**
 - j. The need of the applicant for a communications tower within the immediate geographic area to provide an acceptable level of communications service to the area;**
 - k. The size of the tract and the most likely future development as indicated by the Comprehensive Plan, planned infrastructure, topography and other physical facts.**
 - l. Landscaping**
- 2. Collocation of facilities should be encouraged wherever practical by allowing reasonable extra height or tower diameter necessary to support multiple antennas.**

Approved per conceptual plan(s) on page(s) _____ of the agenda packet.

Subject to the following conditions (if any): _____.

Finding the Special Exception will be in harmony with the spirit and intent of the Code, and will not be injurious to the neighborhood or otherwise detrimental to the public welfare.

10

MINUTES OF THE REGULAR MEETING OF THE BOARD
OF ADJUSTMENT, WEDNESDAY, APRIL 13, 1960.

PRESENT: Cohen, Chairman; Shaull; Galbreath; Norman;
Avery.

Case No. 3343-A ✓
Trustees of the Turley
Methodist Church
Pt. NW, NW, SE,
Section 1-20-12

This being the date set down for public hearing on the appli-
cation of the Trustees of Turley Methodist Church for permis-
sion to use the South 487 feet of the West 497 feet of the NW
NW 1/4, SE 1/4 of Section 1-20-12, and Lots 14 thru 29 in-
clusive, Brannon Addition for church purposes. There being
no protest offered it was,

MOVED by Galbreath (Shaull) that this application be granted.
All members voting yea. Carried.

Case No. 3373-A ✓
Memorial Street Church
of Christ - Lot 2,
Block 3, Mingo Heights

This being the date set down for public hearing on the appli-
cation of the Memorial Street Church of Christ for permis-
sion to extend church use on Lot 2, Block 3, Mingo Heights
Addition. There appeared Dean Smith, Attorney on behalf of
the Church. No protest was offered.

MOVED by Norman (Shaull) that this matter be granted.
All members voting yea. Carried.

Case No. 3380-A ✓
Sixth Church of Christ
Scientist - N. 100' of S/2,
NE, NE, SE, Section
19-19-13

This being the date set down for public hearing on the appli-
cation of the Sixth Church of Christ Scientist for permission
to use the North 100 feet of the S 1/2, NE 1/4, NE 1/4, SE 1/4,
of Section 19-19-13, less the West 287 feet, for off-street
parking. There being no protest offered it was,

MOVED by Avery (Norman) that this matter be granted.
All members voting yea. Carried.

Case No. 3381-A ✓
Northminster Presby-
terian Church - Part of
Section 12-20-12

This being the date set down for public hearing on the appli-
cation of the Northminster Presbyterian Church for permis-
sion to use the following described property for church pur-
poses:

That part of the NE 1/4, NE 1/4, of Section 12-20-12, descri-
bed as beginning at a point on the North line of the NE 1/4 of
Section 12, 610 feet west of the northeast corner, thence South
226 feet; west 160 feet; south 656 feet; west 150 feet; south
260.7 feet to a point on the north line of Sharon Heights Addi-
tion; west along the north boundary of Sharon Heights 288 feet;
North 1142.37 feet to a point on the north line of Section 12;



Looking north at church from driveway which will be used to access tower



Looking west from driveway on N. Johnstown Ave. toward area where tower will be located



Looking south from E. 61st St. N. toward subject property

E61 ST N

N JOHNSTOWN AVE

E60 ST N



Subject Tract

CBOA-2788

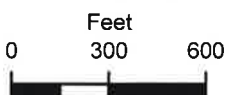
20-12 01

Note: Graphic overlays may not precisely align with physical features on the ground.

Aerial Photo Date: February 2018

5.9





Subject Tract

CBOA-2788

20-12 01

Note: Graphic overlays may not precisely align with physical features on the ground.

Aerial Photo Date: February 2018

5.10



October 17, 2019

Chris Patterson
Project Manager
Faulk & Foster
1811 Auburn Avenue
Monroe, LA 71201

RE: Proposed 130' Sabre Monopole for Turley, OK

Dear Mr. Patterson,

Upon receipt of order, we propose to design and supply the above referenced Sabre monopole for an Ultimate Wind Speed of 109 mph with no ice and 30 mph with 2" radial ice, Structure Class II, Exposure Category C and Topographic Category 1 in accordance with the Telecommunications Industry Association Standard ANSI/TIA-222-G, "Structural Standard for Antenna Supporting Structures and Antennas".

When designed according to this standard, the wind pressures and steel strength capacities include several safety factors, resulting in an overall minimum safety factor of 25%. Therefore, it is highly unlikely that the monopole will fail structurally in a wind event where the design wind speed is exceeded within the range of the built-in safety factors.

Should the wind speed increase beyond the capacity of the built-in safety factors, to the point of failure of one or more structural elements, the most likely location of the failure would be within the upper portion of the monopole shaft. Assuming that the wind pressure profile is similar to that used to design the monopole, the monopole will buckle at the location of the highest combined stress ratio within the upper portion. This is likely to result in the portion of the monopole above leaning over and remaining in a permanently deformed condition. *Please note that this letter only applies to the above referenced monopole designed and manufactured by Sabre Towers & Poles.* The fall radius for the monopole design described would be within the target parcel

Sincerely,

Robert E. Beacom, P.E., S.E.
Engineering Supervisor



STATEMENT OF ORDINANCE COMPLIANCE

Application: Board of Adjustment Exceptions

US Cellular "USCC" Site Name: Turley #222712

USCC Legal Entity Name: USCOC of Greater Oklahoma, LLC

Project Description: 130' monopine wireless facility

Parcel ID: 90201-02-01-30620

Property Owner: Turley United Methodist Church

Zoning: Agriculture

Address: To be assigned; nearest address: 6050 NORTH JOHNSTOWN AVE, TULSA, OK 74126

Please see the responses in red below following the applicable ordinance sections.

1204.2

Included Uses:

Ambulance Service

Antennas and Supporting Structures

Electrical Regulating Station, excluding storage or service garages and yards

Fire Protection Facility

Pressure Control Station, gas or liquid, excluding storage or service garages and yards

Shelter: Civic defense or storm

Stormwater Detention Facility

Water Storage Facility, NEC

1204.3

Use Conditions:

Antennas and their supporting structures shall meet the following requirements:

Purpose:

The purpose of this section is to establish requirements for the location of wireless communications towers and antennas. The goals of this ordinance are to: (1) protect residential areas and land uses from potentially adverse impacts of towers and antennas; (2) encourage the location of towers in non-

residential areas; (3) minimize the total number of towers throughout the community; (4) strongly encourage the joint use of new and existing tower sites as a primary option rather than construction of additional single-use towers; (5) encourage users of towers and antennas to locate them, to the extent possible, in areas where the adverse impact on the community is minimal; (6) encourage users of towers and antennas to configure them in a way that minimizes the adverse visual impact of the towers and antennas through careful design, siting, landscape screening, and innovative camouflaging techniques; (7) enhance the ability of the providers of telecommunications services to provide such services to the community quickly, effectively, and efficiently; (8) consider the public health and safety of communication towers; and (9) avoid potential damage to adjacent properties from tower failure through engineering and careful siting of tower structures. In furtherance of these goals, the Tulsa County Board of Adjustment shall give due consideration to the Comprehensive Plan for the Tulsa Metropolitan Area, zoning map, existing land uses, and environmentally sensitive areas in approving sites for the location of towers and antennas.

A.

Exclusions. The following activities shall be exempt from these regulations:

1. Amateur radio operators;
2. Microwave reflectors and parabolic antennas;
3. Antennas and equipment completely located inside of buildings; and
4. Minor modifications of existing wireless communications facilities and attached wireless communications facilities, whether emergency or routine, provide there is little or no change in the visual appearance. Minor modifications are those modifications, including the addition of antennas, to conforming wireless and attached wireless communications facilities that meet the performance standards set forth in this document.

B.

Definitions. As used in this ordinance, the following terms shall have the meanings set forth below:

1. Antenna means any exterior transmitting or receiving device used in communications to radiate or capture electromagnetic waves, digital signals, analog signals, radio frequencies, wireless telecommunications signals or other communication signals.

2. FAA means the Federal Aviation Administration.
3. FCC means the Federal Communications Commission.
4. Height means, when referring to a tower or other structure, the distance measured from the finished grade of the parcel to the highest point on the tower or other structure, including the base pad.
5. Preexisting towers and preexisting antennas means any tower or antenna which lawfully existed on the effective date of this ordinance, including permitted towers or antennas that have not yet been constructed so long as such approval is current and not expired.
6. Tower means any structure more than twenty (20) feet tall that is designed and constructed primarily for the purpose of supporting one or more antennas for telephone, radio and similar communication purposes, including self-supporting lattice towers, guyed towers, or monopole towers. The term includes radio and television transmission towers, microwave towers, common-carrier towers, cellular telephone towers and the like. The term includes the structure and any support thereto.

C.

General Requirements for Antennas and Towers:

1. Principal or Accessory Use. Towers may be considered either principal or accessory uses. A different existing use on the same lot shall not preclude the installation of a tower on such lot.

This pole shall be considered a principal use.

2. Towers and antennas shall meet the following requirements:

(a)

Towers and antennas shall be designed to blend into the surrounding environment through the use of color, galvanizing, or camouflaging architectural treatment, except in instances where the color is dictated by federal or state authorities such as the Federal Aviation Administration.

This pole will be designed to blend through galvanizing materials.

(b)

Communication towers if located within an R District or if located within 300 feet of an R District boundary line shall be of a monopole design, unless the Board of Adjustment determines by special exception that an alternative design would adequately blend into the surrounding environment, or that the required antennas cannot be supported by a

monopole.

This pole is designed as a monopole.

(c)

If an antenna is installed on a structure other than a tower, the antenna mechanical equipment must be of a color that is identical to, or closely compatible with, the color of the supporting structure so as to make the antenna and related equipment as visually unobtrusive as possible.

This section is not applicable.

3.

Not Essential Services. Towers and antennas shall be regulated and permitted pursuant to this ordinance and shall not be regulated or permitted as essential services, public utilities, or private utilities.

Understood.

4.

Tower Lighting. Towers shall not be illuminated by artificial means and shall not display strobe lights unless such lighting is specifically required by the Federal Aviation Administration or other federal or state authority for a particular tower. When incorporated into the approved design of the tower, light fixtures used to illuminate ball fields, parking lots, or similar areas may be attached to the tower.

This tower is not proposed to be lit.

5.

Signs and Advertising. The use of any portion of a tower for signs other than warning or equipment information signs is prohibited.

No signs or advertising are proposed.

6.

Accessory Utility Buildings. All utility buildings and structures accessory to a tower shall meet all the requirements of the underlying zoning district. Exterior ground mounted equipment occupying more than 50 square feet shall be screened from view from property within 150 feet used for residential purposes.

No equipment shelter is proposed. The ground equipment will be contained within cabinets. Natural vegetation and prior existing trees will provide screening to the west.

7.

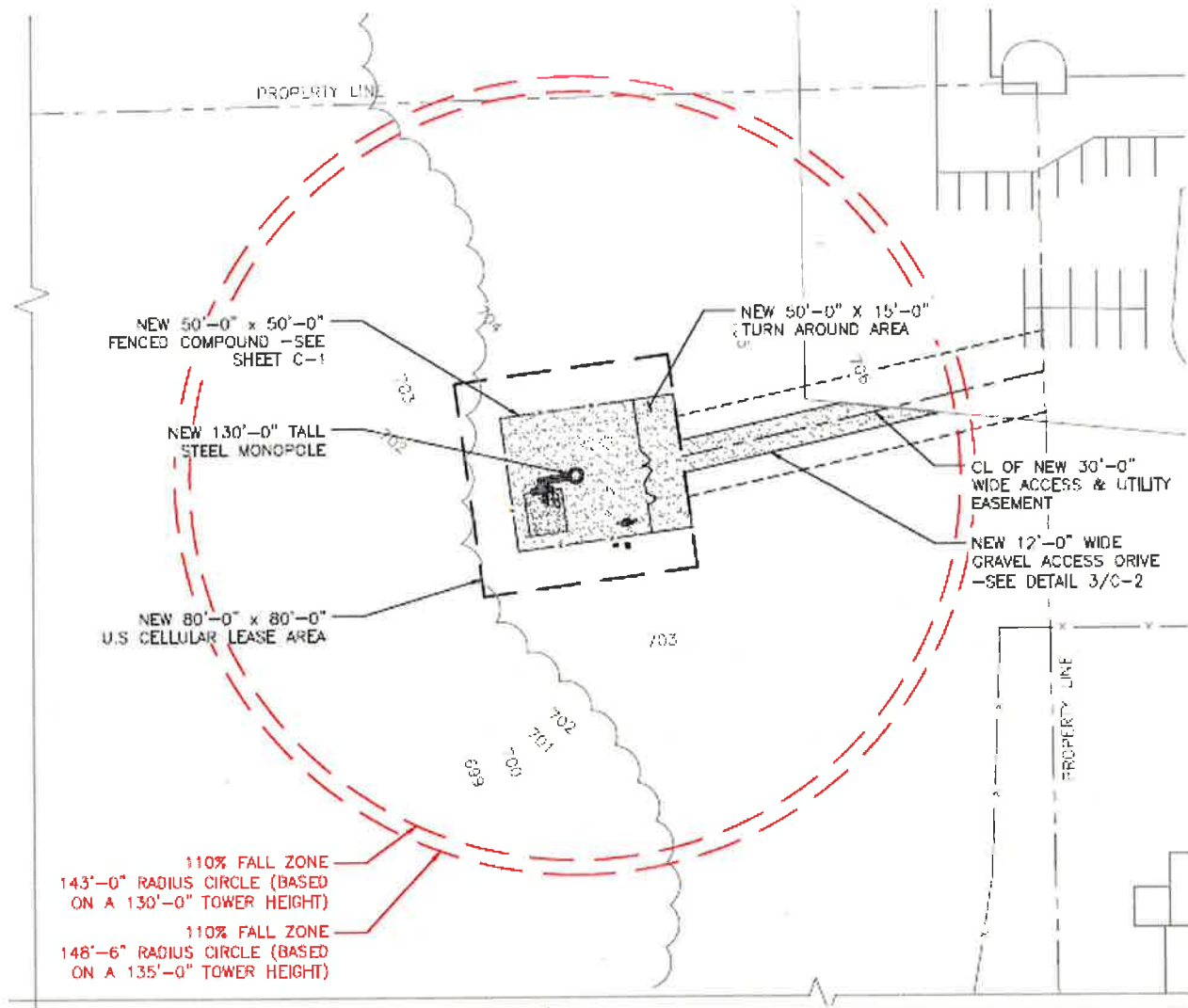
The following setback requirements shall apply to all towers; provided,

however, that the Board of Adjustment may modify the requirements by special exception;

(a)

Towers must be set back a distance equal to at least one hundred ten percent (110%) of the height of the tower from any adjoining lot line of a residential, office or agricultural zoned lot, excluding expressway rights-of-way zoned residential.

Please see the certified pole structural letter provided by the pole manufacturer. Please note that a couple foot exception may be necessary for the current placement. The church also owns the northern parcel that is depicted in this site plan excerpt right here:



(b)

Guys and accessory buildings must satisfy the minimum zoning district setback requirements.

No guy wires or accessory buildings are proposed.

8.

Security Fencing. Towers shall be enclosed by security fencing not less than six

(6) feet in height or shall be equipped with an appropriate anti-climbing device; provided, however, that the Board of Adjustment may modify or waive such requirements by special exception.

A six foot security fence with three strands of barbed wire is planned.

D.

Antennas and Towers Permitted by Administrative Approval. Antennas or towers, except those approved or requiring approval by the Board of Adjustment (Section 1204.3.E), shall be permitted by right, provided a permit is obtained from the County Building Inspector prior to construction and provided that the towers shall comply with the following standards.

Tulsa County is of the opinion that a BOA hearing is required per Section 310, Table 1.

1.

When located in C, I, or IR zoning districts, provided that towers shall be set back from an R District boundary line one-hundred ten percent (110%) of the height of the tower measured at grade. The setback may be modified by special exception by the Board of Adjustment pursuant to Section 1680 of this code; or

This Section is not applicable.

2.

When antennas are to be attached to a roof or wall of buildings in commercial or industrial zones, or to office or multi-family buildings of two or more stories, or to institutional buildings such as schools, churches and hospitals with existing architectural elements more than thirty-five (35) feet tall, provided that:

This Section is not applicable.

(a)

An antenna does not extend more than twenty (20) feet above the highest point of the building, or, if located on an architectural feature such as a steeple or bell tower, does not protrude above that structure; provided,

however, that the Board of Adjustment may modify such requirements by special exception; and

(b)

The antennas comply with all applicable FCC and FAA regulations; and

(c)

The antennas comply with all applicable building codes.

3.

When antennas are to be attached to an existing tower, or other structure not mentioned in 1204.3.D.2. neither of which is located in a residentially-zoned district.

This Section is not applicable.

4.

When the tower is to be modified or reconstructed to accommodate the collocation of antennas; and

This Section is not applicable.

(a)

The tower is of the same type as the existing tower or is to be constructed as a monopole; and

(b)

The modification or reconstruction does not exceed thirty (30) feet over the height of the existing tower and all requirements of Section 1204.C. are met.

E.

Antenna and Towers Requiring Special Exceptions. If a tower or antenna is not permitted pursuant to Section 1204.3.D. of this chapter, a special exception shall be required for the construction of a tower in all zoning districts.

Per Tulsa County, a special exception is required.

1.

Factors to be considered in granting a special exception. In addition to any other requirements of this section, the following factors shall be considered in the determination to grant or deny a special exception for an antenna or tower:

(a)

Height of the proposed tower,

The pole will be 130' tall. This height is necessary for coverage of the populated area of Turley.

(b)

Proximity of the tower to residential structures, residential district boundaries and existing towers;

The nearest existing tower was evaluated and found to be insufficient for the coverage objectives of the commercial area. The nearest tower is .58 miles to the SE near Fire Station Number 19.

The proposal is east of a treed area. Mature trees intervene between the nearest unaffiliated home and the project location. The nearest home that is not on a church parcel is approximately 415' to the west of the project location. The nearest home located on church parcels is approximately 240' to the southeast.

The proposal is in a setting that is occupied by other tall structures, namely overhead utility lines.

(c)

Nature of uses on adjacent and nearby properties;

The church is an adjacent use. The church is the landlord. The church owns an adjacent parcel. The other adjacent uses are vacant woods and an affiliated residence.

(d)

Surrounding topography,

The topography is basically flat.

(e)

Surrounding tree coverage and foliage;

There is natural screening in the area, namely a wooded area to the west.

(f)

Design of the tower, with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness;

(g)

The total number and size of antennas proposed and the ability of the proposed tower to accommodate collocation;

Please see the submitted construction drawings. The tower will be equipped for co-location. The antennas will be located on a mount on the pole.

(h)

Architectural design of utility buildings and accessory structures to blend with the surrounding environment;

Equipment cabinets will be utilized. The cabinets are approximately 4 feet tall.

(i)

Proposed ingress and egress;

The pole will be accessed from the church parking lot.

(j)

The need of the applicant for a communications tower within the immediate geographic area to provide an acceptable level of communications service to the area;

US Cellular does not have a facility in Turley. The search parameters were designed to support coverage in the dense locations in Turley where service upgrades are necessary. The project was placed near the commercial areas to provide antennas in those directions.

(k)

The size of the tract and the most likely future development as indicated by the Comprehensive Plan, planned infrastructure, topography and other physical facts;

(l)

Landscaping.

The determination of the need for landscaping is pending. US Cellular is willing to landscape as advised.

2.

Collocation. Collocation of facilities should be encouraged wherever practical by allowing reasonable extra height or tower diameter necessary to support multiple antennas.

The pole is proposed at a height that will support collocation options.

3.

The findings of the Board of Adjustment as to each of these factors shall be made on the record and contained in the written minutes of the meeting.

County

12-9

05/05/08

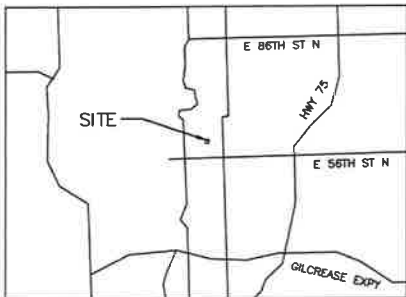
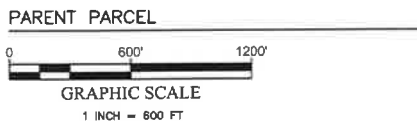
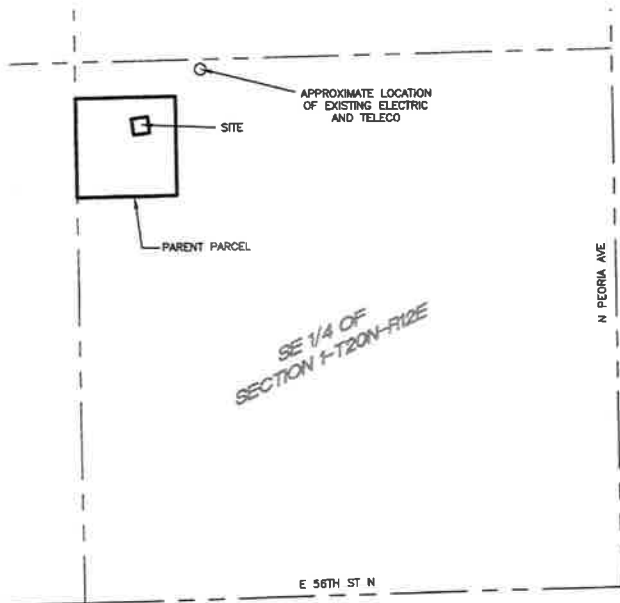
F.

Existing Towers and Antennas. Antennas and towers lawfully existing at the time this ordinance is adopted shall be allowed to continue their usage as they presently exist. Routine maintenance, including antenna replacement, shall be permitted on such existing towers. New construction other than routine maintenance shall require compliance with the requirements of this ordinance.

1204.4

Off-Street Parking and Loading Requirements:

None.



VICINITY MAP
(NOT TO SCALE)

DESCRIPTION OF PARENT PARCEL

THE SOUTH 487 FEET OF THE WEST 497 FEET OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE SECTION 1 TOWNSHIP 20 NORTH RANGE 12 EAST, DAWSON TOWNSHIP, TULSA COUNTY, STATE OF OKLAHOMA.

(PER WARRANTY DEED RECORDED IN THE TULSA COUNTY RECORDER'S OFFICE, BOOK 2690, PAGE 411)

SCHEDULE "B" - SECTION II ITEMS:

FILE NO.: USC-1347508-C

EFFECTIVE DATE: DECEMBER 10, 2018

5. RIGHT OF WAY EASEMENT BETWEEN THOMAS O. BRANNON AND ELSIE HALBERT BRANNON AND PUBLIC SERVICE COMPANY OF OKLAHOMA, AN OKLAHOMA CORPORATION, DATED JANUARY 19, 1956 RECORDED JANUARY 23, 1956, IN BOOK 2651 PAGE 283, IN TULSA COUNTY, OKLAHOMA.

AS AFFECTED BY DELINEATION AND AMENDMENT OF EASEMENT WITH RESTRICTIVE COVENANT BETWEEN THE TURLEY METHODIST CHURCH, INCORPORATED AND PUBLIC SERVICE COMPANY OF OKLAHOMA, AN OKLAHOMA CORPORATION, A UNIT OF AMERICAN ELECTRIC POWER, DATED FEBRUARY 1, 2008 RECORDED APRIL 28, 2008, AS INSTRUMENT NO. 2008043493, IN TULSA COUNTY, OKLAHOMA--DOES NOT AFFECT.

7. SANITARY SEWER CONNECTION CONTRACT BETWEEN CITY OF TULSA, OKLAHOMA AND THE TURLEY METHODIST CHURCH, INC., A CORPORATION, DATED SEPTEMBER 21, 1962 RECORDED OCTOBER 4, 1962, IN BOOK 3280 PAGE 61, IN TULSA COUNTY, OKLAHOMA--BLANKET EASEMENT, SUBJECT TO.

8. AS AFFECTED BY DELINEATION AND AMENDMENT OF EASEMENT WITH RESTRICTIVE COVENANT BETWEEN THE TURLEY METHODIST CHURCH, INCORPORATED AND PUBLIC SERVICE COMPANY OF OKLAHOMA, AN OKLAHOMA CORPORATION, A UNIT OF AMERICAN ELECTRIC POWER, DATED FEBRUARY 1, 2008 RECORDED APRIL 28, 2008, AS INSTRUMENT NO. 2008043493, IN TULSA COUNTY, OKLAHOMA--DOES NOT AFFECT.

BASED ON THE COMMITMENT PROVIDED, NO OTHER EASEMENTS APPEAR TO AFFECT THIS SITE.

SITE BENCHMARK

- BENCHMARK 1 - TOP OF 5/8-INCH CAPPED IRON ROD SET AT SOUTHWEST CORNER OF PROPOSED TOWER LEASE SITE. ELEVATION = 702.76' (NAVD 88)
- BENCHMARK 2 - TOP OF 5/8-INCH CAPPED IRON ROD SET, WHICH BEARS N66°13'55"E, 166.75 FEET FROM BENCHMARK 1. ELEVATION = 702.76' (NAVD 88)

GENERAL NOTES

- 1) THE PROPOSED TOWER LEASE SITE SHOWN HEREON LIES WITHIN UNSHADED ZONE X, DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, ACCORDING TO FEMA FIRM PANEL MAP NUMBER 40143C0226L, EFFECTIVE DATE: 10/16/2012.
- 2) BEARINGS SHOWN HEREON ARE GRID, BASED ON THE OKLAHOMA STATE PLANE COORDINATE SYSTEM, NAD 83, NORTH ZONE.
- 3) ALL DISTANCES SHOWN HEREON ARE GRID DISTANCES, U.S. SURVEY FEET. SURFACE DISTANCES CAN BE CALCULATED BY APPLYING A SCALE FACTOR OF 1.00008229178596.
- 4) ELEVATIONS SHOWN HEREON ARE NAVD 88, GEOID 12B, U.S. SURVEY FEET.
- 5) SURVEYOR ADDRESSED ONLY THOSE ITEMS LISTED IN FIDELITY NATIONAL TITLE INSURANCE COMPANY'S COMMITMENT FOR TITLE INSURANCE, NO. USC-1347508-C, EFFECTIVE DATE DECEMBER 10, 2018. NO FURTHER RESEARCH WAS PERFORMED BY SURVEYOR.
- 6) PARENT PARCEL(S) BOUNDARY LINES AND/OR SECTION LINES SHOWN ON THESE DRAWINGS ARE CALCULATED FROM RECORD DOCUMENTS AND MONUMENTS NOTED HEREON, AND DO NOT REPRESENT A FULL SEPARATE BOUNDARY SURVEY FROM THE LEASE TRACT BOUNDARY SURVEY.
- 7) THIS DRAWING IS NOT INTENDED FOR USE AS A CONSTRUCTION DOCUMENT.

UTILITY NOTE

THIS EXHIBIT MAY NOT REFLECT ANY UNDERGROUND UTILITIES, EASEMENTS OF RECORD OR OTHER ENCUMBRANCES THAT AFFECT THE SUBJECT AREA. NO UNDERGROUND UTILITY LOCATION SERVICES OR RECORDS RESEARCH WAS PROVIDED BY SAM. IT IS THE CLIENT'S/CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES AND PROTECT SAID UTILITIES FROM DAMAGE, ALWAYS CALL 811 OR 1(800)522-OKIE PRIOR TO EXCAVATING.

TOWER INFORMATION

TOWER TYPE: MONOPOLE
HEIGHT: 130'



Jason Sullivan 2/13/19

JASON SULLIVAN
#1791
SURVEYING AND MAPPING, LLC

THIS SURVEY EXHIBIT MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ESTABLISHED BY THE OKLAHOMA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS

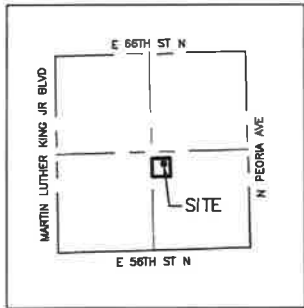


7101 Envoy Court
Dallas, TX 75247
Ofc: 214.631.7888
Fax: 214.631.7103
email: info@sam.biz
Texas Firm Registration No. 10064300
OK COA #4216, EXP DATE: 6/19/2019

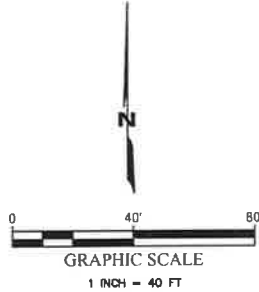
| REV | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | |
|------------------------------|---|
| SITE NAME | TURLEY |
| SITE VISIT DATE: | 1/22/2019 |
| SITE NUMBER: | 222712 |
| SITE ADDRESS | 6050 N. JOHNSTOWN AVE. TULSA, OK 74126 |
| SHEET NAME | |
| SITE EXHIBIT AND DESCRIPTION | |
| SHEET NUMBER | |

5.22

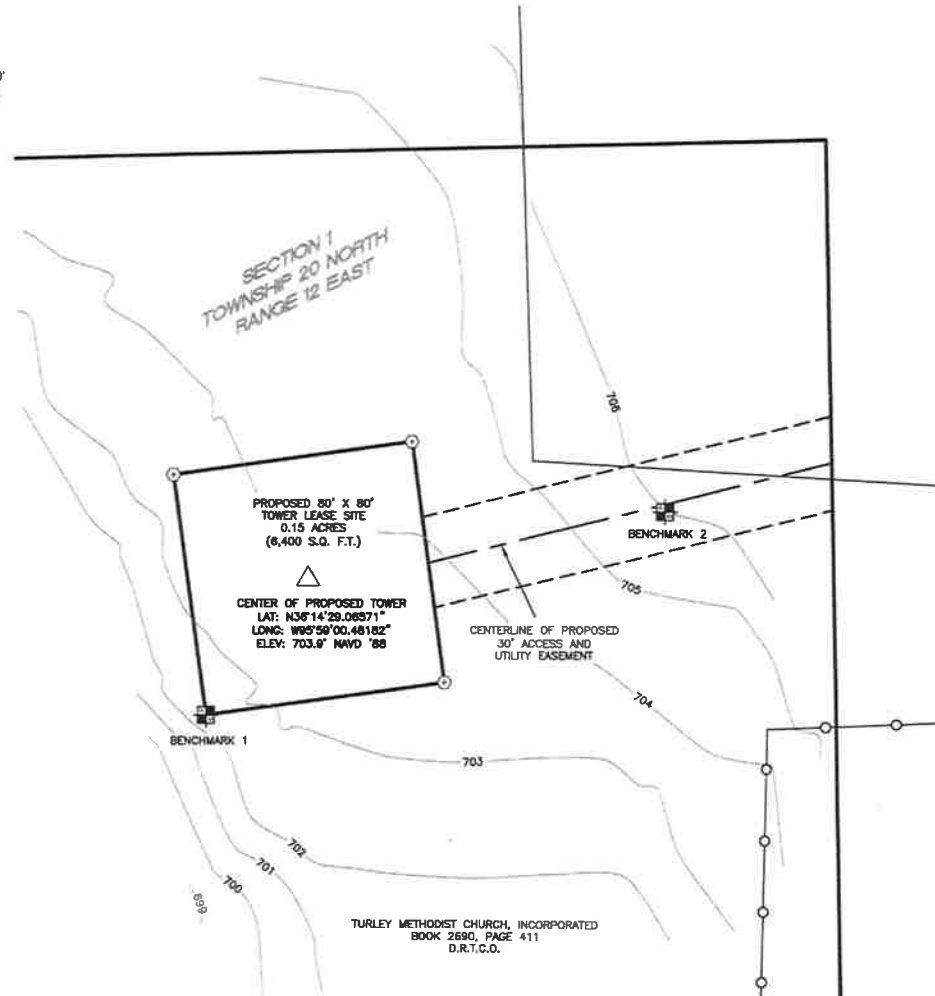


VICINITY MAP
SECTION 1
(NOT TO SCALE)



SITE SURVEY

SECTION 1
TOWNSHIP 20 NORTH
RANGE 12 EAST



TOPOGRAPHIC SURVEY CERTIFICATION

I, JASON SULLIVAN, CERTIFY THAT THIS PROJECT WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION; THAT THIS GROUND SURVEY WAS PERFORMED AT THE 95 PERCENT CONFIDENCE LEVEL TO MEET THE FEDERAL GEOGRAPHIC DATA COMMITTEE STANDARDS; THAT THIS SURVEY WAS PERFORMED TO MEET THE SPECIFICATIONS FOR TOPOGRAPHIC AND PLANIMETRIC MAPPING CONTAINED IN THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS. THE ORIGINAL DATA WAS OBTAINED ON 12/19/2018; THAT THE SURVEY WAS COMPLETED ON 1/22/2019; AND ALL COORDINATES ARE BASED ON THE OKLAHOMA STATE PLANE COORDINATE SYSTEM, NAD 83, NORTH ZONE AND ALL ELEVATIONS ARE BASED ON NAVD 88.

LEGEND

- D.R.T.C.O. DEED RECORDS, TULSA COUNTY, OKLAHOMA
- SITE BENCHMARK
- 5/8" IRON ROD WITH CAP STAMPED "SAM" SET
- CHAIN LINK FENCE
- SECTION LINE
- 1/4 SECTION LINE
- SUBJECT PROPERTY LINE
- PROPERTY LINE
- CONCRETE



7101 Ervay Court
Dallas, TX 75247
Ofc: 214.831.7088
Fax: 214.831.7103
email: info@sam.biz
Texas Firm Registration No. 10064300
OK COA #4216, EXP DATE: 6/19/2019

| REV | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
| | | | |
| | | | |
| | | | |
| | | | |

| | |
|------------------|---|
| SITE NAME | TURLEY |
| SITE VISIT DATE: | 1/22/2019 |
| SITE NUMBER: | 222712 |
| SITE ADDRESS | 6050 N. JOHNSTOWN AVE. TULSA, OK 74126 |
| SHEET NAME | SITE EXHIBIT AND DESCRIPTION |
| SHEET NUMBER | 2 OF 4 |

5.23



LETS
LETS America, Inc.



7101 Envoy Court
Dallas, TX 75247
Office: 214.631.7888
Fax: 214.631.7103
email: info@sam.biz
Texas Firm Registration No. 10064300
OK COA #4216, EXP DATE: 6/19/2019

| REV | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

SITE NAME
TURLEY

SITE VISIT DATE:
1/22/2019

SITE NUMBER:
222712

SITE ADDRESS
6050 N. JOHNSTOWN AVE.
TULSA, OK 74126

SHEET NAME
SITE EXHIBIT AND DESCRIPTION

SHEET NUMBER
4 OF 4

PROPOSED TOWER LEASE SITE DESCRIPTION:

BEING A TRACT OF LAND SITUATED IN THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 1, TOWNSHIP 20 NORTH, RANGE 12 EAST OF THE INDIAN MERIDIAN, TULSA COUNTY, OKLAHOMA AND BEING PART OF A TRACT OF LAND DESCRIBED IN DEED TO TURLEY METHODIST CHURCH, INCORPORATED, RECORDED IN BOOK 2690, PAGE 411 OF THE DEED RECORDS OF TULSA COUNTY, OKLAHOMA (D.R.T.C.O.), AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 5/8-INCH IRON ROD WITH CAP STAMPED "SAM" SET FOR CORNER, FROM WHICH A PK NAIL FOUND AT THE SOUTH 1/4 CORNER OF SAID SECTION 1 BEARS SOUTH 06 DEGREES 04 MINUTES 21 SECONDS WEST, A DISTANCE OF 2,305.38 FEET;

THENCE NORTH 07 DEGREES 48 MINUTES 39 SECONDS WEST, A DISTANCE OF 80.00 FEET TO A 5/8-INCH IRON ROD WITH CAP STAMPED "SAM" SET FOR CORNER;

THENCE NORTH 82 DEGREES 11 MINUTES 21 SECONDS EAST, A DISTANCE OF 80.00 FEET TO A 5/8-INCH IRON ROD WITH CAP STAMPED "SAM" SET FOR CORNER, FROM WHICH A 1/2-INCH IRON ROD FOUND AT THE NORTHEAST CORNER OF SAID SECTION 1 BEARS NORTH 36 DEGREES 57 MINUTES 54 SECONDS EAST, A DISTANCE OF 3,714.11 FEET;

THENCE SOUTH 07 DEGREES 48 MINUTES 39 SECONDS EAST, A DISTANCE OF 80.00 FEET TO A 5/8-INCH IRON ROD WITH CAP STAMPED "SAM" SET FOR CORNER;

THENCE SOUTH 82 DEGREES 11 MINUTES 21 SECONDS WEST, A DISTANCE OF 80.00 FEET, BACK TO THE POINT OF BEGINNING, CONTAINING 6,400 SQUARE FEET, OR 0.15 OF AN ACRE OF LAND, MORE OR LESS.

PROPOSED ACCESS AND UTILITY EASEMENT DESCRIPTION:

BEING A 30' WIDE STRIP OF LAND SITUATED IN THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 1, TOWNSHIP 20 NORTH, RANGE 12 EAST OF THE INDIAN MERIDIAN, TULSA COUNTY, OKLAHOMA AND BEING PART OF A TRACT OF LAND DESCRIBED IN DEED TO TURLEY METHODIST CHURCH, INCORPORATED, RECORDED IN BOOK 2690, PAGE 411 OF THE DEED RECORDS OF TULSA COUNTY, OKLAHOMA (D.R.T.C.O.), AND BEING 15 FEET EACH SIDE OF A CENTERLINE MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE EAST LINE OF A 80' X 80' PROPOSED TOWER LEASE SITE, FROM WHICH A 1/2-INCH IRON ROD FOUND AT THE NORTHEAST CORNER OF SAID SECTION 1 BEARS NORTH 36 DEGREES 32 MINUTES 01 SECONDS EAST, A DISTANCE OF 3,742.61 FEET.

THENCE NORTH 76 DEGREES 19 MINUTES 57 SECONDS EAST, A DISTANCE OF 138.03 FEET TO THE EAST LINE OF SAID TURLEY TRACT TO AND FOR THE POINT OF TERMINATION, FROM WHICH A PK NAIL FOUND AT THE SOUTH 1/4 CORNER OF SAID SECTION 1 BEARS SOUTH 10 DEGREES 46 MINUTES 08 SECONDS WEST, A DISTANCE OF 2,418.15 FEET.

5.25



NEW SITE BUILD
TURLEY
222712

6050 N. JOHNSTOWN AVE.
TULSA, OK 74126
130'-0" - MONOPOLE



| REVISIONS | | | |
|-----------|----------|------------------|-----|
| REV. | DATE | ISSUED FOR | INT |
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SNN |
| D | 08/18/19 | CONSTRUCTION SET | SGM |
| Δ | 10/16/19 | CLIENT COMMENTS | SGM |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA

222712
TURLEY
6050 N. JOHNSTOWN AVE.
TULSA, OK 74126
TULSA COUNTY COUNTY

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

VICINITY MAP



LOCATION MAP



PROJECT INFORMATION

PROPERTY OWNER INFORMATION:
TURLEY UNITED METHODIST CHURCH
6050 N JOHNSTOWN AVE
TULSA, OK 74126
PHONE: (918) 605-4131

TA INFORMATION:
TOWER BASE
LAT: 35° 14' 29.06571" (35.241407°)
LONG: 95° 59' 00.48182" (-95.983467°)
GROUND ELEVATION (NAVD 88): 703.9'

TOWER OWNER:
U.S. CELLULAR
3545 N 124TH STREET
BROOKFIELD, WI 53005
RANDY MATTSO/W PROJECT MANAGER
PHONE: (318) 325-4666

PARCEL NUMBER:
90201-02-01-30620

ZONING JURISDICTION:
TULSA, OKLAHOMA

APPLICANT
DAN HOOVER/PROJECT DIRECTOR
PHONE: (318) 348-2297
CHRISH PATTERSON/PROJECT MANAGER
PHONE: (318) 355-8083
BRADY STANFORD/CONSTRUCTION MANAGER
PHONE: (509) 339-3655

SITE ACQUISITION:
FAULK & FOSTER
1811 ALBURN AVE.
MONROE, LA 71201
RALPH THOMAS
PHONE: (318) 325-4666

A/E FIRM:
LETS AMERICA, INC.
112 S KYRNE RD, STE 1
CHANDLER, AZ 85226
PHONE: (480) 961-9151
E-MAIL: INFO@LETSINC.COM

SURVEYOR
SAM, LLC
7101 ENVY COURT
DALLAS, TX 75247
PHONE: (214) 631-7888
EMAIL: INFO@SAM.BIZ

SCOPE OF WORK

- INSTALL (2) NEW U.S. CELLULAR PANEL ANTENNAS
MODEL: DENGYO OCTB-2LX2HX-BW65
Ø 120'-0" RAD CENTER
- INSTALL (1) NEW U.S. CELLULAR PANEL ANTENNA
MODEL: DENGYO OCTB-2LX2HX-BW45
Ø 120'-0" RAD CENTER
- INSTALL (3) NEW U.S. CELLULAR RRHS
MODEL: AIRSCALE DUAL BAND RRH AHLOA (B12/B71)
- INSTALL (2) NEW U.S. CELLULAR RAYCAP SPD
MODEL: RUSDC-5267-PF-48
- INSTALL (1) NEW U.S. CELLULAR 1-1/4" HYBRID CABLE

APPLICABLE CODES

- ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES, NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.
- 2015 INTERNATIONAL BUILDING CODE
 - 2015 INTERNATIONAL EXISTING BUILDING CODE
 - 2015 INTERNATIONAL FIRE CODE
 - 2015 INTERNATIONAL FUEL GAS CODE
 - 2015 INTERNATIONAL MECHANICAL CODE
 - 2015 INTERNATIONAL PLUMBING CODE
 - 2015 INTERNATIONAL RESIDENTIAL CODE
 - 2014 NATIONAL ELECTRICAL CODE

SHEET INDEX

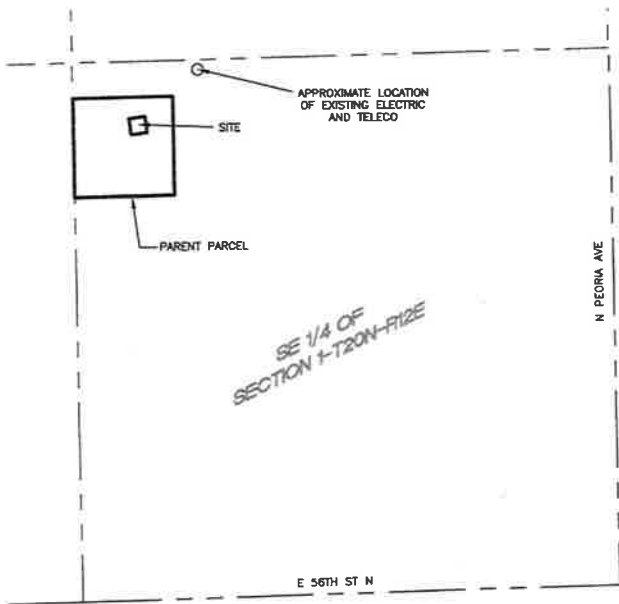
| SHEET NUMBER | TITLE SHEET | REV | ENGINEER |
|--------------|---|-----|----------|
| T-1 | TITLE SHEET | Δ | MKK |
| 2-5 | SURVEY* | Δ | JS |
| SP-1 | SPECIFICATIONS | Δ | MKK |
| SP-2 | SPECIFICATIONS | Δ | MKK |
| A-1 | OVERALL SITE PLAN | Δ | MKK |
| A-1.1 | FALL ZONE AREA | Δ | MKK |
| A-2 | COMPOUND PLAN & SITE PHOTOS | Δ | MKK |
| A-3 | GRADING PLAN | Δ | MKK |
| A-4 | SITE ELEVATION & ANTENNA PLAN | Δ | MKK |
| A-5 | EQUIPMENT PLAN & CABINET DETAILS | Δ | MKK |
| A-6 | NEW ANTENNA, RADIOS & CABLE CONFIGURATION | Δ | MKK |
| A-7 | EQUIPMENT DETAILS | Δ | MKK |
| A-8 | ICE BRIDGE AND MOUNTING DETAILS | Δ | MKK |
| A-9 | PLATFORM & RING MOUNT DETAILS | Δ | MKK |
| A-10 | CABLE INFORMATION & DETAIL | Δ | MKK |
| A-11 | CABLE COLOR CODING & ROUTING PLAN | Δ | MKK |
| A-12 | PLUMBING DIAGRAM | Δ | MKK |
| C-1 | FENCE DETAILS | Δ | MKK |
| C-2 | CONSTRUCTION DETAILS | Δ | MKK |
| G-1 | GROUNDING PLAN | Δ | MKK |
| G-2 | GROUNDING DETAILS | Δ | MKK |
| G-3 | GROUNDING DETAILS | Δ | MKK |
| G-4 | GROUNDING DETAILS | Δ | MKK |
| G-5 | GROUNDING NOTES | Δ | MKK |
| E-1 | ELECTRICAL LINE DIAGRAM & NOTES | Δ | MKK |
| E-2 | UTILITY RACK DETAILS | Δ | MKK |
| E-3 | UNDERGROUND UTILITIES DETAILS | Δ | MKK |

* COMPLETED BY OTHERS

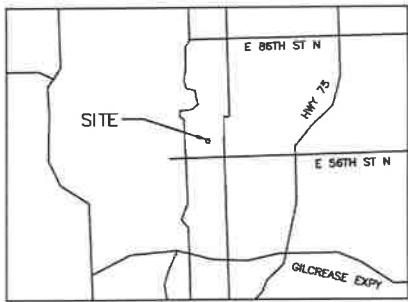
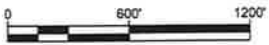
CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS/CONDITIONS ON SITE. IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY WORK OR BE RESPONSIBLE FOR THE SAME.



S.26



PARENT PARCEL



VICINITY MAP

(NOT TO SCALE)

DESCRIPTION OF PARENT PARCEL

THE SOUTH 487 FEET OF THE WEST 497 FEET OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE SECTION 1 TOWNSHIP 20 NORTH RANGE 12 EAST, DAMSON TOWNSHIP, TULSA COUNTY, STATE OF OKLAHOMA.
 (PER WARRANTY DEED RECORDED IN THE TULSA COUNTY RECORDER'S OFFICE, BOOK 2690, PAGE 411)

SCHEDULE "B" - SECTION II ITEMS:

FILE NO.: USC-1347508-C
 EFFECTIVE DATE: DECEMBER 10, 2018

6. RIGHT OF WAY EASEMENT BETWEEN THOMAS O. BRANNON AND ELSIE HALBERT BRANNON AND PUBLIC SERVICE COMPANY OF OKLAHOMA, AN OKLAHOMA CORPORATION, DATED JANUARY 19, 1956 RECORDED JANUARY 23, 1956, IN BOOK 2651 PAGE 283, IN TULSA COUNTY, OKLAHOMA.



 AS AFFECTED BY DELINEATION AND AMENDMENT OF EASEMENT WITH RESTRICTIVE COVENANT BETWEEN THE TURLEY METHODIST CHURCH, INCORPORATED AND PUBLIC SERVICE COMPANY OF OKLAHOMA, AN OKLAHOMA CORPORATION, A UNIT OF AMERICAN ELECTRIC POWER, DATED FEBRUARY 1, 2008 RECORDED APRIL 28, 2008, AS INSTRUMENT NO. 2008043493, IN TULSA COUNTY, OKLAHOMA--DOES NOT AFFECT.

7. SANITARY SEWER CONNECTION CONTRACT BETWEEN CITY OF TULSA, OKLAHOMA AND THE TURLEY METHODIST CHURCH, INC., A CORPORATION, DATED SEPTEMBER 21, 1962 RECORDED OCTOBER 4, 1962, IN BOOK 3280 PAGE 61, IN TULSA COUNTY, OKLAHOMA--BLANKET EASEMENT, SUBJECT TO.

8. AS AFFECTED BY DELINEATION AND AMENDMENT OF EASEMENT WITH RESTRICTIVE COVENANT BETWEEN THE TURLEY METHODIST CHURCH, INCORPORATED AND PUBLIC SERVICE COMPANY OF OKLAHOMA, AN OKLAHOMA CORPORATION, A UNIT OF AMERICAN ELECTRIC POWER, DATED FEBRUARY 1, 2008 RECORDED APRIL 28, 2008, AS INSTRUMENT NO. 2008043493, IN TULSA COUNTY, OKLAHOMA--DOES NOT AFFECT.

BASED ON THE COMMITMENT PROVIDED, NO OTHER EASEMENTS APPEAR TO AFFECT THIS SITE.

SITE BENCHMARK

-  BENCHMARK 1 - TOP OF 5/8-INCH CAPPED IRON ROD SET AT SOUTHWEST CORNER OF PROPOSED TOWER LEASE SITE. ELEVATION = 702.76' (NAVD 88)
-  BENCHMARK 2 - TOP OF 5/8-INCH CAPPED IRON ROD SET, WHICH BEARS N66°13'55"E, 166.75 FEET FROM BENCHMARK 1. ELEVATION = 702.76' (NAVD 88)

GENERAL NOTES

- 1) THE PROPOSED TOWER LEASE SITE SHOWN HEREON LIES WITHIN UNSHADED ZONE X, DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, ACCORDING TO FEMA FIRM PANEL MAP NUMBER 40143C0226L, EFFECTIVE DATE: 10/16/2012.
- 2) BEARINGS SHOWN HEREON ARE GRID, BASED ON THE OKLAHOMA STATE PLANE COORDINATE SYSTEM, NAD 83, NORTH ZONE.
- 3) ALL DISTANCES SHOWN HEREON ARE GRID DISTANCES, U.S. SURVEY FEET. SURFACE DISTANCES CAN BE CALCULATED BY APPLYING A SCALE FACTOR OF 1.00008229178596.
- 4) ELEVATIONS SHOWN HEREON ARE NAVD 88, GEOID 12B, U.S. SURVEY FEET.
- 5) SURVEYOR ADDRESSED ONLY THOSE ITEMS LISTED IN FIDELITY NATIONAL TITLE INSURANCE COMPANY'S COMMITMENT FOR TITLE INSURANCE, NO. USC-1347508-C, EFFECTIVE DATE DECEMBER 10, 2018. NO FURTHER RESEARCH WAS PERFORMED BY SURVEYOR.
- 6) PARENT PARCEL(S) BOUNDARY LINES AND/OR SECTION LINES SHOWN ON THESE DRAWINGS ARE CALCULATED FROM RECORD DOCUMENTS AND MONUMENTS NOTED HEREON, AND DO NOT REPRESENT A FULL SEPARATE BOUNDARY SURVEY FROM THE LEASE TRACT BOUNDARY SURVEY.
- 7) THIS DRAWING IS NOT INTENDED FOR USE AS A CONSTRUCTION DOCUMENT.

UTILITY NOTE

THIS EXHIBIT MAY NOT REFLECT ANY UNDERGROUND UTILITIES, EASEMENTS OF RECORD OR OTHER ENCUMBRANCES THAT AFFECT THE SUBJECT AREA. NO UNDERGROUND UTILITY LOCATION SERVICES OR RECORDS RESEARCH WAS PROVIDED BY SAM. IT IS THE CLIENT'S/CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES AND PROTECT SAID UTILITIES FROM DAMAGE. ALWAYS CALL 811 OR 1(800)522-OKIE PRIOR TO EXCAVATING.

TOWER INFORMATION

TOWER TYPE: MONOPOLE
 HEIGHT: 130'



Jason Sullivan 2/13/19

JASON SULLIVAN
 RES #1791
 SURVEYING AND MAPPING, LLC

THIS SURVEY EXHIBIT MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ESTABLISHED BY THE OKLAHOMA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS

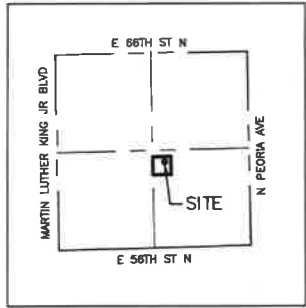


7101 Emvay Court
 Dallas, TX 75247
 Ofc: 214.631.7888
 Fax: 214.631.7103
 email: info@sam.biz
 Texas Firm Registration No. 10064300
 OK COA #4216, EXP DATE: 6/19/2019

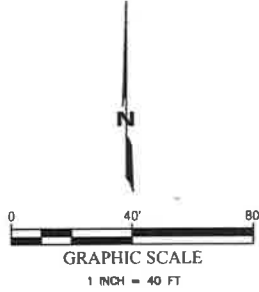
| REV | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | |
|------------------------------|---|
| SITE NAME | TURLEY |
| SITE VISIT DATE: | 1/22/2019 |
| SITE NUMBER: | 222712 |
| SITE ADDRESS | 6050 N. JOHNSTOWN AVE. TULSA, OK 74126 |
| SHEET NAME | |
| SITE EXHIBIT AND DESCRIPTION | |
| SHEET NUMBER | 1 OF 4 |

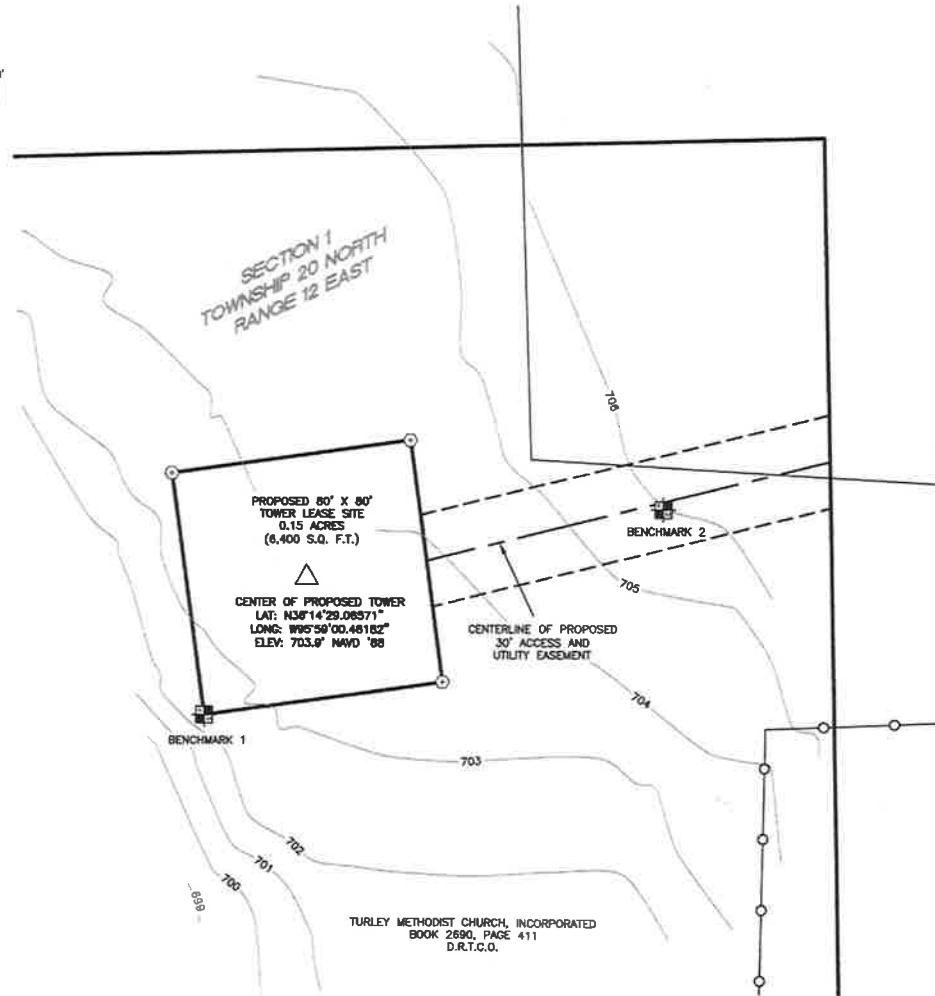
5.27



VICINITY MAP
SECTION 1
(NOT TO SCALE)



SITE SURVEY



TOPOGRAPHIC SURVEY CERTIFICATION

I, JASON SULLMAN, CERTIFY THAT THIS PROJECT WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION; THAT THIS GROUND SURVEY WAS PERFORMED AT THE 95 PERCENT CONFIDENCE LEVEL TO MEET THE FEDERAL GEOGRAPHIC DATA COMMITTEE STANDARDS; THAT THIS SURVEY WAS PERFORMED TO MEET THE SPECIFICATIONS FOR TOPOGRAPHIC AND PLANIMETRIC MAPPING CONTAINED IN THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS. THE ORIGINAL DATA WAS OBTAINED ON 12/19/2018; THAT THE SURVEY WAS COMPLETED ON 1/22/2019; AND ALL COORDINATES ARE BASED ON THE OKLAHOMA STATE PLANE COORDINATE SYSTEM, NAD 83, NORTH ZONE AND ALL ELEVATIONS ARE BASED ON NAVD 88.

LEGEND

- D.R.T.C.O. DEED RECORDS, TULSA COUNTY, OKLAHOMA
- SITE BENCHMARK
- 5/8" IRON ROD WITH CAP STAMPED "SAM" SET
- CHAIN LINK FENCE
- SECTION LINE
- 1/4 SECTION LINE
- SUBJECT PROPERTY LINE
- PROPERTY LINE
- CONCRETE



LETS
LETS America, Inc.



7101 Envoy Court
Dallas, TX 75247
Ofc: 214.631.7068
Fax: 214.631.7103
email: info@sam.biz
Texas Firm Registration No. 10064300
OK COA #4216, EXP DATE: 6/19/2019

| REV | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | |
|------------------|---|
| SITE NAME | TURLEY |
| SITE VISIT DATE: | 1/22/2019 |
| SITE NUMBER: | 222712 |
| SITE ADDRESS | 6050 N. JOHNSTOWN AVE. TULSA, OK 74126 |
| SHEET NAME | SITE EXHIBIT AND DESCRIPTION |
| SHEET NUMBER | 2 OF 4 |

S. 28

LEASE SITE SURVEY & EASEMENTS



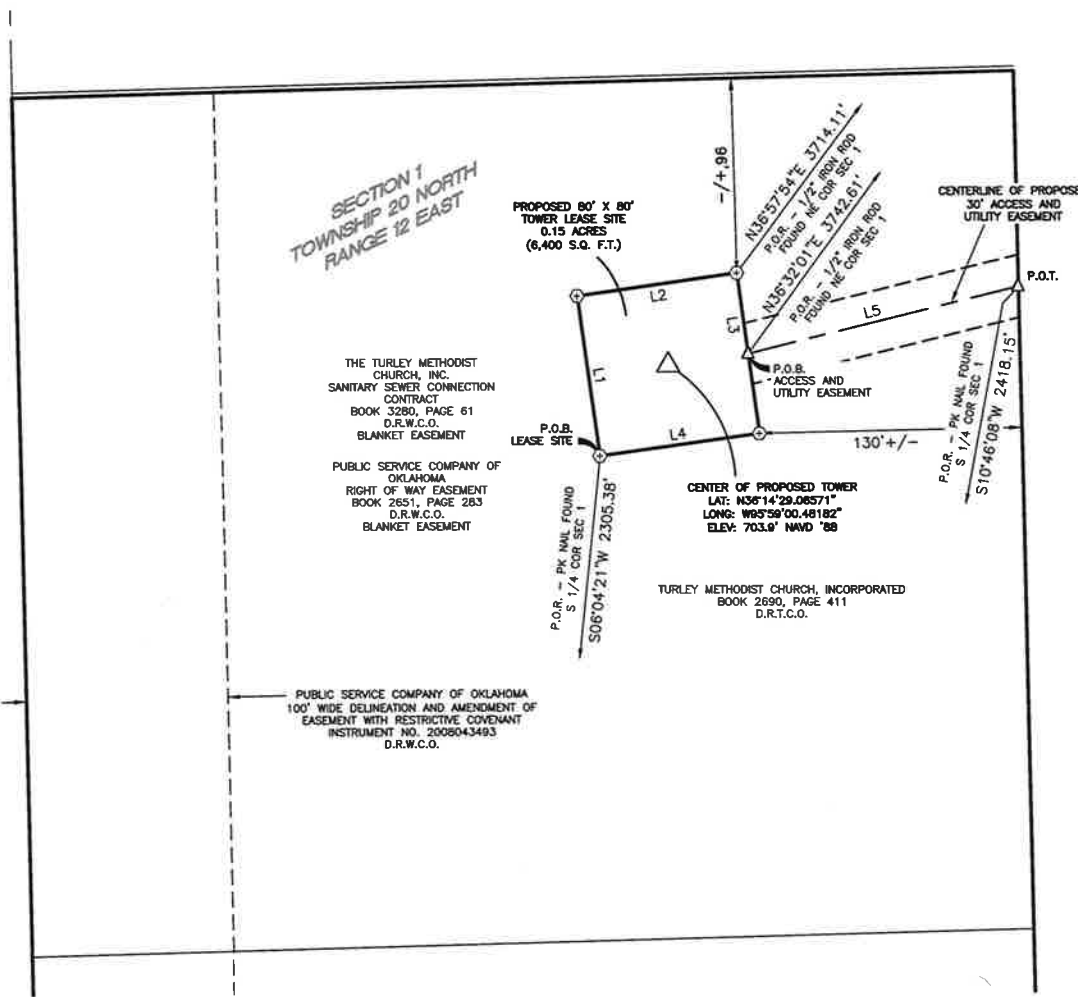
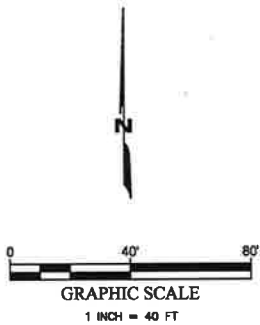
LETS
LETS America, Inc.



7101 Envooy Court
Dallas, TX 75247
Ofc: 214.631.7898
Fax: 214.631.7103
email: info@sam.biz
Texas Firm Registration No. 10064300
OK COA #4218, EXP DATE: 6/19/2019

| REV | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | |
|------------------|---|
| SITE NAME | TURLEY |
| SITE VISIT DATE: | 1/22/2019 |
| SITE NUMBER: | 222712 |
| SITE ADDRESS | 8050 N. JOHNSTOWN AVE. TULSA, OK 74128 |
| SHEET NAME | SITE EXHIBIT AND DESCRIPTION |
| SHEET NUMBER | 3 OF 4 |



| LINE TABLE | | |
|------------|-------------|----------|
| NUMBER | BEARING | DISTANCE |
| L1 | N07°48'39"W | 80.00' |
| L2 | N82°11'21"E | 80.00' |
| L3 | S07°48'39"E | 80.00' |
| L4 | S82°11'21"W | 80.00' |
| L5 | N76°19'57"E | 138.03' |

LEGEND

- D.R.T.C.O. DEED RECORDS, TULSA COUNTY, OKLAHOMA
- P.O.B. POINT OF BEGINNING
- P.O.T. POINT OF TERMINATION
- P.O.R. POINT OF REFERENCE
- ⊕ 5/8" IRON ROD WITH CAP STAMPED "SAM" SET
- △ CALCULATED POINT
- SECTION LINE
- - - 1/4 SECTION LINE
- ==== SUBJECT PROPERTY LINE
- ==== PROPERTY LINE

5.29



LETS
LETS America, Inc.



7101 Envooy Court
Dallas, TX 75247
Ofc: 214.631.7888
Fax: 214.631.7103
email: info@sam.biz

Texas Firm Registration No. 10064300
OK CDA #4216, EXP DATE: 8/19/2019

| REV | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | |
|------------------|---|
| SITE NAME | TURLEY |
| SITE VISIT DATE: | 1/22/2019 |
| SITE NUMBER: | 222712 |
| SITE ADDRESS | 8050 N. JOHNSTOWN AVE. TULSA, OK 74126 |
| SHEET NAME | SITE EXHIBIT AND DESCRIPTION |
| SHEET NUMBER | 4 OF 4 |

PROPOSED TOWER LEASE SITE DESCRIPTION:

BEING A TRACT OF LAND SITUATED IN THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 1, TOWNSHIP 20 NORTH, RANGE 12 EAST OF THE INDIAN MERIDIAN, TULSA COUNTY, OKLAHOMA AND BEING PART OF A TRACT OF LAND DESCRIBED IN DEED TO TURLEY METHODIST CHURCH, INCORPORATED, RECORDED IN BOOK 2690, PAGE 411 OF THE DEED RECORDS OF TULSA COUNTY, OKLAHOMA (D.R.T.C.O.), AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 5/8-INCH IRON ROD WITH CAP STAMPED "SAM" SET FOR CORNER, FROM WHICH A PK NAIL FOUND AT THE SOUTH 1/4 CORNER OF SAID SECTION 1 BEARS SOUTH 06 DEGREES 04 MINUTES 21 SECONDS WEST, A DISTANCE OF 2,305.38 FEET;

THENCE NORTH 07 DEGREES 48 MINUTES 39 SECONDS WEST, A DISTANCE OF 80.00 FEET TO A 5/8-INCH IRON ROD WITH CAP STAMPED "SAM" SET FOR CORNER;

THENCE NORTH 82 DEGREES 11 MINUTES 21 SECONDS EAST, A DISTANCE OF 80.00 FEET TO A 5/8-INCH IRON ROD WITH CAP STAMPED "SAM" SET FOR CORNER, FROM WHICH A 1/2-INCH IRON ROD FOUND AT THE NORTHEAST CORNER OF SAID SECTION 1 BEARS NORTH 36 DEGREES 57 MINUTES 54 SECONDS EAST, A DISTANCE OF 3,714.11 FEET;

THENCE SOUTH 07 DEGREES 48 MINUTES 39 SECONDS EAST, A DISTANCE OF 80.00 FEET TO A 5/8-INCH IRON ROD WITH CAP STAMPED "SAM" SET FOR CORNER;

THENCE SOUTH 82 DEGREES 11 MINUTES 21 SECONDS WEST, A DISTANCE OF 80.00 FEET, BACK TO THE POINT OF BEGINNING, CONTAINING 6,400 SQUARE FEET, OR 0.15 OF AN ACRE OF LAND, MORE OR LESS.

PROPOSED ACCESS AND UTILITY EASEMENT DESCRIPTION:

BEING A 30' WIDE STRIP OF LAND SITUATED IN THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 1, TOWNSHIP 20 NORTH, RANGE 12 EAST OF THE INDIAN MERIDIAN, TULSA COUNTY, OKLAHOMA AND BEING PART OF A TRACT OF LAND DESCRIBED IN DEED TO TURLEY METHODIST CHURCH, INCORPORATED, RECORDED IN BOOK 2690, PAGE 411 OF THE DEED RECORDS OF TULSA COUNTY, OKLAHOMA (D.R.T.C.O.), AND BEING 15 FEET EACH SIDE OF A CENTERLINE MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE EAST LINE OF A 80' X 80' PROPOSED TOWER LEASE SITE, FROM WHICH A 1/2-INCH IRON ROD FOUND AT THE NORTHEAST CORNER OF SAID SECTION 1 BEARS NORTH 36 DEGREES 32 MINUTES 01 SECONDS EAST, A DISTANCE OF 3,742.61 FEET.

THENCE NORTH 76 DEGREES 19 MINUTES 57 SECONDS EAST, A DISTANCE OF 138.03 FEET TO THE EAST LINE OF SAID TURLEY TRACT TO AND FOR THE POINT OF TERMINATION, FROM WHICH A PK NAIL FOUND AT THE SOUTH 1/4 CORNER OF SAID SECTION 1 BEARS SOUTH 10 DEGREES 46 MINUTES 08 SECONDS WEST, A DISTANCE OF 2,418.15 FEET.

5.30

GENERAL REQUIREMENTS

1. SITE WORK SHALL BE COMPLETED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS (US CELLULAR STANDARD PLANS AND SPECIFICATIONS) AND THE REFERENCED STANDARDS.
 - A. ALL APPLICABLE LOCAL STATE AND FEDERAL CODES AND REGULATIONS.
 - B. INTERNATIONAL BUILDING CODE (IBC) BUILDING OFFICIALS & CODE ADMINISTRATORS (BOCA) AS APPLICABLE.
 - C. AMERICAN CONCRETE INSTITUTE (ACI).
 - D. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM).
 - E. ELECTRONICS INDUSTRIES ASSOCIATION STANDARDS (EIA/TIA-222-F) MOST CURRENT VERSION ADOPTED BY SUBJECT STATE.
 - F. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
2. WHERE A CONFLICT OCCURS BETWEEN REFERENCED STANDARDS AND US CELLULAR STANDARD PLANS AND SPECIFICATIONS, THE MORE STRINGENT STANDARD SHALL APPLY.
3. THE FACILITY IS AN UNOCCUPIED SPECIALIZED MOBILE RADIO FACILITY.
4. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
5. PRIOR TO THE SUBMISSIONS OF THE BIDS, THE CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME FAMILIAR WITH THE FIELD CONDITIONS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.
6. THE CONTRACTOR SHALL RECEIVE IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY IDENTIFIED BY THE CONTRACT DOCUMENTS.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY OTHERWISE NOTED.
8. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING BEST SKILLED PERSONNEL. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE LANDLORDS AUTHORIZED REPRESENTATIVE.
9. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE SITE AND NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES BEFORE STARTING ANY WORK.
10. WHEN CONTRACTOR'S ACTIVITIES IMPEDE OR OBSTRUCT TRAFFIC FLOW, CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL DEVICES, SIGNS, AND FLAGMEN IN ACCORDANCE WITH PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
11. THE CONTRACTOR SHALL COORDINATE SITE ACCESS AND SECURITY WITH THE PROPERTY OWNER AND US CELLULAR PRIOR TO CONSTRUCTION.
12. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS SUCH AS BUT NOT LIMITED TO, PAVING, CURBS, AGRICULTURAL CROPS, DRAIN TILE, FENCES, LANDSCAPING, GALVANIZED SURFACES, ETC. AND UPON COMPLETION OF WORK REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION.
13. THE LOCATIONS OF UTILITIES SHOWN ON THE PLAN ARE BASED ON EXISTING RECORDS, FIELD LOCATIONS OR OWNER SUPPLIED INFORMATION AND MAY NOT BE ACCURATE. THE CONTRACTOR SHALL MARK ALL PUBLIC & PRIVATE UTILITIES. THE CONTRACTOR SHALL CALL THE LOCAL "ONE CALL" PROVIDER A MINIMUM OF THREE BUSINESS DAYS PRIOR TO EXCAVATING TO ALLOW MEMBER UTILITIES TO LOCATE THEIR FACILITIES. THE PROPERTY OWNER SHALL BE NOTIFIED IN A SIMILAR FASHION TO ALLOW HIM TO LOCATE HIS PRIVATE UTILITIES.
14. WHEN EXCAVATING AROUND UTILITIES, THE CONTRACTOR SHALL USE REASONABLE CARE IN LOCATING AND PROTECTING UTILITIES. US CELLULAR SHALL BE NOTIFIED IMMEDIATELY OF ANY CONFLICTS BETWEEN EXISTING UTILITIES AND PROPOSED CONSTRUCTION.
15. DAMAGE TO PUBLIC OR PRIVATE UTILITIES SHALL BE REPORTED TO US CELLULAR AND THE OWNER OF THE UTILITY IMMEDIATELY. ANY DAMAGE RESULTING FROM CONTRACTOR'S NEGLIGENCE OR FAILURE TO ACT WITH DUE REGARD SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
16. UNLESS OTHERWISE NOTED ON THE PLANS, CONTRACTOR SHALL ASSUME ALL SURFACE FEATURES SUCH AS BUILDINGS, PAVEMENTS, LANDSCAPING FEATURES AND PLANTS ARE TO BE SAVED AND PROTECTED FROM DAMAGE.
17. KEEP THE CONSTRUCTION SITE CLEAN, HAZARD FREE AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST OR SMUDGES OF ANY NATURE.
18. THE CONTRACTOR SHALL PROVIDE ON-SITE TRASH RECEPTACLES FOR COLLECTION OF NON-TOXIC DEBRIS. ALL TRASH SHALL BE COLLECTED ON A DAILY BASIS.
19. ALL TOXIC AND ENVIRONMENTALLY HAZARDOUS SUBSTANCES SHALL BE USED AND DISPOSED OF IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS. UNDER NO CIRCUMSTANCES SHALL RINSING OR DUMPING OF THESE SUBSTANCES OCCUR ON-SITE.

20. THE CONTRACTOR SHALL MAINTAIN AND SUPPLY US CELLULAR WITH AS-BUILT PLANS UPON COMPLETION OF THE PROJECT.
 21. MEANS AND METHODS OF CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, THE DESIGN AND PLACEMENT OF FORMS AND SHORING ARE THE RESPONSIBILITY OF THE CONTRACTOR.
 22. THE GENERAL CONTRACTOR SHALL COORDINATE/ASSIST DIFFERENT TRADE CONTRACTORS IN TERMS OF COORDINATION OF SITE ACCESS.
 23. ALL ARCHITECTURAL, MECHANICAL & ELECTRICAL SYSTEM AND COMPONENTS IN THIS FACILITY SHALL BE INSTALLED TO RESIST WIND, ICE AND SNOW FORCES AS PER NATIONAL STANDARDS AND BUILDING CODES (LATEST ADOPTED EDITION).
 24. US CELLULAR WILL OBTAIN NECESSARY PERMITS AND LICENSES FROM THE FEDERAL COMMUNICATIONS COMMISSION (FCC) AND THE FEDERAL AVIATION ADMINISTRATION (FAA). UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIAL PROVISIONS, CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL OTHER PERMITS NECESSARY FOR CONSTRUCTION.
 25. US CELLULAR WILL ORDER AND PAY FOR ANY NECESSARY ELECTRIC AND TELEPHONE UTILITY INSTALLATIONS TO THE POINT OF TERMINATION AS SHOWN ON THE PROJECT PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH UTILITIES.
 26. US CELLULAR WILL PROVIDE PRIMARY HORIZONTAL AND VERTICAL CONTROL FOR CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE TO CORRECTLY TRANSFER LINE AND GRADE. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL STAKING OR RE-STAKING.
 27. US CELLULAR MAY RETAIN THE SERVICES OF A TESTING LABORATORY TO PERFORM QUALITY ASSURANCE TESTING ON VARIOUS PORTIONS OF THE CONTRACTORS WORK. WHEN REQUESTED, THE CONTRACTOR SHALL INFORM THE TESTING LABORATORY AND ASSIST THEM IN COMPLETING TESTS.
 28. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY UTILITIES OR FACILITIES IT DEEMS NECESSARY TO COMPLETE IT'S WORK. THIS INCLUDES, BUT IS NOT LIMITED TO WATER, SEWER, POWER, TELEPHONE, HEAT, LIGHTING OR SECURITY.
 29. NOTIFY ENGINEER 2 DAYS IN ADVANCE OF INITIATING SITE CONSTRUCTION ACTIVITIES.
- DEMOLITION**
1. PERFORM DEMOLITION AND REMOVAL OF EXISTING MATERIALS OR STRUCTURES AS SHOWN ON THE PLANS AND AS SPECIFIED IN SPECIAL CONDITIONS. PROTECT EXISTING FACILITIES OR STRUCTURES THAT ARE TO REMAIN.
 2. COMPLETE DEMOLITION IN A SYSTEMATIC MANNER BEGINNING AT THE HIGHEST LEVEL
 3. NEATLY SAW OR CUT JOINTS AT THE LIMITS OF REMOVAL; WHENEVER POSSIBLE LOCATE CUTS AT EXISTING JOINTS.
 4. PATCH AND REPAIR ANY DAMAGED SURFACES OR STRUCTURAL MEMBERS AT THE LIMITS OF REMOVAL.
 5. REMOVAL DEMOLITION DEBRIS FROM THE SITE ON A REGULAR BASIS. DISPOSE ALL DEBRIS OFFSITE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS. BURNING OF MATERIAL SHALL NOT BE ALLOWED UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIAL PROVISIONS.
- CLEARING AND GRUBBING**
1. REMOVE TREES, STUMPS, SHRUBS, GRASS AND OTHER VEGETATION AS SHOWN ON THE PLANS TO ALLOW FOR CONSTRUCTION OF NEW CELLULAR FACILITIES.
 2. WHEN POSSIBLE, NEATLY TRIM OR CUT BACK EXISTING TREES OR VEGETATION TO ALLOW FOR CONSTRUCTION OF NEW CELLULAR FACILITIES.
 3. WHEN CLEARING TREES, PROTECT ALL SURROUNDING STRUCTURES, PAVEMENTS AND LANDSCAPING BY TOPPING, TRIMMING AND USING GUY LINES.
 4. COMPLETELY REMOVE ALL STUMPS AND ROOTS. STUMPS AND ROOTS MAY BE REMOVED BY GRUBBING, CHIPPING OR GRINDING.
 5. DISPOSE OF ALL DEBRIS OFFSITE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS. BURNING OF MATERIAL SHALL NOT BE ALLOWED UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIAL PROVISIONS.
- EARTHWORK**
1. REMOVE TOPSOIL FROM BENEATH ALL PROPOSED ROADS, PARKING AREAS, BUILDINGS AND AREAS TO RECEIVE MORE THAN 6" OF FILL STOCKPILE TOPSOIL FOR USE DURING RESTORATION.
 2. ALL TREES DESIGNATED TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION BY A 5 FOOT HIGH TREE BARRIER UTILIZING WIRE FENCING, OR PROTECTIVE SAFETY NETTING.
- GRADE AREAS IN ACCORDANCE WITH ELEVATIONS AND GRADES SHOWN ON THE PLANS OR AS NECESSARY IN GRADING TO PROVIDE DRAINAGE.

4. FILL MATERIAL USED IN GRADING OPERATIONS SHALL CONSIST OF EARTH WHICH IS FREE OF DEBRIS, BOULDERS OR ORGANIC MATERIAL. FILL SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 90% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY.
5. ALL FILL SHALL BE TESTED FOR FIELD DENSITY. TESTS SHALL BE TAKEN IN EACH LIFT OF FILL AT LOCATIONS DESIGNATED BY THE OWNER'S REPRESENTATIVE.
6. SELECT GRANULAR FILL SHALL BE USED WHEN FILLING OR BACKFILLING BENEATH AND/OR AROUND ANY STRUCTURES, ROADS OR PARKING AREAS. SELECT FILL SHALL BE PLACED IN 9" LIFTS AND COMPACTED TO 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. SELECT GRANULAR FILL SHALL CONSIST OF SAND, GRAVEL OR MIXTURE OF SAND AND GRAVEL FREE OF ORGANIC MATERIAL. THE MATERIAL SHALL HAVE A 2" MAXIMUM SIZE, LESS THAN 10% PASSING NO. 200 SIEVE, A PLASTICITY INDEX OF 6 OR LESS, AND A UNIFORMITY COEFFICIENT OF 5 OR GREATER.
7. ALL DISTURBED AREAS SHALL BE RESTORED AS SOON AS POSSIBLE WITH 4" TOPSOIL SEED, FERTILIZER AND MULCH. GRASS SEED SHALL BE A SUITABLE MIX CONTAINING BOTH ANNUAL AND PERENNIAL VARIETIES OF FESCUE, RYE AND BLUEGRASS. FERTILIZER SHALL CONTAIN A MINIMUM OF 10% EACH OF NITROGEN, PHOSPHORIC ACID AND POTASH. MULCH SHALL BE A STRAW OR HAY MIXTURE FREE OF NOXIOUS WEED SEEDS. APPLY SEED AND FERTILIZER AS RECOMMENDED BY MANUFACTURER. MULCH SHALL BE CRIMPED AFTER APPLICATION.
8. THE CONTRACTOR SHALL VERIFY, UPON COMPLETION OF DEVELOPMENT, THE SITE IS PROPERLY STABILIZED AND ALL INDICATED SWALES & STORMWATER FACILITIES ARE CONSTRUCTED AS INDICATED ON THE PLANS.
9. TOWER, TOWER FOUNDATIONS, SLABS, MODULAR BUILDINGS AND ELECTRICAL AND MECHANICAL FEATURES ARE TO BE DESIGNED AND SPECIFIED BY OTHERS.
10. EROSION CONTROL - ALL MEASURES SHALL BE INSPECTED DAILY AND IMMEDIATELY FOLLOWING ALL RAIN FALL EVENTS. ALL DEFICIENCIES SHALL BE NOTED AND REPAIRED IMMEDIATELY.
11. SEDIMENTATION CONTROL - SEDIMENTATION CONTROL SHALL BE ACCOMPLISHED DURING CONSTRUCTION THROUGH THE USE OF SILT FENCING PLACED AS SHOWN ON THE ATTACHED PLAN. THE CONTROL DEVICES SHALL BE SET AT THE ONSET OF SITE GRADING TO PREVENT SILTING OF THE EXISTING STORMWATER FACILITIES.

EROSION CONTROL

1. CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH THE MOST STRINGENT OF PROJECT PLANS, SPECIAL PROVISIONS, THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES "OKLAHOMA CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK", OR LOCAL ORDINANCES.
2. ESTABLISH EROSION CONTROL MEASURES PRIOR TO STARTING CONSTRUCTION AND MAINTAIN THROUGHOUT CONSTRUCTION. INSPECT EROSION CONTROL MEASURES FOLLOWING EACH RAINFALL EVENT AND REPAIR AS NECESSARY.

ROAD AND PARKING AREA CONSTRUCTION

1. PREPARE SUBGRADE FOR ROADS AND PARKING AREAS IN ACCORDANCE WITH "EARTHWORK" SECTION.
2. PROOF ROLL ROAD TO IDENTIFY UNSUITABLE MATERIALS. EXCAVATE UNSUITABLE MATERIAL AND DISPOSE OFFSITE. BACKFILL UNDERCUT EXCAVATION USING 3" BREAKER RUN MATERIAL. BREAKER RUN MATERIAL SHALL BE CRUSHED STONE MEETING THE FOLLOWING GRADATION:

| SIEVE SIZE | % WEIGHT PASSING |
|------------|------------------|
| 3" | 100 |
| 1 1/2" | 0-50 |
| 3/4" | 0-20 |
| #200 | 0-10 |

3. PLACE CRUSHED AGGREGATE BASE COURSE IN MAXIMUM OF 6" THICK LIFTS IN ACCORDANCE WITH DETAIL DRAWINGS. MOISTURE CONDITION BASE COURSE AS NECESSARY TO ACHIEVE COMPACTION. BASE COURSE SHALL BE COMPACTED TO 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. BASE COURSE MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:

| 3" BASE COURSE | |
|----------------|------------------|
| SIEVE SIZE | % WEIGHT PASSING |
| 3" | 100 |
| 2 1/2" | 25-60 |
| 3/4" | 0-20 |
| 3/8" | 0-5 |

CARRIER:



3545 N. 124TH STREET
BROOKFIELD, IL 63005

CLIENT:



1811 AUBURN AVE.
MONROE, LA 71201
RALPH THOMAS
(318) 325-4666

PLAN PREPARED BY:



LETS America, Inc.
112 S. KYBURG RD. STE. 1
CHANDLER, AZ 85228
ARIZONA: 480-961-9151
TX: 972-468-029

REVISIONS

| REV. | DATE | ISSUED FOR | INT |
|------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SGM |
| D | 08/18/19 | CONSTRUCTION SET | SNW |
| | 10/16/19 | CLIENT COMMENTS | SCM |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA.

222712
TURLEY
6050 N. JOHNSTOWN AVE.
TULSA, OK 74126
TULSA COUNTY COUNTY

SHEET TITLE
TITLE SHEET

SHEET NUMBER
SP-1

1/2" BASE COURSE

| SIEVE SIZE | % WEIGHT PASSING |
|------------|------------------|
| 1 1/2" | 100 |
| 1" | 70-100 |
| 3/4" | 55-95 |
| 3/8" | 30-65 |
| #4 | 25-55 |
| #10 | 15-40 |
| #200 | 0-10 |

4. PLACE BASE COURSE WITH CROWN OR UNIFORM SLOPE AS NECESSARY TO PROVIDE DRAINAGE FROM THE SITE.
5. GEOTEXTILE FABRIC SHALL BE USED IN THE EVENT OF UNSTABLE SOIL CONDITIONS. VERIFICATION OF SUCH CONDITIONS IS THE RESPONSIBILITY OF THE CONTRACTOR.

CONCRETE AND STEEL REINFORCEMENT

1. CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C94. CONCRETE SHALL BE 6 BAG MIX HAVING A 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI. MAXIMUM AGGREGATE SIZE OF 1", MAXIMUM WATER CEMENT RATIO OF 0.45, AIR ENTRAINMENT OF 6% +/- 1%, AND SLUMP OF 3" +/- 1". DEVIATIONS FROM THE MIX MUST BE APPROVED BY US CELLULAR PRIOR TO USE.
2. CONCRETE CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE MOST STRINGENT OF: PROJECT PLANS, SPECIAL PROVISIONS, OR THE AMERICAN CONCRETE INSTITUTE (ACI) PUBLICATIONS. CONCRETE WORK FOR TOWER FOUNDATIONS SHALL BE COMPLETED IN ACCORDANCE WITH PLANS AND SPECIFICATIONS PROVIDED BY THE TOWER VENDOR.
3. FORM MATERIALS WILL COMPLY WITH ACI301. PLYWOOD FORMS SHALL BE APA B-B PLYFORM CLASS 1 SOUND SHEETS. LUMBER SHALL BE SPRUCE-PINE-FIR SPECIES #2 OR BETTER GRADE. TUBULAR COLUMN FORMS MAY BE SPIRALLY WOUND LAMINATED FIBER MATERIAL. FORM TIES SHALL BE REMOVABLE OR SNAP-OFF METAL TYPE.
4. CONCRETE SHALL BE MADE OF CEMENT MEETING THE REQUIREMENTS OF ASTM C150, NORMAL TYPE I PORTLAND. FINE AND COARSE AGGREGATES FOR CONCRETE SHALL MEET THE REQUIREMENTS OF ASTM C33.
5. PLACE SUPPORT AND SECURE REINFORCEMENT STEEL AT LOCATIONS SHOWN ON PLANS. REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH ACI315. REBAR YIELD STRENGTH= 60,000 PSI.
6. AIR ENTRAINING ADMIXTURES SHALL MEET THE REQUIREMENTS OF ASTM C260; WATER REDUCING ADMIXTURES SHALL MEET THE REQUIREMENTS OF ASTM C494, TYPE A. ALL OTHER ADMIXTURES ARE PROHIBITED WITHOUT PRIOR APPROVAL BY US CELLULAR.
7. VAPOR BARRIER SHALL BE 6 MIL THICK POLYETHYLENE, MEETING THE REQUIREMENTS OF ASTM D2103.
8. CURING COMPOUND SHALL MEET THE REQUIREMENTS OF ASTM C309.
9. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
10. ALL CONSTRUCTION AND EXPANSION JOINTS SHALL BE INSTALLED PER THE DRAWINGS.
11. ALL EXPOSED CORNERS OF CONCRETE WORK SHALL BE CHAMFERED 3/4" UNLESS NOTED OTHERWISE.
12. PLACE, SUPPORT AND SECURE REINFORCEMENT STEEL AT LOCATIONS SHOWN ON PLANS. REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH ACI315.
13. ALL FORM WORK SHALL BE RIGID, TIGHT, LEVEL, PLUMB AND SUFFICIENTLY SHORED TO RESIST CONSTRUCTION LOAD CONDITIONS. COAT FORMS WITH RELEASE AGENT PRIOR TO PLACING REINFORCING STEEL.
14. PREPARE SUBGRADE FOR CONCRETE IN ACCORDANCE WITH PROJECT PLANS AND SPECIAL PROVISION. DO NOT PLACE CONCRETE ON FROZEN SUBGRADE.
15. PROVIDE US CELLULAR A MINIMUM OF 24 HRS. NOTICE PRIOR TO PLACING CONCRETE TO ALLOW FOR INSPECTION AND SCHEDULING OF TESTING.
16. UTILIZE CHUTES, TROUGHS OR CONVEYORS TO PLACE CONCRETE SO THAT HANDLING OF CONCRETE IS MINIMIZED, AVOID SEGREGATION OF THE AGGREGATE AND DISTURBING REINFORCING STEEL.
17. UNIFORMLY CONSOLIDATE CONCRETE USING HAND TOOLS OR MECHANICAL VIBRATORS. THOROUGHLY CONSOLIDATE EACH LAYER PRIOR TO PLACING SUBSEQUENT LAYERS.
18. WHEN PLACING OPERATIONS ARE TEMPORARILY SUSPENDED, THE UNFINISHED FACE OF THE POUR SHALL BE COVERED WITH WET BURLAP UNTIL PLACING OPERATIONS ARE RESUMED. WHEN PLACING OPERATIONS ARE SUSPENDED FOR MORE THAN 30 MINUTES, PROVIDE AN UNBONDED CONSTRUCTION JOINT.
19. TROWEL FINISH SURFACES UNLESS OTHERWISE DIRECTED ON THE PLANS.
20. AFTER FINAL FINISHING, PROVIDE POLYETHYLENE VAPOR BARRIER OR CURING COMPOUND TO MAINTAIN MOISTURE AND TEMPERATURE OF CONCRETE.

21. IN EXTREME WEATHER PLACE AND CURE CONCRETE IN ACCORDANCE WITH EITHER ACI306R-89 FOR COLD WEATHER OR ACI305R-89 FOR HOT WEATHER.
22. WELDING OF REINFORCING STEEL ARE PROHIBITED.
23. REMOVE FORMS IN A MANNER THAT DOES NOT DAMAGE THE CONCRETE, FILL AND PATCH AND POCKETS OR HOLES ON EXPOSED SURFACES USING MORTAR MIXTURE.
24. PROVIDE TEST CYLINDERS AS FOLLOWS:
 - A. EQUIPMENT ENCLOSURE:
 - 1 CYLINDER AT 7 DAYS.
 - 1 CYLINDER AT 14 DAYS.
 - 2 CYLINDER AT 28 DAYS.
25. NOTIFY ENGINEER 48 HOURS IN ADVANCE OF TOWER FOUNDATION INSTALLATION.
26. REFER TO TOWER MANUFACTURER SPECIFICATIONS REGARDING FOUNDATION REQUIREMENTS.

CARRIER:



3545 N. 124TH STREET
BROOKFIELD, WI 53005

CLIENT:



1811 ALBURN AVE.
MONROE, LA 71201
RALPH THOMAS
(318) 335-6686


PLAN PREPARED BY:



LETS America, Inc.
112 S. KYRIE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-8151
FL-185-029

| REV. | DATE | ISSUED FOR | INT |
|------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SBP |
| B | 05/17/19 | 95% CD'S | SFM |
| C | 08/29/19 | 95% CD'S | SNH |
| 0 | 09/18/19 | CONSTRUCTION SET | SGM |
| Δ | 10/16/19 | CLIENT COMMENTS | SGM |

NOT FOR CONSTRUCTION UNLESS
LABELED AS CONSTRUCTION SET



DATE: 10/16/19

I HEREBY CERTIFY THAT THESE PLANS WERE
PREPARED BY ME OR UNDER MY DIRECT SUPERVISION
AND THAT I AM A FULLY REGISTERED ENGINEER
UNDER THE LAWS OF THE STATE OF OKLAHOMA.

222712
TURLEY
6050 N. JOHNSTOWN AVE.
TULSA, OK 74126
TULSA COUNTY COUNTY

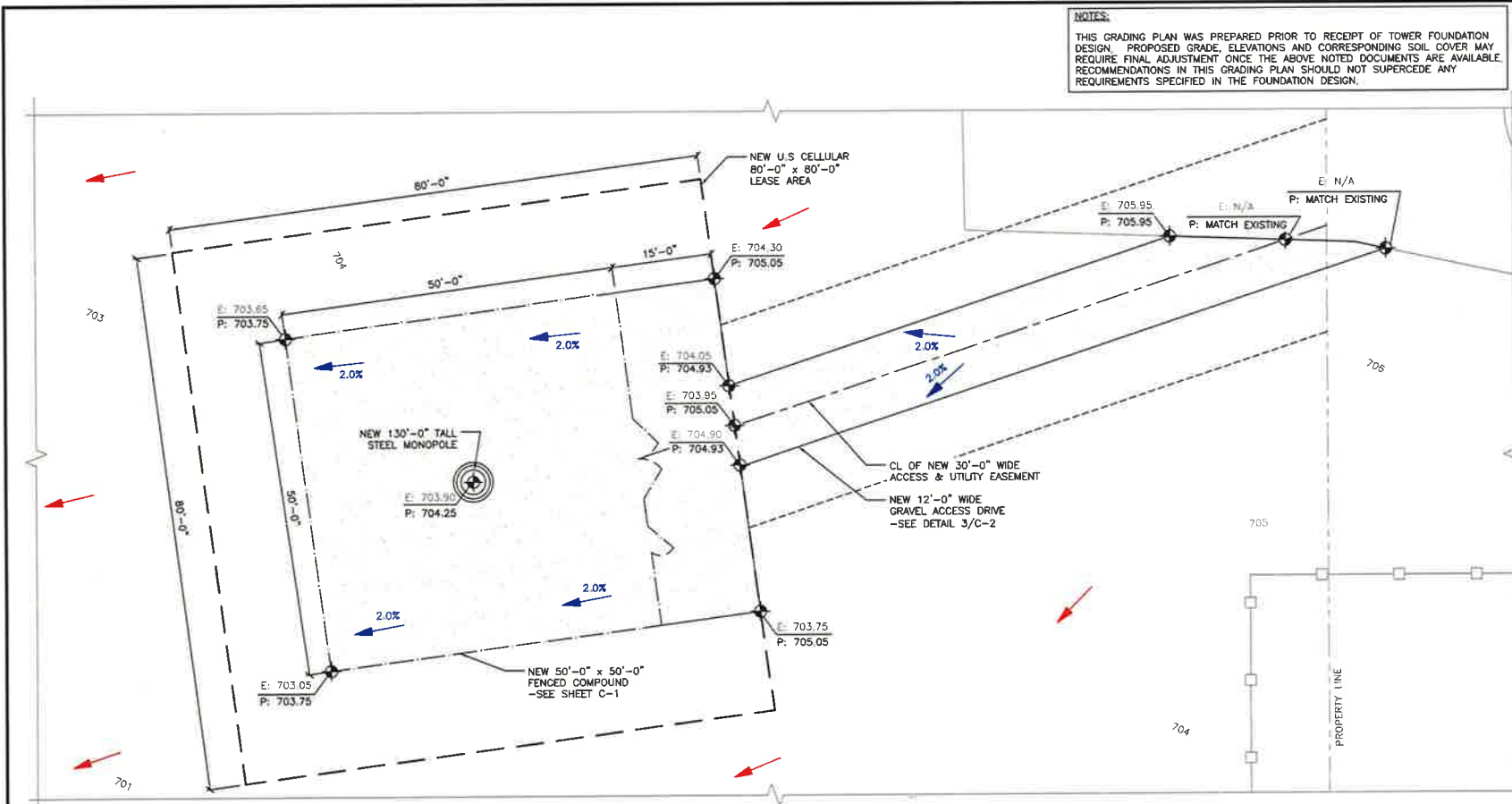
SHEET TITLE

TITLE SHEET

SHEET NUMBER

SP-2

5.32



NOTES:
 THIS GRADING PLAN WAS PREPARED PRIOR TO RECEIPT OF TOWER FOUNDATION DESIGN. PROPOSED GRADE, ELEVATIONS AND CORRESPONDING SOIL COVER MAY REQUIRE FINAL ADJUSTMENT ONCE THE ABOVE NOTED DOCUMENTS ARE AVAILABLE. RECOMMENDATIONS IN THIS GRADING PLAN SHOULD NOT SUPERCEDE ANY REQUIREMENTS SPECIFIED IN THE FOUNDATION DESIGN.

CARRIER:

 3545 N. 124TH STREET
 BROOKFIELD, WI 53005

CLIENT:

 1811 AUBURN AVE.
 MONROE, LA 71201
 RALPH THOMAS
 (318) 325-4665

PLAN PREPARED BY:

 LETS America, Inc.
 112 S. KYRENE RD. STE. 1
 CHANDLER, AZ 85228
 ARIZONA: 480-961-9151
 FL: 865-029

| REV. | DATE | REVISIONS ISSUED FOR | INT |
|------|----------|----------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SPM |
| D | 09/18/19 | CONSTRUCTION SET | SGM |
| Δ | 10/16/19 | CLIENT COMMENTS | SGM |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



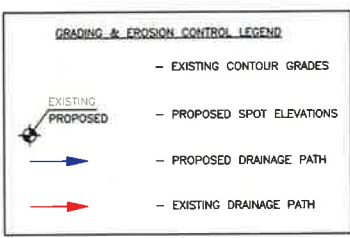
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA.

222712
 TURLEY
 6050 N. JOHNSTOWN AVE.
 TULSA, OK 74126
 TULSA COUNTY COUNTY

SHEET TITLE
GRADING PLAN

SHEET NUMBER
A-3

- GRADING & EROSION CONTROL NOTES**
1. CONTOUR INTERVAL IS 1 FOOT.
 2. CONTRACTOR SHALL GRADUALLY MATCH INTO EXISTING GRADE.
 3. NO PROPOSED EARTHWORK SHALL HAVE A GREATER SLOPE THAN 3:1.
 4. DRIVEWAY GRADE WITHIN 25 FEET OF PUBLIC ROAD ACCESS POINT SHALL BE LESS THAN 10% (10:1).
 5. FINISHED GRADE SLOPES GREATER THAN 4:1, DITCH BOTTOMS AND GRASS SURFACES WITHIN 3 FEET OF ANY PAVED OR GRAVEL SURFACE REQUIRE EROSION MAT (TYPE 2 D - 12 MONTH LONGEVITY, DOUBLE NET EROSION CONTROL BLANKET).
 6. ALL DISTURBED GRASS/TURF AREAS SHALL BE RESTORED WITH TOPSOIL, SEED AND MULCH. TOPSOIL TO BE 6-INCHES MINIMUM. SEED TO CONSIST OF NATIVE PURE LIVE SEED (PLS) AT 98% PURITY AND 95% GERMINATION MULCH TO BE WEED-FREE GRAIN STRAW.
 7. INSTALL DITCH CHECKS EVERY 300 FEET AND IMMEDIATELY UPSTREAM OF CULVERTS TO PREVENT EXCESSIVE EROSION.
 8. CONTRACTOR TO PERFORM MAINTENANCE AND INSPECTION OF EROSION CONTROL DEVICES AND EXPOSED GRADE THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL CONTINUE MAINTENANCE AND INSPECTION UNTIL FULL VEGETATION ESTABLISHMENT AND/OR PROJECT ACCEPTANCE.

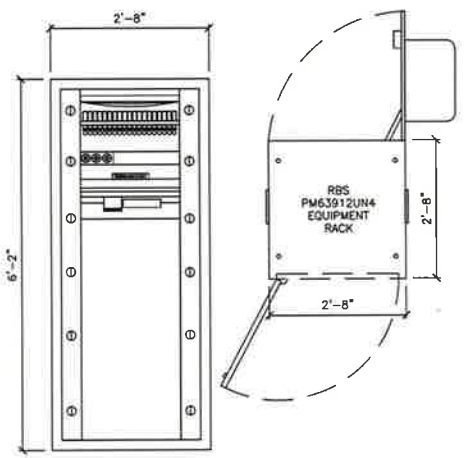


GRADING PLAN

0.1' 5' 3' 5" SCALE: 3/16"=1'-0" (22x34)
 (OR) 3/32"=1'-0" (11x17)

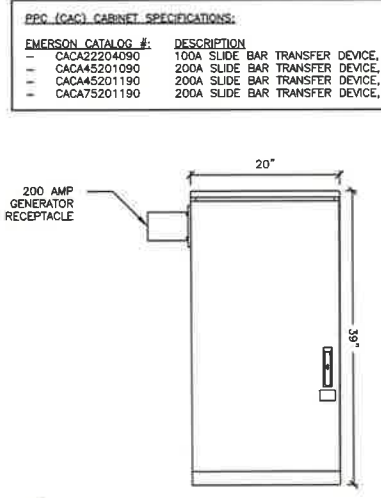
1

5.36



CUBE-PM63912UN4 - RBS ONLY CABINET
CABINET DIMENSIONS (H X W X D):
 (74 IN) X (32 IN) X (32 IN)
 (1879.6 MM) X (812.8 MM) X (812.8 MM)

DESCRIPTION
 39 RUS OF 23' RACK SPACE
 8" PLINTH WITH REMOVABLE FRONT & REAR PANELS - FUTURE CABINETS WILL HAVE PUNCHOUTS IN THE BOTTOM FOR CABLE ROUTING
 10,000 BTU AIR CONDITIONER, AC POWERED WITH 500 WATT AC HEATER AND FILTER SYSTEM ON FRONT DOOR OF EQUIPMENT COMPARTMENT.
 EQUIPMENT COMPARTMENT IS EQUIPPED WITH A BACK UP DC VENT SYSTEM
 SOLAR SHIELD
 AC EQUIP
 16 POSITION LOAD CENTER WITH CROUSE-HINDS GEN INLET, GFCI OUTLET AC-DC POWER PLANT -48V
 GE INFINITY S POWER SYSTEM AND GALAXY PULSAR PLUS NE843E S CONTROLLER LED LIGHT, DC POWERED, TOP FRONT ASENTRIA 550-2 SITE BOSS(NOT FOR USE AT THIS TIME)
 ALARM TERMINAL STRIP FOR EQUIPMENT ALARM OUTPUTS CONSISTS OF:
 (40) DRY CONTACT ALARMS
 (8) VOLTAGE INPUTS
 (8) RELAY INPUTS
 PPC CABINET, 200AMP, W/SURGE AND GEN INLET
 CACA45201090 200A, 24P, 65K, AR20044R



PPC (CAC) CABINET SPECIFICATIONS:

| EMERSON CATALOG #: | DESCRIPTION |
|--------------------|--|
| - CACA22204090 | 100A SLIDE BAR TRANSFER DEVICE, 24-POSITION LOAD CENTER, ADR1044RS, MOV |
| - CACA45201090 | 200A SLIDE BAR TRANSFER DEVICE, 24-POSITION LOAD CENTER, AR20044RS, MOV |
| - CACA45201190 | 200A SLIDE BAR TRANSFER DEVICE, 24-POSITION LOAD CENTER, AR20044RS WITH 45° ANGLE ADAPTER, MOV |
| - CACA75201190 | 200A SLIDE BAR TRANSFER DEVICE, 30-POSITION LOAD CENTER, AR20044RS, MOV |

PPC (CAC MODEL) CABINET SPECIFICATION:

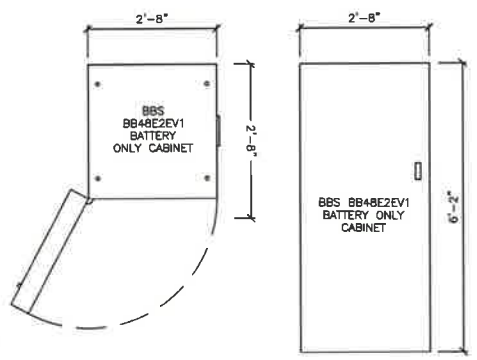
- CABINET DIMENSIONS: 39.00" x 20.00" x 10.00" (H x W x D)
- WEIGHT: APPROX. 75 LBS.
- EXTERNAL MATERIAL: 0.1" THICK ALUMINUM
- CABINET ENCLOSURE TYPE: ONE AC POWER TVSS CABINET (NEMA 3R TYPE ENCLOSURE)
- WEATHER PROTECTION: RAIN/DRIP HOOD, RAIN TESTED PER UL 891

RBS EQUIPMENT CABINET DETAIL

SCALE N.T.S. 4

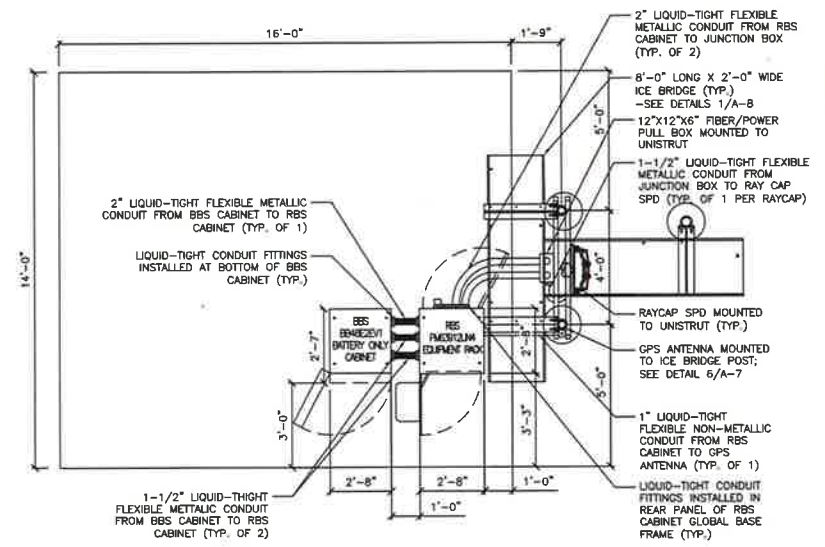
PPC CABINET DETAIL

SCALE N.T.S. 2



CUBE-BB48E2EV1 - BATTERY ONLY CABINET
CABINET DIMENSIONS (H X W X D):
 (74 IN) X (32 IN) X (32 IN)
 (1879.6 MM) X (812.8 MM) X (812.8 MM)

DESCRIPTION
 FRONT DOOR, 3 POINT LATCHING, PADLOCKABLE 216 HEX BOLT ENTRY REMOVABLE REAR PANEL, (6) 1/4 TURN LATCHES, (2) PADLOCKABLE
 DOOR INTRUSION ALARMS ON BOTH DOORS
 (5) BATTERY RACKS - 12.9" H X 21" W X 26.5" D EACH
 6" PLINTH WITH REMOVABLE FRONT & REAR PANELS
 (1) 2000 BTU AC POWERED AIR CONDITIONER WITH 500 WATT AC HEATER AND FILTER SYSTEM ON THE FRONT DOOR
 POWER AND RETURN BUS WITH #2 AWG WIRE/CABLE.
 BONDING/GROUNDING BATTERY COMPARTMENT
 14 POSITION ISOLATED COPPER BUS BAR FOR +24V OR -48VDC
 14 POSITION ISOLATED COPPER BUS BAR FOR BATTERY RETURN



BATTERY BACKUP SYSTEM DETAIL

SCALE N.T.S. 3

EQUIPMENT PLAN

SCALE N.T.S. 1



| REV. | DATE | ISSUED FOR | INT |
|------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SNM |
| D | 08/18/19 | CONSTRUCTION SET | SGM |
| Δ | 10/16/19 | CLIENT COMMENTS | SGM |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA

222712
 TURLEY
 6050 N. JOHNSTOWN AVE.
 TULSA, OK 74126
 TULSA COUNTY COUNTY

SHEET TITLE
EQUIPMENT PLAN & CABINET DETAILS

SHEET NUMBER
A-5



REVISIONS

| REV. | DATE | ISSUED FOR | INT |
|------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SNN |
| D | 09/18/19 | CONSTRUCTION SET | SGM |
| Δ | 10/16/19 | CLIENT COMMENTS | SGM |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA

222712
TURLEY
6050 N. JOHNSTOWN AVE.
TULSA, OK 74126
TULSA COUNTY COUNTY

SHEET TITLE
**NEW ANTENNA,
RADIOS & CABLE
CONFIGURATION**

SHEET NUMBER
A-6

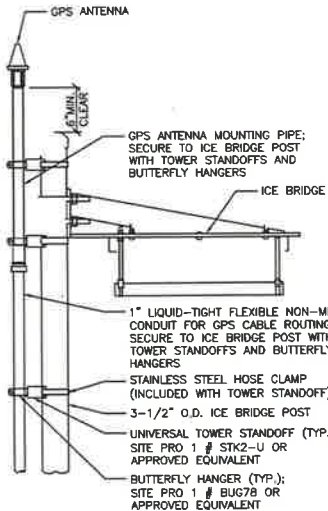
PROPOSED ANTENNA CONFIGURATION AND CABLE SCHEDULE
SUPPLIED BY USCC, FROM RAN DESIGN PACKAGE DATED 08/08/19 BY NIKHIL PUNEKAR

| SECTOR | POSITION | TECH | ANTENNA | ANTENNA HEIGHT | AZIMUTH | TMA/RRU MODEL | DC SURGE AND DISTRIBUTION | CABLE TYPE | CABLE LENGTH* | MECH TILT | ELECTRICAL DOWNTILT | | |
|--------|----------|------|---------------------------------|----------------|---------|---------------|---------------------------|-----------------------|-----------------------|-----------|---------------------|---|---|
| A | 1 | LTE | (1) DENGYO OCT8-2LX2HX-BW65 (N) | 120'-0" | 30° | (1) AHLQA (N) | (2) RAYCAP (N) SPD | (1) 1-1/4" HYBRID (N) | 160'-0" | 0 | 2 | | |
| | 2 | - | - | | - | - | | - | | - | - | | |
| | 3 | - | - | | - | - | | - | | - | - | | |
| | 4 | - | - | | - | - | | - | | - | - | | |
| B | 1 | - | - | 120'-0" | - | - | | (2) RAYCAP (N) SPD | - | - | - | - | |
| | 2 | LTE | (1) DENGYO OCT8-2LX2HX-BW65 (N) | | 180° | (1) AHLQA (N) | | | - | | 0 | 2 | |
| | 3 | - | - | | - | - | | | - | | - | - | |
| | 4 | - | - | | - | - | | | - | | - | - | |
| C | 1 | - | - | 120'-0" | - | - | | | (2) RAYCAP (N) SPD | - | - | - | - |
| | 2 | LTE | (1) DENGYO OCT8-2LX2HX-BW45 (N) | | 280° | (1) AHLQA (N) | | | | - | | 0 | 2 |
| | 3 | - | - | | - | - | | | | - | | - | - |
| | 4 | - | - | | - | - | | | | - | | - | - |

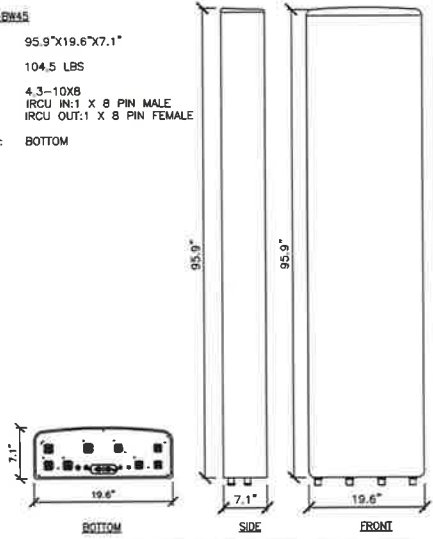
* INCLUDES SAFETY FACTOR OF 20 FT. (10 FT. A BOTH ENDS OF CABLE RUN). CONTRACTOR TO VERIFY RF DATA WITH U.S. CELLULAR CONSTRUCTION MANAGER AND/OR RF ENGINEER PRIOR TO INSTALLATION

(N) = NEW
(E) = EXISTING
(XR) = EXISTING/RELOCATED
(E) = ELECTRICAL
(M) = MECHANICAL

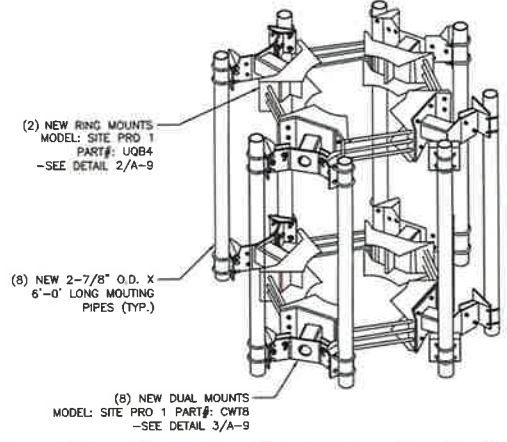
5.39



DENGYO OCT8-2UX2HY-BW45
 DIMENSIONS, HxWxD: 95.9\"x19.6\"x7.1\"
 NET WEIGHT: 104.5 LBS
 CONNECTOR: 4.3-10X8
 IRCU IN: 1 X 8 PIN MALE
 IRCU OUT: 1 X 8 PIN FEMALE
 CONNECTOR POSITION: BOTTOM



RADIO MONOPOLE ATTACHMENT:
 DESCRIPTION: CONSIST OF THE FOLLOWING:
 (2) QUAD UNIVERSAL RING MOUNTS
 FITS 12\" TO 60\" DIAMETER MONOPOLES
 (8) DUAL PIPES MOUNTS WITH 14\" STANDOFF
 ACCEPTS 2-3/8\", 2-7/8\" & 3-1/2\" O.D. PIPES



CARRIER:

 3545 N. 124TH STREET
 BROOKFIELD, WI 53005

CLIENT:

 1811 AUBURN AVE.
 MONROE, LA 71201
 SHELBY THOMAS
 (318) 325-4666

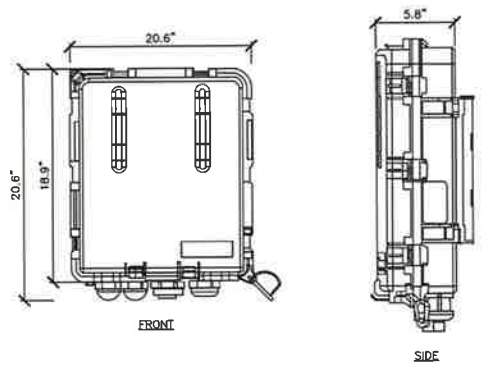
PLAN PREPARED BY:

 LETS America, Inc.
 112 S. KYRIENE RD. STE. 1
 CHANDLER, AZ 85226
 ARIZONA: 480-961-9151
 FL-RES-029

| REV. | DATE | ISSUED FOR | INT |
|------------------------------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SMM |
| D | 09/18/19 | CONSTRUCTION SET | SOM |
| 10/16/19 CLIENT COMMENTS SOM | | | |

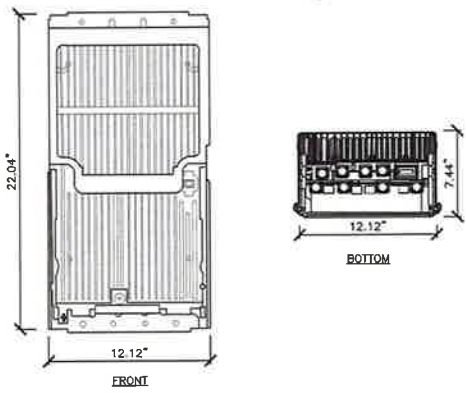
NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

RAYCAP RRU SURGE PROTECTION:
 RAYCAP MODEL #: RUSDC-6267-PF-48
 DIMENSIONS, HxWxD: 20.6\"x18.9\"x5.8\"
 WEIGHT: 19.95 LBS

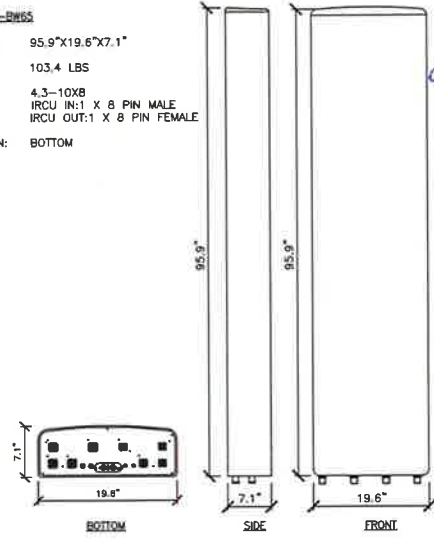


AIRSCALE DUAL BAND RRH AHLQA (R12/B71)
 DIMENSIONS, HxWxD: 22.04\"x12.12\"x7.44\"
 WEIGHT, WITHOUT MOUNTING KIT: 53 LBS

NOTE:
 REMOTE RADIO UNITS MUST BE POWERED UP WITHIN 48 HOURS OF INSTALLATION ON TOWER.



DENGYO OCT8-2UX2HY-BW65
 DIMENSIONS, HxWxD: 95.9\"x19.6\"x7.1\"
 NET WEIGHT: 103.4 LBS
 CONNECTOR: 4.3-10X8
 IRCU IN: 1 X 8 PIN MALE
 IRCU OUT: 1 X 8 PIN FEMALE
 CONNECTOR POSITION: BOTTOM



REGISTERED PROFESSIONAL ENGINEER

 DATE: 10/16/19

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA

222712
 TURLEY
 6050 N. JOHNSTOWN AVE.
 TULSA, OK 74126
 TULSA COUNTY COUNTY

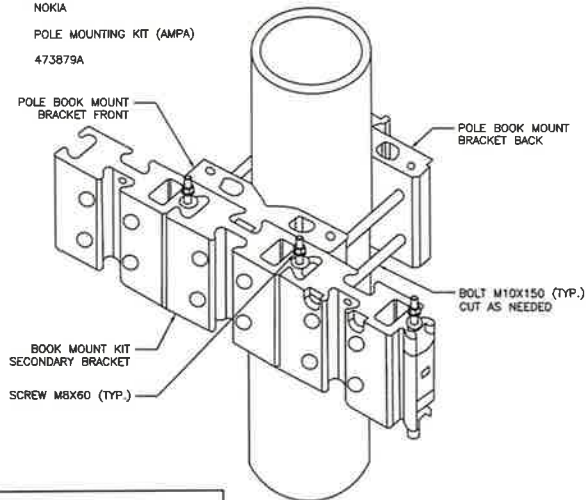
SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
A-7

5.40

BOOK MOUNT POLE KIT

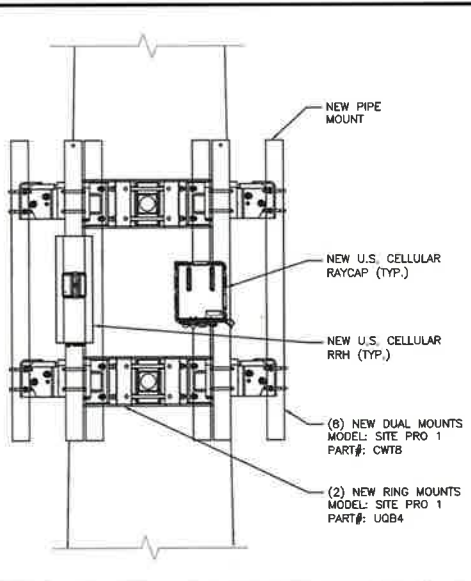
MANUFACTURER: NOKIA
 DESCRIPTION: POLE MOUNTING KIT (AMPA)
 MODEL: 473879A



NOTE:
 CAN BE USED WITH PIPES FROM 1.2"± TO 4.7"± DIA.

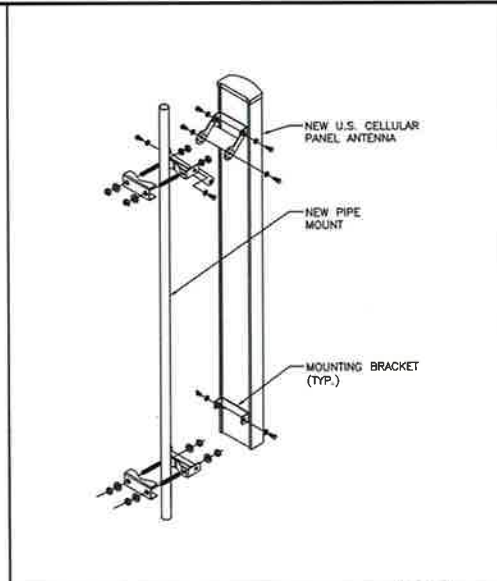
RRH MOUNTING BRACKET DETAIL

SCALE
 N.T.S. 5



RRH MOUNTING DETAIL

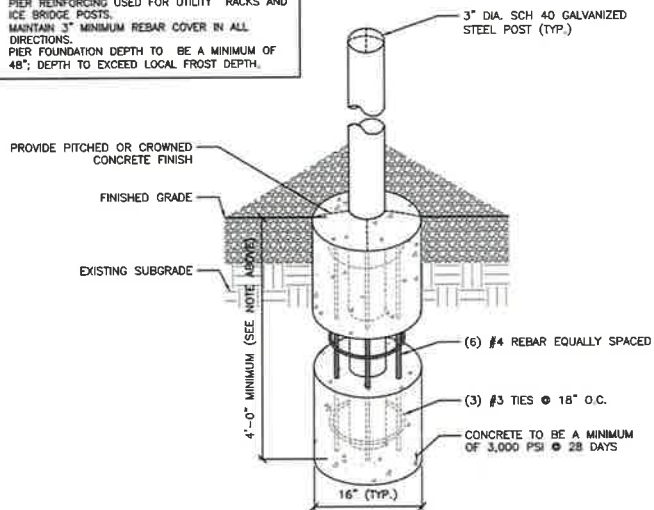
SCALE
 N.T.S. 3



ANTENNA MOUNTING DETAIL

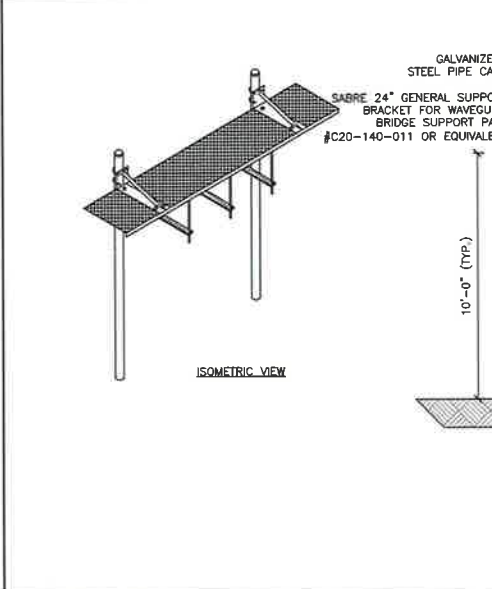
SCALE
 N.T.S. 2

- NOTES:
- PIER REINFORCING USED FOR UTILITY RACKS AND ICE BRIDGE POSTS.
 - MAINTAIN 3" MINIMUM REBAR COVER IN ALL DIRECTIONS.
 - PIER FOUNDATION DEPTH TO BE A MINIMUM OF 48"; DEPTH TO EXCEED LOCAL FROST DEPTH.



CONCRETE PIER FOUNDATION DETAIL

SCALE
 N.T.S. 4



ICE BRIDGE DETAIL

SCALE
 N.T.S. 1

CARRIER:

 3545 N. 124TH STREET
 BROOKFIELD, WI 53005

CLIENT:

 1811 AUBURN AVE.
 MONROE, LA 71201
 RALPH THOMAS
 (510) 325-4666

PLAN PREPARED BY:

 LETS America, Inc.
 112 S. KYRENE RD. STE. 1
 CHANDLER, AZ 85226
 ARIZONA: 480-961-9151
 F1-NES-029

| REV. | DATE | ISSUED FOR | INT |
|------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SMM |
| O | 09/18/19 | CONSTRUCTION SET | SOM |
| Δ | 10/16/19 | CLIENT COMMENTS | SOM |

NOT FOR CONSTRUCTION UNLESS
 LABELED AS CONSTRUCTION SET

I HEREBY CERTIFY THAT THESE PLANS WERE
 PREPARED BY ME OR UNDER MY DIRECT SUPERVISION
 AND THAT I AM A DULY REGISTERED ENGINEER
 UNDER THE LAWS OF THE STATE OF OKLAHOMA

222712
 TURLEY
 6050 N. JOHNSTOWN AVE.
 TULSA, OK 74126
 TULSA COUNTY COUNTY

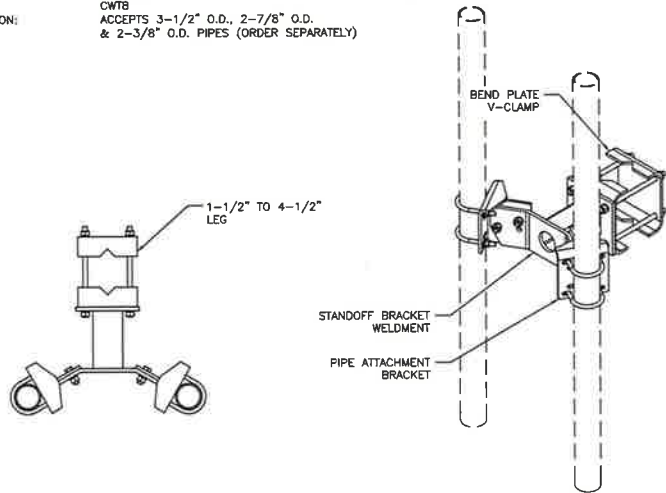
SHEET TITLE
**ICE BRIDGE
 AND MOUNTING
 DETAILS**

SHEET NUMBER
A-8

5.41

DUAL ANTENNA MOUNT:

MODEL: SITE PRO 1
 PART#: CWTB
 DESCRIPTION: ACCEPTS 3-1/2" O.D., 2-7/8" O.D. & 2-3/8" O.D. PIPES (ORDER SEPARATELY)

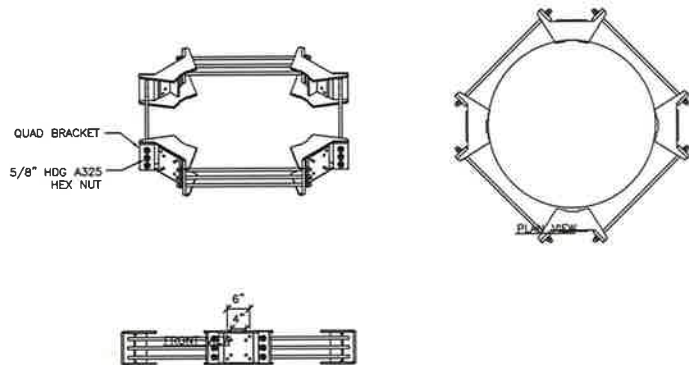


DUAL ANTENNA MOUNT DETAIL

SCALE N.T.S. 3

QUAD UNIVERSAL RING MOUNT:

MODEL: SITE PRO 1
 PART#: UQB4
 DESCRIPTION: FOUR SIDED RING ASSEMBLY FITS 12" TO 60" DIAMETER MONOPOLES 6"x6" BOLT PATTERN

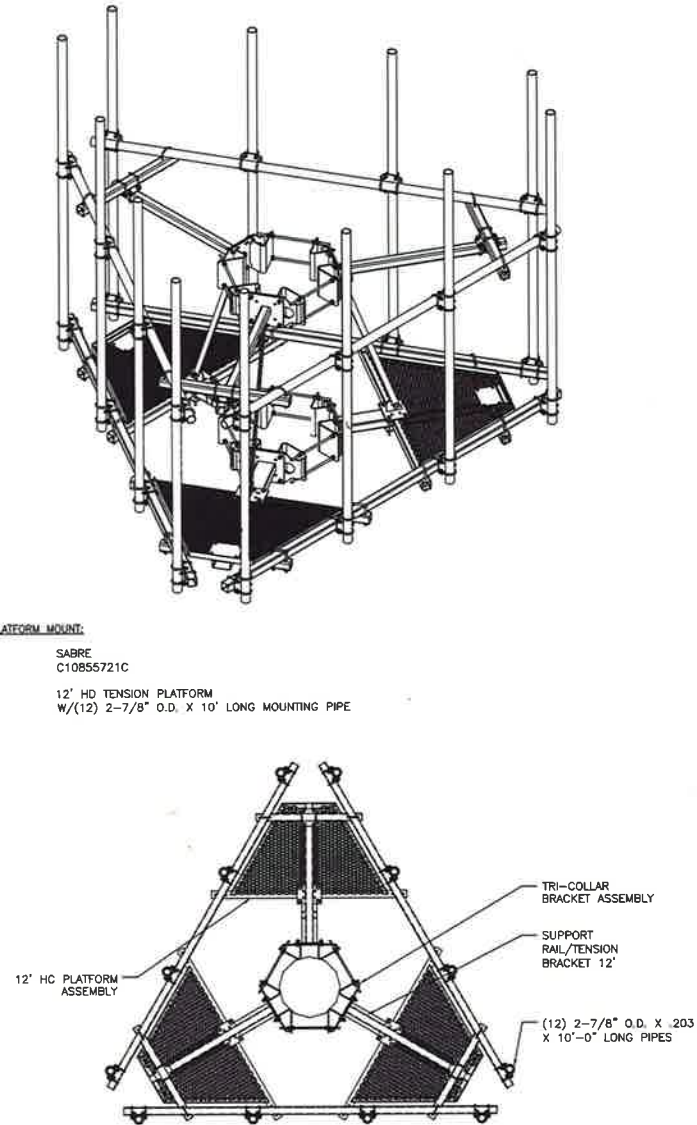


RING MOUNT DETAIL

SCALE N.T.S. 2

12' HD TENSION PLATFORM MOUNT:

MODEL: SABRE
 PART#: C10855721C
 DESCRIPTION: 12' HD TENSION PLATFORM W/(12) 2-7/8" O.D. X 10' LONG MOUNTING PIPE



PLATFORM MOUNT DETAIL

SCALE N.T.S. 1

CARRIER:

 3545 N. 124TH STREET
 BROOKFIELD, WI 53005

CLIENT:

 1811 ALBURN AVE.
 MONROE, LA 71201
 RALPH THOMAS
 (516) 325-4666

PLAN PREPARED BY:

 LETS America, Inc.
 112 S. KYRNE RD. STE 1
 CHANDLER, AZ 85226
 ARIZONA: 480-961-9151
 FL-NES-028

| REV. | DATE | ISSUED FOR | INT |
|------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SMM |
| D | 08/18/19 | CONSTRUCTION SET | SGM |
| Δ | 10/16/19 | CLIENT COMMENTS | SGM |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

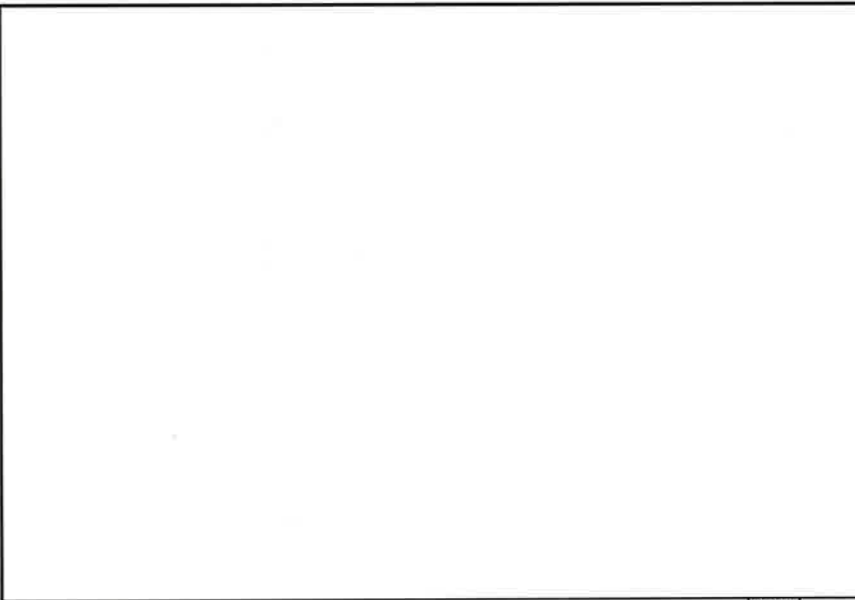
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA

222712
 TURLEY
 6050 N. JOHNSTOWN AVE.
 TULSA, OK 74126
 TULSA COUNTY COUNTY

SHEET TITLE
PLATFORM & RING MOUNT DETAILS

SHEET NUMBER
A-9

5.42



NOT USED SCALE N.T.S. 3

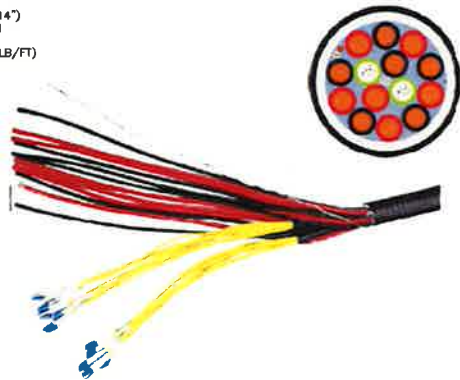
EUPEN HYBRID CABLE

DESCRIPTION: HYBRID FIBER OPTIC CABLE WITH 48V ENERGY FEEDER IN CORRUGATED ALUMINUM SHIELDING WITH UV RESISTANT PE JACKET

SHIPPED WITH 4" PROTECTED JACKET (2.25" O.D.) AT EACH END.

NON-ARMORED ENDS ARE 3" IN LENGTH (2" O.D.).

SPECIFICATIONS: MINIMUM BENDING RADIUS: 360 mm (14")
 MAXIMUM PULLING STRENGTH: 150 daN
 MAXIMUM HANGER SPACING: 1.0 m
 APPROX. WEIGHT: 2300 kg/km (1.55 LB/FT)



HYBRID CABLE DETAIL SCALE N.T.S. 2

| HYBRID CABLE LENGTH | | | |
|---------------------------------------|--|--|--------|
| QUANTITY FROM ICE BRIDGE RAYCAP SPD | | | 1 |
| LENGTH ALONG ICE BRIDGE | | | 16 FT |
| LENGTH FROM AGL TO ANTENNA RAD CENTER | | | 120 FT |
| TOTAL LENGTH OF HYBRID CABLE | | | 136 FT |
| ROUNDED LENGTH* | | | 160 FT |

| RET CABLE INFORMATION | | | |
|-------------------------|----------|---------|------|
| ANTENNA TO REMOTE RADIO | | | |
| | QUANTITY | LENGTH | |
| ALPHA SECTOR | 1 | 32.8 FT | 10 M |
| BETA SECTOR | 1 | 32.8 FT | 10 M |
| GAMMA SECTOR | 1 | 32.8 FT | 10 M |

STANDARD RET CABLE LENGTH OF 10 METERS, RF APPROVAL REQUESTED FOR ADDITIONAL RET CABLE LENGTH

| COAX JUMPER CABLE INFO | | | |
|--------------------------|----------|--------|--|
| RADIO TO ANTENNA (AHLOA) | | | |
| | QUANTITY | LENGTH | |
| ALPHA SECTOR | 4 | 25 FT | |
| BETA SECTOR | 4 | 25 FT | |
| GAMMA SECTOR | 4 | 25 FT | |

COAX JUMPERS TO BE ROUNDED TO 5'-0" INCREMENTS; ALL SECTORS MUST HAVE THE SAME JUMPER LENGTHS

| FIBER JUMPER CABLE INFORMATION | | | |
|------------------------------------|----------|---------|-----|
| RAYCAP SPD TO REMOTE RADIO (AHLOA) | | | |
| | QUANTITY | LENGTH | |
| ALPHA SECTOR | 2 | 16.4 FT | 5 M |
| BETA SECTOR | 2 | 16.4 FT | 5 M |
| GAMMA SECTOR | 2 | 16.4 FT | 5 M |

| POWER JUMPER CABLE INFORMATION | | | |
|------------------------------------|----------|---------|-----|
| RAYCAP SPD TO REMOTE RADIO (AHLOA) | | | |
| | QUANTITY | LENGTH | |
| ALPHA SECTOR | 1 | 16.4 FT | 5 M |
| BETA SECTOR | 1 | 16.4 FT | 5 M |
| GAMMA SECTOR | 1 | 16.4 FT | 5 M |

| CABLE INFORMATION | | | |
|-------------------|---|--------------|---|
| SCALE N.T.S. | 2 | SCALE N.T.S. | 1 |

CARRIER:

3545 N. 124TH STREET
BROOKFIELD, WI 53005

CLIENT:

1811 ALBURN AVE.
MONROE, LA 71201
RALPH THOMAS
(318) 325-4666

PLAN PREPARED BY:

LETS America, Inc.
112 S. KYNDIE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-9151
FL-NEE-029

REVISIONS

| REV. | DATE | ISSUED FOR | INT |
|------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SNN |
| D | 09/18/19 | CONSTRUCTION SET | SGM |
| Δ | 10/16/19 | CLIENT COMMENTS | SGM |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

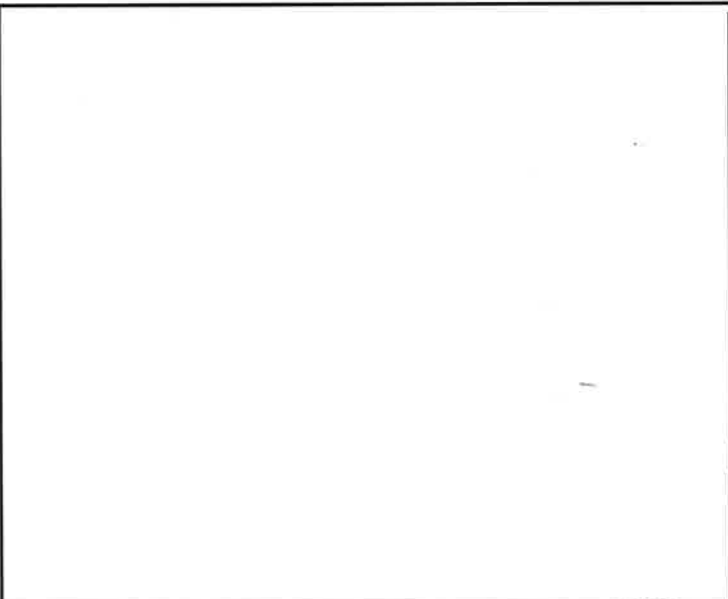
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA.

222712
TURLEY
6050 N. JOHNSTOWN AVE.
TULSA, OK 74126
TULSA COUNTY COUNTY

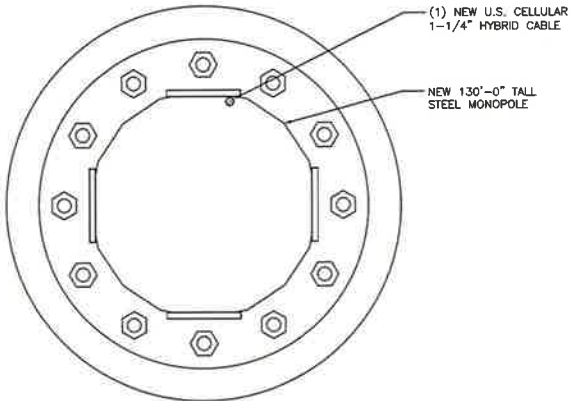
SHEET TITLE
CABLE INFORMATION & DETAIL

SHEET NUMBER
A-10

5.43



NOT USED SCALE N.T.S. 6



CABLE ROUTING PLAN SCALE N.T.S. 5

1. CONTRACTOR IS TO REFER TO USCC MOST CURRENT RADIO FREQUENCY DATA SHEET (RFDS) PRIOR TO CONSTRUCTION.
2. THE SIZE, HEIGHT, AND DIRECTION OF THE ANTENNAS SHALL BE ADJUSTED TO ACHIEVE THE AZIMUTHS SPECIFIED AND LIMIT SHADOWING AND TO MEET THE SYSTEM REQUIREMENTS.
3. CONTRACTOR SHALL VERIFY THE HEIGHT OF THE ANTENNA WITH THE USCC PROJECT MANAGER.
4. VERIFY TYPE AND SIZE OF TOWER LEG PRIOR TO ORDERING ANY ANTENNA MOUNT.
5. UNLESS NOTED OTHERWISE THE CONTRACTOR MUST PROVIDE ALL MATERIAL NECESSARY.
6. ANTENNA AZIMUTHS ARE DEGREES OFF OF TRUE NORTH, BEARING CLOCKWISE, IN WHICH ANTENNA FACE IS DIRECTED. ALL ANTENNAS (AND SUPPORTING STRUCTURES AS PRACTICAL) SHALL BE ACCURATELY ORIENTED IN THE SPECIFIED DIRECTION.
7. CONTRACTOR SHALL VERIFY ALL RF INFORMATION PRIOR TO CONSTRUCTION.
8. SWEEP TEST SHALL BE PERFORMED BY GENERAL CONTRACTOR AND SUBMITTED TO USCC CONSTRUCTION SPECIALIST, TEST SHALL BE PERFORMED PER USCC STANDARDS.
9. CABLE LENGTHS WERE DETERMINED BASED ON THE DESIGN DRAWING. CONTRACTOR TO VERIFY ACTUAL LENGTH DURING PRE-CONSTRUCTION WALK.
10. CONTRACTOR TO USE ROSENBERGER FIBER LINE HANGER COMPONENTS (OR ENGINEER APPROVED EQUAL).

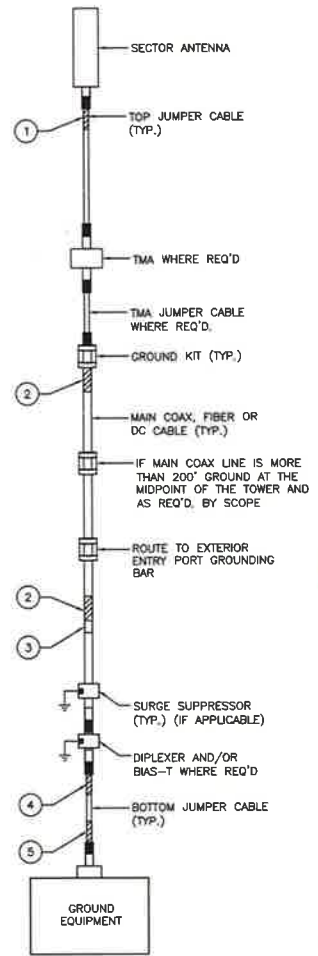
ANTENNA & CABLING NOTES SCALE N.T.S. 4

| RF, DC, & COAX CABLE MARKING LOCATIONS TABLE | |
|--|--|
| NO. | LOCATIONS |
| ① | EACH TOP-JUMPER SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS. |
| ② | EACH MAIN COAX SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS NEAR THE TOP-JUMPER CONNECTION AND WITH (1) SET OF 3/4" WIDE COLOR BANDS JUST PRIOR TO ENTERING THE BTS OR TRANSMITTER BUILDING. |
| ③ | CABLE ENTRY PORT ON THE INTERIOR OF THE SHELTER. |
| ④ | ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER. |
| ⑤ | ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER. |

CABLE MARKING DIAGRAM SCALE N.T.S. 3

1. THE ANTENNA SYSTEM COAX SHALL BE LABELED WITH VINYL TAPE.
2. THE STANDARD IS BASED ON EIGHT COLORED TAPES-RED, BLUE, GREEN, YELLOW, ORANGE, BROWN, WHITE, AND VIOLET. THESE TAPES MUST BE 3/4" WIDE & UV RESISTANT SUCH AS SCOTCH 35 VINYL ELECTRICAL COLOR CODING TAPE AND SHOULD BE READILY AVAILABLE TO THE ELECTRICIAN OR CONTRACTOR ON SITE.
3. USING COLOR BANDS ON THE CABLES, MARK ALL RF CABLE BY SECTOR AND CABLE NUMBER AS SHOWN ON "CABLE COLOR CHART".
4. WHEN AN EXISTING COAXIAL LINE THAT IS INTENDED TO BE A SHARED LINE BETWEEN TECHNOLOGIES IS ENCOUNTERED, THE CONTRACTOR SHALL REMOVE THE EXISTING COLOR CODING SCHEME AND REPLACE IT WITH THE COLOR CODING STANDARD. IN THE ABSENCE OF AN EXISTING COLOR CODING AND TAGGING SCHEME, OR WHEN INSTALLING PROPOSED COAXIAL CABLES, THIS GUIDELINE SHALL BE IMPLEMENTED AT THAT SITE REGARDLESS OF TECHNOLOGY.
5. ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE INSTALLED USING A MINIMUM OF (3) THREE WRAPS OF TAPE AND SHALL BE NEATLY TRIMMED AND SMOOTHED OUT SO AS TO AVOID UNRAVELING.
6. ALL COLOR BANDS INSTALLED AT THE TOP OF THE TOWER SHALL BE A MINIMUM OF 3" WIDE, AND SHALL HAVE A MINIMUM OF 3/4" OF SPACE BETWEEN EACH COLOR.
7. ALL COLOR CODES SHALL BE INSTALLED SO AS TO ALIGN NEATLY WITH ONE ANOTHER FROM SIDE-TO-SIDE.
8. IF EXISTING CABLES AT THE SITE ALREADY HAVE A COLOR CODING SCHEME AND THEY ARE NOT INTENDED TO BE REUSED OR SHARED WITH THE NEW TECHNOLOGY, THE EXISTING COLOR CODING SCHEME SHALL REMAIN UNTOUCHED.

CABLE MARKING NOTES SCALE N.T.S. 2



CABLE COLOR CODING DIAGRAM SCALE N.T.S. 1

CARRIER:

3345 N. 124TH STREET
BROOKFIELD, WI 53005

CLIENT:

1811 AUBURN AVE.
MONROE, LA 71201
RALPH THOMAS
(318) 325-4666

PLAN PREPARED BY:

LETS America, Inc.
112 S. KYRENIE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-9151
FL: HES-029

| REVISIONS | | | | |
|-----------|----------|------------------|-----|--|
| REV. | DATE | ISSUED FOR | INT | |
| A | 03/04/19 | 90% CD'S | SEP | |
| B | 05/17/19 | 95% CD'S | SPM | |
| C | 08/29/19 | 95% CD'S | SNN | |
| 0 | 09/18/19 | CONSTRUCTION SET | SGM | |
| Δ | 10/16/19 | CLIENT COMMENTS | SGM | |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA.

222712
TURLEY
6050 N. JOHNSTOWN AVE.
TULSA, OK 74126
TULSA COUNTY COUNTY

SHEET TITLE
CABLE COLOR CODING & ROUTING PLAN

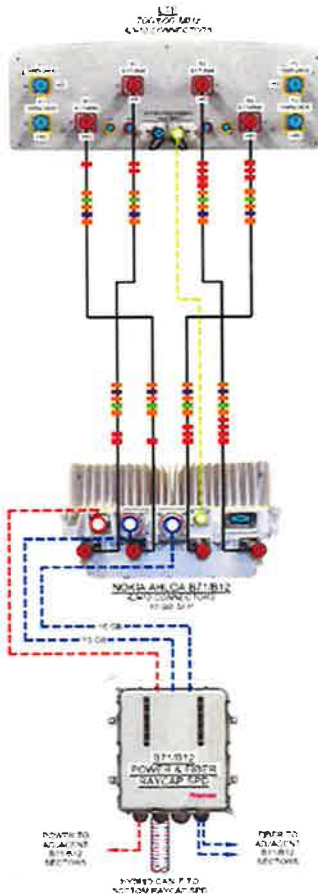
SHEET NUMBER
A-11

5.44



- NOTES:
1. ALL JUMPER WIRE IN RACK UNITS & ANTENNAS MUST BE THE SAME LENGTH.
 2. CONTRACTOR TO INSTALL WEATHERPROOF CAP ON ALL UNUSED PORTS.

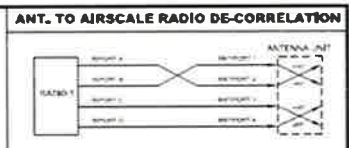
**NSN/ B71/B12
PER SECTOR CONFIGURATION**



PLUMBING DIAGRAM, DX219

CONTAINS U.S. CELLULAR CONFIDENTIAL INFORMATION, NOT FOR EXTERNAL USE OR DISCLOSURE WITHOUT PROPER AUTHORIZATION.

- NOTE:
- CONTRACTOR TO INSTALL WEATHERPROOF CAP AT BOTH UN-USED HIGH BAND PORTS ON ANTENNA.
 - CONTRACTOR TO INSTALL TERMINATION LOADS AT UN-USED B5 JUMPER PORTS ON DIPLEXERS; ROSENBERGER # L-2-DM-01



CABLE LEGEND

| | |
|--|-------------------|
| | FIBER OPTIC CABLE |
| | 1/2" COAX JUMPER |
| | FEEDER JUMPER |
| | POWERS JUMPER |
| | RF CABLE |
| | 400 BAND POINT |
| | 400 BAND POINT |
| | WEATHERPROOF CAP |

CARRIER:

3545 N. 124TH STREET
BROOKFIELD, WI 53005

CLIENT:

1811 ALBURN AVE.
MONROE, LA 71201
RALPH THOMAS
(318) 325-4666

PLAN PREPARED BY:

LETS America, Inc.
112 S. KYRENE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-9151
F1-MS-029

REVISIONS

| REV. | DATE | ISSUED FOR | INT. |
|------|----------|------------------|------|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SNN |
| D | 09/18/19 | CONSTRUCTION SET | SGM |
| Δ | 10/16/19 | CLIENT COMMENTS | SGM |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA

222712
TURLEY
6050 N. JOHNSTOWN AVE.
TULSA, OK 74126
TULSA COUNTY COUNTY

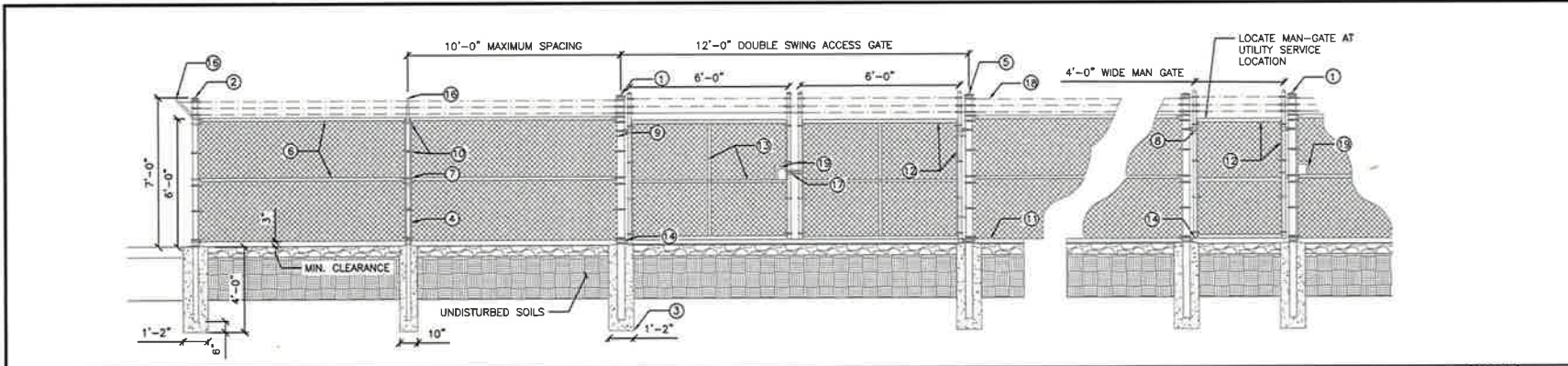
SHEET TITLE
**PLUMBING
DIAGRAM**

SHEET NUMBER
A-12



SCALE
N.T.S. 1

S.45



COMPOUND FENCE DETAIL

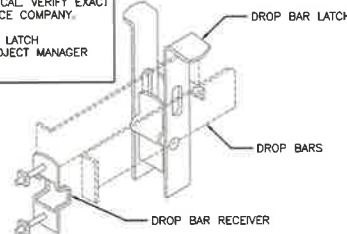
SCALE
N.T.S. 5

REFERENCE NOTES:

1. 4" O.D. GALVANIZED STEEL, SCHEDULE 40 GATE POST.
2. 3" O.D. GALVANIZED STEEL, SCHEDULE 40 CORNER POST.
3. CONCRETE PIER FOUNDATION, TO ACHIEVE A MINIMUM STRENGTH OF 3000 PSI AT 28 DAYS. CONCRETE DEPTH TO BE A MINIMUM OF 6" BELOW FROST LINE (48" MINIMUM, TYP.).
4. 2-1/2" O.D. GALVANIZED STEEL, SCHEDULE 40 INTERMEDIARY LINE POSTS. LINE POSTS SHALL BE EQUALLY SPACED AT MAXIMUM 10'-0" O.C.
5. FENCE POST CAP (SIZE VARIES).
6. 1-5/8" O.D. TOP RAIL & MID BRACE RAIL PIPE.
7. OFFSET BRACE RAIL ENDS FOR MID BRACE RAIL.
8. 3/16" O.D. TRUSS ROD WITH TRUSS TIGHTENER ASSEMBLY.
9. 3/16" x 3/4" STRETCHER BAR, TO EXTEND FULL HEIGHT OF FENCE.
10. 3/4" TENSION BAND (TYP.).
11. TENSION WIRE.
12. 1-7/8" O.D. GALVANIZED STEEL FENCE GATE FRAME.
13. 1-3/8" O.D. GALVANIZED STEEL HORIZONTAL AND VERTICAL GATE BRACES.
14. MALLEABLE BUTT HINGES (TYP.).
15. N/A
16. 45° BARB ARM FENCE POST CAP.
17. GATE LATCH; SEE DETAIL B/C4.
18. STRANDS OF 4 FT. BARB WIRE.
19. 6" x 6" HANDHOLE FOR CHAIN LOCK

NOTES:

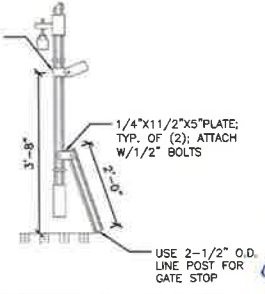
- ALL STEEL SHALL BE HOT-DIPPED GALVANIZED.
- DETAIL SHOWN IS TYPICAL. VERIFY EXACT REQUIREMENTS WITH FENCE COMPANY.
- VERIFY DIMENSIONS & LATCH MANUFACTURER WITH PROJECT MANAGER PRIOR TO INSTALLATION.



GATE LATCH DETAIL

SCALE
N.T.S. 3

GATE STOP LATCH COMPRISED OF TENSION BANDS; TYP. OF (2)



GATE STOP DETAIL

SCALE
N.T.S. 2

REFERENCE NOTES

SCALE
N.T.S. 4

1.0 SCOPE:

1.1 THIS SECTION COVERS THE REQUIREMENTS FOR THE MATERIALS AND THE CONSTRUCTION OF SITE FENCING, GUY AREA FENCING, ACCESS ROAD GATES AND CATTLE GUARDS. SEE SITE PLAN AND DRAWINGS FOR DETAILS.

2.0 SPECIAL REQUIREMENTS:

- 2.1 ALL WIRE, FABRIC, FITTINGS, HARDWARE AND STEEL MEMBERS USED FOR SITE AREA FENCING, GUY ANCHOR FENCING AND ACCESS ROAD GATES SHALL BE HOT DIPPED GALVANIZED (ASTM A153) OR OTHER APPROVED NON CORROSIVE MATERIAL AND CONFORM TO FEDERAL SPEC RR-1-191G (1-25-74).
- 2.2 ALL NON-CORROSIVE MATERIAL SHALL BE PRE-APPROVED BY THE PROJECT MANAGER.
- 2.3 ANY DAMAGE TO GALVANIZING OR NON-CORROSIVE COATING DURING CONSTRUCTION SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S RECOMMENDED METHODS.

3.0 FENCE POST:

- 3.1 LOCATION OF CORNER POSTS SHALL BE DETERMINED FROM STAKES AND PROPERTY PINS INSTALLED BY THE REGISTERED LAND SURVEYOR UNDER CONTRACT FOR THE PROJECT. IF THE STAKES ARE NOT PRESENT OR DO NOT CONFORM TO THE SITE PLAN, CONSULT WITH THE PROJECT MANAGER.
- 3.2 CORNERS AND GATE POST FOR SITE SHALL BE 4" AND 3" RESPECTIVELY (OUTSIDE DIA.) GALVANIZED PIPE. LINE POST SHALL BE 2-1/2" (OUTSIDE DIA.) GALVANIZED PIPE.
- 3.3 CORNER POSTS SHALL BE SET WITHIN ONE INCH (1") OF DIMENSIONS INDICATED ON THE SITE PLAN.
- 3.4 FENCE POSTS SHALL BE VERTICALLY PLUMB IN ALL PLANES WITHIN 1/2 INCH (1/2").

3.5 CORNER AND GATE POST FOUNDATIONS SHALL BE A MINIMUM FOUR FEET (4'-0") DEEP OR SIX INCHES (6") BELOW THE FROST LINE, WHICHEVER IS GREATER. WITH MINIMUM THREE INCH (3") CLEARANCE BETWEEN BOTTOM OF POST AND BOTTOM OF THE HOLE.

3.6 POST FOUNDATIONS GATE AND CORNER POSTS SHALL BE 12 INCHES (12") IN DIAMETER.

3.7 LINE POSTS BETWEEN CORNER AND GATE POSTS SHALL BE EQUALLY SPACED WITH A TEN FOOT (10'-0") MAXIMUM SPACING. GATE POST LOCATIONS SHALL BE IN ACCORDANCE WITH SITE PLAN AND SHALL BE VERIFIED WITH THE PROJECT MANAGER.

3.8 ALL POSTS EXCEPT GATE POSTS SHALL BE CAPPED WITH A COMBINATION CAP AND BARB WIRE SUPPORTING ARM. GATE POSTS SHALL BE TWELVE INCHES (12") HIGHER THAN CORNER OR LINE POSTS TO PROVIDE FOR TERMINATION OF BARBED WIRE. GATE POSTS SHALL BE CAPPED WITH STANDARD CAP.

3.9 ALL CORNER, GATE AND END PANELS SHALL HAVE MINIMUM 3/8" DIAMETER DIAGONAL TRUSS RODS WITH TURNBUCKLES. HORIZONTAL BRACE RODS, 1-5/8" OUTSIDE DIMENSION PIPE, SHALL BE INSTALLED BETWEEN POSTS.

3.10 A TOP RAIL (1-5/8" O.D.) GALVANIZED PIPE SHALL BE INSTALLED BETWEEN POSTS.

3.11 ALL FOUR CORNERS POSTS AND BOTH GATE POSTS SHALL BE CONNECTED TO THE SITE GROUNDING SYSTEM (REFER TO GROUNDING SYSTEM STANDARD).

4.0 FABRIC:

- 4.1 FENCE FABRIC SHALL BE 2" MESH #9 GAUGE, GALVANIZED, SIX FOOT (6'-0") HIGH, UNLESS OTHERWISE SPECIFIED, CHAIN LINK FABRIC WITH KNUCKLED TOP SELVAGE AND TWISTED BOTTOM SELVAGE.
- 4.2 FABRIC SHALL BE TENSIONED PER MANUFACTURER'S RECOMMENDATIONS TO PRESENT A NEAT APPEARANCE. A MAXIMUM THREE INCH (3") GAP SHALL BE PERMITTED BETWEEN FABRIC AND FINAL GRADE.

4.3 FABRIC SHALL BE SECURED AT CORNER AND GATE POSTS USING STRETCHER BARS AND TENSION BAND CUPS.

4.4 FABRIC SHALL BE SECURED TO THE TOP RAIL AND BRACE RODS USING TIE CLIPS.

4.5 THREE (3) RUNS OF 4-POINT GALVANIZED BARBED WIRE SHALL BE INSTALLED ALONG TOP OF FENCE. BARBED WIRE SHALL BE TENSIONED PER MANUFACTURER'S RECOMMENDATIONS TO PRESENT A NEAT APPEARANCE.

5.0 GATE:

5.1 LOCATION OF GATE SHALL CONFORM TO THE SITE PLAN. GATE SIZE SHALL BE 16'-0" WIDE (UNLESS OTHERWISE NOTED).

5.2 ALL JOINTS BETWEEN TUBULAR GATE MEMBERS SHALL BE WELDED OR HEAVY FITTINGS PROVIDING RIGID AND WATERTIGHT CONNECTIONS.

5.3 GATE HINGES SHALL PROVIDE FOR 180 DEGREE RADIUS GATE SWING. ALL HINGE NUTS SHALL BE ON THE INSIDE AND DOUBLE-NUT TO DETER UNAUTHORIZED ENTRY.

5.4 BARBED WIRE GUARD SHALL BE INSTALLED ON TOP OF GATES. ADEQUATE CLEARANCE SHALL BE MAINTAINED TO ALLOW GATE OPERATION.

5.5 GATE SHALL BE INSTALLED PLUMB AND SHALL OPEN AND CLOSE FREELY.

5.6 GATE POSTS SHALL NOT BE SHARED AS A CORNER POST.

GENERAL NOTES

SCALE
N.T.S. 1

CARRIER:
US Cellular
3545 N. 124TH STREET
BROOKFIELD, WI 53005

CLIENT:
Faulk & Foster
1811 AUBURN AVE.
MONROE, LA 71201
RALPH THOMAS
(318) 325-4666

PLAN PREPARED BY:
LETS
LETS America, Inc.
112 S. KYRENE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-9151
F1-NBS-029

| REV. | DATE | ISSUED FOR | INT |
|------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SNH |
| 0 | 09/18/19 | CONSTRUCTION SET | SGM |
| Δ | 10/16/19 | CLIENT COMMENTS | SGM |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

REGISTERED PROFESSIONAL ENGINEER
MADHAN KUMAR KANTHA SAMY
27578
OKLAHOMA
DATE: 10/16/19

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA

222712
TURLEY
6050 N. JOHNSTOWN AVE.
TULSA, OK 74126
TULSA COUNTY COUNTY

SHEET TITLE
FENCE DETAILS

SHEET NUMBER
C-1

5.4.6

GROUNDING NOTE:
 THIS GROUNDING PLAN WAS PREPARED PRIOR TO THE RECEIPT OF THE TOWER FOUNDATION DESIGN. THE LAYOUT OF RADIALS AND GROUND RODS ARE APPROXIMATE IN NATURE AND MAY NEED TO BE ADJUSTED IN THE FIELD. GROUND RODS SHOULD NOT EXTEND THROUGH THE TOWER FOUNDATION OR OTHER STRUCTURAL ELEMENTS WITHOUT PRIOR APPROVAL FROM THE DESIGN ENGINEER. IN ADDITION, SOME ADJUSTMENT TO THE GROUND METHOD MAY BE REQUIRED IN INSTANCES WHERE SHALLOW BEDROCK OR OTHER UNIQUE CIRCUMSTANCES ARE ENCOUNTERED. CONTRACTOR SHALL CONSULT GEOTECHNICAL REPORT FOR FURTHER DESIGN AND CONSTRUCTION RECOMMENDATIONS.

GROUNDING SCHEDULE:

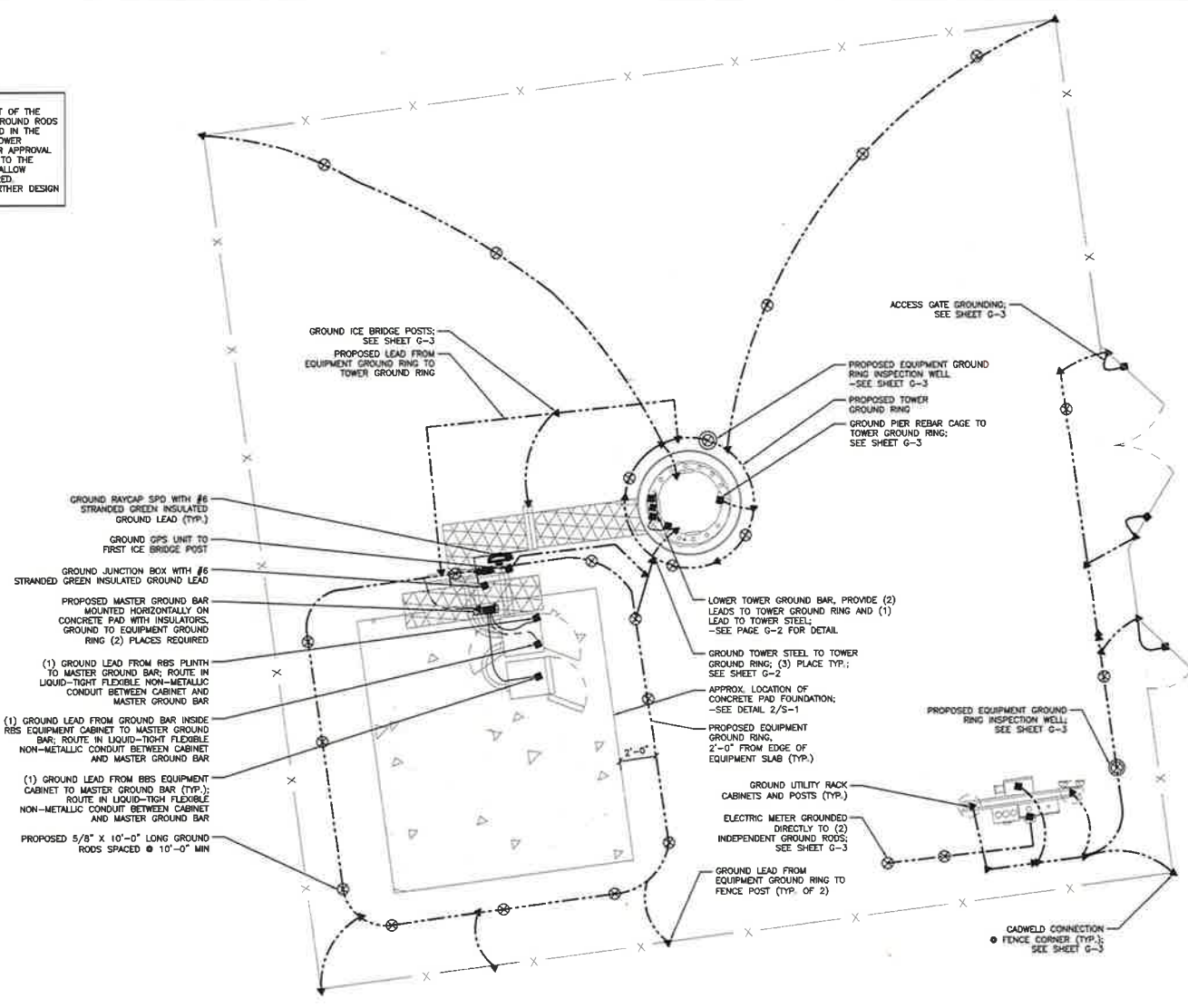
- ▲ CADWELDED CONNECTION
- MECHANICAL BURNDY CONNECTION
- ⊗ GROUND ROD (5/8"x10'-0" LONG COPPER CLAD SPACED 10'-0" O.C.)
- ⊙ GROUND ROD W/INSPECTION WELL

#2 AWG SOLID TINNED COPPER
 - FENCE COMPOUND GROUND RING
 - LEADS FROM GROUND RING TO TOWER
 - LEADS FROM GROUND RING TO EQUIPMENT
 - MAIN LEADS TO GROUND BARS

#6 STRANDED GREEN INSULATED COPPER
 - RAYCAP SPD TO GROUND BAR
 - JUNCTION BOX TO GROUND BAR

NOTES:

1. ALL GROUND LEADS EXTENDING FROM BELOW GRADE SHALL EXTEND A MINIMUM OF 6" ABOVE GRADE FOR TESTING PURPOSES.
2. ALL GROUND LEADS EXTENDING FROM BELOW GRADE TO BE ENCASED IN 3/4" LIQUID TIGHT OR 3/4" RIGID CONDUIT W/THE CONDUIT BEING BURIED A MIN. OF 24" BELOW GRADE.
3. PRIOR TO FINAL COMPACTION, CONTRACTOR SHALL TEST GROUND SYSTEM TO VERIFY 5 OHM OR LESS CRITERIA IS ACHIEVED. CONTRACTOR SHALL SUPPLEMENT GROUND SYSTEM AS NEEDED. FINAL TEST RESULTS SHALL BE DOCUMENTED AND PROVIDED TO ENGINEER.
4. OHM-ROD TO BE UTILIZED IN EVENT OF SHALLOW BEDROCK, OVERLYING SHALLOW FOUNDATION WHERE CONVENTIONAL RODS CANNOT BE INSTALLED, WHERE GROUND SYSTEM NEEDS TO BE SUPPLEMENTED TO ACHIEVE 5 OHM OR LESS RESISTANCE.



CARRIER:

 3545 N. 124TH STREET
 BROOKFIELD, WI 53005

CLIENT:

 1811 AUBURN AVE
 MONROE, LA 71201
 RALPH THOMAS
 (318) 325-4686

PLAN PREPARED BY:

 LETS America, Inc.
 112 S. KYRENIE RD. STE 1
 CHANDLER, AZ 85226
 ARIZONA: 480-961-9151
 FL-NES-029

| REV. | DATE | ISSUED FOR | INT |
|------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SNN |
| D | 09/18/19 | CONSTRUCTION SET | SGM |
| Δ | 10/16/19 | CLIENT COMMENTS | SGM |

NOT FOR CONSTRUCTION UNLESS
 LABELED AS CONSTRUCTION SET

I HEREBY CERTIFY THAT THESE PLANS WERE
 PREPARED BY ME OR UNDER MY DIRECT SUPERVISION
 AND THAT I AM A FULLY LICENSED ENGINEER
 UNDER THE LAWS OF THE STATE OF OKLAHOMA

222712
 TURLEY
 6050 N. JOHNSTOWN AVE.
 TULSA, OK 74126
 TULSA COUNTY COUNTY

SHEET TITLE
**GROUNDING
 PLAN**

SHEET NUMBER
G-1

GROUNDING PLAN

0 1' 2' 3' SCALE: 3/8"=1'-0" (22x34)
 (OR) 3/16"=1'-0" (11x12)



1

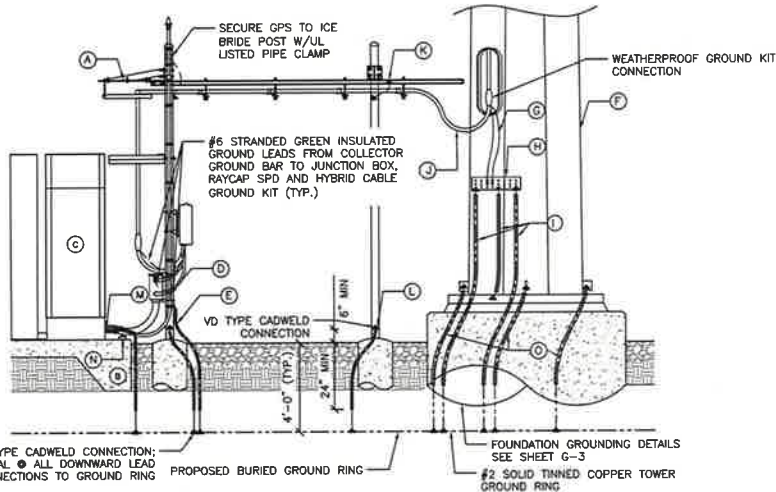
5.48

REFERENCE NOTES

- A. PROPOSED ICE BRIDGE; SEE PAGE A-2 FOR DETAILS
- B. OUTLINE OF PROPOSED CONCRETE EQUIPMENT PAD
- C. OUTLINE OF PROPOSED EQUIPMENT CABINET.
- D. 4" x 12" x 1/4" THK TINNED INSUL. EQUIPMENT GROUND BAR. ELECTRICAL CONTRACTOR TO EXTEND (2) #2 SOLID TINNED COPPER LEADS DOWN INTO 3/4" LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUITS AND PROVIDE NECESSARY CADWELD CONNECTIONS
- E. 3/4" LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT; EXTEND CONDUIT 24" BELOW GRADE
- F. MONOPOLE TOWER
- G. HYBRID CABLE GROUND KITS TO TGB. KIT SUPPLIED BY U.S. CELLULAR AND INSTALLED BY ANTENNA CONTRACTOR
- H. 4" x 12" x 1/4" THK TINNED INSUL. GROUND BAR. MOUNT LOWER TGB DIAGONALLY ON TOWER FOR EASIER HOOK-UP OF GROUNDING STRAPS. MOUNT BAR ON TOWER JUST BELOW ICE BRIDGE LEVEL AND AT THE TOP OF THE TOWER (UGB) USING STAINLESS STEEL HARDWARE.
- I. #2 AWG SOLID, TINNED COPPER GROUND LEADS FROM LOWER TGB (1) TO TOWER STEEL & (2) TO GROUND RING.
- J. HYBRID CABLES WITH DRIPLOOP INSTALLED BY ANTENNA CONTRACTOR; MAINTAIN MINIMUM BEND RADIUS
- K. #2 AWG SOLID TINNED COPPER BETWEEN WAVEGUIDE BRIDGE AND STEEL SUPPORT POST BY ANTENNA CONTRACTOR. PROVIDE TYPE VD CADWELD CONNECTION TO SUPPORT POST AND LONG BARREL COMPRESSION LUG CONNECTION TO ICE BRIDGE. ORIENT HIGH SIDE TOWARDS TOWER.
- L. #2 AWG SOLID, TINNED COPPER LEADS TO BE CADWELDED TO ICE BRIDGE POSTS 6" MIN. ABOVE FINISHED GRADE. ENCASE IN 3/4" LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT.
- M. (2) GROUND LEADS FROM MASTER GROUND BAR TO RBS EQUIPMENT CABINET IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT, (1) FOR PLINTH AND (1) FOR CABINET.
- N. 4" x 12" x 1/4" THK TINNED INSUL. MASTER GROUND BAR. ELECTRICAL CONTRACTOR TO EXTEND (2) #2 SOLID TINNED COPPER LEADS DOWN INTO 3/4" LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUITS AND PROVIDE NECESSARY CADWELD CONNECTIONS.
- O. #2 AWG SOLID TINNED COPPER GROUND LEADS ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT FROM TOWER STEEL (3) TO GROUND RING (CADWELD TYPE VD).

NOTES:

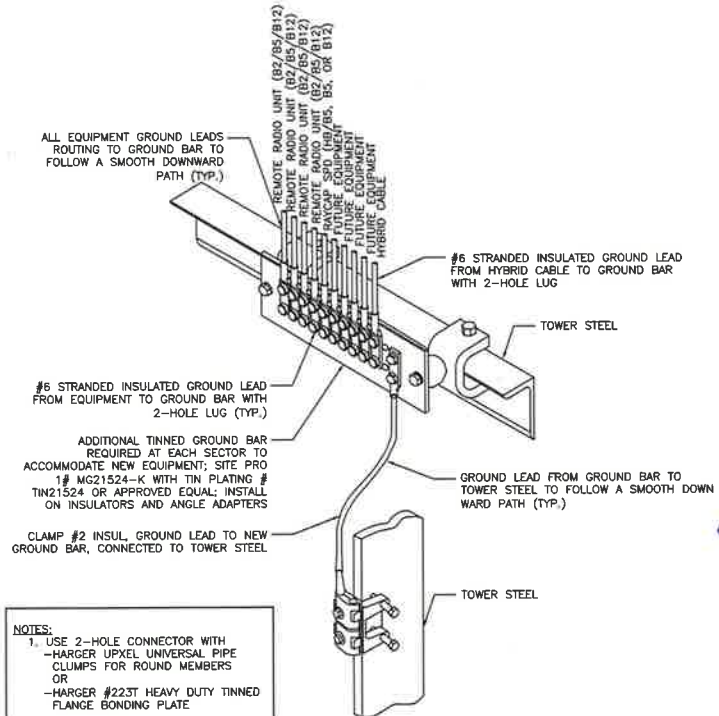
- 1. ALL BELOW-GRADE CONNECTIONS ARE TO BE EXOTHERMICALLY WELDED MINIMUM OF 48" BELOW GRADE.
- 2. ALL LEADS EXTENDING ABOVE GRADE TO BE ENCASED IN 3/4" CONDUIT AND EXTEND A MINIMUM OF 6" ABOVE FINISHED GRADE AND 24" BELOW FINISHED GRADE.
- 3. APPLY COLD GALVANIZATION TO ALL ABOVE-GROUND EXOTHERMICALLY WELDED CONNECTIONS
- 4. APPLY ANTI OXIDENT "KOPR SHIELD" TO ALL MECHANICAL CONNECTIONS.
- 5. UPPER AND LOWER TOWER GROUND BARS TO BE BONDED DIRECTLY TO TOWER STEEL WITH #2 CONDUCTORS



PT TYPE CADWELD CONNECTION; TYPICAL Ø ALL DOWNWARD LEAD CONNECTIONS TO GROUND RING
 PROPOSED BURIED GROUND RING
 FOUNDATION GROUNDING DETAILS SEE SHEET G-3
 #2 SOLID TINNED COPPER TOWER GROUND RING

SCALE N.T.S. 2

SECTOR GROUNDING DIAGRAM



- NOTES:**
- 1. USE 2-HOLE CONNECTOR WITH -HARGER UPXEL UNIVERSAL PIPE CLUMPS FOR ROUND MEMBERS OR -HARGER #223T HEAVY DUTY TINNED FLANGE BONDING PLATE
 - 2. USE EXTERNAL ANTI-OXIDATION COMPOUND.
 - 3. PAINT WITH COLD GALV. COMPUND AFTER BONDING.

SCALE N.T.S. 1

CARRIER:

 3345 N. 124TH STREET
 BROOKFIELD, WI 53005

CLIENT:

 1811 AUBURN AVE.
 MONROE, LA 71201
 RALPH THOMAS
 (318) 325-4866

PLAN PREPARED BY:

 LETS America, Inc.
 112 S. KYBURG RD. STE. 1
 CHANDLER, AZ 85226
 ARIZONA: 480-961-8151
 FT-1085-029

| REV. | DATE | ISSUED FOR | INT |
|------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SNN |
| D | 09/18/19 | CONSTRUCTION SET | SGM |
| Δ | 10/16/19 | CLIENT COMMENTS | SGM |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

REGISTERED PROFESSIONAL ENGINEER

 MADHAN KUMAR KANTHA SAMY
 27578
 OKLAHOMA
 DATE: 10/18/19

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA

222712
 TURLEY
 6050 N. JOHNSTOWN AVE.
 TULSA, OK 74126
 TULSA COUNTY COUNTY

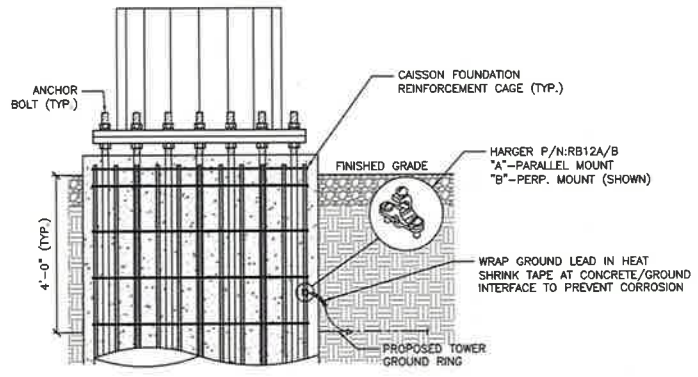
SHEET TITLE
**GROUNDING
 DETAILS**

SHEET NUMBER
G-2

5.49

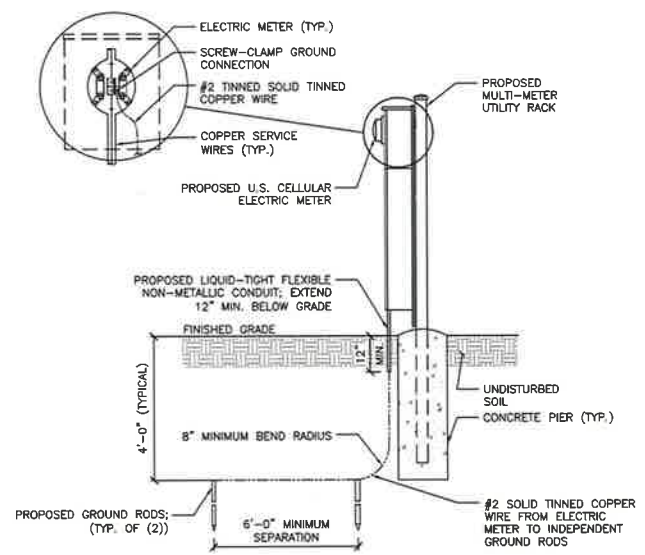
NOTE:

- FOUNDATION SHOWN IS TYPICAL, SEE TOWER FOUNDATION PLANS FOR PIER REINFORCEMENT DETAILS.
- FOUNDATION GROUNDING PER NEC 250.52(3)(A), GROUNDING CONNECTIONS TO BE COVERED BY A MINIMUM OF 3" CONCRETE AND BE MADE TO A MIN. 20'-0" CONTINUOUS REBAR, IF POSSIBLE.



TOWER FOUNDATION GROUNDING DETAILS

SCALE 4
N.T.S.



ELECTRIC METER GROUND DETAIL

SCALE 2
N.T.S.

CARRIER:
US Cellular
3545 N. 124TH STREET
BROOKFIELD, WI 53005

CLIENT:
Faulk & Foster
1811 AUBURN AVE.
MONROE, LA 71201
RALPH THOMAS
(518) 325-4686

PLAN PREPARED BY:
LETS
LETS America, Inc.
112 S. KYRRE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-6151
FL: 888-029

| REV. | DATE | ISSUED FOR | INT |
|------------------------------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SGM |
| D | 09/18/19 | CONSTRUCTION SET | SGM |
| 10/16/19 CLIENT COMMENTS SGM | | | |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA.

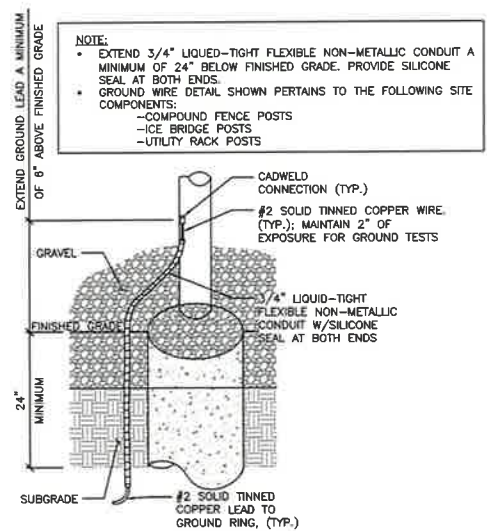
222712
TURLEY
6050 N. JOHNSTOWN AVE.
TULSA, OK 74126
TULSA COUNTY COUNTY

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
G-3

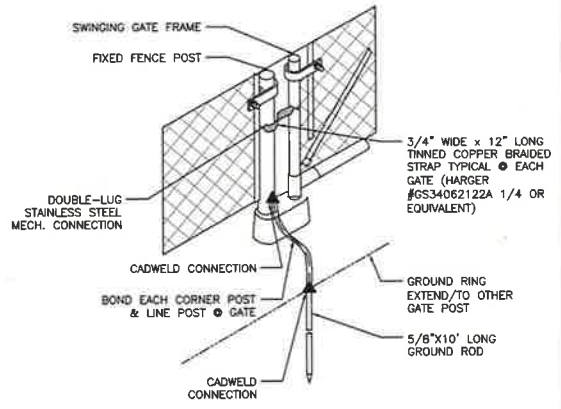
NOTE:

- EXTEND 3/4" LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT A MINIMUM OF 24" BELOW FINISHED GRADE. PROVIDE SILICONE SEAL AT BOTH ENDS.
- GROUND WIRE DETAIL SHOWN PERTAINS TO THE FOLLOWING SITE COMPONENTS:
-COMPOUND FENCE POSTS
-ICE BRIDGE POSTS
-UTILITY RACK POSTS



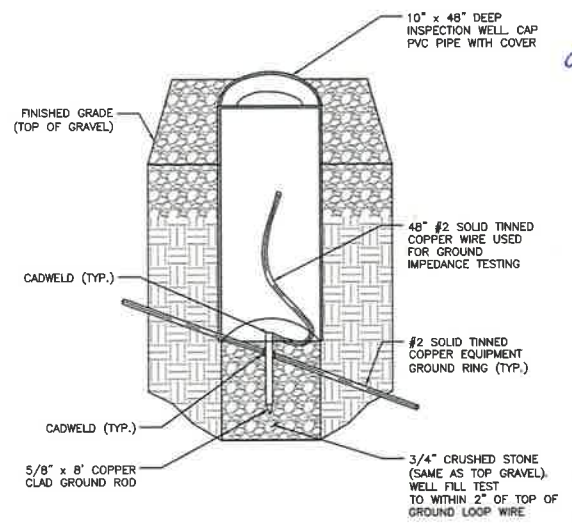
POST GROUND WIRE DETAIL

SCALE 5
N.T.S.



GATE GROUNDING DETAIL

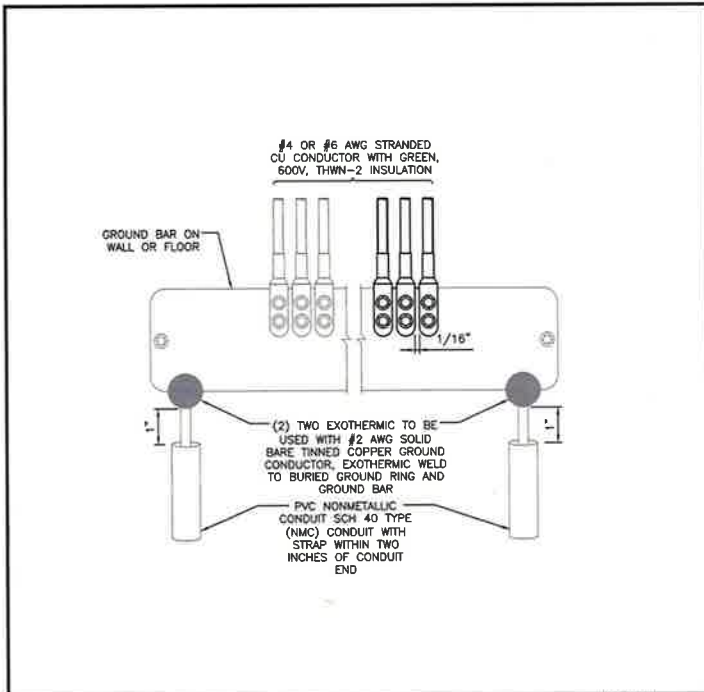
SCALE 3
N.T.S.



INSPECTION WELL DETAIL

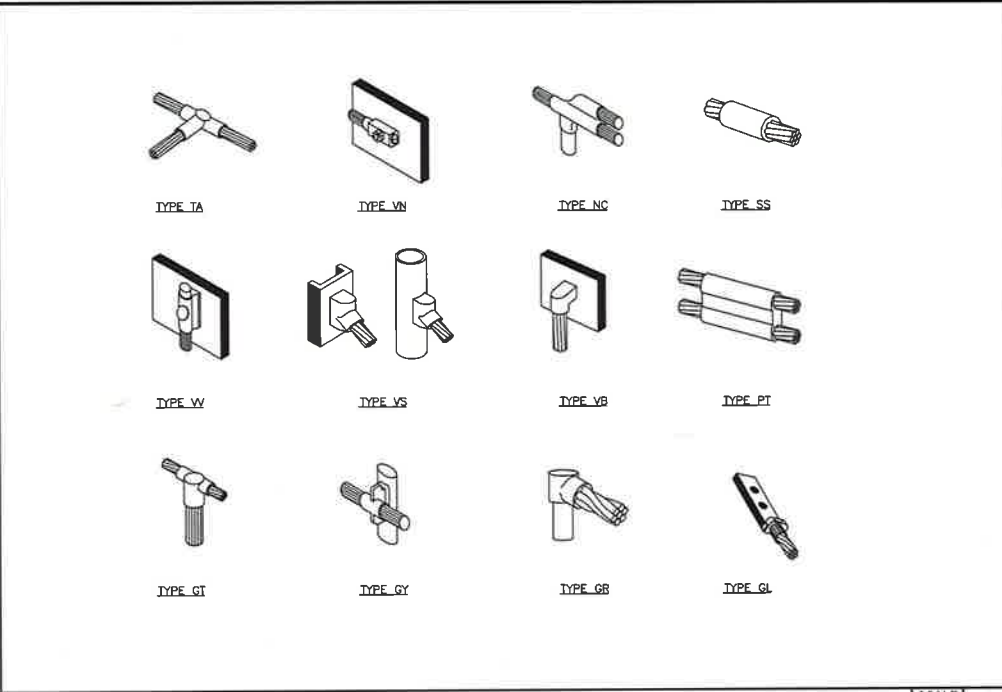
SCALE 1
N.T.S.

5.50



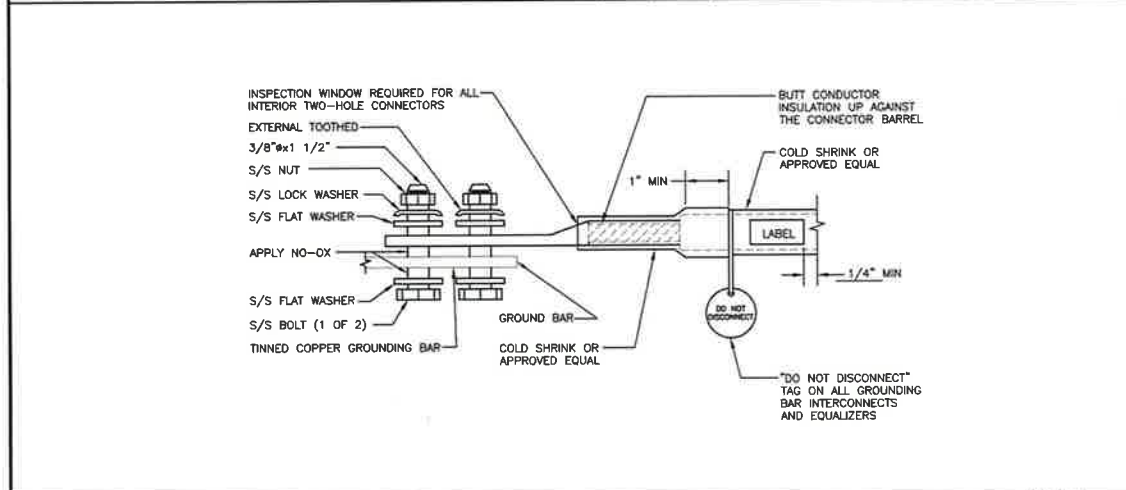
GROUND BAR DETAILS

SCALE 4
N.T.S.



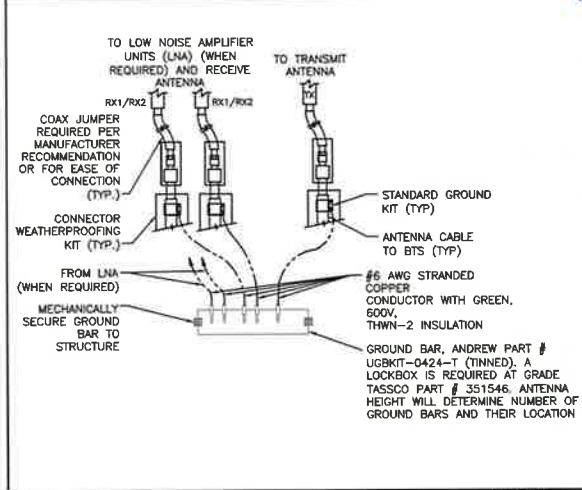
CADWELD DETAILS

SCALE 2
N.T.S.



EXTERIOR TWO HOLE LUG DETAIL

SCALE 3
N.T.S.



ANTENNA GROUND BAR DETAIL

SCALE 1
N.T.S.

CARRIER:
US Cellular
3345 N. 124TH STREET
BROOKFIELD, WI 53005

CLIENT:
Faulk & Foster
1811 ALABAMA AVE.
MONROE, LA 71201
RALPH THOMAS
(318) 325-4666

PLAN PREPARED BY:
LETS
LETS America, Inc.
112 S. KYRENE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-9151
F1-NE5-029

| REV. | DATE | ISSUED FOR | INT |
|------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SMN |
| 0 | 09/18/19 | CONSTRUCTION SET | SGM |
| Δ | 10/16/19 | CLIENT COMMENTS | SGM |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

REGISTERED PROFESSIONAL ENGINEER
MADHAN KUMAR KANTHA SAMY
27578
OKLAHOMA
DATE: 10/16/19

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A QUALY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA

222712
TURLEY
6050 N. JOHNSTOWN AVE.
TULSA, OK 74126
TULSA COUNTY COUNTY

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
G-4

5.51

GROUNDING SYSTEM NOTES

1. SCOPE:

THIS SECTION COVERS THE SPECIFICATIONS FOR CELL SITE GROUNDING. THE AREAS OF FOCUS ARE: TOWER, EQUIPMENT PAD AND INSTALLATION METHODS.

2. GENERAL:

- 2.1 ALL GROUND RODS SHALL BE 5/8" COPPER CLAD STEEL 10'-0" LONG. GROUND RODS SHALL BE EQUALLY SPACED AT 10FT. INTERVALS. REFER TO SITE GROUNDING PLAN FOR DETAILS AND PLACEMENT WITH GROUNDING.
- 2.2 GROUNDING A SYSTEM SHALL BE MEGGAR TESTED TO ASSURE SATISFYING 5 OHMS OR LESS RESISTANCE.
- 2.3 ALL CADWELD CONNECTIONS TO GALVANIZED MATERIAL SHALL BE PROPERLY PREPARED TO ASSURE A SATISFACTORY CADWELD. THE CADWELD CONNECTION SHALL BE COATED WITH A COLD GALVANIZING SPRAY.
- 2.4 CONTRACTOR SHALL PROVIDE PHOTO DOCUMENTATION OF THE GROUND SYSTEM BY PROVIDING A CD TO US CELLULAR.
REQUIRED PHOTOS SHALL INCLUDE:
• ALL BUSS BARS AND COAX GROUND CONNECTIONS,
• TOWER GROUND RING,
• EQUIPMENT PAD GROUND RING,
• CONNECTIONS TO POWER, TELCO, A.C., FENCING AND ICE BRIDGE,
• CONNECTIONS TO POWER, TELCO, A.C., FENCING AND ICE BRIDGE.
- 2.5 CONTRACTOR SHALL PROVIDE AS-BUILT PLANS SHOWING LOCATION AND DIMENSIONS OF BELOW GRADE GROUNDING FEATURES.

3. INSTALLATION:

- 3.1 ALL EXTERIOR ABOVE AND BELOW GROUND CONNECTIONS SHALL BE CADWELD. NO ALUMINUM CONNECTORS SHALL BE USED UNLESS SPECIFIED OTHERWISE ON PLANS.
- 3.2 NO RIGHT-ANGLE CADWELD CONNECTION (OTHER THAN GROUND RODS TO GROUND RING CONNECTION) SHALL BE USED. ALL WIRE-TO-WIRE CONNECTIONS SHALL UTILIZE "Y-TYPE" CONNECTIONS.
- 3.3 ALL VERTICAL JUMPERS SHALL NOT BE WELDED WITHIN TWO (2) FT. OF THE GROUND ROD.
- 3.4 KOPR SHIELD REQUIRED FOR ALL MECHANICAL CONNECTIONS.
- 3.5 ALL CADWELDS FINISHED WITH COLD GALVANIZED SHIELD.

4. TOWER:

- 4.1 A #2 SOLID TINNED COPPER WIRE SHALL BE BURIED A MINIMUM FOUR (4) FT. UNDERGROUND AND ENCIRCLE TOWER FOUNDATION TWO (2) FT. FROM THE FOUNDATION. THIS GROUNDING SYSTEM SHALL BE CONNECTED TO THE EQUIPMENT GROUND RING IN TWO (2) PLACES USING CADWELD CONNECTIONS. SUCH CONNECTIONS SHALL BE "Y-TYPE" CADWELD CONNECTIONS.
- 4.2 THREE (3) #2 SOLID TINNED COPPER WIRES SHALL BE RUN FROM THE TOWER GROUND RING TO THE TOWER. THESE WIRES SHALL BE CONNECTED TO THE USING A CADWELD CONNECTION. NO SHARP BENDS SHALL BE PLACED IN GROUND LEADS.
- 4.3 GROUND SYSTEM SHALL INCLUDE THE INSTALLATION OF AN ISOLATED LIGHTNING ROD AT THE TOP OF THE TOWER EXTENDING A MINIMUM OF (2) FT. ABOVE THE HIGHEST ANTENNA. A #2 INSULATED COPPER WIRE SHALL BE CONNECTED TO THE TOWER LIGHTNING ROD USING AN APPROVED MECHANICAL CONNECTOR, OR CADWELDED TO TOWER STEEL.

5. EQUIPMENT PAD:

- 5.1 A #2 SOLID TINNED COPPER WIRE SHALL BE BURIED A MINIMUM OF FOUR (4) FT. UNDERGROUND AND ENCIRCLE EQUIPMENT PAD TWO (2) FEET FROM THE FOUNDATION. GROUND RING CORNERS SHALL BE INSTALLED WITH A MINIMUM TWO FOOT RADIUS (NO SHARP RIGHT ANGLE BENDS).
- 5.2 A #2 SOLID TINNED COPPER WIRE SHALL BE INSTALLED FROM THE EQUIPMENT GROUND RING AND CONNECTED TO THE TINNED COPPER BUS BAR LOCATED ON THE EQUIPMENT PAD UNISTRUT RACK WITH A MINIMUM NINE (9) INCHES RADIUS. A "Y-TYPE" OR PARALLEL-TYPE CADWELD CONNECTION SHALL BE USED FOR ALL CONNECTIONS TO THE GROUND RING.

6. FENCING:

- 6.1 A #2 SOLID TINNED COPPER GROUND WIRE SHALL BE INSTALLED FROM THE FENCE CORNER POSTS TO THE GROUND RING AND SHALL BE BURIED A MINIMUM FOUR (4) FT. UNDERGROUND. THESE RUNS SHALL INCLUDE GROUND RODS EQUALLY SPACED AT 10FT. INTERVALS. THESE RUNS SHALL BE BROUGHT ABOVE GROUND LEVEL AND SUPPORTED ABOVE GROUND WITH TEMPORARY POSTS UNTIL PERMANENT FENCING IS INSTALLED. GROUND WIRE SHALL BE CONNECTED TO THE FENCE POSTS USING CADWELD TYPE CONNECTIONS.

7. EXISTING GROUND SYSTEMS:

- 7.1 CONTRACTOR SHALL PROVIDE CONNECTIONS TO ALL EXISTING GROUND SYSTEMS AT THE SITE (SCADA, TELEMETRY, ETC.).

8. COMPLIANCE:

8.1 ELECTRICAL CODE COMPLIANCE

COMPLY WITH APPLICABLE LOCAL ELECTRICAL CODES REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION, AND NEC AS APPLICABLE TO ELECTRICAL GROUNDING AND BONDING, PERTAINING TO SYSTEMS, CIRCUITS AND EQUIPMENT.

8.2 UL COMPLIANCE

COMPLY WITH APPLICABLE REQUIREMENTS OF UL467, 486A AND 869 PERTAINING TO GROUNDING AND BONDING OF SYSTEMS, CIRCUITS AND EQUIPMENT. USE GROUNDING AND BONDING PRODUCTS WHICH ARE UL-LISTED AND LABELED FOR THEIR INTENDED USAGE.

8.3 IEEE COMPLIANCE

COMPLY WITH APPLICABLE REQUIREMENTS OF RECOMMENDED INSTALLATION PRACTICES OF IEEE STANDARDS 80, 81, 141 AND 142 PERTAINING TO GROUNDING AND BONDING OF SYSTEMS, CIRCUITS AND EQUIPMENT.

ANTENNA & COAXIAL/HYBRID CABLE INSTALLATION

I. SCOPE:

A. THIS SECTION COVERS THE SPECIFICATIONS FOR ANTENNA AND COAXIAL/HYBRID CABLE INSTALLATION. THE AREAS OF FOCUS ARE THE INSTALLATION OF: ANTENNAS, COAXIAL/HYBRID, CONNECTIONS, AND ICE BRIDGE. BEND ON TOWER GROUND BAR AND ON COLLECTOR GROUND BAR AT EQUIPMENT PAD.

II. ANTENNAS:

- A. ANTENNAS SHALL BE PLUMB AND INSTALLED SO THAT ENTIRE WHIP EXTENDS ABOVE VERTICAL PIPE MOUNT. DIRECTIONAL ANTENNAS SHALL BE ORIENTED TO PROPER AZIMUTH, PROVIDED ON THE RF SPECIFICATION SHEET. NOTE: THE ANTENNA MAY BE ORIENTED USING THE REFLECTOR AS THE REFERENCE. ADJUSTING ITS AZIMUTH 180 DEGREES FROM MAXIMUM ANTENNA RADIATION.
- B. MICROWAVE ANTENNAS (DISHES) SHALL BE ASSEMBLED PER MANUFACTURER'S DRAWINGS. STIFF ARMS AND RADOMES SHALL BE INSTALLED WITH POLARIZATION PROVIDED BY RF SPECIFICATION SHEET. IF PATH IS NOT READY TO ALIGN DISH SHOULD BE POINTED TOWARD CALCULATED AZIMUTH OR DIRECTION OF FIELD STAKE DENOTING OPPOSITE END. TWO STIFF ARMS SHALL BE PROVIDED FOR MICROWAVE DISHES 6'-0" IN DIAMETER AND GREATER.
- C. A TRANSIT OR SPECIALIZED ALIGNMENT TOOL SHALL BE USED TO PROPERLY ALIGN CELLULAR AND MICROWAVE ANTENNAS.


III. HYBRID/COAXIAL/HYBRID CABLE:


- A. COAXIAL/HYBRID CABLE SHALL BE SUPPORTED WITH SNAP IN HANGERS. SNAP IN HANGERS SHOULD BE USED EVERY 3 FEET THE ENTIRE HEIGHT OF TOWER. ANGLE ADAPTERS OR ROUND MEMBER ADAPTERS WITH BUTTERFLY CLAMPS SHALL BE USED ELSEWHERE. I.E. SIDEARMS, PLATFORMS AND MICROWAVE MOUNTS.
- B. COAXIAL/HYBRID CABLE SHALL ALSO BE SUPPORTED WITH HOISTING GRIPS, INSTALLED AT MAXIMUM INTERVALS OF 200 FEET. HOISTING GRIPS SHALL BE ATTACHED WITH SHACKLES. BOLTED IN THE 7/16" HOLE WAVEGUIDE LADDER.
- C. ALL JUMPERS USED BETWEEN COAXIAL/HYBRID CABLE AND ANTENNA SHALL BE SUPPORTED WITHIN 18 INCHES OF ANTENNA. USING BUTTERFLY CLAMPS WITH ANGLE ADAPTERS OR ROUND MEMBER ADAPTERS AROUND PIPES. CELLULAR ANTENNAS TYPICALLY USE 6'-0" JUMPERS.
- D. COAXIAL/HYBRID CABLE SHALL BE NEATLY BENT WHEN REQUIRED USING A MINIMUM BENDING RADIUS OF 10 TIMES THE DIAMETER OF THE COAXIAL/HYBRID CABLE. DRIP LOOPS SHOULD BEGIN AT THE ICE BRIDGE. THE BEND IN THE COAXIAL/HYBRID CABLE SHOULD BE AT A LOWER HEIGHT THAN THE ENTRY PORT.
- E. COAXIAL/HYBRID/WAVEGUIDE CABLES SHOULD BE LABELED WITH COLORED TAPE AT EACH END:
SECTOR INDICATOR- PRIMARY COLORS
USE 3/4" TO 1" WIDE COLORED TAPE TO INDICATE SECTORS
ALPHA SECTOR FOR SECTORED SITE: RED
BETA SECTOR FOR SECTORED SITE: WHITE
GAMMA SECTOR FOR SECTORED SITE: BLUE
DELTA SECTOR FOR SECTORED SITE: BLUE
EPSILON SECTOR FOR SECTORED SITE: VIOLET
FUNCTION INDICATOR- SECONDARY COLORS
USE 3" WIDE COLORED TAPE TO INDICATE TECHNOLOGY.
CDMA: YELLOW GSM: VIOLET LTE: ORANGE
USE 3" WIDE COLORED TAPE TO INDICATE FREQUENCY.
700: GREEN 800: BROWN 1900: BLUE 2100: WHITE
USE 6" WIDE COLORED TAPE TO INDICATE HYBRID CABLES.
HYBRID CABLES : BROWN
- F. ALL EXCEPTIONS NEED TO BE VERIFIED WITH THE PROJECT MANAGER.


IV. CONNECTORS:

- A. ALL CONNECTIONS AND GROUNDING KITS SHALL BE WEATHER PROOFED USING COLD SHRINK OR ANDREW APPROVED WEATHER STRIPPING.
NOTE: NO PORTION OF CONNECTOR SHALL BE EXPOSED TO THE ELEMENTS.

- B. COAXIAL/HYBRID CABLE SHALL BE GROUNDING USING GROUNDING KITS AT THE TOP, BELOW THE BEND, BOTTOM & ABOVE. THEY SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- C. GROUNDING KITS SHALL BE NEATLY INSTALLED SO THAT THE JUMPER RUNS IN THE SAME DIRECTION AS THE COAXIAL/HYBRID AND GROUND BAR. JUMPER WIRE SHOULD RUN IN A DIRECT DOWNWARD PATH TO THE GROUND BAR/TOWER LADDER, BUT HAVE ADEQUATE SLACK FOR EXPANSION, CONTRACTION, AND REPAIR. NON-OXIDE GREASE SHOULD BE APPLIED BETWEEN LUG AND BAR/TOWER.
- D. TOWER GROUND BAR SHALL BE INSTALLED ON THE ANGLE BEHIND THE FIRST DIAGONAL WAVEGUIDE LADDER RUNG, ABOVE 6"-6".
- V. ICE BRIDGE:
A. IF BRIDGE IS SUPPORTED BY VERTICAL PIPES, THEY SHOULD BE CUT EVENLY AND CAPPED, APPROXIMATELY 18" ABOVE ICE BRIDGE.
B. SINGLE-TIER WAVEGUIDE LADDER SHALL BE INSTALLED UNDER ICE BRIDGE PROPERLY SUPPORTED PER TOWER MANUFACTURER'S DRAWINGS.


CARRIER:

3545 N. 124TH STREET
BROOKFIELD, WI 53005

CLIENT:

1811 AUBURN AVE.
MONROE, LA 71201
RALPH THOMAS
(516) 325-4666

PLAN PREPARED BY:

LETS America, Inc.
112 S. KIRKHOE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-9151
FL-NEE-029

| REV. | DATE | REVISIONS | ISSUED FOR | INT |
|------|----------|------------------|------------|-----|
| A | 03/04/19 | 90% CO'S | SEP | |
| B | 05/17/19 | 95% CO'S | SPM | |
| C | 08/29/19 | 95% CO'S | SGM | |
| D | 08/18/19 | CONSTRUCTION SET | SGM | |
| A | 10/16/19 | CLIENT COMMENTS | SGM | |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA

222712
TURLEY
6050 N. JOHNSTOWN AVE.
TULSA, OK 74126
TULSA COUNTY COUNTY

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
G-5

GROUNDING NOTES SCALE N.T.S. 2

ANTENNA INSTALLATION NOTES SCALE N.T.S. 1

5.52

ELECTRICAL NOTES

- GENERAL**
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC. FOR A COMPLETE AND PROPERLY OPERATING SYSTEM ENERGIZED THROUGHOUT INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
 - CONTRACTOR IS TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF PERMANENT POWER TO THE SITE.
 - CONTRACTOR SHALL OBTAIN ALL NECESSARY BUILDING PERMITS, INSPECTIONS AND APPROVALS, AND PAY ALL REQUIRED FEES PURSUANT TO THE WORK.
 - ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST VERSION OF THE NATIONAL ELECTRICAL CODE AND ANY APPLICABLE NATIONAL STATE AND LOCAL CODES. ALL COMPONENTS SHALL BE U.L. APPROVED.
 - CONTRACTOR SHALL BEFORE SUBMITTING HIS BID, VISIT THE SITE OF THE PROJECT AND BECOME FAMILIAR WITH THE CONDITIONS, NO ALLOWANCE WILL BE MADE FOR EXISTING CONDITIONS OR FAILURE OF THE CONTRACTOR TO OBSERVE THEM.
 - EXACT LOCATION OF ALL EQUIPMENT SHALL BE COORDINATED WITH OWNER AND OTHER TRADERS.
 - CONTRACTOR SHALL PROVIDE ALL VERIFICATION OBSERVATION TESTS AND EXAMINE ALL WORK PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION, CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT/ENGINEER LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
 - ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN SAFE CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUPS OF EQUIPMENT (SEE NOTE C FOR EXCEPTIONS), MATERIALS SHALL NOT BE APPROVED BY THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NBFU AND "UL" LISTED.
 - WHERE EQUIPMENT IS SPECIFIED BY MANUFACTURER AND TYPE, SUBSTITUTION SHALL ONLY BE MADE WITH THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL SUBMIT DETAILS OF PROPOSED MATERIALS, REASON FOR CHANGE AND CHANGE IN CONTRACT AMOUNT.
 - EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY LABELED WITH ENGRAVED PLASTIC LABELS FOR EACH PANELBOARD, PULL BOX, J-BOX, SWITCH BOX, ETC. IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)
 - THESE PLANS AND DIAGRAMMATIC ONLY AND ARE TO BE FOLLOWED AS CLOSE AS POSSIBLE.
 - THE TEMPERATURE RATING ASSOCIATED WITH THE AMPACITY OF A CONDUCTOR SHALL BE SO SELECTED AND COORDINATED AS TO NOT EXCEED THE LOWEST TEMPERATURE RATING OF ANY CONNECTED TERMINATION, CONDUCTOR OR DEVICE, REFER TO TABLE A.
 - ALL ENCLOSURES CONTAINING THE SERVICE CONDUCTORS—SERVICE RACEWAY, CABLE ARMOR, BOXES, FITTINGS, CABINETS MUST BE EFFECTIVELY BONDED TOGETHER.
 - ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 UNLESS OTHERWISE SPECIFIED, WITH UV PROTECTION (UNLESS NOTED OTHERWISE) AT A MINIMUM DEPTH SPECIFIED BY NATIONAL STATE AND LOCAL CODES. IT IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY THE DIGGER HOTLINE OR OTHER SUCH NOTIFYING AGENCY FORTY EIGHT (48) HOURS PRIOR TO THE START OF DIGGING, TRENCHING, EXCAVATION, OR OTHER SUCH EARTH REMOVAL.
 - THE UNDERGROUND SERVICE ENTRANCE WORK MUST BE CONSTRUCTED ACCORDANCE TO THE LOCAL BUILDING CODE NEC & UTILITY STANDARDS. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL UTILITY BEFORE QUOTING AND DURING THE CONSTRUCTION.

MATERIALS, ELECTRICAL WIRING AND RACEWAYS

- ALL CIRCUIT BREAKERS, CONDUCTORS AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING SHORT CIRCUIT TO WHICH THEY MAY BE SUBJECTED AND A MINIMUM OF 10,000 AIC RATING UNLESS SPECIFIED OTHERWISE.
- PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS SHALL HAVE ENGRAVED LETTERING WHERE INDICATED ON THE DRAWINGS, WEATHERPROOF RECEPTACLES SHALL HAVE SIERRA "WPD" 8" LIFT COVER PLATES.
- METER SOCKET AMPERAGE, VOLTAGE AND NUMBER OF PHASES SHALL BE AS NOTED ON THE DRAWINGS AND MANUFACTURED BY SQUARE "D" COMPANY OR AN APPROVED EQUAL.
- INSTALLATION OF RIGID METAL CONDUIT SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF ARTICLES 300 & 348-NEC SHALL BE UL APPROVED.
- INSTALLATION OF ELECTRICAL METALLIC TUBING (EMT) SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF ARTICLES 300 & 348-NEC SHALL BE U.L. APPROVED.

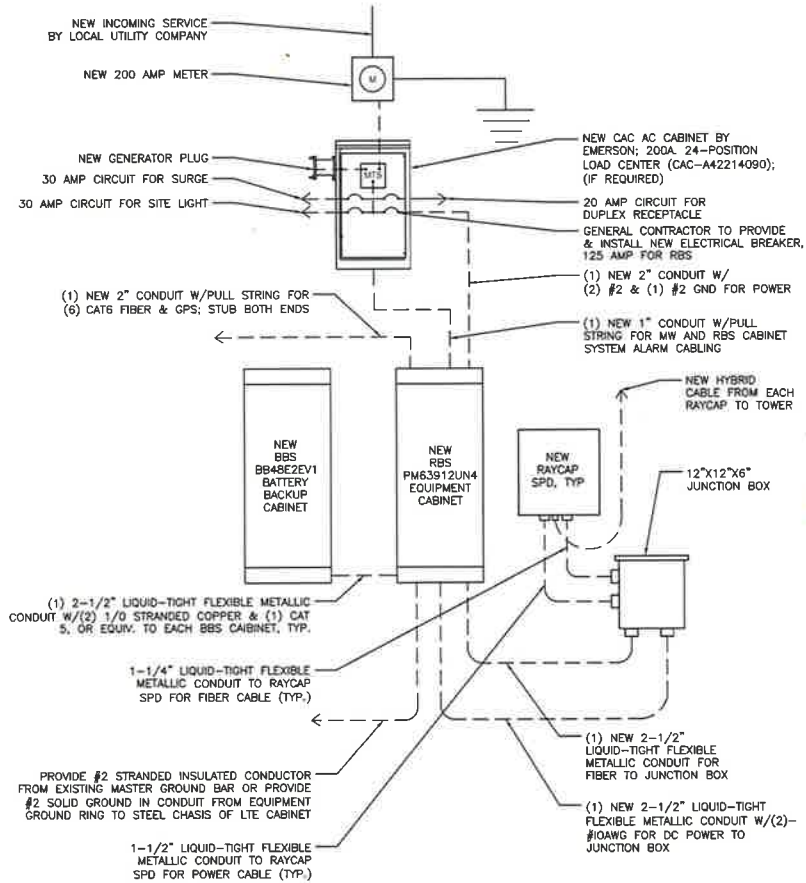
- INSTALLATION OF INTERMEDIATE METAL CONDUIT (IMC) SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF ARTICLES 300 & 348-NEC. SHALL BE UL APPROVED.
- PLASTIC CONDUIT SHALL BE SCHEDULE 40, HIGH IMPACT, POLYVINYL CHLORIDE AND SHALL BE USED WITH UNTHREADED SOLVENT CEMENT PLASTIC CONDUIT FITTINGS. COUPLINGS SHALL HAVE A CENTER STOP TO TYPE ENSURE PROPER SEATING. CONDUIT SHALL BE MANUFACTURED BY CARLON OR ACCEPTABLE EQUAL SHALL BE IN COMPLIANCE WITH ART 300 & 347-NEC. UL APPROVED.
- ALL WIRING OF ALL KINDS MUST BE INSTALLED IN CONDUIT, UNLESS OTHERWISE NOTED OR APPROVED BY THE ELECTRICAL ENGINEER.
- ALL WIRINGS SHALL BE IN ACCORDANCE WITH THE (NEC) NATIONAL ELECTRICAL CODE OR AS INDICATED ON PLANS.
- RACEWAYS SHALL BE STEEL GALVANIZED AND/OR PAINTED, WITH SIZE AS SPECIFIED AND IN ACCORDANCE WITH THE (NEC) NATIONAL ELECTRICAL CODE UNLESS OTHERWISE NOTED ON PLANS. ALL RACEWAYS SHALL BE APPROVED PRIOR TO INSTALLATION.
- JUNCTION BOXES OR PULL BOXES SHALL MEET (NEC) NATIONAL ELECTRICAL CODE STANDARDS AND AS APPROVED FOR INSTALLATION OF RACEWAYS AND WIRING.
- THE RACEWAY AND WIRING INSTALLATION SHALL BE GROUNDED PERMANENTLY AND EFFECTIVELY IN ACCORDANCE WITH ARTICLE 250 OF THE (NEC) NATIONAL ELECTRICAL CODE.
- THE CONTRACTOR SHALL BE AWARE THAT ALL STATE AND LOCAL CODES SHALL APPLY TO THIS INSTALLATION AND MUST BE ADHERED TO.

SCOPE OF WORK

- THE CONTRACTOR SHALL PROVIDE ALL ELECTRICAL WIRING AND EQUIPMENT UNLESS OTHERWISE INDICATED. MAIN COMPONENTS ARE AS FOLLOWS:
 - PROVIDE ELECTRICAL SERVICE AS INDICATED ON THE DRAWINGS.
 - PROVIDE FIBER CONDUIT WITH PULL WIRE AS INDICATED HEREIN AND ON DRAWINGS.
 - COORDINATE ELECTRICAL SERVICE WITH LOCAL POWER COMPANY.
 - COORDINATE FIBER SERVICE WITH LOCAL FIBER COMPANY.
 - INSTALL WIRE AND CONDUIT AS INDICATED. PROVIDE CABLE SUPPORTS AS INDICATED.
 - PROVIDE GROUNDING AS INDICATED.
- ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" OR "AS-BUILT" DRAWINGS AT THE COMPLETION OF THE JOB SHOWING ACTUAL DIMENSIONS, ROUTINGS AND CIRCUITS SHALL BE PROVIDED TO CLIENT. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO CLIENT AT JOB COMPLETION.
- PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF ELECTRICAL WORK.
- UPON COMPLETION OF WORK CONDUIT CONTINUITY, SHORT CIRCUIT, AND GROUNDING FALL POTENTIAL TEST WILL BE MADE FOR APPROVAL. SUBMIT TEST REPORTS TO CLIENT, CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE IN A COMPLETE AND UNDAMAGED CONDITION.
- THE COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF SITE ACCEPTANCE BY CLIENT. ANY WORK MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AND AT THE EXPENSE OF THE CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE ELECTRICAL EQUIPMENT PROVIDED BY CLIENT'S SUPPLIERS.

ELECTRICAL NOTES:

- REFER TO MANUFACTURER RECOMMENDATIONS AND SPECIFICATIONS FOR INTERNAL WIRING VERIFICATION.
- PROVIDE 100 AMP SERVICE AT ENTRANCE RATED DISCONNECT IF NOT ALREADY EXISTING. REPLACE EXISTING 200 AMP DISCONNECT WITH 100 AMP SERVICE ENTRANCE RATED DISCONNECT IF APPLICABLE.



| REV. DATE | ISSUED FOR | INT |
|------------|------------------|-----|
| A 03/04/19 | 90% CD'S | SEP |
| B 05/17/19 | 95% CD'S | SFM |
| C 08/29/19 | 95% CD'S | SNN |
| 0 08/18/19 | CONSTRUCTION SET | SGM |
| 10/16/19 | CLIENT COMMENTS | SGM |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET



I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA

222712
TURLEY
6050 N. JOHNSTOWN AVE.
TULSA, OK 74126
TULSA COUNTY COUNTY

SHEET TITLE
**ELECTRICAL
LINE DIAGRAM
& NOTES**

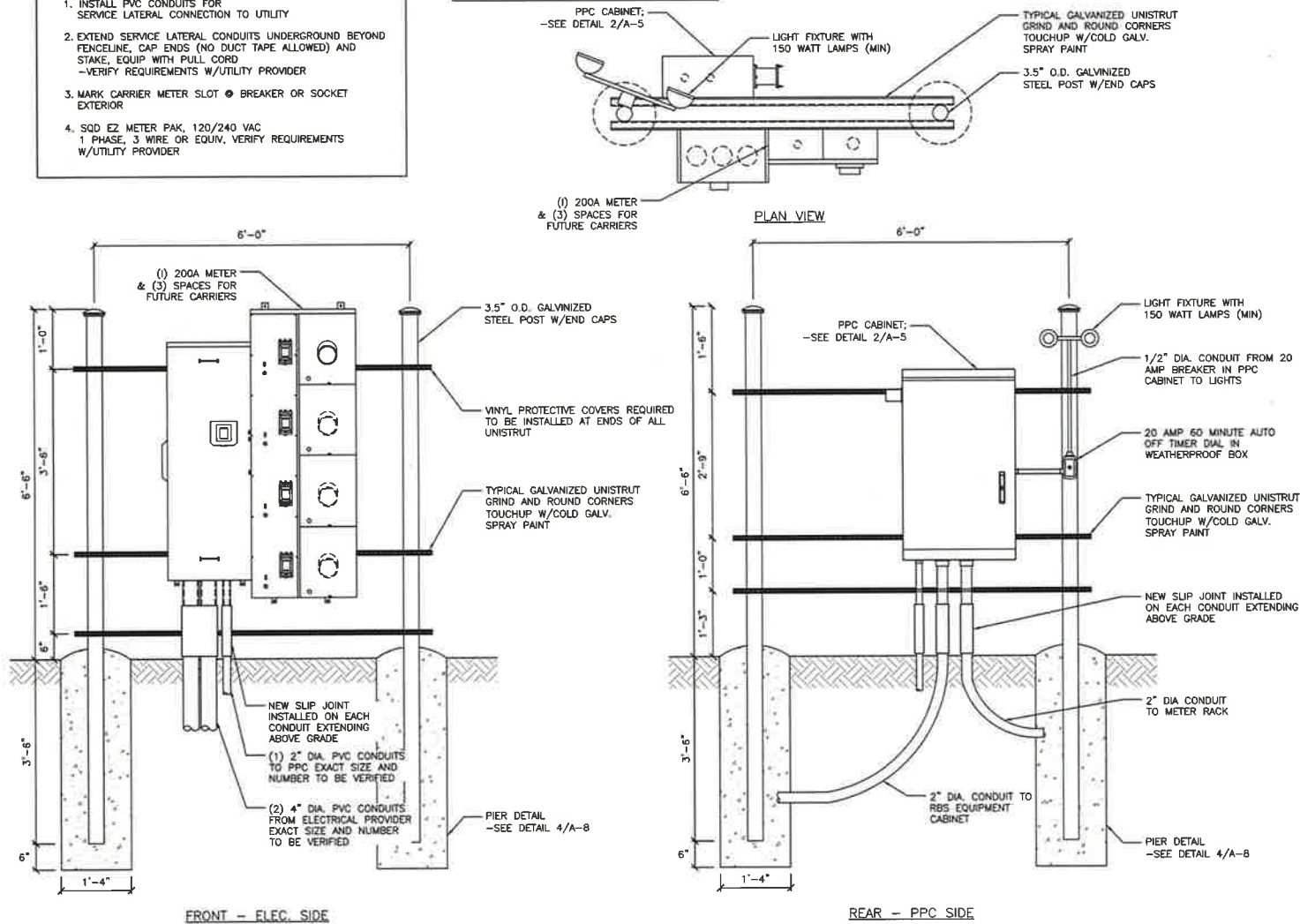
SHEET NUMBER
E-1

5.53

NOTE:

1. INSTALL PVC CONDUITS FOR SERVICE LATERAL CONNECTION TO UTILITY
2. EXTEND SERVICE LATERAL CONDUITS UNDERGROUND BEYOND FENCELINE, CAP ENDS (NO DUCT TAPE ALLOWED) AND STAKE, EQUIP WITH PULL CORD
-VERIFY REQUIREMENTS W/UTILITY PROVIDER
3. MARK CARRIER METER SLOT ● BREAKER OR SOCKET EXTERIOR
4. SQD EZ METER PAK, 120/240 VAC 1 PHASE, 3 WIRE OR EQUIV, VERIFY REQUIREMENTS W/UTILITY PROVIDER

FINAL LAYOUT & DESIGN DETERMINED BY CONTRACTOR/UTILITY, VERIFY FINAL DESIGN WITH US CELLULAR



CARRIER:

 3545 N. 124TH STREET
 BROOKFIELD, WI 53005

CLIENT:

 1811 ALBURN AVE.
 MONROE, LA 71201
 RALPH THOMAS
 (318) 325-4666

PLAN PREPARED BY:

 LETS America, Inc.
 112 S. KYRICH RD. STE 1
 CHANDLER, AZ 85226
 ARIZONA: 480-961-9151
 FL-NES-029

| REV. | DATE | ISSUED FOR | INT |
|------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SNN |
| 0 | 09/18/19 | CONSTRUCTION SET | SGM |
| Δ | 10/16/19 | CLIENT COMMENTS | SGM |

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

REGISTERED PROFESSIONAL ENGINEER

 MADHAN KUMAR KANTHA SAMY
 27578
 OKLAHOMA
 DATE: 10/16/19

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OKLAHOMA.

222712
 TURLEY
 6050 N. JOHNSTOWN AVE.
 TULSA, OK 74126
 TULSA COUNTY COUNTY

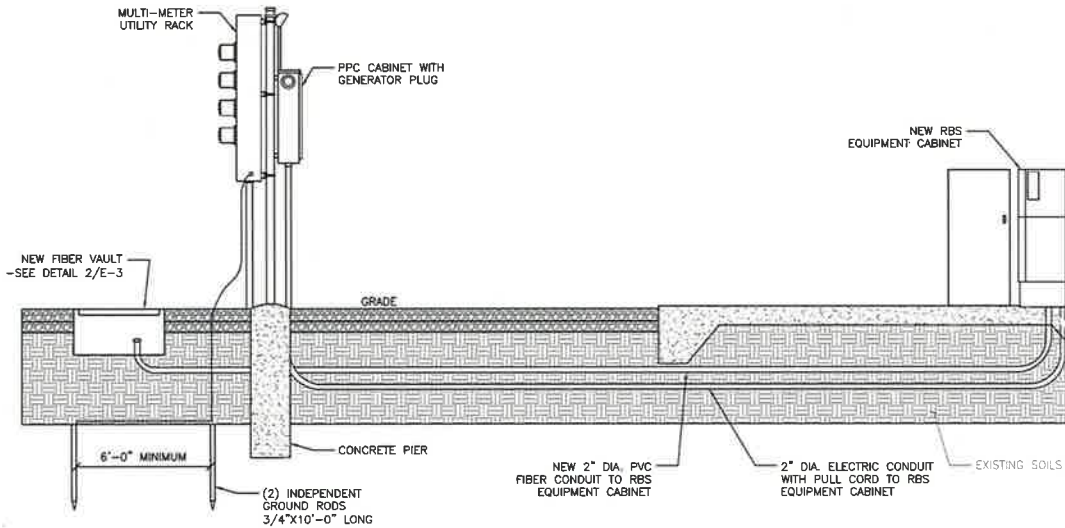
SHEET TITLE
UTILITY RACK DETAILS

SHEET NUMBER
E-2

SCALE
 N.T.S. 1

MULTI-CARRIER UTILITY RACK DETAILS

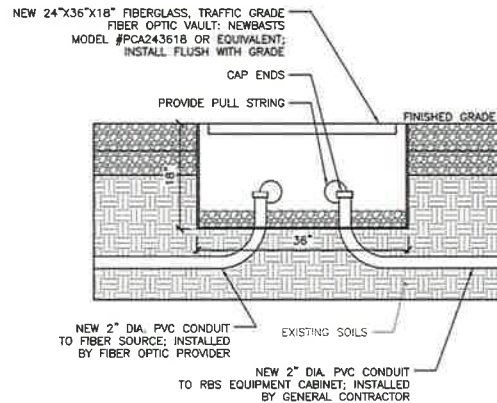
5.54



MULTI-CARRIER UTILITY PEDESTAL DETAIL

SCALE 4
N.T.S.

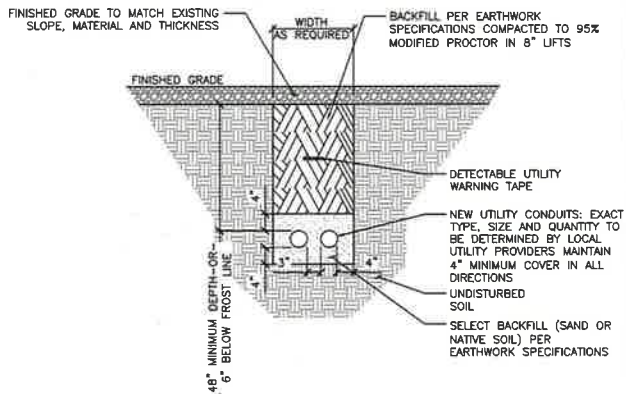
NOTE:
PROVIDE 8"x8"x6" PVC BOX AT SHELTER TELCO
ENTRANCE; CANTEX MODEL #5133164 OR EQUIVALENT.



FIBER VAULT DETAIL

SCALE 2
N.T.S.

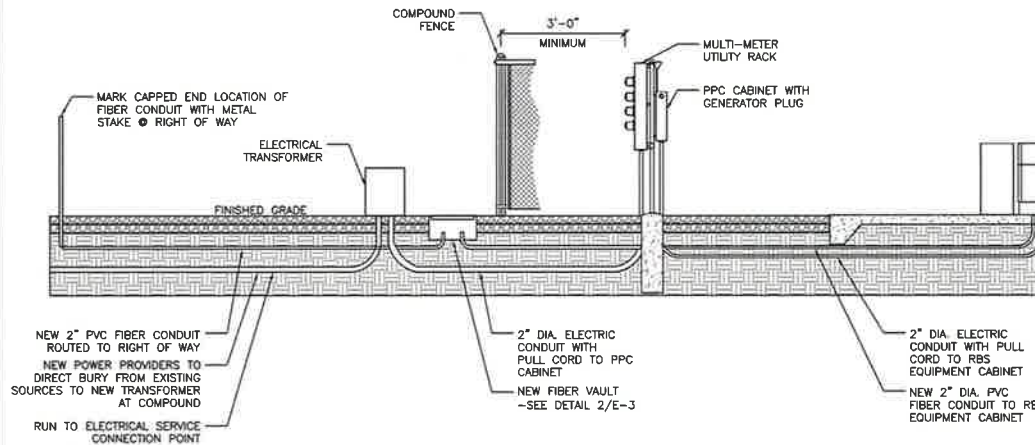
NOTES:
UTILITY CONDUITS TO BE BURIED A MINIMUM DEPTH OF
48" BELOW GROUND LEVEL OR 6" BELOW THE FROST LINE.
CONDUIT TYPE, SIZE, QUANTITY AND SEPARATION TO BE
VERIFIED WITH LOCAL UTILITY PROVIDER REQUIREMENTS.



UTILITY TRENCH DETAIL

SCALE 3
N.T.S.

NOTE:
INSTALL IN ACCORDANCE WITH LOCAL CODES AND
UTILITY COMPANY REQUIREMENTS.



STANDARD UNDERGROUND UTILITIES

SCALE 1
N.T.S.

CARRIER:
U.S. Cellular
3345 N. 124TH STREET
BROOKFIELD, WI 53005

CLIENT:
Faulk & Foster
1811 AUBURN AVE.
MONROE, LA 71201
RALPH THOMAS
(518) 325-4666

PLAN PREPARED BY:
LETS
LETS America, Inc.
112 S. KYBURG RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-9151
FL: NBS-029

| REV. | DATE | ISSUED FOR | INT |
|------|----------|------------------|-----|
| A | 03/04/19 | 90% CD'S | SEP |
| B | 05/17/19 | 95% CD'S | SPM |
| C | 08/29/19 | 95% CD'S | SNM |
| D | 09/18/19 | CONSTRUCTION SET | SGM |

10/16/19 CLIENT COMMENTS SGM

NOT FOR CONSTRUCTION UNLESS
LABELED AS CONSTRUCTION SET

REGISTERED PROFESSIONAL ENGINEER
MADHAN KUMAR KANTHA SAMY
27578
OKLAHOMA
DATE: 10/16/19

I HEREBY CERTIFY THAT THESE PLANS WERE
PREPARED BY ME OR UNDER MY DIRECT SUPERVISION
AND THAT I AM A DULY REGISTERED ENGINEER
UNDER THE LAWS OF THE STATE OF OKLAHOMA.

222712
TURLEY
6050 N. JOHNSTOWN AVE.
TULSA, OK 74126
TULSA COUNTY COUNTY

SHEET TITLE
**UNDERGROUND
UTILITIES
DETAILS**

SHEET NUMBER
E-3