



# Shortwave Radio Station Kane County, IL

DEREK MCGREW

- Narrative
- Special Use Permit Application
- Flood Plain Map and Wetland Map
- 250' Buffer Property List
- Kane County Land Use Opinion
- Illinois DNR Review
- Kane County Stormwater Permit
- FAA Approvals
- Driveway Permit Authorization
- Batavia Fire District Approval
- State of Illinois Fire Marshall Approval
- Property Value Study
- Environmental Reports
  - a. NEPA
  - b. Phase 1
  - c. Arch Report
  - d. Approval by Army Corps of Engineers
- Construction Drawings

# Narrative

Please find enclosed an application for a Shortwave Radio Station. This station will be broadcasting Christian broadcasts in Illinois and all over the world. A search for a property was conducted which resulted in reviewing and eliminating over 1000 properties within Kane County. The perfect property would have the following criteria:

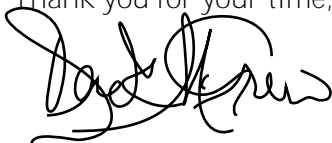
1. Placed in an area that meets the broadcasting requirements.
2. The owner of the land is willing to lease several acres of their land.
3. Property large enough for this type of facility.
4. Meets the zoning requirements including but not limited to size and zoning district.
5. Has no detrimental effect on wetlands.
6. Does not affect floodplain.
7. Does not have a negative effect on aviation due to height or proximity to airports.
8. Does not have a negative effect on surrounding lands, uses, or development.
9. Generally has little topography or other construction limitations.

This property meets or exceeds all of these requirements. You will find enclosed that all other necessary approvals have been obtained other than this Special Use Permit approval. Much time, effort and cost have been spent over the last many months to obtain these approvals from the local and Federal agencies. The cover letter included is a picture of a similar facility from a similar distance from the road. The photo was also zoomed in or the masts would be even less visible.

These facilities are unmanned, produce no significant sound or smell and are rarely visited. While future development in this area is unlikely due to the general type of ownership, enclosed is a study proving that these types of facilities do not have a negative effect on property values. I do wish to stress that this is not an opinion, or internet research, but factual documentation of properties and their values before and after a communications facility was constructed nearby.

Ursanav and Parable Broadcasting respectfully request approval of this Special Use Permit.

Thank you for your time,



Derek McGrew

317-507-4541

**KANE COUNTY DEVELOPMENT DEPARTMENT**  
**Zoning Division, Kane County Government Center**  
**719 S. Batavia Avenue**  
**Geneva, Illinois 60134**  
**(630) 444-1236**

**INSTRUCTIONS AND APPLICATION FOR ZONING MAP AMENDMENT**  
**AND/OR SPECIAL USE**

A request for the rezoning of property or for a special use in Kane County must be filed with all of the attached forms filled out completely.

The application must be signed by the owner of record of the property. In the case of property under purchase contract, the owner of record must sign and the contract purchaser should also sign the application as such purchaser is usually the person who will eventually establish the proposed zoning. Owner and contract purchaser must include their address and phone number on the application.

A **Land Use Opinion Report** from the Kane-DuPage Soil & Water Conservation District Office must accompany the application for rezoning or special use. Information on obtaining their report is available on their website which is noted below. Their report will be forwarded directly to our office.

An **Endangered Species Consultation Agency Action Report** from the Illinois Department of Natural Resources must accompany any rezoning request involving land zoned F-District Farming. Information on obtaining their report is available on their website which is noted below. Their report will be forwarded directly to our office.

Contact with local and/or state highway departments may be necessary. Authority for the location of entrances and exits from property to be rezoned must be obtained from the highway department having jurisdiction. If a township, county or state road is adjacent to the property involved in the rezoning, it may be necessary to dedicate right-of-way. To determine this, contact the Kane County Department of Transportation.

In submitting an application for rezoning, the required fees are as follows: **Residential Use:** \$800.00 for areas of less than two (2) acres; \$900.00 for two (2) acres but less than five (5) acres; \$1,125.00 for five (5) acres but less than ten (10) acres; \$1200.00 for ten (10) acres or more, plus \$50.00 per acre or portion thereof over 10 acres. **Non-Residential Use:** \$1,500.00 for areas of less than two (2) acres; \$1,800.00 for two (2) acres but less than five (5) acres; \$2,250.00 for five (5) acres but less than ten (10) acres; \$2,250.00 for ten (10) acres or more, plus \$75.00 per acre, or portion thereof over ten acres. ALSO, each request for a variation, as part of a rezoning or special use petition, shall be assessed a fee of one hundred dollars (\$100.00). Said fee must accompany application for rezoning or special use.

When land and/or the use of land (for which rezoning, special use, or variance is required by Appendix B), is maintained, used or commenced prior to obtaining said rezoning, special use, or variance, by one who knows or should have known the requirements for said rezoning, special use, or variance the fees above specified shall be **increased by one hundred (100) percent**. The payment of such additional fee

shall not relieve any persons from fully complying with the requirements of Appendix B, in the execution of the rezoning, special use, or variance, nor from any other penalties prescribed therein.

Mark VanKerkhoff, Director  
Development and Community Services Dept.

Dated: April 12, 2019

**Please make note of the addresses below:**

Kane County Zoning Board of Appeals  
Attn: Zoning Enforcement Officer  
719 Batavia Avenue  
Geneva, IL 60134  
(630) 444-1236

Kane Dupage Soil & Water  
Conservation District Office  
2315 Dean Street  
St. Charles, IL 60174  
(630) 584-7961  
[www.kanedupageswd.org/luo.pdf](http://www.kanedupageswd.org/luo.pdf)

Endangered and Threatened Species Program Manager  
EcoCAT Consultation Program  
Office of Realty & Capital Planning  
217-785-5500  
<http://dnr.illinois.gov/ecopublic/>

Kane County Department of Transportation  
41W011 Burlington Road  
St. Charles, IL 60175  
(630) 584-1170

KANE COUNTY DEVELOPMENT DEPARTMENT  
 Zoning Division, Kane County Government Center  
 719 S. Batavia Avenue  
 Geneva, Illinois 60134  
 Office (630) 444-1236 Fax: (630) 232-3411

<i>Received Date</i>
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**APPLICATION FOR ZONING MAP AMENDMENT  
 AND/OR SPECIAL USE**

*Instructions:*

*To request a map amendment (rezoning) for a property, complete this application and submit it with all required attachments to the Subdivision and Zoning Division.*

*When the application is complete, we will begin the review process.*

**The information you provide must be complete and accurate. If you have a question please call the subdivision and zoning division, and we will be happy to assist you.**

<b>1. Property Information:</b>	<b>Parcel Number (s):</b> 11-26-400-009
	<b>Street Address (or common location if no address is assigned):</b> 40W015 Seavey Road

<b>2. Applicant Information:</b>	<b>Name</b> Derek McGrew on behalf of URSANAV and Parable Broadcasting	<b>Phone</b> 317-507-4541
	<b>Address</b> 85 Rangeway Road, North Billerica, MA 01862	<b>Fax</b>
		<b>Email</b> derek@cellusite.net

<b>3. Owner of record information:</b>	<b>Name</b> Mary Coffey and Joe Reckinger	<b>Phone</b> 630-777-9140
	<b>Address</b> 39W840 Seavey Road	<b>Fax</b>
		<b>Email</b>

**Zoning and Use Information:**

2040 Plan Land Use Designation of the property: Open Space

Current zoning of the property: F

Current use of the property: Agricultural

Proposed zoning of the property: F

Proposed use of the property: Wireless Communications

If the proposed Map Amendment is approved, what improvements or construction is planned? (An accurate site plan may be required)  
Short Wave Radio Station

**Attachment Checklist**

- Plat of Survey prepared by an Illinois Registered Land Surveyor.
- Legal description
- Completed Land Use Opinion (Available in pdf form at [www.kanedupageswed.org/luo.pdf](http://www.kanedupageswed.org/luo.pdf)), as required by state law, mailed to: The Kane Dupage Soil and Water Conservation District, 545 S. Randall Road, St. Charles, IL 60174.
- Endangered Species Consultation Agency Action Report (available in pdf form at <http://dnr.illinois.gov/ecopublic/>) to be filed with the Illinois Department of Natural Resources. (\* This report may best be accessed with Internet Explorer on some computers, per the State)
- List of record owners of all property within 250 feet of the subject property
- Trust Disclosure (If applicable)
- Findings of Fact Sheet
- Application fee (make check payable to Kane County Development Department)

**I (we) certify that this application and the documents submitted with it are true and correct to the best of my (our) knowledge and belief.**

Record Owner 	Date 07/03/2020
Applicant or Authorized Agent	Date

# Findings of Fact Sheet – Map Amendment and/or Special Use

- *The Kane County Zoning Board is required to make findings of fact when considering a rezoning. (map amendment)*
- *You should “make your case” by explaining specifically how your proposed rezoning relates to each of the following factors.*

Derek McGrew

07/03/2020

*Name of Development/Applicant*

*Date*

**1. How does your proposed use relate to the existing uses of property within the general area of the property in question?**

The proposed use will relate well to the area. The proposed use is an unmanned facility with little area of disturbance.

The facility produces virtually no sound, no pollution and nearly no traffic. The property is a perfect fit for this type of project

**2. What are the zoning classifications of properties in the general area of the property in question?**

F and F-1

**3. How does the suitability of the property in question relate to the uses permitted under the existing zoning classification?**

While searching for a suitable location for a facility such as this one, there are many factors that have to be considered.

These factors include environmental, aeronautical, zoning, construction, surrounding property interest and use and others.

This property was selected because it is one of the very few that meets all criteria. Well over 1000 properties were eliminated in the search for placement of this facility. This property not only meets all necessary criteria, but is far from other residential uses and is adjacent to another wireless communications facility.

**4. What is the trend of development, if any, in the general area of the property in question?**

There has not been any trend of development in this area, and much of the surrounding property is owned by either the same owner as this project, or County Forest Preserve. So, there is no reason to believe that there will be any significant future development along Seavey Road.

**5. How does the projected use of the property, relate to the Kane County 2040 Land Use Plan?**

The 2040 Land Use plan makes no mention of wireless communications or towers, so it is difficult to relate a use that wasn't considered in the Land Use Plan. Generally, wireless communications facilities are preferred to be placed in either Agricultural or Industrial zoning districts and uses. This property is not only Agricultural in use, but also is surrounded by land that is Agricultural in zoning and use. As this property is classified as Open Space, the use will relate well with the plan as the proposed use encumbers very little square footage and therefore very little effect on the property's natural resources.



# Findings of Fact Sheet – Special Use

07/03/2020

**Special Use Request**

**Date**

- *The Kane County Zoning Board is required to make findings of fact when considering a special use.*
- *Special Uses shall be considered at a public hearing before the Zoning Board of Appeals. In its report of findings of facts, recommendations shall be made to the County Board following the public hearing. The Zoning Board **will not** recommend a special use **unless** the following items are addressed:*

**6. Explain how the establishment, maintenance or operation of the special use will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare.**

The shortwave radio station will have no negative effect whatsoever on the public health, safety, morals, comfort or general welfare of the surrounding area. It could easily be argued that a Christian Radio station promotes the health, morals, comfort and general welfare of the area. The local fire department, DNR, County Stormwater, Federal Aviation Administration, State Fire Marshall and building department have all approved of this project.

**7. Explain how the special use will not be injurious to the use, enjoyment and value of other property in the immediate vicinity.**

Wireless communications facilities have no fact-based documented effect on the surrounding area or immediate vicinity of the facility. Please find attached within a property value study documenting that there is no effect.

**8. Explain how the special use will not impede the normal, orderly development and improvement of the surrounding property.**

The proposed use does not have any effect on the normal development of surrounding properties. Although in this location it is unlikely, residential subdivisions are often built around existing telecommunications facilities.

**9. Will adequate utility, access roads, drainage and other necessary facilities be provided? Please explain:**

Yes. A new access road will be constructed along with necessary utilities such as power and fiber to the facility.

**10. Will adequate measures be provided for ingress and egress and so designed to minimize the traffic and congestion? Please explain:**

The facility has no measurable effect on traffic. The facility would be visited on average once per month.

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**11. Will the special use conform to the regulations of the district in which it is located? Please explain:**

Yes. The facility is proposed to meet or exceed all setback requirements.

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**CERTIFICATION OF NOTIFICATION  
OF PROPERTY OWNERS WITHIN 250 FEET OF SUBJECT PROPERTY**

Date: 07/03/2020

To: **KANE COUNTY ZONING BOARD OF APPEALS**

From: Derek McGrew/Applicant

85 Rangeway Road #110

North Billerica, MA 01862

(Ph #) 317-507-4541

The undersigned, being sworn upon this oath, deposes and says that the list below includes the names and addresses of all owners of property within 250 feet of the property referred to in petition for

(circle one) Variance Rezoning **Special Use**

for the purpose of Construction of a short wave radio station facility

and, further, that all persons owning property within 250 feet of the parcel referred to in petition have been notified of the intent of the petitioner(s).

Petitioner's property is located in Section 26, Township 39N, County of Kane. (Legal Description Attached)

List names of property owners below. (Property Owners do not have to sign this form)

NAME	ADDRESS (street, city, state and zip code)
<u>Mary and Edwin Dunteman</u>	<u>02S848 Bliss Road, Sugar Grove, IL 60554</u>
<u>Richard and Susan A Nye</u>	<u>40W257 Seavey Road, Batavia, IL 60510</u>
<u>Joe Reckinger and Mary Coffey</u>	<u>39W840 Seavey Road, Batavia, IL 60510</u>
<u>Charles, Francis and Mary Coffey</u>	<u>40W015 Seavey Road, Batavia, IL 60510</u>
<u>JW KL J Hoscheid K Dunteman</u>	<u>2 S 848 Bliss Road, Sugar Grove, IL 60554</u>
<u>Forest Preserve District of Kane County</u>	<u>1996 S Kirk Road Suite 320, Geneva, IL 60134</u>

By: \_\_\_\_\_

(Property Owner or Agent)

Subscribed and sworn to before me

this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
Notary

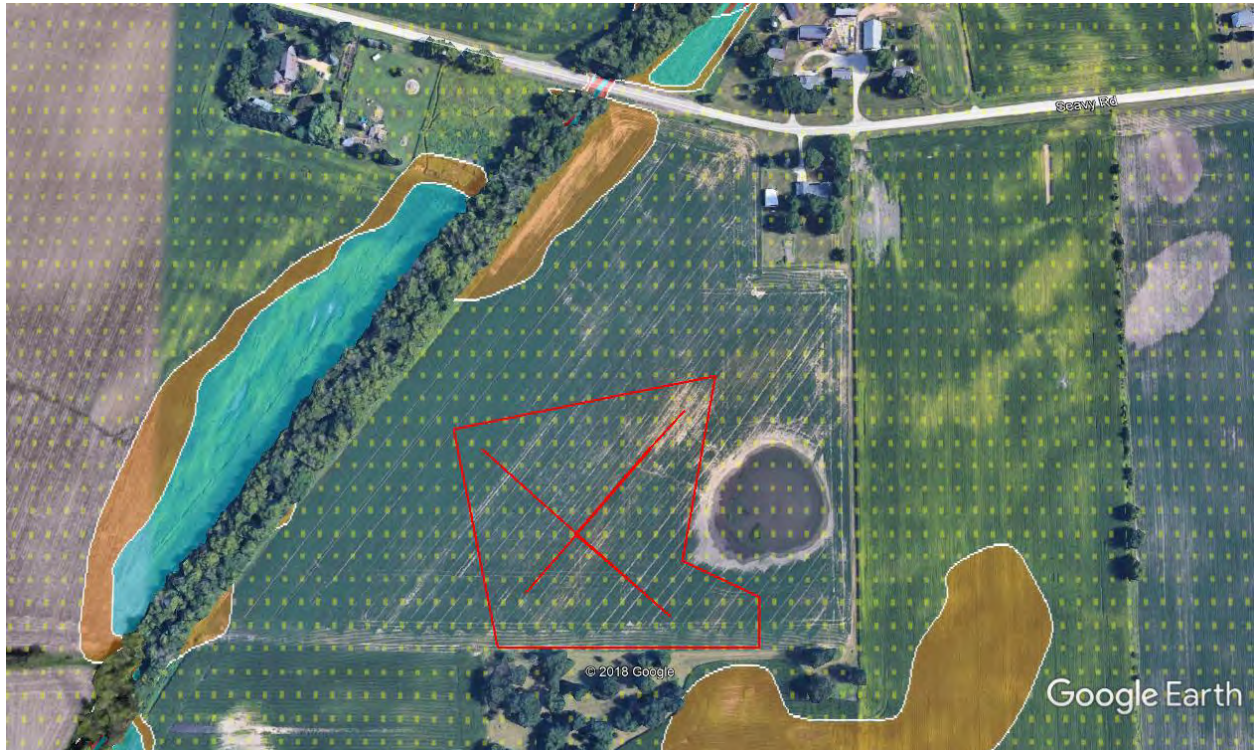
**TIME ESTIMATE**  
**REZONINGS AND SPECIAL USES**  
(After all required documents have been submitted)

<u><b>ACTION</b></u>	<u><b>AVERAGE NUMBER OF DAYS</b></u>
KDS & WCD AND IDOC APPLICATIONS (Kane-DuPage Soil & Water Conservation District; Illinois Department of Natural Resources)	30
TECHNICAL STAFF REVIEW (Meeting held each Monday morning- Petitions scheduled as time permits.)	20
ZONING BOARD PUBLIC HEARING (Hearing held as needed--published 15 days prior to hearing-Statutory requirement)	30
DEVELOPMENT COMMITTEE Agenda set for County Board Meeting (Meeting held third Tuesday of each month)	20
COUNTY BOARD MEETING Final Decision (Meeting held second Tuesday of each month)	20
	<hr/> <b>TOTAL 120</b> <b>(4 MONTHS)</b>

# Wetland Map



# Floodplain Map



# Topo Map



# Situs Address Buffer

Parcel Number:  Distance:  Feet   
 Include Source Parcel:  Yes  No

This list contains situs addresses for parcels within 250 feet of parcel 1126400009†

Situs Addresses (physical locations)				
Parcel	Address	City	State	Zip
1126400009				
1125300007				
1125300008	39W978 SEAVEY RD	BATAVIA	IL	60510-9402
1126400001	40W410 SEAVEY RD	BATAVIA	IL	60510-9404
1126400002	40W018 SEAVEY RD	BATAVIA	IL	60510-9778
1126400006	40W015 SEAVEY RD	BATAVIA	IL	60510-9419
1126400007				
1126400008	40W257 SEAVEY RD	BATAVIA	IL	60510-9420
1126400010				
1135200004				
1135200009				
1136100001				

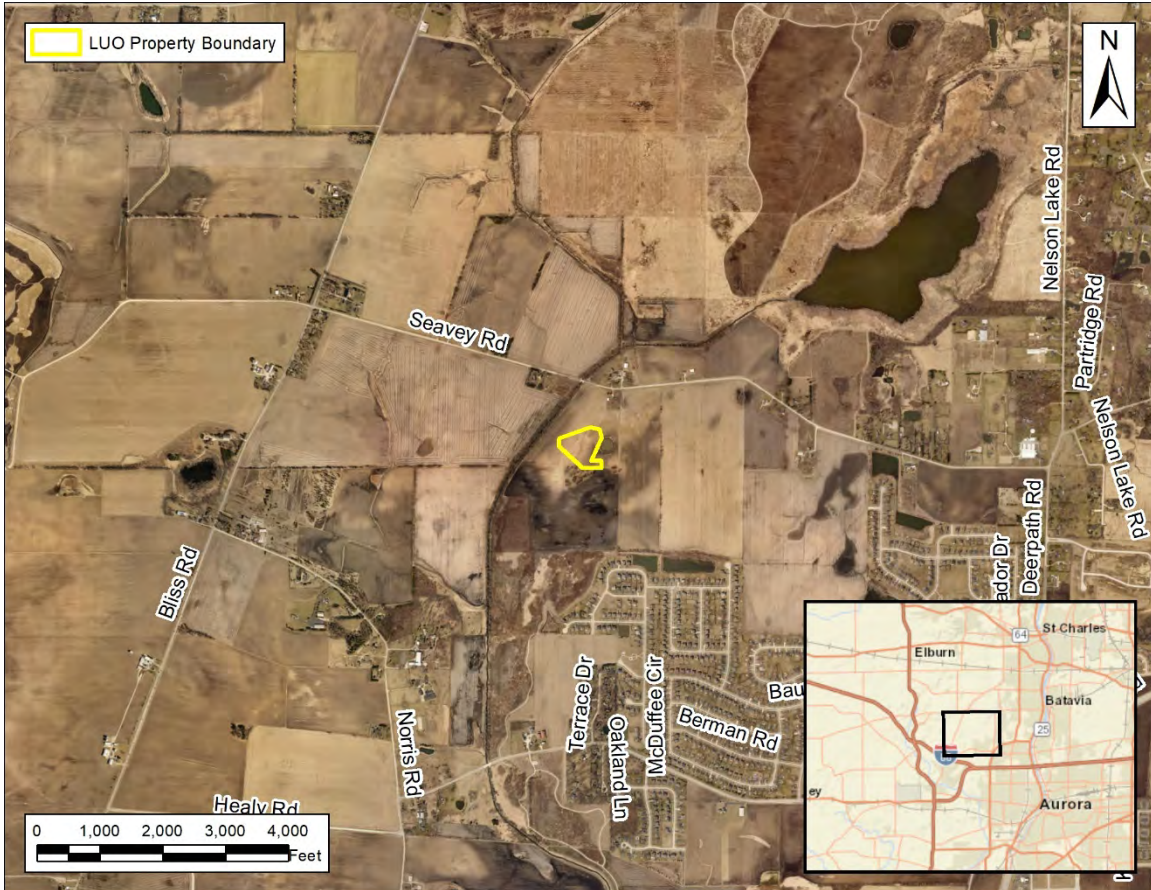
250 foot buffer of 1126400009 returned 12 parcels  
 \*Indicates condo parcel

This information is based on curent GIS Parcel Data

NOTE: Condo Parcels may be included that are beyond the buffer due to the nature of how condos are mapped!  
 †It will not include any records that could not be compressed due to system locks in the GIS system  
 ††Count includes only unique parcel polygons. All Condos are counted grouped by their associated "-000" communal polygon

**KANE-DUPAGE  
SOIL AND WATER CONSERVATION DISTRICT**

**LAND USE OPINION  
19-107**



January 21, 2020

Prepared for:  
Kane County

Petitioner:  
Derek McGrew  
103 Wilshire Court  
Noblesville IN 46062



**Petitioner:** Derek McGrew, 103 Wilshire Ct, Noblesville, IN 46062

**Contact Person:** Derek McGrew, 317-507-4541

**Unit of Government Responsible for Permits:** Kane County

**Acreage:** 6.76

**Location of Parcel:** Section 26, Township 39N, Range 7E

**Property Address/PIN#:** 40W015 Seavey Road, North Aurora

**Existing Land Use:** Agricultural

**Surrounding Land Use:** Agricultural

**Proposed Land Use:** Wireless communication tower

### Natural Resource Concerns

**Land Cover in the Early 1800's:** This site is located in an area previously identified as forest. (See page 2 for more information.)

**Kane County Green Infrastructure Plan:** This site is located in an area indicated Environmental Resource Area (with buffer) and Remnant Oak Woodland. (See page 3.)

**Wetlands:** The National Wetland Inventory map identifies a wetland adjacent to the site. The ADID wetland map does not identify wetland areas on this site. In the event that any indications of wetlands are identified on this site during the proposed land use change, a wetland delineation specialist who is recognized by the U.S. Army Corps of Engineers should determine the exact boundaries and value of any wetlands. (See page 4 & 5 for more wetland information.)

**Floodplain:** There are no floodplain areas identified on this site. (See page 6.)

**Streams:** There are no streams on this site.(See page 7.)

**Regulations:** Please note that additional permits are required for any development impacting wetlands, streams or floodplain areas. Please see page 8 for regulation information.

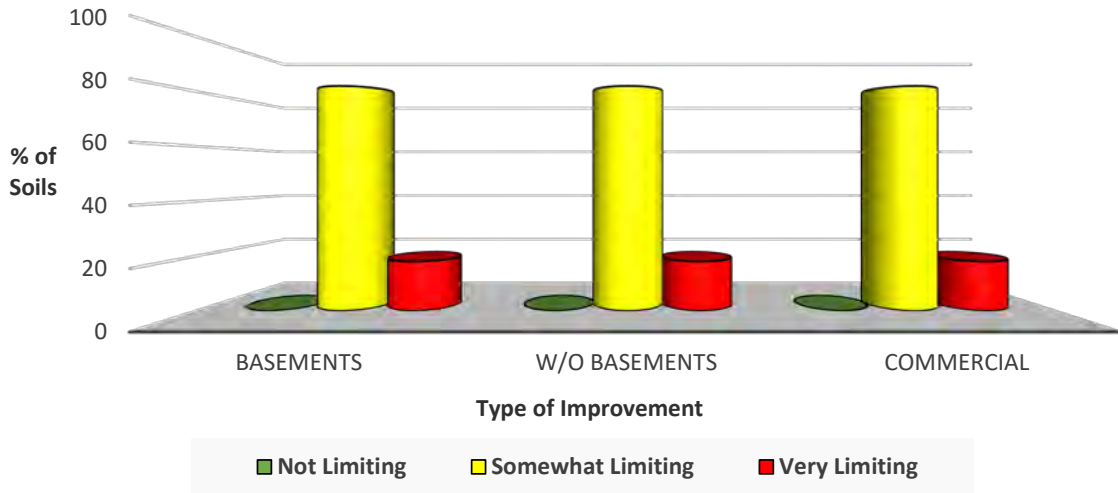
**Aquifer Sensitivity:** This site is classified as having a high potential for aquifer contamination. (See page 9.)

**Topography and Drainage:** Please refer to page 10 for information regarding site topography and drainage.

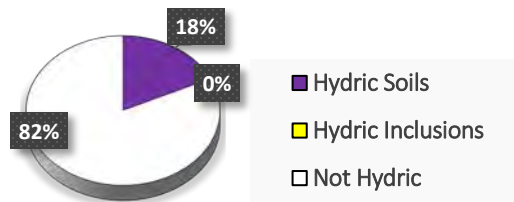
**Stormwater:** See page 11 for information regarding stormwater management.

**Soil Erosion:** Any development on this site should include a soil erosion and sediment control plan. (See page 11.)

**Building Limitations:** Soils at this site may contain limitations for dwellings with basements, dwellings without basements, and small commercial buildings. See page 13 and attached Soils Tables located on the final pages this report. All information is from the Soil Survey of Kane County, Illinois.



**Hydric Soils:** There are hydric soils identified on this site. (See page 14.)



**LESA-Prime Farmland:** Sites with a score of 26-33 or greater on the Land Evaluation (LE) portion of the LESA score are considered to have high value farmland soils. This site has a score of **26** placing it within the definition of high value soils/prime farmland. (See Page 16 for more information.)

### LAND USE OPINION

**Land Use Opinion:** The most current natural resource data indicates the following concerns for this site: **Adjacent Wetlands, Soil Limitations, Aquifer Sensitivity, LESA – Prime Farmland, Soil Erosion and Sediment Control, and Stormwater Management.** Based on the information in this report, it is the opinion of the Kane-DuPage Soil and Water Conservation District Board that this site **may not be suited** for land use change **unless** the previously mentioned concerns are addressed.

## SITE INSPECTION

A site inspection was conducted by Resource Assistant, Jennifer Shroder on January 7, 2020. The following photos were taken during this inspection and reflect the site conditions at that time.



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## PURPOSE AND INTENT

This report presents natural resource information to officials of the local governing body and other decision makers. Decisions concerning variations, amendments or relief of local zoning ordinance may reference this report. Also, decisions concerning the future of a proposed subdivision of vacant or agricultural lands, and the subsequent development of these lands because of these decisions may reference this report. This report is a requirement under the Soil and Water Conservation District Act contained in ILCS 70, 405/1 ET seq.

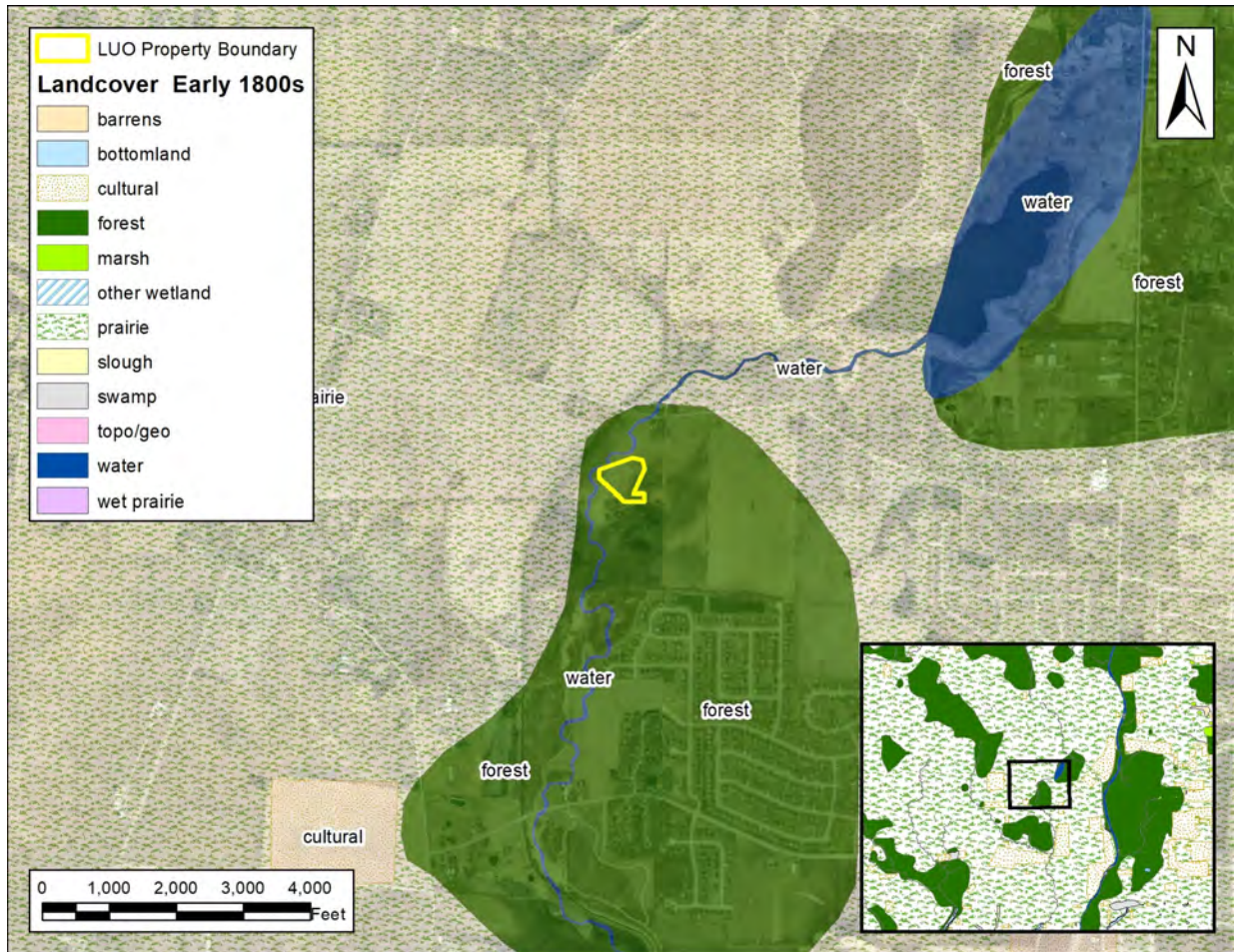
This report intends to present the most current natural resource information available in an understandable format. It contains a description of the present conditions and resources available and their potential impact on each other. This information comes from standardized data, on-site investigations and other information furnished by the petitioner.

Please read the entire report to coordinate and interrelate all natural resource factors considered. This report, when used properly, will provide the basis for good land use change decisions and proper development while protecting the natural resource base of the county.

The conclusion of this report in no way indicates the impossibility of a certain land use. However, it should alert the reader to possible problems that may occur if the capabilities of the land are ignored. Please direct technical questions about data supplied in this report to:

**Kane-DuPage**  
**Soil and Water Conservation District**  
**2315 Dean Street, Suite 100**  
**St. Charles, IL 60175**  
**Phone: (630) 584-7960**

## LAND COVER IN THE EARLY 1800'S



**Figure 1: Land Cover in the Early 1800's**

Illinois Department of Natural Resources, Illinois Natural History Survey, Land Cover of Illinois in the Early 1800s., Vector Digital Data, Version 6.0, August, 2003.

These surveys represent one of the earliest detailed maps for Illinois. The surveys began in 1804 and were largely completed by 1843. They predate our county land ownership maps and atlases. These plat maps and field notebooks contain a wealth of information about what the landscape was like before the flood of settlers came into the state.

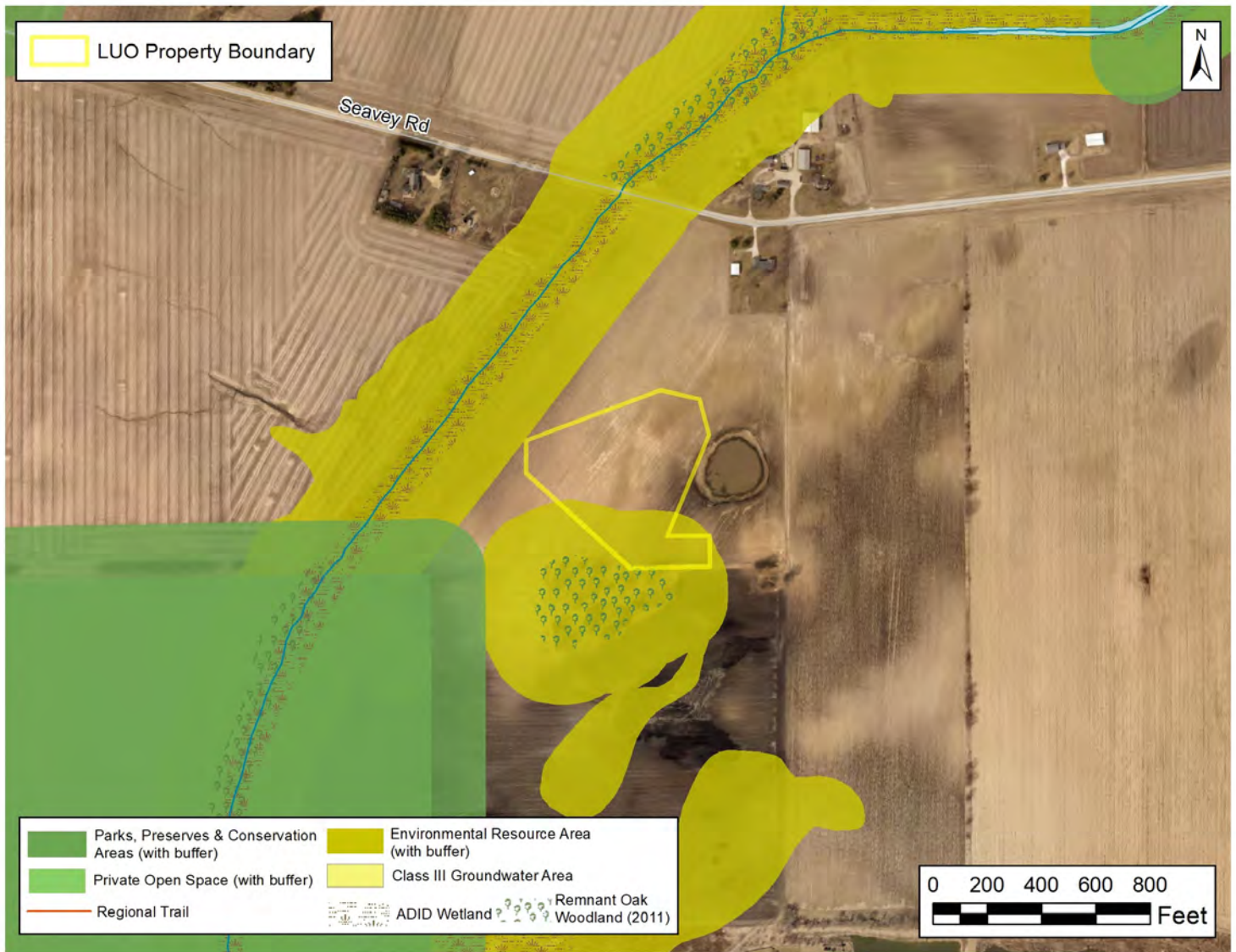
The vast majority of the landscape of Illinois in the early 1800's consisted of two different natural resource areas. These two areas were prairie and forest. Prairie and woodland ecosystems are extremely valuable resources for many reasons. These areas:

- provide wildlife habitat and support biodiversity
- provide areas for recreational opportunities

- improve soil health and reduce soil loss
- improve air and water quality

Other designations include, cultural (or agricultural area), marsh, wet prairie, wetland, barrens and water. Please note that these designations are based on surveys taken in the early 1800's, and may not represent exact site conditions.

**This site is located in an area surveyed as forest on the land cover in the early 1800's map. The District recommends preserving as much as of the natural character of the site as possible during this land use change. It is also recommended that native plants be utilized for landscaping whenever possible. Removal of invasive species is also encouraged.**



**Figure 2: Kane County Green Infrastructure Plan**

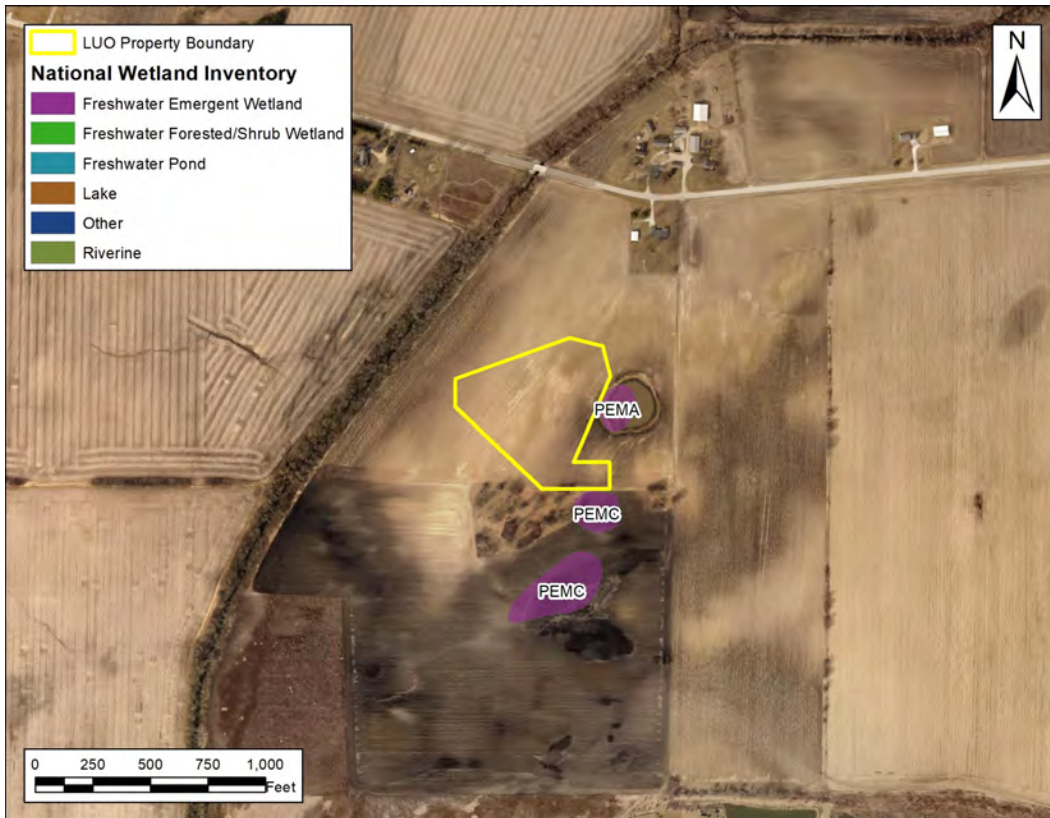
From the Kane County Green Infrastructure Plan, “Green infrastructure is an interconnected system of natural areas and open spaces including woodlands, wetlands, trails and parks, which are protected and managed for the ecological values and functions they provide to people and wildlife. The Kane County 2040 Green Infrastructure Plan includes analysis of existing natural resources in the County and recommendations for green infrastructure priorities and approaches. The ultimate goal of the Kane County 2040 Green infrastructure Plan is to lay the groundwork for green infrastructure planning and projects at the regional, community, neighborhood and site levels.”

The benefits of green infrastructure include:

- Preservation of habitat and biodiversity
- Water and soil conservation
- Flood storage and protection
- Improved public health
- Encourage local food production
- Economic benefits
- Mitigation and adaptation for climate change

**This site includes the following priority areas as designated on the Kane County 2040 Green Infrastructure Plan: Remnant Oak Woodlands, Environmental Resource Area (with buffer).**

# NWI WETLANDS



**Figure 3: National Wetland Inventory Map**

United States Department of the Interior, Fish and Wildlife Service, National Wetlands Inventory Photo Year 1983-1984, Digitized 1985-1986.

Wetlands are some of the most productive and diverse ecological systems on earth. The U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency define wetlands as follows, “Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.” Some other common wetlands located in this part of Illinois are fens and wet meadows.

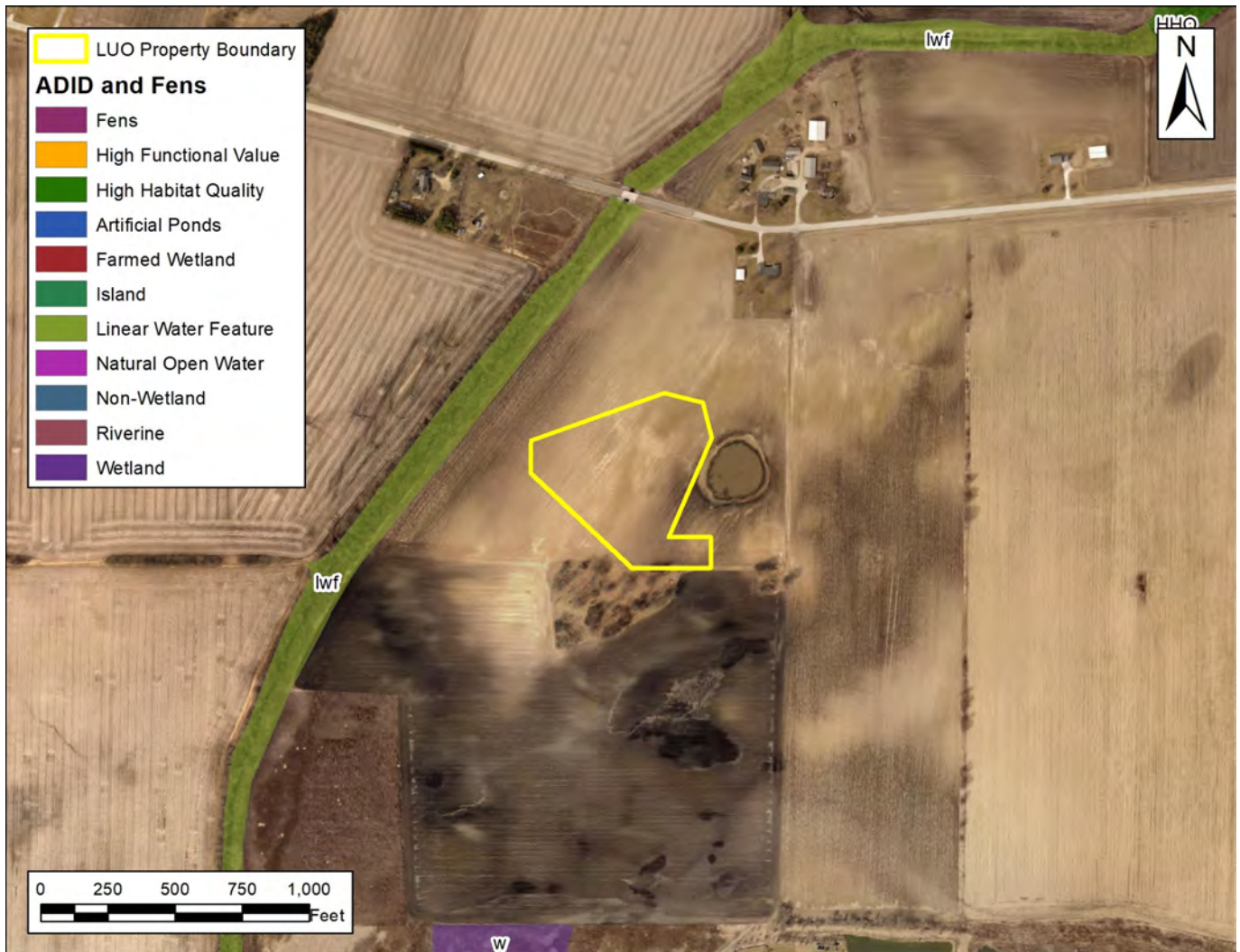
Wetlands function in many ways to benefit mankind. Some of their many functions and benefits include:

- Controlling flooding by offering a slow release of excess water downstream or through the soil.
- Cleansing water by filtering out sediment and pollutants.

- Functioning as rechargers of our valuable groundwater.
- Providing essential breeding, rearing, and feeding grounds for many species of wildlife.

**The National Wetland Inventory Map identifies wetlands adjacent to this site. The types of wetlands identified adjacent to this site include: PEMA—Palustrine Emergent Temporarily Flooded. In the event that any indications of wetlands are identified on this site during the proposed land use change, a wetland delineation specialist who is recognized by the U.S. Army Corps of Engineers should determine the exact boundaries and value of these wetlands. Please see page 8 for wetland regulation information.**

## ADID WETLANDS



**Figure 4: ADID Wetlands**

Kane County's Wetlands and Streams Advanced Identification (ADID) Study completed in 2004.

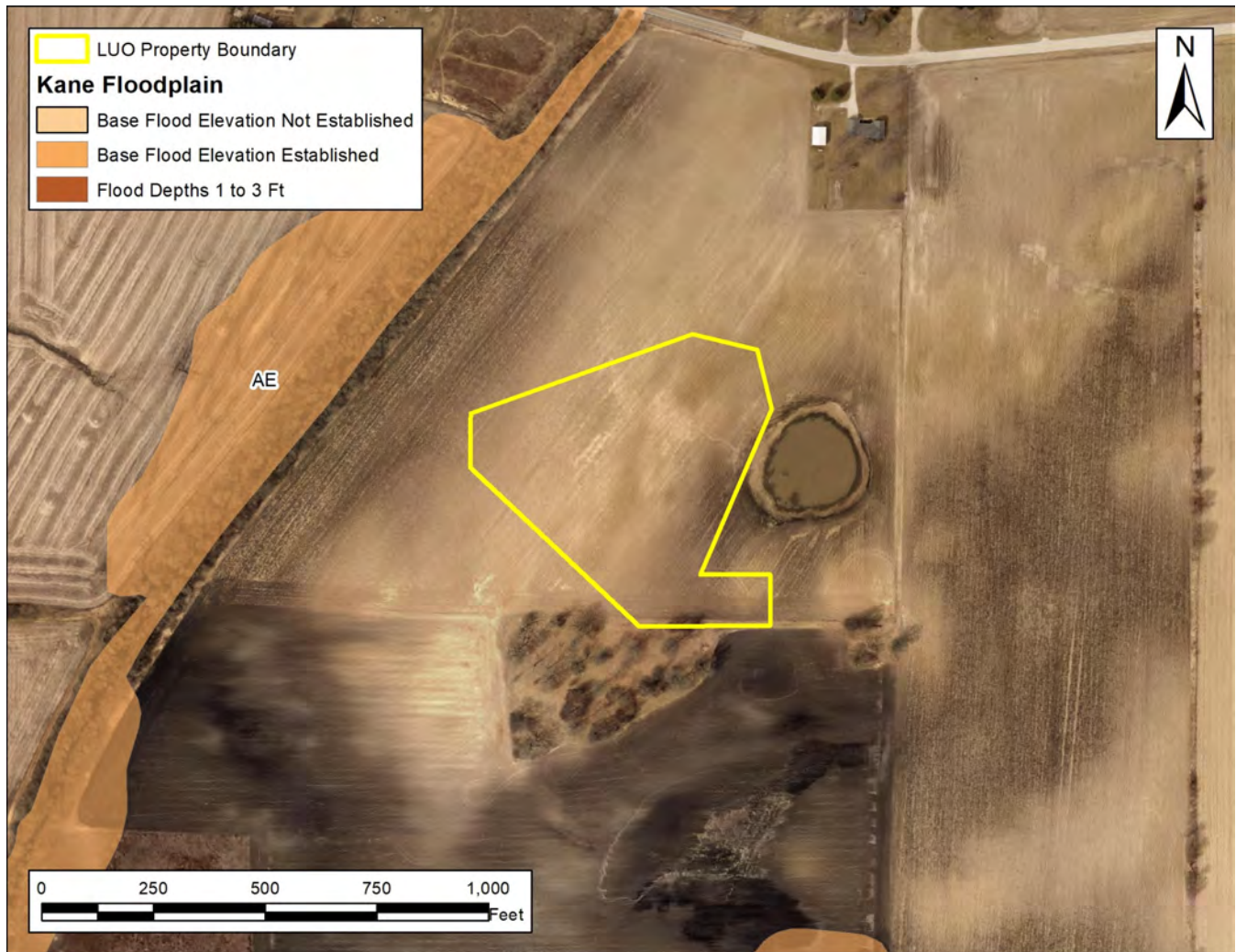
Released in August of 2004, the Kane County Advanced Identification of Aquatic Resources (or ADID) study is a cooperative effort between federal, state, and local agencies to inventory, evaluate, and map high quality wetland and stream resources in the county. ADID studies are part of a U.S. Environmental Protection Agency program to provide improved awareness of the locations, functions, and values of wetlands and other waters of the United States. The primary purpose is to identify wetlands and streams unsuitable for dredging and filling because they are of particularly high quality. This information can be used by federal, state, and local gov-

ernments to aid in zoning, permitting, and land acquisition decisions. In addition, the information can provide data to agencies, landowners, and private citizens interested in restoration, acquisition, or protection of aquatic sites and resources. For more detailed information regarding wetlands in Kane County, please refer to the full Kane County ADID study at : <http://dewprojects.countyofkane.org/adid/index.htm>

**A review of the Kane County ADID map revealed that no ADID wetlands were identified on this site.**



# FLOODPLAIN



**Figure 5: Floodplain Map**

Federal Emergency Management Agency, National Flood Insurance Program, Q3 Flood Data, Disc 6, 2011.

From FEMA’s Floodplain Natural Resources and Functions Chapter 8, “Undeveloped floodplain land provides many natural resources and functions of considerable economic, social and environmental value. Nevertheless, these and other benefits are often overlooked when local land-use decisions are made. Floodplains often contain wetlands and other important ecological areas as part of a total functioning system that impacts directly on the quality of the local environment.”

There are so many benefits of the floodplain that not all can be listed here, but the following is a general list of benefits and functions:

- natural flood storage and erosion control
- water quality maintenance
- groundwater recharge
- nutrient filtration
- biological productivity/wildlife habitat
- recreational opportunities/aesthetic value

**According to the Flood Insurance Rate Map, no part of this site is within the boundaries of a 100-year floodplain. This development should not impede the beneficial functions of the floodplain. Please see page 8 for information regarding floodplain regulations.**

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## STREAMS AND WATERSHED MANAGEMENT

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**Rivers and Streams** are necessary components of successfully functioning ecosystems. It is important to protect the beneficial functions and integrity of our local streams and rivers. Development near stream systems has the potential to increase flooding, especially in urban areas where there is a lot of impervious surface and a greater amount of stormwater runoff. Pollution is also an issue for stream systems in urban and rural areas. It is rare for any surface waters to be impacted by only one source of pollution. With few exceptions, every land-use activity is a potential source of nonpoint source water pollution (IEPA– Nonpoint Source Pollution).

The Illinois Environmental Protection Agency provides the following in regards to nonpoint source pollution, “Nonpoint source pollution (NPS) occurs when runoff from rain and snowmelt carries pollutants into waterways such as rivers, streams, lakes, wetlands, and even groundwater. Examples of or sources of NPS pollution in Illinois include runoff from farm fields, livestock facilities, construction sites, lawns and gardens, city streets and parking lots, surface coal mines, and forestry. The major sources of NPS pollution in Illinois are agriculture, urban runoff, and habitat modification.”

Local watershed management planning is an important effort that involves citizens of a watershed in the protection of their local water resources. Water quality is a reflection of its watershed.

### **Common Watershed Goals:**

- Protect and restore natural resources
- Improve water quality
- Reduce flood damage

- Enhance and restore stream health
- Guide new development to benefit watershed goals
- Preserve and develop green infrastructure
- Enhance education and stewardship

There are many subwatershed plans that have already been developed in Kane County. Please follow the link to the Kane County 2040 Green Infrastructure Plan. See page 108 for a list of local watershed plans.

<http://countyofkane.org/FDER/Pages/development/planning.aspx>

**Nutrient management** is of vital importance to the health of our rivers and streams. Nutrient load in our local streams and rivers has contributed to the Gulf of Mexico hypoxia, or a “dead zone” located where the Mississippi River meets the Gulf of Mexico. This dead zone has little to no biological activity. Yearly averages indicate the dead zone to be greater than 5,000 square miles in size. Illinois was required and has introduced a plan to reduce nutrient loss from point source pollution sources, such as wastewater treatment plants and industrial wastewater, as well as nonpoint pollution sources. Read Illinois’s Plan for reducing nutrient loss here:

<http://www.epa.illinois.gov/topics/water-quality/watershed-management/excess-nutrients/nutrient-loss-reduction-strategy/index>

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## REGULATORY INFORMATION

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The laws of the United States and the State of Illinois assign certain agencies specific and different regulatory roles to protect the waters within the State's boundaries. These roles, when considered together, include protection of navigation channels and harbors, protection against floodway encroachment, maintenance and enhancement of water quality, protection of fish and wildlife habitat As well as recreational resources. Unregulated use of waters within the State of Illinois could permanently destroy or alter the character of these valuable resources and adversely impact the public. Therefore, please contact the proper regulatory authorities when planning any work associated with Illinois waters so that proper consideration and approval can be obtained.

### **REGULATORY AGENCIES:**

**Wetland/U.S. Waters:** U.S. Army Corps of Engineers, Chicago District, 111 North Canal Street, Chicago, IL 60606-7206. Phone: (312) 353-6400.

<http://www.lrc.usace.army.mil/>

**Wetland/Isolated:** Kane County Water Resources Division, 719 Batavia Avenue, Geneva, IL 60134. (630)232-3400.

<http://www.countyofkane.org/FDER/Pages/environmentalResources/water.aspx>

**Floodplains:** Illinois Department of Natural Resources\Office of Water Resources, 2050 W. Stearns Road, Bartlett, IL 60103. (847)608-3100.

<https://www.dnr.illinois.gov/WaterResources/Pages/Permit%20Programs.aspx>

### **Who Must Apply:**

**Wetland and/or Floodplain Permit:** Anyone proposing to dredge, fill, riprap, or otherwise alter the banks or beds of, or construct, operate, or maintain any dock, pier, wharf, sluice, dam, piling, wall, fence, utility, floodplain or floodway subject to State or Federal regulatory jurisdiction should apply for agency approvals.

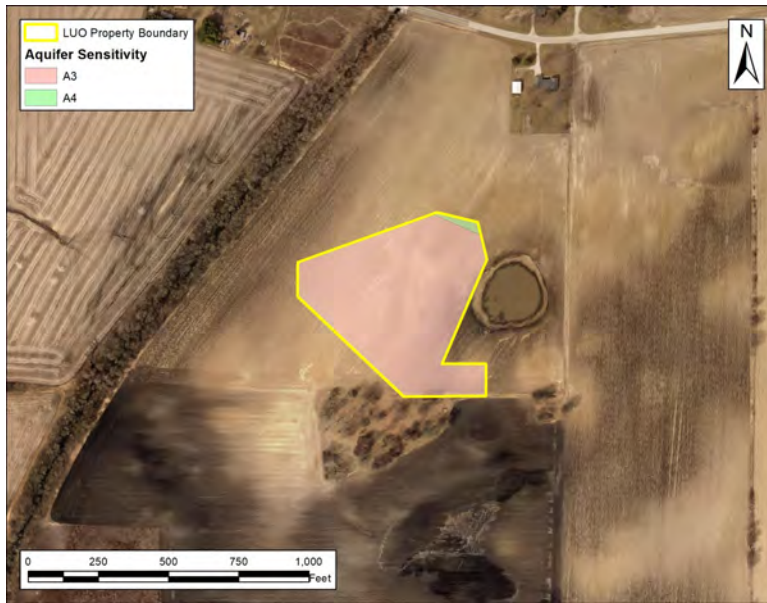
**Construction Permit:** Anyone disturbing an acre or more of land during proposed construction activities should apply for the NPDES General Construction Permit ILR10. Building and stormwater permits should also be obtained locally from municipal government and/or Kane County.

**NPDES General Construction Permit ILR10:** Illinois Environmental Protection Agency, Division of Water Pollution Control, 1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794. (217)782-0610.

<http://www.epa.illinois.gov/topics/forms/water-permits/storm-water/construction/index>

**Coordination:** We recommend early coordination with the regulatory agencies **BEFORE** finalizing work plans. This allows the agencies to recommend measures to mitigate/compensate for adverse impacts. Also, the agency can make possible environmental enhancement provisions early in the project planning stage. This could reduce time required to process necessary approvals. Please be advised that failure to coordinate with regulatory agencies could result in project shut down, fines and/or imprisonment.

# AQUIFER SENSITIVITY



**Figure 6: Aquifer Sensitivity Map**

Dey, W.S., A.M. Davis, and B.B. Curry 2007, Aquifer Sensitivity to Contamination, Kane County, Illinois: Illinois State Geological Survey, Illinois County Geologic Map, ICGM Kane-AS

The map aquifer sensitivity to contamination (Dey et al 2007) is a representation of the potential vulnerability of aquifers in an area to contamination from sources of contaminants at or near the surface. The U.S. Environmental Protection Agency (1993) defines aquifer sensitivity/contamination potential as “a measure of the ease with which a contaminant applied on or near the land surface can migrate to an aquifer.”

**Aquifers function as a storage area for groundwater recharge, which makes them a reliable source of fresh water. Groundwater accounts for a considerable percentage of the drinking water in Kane County. The chart below shows the aquifer sensitivity classifications. This site is classified as having a high potential for contamination.**

*A = High Potential, B = Moderately High Potential, C=Moderate Potential, D = Moderately Low Potential, E = Low Potential*

<b>A1</b>	Aquifers are greater than 50ft thick and within 5ft of the surface	<b>C1</b>	Aquifers are greater than 50ft thick and between 20 and 50ft below the surface
<b>A2</b>	Aquifers are greater than 50ft thick and between 5 and 20ft below the surface	<b>C2</b>	Aquifers are between 20 and 50ft thick and between 20 and 50ft below the surface
<b>A3</b>	Aquifers are between 20 and 50ft thick and within 5ft of the surface	<b>C3</b>	Sand and gravel aquifers are between 5 and 20ft thick, or high-permeability bedrock aquifers are between 15 and 20ft thick, both between 20 and 50ft below the surface
<b>A4</b>	Aquifers are between 20 and 50ft thick and between 5 and 20ft below the surface	<b>D1</b>	Aquifers are greater than 50ft thick and between 20 and 50ft below the surface
<b>B1</b>	Sand and gravel aquifers are between 5 and 20ft thick, or high-permeability bedrock aquifers are between 15 and 20ft thick, both within 5ft of the surface	<b>D2</b>	Aquifers are between 20 and 50ft thick and between 50 and 100ft below the surface
<b>B2</b>	Sand and gravel aquifers are between 5 and 20ft thick, or high-permeability bedrock aquifers are between 15 and 20ft thick, both between 5 and 20ft below the surface	<b>D3</b>	Sand and gravel aquifers are between 5 and 20ft thick, or high-permeability bedrock aquifers are between 15 and 20ft thick, both between 50 and 100ft below the surface
<b>E1</b>	Sand and gravel or high-permeability bedrock aquifers are not present within 100 ft of the land surface		

## TOPOGRAPHY AND DRAINAGE

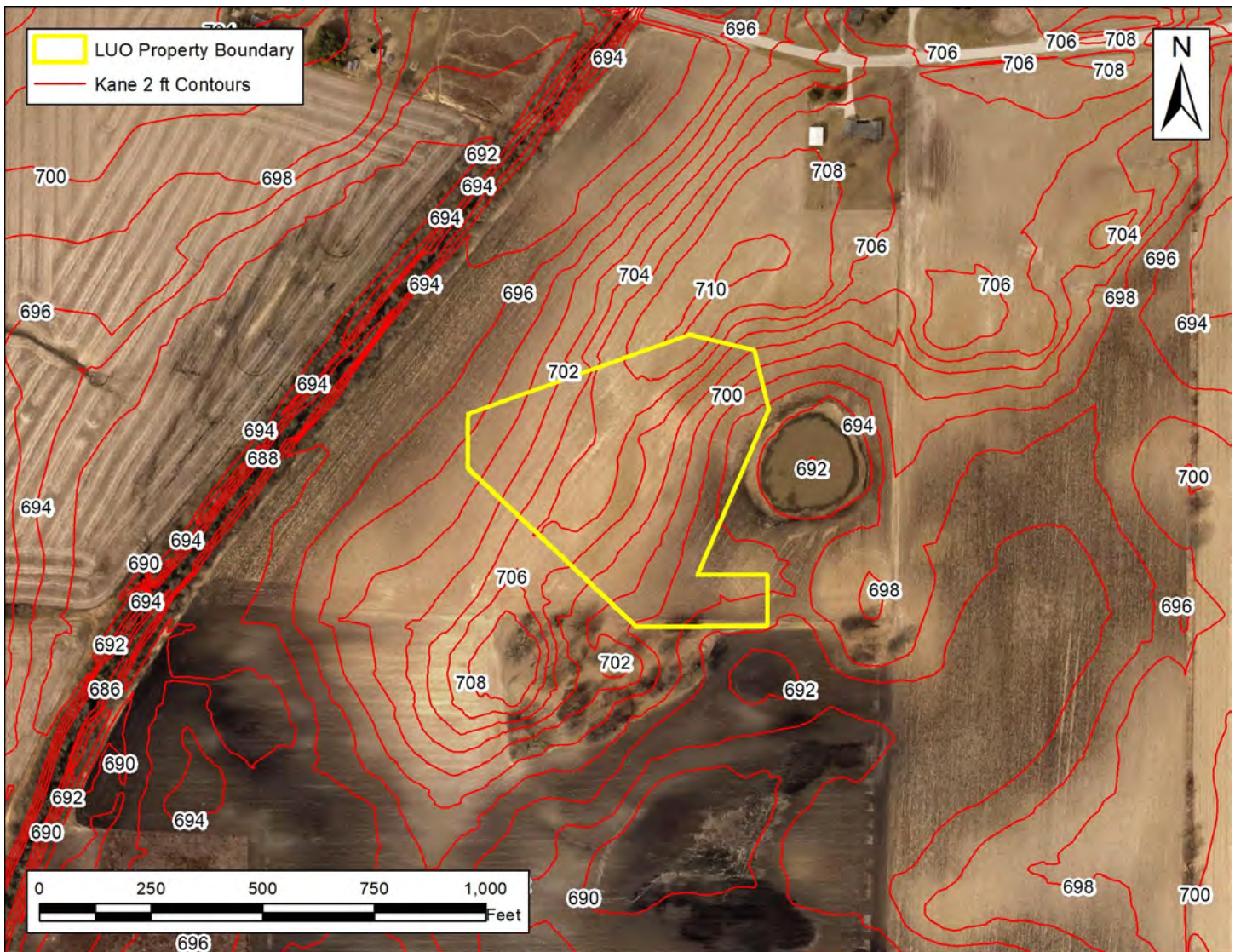


Figure 7: Municipalities 2 Ft Contours

USGS Topographic maps and other topographic surveys give information on elevations, which are important to determine slopes, natural drainage directions, and watershed information. Elevations determine the area of impact of flooding. Slope information determines steepness and erosion potential of the site. Slope has the greatest impact in determining the erosion potential of a site during construction activities. Drainage directions determine where water leaves the property in question, possibly impacting surrounding natural resources.

It is important to consider drainage during any pro-

posed construction onsite. Any areas where water leaves the site should be monitored for potential pollutants which could contaminate downstream waters.

**The high point of this property is located in the northern portion of the site at an elevation of approximately 710 feet above mean sea level. The property generally drains to the southeast via overland. The lowest elevation on the property is approximately 698 feet above sea level.**

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## STORMWATER

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Any proposed removal of vegetation, compaction of soil, and addition of impervious surfaces (rooftops, roadways, etc.) will greatly increase the amount of stormwater runoff generated on this site. The District recommends the use of onsite stormwater management strategies whenever possible. IEPA now recommends that stormwater pollution prevention plans include post-construction stormwater management which retains the greatest amount of post-development stormwater runoff practicable, given the site and project constraints. From the ILR10 permit for construction sites 1 acre or more, “Such practices include but are not limited to: stormwater detention structures (including wet ponds); stormwater retention structures; flow attenuation by use of open

vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices).”

**Site assessment with soil testing should help to determine what stormwater management practices are best for your site. Insufficient stormwater management has the potential to cause or aggravate flooding conditions on surrounding properties, or elsewhere in the watershed. Please refer to the Kane County Stormwater Ordinance for stormwater requirements and minimum standards.**

<http://www.countyofkane.org/FDER/Pages/environmentalResources/waterResources/>

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## SOIL EROSION

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Development on this site should include the use of a soil erosion and sedimentation control plan. Due to the soil type and slope of the site, the District believes that the potential for soil erosion during and after any proposed construction could be **large**. Furthermore, the erosion and resulting sedimentation may become a primary nonpoint source of water pollution. Eroded soil during the construction phase can create unsafe conditions on roadways, degrade water quality, and destroy aquatic ecosystems lower in the watershed. Soil erosion also increases the risk of flooding due to choking culverts, ditches, and storm sewers, and by reducing the capacity of natural and man-made detention facilities.

Erosion and sedimentation control measures include: 1) staging the construction to minimize the amount of disturbed areas present at the same time, 2) maintaining or planting vegetative groundcover, and 3) keeping runoff velocities low.

Soil erosion and sedimentation control plans, including maintenance responsibilities, should be clearly communicated to all contractors working on the site. Special care must be taken to protect any wetlands, streams and other sensitive areas.

**Please refer to the Illinois Urban Manual for erosion and sediment control information and technical guidance when creating erosion and sediment control plans. The practice standards and standard drawings from the Illinois Urban Manual represent the minimum standard in Illinois.**

## SOILS INFORMATION

### IMPORTANCE OF SOILS INFORMATION

Soils information is taken from the Soil Survey of Kane County, Illinois, United States Department of Agriculture, Natural Resource Conservation Service. This information is important to all parties involved in determining the suitability of the proposed land use change.

### SOIL MAP UNITS

The soil survey map of this area (Table 1) indicates soil map units. Each soil map unit has limitations for a variety of land uses such as septic systems, and buildings site development, including dwellings with and without basements. Some soils contain **limiting** conditions for building site development. **See Soils Interpretations section and attached Soil Table.**

The Soil Survey Geographic (SSURGO) data base was produced by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies for the Soil Survey of Kane County, Illinois. The soils were mapped at a scale of 1:12,000. The enlargement of these maps to scales greater than that at which they were originally mapped can cause misunderstanding of the detail of the mapping. If enlarged, maps do not show the small areas of contrasting soil that could have been shown at a larger scale. The depicted soil boundaries and interpretations derived from them do not eliminate the need of onsite sampling, testing, and detailed study of specific sites for intensive uses. Thus, this map and its interpretations are intended for planning purposes only.

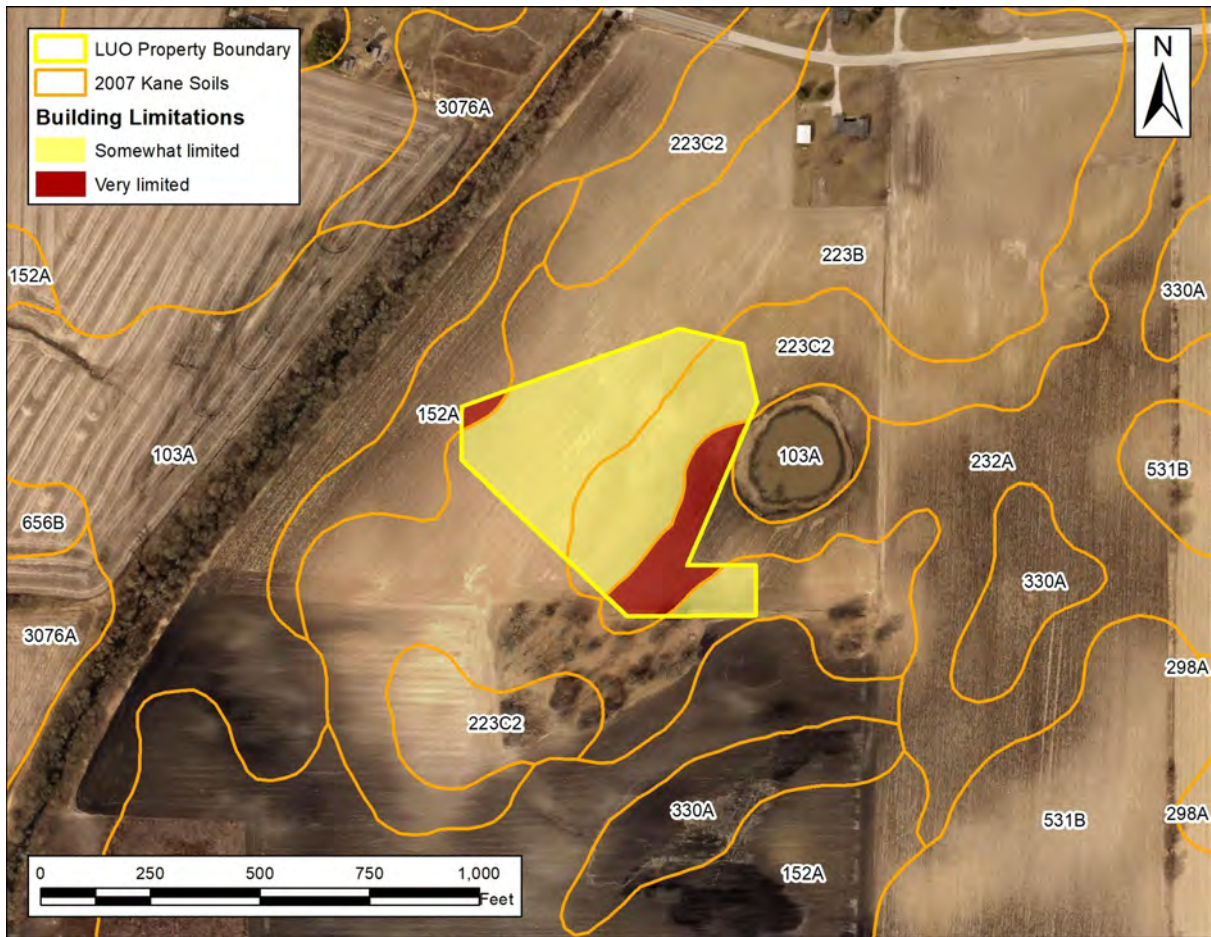
### LIST OF SOIL MAP UNITS

SOIL MAP UNIT	PERCENT OF PARCEL	ACRES
103A—Houghton	<1%	0.01
152A—Drummer	2%	0.10
223B—Varna	48%	3.22
223C2—Varna	34%	2.33
232A—Ashkum	16%	1.10
<b>Table 1: Soil Map Units</b>	<b>Total</b>	<b>6.76</b>

All percentages and acreages are approximate.

**We suggest that a geotechnical engineer conduct an on site investigation. This should determine, specifically, what soils type is present at a particular location, along with its associated limitations or potential for a particular use. It will also assist in determining which types of engineering procedures are necessary to account for the limitations of the soil on the site.**

## BUILDING LIMITATIONS



**Figure 8: Soil Survey Map**

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Kane County SSURGO soil layer certified in 2007. Areas shaded red represent VERY LIMITING limitations for building site development, areas shaded yellow represent SOMEWHAT LIMITING limitations for building site development, and areas shaded green represent NOT LIMITING limitations for building site development.

The soil limitation ratings are used mainly for engineering designs of dwellings with or without basements, local streets and roads, small commercial buildings, septic tank absorption fields, and etc. The ratings of not limiting, somewhat limiting, and very limiting are based on national averages and are defined and used as follows:

**Not Limiting (Slight)** - This limitation rating indicates that the soil properties are generally favorable for the specified use and that any limitations are minor and easily overcome.

**Somewhat Limiting (Moderate)** - This rating indicates that the soil properties and site features are un-

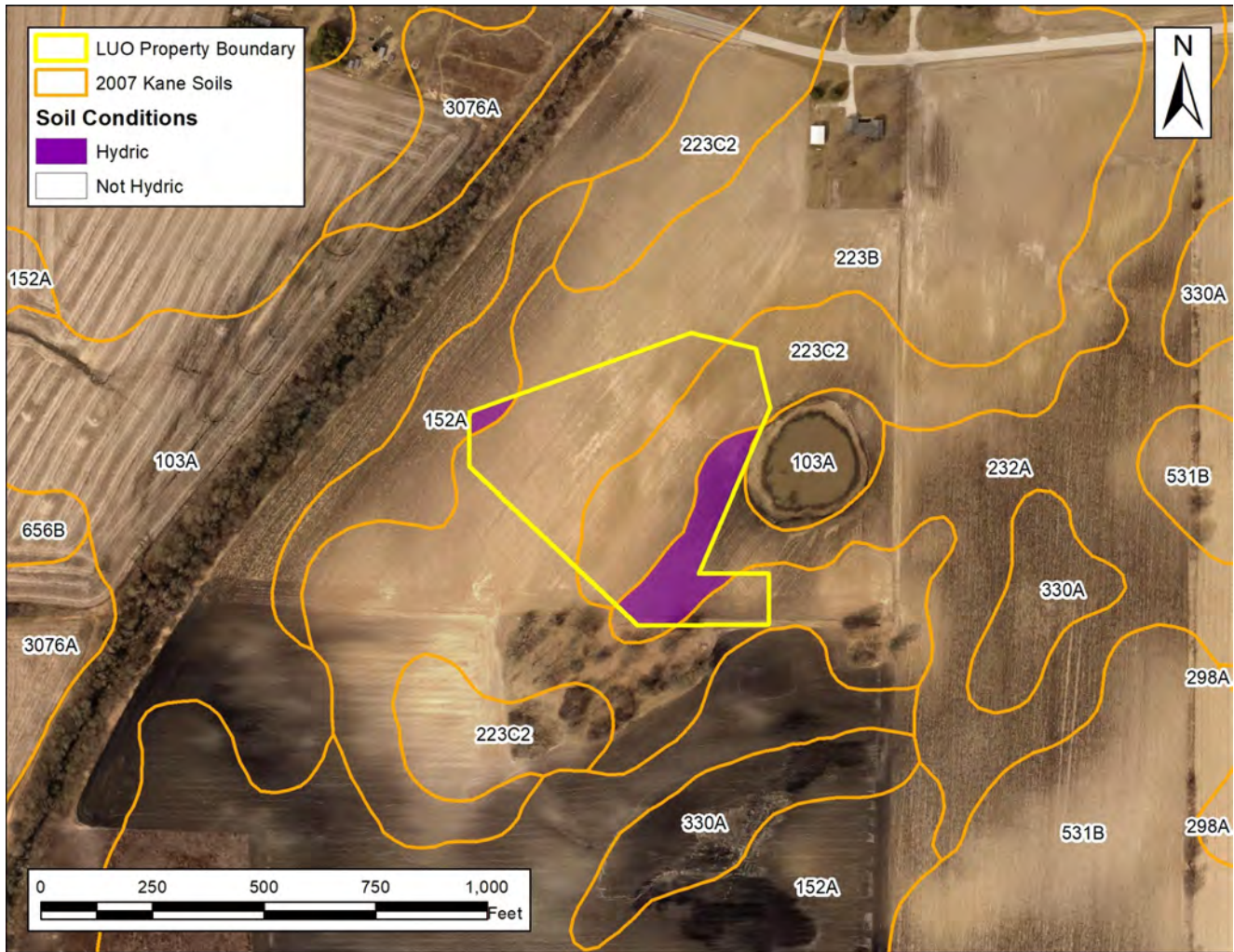
favorable for the specified use, but that the limitations can be overcome or minimized with special planning and design.

**Very Limiting (Severe)** - This indicates that one or more soil properties or site features are very unfavorable and difficult. A major increase in construction effort, special designs, or intensive maintenance is required. These costly measures may not be feasible for some soils that are rated as severe.

**There are limitations for building site development on this site. A comprehensive soil assessment should be completed prior to any earth disturbing activities on this site.**



## HYDRIC SOILS



**Figure 9: Hydric Soils**

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Kane County SSURGO soil layer certified in 2007. Hydric soils are shaded purple and soils with hydric inclusions are shaded yellow.

**Hydric soils** are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

**Hydric inclusions** are small areas, or inclusions, of nonhydric soils in the higher positions of the landform or map units dominantly made of nonhydric soils with inclusions of hydric soils in the low positions on the landform.

Hydric soils provide limitations for building site development due to their potential for ponding and poor drainage capacity. This often results in the need for improved drainage onsite prior to any proposed development. Any change to the natural drainage onsite has the potential to create flooding issues on and adjacent to the site. Hydric soils are often organic (peat or muck) and not suitable construction material. Hydric soils also may indicate wetlands onsite.

**The NRCS Soil Survey indicates hydric soils on this site. A comprehensive soil assessment should be completed prior to any earth disturbing activities on this site.**

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## LESA– PRIME FARMLAND

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*NOTE: The Kane County LESA System was revised and updated in 2004. Scores are reflected through a 33 point system used for the soils or Land Evaluation (LE) portion of the LESA Score.*

Through the use of Kane County's Land Evaluation and Site Assessment System (LESA), a numerical value was determined for this site. The LESA System is designed to determine the quality of land for agricultural uses and to assess sites or land areas for their long term agricultural economic viability. In agricultural land evaluation, soils of a given area are rated ranging from the best to the worst suited for a stated agricultural use, i.e., cropland, forest land, or rangeland. A relative value is determined for each soil. The best soils are assigned a value of 33 and all others are assigned lower values. Therefore, the closer the relative value is to 33, the more valuable and more pro-

ductive the site's soils are for agricultural purposes.

The land evaluation represents thirty-three percent of the total LESA score. It is based on data from the National Cooperative Soil Survey. The site assessment portion of a LESA represents sixty-seven percent of the LESA score. It is based on factors such as zoning and land use compatibility

**The land evaluation for this site is 26, which does represent the upper percent level of agricultural productivity.**

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**Our opinion is based on information from the following sources:**

- Illinois Department of Natural Resources, Illinois Natural History Survey, Land Cover of Illinois in the Early 1800s., Vector Digital Data, Version 6.0, August, 2003.
- County of Kane. “Kane County 2040 Green Infrastructure Plan”. Adopted December 10, 2013.
- United States Department of the Interior, Fish and Wildlife Service, National Wetlands Inventory, Photo Year 1983-1984, Digitized 1985-1986.
- Kane County’s Wetlands and Streams Advanced Identification (ADID) Study completed in 2004.
- Federal Emergency Management Agency, National Flood Insurance Program, Q3 Flood Data, Disc 6, 2011.
- U.S. Geological Survey, Illinois Digital Orthophoto Quadrangles, 2006 photos, Published: Champaign, Illinois State Geological Survey, 2006.
- Nonpoint Source Pollution– What’s it All About?. Illinois Environmental Protection Agency. <http://www.epa.illinois.gov/topics/water-quality/watershed-management/nonpoint-sources/what-is-nonpoint-source-pollution/index>. 2015 Illinois EPA .
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Kane County, IL SSURGO soil layer certified in 2007, and DuPage County, IL SSURGO soil layer certified in 2007 and accompanying interpretations.
- Dey, W.S., A.M. Davis, and B.B. Curry, 2007, Aquifer Sensitivity to Contamination, Kane County, Illinois: Illinois State Geological Survey, Illinois County Geologic Map, ICGM Kane-AS.
- An on-site investigation conducted by the SWCD Resource Assistant, Jennifer Shroder on January 7, 2020.

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We respectfully submit this information in compliance with the Illinois Soil and Water Conservation Districts Act (ILCS 70, 405/1 et seq). The District Board reviews proposed developments. Jennifer Shroder, Resource Assistant, prepared this report.

cc: Derek McGrew  
103 Wilshire Ct  
Noblesville, IN 46062

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## Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Map unit: 103A - Houghton muck, 0 to 2 percent slopes

Component: Houghton, muck (90%)

*The Houghton, muck component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on outwash plains. The parent material consists of herbaceous organic material. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 45 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface.*

Map unit: 152A - Drummer silty clay loam, 0 to 2 percent slopes

Component: Drummer, drained (94%)

*The Drummer, drained component makes up 94 percent of the map unit. Slopes are 0 to 2 percent. This component is on outwash plains on plains. The parent material consists of loess over stratified loamy outwash. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 2w. This soil meets hydric criteria.*

Map unit: 223B - Varna silt loam, 2 to 4 percent slopes

Component: Varna (90%)

*The Varna component makes up 90 percent of the map unit. Slopes are 2 to 4 percent. This component is on ground moraines. The parent material consists of Thin mantle of loess or other silty material and in the underlying till. Depth to a root restrictive layer, densic material, is 24 to 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during February, March, April. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 8 percent.*

Map unit: 223C2 - Varna silt loam, 4 to 6 percent slopes, eroded

Component: Varna, eroded (96%)

*The Varna, eroded component makes up 96 percent of the map unit. Slopes are 4 to 6 percent. This component is on ground moraines. The parent material consists of Thin mantle of loess or other silty material and in the underlying till. Depth to a root restrictive layer, densic material, is 24 to 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during February, March, April. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 8 percent.*

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## Map Unit Description

Kane County, Illinois

Map unit: 232A - Ashkum silty clay loam, 0 to 2 percent slopes

Component: Ashkum, drained (92%)

*The Ashkum, drained component makes up 92 percent of the map unit. Slopes are 0 to 2 percent. This component is on ground moraines on uplands. The parent material consists of clayey colluvium over till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 2w. This soil meets hydric criteria.*

## Dwellings With Basements

### Rating Options

Attribute Name: Dwellings With Basements

Dwellings are single-family houses of three stories or less. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
103A	Houghton muck, 0 to 2 percent slopes	Very limited	Houghton, muck 90% Ponding Subsidence Depth to saturated zone Organic matter content Houghton, ponded 4% Ponding Subsidence Depth to saturated zone Organic matter content Palms 2% Ponding Subsidence Depth to saturated zone Willette, muck 1% Ponding Subsidence Depth to saturated zone
152A	Drummer silty clay loam, 0 to 2 percent slopes	Very limited	Drummer, drained 94% Ponding Depth to saturated zone Shrink-swell Peotone, drained 3% Ponding Depth to saturated zone Shrink-swell Harpster, drained 3% Ponding Depth to saturated zone Shrink-swell
223B	Varna silt loam, 2 to 4 percent slopes	Somewhat limited	Varna 90% Depth to saturated zone Shrink-swell
223C2	Varna silt loam, 4 to 6 percent slopes, eroded	Somewhat limited	Varna, eroded 96% Depth to saturated zone Shrink-swell
232A	Ashkum silty clay loam, 0 to 2 percent slopes	Very limited	Ashkum, drained 92% Ponding Depth to saturated zone Shrink-swell Peotone, drained 5% Ponding Depth to saturated zone Shrink-swell Orthents, clayey 2% Shrink-swell Depth to saturated zone

## Dwellings Without Basements

### Rating Options

Attribute Name: Dwellings Without Basements

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
103A	Houghton muck, 0 to 2 percent slopes	Very limited	Houghton, muck 90% Ponding Subsidence Depth to saturated zone Organic matter content Houghton, ponded 4% Ponding Subsidence Depth to saturated zone Organic matter content Palms 2% Ponding Subsidence Depth to saturated zone Organic matter content Willette, muck 1% Ponding Subsidence Depth to saturated zone Organic matter content Shrink-swell
152A	Drummer silty clay loam, 0 to 2 percent slopes	Very limited	Drummer, drained 94% Ponding Depth to saturated zone Shrink-swell Peotone, drained 3% Ponding Depth to saturated zone Shrink-swell Harpster, drained 3% Ponding Depth to saturated zone Shrink-swell
223B	Varna silt loam, 2 to 4 percent slopes	Somewhat limited	Varna 90% Shrink-swell
223C2	Varna silt loam, 4 to 6 percent slopes, eroded	Somewhat limited	Varna, eroded 96% Shrink-swell
232A	Ashkum silty clay loam, 0 to 2 percent slopes	Very limited	Ashkum, drained 92% Ponding Depth to saturated zone Shrink-swell Peotone, drained 5% Ponding Depth to saturated zone Shrink-swell Orthents, clayey 2% Shrink-swell

## Small Commercial Buildings

### Rating Options

Attribute Name: Small Commercial Buildings

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification of the soil). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
103A	Houghton muck, 0 to 2 percent slopes	Very limited	Houghton, muck 90% Ponding Subsidence Depth to saturated zone Organic matter content Houghton, ponded 4% Ponding Subsidence Depth to saturated zone Organic matter content Palms 2% Ponding Subsidence Depth to saturated zone Organic matter content Willette, muck 1% Ponding Subsidence Depth to saturated zone Organic matter content Shrink-swell
152A	Drummer silty clay loam, 0 to 2 percent slopes	Very limited	Drummer, drained 94% Ponding Depth to saturated zone Shrink-swell Peotone, drained 3% Ponding Depth to saturated zone Shrink-swell Harpster, drained 3% Ponding Depth to saturated zone Shrink-swell
223B	Varna silt loam, 2 to 4 percent slopes	Somewhat limited	Varna 90% Shrink-swell
223C2	Varna silt loam, 4 to 6 percent slopes, eroded	Somewhat limited	Varna, eroded 96% Shrink-swell Slope
232A	Ashkum silty clay loam, 0 to 2 percent slopes	Very limited	Ashkum, drained 92% Ponding Depth to saturated zone Shrink-swell Peotone, drained 5% Ponding Depth to saturated zone Shrink-swell Orthents, clayey 2% Shrink-swell



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## CONTACTS

### Federal Agencies

#### **U. S. Army Corps of Engineers**

Regulatory Branch  
231 S LaSalle Street, Suite 1500  
Chicago, Illinois 60604  
(312)846-5330

<http://www.usace.army.mil>

#### **U.S.D.A. Natural Resources Conservation Service**

2315 Dean Street Suite 100  
St. Charles, Illinois 60175  
(630)584-7960 ext. 3

<http://www.il.nrcs.usda.gov/>

#### **U.S. Fish & Wildlife Service**

Chicago Illinois Field Office  
230 South Dearborn Suite 2938  
Chicago, IL 60604  
(847)298-3250

<http://www.fws.gov/>

#### **U.S. Environmental Protection Agency**

Region 5  
77 West Jackson Boulevard  
Chicago, Illinois 60604  
(312)353-2000 or (800)621-8431

[http://www.epa.gov/region5/  
r5hotline@epa.gov](http://www.epa.gov/region5/r5hotline@epa.gov)

### State Agencies

#### **Illinois Department of Natural Resources**

1 Natural Resources Way  
Springfield, Illinois 62702-1271  
(217)782-6302

<http://dnr.state.il.us/>

#### **Illinois Environmental Protection Agency**

1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276  
(217)782-3397

<http://www.epa.state.il.us/>

#### **Illinois Department of Transportation**

2300 South Dirksen Parkway  
Schaumburg, Illinois 62764-0001  
(217)782-7820/(800)452-4368

<http://www.idot.illinois.gov/>

#### **Illinois Natural History Survey**

1816 South Oak Street MC652  
Champaign, Illinois 61820  
(217)333-6880

<http://www.inhs.uiuc.edu/>

### County Offices

#### **Kane County**

Government Center  
719 South Batavia Ave.  
Geneva, IL 60134  
(630)232-3400

<http://www.countyofkane.org/>

#### **Development Department**

(630)232-3492

#### **Department of Environmental Management**

(630)208-5118

#### **Forest Preserve District**

1996 South Kirk Road, Suite 320  
Geneva, IL 60134  
(630)232-5980

[forestpreserve.countyofkane.org](http://forestpreserve.countyofkane.org)

#### **Health Department**

1240 North Highland Avenue  
Aurora, IL 60506  
(630)208-3801



# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
www.dnr.illinois.gov

JB Pritzker, Governor  
Colleen Callahan, Director

December 20, 2019

Mr. Derek McGrew  
103 Wilshire Court  
Noblesville, IN 46062

**RE: Aurora West Shortwave  
Consultation Program  
EcoCAT Review #2004878  
Kane County**

Dear Mr. McGrew:

The Department has received your submission for this project for the purposes of consultation pursuant to the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075. Additionally, the Department may offer advice and recommendations for species covered under the *Fish & Aquatic Life Code* [515 ILCS 5, *et seq.*]; the *Illinois Wildlife Code* [520 ILCS 5, *et seq.*]; and the *Herptiles-Herps Act* [510 ILCS 69].

The proposed action consists of installation of an AM shortwave radio station telecommunications facility located at 40W015 Seavey Road in Batavia, IL. The EcoCAT system identified Nelson Lake Marsh Illinois Natural Area Inventory (INAI) Site and Nelson Lake Marsh Nature Preserve approximately 0.6 miles from the proposed facility. This area contains records for the State-listed black tern (*Chlidonias niger*), black-crowned night heron (*Nycticorax nycticorax*), common moorhen (*Gallinula galeata*), least bittern (*Ixobrychus exilis*) and yellow-headed blackbird (*Xanthocephalus xanthocephalus*).

Due to the potential presence of the listed migratory birds in the area, the Department recommends the project proponent consider adopting the U.S. Fish & Wildlife Service-Midwest Regions "Endangered Species recommendations for Communication Tower Siting, Construction, Operation, and Decommissioning Recommendations". Please use the link below to access to the USFWS recommendations:

<https://www.fws.gov/midwest/endangered/section7/telecomguidance.html>

Given the above recommendations are adopted, the Department has determined that impacts are unlikely. **In accordance with 17 Ill. Adm. Code 1075.40(h), please notify the Department of your decision regarding these recommendations.**

Consultation on the part of the Department is closed, unless the applicant desires additional information or advice related to this proposal. Consultation for Part 1075 is valid for two years unless new information becomes available which was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the action has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal and should not be regarded as a final statement on the project being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are unexpectedly encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations.

Please contact me with any questions about this review.

Sincerely,



Adam Rawe  
Resource Planner  
Office of Realty & Capital Planning  
Illinois Dept. of Natural Resources  
One Natural Resources Way  
Springfield, IL 62702-1271  
adam.rawe@illinois.gov  
Phone: (217) 785-4991



Kane County Water Resources Division  
719 Batavia Ave.  
Geneva, IL 60134  
630-232-3497  
630-208-3837 FAX

# KANE COUNTY STORMWATER PERMIT NO. PRSW202000340

This project has been permitted for the following:

- Soil Erosion & Sediment Control**
- Stormwater Detention**
- Wetland Impact(s)**
- Floodplain Impact(s)**

**This project allows for the following specific activity(s):**

Construction of a Shortwave Radio Station, access drive and equipment pad. BMP to be constructed as Watershed Benefit Measure in existing depressional storage area.

**Project Name:** Shortwave AM at 39W840 Seavey

**Site Location:** \_\_\_\_\_

**Township(s):** Blackberry

**Section(s):** \_\_\_\_\_

**Applicant/Owner:** UrsaNav applicant / Coffey & Reckinger owners

**Issued By:** Jodie Wollnik

**Signature:** \_\_\_\_\_

**Date:** 06/05/2020

**Permit to be posted in a visible location**

When calling with questions or to request an inspection, please refer to permit number.

**Standard Conditions that apply to all permitted projects:**

1. This permit does not include authorization from any other Kane County Department or Division. No guarantee for the construction of the permitted improvements is granted based on this permit alone. Additional permits or authorizations from other local agencies may be required.
2. This permit does not relieve the permittee of the responsibility to obtain federal and/or state authorizations required for the construction of the permitted activity. If the permittee is required by law to obtain approval from any federal or state agency to do the work, this permit is not effective until federal or state approval.
3. All developments shall meet the requirements of §201, §202, Articles 3 and 6 of the Kane County Stormwater Management Ordinance (the "Ordinance"), latest edition.
4. The site is to be stabilized as soon as possible during the construction process. All disturbed area shall be stabilized within 14 days of final grading or when left idle for more than seven days.
5. This permit does not release the permittee from liability for damage to persons or property resulting from the work covered by this permit, and does not authorize any damage to private property or invasion of private rights.
6. The Division in issuing this permit has relied upon the statements and representations made by the permittee; if any statement or representation made by the permittee is false, the Division may revoke the necessary based on conditions found in the field during construction.
7. The previous mentioned conditions do not preclude additional improvements or further reviews that may be necessary based on conditions found in the field during construction.
8. The expiration date for this permit is 12/31/2023 in accordance with the Kane County Stormwater Ordinance refer to §501 of the Ordinance for renewal options.

**Standard conditions below apply to this permitted activity:**

Offsite outfall is not currently functioning due to a failure in the Village of North Aurora. The Village is currently working on repairs, therefore no additional offsite outfall work is required as part of this project.

The applicant has certified that the property owner is aware that any additional impervious surfaces added to the property in the future will trigger stormwater detention for the AM Radio improvements in addition to the owners improvements.

The applicant will record the final Declaration of Restriction and Covenant and provide record drawings for the WBM prior to release of the LOC

The approved plans are dated June 1, 2020. The access drive past the house as well as the equipment pad are required to drain to the WBM in the depressional storage area.

All erosion control measures shall be installed in accordance with Article 3 "Erosion and Sediment Control (NRCS)" of the Ordinance and with the plan specifications as listed on the site improvement plans. Kane County shall be notified upon completion of the installation of the soil erosion measures.

The proposed development may not impede flow through the site. No fill material shall be placed within any overland flood route, floodplain or existing depressional area.

Record Drawing or a final grading survey shall be submitted prior to final inspection for review of the constructed improvements.



Mail Processing Center  
Federal Aviation Administration  
Southwest Regional Office  
Obstruction Evaluation Group  
10101 Hillwood Parkway  
Fort Worth, TX 76177

Aeronautical Study No.  
2020-AGL-2117-OE  
Prior Study No.  
2019-AGL-12144-OE

Issued Date: 03/05/2020

Andrew Smith  
RESCOM Environmental Corp  
PO Box 361  
Petoskey, MI 49770

**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:            Antenna Tower Aurora Array Tower 1  
Location:            Batavia, IL  
Latitude:            41-49-29.33N NAD 83  
Longitude:           88-23-50.89W  
Heights:            702 feet site elevation (SE)  
                          199 feet above ground level (AGL)  
                          901 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 09/05/2021 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

**NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.**

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

This determination cancels and supersedes prior determinations issued for this structure.

If we can be of further assistance, please contact our office at (816) 329-2544, or [William.M.Ratts@faa.gov](mailto:William.M.Ratts@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-AGL-2117-OE.

**Signature Control No: 429684274-432699046**

( DNE )

Bill Ratts  
Technician

Attachment(s)  
Frequency Data  
Map(s)

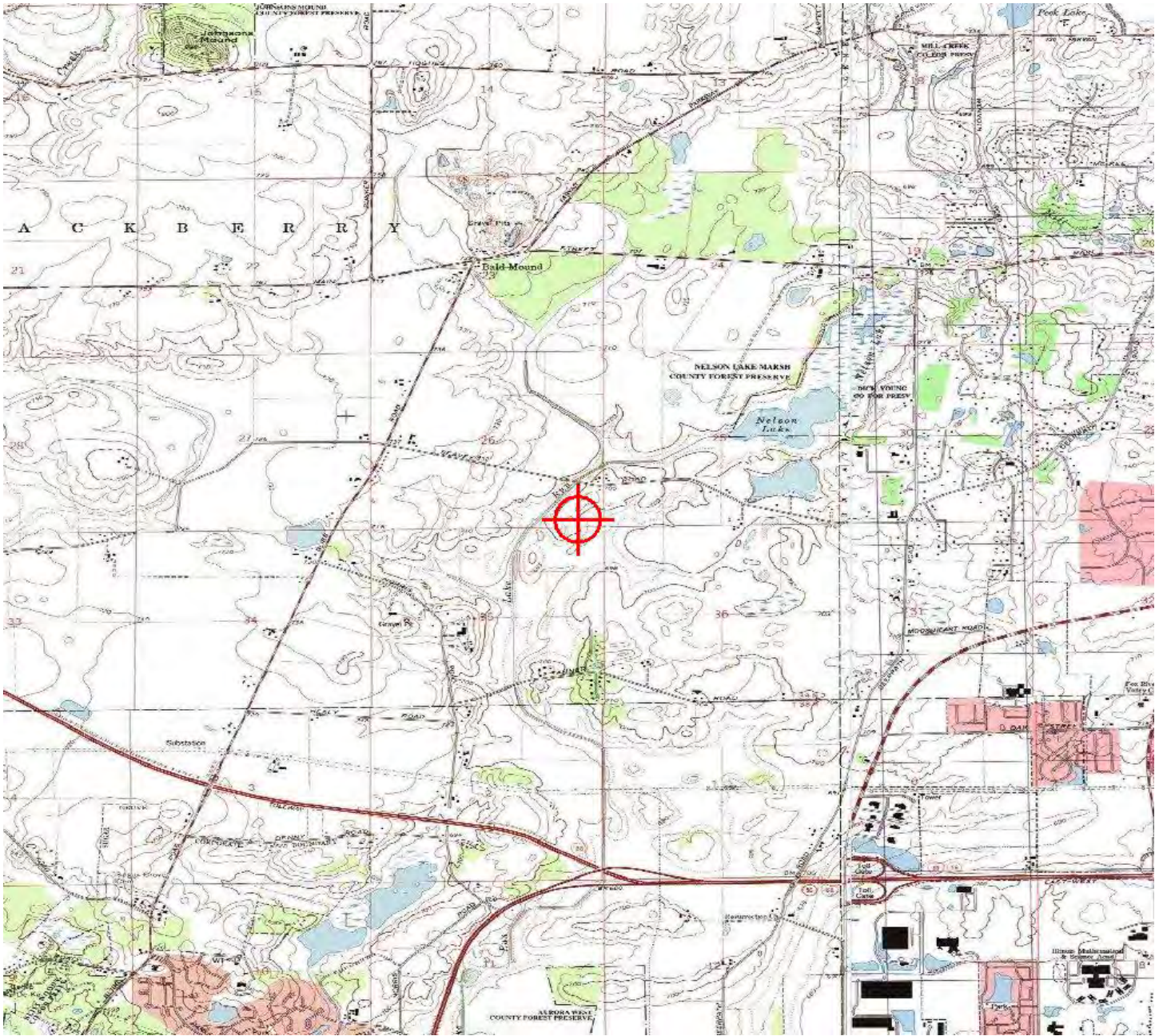
cc: FCC

Frequency Data for ASN 2020-AGL-2117-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
6	7	GHz	55	dBW
6	7	GHz	42	dBW
10	11.7	GHz	55	dBW
10	11.7	GHz	42	dBW
17.7	19.7	GHz	55	dBW
17.7	19.7	GHz	42	dBW
21.2	23.6	GHz	55	dBW
21.2	23.6	GHz	42	dBW
614	698	MHz	1000	W
614	698	MHz	2000	W
698	806	MHz	1000	W
806	901	MHz	500	W
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
929	932	MHz	3500	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1670	1675	MHz	500	W
1710	1755	MHz	500	W
1850	1910	MHz	1640	W
1850	1990	MHz	1640	W
1930	1990	MHz	1640	W
1990	2025	MHz	500	W
2110	2200	MHz	500	W
2305	2360	MHz	2000	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W
2496	2690	MHz	500	W



TOPO Map for ASN 2020-AGL-2117-OE





Mail Processing Center  
Federal Aviation Administration  
Southwest Regional Office  
Obstruction Evaluation Group  
10101 Hillwood Parkway  
Fort Worth, TX 76177

Aeronautical Study No.  
2020-AGL-2118-OE

Issued Date: 03/05/2020

Andrew Smith  
RESCOM Environmental Corp  
PO Box 361  
Petoskey, MI 49770

**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower Aurora Array Tower 2
Location:	Batavia, IL
Latitude:	41-49-31.33N NAD 83
Longitude:	88-23-53.33W
Heights:	706 feet site elevation (SE) 199 feet above ground level (AGL) 905 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

**See attachment for additional condition(s) or information.**

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 09/05/2021 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

**NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO**

**SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.**

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (816) 329-2544, or [William.M.Ratts@faa.gov](mailto:William.M.Ratts@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-AGL-2118-OE.

**Signature Control No: 429684347-432699408**

( DNE )

Bill Ratts  
Technician

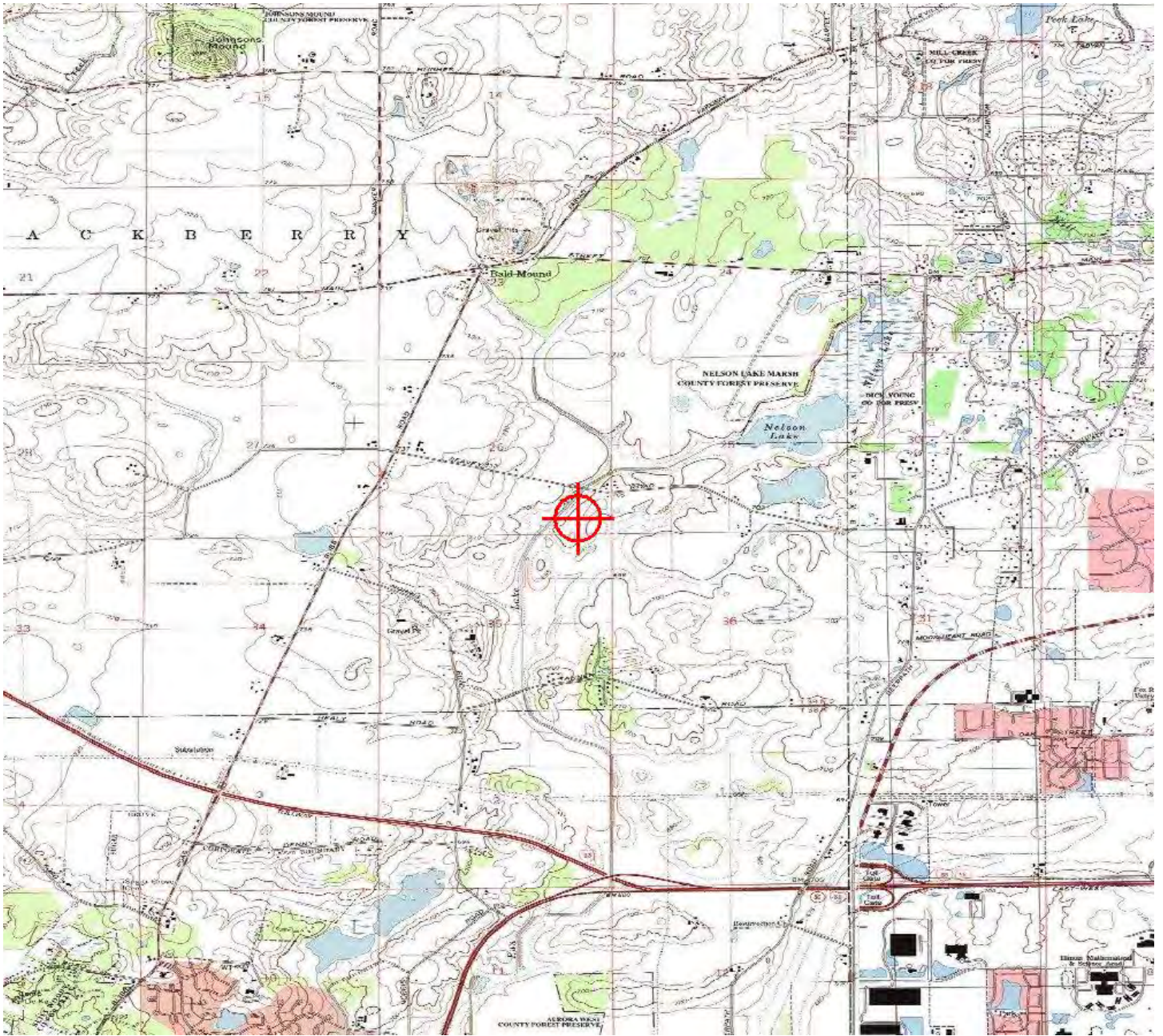
Attachment(s)  
Additional Information  
Map(s)

cc: FCC

**Additional information for ASN 2020-AGL-2118-OE**

This determination is for the structure only. No frequencies have been added to case and therefore were not evaluated.

TOPO Map for ASN 2020-AGL-2118-OE



**derek@cellusite.net**

---

**From:** roads@blackberrytwp.com  
**Sent:** Tuesday, January 21, 2020 10:44 AM  
**To:** derek@cellusite.net  
**Subject:** RE: Driveway Permit - Site Name: Aurora

Derek:

As long as you are using the existing entrance that is already there along Seavey Road, no permit is necessary.

Regards,

***Rod Feece***

Highway Commissioner

Blackberry Township

Elburn, IL 60119

 630-365-9109 x2

 630-365-6568

 [roads@blackberrytwp.com](mailto:roads@blackberrytwp.com)

 [www.blackberrytwp.com](http://www.blackberrytwp.com)

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Please destroy this transmission in any format and notify the sender, if you received this transmission in error.

Thank you.

---

**From:** derek@cellusite.net <derek@cellusite.net>

**Sent:** Tuesday, January 21, 2020 9:34 AM

**To:** roads@blackberrytwp.com

**Cc:** kim@cellusite.net

**Subject:** FW: Driveway Permit - Site Name: Aurora

Rod,

Can you please confirm that Blackberry Twp is aware that we are planning to improve and use the existing farm entrance just East of the address and on the parcel listed below and that no permit is necessary?

40W015 Seavey Road, Batavia, IL. Parcel 11-26-400-009

Thanks!

Derek McGrew

CSite, LLC

103 Wilshire Court

Noblesville, IN 46062

317-507-4541

[www.cellusite.net](http://www.cellusite.net)

Every Site, Every Day

---

**From:** [derek@cellusite.net](mailto:derek@cellusite.net) <derek@cellusite.net>

**Sent:** Tuesday, January 21, 2020 7:00 AM



# BATAVIA FIRE DEPARTMENT

800 E. WILSON STREET. BATAVIA, IL 60510

Phone: 630-454-2100

FAX: 630-454-2101



RANDY DEICKE  
FIRE CHIEF

JEFFERY D. SCHIELKE  
MAYOR

June 16, 2020

Derek McGrew  
CSite, LLC  
103 Wilshire Ct.  
Noblesville, IN 46062

RE: UrsaNav  
40W015 Seavey Rd.  
Batavia, IL 60510  
Kane County Permit #2020-00729

Mr. McGrew,

The generator installation plans, received June 10, 2020, for the above address have been reviewed and approved with the following comment(s):

1. Please contact the IL Office of the State Fire Marshal for guidance on above-ground fuel storage installations. The plans may be required to be submitted for review and permit.
2. Construction and electrical requirements are subject to the Kane County Building Department review and approval.
3. The ability of the Batavia Fire Department to provide service depends greatly on access to the site. As the installation appears to be unmanned, it is recommended that the roadway provide a vehicle weight capacity of 75,000 pounds, and that the roadway be kept free of obstructions at all times including mud, ice, and snow.
4. Access to the site includes keyed access to the gate and the building. A Batavia Fire Department lock box is required. They may be purchased through the City of Batavia Community Development Office (630-454-2700).
5. A fire suppression plan has been received, reviewed, and approved.
6. The proposed fire alarm must have a plan submitted to the fire department for review and approval.
7. The project has been submitted under two different addresses, the above listed address and in your email as 39W840 Seavey Rd. Please confirm the correct address for the project.
8. The fire alarm and fire suppression systems installations require an acceptance test upon completion. Please allow 48 hours when scheduling.



# BATAVIA FIRE DEPARTMENT

800 E. WILSON STREET. BATAVIA, IL 60510

Phone: 630-454-2100

FAX: 630-454-2101

RANDY DEICKE  
FIRE CHIEF

JEFFERY D. SCHIELKE  
MAYOR



Sincerely,  
John Kessler

A handwritten signature in black ink, appearing to read "John Kessler".

Fire Marshal  
Batavia Fire Department  
630-454-2100





Office of the Illinois  
State Fire Marshal  
"Partnering With the Fire Service to Protect Illinois"

TECHNICAL SERVICES DIVISION  
(312)-814-8960

Fax (312) 814-3459

June 18, 2020

Project # 20183

Derek McGrew  
URSANAV  
85 Rangeway Road, Suite 110  
North Billerica, MA 01862

Re: Parable Broadcasting  
39W840 Seavey Road  
Batavia, IL 60510  
**KANE COUNTY**

Dear Mr. McGrew:

Applications and drawings have been reviewed by the Technical Services Division of the Office of the Illinois State Fire Marshal (OSFM), for the proposed installation of above ground bulk storage tanks (ASTs) at the above referenced location.

**A copy of this review letter is being returned to you as well as to the local fire department and a fire prevention inspector from the Office of the Illinois State Fire Marshal. You are required to contact the OSFM Fire Prevention Division Regional Office via written correspondence when all work has been completed and before the proposed tanks are filled with product to request that an on-site inspection can be scheduled. The installation shall not be placed in operation until approval is given by the OSFM. The written request to schedule an inspection may be emailed to [SFM.FirePreventionChicago@illinois.gov](mailto:SFM.FirePreventionChicago@illinois.gov) or faxed to AST Inspections at 312-814-3459. The faxed or e-mailed correspondence must include the address of the tank installation and a name and phone number of a contact person who the OSFM should contact regarding the tank installation inspection and a copy of the plan review letter. The findings of this review are effective for a period of twelve (12) months from the date of this letter. If the proposed installation is not made within this time period, the findings will be considered void, and re-application to the Office of the State Fire Marshal is required. No extensions will be issued. This review specifically pertains to:**

**ONE (1) NEW 693 GALLON CAPACITY, ABOVEGROUND, INDOOR BULK LIQUID DIESEL STORAGE TANK(S).**

This review does not pertain to the installation, removal, lining or abandonment of underground storage tanks at this facility. Nor does this review pertain to any other existing or future aboveground or LP-Gas storage tanks located at this site other than those specified on the application and in this review letter.

The installation appears to conform to Title 41 Illinois Administrative Code Part 160 "Storage, Transportation, Sale and Use of Gasoline and Volatile Oils: Rule and Regulations Relating to General Storage" with the following noted exceptions and special conditions:

## **GENERAL**

1. This review does not pertain to the dispensing of fuel from this tank(s) (such as gasoline or diesel fuel) into the fuel tank(s) of motor vehicles. Any tank installed at this site for the purpose of dispensing fuel into other vehicles shall have a "Dispensing Only" application submitted to the OSFM's Division of Technical Services and shall be installed in compliance with Title 41 Illinois Administrative Code 180. (Bulk truck and tank car loading/unloading is not considered "dispensing" and therefore is permitted.)
2. The findings of this review pertain specifically to the product listed and do not automatically pertain to any other classification of flammable or combustible liquid being stored in the tank(s).
3. In accordance with OSFM policy, when an integral fuel supply tank for a generator is located inside of any occupancy, building or any modular structure that the tank and its venting must comply with Part 160 and the requirements of the Policy on the "Indoor Storage Tanks of Flammable and Combustible Liquids" which require that the tank's vents and fill piping terminate outside of the building or structure. In those situations where the generator is integrated with the fuel supply tank and is located outside of an occupancy, building or any modular structure, and the fuel contained is a combustible liquid, the fuel supply tank must be in compliance with Part 160 and OSFM Policy 07-TS-004 with the exception that:
  - The tank's vents may terminate inside the generator compartment provided the compartment is louvered on multiple sides and the louvers are located or extend to the lower portion of the walls or doors. (If the generator compartment is not louvered, the tank vents must extend to the outside of the generator compartment).
  - The fuel fill port may be located in the generator housing whether louvered or not provided the fill cap is a tight-fit.

## **VALVES AND PIPING**

4. Any indoor product piping shall be so located that any leakage resulting from pipe failure would not unduly expose persons. Piping shall be arranged so leakage can readily be controlled by operation of an accessible remotely located valve(s).
5. Any indoor product piping shall be of steel or nodular iron, or otherwise be protected by materials having a fire resistance rating of no less than 2-hours.

## **SITE LAYOUT AND SAFETY FEATURES**

6. No combustible material shall be permitted under, or within 10 feet of any storage tanks.
7. All electrical installations, appliances, equipment, and wiring shall conform to the provisions of NFPA 70(1984), Chapter 5 and application sections thereof.

## **INDOOR TANKS**

8. If the building containing the indoor flammable/combustible liquid storage tank/s also contains other occupancy types (such as office or combustible storage areas) then the tank shall be separated from

Derek McGrew  
URSANAV  
June 18, 2020

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Parable Broadcasting  
Batavia, Illinois  
Project # 20183

those areas of the building by 2-hour fire resistant construction, by a fire insulated tank listed in accordance with UL 2085, or a fire resistant tank listed in accordance with UL 2080. Aboveground indoor Class IIIB liquid storage tanks are not required to be physically separated from other areas of an occupancy by fire-rated barriers or by fire-rated tank design, regardless of occupancy classification.

The Office of the State Fire Marshal recommends contact with all local authorities to ensure compliance with their regulations as well as the findings of this review letter.

The Office of the State Fire Marshal will conduct an inspection as soon as possible after notification of the completion of all work. If work at the installation site is found to be incomplete or in violation of applicable regulations, follow-up inspections will be conducted at the convenience of the assigned fire prevention inspector, with use of the tanks prohibited until such final inspection occurs.

Respectfully,

Bernie Arends  
OSFM Division of Technical Services

c: OSFM Fire Prevention Portal  
Fire Chief, Batavia Fire Department  
Additional To: Tank Owner



OFFICE OF THE ILLINOIS  
STATE FIRE MARSHAL  
TECHNICAL SERVICES DIVISION

James R. Thompson Center · 100 West Randolph Street · Suite 4-600 · Chicago, Illinois 60601  
PHONE: 312-814-8960 FAX: 312-814-3459 E-MAIL: [sfm.techservices@illinois.gov](mailto:sfm.techservices@illinois.gov)

**APPLICATION FOR NON-DISPENSING ABOVEGROUND BULK STORAGE TANK INSTALLATION**

Complete and file with site plans, 8½ x 11” only, at the above address.


(1) **OWNER OF TANKS** - Corporation, partnership, or other business entity: (Must be mailing address):

Name Parable Broadcasting  
Street Address 440 Monticello Ave, Suite 2200  
City Norfolk State VA Zip 23510  
Contact Person Phone Charles Schue  
Email Address cschue@ursanav.com

(2) **FACILITY** - (Name and address where tanks are located):

Name Joe Reckinger and Mary Coffey  
Street Address 39W840 Seavey Road  
City Batavia State IL Zip 60510  
County Kane  
Contact Person Phone Derek McGrew / 317-507-4541  
Email Address derek@cellusite.net  
Fire Department Batavia Fire Department

(3) **PERSON/COMPANY INSTALLING TANK(S)**: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that all information submitted is true, accurate and complete.

Company Name URSANAV Address 85 Rangeway Road, Suite 110  
City North Billerica State MA Zip 01862  
Telephone # 703-623-5212 Fax # \_\_\_\_\_ Email Address cschue@ursanav.com  
Name of Authorized Representative Derek McGrew Title or Position Agent  
Signature  Date 06/17/2020

(4) **SITE STATUS** – (Check all that apply):  Installing Initial AST  Relocating Existing AST at Site  
 Replacing Existing AST  Adding Additional AST at Existing AST Site

(5) **GENERAL INFORMATION** - Fill in the appropriate blanks for the AST system(s) that will be installed.  
Attach additional sheet(s) if more space is needed.

Tank Number	Capacity in Gallons	Product to be Stored	Is the Tank New or Used N/U	Material of Construction of Tank	Material of Construction of Piping	Size of Emergency Vent	Is Secondary Containment Provided? Y/N	Is Tank Electrically Grounded? Y/N
1	693	Diesel	N				Y	Y

**(8) METHOD OF SECONDARY CONTAINMENT:**

- Earthen Dike       Double Walled Tank       Steel Catch-Pan  
 Concrete Dike       Tank Vaulted in Concrete       Other (explain below)

Explanation: \_\_\_\_\_

**(9) PURPOSE OF TANK INSTALLATION (Tanks for dispensing fuel into motor vehicles require filing of different application):**

- Waste Oil Storage       Emergency Generator Fuel       Process Liquids  
 Auto Lube Oil Storage Heating Oil       Bulk Petroleum Storage       Other (explain below)

Explanation: \_\_\_\_\_

**(10) WILL TANK(S) BEAR THE LISTING LABEL OF UL OR ANOTHER NATIONAL TESTING LAB?**

- UL 142,  UL 2080,  UL 2085  UL 2244  UL 2245 (Check all that apply)

Another National Testing Lab: Name: \_\_\_\_\_

**(11) IF TANK(S) DO NOT BEAR THE LABEL OF A RECOGNIZED LAB, TO WHAT SPECIFICATIONS ARE THEY CONSTRUCTED?**

Explanation: \_\_\_\_\_

**(12) WILL TANKS BE FABRICATED ON SITE (FIELD ERECTED) OR PRE-FABRICATED AT FACTORY?**

- Fabricated On Site       Pre-Fabricated at Factory

**(13) IS A REGULAR VENT OPENINGS AT LEAST 1 ¼" IN DIAMETER BEING PROVIDED? (Note: IF a pump is used to fill the tank, and a tight connection is made to the fill pipe, the vent shall not be smaller than the fill pipe.)**

- Yes       No: \_\_\_\_\_

**(14) IS ABOVEGROUND PIPING PROTECTED AGAINST MECHANICAL INJURY REASONABLY POSSIBLE?  Yes  No**

**(15) METHOD FIRE SUPPRESSION PROVIDED?**

- Portable fire extinguishers (Minimum rating of 4A:60 BC)       Foam Suppression System

Other (Explain): Fire Suppression Plan \_\_\_\_\_

**(16) WILL TANK(S) BE LOCATED "INDOORS? (If "No", disregard following questions)**

- Yes       No

(a) Type of occupancy Unmanned communications facility

(e.g., Hospital, Auto Dealer, Industrial Factory, Liquid Warehouse, Service Station, etc.)

(b) Is the tank separated from other areas of the building by fire resistant construction? (A 2-hour fire-rated separation is required except for 2-hour fire-rated ASTs or if only Class IIIB liquids are being stored)

- Yes       No

(c) Method of accomplishing 2-hour fire rated separation between ASTs and other areas of the building:

- Fire-Rated AST       Fire-Rated Separation Provided by Building Components

(d) Is the tank vented to the exterior? (Exterior venting required except for Class IIIB liquids)

- Yes       No

(e) Does the fill line terminate exterior to the building? (Exterior fill is required except for Class IIIB liquids)

- Yes       No

**MAKE SURE SITE PLANS IDENTIFY ALL TANKS, PIPING, BUILDINGS AND PROPERTY LINES WITH ALL SEPARATION DISTANCES SHALL BE IDENTIFIED INSUFFICIENT INFORMATION OR ILLEGIBILITY IS CAUSE FOR RETURN OR DENIAL**



# Market Impact Analysis Effect Wireless Towers Have On Surrounding Properties

By

Jim Snodgrass – Wall & Associates

Lejo Harmeson – Wall & Associates

Darren Snodgrass – TNG Wireless Consulting



## Personal Background

Jim Snodgrass has been a Real Estate Broker on the West Side of Indianapolis since 1969. Formerly Vice President of Residential Sales at F.C. Tucker Company, Jim has developed no less than 6 subdivisions in Western Marion County, Hendricks County and Morgan County. Principal at Wall & Associates since its' inception in 1989 Jim has been actively involved in residential development and sales along with commercial / industrial projects.

Lejo Harmeson has been a Real Estate Broker in the Central Indiana market since 1991. He is the current Managing Broker for Wall & Associates. Lejo has been involved in residential and commercial transactions in Hendricks, Marion, Morgan, Putnam, Montgomery, Hamilton, Hancock, Madison, Shelby, Monroe and Delaware Counties. Prior to working with Wall & Associates Lejo was involved in the Mortgage Banking side of the real estate business.

Darren Snodgrass has been an Indiana Real Estate Broker since 1986. He has been in the Wireless Site Acquisition and Development industry since 1994. Darren has been the President of Site Development Services for a local Wireless Infrastructure business as well as a National Project Director for the third largest Tower Company in the United States, SBA Communications. Darren has directed or been intimately involved in the development and launching of two carrier networks. He has also had responsibility for the development of over 2000 sites from the Great Lakes Region to the West Coast and the Pacific Northwest. Darren formed TNG Wireless in 2013.



## Executive Summary

In preparation of this report a study of the market results for the two areas in question were pulled from Metropolitan Indianapolis Board of Realtor's database site. MIBOR has all transaction records of real estate deals performed by member Realtors for Brown County, Shelby County, Johnson County, Morgan County, Putnam County, Hendricks County, Marion County, Hancock County, Madison County, Hamilton County, Boone County and Montgomery County.

Two Tower sites were reviewed. The first was the Verizon / American Tower location near the subject property and the second was the Self Support Structure located off of SR 39 at the CountryMark location. An analysis area of ½ mile was used for each tower location. Summaries were pulled from each area by year and are a part of this report in the back up documentation. Aspects reviewed were:

- Minimum List Price
- Maximum Sale Price
- List Price Average
- List Price Median
- Minimum Sold Price
- Maximum Sold Price
- Sold Price Average
- Sold Price Median
- Average Days on the Market.

A line was drawn at the year of the construction of the tower with the year prior and the subsequent years listed as references and comparisons. A summary of those results are included in this report. Facts all indicate that there was no decrease in Average Sold Price and Median Sold price in either instance, nor was there any lengthening of the Average Days on the market.





These facts compel us to draw the conclusion that the construction of the towers in these two locations in or near the Town of Monrovia, Morgan County, Indiana had no adverse effect on the surround property values. This would lead to conclude that the addition of another similar structure in the same area as the existing Verizon / American Tower Monopole would likewise have no adverse effect on the surround property values.

James F. Snodgrass  
Broker – Principal – Wall & Associates  
9020 Crawfordsville Road  
Indianapolis, IN 46234

Lejo Harmeson  
Managing Broker – Principal – Wall & Associates  
9020 Crawfordsville Road  
Indianapolis, IN 46234

Darren S. Snodgrass  
Principal  
TNG Wireless  
1829 Fortner Drive  
Indianapolis, IN 46231

Existing Self Support Tower - 1/2 Mile Radius - Built 2011

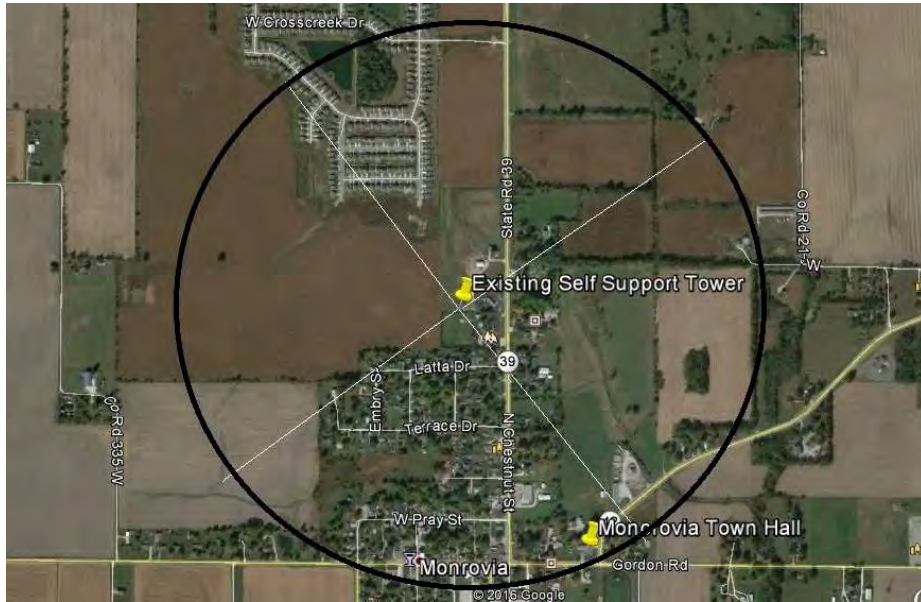
	List Price - Minimum	List Price - Maximum	List Price - Average	List Price - Median	Sold Price - Minimum	Sold Price - Maximum	Sold Price - Average	Sold Price - Median	Average Days on Market
2015	\$ 49,900.00	\$ 280,000.00	\$ 135,814.00	\$ 141,900.00	\$ 48,900.00	\$ 280,000.00	\$ 133,734.00	\$ 139,500.00	121
2014	\$ 82,000.00	\$ 177,900.00	\$ 129,771.00	\$ 131,900.00	\$ 73,000.00	\$ 177,000.00	\$ 127,588.00	\$ 128,500.00	84
2013	\$ 53,000.00	\$ 159,900.00	\$ 111,085.00	\$ 105,300.00	\$ 49,000.00	\$ 148,500.00	\$ 105,987.00	\$ 105,300.00	61
2012	\$ 35,000.00	\$ 154,900.00	\$ 106,368.00	\$ 107,490.00	\$ 35,000.00	\$ 154,900.00	\$ 101,589.00	\$ 99,000.00	92
2011	\$ 54,000.00	\$ 149,000.00	\$ 106,557.00	\$ 106,500.00	\$ 59,000.00	\$ 149,900.00	\$ 101,174.00	\$ 94,750.00	128
2010	\$ 27,000.00	\$ 142,000.00	\$ 104,399.00	\$ 110,708.00	\$ 40,000.00	\$ 142,000.00	\$ 101,807.00	\$ 104,450.00	74

Existing American Tower - 1/2 Mile Radius - Built 2007

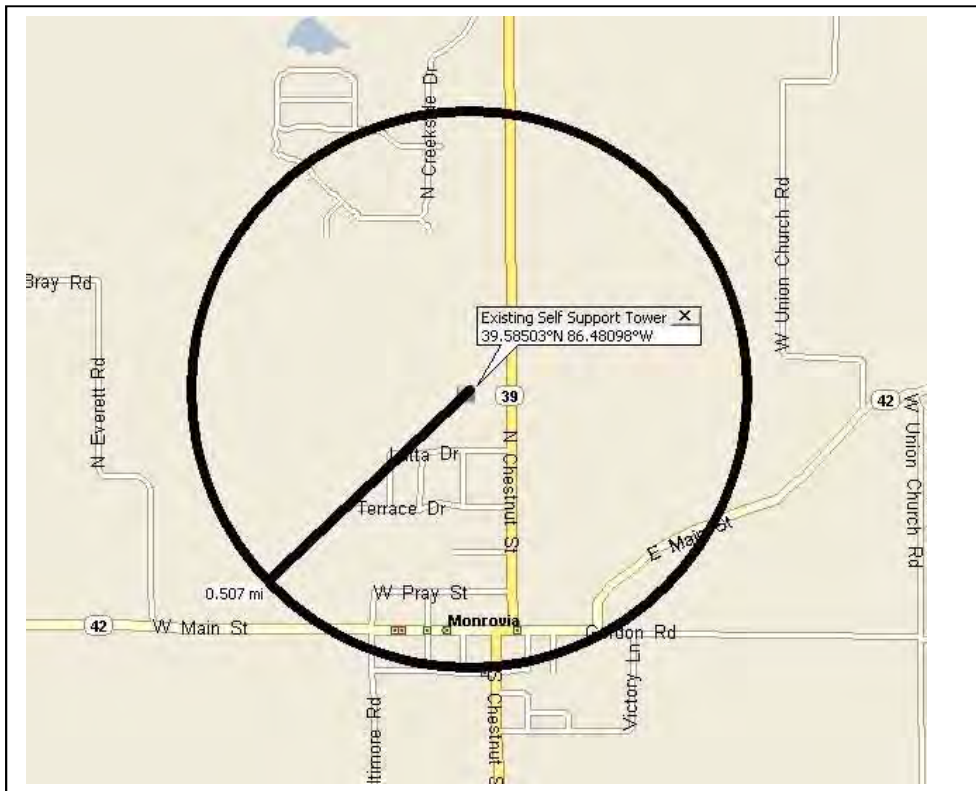
	List Price - Minimum	List Price - Maximum	List Price - Average	List Price - Median	Sold Price - Minimum	Sold Price - Maximum	Sold Price - Average	Sold Price - Median	Average Days on Market
2015	\$ 164,900.00	\$ 164,900.00	\$ 164,900.00	\$ 164,900.00	\$ 164,900.00	\$ 164,900.00	\$ 164,900.00	\$ 164,900.00	182
2014	\$ 149,900.00	\$ 149,900.00	\$ 149,900.00	\$ 149,900.00	\$ 145,000.00	\$ 145,000.00	\$ 145,000.00	\$ 145,000.00	36
2013	\$ 142,900.00	\$ 142,900.00	\$ 142,900.00	\$ 142,900.00	\$ 142,900.00	\$ 142,900.00	\$ 142,900.00	\$ 142,900.00	58
2012	\$ 99,000.00	\$ 99,000.00	\$ 99,000.00	\$ 99,000.00	\$ 94,000.00	\$ 94,000.00	\$ 94,000.00	\$ 94,000.00	73
2011	\$ 109,000.00	\$ 140,000.00	\$ 119,633.00	\$ 109,900.00	\$ 109,000.00	\$ 134,250.00	\$ 117,717.00	\$ 109,900.00	197
2010	\$ 27,000.00	\$ 179,900.00	\$ 114,225.00	\$ 125,000.00	\$ 41,900.00	\$ 176,000.00	\$ 113,725.00	\$ 118,500.00	132
2009	\$ 104,000.00	\$ 104,000.00	\$ 104,000.00	\$ 104,000.00	\$ 101,000.00	\$ 101,000.00	\$ 101,000.00	\$ 101,000.00	121
2008	\$ 115,000.00	\$ 259,900.00	\$ 181,600.00	\$ 169,900.00	\$ 115,000.00	\$ 235,000.00	\$ 169,333.00	\$ 158,000.00	73
2007	\$ 89,900.00	\$ 89,900.00	\$ 89,900.00	\$ 89,900.00	\$ 87,500.00	\$ 87,500.00	\$ 87,500.00	\$ 87,500.00	117
2006	\$ 167,280.00	\$ 167,280.00	\$ 167,280.00	\$ 167,280.00	\$ 167,280.00	\$ 167,280.00	\$ 167,280.00	\$ 167,280.00	

1 Property Sold that year

Aerial Map with 1/2 mile ring – Existing Self Support Tower



Map with 1/2 mile ring – Existing Self Support Tower



Property Type is one of 'Residential', 'Residential/lease' Status is one of 'Act', 'AcC', 'Pend', 'Sold' Property Sub Type is 'Single Fam' Trans Type is 'Sale' Latitude, Longitude is around 39.59, -86.48 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2010 to 12/31/2010

**Residential**

Sold Properties	MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Levl	Yr	Bit	SFOpt	SFMU	\$/SqFt	List Price	Sold Price	DOM
	21051420	09/27/2010	2952 West LONGBRANCH	E5502	Sub NOT found in Table	4	2/1	2CATC	0	2LEVL	2010	0	2,833	0	\$50.12	\$142,000	\$142,000	0
	2939040	05/07/2010	11448 North Meadowbend	W5502	HOMESTEAD	5	3/0	2CATC	0	2LEVL	2007	0	3,914	0	\$36.15	\$139,900	\$141,500	245
	21022367	11/05/2010	3093 West Meadow Bend	Dr5502	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2010	0	2,338	0	\$57.22	\$131,370	\$133,770	130
	21041531	10/08/2010	11431 North CREEKSIDE	Dr5502	Sub NOT found in Table	4	2/1	2CATC	0	2LEVL	2010	0	0	0	\$0.00	\$129,300	\$129,300	35
	2956042	04/21/2010	11427 North Meadowbend	D5502	HOMESTEAD	4	2/1	2CATC	1	2LEVL	2006	0	3,008	0	\$42.89	\$133,500	\$129,000	125
	21017815	08/27/2010	11388 North MEADOWBEND	E5502	Sub NOT found in Table	3	2/1	2CATC	0	2LEVL	2007	0	2,182	0	\$57.74	\$134,000	\$125,990	20
	2960686	05/27/2010	3128 West MEADOWBEND	E5502	HOMESTEAD	3	2/0	2CATC	0	1LEVL	2010	0	1,583	0	\$72.02	\$111,900	\$114,000	138
	2959547	05/18/2010	11421 North Creekside	Dr5502	HOMESTEAD	3	2/0	2CATC	0	1LEVL	2009	0	1,533	0	\$72.33	\$115,200	\$110,875	42
	21008026	06/21/2010	2965 West CROSSCREEK	E5502	Sub NOT found in Table	5	3/0	2CATC	0	2LEVL	2006	0	3,003	0	\$36.63	\$112,000	\$110,000	19
	21030611	07/30/2010	55 CIRCLE Drive		CIRCLE DRIVE	3	2/0	2CATC	0	1LEVL	1971	0	1,080	0	\$97.22	\$112,900	\$105,000	5
	2959155	03/10/2010	3043 West Meadowbend	Lar5502	HOMESTEAD	3	2/1	2CATC	1	2LEVL	2009	0	1,992	0	\$52.16	\$101,500	\$103,900	46
	21018584	11/24/2010	3087 West MEADOWBEND	E5502	Sub NOT found in Table	3	2/0	2CATC	0	1LEVL	2010	0	1,496	0	\$66.84	\$109,515	\$100,000	187
	21039273	10/25/2010	3075 West CROSSCREEK	E5502	Sub NOT found in Table	3	2/1	2CATC	0	2LEVL	2007	0	2,066	0	\$47.92	\$105,900	\$99,000	13
	21017814	08/04/2010	3068 West MEADOWBEND	E5502	Sub NOT found in Table	3	2/0	2CATC	0	1LEVL	2006	0	1,505	0	\$59.80	\$97,200	\$90,000	60
	21041287	09/09/2010	375 Maple Street		GLENN W LATTAS	2	1/0	2CDTC	0	1LEVL	1970	0	1,250	0	\$69.60	\$92,900	\$87,000	11
	21013379	06/14/2010	3120 West CROSSCREEK	E5502	Sub NOT found in Table	3	2/1	2CATC	0	2LEVL	2007	0	2,081	0	\$39.88	\$97,000	\$83,000	31
	21017984	08/06/2010	3127 MEADOWBEND Drive	E502	HOMESTEAD	3	2/0	2CATC	0	2LEVL	2008	0	1,968	0	\$41.62	\$86,000	\$81,900	112
	2957720	01/19/2010	260 West WASHINGTON	SH5502	NO SUBDIVISION	2	1/0	2CDTC	0	1LEVL	1956	1,020	1,020	0	\$66.67	\$68,900	\$68,000	15
	21030993	07/15/2010	35 East MAIN Street	E502	CARTERS	3	2/0	1CDTC	0	2LEVL	1920	374	1,523	0	\$27.51	\$27,000	\$41,900	9
	2927451	03/29/2010	120 West WASHINGTON	SH5502	CARTERS	3	1/0	NONE	1	1LEVL	1920	0	1,330	0	\$30.08	\$40,000	\$40,000	236

# LISTINGS: 20  
 Medians:  
 Minimums:  
 Maximums:  
 Averages:

Quick Statistics ( 20 Listings Total )				
	Min	Max	Average	Median
List Price	\$27,000	\$142,000	\$104,399	\$110,708
Sold Price	\$40,000	\$142,000	\$101,807	\$104,450

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This is a broker price opinion or comparative market analysis and should not be considered an appraisal. In making any decision that relies upon my work, you should know that I have not followed the guidelines for development of an appraisal or analysis contained in the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation.

CMA 1 - Line

Prepared By: Lejo Hammeson

Listings as of 09/19/16 at 10:44 am

Property Type is one of 'Residential', 'ResidentialLease' Status is one of 'Act', 'ActC', 'Pend', 'Sold' Property Sub Type is 'Single Fam' Trans Type is 'Sale' Latitude, Longitude is around 39.59, -86.48 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2011 to 12/31/2011

Residential

MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Level	Yr Blt	SFOpt	SFMU	\$/Sqft	List Price	Sold Price	DOM
211339362	10/28/2011	11364 North Creekside Drive	5502	HOMESTEAD	5	2/1	2C	0	2LEV	2006	0	3,008	\$49.83	\$149,900	\$149,900	22
21104714	02/01/2011	3075 West LONGBRANCH	5502	Sub NOT found In Table	3	2/0	2C	0	2LEV	2010	0	2,417	\$57.51	\$139,000	\$139,000	8
21119391	07/22/2011	3105 West LONGBRANCH	5502	HOMESTEAD	4	2/1	2C	1	2LEV	2011	0	2,227	\$62.37	\$138,900	\$138,900	14
211332912	10/07/2011	2977 West LONGBRANCH	5502	Sub NOT found In Table	5	2/1	2C	0	2LEV	2008	0	3,018	\$42.74	\$134,900	\$129,000	35
21117096	07/28/2011	2942 West LONGBRANCH	5502	HOMESTEAD	3	2/1	2C	0	2LEV	2011	0	2,057	\$61.74	\$133,785	\$127,000	84
21142535	12/29/2011	270 East Main Street	5502	NO SUBDIVISION	3	1/0	2C	1	1LEV	1950	1,026	1,026	\$106.24	\$109,000	\$109,000	416
21029808	01/20/2011	3120 West Crosscreek Drive	5502	HOMESTEAD	3	2/1	2C	0	2LEV	2007	0	2,104	\$51.76	\$109,900	\$108,900	202
21106873	11/18/2011	11259 North SASHING	5502	HOMESTEAD	3	2/1	2C	0	2LEV	2008	0	1,880	\$55.85	\$108,000	\$105,000	262
21051135	06/24/2011	2947 West LONGBRANCH	5502	HOMESTEAD	3	2/0	2C	0	1LEV	2010	0	1,300	\$76.85	\$99,900	\$99,900	226
21029705	03/04/2011	3047 West MEADOWBEND	5502	Sub NOT found In Table	4	2/1	2C	0	2LEV	2005	0	1,845	\$52.03	\$99,900	\$96,000	266
21149155	12/23/2011	410 North CHESTNUT Street	5502	GLENN W/LATTAS	3	2/1	3C	0	1HALF	1920	304	2,640	\$35.42	\$104,999	\$93,500	45
21060916	04/25/2011	11378 North MEADOWBEND	5502	Sub NOT found In Table	3	2/1	2C	0	2LEV	2007	0	2,293	\$39.25	\$125,000	\$90,000	74
21051778	05/05/2011	80 Latta Drive	5502	NO SUBDIVISION	3	1/0	2C	1	1LEV	1955	0	1,536	\$57.88	\$88,900	\$88,900	175
21050447	09/10/2011	3138 West MEADOWBEND	5502	Sub NOT found In Table	3	2/0	2C	0	1LEV	2008	0	1,505	\$58.14	\$84,850	\$87,500	217
21129968	08/18/2011	3123 West MEADOWBEND	5502	Sub NOT found In Table	3	2/0	2C	0	1LEV	2007	0	1,505	\$56.81	\$87,500	\$85,500	24
21112814	07/27/2011	3137 West MEADOWBEND	5502	Sub NOT found In Table	4	2/1	2C	1	2LEV	2007	0	2,888	\$29.43	\$108,000	\$85,000	126
21052998	02/15/2011	11259 North SASHING Way	5502	Sub NOT found In Table	3	2/1	2C	0	2LEV	2008	0	1,880	\$42.97	\$90,000	\$80,777	79
21121553	08/24/2011	3085 West CROSSCREEK	5502	Sub NOT found In Table	3	2/1	2C	0	2LEV	2007	0	1,532	\$44.39	\$76,500	\$68,000	56
21108032	10/03/2011	3100 West CROSSCREEK	5502	HOMESTEAD	3	2/1	2C	0	2LEV	2007	0	1,584	\$37.25	\$54,000	\$59,000	133

# LISTINGS: 20  
 Medians:  
 Minimums:  
 Maximums:  
 Averages:

Quick Statistics ( 20 Listings Total )						
	Min	Max	Average	Median		
List Price	\$54,000	\$149,900	\$106,557	\$106,500		
Sold Price	\$59,000	\$149,900	\$101,174	\$94,750		

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CMA 1 - Line

Prepared By: Lejo Hammeson

Listings as of 09/19/16 at 10:43 am

Property Type is one of 'Residential', 'Residential:lease' Status is one of 'Act', 'ActC', 'Pend', 'Sold' Property Sub Type is 'Single Fam' Trans Type is 'Sale' Latitude, Longitude is around 39.59, -86.48 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2012 to 12/31/2012

Residential

MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Levl	Yr Blt	SFOpt	SFMU	\$/Sqft	List Price	Sold Price	DOM
21134413	02/29/2012	3052 West Meadowbend Dr#5502	5502	HOMESTEAD	4	2/1	2CATC,1	0	2LEVL	2007	0	2,989	\$51.82	\$154,900	\$154,900	194
21167477	07/06/2012	11267 North Sashing Way	5502	Sub NOT found in Table	4	2/1	2CATC	0	2LEVL	2008	0	2,939	\$47.60	\$139,900	\$139,900	104
21187554	11/07/2012	3005 West CROSSCREEK ES502	5502	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2007	0	3,196	\$43.02	\$137,500	\$137,500	64
21188697	08/21/2012	305 North CHESTNUT Streets5502	5502	NO SUBDIVISION	2	1/0	1CDT,C,1	0	1LEVL	1940	0	872	\$154.82	\$135,000	\$135,000	6
21177417	07/06/2012	215 BALTIMORE Road	5502	NO SUBDIVISION	2	1/1	2CATC	1	1LEVL	1975	0	1,824	\$69.90	\$135,000	\$127,500	15
21171519	10/09/2012	2960 West CROSSCREEK ES502	5502	Sub NOT found in Table	4	2/1	2CATC	1	2LEVL	2007	0	3,592	\$34.80	\$127,900	\$125,000	151
21186719	09/28/2012	2914 Sampler Lane	5502	HOMESTEAD	3	2/0	2CATC	0	1LEVL	2012	0	1,300	\$81.85	\$105,080	\$106,405	21
21194710	10/30/2012	11458 North MEADOWBENES502	5502	Sub NOT found in Table	4	2/1	2CATC	0	2LEVL	2007	0	2,028	\$50.54	\$104,900	\$102,500	29
21151939	03/12/2012	9870 North WEST UNION Rd#502	5502	MARTINS	3	2/0	2CATC	0	1LEVL	1968	0	1,272	\$75.08	\$109,900	\$95,500	73
21145282	01/04/2012	3100 West Crosscreek Drive5502	5502	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2007	0	1,584	\$59.34	\$109,900	\$94,000	46
21177945	08/03/2012	320 East MAIN Street	5502	NO SUBDIVISION	2	1/0	2CATC	0	1LEVL	1955	0	962	\$97.71	\$99,000	\$94,000	73
21184589	08/20/2012	235 North CHESTNUT Streets5502	5502	NO SUBDIVISION	3	2/0	2CATC	0	1LEVL	1959	0	1,480	\$61.49	\$94,900	\$91,000	53
21179139	08/09/2012	3118 West MEADOWBEND	5502	Sub NOT found in Table	3	2/0	2CATC	0	1LEVL	2007	0	1,284	\$54.52	\$86,000	\$70,000	43
21199172	11/15/2012	3107 West MEADOWBEND	5502	Sub NOT found in Table	3	2/0	2CATC	0	1LEVL	2007	0	1,223	\$53.32	\$70,000	\$65,213	7
21123042	04/27/2012	225 Terrace Drive	5502	GLENN W LATTAS	3	1/0	1CATC	0	1LEVL	1970	0	1,000	\$52.00	\$57,000	\$52,000	340
21122762	01/28/2012	270 West PRAY Street	5502	NO SUBDIVISION	2	1/0	2GDT,C	0	1HALF	1900	0	1,018	\$34.38	\$35,000	\$35,000	250

# LISTINGS:	16	Medians:	3	2/0	2007	1,390	\$53.92	\$107,490	\$99,000	59
		Min/nums:	2	1/0	1900	872	\$34.38	\$35,000	\$35,000	6
		Maximums:	4	2/1	2012	3,592	\$154.82	\$154,900	\$154,900	340
		Averages:	3	2/0	1984	1,785	\$63.89	\$106,368	\$101,589	92

Quick Statistics ( 16 Listings Total )

	Min	Max	Average	Median
List Price	\$35,000	\$154,900	\$106,368	\$107,490
Sold Price	\$35,000	\$154,900	\$101,589	\$99,000

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Property Type is one of 'Residential', 'Residential lease', 'Status is one of 'Act', 'Actc', 'Pend', 'Sold' Property Sub Type is 'Single Fam', 'Trans Type is 'Sale', 'Latitude, Longitude is around 39.59', -86.48 Area is '5502 - Morgan - Monroe' Close Date is 07/01/2013 to 12/31/2013

**Residential**

MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Levl	Yr Blt	SFOpt	SFMU	\$/sqft	List Price	Sold Price	DOM
21234452	10/08/2013	11248 North TRAPUNTO Lat5502	HOMESTEAD	HOMESTEAD	4	2/1	2CATC	0	2LEVL	2008	0	2,343	\$63.38	\$149,895	\$148,500	51
21222592	05/10/2013	11201 North Longbranch Str5502	HOMESTEAD	HOMESTEAD	4	2/1	2CATC	1	2LEVL	2013	0	2,199	\$66.85	\$148,595	\$147,000	1
21202353	01/08/2013	3102 West MEADOWBEND 5502	HOMESTEAD	HOMESTEAD	4	2/1	2CATC	1	2LEVL	2012	0	2,289	\$63.35	\$148,050	\$145,000	12
21215479	06/14/2013	11244 North SASHING 5502	Sub NOT found in Table	Sub NOT found in Table	4	2/1	2CATC	0	2LEVL	2008	0	3,729	\$38.88	\$159,900	\$145,000	52
21196418	01/08/2013	11511 North CREEKSIDE Dr5502	HOMESTEAD	HOMESTEAD	4	2/1	2CATC	1	2LEVL	2009	0	2,148	\$64.25	\$142,900	\$138,000	42
21217091	05/31/2013	11457 North MEADOWBENI5502	Sub NOT found in Table	Sub NOT found in Table	4	2/1	2CATC	0	2LEVL	2007	0	2,989	\$45.83	\$139,900	\$137,000	29
21204112	03/29/2013	3014 West Sampler Lane 5502	HOMESTEAD	HOMESTEAD	4	2/1	2CATC	0	2LEVL	2012	0	2,002	\$66.80	\$132,725	\$133,725	49
21216364	03/27/2013	3133 West MEADOWBEND 5502	HOMESTEAD	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2007	0	3,008	\$43.22	\$137,900	\$130,000	18
21199471	03/28/2013	11188 North Trapunto Lane 5502	NO SUBDIVISION	NO SUBDIVISION	3	2/0	2CATC	1	1LEVL	2012	0	1,583	\$78.61	\$121,900	\$124,445	133
21214146	05/31/2013	11239 North SASHING Way 5502	Sub NOT found in Table	Sub NOT found in Table	3	2/1	2CATC	0	2LEVL	2008	0	1,587	\$69.31	\$113,900	\$110,000	117
21260522	11/15/2013	3100 West CROSSCREEK 5502	HOMESTEAD	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2007	0	1,584	\$65.03	\$102,900	\$103,000	3
21204528	02/27/2013	110 CIRCLE DIVE 5502	CIRCLE DRIVE	CIRCLE DRIVE	3	2/0	2CATC	0	1LEVL	1971	0	1,416	\$69.21	\$104,500	\$98,000	61
21238757	10/02/2013	3070 West CROSSCREEK 5502	HOMESTEAD	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2007	0	2,316	\$39.08	\$90,000	\$90,500	15
21234163	11/14/2013	3022 West MEADOWBEND 5502	Sub NOT found in Table	Sub NOT found in Table	3	2/0	2CATC	0	1LEVL	2006	0	1,848	\$48.70	\$110,000	\$90,000	168
21201563	01/11/2013	11356 North CREEKSIDE Dr5502	Sub NOT found in Table	Sub NOT found in Table	4	2/1	2CATC	0	2LEVL	2006	0	2,621	\$33.71	\$95,000	\$88,365	34
21206639	03/15/2013	11386 North CREEKSIDE Dr5502	Sub NOT found in Table	Sub NOT found in Table	3	2/0	2CATC	0	1LEVL	2006	0	1,699	\$50.03	\$85,000	\$85,000	25
21250699	12/30/2013	11261 North LONGBRANCH5502	Sub NOT found in Table	Sub NOT found in Table	4	2/1	2CATC	1	2LEVL	2007	0	2,636	\$32.25	\$85,000	\$85,000	10
21216223	10/10/2013	245 TERRACE DIVE 5502	GLENN W LATTAS	GLENN W LATTAS	3	1/0	1CATC,	0	1LEVL	1972	0	1,000	\$94.75	\$89,900	\$84,750	151
21212393	07/22/2013	3152 West LONGBRANCH 5502	Sub NOT found in Table	Sub NOT found in Table	4	2/1	2CATC	1	2LEVL	2010	0	1,656	\$50.12	\$89,900	\$83,000	183
21193948	01/25/2013	3133 West MEADOWBEND 5502	HOMESTEAD	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2007	0	3,008	\$27.03	\$105,300	\$81,311	100
21243064	09/06/2013	2927 West LONGBRANCH 5502	Sub NOT found in Table	Sub NOT found in Table	3	2/0	2CATC	1	1LEVL	2008	0	1,251	\$56.76	\$66,000	\$71,008	10
21245143	10/10/2013	130 CIRCLE DIVE 5502	CIRCLE DRIVE	CIRCLE DRIVE	4	2/0	NONE	1	2LEVL	1975	0	1,602	\$43.76	\$82,800	\$70,100	55
21216807	05/29/2013	350 MAPLE Street 5502	GLENN W LATTAS	GLENN W LATTAS	3	1/1	2CDTC	0	1LEVL	1972	0	1,325	\$36.98	\$53,000	\$49,000	82

# LISTINGS:	23	Medians:	3	2/1	2007	2,002	\$50.12	\$105,300	\$98,000	49
		Minimums:	3	1/0	1971	1,000	\$27.03	\$53,000	\$49,000	1
		Maximums:	4	2/1	2013	3,729	\$84.75	\$159,900	\$148,500	183
		Averages:	3	2/1	2002	2,080	\$53.82	\$111,085	\$105,987	61

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	Quick Statistics ( 23 Listings Total )			
	Min	Max	Average	Median
List Price	\$53,000	\$159,900	\$111,085	\$105,300
Sold Price	\$49,000	\$148,500	\$105,987	\$98,000

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CMA 1 - Line

Prepared By: Lejo Harneson

Listings as of 09/19/16 at 10:40 am

Property Type is one of 'Residential', 'Residential/Lease', 'Status is one of 'Act', 'ActC', 'Pend', 'Sold' Property Sub Type is 'Single Fam', Trans Type is 'Sale' Latitude, Longitude is around 39.59,

-86.48 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2014 to 12/31/2014

Residential

MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Levl	Yr Blt	SFOpt	SFMU	\$/SqrFt	List Price	Sold Price	DOM
21282377	11/03/2014	2970 West CROSSCREEK ES502	5502	Sub NOT found in Table	4	2/1	3CATC	1	2LEVL	2006	0	3,578	\$49.47	\$177,900	\$177,000	217
21288077	11/06/2014	11238 North TRAPUNTO	5502	Sub NOT found in Table	4	2/1	2CATC	1	2LEVL	2008	0	2,816	\$66.82	\$164,900	\$160,000	175
21271553	02/28/2014	11138 North Trapunto Lane	5502	HOMESTEAD	4	2/1	2CATC	1	2LEVL	2013	0	2,199	\$71.85	\$163,040	\$158,000	19
21289816	09/18/2014	2965 West CROSSCREEK ES502	5502	Sub NOT found in Table	4	2/1	2CATC	0	2LEVL	2006	0	3,018	\$61.03	\$159,900	\$154,000	100
21257753	01/31/2014	2921 West HAWANIAN Lane5502	5502	HOMESTEAD	4	2/1	2CATC	0	2LEVL	2013	0	2,288	\$66.70	\$151,155	\$152,605	49
21294013	09/04/2014	3075 West LONGBRANCH ES502	5502	Sub NOT found in Table	3	3/0	2CATC	0	2LEVL	2011	0	3,629	\$41.80	\$159,987	\$151,687	46
21279709	04/22/2014	35 East MAIN Street	5502	CARTERS	3	1/1	1CDTC	1	2HALF	1920	374	1,523	\$95.21	\$149,900	\$145,000	36
21295125	08/27/2014	2940 West CROSSCREEK ES502	5502	Sub NOT found in Table	6	2/1	2CATC	0	2LEVL	2006	0	3,056	\$47.45	\$149,900	\$145,000	86
21285544	08/22/2014	2991 West HAWANIAN Lane5502	5502	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2014	0	2,087	\$69.28	\$145,595	\$144,595	72
21271561	02/21/2014	11551 North CREEKSIDE Dr5502	5502	HOMESTEAD	3	2/0	2CATC	1	1LEVL	2013	0	1,583	\$91.09	\$144,900	\$144,200	7
21289289	08/25/2014	11441 North CREEKSIDE Dr5502	5502	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2006	0	2,574	\$55.75	\$142,500	\$143,500	114
21253632	02/07/2014	2992 West LONGBRANCH ES502	5502	Sub NOT found in Table	3	2/1	2CATC	0	2LEVL	2006	0	3,106	\$45.40	\$141,500	\$141,000	127
21284915	08/11/2014	11461 North Creekside Drive5502	5502	Sub NOT found in Table	3	2/1	2CATC	0	2LEVL	2006	0	3,202	\$43.72	\$140,000	\$140,000	119
21307645	10/10/2014	235 North CHESTNUT Street5502	5502	NO SUBDIVISION	3	2/0	2CATC	0	1LEVL	1959	0	1,480	\$92.57	\$139,900	\$137,000	67
21324529	10/31/2014	2941 Hawaiian	5502	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2014	0	1,800	\$75.90	\$136,625	\$136,625	30
21296592	10/25/2014	2872 West LONGBRANCH ES502	5502	HOMESTEAD 3	3	2/1	2CATC	1	2LEVL	2008	0	2,152	\$62.73	\$139,900	\$135,000	54
21253135	02/28/2014	3018 West Hawaiian Lane	5502	HOMESTEAD	3	2/0	2CATC	0	1LEVL	2013	0	1,583	\$81.17	\$131,900	\$128,500	120
21286697	05/23/2014	3022 West MEADOWBEND	5502	HOMESTEAD	3	2/0	2CATC	0	1LEVL	2006	0	1,848	\$68.72	\$128,900	\$127,000	9
21278247	07/31/2014	3033 West MEADOWBEND	5502	HOMESTEAD	3	2/1	2CATC	0	1LEVL	2006	0	2,185	\$66.70	\$124,900	\$123,900	78
21289844	07/31/2014	9994 STATE ROAD 39	5502	NO SUBDIVISION	3	2/0	2CATC	2	1LEVL	1959	0	2,040	\$60.54	\$124,900	\$123,500	24
21283203	06/13/2014	11447 North MEADOWBEND	5502	HOMESTEAD	4	2/1	2CATC	0	2LEVL	2006	0	3,008	\$39.89	\$124,900	\$120,000	72
21307055	12/30/2014	2981 West HAWANIAN Lane5502	5502	HOMESTEAD	3	2/0	2CATC	0	1LEVL	2014	0	1,340	\$89.55	\$119,900	\$120,000	112
21329119	12/19/2014	11301 North Creekside Drive5502	5502	Sub NOT found in Table	3	2/0	2CATC	1	1LEVL	2006	0	1,561	\$76.87	\$120,000	\$120,000	1
21286641	07/03/2014	11148 North Trapunto Lane	5502	HOMESTEAD	3	2/0	2CATC	0	1LEVL	2014	0	1,340	\$88.57	\$118,685	\$118,685	43
21240131	01/15/2014	2997 West LONGBRANCH ES502	5502	Sub NOT found in Table	3	2/0	2CATC	1	1LEVL	2008	0	1,259	\$93.73	\$119,900	\$118,000	139
21274093	05/23/2014	11381 North CREEKSIDE Dr5502	5502	Sub NOT found in Table	3	2/1	2CATC	0	2LEVL	2006	0	2,962	\$38.79	\$114,900	\$114,900	71
21197031	02/28/2014	2925 West CROSSCREEK ES502	5502	Sub NOT found in Table	3	2/1	2CATC	1	2LEVL	2006	0	1,852	\$56.70	\$105,000	\$105,000	464
21275402	05/23/2014	3067 West MEADOWBEND	5502	Sub NOT found in Table	3	2/1	2CATC	0	2LEVL	2007	0	2,046	\$48.83	\$105,000	\$100,000	54
21299232	10/06/2014	11438 North MEADOWBEND	5502	HOMESTEAD	3	1/0	2CATC	0	1LEVL	2007	0	1,507	\$62.97	\$94,900	\$94,900	109
21314261	12/02/2014	40 West Main Street	5502	HOCKETTS	3	1/0	2CDTC	0	2LEVL	1930	0	1,381	\$64.08	\$89,900	\$88,500	24
21319065	10/02/2014	330 Embry Street	5502	GLENN W LATTAS	3	1/0	1CATC	0	1LEVL	1974	0	960	\$89.58	\$86,000	\$86,000	0
21265666	03/19/2014	2940 West CROSSCREEK ES502	5502	Sub NOT found in Table	6	2/1	2CATC	0	2LEVL	2006	0	2,941	\$28.33	\$82,000	\$83,311	8
213151524	12/31/2014	325 TERRACE Drive	5502	GLENN W LATTAS	3	1/1	2CATC	1	1LEVL	1975	0	2,024	\$36.07	\$84,150	\$73,000	128

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**CMA 1 - Line**

Listings as of 09/19/16 at 10:40 am

Residential	# LISTINGS:	Medians:	Minimums:	Maximums:	Averages:
	33	3 2/1	3 1/0	6 3/1	3 2/1
		2006 374 2,048 \$62.73	1920 374 960 \$28.33	2014 374 3,629 \$95.21	1999 374 2,180 \$63.57
		\$131,900	\$82,000	\$177,900	\$129,771
		\$128,500	\$73,000	\$177,000	\$127,588

Quick Statistics ( 33 Listings Total )				
	Min	Max	Average	Median
List Price	\$82,000	\$177,900	\$129,771	\$131,900
Sold Price	\$73,000	\$177,000	\$127,588	\$128,500

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CMA 1 - Line

Prepared By: Lejo Harneson

Listings as of 09/19/16 at 10:39 am

Property Type is one of 'Residential', 'ResidentialLease', 'Status is one of 'Act', 'ActC', 'Pend', 'Sold' Property Sub Type is 'Single Fam' Trans Type is 'Sale' Latitude, Longitude is around 39.59, -86.48 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2015 to 12/31/2015

Residential

MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Levl	Yr Bk	SFOpt	SFMU	\$/SqFt	List Price	Sold Price	DOM
21354733	07/24/2015	435 North Chestnut Street	5502	NO SUBDIVISION	6	2/0	OTHER	0	2LEVL	1930	0	2,050	\$136.59	\$280,000	\$280,000	33
21339638	07/31/2015	3132 West Meadowbend Dr#5502	5502	NO SUBDIVISION	4	2/1	2CATC	1	2LEVL	2007	0	4,145	\$43.18	\$186,500	\$179,000	128
21375819	10/30/2015	2901 West Hawaiian Lane	5502	Homestead	4	2/1	2CATC	0	2LEVL	2015	0	2,286	\$72.82	\$167,900	\$165,000	15
21334054	04/10/2015	11437 North Meadowbend D#5502	5502	HOMESTEAD	4	2/1	2CATC	1	2LEVL	2006	0	3,008	\$52.36	\$159,900	\$157,500	42
21324257	03/02/2015	3052 West Longbranch Drive5502	5502	Sub NOT found in Table	4	3/0	2CATC	1	2LEVL	2012	0	2,350	\$66.60	\$156,900	\$156,500	100
21320255	06/26/2015	11258 North Trapunto Lane	5502	HOMESTEAD	4	2/1	2CATC	1	2LEVL	2011	0	2,300	\$66.96	\$154,000	\$154,000	254
21328903	03/31/2015	3112 West Meadowbend Dr#5502	5502	HOMESTEAD	4	2/1	2CATC	0	2LEVL	2012	0	2,360	\$64.79	\$154,900	\$152,900	57
21356154	10/19/2015	11326 North Creekside Drive5502	5502	HOMESTEAD	3	2/1	2CATC	1	2LEVL	2006	0	3,018	\$49.70	\$153,900	\$150,000	132
21317131	05/04/2015	2992 West Longbranch Drive5502	5502	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2008	0	3,106	\$47.97	\$154,500	\$149,000	221
21328772	08/19/2015	3195 West Longbranch Drive5502	5502	HOMESTEAD	4	2/1	2CATC	0	2LEVL	2010	0	2,160	\$68.01	\$146,900	\$146,900	217
21385107	12/10/2015	2974 West Sampler Lane	5502	HOMESTEAD	4	2/1	2CATC	0	2LEVL	2013	0	2,280	\$64.04	\$149,999	\$146,000	20
21319660	03/25/2015	2969 West Sampler Lane	5502	HOMESTEAD	4	2/1	2CATC	0	2LEVL	2014	0	2,298	\$63.37	\$149,900	\$145,000	139
21338644	06/02/2015	3098 West Meadowbend Lar#5502	5502	HOMESTEAD	4	2/1	2CATC	1	2LEVL	2008	0	3,048	\$47.57	\$149,900	\$145,000	80
21329234	07/09/2015	11531 North Creekside Drive5502	5502	HOMESTEAD	3	2/0	2CATC	1	1LEVL	2013	0	1,553	\$92.40	\$144,900	\$144,900	167
21356378	09/25/2015	3133 West Meadowbend Lar#5502	5502	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2009	0	1,930	\$72.02	\$139,900	\$139,000	163
21341336	09/29/2015	2919 West Sampler Lane	5502	HOMESTEAD	4	2/1	2CATC	0	2LEVL	2014	0	2,279	\$61.43	\$141,900	\$140,000	163
21347724	06/03/2015	3032 West Longbranch Drive5502	5502	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2009	0	1,930	\$72.02	\$139,900	\$139,000	0
21319601	03/13/2015	2938 West Hawaiian Lane	5502	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2014	0	2,087	\$64.93	\$141,900	\$135,500	106
21352558	07/10/2015	11259 North Sashing Way	5502	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2008	0	1,880	\$67.55	\$128,000	\$127,000	6
21298167	02/03/2015	2957 West LONGBRANCH E#5502	5502	Sub NOT found in Table	4	2/1	2CATC	0	2LEVL	2008	0	1,805	\$69.25	\$128,900	\$125,000	216
21356074	09/17/2015	3082 West Meadowbend Dr#5502	5502	HOMESTEAD	3	2/0	2CATC	0	1LEVL	2012	0	1,300	\$96.15	\$125,000	\$125,000	77
21347204	06/07/2015	2932 West Longbranch Drive5502	5502	HOMESTEAD	3	2/1	2CATC	0	2LEVL	2012	0	2,014	\$60.58	\$124,900	\$122,000	108
21305286	01/20/2015	3060 West CROSSCREEK E#5502	5502	Sub NOT found in Table	3	2/1	2CATC	0	2LEVL	2007	0	1,788	\$67.11	\$123,000	\$120,000	155
21371378	12/22/2015	360 North Chestnut Street	5502	GLENN W LATTAS	2	1/0	2CDTC	0	1LEVL	1960	1,392	1,680	\$70.83	\$123,000	\$119,000	128
21342496	09/14/2015	2947 West Longbranch Drive5502	5502	HOMESTEAD RIVER SIDE PARK	3	2/0	2CATC	0	1LEVL	2010	0	1,340	\$87.31	\$114,950	\$117,000	107
21333480	03/31/2015	11326 North Creekside Drive5502	5502	HOMESTEAD	3	2/1	2CATC	1	2LEVL	2006	0	3,018	\$37.11	\$119,900	\$112,000	46
21378652	11/20/2015	410 North CHESTNUT Streets5502	5502	GLENN W LATTAS	3	2/1	2CATC	0	1HALF	1920	304	2,640	\$40.72	\$109,900	\$107,500	41
21349942	08/21/2015	11421 North Creekside Drive5502	5502	HOMESTEAD	3	2/0	2CATC	0	1LEVL	2010	0	1,551	\$68.02	\$97,000	\$105,500	108
21368068	09/24/2015	245 Terrace Drive	5502	GLENN W LATTAS	3	1/0	1CATC	0	1LEVL	1972	0	1,000	\$95.90	\$95,900	\$95,900	32
21322495	06/24/2015	280 West Washington Street#5502	5502	NO SUBDIVISION	3	2/0	2CDTC	0	1HALF	1890	0	1,836	\$37.04	\$68,000	\$68,000	157
21265562	02/13/2015	280 West MAIN Street	5502	MONROVA	3	2/0	OTHER	0	2LEVL	1870	0	1,582	\$37.29	\$59,000	\$59,000	409
21286997	04/17/2015	340 TERRACE Drive	5502	NO SUBDIVISION	1	1/0	NONE	0	1LEVL	1970	0	630	\$77.62	\$49,900	\$48,900	320

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CMA 1 - Line

Listings as of 09/19/16 at 10:39 am

Residential                       
 # LISTINGS: 32

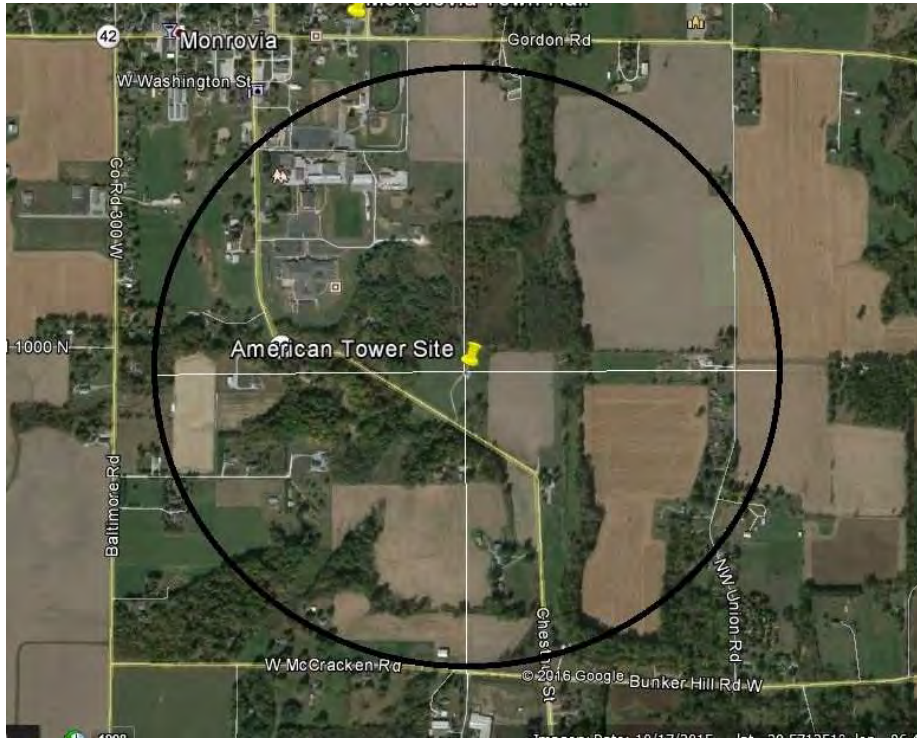
Medians:	3	2/1	2008	848	2,124	\$65.76	\$141,900	\$139,500	108
Minimums:	1	1/0	1870	304	630	\$37.04	\$49,900	\$48,900	0
Maximums:	6	3/1	2015	1,392	4,145	\$136.59	\$280,000	\$280,000	409
Averages:	3	2/1	1993	848	2,166	\$65.46	\$135,814	\$133,734	121

Quick Statistics ( 32 Listings Total )					
	Min	Max	Average	Median	
List Price	\$49,900	\$280,000	\$135,814	\$141,900	
Sold Price	\$48,900	\$280,000	\$133,734	\$139,500	

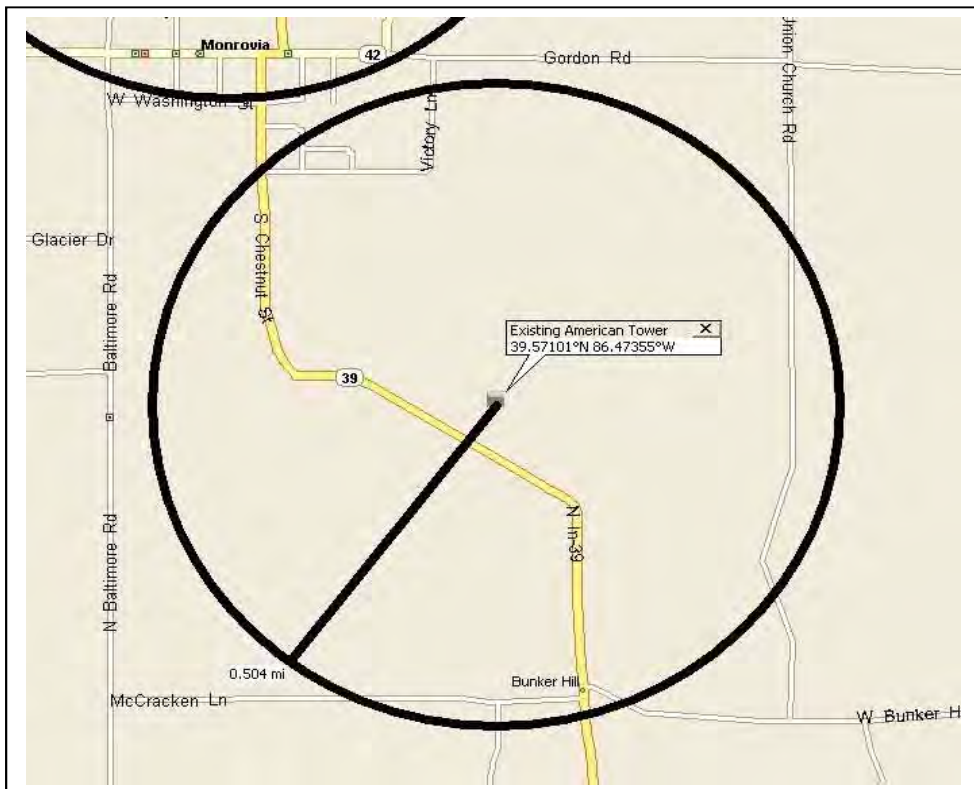
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Aerial Map with 1/2 mile ring – American Tower Site



Map with 1/2 mile ring – American Tower Site



Property Type is one of 'Residential', 'Residential-lease' Status is one of 'Act', 'ActC', 'Pend' Status is 'Sold' Status Contractual Search Date is 09/19/2016 to 09/22/2006 Property Sub Type is 'Single Fam' Trans Type is 'Sale' Latitude, Longitude is around 39.57, -86.47 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2006 to 12/31/2006

**Residential**

Sold Properties	MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Lvl	Yr Bt	SFOpt	SFMU	\$\$/SqFt	List Price	Sold Price	DOM
	2648818	10/23/2006	9746 North West Union Roac5502	NO SUBDIVISION		3	2/1	2CATC	1	2LEVL	1991	0	2,784	\$60.09	\$167,280	\$167,280	

# LISTINGS:	1	Medians:	3	2/1	1991	2,784	\$60.09	\$167,280	\$167,280
		Minimums:	3	2/1	1991	2,784	\$60.09	\$167,280	\$167,280
		Maximums:	3	2/1	1991	2,784	\$60.09	\$167,280	\$167,280
		Averages:	3	2/1	1991	2,784	\$60.09	\$167,280	\$167,280

Quick Statistics ( 1 Listing Total )				
	Min	Max	Average	Median
List Price	\$167,280	\$167,280	\$167,280	\$167,280
Sold Price	\$167,280	\$167,280	\$167,280	\$167,280

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**CMA 1 - Line**

Prepared By: Lejo Hammason

Listings as of 09/19/16 at 10:24 am

Property Type is one of 'Residential', 'Residential/lease' Status is one of 'Act', 'ActC', 'Pend' Status is 'Sold' Status Contractual Search Date is 09/19/2016 to 09/22/2006 Property Sub Type is 'Single Fam' Trans Type is 'Sale' Latitude, Longitude is around 39.57, -86.47 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2007 to 12/31/2007

**Residential**

Sold Properties	MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Levl	Yr-Blt	SFOpt	SFMU	\$/SqFt	List Price	Sold Price	DOM
	2720241	08/29/2007	125 East Main Street	5502	NO SUBDIVISION	2	2/0	2CDTC	0	1LEVL	1900	224	1,056	\$82.86	\$89,900	\$87,500	117
<b># LISTINGS:</b>	<b>1</b>					<b>2</b>	<b>2/0</b>				<b>1900</b>	<b>224</b>	<b>1,056</b>	<b>\$82.86</b>	<b>\$89,900</b>	<b>\$87,500</b>	<b>117</b>
						<b>2</b>	<b>2/0</b>				<b>1900</b>	<b>224</b>	<b>1,056</b>	<b>\$82.86</b>	<b>\$89,900</b>	<b>\$87,500</b>	<b>117</b>
						<b>2</b>	<b>2/0</b>				<b>1900</b>	<b>224</b>	<b>1,056</b>	<b>\$82.86</b>	<b>\$89,900</b>	<b>\$87,500</b>	<b>117</b>
						<b>2</b>	<b>2/0</b>				<b>1900</b>	<b>224</b>	<b>1,056</b>	<b>\$82.86</b>	<b>\$89,900</b>	<b>\$87,500</b>	<b>117</b>

Quick Statistics ( 1 Listing Total )					
	Min	Max	Average	Median	
List Price	\$89,900	\$89,900	\$89,900	\$89,900	
Sold Price	\$87,500	\$87,500	\$87,500	\$87,500	

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**CMA 1 - Line**

Prepared By: Lejo Hammerson

Listings as of 09/19/16 at 10:16 am

Property Type is one of 'Residential', 'ResidentialLease' Status is one of 'Act', 'ActC', 'Pend' Status is 'Sold' Status Contractual Search Date is 09/19/2016 to 09/22/2006 Property Sub Type is 'Single Fam'l' Trans Type is 'Sale' Latitude, Longitude is around 39.57, -86.47 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2008 to 12/31/2008

**Residential**

MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Levl	Yr Blt	SFOpt	SFMU	\$/sqft	List Price	Sold Price	DOM
2806656	04/14/2008	9815 North BALTIMORE	Ros5502	NO SUBDIVISION	4	4/0	2CATC	1	2LEVL	1998	1,821	2,829	\$83.07	\$259,900	\$235,000	39
2811288	08/29/2008	1978 West Gordon Road	5502	NO SUBDIVISION	4	2/0	2CATC	0	1LEVL	1960	1,539	1,539	\$102.66	\$169,900	\$158,000	169
2824036	05/19/2008	2153 West BUNKER HILL	R5502	NO SUBDIVISION	2	2/0	4CDTC	1	2LEVL	1977	0	1,200	\$95.83	\$115,000	\$115,000	11
<b># LISTINGS:</b>		<b>3</b>														
		<b>Medians:</b>			4	2/0				1977	1,680	1,539	\$95.83	\$169,900	\$158,000	39
		<b>Minimums:</b>			2	2/0				1960	1,539	1,200	\$83.07	\$115,000	\$115,000	11
		<b>Maximums:</b>			4	4/0				1998	1,821	2,829	\$102.66	\$259,900	\$235,000	169
		<b>Averages:</b>			3	3/0				1978	1,680	1,856	\$93.86	\$161,600	\$169,333	73

**Quick Statistics ( 3 Listings Total )**

	Min	Max	Average	Median
List Price	\$115,000	\$259,900	\$181,600	\$169,900
Sold Price	\$115,000	\$235,000	\$169,333	\$158,000

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**CMA 1 - Line**

Prepared By: Lejo Harneson

Listings as of 09/19/16 at 10:24 am

Property Type is one of 'Residential', 'Residential/lease' Status is one of 'Act', 'ActC', 'Pend' Status is 'Sold' Status Contractual Search Date is 09/19/2016 to 09/22/2006 Property Sub Type is Single  
 Farm' Trans Type is 'Sale' Latitude, Longitude is around 39.57, -86.47 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2009 to 12/31/2009

**Residential**

Sold Properties	MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Levl	Yr	Bit	SFOpt	SFMU	\$/SqFt	List Price	Sold Price	DOM	
	2855566	02/26/2009	270 East Main Street	5502	NO SUBDIVISION	3	1/0	2CDTC	1	1LEVEL	1950	1,026	1,026	1,026	\$98.44	\$104,000	\$101,000	121	
<b># LISTINGS:</b>			<b>1</b>																
			<b>Medians:</b>																
			<b>Minimums:</b>																
			<b>Maximums:</b>																
			<b>Averages:</b>																

Quick Statistics ( 1 Listing Total )				
	Min	Max	Average	Median
List Price	\$104,000	\$104,000	\$104,000	\$104,000
Sold Price	\$101,000	\$101,000	\$101,000	\$101,000

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**CMA 1 - Line**

Prepared By: Lejo Hammerson

Listings as of 09/19/16 at 10:25 am

Property Type is one of 'Residential', 'Residential/lease' Status is one of 'Act', 'ActC', 'Pend' Status Contractual Search Date is 09/19/2016 to 09/22/2006 Property Sub Type is Single  
 Farm' Trans Type is 'Sale' Latitude, Longitude is around 39.57, -86.47 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2010 to 12/31/2010

**Residential**

MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Levl	Yr Bt	SFOpt	SFMU	\$\$/SqFt	List Price	Sold Price	DOM
21036149	08/30/2010	9914 North JUDSON Drive	5502	SYCAMORE PARK	3	2/0	2C/ATC	1	1LEVL	1974	0	1,816	\$96.92	\$179,900	\$176,000	51
21020524	12/07/2010	495 South CHESTNUT Street	5502	NO SUBDIVISION	3	2/0	3C/DTC	2	1HALF	1970	0	2,498	\$60.05	\$165,000	\$150,000	236
2959497	09/14/2010	9808 North West Union Road	5502	MARTIN	4	1/0	2C/ATC	1	1LEVL	1970	0	1,720	\$50.58	\$85,000	\$87,000	233
21030993	07/15/2010	35 East MAIN Street	5502	CARTERS	3	2/0	1C/DTC	0	2LEVL	1920	374	1,523	\$27.51	\$27,000	\$41,900	9
<b># LISTINGS: 4</b>																
<b>Medians:</b>																
Min/nums: 3 2/0 1970 374 1,768 \$55.31 \$125,000 \$118,500 142																
Maximums: 3 1/0 1920 374 1,523 \$27.51 \$27,000 \$41,900 9																
Averages: 4 2/0 1974 374 2,498 \$96.92 \$179,900 \$176,000 236																
Averages: 3 2/0 1959 374 1,889 \$58.76 \$114,225 \$113,725 132																

Quick Statistics ( 4 Listings Total )						
	Min	Max	Average	Median		
List Price	\$27,000	\$179,900	\$114,225	\$125,000		
Sold Price	\$41,900	\$176,000	\$113,725	\$118,500		

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CMA 1 - Line

Prepared By: Lejo Harneson

Listings as of 09/19/16 at 10:26 am

Property Type is one of 'Residential', 'Residential-lease' Status is one of 'Act', 'ActC', 'Pend' Status is 'Sold' Status Contractual Search Date is 09/19/2016 to 09/22/2006 Property Sub Type is 'Single Fam' Trans Type is 'Sale' Latitude, Longitude is around 39.57, -86.47 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2011 to 12/31/2011

Residential

MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Levl	Yr-Blt	SFOpt	SFMU	\$/SqFt	List Price	Sold Price	DOM
21141683	10/28/2011	9944 North State Road 39	5502	NO SUBDIVISION	3	1/1	2CDTC	1	1LEVL	1960	0	1,300	\$103.27	\$140,000	\$134,250	17
21105160	10/03/2011	2168 West BUNKER HILL Rd	5502	NO SUBDIVISION	3	2/0	2CATC	1	1LEVL	1995	0	1,535	\$71.60	\$109,900	\$109,900	159
21142535	12/29/2011	270 East Main Street	5502	NO SUBDIVISION	3	1/0	2CDTC	1	1LEVL	1950	1,026	1,026	\$106.24	\$109,000	\$109,000	416
<b># LISTINGS: 3</b>																
<b>Medians:</b>																
3 1/0 1960 1,026 1,300 \$103.27 \$109,900 \$109,900 159																
<b>Minimums:</b>																
3 1/0 1950 1,026 1,026 \$71.60 \$109,000 \$109,000 17																
<b>Maximums:</b>																
3 2/1 1995 1,026 1,535 \$106.24 \$140,000 \$134,250 416																
<b>Averages:</b>																
3 1/0 1968 1,026 1,287 \$93.70 \$117,717 \$117,717 197																

Quick Statistics ( 3 Listings Total )

	Min	Max	Average	Median
List Price	\$109,000	\$140,000	\$119,633	\$109,900
Sold Price	\$109,000	\$134,250	\$117,717	\$109,900

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**CMA 1 - Line**

Prepared By: Lejo Harneson

Listings as of 09/19/16 at 10:27 am

Property Type is one of 'Residential', 'Residential/lease' Status is one of 'Act', 'ActC', 'Pend' Status is 'Sold' Status Contractual Search Date is 09/19/2016 to 09/22/2006 Property Sub Type is 'Single Farm' Trans Type is 'Sale' Latitude, Longitude is around 39.57, -86.47 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2012 to 12/31/2012

**Residential**

MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Levl	Yr-Blt	SFOpt	SFMU	\$/SqFt	List Price	Sold Price	DOM
21177945	08/03/2012	320 East MAIN Street	5502	NO SUBDIVISION	2	1/0	2CATC	0	1LEVL	1955	0	962	\$97.71	\$99,000	\$94,000	73
<b># LISTINGS:</b>	<b>1</b>									<b>Medians:</b>						
										<b>Minimums:</b>						
										<b>Maximums:</b>						
										<b>Averages:</b>						

Quick Statistics ( 1 Listing Total )						
	Min	Max	Average	Median		
List Price	\$99,000	\$99,000	\$99,000	\$99,000		
Sold Price	\$94,000	\$94,000	\$94,000	\$94,000		

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**CMA 1 - Line**

Prepared By: Lejo Hammeson

Listings as of 09/19/16 at 10:28 am

Property Type is one of 'Residential', 'Residential-lease' Status is one of 'Act', 'ActC', 'Pend' Status is 'Sold' Status Contractual Search Date is 09/19/2016 to 09/22/2006 Property Sub Type is 'Single Farm' Trans Type is 'Sale' Latitude, Longitude is around 39.57, -86.47 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2013 to 12/31/2013

**Residential**

MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Level	Yr Blt	SFOpt	SFMU	\$/SqFt	List Price	Sold Price	DOM
21245044	09/13/2013	9415 North S R 39	5502	ROGERS	3	1/1	2CDTC,	1	1LEVEL	1960	0	1,344	\$106.32	\$142,900	\$142,900	58
<b># LISTINGS:</b>	<b>1</b>	<b>Medians:</b>			<b>3</b>	<b>1/1</b>				<b>1960</b>		<b>1,344</b>	<b>\$106.32</b>	<b>\$142,900</b>	<b>\$142,900</b>	<b>58</b>
		<b>Minimums:</b>			<b>3</b>	<b>1/1</b>				<b>1960</b>		<b>1,344</b>	<b>\$106.32</b>	<b>\$142,900</b>	<b>\$142,900</b>	<b>58</b>
		<b>Maximums:</b>			<b>3</b>	<b>1/1</b>				<b>1960</b>		<b>1,344</b>	<b>\$106.32</b>	<b>\$142,900</b>	<b>\$142,900</b>	<b>58</b>
		<b>Averages:</b>			<b>3</b>	<b>1/1</b>				<b>1960</b>		<b>1,344</b>	<b>\$106.32</b>	<b>\$142,900</b>	<b>\$142,900</b>	<b>58</b>

Quick Statistics ( 1 Listing Total )					
	Min	Max	Average	Median	
List Price	\$142,900	\$142,900	\$142,900	\$142,900	
Sold Price	\$142,900	\$142,900	\$142,900	\$142,900	

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**CMA 1 - Line**

Prepared By: Lejo Harmonson

Listings as of 09/19/16 at 10:29 am

Property Type is one of 'Residential', 'ResidentialLease' Status is one of 'Act', 'AcC', 'Pend' Status is 'Sold' Status Contractual Search Date is 09/19/2016 to 09/22/2006 Property Sub Type is 'Single' Farm' Trans Type is 'Sale' Latitude, Longitude is around 39.57, -86.47 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2014 to 12/31/2014

**Residential**

MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Levl	Yr Blt	SFOpt	SFMU	\$/Sqft	List Price	Sold Price	DOM	
21279709	04/22/2014	35 East MAIN Street	5502	CARTERS	3	1/1	1	CDTC	1	2HALF	1920	374	1,523	\$95,21	\$149,900	\$145,000	36
<b># LISTINGS:</b>	<b>1</b>	<b>Medians:</b>			<b>3</b>	<b>1/1</b>				<b>1920</b>	<b>374</b>	<b>1,523</b>	<b>\$95,21</b>	<b>\$149,900</b>	<b>\$145,000</b>	<b>36</b>	
		<b>Minimums:</b>			<b>3</b>	<b>1/1</b>				<b>1920</b>	<b>374</b>	<b>1,523</b>	<b>\$95,21</b>	<b>\$149,900</b>	<b>\$145,000</b>	<b>36</b>	
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		<b>Averages:</b>			<b>3</b>	<b>1/1</b>				<b>1920</b>	<b>374</b>	<b>1,523</b>	<b>\$95,21</b>	<b>\$149,900</b>	<b>\$145,000</b>	<b>36</b>	

Quick Statistics ( 1 Listing Total )						
	Min	Max	Average	Median		
List Price	\$149,900	\$149,900	\$149,900	\$149,900		
Sold Price	\$145,000	\$145,000	\$145,000	\$145,000		

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This is a broker price opinion or comparative market analysis and should not be considered an appraisal. In making any decision that relies upon my work, you should know that I have not followed the guidelines for development of an appraisal or analysis contained in the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation.

**CMA 1 - Line**

Prepared By: Lejo Hammerson

Listings as of 09/19/16 at 10:34 am

Property Type is one of 'Residential', 'ResidentialLease' Status is one of 'Act', 'ActC', 'Pend', 'Sold' Property Sub Type is 'Single Fam' Trans Type is 'Sale' Latitude, Longitude is around 39.58, -86.46 Area is '5502 - Morgan - Monroe' Close Date is 01/01/2015 to 12/31/2015

**Residential**

MLS #	Sold Date	Address	Area	Subdivision	Bd	Bth	Gar	FP	Levl	Yr Blt	SFOpt	SFMU	\$/SqFt	List Price	Sold Price	DOM
21324941	06/04/2015	1411 West Antioch Lane	5502	NO SUBDIVISION	3	3/0	NONE	0	2LEVL	2002	0	2,912	\$56.63	\$164,900	\$164,900	182
<b># LISTINGS:</b>	<b>1</b>	<b>Medians:</b>			<b>3</b>	<b>3/0</b>				<b>2002</b>		<b>2,912</b>	<b>\$56.63</b>	<b>\$164,900</b>	<b>\$164,900</b>	<b>182</b>
		<b>Minimums:</b>			<b>3</b>	<b>3/0</b>				<b>2002</b>		<b>2,912</b>	<b>\$56.63</b>	<b>\$164,900</b>	<b>\$164,900</b>	<b>182</b>
		<b>Maximums:</b>			<b>3</b>	<b>3/0</b>				<b>2002</b>		<b>2,912</b>	<b>\$56.63</b>	<b>\$164,900</b>	<b>\$164,900</b>	<b>182</b>
		<b>Averages:</b>			<b>3</b>	<b>3/0</b>				<b>2002</b>		<b>2,912</b>	<b>\$56.63</b>	<b>\$164,900</b>	<b>\$164,900</b>	<b>182</b>

Quick Statistics ( 1 Listing Total )						
	Min	Max	Average	Median		
List Price	\$164,900	\$164,900	\$164,900	\$164,900		
Sold Price	\$164,900	\$164,900	\$164,900	\$164,900		

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This is a broker price opinion or comparative market analysis and should not be considered an appraisal. In making any decision that relies upon my work, you should know that I have not followed the guidelines for development of an appraisal or analysis contained in the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation.



March 13, 2020

UrsaNav, Inc.  
85 Rangeway Road, Building 3, Suite 110  
North Billerica, MA 01862

**RE: FCC NEPA Summary Report for:**

Aurora West – Reckinger Site  
40W015 Seavey Road  
Batavia, Kane County, IL 60150  
TCNS ID: **193600**

RESCOM Environmental Corp has completed a NEPA Summary Report for the above referenced property. Based on the information presented in this report, the proposed project will have no adverse effect upon any of the National Environmental Policy Act (NEPA) Special Interest Items referenced in 47 CFR Subpart 1, Chapter 1, Sections 1.1301-1.1319.

Thank you for the opportunity to provide this service and we look forward to working with you in the future. If you have any questions or comments, please call our office at (231) 409-2563.

Sincerely,

**RESCOM Environmental Corp**

A handwritten signature in black ink, appearing to read "Andrew Smith". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Andrew Smith  
Project Manager  
[andrew.smith@rescom.org](mailto:andrew.smith@rescom.org)

RESCOM File 19100090



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## NEPA/NHPA SCREENING CHECKLIST

<b>Project Type:</b> <input checked="" type="checkbox"/> New Antenna Facility <input type="checkbox"/> Modification of Existing Facility	<b>Site Type:</b> <input checked="" type="checkbox"/> FCC Tower Structure <input type="checkbox"/> Utility Structure <input type="checkbox"/> Other Non-Tower Structure	<b>Site ID:</b> Aurora West - Reckinger Site	<b>Location:</b> 40W015 Seavey Road Batavia, Kane County, IL 60150
--	--	---	--

**Will the facility be located in an officially designated wilderness area, per 47 CFR §1.1307(a)(1)?**

Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	<b>Consulting Agency To Contact:</b> NPS, USFWS & BLM <b>Comments:</b> See attached documentation
------------------------------	--	------------------------------	--

**Will the facility be located in a designated wilderness preserve, per 47 CFR §1.1307(a)(2)?**

Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	<b>Consulting Agency To Contact:</b> NPS, USFS & BLM <b>Comments:</b> See attached documentation
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**Will the facility affect listed or proposed threatened or endangered species or designated critical habitats; or jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats, as determined by the Secretary of the Interior pursuant to the Endangered Species Act of 1973, per 47 CFR §1.1307(a)(3)?**

Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	<b>Consulting Agency To Contact:</b> USFWS & State Equivalent <b>Comments:</b> See attached documentation
------------------------------	--	------------------------------	--

**Will the facility affect districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture, that are listed, or are eligible for listing in the National Register of Historic Places, per 47 CFR §1.1307(a)(4)?**

Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	<b>Consulting Agency To Contact:</b> SHPO, THPO & NHOS <b>Comments:</b> See attached documentation
------------------------------	--	------------------------------	---

**Will the facility affect Indian religious sites, per 47 CFR §1.1307(a)(5)?**

Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	<b>Consulting Agency To Contact:</b> THPO, NHOS & Bureau of Indian Affairs <b>Comments:</b> See attached documentation
------------------------------	--	------------------------------	---

**Will the facility be located in a floodplain, per 47 CFR §1.1307(a)(6)?**

Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	<b>Consulting Agency To Contact:</b> FEMA <b>Comments:</b> See attached documentation
------------------------------	--	------------------------------	--

**Will the facility involve a significant change in surface features, per 47 CFR §1.1307(a)(7)?**

Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	<b>Consulting Agency To Contact:</b> US Army Corps of Engineers <b>Comments:</b> See attached documentation
------------------------------	--	------------------------------	--

**Will the facility be equipped with high intensity white lights in a residential neighborhood, per 47 CFR §1.1307(a)(8)?**

Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	<b>Consulting Agency To Contact:</b> Not Applicable <b>Comments:</b> This category was not reviewed by RESCOM Environmental Corporation
------------------------------	--	------------------------------	--

**Facilities that may result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in 47 CFR §1.1307 (b).**

Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	<b>Consulting Agency To Contact:</b> Not Applicable <b>Comments:</b> This category was not reviewed by RESCOM Environmental Corporation
------------------------------	--	------------------------------	--

Preparer certifies that to the best of their knowledge the above information is accurate

Prepared By: Andrew Smith Company: RESCOM Environmental

(Print name): Andrew Smith Date: March 13, 2020



## NEPA SUMMARY REVIEW

### PROJECT OVERVIEW:

RESCOM Environmental completed a NEPA Summary for the above referenced project to determine potential affects to Special Interest Items 1-9 listed in 47 CFR Subpart 1, Chapter 1, Section 1.1307(a). This NEPA Impact Assessment was performed in consideration of 47 CFR Subpart 1, Chapter 1, Sections 1.1301-1.1319 and the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (NPAC). Ursa Nav proposes the construction of an antenna array telecommunications facility. Work includes the construction of two 184' guyed towers, one 30' monopole style tower, and a generator and shelter on a new concrete slab all within a fenced compound.

### REGULATORY SUMMARY:

Based on CFR 36, Part 800, Subpart B of the National Historic Preservation Act and the FCC's NPA, new construction projects are required to be submitted for Section 106 Review to State Historic Preservation Offices and interested Tribal Groups. Additionally, based on 47 CFR Subpart 1, Chapter 1, Section 1.1306 (Note 1), construction of new telecommunications facilities requires a review of impacts to the following Special Interest Items: wilderness areas, wildlife preserves, threatened and endangered species, designated floodplains, and changes to surface features.

### AREA OF POTENTIAL EFFECTS:

Based on the height of the tower and procedures outlined by the NPA, the Area of Potential Effects (APE) for indirect visual effects is a 0.5-mile radius from the tower center. The Visual APE is largely buffered by agricultural and residential development. The APE for direct effects is limited to the new tower footprint and the limited access and utilities routed to the new tower.

### HISTORIC RESEARCH:

State Historic Preservation Office records were reviewed to determine if any listed or eligible historic resources exist within the APE. Additionally, RESCOM reviewed the National Register of Historic Places (NRHP) online database and Google Earth layer to determine if any listed historic resources exist within the APE. RESCOM identified no historic resources within the project APEs that required SHPO evaluation. Historic resource information and photographs are included within the SHPO submission in Attachment A.

### SITE RECONNAISSANCE:

RESCOM Environmental completed a site visit to photograph the subject property, adjacent properties, and any present historic resources within the indirect visual APE. An archaeological survey was conducted as ground disturbing activities are associated with the proposed project and archaeological clearance was recommended (See Attachment A).

### SHPO CONSULTATION:

RESCOM consulted with the Illinois State Historic Preservation Office's (SHPO) to conduct a Section 106 Review for the proposed project. RESCOM provided a cultural resources evaluation report for Section 106 Review to the SHPO on January 10, 2020, requesting concurrence of the "**no historic properties**" determination. The Illinois SHPO did not respond, and the filing expired on February 10, 2020. The NPA states that when a SHPO fails to comment on a recommendation of no historic properties the proponent can assume concurrence of the determination of "**no historic properties.**" Therefore, as of February 10, 2020, requirements with respect to SHPO consultation are deemed complete.

The SHPO consultation process allows additional consulting parties to comment on impacts to historic resources from federal undertakings. RESCOM consulted with the appropriate jurisdiction officials as well as a local historic preservation entity to seek comment on effects from the undertaking. Letters were mailed to these groups on January 10, 2020, outlining the proposed project and inviting them to comment on the potential for the proposed project to effect historic resources. RESCOM contacted the Kane County Chronicle and posted a "Public Participation" ad in the paper on December 12, 2019. The proposed project was described in detail and "questions, comments, and correspondence" were solicited



## NEPA SUMMARY REVIEW

from the public regarding potential effect to historic properties. RESCOM did not receive any response from the public concerning historic properties for this project.

Per the NPA, the applicant must allow a period of 30 days for the public and all consulting parties to provide comment on the proposed project. All requirements with respect to SHPO consultation are complete. See Attachment A for full SHPO details.

### **TRIBAL CONSULTATION:**

RESCOM utilized the Tower Construction Notification System (TCNS) maintained by the Federal Communications Commission (FCC) to identify any tribal entities with interest in the area of the proposed project. The FCC responded, assigning the project with TCNS number 193600. All tribal groups have either responded indicating no concern with the proposed project, provided an exclusion via TCNS, or been closed out by the FCC. Therefore, all requirements with respect to THPO consultation are complete. All Tribal consultation documentation is in Attachment B.

*All Tribes do request immediate notification should human remains or objects under NAGPRA become uncovered during construction.*

### **WILDERNESS AREAS & WILDLIFE PRESERVES:**

RESCOM reviewed maps published by the National Forest Service, the US Fish and Wildlife Service (USFWS), and Wilderness.net, and found no Wildlife Preserves, Wilderness Areas, National Grasslands, National Forests, or National Scenic Trails are located at or near the subject property. Additionally, no Wildlife Preserves, Wilderness Areas, National Grasslands, National Forests, or National Scenic Trails were noted during the site visit (See Attachment C).

### **THREATENED & ENDANGERED SPECIES & CRITICAL HABITATS:**

An informal biological assessment was conducted at the subject property to determine if habitats necessary to support listed species or critical habitats exist at the subject property and in the immediate vicinity. The informal biological assessment is based on visual observations of on-site conditions and general habitats as compared to data acquired from the U.S. Fish and Wildlife Service (USFWS).

Based on information obtained from the USFWS, habitats necessary to support federally listed threatened and endangered species do not occur at or in the vicinity of the subject property. Therefore, the proposed project will not affect any listed threatened or endangered species. In addition, there are no designated critical habitats at or in the vicinity of the subject property (See Attachment C).

### **DESIGNATED FLOODPLAINS:**

RESCOM reviewed flood insurance maps published by the Federal Emergency Management Agency. The subject property is not within the boundary of a designated floodplain (See Attachment C).

### **CHANGES TO SURFACE FEATURES:**

RESCOM reviewed a digitized National Wetlands Inventory (NWI) map compiled with data maintained by the USFWS. Based on a review of the NWI map, the proposed project will not fall within a designated wetland. Furthermore, the scope of project does not call for wetland fill, water diversion, or deforestation. Therefore, the proposed project will not cause a significant change in surface features (See Attachment C).



## NEPA SUMMARY REVIEW

### CONCLUSIONS:

Based on information provided by the applicant, information acquired by RESCOM Environmental, and the outcome of the SHPO, THPO, and Public consultation processes, RESCOM has determined the proposed project will not adversely affect any of the Special Interest Items 1-9 listed in 47 CFR Subpart 1, Chapter 1, Sections 1.1301-1.1319 and the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (NPAC).



---

Andrew Smith - Project Manager

March 13, 2020

---

Date

### Attachments:

- A. State Historic Preservation Office Consultations
- B. Native American Tribal Consultations
- C. Informal Biological Assessment & Maps





November 13, 2019

UrsaNav, Inc.  
85 Rangeway Road  
Bldg. 3; Suite 110  
N. Billerica, MA 01862

Re: Phase I Environmental Site Assessment  
Aurora West- Reckinger Site  
39W840 Seavey Road  
Batavia, Kane County, Illinois

RESCOM Environmental Corp. has completed a Phase I Environmental Site Assessment for the above referenced property. This assessment was performed in conformance with the American Society for Testing and Materials (ASTM) Standard Practice E 1527.

This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property. It is the opinion of the Environmental Professional that no further inquiry is required.

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

This Phase I Environmental Site Assessment has been prepared for the exclusive use of UrsaNav, Inc. Thank you for the opportunity to provide this service and we look forward to working with you in the future. If you have any questions or comments, please call our office at (231) 409-2563.

Sincerely,

***RESCOM Environmental Corp***

A handwritten signature in black ink that reads "Susan Blackmore".

Susan Blackmore, LPG  
Environmental Professional

A handwritten signature in black ink that reads "Joseph P. Lee".

Joseph P. Lee  
Environmental Professional

RESCOM File: 19100090



**ASTM E 1527  
PHASE I ENVIRONMENTAL SITE ASSESSMENT**

AURORA WEST- RECKINGER SITE  
39W840 SEAVEY ROAD  
BATAVIA, KANE COUNTY, ILLINOIS

Prepared for:

UrsaNav, Inc.  
85 Rangeway Road  
Bldg. 3; Suite 110  
N. Billerica, MA 01862

November 13, 2019

Prepared by:

**RESCOM Environmental Corp**  
PO Box 361  
Petoskey, Michigan 49770  
(231) 409-2563  
RESCOM ID: 19100090

*Susan Blackmore*

---

**Prepared by:** Susan Blackmore, LPG  
Environmental Professional

A handwritten signature in black ink, appearing to read "Joseph P. Lee". The signature is written in a cursive style with a large, prominent "J" and "L".

---

**Reviewed by:** Joseph P. Lee  
Environmental Professional

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Appendix A – Property Location Map and Aerial Site Plan

Appendix B – Historical Topographic Maps and Aerial Photographs

Appendix C – ERIS Database Search Report

Appendix D – Site Photographs

Appendix E – Resumes of Environmental Professionals



## **INTRODUCTION**

### **Executive Summary**

The report of findings for the property located at the Aurora West- Rickinger Site, 39W840 Seavey Road in Batavia, Kane County, Illinois, are summarized as follows:

#### **Findings**

1. The subject property consists of a planted corn field south of Seavey Road with an access easement to the east and north and measures approximately 8-acres. UrsaNav, Inc proposes to construct a guyed style telecommunication tower array, a fenced compound area, an equipment shelter and a 12' wide gravel access drive from Seavey Road.
2. RESCOM Environmental Corp. (RESCOM) personnel completed a site visit on October 22, 2019. No evidence of underground or aboveground storage tanks, abandoned drums, electrical transformers that may contain polychlorinated biphenyls (PCBs), hazardous substance releases or other visible signs of recognized environmental conditions (RECs) were noted on the subject property at the time of the site visit.
3. The surrounding property uses are as follows: farmland to the north followed by a residence and Seavey Road; farmland with a pond to the east; farmland to the south followed by a wooded area; and farmland to the west followed by Lake Run.
4. Based on historical information collected by RESCOM, the subject property appears to have been farmland since at least 1964. No other property uses, or development of the subject property was identified through the historic research.
5. RESCOM personnel contacted Mr. Joseph Reckinger, property representative, regarding the subject property on November 12, 2019. Mr. Reckinger was not aware of any environmental concerns at or near the subject property. Mr. Reckinger stated that the subject property use currently is farmland and he was not aware of any prior uses other than for agriculture (row crops). Mr. Reckinger has owned the property for at least 50 years.
6. A regulatory review of available federal, state, local and tribal environmental databases was completed to determine if the subject property or any surrounding properties, within guidelines established by the American Society for Testing and Materials (ASTM), are listed as environmentally contaminated sites. The regulatory review indicates that the subject property parent parcel is not listed as a site of environmental concern. No surrounding properties was identified within ASTM search criteria.

#### **Recommendations**

This assessment has revealed no evidence of recognized environmental conditions in connection with the subject property. It is the opinion of the Environmental Professional that no further inquiry is required.



**ARCHAEOLOGICAL RECORDS CHECK AND PHASE IA  
ARCHAEOLOGICAL RECONNAISSANCE OF APPROXIMATELY 8-ACRES  
FOR AURORA WEST - RECKINGER SITE IN KANE COUNTY, ILLINOIS.**

November 5, 2019

**PREPARED BY:**

RESCOM Environmental Corp  
P.O. Box 361  
Petoskey, Michigan 49770  
(231) 409-2563

RESCOM ID: 19100090

A handwritten signature in dark ink, appearing to read "Andrew M. Smith". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

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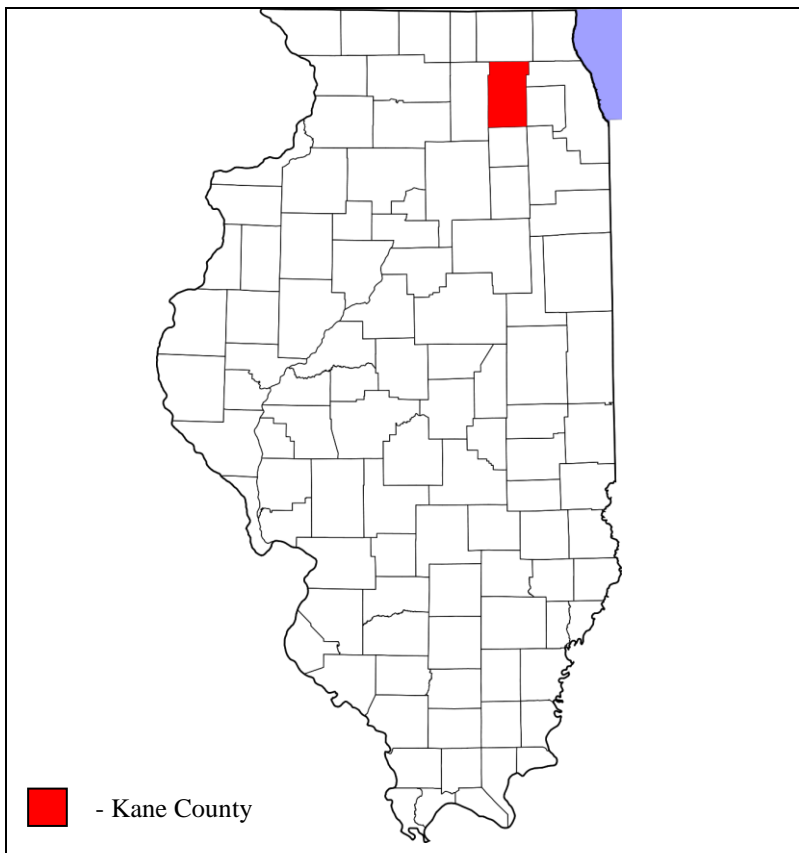
Andrew M. Smith, M.A.  
Principal Investigator

## INTRODUCTION

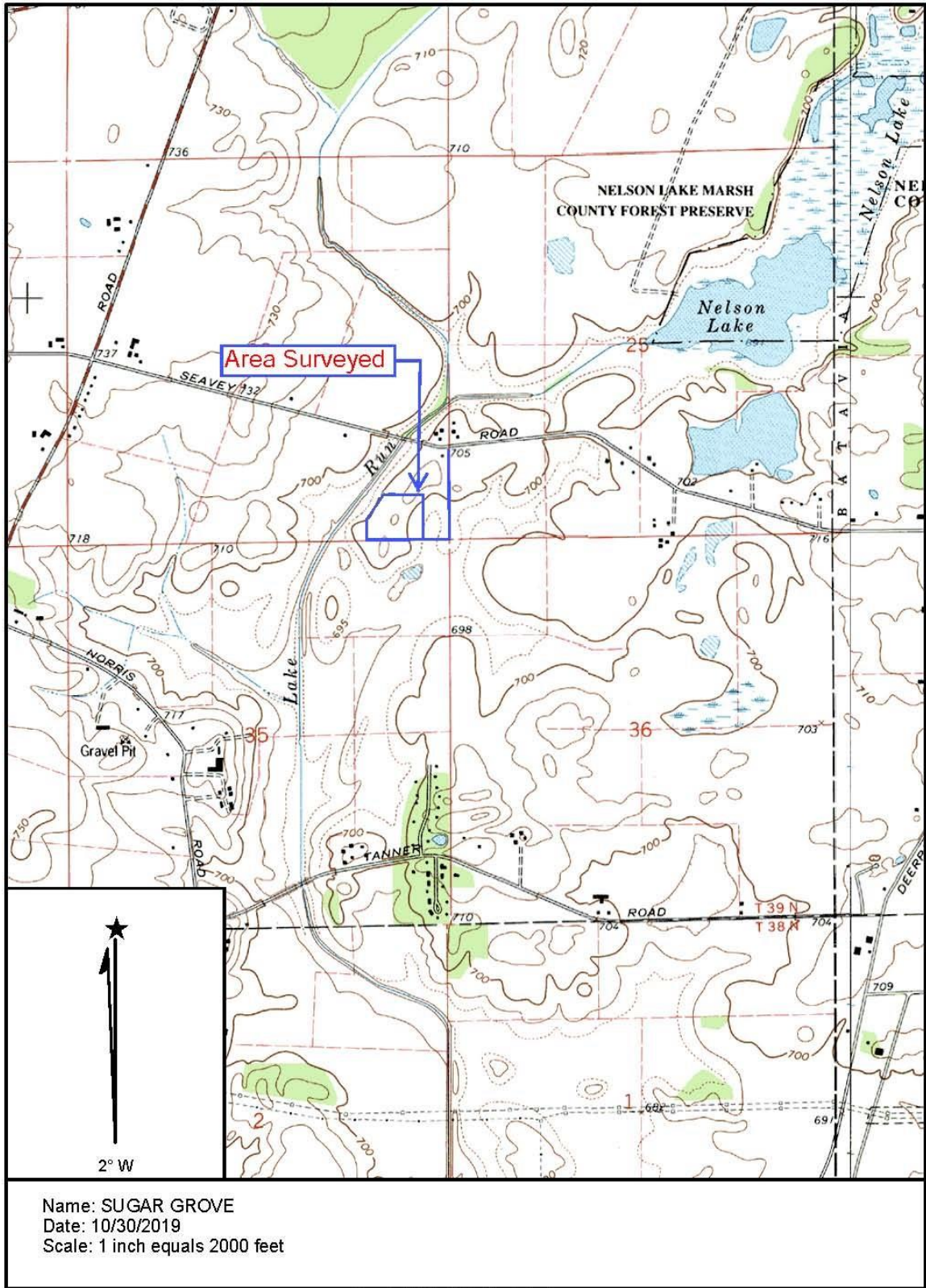
In response to a request, RESCOM Environmental Corp., has completed a Phase Ia archaeological reconnaissance and records check for a proposed tower site in Kane County, Illinois (Figure 1). The project area is located at 41°49'31.0"N 88°23'52.0"W in Blackberry Township in the SE¼ of the SE¼ of Section 26, Township 39 North, Range 7 East, as seen on the Sugar Grove, IL, USGS 7.5' topographical quadrangle (Figure 2). The project area consists of a planted corn field south of Seavey Rd with an access easement to the east and north and measures approximately 8-acres (3.2 hectares). The proposed construction is to be contained within a 5.41-acres fenced compound however, an additional buffer around the compound was also investigated at the time of field work (Figures 3 & 4).

An archaeological records check was conducted by RESCOM Environmental Corp. on October 22, 2019 and determined that no archaeological sites have been recorded within the project area. Fieldwork was conducted on October 24, 2019 by Andrew Smith, M.A., Ball State University 2010, and Jamie Cochran-Smith M.A., Ball State University 2011, and required 4 hours.

One small lithic scatter site (11K1437) and one isolated find (11K1438) were discovered during the current survey. This report details the results of the records check and Phase Ia field reconnaissance and presents the conclusions and recommendations of RESCOM concerning any additional archaeological investigations.



**Figure 1.** Location of Kane County within Illinois.



**Figure 2.** Location of the project area on the Sugar Grove, IL 7.5' USGS topographic quadrangle.



## NATURAL SETTING

The project area is located in the northeastern part of the state and lies within the Wheaton Morainal Country physiographic zone within the Great Lakes Section (Leighton et al. 1948). The general description of the zone is:

“characterized by glacial morainic topography (mostly of the Cary substage), which is more complex in detail and has more lakes and swamps than do the open stretches of the adjoining Bloomington Ridged Plain. It includes a series of broad parallel morainic ridges, which encircle Lake Michigan. In detail the topography is complicated by a variety of elongated hills, mounds, basins, sags, and valleys. The area is dominated by the Valparaiso moraine, which has the highest elevation and, except where interrupted by valleys, is continuous from Wisconsin to Indiana. With the exception of the Tinley moraine, all other moraines are discontinuous geographic features — those in front of the Valparaiso moraine are overridden by it and those behind are either interrupted by the Chicago Lake Plain or merge with ground moraines. Karnes, kame terraces, kettles, basins, and eskers, although not abundant, occur more commonly than elsewhere in the state. Fox Lake and associated lakes are conspicuous water bodies. Small basins of extinct lakes and ponds underlain by stratified silts and clays are found throughout the area.” (Leighton et al. 1948).

The topography has been modified throughout the last 12,000 years by rivers and streams eroding through the till and contains complex interlobate landscapes. The bedrock geology of the project area is composed primarily of Silurian rocks (Kolata 2005).

Soils within the project area include Varna silt loam, 2 to 6 percent slopes (eroded in higher slopes) and Drummer silty clay loam, 0 to 2 percent slopes (Web Soil Survey accessed October 23, 2019). The Varna Series consists of very deep and moderately well drained soils found on convex slopes of the relatively undissected till plains of Wisconsinan Age (USDA 2008). The Drummer Series consists of very deep, poorly drained soils formed in loess and located on nearly level or depressions in outwash plains, stream terraces, and till plains of Wisconsinan Age (USDA 2015).

Prior to Euroamerican settlement the Kane Country was primarily forested with interspersed wetlands. Many aquatic as well as mammalian species would have been available throughout the prehistoric period. These species would have been representative of the eastern mixed woodland fauna and could have included any of the following: porcupine, black bear, fisher, eastern spotted skunk, river otter, wapiti (elk), bison, opossum, eastern cottontail, woodchuck, gray squirrel, fox squirrel, southern flying squirrel, beaver, raccoon, striped skunk and white-tailed deer.

Given the environmental conditions of the project area and surrounding region, there is the potential for the project area to contain previously unrecognized archaeological sites. The following sections describe previous research conducted in and near the project area and provide a general background of regional Illinois prehistory.

## CULTURAL SETTING

Illinois' history is long and complex, dating at least to 12,000 years ago and includes a wide variety of societies and cultures. Many parts of Illinois' history are unknown due to limited historic documentation, or in the case of prehistoric cultures, the limited archaeological record. The following is a table showing the archaeological periods commonly used to describe cultures and cultural changes in the Midwest in general and in northern Illinois in particular.

### Regional Prehistory

Period	Date Ranges (All B.P.)	Diagnostic Attributes
Paleoindian	12,000-9,000	Fluted points, large game hunting, small band size, high mobility, use of high quality exotic cherts (see Fagan 2000, Faulkner 1973, Fitting 1965, Justice 1987, Ritchie and Funk 1973, White 2005).
Early Archaic	9,000-8,000	Glacial retreat, bevel edged points, bifurcate points, broad spectrum hunting and gathering, probable larger populations than preceding period (see Anderson and Hanson 1988, Fagan 1987, Justice 1987).
Middle Archaic	8,000-5,000	Hypsithermal maximum, side-notched points, large settlements along waterways, continued broad spectrum hunting and gathering including more nut utilization (see Dincauze and Mulholland 1977, Fagan 1987, Simons et al. 1984).
Late Archaic	5,000-3,500	Large diversity of lithic artifact types from large spear points to small darts, large trade networks develop, beginning of elaborate burial practices, large amounts of fire-cracked rock and highly visible surface sites (see Fagan 1987, Lovis and Robertson 1989, Prufer and Pedde 2001, Winters 1968, Yarnell 1988).
Early Woodland	3,500-2,100	First pottery use, large contracting stemmed points, increased reliance on domesticated plants, greater ceremonial exchange, and continuation of elaborate burial practices (see Dragoo 1976, Griffin 1978, Yarnell 1964).
Middle Woodland	2,100-1,600	Large corner notched points, expanded stemmed points, large trade networks extending to the Rocky Mountains and the Gulf of Mexico, increased reliance on domesticated plants, permanent villages, heavily decorated ceramics (see Fagan 1987, Justice 1987, Ottesen 1985, Smart and Ford 1983).
Late Woodland	1,600-1,000	Localized resource procurement, breakdown of large trade networks, intrusive burial practices, maize introduction, small triangular points probably indicative of the first bow and arrow, collared ceramics (see Baerreis and Freeman 1958, Fagan 1987, Hall 1987, Justice 1987).
Mississippian	1,000-500	Maize dependence and large hierarchical permanent settlements. Pyramid mounds and shell-tempered pottery common.
Protohistoric	500-	Social instability, widespread population movements, similar subsistence strategies to the Late Woodland (see Brown and Sasso 2001, Brose et al. 2000, Emerson 1999).

## Regional History

The first Europeans to explore Illinois were Jacques Marquette and Louis Jolliet in 1673 near the Grand Village of Kaskaskia (Jensen 2001). Later settlement included French fur trading posts and strategic forts. In 1763 control of Illinois was ceded by the French to the British (Jensen 2001). After the American Revolution Illinois was ceded to the American government in the Treaty of Paris (Jensen 2001). Illinois gained statehood in 1818 and Kane County was established in 1836. The City of Geneva serves as county seat.

## PREVIOUS INVESTIGATIONS

An archaeological records check conducted via the Illinois SHPO online database (HARGIS) determined no previously recorded archaeological sites overlap the project area. HARGIS shows twenty-six archaeological sites within a mile of the project location (Tables 1). No resources listed in the National Register of Historic Places are present within a mile of the project.

**Table 1.** Sites within a mile of the project area.

Site	Type	Temporal Affiliation	NRHP Determination
11K0654	Lithic Scatter	Prehistoric - Unknown	Not Eligible
11K0655	Lithic Scatter	Prehistoric - Unknown	Not Eligible
11K0656	Habitation/House – Standing Structure	Historic – Early Industrial (1871-1900), Urban Industrial (1901-1945), Post-War (1946-Present)	Not Eligible
11K0657	Habitation/Farmstead – Standing Structure	Historic – Urban Industrial (1901-1945)	Not Eligible
11K0659	Habitation/Farmstead – Destroyed	Historic – Early Industrial (1871-1900), Urban Industrial (1901-1945)	Not Eligible
11K0660	Lithic Scatter	Prehistoric - Unknown	Not Eligible
11K0781	Habitation/Commercial – Standing Structure	Historic – Early Industrial (1871-1900), Urban Industrial (1901-1945), Post-War (1946-Present)	Not Eligible
11K1015	Lithic Scatter	Prehistoric – Early Archaic	Undetermined / Further Work Recommended
11K1016	Lithic Scatter	Prehistoric - Unknown	Not Eligible
11K1017	Lithic Scatter	Prehistoric - Unknown	Not Eligible
11K1018	Lithic Scatter	Prehistoric – Middle Archaic	Not Eligible
11K1019	Isolated Find – Kirk Corner-Notched	Prehistoric – Early Archaic	Not Eligible
11K1020	Lithic Scatter	Prehistoric – Early Archaic	Not Eligible
11K1021	Lithic Scatter	Prehistoric - Unknown	Not Eligible



<b>11K1022</b>	Lithic Scatter	Prehistoric – Paleoindian / Early Archaic	Undetermined / Further Work Recommended
<b>11K1023</b>	Isolated Find – Biface Fragment	Prehistoric - Unknown	Not Eligible
<b>11K1024</b>	Isolated Find – Kirk Corner-Notched	Prehistoric – Early Archaic	Not Eligible
<b>11K1025</b>	Lithic Scatter	Prehistoric - Unknown	Undetermined / Further Work Recommended
<b>11K1144</b>	Lithic Scatter	Prehistoric - Unknown	Not Eligible
<b>11K1145</b>	Lithic Scatter	Prehistoric - Unknown	Undetermined / Further Work Recommended
<b>11K1146</b>	Lithic Scatter	Prehistoric – Middle Archaic	Undetermined / Further Work Recommended
<b>11K1148</b>	Lithic Scatter	Prehistoric - Unknown	Not Eligible
<b>11K1149</b>	Lithic Scatter	Prehistoric - Unknown	Not Eligible
<b>11K1192</b>	Lithic Scatter	Prehistoric - Unknown	Not Eligible
<b>11K1383</b>	Information Not Available	Information Not Available	Information Not Available
<b>11K1390</b>	Information Not Available	Information Not Available	Information Not Available

## **METHODS**

Fieldwork was conducted on October 24, 2019 by Andrew Smith and Jamie Cochran-Smith. The project area consisted of an 8-acre planted corn field with surface visibility ranging between 60-80% (Figure 5). A pedestrian survey at 10-meter intervals was conducted throughout the entire project area in order to identify any cultural materials or possible prior disturbance. Upon recovering artifacts during the pedestrian survey, pedestrian intervals were reduced to 1-meter and artifacts identified were collected and their location documented to determine site boundaries. Surface visibility in the proposed access easement was limited on the east side of the project area, however, shovel testing was not necessary due to high levels of soil erosion (Figure 6). The access easement was visually examined and in addition to erosion, evidence of previous disturbance due to heavy vehicle traffic is present (see Figure 6).

## **LABORATORY METHODS**

Artifacts collected during the project were washed in water and dried at room temperature. Artifacts were identified and cataloged according to a hierarchical key and were counted and weighed. Artifacts were cataloged and photographed by RESCOM personnel and accession and catalog numbers were applied. Upon completion of the project, all project documentation and collected materials will be curated at the Illinois State Museum under the accession number of 19.2.



**Figure 5.** Photograph showing surface visibility within the project area.



**Figure 6.** Photograph of access easement; note previously disturbed soils.

## RESULTS

Two sites (11K1437 & 11K1438) were recorded during the current survey. Site 11K1437 is a 5-m by 5-m lithic scatter within a plowed area in fairly eroded soils. A total of four artifacts were recovered from 11K1437 all consisting of chipped stone chert flakes with no diagnostic features (Table 2, Figures 7 & 8). Due to the lack of diagnostic artifacts recovered from 11K1437, a particular temporal affiliation could not be established.

Site 11K1438 is an isolated find within a plowed area in fairly eroded soils and consists of a single chipped stone chert flake (Table 3, Figures 9 & 10). No diagnostic artifacts were recovered from 11K1438 and a temporal affiliation could be established.

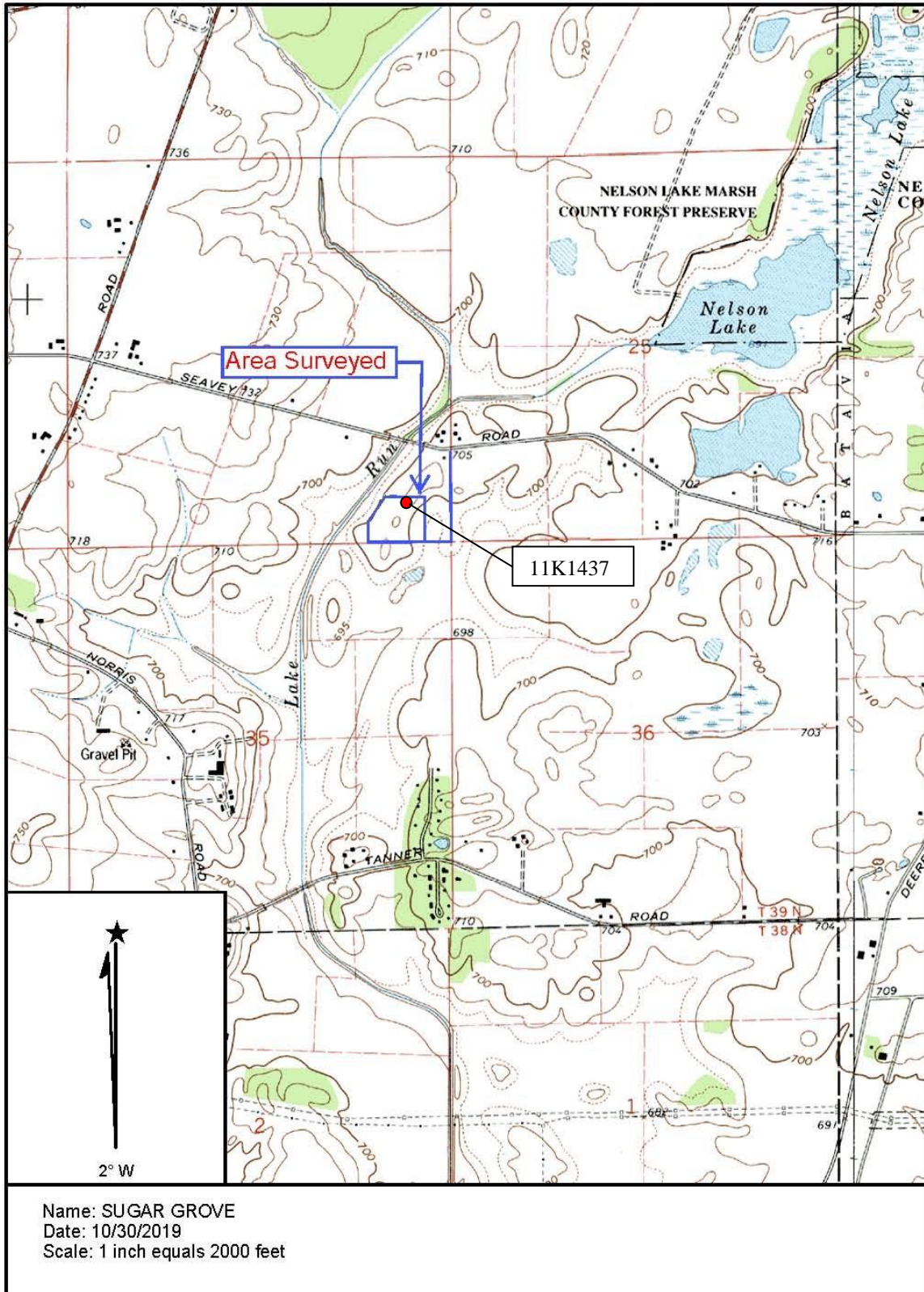
Both sites recorded during the survey do not appear to have the potential to provide information important in prehistory and do not appear to qualify for the National Register of Historic Places. Additionally, isolated finds are not considered eligible for listing on the National Register of Historic Places. Based on the very ephemeral seeming nature of the recorded sites, no further archaeological work is recommended.

**Table 2.** Artifacts recovered from site 11K1437.

Accession No	Artifact	No	Weight (g)
19.2.1437.1	Chipped Stone Chert Debitage	4	5



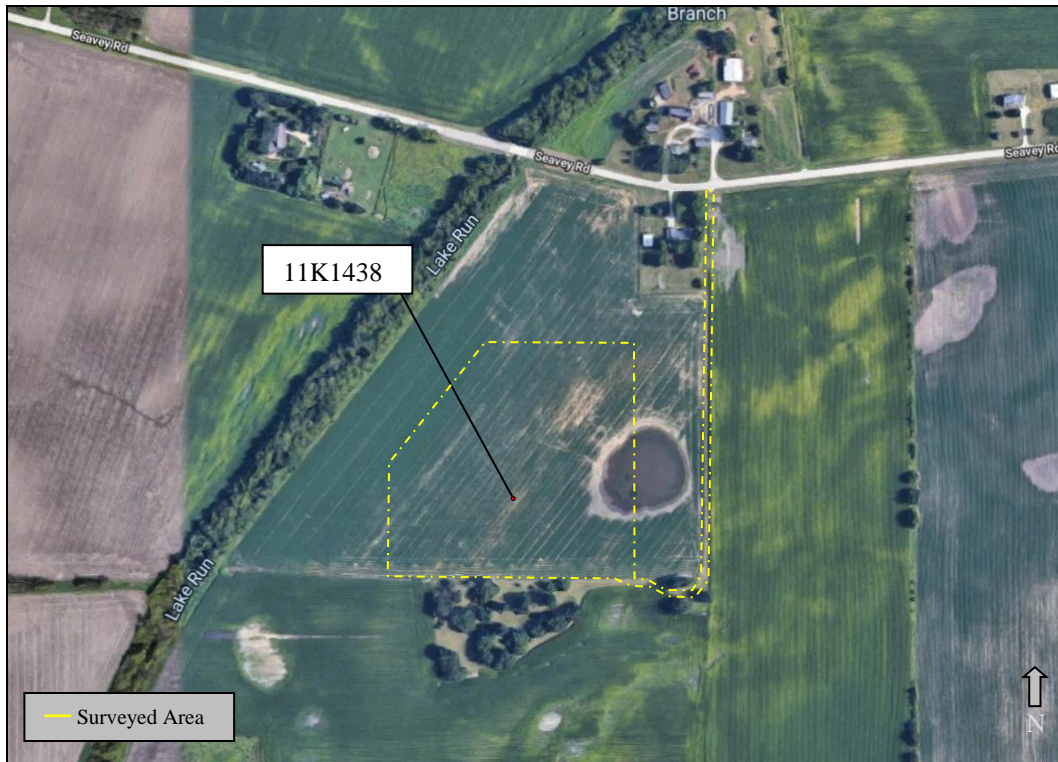
**Figure 7.** Site 11K1437 within the surveyed area.



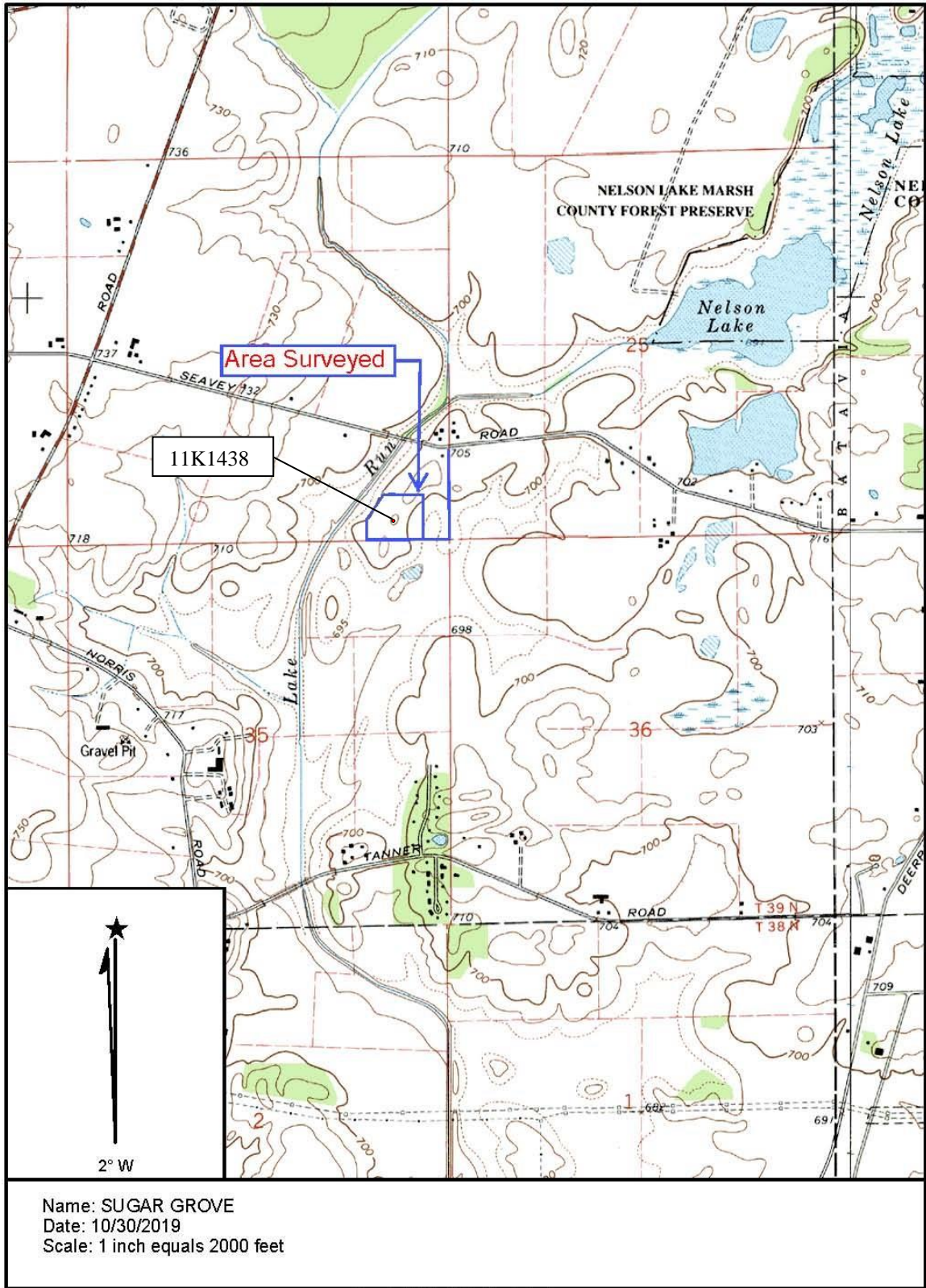
**Figure 8.** Location of 11K1437 as seen on the Sugar Grove, IL 7.5' USGS topographic quadrangle.

**Table 3.** Artifacts recovered from site 11K1438.

<b>Accession No</b>	<b>Artifact</b>			<b>No</b>	<b>Weight (g)</b>
19.2.1438.1	Chipped Stone	Chert	Debitage	1	1



**Figure 9.** Site 11K1438 within the surveyed area.



**Figure 10.** Location of 11K1438 as seen on the Sugar Grove, IL 7.5' USGS topographic quadrangle.

## CONCLUSIONS AND RECOMMENDATIONS

In response to a request, RESCOM Environmental Corp., has completed a Phase Ia archaeological reconnaissance and records check for a proposed tower site in Kane County, Illinois. The project area is located at 41°49'31.0"N 88°23'52.0"W in Blackberry Township in the SE¼ of the SE¼ of Section 26, Township 39 North, Range 7 East, as seen on the Sugar Grove, IL, USGS 7.5' topographical quadrangle. The project area consists of a planted corn field south of Seavey Rd with an access easement to the east and north and measures approximately 8-acres (3.2 hectares). The proposed construction is to be contained within a 5.41-acres fenced compound however, an additional buffer around the compound was also investigated at the time of field work.

Two sites (11K1437 & 11K1438) were discovered during the current survey. Site 11K1437 consists of a small lithic scatter with no diagnostic artifacts and does not appear to provide information important in prehistory. Additionally, site 11K1437 is outside of the proposed compound and is not expected to be affected as a result of the current project. Due to the ephemeral nature of the site and its location in relation to the proposed work no further work is recommended. Site 11K1438 is an isolated find which are not considered eligible for listing on the National Register of Historic Places. It is our recommendation that there are no archaeological sites eligible for listing on the National Register of Historic Places within the project area and we recommend archaeological clearance.

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May 27, 2020

UrsaNav, Inc.  
85 Rangeway Road, Building 3, Suite 110  
North Billerica, MA 01862

**RE: Environmental Compliance Efforts:**  
Aurora West  
1 mile east of intersection of Seavey Rd. & Bliss Rd.  
Batavia, Kane County, IL 60510

Dear UrsaNav Inc.,

RESCOM Environmental has reviewed construction drawings for the above listed project. The plans call for removal of soil from the perimeter of an existing wetland for use in raising the elevation of a proposed roadbed. The soil being removed is minimal, and will, in fact, increase the size of the existing Freshwater Emergent Wetland. Because the construction will occur in an area without the potential for runoff of sediments into nearby streams and no modification of any streams are required the United States Army Corp. of Engineers and the United States Fish and Wildlife Service delegate the authority of permits to the local level. No additional consultation at the federal level is required for this undertaking.

If you have any questions or would like to provide comments on the proposed project, please feel free to contact me directly at 260-385-6999 or by email.

Sincerely,

**RESCOM Environmental Corp**

A handwritten signature in black ink, appearing to read "Andrew Smith", written over a horizontal line.

Andrew Smith  
Project Manager  
[andrew.smith@rescom.org](mailto:andrew.smith@rescom.org)



**SITE NAME:** AURORA WEST - RECKINGER

**SITE ADDRESS:** 40W015 SEAVEY ROAD  
BATAVIA, IL 60510

**JURISDICTION:** KANE COUNTY

**SITE TYPE:** RAW LAND



85 RANGWAY RD #110  
NORTH BILLERICA, MA 01862  
(781) 538-5299

**FULLERTON**  
ENGINEERING · DESIGN

1100 E. WOODFIELD ROAD, SUITE 500  
SCHAUMBURG, ILLINOIS 60173  
TEL: 847-908-8400  
DESIGN FIRM NO. 184.008202-0006  
www.FullertonEngineering.com

**PROJECT INFORMATION**

**SITE NAME:** AURORA WEST – RECKINGER

**SITE NUMBER:** N/A

**SITE ADDRESS:** 40W015 SEAVEY ROAD  
BATAVIA, IL 60510

**SITE TYPE:** RAW LAND

**JURISDICTION:** KANE COUNTY  
**APN:** 11-26-400-009  
**ZONING CLASSIFICATION:** NA  
**OCCUPANCY TYPE:** U-UTILITY  
**CONSTRUCTION TYPE:** II-B

**APPLICANT:** URSANAV, INC  
**ADDRESS:** 85 RANGWAY RD #110  
NORTH BILLERICA, MA 01862  
**CONTACT:** CHARLES SCHUE  
**PHONE:** (781) 538-5299  
**EMAIL:** cschue@ursanav.com

**SITE COORDINATES:**  
**LATITUDE:** 41.824289°  
**LONGITUDE:** -88.396743°  
**GROUND ELEV. (A.M.S.L.):** 698'

**PROPERTY OWNER:** COFFEY M C & CF & RECKINGER JP & DL  
**ADDRESS:** 39W840 SEAVEY RD  
BATAVIA, IL 60510

**PROPOSED USE:** TELECOMMUNICATIONS FACILITY

**NOTE:** DRAWING SCALES ARE FOR 11"x17" SHEETS UNLESS OTHERWISE NOTED

**SCOPE OF WORK**

THE SCOPE OF WORK CONSISTS OF:

- NEW FENCED COMPOUNDS INSIDE NEW 8 ACRES LEASE AREA
- (3) NEW ARRAY ANTENNAS
- (1) NEW EQUIPMENT SHELTER
- (1) NEW GENERATOR SHELTER
- NEW GRAVEL ROAD

CONTRACTOR SHALL FURNISH ALL MATERIAL WITH THE EXCEPTION OF URSANAV SUPPLIED MATERIAL.

ALL MATERIAL SHALL BE INSTALLED BY THE CONTRACTOR, UNLESS STATED OTHERWISE.

**APPLICABLE BUILDING CODES AND STANDARDS**

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES.

**BUILDING CODE:** 2012 INTERNATIONAL BUILDING CODE AS AMENDED

**ELECTRICAL CODE:** 2011 NATIONAL ELECTRICAL CODE

- FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.
- ADA ACCESS REQUIREMENTS ARE NOT REQUIRED.
- THIS FACILITY DOES NOT REQUIRE POTABLE WATER AND WILL NOT PRODUCE ANY SEWAGE

REV	DATE	DESCRIPTION	BY
1	3/27/20	90% REVIEW	LA
0	4/22/20	PERMITTING	LA
1	5/6/20	REVISION	LA
2	6/2/20	FINAL	BL

I HEREBY CERTIFY THAT THESE DRAWINGS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONTROL, AND TO THE BEST OF MY KNOWLEDGE AND BELIEF COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE CODES.



**SITE LOCATION MAP**



**DRAWING INDEX**

T-1	TITLE SHEET
GN-1	GENERAL NOTES
1 OF 1	SURVEY PLAT
2 OF 2	SURVEY PLAT
C-1	OVERALL SITE PLAN
C-2	ENLARGED SITE PLAN
C-3	COMPOUND PLAN
C-4	SITE ELEVATION
C-5	OVERALL SITE GRADING PLAN
C-6 ~ C-6F	PARTIAL SITE GRADING PLAN
C-6G ~ C-6H	GRADING DETAILS
C-6I	EROSION CONTROL DETAILS
C-6J	WATERSHED PLAN
C-6K	CALCULATIONS
C-7	SITE DETAILS
C-8 & C-9	FENCE DETAILS
C-10 & C-11	SITE DETAILS
E-1	UTILITY PLAN
E-2	ENLARGED UTILITY PLAN AND DETAILS
E-3	CT CABINET SPECIFICATIONS
E-4 & E-5	PULL BOX SPECIFICATIONS

SITE NAME

**AURORA WEST  
RECKINGER**

SITE ADDRESS

40W015 SEAVEY RD  
BATAVIA, IL 60510

**PROJECT CONSULTANTS**

**ENGINEER/ARCHITECT:** FULLERTON ENGINEERING CONSULTANTS, LLC  
**ADDRESS:** 1100 E. WOODFIELD ROAD, SUITE 500  
SCHAUMBURG, ILLINOIS 60173  
**CONTACT:** J. HODGE  
**PHONE:** (847) 908-8573  
**EMAIL:** jhodge@fullertonengineering.com

**POWER COMPANY:** COMED  
**PHONE:**

**DIRECTIONS**

SCAN QR CODE FOR LINK TO SITE LOCATION MAP



**ADDITIONAL DRAWINGS (FOR REFERENCE ONLY):**

SHEET 1	EXISTING DRAINAGE TILE INVESTIGATION PLAN
SHEET 2	EQUIPMENT ENCLOSURE LAYOUT
SHEET 3	GENERATOR ENCLOSURE LAYOUT
SHEET 4	ENCLOSURE ELEVATIONS
SHEET 5	FOUNDATION PLAN
SHEET 6	GROUNDING PLAN AND DETAILS 1
SHEET 7	GROUNDING PLAN AND DETAILS 2
SHEET 8	CONCRETE NOTES

SHEET NAME

**TITLE SHEET**

SHEET NUMBER

**T-1**

**GENERAL:**

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL LAWS, REGULATIONS, AND RULES SET FORTH BY FEDERAL, STATE, AND LOCAL AUTHORITIES WITH JURISDICTION OVER THE PROJECT. THIS RESPONSIBILITY IS IN EFFECT REGARDLESS OF WHETHER THE LAW, ORDINANCE, REGULATION OR RULE IS MENTIONED IN THESE SPECIFICATIONS.
2. ALL WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS, PROJECT SPECIFICATIONS, AND THE CONSTRUCTION CONTRACT DOCUMENTS.
3. THE CONTRACTOR SHALL HAVE AND MAINTAIN A VALID CONTRACTOR'S LICENSE FOR THE LOCATION IN WHICH THE WORK IS TO BE PERFORMED. FOR JURISDICTIONS THAT LICENSE INDIVIDUAL TRADES, THE TRADESMAN OR SUBCONTRACTOR PERFORMING THOSE TRADES SHALL BE LICENSED.
4. FOLLOW ALL APPLICABLE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND STATE LAW AS DEFINED IN THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT.
5. PRIOR TO THE SUBMISSION OF THE BID, THE CONTRACTOR SHALL VISIT THE JOB SITE, VERIFY ALL DIMENSIONS AND BECOME FAMILIAR WITH THE FIELD CONDITIONS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER.
6. DRAWING PLANS SHALL NOT BE SCALED.
7. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK NOT CLEARLY IDENTIFIED ON THE DRAWINGS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE PROJECT MANAGER.
8. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS UNLESS SPECIFICALLY OTHERWISE NOTED.
9. ALL MEANS AND METHODS OF CONSTRUCTION DEALING WITH TOWER CONSTRUCTION AND SAFETY, STEEL ERECTION, EXCAVATIONS, TRENCHING, SCAFFOLDING, FORMWORK, ELECTRICAL, AND WORK IN CONFINED SPACES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. WHEN THE CONTRACTOR ACTIVITIES IMPEDE OR OBSTRUCT TRAFFIC FLOW, CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL DEVICES, SIGNS, AND FLAGMEN IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, DOT AND LOCAL REQUIREMENTS.
11. THE CONTRACTOR SHALL COORDINATE SITE ACCESS AND SECURITY WITH THE PROPERTY OWNER AND THE PROJECT MANAGER PRIOR TO CONSTRUCTION.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH UTILITIES.
13. THE CONTRACTOR SHALL CALL THE LOCAL PUBLIC UTILITY LOCATING PROVIDER (811) A MINIMUM OF THREE BUSINESS DAYS PRIOR TO EXCAVATING IN THE PUBLIC RIGHT OF WAY.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING PRIVATE UTILITIES.
15. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY UTILITIES OR FACILITIES IT DEEMS NECESSARY TO COMPLETE THE WORK. THIS INCLUDES, BUT IS NOT LIMITED TO WATER, SEWER, POWER, TELEPHONE, HEAT, LIGHTING OR SECURITY.
16. WHEN EXCAVATING IN THE AREA OF EXISTING UTILITIES, THE CONTRACTOR SHALL USE REASONABLE CARE IN PROTECTING SUCH UTILITIES. CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY OF ANY CONFLICTS BETWEEN EXISTING UTILITIES AND PROPOSED CONSTRUCTION.
17. DAMAGE TO PUBLIC OR PRIVATE UTILITIES SHALL BE REPORTED TO THE PROJECT MANAGER AND THE OWNER OF THE UTILITY IMMEDIATELY. ANY DAMAGE RESULTING FROM CONTRACTORS NEGLIGENCE OR FAILURE TO ACT WITH DUE REGARD SHALL BE REPAIRED AT CONTRACTORS EXPENSE.
18. UNLESS OTHERWISE NOTED ON THE PLANS, CONTRACTOR SHALL ASSUME ALL SURFACE FEATURES SUCH AS BUT NOT LIMITED TO BUILDINGS, PAVEMENTS, LANDSCAPING FEATURES, PLANTS, ETC. ARE TO BE SAVED AND PROTECTED FROM DAMAGE. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING SITE CONDITIONS AND UPON COMPLETION OF WORK REPAIR BACK TO ORIGINAL CONDITIONS ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION.
19. 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 SHALL BE SUBJECT TO APPROVAL BY THE PROPERTY OWNER AND THE PROJECT MANAGER.
20. THE CONTRACTOR SHALL PROVIDE ON-SITE TRASH RECEPTACLES FOR COLLECTION OF NON-TOXIC DEBRIS. ALL TRASH SHALL BE COLLECTED ON A DAILY BASIS.
21. 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.
22. UNLESS NOTED OTHERWISE, CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS NECESSARY FOR CONSTRUCTION.
23. THE PROJECT MANAGER 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.
24. THE CONTRACTOR SHALL MAINTAIN AND SUPPLY THE PROJECT MANAGER WITH AS-BUILT PLANS UPON COMPLETION OF THE PROJECT.
25. THE CONTRACTOR SHALL STOP CONSTRUCTION AND NOTIFY CLIENT IMMEDIATELY SHOULD HUMAN REMAINS OR OBJECTS UNDER NAGPRA ACT BECOME UNCOVERED DURING CONSTRUCTION.

**ELECTRIC:**

1. THE CONTRACTOR SHALL PERFORM WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND OSHA REQUIREMENTS.
2. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES.
3. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS AND TRANSPORTATION FOR A COMPLETE AND PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT AND AS INDICATED ON DRAWINGS.
4. THE CONTRACTOR SHALL OBTAIN ALL PERMITS, PAY PERMIT AND INSPECTION FEES, AND BE RESPONSIBLE FOR SCHEDULING INSPECTIONS WITH THE AUTHORITY HAVING JURISDICTION.
5. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, IEEE, NEMA AND NFPA.
6. ALL MATERIALS SHALL BE U.L. LISTED.
7. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT.
8. MATERIALS SHALL MEET WITH APPROVAL OF THE AUTHORITY HAVING JURISDICTION.
9. THE CONTRACTOR SHALL PERFORM ALL VERIFICATION OBSERVATIONS TEST, AND EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND STARTING CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE PROJECT MANAGER LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
10. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF THE TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS TO BE PAID BY CONTRACTOR.
11. UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL OF POTENTIAL GROUND TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO THE PROJECT MANAGER.
12. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO THE PROJECT MANAGER AT JOB COMPLETION.
13. POST-INSTALLATION, ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
14. PROVIDE THE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS-INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS AND CIRCUITS.
15. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS NOTING USE FUNCTION.
16. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANEL BOARD, PULL BOX, J-BOX, SWITCH BOX, ETC.
17. ALL CONDUIT INSTALLED SHALL BE SURFACE MOUNTED OR DIRECT BURIAL UNLESS OTHERWISE NOTED.
18. ALL CONDUIT SHALL HAVE A PULL WIRE, ROPE OR MULE TAPE PER PROJECT MANAGER.
19. ALL CONDUCTORS SHALL BE COPPER.
20. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
21. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
22. PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED TO MATCH ORIGINAL RATING.
23. BX OR ROMEX CABLE IS NOT PERMITTED.
24. ALL ELECTRICAL/FIBER ENCLOSURES, JUNCTION BOXES, CONDUIT KNOCKOUTS, RACEWAYS, ETC. SHALL BE RODENT-PROOF.
25. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.

**SITE WORK:**

1. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE WELL DRAINED AT ALL TIMES.
2. PERFORM ALL SURVEY, LAYOUT, STAKING AND MARKING TO ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK.
3. LOCATE AND CLEARLY FLAG TREES, VEGETATION AND EXISTING SITE CONDITIONS TO REMAIN UNDISTURBED DURING CONSTRUCTION.
4. THE CONTRACTOR SHALL COORDINATE WITH PROJECT MANAGER TO ESTABLISH INSPECTIONS AND APPROVAL PROCESS FOR ALL SITE WORK.
5. EXCAVATION AND STRUCTURAL BACKFILL FOR TOWER AND EQUIPMENT FOUNDATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. CONTRACTOR IS REQUIRED TO OBTAIN A COPY OF THE REPORT PRIOR TO CONSTRUCTION.
6. SUITABLE NON-STRUCTURAL BACKFILL: EXCAVATED INORGANIC MATERIAL, COHESIVE AND NON-COHESIVE MATERIALS, INCLUDING GRAVEL, SAND, SILT, CLAY, AND COMBINATIONS THEREOF FREE FROM REFUSE, FROZEN LUMPS, STONES OR ROCKS LARGER THAN 3 INCHES.
7. UNSUITABLE BACKFILL: TOP SOIL, HIGH AND MODERATELY PLASTIC SILTS AND CLAY, MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES.
8. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE AND ONLY THE IMMEDIATE SURROUNDINGS NECESSARY TO COMPLETE THE WORK. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: TREES, BRUSH, ROOTS, STUMPS, RUBBISH AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA.
9. CLEARING, GRUBBING AND TREE REMOVAL IS NOT REQUIRED WITHIN ANTENNA TOWERS AREA EXCEPT AT LOCATIONS OF ANTENNA TOWER FOUNDATIONS.
10. CLEAR, GRUB, STRIP AND EXCAVATE FOR THE ACCESS ROAD AND EQUIPMENT COMPOUND TO THE LINES AND GRADES INDICATED ON THE DRAWINGS. SCARIFY TO A DEPTH OF 6 INCHES AND PROOF-ROLL. ALL DEPRESSIONS, SOFT PLACES AND OTHER DEFECTS SHALL BE FILLED AND COMPACTED WITH SUITABLE FILL.
11. ALL MATERIALS AND DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS SHALL BE REMOVED FROM THE SITE AND DISPOSED PROPERLY. BURNING IS NOT PERMITTED.
12. GEOTEXTILE FABRIC SHALL BE INSTALLED PER MANUFACTURER RECOMMENDATIONS.
13. REMOVE ALL FORMWORK RESULTING FROM CONCRETE CONSTRUCTION PRIOR TO BACKFILL.
14. ALL SUITABLE FILL MATERIAL SHALL BE INSTALLED IN HORIZONTAL LAYERS NOT EXCEEDING A LOOSE DEPTH OF 9 INCHES AND SHALL BE COMPACTED TO NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY PER THE MODIFIED PROCTOR TEST, ASTM D1557.
15. WHEN SOFT, YIELDING OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED AT THE REQUIRED TRENCH BOTTOM ELEVATION, OVER-EXCAVATE THE TRENCH TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE REQUIRED ELEVATION AND BACKFILL WITH GRANULAR BEDDING MATERIAL.
16. UTILIZE SUITABLE FILL MATERIALS RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF FILL, ACCESS ROAD, SITE GRADING AND FOR THE REPLACEMENT OF REMOVED UNSUITABLE MATERIALS.
17. PERFORM ALL FINISHED GRADING TO PROVIDE SMOOTH, EVEN SURFACE AND SUBSURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.



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(781) 538-5299

**FULLERTON**  
ENGINEERING · DESIGN

1100 E. WOODFIELD ROAD, SUITE 500  
SCHAUMBURG, ILLINOIS 60173  
TEL: 847-908-8400  
DESIGN FIRM NO. 184.008202-0006  
www.FullertonEngineering.com

REV	DATE	DESCRIPTION	BY
1	3/27/20	90% REVIEW	LA
0	4/22/20	PERMITTING	LA
1	5/6/20	REVISION	LA
2	6/2/20	FINAL	BL

I HEREBY CERTIFY THAT THESE DRAWINGS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONTROL, AND TO THE BEST OF MY KNOWLEDGE AND BELIEF COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE CODES.



DocuSign

SITE NAME

**AURORA WEST  
RECKINGER**

SITE ADDRESS

40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

**GENERAL  
NOTES**

SHEET NUMBER

**GN-1**

# SURVEY PLAT

OWNERS: MARY C. COFFEY AND CHARLES F. COFFEY;  
 JOSEPH P. RECKINGER AND DEBRA L. RECKINGER  
 ADDRESS: 40W015 SEAVEY ROAD  
 BATAVIA IL 60510  
 KANE COUNTY

## TITLE REPORT INFORMATION

XCEL CONSULTANTS HAS RECEIVED AND REVIEWED THE TITLE COMMITMENT PREPARED BY CHICAGO TITLE INSURANCE COMPANY, DATED EFFECTIVE AUGUST 26, 2019, BEING COMMITMENT NO. 190285825 FOR THE SUBJECT PROPERTY.

## PARENT DESCRIPTION

THAT PART OF THE SOUTHEAST 1/4 OF SECTION 26, TOWNSHIP 39 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

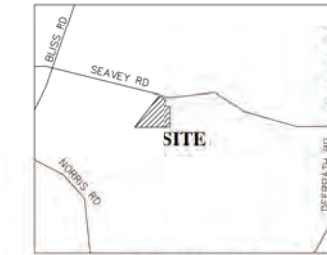
BEGINNING AT THE SOUTHEAST CORNER OF SAID SOUTHEAST 1/4; THENCE WEST ALONG THE SOUTH LINE OF SAID SOUTHEAST 1/4 1680 FEET TO THE CENTER LINE OF A CREEK; THENCE NORTH 36 DEGREES 38 MINUTES 54 SECONDS EAST ALONG SAID CENTER LINE 495.59 FEET; THENCE NORTH 38 DEGREES 45 MINUTES 57 SECONDS EAST ALONG SAID CENTER LINE 1264.82 FEET TO THE CENTER LINE OF SEAVEY ROAD; THENCE SOUTH 75 DEGREES 51 MINUTES EAST ALONG THE CENTER LINE OF SAID SEAVEY ROAD 509.68 FEET; THENCE NORTH 83 DEGREES 44 MINUTES EAST ALONG THE CENTER LINE OF ROAD 111.2 FEET TO THE EAST LINE OF AFORESAID SOUTHEAST 1/4; THENCE SOUTH 0 DEGREES 28 MINUTES WEST ALONG SAID EAST LINE 1262.80 FEET TO THE POINT OF BEGINNING.

EXCEPT THAT PART DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SAID SOUTHEAST 1/4; THENCE NORTHERLY ALONG THE EASTERLY LINE OF SAID SOUTHEAST 1/4 1262.57 FEET TO THE CENTER LINE OF SEAVEY ROAD FOR A POINT OF BEGINNING; THENCE SOUTHERLY ALONG THE LAST DESCRIBED COURSE 330.0 FEET; THENCE WESTERLY AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE 160.0 FEET; THENCE NORTHERLY AT RIGHT ANGLES TO THE LAST DESCRIBED COURSE 329.17 FEET TO THE CENTER LINE OF SAID SEAVEY ROAD; THENCE SOUTHEASTERLY ALONG SAID CENTER LINE 49.63 FEET TO AN ANGLE IN SAID CENTER LINE; THENCE EASTERLY ALONG SAID CENTER LINE 112.79 FEET TO THE POINT OF BEGINNING, IN THE TOWNSHIP OF BLACKBERRY, KANE COUNTY, ILLINOIS.

ALSO EXCEPTING THEREFROM THAT PART OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 39 NORTH, RANGE 7 EAST OF THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SAID SOUTHEAST QUARTER; THENCE NORTH 00 DEGREES 01 MINUTES 02 SECONDS EAST, ALONG THE EAST LINE OF SOUTHEAST QUARTER, 932.18 FEET TO THE SOUTHEAST CORNER OF A PARCEL OF LAND CONVEYED BY DOCUMENT NUMBER 1555926; THENCE NORTH 89 DEGREES 58 MINUTES 58 SECONDS WEST, ALONG THE SOUTH LINE OF SAID PARCEL OF LAND, 160.00 FEET FOR THE POINT OF BEGINNING; THENCE CONTINUING NORTH 89 DEGREES 58 MINUTES 58 SECONDS WEST, 52.00 FEET; THENCE NORTH 00 DEGREES 01 MINUTES 02 SECONDS EAST, PARALLEL TO WEST LINE OF SAID PARCEL OF LAND, 342.74 FEET; THENCE SOUTH 75 DEGREES 21 MINUTES 29 SECONDS EAST, 53.74 FEET TO THE NORTHWEST CORNER OF SAID PARCEL OF LAND; THENCE SOUTH 00 DEGREES 01 MINUTES 02 SECONDS WEST, ALONG THE WEST LINE OF SAID PARCEL OF LAND, 329.17 FEET TO THE POINT OF BEGINNING, IN THE TOWNSHIP OF BLACKBERRY, KANE COUNTY, ILLINOIS.

THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY XCEL CONSULTANTS, INC. AND AS SUCH WE ARE NOT RESPONSIBLE FOR THE INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENT OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, UNRECORDED EASEMENT, AUGMENTING EASEMENT, IMPLIED OR PRESCRIPTIVE EASEMENTS, OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE. INFORMATION REGARDING THESE MATTERS WERE GAINED FROM CHICAGO TITLE INSURANCE COMPANY, COMMITMENT NUMBER 190285825, DATED AUGUST 26, 2019. PREPARED FOR PETER H. RECKINGER AND CATHERINE E. RECKINGER. THE FOLLOWING COMMENTS ARE IN REGARD TO SAID REPORT AND THE NUMBERS IN THE COMMENTS CORRESPOND TO THE NUMBERING SYSTEM IN SAID REPORT.

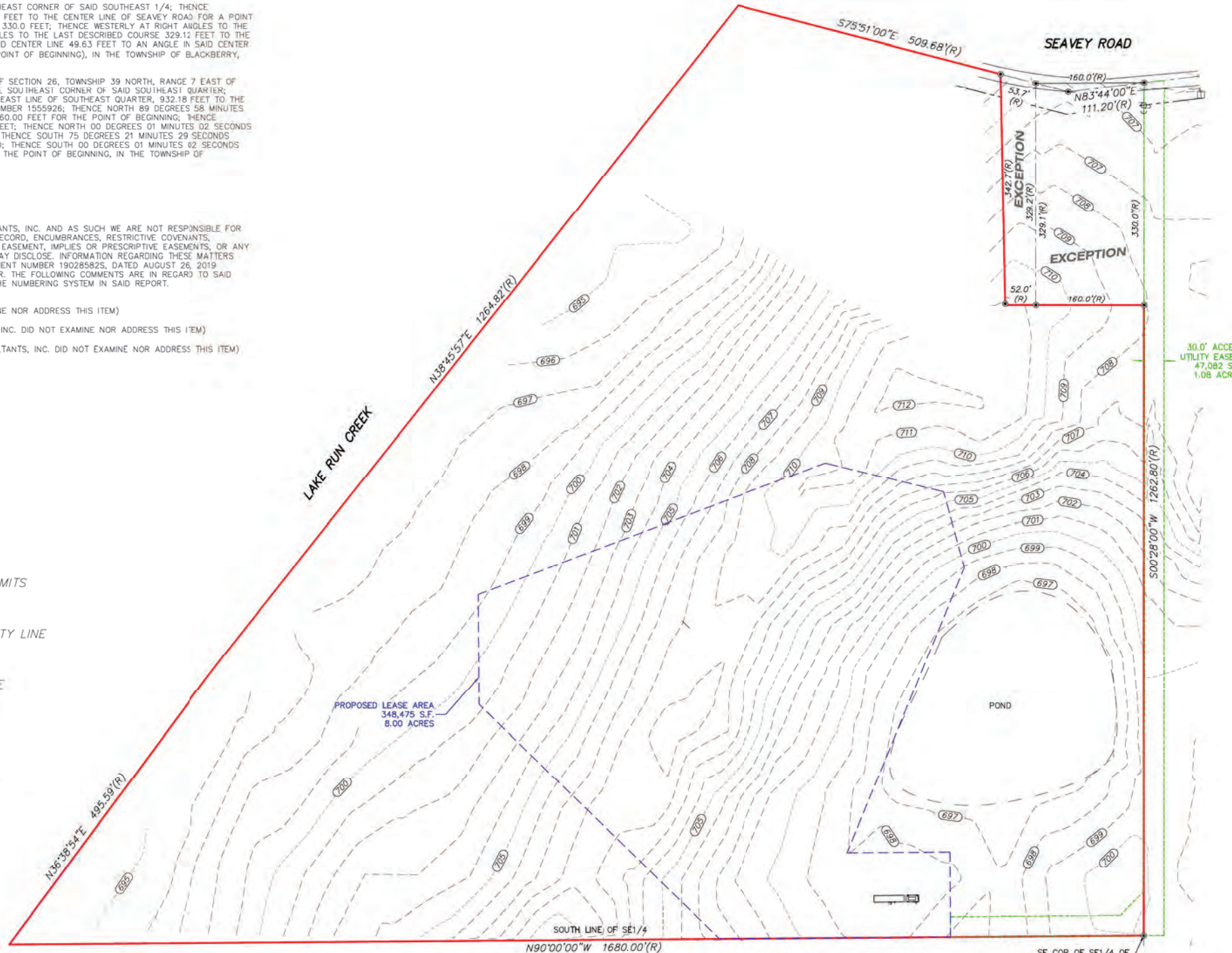
- A. LAST GRANTEE OF RECORD (XCEL CONSULTANTS, INC. DID NOT EXAMINE NOR ADDRESS THIS ITEM)
- B. CURRENT YEAR REAL ESTATE TAX INFORMATION (XCEL CONSULTANTS, INC. DID NOT EXAMINE NOR ADDRESS THIS ITEM)
- C. MORTGAGES, JUDGMENTS AND OTHER LIENS OF RECORD (XCEL CONSULTANTS, INC. DID NOT EXAMINE NOR ADDRESS THIS ITEM)



VICINITY MAP  
NOT TO SCALE

## UTILITY CONTACT INFORMATION

POWER CONTACT: COMED  
 TELEPHONE CONTACT: 780



## LEGEND

- PARENT PARCEL LIMITS
- - - LEASE LINE
- - - ADJACENT PROPERTY LINE
- - - EASEMENT LINE
- - - RIGHT OF WAY LINE
- - - SURVEY TIE LINE
- - - POND LIMITS
- - - FENCE
- GRAVEL SURFACE

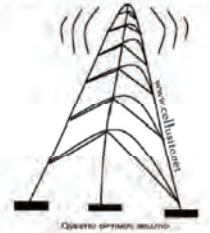
## SITE TOPO



85 RANGEMAN RD #110  
 NORTH BILLERICA, MA 01862  
 (781) 538-5299

## PLANS COORDINATED BY:

CelluSite, LLC



## PLANS PREPARED BY:

8300 42ND STREET WEST  
 ROCK ISLAND, IL 61201  
 (O) 309-787-9988  
 (F) 309-756-5540  
 (E) XCEL@XCELCONSULTANTSINC.COM



JOB # 192251

DATE: DESCRIPTION: BY: REV:

DATE	DESCRIPTION	BY	REV

## SITE INFORMATION:

AURORA WEST -  
 RECKINGER

40W015 SEAVEY ROAD  
 BATAVIA, IL 60510  
 KANE COUNTY

## SHEET TITLE:

SURVEY PLAT

## SHEET NUMBER:

1 OF 1

# SURVEY PLAT

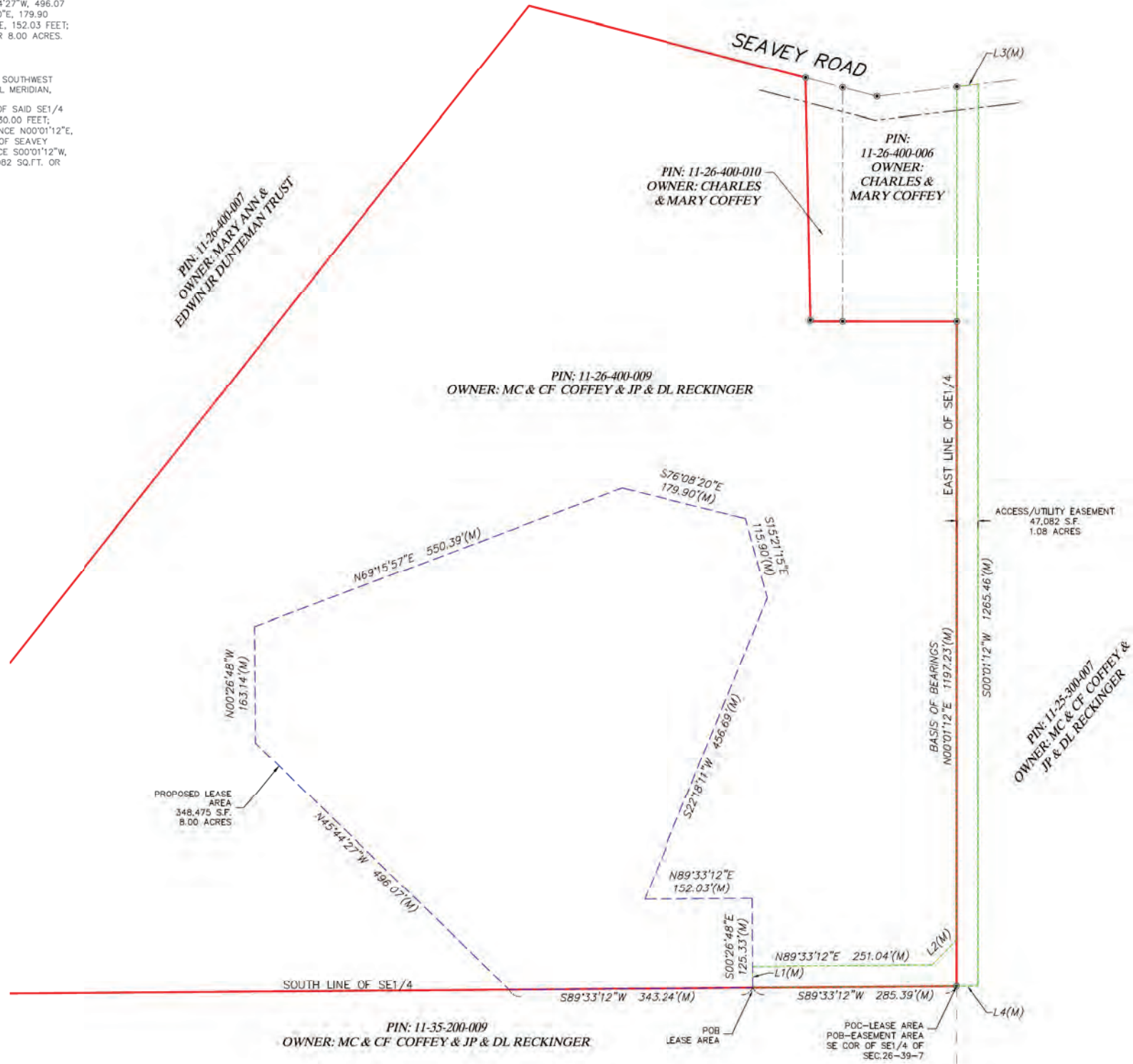
OWNERS: MARY C. COFFEY AND CHARLES F. COFFEY;  
JOSEPH P. RECKINGER AND DEBRA L. RECKINGER  
ADDRESS: 40W015 SEAVEY ROAD  
BATAVIA IL 60510  
KANE COUNTY

## LEASED PREMISES

THAT PART OF THE SOUTHEAST 1/4 OF SECTION 26, TOWNSHIP 39 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:  
COMMENCING AT THE SE CORNER OF SAID SE1/4; THENCE S89°33'12"W, ALONG THE SOUTH LINE OF SAID SE1/4, 285.39 FEET TO THE POINT OF BEGINNING FOR THE LEASE AREA INTENDED TO BE DESCRIBED; THENCE S89°33'12"W, ALONG THE SOUTH LINE OF SAID SE1/4, 343.24 FEET; THENCE N45°44'27"W, 496.07 FEET; THENCE N00°26'48"W, 163.14 FEET; THENCE N69°15'57"E, 550.39 FEET; THENCE S76°08'20"E, 179.90 FEET; THENCE S15°21'15"E, 115.90 FEET; THENCE S22°18'11"W, 456.69 FEET; THENCE N89°33'12"E, 152.03 FEET; THENCE S00°26'48"W, 125.33 FEET TO THE POINT OF BEGINNING, CONTAINING 348,475 SQ.FT. OR 8.00 ACRES.

## ACCESS/UTILITY EASEMENT

THAT PART OF THE SOUTHEAST 1/4 OF SECTION 26 AND PART OF THE WEST 30 FEET OF THE SOUTHWEST QUARTER OF SECTION 25, ALL IN TOWNSHIP 39 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:  
BEGINNING AT THE SE CORNER OF SAID SE1/4; THENCE S89°33'12"W, ALONG THE SOUTH LINE OF SAID SE1/4 OF SECTION 26, 285.39 FEET TO THE SE CORNER OF THE LEASE AREA; THENCE N00°26'48"W, 30.00 FEET; THENCE N89°33'12"E, 251.04 FEET TO THE EAST LINE OF THE SAID SE1/4 OF SECTION 26; THENCE N00°01'12"E, ALONG THE SAID EAST LINE OF THE SE1/4 OF SECTION 26, 1197.23 FEET TO THE CENTERLINE OF SEAVEY ROAD; THENCE N83°11'27"E, ALONG THE SAID CENTERLINE OF SEAVEY ROAD, 30.21 FEET; THENCE S00°01'12"W, 1265.46 FEET; THENCE S89°33'12"W, 30.00 FEET TO THE POINT OF BEGINNING, CONTAINING 47,082 SQ.FT. OR 1.08 ACRES.



- ### GENERAL NOTES
- 1) A FULL BOUNDARY SURVEY WAS NOT PERFORMED ON THE PARENT PARCEL SHOWN ON THIS SHEET. MONUMENTS SHOWN AS "FOUND" AND RECORDED DOCUMENTS WERE USED TO DESCRIBE THE EASEMENTS AND LEASED PREMISES.
  - 2) THE LOCATIONS OF UTILITY MAINS, STRUCTURES, AND SERVICE CONNECTIONS PLOTTED ON THIS DRAWING ARE APPROXIMATE ONLY AND WERE OBTAINED FROM RECORDS MADE AVAILABLE TO XCEL CONSULTANTS, INC. THERE MAY BE OTHER EXISTING UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS NOT KNOWN TO XCEL CONSULTANTS, INC., AND NOT SHOWN ON THIS DRAWING.
  - 3) BEARINGS ARE REFERENCED TO THE EAST LINE OF THE SOUTHEAST QUARTER OF SECTION 26, WITH THE ASSUMED BEARING OF N00°01'12"E.
  - 4) THE SURVEY FOR THIS MAP WAS PERFORMED ON DECEMBER 5, 2019 BY XCEL CONSULTANTS, INC.; REVIEW WAS PERFORMED BY JAMES A. FAETANINI, P.L.S.
  - 5) THERE APPEARS TO BE TELEPHONE AND ELECTRICAL SERVICE PRESENT ON OR NEAR THE LEASED PREMISES.
  - 6) THERE DOES NOT APPEAR TO BE ANY APPLICABLE BUFFER ZONES OR LANDSCAPE REQUIREMENTS.
  - 7) THE LEASED PREMISES IS CONTIGUOUS ALONG ITS COMMON BOUNDARIES TO THE ACCESS/UTILITY EASEMENT, WHICH IN TURN IS CONTIGUOUS ALONG ITS COMMON BOUNDARIES TO A PUBLICLY OWNED PARCEL, WHICH IS CONTIGUOUS TO THE PUBLIC RIGHT OF WAY OF SEAVEY ROAD, AND THAT THERE ARE NO GAPS, GORES, SPACES OR OVERLAPS BETWEEN OR AMONG ANY OF SAID PARCELS OF LAND.
  - 8) THE MAJORITY OF THE ACCESS ROAD IS LOCATED ON PIN NUMBER 11-25-300-007, WHICH WAS NOT INCLUDED IN REFERENCED TITLE.

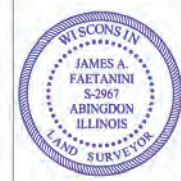


LINE	LENGTH	BEARING
L1(M)	30.00'	N00°26'48"W
L2(M)	49.33'	N44°33'12"E
L3(M)	30.21'	N83°11'27"E
L4(M)	285.39'	S89°33'12"W

## SITE INFORMATION

**SITE OWNER:** MARY C. COFFEY AND CHARLES F. COFFEY AND JOSEPH P. RECKINGER AND DEBRA L. RECKINGER  
**SITE ADDRESS:** 40W015 SEAVEY ROAD, BATAVIA IL 60510, KANE COUNTY  
**TAX PARCEL NUMBERS:** 11-26-400-009  
**THIS PARCEL IS ZONED:** F - FARMING DISTRICT  
MINIMUM LOT SIZE: 1 ACRES  
MAXIMUM LOT SIZE: 40 ACRES  
SET BACKS  
FRONT: NONE REFERENCED  
BACK: NONE REFERENCED  
SIDE: NONE REFERENCED  
ZONING INFORMATION FROM KANE COUNTY ZONING ORDINANCE SECTION 8  
**JURISDICTION:** CITY OF BATAVIA, KANE COUNTY  
**FLOODPLAIN:** ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY MAPS, THE PROPOSED TELECOMMUNICATIONS SITE IS LOCATED IN ZONE X (AREA OF MINIMAL FLOOD HAZARD), COMMUNITY PANEL NO. 17089C0310H, DATED AUGUST 3, 2009.  
**WETLANDS:** NO WETLANDS AREAS HAVE BEEN INVESTIGATED BY THIS SURVEY

TO: PI TELECOM INFRASTRUCTURE T, LLC, A DELAWARE LIMITED LIABILITY COMPANY, AND CHICAGO TITLE INSURANCE COMPANY  
I, JAMES A. FAETANINI, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF CHAPTER 236.34 OF WISCONSIN STATUTES, THAT UNDER THE DIRECTION OF LAND O LAKES, I HAVE SURVEYED AND MAPPED THE PROPOSED AREA WITHIN THE SPECIFIED BANDS AS DIRECTED.  
JAMES A. FAETANINI  
LICENSE NUMBER 2967-B  
MY LICENSE RENEWAL DATE IS JANUARY 31, 2018  
SHEETS COVERED BY THIS SEAL 2 OF 2



85 RANGWAY RD #110  
NORTH BILLERICA, MA 01862  
(781) 938-5299

## PLANS COORDINATED BY:

**CelluSite, LLC**



## PLANS PREPARED BY:

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ROCK ISLAND, IL 61201  
(D) 309-787-9988  
(F) 309-758-5540  
(E) XCEL@XCELCONSULTANTSINC.COM



JOB # 192251

## DATE: DESCRIPTION: BY: REV:

DATE	DESCRIPTION	BY	REV

## SITE INFORMATION:

**AURORA WEST - RECKINGER**

**40W015 SEAVEY ROAD  
BATAVIA, IL 60510  
KANE COUNTY**

## SHEET TITLE:

**SURVEY PLAT**

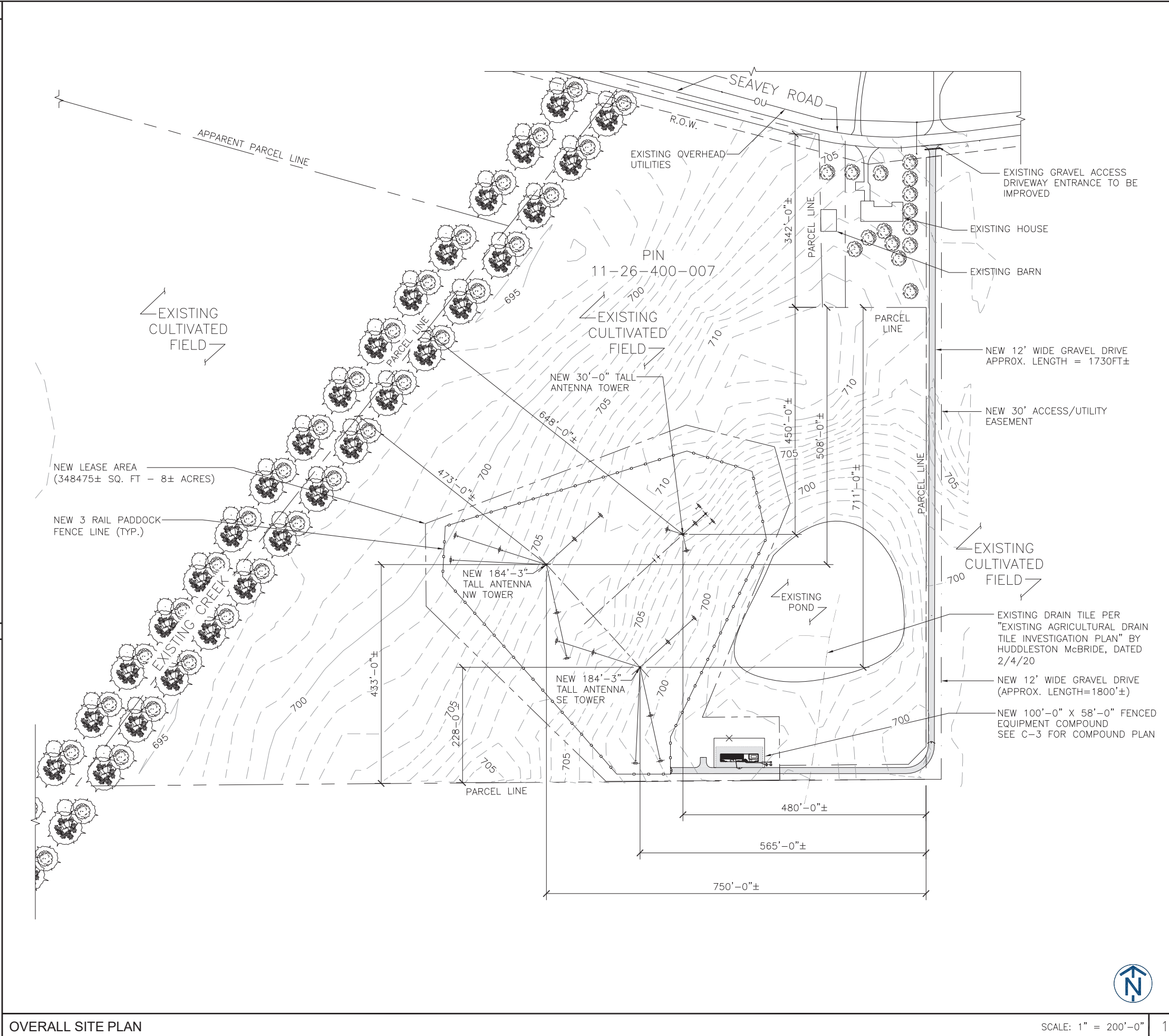
## SHEET NUMBER:

**2 OF 2**



ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AGL	ABOVE GROUND LEVEL
AMSL	ABOVE MEAN SEA LEVEL
APPROX	APPROXIMATE
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BLDG	BUILDING
BBU	BASE BAND UNIT
CL	CENTERLINE
CLR	CLEAR
COL	COLUMN
CONC	CONCRETE
CND	CONDUIT
CRAN	CENTRALIZED RAN
C-RAN	CLOUD RAN
DWG	DRAWING
FT	FOOT(FEET)
EGB	EQUIPMENT GROUND BAR
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
ELEV	ELEVATION
EQUIP	EQUIPMENT
(E)	EXISTING
EXT	EXTERIOR
FND	FOUNDATION
F	FIBER
GA	GAUGE
GALV	GALVANIZED
GPS	GLOBAL POSITIONING SYSTEM
GND	GROUND
GSM	GLOBAL SYSTEM FOR MOBILE COMMUNICATION
LTE	LONG TERM EVOLUTION
MAX	MAXIMUM
MFR	MANUFACTURER
MGB	MASTER GROUND BAR
MIN	MINIMUM
MIMO	MULTIPLE IN MULTIPLE OUT
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
PPC	POWER PROTECTION CABINET
P	PROPERTY LINE
RAN	RADIO ACCESS NETWORK
RBS	RADIO BASED STATION
RRH	REMOTE RADIO HEAD
RGS	RIGID GALVANIZED STEEL
IN	INCH(ES)
INT	INTERIOR
LB(S), #	POUND(S)
SF	SQUARE FOOT
STL	STEEL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UMTS	UNIVERSAL MOBILE TELE-COMMUNICATION SYSTEM
VIF	VERIFY IN FIELD
W/	WITH
XFMR	TRANSFORMER

SYMBOLS	
	REVISION
	WORK POINT
	UTILITY POLE
	BRICK
	COMPRESSED STONE
	CONCRETE
	EARTH
	GRAVEL
	MASONRY
	STEEL
	CENTERLINE
	PROPERTY LINE
	LEASE LINE
	EASEMENT LINE
	FENCE
	CHAINLINK
	WOOD
	WROUGHT IRON
	ELECTRIC
	OVERHEAD
	UNDERGROUND
	FIBER
	OVERHEAD
	UNDERGROUND
	TELEPHONE
	OVERHEAD
	UNDERGROUND
	DCPOWER
	SECTION REFERENCE



85 RANGWAY RD #110  
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(781) 538-5299

## FULLERTON

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SCHAUMBURG, ILLINOIS 60173  
TEL: 847-908-8400  
DESIGN FIRM NO. 184.008202-0006  
www.FullertonEngineering.com

REV	DATE	DESCRIPTION	BY
1	3/27/20	90% REVIEW	LA
0	4/22/20	PERMITTING	LA
1	5/6/20	REVISION	LA
2	6/2/20	FINAL	BL

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SITE NAME

## AURORA WEST RECKINGER

SITE ADDRESS

40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

## OVERALL SITE PLAN

SHEET NUMBER

# C-1

SCALE: 1" = 200'-0" 1

## OVERALL SITE PLAN



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SITE NAME

### AURORA WEST RECKINGER

SITE ADDRESS

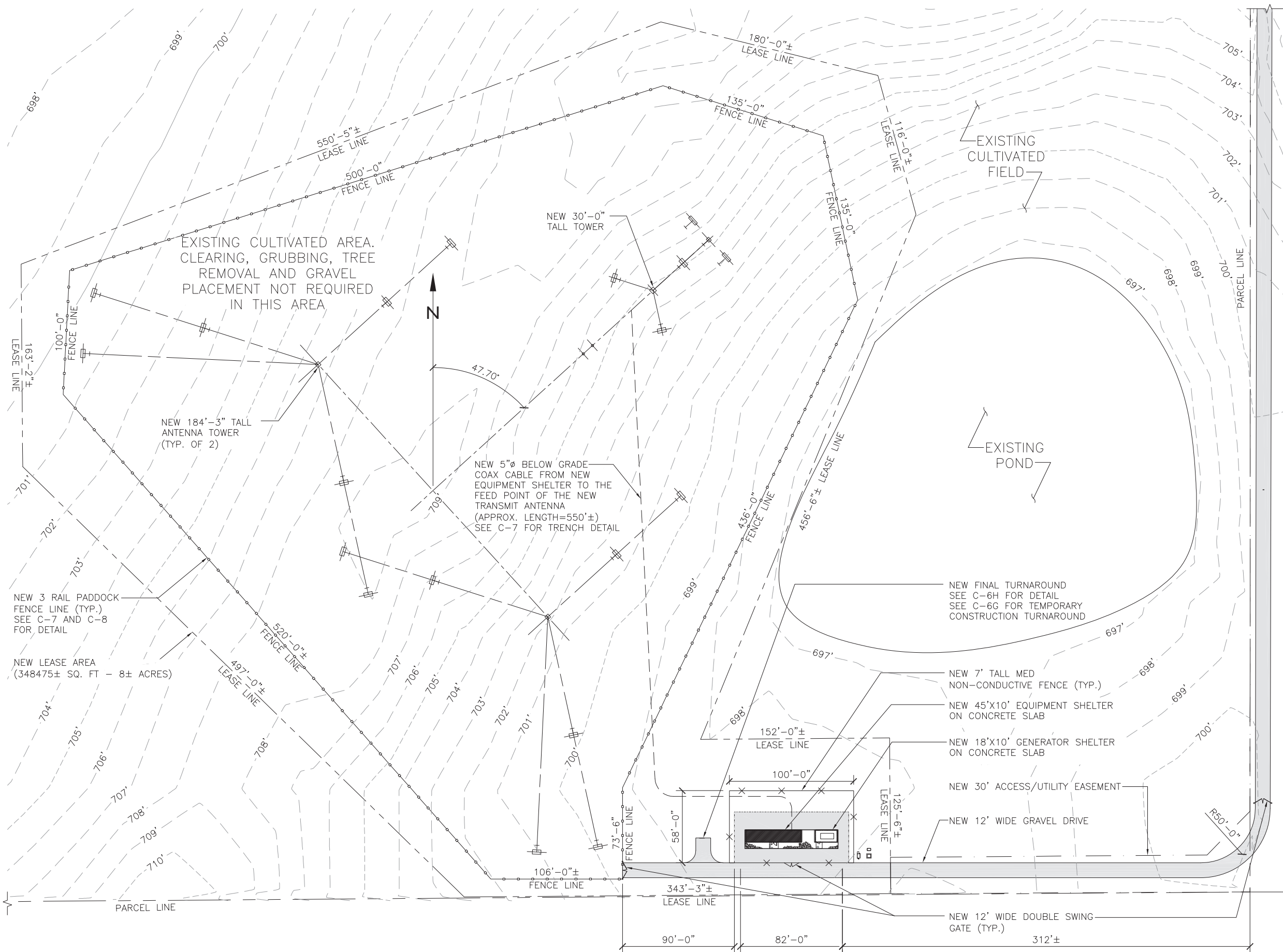
40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

### ENLARGED SITE PLAN

SHEET NUMBER

## C-2





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1	5/6/20	REVISION	LA
2	6/2/20	FINAL	BL

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SITE NAME

**AURORA WEST  
RECKINGER**

SITE ADDRESS

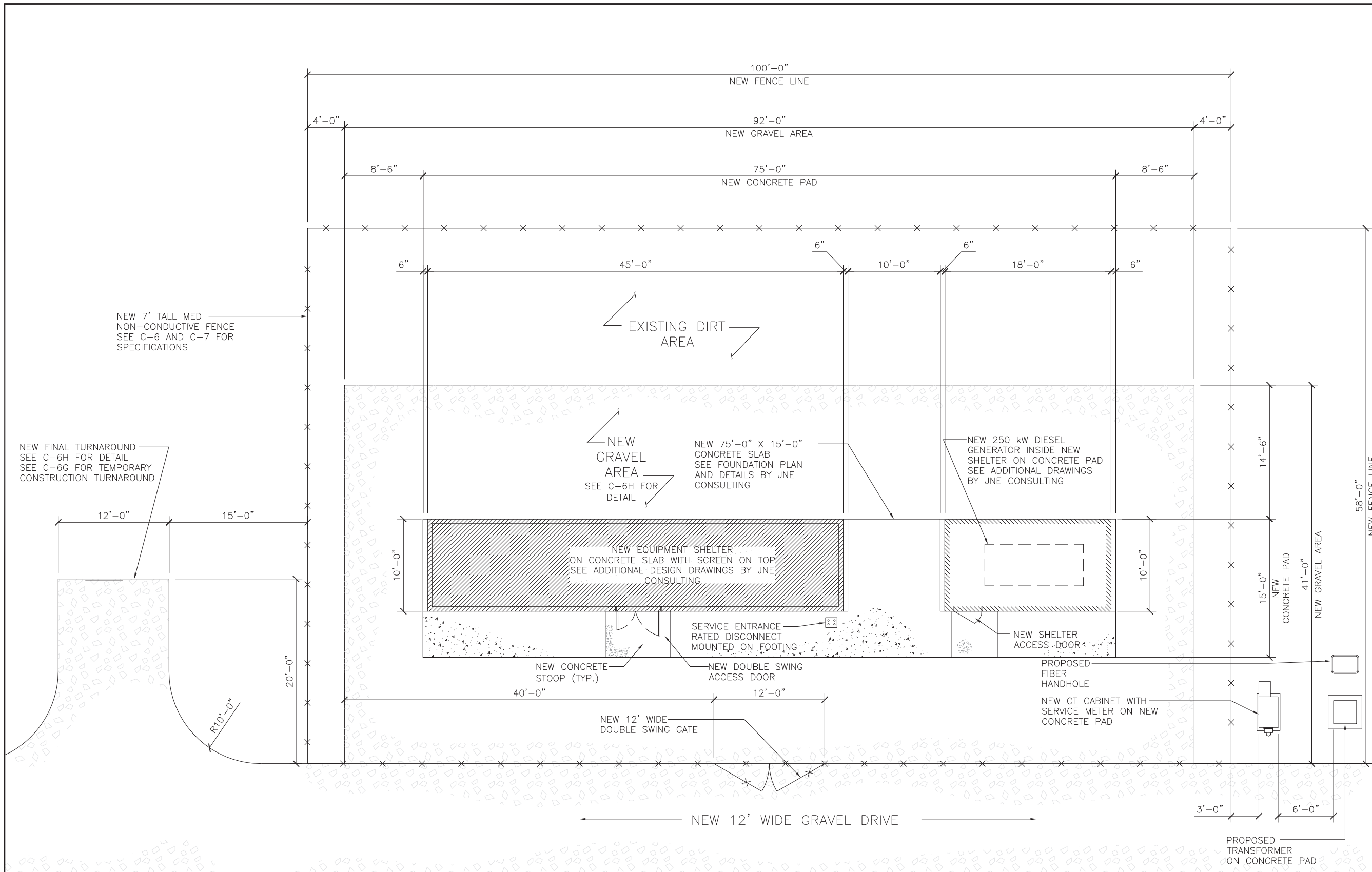
40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

**COMPOUND PLAN**

SHEET NUMBER

**C-3**



NOTES:

1. CALCULATIONS AND DESIGN FOR THE STRUCTURES AND FOUNDATIONS WERE PREPARED BY OTHERS AND THOSE CALCULATIONS CERTIFY THE CAPACITY OF THE STRUCTURE TO SUPPORT THE NEW EQUIPMENT



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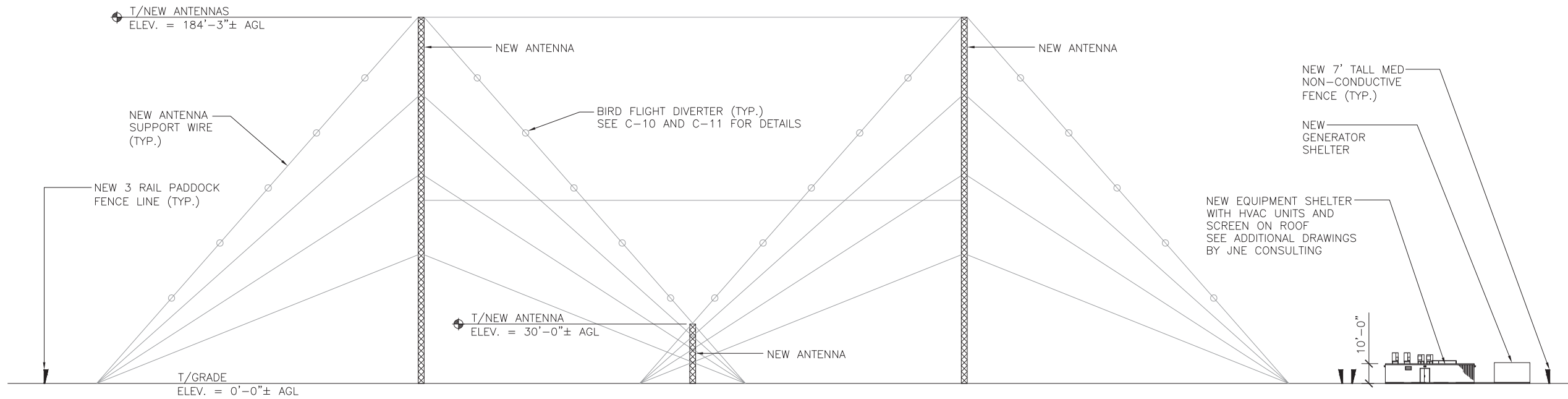
1100 E. WOODFIELD ROAD, SUITE 500  
SCHAUMBURG, ILLINOIS 60173  
TEL: 847-908-8400  
DESIGN FIRM NO. 184.008202-0006  
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SITE NAME

**AURORA WEST  
RECKINGER**

SITE ADDRESS

40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

**SITE ELEVATION**

SHEET NUMBER

**C-4**

**LEGEND**

EXISTING CONTOURS — — — — —

PROPOSED CONTOURS —————

SILT FENCE ———— ||| ————

PROPOSED SPOT ELEVATION XXX

- NOTES:**
1. DAMAGE TO EXISTING DRAIN TILE SHALL BE LOCATED AND REPAIRED BY CONTRACTOR
  2. REFER TO "EXISTING AGRICULTURAL DRAIN TILE INVESTIGATION PLAN" BY HUDDLESTON McBRIDE, DATED 2/4/20 FOR REPAIR DETAIL
  3. CONTRACTOR SHALL COORDINATE REPAIR WITH LAND OWNER



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1	5/6/20	REVISION	LA
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SITE NAME

**AURORA WEST RECKINGER**

SITE ADDRESS

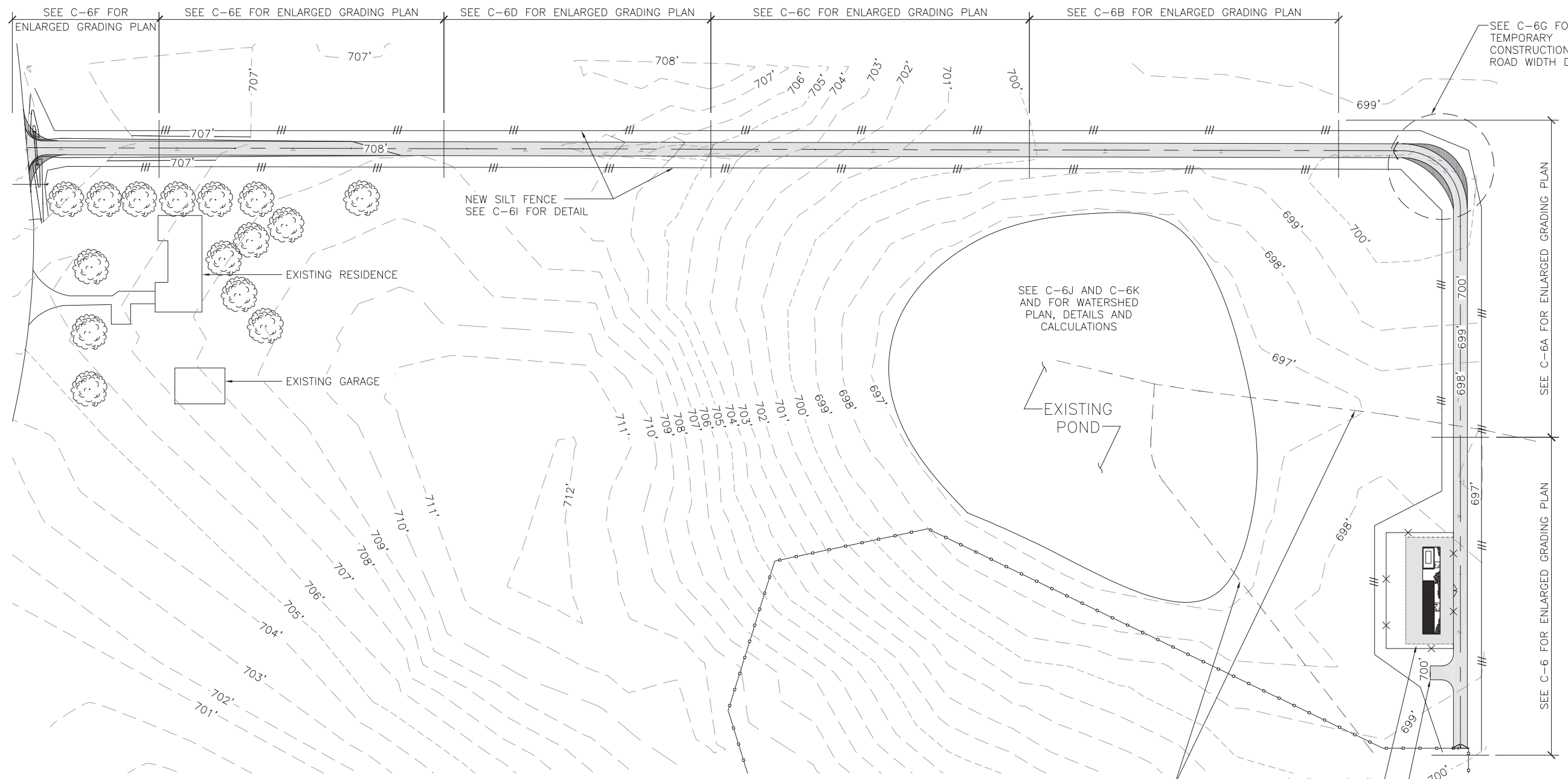
40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

**OVERALL SITE GRADING PLAN**

SHEET NUMBER

**C-5**



**LEGEND**

EXISTING CONTOURS — — — — —

PROPOSED CONTOURS —————

SILT FENCE ———— ||| ————

PROPOSED SPOT ELEVATION ● XXX



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1	5/6/20	REVISION	LA
2	6/2/20	FINAL	BL

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SITE NAME

**AURORA WEST  
RECKINGER**

SITE ADDRESS

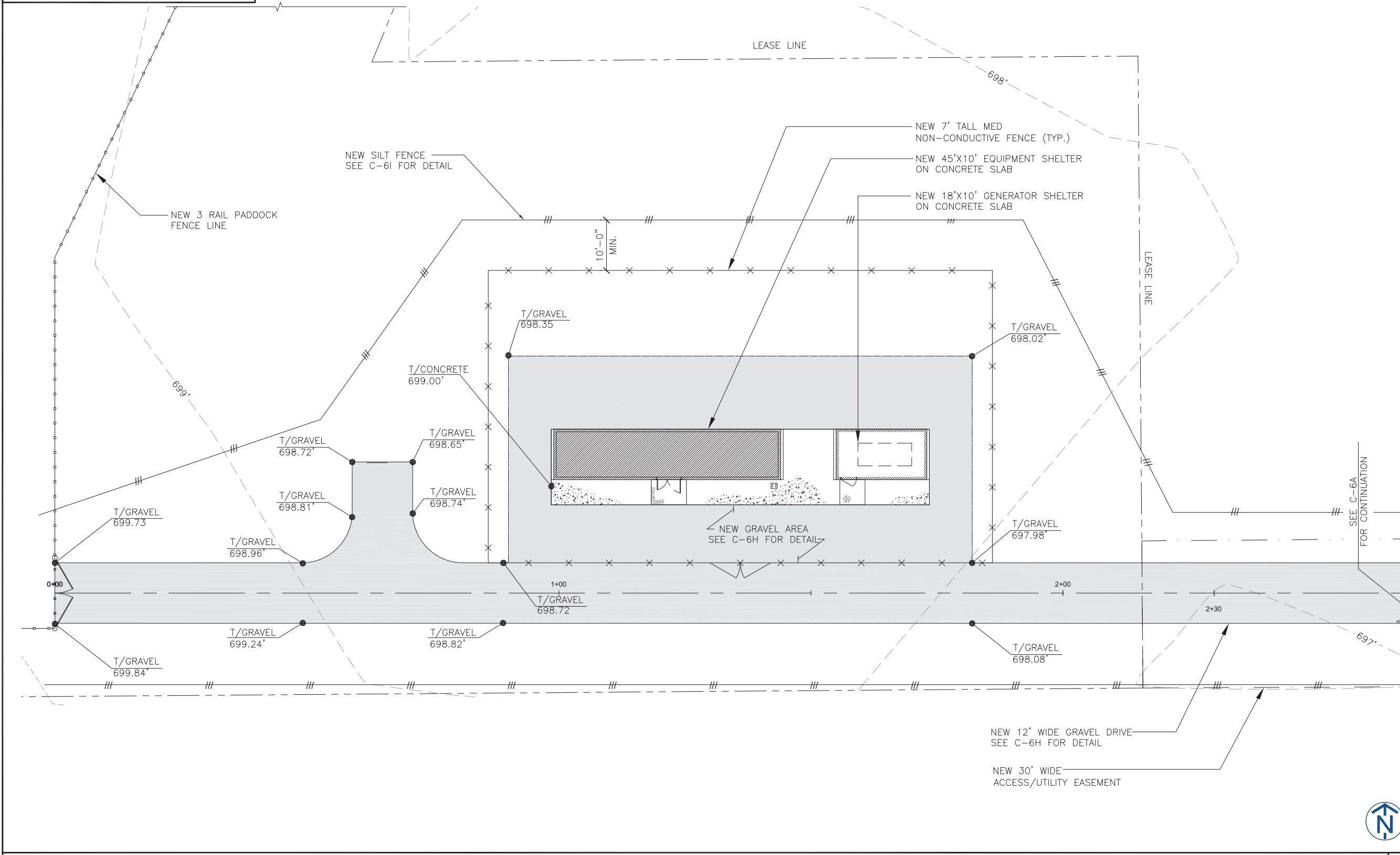
40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

**PARTIAL SITE  
GRADING PLAN**

SHEET NUMBER

**C-6**



SITE GRADING PLAN

SCALE 1" = 10'-0"

1

**LEGEND**

EXISTING CONTOURS — — — — —

PROPOSED CONTOURS —————

SILT FENCE ———— ||| ————

PROPOSED SPOT ELEVATION ● XXX



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0	4/22/20	PERMITTING	LA
1	5/6/20	REVISION	LA
2	6/2/20	FINAL	BL

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SITE NAME

**AURORA WEST  
RECKINGER**

SITE ADDRESS

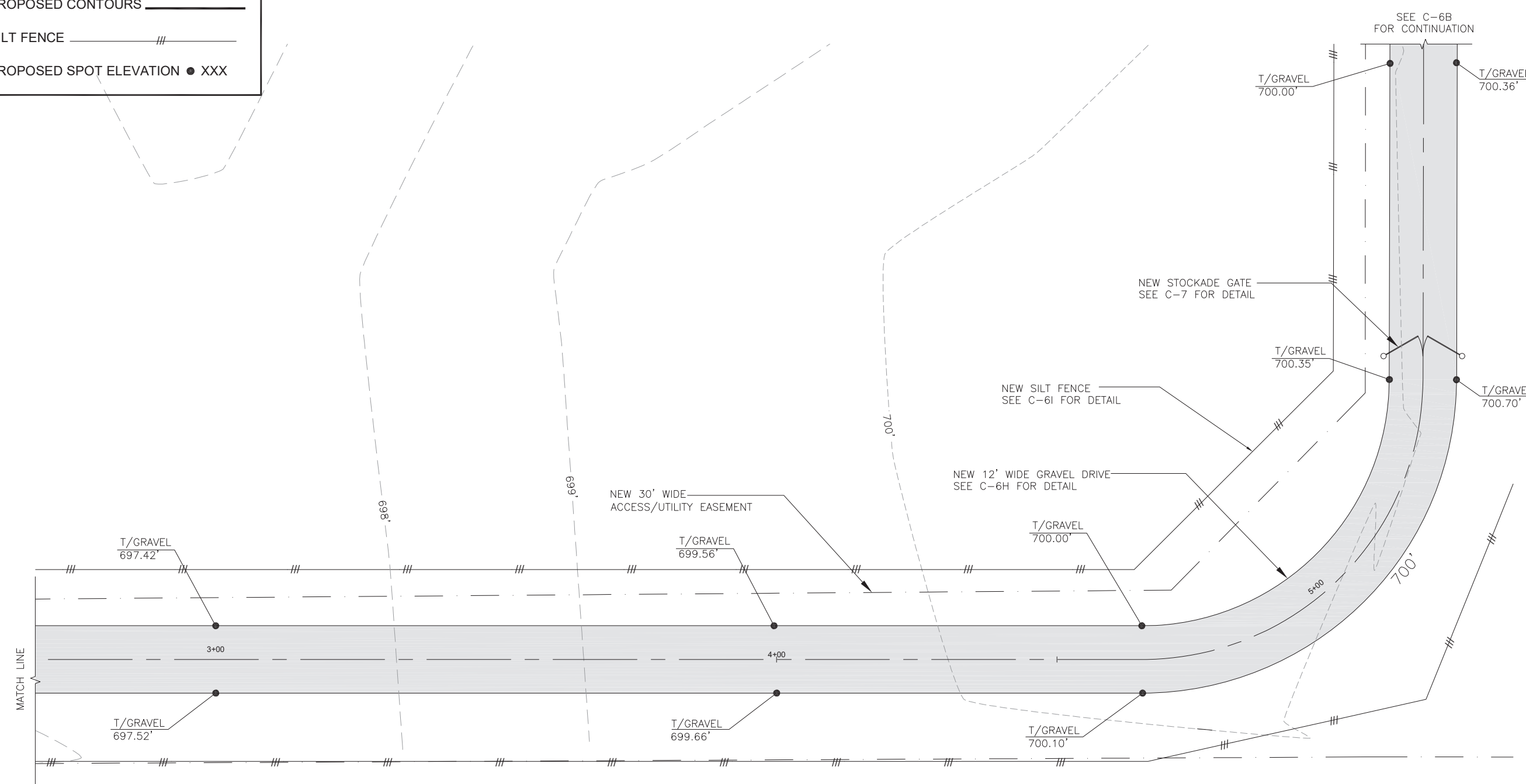
40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

**PARTIAL SITE  
GRADING PLAN**

SHEET NUMBER

**C-6A**



**LEGEND**

EXISTING CONTOURS — — — — —

PROPOSED CONTOURS —————

SILT FENCE ———— ||| ————

PROPOSED SPOT ELEVATION ● XXX



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1	5/6/20	REVISION	LA
2	6/2/20	FINAL	BL

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SITE NAME

**AURORA WEST RECKINGER**

SITE ADDRESS

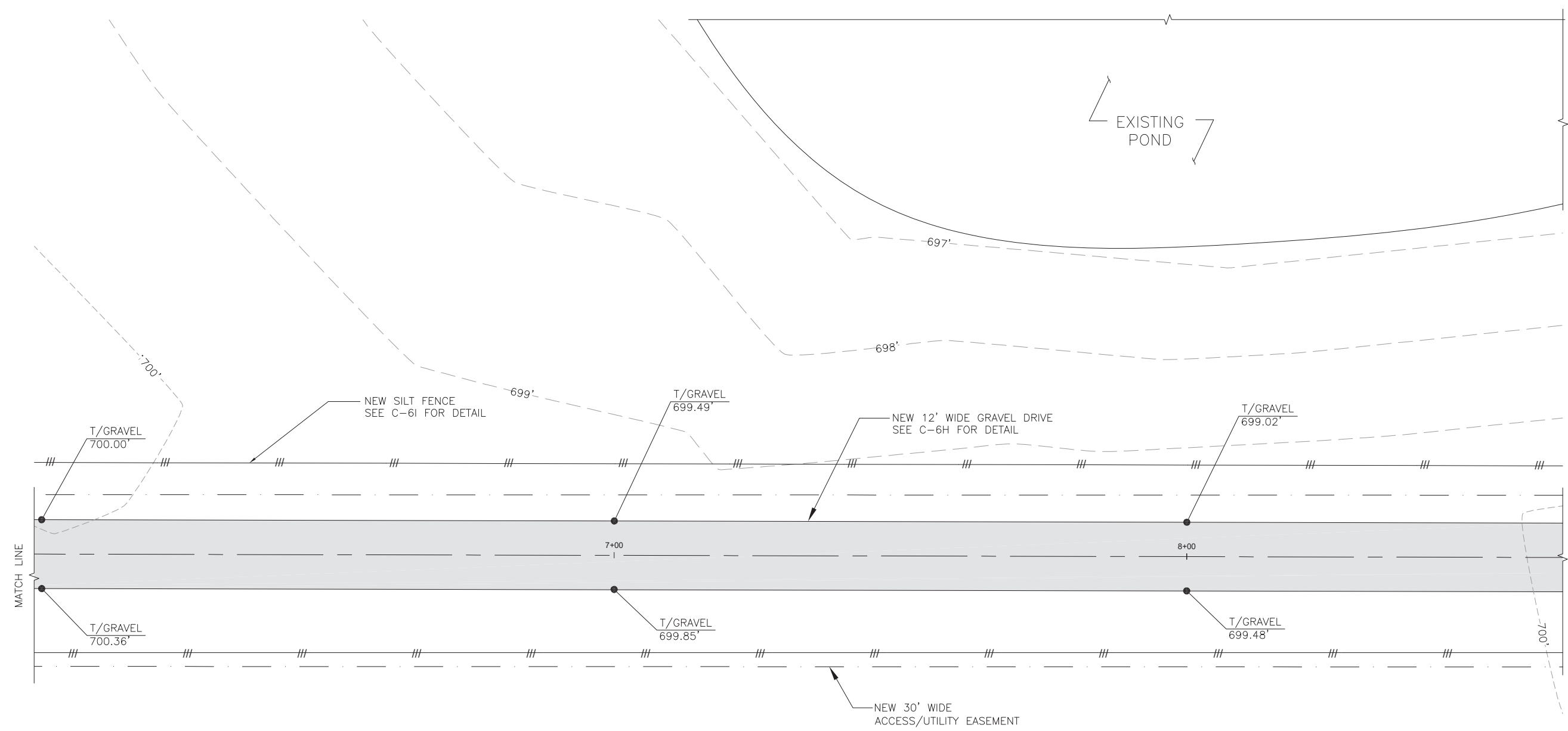
40W015 SEAVEY RD  
 BATAVIA, IL 60510

SHEET NAME

**PARTIAL SITE GRADING PLAN**

SHEET NUMBER

**C-6B**





**LEGEND**

EXISTING CONTOURS — — — — —

PROPOSED CONTOURS —————

SILT FENCE ———— ||| ————

PROPOSED SPOT ELEVATION ● XXX



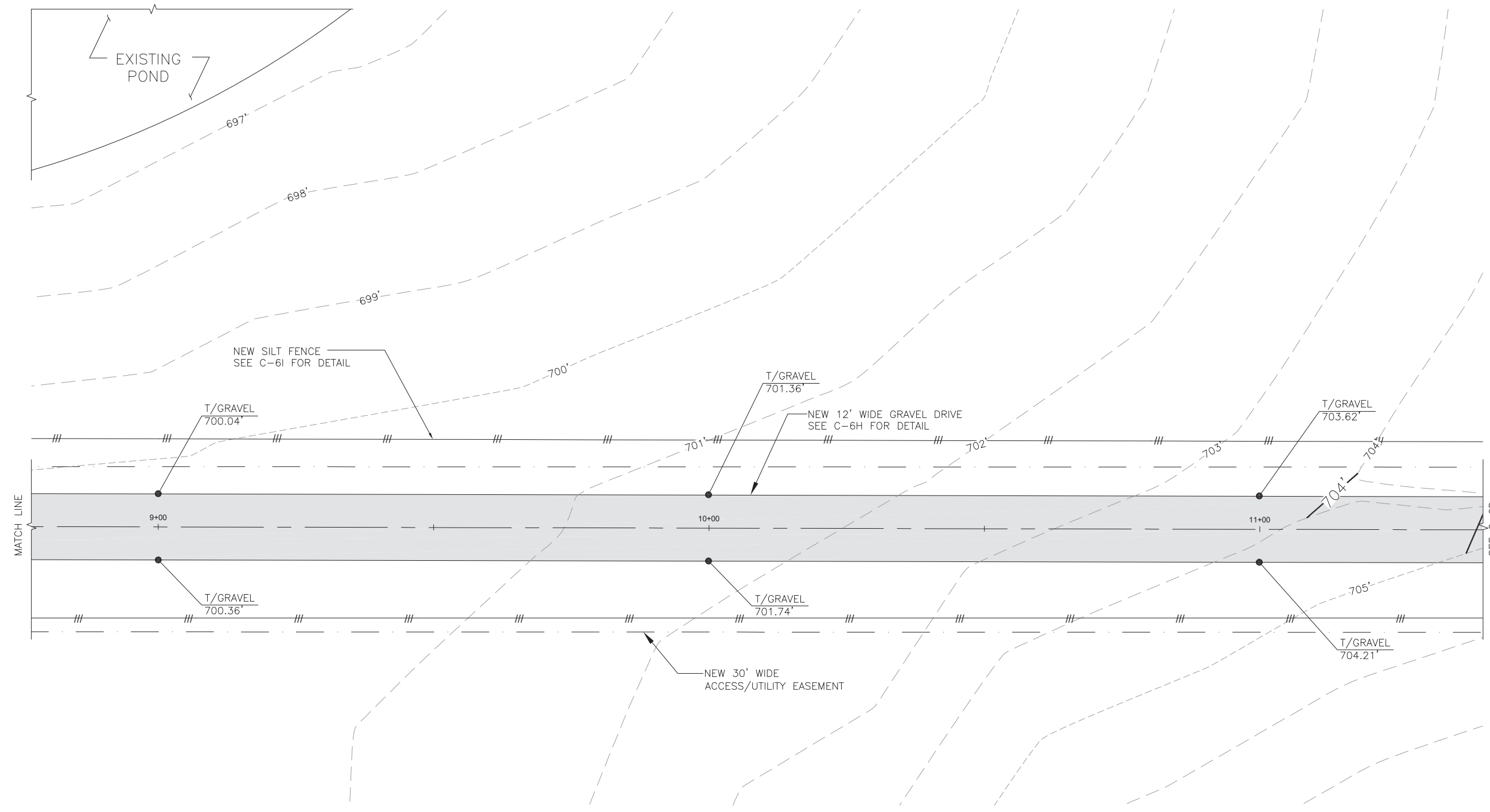
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SITE NAME

**AURORA WEST RECKINGER**

SITE ADDRESS

40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

**PARTIAL SITE GRADING PLAN**

SHEET NUMBER

**C-6C**

**LEGEND**

EXISTING CONTOURS — — — — —

PROPOSED CONTOURS —————

SILT FENCE ———— ||| ————

PROPOSED SPOT ELEVATION ● XXX



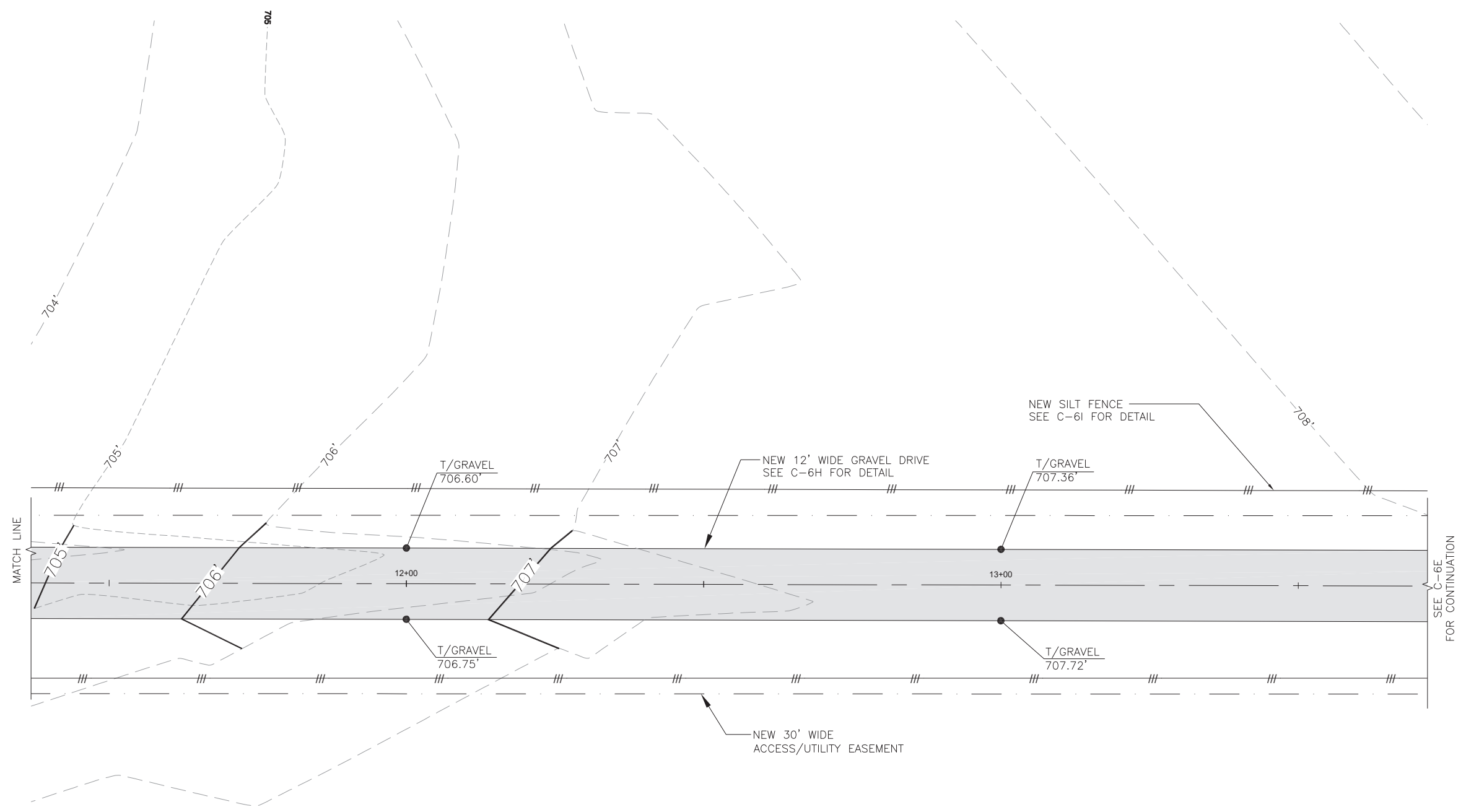
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1	5/6/20	REVISION	LA
2	6/2/20	FINAL	BL

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SITE NAME

**AURORA WEST RECKINGER**

SITE ADDRESS

40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

**PARTIAL SITE GRADING PLAN**

SHEET NUMBER

**C-6D**

**LEGEND**

EXISTING CONTOURS — — — — —

PROPOSED CONTOURS —————

SILT FENCE ———— ||| ————

PROPOSED SPOT ELEVATION ● XXX



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RECKINGER**

SITE ADDRESS

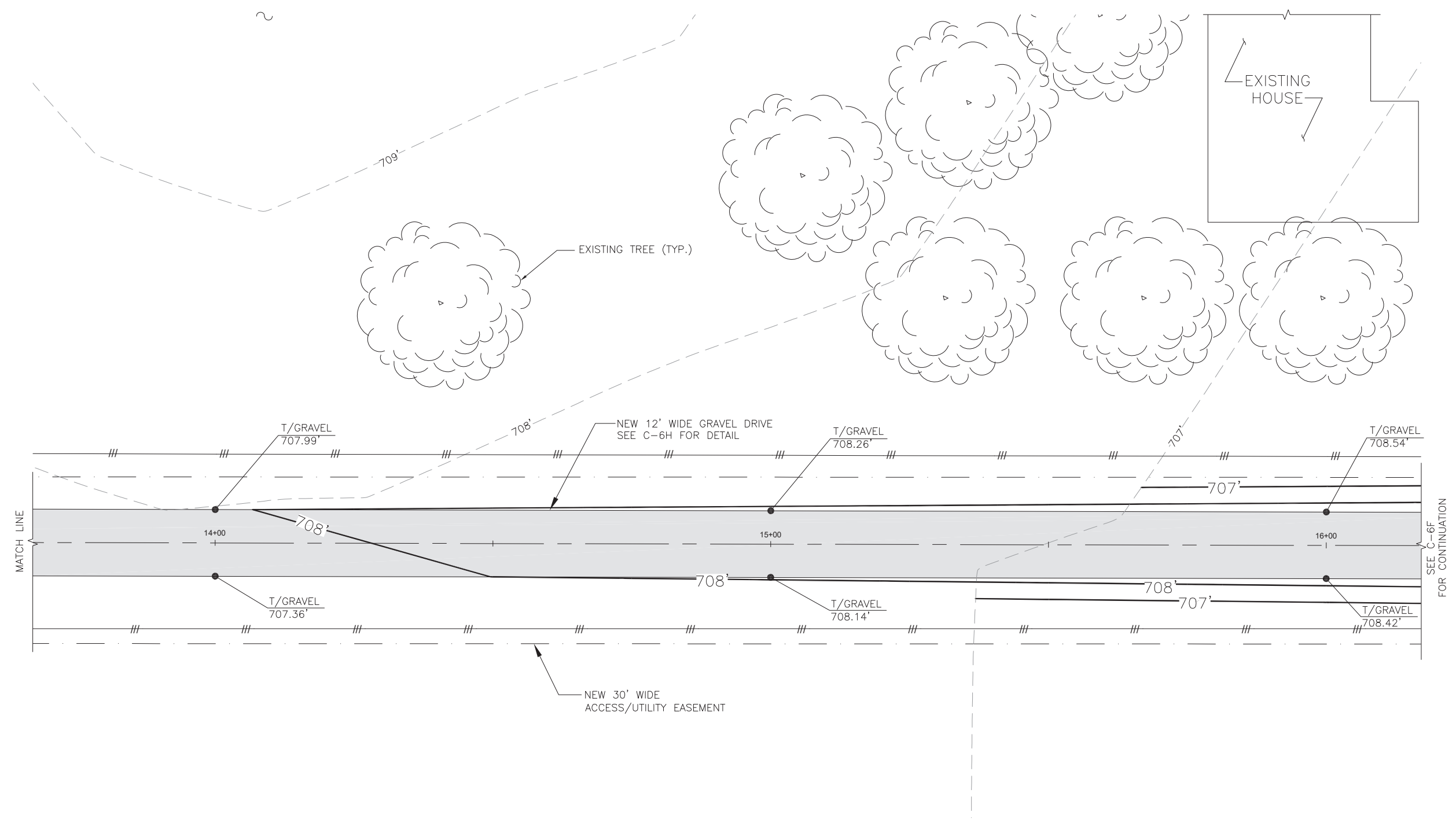
40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

**PARTIAL SITE  
GRADING PLAN**

SHEET NUMBER

**C-6E**



**LEGEND**

EXISTING CONTOURS — — — — —

PROPOSED CONTOURS —————

SILT FENCE —————

PROPOSED SPOT ELEVATION ● XXX



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SITE ADDRESS

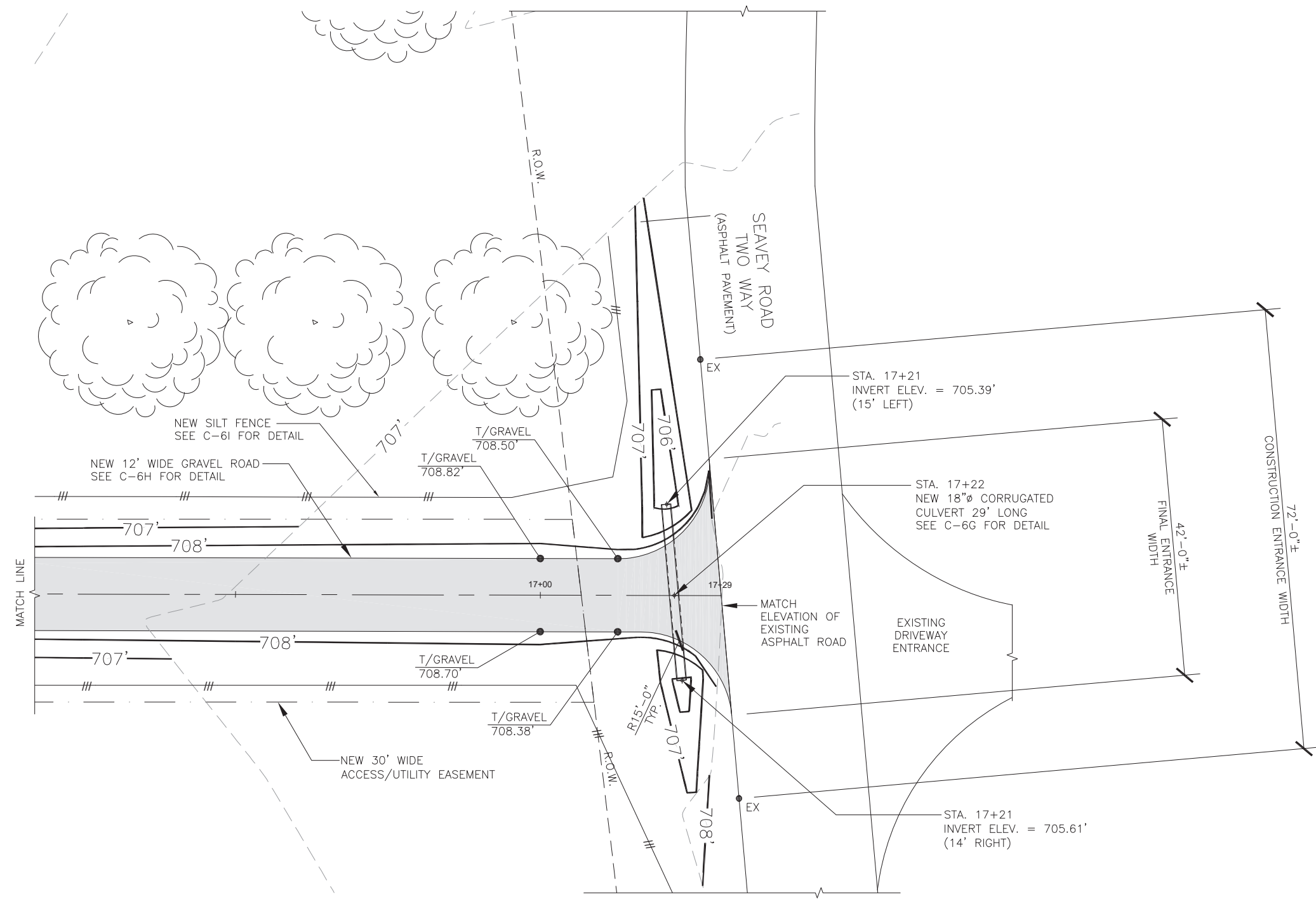
40W015 SEAVEY RD  
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SHEET NAME

**PARTIAL SITE  
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SHEET NUMBER

**C-6F**





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RECKINGER**

SITE ADDRESS

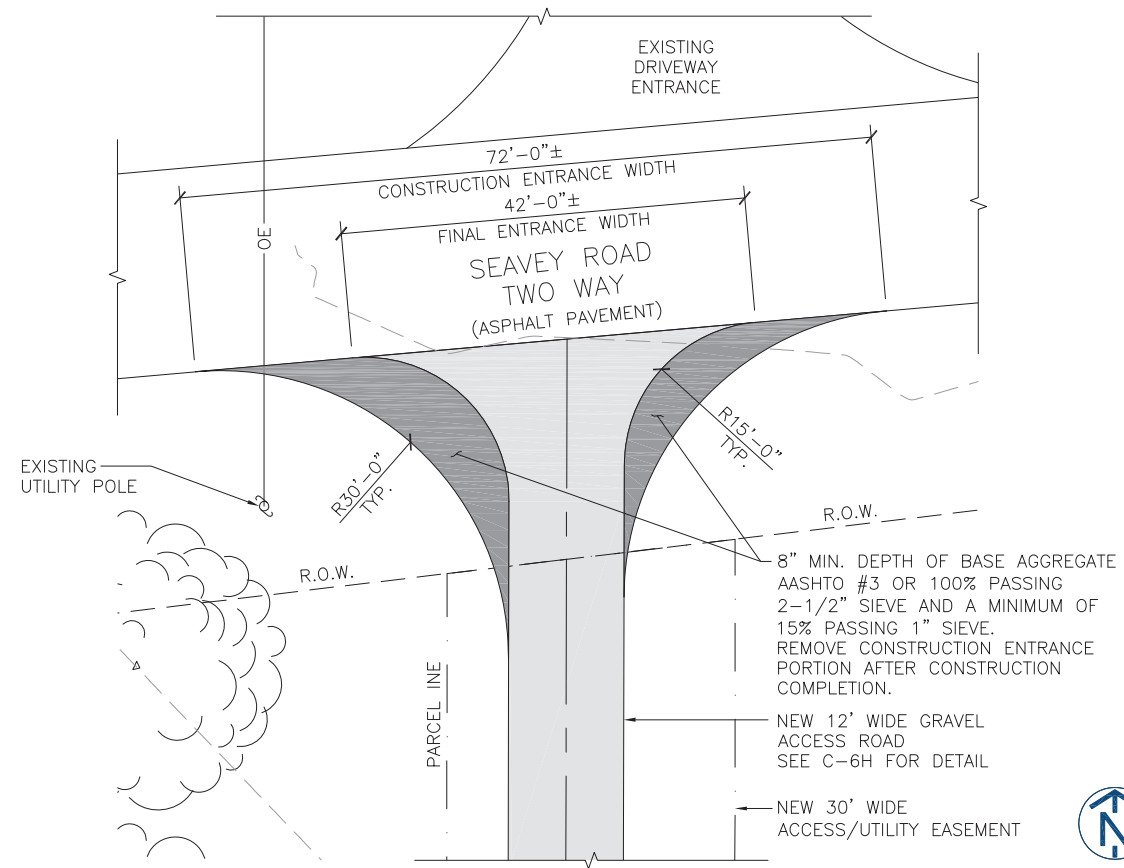
40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

**GRADING  
DETAILS**

SHEET NUMBER

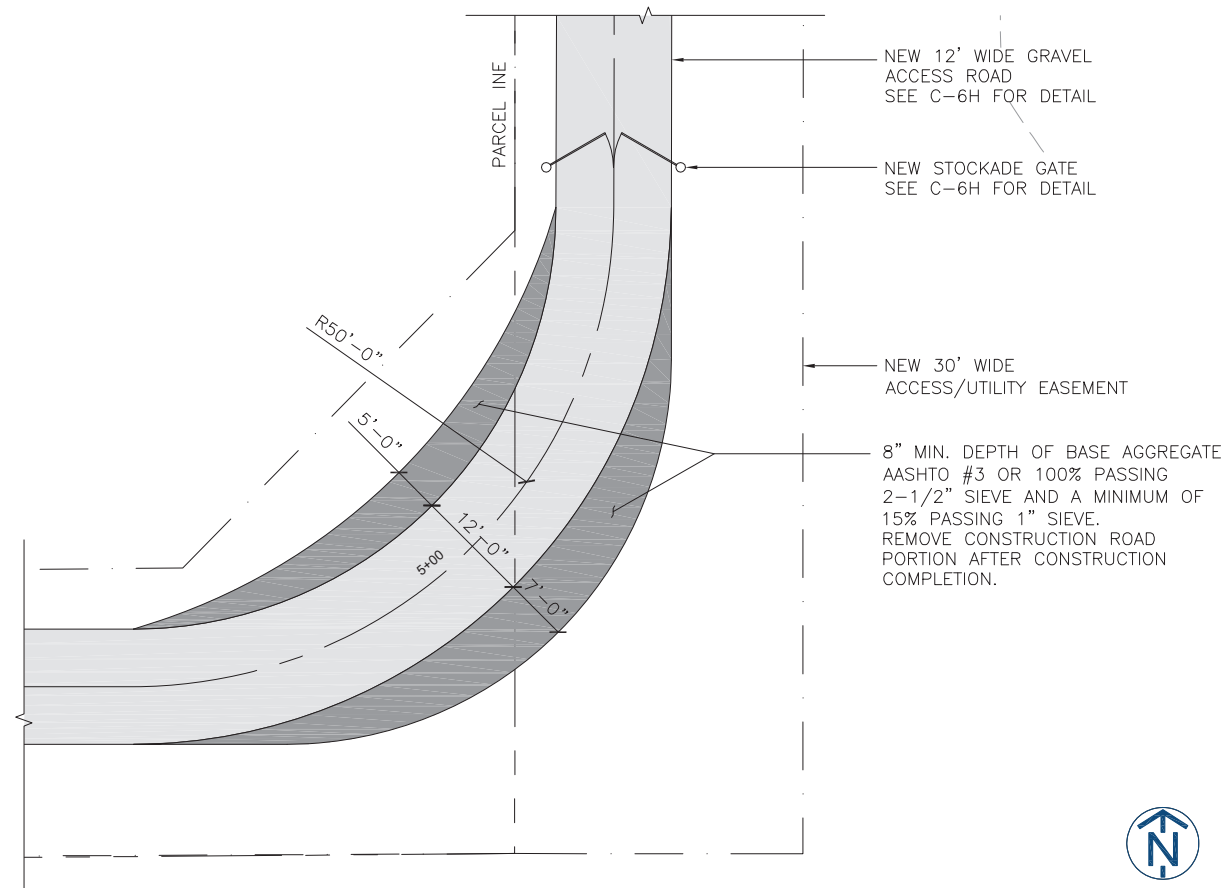
**C-6G**



CONSTRUCTION ROAD ENTRANCE DETAIL

SCALE: 1" = 20'-0"

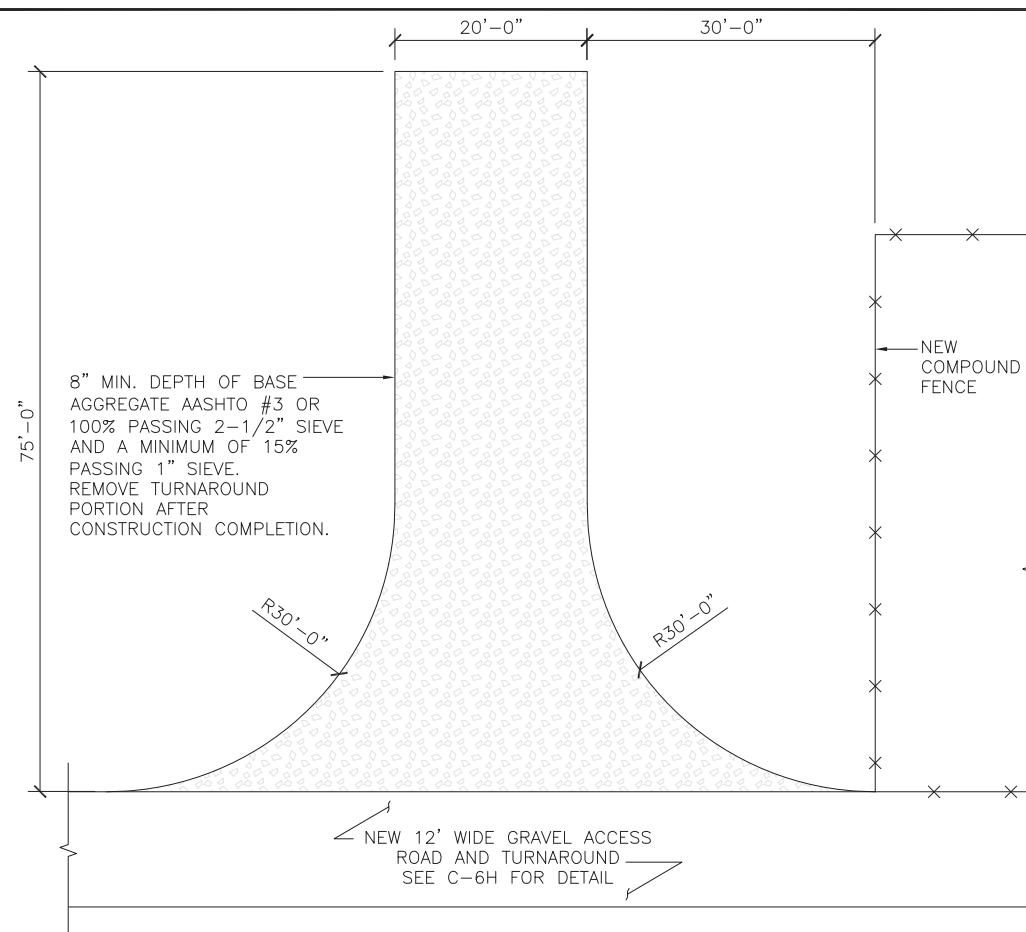
1



CONSTRUCTION ROAD TURN DETAIL

SCALE: 1" = 20'-0"

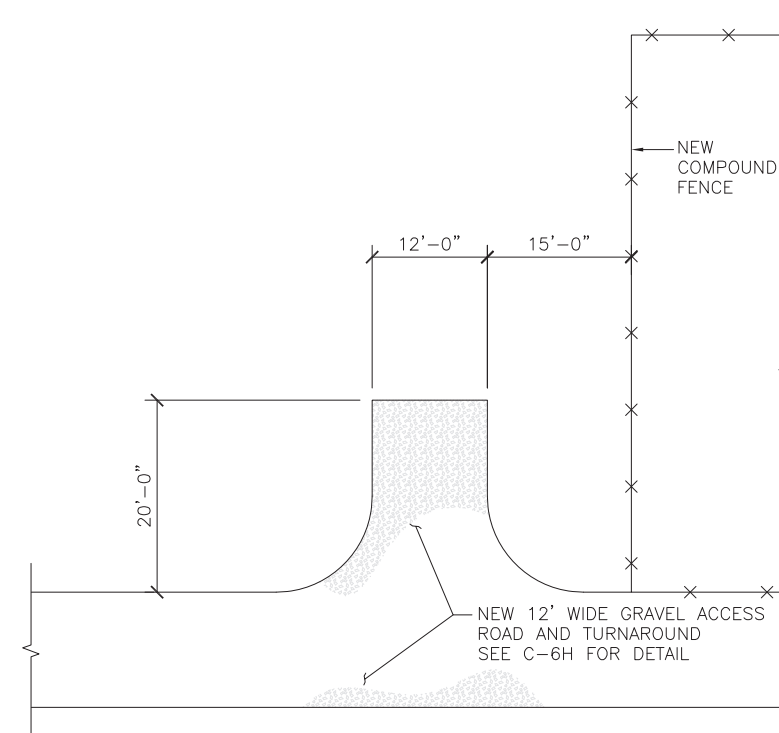
2



TEMPORARY CONSTRUCTION TURNAROUND DETAIL

SCALE: N.T.S.

3



FINAL TURNAROUND DETAIL

SCALE: N.T.S.

4



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**AURORA WEST RECKINGER**

SITE ADDRESS

40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

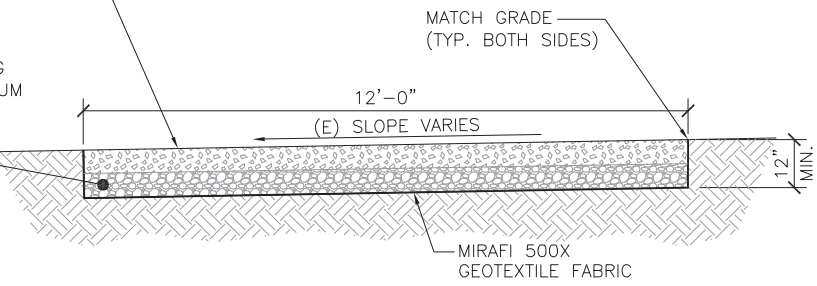
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DETAILS**

SHEET NUMBER

**C-6H**

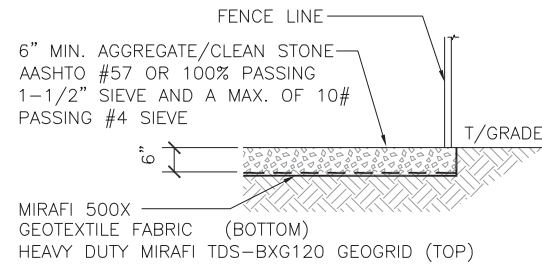
FINAL ACCESS ROAD SHALL BE PLACED AFTER MAJOR CONSTRUCTION AND TOWER ERECTION IS COMPLETED.  
4" MIN. FINISH AGGREGATE AASHTO #57 OR 100% PASSING 1-1/2" SIEVE AND 10% MAXIMUM PASSING THE #4 SIEVE

VERIFY DEPTH OF CONSTRUCTION ROAD WITH CM  
8" MIN. BASE AGGREGATE AASHTO #3 OR 100% PASSING 2-1/2" SIEVE AND A MAXIMUM OF 15% PASSING THE 1" SIEVE



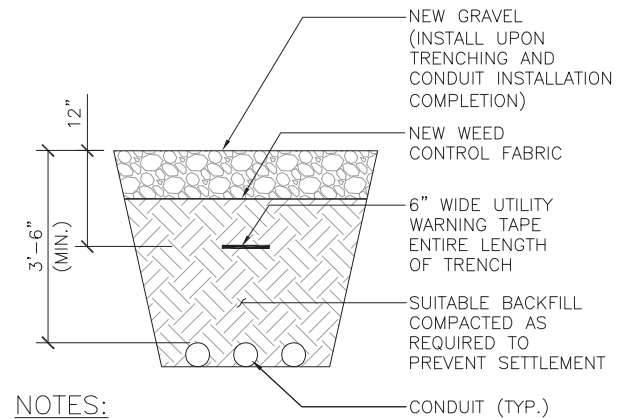
ACCESS ROAD DETAIL

SCALE: N.T.S. 1



COMPOUND GRAVEL DETAIL

SCALE: N.T.S. 2



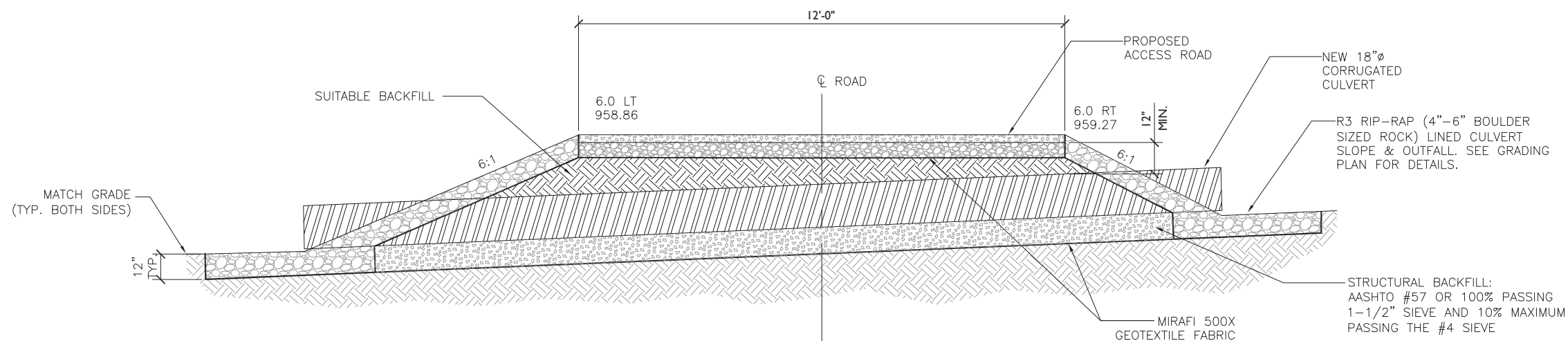
**NOTES:**

- CONTRACTOR TO VERIFY LOCAL UTILITY REQUIREMENTS FOR DEPTH, SIZE & SEPARATION OF CONDUITS PRIOR TO INSTALLATION. NOTIFY CONSTRUCTION MANAGER IMMEDIATELY OF ANY DISCREPANCIES.
- CONTRACTOR TO CALL 811, 48 HRS PRIOR TO EXCAVATING FOR UNDERGROUND UTILITY LOCATIONS. LOCATION SURROUNDING EXCAVATED AREA MUST BE PRIVATELY LOCATED FOR NON-PUBLIC UTILITIES.



TRENCH DETAIL INSIDE ENCLOSURE COMPOUND

SCALE: N.T.S. 3



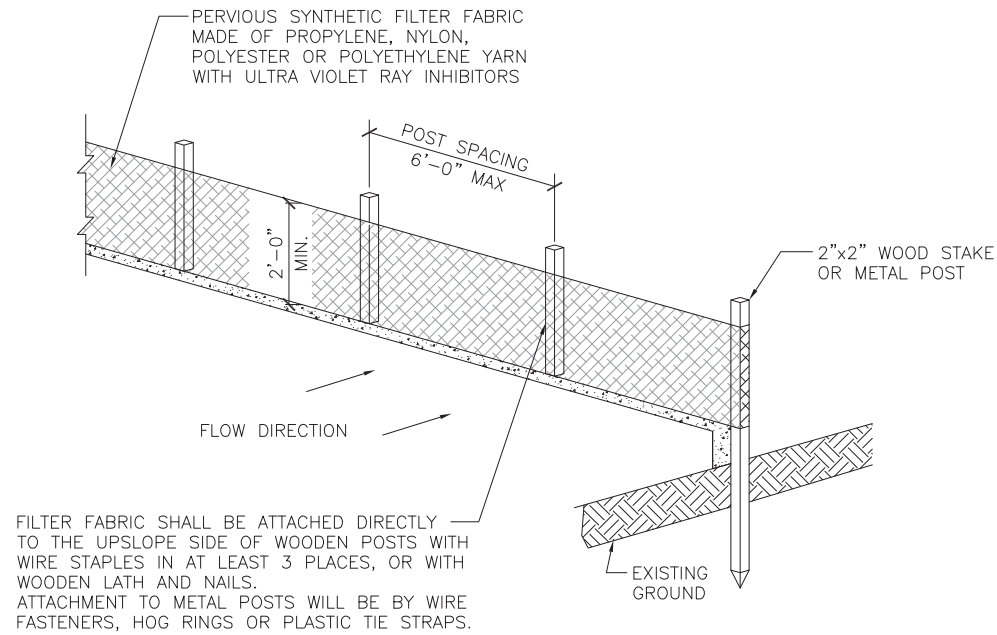
CULVERT DETAIL

SCALE: N.T.S. 4

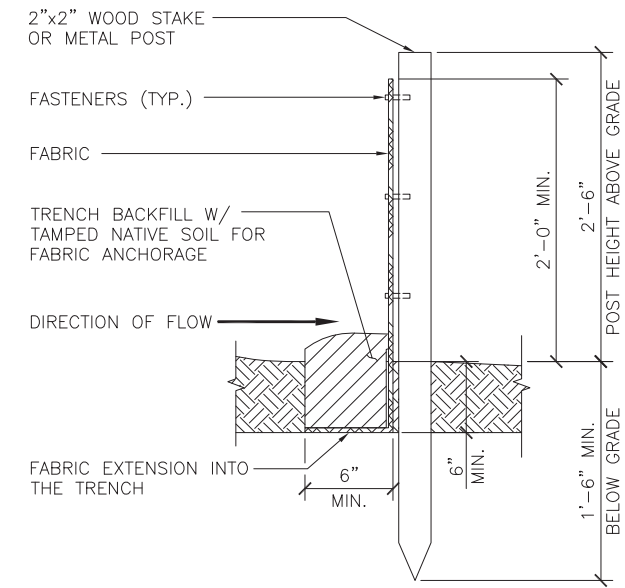
- ALL VEGETATIVE AND STRUCTURAL EROSION CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE APPLICABLE STATE ADOPTED "PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL" AND THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" OF THE STATE ENVIRONMENTAL PROTECTION AGENCY.
- A SOIL EROSION CONTROL FENCE SHALL BE INSTALLED BEFORE DISTURBING THE GROUND AND SHALL BE PROVIDED AS SHOWN ON THE PLAN. THE CONDITION OF THE FENCE SHALL BE INSPECTED REGULARLY AND AFTER EVERY RAINSTORM THAT MIGHT PRODUCE RUNOFF. DAMAGED OR DETERIORATED ITEMS SHALL BE REPLACED AND MAINTAINED IN AN EFFECTIVE CONDITION
- SOIL EROSION CONTROL MEASURES SHALL BE INCLUDED IN CONTRACTOR BID AND PRICING
- THE ENTIRE SITE SHALL BE GRADED SO THAT NO STORM WATER RUNOFF AND LIKewise SOIL SEDIMENT CAN FLOW UNRESTRICTED FROM THE SITE
- ALL INLETS, STRUCTURES, PIPES, SWALES, AND ROADS SHALL BE KEPT CLEAN AND FREE OF DIRT AND SILT
- MAINTAIN SOIL EROSION CONTROL MEASURES THROUGH THE DURATION OF THIS PROJECT
- SEDIMENT DEPOSITS SHALL BE REMOVED WHEN REACHING ONE HALF THE HEIGHT OF THE BARRIER
- ALL SOIL EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL ALL DISTURBED EARTH HAS BEEN PAVED OR VEGETATED
- ANY EXCESS TOPSOIL THAT IS TO BE STOCKPILED FOR A PERIOD LONGER THAN 2 WEEKS SHALL BE PROTECTED BY EXCAVATING A TRENCH COMPLETELY AROUND THE STOCKPILE TO PREVENT THE ESCAPE OF SOIL MATERIAL THROUGH STORM WATER RUNOFF. STOCKPILES THAT ARE TO REMAIN LONGER THAN 14 DAYS SHALL BE SEEDED WITH AN APPROPRIATE GROUND COVER
- TO PREVENT SOIL FROM LEAVING THE SITE ON CONSTRUCTION VEHICLE WHEELS, TEMPORARY GRAVEL ROADS AT WORK ENTRANCES SHALL BE CONSTRUCTED AND SHALL EXTEND INTO JOB SITE. THE EXISTING PAVEMENT SURFACES SHALL BE INSPECTED DAILY FOR SOIL DEBRIS AND SHALL BE CLEANED WHEN NECESSARY
- REPLACE SOIL EROSION CONTROL MEASURES WITH SEED, SOD AND TOPSOIL AT THE COMPLETION OF THE PROJECT
- SOIL EROSION CONTROL MEASURES SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN PROJECT IS COMPLETED

## SOIL EROSION AND SEDIMENT CONTROL NOTES

**1**  
C-6I SCALE: N.T.S.



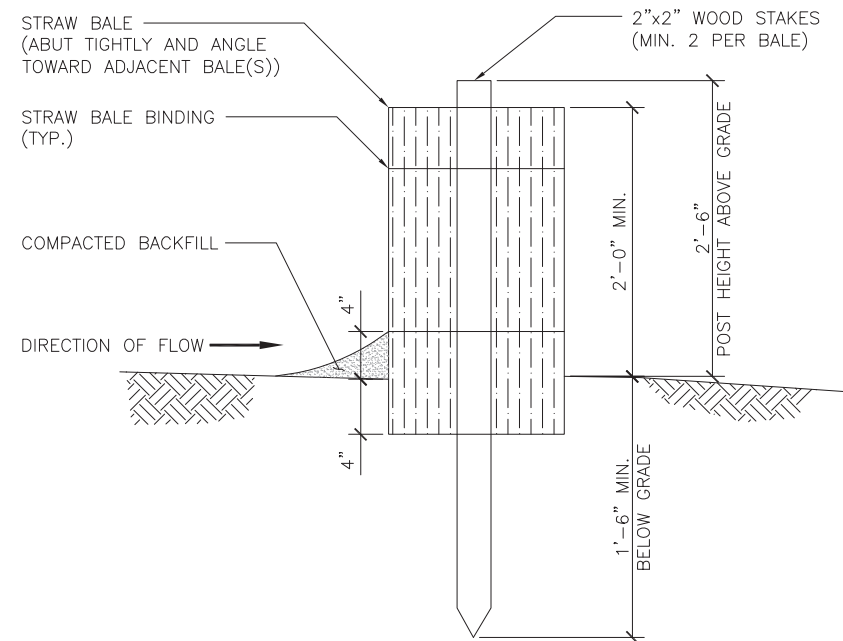
ISOMETRIC VIEW



SECTION VIEW

## 2 EROSION CONTROL - SILT FENCE

C-6I SCALE: N.T.S.



SECTION VIEW

## 3 EROSION CONTROL - STRAW BALE (OPTIONAL)

C-6I SCALE: N.T.S.



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SITE ADDRESS

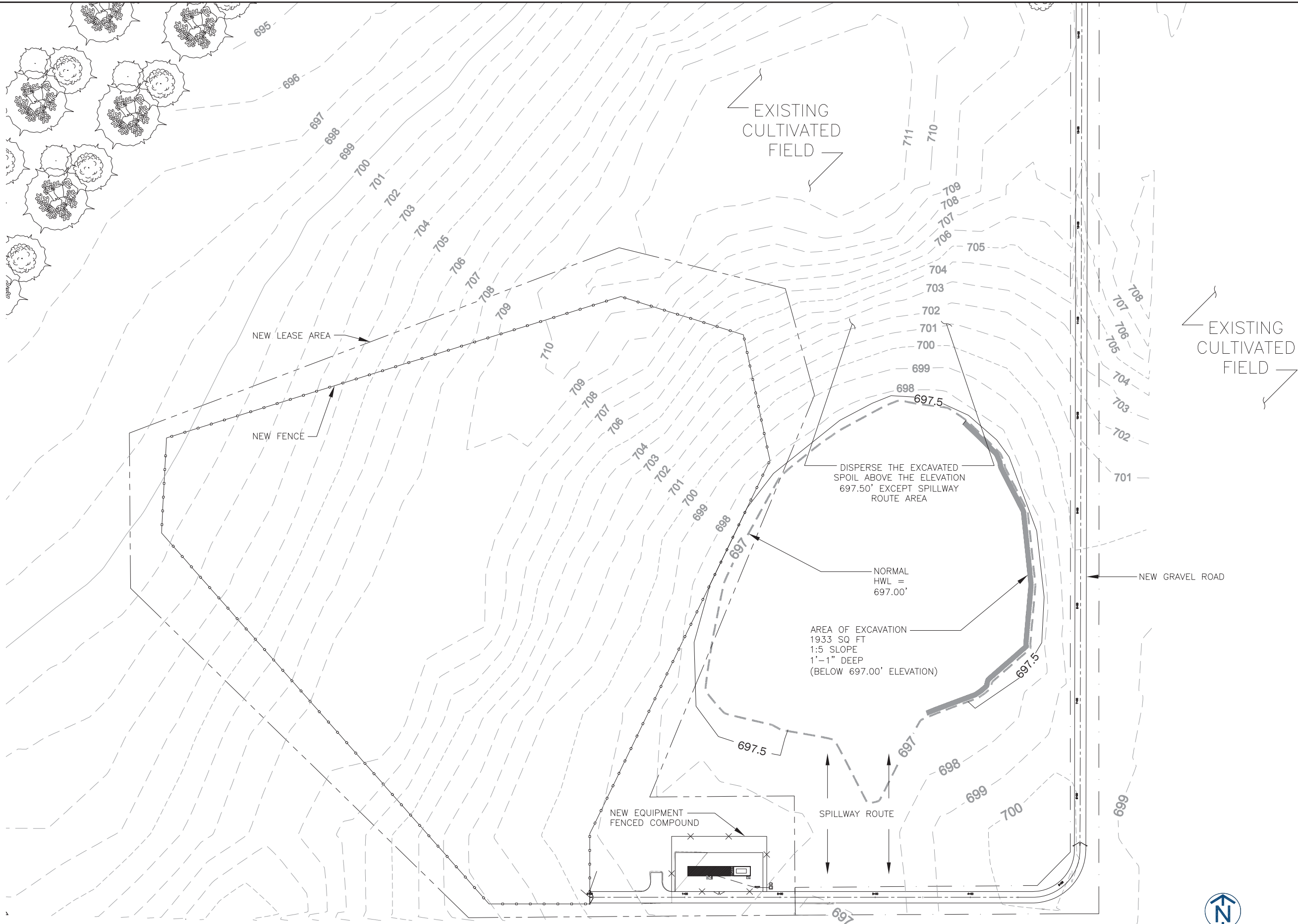
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SHEET NAME

**EROSION CONTROL  
DETAILS**

SHEET NUMBER

**C-6I**



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SHEET NAME

**WATERSHED PLAN**

SHEET NUMBER

**C-6J**



Total Impervious Area:  
Proposed road 24910 sq ft = 0.57ac

Total undisturbed area= 35 ac  
(0.57ac)/35 ac x 100= 1.6% > 1%

Detention Required: No, 24910 sq ft < 25000 sq ft

Stormwater/ Mitigation BMP- Yes, New Impervious Area > 5,000 sq. Ft and greater than 1% of the Site area.

1. Filling in depressed detention

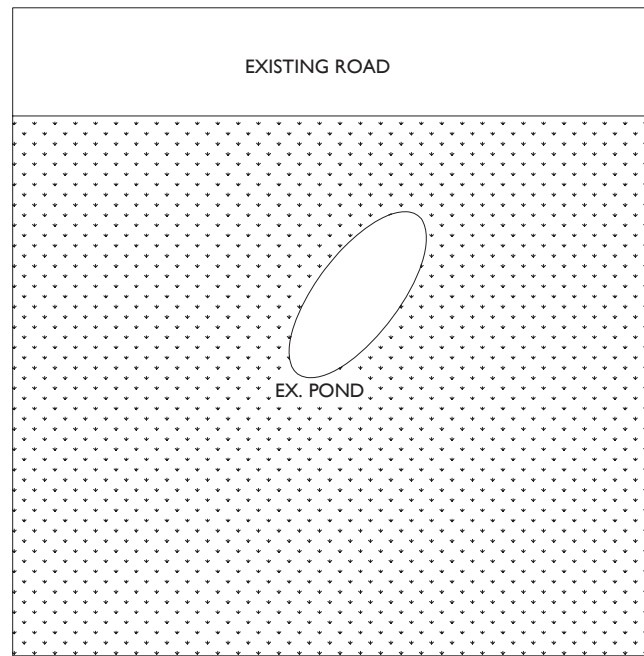
The proposed road profile across the depressed area mostly follow the existing ground profile. No fill below hwl 697 ft. elevation. therefore, there are no filling in the existing depressed detention. (See C-6K)

2. Mitigation BMP Volume:

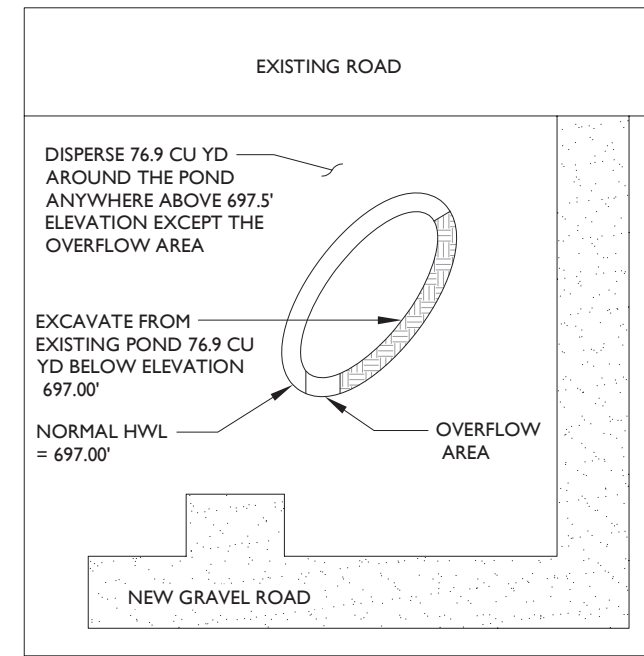
VBMP = 1in x NIHDA  
Total Excavation on the Existing Pond

VBMP =1in x 1ft/12in x 24910 sq ft = 2075 cu ft/27 cu ft/cu yd = 76.9 cu yd

3. The total excavation in the existing pond is BMP-76.9 cu. yd.  
Excavated soil should be dispersed on the property above the elevation 697.5' except the overflow route area.



EXISTING SITE



PROPOSED SITE



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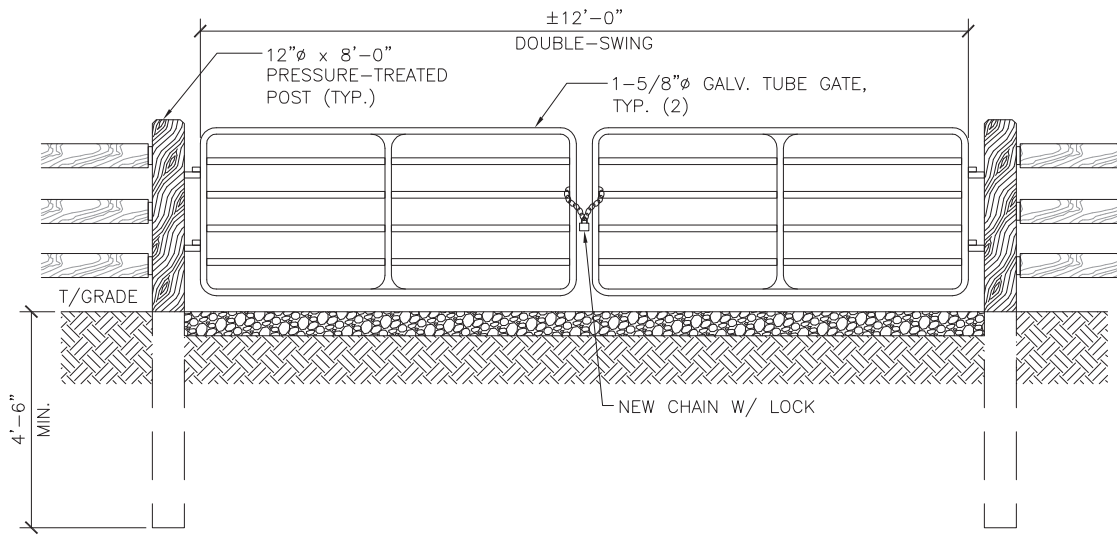
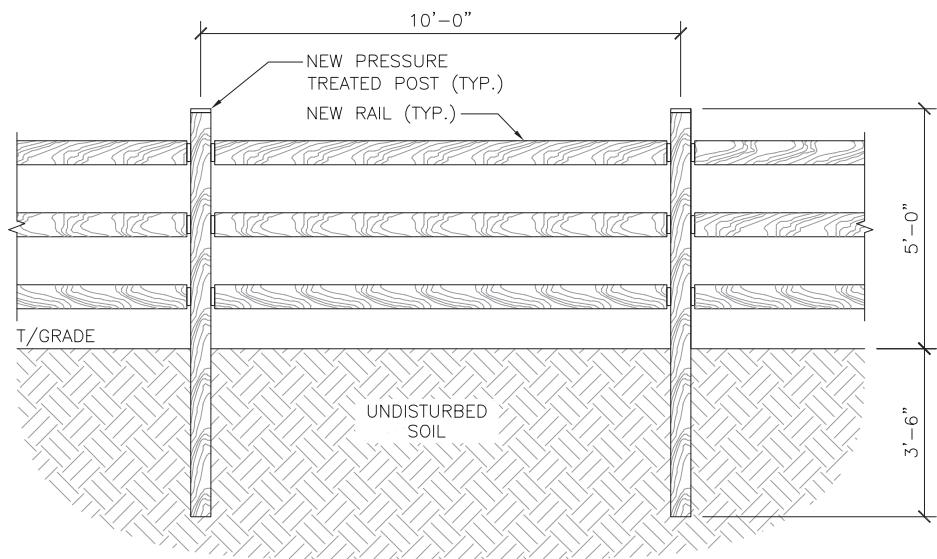
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SHEET NAME

**CALCULATIONS**

SHEET NUMBER

**C-6K**



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SHEET NAME

**SITE DETAILS**

SHEET NUMBER

**C-7**

3 RAIL Paddock FENCE

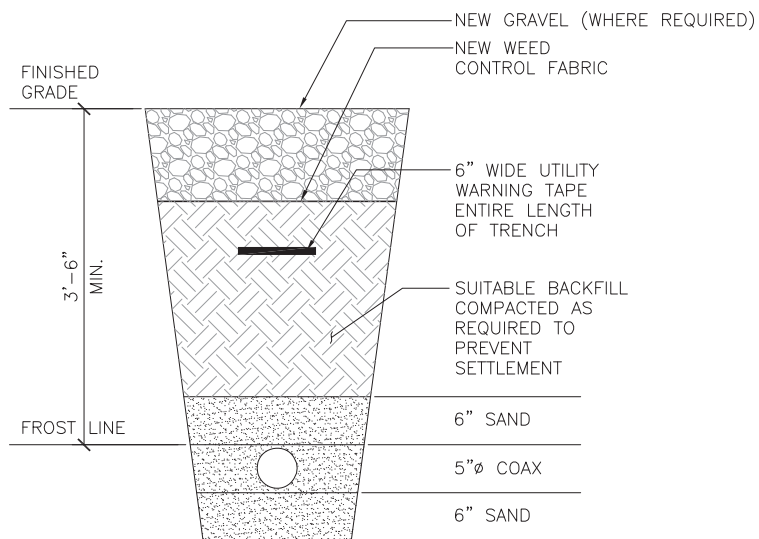
SCALE: N.T.S.

1

GATE DETAIL

SCALE: N.T.S.

2



**NOTES:**

1. CONTRACTOR TO VERIFY LOCAL UTILITY REQUIREMENTS FOR DEPTH, SIZE & SEPARATION OF CONDUITS PRIOR TO INSTALLATION. NOTIFY CONSTRUCTION MANAGER IMMEDIATELY OF ANY DISCREPANCIES.
2. CONTRACTOR TO CALL 811, 48 HRS PRIOR TO EXCAVATING FOR UNDERGROUND UTILITY LOCATIONS. LOCATION SURROUNDING EXCAVATED AREA MUST BE PRIVATELY LOCATED FOR NON-PUBLIC UTILITIES.



COAX TRENCH DETAIL

SCALE: N.T.S.

3

NOT USED

SCALE: N.T.S.

4



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SHEET NAME

**FENCE DETAILS**

SHEET NUMBER

**C-8**



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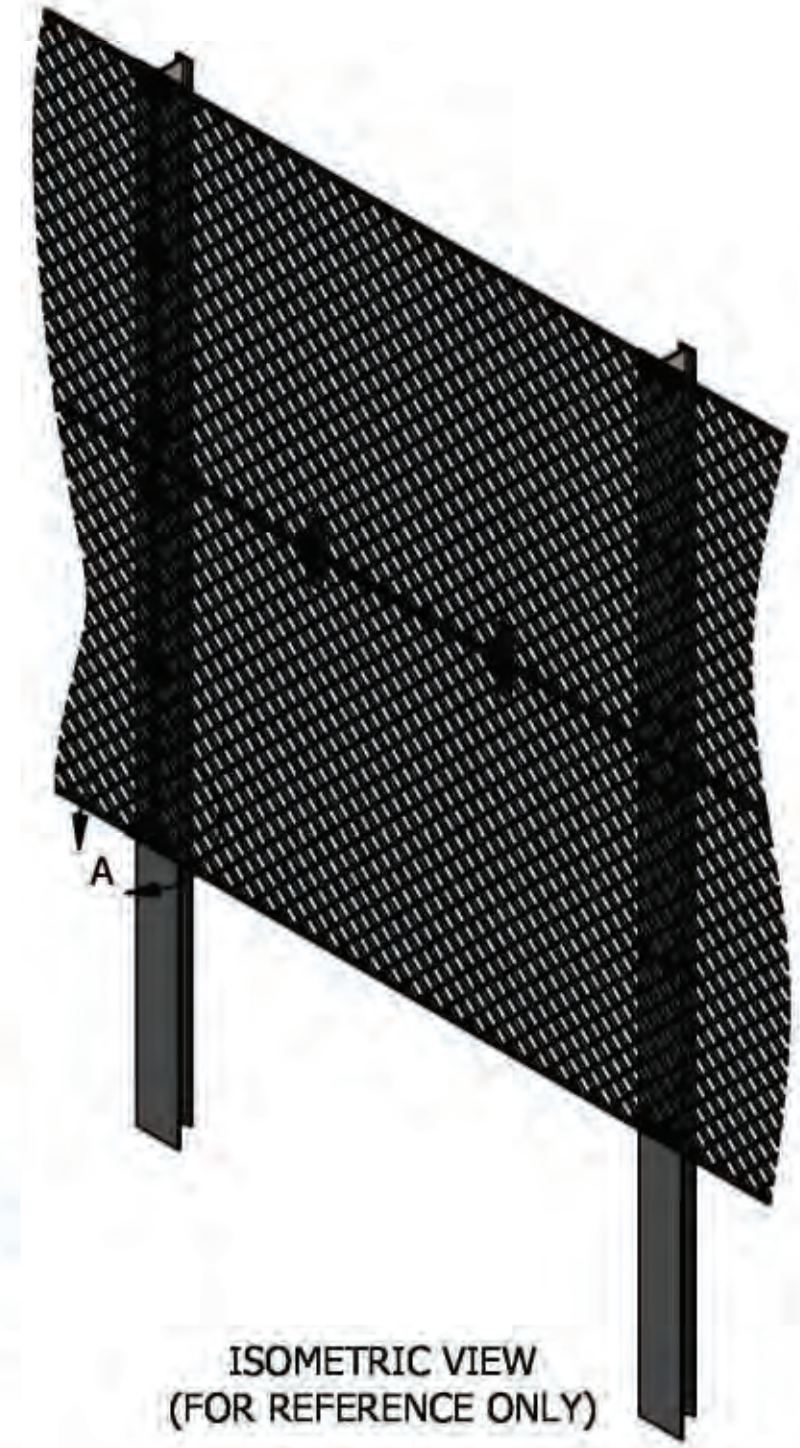
**ANC HIGH SECURITY  
NON-CONDUCTIVE FENCE  
ISOMETRIC**

MATERIAL SPECIFICATIONS:  
AISI STEEL, 45° PLATE ANGLE & CHANNEL  
ADD DIMENSIONS & ALL DIMENSIONS  
COMMERCIAL ONLY, ALL UNITS

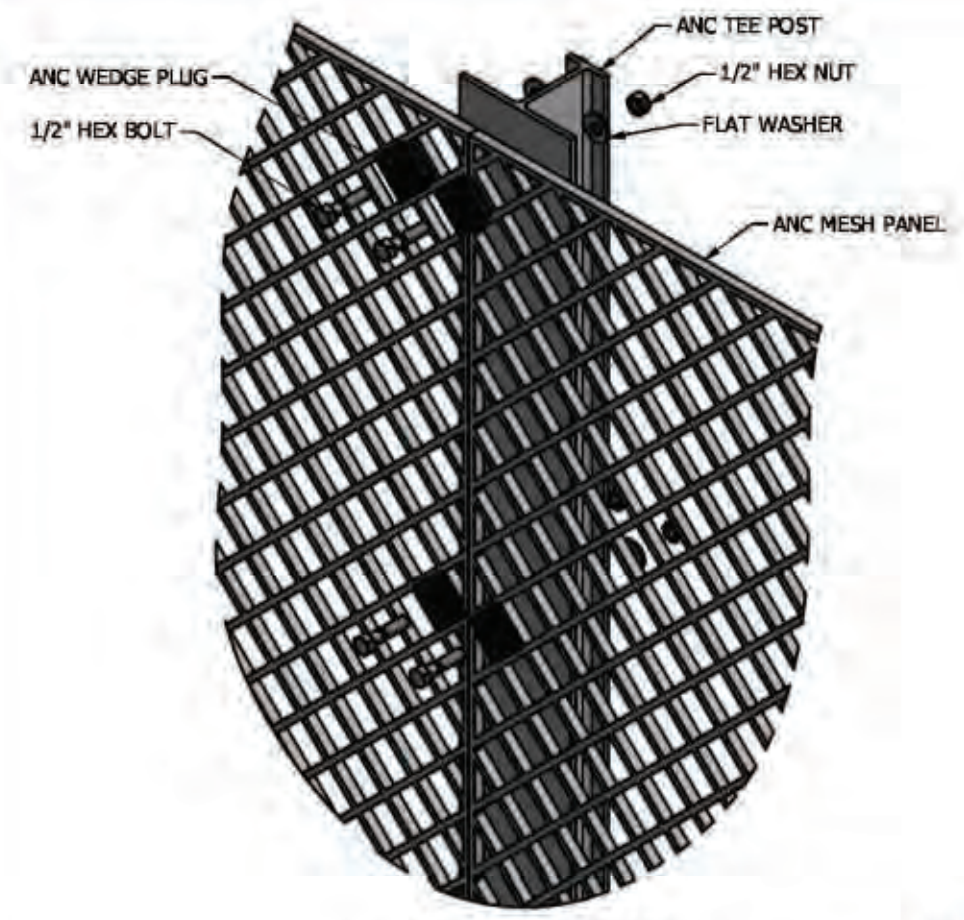
PROJECT	CUSTOMER	NO.	DATE	QUANTITY	REVISION	DATE	BY

SHEET NO.  
**TBD**

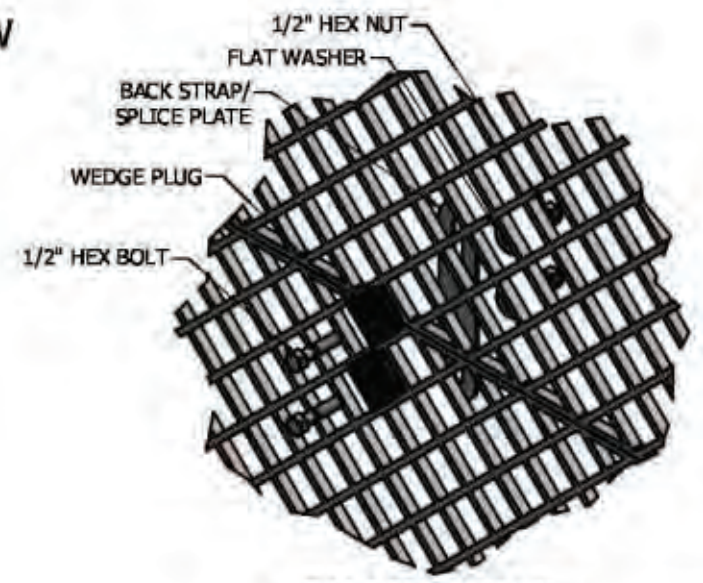
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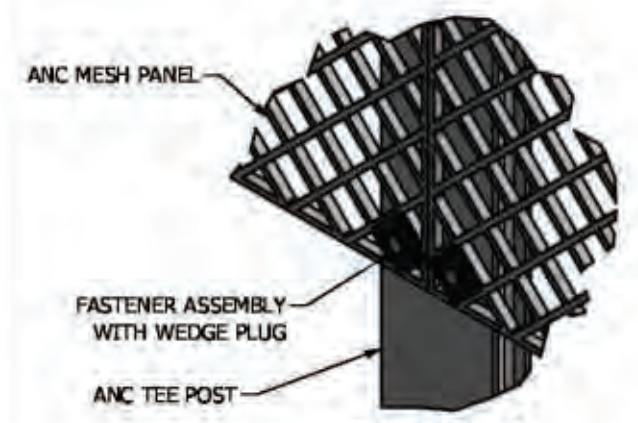
**ISOMETRIC VIEW  
(FOR REFERENCE ONLY)**



**EXPLODED VIEW**



**SPLICE DETAIL  
EXPLODED VIEW**



**DETAIL A  
ASSEMBLED VIEW**



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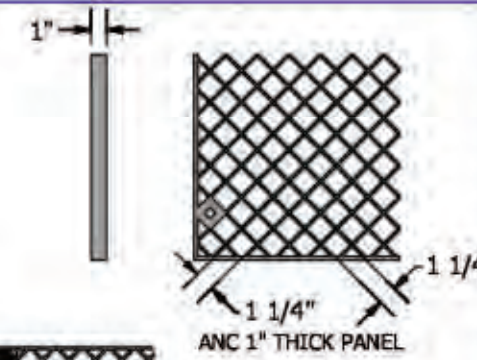
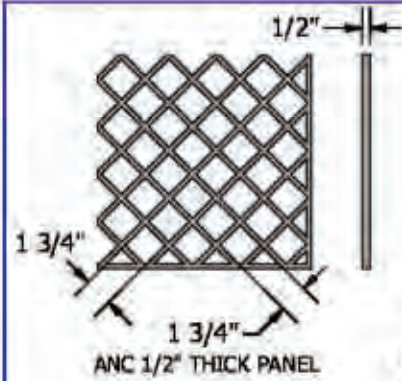
SHEET NAME

**FENCE DETAILS**

SHEET NUMBER

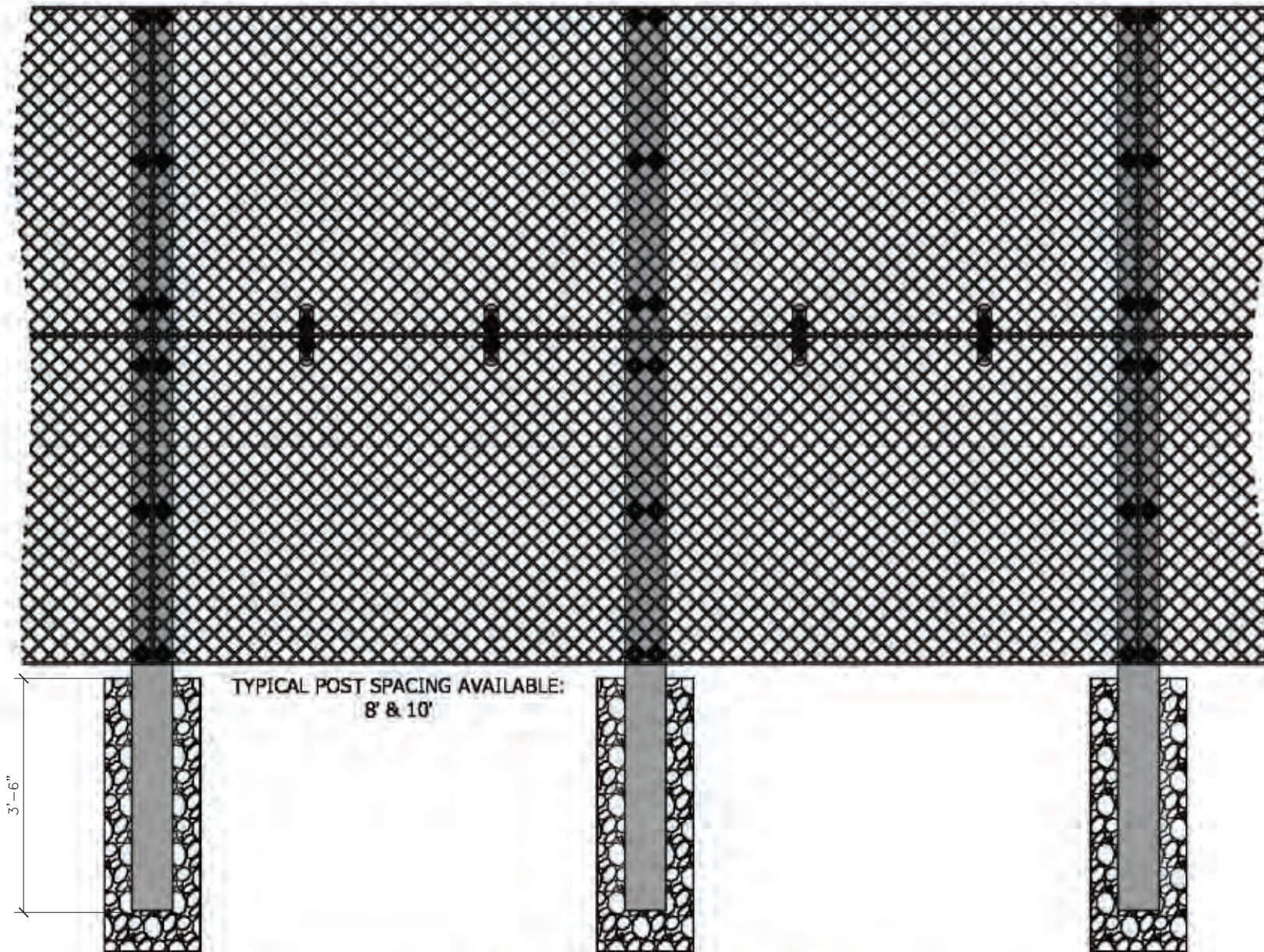
**C-9**

### TYPICAL DETAILS OF AVAILABLE MESH:



TOPPERS AVAILABLE:  
BARBED WIRE & RAZOR WIRE

TYPICAL FENCE HEIGHTS AVAILABLE:  
7', 8', 10', & 12'



NOTE: WIND LOAD REQUIREMENTS WILL DETERMINE POST SIZE AND SPACING



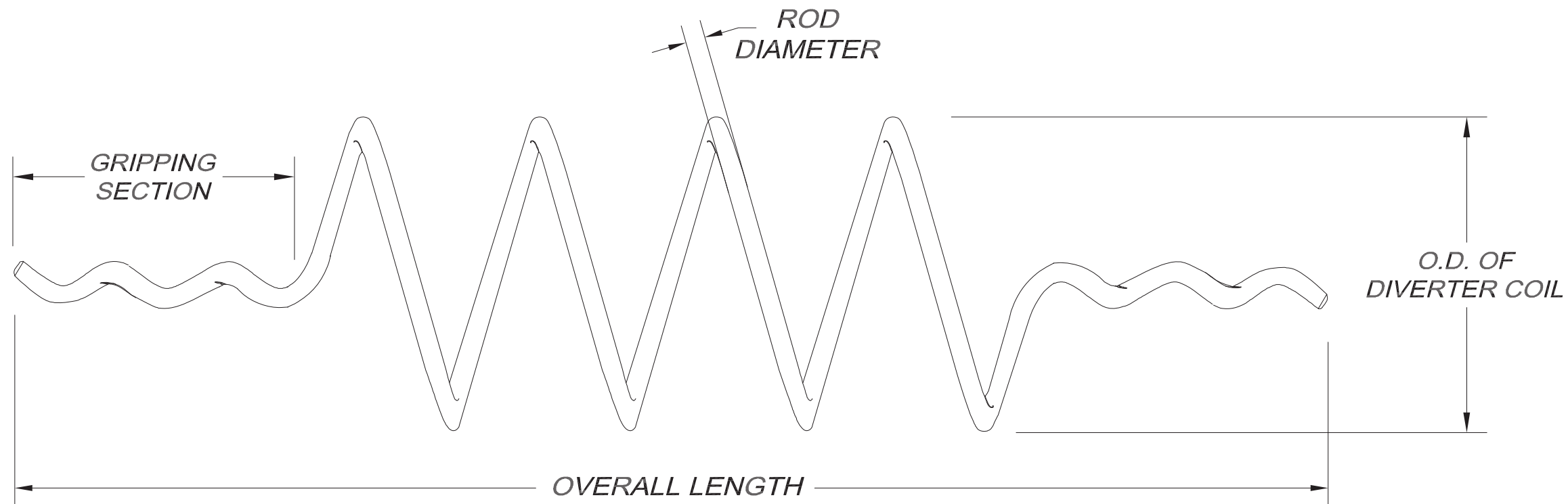
NO.	REV.	DATE	DESCRIPTION

**ANC HIGH SECURITY  
NON-CONDUCTIVE FENCE**

MATERIAL SPECIFICATIONS  
ASTM F1418, ALL PLATE ANGLE & CHANNEL  
ASB GRADE 304 L/TUBE STEEL  
COMMERCIAL GRADE ALUMINUM

PROJECT	DATE	REVISION	DESCRIPTION

SHEET NO.  
**TBD**



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**C-10**

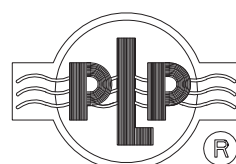
CATALOG NUMBER	CONDUCTOR RANGE in (mm)	OVERALL LENGTH in (mm)	O.D. OF DIVERTER COIL in (mm)	WEIGHT lbs (kg)
SFD-0445	.175-.249 (4.4-6.3)	20 (508)	7.0 (178)	.40 (.18)
SFD-0635	.250-.349 (6.4-8.9)	23 (584)	7.0 (178)	.46 (.21)
SFD-0890	.350-.449 (9.0-11.4)	25 (635)	7.5 (191)	.50 (.23)
SFD-1140	.450-.599 (11.4-15.2)	35 (889)	8.0 (203)	.70 (0.32)
SFD-1520	.600-.770 (15.2-19.6)	38 (965)	8.0 (203)	1.40 (0.64)
SFD-1960	.771-.858 (19.6-21.8)	38 (965)	8.0 (203)	1.40 (0.64)
SFD-2220	.859-.942 (21.8-23.9)	40 (1016)	8.0 (203)	1.50 (0.68)
SFD-2460	.943-1.121 (23.9-28.5)	40 (1016)	8.0 (203)	1.50 (0.68)
SFD-2700	1.122-1.306 (28.5-33.2)	40 (1016)	8.0 (203)	2.00 (0.91)
SFD-3035	1.307-1.530 (33.2-38.9)	46 (1168)	8.0 (203)	2.00 (0.91)

*Standard Color is Gray  
For Yellow add "-Y" to the end of the catalog number  
For Orange add "-O" to the end of the catalog number  
For Black Semi-conductive jacket add "-B" to the end of the catalog number*

**NOTES:**

**1. MATERIAL: HIGH IMPACT PVC; SLIGHT COLOR VARIATION CAN OCCUR BETWEEN BATCHES.**

ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY PER FACTORY TOLERANCES, CONTACT PLP FOR MORE INFORMATION.



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660 BETA DRIVE MAYFIELD, OHIO 44143  
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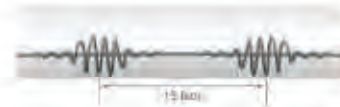
**Swan Flight Diverter**

DWG BY:	CHK BY:	DATE:	SCALE	FILE NAME
MRB	RJP	10/24/16	NTS	SFD-0445-3035

# SWAN-FLIGHT™ DIVERTER



● COMMUNICATIONS  
 ● ENERGY  
 ● SPECIAL INDUSTRIES  
 ● SOLAR



## PLP® Distribution Products SWAN-FLIGHT™ DIVERTER

### Description

The Preformed Line Products SWAN-FLIGHT Diverter is designed for use on overhead conductors to create greater visibility for avian flight paths on overhead lines and tower down guys. Offering little wind resistance, it reduces hazards to both lines and birds. For low and medium voltage construction, apply the SWAN-FLIGHT Diverter to phase conductors (bare or jacketed). For high voltages, it is typically used on shield wire.

The SWAN-FLIGHT Diverter is lightweight, offers little wind resistance and is easily and quickly applied by hand or hot stick. The positive grip on the conductor is designed to ensure that the SWAN-FLIGHT Diverter remains in the applied location and does not move along the span under Aeolian vibration or other conditions.

### Materials

Manufactured from rigid high impact polyvinyl chloride (PVC), the SWAN-FLIGHT Diverter possesses excellent chemical resistance, strength properties and will retain good physical characteristics within a range of extreme temperatures. Industrial fumes and salt water cannot seriously degrade the properties of rigid PVC.

### Spacing

For optimal results, spacing distances are generally recommended at 15' intervals,

depending upon local conditions. Since wind resistance is very limited, sufficient SWAN-FLIGHT Diverter can be used to ensure adequate visibility without creating stresses on the line. When marking adjacent spans, overall visibility is improved by staggering the placement between the spans.

### Features

SWAN-FLIGHT Diverter are designed to offer the following advantages:

- Increased conductor profile to provide increased visibility where large, slow moving bird flight paths are present
- Economical and easily applied
- Lightweight
- Long service life without deterioration of material properties
- Minimal wind resistance
- Manufactured from gray or yellow high impact PVC with UV protection

### Visibility

The diverter section increases the visible profile of the cable or conductor to ensure safety, but avoids an undesirable bulky outline.

### Application

Ensure the correct size SWAN-FLIGHT Diverter is used. For detailed installation description, refer to the application procedure. Hot stick application is fast and simple with standard equipment.

SWAN-FLIGHT Diverter - Product Data							
PLP Catalog Number	Conductor Range (Inches)		Overall Length (Inches)	Diameter of Diverter Coil (Inches)	Diameter of PVC Rod (Inches)	Approx. Weight (lbs)	Color Code
	Min	Max					
SFD-0445	0.175	0.249	20	7.0	0.375	0.40	Black
SFD-0635	0.250	0.349	23	7.0	0.375	0.46	Blue
SFD-0890	0.350	0.449	25	7.5	0.375	0.50	Brown
SFD-1140	0.450	0.599	35	8.0	0.375	0.70	Green
SFD-1520	0.600	0.770	38	8.0	0.500	1.40	Purple
SFD-1960	0.771	0.858	38	8.0	0.500	1.40	Red
SFD-2220	0.859	0.970	40	8.0	0.500	1.50	Orange
SFD-2460	0.971	1.121	40	8.0	0.500	1.50	Pink
SFD-2700	1.122	1.306	40	8.0	0.500	2.00	Gray*
SFD-3035	1.307	1.530	46	8.0	0.500	2.00	Black

\*Gray is the standard color. For yellow add "Y" after the catalog number.  
Add suffix -B to the catalog number for black semi-conductive layer for applications @ 230kV (i.e.: SFD-2460-B).  
The SWAN-FLIGHT Diverter should not be applied on phase conductors energized at voltages of 945kV and above.



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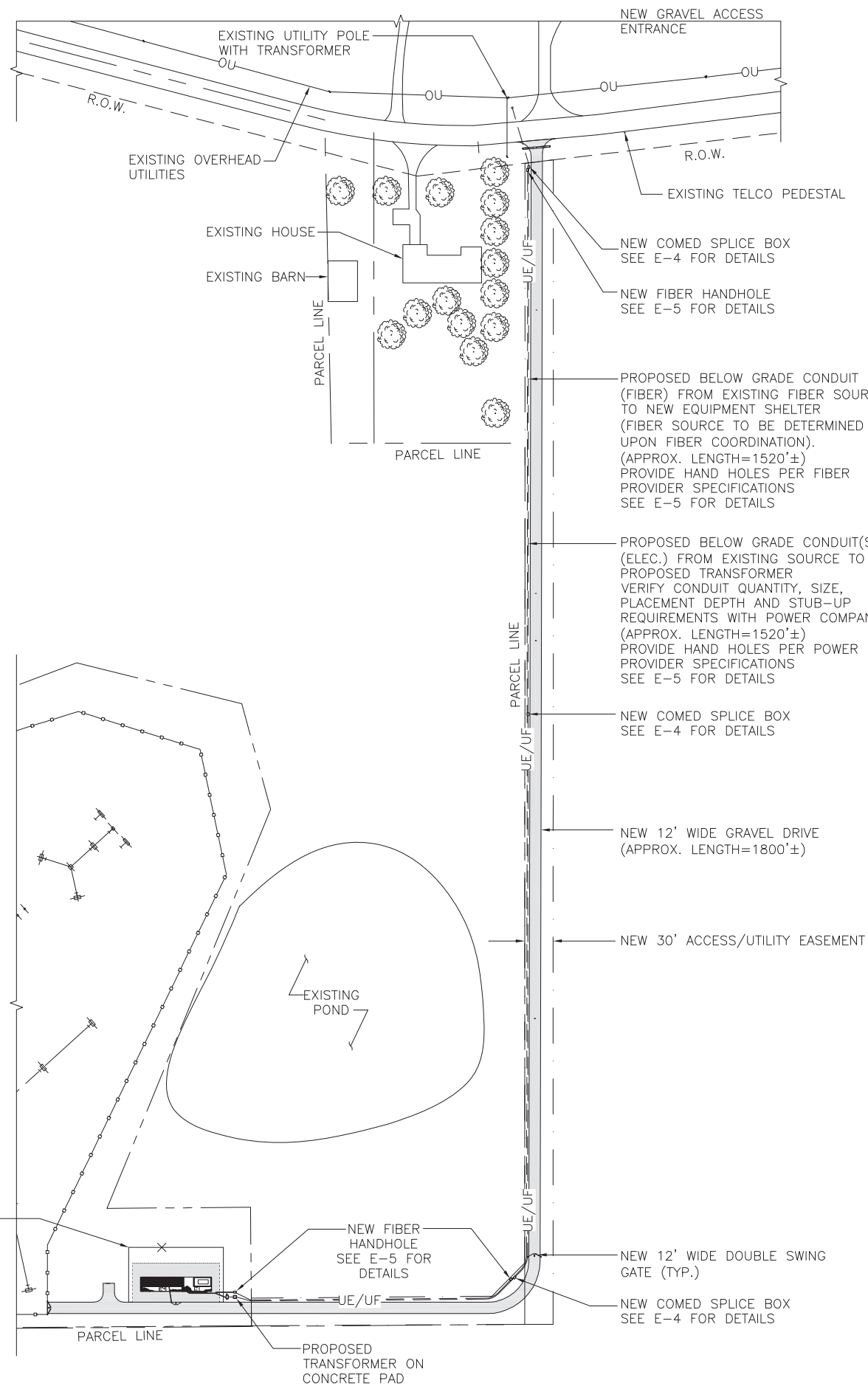
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SHEET NAME

**SITE DETAILS**

SHEET NUMBER

**C-11**



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**UTILITY PLAN**

SHEET NUMBER

**E-1**



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1	5/6/20	REVISION	LA
2	6/2/20	FINAL	BL

I HEREBY CERTIFY THAT THESE DRAWINGS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND CONTROL, AND TO THE BEST OF MY KNOWLEDGE AND BELIEF COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE CODES.



DocuSign

SITE NAME

**AURORA WEST  
RECKINGER**

SITE ADDRESS

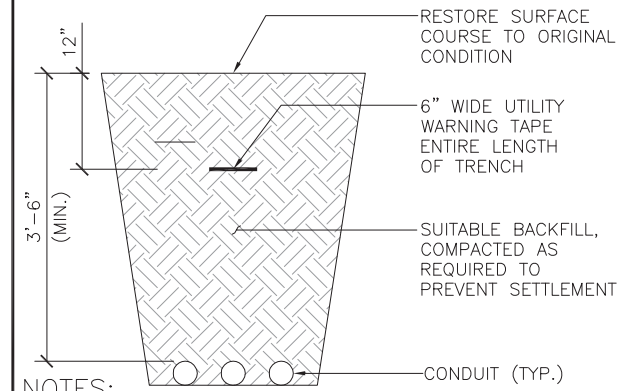
40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

**ENLARGED  
UTILITY PLAN AND  
DETAILS**

SHEET NUMBER

**E-2**

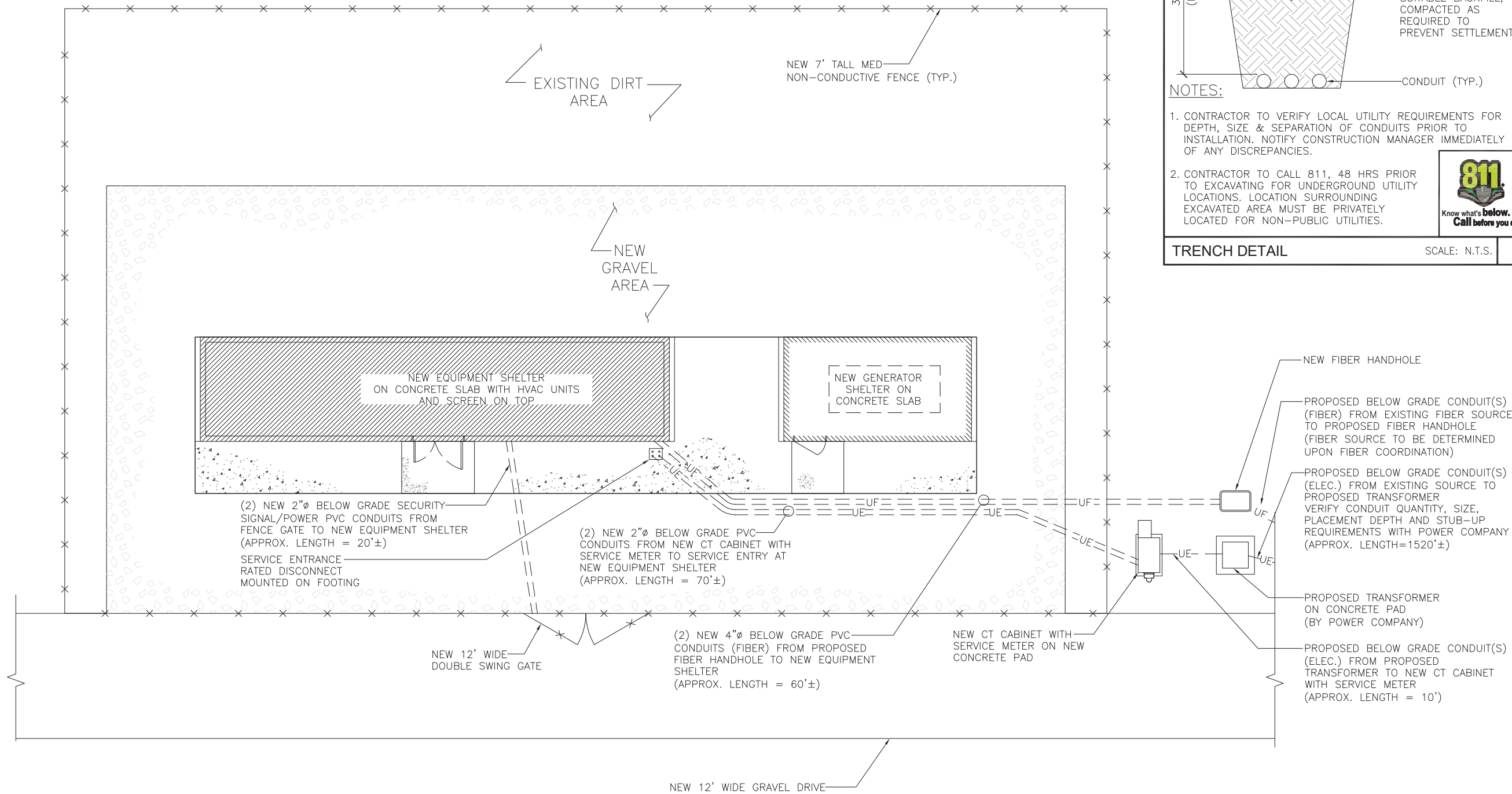


**NOTES:**

- CONTRACTOR TO VERIFY LOCAL UTILITY REQUIREMENTS FOR DEPTH, SIZE & SEPARATION OF CONDUITS PRIOR TO INSTALLATION. NOTIFY CONSTRUCTION MANAGER IMMEDIATELY OF ANY DISCREPANCIES.
- CONTRACTOR TO CALL 811, 48 HRS PRIOR TO EXCAVATING FOR UNDERGROUND UTILITY LOCATIONS. LOCATION SURROUNDING EXCAVATED AREA MUST BE PRIVATELY LOCATED FOR NON-PUBLIC UTILITIES.

**TRENCH DETAIL**

SCALE: N.T.S. 1







85 RANGWAY RD #110  
NORTH BILLERICA, MA 01862  
(781) 538-5299

**FULLERTON**  
ENGINEERING · DESIGN

1100 E. WOODFIELD ROAD, SUITE 500  
SCHAUMBURG, ILLINOIS 60173  
TEL: 847-908-8400  
DESIGN FIRM NO. 184.008202-0006  
www.FullertonEngineering.com

REV	DATE	DESCRIPTION	BY
1	3/27/20	90% REVIEW	LA
0	4/22/20	PERMITTING	LA
1	5/6/20	REVISION	LA
2	6/2/20	FINAL	BL

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SITE NAME

**AURORA WEST  
RECKINGER**

SITE ADDRESS

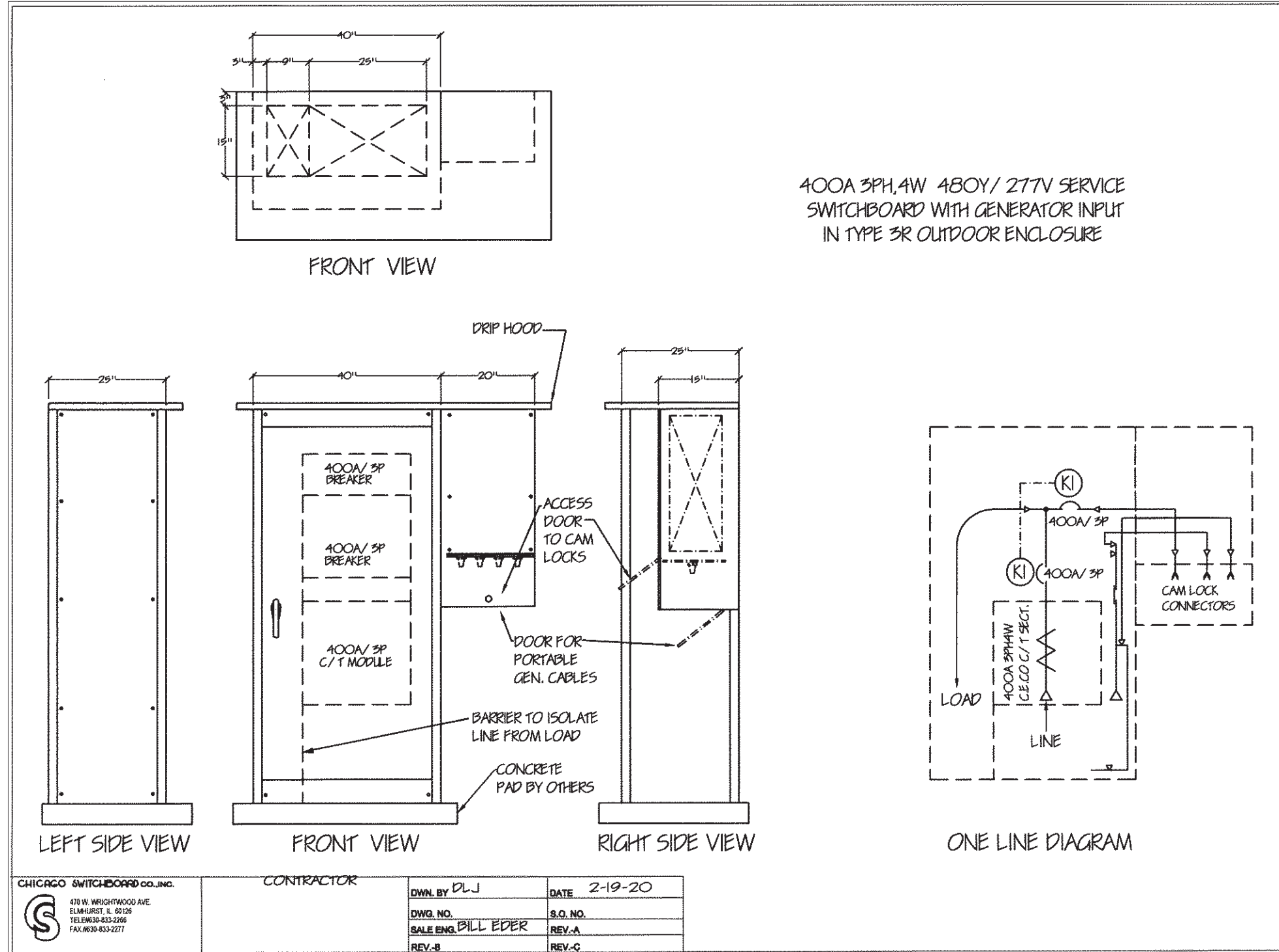
40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

**CT CABINET  
SPECIFICATIONS**

SHEET NUMBER

**E-3**



CHICAGO SWITCHBOARD CO., INC.  
470 W. WRIGHTWOOD AVE.  
ELMHURST, IL 60120  
TELEPHONE 833-2266  
FAX 833-2277

CONTRACTOR

DWN. BY DLJ	DATE 2-19-20
DWG. NO.	S.O. NO.
SALE ENG. BILL EDER	REV. A
REV. B	REV. C



85 RANGWAY RD #110  
NORTH BILLERICA, MA 01862  
(781) 538-5299

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TEL: 847-908-8400  
DESIGN FIRM NO. 184.008202-0006  
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REV	DATE	DESCRIPTION	BY
1	3/27/20	90% REVIEW	LA
0	4/22/20	PERMITTING	LA
1	5/6/20	REVISION	LA
2	6/2/20	FINAL	BL

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SITE NAME

**AURORA WEST  
RECKINGER**

SITE ADDRESS

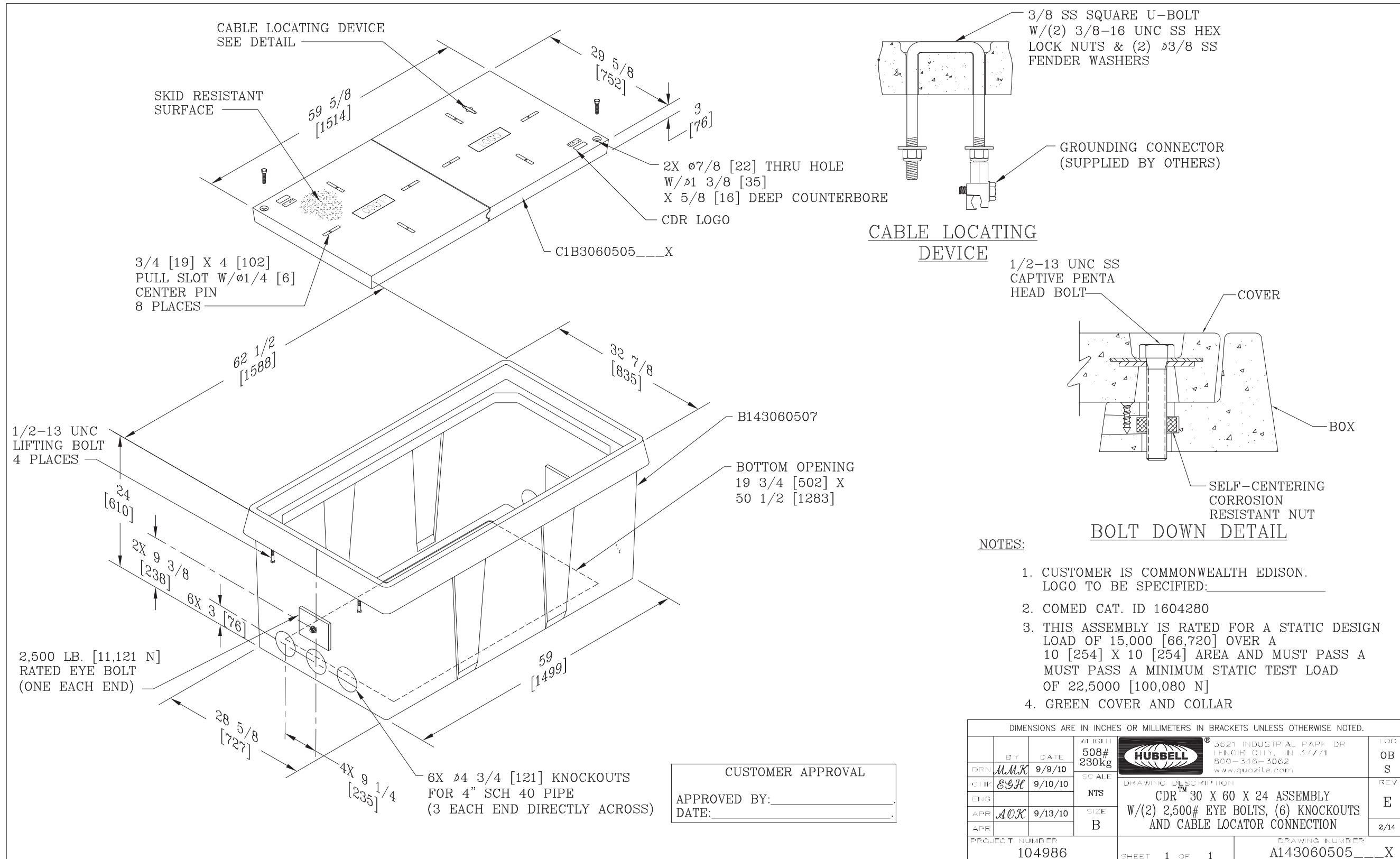
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BATAVIA, IL 60510

SHEET NAME

**PULL BOX  
SPECIFICATIONS**

SHEET NUMBER

**E-4**





85 RANGEWAY RD #110  
NORTH BILLERICA, MA 01862  
(781) 538-5299

**FULLERTON**  
ENGINEERING · DESIGN

1100 E. WOODFIELD ROAD, SUITE 500  
SCHAUMBURG, ILLINOIS 60173  
TEL: 847-908-8400  
DESIGN FIRM NO. 184.008202-0006  
www.FullertonEngineering.com

REV	DATE	DESCRIPTION	BY
1	3/27/20	90% REVIEW	LA
0	4/22/20	PERMITTING	LA
1	5/6/20	REVISION	LA
2	6/2/20	FINAL	BL

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DocuSign

SITE NAME

**AURORA WEST  
RECKINGER**

SITE ADDRESS

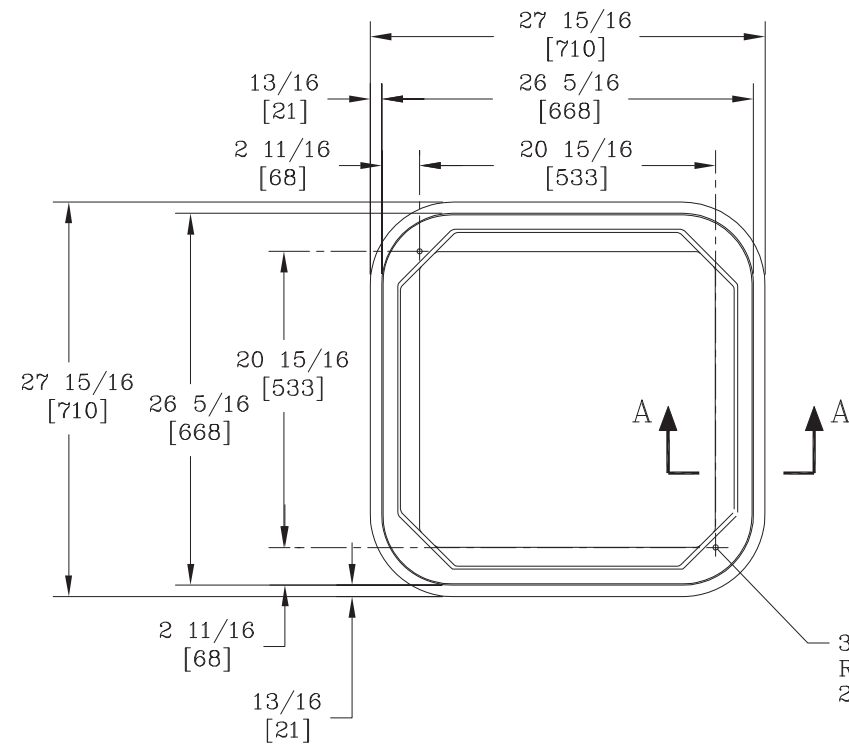
40W015 SEAVEY RD  
BATAVIA, IL 60510

SHEET NAME

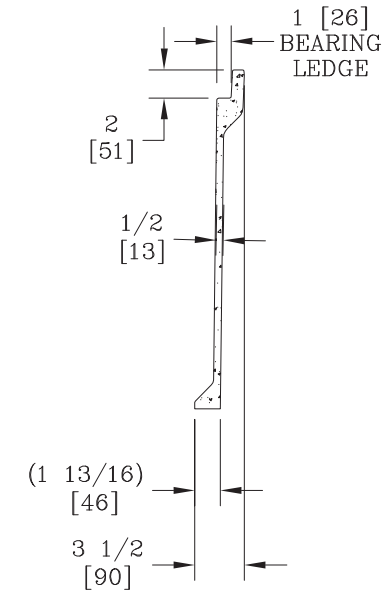
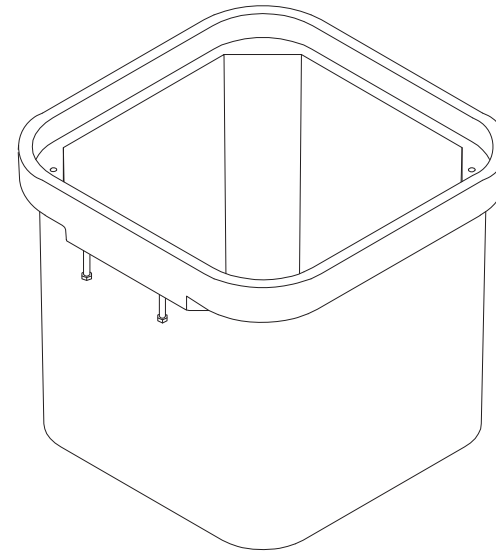
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SPECIFICATIONS**

SHEET NUMBER

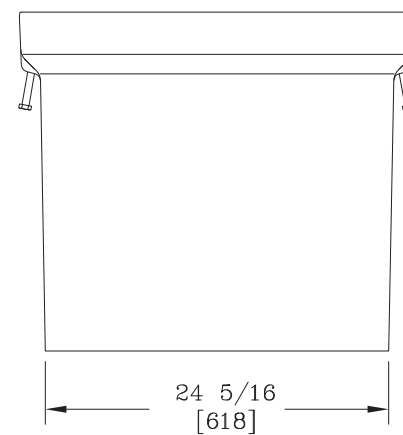
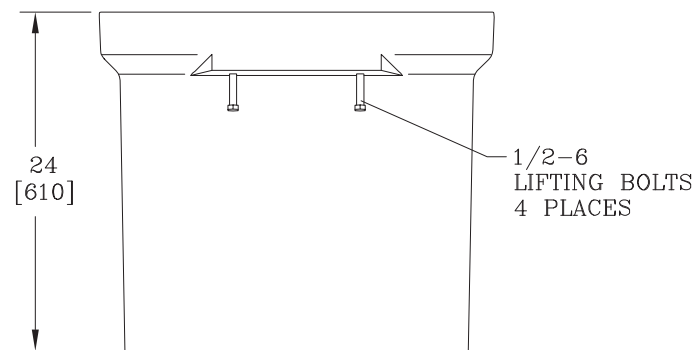
**E-5**



3/8-7 SELF ALIGNING,  
REPLACEABLE S.S. EZ-NUT  
2 PLACES



SECTION A-A



**NOTE:**

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

DIMENSIONS ARE IN INCHES OR MILLIMETERS IN BRACKETS UNLESS OTHERWISE NOTED.				HUBBELL® 3621 INDUSTRIAL PARK DR LENOIR CITY, TN 37771 800-346-3062 www.quazite.com		LOC	
BY	DATE	WEIGHT	DRAWING DESCRIPTION	QUAZITE® BOX	S	REV	
DRN	JJP	165# 75kg					
CHK	M&F	SCALE					E
ENG	JPF	1"=1'					
APR	EMP	SIZE					
APR		B					
PROJECT NUMBER			DRAWING NUMBER		3/12		
00461			PG2424BA24		SHEET 1 OF 1		

# EXISTING AGRICULTURAL DRAIN TILE INVESTIGATION PLAN

## RECKINGER TOWER SITE PREPARED FOR C SITE, LLC

Section no. 33, Blackberry Twp., Kane Co., IL.

### EXISTING SUBSURFACE AGRICULTURAL DRAIN TILE INVESTIGATION REPORT

#### RECKINGER TOWER SITE C SITE, LLC

RECKINGER TOWER SITE / C SITE, LLC, FIELD FILE NO. 4-4-38, DATE: 2/4/20.  
IN ACCORDANCE WITH KANE COUNTY STORM WATER ORDINANCE DRAIN TILE INVESTIGATION STANDARDS  
COPYRIGHT © 2020, BY HUDDLESTON McBRIDE LAND DRAINAGE COMPANY

##### DESCRIPTION CHART NO. 1A:

ID NO.	SIZE	TYPE / QUALITY	FLOW %	SILT %	DEPTH	FIELD NOTES
1	4"	CLAY / GOOD	100%	20%	60"	ACTIVE FLOW RATE AND CAPACITY RESTRICTED FLOW AND SURCHARGED
2	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
3	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
4	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
5	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
6	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
7	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
8	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
9	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
10	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
11	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
12	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
13	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
14	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
15	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
16	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
17	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
18	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
19	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED
20	4"	CLAY / GOOD	100%	20%	60"	NO DRAIN TILE LOCATED

##### DESCRIPTION CHART NO. 1B:

DATA POINT	SIZE	TYPE / QUALITY	FLOW %	SILT %	DEPTH	FIELD NOTES
1	4"	CLAY / GOOD	100%	20%	60"	MANHOLE AT PANEL EIGHTS



**MAP LEGEND:**

- EXISTING DRAIN TILE FLOW DIRECTION
- EX. POLYETHYLENE MAINLINE OR SYSTEM PART
- EX. CLAY DRAIN TILE MAINLINE OR SYSTEM PART
- EXISTING DRAIN TILE CONTIGUES TO UP AND WATERPHEED
- EXISTING DRAIN TILE OUTLET'S TO SURFACE
- EXIST. DRAIN TILE (1) INSPECTION STRUCTURE / (2) CATCH BASIN
- EXIST. DRAIN TILE (1) LOCATED END / (2) ASSUMED END
- EXISTING DRAIN TILE CONTIGUES TO OFF-SITE OUTLET SYSTEM
- EXISTING DRAIN TILE FAILURE / FLOW SURCHARGE TO SURFACE
- EXISTING DRAIN TILE MAPPED BY SPECULATION AND ASSUMPTION
- EXISTING DRAIN TILE ABANDONED (NOT FUNCTIONAL)
- EXISTING DRAIN TILE "BLOWOUT" OR FAILURE
- HAND PROBE OR ELECTRONIC SCAN FOR DRAIN TILE LOCATION
- INVESTIGATION SLIT TRENCH FOR INVESTIGATION
- SPECIFIC PIT EXCAVATION FOR INVESTIGATION
- SURVEY DATA POINTS
- REPORT IDENTIFICATION NUMBER

**REPORT LEGEND:**

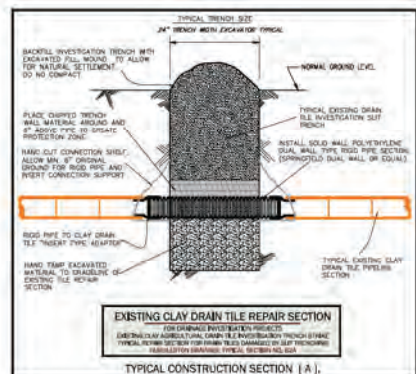
- ID NO. POINT OF EXCAVATION FOR SPECIFIC DRAIN TILE INVESTIGATION.
- SIZE (SIZE) DRAIN TILE INTERNAL DIAMETER IN INCHES.
- MATERIAL / QUALITY TYPE OF TILE MATERIALS, PIPE QUALITY - GOOD, FAIR & POOR.
- FLOW % PERCENTAGE OF TILE DIAMETER OCCUPIED BY ACTIVE FLOW.
- SILT % RESTRICTED OR BACKED UP FLOW, SURCHARGED CONDITION
- DEPTH PERCENTAGE OF TILE DIAMETER OCCUPIED BY RESTRICTIVE SILT, ABANDONED, FILLED WITH SILT BLOCKAGE, NO FLOW POTENTIAL MEASUREMENT FROM EXISTING GROUND LEVEL TO PIPE INVERT.

**(GENERAL NOTES)**

- MAINLINE TILE TRUNK LINE OR MUTUAL DRAIN, COLLECTOR OF SUB-SYSTEMS.
- SUB-MAIN TILE SECONDARY TRUNK LINE OF RANDOM SYSTEM COLLECTOR.
- LATERAL TILE FEEDER LINE, SERVICE TILE OR SYSTEM SPUR.
- "BLOWOUT" EXISTING SYSTEM PIPE FAILURE OR RESTRICTION.
- DRAIN TILE ENDS MAINLINE, SUB-MAIN OR LATERAL PLANNED TERMINATION.
- SLIT TRENCH INVESTIGATION TRENCH, TYPICAL 2'-0" WIDE x 6'-0" DEPTH.

**SPECIAL NOTES:**

- ALL EXISTING AGRICULTURAL DRAIN TILES LOCATED DURING THIS INVESTIGATION SURVEY HAVE BEEN IDENTIFIED ON THIS PLAN AND FIELD SPACED AT 4-50 INTERVALS. IN SOME OCCASIONS CERTAIN EXISTING LOCAL DRAIN TILE SECTIONS MAY BE SPECULATED AND CONSIDERED AS AN ASSUMED ROUTE WHICH SHALL BE DELINEATED ON THIS PLAN.
- ANY EXISTING DRAIN TILE NOT ENCOUNTERED DURING SLIT TRENCHING OR PROBE TRANSECT PROCEDURES WILL REMAIN UNKNOWN.
- ALL EXISTING DRAIN TILES DAMAGED DURING THE INVESTIGATION PROCESS SHALL BE REPAIRED TO THEIR ORIGINAL STATE IN ACCORDANCE WITH NATURAL RESOURCE CONSERVATION SERVICE STANDARDS FOR DRAIN TILE INSTALLATION AND REPAIR (NATURAL RESOURCE SERVICE TYPICAL STANDARD).
- ALL EXISTING DRAIN TILE LOCATION DIMENSIONS HAVE BEEN SURVEYED BY AGRICULTURAL GRADE AND SURVEY SYSTEMS AND INCLUDE SUB-METER ACCURACY. ALL LOCATIONS PERTINENT TO FINAL DESIGN SHALL BE VERIFIED BY THE PROJECT SURVEYOR.
- THIS DRAIN TILE INVESTIGATION REPORT IS INTENDED TO IDENTIFY EXISTING DRAIN TILE MAINLINE AND LATERAL TILE AND ANY LOCAL AGRICULTURAL PROPERTY OR DRINK TILE WHICH MAY SERVICE THE UP-AND PROPERTY OF OTHERS OR WITH MUTUAL DRAINAGE STATUS.
- THIS DRAIN TILE INVESTIGATION REPORT SHALL BE FILED WITH HUDDLESTON DRAINAGE LAND DRAINAGE CO., AND WILL BE REPRODUCED AND DISBURSED ONLY BY PERMISSION OF THE CONTRACT PRINCIPALS.



THESE SYMBOLS REPRESENT SURVEY DATA POINTS WHICH HAVE BEEN STAKED IN THE FIELD FOR THE SPECIFIC PURPOSE OF ELECTRONIC LOCATION AND ELEVATION DETERMINATION BY THE PROJECT SURVEYOR.  
THESE DATA POINTS CONSIST OF A 2" x 2" GROUND IRIS AND A 3/8" OD INLINE LOCATION STAKE WHICH INCLUDES DATA POINT IDENTIFICATION NUMBER, SEPARATION MEASUREMENT FROM IRIS TO PIPE INVERT, AND PIPE SIZE.  
ALL EXISTING DRAIN TILE LOCATIONS HAVE BEEN FIELD STAKED WITH TESTING DRAIN TILE PIN FLAGS AT 50' INTERVALS AND DOUBLE FLAGS AT INTERSECTIONS.



NOTE: EXISTING (1) 6\"/>

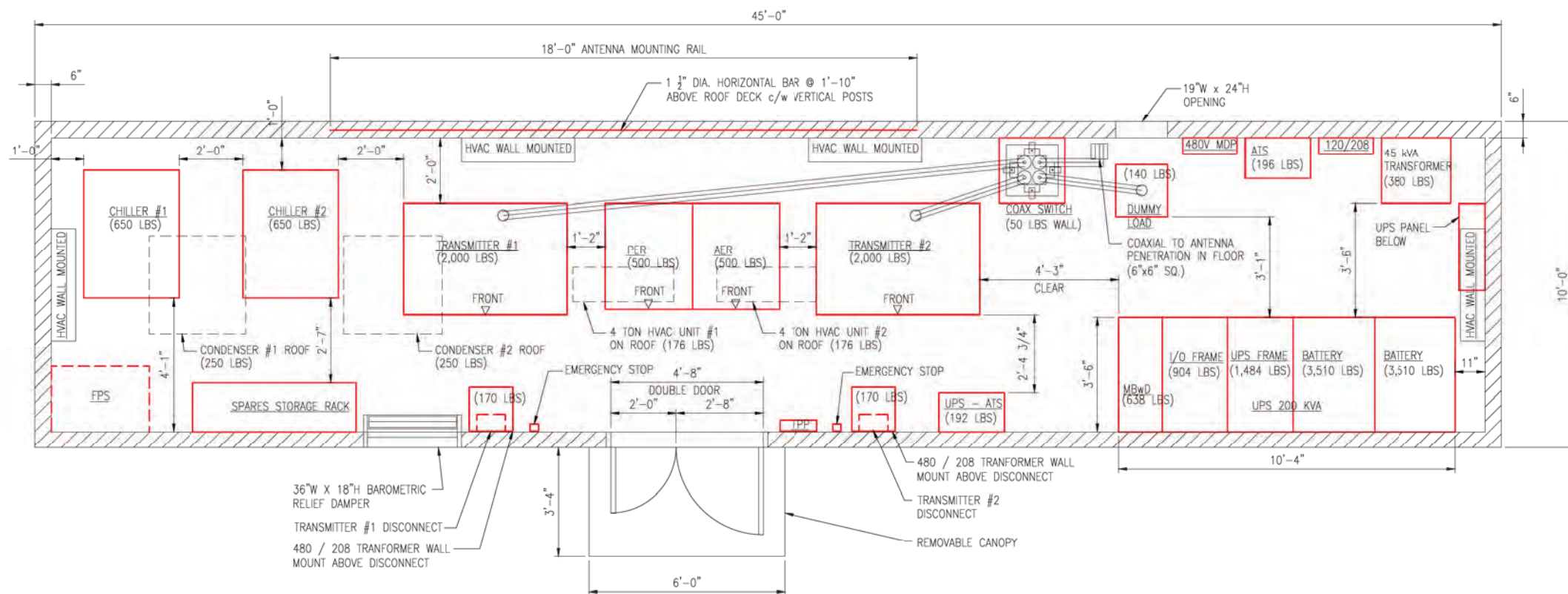
NOTE: DOWNSTREAM FLOW RESTRICTION CAUSES UPLAND SURCHARGE AND PONDING CONDITIONS WITHIN LOCAL DEPRESSION.

**C SITE, LLC**  
Derek McGrew, PROJECT MANAGER  
103 Wilshire Court, Noblesville, IN., 46062

APPROVED BY AND DATE: TOM HUDDLESTON 2/4/20  
ACKNOWLEDGMENTS: HUDDLESTON DRAINAGE MAP and ARCHIVE SYSTEMS  
DRAWN BY AND DATE: TOM HUDDLESTON 2/4/20

PROJECT DATE: 2/4/20  
FIELD FILE NO.: 4-4-38  
DRAWING NO.: 4-4-38\_R1  
DATE: BY: DESCRIPTION:  
WEATHER CONDITIONS: SUNNY/ COLD - 25o  
DRAWING SCALE: 1" TO 100'  
SHEET NO.: ONE OF ONE

44th Anniversary 1976-2020  
ILLINOIS FARM BUREAU MEMBER  
811 Know what's below. Call before you dig.  
RECKINGER TOWER SITE  
HUDDLESTON McBRIDE PROFESSIONAL LAND DRAINAGE SERVICES  
8804 FOWLER RD., ROCHELLE, ILLINOIS PHONE 815-642-6007

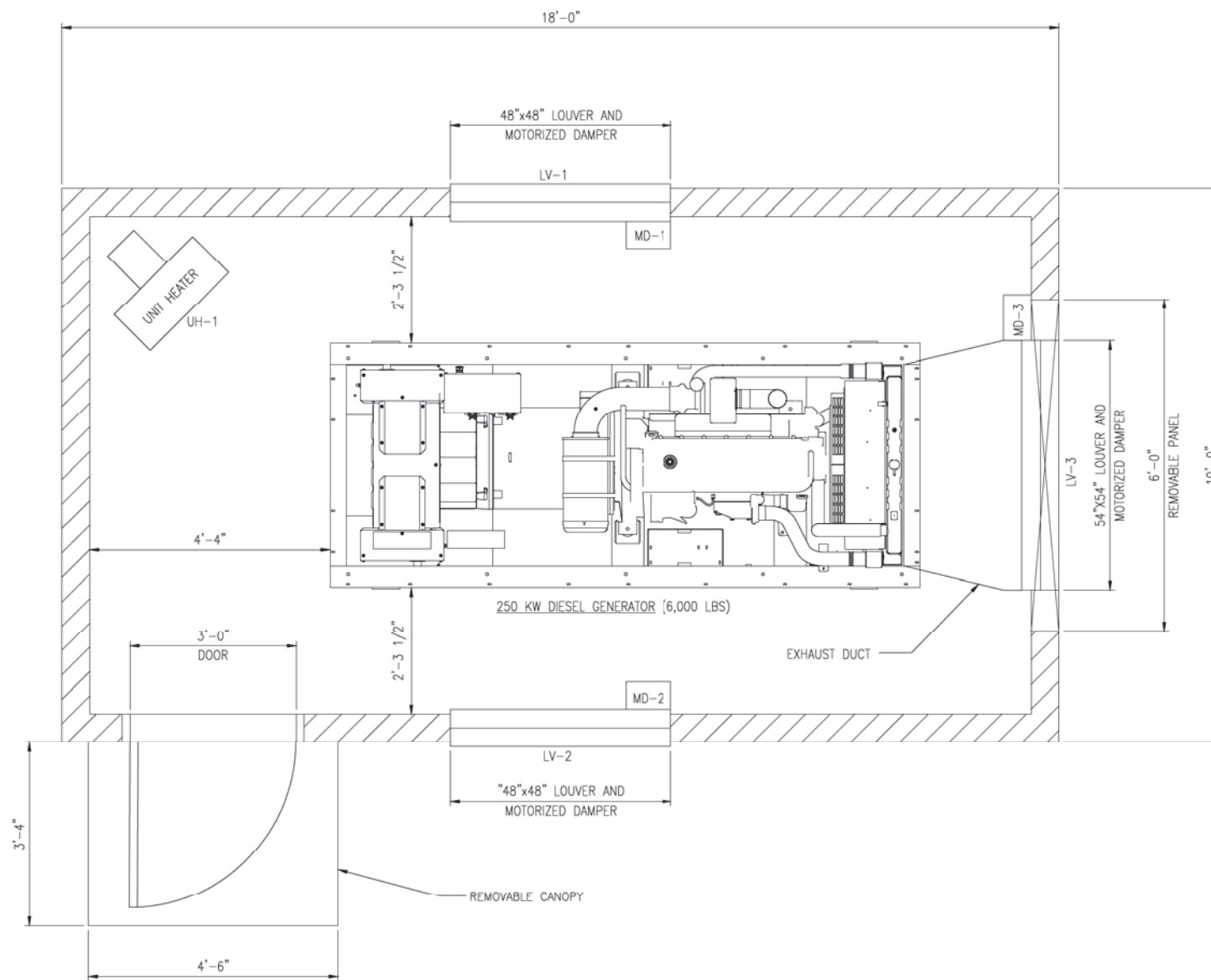


**TRANSMITTER ENCLOSURE – GENERAL ARRANGEMENT PLAN (45 FT OPTION) – REMOVABLE CANOPY**

- ATS – AUTO TRANSMITTER SWITCH
- MDP – MAIN DISTRIBUTION PANEL
- UPS – UPS POWER UNIT
- PER – PRIMARY EQUIPMENT RACK
- FPS – FIRE PROTECTION SYSTEM
- FPP – FIRE PROTECTION PANEL
- AER – AUXILIARY EQUIPMENT RACK

**NOT FOR CONSTRUCTION**

REV	DESCRIPTION	REVISED BY	DATE	CHECKED BY	REV	DESCRIPTION	REVISED BY	DATE	CHECKED BY	CLIENT	DRAWING TITLE	PROJECT TITLE	
					A	ISSUED FOR REVIEW – PRELIMINARY	RR	DEC-05-2019	RR	<b>AETHERA TECHNOLOGIES</b> 63 CRANE LAKE DRIVE HALIFAX, NOVA SCOTIA B3S 1B5	<b>JNE CONSULTING</b> <i>Professional Engineers</i> <small>44 ISO 9001:2015 Registered Company</small> 176 Shaw Street, Hamilton, Ontario, Canada L8L 3P7 Tel: 905-529-5122, Fax: 905-529-9774, www.jne.ca	<b>GENERAL ARRANGEMENT PLAN</b> 45 FT OPTION (200 KVA UPS) REMOVABLE CANOPY	<b>TRANSMITTER ENCLOSURE</b> BATAVIA, ILLINOIS
									DRAWN BY: J.GALLINA DATE: JUNE-24-2019 CHECKED BY: R.ROSATI APPROVED BY:				



**GENERATOR ENCLOSURE – GENERAL ARRANGEMENT PLAN (18 FT)**

**NOT FOR CONSTRUCTION**

REV	DESCRIPTION	REVISED BY	DATE	CHECKED BY	REV	DESCRIPTION	REVISED BY	DATE	CHECKED BY
					A	ISSUED FOR REVIEW – PRELIMINARY	RR	DEC-05-2019	RR

**AETHERA TECHNOLOGIES**  
 63 CRANE LAKE DRIVE  
 HALIFAX, NOVA SCOTIA  
 B3S 1B5

**JNE CONSULTING**  
*Professional Engineers*  
 An ISO 9001:2015 Registered Company  
 176 Shaw Street, Hamilton, Ontario, Canada L8L 3P7  
 Tel: 905-529-5122, Fax: 905-529-1674, www.jne.ca

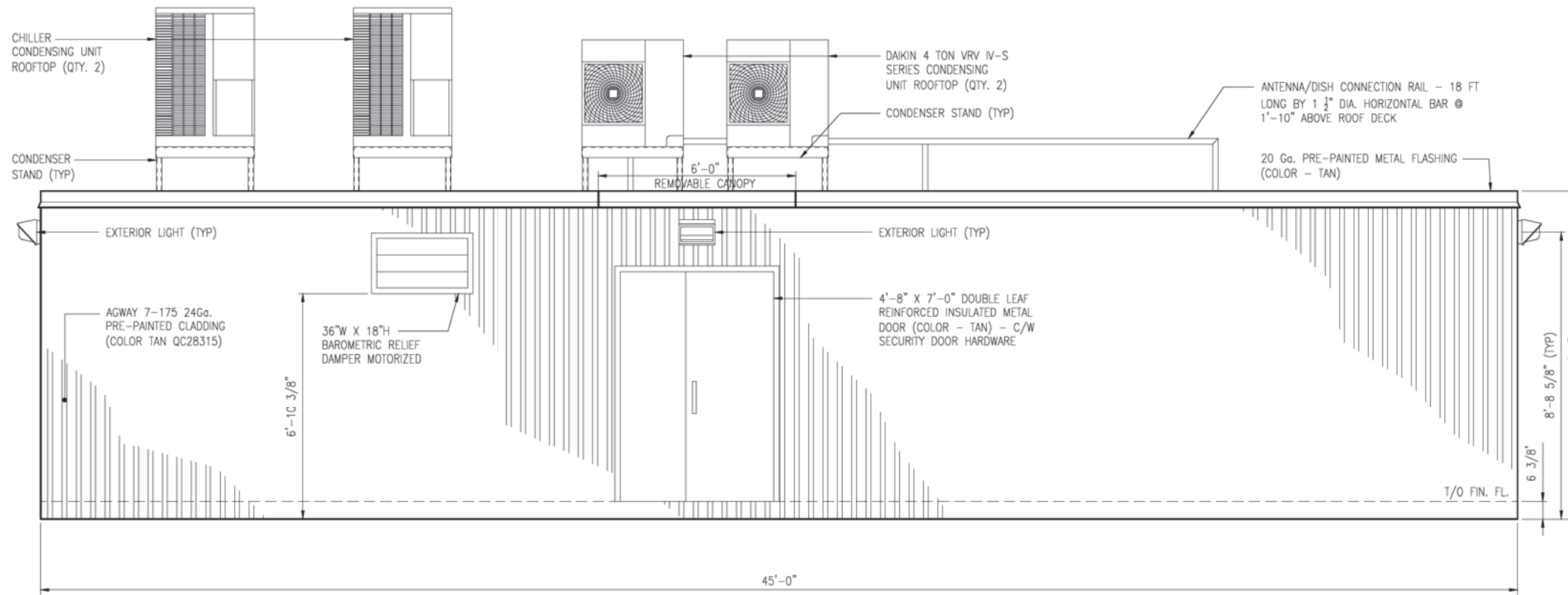
DATE: NOV-16-2019  
 DRAWN BY: J. GALLINA  
 CHECKED BY: R. ROSATI

DRAWING TITLE: **GENERAL ARRANGEMENT PLAN**  
 250 KW DIESEL GENERATOR ENCLOSURE (18 FT)

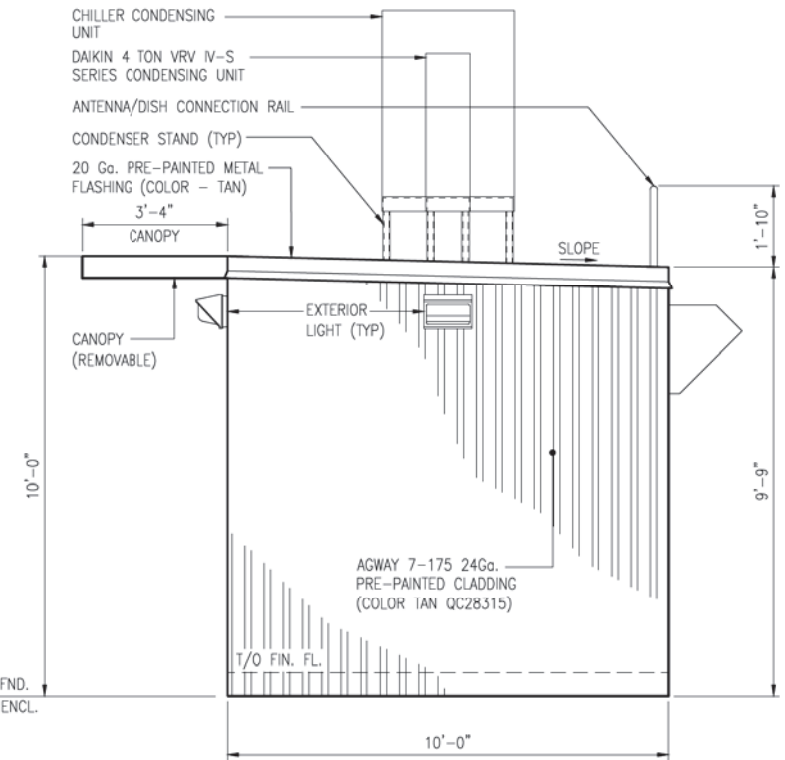
PROJECT No: 03-60-1901-00  
 SCALE: 3/4"=1'-0"

PROJECT TITLE: **GENERATOR ENCLOSURE**  
 BATAVIA, ILLINOIS

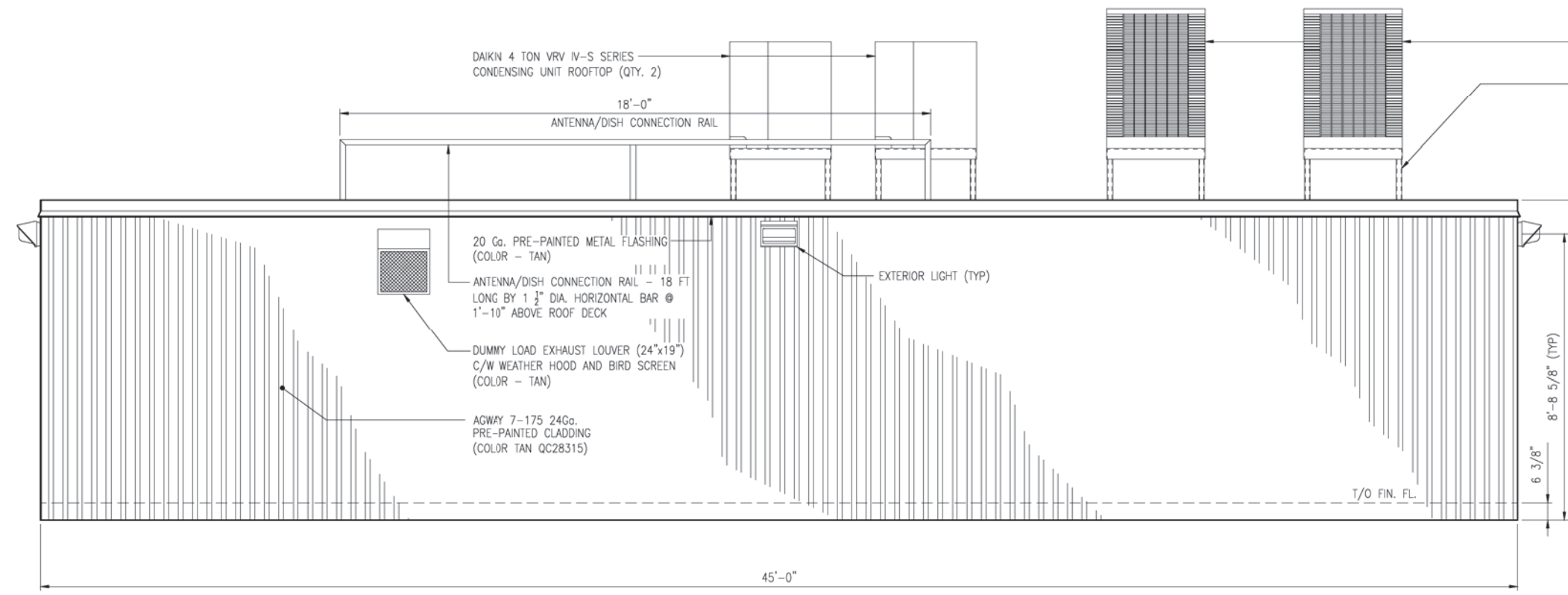
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 REV No: **A**



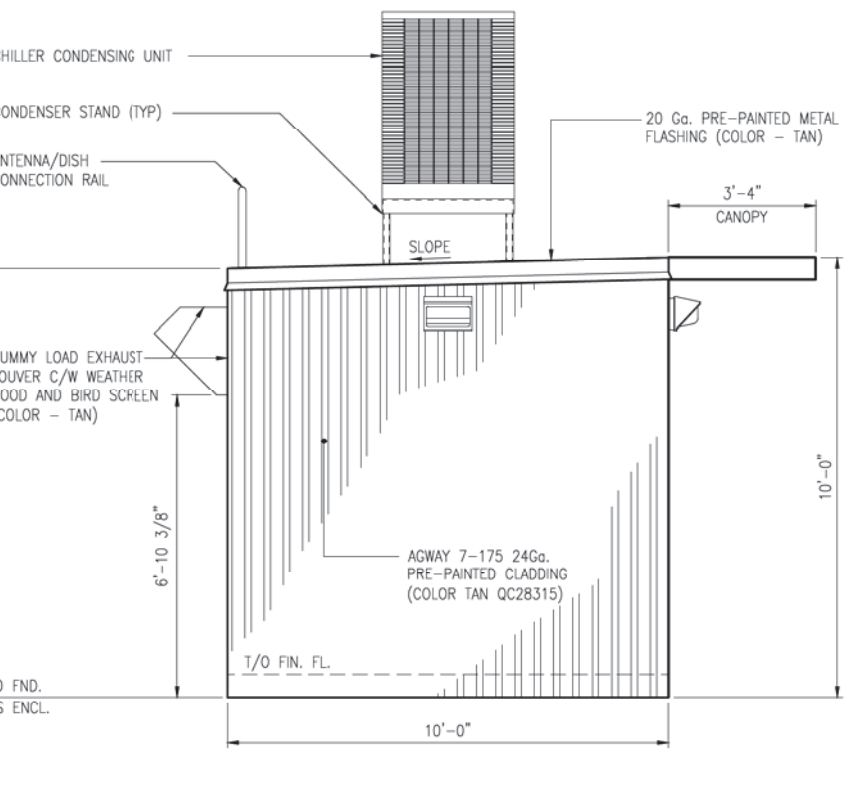
**TRANSMITTER ENCLOSURE – FRONT ELEVATION**



**TRANSMITTER ENCLOSURE – RIGHT SIDE ELEVATION**



**TRANSMITTER ENCLOSURE – REAR ELEVATION**

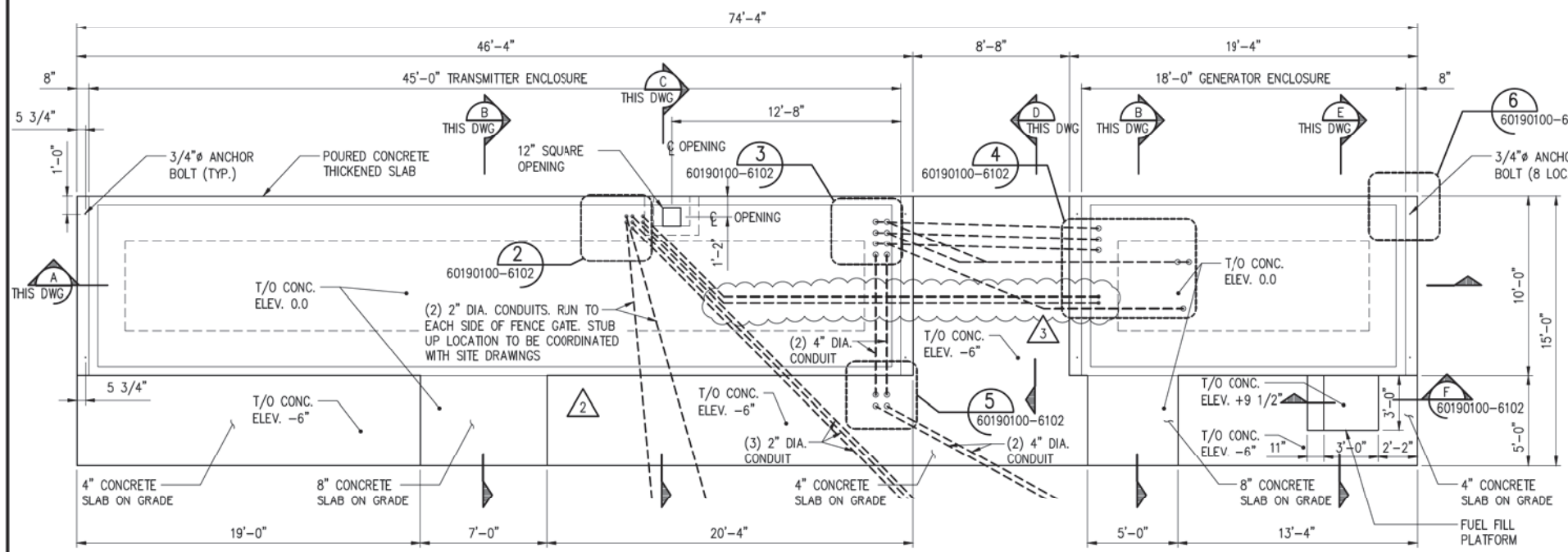


**TRANSMITTER ENCLOSURE – LEFT SIDE ELEVATION**

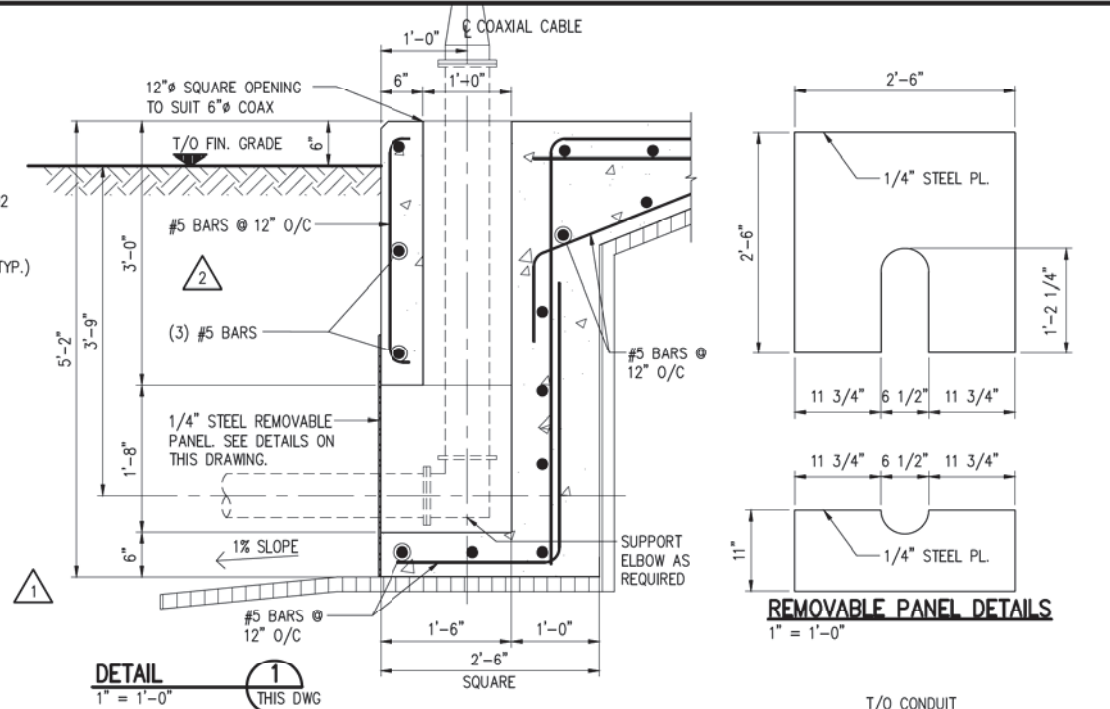
**NOT FOR CONSTRUCTION**

REV	DESCRIPTION	REVISED BY	DATE	CHECKED BY	REV	DESCRIPTION	REVISED BY	DATE	CHECKED BY
A	ISSUED FOR REVIEW – PRELIMINARY	RR	DEC-05-2019						

<b>AETHERA TECHNOLOGIES</b> 63 CRANE LAKE DRIVE HALIFAX, NOVA SCOTIA B3S 1B5	 <b>JNE CONSULTING</b> <i>Professional Engineers</i> 176 Shaw Street, Hamilton, Ontario, Canada L8L 3P7 Tel: 905-529-5122, Fax: 905-529-1974, www.jne.ca	DRAWING TITLE <b>TRANSMITTER ENCLOSURE</b> ENCLOSURE WITH REMOVABLE CANOPY ELEVATIONS		PROJECT TITLE <b>TRANSMITTER ENCLOSURE</b> BATAVIA, ILLINOIS	
		DRAWN BY J. GALLINA	DATE DEC-2-2019	SCALE 1/2"=1'-0"	PROJECT No. 03-60-1901-00

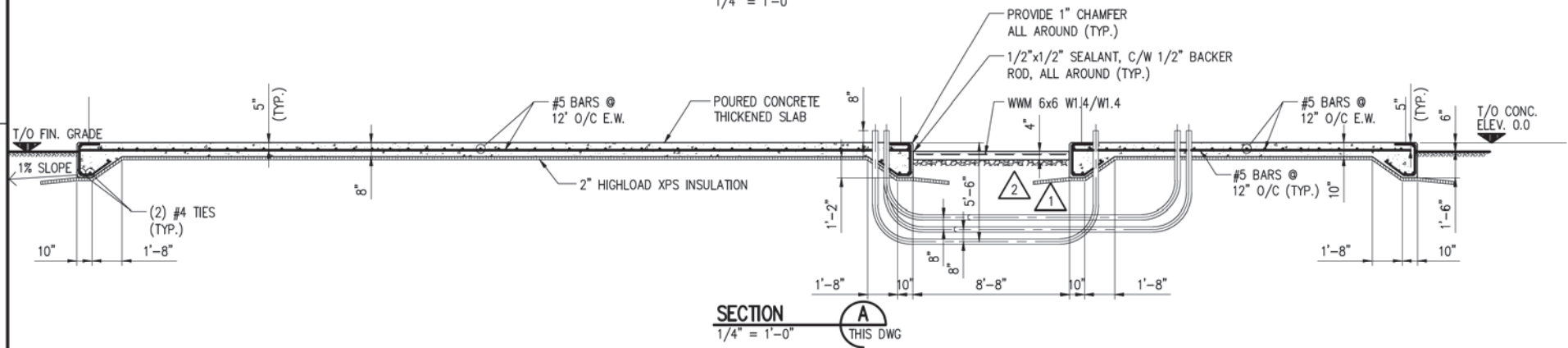


**FOUNDATION PLAN**  
1/4" = 1'-0"

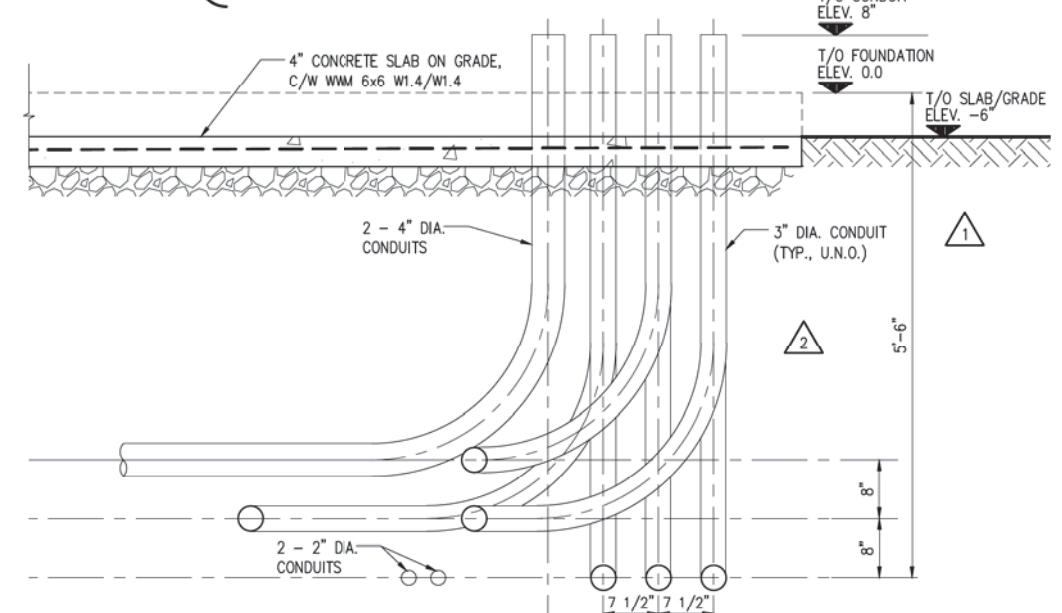


**DETAIL 1**  
1" = 1'-0"

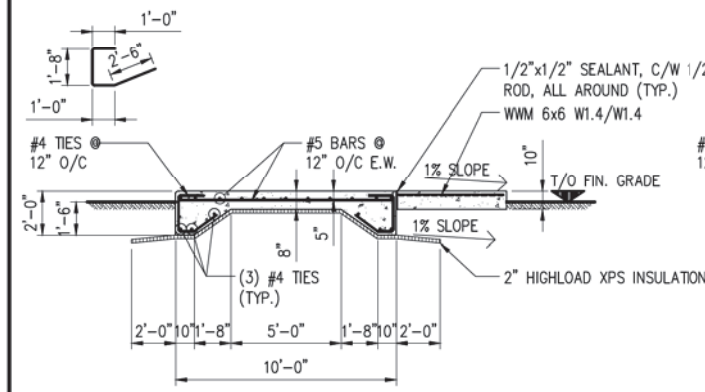
**REMOVABLE PANEL DETAILS**  
1" = 1'-0"



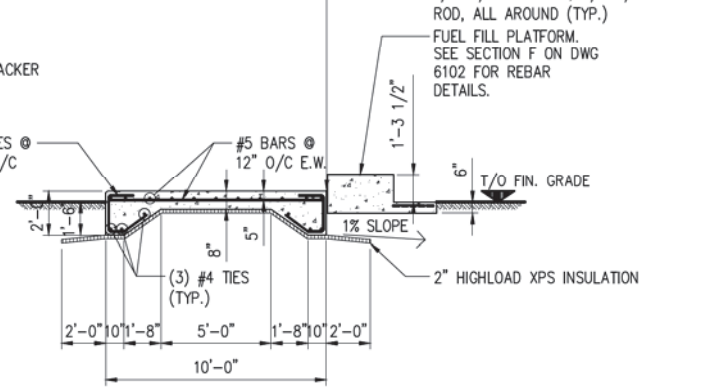
**SECTION A**  
1/4" = 1'-0"



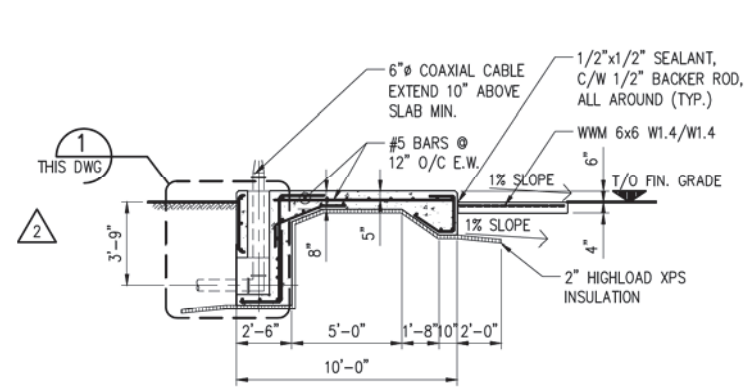
**SECTION D**  
1" = 1'-0"



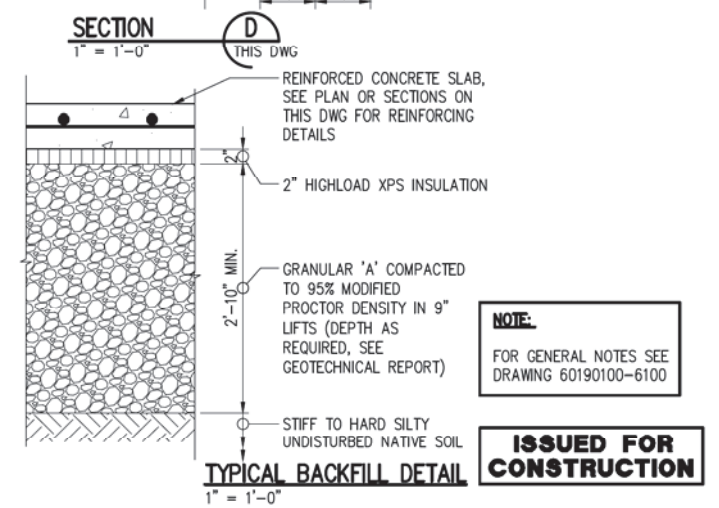
**SECTION B**  
1/4" = 1'-0"



**SECTION E**  
1/4" = 1'-0"



**SECTION C**  
1/4" = 1'-0"



**TYPICAL BACKFILL DETAIL**  
1" = 1'-0"

**NOTE:**  
FOR GENERAL NOTES SEE DRAWING 60190100-6100

**ISSUED FOR CONSTRUCTION**

REV	DESCRIPTION	REVISED BY	DATE	ISSUED BY	REV	DESCRIPTION	REVISED BY	DATE	ISSUED BY
0	ISSUED FOR CONSTRUCTION				0	ISSUED FOR CONSTRUCTION	B.S.	MAR. 27, 2020	M.S.
1	ISSUED FOR CONSTRUCTION - CONDUIT DEPTH CHANGE				1	ISSUED FOR CONSTRUCTION - CONDUIT DEPTH CHANGE	R.R.	APR. 29, 2020	R.R.
2	ISSUED FOR CONSTRUCTION - CONDUIT DEPTH CHANGE				2	ISSUED FOR CONSTRUCTION - CONDUIT DEPTH CHANGE	JWG	MAY 07, 2020	R.R.
3	ISSUED FOR CONSTRUCTION - MOVED CONDUITS C6 AND C7				3	ISSUED FOR CONSTRUCTION - MOVED CONDUITS C6 AND C7	JWG	MAY 20, 2020	R.R.

<b>AETHERA TECHNOLOGIES</b> 63 CRANE LAKE DRIVE HALIFAX, NOVA SCOTIA B3S 1B5	<b>JNE CONSULTING</b> Professional Engineers 176 Shaw Street, Hamilton, Ontario, Canada L8L 3P7 Tel: 905-629-5122, Fax: 905-629-9574, www.jne.ca	<b>FOUNDATION PLAN,</b> SECTIONS AND DETAILS		<b>TRANSMITTER &amp; GENERATOR ENCLOSURES</b> BATAVIA, ILLINOIS	
		DRAWN BY: B.S. CHECKED BY: E.G.	DATE: JAN. 22, 2020 APPROVED BY: M.S.	CAD FILE: 60190100-6101 SCALE: AS NOTED	PROJECT NO.: 03-60-1901-00



BILL OF MATERIAL		
ITEM	QTY.	DESCRIPTION
①	7 (MIN)	GROUND ROD, COPPER CLAD, 5/8" x 10' LONG
②	7 (MIN)	CONNECTOR FOR #4/0 AWG CABLE TO 5/8" ROD
③	AS REQ.	#4/0 AWG BARE COPPER CABLE (LENGTH AS REQ.)

**LEGEND:**

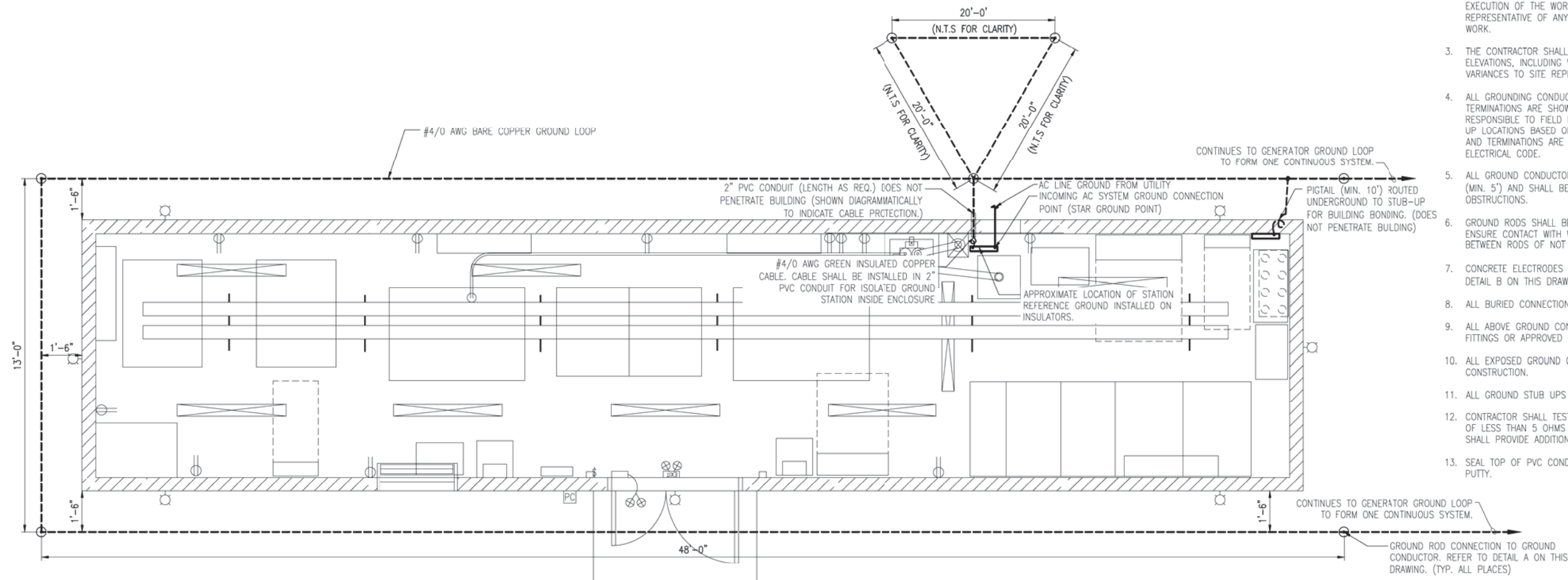
⊙ DENOTES 5/8" X 10' LONG COPPER CLAD GROUND ROD

----- #4/0 AWG BARE COPPER GROUND

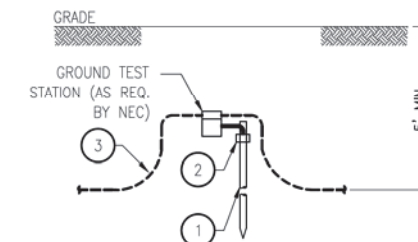
⌚ #4/0 AWG GROUNDING PIGTAIL (LENGTH TO BE FIELD DETERMINED, MIN. 10')

**GENERAL NOTES:**

- GROUNDING SHALL BE DONE IN ACCORDANCE TO THE LATEST EDITION OF NATIONAL ELECTRICAL CODE.
- THE CONTRACTOR SHALL CONDUCT SITE INSPECTIONS TO OBTAIN INFORMATION REGARDING POSSIBLE CONFLICTS OR INTERFERENCES THAT MAY AFFECT THE EXECUTION OF THE WORK. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY SITE REPRESENTATIVE OF ANY SUCH FINDINGS, PRIOR TO THE COMMENCEMENT OF THE WORK.
- THE CONTRACTOR SHALL FIELD VERIFY ALL INSTALLATION DIMENSIONS AND ELEVATIONS, INCLUDING WORK BY OTHERS AND REPORT ANY DISCREPANCIES OR VARIANCES TO SITE REPRESENTATIVE.
- ALL GROUNDING CONDUCTORS, RODS, AND GROUND STUB-UPS, CONNECTIONS, AND TERMINATIONS ARE SHOWN DIAGRAMMATICALLY ONLY. THE CONTRACTOR IS RESPONSIBLE TO FIELD DETERMINE AND LOCATE APPROPRIATE ROUTING AND STUB UP LOCATIONS BASED ON SITE CONDITIONS TO ENSURE ALL CONNECTIONS, ROUTES, AND TERMINATIONS ARE MADE IN ACCORDANCE WITH THE LATEST NATIONAL ELECTRICAL CODE.
- ALL GROUND CONDUCTORS AND RODS SHALL BE BURIED BELOW GRADE FROST LINE (MIN. 5') AND SHALL BE FIELD ROUTED TO AVOID ANY UNDERGROUND OBSTRUCTIONS.
- GROUND RODS SHALL BE DRIVEN TO A DEPTH OF NOT LESS THAN 8 FT AND MUST ENSURE CONTACT WITH WATER TABLE. RODS SHALL HAVE A MINIMUM SEPARATION BETWEEN RODS OF NOT LESS 2 TIMES THE ROD LENGTH.
- CONCRETE ELECTRODES (REBAR) SHALL BE TIED TO MAIN GROUND LOOP (SEE DETAIL B ON THIS DRAWING)
- ALL BURIED CONNECTIONS SHALL BE MADE USING EXOTHERMIC WELDS.
- ALL ABOVE GROUND CONNECTIONS SHALL BE MADE USING COMPRESSION TYPE FITTINGS OR APPROVED EQUAL.
- ALL EXPOSED GROUND CONDUCTORS SHALL BE MECHANICALLY PROTECTED DURING CONSTRUCTION.
- ALL GROUND STUB UPS SHALL BE MECHANICALLY PROTECTED USING PVC CONDUIT.
- CONTRACTOR SHALL TEST AND REPORT A MINIMUM ELECTRICAL GROUND RESISTANCE OF LESS THAN 5 OHMS AFTER INSTALLATION. IF REQUIRED THE CONTRACTOR SHALL PROVIDE ADDITIONAL GROUND RODS TO ACHIEVE THIS MINIMUM RESISTANCE.
- SEAL TOP OF PVC CONDUIT SLEEVE AROUND THE GROUND WIRE WITH DUCT SEAL PUTTY.

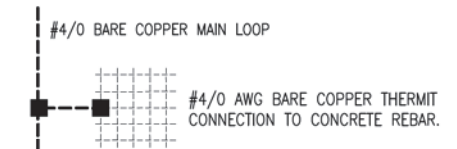


**TRANSMITTER ENCLOSURE – EMBEDDED GROUNDING LAYOUT**  
1/2" = 1'-0"



**DETAIL A – TYPICAL GROUND ROD INSTALLATION**

N.T.S.  
CONTRACTOR TO FIELD DETERMINE BEST INSTALLATION METHODS PER LATEST NATIONAL ELECTRICAL CODE.  
FOR ILLUSTRATION PURPOSES ONLY. EXACT FIELD INSTALLATION MAY VARY.



**DETAIL B – CONCRETE ELECTRODE (REBAR) GROUNDING**

N.T.S.  
NOT SHOWN ON MAIN LOOP FOR CLARITY  
CONTRACTOR TO FIELD DETERMINE BEST INSTALLATION METHODS PER LATEST NATIONAL ELECTRICAL CODE.

**ISSUED FOR CONSTRUCTION**

**YES**  
YAGLA ENGINEERING SERVICES  
161 N CLARK SUITE 1600 CHICAGO, IL 60601 (630) 777-9880  
IL DESIGN FIRM LICENSE NO: 184.005166  
WEBSITE: www.yagla.com EMAIL: tyagla@yagla.com



REV	DESCRIPTION	REVISED BY	DATE	CHECKED BY	CLIENT
0	ISSUED FOR CONSTRUCTION	M. P.	MAR. 30, 2020		
1	REVISED PER YAGLA RETURNING COMMENTS	M. P.	APR. 08, 2020		

**AETHERA TECHNOLOGIES**  
63 CRANE LAKE DRIVE  
HALIFAX, NOVA SCOTIA  
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**JNE CONSULTING**  
Professional Engineers  
178 Shaw Street, Hamilton, Ontario, Canada L8L 3P7  
Tel: 905-529-5122, Fax: 905-529-1974, www.jne.ca

DRAWN BY: S.K. DATE: MAR. 03, 2020  
CHECKED BY: APPROVED BY:

**TRANSMITTER ENCLOSURE**  
EMBEDDED GROUNDING LAYOUT

DRAWING No. 60190100-2501  
SCALE: 1/2" = 1'-0"  
PROJECT No. 03-60-1901-00

**TRANSMITTER ENCLOSURE**  
BATAVIA, ILLINOIS

REV No. 1

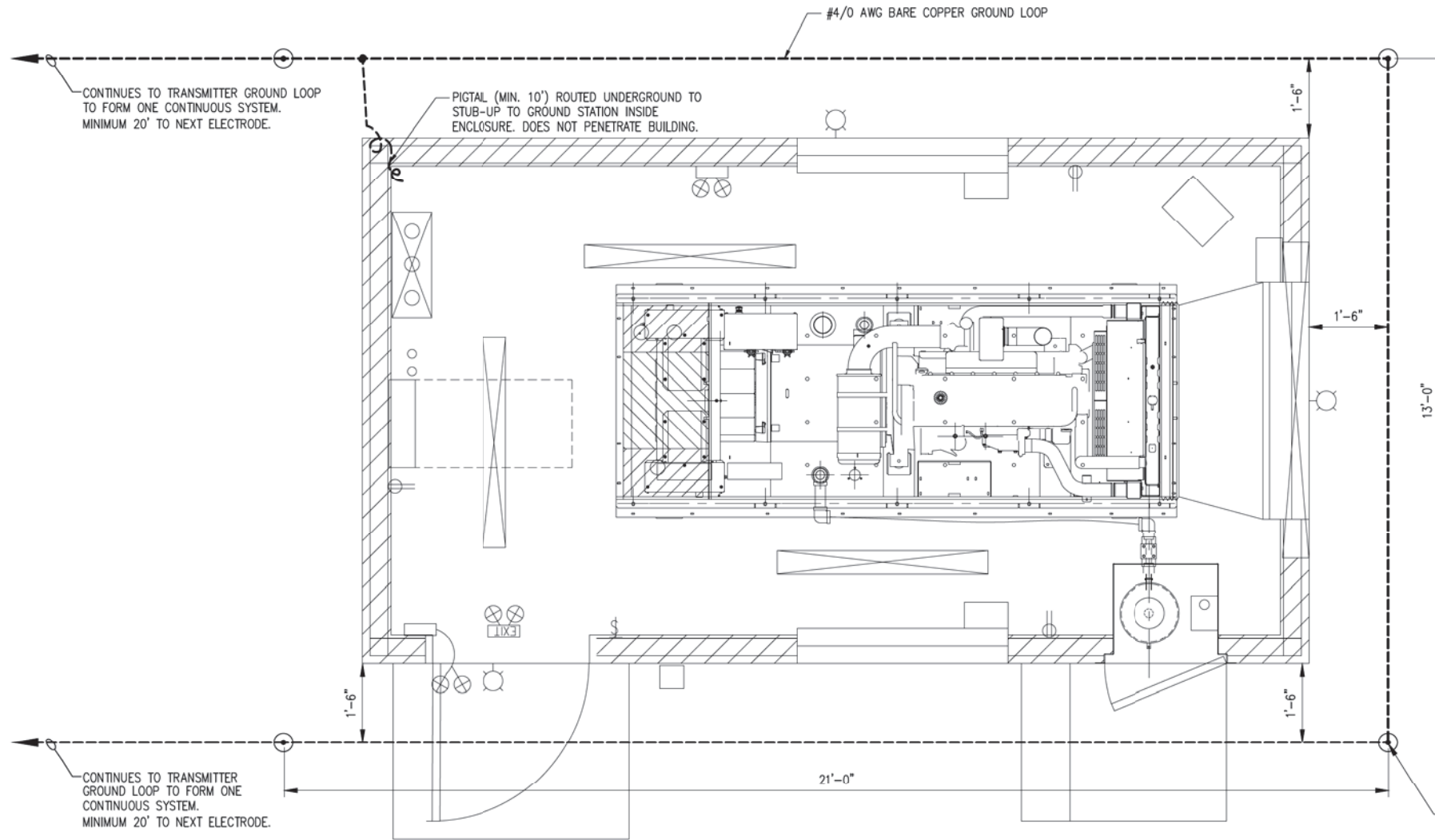
BILL OF MATERIAL		DESCRIPTION
ITEM	QTY.	
①	4	GROUND ROD, COPPER CLAD, 5/8" x 10' LONG
②	4	CONNECTOR FOR #4/0 AWG CABLE TO 5/8" ROD
③	AS REQ.	#4/0 AWG BARE COPPER CABLE (LENGTH AS REQ.)

**LEGEND:**

⊙ DENOTES 5/8" X 10' LONG COPPER CLAD GROUND ROD

----- #4/0 AWG BARE COPPER GROUND

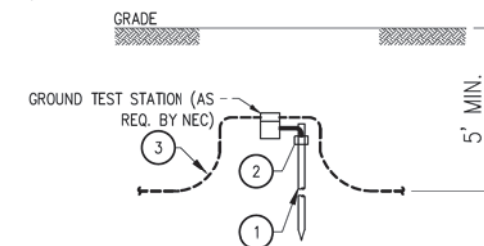
⌞ #4/0 AWG GROUNDING PIGTAIL (LENGTH TO BE FIELD DETERMINED)



**GENERAL NOTES:**

- GROUNDING SHALL BE DONE IN ACCORDANCE TO THE LATEST EDITION OF NATIONAL ELECTRICAL CODE.
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- ALL BURIED CONNECTIONS SHALL BE MADE USING EXOTHERMIC WELDS.
- ALL ABOVE GROUND CONNECTIONS SHALL BE MADE USING COMPRESSION TYPE FITTINGS OR APPROVED EQUAL.
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- ALL GROUND STUB UPS SHALL BE MECHANICALLY PROTECTED USING PVC CONDUIT.
- CONTRACTOR SHALL TEST AND REPORT A MINIMUM ELECTRICAL GROUND RESISTANCE OF LESS THAN 5 OHMS AFTER INSTALLATION. IF REQUIRED THE CONTRACTOR SHALL PROVIDE ADDITIONAL GROUND RODS TO ACHIEVE THIS MINIMUM RESISTANCE.
- SEAL TOP OF PVC CONDUIT SLEEVE AROUND THE GROUND WIRE WITH DUCT SEAL PUTTY.

**GENERATOR ENCLOSURE -- EMBEDDED GROUNDING LAYOUT**  
3/4" = 1'-0"



**DETAIL A -- TYPICAL GROUND ROD INSTALLATION**

N.T.S.

CONTRACTOR TO FIELD DETERMINE BEST INSTALLATION METHODS PER LATEST NATIONAL ELECTRICAL CODE.

**ISSUED FOR CONSTRUCTION**

**YES**  
YAGLA ENGINEERING SERVICES  
161 N CLARK SUITE 1600 CHICAGO, IL 60601 (630) 777-9880  
IL DESIGN FIRM LICENSE NO: 184.005166  
WEBSITE: www.yagla.com EMAIL: tyagla@yagla.com



REV	DESCRIPTION	REVISED BY	DATE	CHECKED BY	CLIENT
0	ISSUED FOR CONSTRUCTION	M. P.	MAR. 30, 2020		
1	REVISED PER YAGLA RETURNING COMMENTS	M. P.	APR. 08, 2020		

**AETHERA TECHNOLOGIES**  
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HALIFAX, NOVA SCOTIA  
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**JNE CONSULTING**  
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178 Shaw Street, Hamilton, Ontario, Canada L8L 3P7  
Tel: 905-529-5122, Fax: 905-529-1974, www.jne.ca

DRAWN BY: S.K. DATE: MAR. 03, 2020  
CHECKED BY: APPROVED BY:

DRAWING TITLE: **GENERATOR ENCLOSURE**  
EMBEDDED GROUNDING LAYOUT

SCALE: 3/4" = 1'-0"

PROJECT No: 03-60-1901-00

PROJECT TITLE: **TRANSMITTER ENCLOSURE**  
BATAVIA, ILLINOIS

DRAWING No: 60190100-2502  
REV No: 1

**GENERAL NOTES:**

- DESIGN IS BASED ON THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC) AND THE LIMIT STATES DESIGN METHOD IN ACCORDANCE WITH ACI 318.
- FOUNDATION DESIGN WILL BE IN ACCORDANCE WITH GEOTECHNICAL REPORT #192537, DATED, JAN. 16, 2020, BY GSS INC.
- SUPPLY, FABRICATION, INSTALLATION AND INSPECTION OF REINFORCED CONCRETE TO CONFORM TO ACI 301 AND ACI 318.
- ANY MATERIAL SUBSTITUTION MUST RECEIVE PRIOR APPROVAL FROM THE ENGINEER.
- IN CASE OF CONFLICTING INFORMATION GIVEN BETWEEN DRAWINGS AND SPECIFICATIONS, THE MORE STRINGENT SHALL GOVERN OR CONTRACTOR MUST SEEK CLARIFICATION IN WRITING FROM ENGINEER.
- SITE LOCATION: THE TOWERING SITE AURORA WEST-RECKINGER, BATAVA, ILLINOIS, USA.

**GENERAL SCOPE OF WORK AND CONTRACTOR RESPONSIBILITIES:**

- SUPPLY AND INSTALL CONCRETE, REINFORCEMENT, AND EMBEDDED ITEMS REQUIRED TO COMPLETE THE WORK SHOWN ON THE CONCRETE DRAWINGS.
- SUBMIT SHOP DRAWINGS FOR REINFORCEMENT AND EMBEDDED ITEMS TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF FABRICATION.
- EXCAVATION TO FACILITATE THE INSTALLATION OF FOUNDATIONS.
- BACKFILLING OF EXCAVATION TO FINISHED GRADE INCLUDING COMPACTION.
- ALL WORK TO COMPLY WITH ALL SAFETY ASPECTS AS REQUIRED BY THE APPLICABLE REGULATIONS, CODES AND OWNER'S HEALTH AND SAFETY SPECIFICATIONS.
- INSPECT THE SITE AND BECOME FAMILIAR WITH THE WORKING ENVIRONMENT, WORK SCHEDULES, MEANS OF ACCESS AND REQUIREMENTS SPECIFIED BY THE OWNER.
- REPLACE OR REPAIR TO THE SATISFACTION OF OWNER'S REPRESENTATIVE AND AT CONTRACTORS OWN COST FOR ANY DAMAGE TO EXISTING FACILITIES CAUSED BY THE CONTRACTOR.
- SAFEKEEPING OF CONSTRUCTION MATERIALS AND EQUIPMENT.
- SITE CLEAN-UP INCLUDING REMOVAL AND DISPOSAL OF SURPLUS MATERIAL.
- REPORT ALL AMBIGUITIES OR INCONSISTENCIES TO THE OWNER'S REPRESENTATIVE AND OBTAIN WRITTEN INSTRUCTIONS ON HOW TO PROCEED.
- BUY, SUPPLY AND INSTALL PIPING AND ELECTRICAL EMBEDDED ITEMS SHOWN ON DWG 60190100-6101 PRIOR TO POURING CONCRETE SLAB-ON-GRADE. THE PIPING AND ELECTRICAL EMBEDDED ITEMS SHALL BE PROPERLY INSTALLED IN ACCORDANCE WITH RELEVANT CONCURRENT GOVERNING PROVISIONS. REFER TO DRAWING 60190100-6031 AND 60190100-6254 FOR MORE DETAILS.

**EXCAVATION AND BACKFILL:**

- ALL STRUCTURES ARE DESIGNED TO BE FOUNDED AT THE ELEVATIONS AND LOCATIONS SHOWN ON THE DESIGN DRAWINGS AND MUST BE ON SOLID UNDISTURBED NATIVE GROUND, COMPACTED STRUCTURAL FILL, OR LEAN CONCRETE HAVING AN ALLOWABLE SAFE DESIGN SOIL BEARING PRESSURE OF 2000 PSF BASED ON THE GEOTECHNICAL REPORT BY GSS INC.
- ON COMPLETION OF EXCAVATION, THE GEOTECHNICAL CONSULTANT MUST CONFIRM IN THE FIELD THE ALLOWABLE SAFE BEARING PRESSURES AT THE FOUNDED ELEVATION BEFORE PLACING FORMS, REINFORCEMENT OR ANY CONCRETE. THIS CONFIRMATION MUST BE IN WRITING. ANY NECESSARY REMEDIAL WORK TO ACHIEVE THE ALLOWABLE DESIGN BEARING PRESSURE QUOTED MUST BE COMPLETED AS DIRECTED BY THE ENGINEER BEFORE PROCEEDING WITH FUTURE WORKS.
- ALL UNSUITABLE FOUNDATION SOILS SHALL BE COMPLETELY REMOVED TO COMPETENT SUBGRADE AND REPLACED WITH BACKFILL MATERIALS AS DIRECTED BY GEOTECHNICAL ENGINEER.
- ALL SUBGRADE MUST BE EXAMINED AND APPROVED BY SITE GEOTECHNICAL ENGINEER TO ACHIEVE THE ALLOWABLE SAFE DESIGN BEARING PRESSURES. CONTRACTOR SHALL CARRY OUT LOAD BEARING COMPACTION TEST UPON REQUEST BY SITE GEOTECHNICAL ENGINEER. ANY OVER EXCAVATION OF FOUNDATION GRADES MUST BE MADE GOOD WITH BLINDING/LEAN CONCRETE FOR FOOTINGS ON ROCK OR WITH COMPACTED BACKFILL TO ACHIEVE THE ALLOWABLE SAFE DESIGN BEARING PRESSURES.
- IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL WORK COMPLIES WITH THE OWNER'S PROCEDURES AND GOVERNING SAFETY STANDARDS.
- LOCATING AND ISOLATING UNDERGROUND UTILITIES SHALL BE COMPLETED BEFORE ANY EXCAVATION COMMENCES. CARE SHALL BE EXERCISED DURING EXCAVATION TO AVOID DAMAGE TO EXISTING UNDERGROUND PIPES, STRUCTURES, DUCTS OR POWER CABLES. IF DAMAGE TO ANY OF THESE OCCURS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- REFER TO THE GEOTECHNICAL REPORT FOR EXCAVATION SIDE SLOPE REQUIREMENT.
- THE CONTRACTOR SHALL MONITOR EXCAVATION SLOPES ADJACENT TO STRUCTURES, ROADS AND UNDERGROUND UTILITIES THROUGHOUT THE COURSE OF EXCAVATIONS, BACKFILLING AND COMPACTION. THE CONTRACTOR SHALL BE PREPARED AT ALL TIMES TO TAKE PREVENTATIVE OR REMEDIAL ACTIONS IN CASE OF UNDERPINNING OF EXISTING STRUCTURES AND FOUNDATIONS.

- THE CONTRACTOR SHALL INSTALL AND MAINTAIN CONSTRUCTION BARRIERS, FENCING, GUARD RAILS AND LIGHTING REQUIRED FOR THE WORK.
- THE COMPACTED THICKNESS OF BACKFILL SHALL BE AS INDICATED ON THE DRAWING. WHEN A COMPACTED LAYER OF 6" THICKNESS IS SPECIFIED, THE MATERIAL MAY BE PLACED IN A SINGLE LAYER. WHEN A COMPACTED LAYER OF MORE THAN 6" IS REQUIRED, NO LAYER SHALL EXCEED 6" OR LESS THAN 3" WHEN COMPACTED.
- ALL NEW BACKFILL MATERIAL TO BE GRANULAR 'A'. MATERIAL USED SHALL BE CRUSHED LIMESTONE COMPACTED BACKFILL COMPACTED TO 95% MODIFIED PROCTOR DENSITY IN MAXIMUM LIFTS NOT EXCEEDING 9".
- ALL BACKFILL SHALL BE FREE OF ANY ORGANIC MATERIALS OR CLAY.
- PLACE BACKFILL SIMULTANEOUSLY ON BOTH SIDES OF THE WALLS, GRADE BEAMS AND BURIED STRUCTURES TO AVOID UNBALANCED LOADING.
- ALL BACKFILL MATERIAL SHALL BE COMPACTED IMMEDIATELY AFTER PLACING. FILL SHALL BE COMPACTED AND SHAPED TO ENSURE DRAINAGE AWAY FROM THE WORK AREA, BEFORE THE END OF ANY SHIFT.
- DO NOT USE EXCAVATED MATERIAL FOR BACKFILLING UNLESS IT HAS BEEN CERTIFIED CLEAN BY AN APPROVED TESTING FACILITY. IT CAN BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY IN MAXIMUM LIFTS NOT EXCEEDING 9".

**CONCRETE:**

- ALL STRUCTURAL CONCRETE SHALL HAVE MIN. 28 DAYS COMPRESSIVE STRENGTH OF 4000 PSI.
- CEMENT TYPE SHALL BE ASTM C150 TYPE I OR II.
- MAX. AGGREGATE SIZE SHALL BE 3/4" UNO.
- ALL EXPOSED EDGES OF CONCRETE TO HAVE 1" CHAMFERS.
- POURING CONCRETE ABOVE 77 DEGREES FAHRENHEIT (HOT WEATHER CONCRETING) SHALL CONFORM TO THE REQUIREMENTS OF ACI 305 CONCRETE SHALL NOT BE POURED UNTIL ALL CONDUITS, DUCTS, ANCHOR BOLTS, SLEEVES, EMBEDDED ITEMS, ETC. ARE IN PLACE.
- FOR FLOOR, AND WALL PENETRATIONS SEE MECHANICAL, AND ELECTRICAL DRAWINGS.
- ALL CONCRETE SHALL BE MANUFACTURED, PLACED AND CURED IN ACCORDANCE WITH PROVISIONS OF BUILDING CODE, AND REQUIREMENTS FOR REINFORCED CONCRETE ACI 318-14.
- ALL CONCRETE SHALL BE NORMAL WEIGHT AGGREGATE UNLESS NOTED OTHERWISE.
- ALL LEAN CONCRETE SHALL BE MIN. 100 PSI COMPRESSIVE STRENGTH, NON-COMPRESSIVE, NON-SHRINK, SELF CONSOLIDATING, FLOWABLE LEAN CONCRETE.

**REINFORCEMENT:**

- STEEL REINFORCEMENT TO BE DEFORMED BARS TO CONFORM TO ASTM A615, GRADE 60.
- CLEAR CONCRETE COVER TO REINFORCING, UNO.
  - CONCRETE POURED AGAINST EARTH SURFACE: 3"
  - CONCRETE EXPOSED TO EARTH OR WEATHER:
    - 1 1/2" FOR #5 BARS OR SMALLER
    - 2" FOR #6 BARS OR LARGER
  - CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
    - 3/4" FOR SLABS
    - 1 1/2" FOR TOP BARS OF SLAB ON GRADE
- ALL REINFORCING STEEL DETAILING SHALL BE IN ACCORDANCE WITH ACI 318.
- ALL LONGITUDINAL BARS TO HAVE STANDARD 90° BENDS AT ENDS UNLESS NOTED OTHERWISE. HOOKS AND BENDS SHALL CONFORM TO ACI 318.
- ALL REINFORCING STEEL SHALL BE FREE FROM RUST, MUD, OIL OR OTHER BOND-REDUCING COATINGS.
- OBTAIN ENGINEER'S APPROVAL, WHEN ADDITIONAL SPLICING IS REQUIRED FOR CONSTRUCTABILITY.
- TOLERANCES FOR PLACEMENT OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH ACI 117.
- AFTER INITIAL FABRICATION, DO NOT RE-BEND REINFORCEMENT STEEL UNLESS AUTHORIZED BY THE ENGINEER.

**CONCRETE ACCESSORIES:**

- ANCHOR BOLTS TO BE ASTM F1554 AND GALVANIZED, UNLESS NOTED OTHERWISE.



Expires 11-30-2020  
Signed 3-27-2020

**ISSUED FOR CONSTRUCTION**

REV	DESCRIPTION	REVISED BY	DATE	ISSUED BY	REV	DESCRIPTION	REVISED BY	DATE	ISSUED BY	CLIENT	DRAWING TITLE	PROJECT TITLE	DRAWING NO.	REV. NO.				
					0	ISSUED FOR CONSTRUCTION	B.S.	MAR. 27, 2020	M.S.	<b>AETHERA TECHNOLOGIES</b> 63 CRANE LAKE DRIVE HALIFAX, NOVA SCOTIA B3S 1B5	<b>JNE CONSULTING</b> Professional Engineers <small>An ISO 9001:2008 Registered Company</small> 170 Shaw Street, Hamilton, Ontario, Canada L8L 3P7 Tel: 905-529-9122, Fax: 905-529-9174, www.jne.ca	<b>CONCRETE GENERAL NOTES</b>	<b>TRANSMITTER &amp; GENERATOR ENCLOSURES</b> BATAVA, ILLINOIS	60190100-6100	NTS	03-60-1901-00	60190100-6100	0