



#2013-42
431 N. Walkup – Variation
Project Review for Planning and Zoning Commission

<u>Meeting Date:</u>	September 18, 2013
<u>Request:</u>	Variation from Article 3-200 Table 3-200 A to allow the height of an accessory structure to exceed the 15-foot limit to be up to 43 feet in height for a climbing structure.
<u>Location:</u>	431 North Walkup
<u>Acreage:</u>	Approximately 131 acres
<u>Existing Zoning:</u>	RE Residential Estate
<u>Surrounding Properties:</u>	North: RE Residential Estate South: R-1 and R-2 Single Family Residential East: County West: RE Residential Estate, R-1 Single Family Residential and County zoning
<u>Staff Contact:</u>	Elizabeth Maxwell (815.356.3615)

Background:

- **Existing Use:** Veteran Acres is a park owned and operated by the Crystal Lake Park District. The park features ball fields, a playground, splash pad and team challenge course.

Development Analysis:

General

- **Request:** A height variation for a climbing structure. The climbing structure will be used by the Nature Center as part of the team challenge course for adventure programming, team building and skill development. The climbing structure is 43 feet in height. The structure is considered an accessory structure and limited to 15 feet in height.
- **Land Use:** The land use map shows the area as Parks and Open Space. This land use designation is appropriate for this use.
- **Zoning:** The site is zoned RE Residential Estate. Many times parks are found in residential zoning districts. This is an appropriate zoning district for this use.

Site Layout

- The climbing structure would be located east of the baseball diamond in the “lower bowl” area over 800 feet from their east or west property lines.

Comprehensive Land Use Plan 2020 Vision Summary Review:

The Comprehensive Plan designates the subject property as Parks and Open Space, which allows for existing and future parks and natural areas. The following goal is applicable to this request:

Land Use - Industry

Goal: Preserve, protect and enhance the City's open space and natural resources, through cooperative efforts between the City and the Crystal Lake Park District.

This can be accomplished with the following supporting action:

Supporting Action: Support the Park District in achieving its goals.

Success Indicator: Number of development applications and building permits approved for work in the parks.

Findings of Fact:

ZONING ORDINANCE VARIATION

The petitioner is requesting a variation from Article 3-200 Table 3-200 A to allow the height of an accessory structure to exceed the 15-foot limit to be up to 43 feet in height for a climbing structure.

The Unified Development Ordinance lists specific standards for the review and approval of a variation. The granting of a variation rests upon the applicant proving practical difficulty or hardship caused by the Ordinance requirements as they relate to the property. To be considered a zoning hardship, the specific zoning requirements; setbacks, lot width and lot area must create a unique situation on this property. It is the responsibility of the petitioner to prove hardship at the Planning and Zoning Commission public hearing.

Standards

When evidence in a specific case shows conclusively that literal enforcement of any provision of this Ordinance would result in a practical difficulty or particular hardship because:

- a. The plight of the property owner is due to unique circumstances, such as, unusual surroundings or conditions of the property involved, or by reason of exceptional narrowness, shallowness or shape of a zoning lot, or because of unique topography, or underground conditions.

Meets *Does not meet*

- b. Also, that the variation, if granted, will not alter the essential character of the locality.

Meets *Does not meet*

For the purposes of supplementing the above standards, the Commission may take into consideration the extent to which the following facts favorable to the application have been established by the evidence presented at the public hearing:

- a. That the conditions upon which the application for variation is based would not be applicable generally to other property within the same zoning classification;

Meets *Does not meet*

- b. That the alleged difficulty or hardship has not been created by any person presently having interest in the property;
 Meets *Does not meet*
- c. That the granting of the variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located; or
 Meets *Does not meet*
- d. That the proposed variation will not impair an adequate supply of light or air to adjacent property, will not unreasonably diminish or impair the property values of adjacent property, will not unreasonably increase congestion in the public streets, substantially increase the danger of fire or otherwise endanger public safety.
 Meets *Does not meet*

Where the evidence is not found to justify such conditions, that fact shall be reported to the City Council with a recommendation that the variation be denied.

Recommended Conditions:

If a motion to recommend approval of the petitioner's request is made, it should be with the following conditions:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
 - A. Application (Crystal Lake Park District, received 08/30/13)
 - B. Plan Set (Experimental Systems, Inc., dated 07/12/13, received 08/30/13)
2. The petitioner shall address all of the review comments and requirements of the Engineering and Building and Planning and Economic Development Departments.

City of Crystal Lake Development Application

Office Use Only
File # _____

Project Title: Climbing Tower for Veteran Acres Park

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Action Requested

- | | |
|-------------------------------------------------------|----------------------------------------------------------|
| <input type="checkbox"/> Annexation | <input type="checkbox"/> Preliminary PUD |
| <input type="checkbox"/> Comprehensive Plan Amendment | <input type="checkbox"/> Preliminary Plat of Subdivision |
| <input type="checkbox"/> Conceptual PUD Review | <input type="checkbox"/> Rezoning |
| <input type="checkbox"/> Final PUD | <input type="checkbox"/> Special Use Permit |
| <input type="checkbox"/> Final PUD Amendment | <input checked="" type="checkbox"/> Variation |
| <input type="checkbox"/> Final Plat of Subdivision | <input type="checkbox"/> Other |

Petitioner Information

Owner Information (if different)

Name: Crystal Lake Park District
 Address: 1 E. Crystal Lake Ave.
Crystal Lake, IL 60014
 Phone: 815-459-0680 x 205
 Fax: 815-477-5005
 E-mail: aviger@crystallakeparks.org

Name: _____
 Address: _____
 Phone: _____
 Fax: _____
 E-mail: _____

Property Information

Project Description: Construct a 43' tall, 3 sided wooden climbing tower at Veteran Acres Park.

Project Address/Location: 431 N. Walkup

PIN Number(s): 14-32-226-002

Development Team

Please include address, phone, fax and e-mail

Developer: _____

Architect: _____

Attorney: Scott Puma, 175 E. Hawthorne Pkwy., Suite 145, Vernon Hills, IL
60061 (847) 247-7400 F (847) 247-7405

Engineer: John Looney, Experiential Systems, 555 N. Williams St.,
Thornton, IL 60576 (877) 206-8967

Landscape Architect: Ann Viger, 1 E. Crystal Lake Ave., Crystal Lake, IL
(815) 459-0680 x 205 F (815) 477-5005


Planner: _____

Surveyor: _____

Other: _____

Signatures

PETITIONER: Print and Sign name (if different from owner) **Date**

As owner of the property in question, I hereby authorize the seeking of the above requested action.
 **Jason Herbster** **8/29/13**

OWNER: Print and Sign name **Date**

NOTE: If the property is held in trust, the trust officer must sign this petition as owner. In addition, the trust officer must provide a letter that names all beneficiaries of the trust.

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STERNE'S WOODS & FEN

5617 E. Hillside Rd.

Crystal Lake Park District
www.crystallakeparks.org



Sterne's Woods and Fen and Veteran Acres Park combine to provide nearly 300 acres of natural area. Within their boundaries are two dedicated Illinois State Nature Preserves and several miles of trails. These trails lead visitors through a variety of natural communities.

Sterne's Woods and Fen is comprised of upland woods growing on hills formed by glacial activity 13,000 years ago. In the lower areas to the northeast of the property visitors can experience a rare type of wetland known as a fen. These wetlands are home to many rare plant species.

Veteran Acres supports upland woods as well, and it also contains Wingate Prairie. Located in the northeast corner of Veteran Acres, Wingate Prairie is roughly 30 acres and supports many high quality plants. Another popular attraction are the pine woods located throughout both of these parks.

- Parks are open from dawn to dusk.
- Stay on designated trails.
- All dogs must be kept on a leash.
- Dog owners must clean up after their dogs.
- Cutting and picking plants is strictly forbidden.
- Bicycles must stay on designated bike trails.



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CLIMBING TOWER LOCATION



VETERAN ACRES

431 N. Walkup Rd.

Crystal Lake Park District
www.crystallakeparks.org

PUBLIC NOTICE

BEFORE THE PLANNING AND ZONING COMMISSION OF THE CITY OF CRYSTAL LAKE, MCHENRY COUNTY, ILLINOIS

IN THE MATTER OF THE APPLI-
CATION OF

Jason Herbster, on behalf of the
Crystal Lake Park District

LEGAL NOTICE

Notice is hereby given in compli-
ance with the Unified Development
Ordinance (UDO) of the City of
Crystal Lake, Illinois, that a public
hearing will be held before the
Planning and Zoning Commission
upon the application of Jason
Herbster on behalf of the Crystal
Lake Park District relating to the fol-
lowing real estate known as 431
North Walkup Avenue (Veteran
Acres Park), Crystal Lake, Illinois
60014, PIN: 14-32-226-002.

This application is filed for the
purposes of seeking a Variation
from Article 3 Section 3-200 Table
3-200A Density and Dimensional
Standards to allow a climbing wall
an accessory structure of 50 feet in
height, exceeding the maximum
15-foot height limit as well as any
other variations that may be neces-
sary to allow the plans as present-
ed. Plans for this project can be
viewed at the City of Crystal Lake
Planning and Economic Develop-
ment Department at City Hall.

A public hearing before the Plan-
ning and Zoning Commission on
the request will be held at 7:30
p.m. on Wednesday, September
18, 2013, at the Crystal Lake City
Hall, 100 West Woodstock Street,
at which time and place any per-
son determining to be heard may
be present.

Tom Hayden, Chairperson
Planning and Zoning Commission
City of Crystal Lake

(Published in the Northwest Herald
August 30, 2013. #A1766)

**EXPERIENTIAL
SYSTEMS, INC.**

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Thornton, IL, 60476
(877) 206-8967
www.experientialsystems.com

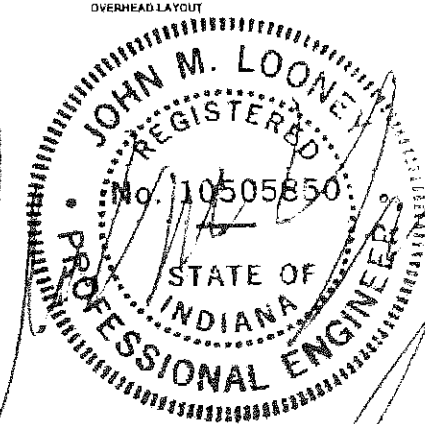
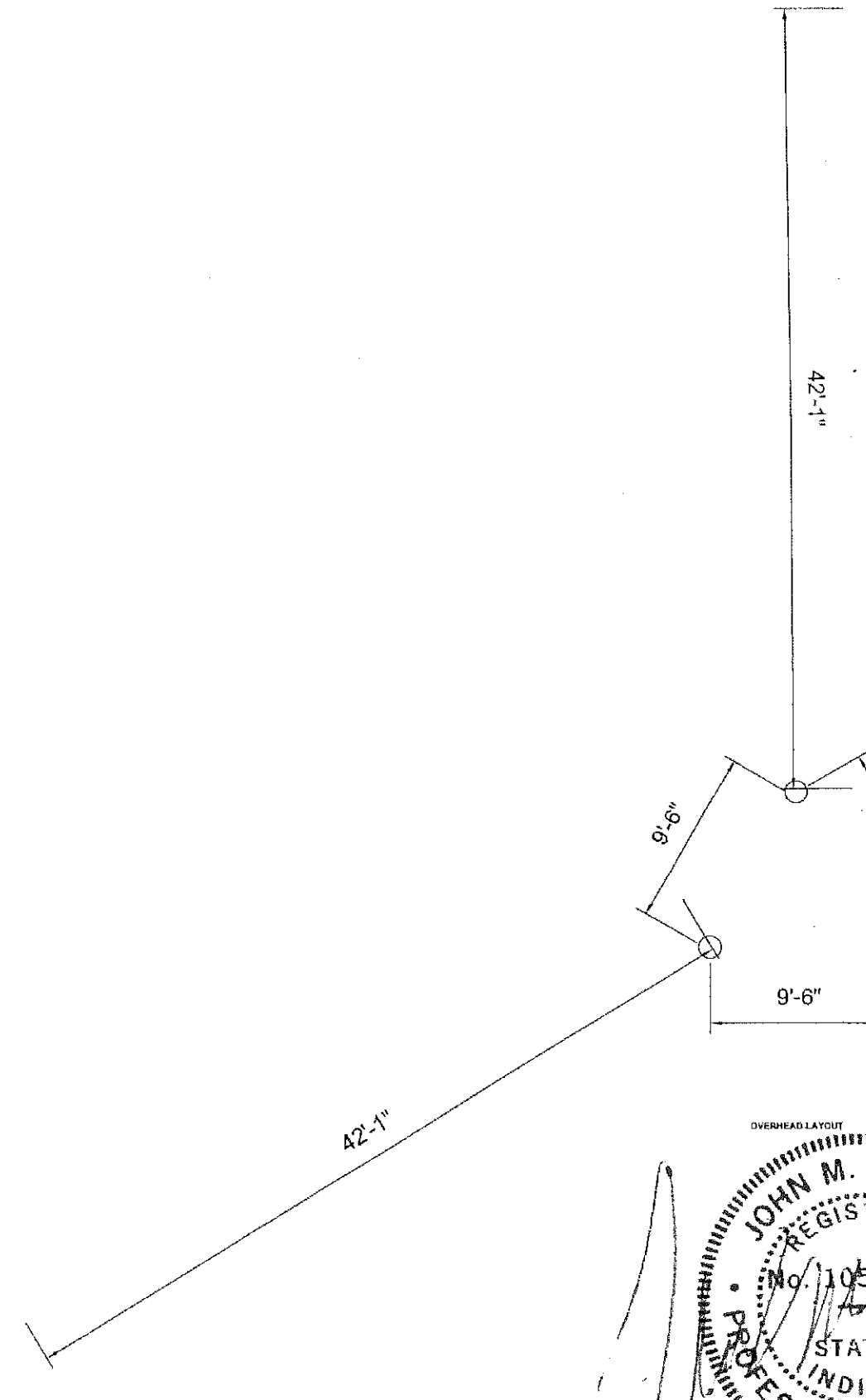
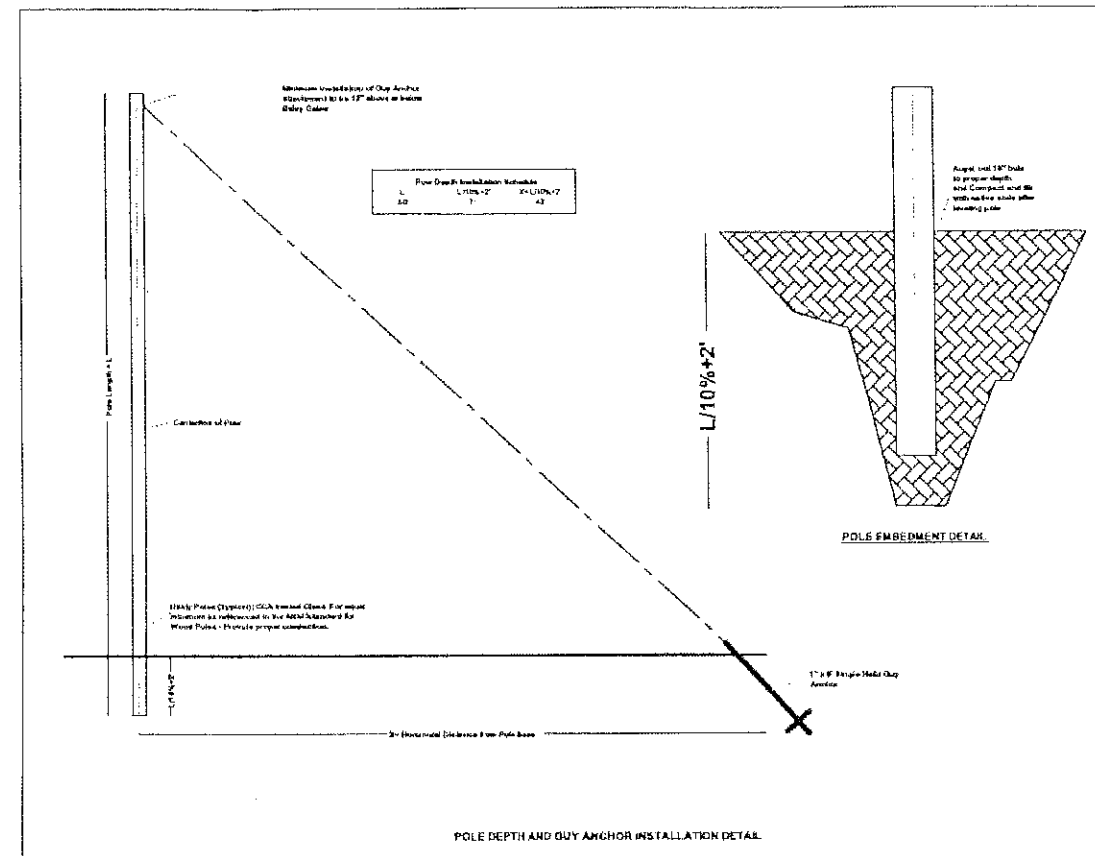
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One Crystal Lake Ave.
Crystal Lake, IL 60014**

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DRAWN BY: KT.
DATE: 07/12/13

DRAWING TITLE:
Tower Layout, Footing and Guys

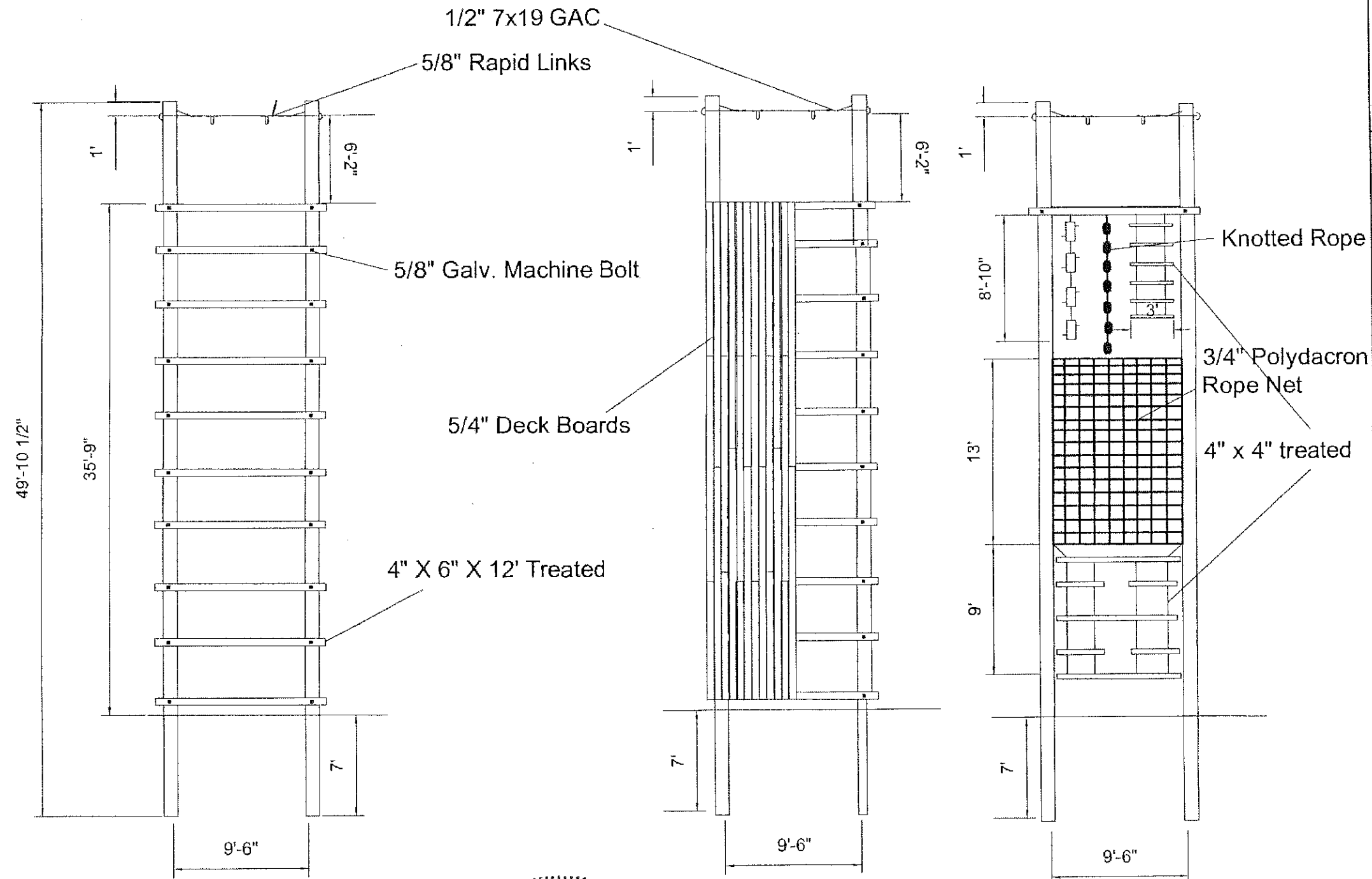
Drawing No.
SHEET. 1



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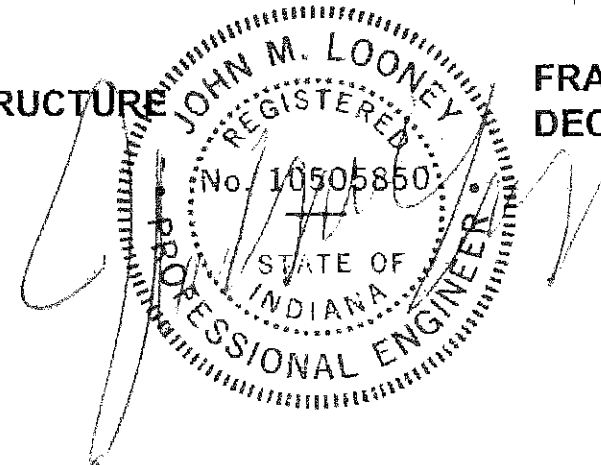
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FRAMING PLAN 1 - BASE STRUCTURE

**FRAMING PLAN 2
DECKING**

FRAMING PLAN 3 - SIDE VIEW



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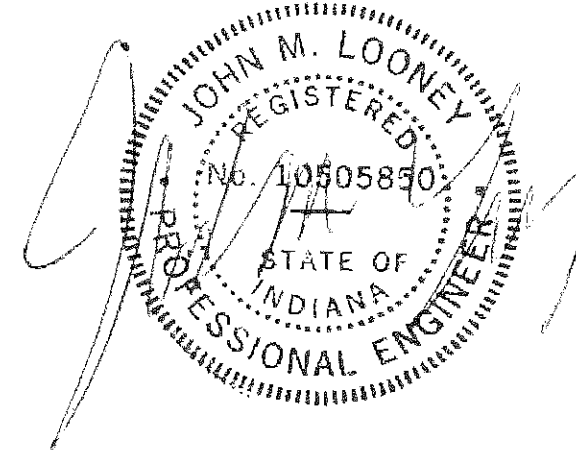
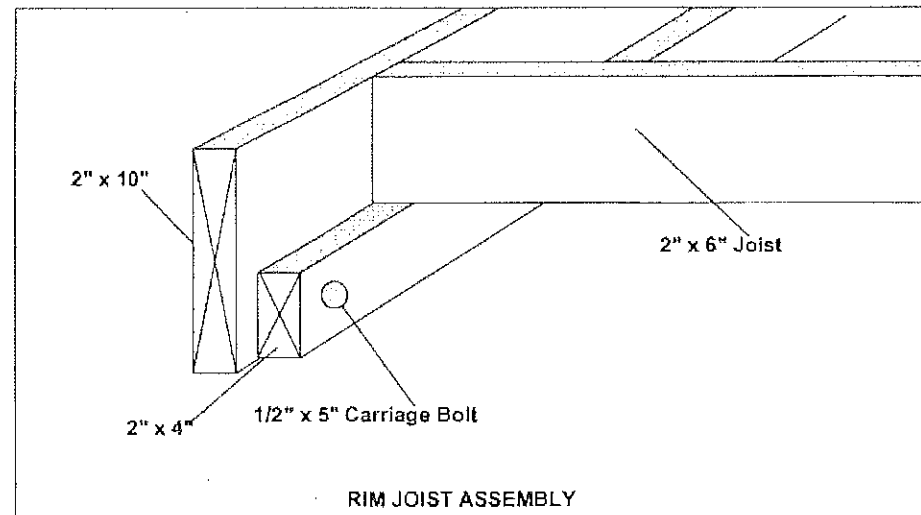
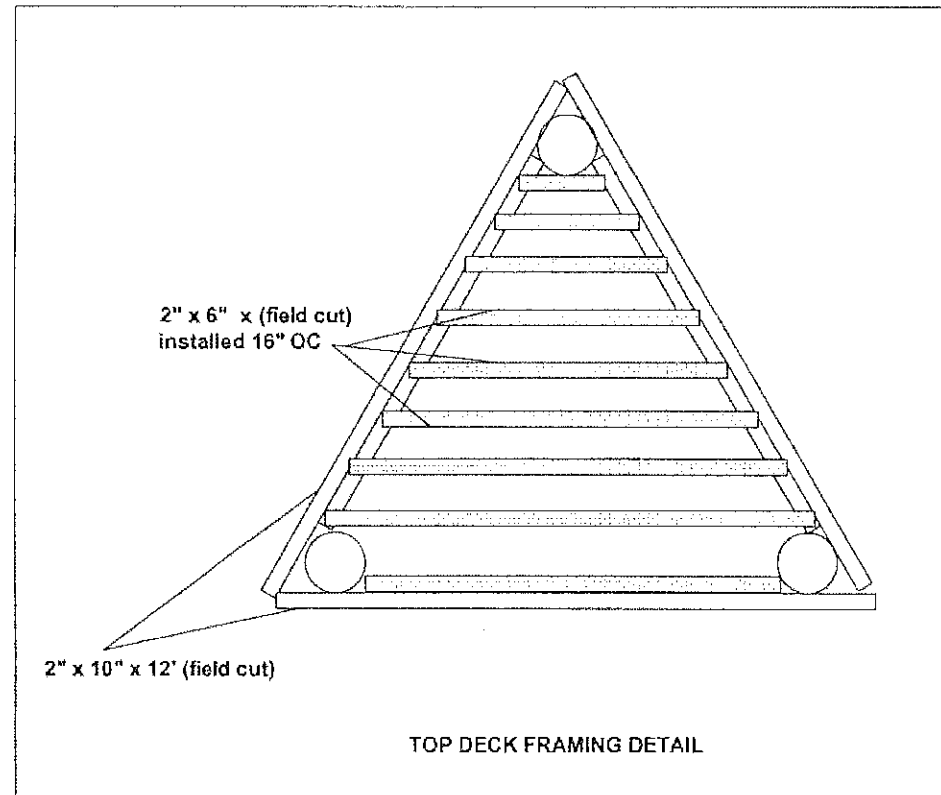
DRAWING TITLE:
Tower Elevations

Drawing No.
SHEET. 2

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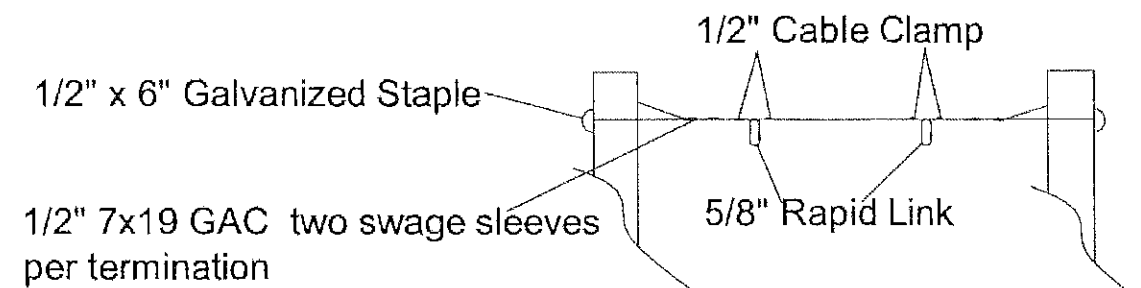
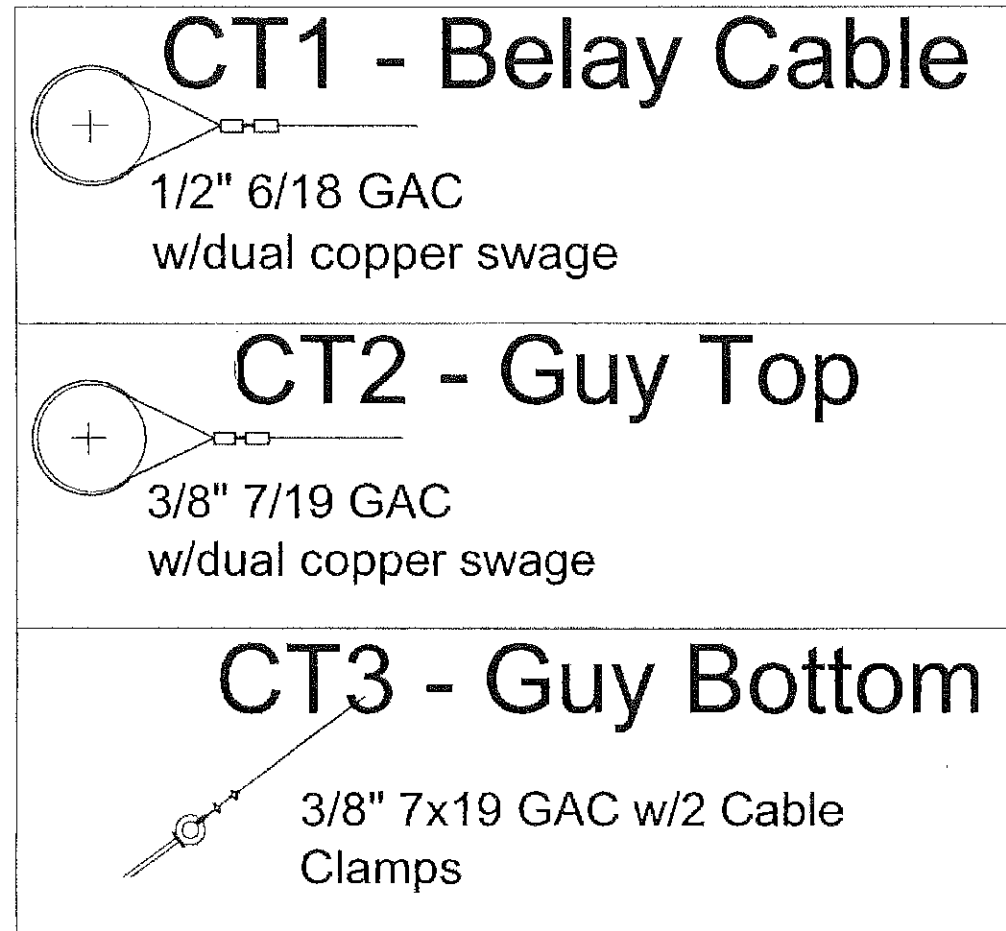
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DRAWING TITLE:
Tower Deck Framing

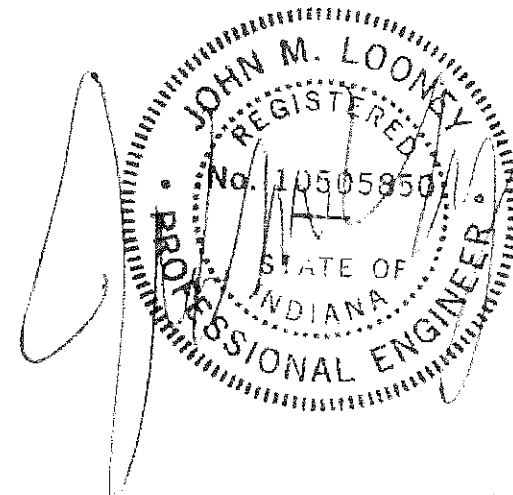
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BELAY CABLE TERMINATION PLAN



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DATE: 07/12/13

DRAWING TITLE:
Tower Cable Terminations

Drawing No.
SHEET. 4

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NOTES:

General Requirements

1. Construction shall be comply with the current version of the Association for Challenge Course Technology (ACCT) Written Standards.
2. Construction shall comply with 2000 IBC
3. When any conflict occurs between the requirements of Federal, State and Local Laws, Codes, Ordinances, Rules or Regulations, the most stringent shall govern.
4. Where no construction details are shown or noted for any part of the work, the details used shall be similar as for other similar work.
5. The manufacturers suggested installation methods and specifications shall be followed.
6. No Substitutions shall be made without consultation of the designer.

Foundation

1. Maximum Soil Pressure: 3,100 PSF dead and live loads may be increased 33.3% for short term loads.
2. Allowable Lateral Bearing Pressure 325 PSF per foot of depth. May be increased by 33.3% for short term loads.
3. Pole depth shall ANSI Wood Pole Standards and extend to a minimum depth of 10% of pole length plus 2 ft.
4. Native soil shall be used for backfill around poles.

Steel

1. All miscellaneous steel (plates, angles, etc.) shall be Hot Dipped Galvanized A 36, or stainless steel.
2. Machine and carriage bolts to be galvanized ASTM A307 or equal.

Wood

1. All Poles to be Class II CCA treated or equal
2. Framing to be treated Douglas Fir no. 2 or better.

Cables

1. Guy cables to be 3/8" 7x19 GAC with minimum breaking strength of at least 14,400 lbs.
2. Tower Belay Cables to be 1/2" 6x18 GAC with minimum breaking strength of at least 21,400 lbs.
3. Each size cable shall have the same size cable clamps and swage sleeves as the diameter of the cable and be installed to manufacturer and ACCT standards.

NOTES:

B. Design Loads

1. Elevated Platforms Live Load T1607.1 paragraph 39 60 psf.
2. Snow Loads
 - a. Ground Snow Loads F1608.2 25 psf.
 - b. Flat Roof (Deck) Load ASCE 7 or T1607.1 25 psf.
 - c. Snow Exposure Factor - Table 1608.3.1 Fully Open
 - d. Snow Load Exposure Factor: Is Category I; Is: 0.9
3. Wind Loads
 - a. Wind Speed F1609 90 mph
 - b. Wind Importance Factor Iw T1604.5 Iw 1.0
 - c. Wind Exposure 1609.4.3
 - d. Wind Pressure C
 - e. Spans Chapter 23 T2308.8 (2) 22 psf

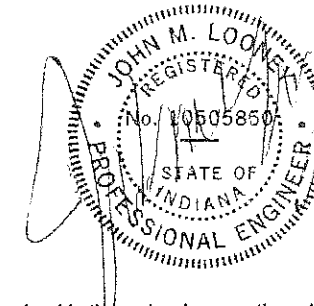
C. Design Standards

1. 2000 International Building Code
2. American Forest and Paper Association National Design Specifications for Wood Construction. ANSI/A&PA NDS-2005
3. ANSI 05.01 American National Standard for Wood Poles
4. Association for Challenge Course Technology (ACCT) Standards 2012 Edition

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DRAWING TITLE:

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Drawing No.

SHEET. 0.1

NOTES

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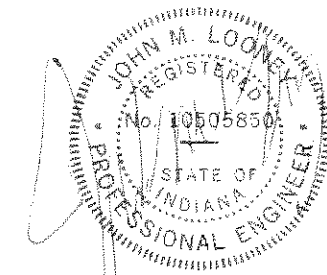
1. 2000 International Building Code
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3. ANSI 05.01 American National Standard for Wood Poles
4. Association for Challenge Course Technology (ACCT) Standards 2012 Edition

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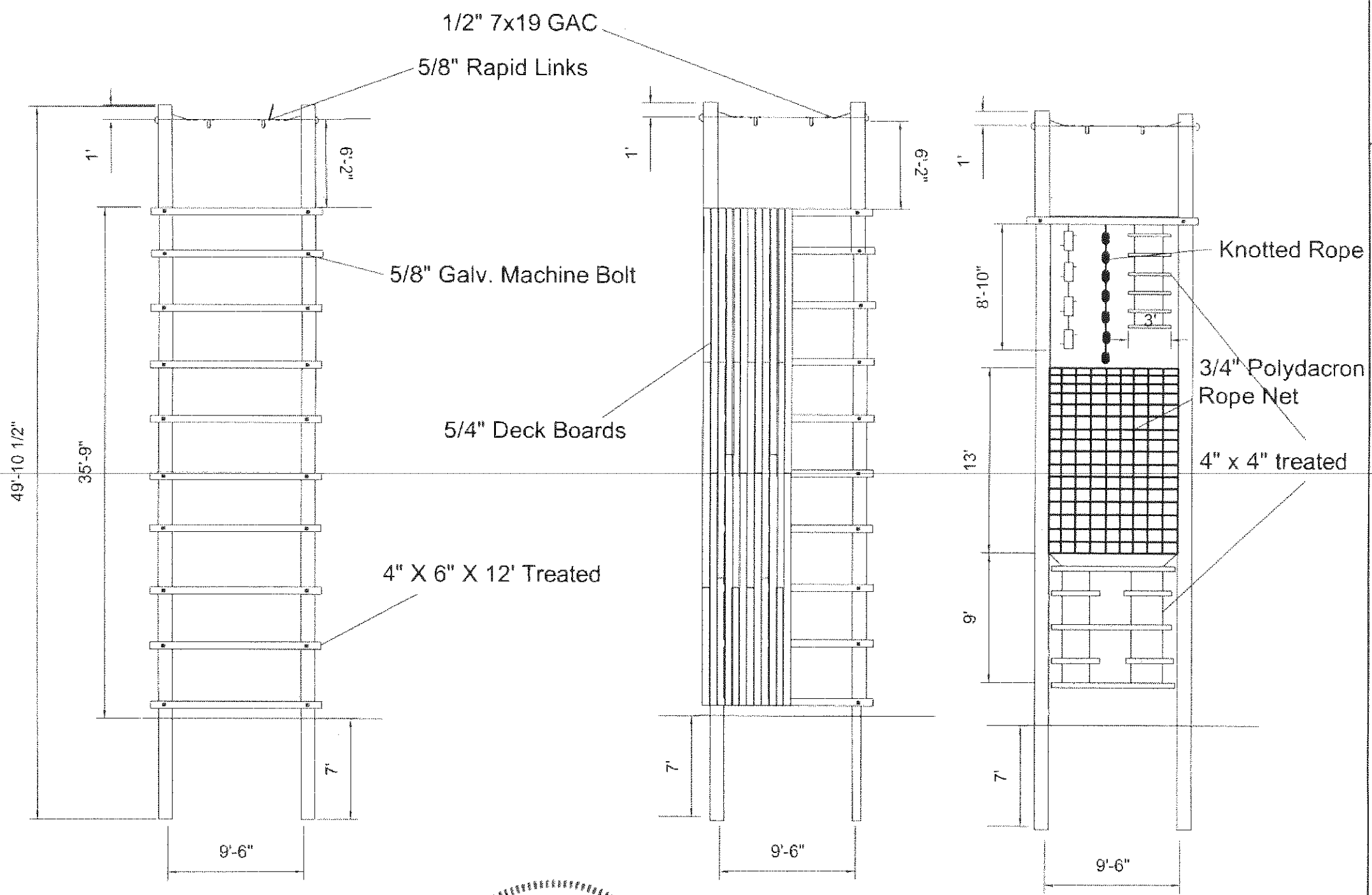
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 NOTES

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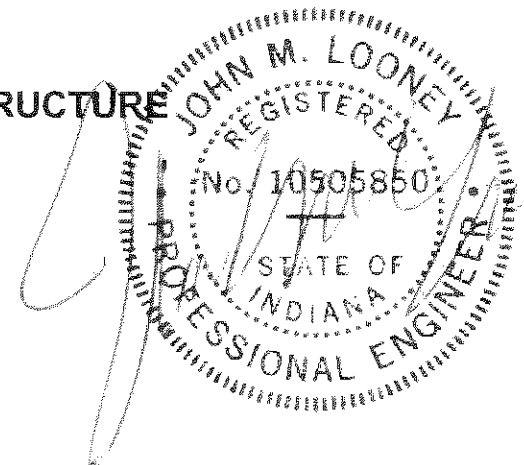
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FRAMING PLAN 1 - BASE STRUCTURE

**FRAMING PLAN 2
 DECKING**

FRAMING PLAN 3 - SIDE VIEW



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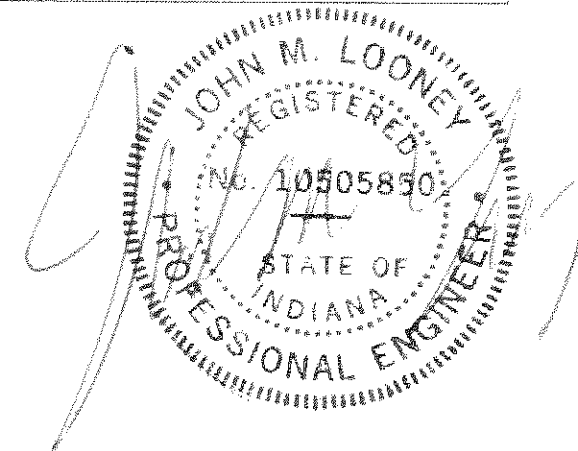
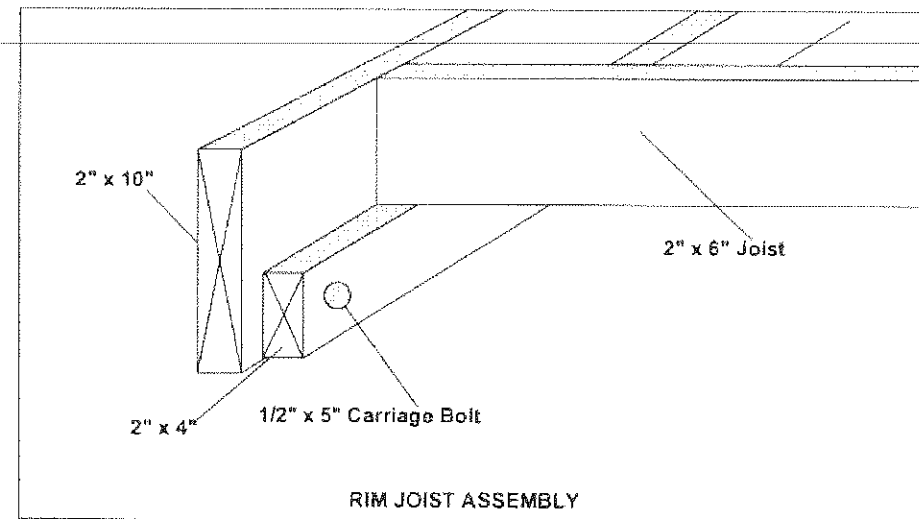
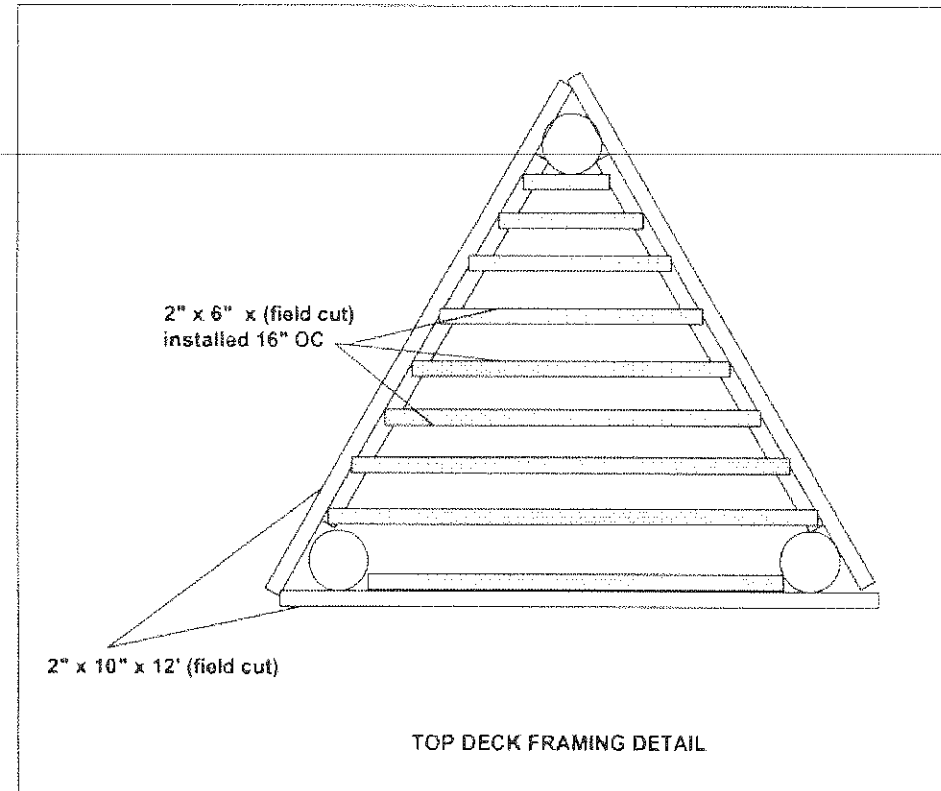
DRAWING TITLE:
 Tower Elevations

Drawing No.
SHEET. 2

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Crystal Lake Park District
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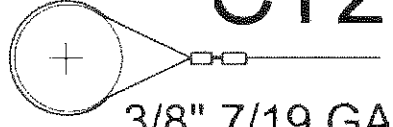
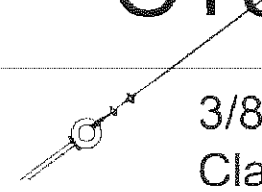
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DRAWING TITLE:
Tower Deck Framing

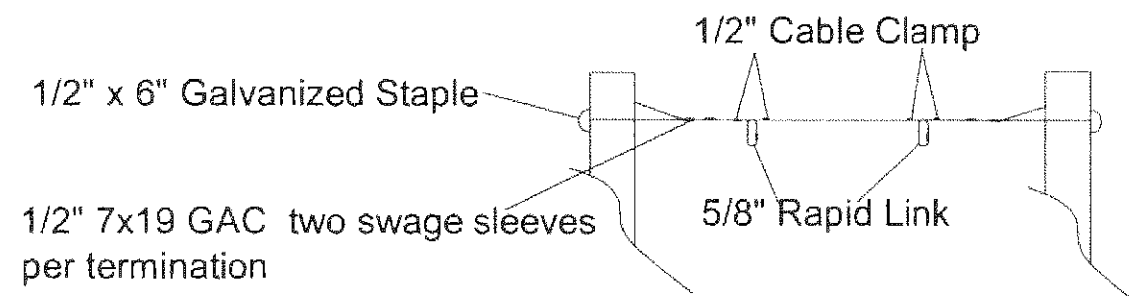
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**EXPERIENTIAL
SYSTEMS, INC.**

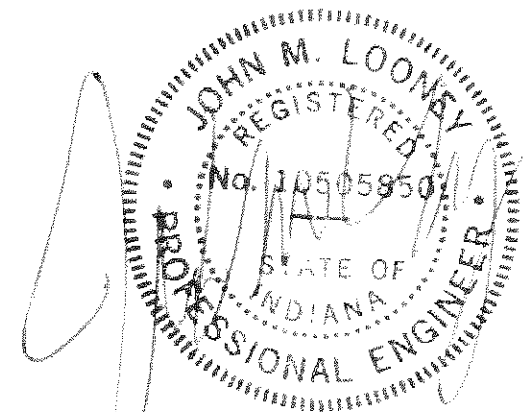
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	CT1 - Belay Cable 1/2" 6/18 GAC w/dual copper swage
	CT2 - Guy Top 3/8" 7/19 GAC w/dual copper swage
	CT3 - Guy Bottom 3/8" 7x19 GAC w/2 Cable Clamps

**Crystal Lake Park District
One Crystal Lake Ave.
Crystal Lake, IL 60014**



BELAY CABLE TERMINATION PLAN

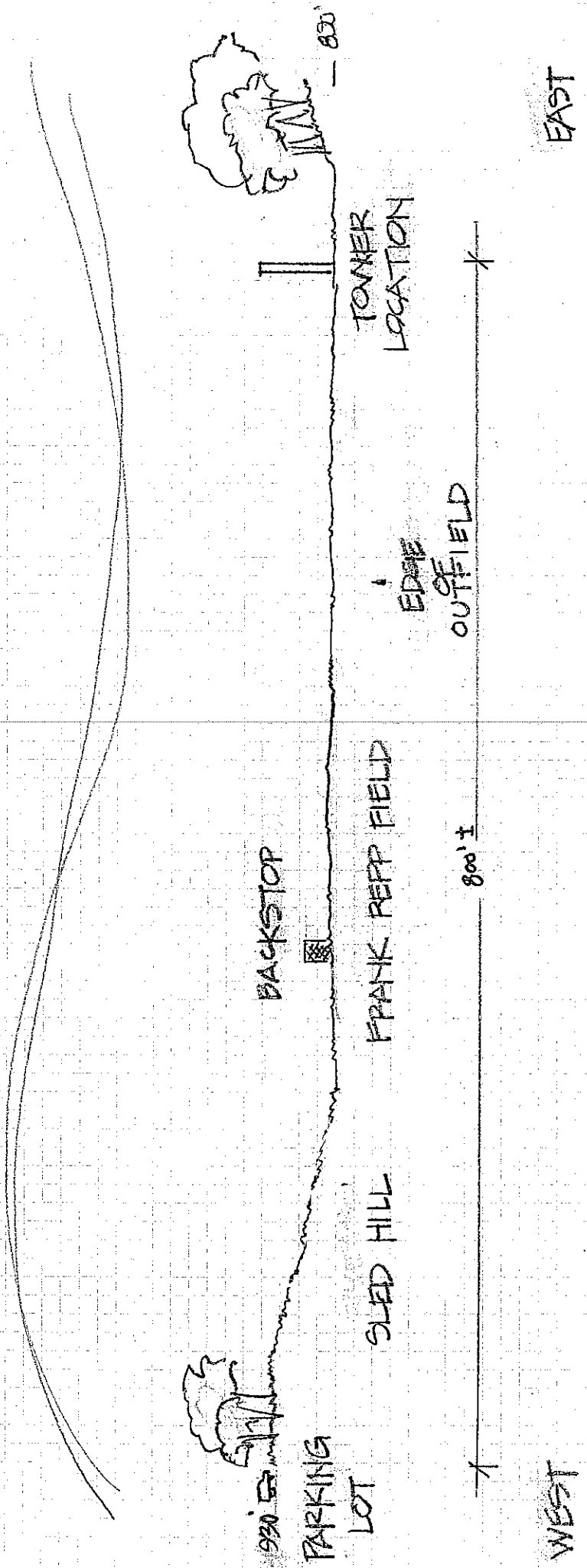


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Tower Cable Terminations

Drawing No.
SHEET. 4



VETERAN ACRES PARK
 CROSS SECTION LOOKING NORTH
 1" = 100'

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Sample Climbing Tower Photos

Constructed by Experiential Systems

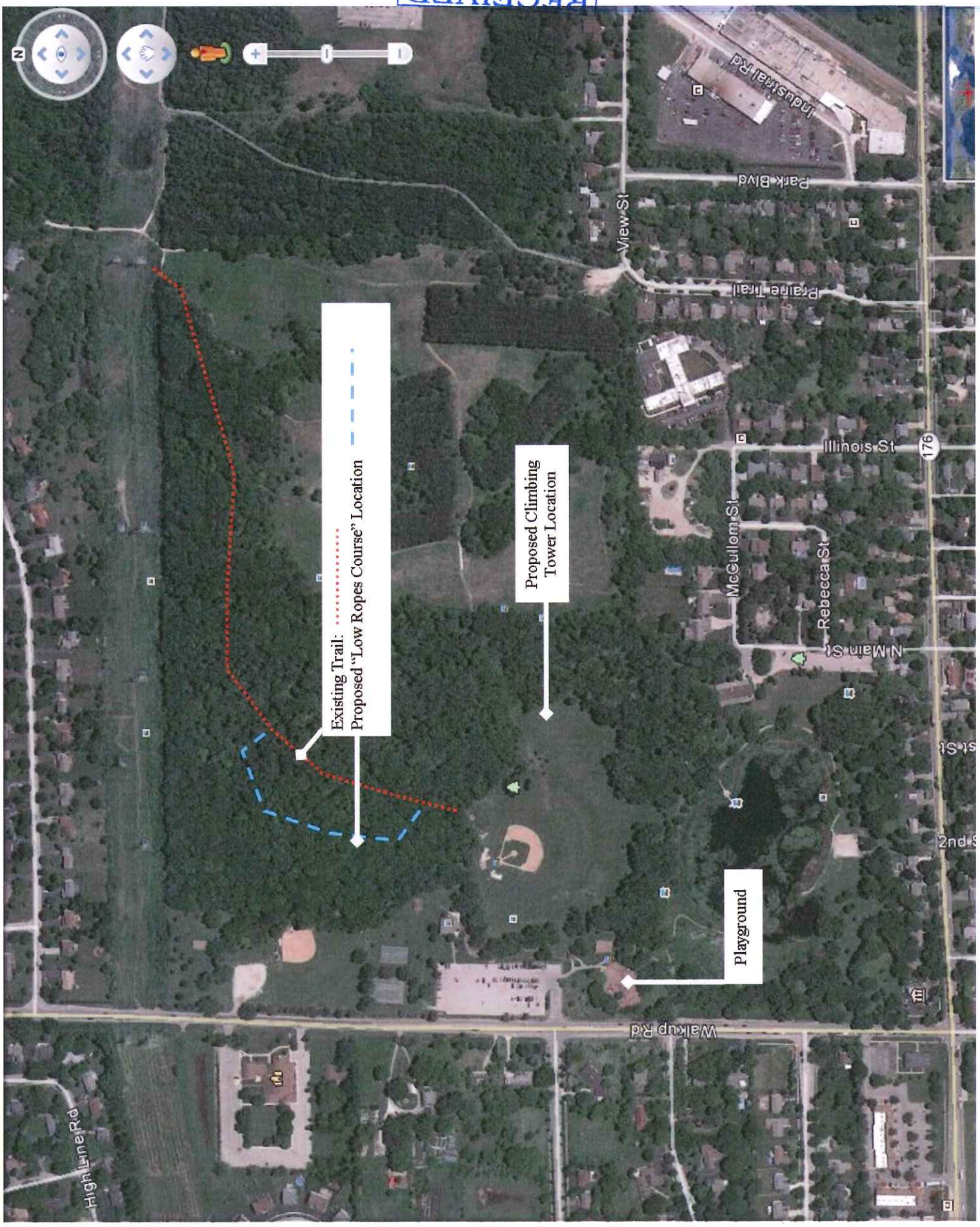
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Existing Trail:
Proposed "Low Ropes Course" Location - - - - -

Proposed Climbing Tower Location

Playground

Highline Rd

Walkup Rd

Illinois St

McCullom St

Rebecca St

N Main St

Park Blvd

Industrial Rd

View St

Prairie Trail



