MARSHALLTOWN
IOWA

PLAN ZONING COMMISSION

Notice of Public Meeting Agenda
February 20, 2018 at 5:00 PM
10 W. State Street - Council Chambers

1. Call To Order & Roll Call
   Bloomquist
   Boston
   Brodin
   Deimerly-Snyder
   Lins-Eich
   Greer
   Valbracht

2. Minutes From January 11, 2018

   Documents:

   011118.PDF

3. Review And Recommendation To Board Of Adjustment On SPECIAL USE PERMIT - 909 S. 2nd Street - Communication Antenna Structure

   Documents:

   021518_909 S 2ND ST_MEMO.PDF
   SUP_PUBLIC SAFETY_022018.PDF

4. Review And Recommendation To The City Council Of Preliminary And Final Plat For Godfrey Subdivision

   Documents:

   GODFREY SUBDIVISION_021318.PDF
   021518_GODFREY_MEMO.PDF
   GODFREY APPLICATION.PDF

5. Highway 14 Corridor Study Update

2018 Tentative Meeting Schedule (Thursday following the 2nd Monday of the Month)

**Dates are tentative and may be changed or canceled in order to accommodate staff schedules or development need.*

January 11, 2018	February 15, 2018	March 15, 2018
April 12, 2018	May 10, 2018	June 14, 2018

July 12, 2018	August 16, 2018	September 13, 2018
October 11, 2018	November 15, 2018	December 13, 2018

MINUTES
MARSHALLTOWN PLAN & ZONING COMMISSION
JANUARY 11, 2018

Call to order: 5:00 PM

Members Present: Jon Boston-Chair, Matthew Brodin, Keith Bloomquist, Steve Valbracht & Angela Lins-Eich

Absent: Aimee Deimerly-Snyder & Sharon Greer-Vice-Chair

1. Approval of Minutes from December 7, 2017

   Approved as distributed.

2. **TABLED from 12/07/17 - REVIEW & RECOMMENDATION of amendment to Glenwood Place PUD.**

   Motion by Valbracht to remove the item from the table for discussion. Second by Bloomquist. Motion carried 5-0.

   Steve Troskey, CGA, was present to discuss the proposed amendment along with representatives from Glenwood Place. Spohnheimer presented the letter from the neighboring property owner, which was submitted. Spohnheimer also provided the previously approved plan, which showed the duplex location related to the proposed accessory structures. No further concerns or discussion.

   Motion by Valbracht to recommend approval of the request to the City Council. Second by Lins-Eich. Motion Carried 5-0

Spohnheimer reminded the Commission of the training scheduled for January 16th at 4:00 PM and the upcoming open house for the Highway 14 Study on January 30th at 5:30 PM.

With no further business, the Commission adjourned.
Respectfully submitted,
Michelle Spohnheimer, Housing & Community Development Director

MARSHALLTOWN
IOWA

TO: Plan Zoning Commission

FROM: Michelle Spohnheimer, Housing & Community Development Director

DATE: February 15, 2018 – Meeting Date

SPECIAL USE PERMIT request for 909 S. 2nd Street – Communication Antenna Structure

The City of Marshalltown is proposing to install a communication antenna structure at the new Public Safety Facility at 909 S. 2nd Street. This proposed tower will be 175' monopole set directly behind the new building. Details are included in the application packet.

Zone:	CC – Community Commercial District.
Use:	Antennas structures are allowed in all districts with a Special Use Permit.
Comprehensive Plan:	Commercial

Zoning Ordinance - Chapter 31 Section 6.1.

b. Special Use Permit Required: Antenna support structures and antennas for entities providing licensed or unlicensed communications services, including but not limited to cellular, personal communications services (PCS), specialized mobilized radio (SMR), enhanced specialized mobilized radio (ESMR), paging and similar services that is either not mounted on existing tall structure, or is more than 20 feet higher than the tall structure on which it is to be mounted shall not be permitted except pursuant to the following conditions:

1) An application must be completed and returned to the zoning officer accompanied by a current fee for a special use permit. The application at a minimum must contain the following information:
   - **i) Necessity**: The wireless communications company shall demonstrate, using technological evidence that the antenna must be located where it is proposed in order to satisfy the antenna's function in the company's system.
   - **ii) Co-Location Effort**: If the applicant proposes to build an antenna support structure (as opposed to mounting the antenna on an existing tall structure), it shall demonstrate that it contacted the owners of tall structures within a one-quarter mile radius of the site proposed, asked for a permission to install the antenna on those tall structures, and was denied for reasons other than failure to agree on compensation. The Board of Adjustment may deny the permit if it concludes that the applicant has not made a good faith effort to mount the antenna on an existing tall structure.
   - **iii) Antenna Height**: The applicant shall demonstrate, to the reasonable satisfaction of the Board of Adjustment, that the antenna is the minimum height required to function satisfactorily. No antenna that is taller than this minimum height shall be approved.
   - **iv) Setbacks from Base of Antenna Support Structure**: The minimum distance between the base of the support structure or any guy anchors and any property line shall be the largest of the following: a). 50% of the antenna height; b). The minimum setback in the underlying zoning district; c). 60 feet.
   - **v) Antenna Support Structure Safety**: The applicant shall demonstrate, to the reasonable satisfaction of the Board of Adjustment, that the proposed antenna and support structure are safe and the surrounding areas will not be negatively affected by support structure failure, falling ice or other debris, or radio frequency interference. All structures shall be fitted with anti-climbing devices, as approved by the manufacturers.

vi) **Fencing**: An opaque fence shall be installed around the antenna support structure and other equipment, unless the antenna is mounted on an existing structure. The fence shall be a maximum of 6 feet in height and serve to screen the base of the structure and to improve security.

vii) **Co-Location**: In order to reduce the number of antenna support structures needed in the community in the future, the proposed support structure shall be required to accommodate other users, including other wireless communications companies, and local police, fire, and ambulance companies.

viii) **FCC License**: The applicant shall provide proof that it is licensed by the Federal Communications Commission.

ix) **Required Parking**: If the site is fully automated, adequate parking shall be required for maintenance workers. If the site is not automated, the number of required parking spaces shall equal the number of people on the largest shift.

x) **Painting**: Antenna support structures should be painted in such a manner as to reduce the visual impact and create a harmonious appearance with its surroundings.

xi) **Site Plan**: A full site plan shall be required for all cell sites, showing the antenna, antenna support structure, building, fencing, buffering, and access.

xii) **Air Safety**: Support structures 200 feet in height or taller, or those near airports, shall meet all Federal Aviation Administration requirements.

c. Applicant must show that the proposed antenna support structure, antenna or accessory structure will be placed in a reasonably available location that will minimize the visual impact on the surrounding area and allow the facility to function in accordance with the minimum standards imposed by applicable communications regulations and applicant's technical design requirements.

d. Antenna support structures in residential neighborhoods are strongly discouraged. The application for a permit in a residential neighborhood must prove that the area cannot be adequately served by a facility placed in a non-residential neighborhood for valid technical reasons.

e. All antenna support structures and communications facilities at sites other than the A-1 and 'M' Districts at a minimum shall be a monopole. All antennas shall be designed to blend into the surrounding environment or to look other than a tower, such as light poles, power poles and trees. At a minimum, all towers not requiring FAA painting or markings shall have an exterior finish which is galvanized or painted dull blue, gray or black. Existing non-monopole antenna support structures shall be allowed to continue. Additional antenna may be added to existing non-monopole structures provided that other requirements of this special use section are followed. If an existing non-monopole structure has been damaged by more than 50% of the fair market value prior to the damage, the replacement of the antenna shall conform to all requirements of this section including the monopole requirement.

Recommendation: The Commission may make a recommendation on to the Board of Adjustment, which may include conditions.

DATE SUBMITTED & FEE PAID: 1/30/18
HEARING DATE: 2/20/18

the City of Marshalltown

BOARD OF ADJUSTMENT

Special Use & Home Occupation Special Use Permit Application

36 N. Center Street, Marshalltown, IA 50158 Ph: 641-754-5756 Fax: 641-754-5742

All items listed must be submitted with this application:

☑ **A site plan, drawn in ink to scale.** This site plan shall not be larger than 11" X 17."

☑ **Any other applicable drawings or diagrams.** Home Occupation Special use permits must submit a floor plan diagram.

N/a **Application fee**. A $300 fee is required for a special use request ($50 for a Home Occupation Special Use request). Make check payable to "City of Marshalltown." The fee must be paid when the application is submitted to the Housing Department.

☐ **Legal description of the property.** The property owner should have a copy of the legal description of the property. *Please note that the tax description on the Marshall County assessor's webpage is NOT the legal description.* The legal description is listed on the property's abstract or owners may obtain a copy of the recorded deed from the Marshall County Recorder's Office for a fee.

It is the burden of the applicant to provide sufficient facts with this application and at the Board of Adjustment meeting to support a finding that all the standards for approval have been met. For all special use requests, with the exception of a Home Occupation Special Use request, the Plan & Zoning Commission shall first review the proposal and make a recommendation to the Board of Adjustment.

Attendance at all meetings is required.

Please type or print legibly in ink.
Property Address: 909 South 2nd Street, Marshalltown, IA 50158
Owner: City of Marshalltown
Mailing Address: 24 N Center Street
Phone: 941-754-5734
Email: jnickel@marshalltown-ia.gov
Owner's Agent (if applicable):
Agent Address:
Agent Phone:
Agent Email:

The board will use this information to review your request. Please attach any additional supporting information. If you have any questions, please contact the Zoning Department at 754-5756.
Please describe the request and what justification there is for the proposal. Attach additional pages if necessary. If applicable, please provide a description of the business or use, discuss any signage to be used, and parking issues.

Owner/Agent Signature:
Date:

the City of Marshalltown

Joel T.S. Greer, Mayor
Jessica Kinser, Administrator
Justin Nickel, Public Works Director
24 North Center Street
Marshalltown, IA 50158-4911
Tel - (641) 754-5734
Fax - (641) 754-5793

DEPARTMENT OF PUBLIC WORKS

January 30, 2018

To: Michelle Spohnheimer
Housing & Community Development Director

From: Justin Nickel
Director of Public Works

Re: 175 Monopole to be erected at the new Police and Fire Joint Facility

Policy Issue: Special Use Permit must be approved by the Board of Adjustment

Recommendation: To approve the special use permit for a 175 foot monopole as proposed

Background: Supporting information

- Necessity – communication line of site from new Police and Fire Facility to Racom building
- Co-Location effort – N/A
- Antenna Height – 175 feet tall
- Setbacks from nearest property line – drawing enclosed
- Antenna Support structure safety – engineer stamped footing design enclosed
- Fencing – N/A
- Co- Location - N/A
- FCC Licensure – City is not licensed by FCC, but the City is seeking FCC approval for installation
- Required Parking – N/A
- Painting – the support structure will be painted to match the colors of the surrounding facility

City Council
Susan Cahill, Mike Gowdy, Joel Greer,
Al Hoop, Leon Lamer, Bill Martin, Bethany Wirin

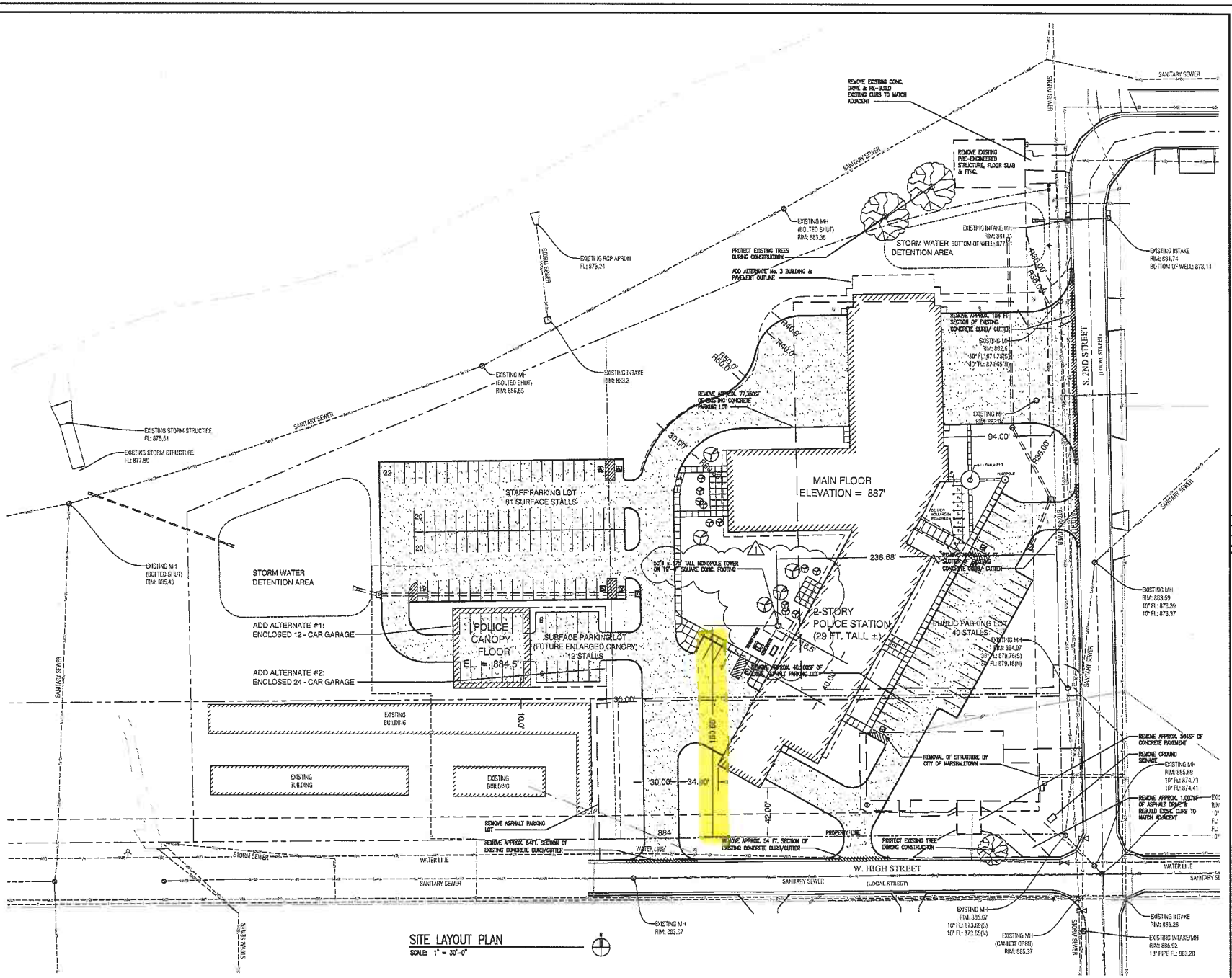
Marshalltown
All-America City
2012

- Site Plan – enclosed
- Air Safety – the monopole installation has received FAA clearance. Finding enclosed.

Budget Impact: None

Attachment: Resolution and Agreement

cc: Jessica Kinser, City Administrator



Notes:

1. CIVIL SHEETS INCLUDED PREVIOUSLY AS PART OF BID PACKAGE NO. 1.
2. SECURITY BOLLARDS SHALL BE PART OF BID PACKAGE 2. SEE THIS SHEET FOR LOCATIONS (11 IN FRONT OF MAIN LOBBY, 1 AT EAST SWAT ENTRANCE, AND 1 AT WEST POLICE SIGNS). SEE SECURITY BOLLARD DETAIL & SPECIFICATION ON 7/A2.1.
3. SEE SECTION 10/A2.2 FOR DETAIL OF FLAGPOLE BASE.

REV	DESCRIPTION	DATE
2	DISPATCH COMMUNICATIONS TOWER & FOOTING	2-1-18

MARSHALLTOWN POLICE & FIRE HEADQUARTERS

909 SOUTH 2ND STREET
MARSHALLTOWN, IOWA 50518

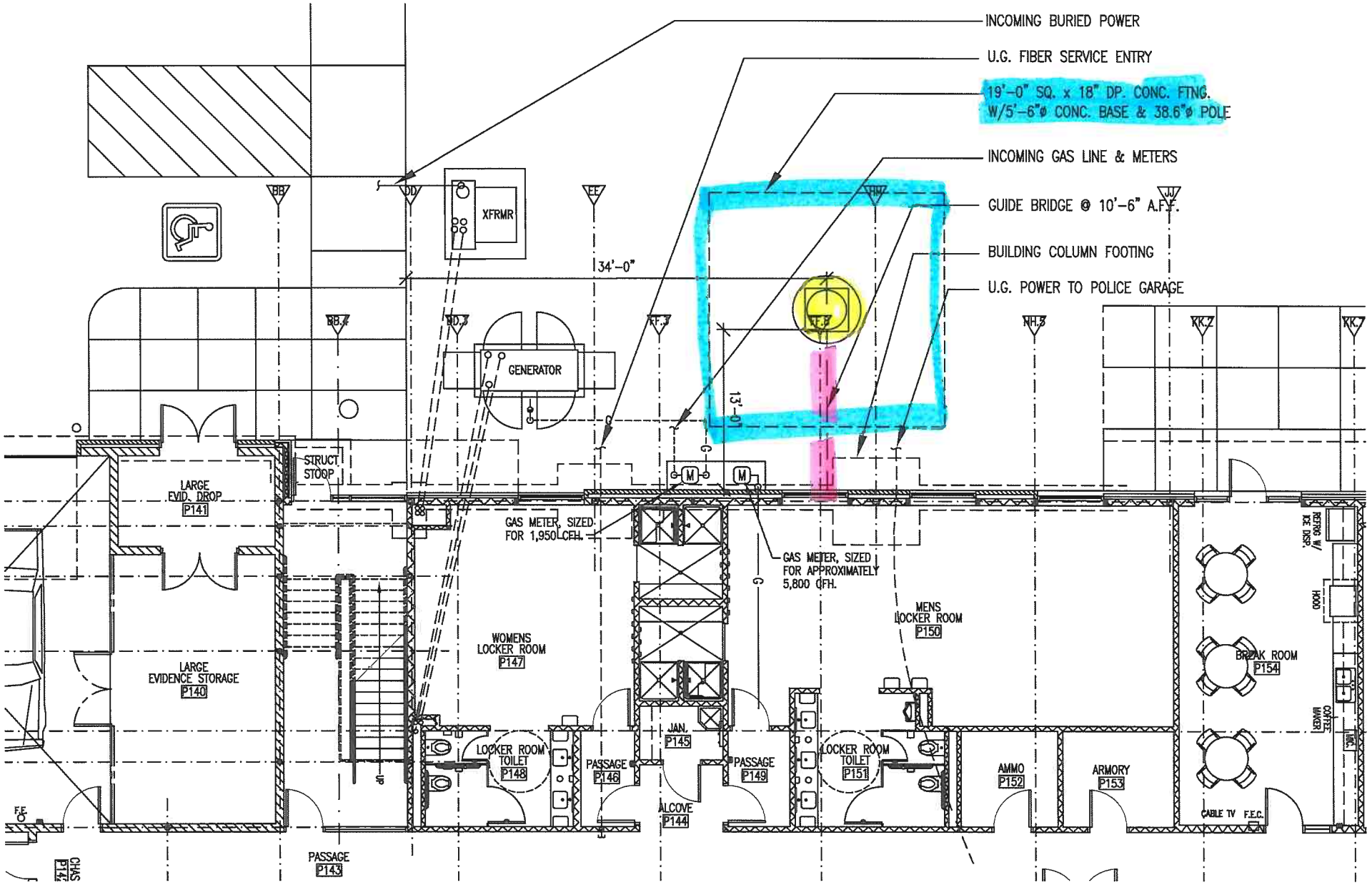
REPRODUCTION — THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN MAY NOT BE REPRODUCED OR EXCERPTED FROM WITHOUT THE EXPRESS WRITTEN PERMISSION OF PROCHASKA & ASSOCIATES. UNAUTHORIZED COPYING, DISCLOSURE, OR CONSTRUCTION USE ARE PROHIBITED BY COPYRIGHT LAW. © COPYRIGHT 2017 PROCHASKA & ASSOCIATES, INC.

PLANNING ARCHITECTURE ENGINEERING
PROCHASKA & ASSOCIATES
INTERIORS & FACILITY MANAGEMENT

SITE LAYOUT PLAN

Date: 07-31-2017 Project No. 180008
Designed By: -
Drawn By: -
Checked By: -

C1.1



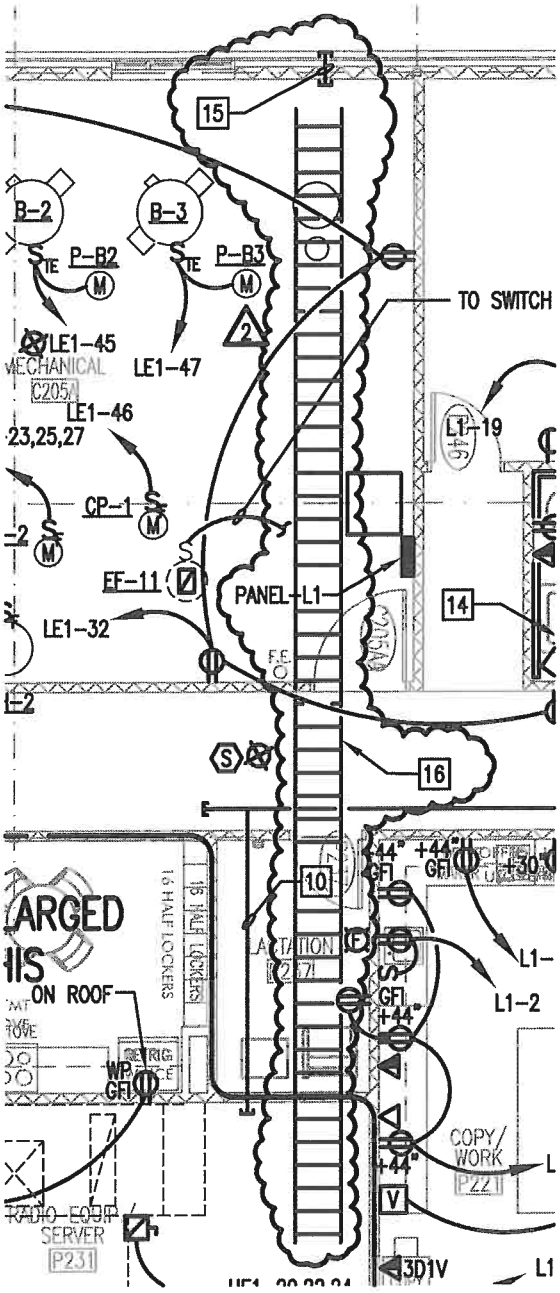
PROPOSED DISPATCH TOWER - UTILITIES COORD. DRAWING

SCALE: 3/32" = 1'-0"

11/2/2017

NORTH

PROCHASKA & ASSOCIATES



2

15 PROVIDE 3-4" PIPE SLEEVES 12" AFF THROUGH WALL FOR ANTENNA CABLES RUNNING ON CABLE BRIDGE. PROVIDE #6 GROUND WIRE FROM MAIN DISTRIBUTION PANEL 'MDP' AND CONNECT TO ANTENNA CABLE GROUNDING BLOCKS.

16 PROVIDE B-LINE #FT6X24X10 BASKET TRAY FOR ANTENNA CABLES. MOUNT IN JOIST SPACE APPROXIMATELY 11'-1" AFF.

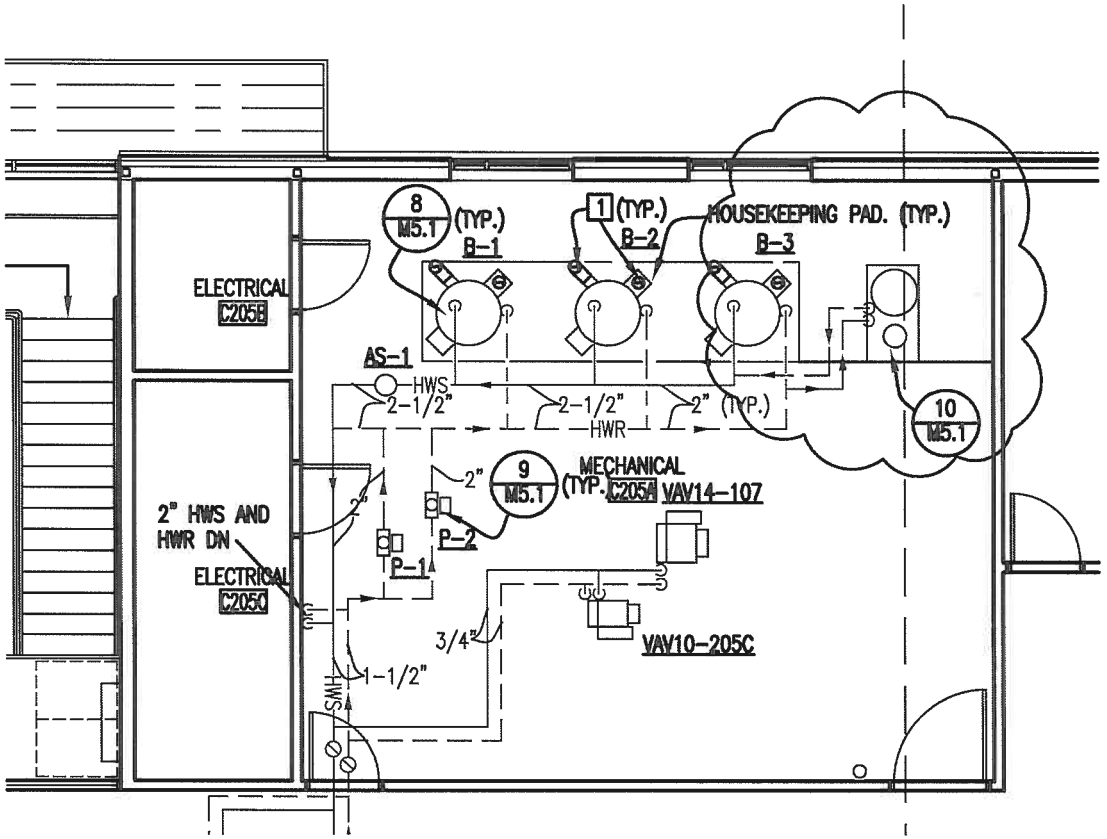
SECOND FLOOR POWER & SYSTEMS PLAN
POLICE WING

SCALE: 1/8" = 1'-0"

PR 007

TRUE NORTH PLAN NORTH

Date:	Project:		Sheet:
12/04/17 Project No. 150603	MARSHALLTOWN POLICE & FIRE HEADQUARTERS	PLANNING ARCHITECTURE ENGINEERING PROCHASKA & ASSOCIATES INTERIORS & FACILITY MANAGEMENT 11317 CHICAGO CIRCLE OMAHA, NEBRASKA 68154-2633 PHONE: 402.334.0755 FAX: 402.334.0868 E-MAIL: mail@prochaska.us	E2.2b



Date: 12/04/17 Project No. 160308	Project: MARSHALLTOWN POLICE AND FIRE HEADQUARTERS MARSHALLTOWN IA **PR 007**	Planning Architecture Engineering Interiors & Facility Management 11317 Chicago Circle Omaha, Nebraska 68154-2533 Phone: (402) 334-0755 Fax: (402) 334-0888 E-Mail: mail@prochaska.us	Sheet: M4.2a

Sabre Industries™
Towers and Poles

Structural Design Report

175' Monopole
Site: Marshalltown, IA

Prepared for: CITY OF MARSHALLTOWN
by: Sabre Towers & Poles ™

Job Number: 175730

December 14, 2017

Monopole Profile 1

Foundation Design Summary 2

Pole Calculations 3-12

Foundation Calculations 13-14

12/15/17

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the Laws of the State of Iowa.

(signature)

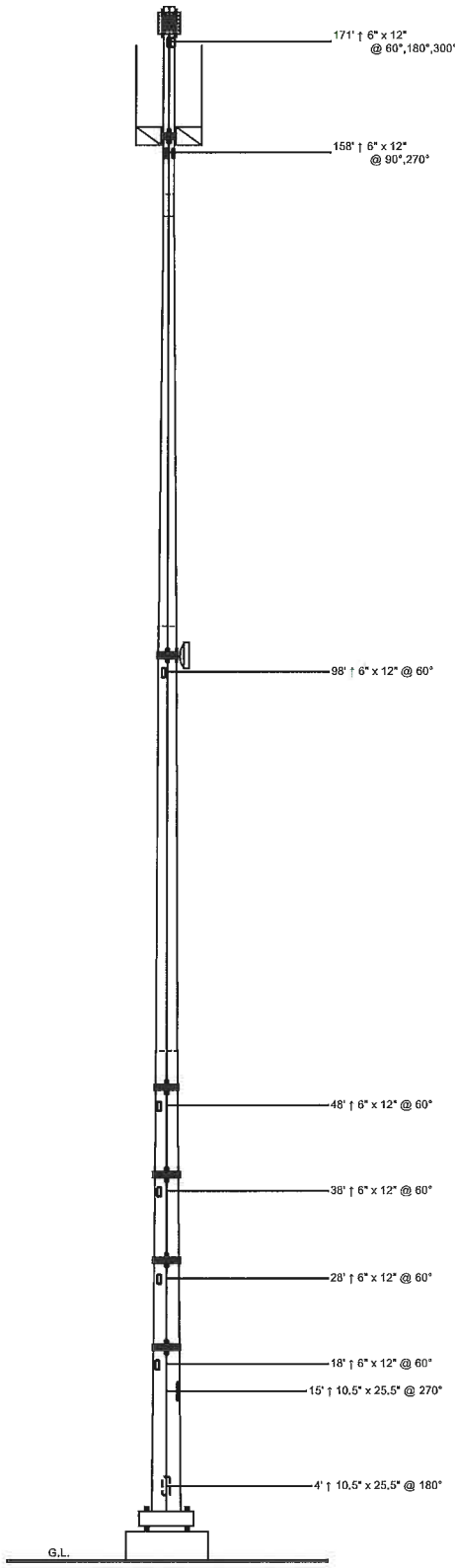
12/15/17 (dated)

KEITH J. TINDALL

My license renewal date is December 31, 2018.

Pages or sheets covered by this seal: 1 - 15

Length (ft)	24'-3"	53'-6"	53'-6"	53'-3"						
Number Of Sides			18							
Thickness (in)			1/4"		5/16"					
Lap Splice (ft)				4' - 6"						
Top Diameter (in)			16.76"	A	23.76"	30.61"	B	14"		
Bottom Diameter (in)			24.79"		31.79"	38.6"		17.64"		
Taper (in/ft)					0.15					
Grade					A572-65					
Weight (lbs)		3156			4256	7648			1227	
Overall Steel Height (ft)					174					



Designed Appurtenance Loading

Elev	Description	Tx-Line
173	Flush Mount (Monopole Only)	
173	(4) PMP 400	(4) 7/8"
170.62	(2) DB224	(2) 7/8"
160	(2) 3ft Sidearms	
100	(1) Dish Mount (Monopole Only) - Pipe Mount (up to 6' Dish)	
100	(1) 3' H.P. Dish	(1) 7/8"
50	Flush Mount (Monopole Only)	
50	(1) 6' Yagi	(1) 7/8"
40	Flush Mount (Monopole Only)	
40	(1) 6' Yagi	(1) 7/8"
30	Flush Mount (Monopole Only)	
30	(1) 6' Yagi	(1) 7/8"
20	Flush Mount (Monopole Only)	
20	(1) 6' Yagi	(1) 7/8"

Load Case Reactions

Description	Axial (kips)	Shear (kips)	Moment (ft-k)	Deflection (ft)	Sway (deg)
3s Gusted Wind	21.6	17.24	1765.34	20.22	12.33
3s Gusted Wind 0.9 Dead	16.23	17.3	1735.72	19.67	11.93
3s Gusted Wind&Ice	36.52	4.36	527.94	6.93	4.29
Service Loads	18.06	3.74	383	4.55	2.72

Base Plate Dimensions

Shape	Width	Thickness	Bolt Circle	Bolt Qty	Bolt Diameter
Square	42"	2.5"	44.75"	8	2.25"

Anchor Bolt Dimensions

Length	Diameter	Hole Diameter	Weight	Type	Finish
84"	2.25"	2.625"	968.8	A615-75	Galv

Material List

Display	Value
A	3' - 6"
B	2' - 6"

Notes

1) Antenna Feed Lines Run Inside Pole
2) All dimensions are above ground level, unless otherwise specified.
3) Weights shown are estimates. Final weights may vary.
4) The Monopole was designed for a basic wind speed of 90 mph with 0" of radial ice, and 40 mph with 3/4" of radial ice, in accordance with ANSI/TIA-222-G, Structure Class III, Exposure Category C, Topographic Category 1.
5) Full Height Step Bolts
6) Tower Rating: 93.7%
7) The tower design meets the requirements for an Ultimate Wind Speed of 120 mph (Risk Category III), in accordance with the 2015 International Building Code.
8) This structure has been designed with a 100% increase in antenna and line loading.

Sabre Industries™
Towers and Poles

Sabre Communications Corporation
7101 Southbridge Drive
P.O. Box 658
Sioux City, IA 51102-0658
Phone: (712) 258-6690
Fax: (712) 279-0814

Information contained herein is the sole property of Sabre Communications Corporation, constitutes a trade secret as defined by Iowa Code Ch. 550 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Communications Corporation.

Job:	175730
Customer:	CITY OF MARSHALLTOWN
Site Name:	Marshalltown, IA
Description:	175' Monopole
Date:	12/14/2017 By: MH

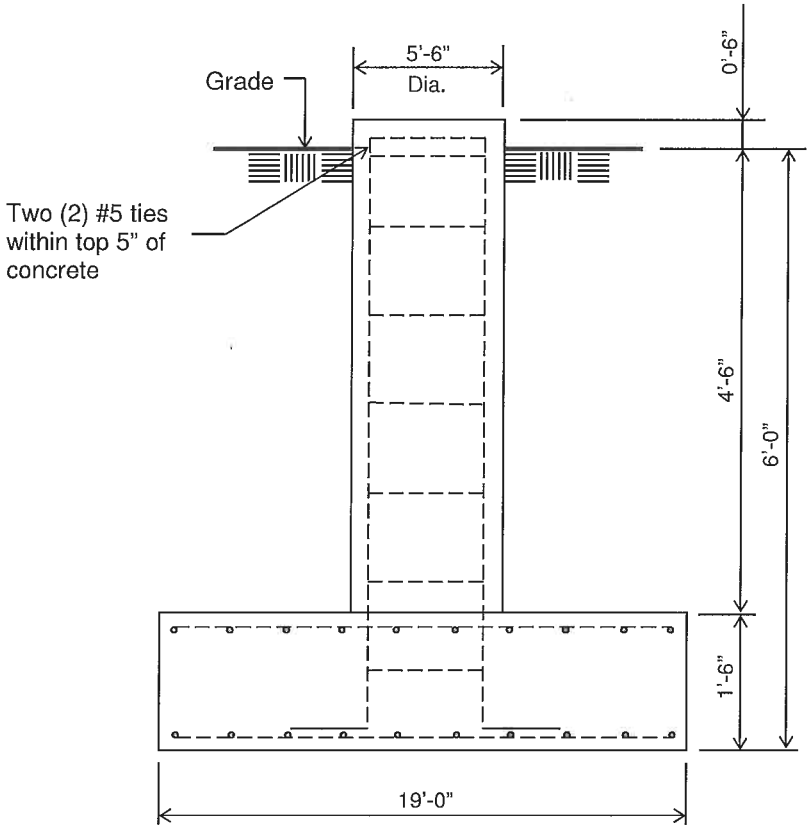
Sabre Industries™
Towers and Poles

No.: 175730

Date: 12/14/17
By: NM

Customer: City of Marshalltown
Site: Marshalltown, IA

175' Monopole at
90 mph Wind with no ice and 40 mph Wind with 0.75 in. Ice per ANSI/TIA-222-G.
Antenna Loading per Page 1



ELEVATION VIEW
(24.46 Cu. Yds.)
(1 REQUIRED; NOT TO SCALE)

Notes:

1) Concrete shall have a minimum 28-day compressive strength of 4,500 psi, in accordance with ACI 318-11.

2) Rebar to conform to ASTM specification A615 Grade 60.

3) All rebar to have a minimum of 3" concrete cover.

4) All exposed concrete corners to be chamfered 3/4".

5) The foundation design is based on the geotechnical report by Terracon Consultants, Inc., Project No. AB175001-01 dated: April 5th, 2017.

6) See the geotechnical report for compaction requirements, if specified.

7) 4.5 ft of soil cover is required over the entire area of the foundation slab.

8) The foundation is based on the following factored loads:
   Moment (kip-ft) = 1766.20
   Axial (kips) = 21.67
   Shear (kips) = 17.23

Rebar Schedule for Pad and Pier	
Pier	(30) #7 vertical rebar w/ hooks at bottom w/ #5 ties, two within top 5" of pier, then 12" C/C
Pad	(20) #8 horizontal rebar evenly spaced each way top and bottom (80 total)

Information contained herein is the sole property of Sabre Towers & Poles, constitutes a trade secret as defined by Iowa Code Ch. 550 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Towers & Poles.

7101 Southbridge Drive - P.O. Box 658 - Sioux City, IA 51102-0658 - Phone 712.258.6690 - Fax 712.279.0814

(USA 222-G) - Monopole Spatial Analysis (c)2015 Guymast Inc.

Tel:(416)736-7453 Fax:(416)736-4372 Web:www.guymast.com

Processed under license at:

Sabre Towers and Poles on: 14 dec 2017 at: 10:05:36

175' Monopole / Marshalltown, IA

* All pole diameters shown on the following pages are across corners.
See profile drawing for widths across flats.

POLE GEOMETRY

ELEV ft	SECTION NAME	No. SIDE	OUTSIDE DIAM in	THICK -NESS in	RESISTANCES ϕ*Pn kip	ϕ*Mn ft-kip	SPLICE TYPE	...OVERLAP... LENGTH ft	RATIO	w/t
174.0										
			14.22	0.250	810.6	227.0				
	A	18								8.1
			17.52	0.250	1002.5	348.3				
152.2										
			17.52	0.250	1002.5	348.3				
	A/B	18					SLIP	2.50	1.75	
			17.41	0.250	996.0	343.8				
149.7										
			17.41	0.250	996.0	343.8				
	B	18								10.3
			24.63	0.250	1415.2	697.0				
102.2										
			24.63	0.250	1415.2	697.0				
	B/C	18					SLIP	3.50	1.73	
			24.67	0.250	1417.5	699.4				
98.7										
			24.67	0.250	1417.5	699.4				
	C	18								15.4
			31.58	0.250	1711.5	1085.9				
53.2										
			31.58	0.250	1711.5	1085.9				
	C/D	18					SLIP	4.50	1.73	
			31.78	0.312	2283.1	1451.9				
48.7										
			31.78	0.312	2283.1	1451.9				
	D	18								15.9
			39.20	0.312	2661.0	2095.0				
0.0										

POLE ASSEMBLY

SECTION NAME	BASE ELEV ft	BOLTS AT BASE OF SECTION NUMBER	TYPE	DIAM in	STRENGTH ksi	THREADS IN SHEAR PLANE	CALC BASE ELEV ft
A	149.750	0	A325	0.00	92.0	0	149.750
B	98.750	0	A325	0.00	92.0	0	98.750
C	48.750	0	A325	0.00	92.0	0	48.750
D	0.000	0	A325	0.00	92.0	0	0.000

POLE SECTIONS

SECTION NAME	No.of SIDES	LENGTH ft	OUTSIDE.DIAMETER BOT * in	TOP * in	THICK-NESS in	MAT-ERIAL ID	FLANGE.ID BOT	TOP	FLANGE.WELD ..GROUP.ID.. BOT	TOP
A	18	24.25	17.91	14.22	0.250	1	0	0	0	0
B	18	53.50	25.17	17.02	0.250	2	0	0	0	0
C	18	53.50	32.28	24.13	0.250	3	0	0	0	0
D	18	53.25	39.20	31.08	0.312	4	0	0	0	0

* - Diameter of circumscribed circle

MATERIAL TYPES

TYPE OF SHAPE	TYPE NO	NO OF ELEM.	ORIENT & deg	HEIGHT in	WIDTH in	.THICKNESS. WEB in	FLANGE in	IRREGULARITY .PROJECTION. % OF AREA	ORIENT deg

PL	1	1	0.0	17.91	0.25	0.250	0.250	0.00	0.0
PL	2	1	0.0	25.17	0.25	0.250	0.250	0.00	0.0
PL	3	1	0.0	32.28	0.25	0.250	0.250	0.00	0.0
PL	4	1	0.0	39.20	0.31	0.312	0.312	0.00	0.0

& - With respect to vertical

MATERIAL PROPERTIES

MATERIAL TYPE NO.	ELASTIC MODULUS ksi	UNIT WEIGHT pcf	.. STRENGTH .. Fu ksi	Fy ksi	THERMAL COEFFICIENT /deg
1	29000.0	490.0	80.0	65.0	0.00001170
2	29000.0	490.0	80.0	65.0	0.00001170
3	29000.0	490.0	80.0	65.0	0.00001170
4	29000.0	490.0	80.0	65.0	0.00001170

* Only 3 condition(s) shown in full
* Some concentrated wind loads may have been derived from full-scale wind tunnel testing

LOADING CONDITION A

90 mph wind with no ice. Wind Azimuth: 0◆

LOADS ON POLE

LOAD TYPE	ELEV ft	APPLY..LOAD..AT RADIUS ft	AZI	LOAD AZI	.....FORCES..... HORIZ kip	DOWN kip	.....MOMENTS..... VERTICAL ft-kip	TORSNAL ft-kip
C	172.000	0.00	0.0	0.0	0.0000	0.8916	0.0000	0.0000
C	172.000	0.00	0.0	0.0	0.9629	0.4778	0.0000	0.0000
C	169.620	0.00	0.0	0.0	0.0000	0.4397	0.0000	0.0000
C	169.620	0.00	0.0	0.0	1.3795	0.2429	0.0000	0.0000
C	159.000	0.00	0.0	0.0	1.2001	0.9696	0.0000	0.0000
C	99.000	0.00	0.0	0.0	0.0000	0.1283	0.0000	0.0000
C	49.000	0.00	0.0	0.0	0.0000	0.0635	0.0000	0.0000
C	49.000	0.00	0.0	0.0	0.4001	0.2956	0.0000	0.0000
C	39.000	0.00	0.0	0.0	0.0000	0.0505	0.0000	0.0000
C	39.000	0.00	0.0	0.0	0.3818	0.2956	0.0000	0.0000
C	29.000	0.00	0.0	0.0	0.0000	0.0376	0.0000	0.0000
C	29.000	0.00	0.0	0.0	0.3593	0.2956	0.0000	0.0000
C	19.000	0.00	0.0	0.0	0.0000	0.0246	0.0000	0.0000
C	19.000	0.00	0.0	0.0	0.3299	0.2956	0.0000	0.0000
D	174.000	0.00	180.0	0.0	0.0452	0.0464	0.0000	0.0000
D	159.500	0.00	180.0	0.0	0.0482	0.0499	0.0000	0.0000
D	159.500	0.00	180.0	0.0	0.0517	0.0637	0.0000	0.0000
D	102.250	0.00	180.0	0.0	0.0658	0.0694	0.0000	0.0000
D	102.250	0.00	180.0	0.0	0.0683	0.1557	0.0000	0.0000
D	98.750	0.00	180.0	0.0	0.0683	0.1557	0.0000	0.0000
D	98.750	0.00	180.0	0.0	0.0695	0.0816	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0754	0.0963	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0761	0.2252	0.0000	0.0000
D	48.750	0.00	180.0	0.0	0.0761	0.2252	0.0000	0.0000
D	48.750	0.00	180.0	0.0	0.0748	0.1293	0.0000	0.0000
D	0.000	0.00	180.0	0.0	0.0700	0.1513	0.0000	0.0000

ANTENNA LOADING

.....ANTENNA..... TYPE	ELEV ft	AZI	ATTACHMENT RAD ft	AZI	.....ANTENNA FORCES..... AXIAL kip	SHEAR kip	GRAVITY kip	TORSION ft-kip
HP	99.0	0.0	1.7	0.0	0.90	0.00	0.20	0.00

LOADING CONDITION M

90 mph wind with no ice. Wind Azimuth: 0◆

LOADS ON POLE

LOAD TYPE	ELEV ft	APPLY..LOAD..AT RADIUS ft	AZI	LOAD AZI	.....FORCES..... HORIZ kip	DOWN kip	.....MOMENTS..... VERTICAL ft-kip	TORSNAL ft-kip

C	172.000	0.00	0.0	0.0	0.0000	0.6687	0.0000	0.0000
C	172.000	0.00	0.0	0.0	0.9629	0.3584	0.0000	0.0000
C	169.620	0.00	0.0	0.0	0.0000	0.3297	0.0000	0.0000
C	169.620	0.00	0.0	0.0	1.3795	0.1822	0.0000	0.0000
C	159.000	0.00	0.0	0.0	1.2001	0.7272	0.0000	0.0000
C	99.000	0.00	0.0	0.0	0.0000	0.0962	0.0000	0.0000
C	49.000	0.00	0.0	0.0	0.0000	0.0476	0.0000	0.0000
C	49.000	0.00	0.0	0.0	0.4001	0.2217	0.0000	0.0000
C	39.000	0.00	0.0	0.0	0.0000	0.0379	0.0000	0.0000
C	39.000	0.00	0.0	0.0	0.3818	0.2217	0.0000	0.0000
C	29.000	0.00	0.0	0.0	0.0000	0.0282	0.0000	0.0000
C	29.000	0.00	0.0	0.0	0.3593	0.2217	0.0000	0.0000
C	19.000	0.00	0.0	0.0	0.0000	0.0185	0.0000	0.0000
C	19.000	0.00	0.0	0.0	0.3299	0.2217	0.0000	0.0000
D	174.000	0.00	180.0	0.0	0.0452	0.0348	0.0000	0.0000
D	159.500	0.00	180.0	0.0	0.0482	0.0374	0.0000	0.0000
D	159.500	0.00	180.0	0.0	0.0517	0.0478	0.0000	0.0000
D	102.250	0.00	180.0	0.0	0.0658	0.0520	0.0000	0.0000
D	102.250	0.00	180.0	0.0	0.0683	0.1168	0.0000	0.0000
D	98.750	0.00	180.0	0.0	0.0683	0.1168	0.0000	0.0000
D	98.750	0.00	180.0	0.0	0.0695	0.0612	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0754	0.0722	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0761	0.1689	0.0000	0.0000
D	48.750	0.00	180.0	0.0	0.0761	0.1689	0.0000	0.0000
D	48.750	0.00	180.0	0.0	0.0748	0.0969	0.0000	0.0000
D	0.000	0.00	180.0	0.0	0.0700	0.1135	0.0000	0.0000

ANTENNA LOADING
==========

.....ANTENNA.....			ATTACHMENT		.....ANTENNA FORCES.....			
TYPE	ELEV	AZI	RAD	AZI	AXIAL	SHEAR	GRAVITY	TORSION
	ft		ft		kip	kip	kip	ft-kip
HP	99.0	0.0	1.7	0.0	0.90	0.00	0.15	0.00

==========

LOADING CONDITION Y ==========

40 mph wind with 0.75 ice. Wind Azimuth: 0♦

LOADS ON POLE
==========

LOAD	ELEV	APPLY..LOAD..AT		LOAD	.....FORCES.....		.....MOMENTS.....	
TYPE		RADIUS	AZI	AZI	HORIZ	DOWN	VERTICAL	TORSNAL
	ft	ft			kip	kip	ft-kip	ft-kip
C	172.000	0.00	0.0	0.0	0.0000	0.8916	0.0000	0.0000
C	172.000	0.00	0.0	0.0	0.2262	0.7080	0.0000	0.0000
C	169.620	0.00	0.0	0.0	0.0000	0.4397	0.0000	0.0000
C	169.620	0.00	0.0	0.0	0.7000	1.1445	0.0000	0.0000
C	159.000	0.00	0.0	0.0	0.2661	1.8479	0.0000	0.0000
C	99.000	0.00	0.0	0.0	0.0000	0.1283	0.0000	0.0000
C	49.000	0.00	0.0	0.0	0.0000	0.0635	0.0000	0.0000
C	49.000	0.00	0.0	0.0	0.1132	0.3268	0.0000	0.0000
C	39.000	0.00	0.0	0.0	0.0000	0.0505	0.0000	0.0000
C	39.000	0.00	0.0	0.0	0.1065	0.3261	0.0000	0.0000
C	29.000	0.00	0.0	0.0	0.0000	0.0376	0.0000	0.0000
C	29.000	0.00	0.0	0.0	0.0985	0.3253	0.0000	0.0000
C	19.000	0.00	0.0	0.0	0.0000	0.0246	0.0000	0.0000
C	19.000	0.00	0.0	0.0	0.0883	0.3241	0.0000	0.0000
D	174.000	0.00	180.0	0.0	0.0116	0.0922	0.0000	0.0000
D	159.500	0.00	180.0	0.0	0.0122	0.0985	0.0000	0.0000
D	159.500	0.00	180.0	0.0	0.0129	0.1189	0.0000	0.0000
D	133.917	0.00	180.0	0.0	0.0135	0.1131	0.0000	0.0000
D	133.917	0.00	180.0	0.0	0.0144	0.1270	0.0000	0.0000
D	118.083	0.00	180.0	0.0	0.0144	0.1270	0.0000	0.0000
D	118.083	0.00	180.0	0.0	0.0153	0.1400	0.0000	0.0000
D	102.250	0.00	180.0	0.0	0.0153	0.1400	0.0000	0.0000
D	102.250	0.00	180.0	0.0	0.0158	0.2249	0.0000	0.0000
D	98.750	0.00	180.0	0.0	0.0158	0.2249	0.0000	0.0000
D	98.750	0.00	180.0	0.0	0.0160	0.1525	0.0000	0.0000
D	83.583	0.00	180.0	0.0	0.0160	0.1525	0.0000	0.0000
D	83.583	0.00	180.0	0.0	0.0165	0.1642	0.0000	0.0000
D	68.417	0.00	180.0	0.0	0.0165	0.1642	0.0000	0.0000
D	68.417	0.00	180.0	0.0	0.0169	0.1754	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0169	0.1754	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0169	0.3065	0.0000	0.0000
D	48.750	0.00	180.0	0.0	0.0169	0.3065	0.0000	0.0000
D	48.750	0.00	180.0	0.0	0.0166	0.2123	0.0000	0.0000
D	0.000	0.00	180.0	0.0	0.0151	0.2312	0.0000	0.0000

ANTENNA LOADING
==========

.....ANTENNA..... TYPE	ELEV ft	AZI	ATTACHMENT RAD ft	AZI	.....ANTENNA FORCES..... AXIAL kip	SHEAR kip	GRAVITY kip	TORSION ft-kip
HP	99.0	0.0	1.7	0.0	0.11	0.00	0.87	0.00

(USA 222-G) - Monopole Spatial Analysis (c)2015 Guymast Inc.

Tel:(416)736-7453 Fax:(416)736-4372 Web:www.guymast.com

Processed under license at:

Sabre Towers and Poles on: 14 dec 2017 at: 10:05:36

175' Monopole / Marshalltown, IA

MAXIMUM POLE DEFORMATIONS CALCULATED(w.r.t. wind direction)

MAST ELEV ft	.....DEFLECTIONS (ft)..... HORIZONTAL ..... ALONG	ACROSS	DOWN	.....ROTATIONS (deg)..... TILT ..... ALONG	ACROSS	TWIST
174.0	20.22A	-0.39W	3.20A	12.33A	-0.19W	0.03E
166.7	18.73A	0.37C	2.88A	12.30A	-0.19W	0.03E
159.5	17.24A	0.35C	2.56A	12.18A	-0.19W	0.03E
149.7	15.28A	0.32C	2.15A	11.84A	-0.18W	0.03E
133.9	12.26A	0.27C	1.55A	10.89A	-0.18W	0.02E
118.1	9.50A	0.22C	1.06A	9.70A	-0.18W	0.02E
102.2	7.05A	0.18C	0.67A	8.41A	0.17C	0.02E
98.7	6.56A	0.17C	0.60A	8.12A	0.17C	0.02E
83.6	4.62A	0.12C	0.35A	6.75A	0.16C	0.01E
68.4	3.04A	0.08C	0.18A	5.35A	0.14C	0.01E
53.2	1.82A	0.05C	0.08A	3.95A	0.11C	0.01E
48.7	1.52A	0.04C	0.06A	3.62A	0.10C	0.01E
36.6	0.85A	0.02C	0.03A	2.69A	0.07C	0.00E
24.4	0.38A	0.01C	0.01A	1.78A	0.05C	0.00E
12.2	0.09A	0.00C	0.00A	0.88A	0.02C	0.00E
0.0	0.00A	0.00A	0.00A	0.00A	0.00A	0.00A

MAXIMUM ANTENNA AND REFLECTOR ROTATIONS

ELEV ft	ANT AZI deg	ANT TYPE	.... BEAM DEFLECTIONS (deg) ..... ROLL	YAW	PITCH	TOTAL
99.0	0.0	HP	-8.005 J	0.501 C	8.143 A	8.143 A

MAXIMUM POLE FORCES CALCULATED(w.r.t. to wind direction)

MAST ELEV ft	TOTAL AXIAL kip	SHEAR.w.r.t.WIND.DIR ALONG kip	ACROSS kip	MOMENT.w.r.t.WIND.DIR ALONG ft-kip	ACROSS ft-kip	TORSION ft-kip
174.0	0.01 W	0.01 H	0.00 L	0.02 P	0.01 L	0.00 L
166.7	3.86 AA	2.68 H	0.00 L	-11.88 B	-0.03 C	0.03 W
	3.87 AA	2.68 H	0.01 I	-11.91 J	-0.04 C	0.03 W
159.5	4.57 AA	3.02 H	0.01 I	-35.42 H	-0.15 I	0.10 K

	4.57 AA	3.03 E	-0.01 W	-35.40 H	-0.14 I	0.10 K
	7.56 AA	4.73 E	-0.01 W	-84.41 H	-0.32 I	-0.23 C
149.7						
	7.56 AC	4.74 H	0.02 L	-84.43 H	-0.32 I	-0.24 C
	9.38 AC	5.61 H	0.02 L	-177.84 H	-0.66 I	0.48 K
133.9						
	9.38 AC	5.61 H	0.02 I	-177.84 H	-0.66 I	0.48 K
	11.39 AC	6.55 H	0.02 I	-287.15 H	-1.17 I	0.79 K
118.1						
	11.39 AC	6.55 H	0.02 I	-287.15 H	-1.17 I	0.79 K
	13.60 AC	7.55 H	0.02 I	-412.83 H	-1.67 I	1.12 K
102.2						
	13.60 AC	7.58 E	0.04 E	-412.92 H	-1.66 I	1.12 K
	15.39 AC	8.66 M	0.48 O	-443.39 H	-2.12 I	1.76 E
98.7						
	15.40 AC	8.71 M	0.46 O	-443.38 H	-2.17 I	1.76 E
	17.71 AC	9.77 M	0.46 O	-594.37 H	8.37 W	1.63 E
83.6						
	17.71 AC	9.76 M	0.47 C	-594.36 H	8.37 W	1.63 E
	20.20 AC	10.85 M	0.47 C	-763.73 A	15.67 W	1.58 E
68.4						
	20.20 AC	10.84 M	0.47 C	-763.73 A	15.68 W	1.58 E
	22.85 AC	11.97 M	0.47 C	-948.85 A	22.96 W	1.59 E
53.2						
	22.85 AC	11.97 M	0.49 C	-948.86 A	22.96 W	1.59 E
	24.62 AC	12.71 M	0.49 C	-1006.87 A	-25.17 C	1.59 E
48.7						
	24.62 AC	12.73 M	0.49 C	-1006.85 A	-25.18 C	1.59 E
	27.62 AC	14.01 M	0.49 C	-1176.62 A	-31.41 C	1.60 E
36.6						
	27.62 AC	14.00 M	0.49 C	-1176.62 A	-31.41 C	1.60 E
	30.65 AC	15.25 M	0.49 C	-1360.96 A	-37.57 C	1.63 E
24.4						
	30.65 AC	15.24 M	0.49 C	-1360.96 A	-37.57 C	1.63 E
	33.73 AC	16.44 M	0.49 C	-1558.59 A	-43.68 C	1.66 E
12.2						
	33.73 AC	16.44 M	0.49 C	-1558.60 A	-43.69 C	1.66 E
	36.52 AC	17.30 M	0.49 C	-1765.34 A	-49.74 C	1.67 E
base reaction	36.52 AC	-17.30 M	-0.49 C	1765.34 A	49.74 C	-1.67 E

COMPLIANCE WITH 4.8.2 & 4.5.4

ELEV ft	AXIAL	BENDING	SHEAR + TORSIONAL	TOTAL	SATISFIED	D/t(w/t)	MAX ALLOWED
174.00							
	0.00W	0.00B	0.00H	0.00B	YES	8.11A	45.2
	0.00AA	0.04B	0.01H	0.05B	YES	8.88A	45.2
166.75							
	0.00AA	0.05J	0.01H	0.05J	YES	8.88A	45.2
	0.00AA	0.12H	0.01H	0.12H	YES	9.65A	45.2
159.50							
	0.00AA	0.12H	0.01E	0.12H	YES	9.65A	45.2
	0.01AA	0.23H	0.01E	0.24H	YES	10.68A	45.2
149.75							
	0.01AC	0.25H	0.01H	0.25H	YES	10.32A	45.2
	0.01AC	0.40H	0.01H	0.40H	YES	12.00A	45.2
133.92							
	0.01AC	0.40H	0.01H	0.40H	YES	12.00A	45.2
	0.01AC	0.51H	0.01H	0.51H	YES	13.67A	45.2
118.08							
	0.01AC	0.51H	0.01H	0.51H	YES	13.67A	45.2
	0.01AC	0.59H	0.01H	0.60H	YES	15.35A	45.2
102.25							
	0.01AC	0.59H	0.01E	0.60H	YES	15.35A	45.2
	0.01AC	0.61H	0.01M	0.61H	YES	15.72A	45.2

98.75							
	0.01AC	0.63H	0.01M	0.64H	YES	15.37A	45.2
	0.01AC	0.72H	0.01M	0.73H	YES	16.97A	45.2
83.58							
	0.01AC	0.72H	0.01M	0.73H	YES	16.97A	45.2
	0.01AC	0.80A	0.01M	0.81A	YES	18.58A	45.2
68.42							
	0.01AC	0.80A	0.01M	0.81A	YES	18.58A	45.2
	0.01AC	0.87A	0.01M	0.88A	YES	20.18A	45.2
53.25							
	0.01AC	0.66A	0.01M	0.67A	YES	15.79A	45.2
	0.01AC	0.67A	0.01M	0.68A	YES	16.17A	45.2
48.75							
	0.01AC	0.69A	0.01M	0.70A	YES	15.89A	45.2
	0.01AC	0.73A	0.01M	0.74A	YES	16.92A	45.2
36.56							
	0.01AC	0.73A	0.01M	0.74A	YES	16.92A	45.2
	0.01AC	0.77A	0.01M	0.78A	YES	17.95A	45.2
24.37							
	0.01AC	0.77A	0.01M	0.78A	YES	17.95A	45.2
	0.01AC	0.81A	0.01M	0.82A	YES	18.99A	45.2
12.19							
	0.01AC	0.81A	0.01M	0.82A	YES	18.99A	45.2
	0.01AC	0.84A	0.01M	0.85A	YES	20.02A	45.2
0.00							

MAXIMUM LOADS ONTO FOUNDATION(w.r.t. wind direction)

DOWN	SHEAR.w.r.t.WIND.DIR ALONG	ACROSS	MOMENT.w.r.t.WIND.DIR ALONG	ACROSS	TORSION
kip	kip	kip	ft-kip	ft-kip	ft-kip
36.52	17.30	0.49	-1765.34	-49.74	1.67
AC	M	C	A	C	E

(USA 222-G) - Monopole Spatial Analysis (c)2015 Guymast Inc.

Tel:(416)736-7453 Fax:(416)736-4372 Web:www.guymast.com

Processed under license at:

Sabre Towers and Poles on: 14 dec 2017 at: 10:05:45

175' Monopole / Marshalltown, IA

****
********** Service Load Condition **********
****

* Only 1 condition(s) shown in full
* Some concentrated wind loads may have been derived from full-scale wind tunnel testing

LOADING CONDITION A

60 mph wind with no ice. Wind Azimuth: 0◆

LOADS ON POLE

LOAD TYPE	ELEV	APPLY..LOAD..AT RADIUS	AZI	LOAD AZI	.....FORCES..... HORIZ	DOWN	.....MOMENTS..... VERTICAL	TORSNAL
	ft	ft			kip	kip	ft-kip	ft-kip
C	172.000	0.00	0.0	0.0	0.0000	0.7430	0.0000	0.0000
C	172.000	0.00	0.0	0.0	0.2081	0.3982	0.0000	0.0000
C	169.620	0.00	0.0	0.0	0.0000	0.3664	0.0000	0.0000
C	169.620	0.00	0.0	0.0	0.2981	0.2024	0.0000	0.0000
C	159.000	0.00	0.0	0.0	0.2594	0.8080	0.0000	0.0000
C	99.000	0.00	0.0	0.0	0.0000	0.1069	0.0000	0.0000
C	49.000	0.00	0.0	0.0	0.0000	0.0529	0.0000	0.0000
C	49.000	0.00	0.0	0.0	0.0865	0.2463	0.0000	0.0000

C	39.000	0.00	0.0	0.0	0.0000	0.0421	0.0000	0.0000
C	39.000	0.00	0.0	0.0	0.0825	0.2463	0.0000	0.0000
C	29.000	0.00	0.0	0.0	0.0000	0.0313	0.0000	0.0000
C	29.000	0.00	0.0	0.0	0.0777	0.2463	0.0000	0.0000
C	19.000	0.00	0.0	0.0	0.0000	0.0205	0.0000	0.0000
C	19.000	0.00	0.0	0.0	0.0713	0.2463	0.0000	0.0000
D	174.000	0.00	180.0	0.0	0.0098	0.0387	0.0000	0.0000
D	159.500	0.00	180.0	0.0	0.0104	0.0415	0.0000	0.0000
D	159.500	0.00	180.0	0.0	0.0112	0.0531	0.0000	0.0000
D	102.250	0.00	180.0	0.0	0.0142	0.0578	0.0000	0.0000
D	102.250	0.00	180.0	0.0	0.0148	0.1297	0.0000	0.0000
D	98.750	0.00	180.0	0.0	0.0148	0.1297	0.0000	0.0000
D	98.750	0.00	180.0	0.0	0.0150	0.0680	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0163	0.0802	0.0000	0.0000
D	53.250	0.00	180.0	0.0	0.0164	0.1877	0.0000	0.0000
D	48.750	0.00	180.0	0.0	0.0164	0.1877	0.0000	0.0000
D	48.750	0.00	180.0	0.0	0.0162	0.1077	0.0000	0.0000
D	0.000	0.00	180.0	0.0	0.0151	0.1261	0.0000	0.0000

ANTENNA LOADING

TYPE	ANTENNA ELEV ft	AZI	ATTACHMENT RAD ft	AZI	ANTENNA FORCES AXIAL kip	SHEAR kip	GRAVITY kip	TORSION ft-kip
HP	99.0	0.0	1.7	0.0	0.19	0.00	0.17	0.00

MAXIMUM POLE DEFORMATIONS CALCULATED(w.r.t. wind direction)

MAST ELEV ft	DEFLECTIONS (ft) HORIZONTAL ALONG	HORIZONTAL ACROSS	DOWN	ROTATIONS (deg) TILT ALONG	TILT ACROSS	TWIST
174.0	4.55B	0.09C	0.16A	2.72B	0.04C	0.00D
166.7	4.21B	0.08C	0.15A	2.71B	0.04C	0.00D
159.5	3.87B	0.08C	0.13A	2.68B	0.04C	0.00D
149.7	3.42B	0.07C	0.11A	2.61B	0.04C	0.00D
133.9	2.72B	0.06C	0.08A	2.39B	0.04C	0.00D
118.1	2.10B	0.05C	0.05A	2.13B	0.04C	0.00D
102.2	1.55B	0.04C	0.03A	1.84B	0.04C	0.00D
98.7	1.44B	0.04C	0.03A	1.78B	0.04C	0.00D
83.6	1.01B	0.03C	0.02A	1.47B	0.03C	0.00D
68.4	0.66B	0.02C	0.01A	1.16B	0.03C	0.00D
53.2	0.40B	0.01C	0.00A	0.86B	0.02C	0.00D
48.7	0.33B	0.01C	0.00A	0.79B	0.02C	0.00D
36.6	0.18B	0.01C	0.00A	0.58B	0.02C	0.00J
24.4	0.08B	0.00C	0.00A	0.39B	0.01C	0.00J
12.2	0.02B	0.00C	0.00A	0.19B	0.01C	0.00J
0.0	0.00A	0.00A	0.00A	0.00A	0.00A	0.00A

MAXIMUM ANTENNA AND REFLECTOR ROTATIONS

ELEV ft	ANT AZI deg	ANT TYPE	BEAM DEFLECTIONS (deg) ROLL	YAW	PITCH	TOTAL
99.0	0.0	HP	-1.749 J	0.025 C	1.778 A	1.778 A

MAXIMUM POLE FORCES CALCULATED(w.r.t. to wind direction)

MAST ELEV ft	TOTAL AXIAL kip	SHEAR.w.r.t.WIND.DIR ALONG kip	SHEAR.w.r.t.WIND.DIR ACROSS kip	MOMENT.w.r.t.WIND.DIR ALONG ft-kip	MOMENT.w.r.t.WIND.DIR ACROSS ft-kip	TORSION ft-kip

174.0						
	0.00 E	0.00 K	0.00 E	0.00 H	0.00 E	0.00 E
	2.00 E	0.58 J	0.00 E	-2.62 A	0.01 K	0.00 K
166.7						
	2.00 K	0.58 B	0.00 L	-2.61 H	-0.01 C	0.00 K
	2.29 K	0.65 B	0.00 L	-7.80 B	0.02 E	0.00 K
159.5						
	2.29 K	0.66 I	0.00 H	-7.80 B	0.02 L	0.00 K
	3.62 K	1.03 I	0.00 H	-18.59 B	-0.06 H	0.01 K
149.7						
	3.62 K	1.03 F	0.00 K	-18.58 B	-0.06 H	0.01 K
	4.49 K	1.22 F	0.00 K	-39.08 B	-0.10 H	0.03 K
133.9						
	4.49 K	1.22 I	0.00 H	-39.08 B	-0.10 H	0.03 K
	5.37 K	1.42 I	0.00 H	-63.00 B	-0.17 H	0.04 K
118.1						
	5.37 K	1.42 I	0.00 H	-63.00 B	-0.17 H	0.04 K
	6.28 K	1.64 I	0.00 H	-90.39 B	-0.24 H	0.06 K
102.2						
	6.27 K	1.65 J	0.01 B	-90.38 B	-0.24 H	0.06 K
	7.00 K	1.89 A	0.10 C	-97.19 F	-0.40 H	0.24 D
98.7						
	7.01 K	1.87 B	0.11 C	-97.19 F	-0.40 H	0.24 D
	8.07 K	2.10 B	0.11 C	-130.09 B	-1.58 C	0.24 D
83.6						
	8.07 K	2.10 B	0.11 C	-130.09 B	-1.58 C	0.24 D
	9.19 K	2.34 B	0.11 C	-166.75 B	-3.25 C	0.24 D
68.4						
	9.19 K	2.34 B	0.11 C	-166.75 B	-3.25 C	0.24 D
	10.38 K	2.58 B	0.11 C	-206.67 B	-4.92 C	0.24 D
53.2						
	10.38 K	2.59 B	0.11 C	-206.67 B	-4.92 C	0.24 D
	11.52 K	2.75 B	0.11 C	-219.18 B	-5.42 C	0.24 D
48.7						
	11.52 K	2.74 L	0.11 C	-219.19 B	-5.43 C	0.24 D
	13.15 K	3.02 L	0.11 C	-255.80 B	-6.81 C	0.24 D
36.6						
	13.15 K	3.02 L	0.11 C	-255.80 B	-6.81 C	0.24 D
	14.83 K	3.29 L	0.11 C	-295.55 B	-8.19 C	-0.24 J
24.4						
	14.83 K	3.29 L	0.11 C	-295.55 B	-8.19 C	-0.24 J
	16.55 K	3.55 L	0.11 C	-338.25 B	-9.55 C	-0.24 J
12.2						
	16.55 K	3.55 L	0.11 C	-338.25 B	-9.55 C	-0.24 J
	18.06 K	3.74 L	0.11 C	-383.00 B	-10.89 C	-0.24 J
base reaction	18.06 K	-3.74 L	-0.11 C	383.00 B	10.89 C	0.24 J

COMPLIANCE WITH 4.8.2 & 4.5.4

ELEV ft	AXIAL	BENDING	SHEAR + TORSIONAL		TOTAL	SATISFIED	D/t(w/t)	MAX ALLOWED
174.00								
	0.00E	0.00H	0.00K	0.00H	YES		8.11A	45.2
	0.00E	0.01A	0.00J	0.01A	YES		8.88A	45.2
166.75								
	0.00K	0.01H	0.00B	0.01H	YES		8.88A	45.2
	0.00K	0.03B	0.00B	0.03B	YES		9.65A	45.2
159.50								
	0.00K	0.03B	0.00I	0.03B	YES		9.65A	45.2
	0.00K	0.05B	0.00I	0.05B	YES		10.68A	45.2
149.75								
	0.00K	0.05B	0.00F	0.06B	YES		10.32A	45.2
	0.00K	0.09B	0.00F	0.09B	YES		12.00A	45.2
133.92								
	0.00K	0.09B	0.00I	0.09B	YES		12.00A	45.2

	0.00K	0.11B	0.00I	0.12B	YES	13.67A	45.2
118.08							
	0.00K	0.11B	0.00I	0.12B	YES	13.67A	45.2
	0.00K	0.13B	0.00I	0.13B	YES	15.35A	45.2
102.25							
	0.00K	0.13B	0.00J	0.13B	YES	15.35A	45.2
	0.00K	0.13H	0.00A	0.14F	YES	15.72A	45.2
98.75							
	0.00K	0.14F	0.00B	0.14F	YES	15.37A	45.2
	0.01K	0.16B	0.00B	0.16B	YES	16.97A	45.2
83.58							
	0.01K	0.16B	0.00B	0.16B	YES	16.97A	45.2
	0.01K	0.17B	0.00B	0.18B	YES	18.58A	45.2
68.42							
	0.01K	0.17B	0.00B	0.18B	YES	18.58A	45.2
	0.01K	0.19B	0.00B	0.20B	YES	20.18A	45.2
53.25							
	0.00K	0.14B	0.00B	0.15B	YES	15.79A	45.2
	0.00K	0.15B	0.00B	0.15B	YES	16.17A	45.2
48.75							
	0.01K	0.15B	0.00L	0.16B	YES	15.89A	45.2
	0.01K	0.16B	0.00L	0.16B	YES	16.92A	45.2
36.56							
	0.01K	0.16B	0.00L	0.16B	YES	16.92A	45.2
	0.01K	0.17B	0.00L	0.17B	YES	17.95A	45.2
24.37							
	0.01K	0.17B	0.00L	0.17B	YES	17.95A	45.2
	0.01K	0.18B	0.00L	0.18B	YES	18.99A	45.2
12.19							
	0.01K	0.18B	0.00L	0.18B	YES	18.99A	45.2
	0.01K	0.18B	0.00L	0.19B	YES	20.02A	45.2
0.00							

MAXIMUM LOADS ONTO FOUNDATION(w.r.t. wind direction)

DOWN	SHEAR.w.r.t.WIND.DIR ALONG	ACROSS	MOMENT.w.r.t.WIND.DIR ALONG	ACROSS	TORSION
kip	kip	kip	ft-kip	ft-kip	ft-kip
18.06	3.74	0.11	-383.00	-10.89	-0.24
K	L	C	B	C	J

Sabre Industries™
Towers and Poles

SO#: 175730
Site Name: Marshalltown, IA
Date: 12/14/2017

Square Base Plate and Anchor Rods per ANSI/TIA 222-G

Pole Data

Diameter:	38.600	in (flat to flat)
Thickness:	0.3125	in
Yield (Fy):	65	ksi
# of Sides:	18	"0" IF Round
Strength (Fu):	80	ksi

Reactions

Moment, Mu:	1765.34	ft-kips
Axial, Pu:	21.6	kips
Shear, Vu:	17.24	kips

Anchor Rod Data

Quantity:	8	(multiple of 4)
Diameter:	2.25	in
Rod Material:	A615	
Strength (Fu):	100	ksi
Yield (Fy):	75	ksi
BC Diam. (in):	44.75	BC Override:
Rod Spacing:	6	in

Anchor Rod Results

Maximum Rod (Pu+ Vu/η):	243.7 Kips	
Allowable Φ*Rnt:	260.0 Kips	(per 4.9.9)
Anchor Rod Interaction Ratio:	**93.7% Pass**	

Plate Data

Width (in):	42	Width Override:
Thickness:	2.5	in
Yield (Fy)	50	ksi
Eff. Width:	20.80	in
Corner Clip	6.00	in
Drain Hole:	2.625	in. diameter
Drain Location:	17	in. center of pole to center of drain hole
Center Hole:	26	in. diameter

Base Plate Results

Base Plate (Mu/Z):	42.0 ksi	
Allowable Φ*Fy:	45 ksi	(per AISC)
Base Plate Interaction Ratio:	**93.2% Pass**	

MAT FOUNDATION DESIGN BY SABRE TOWERS & POLES
175' Monopole City of Marshalltown Marshalltown, IA (175730) 12-14-17 NM

Overall Loads:			
Factored Moment (ft-kips)	1766.2		
Factored Axial (kips)	21.67		
Factored Shear (kips)	17.23		
Bearing Design Strength (ksf)	3.75	Max. Net Bearing Press. (ksf)	3.37
Water Table Below Grade (ft)	**13**		
Width of Mat (ft)	19	Allowable Bearing Pressure (ksf)	**2.50**
Thickness of Mat (ft)	1.5	Safety Factor	**2.00**
Depth to Bottom of Slab (ft)	6	Ultimate Bearing Pressure (ksf)	5.00
Quantity of Bolts in Bolt Circle	8	Bearing Φs	0.75
Bolt Circle Diameter (in)	44.75		
Top of Concrete to Top of Bottom Threads (in)	60		
Diameter of Pier (ft)	5.5	Minimum Pier Diameter (ft)	5.06
Ht. of Pier Above Ground (ft)	0.5	Equivalent Square b (ft)	4.87
Ht. of Pier Below Ground (ft)	4.5	Square Pier? (Y/N)	**N**
Quantity of Bars in Mat	20		
Bar Diameter in Mat (in)	1		
Area of Bars in Mat (in^2)	15.71		
Spacing of Bars in Mat (in)	11.63	Recommended Spacing (in)	5 to 12
Quantity of Bars Pier	30		
Bar Diameter in Pier (in)	0.875		
Tie Bar Diameter in Pier (in)	0.625		
Spacing of Ties (in)	12		
Area of Bars in Pier (in^2)	18.04	Minimum Pier A_s (in^2)	17.11
Spacing of Bars in Pier (in)	6.06	Recommended Spacing (in)	5 to 12
f'c (ksi)	4.5		
fy (ksi)	60		
Unit Wt. of Soil (kcf)	**0.11**		
Unit Wt. of Concrete (kcf)	0.15		
Volume of Concrete (yd^3)	24.46		
Two-Way Shear Action:			
Average d (in)	14		
ϕv_c (ksi)	0.228	v_u (ksi)	0.131
$\phi v_c = \phi(2 + 4/\beta_c)f'_c{}^{1/2}$	0.342		
$\phi v_c = \phi(\alpha_s d/b_o + 2)f'_c{}^{1/2}$	0.241		
$\phi v_c = \phi 4 f'_c{}^{1/2}$	0.228		
Shear perimeter, b_o (in)	251.33		
β_c	1		
One-Way Shear:			
ϕV_c (kips)	364.0	V_u (kips)	176.9
Stability:			
Overturning Design Strength (ft-k)	2428.5	Total Applied M (ft-k)	1878.2

Pier Design:

ϕV_n (kips)	398.7	V_u (kips)	17.2
$\phi V_c=\phi 2(1+N_u/(2000A_g))f'_c{}^{1/2}b_wd$	398.7		
V_s (kips)	0.0	*** V_s max = 4 $f'_c{}^{1/2}b_wd$ (kips)	935.1
Maximum Spacing (in)	11.09	(Only if Shear Ties are Required)	
Actual Hook Development (in)	13.00	Req'd Hook Development l_{dh} (in)	10.39
		*** Ref. To Spacing Requirements ACI 11.5.4.3	

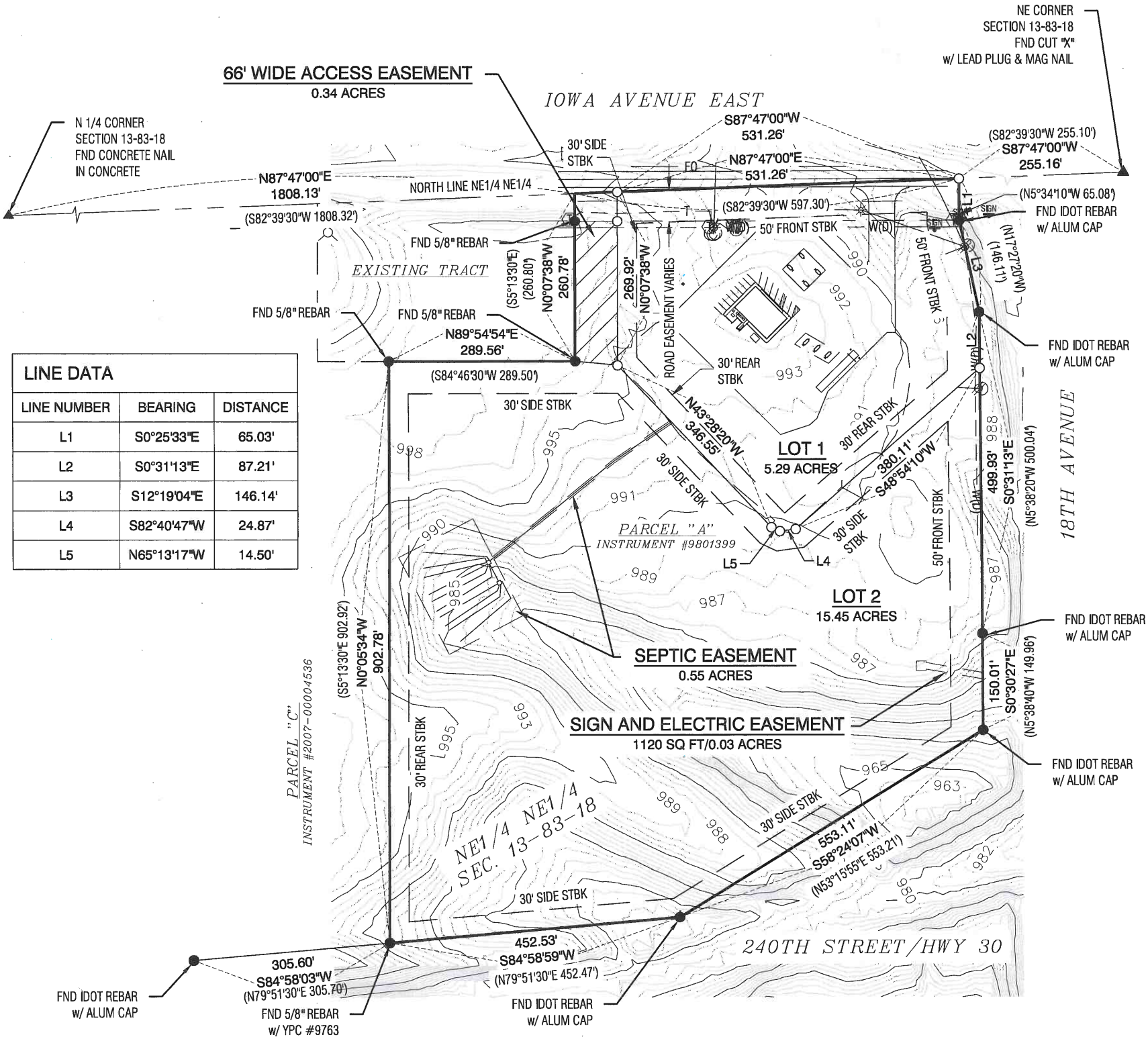
Flexure in Slab:

ϕM_n (ft-kips)	951.4	M_u (ft-kips)	912.3
a (in)	1.08		
Steel Ratio	0.00492		
β_1	0.825		
Maximum Steel Ratio (ρ_t)	0.0197		
Minimum Steel Ratio	0.0018		
Rebar Development in Pad (in)	81.75	Required Development in Pad (in)	25.65

Condition	1 is OK, 0 Fails
Maximum Soil Bearing Pressure	1
Pier Area of Steel	1
Pier Shear	1
Interaction Diagram Visual Check	1
Two-Way Shear Action	1
One-Way Shear Action	1
Overturning	1
Flexure	1
Steel Ratio	1
Length of Development in Pad	1
Hook Development	1

PRELIMINARY PLAT
GODFREY SUBDIVISION

INDEX LEGEND	
LOCATION:	GODFREY SUBDIVISION LOCATED IN PARCEL "A" IN THE NE1/4 OF THE NE1/4 OF SECTION 13-83-18, MARSHALL COUNTY, IOWA
PROPRIETOR:	GODFREY MOTORS, INC
SURVEY REQUESTED BY:	TOBY GODFREY
FIELD WORK COMPLETED:	12/8/2017
SURVEY PREPARED BY: RESPOND TO: JEREMY HARRIS	CLAPSADDLE-GARBER ASSOCIATES, INC, 16 EAST MAIN STREET, P.O. BOX 754, MARSHALLTOWN, IOWA 50158 PHONE 641-752-6701 JHARRIS@CGACONSULTANTS.COM



LINE DATA

LINE NUMBER	BEARING	DISTANCE
L1	S0°25'33"E	65.03'
L2	S0°31'13"E	87.21'
L3	S12°19'04"E	146.14'
L4	S82°40'47"W	24.87'
L5	N65°13'17"W	14.50'

ADDRESS

1701 IOWA AVE. E.
MARSHALLTOWN, IOWA

FLOOD ZONE:

(ZONE X) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANGE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.
PANEL# 19127C0170C
EFFECTIVE DATE NOVEMBER 16, 2011

ZONE INFORMATION:

DISTRICT "PC" - (PLANNED COMMERCIAL)
FRONT YARD: 50' WHERE NO FRONTAGE ROAD REQUIRED; 130-150' WHERE FRONTAGE ROAD IS NOT BUILT BUT WILL BE REQUIRED

SIDE YARDS: 30'

REAR YARD: 30'

MINIMUM LOT WIDTH: 200'

LOT AREA: 60,000 SQUARE FEET

BUILDING HEIGHT: N/A

DESCRIPTION
PARCEL "A" IN THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 13, TOWNSHIP 83 NORTH, RANGE 18 WEST OF THE 5TH P.M., MARSHALL COUNTY, IOWA, FURTHER DESCRIBED AS SHOWN IN PLAT OF SURVEY, FILED MARCH 11, 1998 AS INSTRUMENT NO. 9801399, RECORDS OF THE OFFICE OF THE RECORDER OF MARSHALL COUNTY, IOWA. SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD, IF ANY.

LEGEND:

- ▲ GOVERNMENT CORNER MONUMENT FOUND
- △ GOVERNMENT CORNER MONUMENT SET 1/2" x 30" REBAR w/BLUE PLASTIC ID CAP #22259
- ● PARCEL OR LOT CORNER MONUMENT FOUND
- ○ SET 1/2" x 30" REBAR w/BLUE PLASTIC ID CAP #22259
- ( ) RECORDED AS

N

SCALE 1"=200'
0 200'

NOTE:
ALL BEARINGS ARE THE RESULT OF G.P.S. OBSERVATIONS.

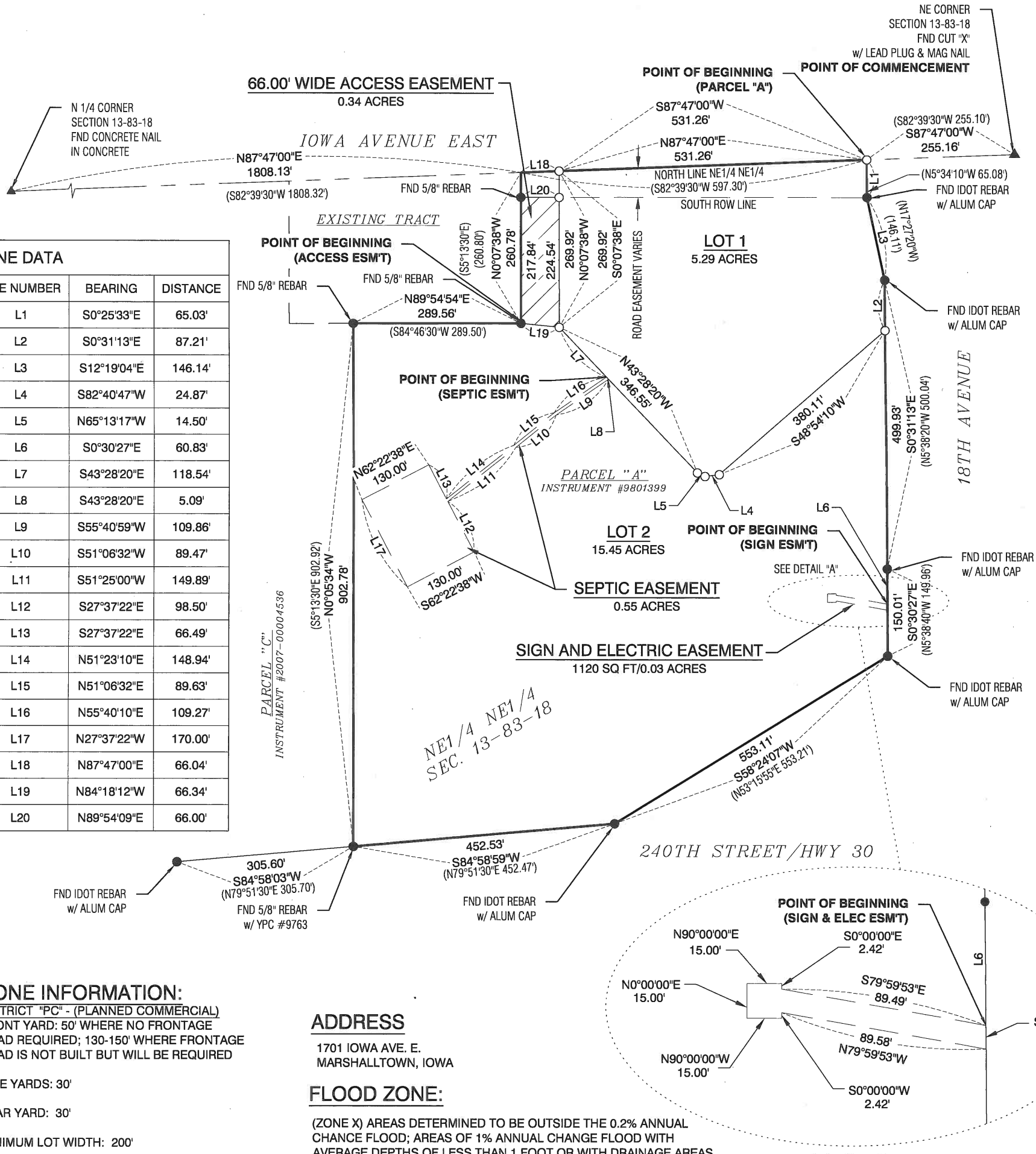
CGA
Clapsaddle-Garber Associates, Inc
16 East Main Street
Marshalltown, Iowa 50158
Ph 641-752-6701
www.cgaconsultants.com

DRAWN	SHEET NO.
CAQ	1
DATE	PROJECT NO.
1-25-2018	77627.05

J:\77627\dwg\Survey\Minor Plat\77627 Prel Plat.dwg - Prel Plat - 02-12-18 - 9:06am - caq288

FINAL PLAT
GODFREY SUBDIVISION

INDEX LEGEND	
LOCATION:	GODFREY SUBDIVISION LOCATED IN PARCEL "A" IN THE NE1/4 OF THE NE1/4 OF SECTION 13-83-18, MARSHALL COUNTY, IOWA
PROPRIETOR:	GODFREY MOTORS, INC
SURVEY REQUESTED BY:	TOBY GODFREY
FIELD WORK COMPLETED:	12/8/2017
SURVEY PREPARED BY: RESPOND TO: JEREMY HARRIS	CLAPSADDLE-GARBER ASSOCIATES, INC, 16 EAST MAIN STREET, P.O. BOX 754, MARSHALLTOWN, IOWA 50158 PHONE 641-752-6701 JHARRIS@CGACONSULTANTS.COM



LINE DATA		
LINE NUMBER	BEARING	DISTANCE
L1	S0°25'33"E	65.03'
L2	S0°31'13"E	87.21'
L3	S12°19'04"E	146.14'
L4	S82°40'47"W	24.87'
L5	N65°13'17"W	14.50'
L6	S0°30'27"E	60.83'
L7	S43°28'20"E	118.54'
L8	S43°28'20"E	5.09'
L9	S55°40'59"W	109.86'
L10	S51°06'32"W	89.47'
L11	S51°25'00"W	149.89'
L12	S27°37'22"E	98.50'
L13	S27°37'22"E	66.49'
L14	N51°23'10"E	148.94'
L15	N51°06'32"E	89.63'
L16	N55°40'10"E	109.27'
L17	N27°37'22"W	170.00'
L18	N87°47'00"E	66.04'
L19	N84°18'12"W	66.34'
L20	N89°54'09"E	66.00'

ZONE INFORMATION:

DISTRICT "PC" - (PLANNED COMMERCIAL)
FRONT YARD: 50' WHERE NO FRONTAGE ROAD REQUIRED; 130-150' WHERE FRONTAGE ROAD IS NOT BUILT BUT WILL BE REQUIRED

SIDE YARDS: 30'

REAR YARD: 30'

MINIMUM LOT WIDTH: 200'

LOT AREA: 60,000 SQUARE FEET

BUILDING HEIGHT: N/A

ADDRESS

1701 IOWA AVE. E.
MARSHALLTOWN, IOWA

FLOOD ZONE:

(ZONE X) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANGE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.
PANEL# 19127C0170C
EFFECTIVE DATE NOVEMBER 16, 2011

DETAIL "A"

DESCRIPTION
SEE SHEET 2 OF 2

NOTE:
ALL BEARINGS ARE THE RESULT OF G.P.S. OBSERVATIONS.

PLAN & ZONING COMMISSION
MAYOR SIGNATURE
ATTEST

LEGEND:

- ▲ GOVERNMENT CORNER MONUMENT FOUND
- △ GOVERNMENT CORNER MONUMENT SET 1/2" x 30" REBAR w/BLUE PLASTIC ID CAP #22259
- ● PARCEL OR LOT CORNER MONUMENT FOUND
- ○ SET 1/2" x 30" REBAR w/BLUE PLASTIC ID CAP #22259
- ( ) RECORDED AS

N

SCALE 1"=200'
0 200'

GODFREY SURVEY
MARSHALL SURVEY

JEREMY A. HARRIS LICENSED 22259 IOWA PROFESSIONAL LAND SURVEYOR

I hereby certify that this land surveying document was prepared and the related survey work was performed by me or under my direct personal supervision and that I am a duly Licensed Professional Land Surveyor under the laws of the State of Iowa.

Jeremy Harris 2-13-18

JEREMY A. HARRIS, PLS date
Iowa License Number 22259
My License Renewal Date is December 31, 2019
Pages or sheets covered by this seal:
SHEETS 1 OF 2 AND 2 OF 2

CGA
Clapsaddle-Garber Associates, Inc
16 East Main Street
Marshalltown, Iowa 50158
Ph 641-752-6701
www.cgaconsultants.com

DRAWN	SHEET NO.
CAQ	1
DATE	PROJECT NO.
1-25-2018	77627.05

DESCRIPTION GODFREY SUBDIVISION

GODFREY SUBDIVISION LOCATED ENTIRELY WITHIN PARCEL "A" IN THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 13, TOWNSHIP 83 NORTH, RANGE 18 WEST OF THE 5TH P.M., MARSHALL COUNTY, IOWA, FURTHER DESCRIBED AS SHOWN IN PLAT OF SURVEY, FILED MARCH 11, 1998 AS INSTRUMENT NO. 9801399, RECORDS OF THE OFFICE OF THE RECORDER OF MARSHALL COUNTY, IOWA. SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD, IF ANY.

DESCRIPTION SIGN AND ELECTRIC EASEMENT

EASEMENT LOCATED ENTIRELY WITHIN LOT 2 OF GODFREY SUBDIVISION IN THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 13, TOWNSHIP 83 NORTH, RANGE 18 WEST OF THE 5th P.M., MARSHALL COUNTY, IOWA.

MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 13; THENCE, S87°47'00"W 255.16' ALONG THE NORTH LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 13 TO THE NORTHEAST CORNER OF A CERTAIN PARCEL OF LAND DESCRIBED AS PARCEL "A" AND RECORDED IN INSTRUMENT NO. 9801399 IN THE OFFICE OF THE RECORDER, MARSHALL COUNTY, IOWA; THENCE, S0°25'33"E 65.03'; THENCE, S12°19'04"E 146.14'; THENCE, S0°31'13"E 499.93'; THENCE, S0°30'27"E 60.83', THE AFORESAID ALL BEING ALONG A EAST LINE OF SAID PARCEL "A" TO THE POINT OF BEGINNING; THENCE, CONTINUING S0°30'27"E 10.17' ALONG SAID EAST LINE; THENCE, N79°59'53"W 89.58'; THENCE, S0°00'00"W 2.42'; THENCE, N90°00'00"W 15.00'; THENCE, N0°00'00"E 15.00'; THENCE, N90°00'00"E 15.00'; THENCE, S0°00'00"E 2.42'; THENCE, S79°59'53"E 89.49' TO THE POINT OF BEGINNING, CONTAINING 1120 SQ FT/0.03 ACRES. SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD, IF ANY.

DESCRIPTION SEPTIC EASEMENT

EASEMENT LOCATED ENTIRELY WITHIN LOT 2 OF GODFREY SUBDIVISION IN THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 13, TOWNSHIP 83 NORTH, RANGE 18 WEST OF THE 5th P.M., MARSHALL COUNTY, IOWA.

MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 13; THENCE, S87°47'00"W 255.16' ALONG THE NORTH LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 13 TO THE NORTHEAST CORNER OF A CERTAIN PARCEL OF LAND DESCRIBED AS PARCEL "A" AND RECORDED IN INSTRUMENT NO. 9801399 IN THE OFFICE OF THE RECORDER, MARSHALL COUNTY, IOWA; THENCE, CONTINUING S87°47'00"W 531.26' ALONG THE NORTH LINE OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 13; THENCE, S0°07'38"E 269.92'; THENCE, S43°28'20"E 118.54' TO THE POINT OF BEGINNING; THENCE, CONTINUING S43°28'20"E 5.09'; THENCE, S55°40'59"W 109.86'; THENCE, S51°06'32"W 89.47'; THENCE, S51°25'00"W 149.89'; THENCE, S27°37'22"E 98.50'; THENCE, S62°22'38"W 130.00'; THENCE, N27°37'22"W 170.00'; THENCE, N62°22'38"E 130.00'; THENCE, S27°37'22"E 66.49'; THENCE, N51°23'10"E 148.94'; THENCE, N51°06'32"E 89.63'; THENCE, N55°40'10"E 109.27' TO THE POINT OF BEGINNING, CONTAINING 0.55 ACRES. SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD, IF ANY.

DESCRIPTION ACCESS EASEMENT

EASEMENT LOCATED ENTIRELY WITHIN LOT 2 OF GODFREY SUBDIVISION IN THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 13, TOWNSHIP 83 NORTH, RANGE 18 WEST OF THE 5th P.M., MARSHALL COUNTY, IOWA.

MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT A NORTHWEST CORNER OF A CERTAIN PARCEL OF LAND DESCRIBED AS PARCEL "A" AND RECORDED IN INSTRUMENT NO. 9801399 IN THE OFFICE OF THE RECORDER, MARSHALL COUNTY, IOWA PARCEL "A"; THENCE, N0°07'38"W 217.84' ALONG A WEST LINE OF SAID PARCEL "A" TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF IOWA AVENUE; THENCE, N89°54'09"E 66.00' ALONG SAID SOUTH RIGHT OF WAY LINE; THENCE, S0°07'38"E 224.54'; THENCE, N84°18'12"W 66.34' TO THE POINT OF BEGINNING, CONTAINING 0.34 ACRES. SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD, IF ANY.

CGA
Clapsaddle-Garber Associates, Inc
16 East Main Street
Marshalltown, Iowa 50158
Ph 641-752-6701
www.cgaconsultants.com

DRAWN	SHEET NO.
CAQ	2 OF 2
DATE	PROJECT NO.
1-25-2018	77627.05

MARSHALLTOWN
IOWA

TO: Plan Zoning Commission

FROM: Michelle Spohnheimer, Housing & Community Development Director

DATE: February 15, 2018 – Meeting Date

Godfrey Subdivision – Preliminary & Final Plat

Godfrey Motors Inc. owns the property at 1701 Iowa Avenue East. The owner is looking to subdivide the existing parcel into two new lots. Lot 1 would contain the existing gas station and the remaining property would be a new lot (Lot 2). Lot 2 does contain the septic system, which serves the gas station, and the freestanding sign is located on Lot 2. Both have identified easements related to these items. The proposal is to sell the station to a new owner who is not interested in the larger parcel.

This property is zoned PC, Planned Commercial. This zoning district requires all parcel splits to go through the subdivision process with a Preliminary and Final plat. The lots have the required frontage and lot area. New development on Lot 2 would have to comply with any design standards in place at the time of development.

Zone:	PC – Planned Commercial District.
Use:	Gasoline station with convenience store – Existing Permitted Use
Comprehensive Plan:	Commercial

Recommendation: The Commission may make a recommendation on to the City Council, which may include conditions. The City has authority to require items such as connection to city water or sewer if available, reformation of lot lines to be at right angles to public streets, requirement that the off-premises sign be relocated immediately, if a new sign is installed, or that it comply with the off premise regulations for signage.

The next available Council meeting is February 26, 2018.

Complete the following contact information. (Please type or print clearly)

Owner Corporation Name Godfrey Motors Inc.	
Contact/Owner Name William G. Godfrey Jr.	
Owner Address 603 Elmwood Dr. Marshalltown, IA 50158	Owner Fax
Owner Phone 641-485-0777	
Owner E-mail	

Name of Law Firm Grimes, Buck, Schoell, Beach & Hitchins	
Attorney Name Kevin Hitchins	
Attorney Address 102 East Church St Marshalltown, IA 50158	Attorney Fax
Attorney Phone 641-752-4507	
Attorney E-mail kevin@gbsbhlaw.com	

Engineer Firm Name CGA	
Engineer Contact Person Jeremy Harris	
Engineer Address 16 E Main St. Marshalltown, IA 50158	
Engineer Phone 641-752-6701	Engineer Fax
Engineer E-mail jharris@cgaconsultants.com	