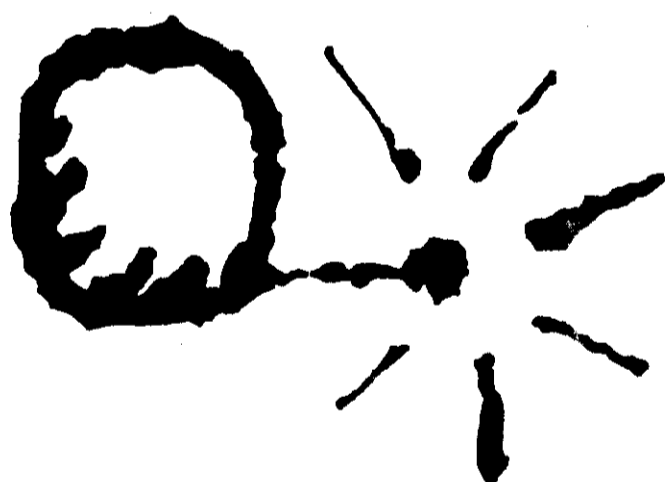


# ABBREVIATIONS

ADJ	ADJUSTABLE	SF	SQUARE FOOT
APPROX	APPROXIMATE	SHT	SHEET
CAB	CABINET	SM	SIMILAR
CLG	CEILING	SS	STAINLESS STEEL
CONC	CONCRETE	STL	STEEL
CONT	CONTINUOUS	TOC	TOP OF CONCRETE
CJ	CONSTRUCTION JOINT	TOM	TOP OF MASONRY
DIA	DIAMETER	TYP	TYPICAL
DWG	DRAWING	WF	WELDED WIRE FABRIC
EQB	EQUIPMENT	UN	UNLESS OTHERWISE NOTED
EA	EACH	W/	WITH
ELEC	ELECTRICAL	W/	WITH
EL	ELEVATION	BTS	BASE TRANSMISSION STATION
EQ	EQUAL	PCS	PERSONAL COMMUNICATIONS SERVICES
EQUIP	EQUIPMENT	POS	PERSONAL COMMUNICATIONS SERVICES
(E)	EXISTING		
EXT	EXTERIOR		
FF	FINISHED FLOOR		
GA	GAUGE	A-1	ANTENNA MARK NO.
GALV	GALVANIZED	€	CENTERLINE
GC	GENERAL CONTRACTOR	PL	PLATE
GRND	GROUND	&	AND
LG	LONG	AT	AT
MAY	MAXIMUM		
MCH	MECHANICAL		
MFR	MANUFACTURER		
MGB	MASTER GROUND BAR		
MIN	MINIMUM		
MTL	METAL		
NIC	NOT IN CONTRACT		
NIS	NOT TO SCALE		
OC	ON CENTER		
OPP	OPPOSITE		

# SYMBOLS AND MATERIALS

	NEW ANTENNA		GROUT OR PLASTER
	EXISTING ANTENNAS		BRICK
	ASPHALT		(EM) MASONRY
	CONCRETE		CONCRETE
	ELECTRIC BOX		EARTH
	LIGHT POLE		GRAVEL
	P.N.D. MONUMENT		PLYWOOD
	SPOT ELEVATION		SAND
	SET POINT		WOOD CONT.
	REISION		WOOD BLOCKING
	GRID REFERENCE		STEEL
	DETAIL REFERENCE		CENTER LINE
	ELEVATION		PROPERTY LINE
	SECTIONS & DETAILS		STEPPED FOOTING
			MATCH LINE
			WORK POINT
			GROUND WIRE
			COAXIAL CABLE



**PRIME CO**  
SM  
PERSONAL COMMUNICATIONS

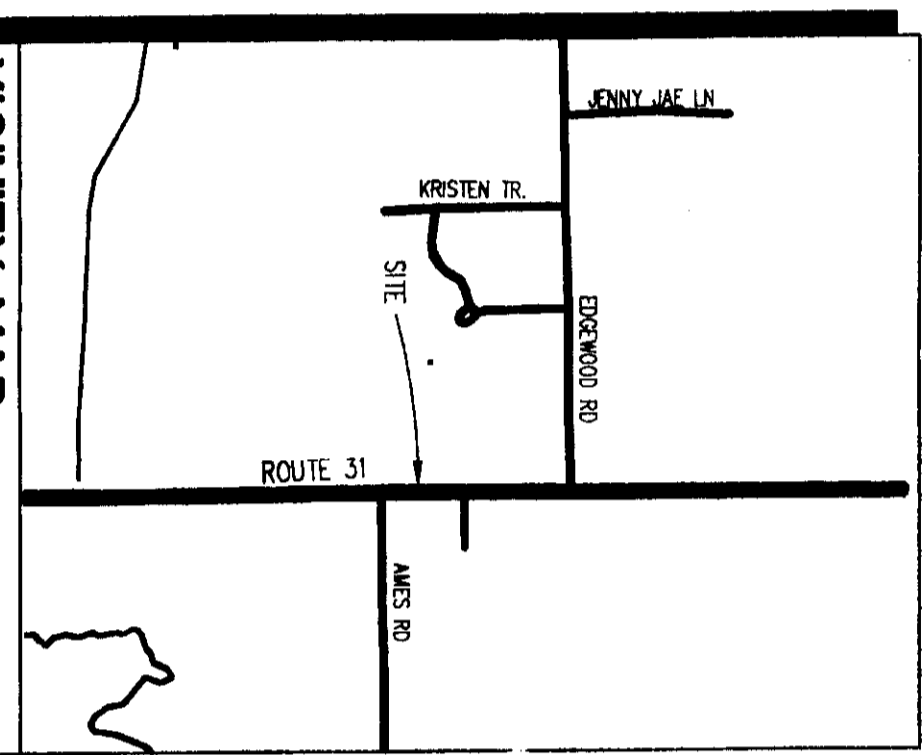
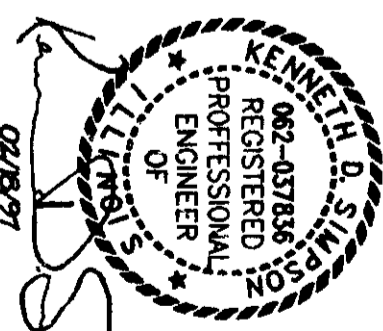
**SITE NAME: PRAIRIE GROVE**

3321 S. ROUTE 31  
CRYSTAL LAKE, ILL. 60014

**SITE NUMBER: CGB 4128-1**

**RAWLAND MONOPOLE**

*AS BUILT  
PROPERTY CLOPP, INC.  
APPROVED  
7/30/97  
SHEETS: 7/19  
Approved  
Approved*



VICINITY MAP  
NO SCALE



DRIVING DIRECTIONS

1-90 WEST TO RTE. 31 (A DISTANCE OF APPROXIMATELY 14.1 MILES FROM RTE. 53) NORTH ON RTE. 31 THROUGH CRYSTAL LAKE AND BEYOND CORP. LIMITS. TOTAL DISTANCE ON RTE. 31 IS APPROXIMATELY 14 MILES. PROPERTY IS 1/4 NORTH OF CRYSTAL LAKE.

**PROJECT SUMMARY**

SITE NUMBER: 4128-1  
SITE NAME: PRAIRIE GROVE  
SITE ADDRESS: PRESIDE HEARTH & PATIO  
3321 S. ROUTE 31  
CRYSTAL LAKE, ILL. 60014  
PROPERTY OWNER: RON UHER  
LOT NUMBER:  
BLOCK NUMBER:  
APPLICANT:  
CONTACT PERSON: D. SENKOTA  
CONTACT PHONE NO.: 630-285-1372  
ASSESSOR'S PARCEL NO.: P/N # 14-22-126-023  
CURRENT ZONING: EXEMPT

**DO NOT SCALE DRAWINGS**

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	
LS-1	LAND SURVEY	
Z-1	SITE PLAN & ELEVATION	
A-1	SITE PLAN, AND STRUCTURAL NOTES	
A-2	ANTENNA LOCATION PLAN, SECTIONS AND ELEVATIONS	
A-3	SECTIONS	
S-3	SCREEN ANCHOR FOUNDATION SECTIONS, AND DETAILS	
E-1	ELECTRICAL PLAN, Riser, NOTES, AND DETAILS	
E-2	GROUNDING RISER AND DETAILS	
E-3	LIGHTING PLAN, ELEVATION, AND ANTENNA SCHEDULE	

**ENGINEER'S LICENSE**

LICENSED ENGINEER - STATE OF ILLINOIS  
SIGNED: 02/18/97  
EXPIRES: 11/31/97

**PRIMECO**  
PERSONAL COMMUNICATIONS  
ONE PERCE PLACE  
SUITE 100  
ITASCA, ILLINOIS 60143  
OFFICE: (630) 773-1800  
FAX: (630) 285-1580

**APPROVALS**

PRIMECO \_\_\_\_\_  
LANDLORD \_\_\_\_\_  
LEASING \_\_\_\_\_  
R.F. \_\_\_\_\_  
ZONING \_\_\_\_\_  
CONSTRUCTION \_\_\_\_\_  
BSE \_\_\_\_\_

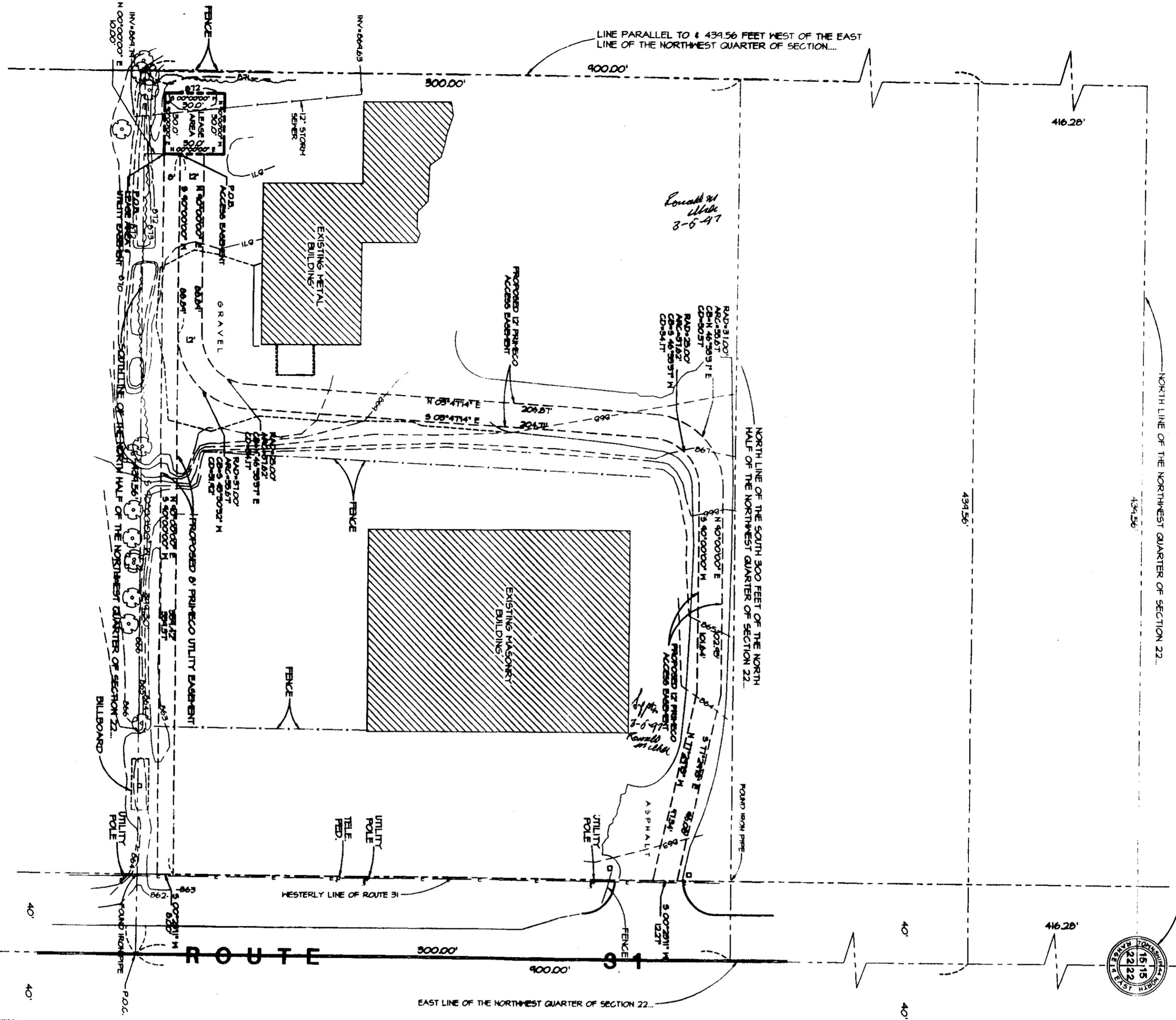
Sargeant & Lundy, Inc.  
PROJECT NO. 9009-018  
DRAWN BY: R.B.C.  
CHECKED BY: W.J.L.

DATE	REVISION
02-21-97	REVISION FOR CONSTRUCTION
02-18-97	FOR CONSTRUCTION BY S & L

**RAWLAND MONOPOLE CGB 4128-1 PRAIRIE GROVE**  
PRESIDE HEARTH & PATIO  
3321 S. ROUTE 31  
CRYSTAL LAKE, ILLINOIS, 60014

SHEET NUMBER  
TITLE SHEET  
**T-1**

# PLAT OF SURVEY



PROPERTY DESCRIPTION FOR THE LEASE AREA  
 THAT PART OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 44 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS, CONTAINING AT THE INTERSECTION OF THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22 AND THE EAST LINE OF THE NORTHWEST QUARTER OF SECTION 22, THEREAS 40 HUNDREDS AND 40/100 PARTS OF A SECTION, 40.40 ACRES, MORE OR LESS, BEING THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 44 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, ILLINOIS.

PROPERTY DESCRIPTION FOR THE UTILITY EASEMENT  
 THAT PART OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 44 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS, CONTAINING AT THE INTERSECTION OF THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22 AND THE EAST LINE OF THE NORTHWEST QUARTER OF SECTION 22, THEREAS 40 HUNDREDS AND 40/100 PARTS OF A SECTION, 40.40 ACRES, MORE OR LESS, BEING THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 44 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, ILLINOIS.

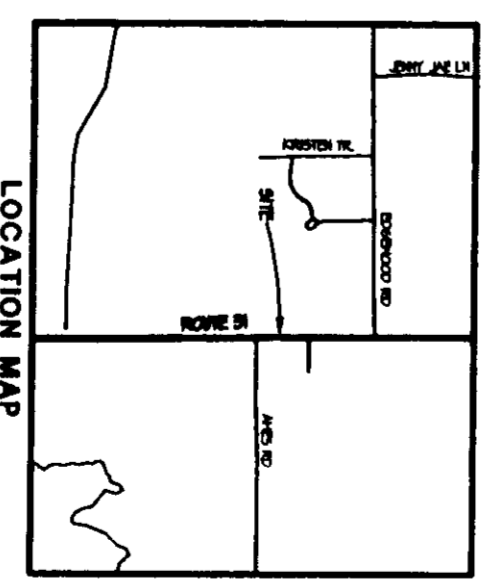
PROPERTY DESCRIPTION FOR THE ACCESS EASEMENT  
 THAT PART OF THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 44 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS, CONTAINING AT THE INTERSECTION OF THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 22 AND THE EAST LINE OF THE NORTHWEST QUARTER OF SECTION 22, THEREAS 40 HUNDREDS AND 40/100 PARTS OF A SECTION, 40.40 ACRES, MORE OR LESS, BEING THE NORTHWEST QUARTER OF SECTION 22, TOWNSHIP 44 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, ILLINOIS.

PROPERTY PREPARED WITH THE AID OF A COMMITMENT FOR TITLE INSURANCE PREPARED BY CHICAGO TITLE INSURANCE COMPANY ORDER NO. 1401 00021044. EFFECTIVE DECEMBER 3, 1946.  
 P.L.N. NO. 14-22-126-023  
 THIS SITE IS LISTED AS BEING IN A ZONE "C"  
 PER FEMA PANEL NO. 17073 0220 B DATED SEPT. 30, 1981  
 LATITUDE: 42° 16' 52.16" N (NAD83)  
 LONGITUDE: 89° 17' 18.92" W (NAD83)

NOTE: THE LOCATION OF UNDERGROUND UTILITIES WAS DETERMINED BY FIELD OBSERVATION & VISIBLE MARKINGS ONLY. CALL UTILITIES BEFORE YOU DIG.



SCALE: 1"=40'



LEGEND

PROPERTY LINE	EXISTING CONCRETE	UTILITY POLE
EXISTING METAL BUILDING	EXISTING WOODS	EXISTING ANCHOR
EXISTING CONCRETE BUILDING	EXISTING FENCE	EXISTING STORM SEWER
BUILDING SETBACK	EXISTING UTILITY	EXISTING STREET LIGHT
HEADINGS DATA	EXISTING ASPHALT	EXISTING SHED
RECORD DATA	EXISTING GRAVEL	EXISTING FENCE LINE
DEED DATA	EXISTING ROAD IRON PIPE	EXISTING BILLBOARD

W-T LAND SURVEYING, INC.  
 LAND AND CONSTRUCTION SURVEYORS  
 34 EAST SCULLY DRIVE  
 SCHAMLUNBURG, ILLINOIS 60193  
 P. (847) 895-3640  
 F. (847) 895-9885

THE W-T LAND SURVEYING, INC. HEREBY CERTIFIES THAT THE ABOVE ILLINOIS REGISTERED LAND SURVEYING IS IN COMPLIANCE WITH THE LAWS OF THE STATE OF ILLINOIS AND THAT THIS PLAT CORRECTLY REPRESENTS A SURVEY AND THAT ALL MONUMENTS SHOWN THEREON ACTUALLY EXIST AND MATERIALS ARE ACCURATELY SHOWN.  
 GIVEN UNDER OUR HAND AND SEAL THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 1987  
 Roger K. Moehling  
 SURVEYOR

**PRIMECO**  
 PERSONAL COMMUNICATIONS  
 ONE SUITE PLACE  
 SUITE #100  
 ITASCA, ILLINOIS 60143  
 OFFICE: (630) 773-1800  
 FAX: (630) 285-1880

APPROVALS

PRIMECO \_\_\_\_\_

LANDLORD \_\_\_\_\_

LEASING \_\_\_\_\_

R.F. \_\_\_\_\_

ZONING \_\_\_\_\_

CONSTRUCTION \_\_\_\_\_

BASE \_\_\_\_\_

PROJECT NO. 897003

DRAWN BY. CDG

CHECKED BY. KIM

**W-T**

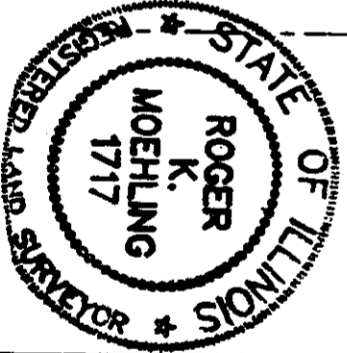
W-T LAND SURVEYING, INC.  
 LAND AND CONSTRUCTION SURVEYORS  
 39 EAST SCULLY DRIVE  
 SCHAMLUNBURG, ILLINOIS 60193  
 Ph. (847) 895-3640  
 Fax. (847) 895-9885

**CGB 4128-1**  
**PRAIRIE GROVE**

3921 S. ROUTE 31  
 CRYSTAL LAKE  
 ILLINOIS 60015

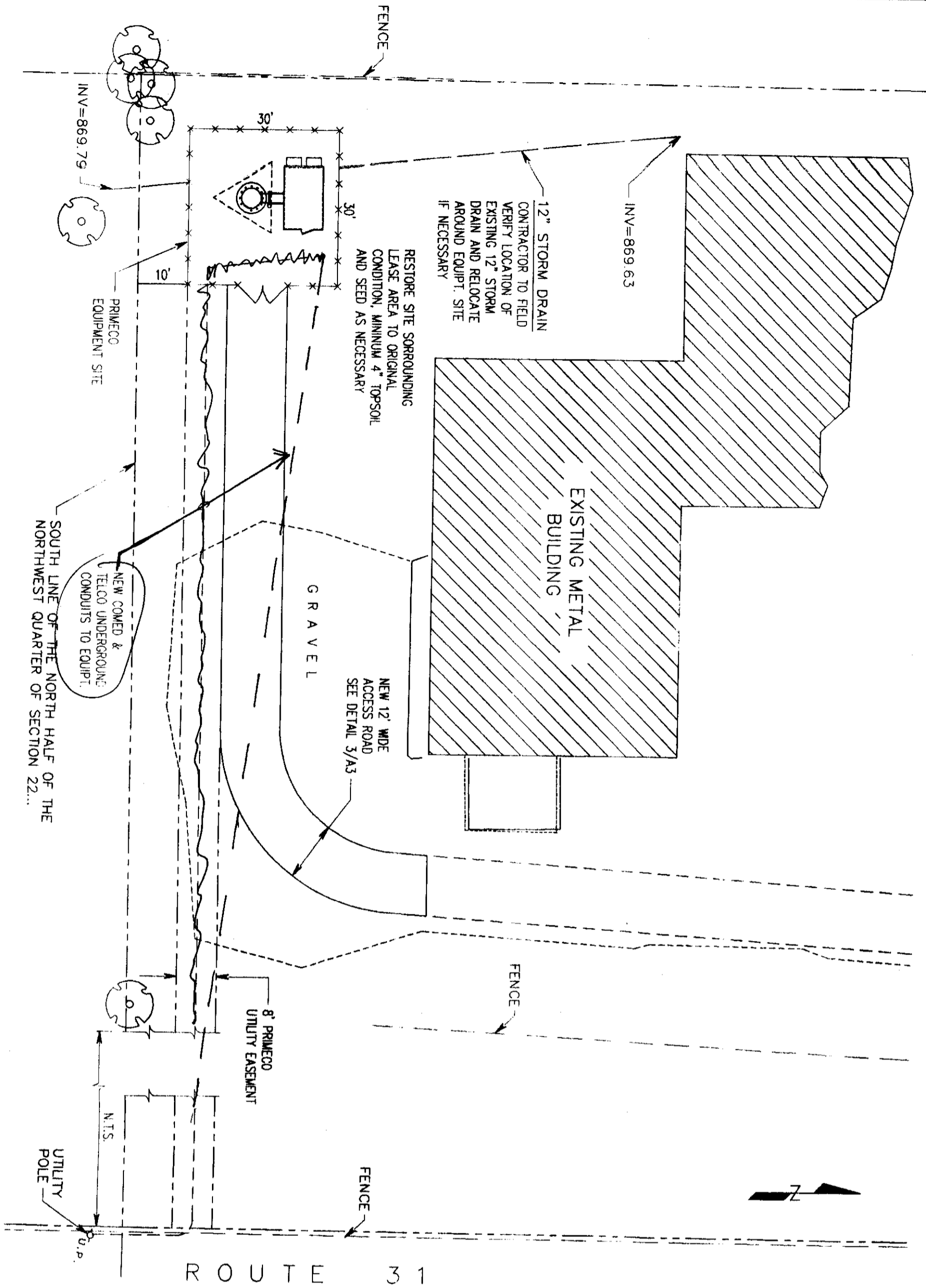
SHEET TITLE  
 LAND SURVEY

SHEET NUMBER  
**LS-1**



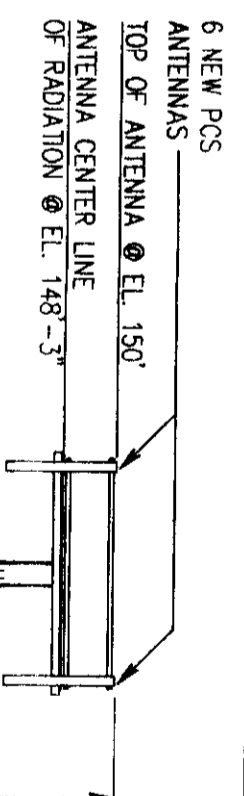
# GENERAL NOTES

1. MONOPOLE, EQUIPMENT PLATFORM AND ANTENNAS ARE DESIGNED TO MEET BOCA NATIONAL BUILDING CODE/1993, CHICAGO BUILDING CODE, AND ANS/EA/TIA-222-E STRUCTURAL STANDARDS FOR STEEL ANTENNA SUPPORTING STRUCTURES. THE DESIGN WIND SPEED IS 80 MPH PLUS 1/2" ICE.
2. ALL STRUCTURAL STEEL SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION.
3. EXISTING VEGETATION WILL BE REMOVED INSIDE LEASED AREA AND ACCESS DRIVE.
4. ALL STRUCTURAL STEEL SHALL BE DESIGNED, FABRICATED, AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATION (LATEST EDITION).
5. ALL CAST IN PLACE CONCRETE SHALL BE MIXED AND PLACED IN ACCORDANCE WITH ACI 318 AND ACI 301.
6. FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION (HANDICAPPED ACCESS NOT REQUIRED).
7. FACILITY WILL NOT BE LIGHTED WITH THE EXCEPTION OF EMERGENCY CONDITIONS.
8. FACILITY HAS NO PLUMBING.
9. FACILITY WILL BE INDEPENDENTLY POWERED WITH SEPARATE METER.
10. MONOPOLE PLATFORM AND ANTENNA INSTALLATION SHALL BE CONDUCTED BY FIELD CREWS EXPERIENCED IN THE ASSEMBLY AND ERECTION OF RADIO ANTENNAS, TRANSMISSION LINES, AND SUPPORT STRUCTURES.
11. CONTRACTOR IS RESPONSIBLE FOR PROVIDING SUITABLE ACCESS ROAD TO SITE FOR ALL CONSTRUCTION ACTIVITIES. PRIMECO REQUIRES A FINISHED ACCESS ROAD AFTER CONSTRUCTION IS COMPLETE AS DEPICTED ON DRAWING A-3 DETAIL 3 ENTITLED "YARD/DRIVEWAY PAVEMENT".



**SITE PLAN**  
SCALE: 1"=20'-0"

1  
Z-1



# SEATT. NOTES

- NEW MONOPOLE BY OTHERS
- GPS
- ICE BRIDGE
- EQUIPMENT SHELTER
- 6'-0" HIGH FENCE
- POWER PEDESTAL PROVIDED BY OTHERS
- NEW EQUIPMENT SHELTER FOUNDATION
- REFER TO LAND SURVEY DRAWING FOR GROUND ELEVATION ABOVE MEAN SEA LEVEL (AMSL).

ALL CONSTRUCTION & INSTALLATION SHALL CONFORM & BE SUBJECT TO MCHENRY COUNTY CODES & ANY OTHER APPLICABLE CODES & ORDINANCES.

ALL PLANS SHALL MEET APPLICABLE CODES INCLUDING MCHENRY COUNTY

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

2  
Z-1

**PRIMECO**  
FEDERAL COMMUNICATIONS  
ONE PERCE PLACE  
TASCA, ILLINOIS 60143  
OFFICE: (630) 773-1800  
FAX: (630) 286-1590

**APPROVALS**

PRIMECO \_\_\_\_\_

LANDLORD \_\_\_\_\_

LEASING \_\_\_\_\_

R.F. \_\_\_\_\_

ZONING \_\_\_\_\_

CONSTRUCTION \_\_\_\_\_

BSF \_\_\_\_\_

*Sargent & Lundy*

PROJECT NO. 10103-019

DRAWN BY: R.B.G.

CHECKED BY: W.J.L.

NO.	DATE	REVISION
A	02-18-97	FOR CONSTRUCTION BY S.A.L.
B	02-21-97	REVISED FOR CONSTRUCTION

**RAWLAND MONOPOLE CGB 4128-1 PRAIRIE GROVE**

FRESIDE HEART & PATIO  
3321 S. ROUTE 31  
CRYSTAL LAKE  
ILLINOIS, 60004

SHEET TITLE  
**SITE PLAN & ELEVATION**

SHEET NUMBER  
**Z-1**

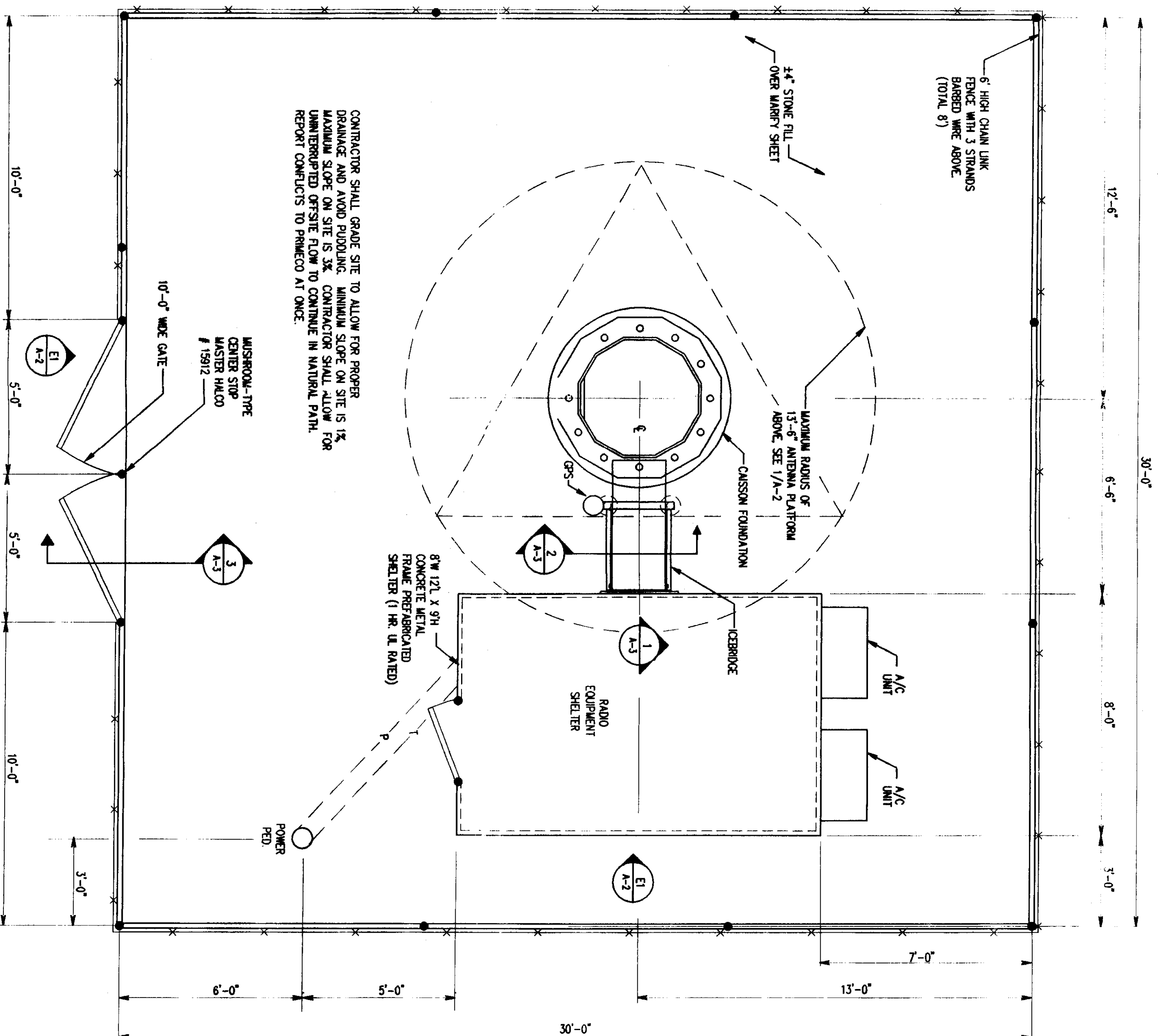
# STRUCTURAL NOTES

1. THE GENERAL CONTRACTOR AND OR HIS SUBCONSULTANT SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
2. REFER TO THE LAND SURVEY DRAWING PREPARED BY OTHERS FOR BOUNDARY SURVEY AND SITE TOPOGRAPHY.
3. DESIGN REQUIREMENTS FOR THE ANTENNA SUPPORTING STRUCTURE ARE PER BOCA NATIONAL BUILDING CODE/1993, CHICAGO BUILDING CODE, AND THE EIA/TIA-222-E STRUCTURAL STANDARDS FOR STEEL ANTENNA SUPPORTING STRUCTURES. THE BASIC WIND SPEED UTILIZED FOR DESIGN IS 80 MPH PLUS 1/2" ICE.
4. CONCRETE FOR FENCE POST AND ICEBRIDGE SUPPORT SHALL BE 3000 PSI AIR ENTRAINED (4x-6x) NORMAL WEIGHT CONCRETE.
5. FENCED SITE AREA SHALL BE CLEARED AND GRUBBED. REMOVE UNSUITABLE SOFT OR LOOSE SOILS, ORGANIC MATERIAL AND OR RUBBLE TO FIRM SUBGRADE AS APPROVED BY GEOTECHNICAL REPORT. PLACE A WARRY 500X SHEET ON SUBGRADE AND FILL WITH 4 INCHES OF ASHTO 57 STONE TO FINISH GRADE.
6. STRUCTURAL STEEL SHALL CONFORM TO LATEST EDITION OF THE AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS- ALLOWABLE STRESS DESIGN INCLUDING THE COMMENTARY AND THE CODE OF STANDARD PRACTICE.
7. STRUCTURAL STEEL PLATES AND SHAPES SHALL CONFORM TO ASTM A36. ALL STRUCTURAL STEEL PIPES SHALL CONFORM TO ASTM A53 GRADE B. ALL STRUCTURAL STEEL COMPONENTS AND FABRICATED ASSEMBLIES SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
8. WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS) D.1.1-92 STRUCTURAL WELDING CODE- STEEL WELD ELECTRONICS SHALL BE E70XX.
9. ALL THREADED STRUCTURAL FASTENERS FOR ANTENNA SUPPORT ASSEMBLIES SHALL CONFORM TO ASTM A325. FASTENERS SHALL BE 5/8" MINIMUM DIAMETER BEARING TYPE CONNECTIONS WITH THREADS INCLUDED IN THE SHEAR PLANE. ALL EXPOSED FASTENERS, NUTS AND WASHERS SHALL BE GALVANIZED UNLESS OTHERWISE NOTED. CONCRETE EXPANSION ANCHORS SHALL BE HILTI KWIK BOLTS UNLESS OTHERWISE NOTED.
10. ALL COAXIAL CABLE CONNECTORS AND TRANSMITTER EQUIPMENT SHALL BE AS SPECIFIED BY THE OWNER. THE CONTRACTOR SHALL FURNISH ALL CONNECTION HARDWARE REQUIRED TO SECURE THE CABLES.
11. STEEL FENCE SYSTEM SHALL INCLUDE THE FENCE POSTS, FABRIC, GATE SYSTEM AND ALL NECESSARY ERECTION ACCESSORIES, FITTINGS, AND FASTENINGS. ALL FENCE SYSTEM COMPONENTS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153. GATES SHALL BE SWING GATES WITH 5'-0" LEAF. REFER TO TYPICAL FENCE DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. INSTALL FENCE AFTER CONCRETE HAS ATTAINED 75% OF 28 DAY DESIGN STRENGTH.
12. NORTH ARROW SHOWN ON PLANS REFERS TO TRUE NORTH. CONTRACTOR SHALL VERIFY TRUE NORTH AND INFORM CONSTRUCTION MANAGER OF ANY DISCREPANCIES BEFORE STARTING CONSTRUCTION.
13. BUILDING/SHELTER FOUNDATION DESIGN IS UNDER SEPARATE CONTRACT BY OTHERS. REFER TO OWNER PROVIDED DRAWINGS.
14. MONOPOLE/TOWER FOUNDATION DESIGN IS UNDER SEPARATE CONTRACT BY OTHERS AND IS EXCLUDED FROM THESE DESIGN DRAWINGS. REFER TO OWNER PROVIDED DRAWINGS FOR SPECIFIC DETAILS REGARDING FOUNDATION SYSTEM.

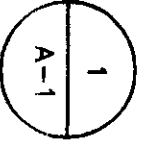
ALL PLANS SHALL MEET APPLICABLE CODES INCLUDING MCHENRY COUNTY

ALL CONSTRUCTION & INSTALLATION SHALL CONFORM & BE SUBJECT TO MCHENRY COUNTY CODES & ANY OTHER APPLICABLE CODES & ORDINANCES.

# SEE ATT. NOTES



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



**PRIMECO**  
RADIO COMMUNICATIONS  
ONE PIERCE PLACE  
SUITE 100  
ITASCA, ILLINOIS 60143  
OFFICE: (630) 773-1600  
FAX: (630) 265-1550

**APPROVALS**

PRIMECO \_\_\_\_\_  
 LANDLORD \_\_\_\_\_  
 LEASING \_\_\_\_\_  
 P.L. \_\_\_\_\_  
 ZONING \_\_\_\_\_  
 CONSTRUCTION \_\_\_\_\_  
 BASE \_\_\_\_\_

Sargeant & Lundy  
 PROJECT NO. 1003-013  
 DRAWN BY: R.B.C.  
 CHECKED BY: W.J.L.

NO.	DATE	REVISION
1	02-21-97	ISSUED FOR CONSTRUCTION
2	02-19-97	FOR CONSTRUCTION BY S & L

**RAWLAND MONOPOLE CGB 4128-1 PRAIRIE GROVE**  
 FERRIS HEART & PATTO  
 3321 S. ROUTE 51  
 CRYSTAL LAKE  
 ILLINOIS, 60014

SHEET TITLE  
 SITE PLAN & STRUCTURAL NOTES  
 SHEET NUMBER  
**A-1**

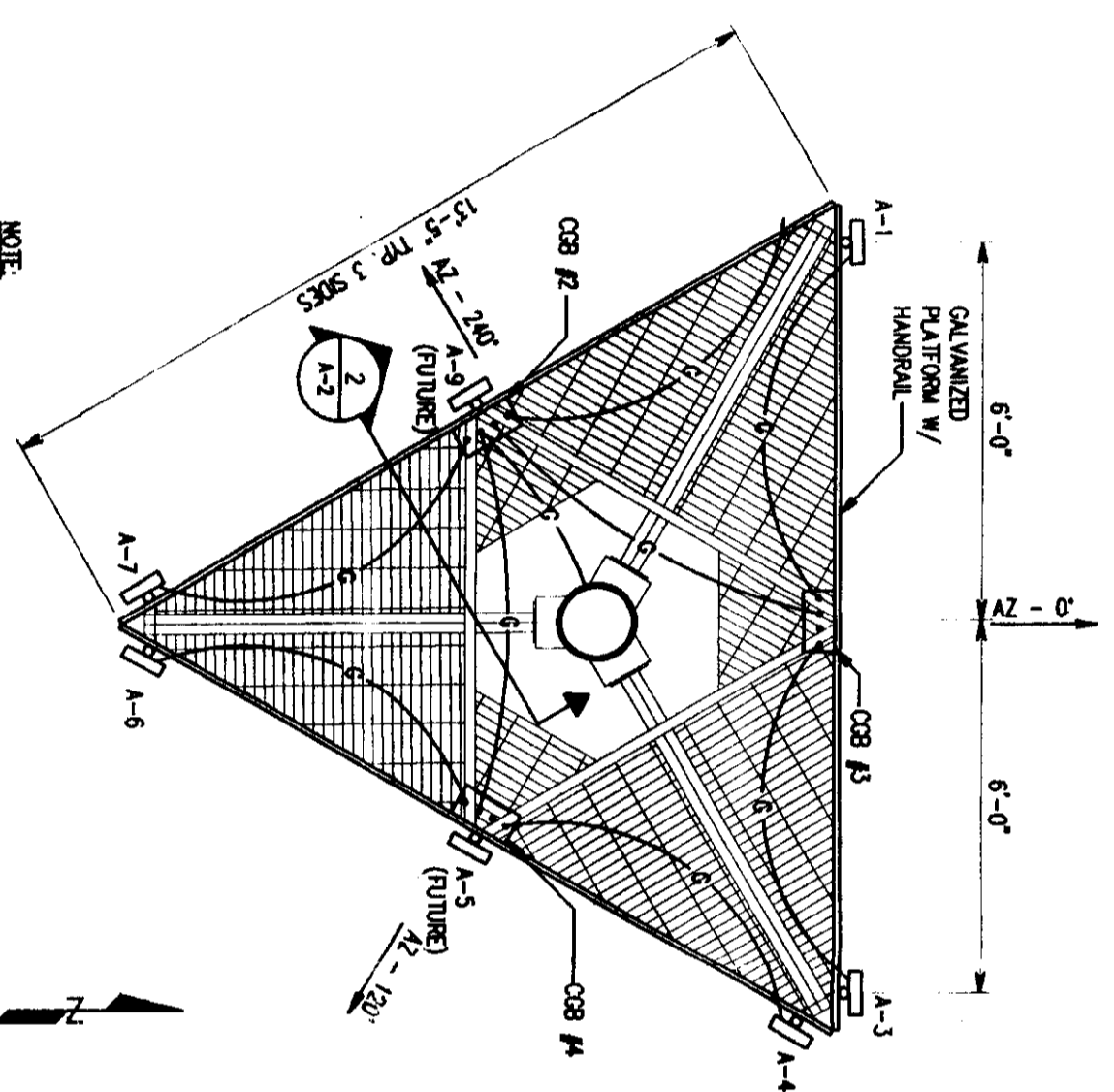
6 NEW PCS ANTENNAS  
TOP OF ANTENNA  
ANTENNA CENTER LINE  
OF RADIATION  
TOP OF POLE

REFER TO SITE PLAN & ELEVATION (DWG. 2-1)

ICE BRIDGE  
EQUIPMENT SHELTER BY OTHERS  
6'-0" HIGH FENCE  
POWER PBD & EMERGENCY LITE  
NEW EQUIPMENT SHELTER SCREW ANCHOR  
NEW FOUNDATION CONSSOM, DESIGN BY OTHERS  
GPS  
NEW MONOPOLE BY OTHERS  
REF. E.L. 0.0'

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

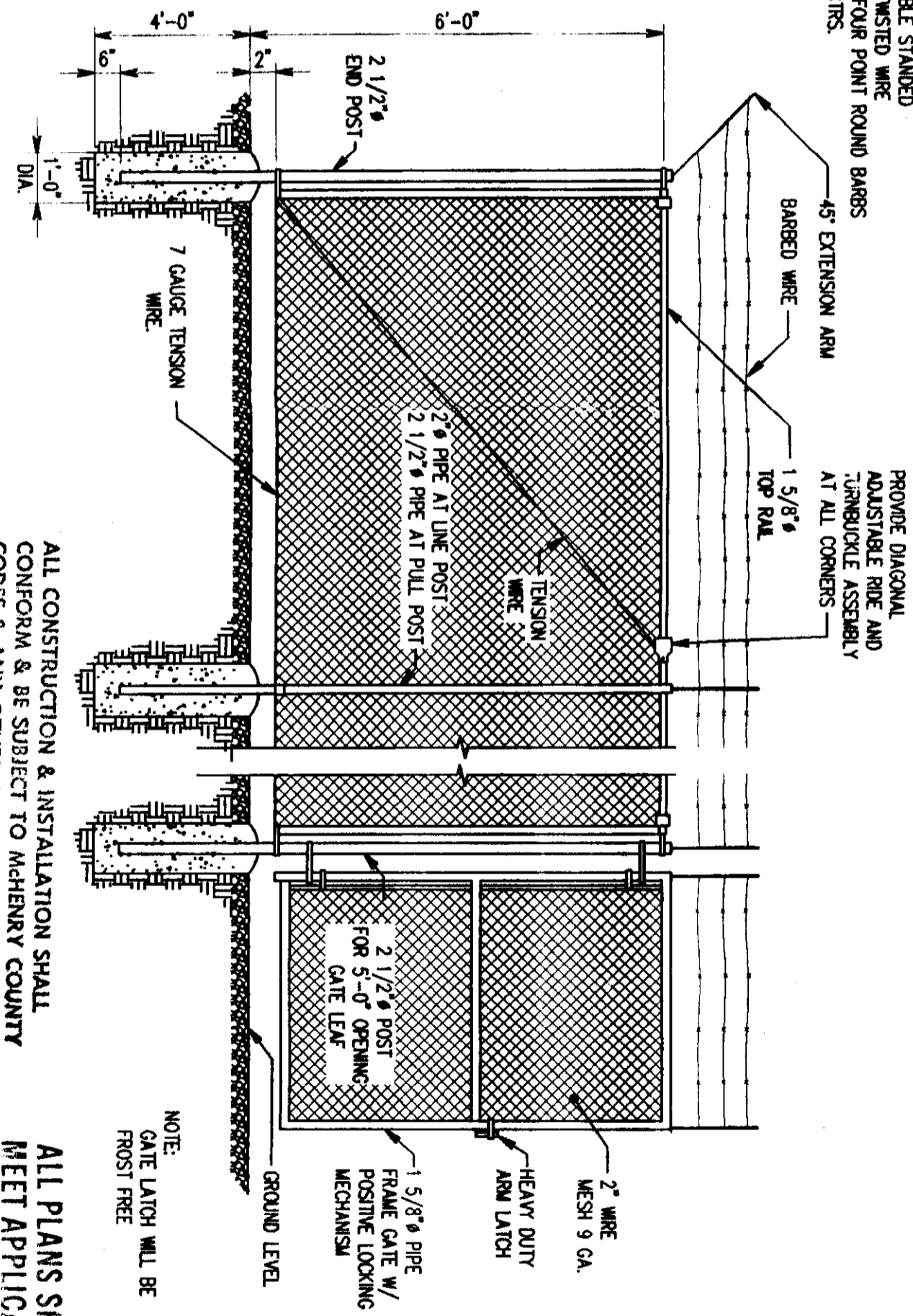
E1  
A-2



**NOTE:**  
MONOPOLE AND PLATFORM IS DESIGNED BY OTHERS  
SEE SITE PLAN FOR ANTENNA AZIMUTH  
**ANTENNA LOCATION PLAN**  
SCALE: 3/8"=1'-0"

1  
A-2

3 STRANDS DOUBLE STANDED  
12 1/2 GAUGE TWISTED WIRE  
WITH 14 GAUGE FOUR POINT ROUND BARBS  
PLACED AT 5" CRTS.

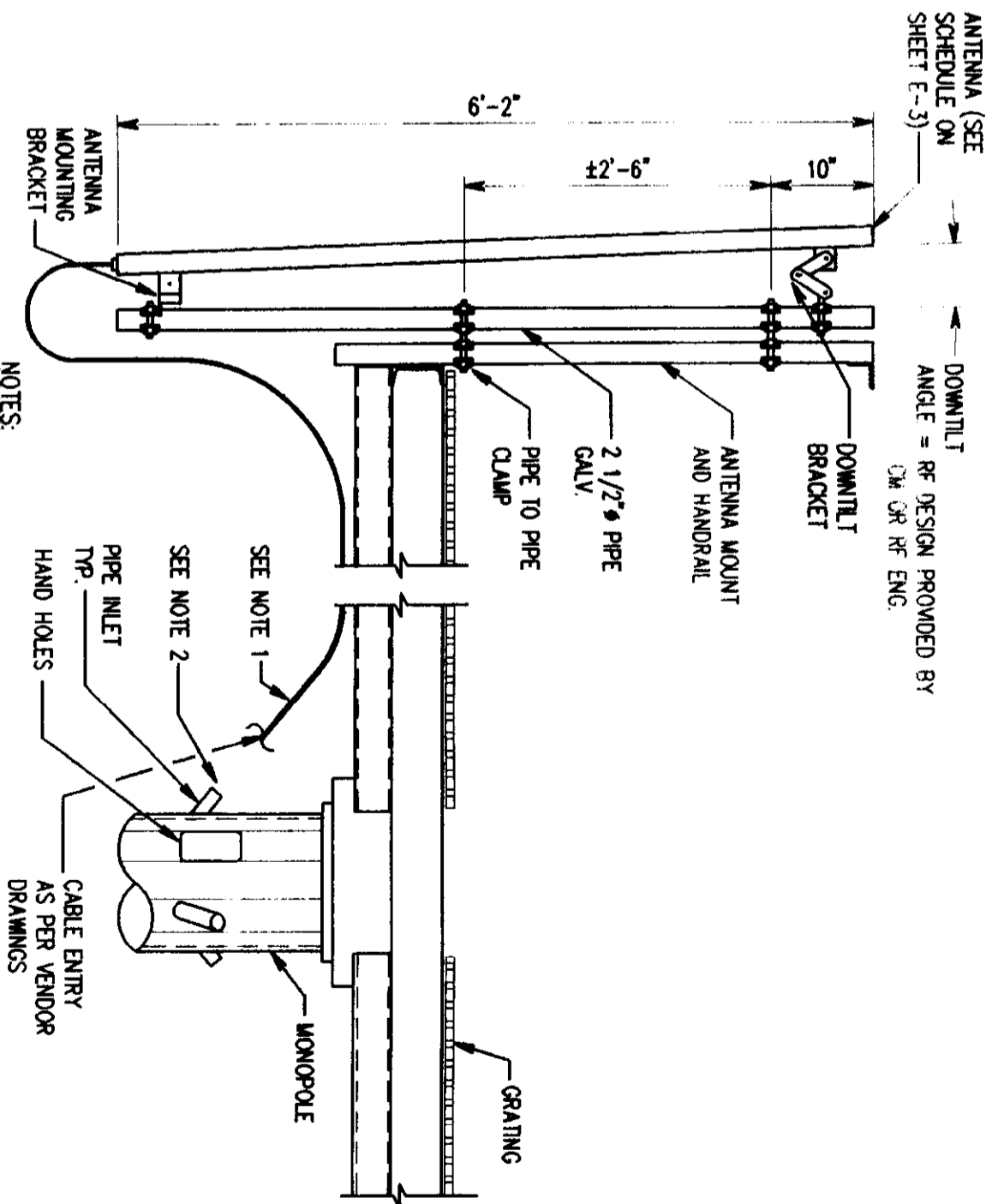


ALL CONSTRUCTION & INSTALLATION SHALL CONFORM & BE SUBJECT TO MCHENRY COUNTY CODES & ANY OTHER APPLICABLE CODES & ORDINANCES.

ALL PLANS SHALL MEET APPLICABLE CODES INCLUDING MCHENRY COUNTY

**ELEVATION**  
SCALE: 3/8"=1'-0"

E2  
A-2



- NOTES:**
1. SECURE CABLES TO GRATING WITH THE WRAPS 3'-0" O.C.
  2. PROVIDE KELLONS GRIP AROUND CABLES AND FASTEN TO TO EXISTING J-HOOKS INSIDE MONOPOLE

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

2  
A-2

**SEE ALL NOTES**

**PRIMECO**  
PERSONAL COMMUNICATIONS  
ONE PERCE PLACE  
SUITE 100  
ITASCA, ILLINOIS 60143  
OFFICE: (630) 773-1800  
FAX: (630) 286-1580

**APPROVALS**

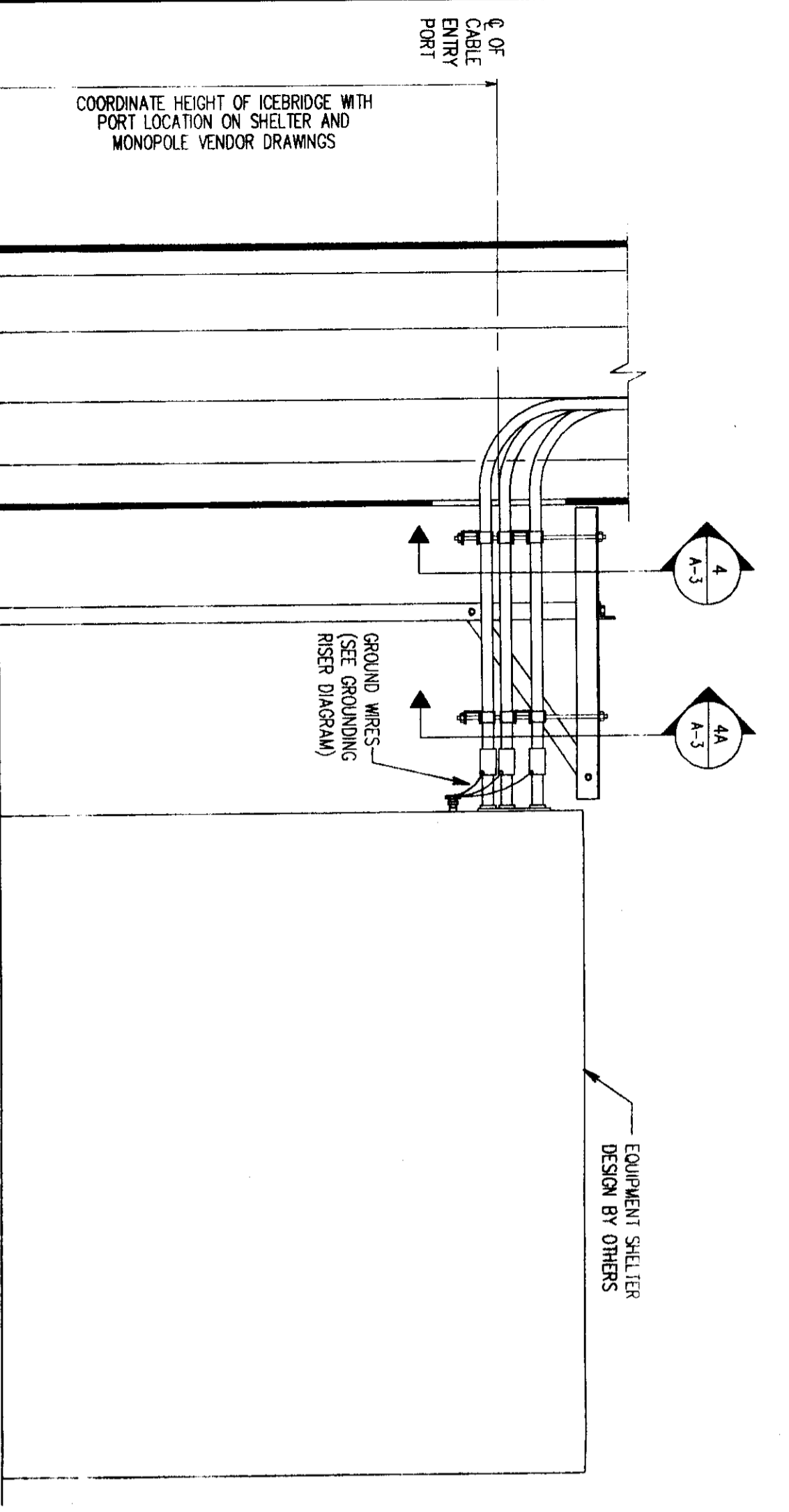
PRIMECO \_\_\_\_\_  
LANDLORD \_\_\_\_\_  
LEASING \_\_\_\_\_  
R.F. \_\_\_\_\_  
ZONING \_\_\_\_\_  
CONSTRUCTION \_\_\_\_\_  
BASE \_\_\_\_\_

Sargent & Lundy...  
PROJECT NO. 1008-018  
DRAWN BY: R.B.G.  
CHECKED BY: W.A.L.

A	02-18-07	COR. CONSTRUCTION BY S & L
B	02-21-07	REVISION FOR CONSTRUCTION

**RAWLAND MONOPOLE CGB 4128-1 PRAIRIE GROVE**  
FERREDE HEART & PATTO  
3321 S. ROUTE 51  
CRYSTAL LAKE  
ILLINOIS, 60004

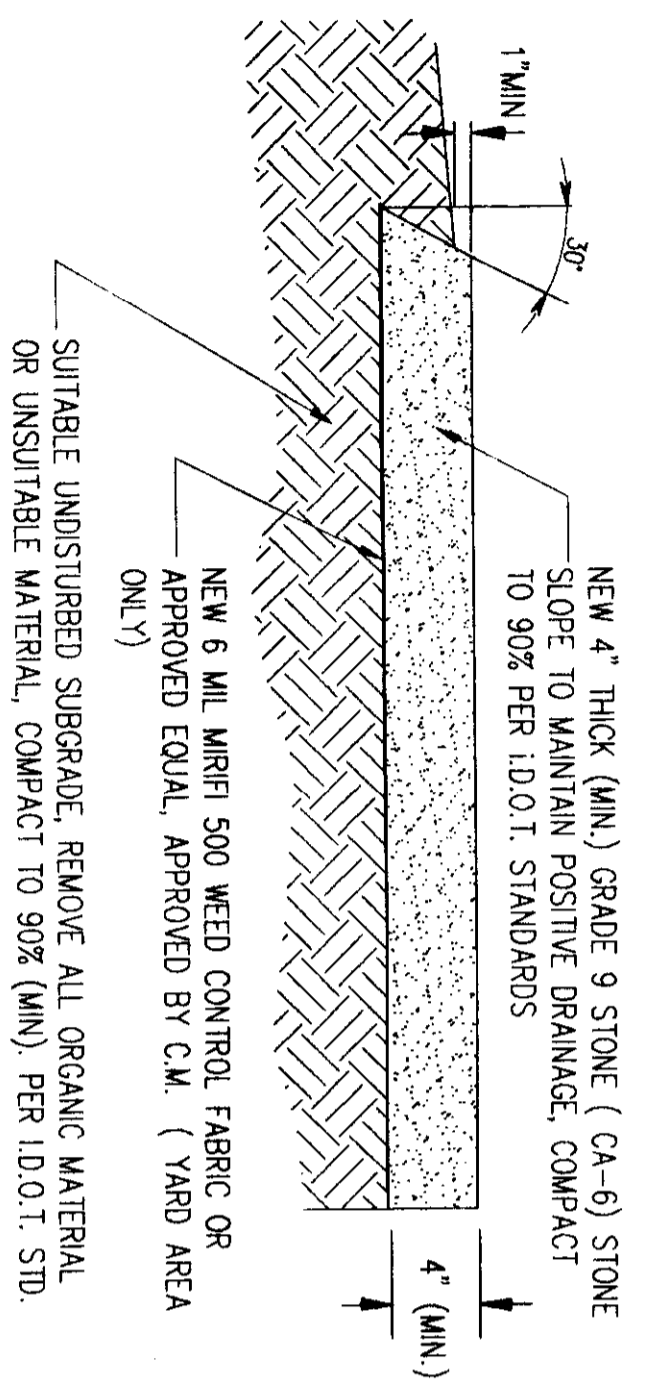
ANTENNA LOCATION PLAN  
SECTIONS & ELEVATIONS  
A-2



# SEE ATT. NOTES

**SECTION**  
SCALE: 1/2"=1'-0"

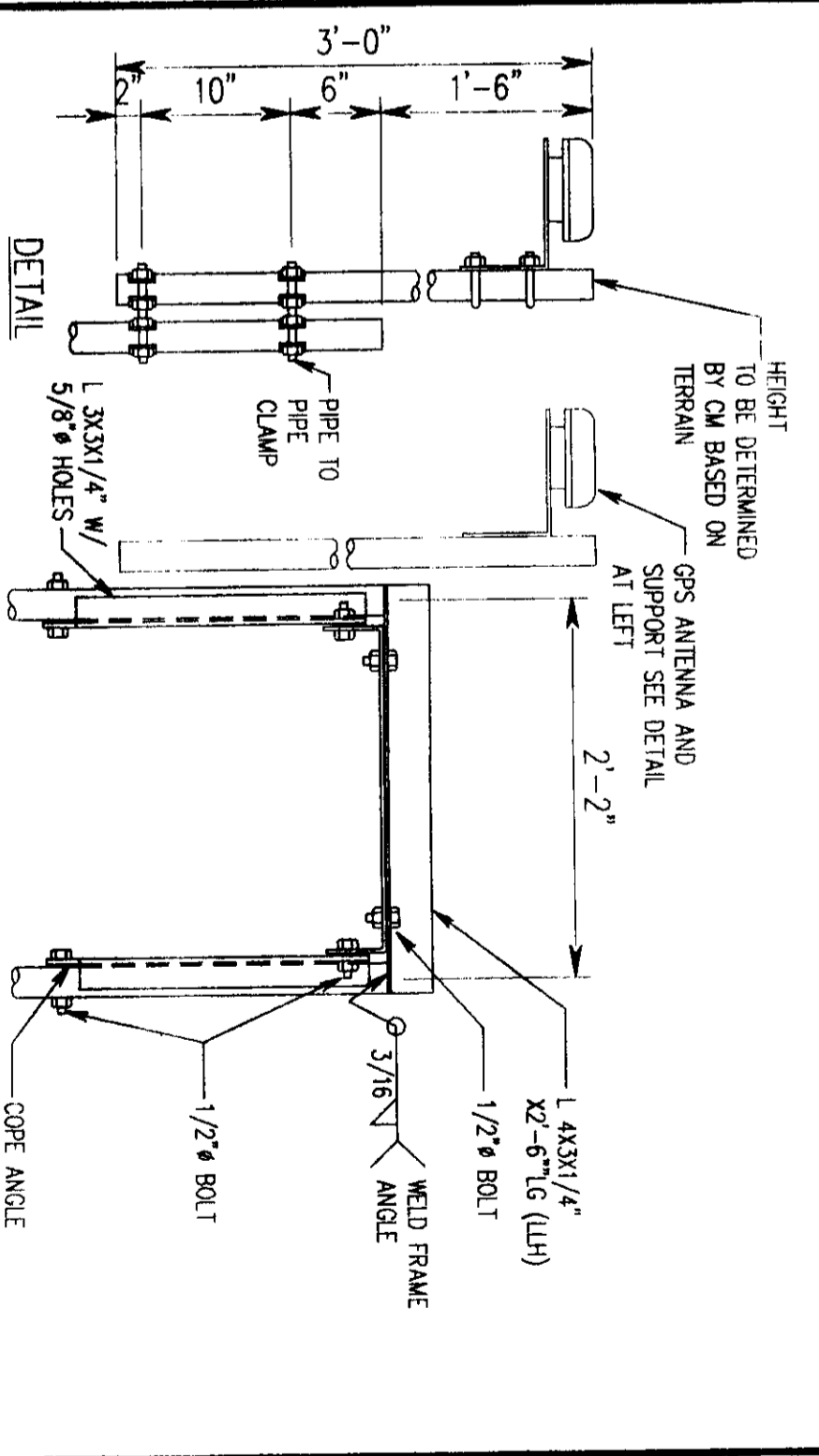
ALL CONSTRUCTION & INSTALLATION SHALL CONFORM & BE SUBJECT TO MCHENRY COUNTY CODES & ANY OTHER APPLICABLE CODES & ORDINANCES.



**YARD / DRIVEWAY PAVEMENT**  
SCALE: N.T.S.

SECTION 3  
SCALE: 1/2"=1'-0"

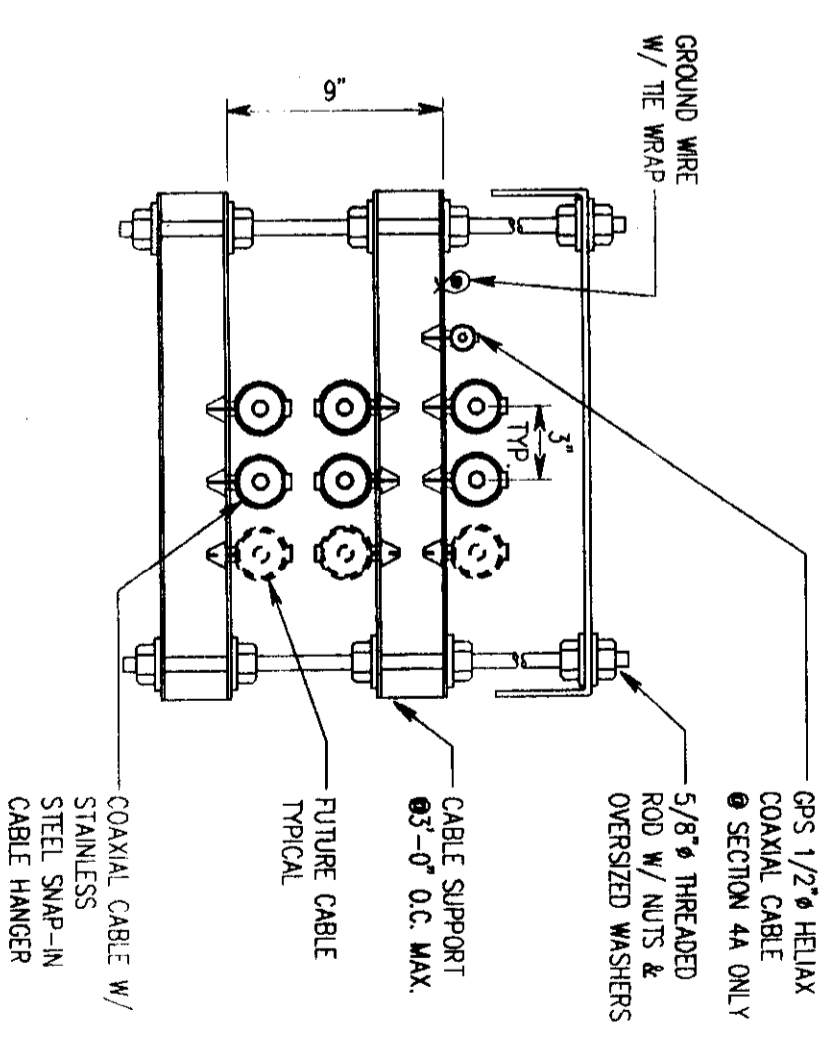
NOTE:  
WEED CONTROL FABRIC SHALL BE USED UNDER ALL AREAS OF THE YARD, INCLUDING UNDER THE SHELTER  
SEE SHEET Z-1 FOR DRIVEWAY WIDTH.



NOTE:  
ALL BOLTS TO BE SUPPLIED W/ NUTS AND WASHERS

**SECTION**  
SCALE: 1"=1'-0"

ALL PLANS SHALL MEET APPLICABLE CODES INCLUDING MCHENRY COUNTY



**SECTION**  
SCALE: 1 1/2"=1'-0"

SECTION 4  
SECTION 4A

**PRIMECO**  
PERSONAL COMMUNICATIONS

ONE PERCE PLACE  
SUITE 100  
ITASCA, ILLINOIS 60143  
OFFICE: (830) 773-1600  
FAX: (830) 286-1690

**APPROVALS**

PRIMECO \_\_\_\_\_

LANDLORD \_\_\_\_\_

LEASING \_\_\_\_\_

H.F. \_\_\_\_\_

ZONING \_\_\_\_\_

CONSTRUCTION \_\_\_\_\_

BASE \_\_\_\_\_

*Bergant & Lundy*

PROJECT NO. 10103-013

DRAWN BY: R.B.C.

CHECKED BY: W.J.L.

A	02-16-97	FOR CONSTRUCTION BY S.F.L.
B	02-21-97	RENGED FOR CONSTRUCTION
C		
D		
E		
F		
G		
H		
I		
J		
K		
L		
M		
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Q		
R		
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U		
V		
W		
X		
Y		
Z		

**RAWLAND MONOPOLE CGB 4128-1 PRAIRIE GROVE**

FRESIDE HEART & PATTO  
3921 S. ROUTE 31  
CRYSTAL LAKE  
ILLINOIS, 60014

SHEET TITLE

SECTIONS

SHEET NUMBER

**A-3**

**PRIMECO**  
 PERSONAL COMMUNICATIONS  
 ONE PIERCE PLACE  
 SUITE 1100  
 ILASCA, ILLINOIS 60143  
 OFFICE: (630) 773-9800  
 FAX: (630) 286-1580

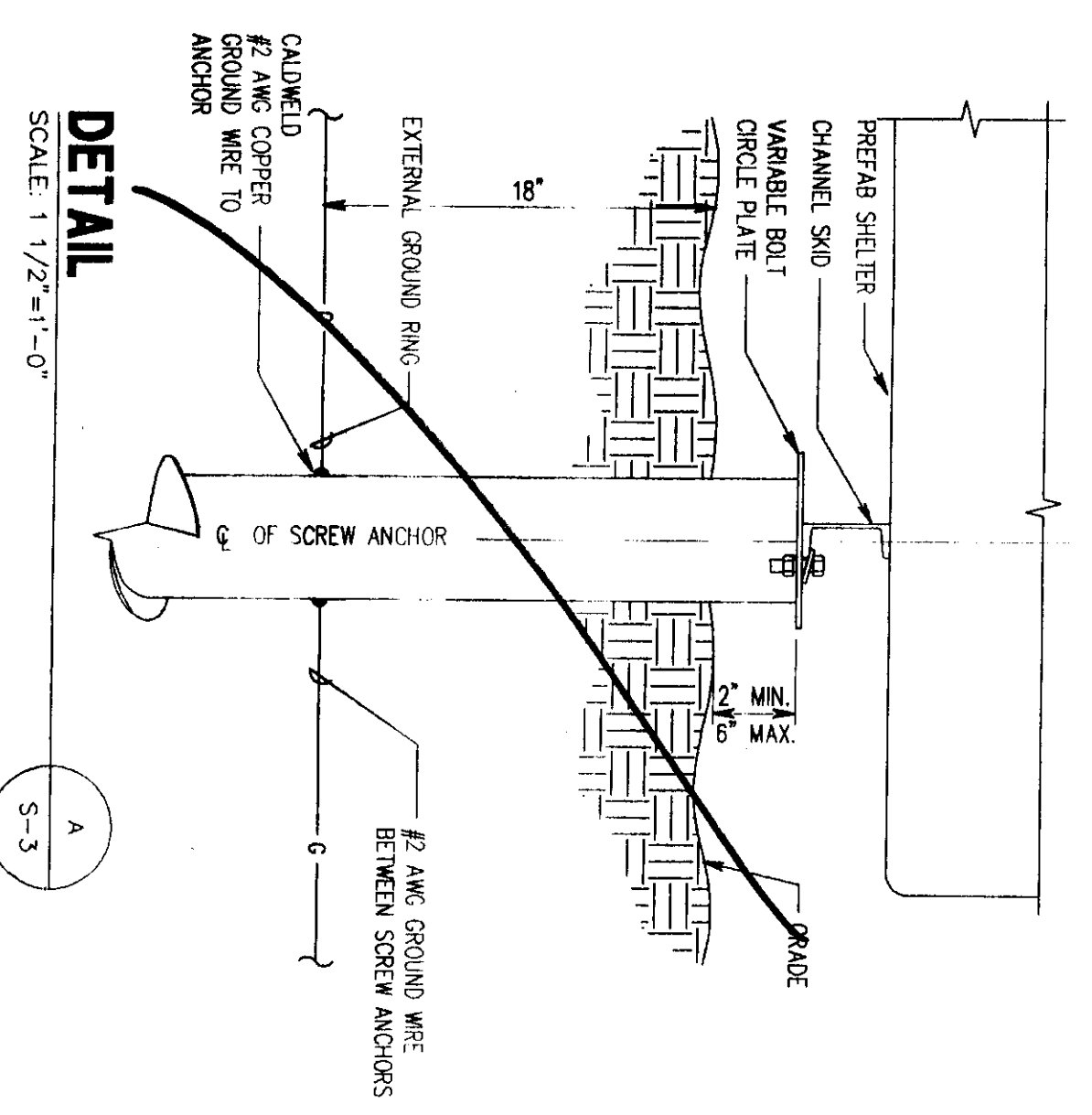
**APPROVALS**  
 PRIMECO \_\_\_\_\_  
 LANDLORD \_\_\_\_\_  
 LEASING \_\_\_\_\_  
 R.F. \_\_\_\_\_  
 ZONING \_\_\_\_\_  
 CONSTRUCTION \_\_\_\_\_  
 BASE \_\_\_\_\_

*Bergant & Lundy*  
 PROJECT NO. 10103-018  
 DRAWN BY: R.B.C.  
 CHECKED BY: W.J.L.

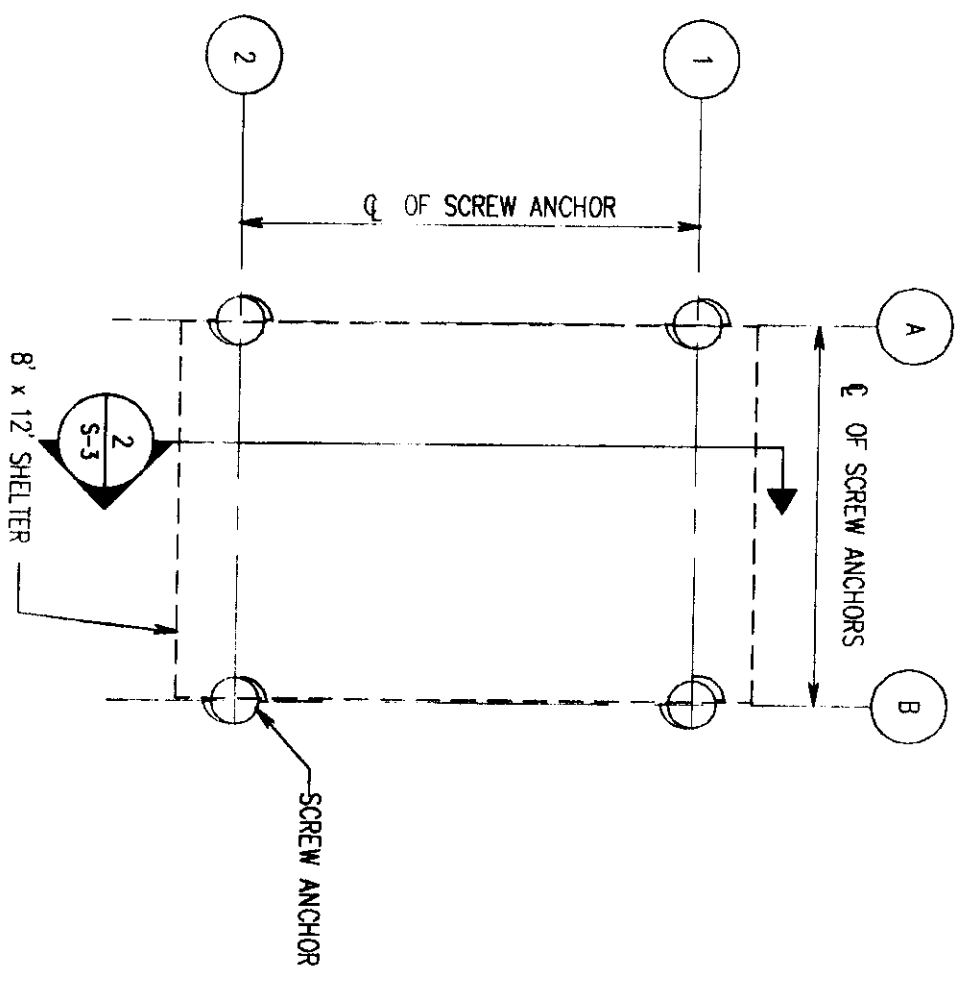
A	02-18-97	FOR CONSTRUCTION BY S & L
B	02-21-97	REVIS FOR CONSTRUCTION

**RAWLAND MONOPOLE CGB 4128-1 PRAIRIE GROVE**  
 FRESIDE HEART & PATIO  
 3321 S. ROUTE 31  
 CRYSTAL LAKE  
 ILLINOIS, 60014

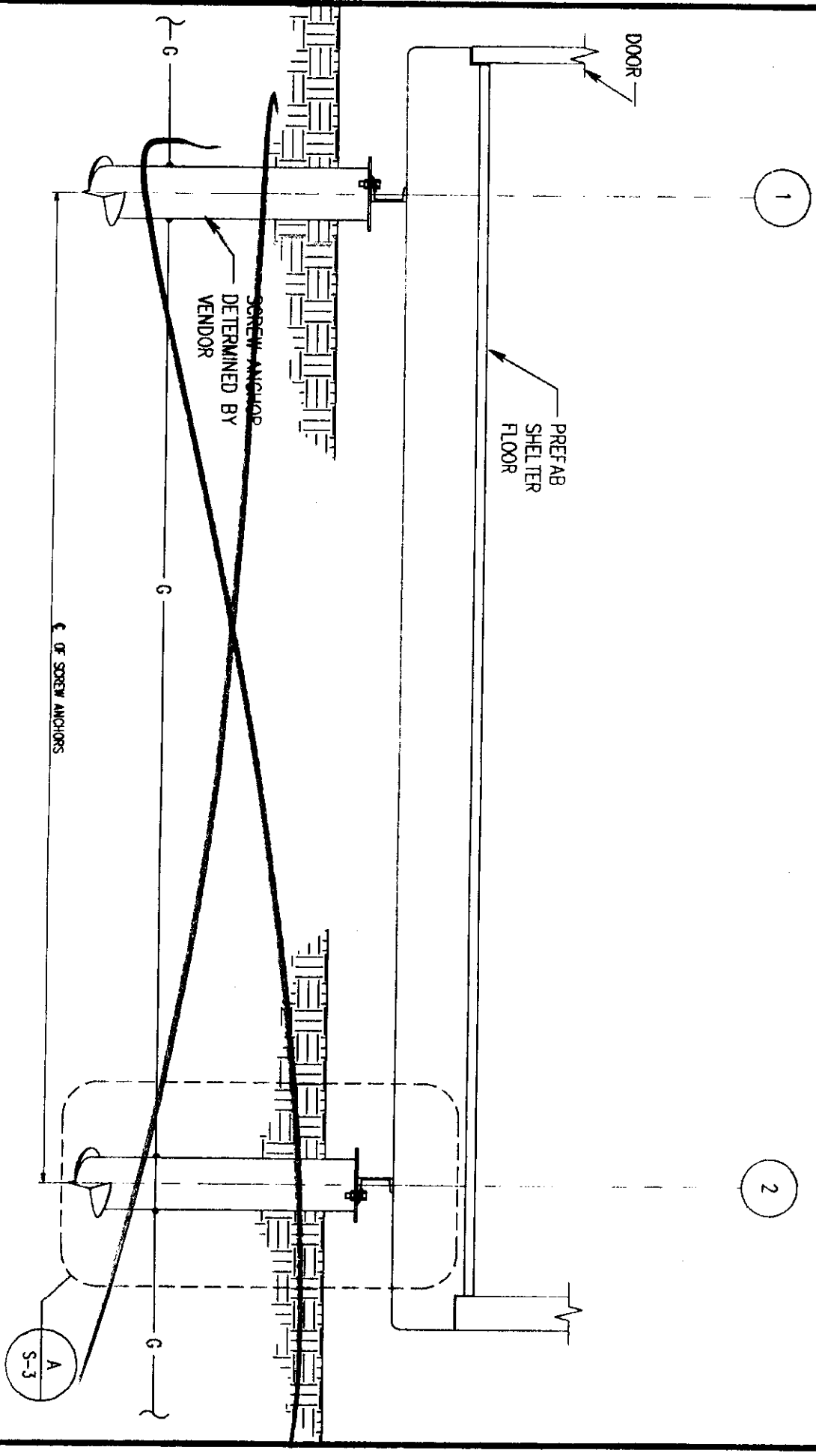
**SEATT. NOTES**  
 SHEET NUMBER  
**S-3**



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



**8' x 12' SHELTER SCREW ANCHOR LOCATION PLAN**  
 SCALE: 1/4"=1'-0"



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

**GENERAL NOTES**

*SEE PAGE R-6 IN R.O.G. PLAN FOR FOUNDATION*

1. FOUNDATION SHOWN IS FOR REFERENCE ONLY
2. EXACT FOUNDATION SPECIFICATION AND ANCHOR BOLT LAYOUT SHALL BE COORDINATED WITH SHELTER MANUFACTURER.

**CONCRETE NOTES**

1. ALL CAST IN PLACE CONCRETE SHALL BE MIXED AND PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318 AND ACI 301.
2. ALL CONCRETE SHALL HAVE A 28 DAY MINIMUM COMPRESSIVE STRENGTH OF 4000 psi.
3. ALL REINFORCING STEEL SHALL CONFORM TO ASTM 615 GRADE 60, DEFORMED BILLET STEEL BARS.
4. MINIMUM CONCRETE COVER OVER REINFORCING STEEL SHALL BE 3 INCHES UNLESS OTHERWISE NOTED.
5. CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL.

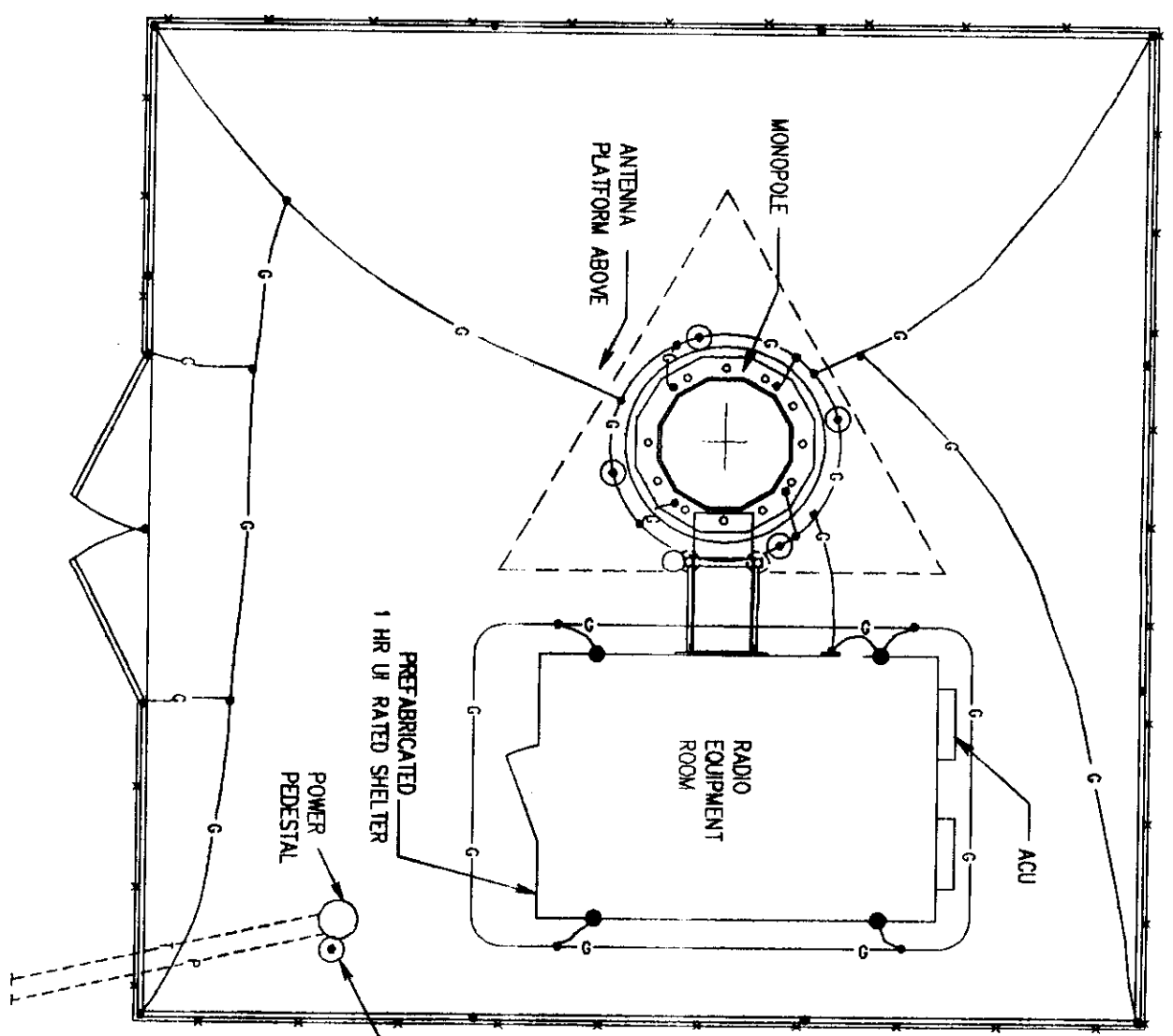
**ALL PLANS SHALL MEET APPLICABLE CODES INCLUDING MCHENRY COUNTY**  
 ALL CONSTRUCTION & INSTALLATION SHALL CONFORM & BE SUBJECT TO MCHENRY COUNTY CODES & ANY OTHER APPLICABLE CODES & ORDINANCES.

**LEGEND**

	SAFETY DISCONNECT SWITCH, SIZED AS NOTED	A	AMPERE
	PANELBOARD	V	VOLT
	KILLWATT HOUR METER	W	WIRE
	TRANSFORMER	C	CONDUIT
	GROUND	G	GROUND
	POLE	P	POLE
	SPGB (SURGE PROTECTOR GROUND BAR)	SPGB	(1/4"x8"x12")
	COB (COLLECTOR GROUND BAR)	COB	(1/4"x8"x24")
	EOB (EXTERNAL GROUND BAR)	EOB	(1/4"x8"x24")
	MGB (MASTER GROUND BAR)	MGB	(1/4"x8"x24")
	IGR (INTERNAL GROUND RING)	IGR	("HALO" GROUND)
	EGR (EXTERNAL GROUND RING)	EGR	EXTERNAL GROUND RING
	ACU (AIR CONDITIONER UNIT)	ACU	AIR CONDITIONER UNIT
	POWER WIRING, SIZED AS NOTED	P	POWER WIRING, SIZED AS NOTED
	TELCO WIRING, SIZED AS NOTED	T	TELCO WIRING, SIZED AS NOTED
	GROUND WIRING, SIZED AS NOTED	G	GROUND WIRING, SIZED AS NOTED

**ELECTRICAL NOTES**

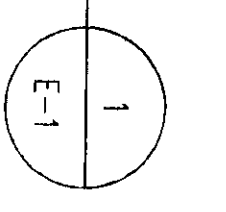
- ALL ELECTRICAL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE (EDITION ACCEPTED BY LOCAL JURISDICTION) AND APPLICABLE LOCAL CODES.
- GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
- ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED.
- WIRES AND CABLES FOR POWER AND LIGHTING SHALL BE COPPER WITH TYPE XHHW, THHN, OR THHN INSULATION. SOLID CONDUCTORS FOR #10 AWG AND SMALLER, STRANDED FOR LARGER THAN #10 AWG. MINIMUM SIZE #12 AWG.
- WIRES AND CABLES FOR POWER AND LIGHTING SHALL BE INSTALLED IN GALVANIZED RIGID STEEL CONDUIT OR FLEXIBLE LIQUIDTIGHT CONDUIT AS INDICATED ON DRAWING.
- CONTRACTOR TO OBTAIN ALL PERMITS, PAY PERMIT FEES, AND BE RESPONSIBLE FOR SCHEDULING INSPECTIONS.
- CONTRACTOR TO OBTAIN LOCAL POWER AND TELEPHONE COMPANY APPROVAL AND COORDINATE WITH UTILITY COMPANIES SERVICE ENTRANCE REQUIREMENTS.
- PROVIDE ALL LABOR AND MATERIAL DESCRIBED ON THIS DRAWING, AND ALL ITEMS INCIDENTAL TO COMPLETING AND PRESENTING THIS PROJECT AS FULLY OPERATIONAL.
- REFER TO STRUCTURAL DRAWINGS FOR SURFACE-MOUNTED GROUND BARS AND ("CADWELL") TO ANTENNA MASTS, FENCE POSTS, MONOPOLE, AND THE GROUND RODS. REMAINING GROUNDING CONNECTIONS SHALL BE COMPRESSION FITTINGS.
- GROUND COAXIAL CABLE SHIELDS AT BOTH ENDS WITH MANUFACTURERS' GROUNDING KITS.
- ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. EXCEPT AS OTHERWISE INDICATED, GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY.
- CONTRACTOR TO PROVIDE GROUND RODS AND GROUND RING AS SHOWN ON SITE PLAN AND GROUNDING RISER DIAGRAM. CONTRACTOR SHALL TEST AND VERIFY THAT THE IMPEDANCE DOES NOT EXCEED 5 OHMS TO GROUND BY MEANS OF A BIDDLE-MEGER TESTER. GROUNDING AND OTHER OPERATIONAL TESTING SHALL BE WITNESSED BY THE OWNER'S REPRESENTATIVE.
- CONTRACTOR TO PROVIDE A SCHEDULE 40 PVC UNDERGROUND CONDUIT WITH PULL WIRE BETWEEN TELEPHONE COMPANY DEMARCATION POINT AND TELCO LINE BOX ON POWER PEDESTAL.
- CONTRACTOR TO PROVIDE A SCHEDULE 40 PVC UNDERGROUND CONDUIT WITH CABLE BETWEEN ELECTRICAL UTILITY COMPANY DEMARCATION POINT AND KWH METER BASE ON POWER PEDESTAL.
- NOTIFY JUILLE, (1-800-892-0123) PRIOR TO ANY EXCAVATION.
- CONTRACTOR TO PROVIDE GROUND INSPECTION WELL ONLY IF REQUIRED BY LOCAL JURISDICTION. REFER TO APPROPRIATE DETAIL ON DRAWING E-3.
- GROUNDING CONDUCTORS SHALL BE COPPER ONLY. ABOVE GROUND EITHER SOLID OR STRANDED CONDUCTORS ARE PERMITTED. IGR AND ALL EXTERNAL CONDUCTORS (WITH THE EXCEPTION FOR GROUND WIRE BETWEEN THE TOP AND THE BOTTOM OF THE ANTENNA TOWER) MUST BE BARE. EQUIPMENT GROUND LEADS IN CABLE TRAYS MUST BE GREEN INSULATED. BELOW GROUND BARE SOLID TINNED WIRE SHALL BE USED. ALL WIRES MUST BE #2 AWG MIN. WITH THE EXCEPTION OF GROUND WIRES FOR MISCELLANEOUS METALLIC OBJECTS IN THE EQUIPMENT SHELTER, WHERE #8 AWG WIRES CAN BE USED.
- THE GROUND ELECTRODE SYSTEM SHALL CONSIST OF SREW ANCHOR & DRIVEN GROUND RODS UNIFORMLY SPACED AROUND CELL SITE. THE GROUND RODS SHALL BE 5/8"x8"-0" COPPER CLAD STEEL. THE RODS SHALL BE INTERCONNECTED WITH #2 AWG BARE SOLID TINNED COPPER GROUND WIRE BURIED 18" BELOW THE SURFACE OF THE SOIL. MINIMUM DISTANCE BETWEEN GROUND RODS - 8'. MAXIMUM - 16' AND THE FOUR SREW ANCHORS OF THE SHELTER.
- GROUNDING CONDUCTORS FROM ABOVE THE GROUND TO THE BELOW GRADE THROUGH A PVC PIPE. PVC PIPE SHALL EXTEND AT LEAST 12" ABOVE AND 12" BELOW THE GRADE LEVEL.



**NOTE:**  
 FLUON POWER PEDESTAL, NO. F11003, MOUNTED ON SREW ANCHOR W/ALBANK 1/375-RL-KR METER FITTING SO-D-070233NB, HUBBELL S10MS & HUBBELL BR100TW INSTALLED BY G.C. TELCO. SHALL PROVIDE & INSTALL TELETYPE TELCO INTERFACE ELECTRIC UTILITY SHALL PROVIDE AND INSTALL METER.

**NOTES:**  
 (\*\*) SEE GROUNDING RISER DIAGRAM FOR MORE GROUNDING CONNECTION DETAILS.

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

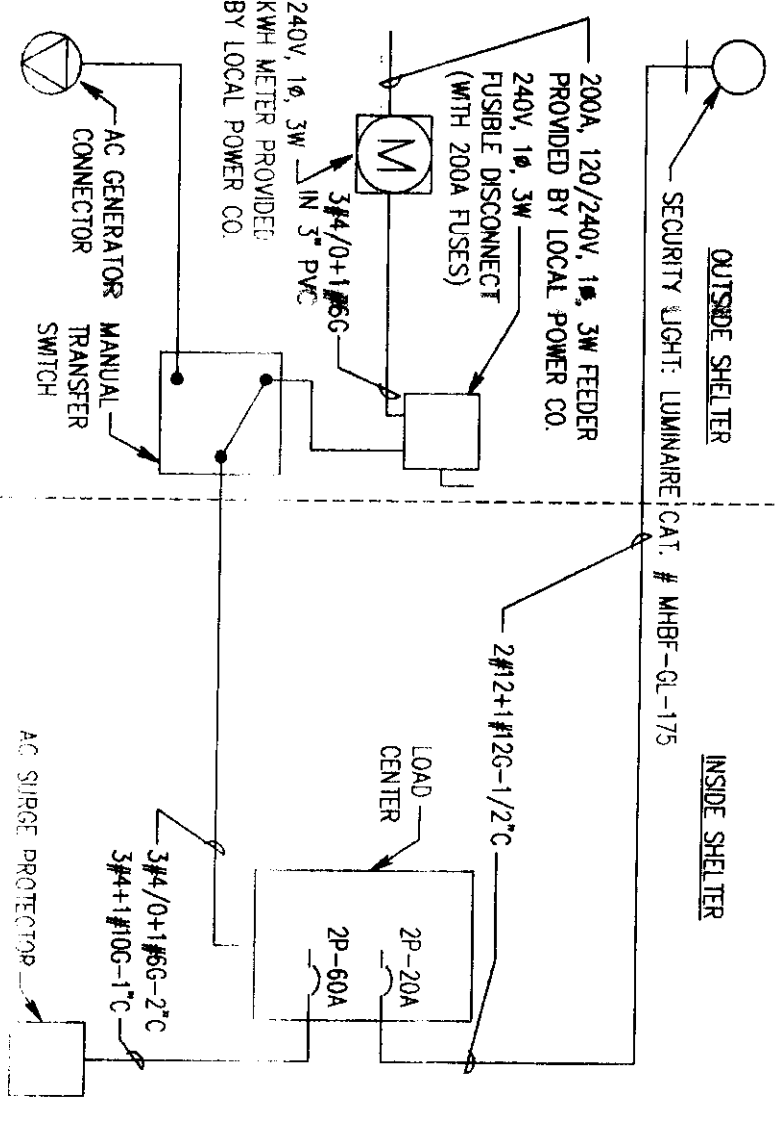


**Install all electric A/P McHenry Cty. and Nec. code req.**

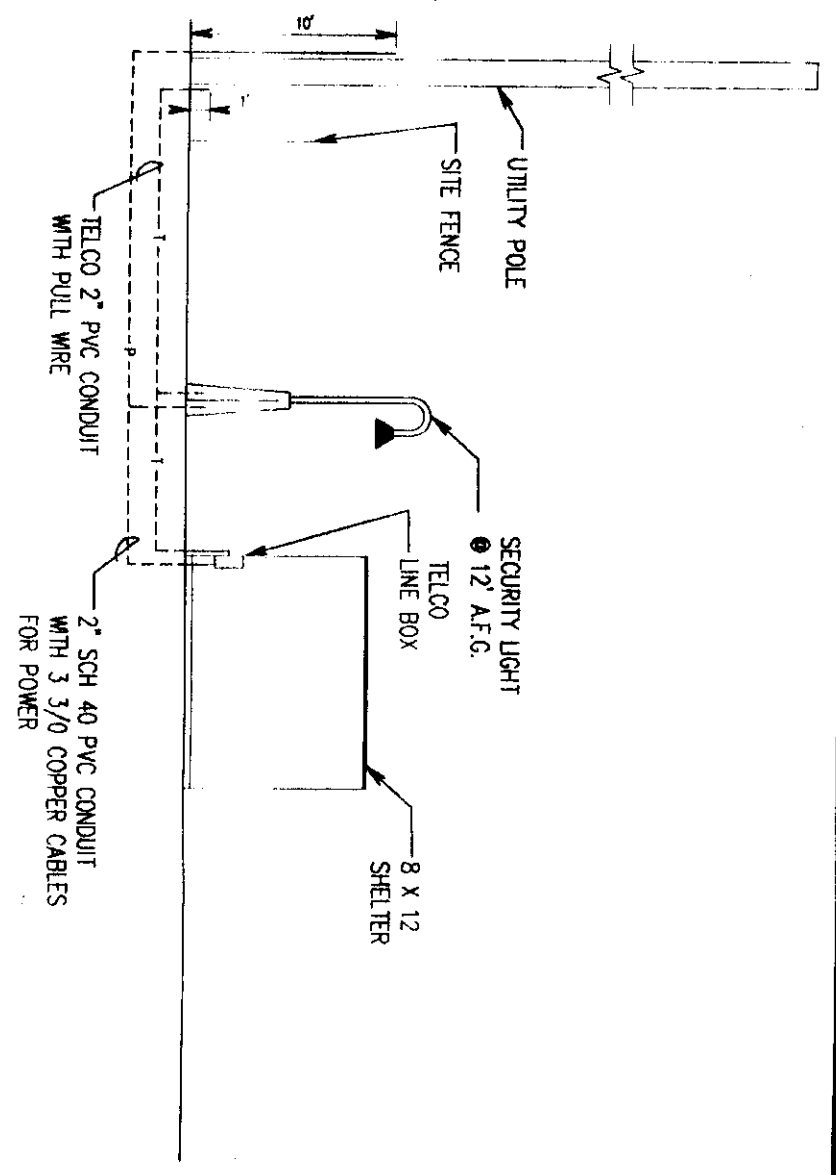
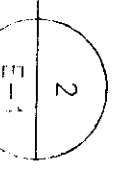
**ALL CONSTRUCTION & INSTALLATION SHALL CONFORM & BE SUBJECT TO MCHENRY COUNTY CODES & ANY OTHER APPLICABLE CODES & ORDINANCES.**

**ALL PLANS SHALL MEET APPLICABLE CODES INCLUDING MCHENRY COUNTY**

**SEE ATT. NOTES**



**POWER DIAGRAM**  
 SCALE: N.T.S.



**ELECTRICAL/TELEPHONE RISER**  
 SCALE: N.T.S.



**PRIMECO**  
 PERSONAL COMMUNICATIONS  
 ONE PERCE PLACE  
 SUITE 1100  
 TASCA, ILLINOIS 60143  
 OFFICE: (630) 773-1800  
 FAX: (630) 285-1880

**APPROVALS**

PRIMECO \_\_\_\_\_

LANDLORD \_\_\_\_\_

LEASING \_\_\_\_\_

R.F. \_\_\_\_\_

ZONING \_\_\_\_\_

CONSTRUCTION \_\_\_\_\_

BASE \_\_\_\_\_

Sargent & Lundy

PROJECT NO. 10103-015

DRAWN BY: R.B.C.

CHECKED BY: W.J.L.

8	02-21-97	REVISION FOR CONSTRUCTION
A	02-18-97	FOR CONSTRUCTION BY S & L

**RAWLAND MONOPOLE CGB 4128-1 PRAIRIE GROVE**

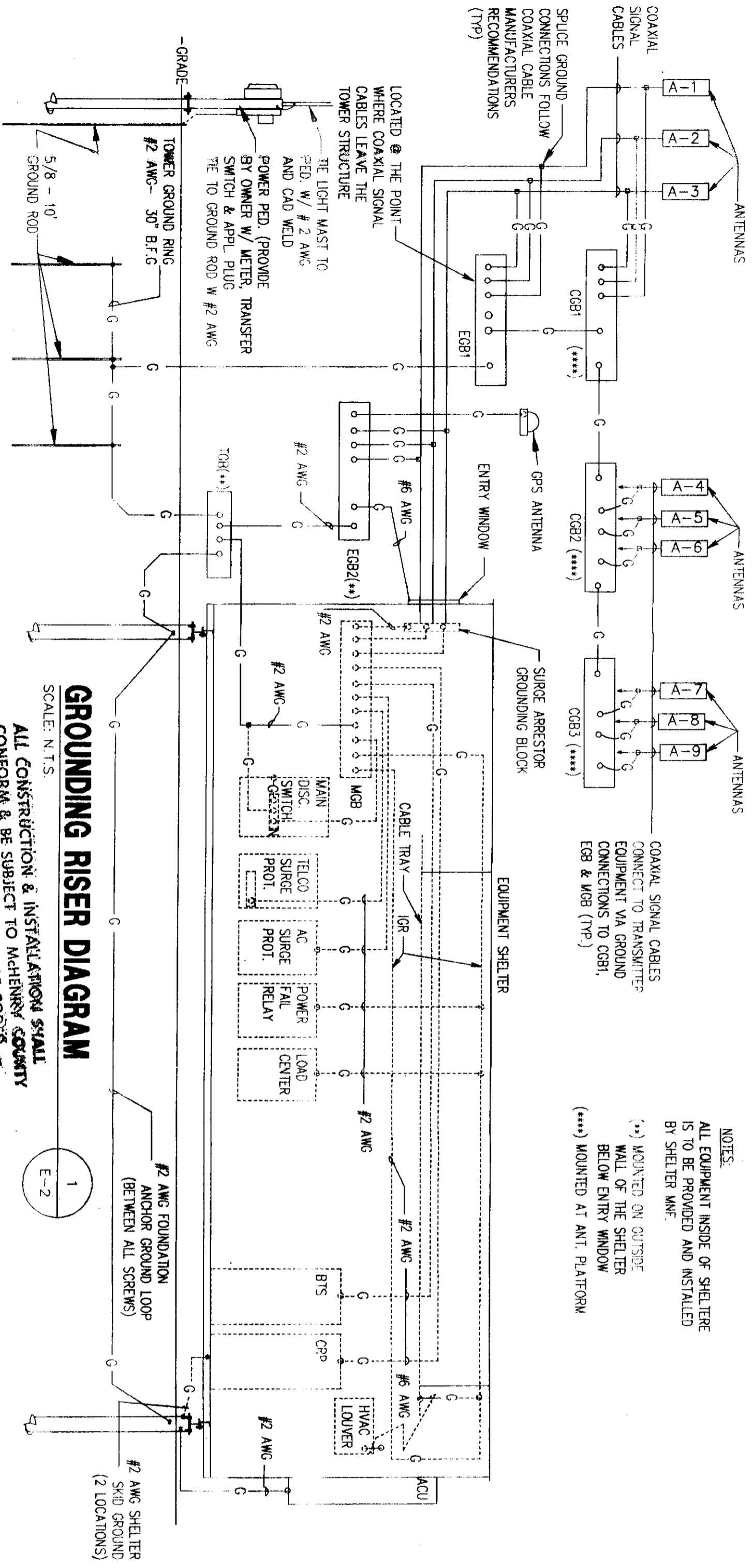
FRESIDE HEART & PATIO  
 5321 S. ROUTE 31  
 CRYSTAL LAKE  
 ILLINOIS 60014

**ELECTRICAL PLAN, RISER NOTES AND DETAILS**

SHEET NUMBER

**E-1**

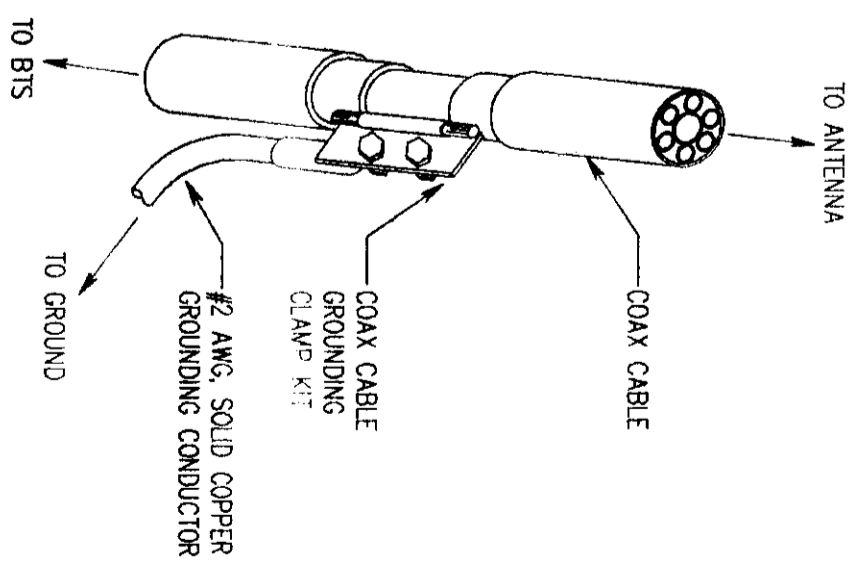




NOTES:  
 ALL EQUIPMENT INSIDE OF SHELTER IS TO BE PROVIDED AND INSTALLED BY SHELTER MANF.  
 (\*\*\*) MOUNTED ON OUTSIDE WALL OF THE SHELTER BELOW ENTRY WINDOW  
 (\*\*\*\*) MOUNTED AT ANT. PLATFORM

**GROUNDING RISER DIAGRAM**  
 SCALE: N.T.S.  
 ALL CONSTRUCTION & INSTALLATION SHALL CONFORM & BE SUBJECT TO McHENRY COUNTY CODES & ANY OTHER APPLICABLE CODES & ORDINANCES.

1  
E-2

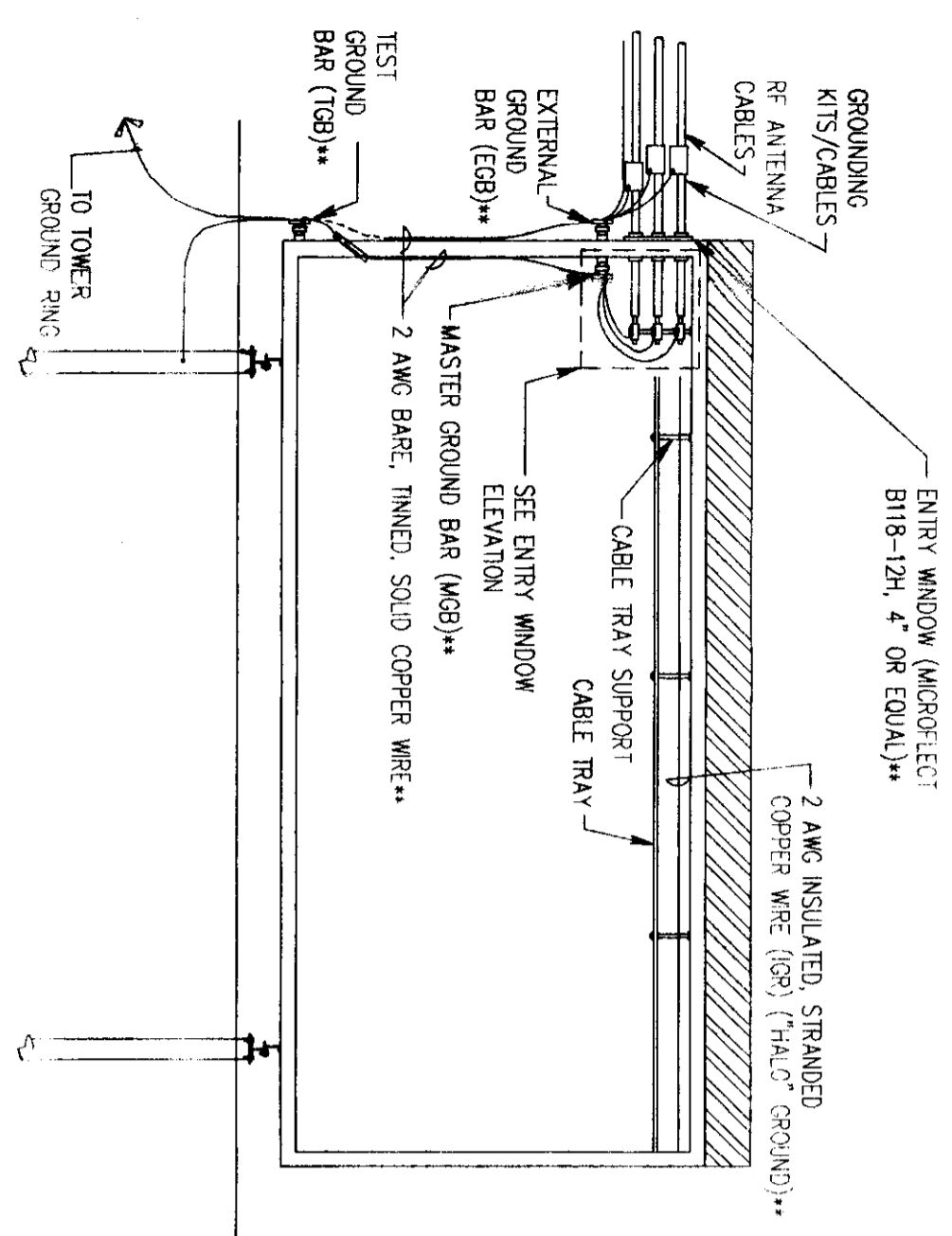


**COAX CABLE GROUNDING DETAIL**  
 SCALE: N.T.S.

2  
E-2

**SEE ATT. NOTES**

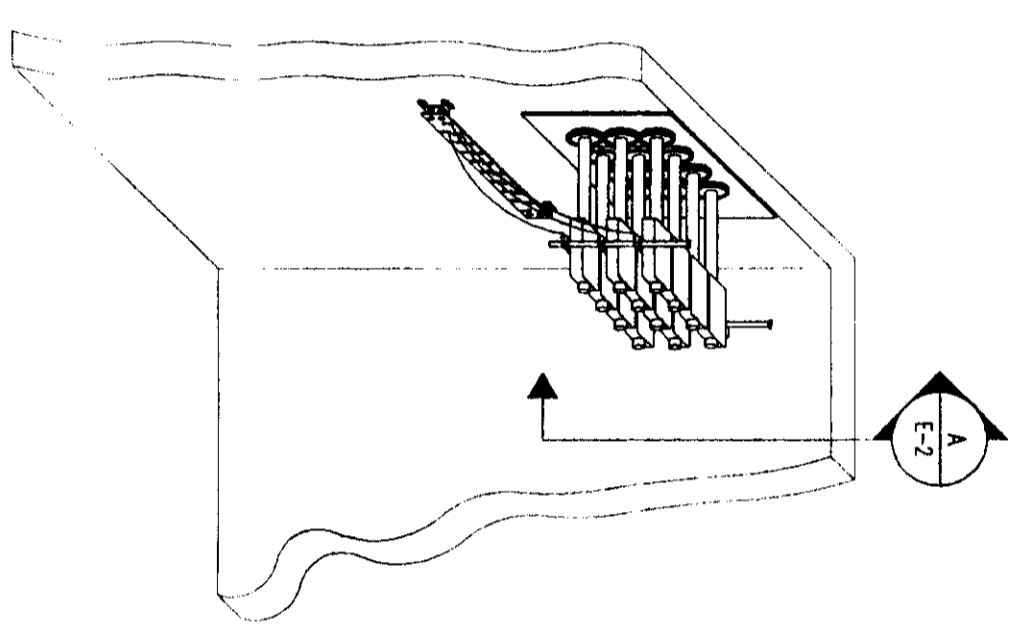
Install all electric A/P McHenry Cty. and Nec. code req.



(\*\*) PROVIDED AND INSTALLED BY SHELTER MANUFACTURER

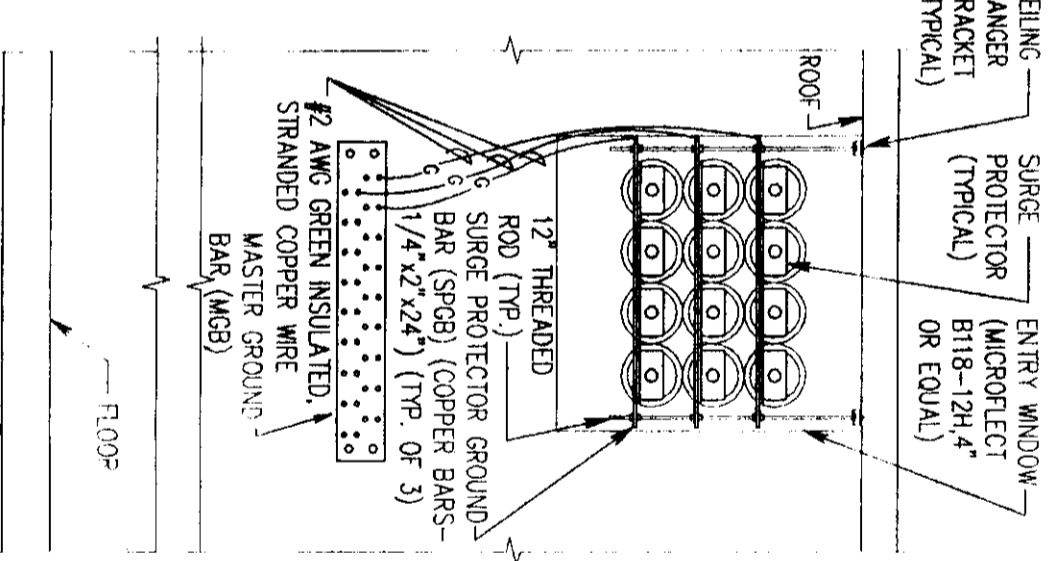
**PARTIAL SHELTER GROUNDING ELEVATION**  
 SCALE: 1"=1'-0"

3  
E-2



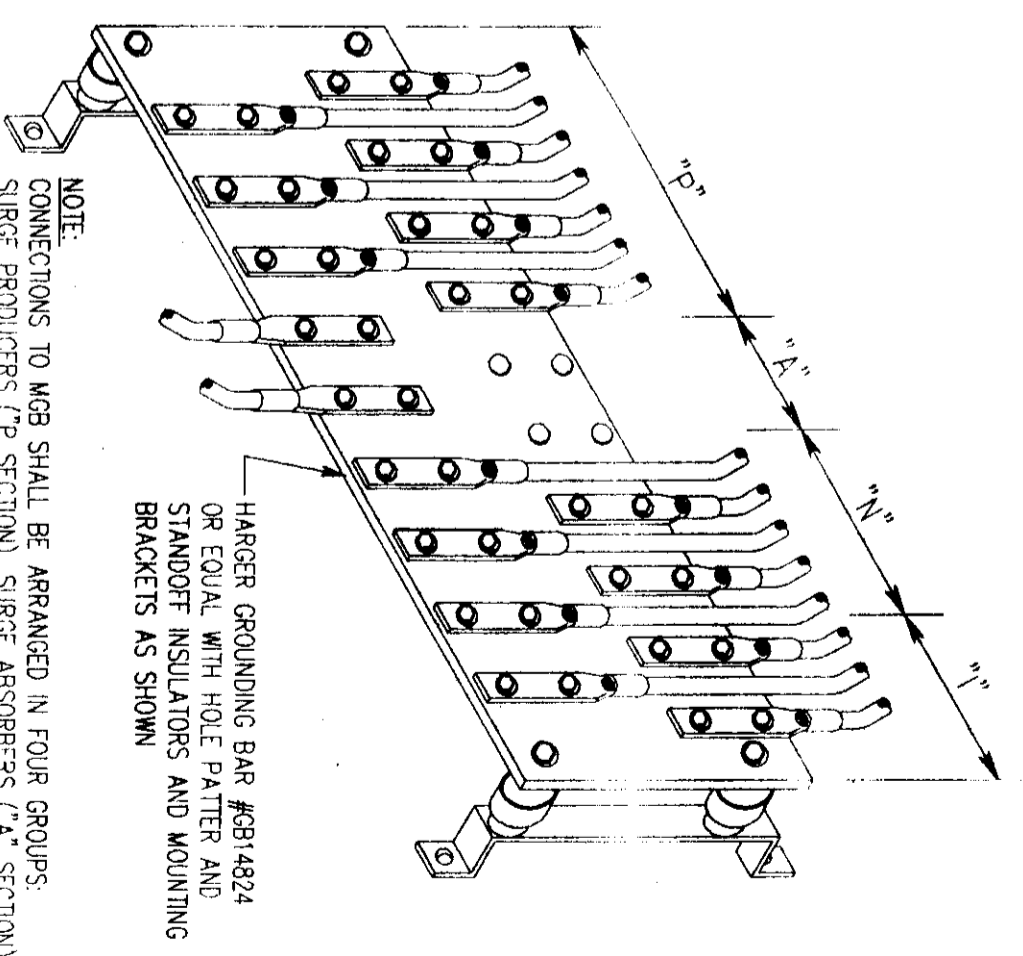
**ENTRY WINDOW ELEVATION**  
 SCALE: 3/8"=1'-0"

4  
E-2



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

5  
E-2



NOTE:  
 CONNECTIONS TO MGB SHALL BE ARRANGED IN FOUR GROUPS: SURGE PRODUCERS ("P" SECTION), SURGE ABSORBERS ("A" SECTION), NON-SURGING EQUIPMENT ("N" SECTION), AND THE ISOLATED GROUND ZONE EQUIPMENT ("I" SECTION):

- "P" SECTION: LEADS FROM EACH RE RACK, LEADS FROM SPGRS, LEADS FROM SURGE PROTECTORS (AC AND TELCO).
- "A" SECTION: LEADS TO EGB, MULTI-GROUNDED NEUTRAL, BUILDING STEEL OR METAL WATER UTILITY PIPE.
- "N" SECTION: LEADS TO IGR (HALO GROUND).
- "I" SECTION: LEADS TO ISOLATED ELECTRICAL OUTLETS AND INTERNAL GROUND BARS (IF ANY).

**MASTER GROUND BAR (MGB)**  
 SCALE: N.T.S.

5  
E-2

**PRIMECO**  
 PERSONAL COMMUNICATIONS  
 ONE PERCE PLACE  
 SUITE 100  
 ITASCA, ILLINOIS 60143  
 OFFICE: (630) 773-8000  
 FAX: (630) 286-1680

**APPROVALS**

PRIMECO \_\_\_\_\_  
 LANDLORD \_\_\_\_\_  
 LEASING \_\_\_\_\_  
 R.F. \_\_\_\_\_  
 ZONING \_\_\_\_\_  
 CONSTRUCTION \_\_\_\_\_  
 BSIE \_\_\_\_\_

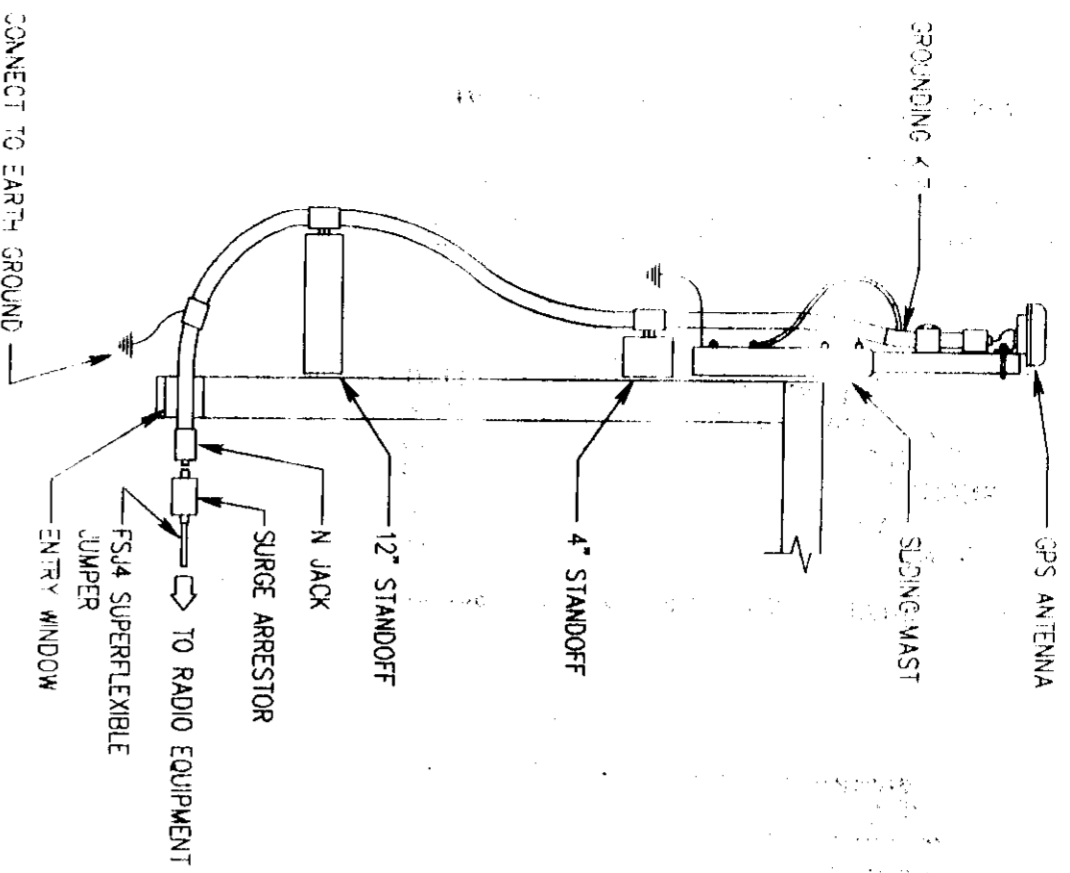
Bergant & Lundy  
 PROJECT NO. 10103-013  
 DRAWN BY: R.C.B.  
 CHECKED BY: W.J.I.

NO.	DATE	REVISION
8	02-21-97	REVISION FOR CONSTRUCTION
A	02-16-97	FOR CONSTRUCTION BY S & L

**RAWLAND MONOPOLE CGB 4128-1 PRAIRIE GROVE**  
 PRESIDE HEART & PATIO  
 3921 S. ROUTE 91  
 CRYSTAL LAKE  
 ILLINOIS, 60004

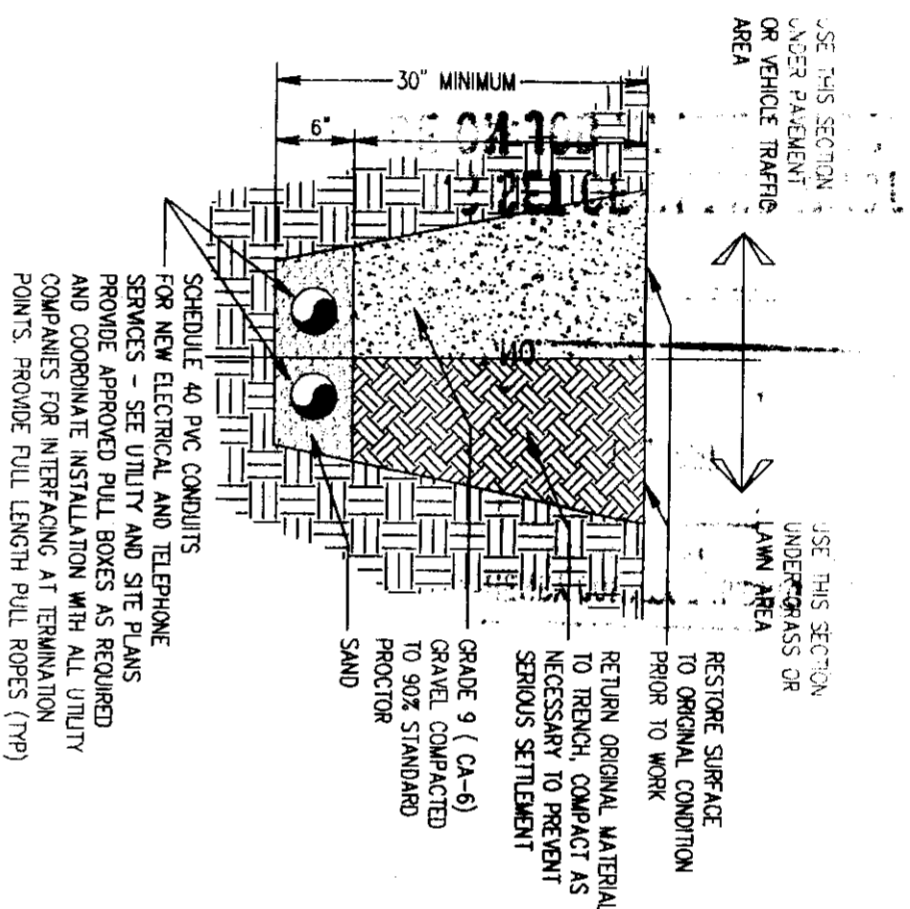
**SHEET TITLE**  
 GROUNDING RISER AND DETAILS

**SHEET NUMBER**  
 E-2



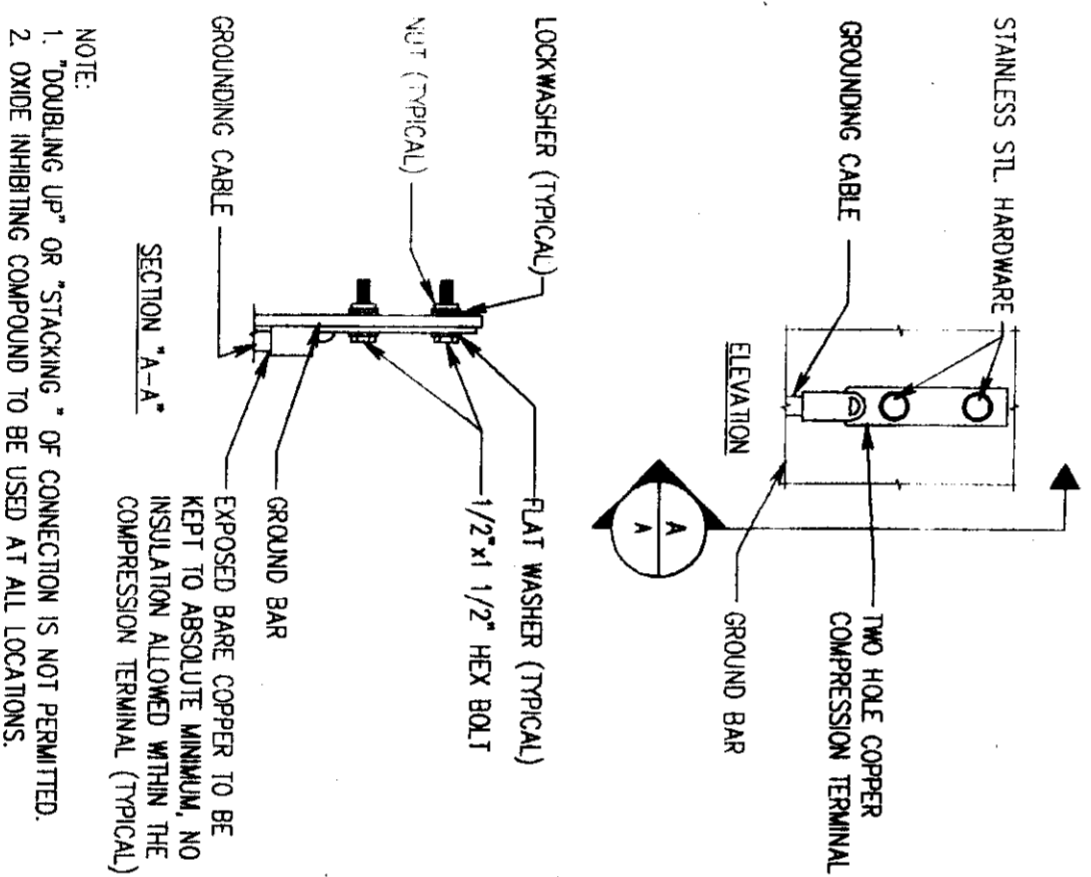
**GPS ANTENNA DETAIL**  
SCALE: 1/2"=1'-0"

E-3



**BURIED CABLE DETAIL**  
SCALE: N.T.S.

E-3



**TYPICAL GROUND BAR CONNECTIONS DETAIL**  
SCALE: N.T.S.

E-3

**ANTENNA AND COAXIAL CABLE SCHEDULE**

ANTENNA MARK	SECTOR	ANTENNA	COAXIAL CABLE FEED LOCATION	DOWN-TILT	AZIMUTH	ANTENNA HEIGHT	COAXIAL CABLE MARK	COAXIAL CABLE
A-1	1	ALLEN TELECOM DB9890H90E (63" x 6.3" x 2')	BOTTOM		0°	97.0'	C-1	HELIX 1 1/4" LDF6-50
A-2	1	-FUTURE-						
A-3	1	ALLEN TELECOM DB9890H90E (63" x 6.3" x 2')	BOTTOM		0°	97.0'	C-3	HELIX 1 1/4" LDF6-50
A-4	2	ALLEN TELECOM DB9890H90E (63" x 6.3" x 2')	BOTTOM		120°	97.0'	C-4	HELIX 1 1/4" LDF6-50
A-5	2	-FUTURE-						
A-6	2	ALLEN TELECOM DB9890H90E (63" x 6.3" x 2')	BOTTOM		120°	97.0'	C-6	HELIX 1 1/4" LDF6-50
A-7	3	ALLEN TELECOM DB9890H90E (63" x 6.3" x 2')	BOTTOM		240°	97.0'	C-7	HELIX 1 1/4" LDF6-50
A-8	3	-FUTURE-						
A-9	3	ALLEN TELECOM DB9890H90E (63" x 6.3" x 2')	BOTTOM		240°	97.0'	C-9	HELIX 1 1/4" LDF6-50

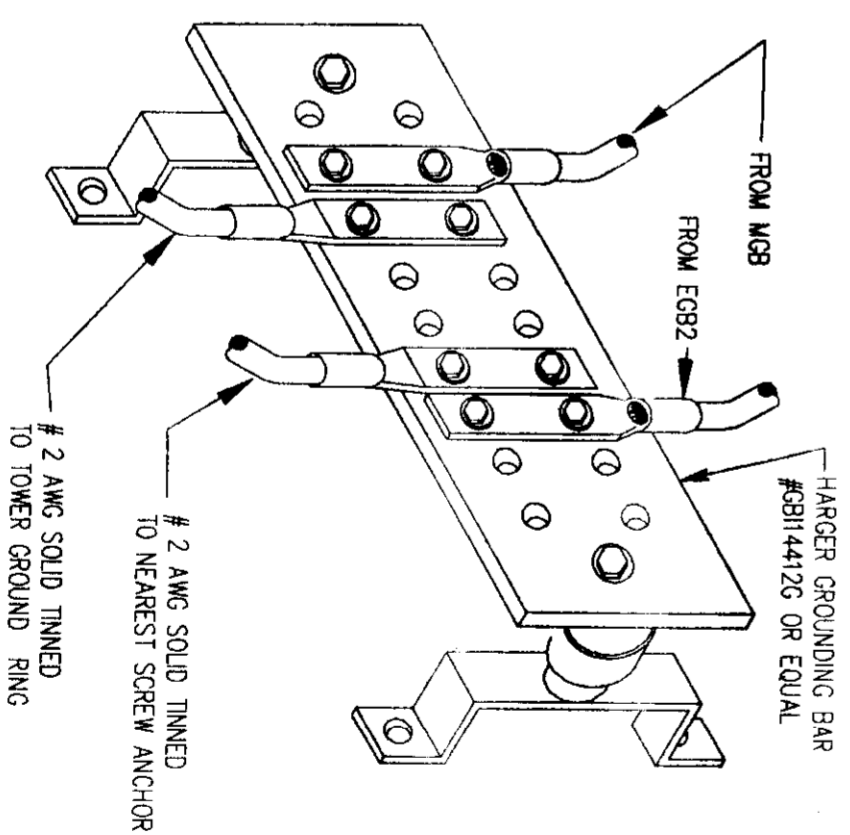
**Install all electric A/P McHenry Cty. and Nec. code req.**

**ALL CONSTRUCTION & INSTALLATION SHALL CONFORM & BE SUBJECT TO MCHENRY COUNTY CODES & ANY OTHER APPLICABLE CODES & ORDINANCES.**

**SEE ATT. NOTES**

**NOTES**

1. ALL ANTENNAS TO BE FURNISHED WITH DOWN-TILT BRACKETS. CONTRACTOR TO COORDINATE REQUIRED MECHANICAL DOWN-TILT FOR EACH ANTENNA WITH RF ENGINEER.
2. ANTENNA CENTERLINE HEIGHT IS IN REFERENCE TO ELEVATION 0.0'
3. CHECK WITH RF ENGINEER FOR LATEST ANTENNA TYPE & AZIMUTH.
4. CONTRACTOR SHALL VERIFY ANTENNA TYPE AND AZIMUTH WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.



**TEST GROUND BAR (TGB)**  
SCALE: N.T.S.

E-3

**PRIMECO**  
NATIONAL CONSTRUCTIONS  
ONE PERCE PLACE  
SUITE 100  
TASCA, ILLINOIS 60143  
OFFICE: (630) 773-1600  
FAX: (630) 286-1580

**APPROVALS**

PRIMECO \_\_\_\_\_  
LANDLORD \_\_\_\_\_  
LEASING \_\_\_\_\_  
R.F. \_\_\_\_\_  
ZONING \_\_\_\_\_  
CONSTRUCTION \_\_\_\_\_  
BSE \_\_\_\_\_

Sargeant & Lundy

PROJECT NO. 10103-013  
DRAWN BY: R.B.C.  
CHECKED BY: W.J.L.

NO.	DATE	REVISION
A	02-18-97	FOR CONSTRUCTION BY S & L
B	02-21-97	REVISED FOR CONSTRUCTION

**RAWLAND MONOPOLE CGB 4128-1 PRAIRIE GROVE**  
FRESIDE HEART & PATTO  
3921 S. ROUTE 31  
CRYSTAL LAKE  
ILLINOIS, 60014

SHEET TITLE  
LIGHTING PLAN,  
ELEVATION AND  
ANTENNA SCHEDULE

SHEET NUMBER  
**E-3**