

PROJECT INFORMATION

SCOPE OF WORK: RAWLAND MONOPOLE AT 110'-0"
 ZONING: AG-1
 JURISDICTION: CITY OF MADISON
 BUILDING CODE: WISCONSIN STATE BUILDING CODE
 TAX I.D. NUMBER: 70824300994
 CURRENT USE: SCHOOL YARD
 PROPOSED USE: TELECOMMUNICATIONS FACILITY

SITE NAME: JAMES MADISON HIGH SCHOOL
 SITE ADDRESS: 201 SOUTH GAMMON RD. MADISON, WI 53717

PROPERTY OWNER: DOUG PEARSON
 4711 PFLAUM RD., MADISON, 53718

CONTACT PHONE: (608) 204-7900

APPLICANT: CINGULAR WIRELESS
 930 NATIONAL PARKWAY
 SCHAMBERG, IL 60173
 FAX# 10091810

LATITUDE: N 43° 03' 41.8" (NAD 83)
 LONGITUDE: W 89° 29' 58.1" (NAD 83)
 ELEVATION: 1041.50' (AMSL)



SITE NUMBER: WI2024
SITE NAME: JAMES MADISON H.S.
 RAWLAND MONOPOLE AT 110'-0"

CINGULAR WIRELESS APPROVAL

Real Estate: _____ Date _____
 RF: _____ Date _____
 Operations: _____ Date _____

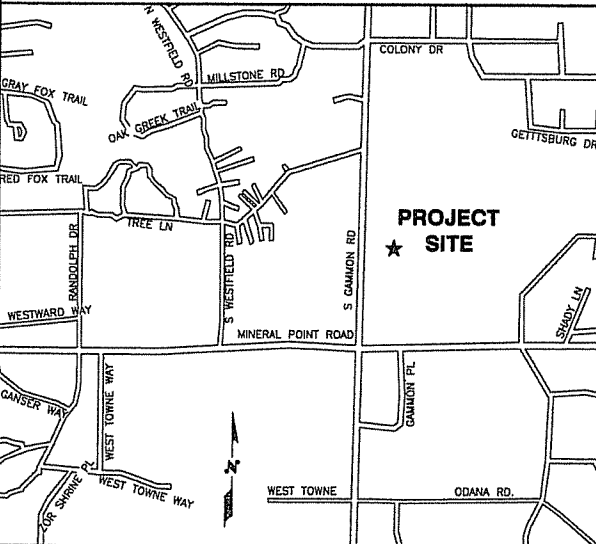
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VICINITY MAP

DRIVING DIRECTIONS:
 FROM I-90 GOING NORTH TAKE EXIT #142 TO US-12 (WEST BELTLINE) GO FOR APPROX. 14 MILES TURN RIGHT ON SOUTH GAMMON ROAD GO FOR APPROX. 1 MILE TO THE SITE LOCATED ON 201 SOUTH GAMMON ROAD.



APPLICABLE BUILDING CODES AND STANDARDS

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (LAW) FOR THE LOCATION. THE EDITION OF THE AIA ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE: WISCONSIN STATE BUILDING CODE AS ADOPTED BY LOCAL BUILDING AUTHORITY

ELECTRICAL CODE: WISCONSIN STATE ELECTRICAL CODE
 NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70 - 2002, NATIONAL ELECTRICAL CODE, AS ADOPTED BY LOCAL BUILDING AUTHORITY
 LIGHTNING PROTECTION CODE:
 (NFPA 780 - 2000, LIGHTNING PROTECTION CODE)

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:
 AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
 AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
 TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-F, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES
 TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM (IEEE 100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT

IEEE 66241, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY 'C3' AND 'HIGH SYSTEM EXPOSURE')

TELCORDIA GR-1275, GENERAL INSTALLATION REQUIREMENTS
 TELCORDIA GR-1503, COAXIAL CABLE CONNECTIONS
 ANSI T1.311, FOR TELECOM - DC POWER SYSTEMS - TELECOM, ENVIRONMENTAL PROTECTION

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

SITE QUALIFICATION PARTICIPANTS

NAME	COMPANY	NUMBER
A/E JOHN BANKS	WESTCHESTER SERVICES, L.L.C.	(847) 277-0070
SAC BRYAN LAZUKA	SITE ACQUISITION CONSULTANTS	(847) 833-1154
CDN XXX	XXX	(XXX) XXX-XXXX
LANDLORD DOUG PEARSON	JAMES MADISON HIGH SCHOOL	(608) 204-7900

WESTCHESTER SERVICES L.L.C.
 604 FOX GLEN BARRINGTON, IL 60010
 TELEPHONE: 847-277-0070
 FAX: 847-277-0080
 ce@westchesterservices.com

JAMES MADISON HIGH SCHOOL
SITE NO. WI2024
 201 SOUTH GAMMON ROAD
 MADISON, WI 53717



NO.	DATE	REVISIONS	BY	CHK	APP'D
1	03.31.07	REVISED PERMIT/CONSTRUCTION	RA	JWB	JWB
0	03.30.07	PERMIT/CONSTRUCTION	RA	JWB	JWB

SCALE: AS SHOWN DESIGNED BY: JWB DRAWN BY: RA

1
01
DETAIL

PROFESSIONAL LICENSE

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LICENSED ARCHITECT UNDER THE WISCONSIN STATE PROFESSIONAL BOARD OF ARCHITECTS.

8719-085
 EXPIRES - 31st SOUTH DELGIN

CINGULAR WIRELESS

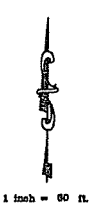
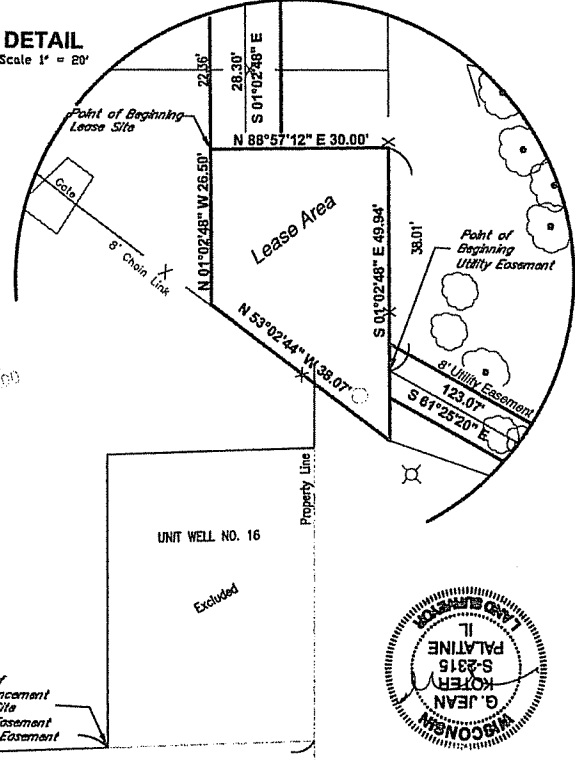
TITLE SHEET

DRAWING NUMBER: WI2024-01 REV: 1

WIRELESS SITE MAP

DETAIL

Scale 1" = 20'



Gammon Road

Mineral Point Road

Legend

- x — x — Chain Link Fence
- Property Line
- Street Line
- Lease Site



Land Surveying Services, Inc.
19 S Bethwell St.
Palatine, Illinois 60067
Phone 847-991-7700
Fax 847-991-7707
Professional Design Firm License No. 184-003632



NO.	DATE	REVISIONS	BY	CHK	APP
1	3-27-07	FINAL			

DESIGNED BY: JLP DRAWN BY: JLP

CINGULAR WIRELESS	
JAMES MADISON HIGH SCHOOL	
SITE NO. WI 2024	
201 S. GAMMON ROAD	MADISON, WI 53717
DRAWN BY: JLP	
LS 1 OF 2	

5

4

3

2

11 x 17 8" SIZE

WIRELESS SITE MAP

LEGAL DESCRIPTION FOR ACCESS EASEMENT:

THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 24, TOWNSHIP 7 NORTH, RANGE 8 EAST OF THE CITY OF MADISON, DANE COUNTY, WISCONSIN MORE FULLY DESCRIBED AS FOLLOWS:
 ALL THAT PART OF THE SAID WEST 1/2 OF THE SOUTHWEST 1/4 LOCATED SOUTHERLY OF THE SOUTHERLY LOT LINES OF LOTS 431 THROUGHOUT 438 INCLUSIVE, IN THE RECORDED PLAT OF EVERGLADE ADDITION TO PARKWOOD HILLS; AND SOUTHWESTERLY AND SOUTHERLY OF THE SOUTHWESTERLY AND SOUTHERLY RIGHT OF WAY OF INNER DRIVE; AND NORTHERLY OF THE NORTHERLY RIGHT OF WAY LINE OF MINERAL POINT ROAD; AND EASTERLY OF THE EASTERLY RIGHT OF WAY LINE OF SOUTH GAMMON ROAD; AND EXCLUDING HEREFROM THE PARCEL FOR THE UNIT WELL NO. 18 EXCLUSION.

THAT PART BEING A STRIP OF LAND 12 FEET WIDE, LYING 6 FEET ON EITHER SIDE OF A LINE DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF UNIT WELL NO. 18 EXCLUSION; THENCE SOUTH 87 DEGREES 37 MINUTES 54 SECONDS WEST ALONG THE APPARENT NORTH RIGHT OF WAY LINE OF MINERAL POINT ROAD 540.21 FEET TO THE PLACE OF BEGINNING; THENCE NORTH 00 DEGREES 37 MINUTES 20 SECONDS WEST 345.45 FEET; THENCE NORTH 89 DEGREES 33 MINUTES 07 SECONDS EAST 178.86 FEET; THENCE SOUTH 01 DEGREES 02 MINUTES 48 SECONDS EAST 28.30 FEET TO THE POINT OF TERMINATION.

LEGAL DESCRIPTION FOR UTILITY EASEMENT:

THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 24, TOWNSHIP 7 NORTH, RANGE 8 EAST OF THE CITY OF MADISON, DANE COUNTY, WISCONSIN MORE FULLY DESCRIBED AS FOLLOWS:
 ALL THAT PART OF THE SAID WEST 1/2 OF THE SOUTHWEST 1/4 LOCATED SOUTHERLY OF THE SOUTHERLY LOT LINES OF LOTS 431 THROUGHOUT 438 INCLUSIVE, IN THE RECORDED PLAT OF EVERGLADE ADDITION TO PARKWOOD HILLS; AND SOUTHWESTERLY AND SOUTHERLY OF THE SOUTHWESTERLY AND SOUTHERLY RIGHT OF WAY OF INNER DRIVE; AND NORTHERLY OF THE NORTHERLY RIGHT OF WAY LINE OF MINERAL POINT ROAD; AND EASTERLY OF THE EASTERLY RIGHT OF WAY LINE OF SOUTH GAMMON ROAD; AND EXCLUDING HEREFROM THE PARCEL FOR THE UNIT WELL NO. 18 EXCLUSION.

THAT PART BEING A STRIP OF LAND 8 FEET WIDE, LYING 4 FEET ON EITHER SIDE OF A LINE DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF UNIT WELL NO. 18 EXCLUSION; THENCE SOUTH 87 DEGREES 37 MINUTES 54 SECONDS WEST ALONG THE APPARENT NORTH RIGHT OF WAY LINE OF MINERAL POINT ROAD 540.21 FEET; THENCE NORTH 00 DEGREES 37 MINUTES 20 SECONDS WEST 345.45 FEET; THENCE NORTH 89 DEGREES 33 MINUTES 07 SECONDS EAST 173.18 FEET; THENCE SOUTH 01 DEGREES 02 MINUTES 48 SECONDS EAST 28.30 FEET; THENCE NORTH 88 DEGREES 57 MINUTES 12 SECONDS EAST 30 FEET; THENCE SOUTH 01 DEGREES 02 MINUTES 48 SECONDS EAST 38.01 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 81 DEGREES 25 MINUTES 20 SECONDS EAST 123.07 FEET; THENCE SOUTH 04 DEGREES 48 MINUTES 32 SECONDS EAST 75.84 FEET; THENCE SOUTH 02 DEGREES 22 MINUTES 18 SECONDS EAST, 169.16 FEET TO THE POINT OF TERMINATION.

NOTES:

1. SITE BENCHMARK - CROSS CUT IN THE NORTHWEST CORNER OF LIGHT POST NEXT TO BLEACHERS STAIRWAY IN THE ASPHALT ACCESS ROAD. ELEVATION 1037.85 FEET
2. LATITUDE: 43°03'41.6" N LONGITUDE: 89°23'58.1" W
3. THE LOCATION OF UNDERGROUND UTILITIES WAS DETERMINED BY FIELD OBSERVATION AND VISIBLE MARKINGS ONLY.
4. FIELD WORK COMPLETED ON 7-18-08
5. THIS PLAT IS FOR CONSTRUCTING CELLULAR EQUIPMENT.
6. THIS PLAT WAS PREPARED WITH THE AID OF A TITLE COMMITMENT PREPARED BY US TITLE SEARCH, INC., NUMBER 17780-W0607-6010, DATED 7/18/08.

PARENT PARCEL:

PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 24, TOWNSHIP 7 NORTH, RANGE 8 EAST OF THE CITY OF MADISON, DANE COUNTY, WISCONSIN MORE FULLY DESCRIBED AS FOLLOWS:
 ALL THAT PART OF THE SAID WEST 1/2 OF THE SOUTHWEST 1/4 LOCATED SOUTHERLY OF THE SOUTHERLY LOT LINES OF LOTS 431 THROUGHOUT 438 INCLUSIVE, IN THE RECORDED PLAT OF EVERGLADE ADDITION TO PARKWOOD HILLS; AND SOUTHWESTERLY AND SOUTHERLY OF THE SOUTHWESTERLY AND SOUTHERLY RIGHT OF WAY OF INNER DRIVE; AND NORTHERLY OF THE NORTHERLY RIGHT OF WAY LINE OF MINERAL POINT ROAD; AND EASTERLY OF THE EASTERLY RIGHT OF WAY LINE OF SOUTH GAMMON ROAD; AND EXCLUDING HEREFROM THE PARCEL FOR THE UNIT WELL NO. 18 EXCLUSION.

LEGAL DESCRIPTION FOR LEASE SITE:

THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 24, TOWNSHIP 7 NORTH, RANGE 8 EAST OF THE CITY OF MADISON, DANE COUNTY, WISCONSIN MORE FULLY DESCRIBED AS FOLLOWS:
 ALL THAT PART OF THE SAID WEST 1/2 OF THE SOUTHWEST 1/4 LOCATED SOUTHERLY OF THE SOUTHERLY LOT LINES OF LOTS 431 THROUGHOUT 438 INCLUSIVE, IN THE RECORDED PLAT OF EVERGLADE ADDITION TO PARKWOOD HILLS; AND SOUTHWESTERLY AND SOUTHERLY OF THE SOUTHWESTERLY AND SOUTHERLY RIGHT OF WAY OF INNER DRIVE; AND NORTHERLY OF THE NORTHERLY RIGHT OF WAY LINE OF MINERAL POINT ROAD; AND EASTERLY OF THE EASTERLY RIGHT OF WAY LINE OF SOUTH GAMMON ROAD; AND EXCLUDING HEREFROM THE PARCEL FOR THE UNIT WELL NO. 18 EXCLUSION.

DESCRIBED AS FOLLOWS:
 COMMENCING AT THE SOUTHWEST CORNER OF UNIT WELL NO. 18 EXCLUSION; THENCE SOUTH 87 DEGREES 37 MINUTES 54 SECONDS WEST ALONG THE APPARENT NORTH RIGHT OF WAY LINE OF MINERAL POINT ROAD 540.21 FEET; THENCE NORTH 00 DEGREES 37 MINUTES 20 SECONDS WEST 345.45 FEET; THENCE NORTH 89 DEGREES 33 MINUTES 07 SECONDS EAST 168.91 FEET; THENCE SOUTH 01 DEGREE 02 MINUTES 48 SECONDS EAST 22.38 FEET TO THE POINT OF BEGINNING; THENCE NORTH 88 DEGREES 57 MINUTES 12 SECONDS EAST 30.00 FEET; THENCE SOUTH 01 DEGREE 02 MINUTES 48 SECONDS EAST 49.94 FEET; THENCE NORTH 83 DEGREES 02 MINUTES 44 SECONDS WEST 38.07 FEET; THENCE NORTH 01 DEGREE 02 MINUTES 48 SECONDS WEST 28.50 FEET TO THE POINT OF BEGINNING, PARCEL CONTAINS 1,148.89 SQ. FT.

STATE OF ILLINOIS)
 COUNTY OF COOK) 188

WE, LAND SURVEYING SERVICES, INC. DO HEREBY CERTIFY THAT WE HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY AND THE PLAT REPRESENTS THE CONDITIONS FOUND AT THE TIME OF THIS SURVEY.

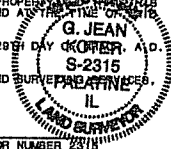
GIVEN UNDER MY HAND AND SEAL THIS 20th DAY OF SEPTEMBER, A.D. 2007, IN PALATINE, ILLINOIS.

GLORIA JEAN KOTER, AN AGENT FOR LAND SURVEYING SERVICES, INC.

[Signature]

WISCONSIN PROFESSIONAL LAND SURVEYOR NUMBER 2318
 License Expiration Date 1-31-08

This professional service conforms to the current Wisconsin minimum standards for a boundary survey.



Land Surveying Services, Inc.
 198 Bothwell St.
 Palatine, Illinois 60067
 Phone 847-291-7700
 Fax 847-291-7707
 Professional Design Firm License No. 184-008632



CINGULAR WIRELESS

JAMES MADISON HIGH SCHOOL
 SITE NO. WI 2024

201 S. GAMMON ROAD MADISON, WI 53717

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	3-27-07	FINAL			

SCALE: AS SHOWN DESIGNED BY: jlp DRAWN BY: jlp

LS 2 OF 2

LSSI JOB No. LS061342

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3

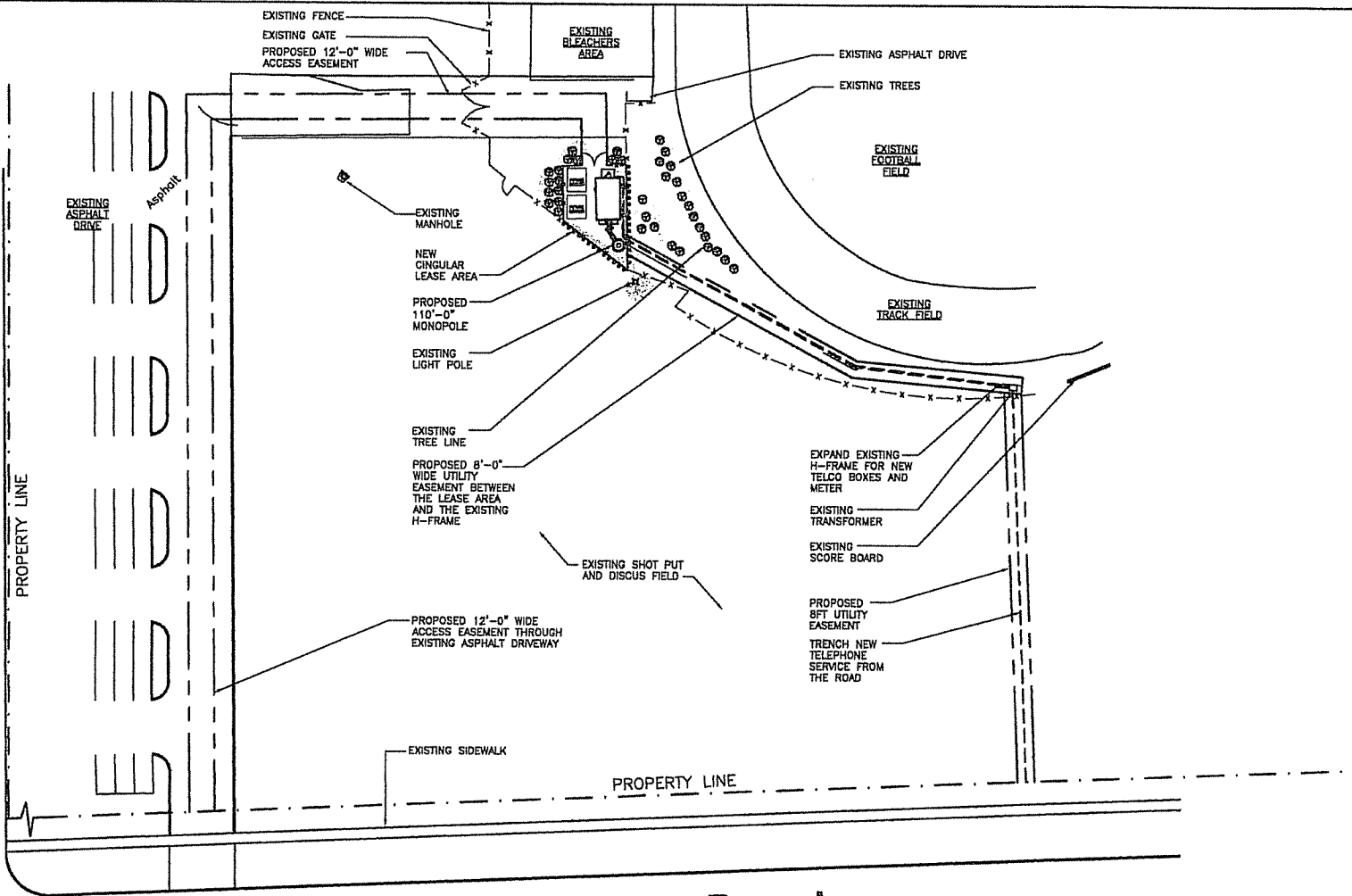
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11/17/08

8

Gammon Road

PROPERTY LINE



Mineral Point Road

OVERALL SITE PLAN

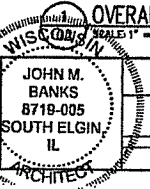


WESTCHESTER SERVICES L.L.C.
 604 FOX GLEN
 BARRINGTON, IL 60010
 TELEPHONE: 847-277-0070
 FAX: 847-277-0080
 cc@westchesterservices.com

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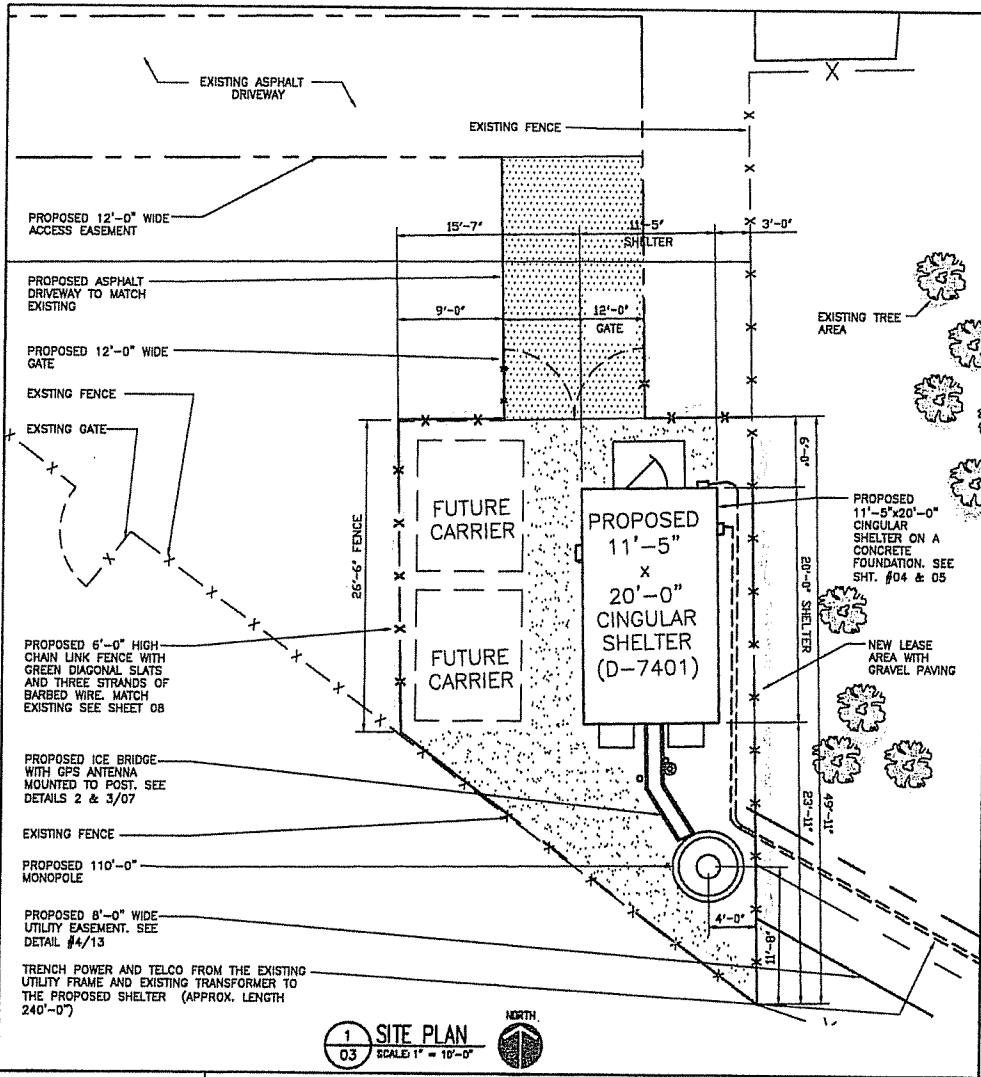


NO.	DATE	REVISIONS	BY	CHKD	APPD
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2	03.30.07	PERMIT/CONSTRUCTION	RA	JMB	JMB

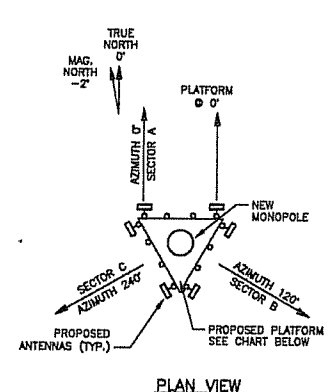
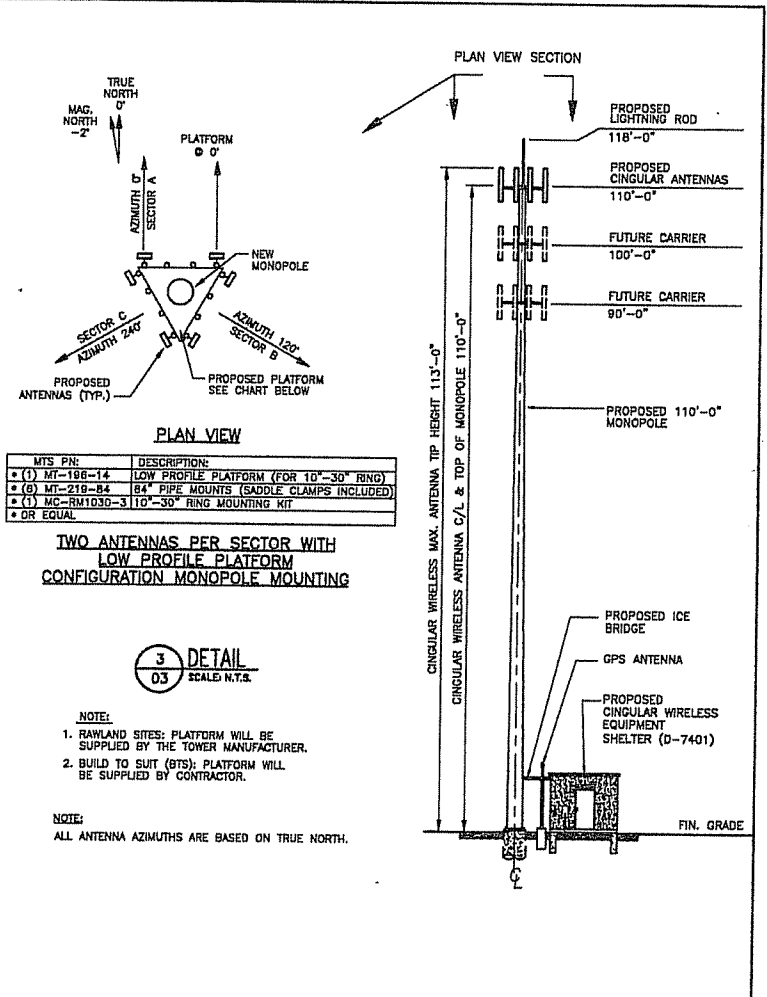


CINGULAR WIRELESS	REV
OVERALL SITE PLAN	
DRAWING NUMBER	
WI2024-02	1

SCALE: AS SHOWN DESIGNED BY: JMB DRAWN BY: JMB



1 SITE PLAN
03 SCALE 1" = 10'-0"



MTS PN:	DESCRIPTION:
• (1) MT-198-14	LOW PROFILE PLATFORM (FOR 10"-30" RING)
• (8) MT-219-84	84" PIPE MOUNTS (SADDLE CLAMPS INCLUDED)
• (1) MC-RM1030-3	110"-30" RING MOUNTING KIT
•	OR EQUAL

TWO ANTENNAS PER SECTOR WITH LOW PROFILE PLATFORM CONFIGURATION MONOPOLE MOUNTING

3 DETAIL
03 SCALE N.T.S.

- NOTE:**
1. RAWLAND SITES: PLATFORM WILL BE SUPPLIED BY THE TOWER MANUFACTURER.
 2. BUILD TO SUIT (BTS): PLATFORM WILL BE SUPPLIED BY CONTRACTOR.
- NOTE:**
ALL ANTENNA AZIMUTHS ARE BASED ON TRUE NORTH.

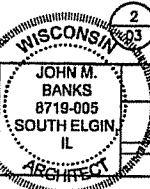
WESTCHESTER SERVICES LLC.
604 FOX GLEN
BARRINGTON, IL 60010
TELEPHONE: 847-277-0070
FAX : 847-277-0080
cc@westchesterservices.com

JAMES MADISON HIGH SCHOOL
SITE NO. W12024
201 SOUTH GAMMON ROAD
MADISON, WI 53717



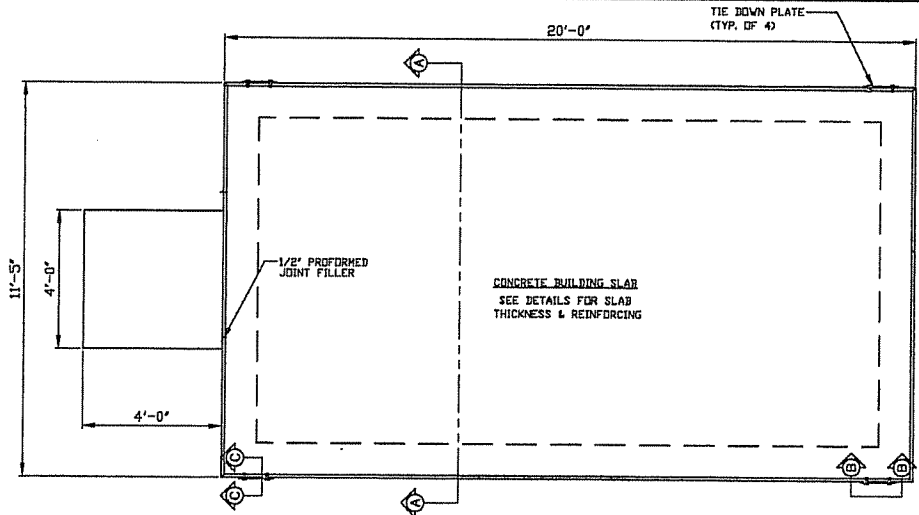
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1	03.31.07	REVISED PERMIT/CONSTRUCTION	RA	JMS	SMS
0	03.30.07	PERMIT/CONSTRUCTION	RA	JMS	SMS

SCALE: AS SHOWN DESIGNED BY: JMS DRAWN BY: RA

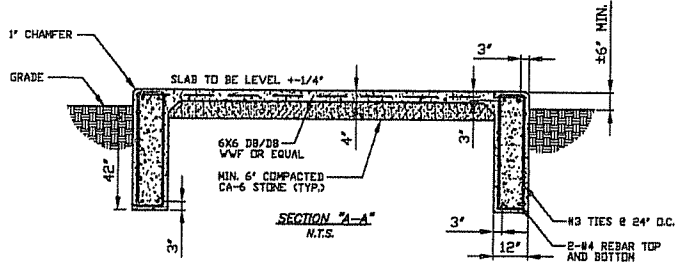


2 TOWER ELEVATION
03 SCALE 1" = 20'-0"

CINGULAR WIRELESS
SITE PLAN & TOWER ELEVATION
DRAWING NUMBER: W12024-03



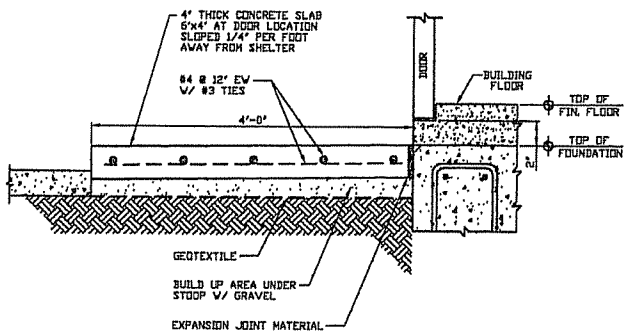
- NOTES:
1. CONCRETE FINISH TO BE CLASS A TOLERANCE
 2. ALL CONCRETE TO BE SIX SACK MIX
 3. PERFORM CONCRETE SLUMP TEST (4" MAX) NO WATER TO BE ADDED TO CONCRETE MIX AFTER 4" SLUMP HAS BEEN ESTABLISHED



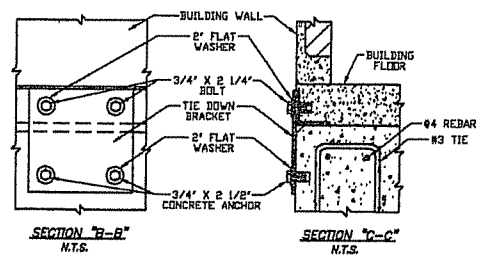
1 TYP. FOUNDATION FLOOR PLAN
SCALE: N.T.S.

- NOTES:
1. SLAB TO BE LEVEL $\pm 1/4"$.
 2. FOOTING TO EXTEND A MINIMUM OF 42" BELOW GRADE.
 3. FINAL SITE DESIGN IS THE RESPONSIBILITY OF THE SITE CONTRACTOR.
 4. SLAB FOUNDATION DESIGNED ASSUMING ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF.
 5. SLAB FOUNDATION DESIGNED ASSUMING MAXIMUM SOIL PLASTICITY INDEX OF 27.
 6. CONCRETE STRENGTH SHALL BE A MINIMUM OF 3000 PSI.

- NOTES:
1. THE SITE SHALL BE STRIPPED OF ALL VEGETATION PRIOR TO FILL OR CONSTRUCTION OF THE FOUNDATION PAD.
 2. ALL FILL SAND SHALL BE 0-15 P.I. WITH A COMPACTION TEST RUN ON EACH 6" LIFT - COMPACTED TO 90% MODIFIED PROCTOR.
 3. ANY SOFT AREAS (TREE STUMP HOLES, ETC.) SHALL BE CUT OUT AND RECOMPACTED TO SAND PROCTOR.
 4. THE SUBCONTRACTOR SHALL KEEP THE SITE SO IT WILL HAVE POSITIVE DRAINAGE AT ALL TIMES.
 5. ALL EXCAVATIONS SHALL BE FREE OF WATER BEFORE POURING CONCRETE.
 6. MINIMUM SOIL BEARING CAPACITY OF 2,000 PSF IN ALL FOUNDATION AND SLAB AREAS.



2 CONCRETE STOOP DETAIL
SCALE: N.T.S.



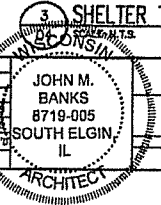
3 SHELTER TIE-DOWN DETAIL
SCALE: N.T.S.

WESTCHESTER SERVICES L.L.C.
804 FOX OLEN
BARRINGTON, IL 60010
TELEPHONE: 847-277-0070
FAX: 847-277-0080
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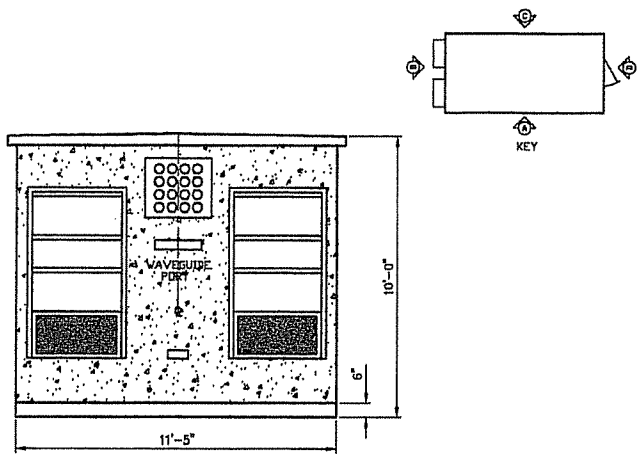
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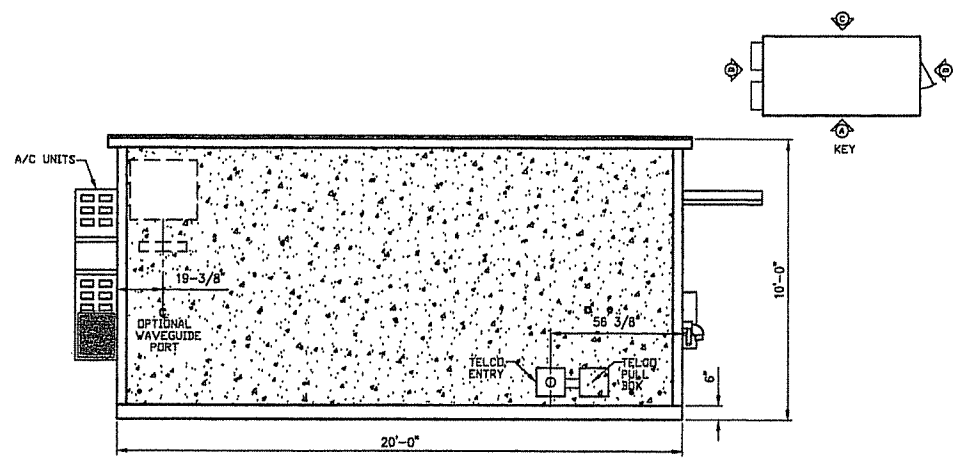
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1	06.31.07	REVISED PERMIT/CONSTRUCTION	RA	JMB	JMB
0	03.30.07	PERMIT/CONSTRUCTION	RA	JMB	JMB



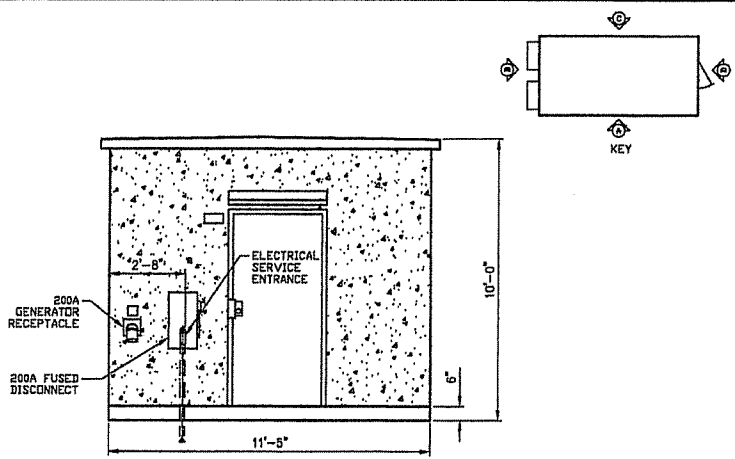
CINGULAR WIRELESS
CONCRETE FOUNDATION DETAILS
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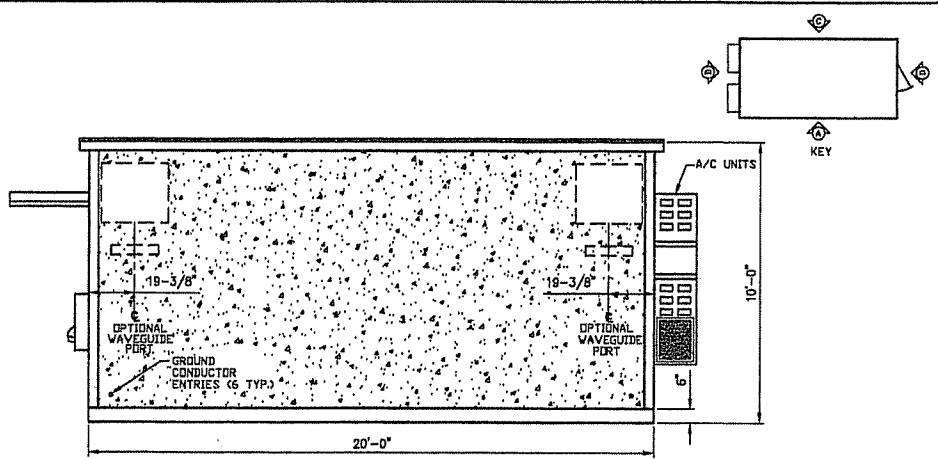
1 D-7401 FIBREBOND EQUIPMENT SHELTER ELEVATION - "B"
05 SCALE N.T.S.



2 D-7401 FIBREBOND EQUIPMENT SHELTER ELEVATION - "A"
05 SCALE N.T.S.



3 D-7401 FIBREBOND EQUIPMENT SHELTER ELEVATION - "D"
05 SCALE N.T.S.



4 D-7401 FIBREBOND EQUIPMENT SHELTER ELEVATION - "C"
05 SCALE N.T.S.

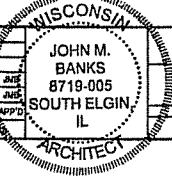
WESTCHESTER SERVICES LLC.
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BARRINGTON, IL 60010
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JAMES MADISON HIGH SCHOOL
SITE NO. W12024
201 SOUTH GAMMON ROAD
MADISON, WI 53717



NO.	DATE	REVISIONS	BY	CHKD	APP'D
1	05.31.07	REVISED PERMIT/CONSTRUCTION	RA	JMB	JMB
0	03.30.07	PERMIT/CONSTRUCTION	RA	JMB	JMB
			BY	CHKD	APP'D

SCALE AS SHOWN DESIGNED BY: JMB DRAWN BY: JMB



CINGULAR WIRELESS	
SHELTER ELEVATIONS	
DATE: W12024-05	REV: 1

ELECTRICAL NOTES:

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE NATIONAL ELECTRIC CODE (EDITION ACCEPTED BY LOCAL JURISDICTION) AND APPLICABLE LOCAL CODES.
2. GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
3. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED.
4. POWER WIRES AND CABLES SHALL BE COPPER WITH TYPE XHHW, THWN, OR THHN INSULATION. SOLID CONDUCTORS FOR #10 AWG AND SMALLER, STRANDED FOR LARGER THAN #10 AWG. MINIMUM SIZE #12 AWG.
5. POWER WIRES AND CABLES SHALL BE INSTALLED IN GALVANIZED RIGID STEEL CONDUIT OR FLEXIBLE LIQUIDTIGHT CONDUIT AS INDICATED ON DRAWING.
6. CONTRACTOR TO OBTAIN ALL PERMITS, PAY PERMIT FEES, AND BE RESPONSIBLE FOR SCHEDULING INSPECTIONS.
7. CONTRACTOR TO OBTAIN LOCAL POWER AND TELEPHONE COMPANY APPROVAL AND COORDINATE WITH UTILITY COMPANIES SERVICE ENTRANCE REQUIREMENTS.
8. PROVIDE ALL LABOR AND MATERIAL DESCRIBED ON THIS DRAWING, AND ALL ITEMS INCIDENTAL TO COMPLETING AND PRESENTING THIS PROJECT AS FULLY OPERATIONAL.
9. CONTRACTOR TO PROVIDE GROUND WIRES, BARS AND CONNECTIONS AS SHOWN ON GROUNDING RISER DIAGRAM. CONTRACTOR SHALL TEST AND VERIFY THAT THE IMPEDANCE DOES NOT EXCEED 5 OHMS TO GROUND BY MEANS OF A BIDOLE-HEGGER TESTER. GROUNDING AND OTHER OPERATIONAL TESTING SHALL BE WITNESSED BY THE OWNER'S REPRESENTATIVE.
10. GROUNDING CONDUCTORS SHALL BE COPPER ONLY. EITHER SOLID OR STRANDED CONDUCTORS ARE PERMITTED. IGR AND ALL EXTERNAL CONDUCTORS MUST BE BARE. EQUIPMENT GROUND LEADS IN CABLE TRAYS MUST BE GREEN INSULATED. ALL WIRES MUST BE #2 AWG MINIMUM.

GENERAL NOTES:

- 1-ALL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE, STATE BUILDING CODES AND THE LOCAL BUILDING CODES. ALL COMPONENTS SHALL BE U.L. LISTED.
- 2-REFER TO SITE LAYOUT PLAN FOR THE EXACT LOCATION OF H-FRAME. REFER TO CINGULAR WIRELESS STANDARD CONSTRUCTION DRAWINGS FOR H-FRAME COMPLETE DESIGN.
- 3-CONTRACTOR TO COORDINATE WITH LOCAL UTILITY COMPANY FOR METER.
- 4-CONTRACTOR TO PROVIDE AND INSTALL METER SOCKET.
- 5-CONTRACTOR TO LOCATE METER RACK TO ENSURE WORKING SPACES REQUIRED BY THE NEC (ART. 110-26), STATE, OR LOCAL CODES ARE MAINTAINED BETWEEN FRONT OF ENCLOSURES AND THE CHAIN LINK FENCE.
- 6-SHOW LOCATION (INCLUDING DIMENSIONS) OF ALL CAPPED UNDERGROUND CONDUIT ON FINAL AS-BUILT DRAWING SUBMITTED TO OWNER.
- 7-COORDINATE EXACT LOCATION OF UNDERGROUND FEEDERS AND CIRCUITRY WITH THE OWNER.
- 8-CONTRACTOR SHALL COORDINATE EFFORTS WITH (LOCAL, ELECTRICAL) AUTHORITY HAVING JURISDICTION (AHJ) AND OTHER TRADES TO DETERMINE "FROST" LINE, AND TYPE(S) OF RACEWAYS REQUIRED FOR INSTALLATION.

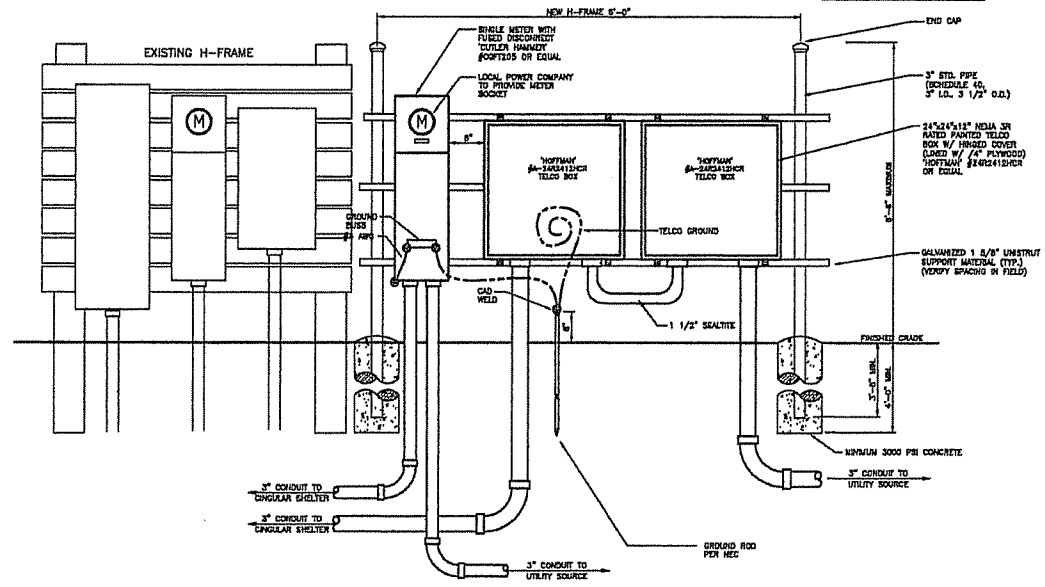
ELECTRICAL LEGEND

SE	SERVICE ENTRANCE
GFCI	GROUND FAULTY CIRCUIT INTERRUPTER
EG	EQUIPMENT GROUND
C	CONDUIT

TOTAL CONNECTED LOAD

GFCI RECEPTACLE	180 VA
OPTD 22 MONITOR	440 VA
TOTAL	620 VA

NOTE:
ALL RISERS AND ELBOWS
TO BE RGS. UNDERGROUND
RUNS ARE PVC.



1 POWER DISTRIBUTION CENTER
SCALE: N.T.S.

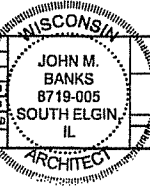
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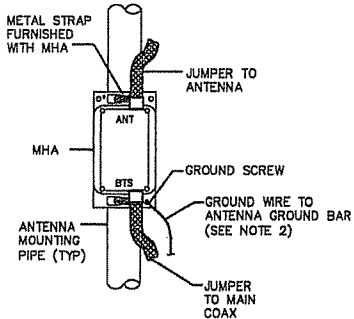


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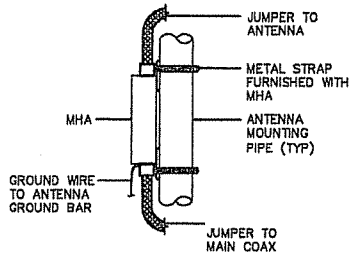
SCALE: AS SHOWN DESIGNED BY: JMB DRAWN BY: RMB



CINGULAR WIRELESS	
GPS & FIF CABINET DETAILS	
DRAWING NUMBER	W12024-06
REV	1



FRONT



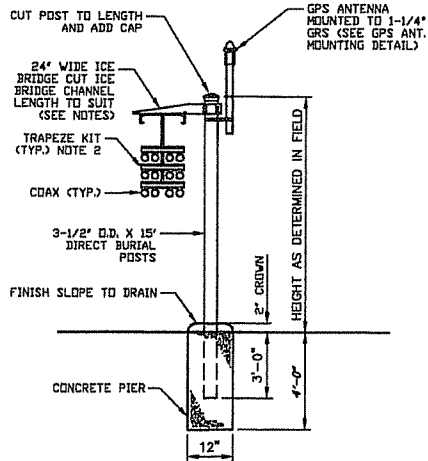
SIDE

NOTES:

1. MHA IS A WEATHERPROOFED ENCLOSURE RATED TO IP65.
2. BOND MHA GROUND STUD TO GROUND BAR WITH 6 AWG GROUND WIRE.
3. PROVIDE SUFFICIENT LENGTH OF JUMPER TO ALLOW FOR PROPER APPLICATION OF WEATHER PROOFING AT ANTENNA AND MHA CONNECTIONS.
4. IF POSSIBLE, MHA SHALL BE MOUNTED BEHIND ANTENNA TO MINIMIZE WIND LOADING ON STRUCTURE.
5. MHA SHALL BE MOUNTED VERTICALLY WITH WEEP HOLE FACING DOWN.

NOKIA MAST HEAD AMPLIFIER (MHA) MOUNTING DETAIL

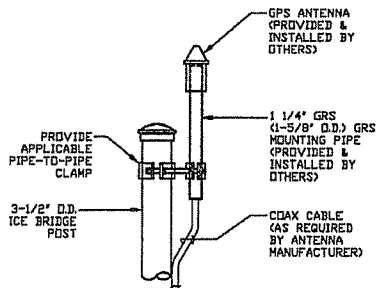
1
07 SCALE: N.T.S.



NOTES:

1. ALL ICE BRIDGE MATERIAL TO BE SUPPLIED BY G.C.
2. MAXIMUM CABLE SUPPORT SPACING 3'-0"

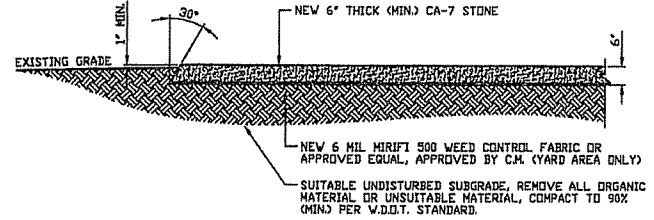
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07 ICE BRIDGE SUPPORT POST FOUNDATION SCALE: N.T.S.



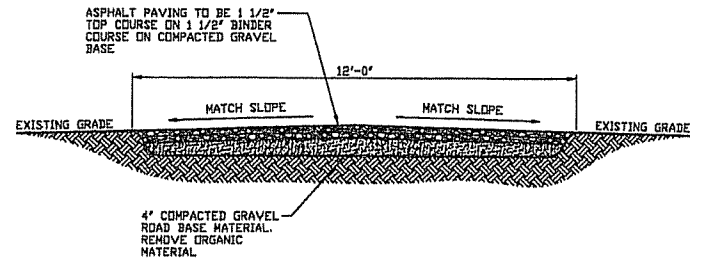
ELEVATION

3
07 GPS ANTENNA MOUNTING DETAIL SCALE: N.T.S.

NOTE:
WEED CONTROL FABRIC SHALL BE USED UNDER ALL AREAS OF THE YARD, AS NOTED ON SITE PLAN.



4
07 YARD PAVEMENT DETAIL SCALE: N.T.S.



EARTH WORK SUBGRADE COMPACTION & SELECT GRANULAR FILL

- A CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING & GRUBBING THE CONSTRUCTION SITE AND ROADWAY AREAS. THE CONTRACTOR SHALL COMPLY WITH THE RECOMMENDATIONS CONTAINED WITHIN THE GEOTECHNICAL REPORT.
- B ALL SELECT GRANULAR FILL SHALL BE COMPACTED TO A 95% COMPACTION AT A MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 OR WITHIN PLUS OR MINUS 3% OF OPTIMUM MOISTURE CONTENT.

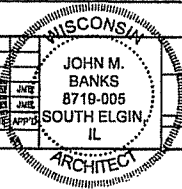
5
07 ASPHALT ACCESS ROAD CROSS SECTION SCALE: N.T.S.

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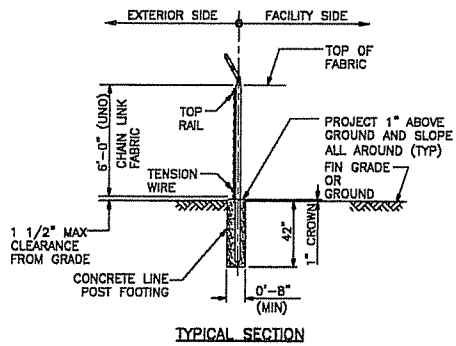
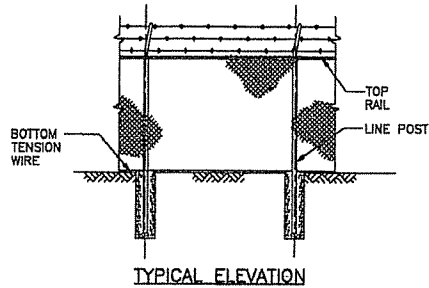
CINGULAR WIRELESS

SITE WORK DETAILS

GROUPING NUMBER

W12024-07

REV 1



WOVEN WIRE FENCE

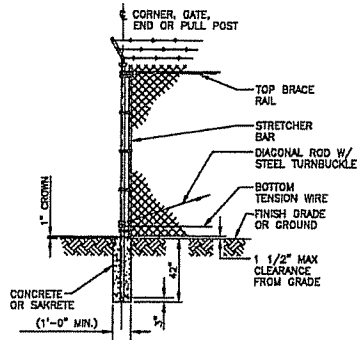
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SCALE: N.T.S.

NOTES:

- (INSTALL FENCING PER ASTM F-567, SWING GATES PER ASTM F- 800)
1. GATE POST, CORNER, TERMINAL OR PULL POST SHALL BE 2 7/8" SCHEDULE 40 FOR GATE WIDTHS UP THROUGH 6 FEET OR 12 FEET FOR DOUBLE SWING GATE PER ASTM-F1083.
 2. LINE POST: 2-3/8" SCHEDULE 40 PIPE PER ASTM-F1083.
 3. GATE FRAME: 1 1/2" SCHEDULE 40 PIPE PER ASTM-F1083.
 4. TOP RAIL & BRACE RAIL: 1 1/4" SCHEDULE 40 PIPE PER ASTM-F1083.
 5. FABRIC: 11 GA. CORE WIRE SIZE 2" MESH, CONFORMING TO ASTM-A392 CLASS 1.
 6. TIE WIRE: MINIMUM 11 GA GALVANIZED STEEL. INSTALL A SINGLE WRAP TIE WIRE AT POSTS AND RAILS AT MAX. 24" INTERVALS. INSTALL HOG RINGS ON TENSION WIRE AT 24" INTERVALS.
 7. TENSION WIRE: 7 GA. GALVANIZED STEEL.
 8. BARBED WIRE: 3 STRANDS OF DOUBLE STRAND 12-1/2 GAUGE TWISTED WIRE, 4 FT. BARBS SPACED ON APPROXIMATELY 5" CENTERS.
 9. GATE LATCH: 1-3/8" O.D. PLUNGER ROD W/ MUSHROOM TYPE CATCH AND LOCK (KEYED ALIKE FOR ALL SITES OR COMBINATION AS SPECIFIED BY CINGULAR).
 10. LOCAL ORDINANCE FOR BARBED WIRE PERMIT SHALL GOVERN INSTALLATION.
 11. HEIGHT = 0' VERTICAL.
 12. ALL WORK SHALL CONFORM WITH THE PROJECT SPECIFICATIONS.

TYPICAL WOVEN WIRE FENCING NOTES

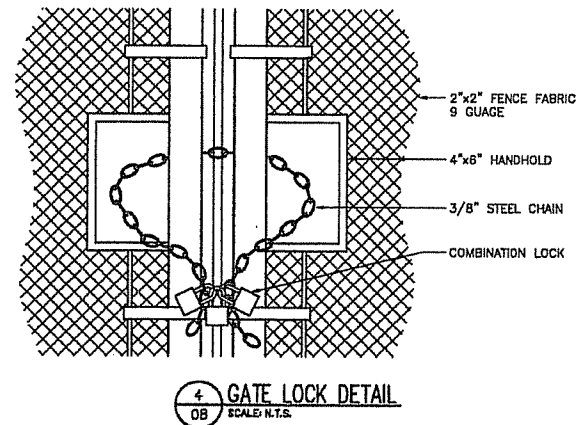
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OB
SCALE: N.T.S.



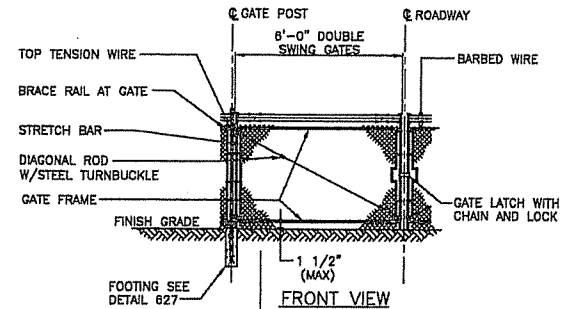
NOTE: FOR NOTES SEE DETAIL 2

WOVEN WIRE CORNER, GATE, END OR PULL POST

3
OB
SCALE: N.T.S.



4
OB
SCALE: N.T.S.



NOTE: SEE DETAIL 629 FOR NOTES.

TOP VIEW

WOVEN WIRE SWING GATE, DOUBLE

5
OB
SCALE: N.T.S.

JOHN M. BANKS
8719-005
SOUTH ELGIN
IL
ARCHITECT

CINGULAR WIRELESS

FENCE DETAILS

DRAWING NUMBER
WI2024-08

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0	03.30.07	PERMIT/CONSTRUCTION	RA	JMB	JMB

SCALE: AS SHOWN DESIGNED BY: JMB DRAWN BY: RA

NOTES:

1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING & EXCAVATION.
3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
5. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.
6. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE.
7. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
8. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
9. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
10. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
12. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

SITE WORK GENERAL NOTES:

1
09
DETAIL

NOTES:

1. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS OTHERWISE NOTED.
2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AWS. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AWS "MANUAL OF STEEL CONSTRUCTION". PAINTED SURFACES SHALL BE TOUCHED UP.
3. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4") CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
5. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.

STRUCTURAL STEEL NOTES:

2
09
DETAIL

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 330, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. SLAB FOUNDATION DESIGN ASSUMING ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A 618, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
 CONCRETE CAST AGAINST EARTH.....3 IN.
 CONCRETE EXPOSED TO EARTH OR WEATHER:
 #8 AND LARGER2 IN.
 #5 AND SMALLER & WWF.....1 1/2 IN.
 CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
 SLAB AND WALL3/4 IN.
 BEAMS AND COLUMNS.....1 1/2 IN.
5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

3
09
CONCRETE AND REINFORCING STEEL NOTES

GENERAL NOTES














1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
 CONTRACTOR - CINGULAR
 SUBCONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION)
 OWNER - CINGULAR
 OEM - ORIGINAL EQUIPMENT MANUFACTURE
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO SCALE AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING.
10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
13. CONSTRUCTION SHALL COMPLY WITH "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF CINGULAR GSM SITES."

4
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DETAIL

ABBREVIATIONS

- AGL ABOVE GRADE LEVEL
- BTS BASE TRANSCENDER STATION
- (E) EXISTING
- MIN MINIMUM
- N.T.S. NOT TO SCALE
- REF REFERENCE
- RF RADIO FREQUENCY
- T.B.D. TO BE DETERMINED
- T.B.R. TO BE RESOLVED
- TYP TYPICAL
- REQ REQUIRED
- EOR EQUIPMENT GROUND RING
- AWG AMERICAN WIRE GAUGE
- MGB MASTER GROUND BUS
- EG EQUIPMENT GROUND
- BCW BARE COPPER WIRE
- SIAD SMART INTEGRATED ACCESS DEVICE
- GEN GENERATOR
- IGR INTERIOR GROUND RING (HALO)
- RBS RADIO BASE STATION

SYMBOLS

-  SOLID GROUND BUS BAR
-  SOLID NEUTRAL BUS BAR
-  SUPPLEMENTAL GROUND CONDUCTOR
-  2-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
-  SINGLE-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
-  CHEMICAL GROUND ROD
-  GROUND ROD
-  DISCONNECT SWITCH
-  METER
-  EXOTHERMIC WELD (CADWELD) (UNLESS OTHERWISE NOTED)
-  5/8" x 10' COPPER CLAD STEEL GROUND ROD WITH INSPECTION SLEEVE
-  EXOTHERMIC WELD (CADWELD) WITH INSPECTION SLEEVE
-  GROUNDING WIRE

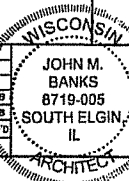
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ABBREVIATIONS AND SYMBOLS

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CINGULAR WIRELESS

CONSTRUCTION NOTES

DRAWING NUMBER	REV
WI2024-08	1

SCALE: AS SHOWN

DESIGNED BY: JMB

DRAWN BY: RA

ARCHITECT

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES. 2. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
2. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
3. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
4. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
5. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA.
6. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH PLASTIC TAPE PER COLOR SCHEDULE. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
7. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
8. ALL THE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
9. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
10. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#8 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
11. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
12. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
13. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANS/IEEE, AND NEC.
14. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
15. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
16. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
17. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND, DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
18. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANS/IEEE, AND NEC.
21. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER)

ELECTRICAL INSTALLATION NOTES (cont.):

23. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS OR NEMA 3R (OR BETTER) OUTDOORS
24. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) BETTER INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
25. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
26. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
27. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

1
10 DETAIL

GREENFIELD GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GESS) SHALL BE BONDED TOGETHER BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 8 OHMS OR LESS.
3. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT & PROVIDE TESTING RESULTS.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDING AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #8 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO ITS EQUIPMENT.
6. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 8 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE #2 AWG SOLID THREADED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR & EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTI-OXIDANT COATINGS (I.E. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 8 FT OF MAIN GROUND WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED, WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT FROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.

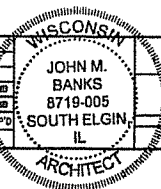
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10 DETAIL

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NO.	DATE	REVISIONS	BY	CHK	APP'D
1	05.31.07	REVISED PERMIT/CONSTRUCTION	RA	JMD	EJMD
0	03.30.07	PERMIT/CONSTRUCTION	RA	JMD	EJMD



CINGULAR WIRELESS

ELECTRICAL NOTES

DRAWING NUMBER

WI2024-10

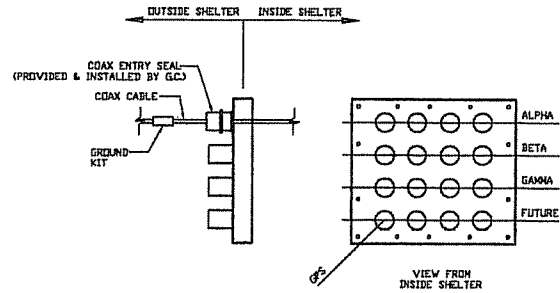
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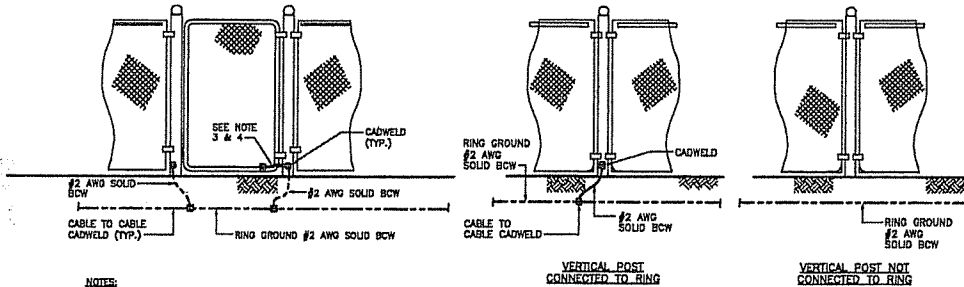
SCALE AS SHOWN

DESIGNED BY: JMD

DRAWN BY: RA



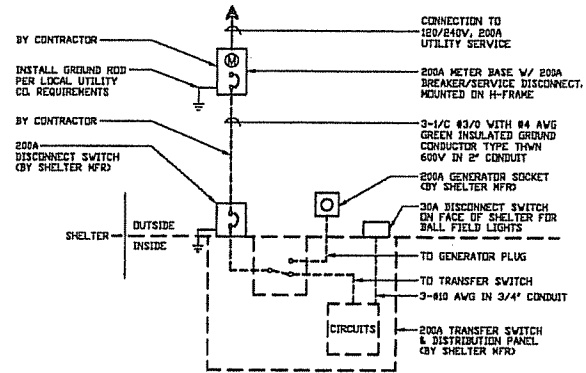
2 HATCH PLATE LAYOUT
SCALE: N.T.S.



- NOTES:**
1. THE #2 AWG. BCW. FROM THE RING GROUND SHALL BE CADWELDED TO THE POST ABOVE GRADE.
 2. BOND EACH HORIZONTAL POLE/BRADE TO EACH OTHER AND TO EACH VERTICAL POLE BONDED TO THE EXTERIOR GROUND RING.
 3. GATE JUMPER SHALL BE #4/0 AWG WELDING CABLE. HARDER NO. QJX4/024.
 4. GATE JUMPER SHALL BE INSTALLED SO THAT IT WILL NOT BE SUBJECTED TO DAMAGING STRAIN WHEN GATE IS FULLY OPEN IN EITHER DIRECTION.

- NOTES:**
1. VERTICAL POSTS SHALL BE BONDED TO THE RING AT EACH CORNER AND AT EACH GATE POST. AS A MINIMUM ONE VERTICAL POST SHALL BE BONDED TO THE GROUND RING IN EVERY 100 FOOT STRAIGHT RUN OF FENCE.
 2. HORIZONTAL POLES SHALL BE BONDED TO EACH OTHER.
 3. BOND EACH HORIZONTAL POLE/BRADE TO EACH OTHER AND TO EACH VERTICAL POST THAT IS BONDED TO THE EXTERIOR GROUND RING.

1 FENCE & GATE GROUNDING DETAILS
SCALE: N.T.S.



3 ONE-LINE DIAGRAM
SCALE: N.T.S.

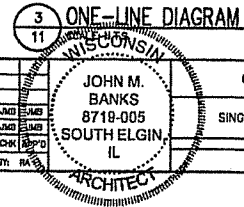
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NO.	DATE	REVISIONS	BY	CHK	APP'D
1	08.31.07	REVISED PERMIT/CONSTRUCTION	NA	JMD	JMD
2	03.20.07	PERMIT/CONSTRUCTION	NA	JMD	JMD

SCALE: AS SHOWN DESIGNED BY: JMD DRAWN BY: RAJ

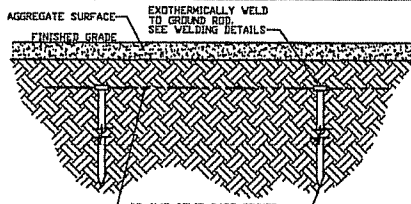


CINGULAR WIRELESS
SINGLE LINE DIAGRAM & DETAILS
DRAWING NUMBER: WI2024-11

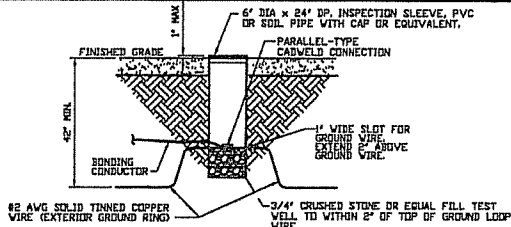
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GENERAL NOTES:

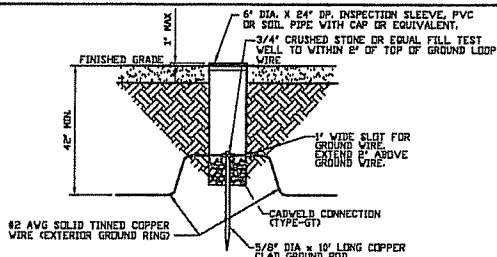
- ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL GROUNDING INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SPECIFIC SITE CONDITIONS.
- ALL EXTERIOR GROUNDING CABLE AND TOP OF GROUNDING RODS SHALL BE BURIED A MINIMUM DEPTH OF 48" BELOW FINISHED GRADE.
- ALL GROUNDING CONDUCTORS SHALL BE #2 SOLID TINNED COPPER CABLE.
- GROUND SYSTEM SHALL BE TESTED PER SPECIFICATIONS AND SHALL HAVE A RESISTANCE OF 5 OHMS OR LESS.
- NOTIFY ENGINEER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.



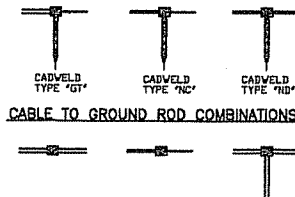
2 GROUND RING DETAIL
SCALE: N.T.S.



3 EXOTHERMIC WELD W/ INSPECTION SLEEVE
SCALE: N.T.S.



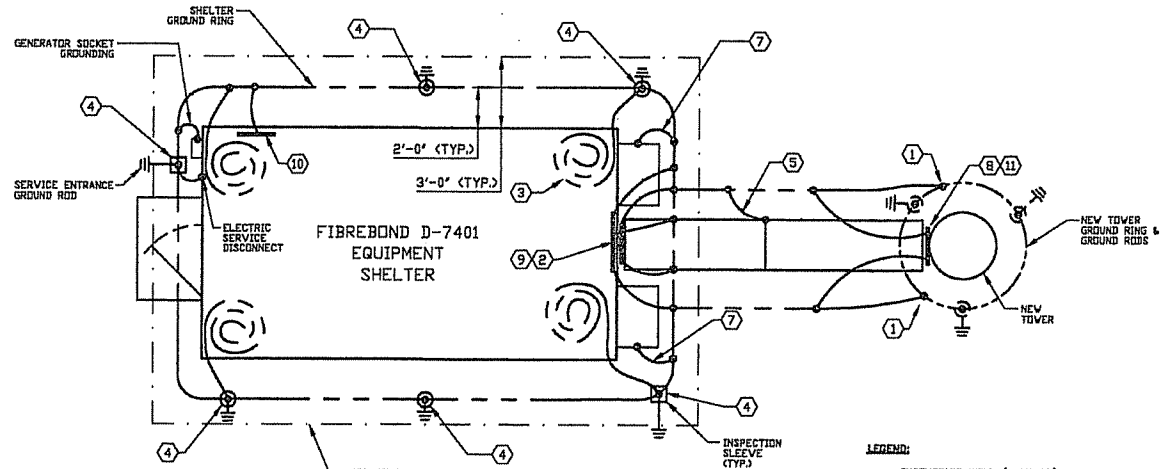
4 GROUND ROD W/ INSPECTION SLEEVE
SCALE: N.T.S.



5 EXOTHERMIC WELDING DETAILS
SCALE: N.T.S.

KEYED NOTES:

- TOWER GROUNDING:** EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING TO EXISTING TOWER AND MAKE EXOTHERMIC CONNECTION.
- HATCHPLATE GROUND BAR:** EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING UP TO THE HATCHPLATE GROUND BAR AND MAKE AN EXOTHERMIC WELD.
- GROUNDING OF INTERNAL GROUND RING:** EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING THROUGH 1/2" DIA. PVC SLEEVE INTO EQUIPMENT SHELTER FOR CONNECTION TO INTERIOR HALF GROUND RING. TYPICAL AT 4 BUILDING CORNERS.
- GROUND ROD:** COPPERCLAD STEEL, 5/8" DIA. TEN (10) FEET LONG.
- ICE BRIDGE SUPPORT POST GROUNDINGS:** EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING TO ALL ICE BRIDGE SUPPORT POSTS AND EXOTHERMICALLY WELD.
- FENCE GROUNDING:** IF FENCE IS WITHIN 6' OF GROUND RING, EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING TO FENCE CORNER POSTS AND EXOTHERMICALLY WELD. BOND INTERMEDIATE POST IF REQUIRED TO MAINTAIN 25' MAX SPACING.
- HVAC GROUNDING:** EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING TO THE HVAC UNIT AND MAKE A MECHANICAL CONNECTION.
- TOWER GROUND BAR:** EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING UP TO THE TOWER GROUND BAR AND MAKE AN EXOTHERMIC WELD. SECURE GROUND BAR DIRECTLY TO TOWER WITH STAINLESS STEEL MOUNTING MATERIAL.
- CELL REFERENCE GROUND BAR:** EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING UP TO THE CELL REFERENCE GROUND BAR (INSIDE SHELTER) AND MAKE A MECHANICAL CONNECTION.
- TELCO GROUND BAR:** EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING UP TO TELCO GROUND BAR (INSIDE SHELTER) AND MAKE A MECHANICAL CONNECTION.
- ANTENNA GROUND BAR:** MOUNT GROUND BAR DIRECTLY TO TOWER AT TOP OF COAX RUNS. SECURE TO TOWER WITH STAINLESS STEEL MOUNT.
- GATE GROUNDING:** EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING TO GATE POSTS AND EXOTHERMICALLY WELD.



1 GROUNDING PLAN
SCALE: (EXAGGERATED FOR CLARITY)

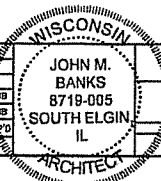
- LEGEND:**
- EXOTHERMIC WELD (CADWELD) (UNLESS OTHERWISE NOTED)
 - ⊖ 5/8" x 10' COPPER CLAD STEEL GROUND ROD
 - ⊖ 5/8" x 10' COPPER CLAD STEEL GROUND ROD WITH INSPECTION SLEEVE
 - ⊖ EXOTHERMIC WELD (CADWELD) WITH INSPECTION SLEEVE
 - GROUNDING WIRE

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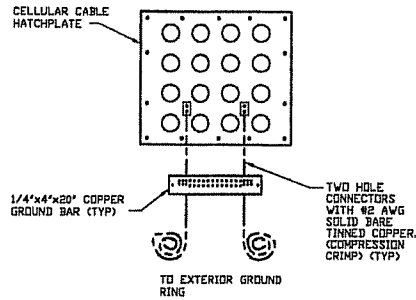


NO.	DATE	REVISIONS	BY	CHK	APP
1	03.31.07	REVISED PERMIT/CONSTRUCTION	RA	JMB	JMB
2	03.30.07	PERMIT/CONSTRUCTION	RA	JMB	JMB

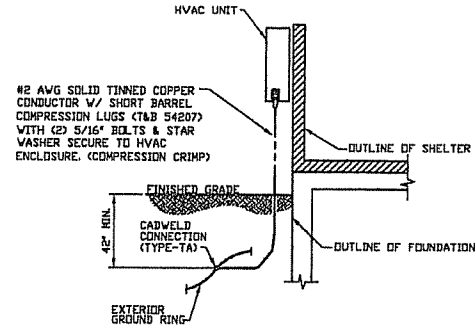


CINGULAR WIRELESS
GROUNDING PLAN & DETAILS
DRAWING NUMBER: WI2024-12
REV: 1

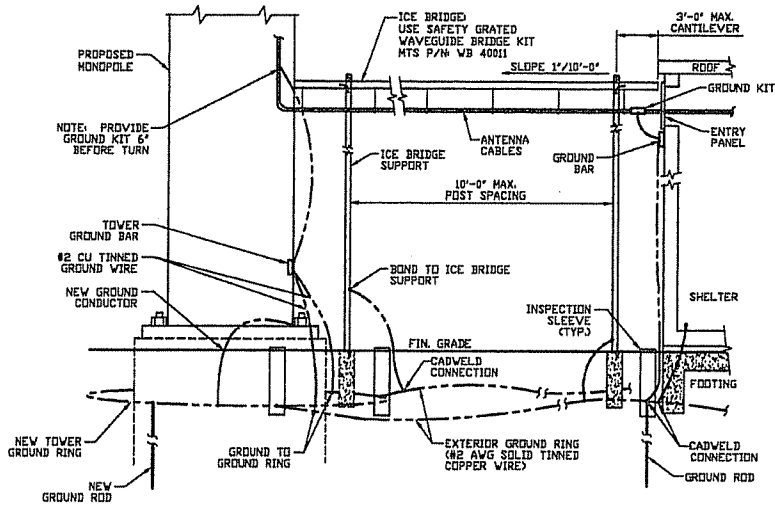
SCALE: AS SHOWN
DESIGNED BY: JMB
DRAWN BY: RA



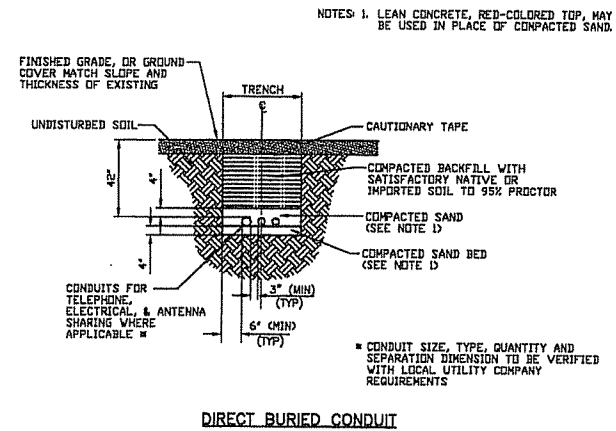
1
13
EXTERIOR HATCH PLATE GROUNDING AT BUILDING
SCALE: N.T.S.



2
13
HVAC GROUND DETAIL
SCALE: N.T.S.



3
13
ICE BRIDGE AND ANTENNA CABLE DETAIL
SCALE: N.T.S.



4
13
DETAIL
SCALE: N.T.S.

NOTES: 1. LEAN CONCRETE, RED-COLORED TOP, MAY BE USED IN PLACE OF COMPACTED SAND.

* CONDUIT SIZE, TYPE, QUANTITY AND SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS

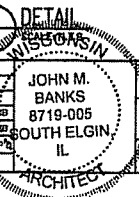
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NO.	DATE	REVISIONS	BY	APP'D
1	03.31.07	REVISED PERMIT/CONSTRUCTION	RA	JOHN M. BANKS
2	03.30.07	PERMIT/CONSTRUCTION	RA	JOHN M. BANKS

SCALE: AS SHOWN DESIGNED BY: JMD DRAWN BY: JMD



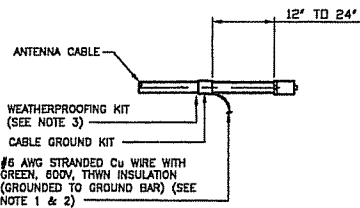
CINGULAR WIRELESS

GROUNDING DETAILS

DRAWING NUMBER

W12024-13

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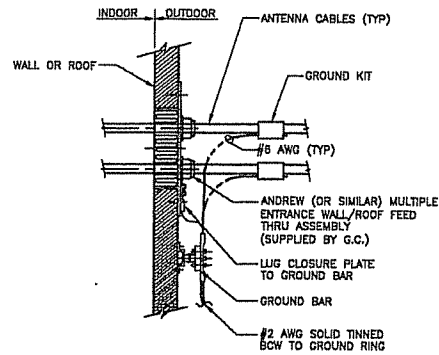


CONNECTION OF CABLE GROUND KIT TO ANTENNA CABLE

NOTES:

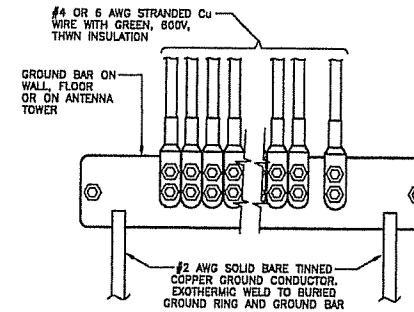
- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
- GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
- WEATHER PROOFING SHALL BE (TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.)

1
14
DETAIL
SCALE: N.T.S.



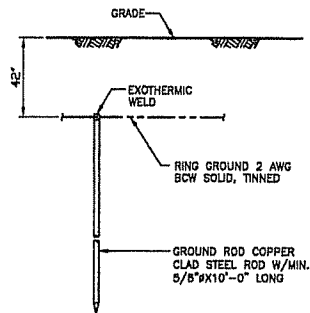
INSTALLATION OF CABLE GROUNDING KIT

2
14
DETAIL
SCALE: N.T.S.



INSTALLATION OF GROUND WIRE TO GROUND BAR

3
14
DETAIL
SCALE: N.T.S.



NOTE:

GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL.

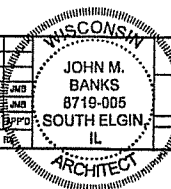
4
14
GROUND ROD DETAIL
SCALE: N.T.S.

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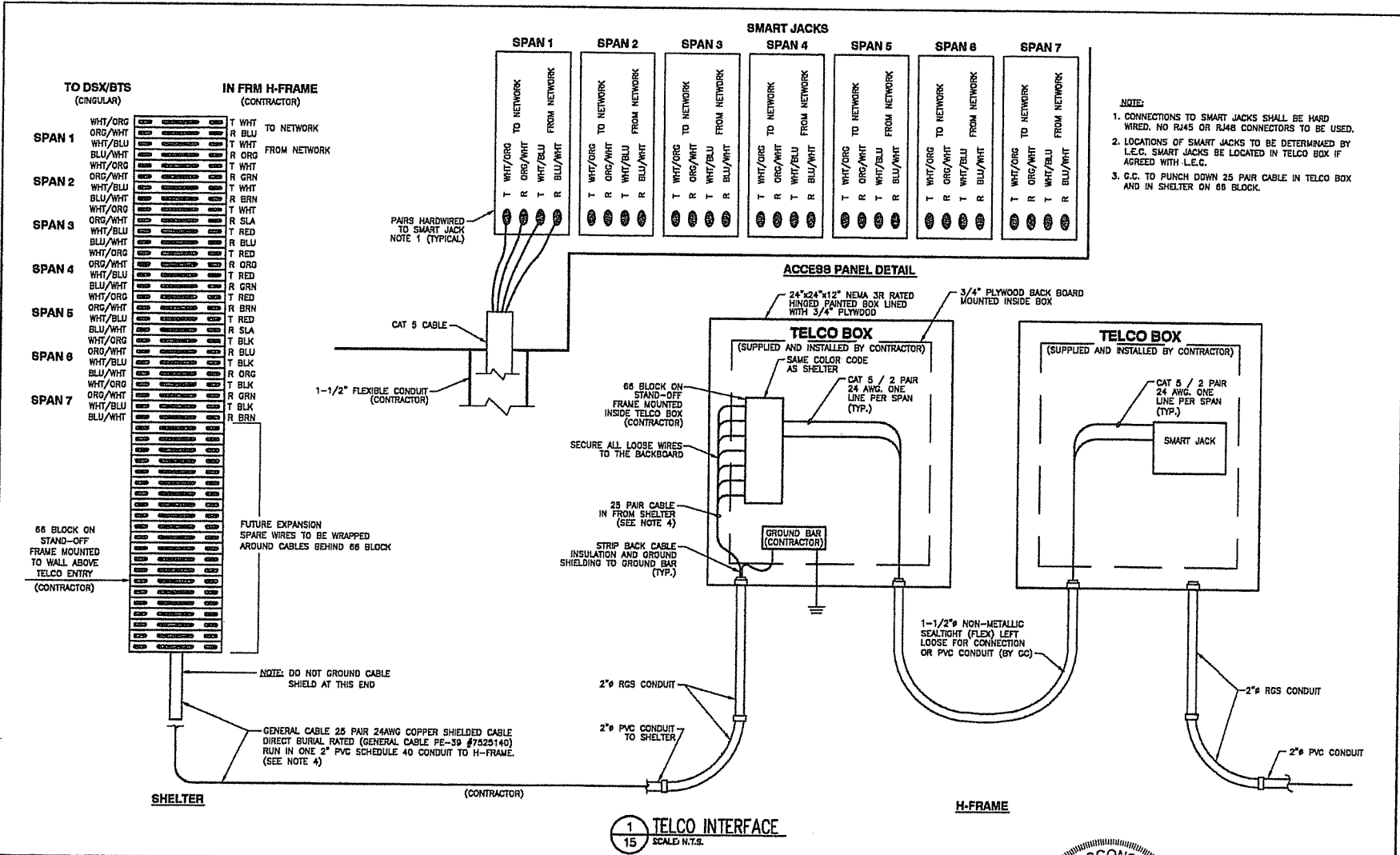


		CINGULAR WIRELESS	
		GROUNDING DETAILS	
		DRAWING NUMBER	
		WI2024-14	
		REV	
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1	03.31.07	REVISED PERMIT/CONSTRUCTION	RA	JMS	JMS
2	03.30.07	PERMIT/CONSTRUCTION	RA	JMS	JMS
NO.	DATE	REVISIONS	BY	CHK	APP'D

SCALE: AS SHOWN DESIGNED BY: JMS DRAWN BY: JMS



- NOTE:**
1. CONNECTIONS TO SMART JACKS SHALL BE HARD WIRED. NO RJ45 OR RJ48 CONNECTORS TO BE USED.
 2. LOCATIONS OF SMART JACKS TO BE DETERMINED BY L.E.C. SMART JACKS BE LOCATED IN TELCO BOX IF AGREED WITH L.E.C.
 3. G.C. TO PUNCH DOWN 25 PAIR CABLE IN TELCO BOX AND IN SHELTER ON 66 BLOCK.

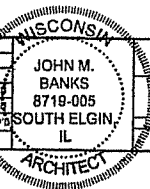
WESTCHESTER SERVICES L.L.C.
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 BARRINGTON, IL 60010
 TELEPHONE: 847-277-0070
 FAX: 847-277-0080
 ce@westchesterservices.com

JAMES MADISON HIGH SCHOOL
SITE NO. WI2024
 201 SOUTH GAMMON ROAD
 MADISON, WI 53717



NO.	DATE	REVISIONS	BY	CHKD	APP'D
1	03.31.07	REVISED PERMIT/CONSTRUCTION	RA	JMB	JMB
0	03.30.07	PERMIT/CONSTRUCTION	RA	JMB	JMB

SCALE: AS SHOWN DESIGNED BY: JMB DRAWN BY: JMB



CINGULAR WIRELESS

TELCO INTERFACE

DRWING NUMBER: WI2024-15

REV: 1

POS	CABLE FROM BTS	ALARM DEFINITION	LEVEL / ID	STATE	ALARM SIDE	DEVICE
1	WHITE/BLUE	SITE DOOR OPEN	1 / 0	BREAKING	FACTORY	FACTORY
2	BLUE/WHITE				INSTALLED	INSTALLED
3	WHITE/ORANGE	HI TEMP RADIO ROOM	1 / 1	BREAKING	FACTORY	FACTORY
4	ORANGE/WHITE				INSTALLED	INSTALLED
5	WHITE/GREEN	AC SURGE ARRESTOR FAIL	1 / 2	BREAKING	FACTORY	FACTORY
6	GREEN/WHITE				INSTALLED	INSTALLED
7	WHITE/BROWN	SMOKE DETECTOR	1 / 3	BREAKING	FACTORY	FACTORY
8	BROWN/WHITE				INSTALLED	INSTALLED
9	RED/BLUE	AC DISTRIBUTION FAIL	1 / 4	BREAKING	FACTORY	FACTORY
10	BLUE/RED				INSTALLED	INSTALLED
11	RED/ORANGE	LO TEMP RADIO ROOM	1 / 5	BREAKING	FACTORY	FACTORY
12	ORANGE/RED				INSTALLED	INSTALLED
13	RED/GREEN	24V BAT DISCONNECT FUSE FAIL	1 / 6	BREAKING	WHITE/BLUE	NC
14	GREEN/RED				BLUE/WHITE	COMMON
15	RED/BROWN	RECT SYSTEM A1 ALARM PECO	1 / 7	BREAKING	VIOLET/GREEN	MODULAR
16	BROWN/RED				VIOLET/ORANGE	PLUG
17	BLACK/BLUE	RECT SYSTEM A2 ALARM PECO	2 / 8	BREAKING	YELLOW/BROWN	MODULAR
18	BLUE/BLACK				YELLOW/SLATE	PLUG
19	BLACK/ORANGE	OVER VOLTAGE PECO	1 / 9	BREAKING	WHITE/BROWN	MODULAR
20	ORANGE/BLACK				WHITE/SLATE	PLUG
21	BLACK/GREEN	BATTERY ON DISCHARGE PECO	1 / A	BREAKING	RED/ORANGE	MODULAR
22	GREEN/BLACK				RED/GREEN	PLUG
23	BLACK/BROWN	FUSE FAIL TELCO	1 / B	BREAKING	WHITE/BLUE	NC
24	BROWN/BLACK				BLUE/WHITE	COMMON
25	YELLOW/BLUE	TMA TROUBLE	1 / C	BREAKING	WHITE	MODULAR
26	BLUE/YELLOW				BLUE	PLUG
27	YELLOW/ORANGE	WHITE STROBE FAIL	1 / D	BREAKING	WHITE/BLUE	NC
28	ORANGE/YELLOW				BLUE/WHITE	COMMON
29	YELLOW/GREEN	RED STROBE FAIL	1 / E	BREAKING	WHITE/ORANGE	NC
30	GREEN/YELLOW				ORANGE/WHITE	COMMON
31	YELLOW/BROWN	SIDE LIGHT FAILURE	2 / F	BREAKING	WHITE/GREEN	NC
32	BROWN/YELLOW				GREEN/WHITE	COMMON

NOTE:

1. THAT CONTRACTOR HAS MADE THIS INSERT ANY QUESTIONS CONTACT A CONTRACTOR REP.
2. THAT POSITION 33 TO 50 ON THE 88 BLOCK IS FOR FUTURE USE.
3. G.C. SHALL RUN CAT 5 CABLE FROM EQUIPMENT TO ASTERISK (*) TERMINAL ON 88 BLOCK AND LEAVE COILED AT 88 BLOCK FOR CINGULAR TO TERMINATE.
4. CAT 5 CABLE SHALL RUN ALONG CABLE TRAY AND BE DRESSED PROPERLY WITH THE WRAPS CUT SUCH THAT SHARP EDGES ARE POINTED UPWARD, CAT 5 CABLE SHOULD NEVER BE STAPLED AGAINST ANY SURFACE TO HOLD IT IN PLACE.

LEGEND:

* DENOTES CONTRACTOR PUNCHDOWN RESPONSIBILITY.

1
16 ALARM TERMINATION DIAGRAM
SCALE: N.T.S.

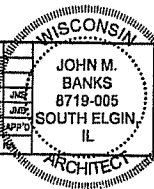
WESTCHESTER SERVICES L.L.C.
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SITE NO. WI2024
201 SOUTH GAMMON ROAD
MADISON, WI 53717



NO.	DATE	REVISIONS	BY	CHK	APP'D
1	05.31.07	REVISED PERMIT/CONSTRUCTION	RA	JMB	JMB
0	03.30.07	PERMIT/CONSTRUCTION	RA	JMB	JMB

SCALE: AS SHOWN DESIGNED BY: JMB DRAWN BY:



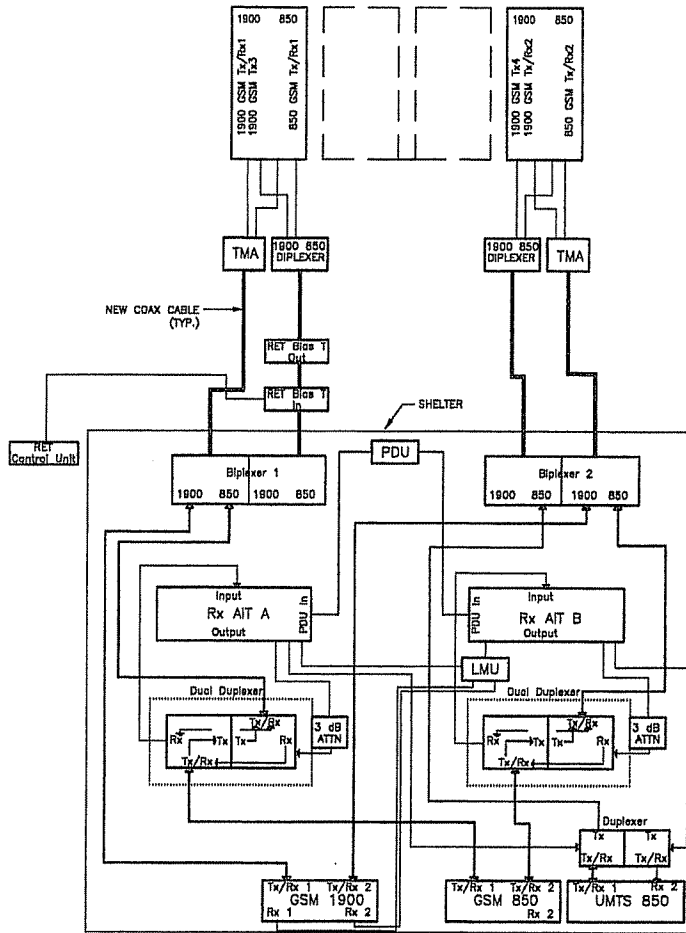
CINGULAR WIRELESS

ALARM TERMINATION

DRAWING NUMBER
WI2024-16

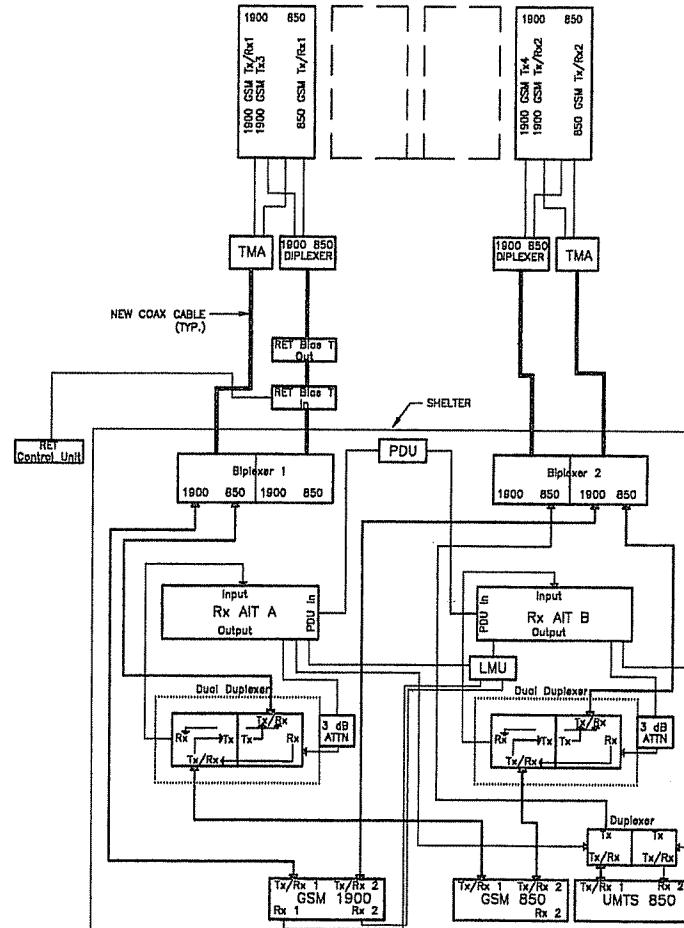
REV
1

CONFIGURATION AS VIEWED FROM THE FRONT OF THE PLATFORM AND THE FRONT OF ANTENNA



1 SECTOR "A" DETAIL
17 SCALE: N.T.S.

CONFIGURATION AS VIEWED FROM THE FRONT OF THE PLATFORM AND THE FRONT OF ANTENNA



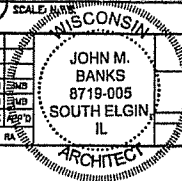
2 SECTOR "B" DETAIL
17 SCALE: N.T.S.

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SITE NO. WI2024
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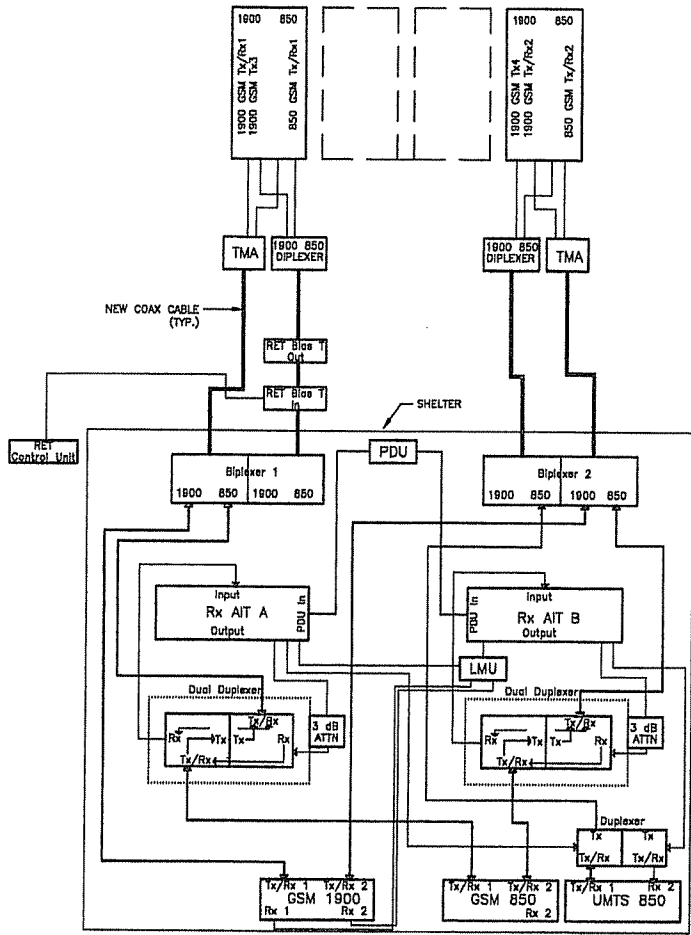


NO.	DATE	REVISIONS	BY	CHK'D	APP'D
1	03.31.07	REVISED PERMIT/CONSTRUCTION	RA	JMB	JMB
2	03.30.07	PERMIT/CONSTRUCTION	RA	JMB	JMB
SCALE: AS SHOWN DESIGNED BY: JMB DRAWN BY: RA					



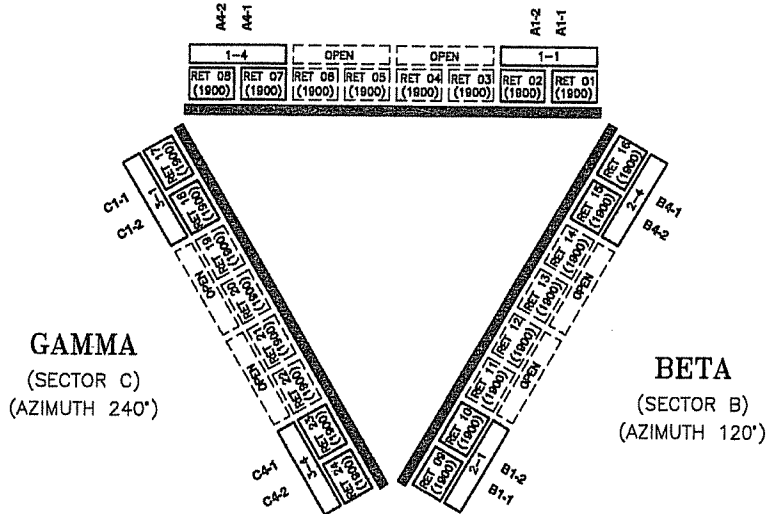
CINGULAR WIRELESS
SECTORS A & B
OWNER: JAMES MADISON HIGH SCHOOL
PROJECT: WI2024-17

CONFIGURATION AS VIEWED FROM THE FRONT OF THE PLATFORM AND THE FRONT OF ANTENNA



1 SECTOR "C" DETAIL
SCALE: N.T.S.

ALPHA
(SECTOR A)
(AZIMUTH 0°)



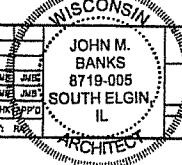
2 ANTENNA CONFIGURATION - PLAN VIEW
SCALE: N.T.S.

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JAMES MADISON HIGH SCHOOL
SITE NO. WI2024
201 SOUTH GAMMON ROAD
MADISON, WI 53717



NO.	DATE	REVISIONS	BY	CHKD	APPD
1	08.31.07	REVISED PERMIT/CONSTRUCTION	RA	JUNE	JUNE
2	03.30.07	PERMIT/CONSTRUCTION	RA	JUNE	JUNE
SCALE: AS SHOWN DESIGNED BY: JWB DRAWN BY: N/A					



CINGULAR WIRELESS	
SECTOR C & PLAN VIEW	
DRAWING NUMBER	REV
WI2024-18	1

SECTOR	ANTENNA NUMBER	POLARITY/PORT	TOP AND BOTTOM JUMPER COLOR	COAX ID	ANTENNA MODEL	ANTENNA VENDOR	TMA	AZIMUTH	MECH. DOWNTILT	ELECT. DOWNTILT	ANTENNA CENTERLINE FROM GROUND	ANTENNA TIP HEIGHT	COMMSCOPE COAXIAL FEEDER	
													SIZE	LENGTH
A	A1	+45 PCS 1900	W W Bl	A1-1	XDU06-80-R	CSS	RFS	0°	0	2	110°-0"	113'-0"	1-5/8"	140'
		-45 PCS 1900	W W Gr	A1-2									1-5/8"	140'
	A4	+45 PCS 1900	W V Bl	A4-1	XDU06-80-R	CSS	RFS	0°	0	2	110°-0"	113'-0"	1-5/8"	140'
		-45 PCS 1900	W V Gr	A4-2									1-5/8"	140'
B	B1	+45 PCS 1900	R W Bl	B1-1	XDU06-80-R	CSS	RFS	120°	0	2	110°-0"	113'-0"	1-5/8"	140'
		-45 PCS 1900	R W Gr	B1-2									1-5/8"	140'
	B4	+45 PCS 1900	R V Bl	B4-1	XDU06-80-R	CSS	RFS	120°	0	2	110°-0"	113'-0"	1-5/8"	140'
		-45 PCS 1900	R V Gr	B4-2									1-5/8"	140'
C	C1	+45 PCS 1900	Y W Bl	C1-1	XDU06-80-R	CSS	RFS	240°	0	2	110°-0"	113'-0"	1-5/8"	140'
		-45 PCS 1900	Y W Gr	C1-2									1-5/8"	140'
	C4	+45 PCS 1900	Y V Bl	C4-1	XDU08-80-R	CSS	RFS	240°	0	2	110°-0"	113'-0"	1-5/8"	140'
		-45 PCS 1900	Y V Gr	C4-2									1-5/8"	140'

TMA MODEL ALL SECTORS (6 TOTAL)	RFS ATM192012-0

NEW MATERIAL EXCLUDING COAX - ALL MATERIAL PROVIDED BY CONTRACTOR

ELECTRICAL DOWNTILT AISG CABLES

ELECTRICAL DOWNTILT AISG BIAS-Ts

LENGTH	MFG.	PART NUMBER	QTY.	MFG.	MODEL	PART NUMBER	REMARK	QTY.
1.5 FEET	CSS	992100-CA005	6	CSS		992015-SC	BTS SIDE	1
12 FEET	CSS	992100-CA040	5	CSS	WEATHER CAP	992016-SC	ANTENNA SIDE	1
24 FEET	CSS	992100-CA080	1	ELECTRICAL DOWNTILT PRIMARY CONTROL				
36 FEET	CSS	992100-CA120	3	MFG.	MODEL	PART NUMBER	REMARK	QTY.
WEATHER CAP	CSS	992005-VS	1	CSS		992010	INPUT VOLTAGE 24VDC	1

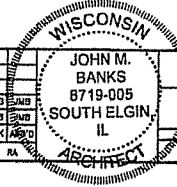
1 ANTENNA INFORMATION CHART
19 SCALED N.T.S.

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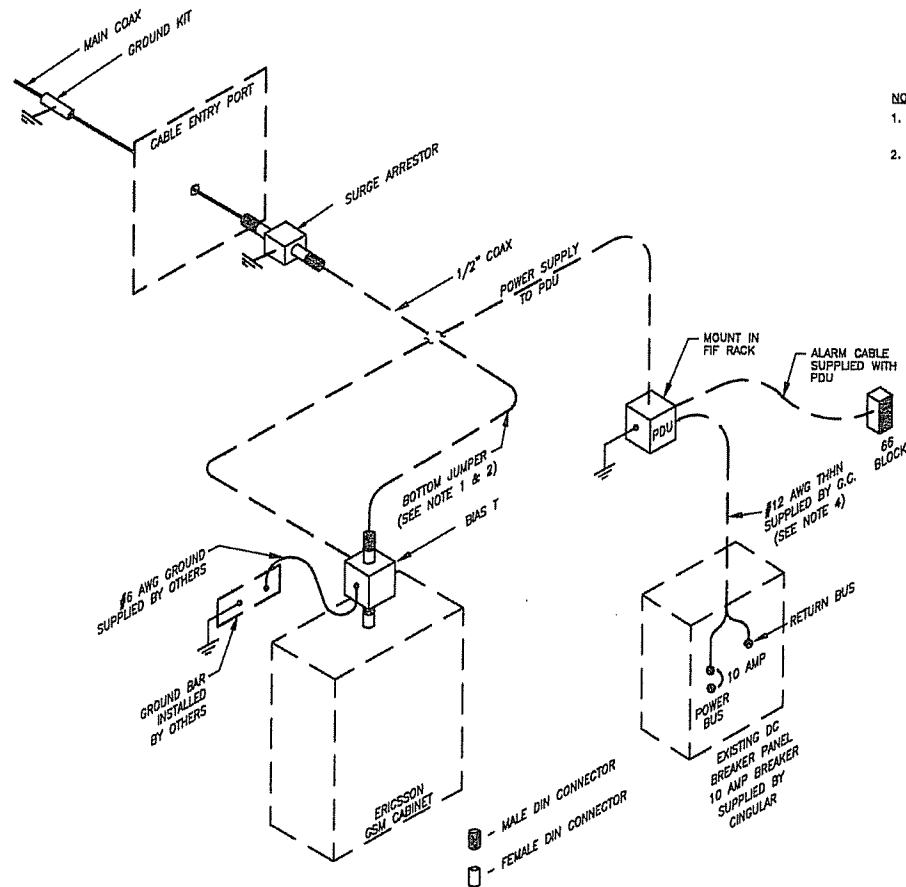
NO.	DATE	REVISIONS	BY	CHK	APP'D
1	05.31.07	REVISED PERMIT/CONSTRUCTION	RA	JMB	JMB
2	03.30.07	PERMIT/CONSTRUCTION	RA	JMB	JMB



CINGULAR WIRELESS
ANTENNA INFORMATION CHART

DRAWING NUMBER: WI2024-19
REV: 1

SCALE: AS SHOWN
DESIGNED BY: JMB
DRAWN BY: RA



- NOTES:**
1. FOR BOTTOM JUMPERS USE 1/2" COAX.
 2. FABRICATE JUMPERS TO ASSURE THAT THE CONNECTOR IS 56" FROM THE PLATFORM ALLOWING ENOUGH SLACK TO REACH ALL BTS CONNECTIONS IF CABINET IS NOT IN PLACE.

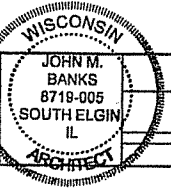
1
20 BOTTOM JUMPER & BIAS T DETAIL
SCALE: N.T.S.

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JAMES MADISON HIGH SCHOOL
SITE NO. W12024
 201 SOUTH GAMMON ROAD
 MADISON, WI 53717



NO.	DATE	REVISIONS	BY	CHK	APP
1	05.31.07	REVISED PERMITS/CONSTRUCTION	RA	JMB	RA
0	03.30.07	PERMITS/CONSTRUCTION	RA	JMB	RA



CINGULAR WIRELESS
BOTTOM JUMPER & BIAS T DETAIL
DRAWING NUMBER
W12024-20
REV
1

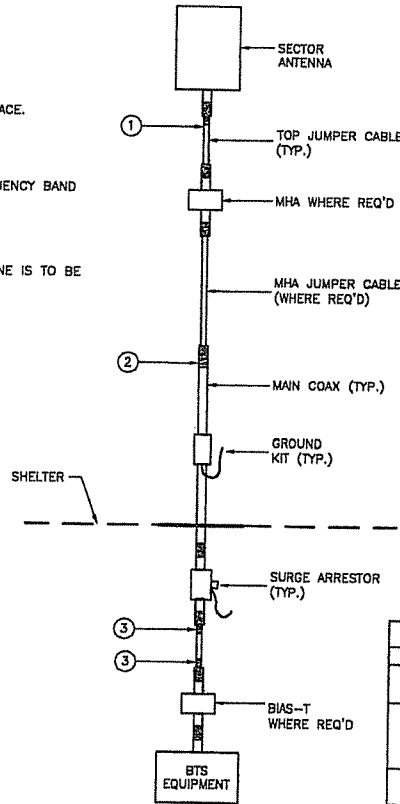
SCALE: AS SHOWN
 DESIGNED BY: JMB
 DRAWN BY: RA

GENERAL NOTES:

- SECTOR ORIENTATION/AZIMUTH WILL VARY FROM REGION TO REGION AND IS SITE SPECIFIC, REFER TO ANTENNA DESIGN SHEET FOR EACH SITE TO DETERMINE THE ANTENNA LOCATION AND FUNCTION OF EACH TOWER SECTOR FACE.
- THE STANDARD IS BASED ON NINE COLORED TAPES—WHITE, RED, YELLOW, VIOLET, GREEN, BLUE, AND BROWN, ORANGE AND GREY. THESE TAPES SHOULD BE READILY AVAILABLE TO THE ELECTRICIAN OR CONTRACTOR ON SITE.
- USING COLOR BANDS ON THE CABLES, MARK ALL RF CABLE BY SECTOR#, ANTENNA#, ANTENNA PORT, AND FREQUENCY BAND AS SHOWN ON "CABLE MARKING COLOR CONVENTION TABLE".
- WHEN AN EXISTING COAXIAL LINE THAT IS INTENDED TO BE A SHARED LINE BETWEEN GSM/3G AND IS 136/TDMA IS ENCOUNTERED, THE CONTRACTOR IS TO REMOVE THE EXISTING COLOR CODING SCHEME AND REPLACE IT WITH THE COLOR CODING AND TAGGING STANDARD THAT IS OUTLINED IN THIS GUIDELINE. IN THE ABSENCE OF AN OF AN EXISTING COLOR CODING AND TAGGING SCHEME, OR WHEN INSTALLING NEW COAXIAL CABLES, THIS GUIDELINE IS TO BE IMPLEMENTED AT THAT SITE REGARDLESS OF TECHNOLOGY.
- ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE INSTALLED USING A MINIMUM OF (3) WRAPS OF TAPE AND SHALL BE NEATLY TRIMMED AND SMOOTHED SO AS TO AVOID UNRAVELING.
- ALL COLOR BANDS INSTALLED ON THE TOWER TOP SHALL BE A MINIMUM OF 3" WIDE AND SHALL HAVE A MINIMUM 3/4" OF SPACE BETWEEN EACH COLOR.
- ALL COLOR BANDS SHALL BE INSTALLED AT OR NEAR THE GROUND AND SHALL BE A MINIMUM OF 3/4" WIDE.
- ALL COLOR CODES SHALL BE INSTALLED SO AS TO ALIGN NEATLY WITH ONE ANOTHER FROM SIDE TO SIDE.

CABLE MARKING COLOR CONVENTION TABLE									
SECTOR ALPHA, A, 1	CABLE A1-1	CABLE A1-2	CABLE A2-1	CABLE A2-2	CABLE A3-1	CABLE A3-2	CABLE A4-1	CABLE A4-2	
	X-POL	WHITE WHITE BLUE	WHITE WHITE GREEN	WHITE RED BLUE	WHITE RED GREEN	WHITE YELLOW BLUE	WHITE YELLOW GREEN	WHITE VIOLET BLUE	WHITE VIOLET GREEN
	V-POL	WHITE WHITE BROWN		WHITE RED BROWN		WHITE YELLOW BROWN		WHITE VIOLET BROWN	
	BAND	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY
SECTOR BETA, B, 2	CABLE B1-1	CABLE B1-2	CABLE B2-1	CABLE B2-2	CABLE B3-1	CABLE B3-2	CABLE B4-1	CABLE B4-2	
	X-POL	RED WHITE BLUE	RED WHITE GREEN	RED RED BLUE	RED RED GREEN	RED YELLOW BLUE	RED YELLOW GREEN	RED VIOLET BLUE	RED VIOLET GREEN
	V-POL	RED WHITE BROWN		RED RED BROWN		RED YELLOW BROWN		RED VIOLET BROWN	
	BAND	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY
SECTOR GAMMA, C, 3	CABLE C1-1	CABLE C1-2	CABLE C2-1	CABLE C2-2	CABLE C3-1	CABLE C3-2	CABLE C4-1	CABLE C4-2	
	X-POL	YELLOW WHITE BLUE	YELLOW WHITE GREEN	YELLOW RED BLUE	YELLOW RED GREEN	YELLOW YELLOW BLUE	YELLOW YELLOW GREEN	YELLOW VIOLET BLUE	YELLOW VIOLET GREEN
	V-POL	YELLOW WHITE BROWN		YELLOW RED BROWN		YELLOW YELLOW BROWN		YELLOW VIOLET BROWN	
	BAND	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY	ORANGE/ GREY

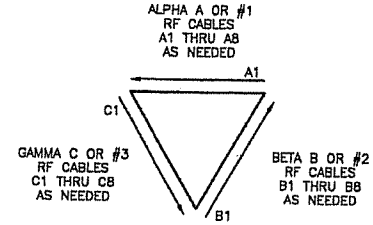
NOTE: X-POLE ANTENNAS SHOULD USE BLUE FOR THE "+" PORT, GREEN FOR THE "-" PORT.
NOTE: COLORBAND #4 REFERS TO THE FREQUENCY BAND: ORANGE=850, GREY=1900



CABLE MARKING LOCATIONS DIAGRAM & COAX COLOR CODE IDENTIFICATION DETAIL

1 DETAIL
21 SCALE: N.T.S.

SECTORIZED EXAMPLE:



TOWER PLAN VIEW

NOTE: IF EXISTING CABLES AT THE SITE ALREADY HAVE A COLOR CODING SCHEME AND THEY ARE NOT INTENDED TO BE REUSED OR SHARED WITH THE GSM TECHNOLOGY, THEN THE EXISTING COLOR CODING SCHEME MAY REMAIN UNTOUCHED.

ALL RF CABLE SHALL BE MARKED AS PER CABLE MARKING LOCATIONS TABLE BELOW:

CABLE MARKING LOCATIONS TABLE			
NO.	TAPE	TAG	LOCATIONS
1.	X		EACH TOP JUMPER WILL BE COLOR CODED WITH ONE SET OF (3") WIDE BANDS.
2.	X		EACH MAIN COAX SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS NEAR THE TOP JUMPER CONNECTION WITH (1) SET OF 3/4" WIDE COLOR BANDS JUST PRIOR TO ENTERING THE BTS OR TRANSMITTER BUILDING.
3.	X		ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF BOTTOM JUMPER.

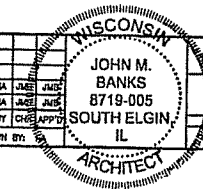
WESTCHESTER SERVICES LLC.
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SITE NO. WI2024
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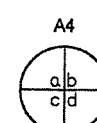
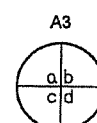
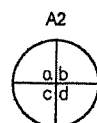
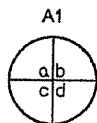
NO.	DATE	REVISIONS	BY	CHEK APP'D	SCALE	DESIGNED BY:	DRAWN BY:
1	05.31.07	REVISED PERMIT/CONSTRUCTION	RA	JMB		JMB	JMB
0	03.30.07	PERMIT/CONSTRUCTION	RA	JMB		JMB	JMB

SCALE: AS SHOWN DESIGNED BY: JMB DRAWN BY: JMB



CINGULAR WIRELESS
COAX LABELING
DESIGNED NUMBER
WI2024-21

NOTE:
THE FOLLOWING LIST IS TO BE FILED
OUT UPON COMPLETION. ONE LIST IS TO
REMAIN ON SITE AND TWO ARE TO BE
FILED WITH CINGULAR.



A1

a	_____
b	_____
c	_____
d	_____

A2

a	_____
b	_____
c	_____
d	_____

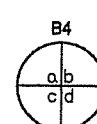
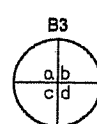
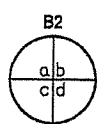
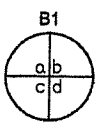
A3

a	_____
b	_____
c	_____
d	_____

A4

a	_____
b	_____
c	_____
d	_____

SECTOR '1'



B1

a	_____
b	_____
c	_____
d	_____

B2

a	_____
b	_____
c	_____
d	_____

B3

a	_____
b	_____
c	_____
d	_____

B4

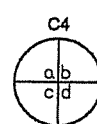
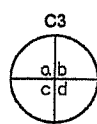
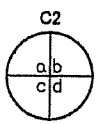
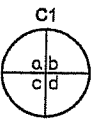
a	_____
b	_____
c	_____
d	_____

SECTOR '2'

CABLE PORT DIAGRAM

**CAUTION: HARMFUL RF ENERGY
EXISTS ON THESE LINES**

*** CABLE PORT DIAGRAM AS SEEN
FROM THE INSIDE OF SHELTER**



C1

a	_____
b	_____
c	_____
d	_____

C2

a	_____
b	_____
c	_____
d	_____

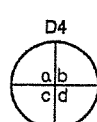
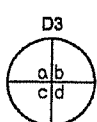
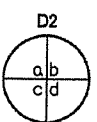
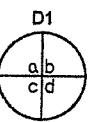
C3

a	_____
b	_____
c	_____
d	_____

C4

a	_____
b	_____
c	_____
d	_____

SECTOR '3'



D1

a	_____
b	_____
c	_____
d	_____

D2

a	_____
b	_____
c	_____
d	_____

D3

a	_____
b	_____
c	_____
d	_____

D4

a	_____
b	_____
c	_____
d	_____

CABLE PORT NOTES:

- A. CONTRACTOR SHALL FILL OUT THE CABLE PORT DIAGRAM UPON COAX INSTALLATION. CABLE PORT DIAGRAM WILL BE AFFIXED TO THE INTERIOR SHELTER WALL NEAR THE CABLE ENTRY PORT TO AID IN CABLE IDENTIFICATION. THE CHART IS INTENDED TO BE USED TO RECORD THE LINE AND CORRESPONDING ANTENNA POSITION ON THE TOWER AT THE TIME OF INSTALLATION.
- B. ONE COMPLETED COPY PLUS TWO BLANK COPIES OF THE CHART SHOULD BE POSTED IN THE SHELTER IN A PROTECTIVE PLASTIC SLEEVE.
- C. CABLE PORT DIAGRAM SHALL BE DRAWN AS SEEN FROM THE INSIDE OF THE EQUIPMENT SHELTER OR ROOM.
- D. IF PORT PLATE CONFIGURATION DIFFERS FROM THE DIAGRAM ABOVE, PLEASE PROVIDE ADDITIONAL DOCUMENTATION EXPLAINING THE DIFFERENCE.
- E. CABLES SHALL BE IDENTIFIED USING THE CABLE ID FROM THE "CABLE MARKING COLOR" CONVENTION TABLE AND/OR THE ANTENNA DESIGNATION GIVEN BY CINGULAR.

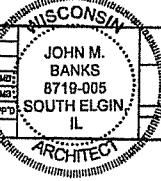
1
22 CABLE PORT DIAGRAM
SCALE N.T.S.

WESTCHESTER SERVICES L.L.C.
804 FOX GLEN
BARRINGTON, IL 60010
TELEPHONE: 847-277-0070
FAX: 847-277-0980
cc@westchesterservices.com

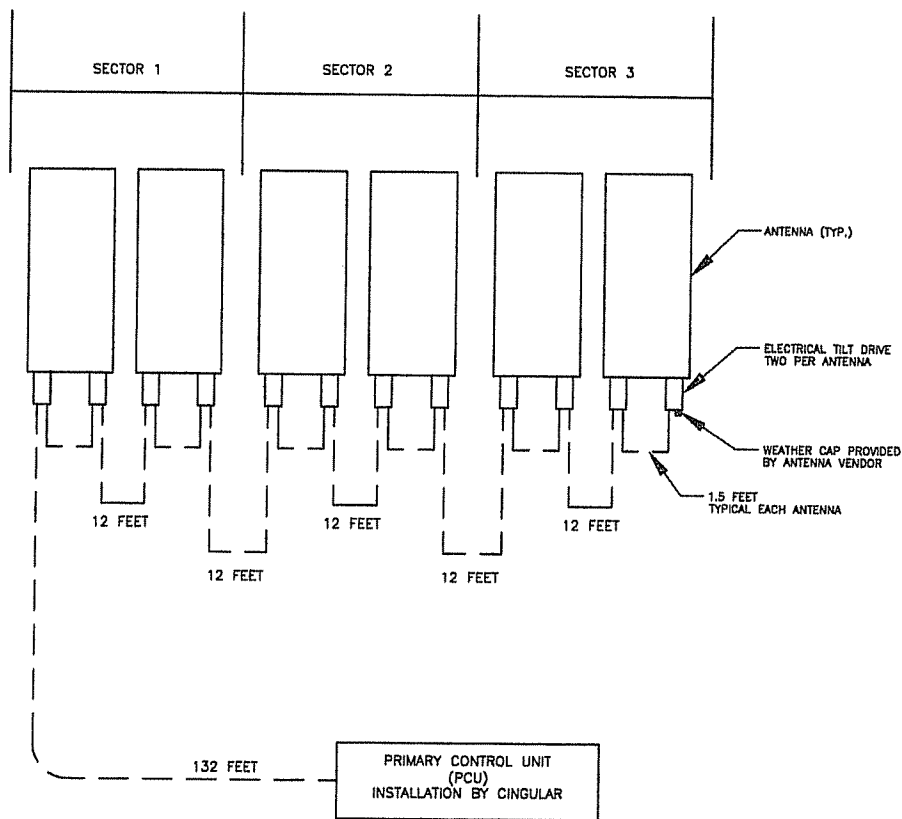
JAMES MADISON HIGH SCHOOL
SITE NO. WI2024
201 SOUTH GAMMON ROAD
MADISON, WI 53717



NO.	DATE	REVISIONS	BY	CHK	APPD
1	05.31.07	REVISED PERMIT/CONSTRUCTION	RA	JME	JMZ
0	03.30.07	PERMIT/CONSTRUCTION	RA	JME	JMZ
SCALE: AS SHOWN		DESIGNED BY: JMB	DRAWN BY:		

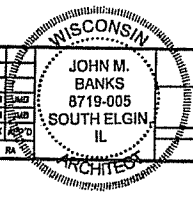


CINGULAR WIRELESS	
CABLE PORT DIAGRAM	
ISSUED NUMBER	REV
WI2024-22	1



- NOTES:**
1. ALSO CABLES PROVIDED CONTROL AND POWER TO ELECTRICAL DOWN TILT DRIVES ON THE ANTENNAS.
 2. THE CABLES ARE FACTORY ASSEMBLIES WITH ONE MALE AND ONE FEMALE CONNECTOR ON EACH END. SUPPORT EVERY 18" USING TIE-WRAPPS SUITABLE FOR OUTDOOR USE.
 3. NO TESTING OR WEATHERPROOFING OF THE CABLE IS REQUIRED.
 4. SEE PLUMBING DIAGRAM FOR ALSO BWS-T PLACEMENT.

RET DIAGRAM
SCALE: N.T.S.



WESTCHESTER SERVICES LLC.
804 FOX GLEN
BARRINGTON, IL 60010
TELEPHONE: 847-277-0070
FAX: 847-277-0080
westchesterservices.com

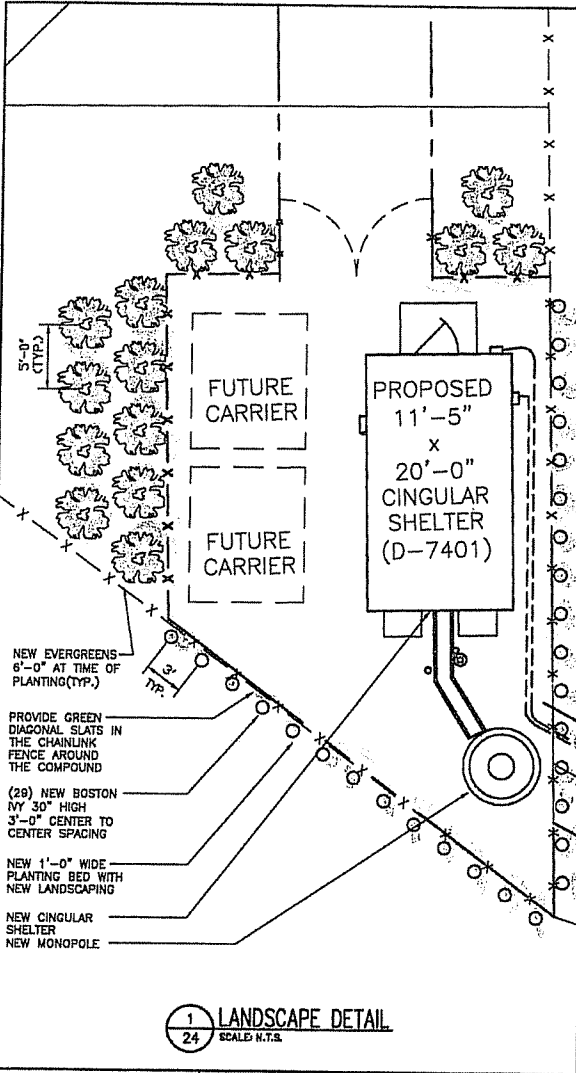
JAMES MADISON HIGH SCHOOL
SITE NO. WI2024
201 SOUTH GAMMON ROAD
MADISON, WI 53717



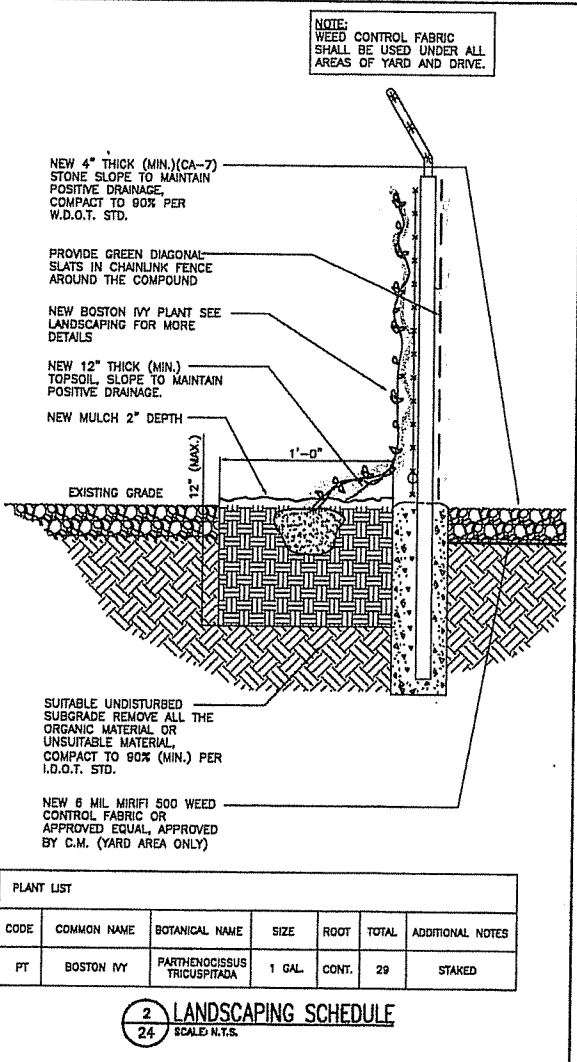
NO.	DATE	REVISIONS	BY	CHK	APP'D
1	03.31.07	REVISED PERMIT/CONSTRUCTION	RA	JMB	EMD
0	03.30.07	PERMIT/CONSTRUCTION	RA	JMB	EMD

SCALE: AS SHOWN DESIGNED BY: JMB DRAWN BY: RA

CINGULAR WIRELESS	
RET DIAGRAM	DRAWING NUMBER
WI2024-23	1



1 LANDSCAPE DETAIL
SCALE: N.T.S.

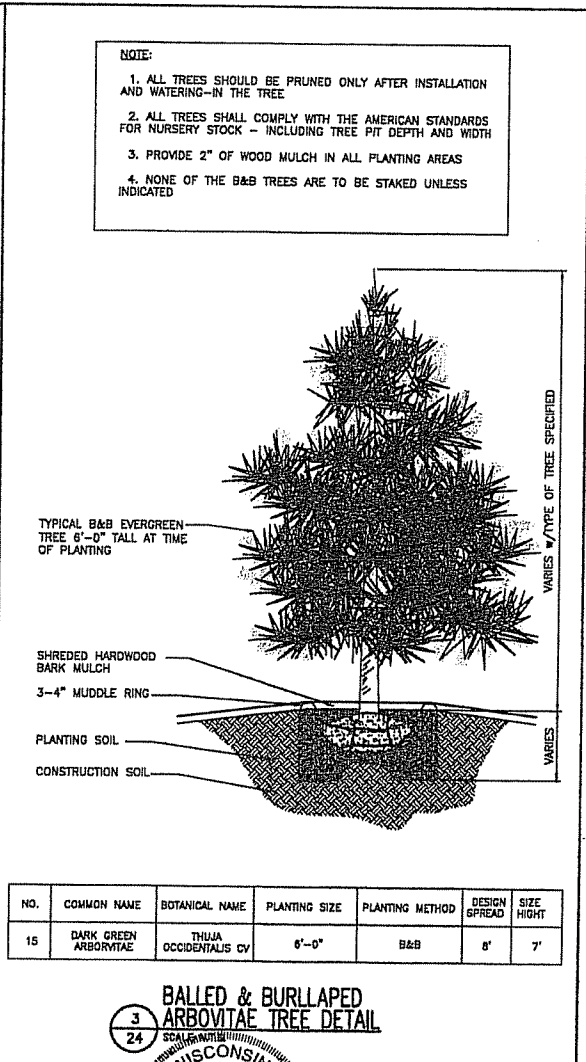


NOTE:
WEED CONTROL FABRIC SHALL BE USED UNDER ALL AREAS OF YARD AND DRIVE.

PLANT LIST

CODE	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	TOTAL	ADDITIONAL NOTES
PT	BOSTON IVY	FARTHENOCISSUS TRICUSPIDATA	1 GAL.	CONT.	29	STAKED

2 LANDSCAPING SCHEDULE
SCALE: N.T.S.



NOTE:
1. ALL TREES SHOULD BE PRUNED ONLY AFTER INSTALLATION AND WATERING-IN THE TREE
2. ALL TREES SHALL COMPLY WITH THE AMERICAN STANDARDS FOR NURSERY STOCK - INCLUDING TREE PIT DEPTH AND WIDTH
3. PROVIDE 2" OF WOOD MULCH IN ALL PLANTING AREAS
4. NONE OF THE B&B TREES ARE TO BE STAKED UNLESS INDICATED

NO.	COMMON NAME	BOTANICAL NAME	PLANTING SIZE	PLANTING METHOD	DESIGN GF/READ	SIZE HEIGHT
15	DARK GREEN ARBOVITAE	THUJA OCCIDENTALIS CV	6'-0"	B&B	8'	7'

3 BALLED & BURLAPED ARBOVITAE TREE DETAIL
SCALE: N.T.S.

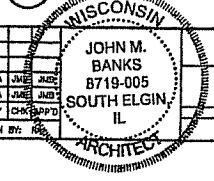
WESTCHESTER SERVICES LLC.
804 FOX GLEN
BARRINGTON, IL 60010
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JAMES MADISON HIGH SCHOOL
SITE NO. W12024
201 SOUTH GAMMON ROAD
MADISON, WI 53717

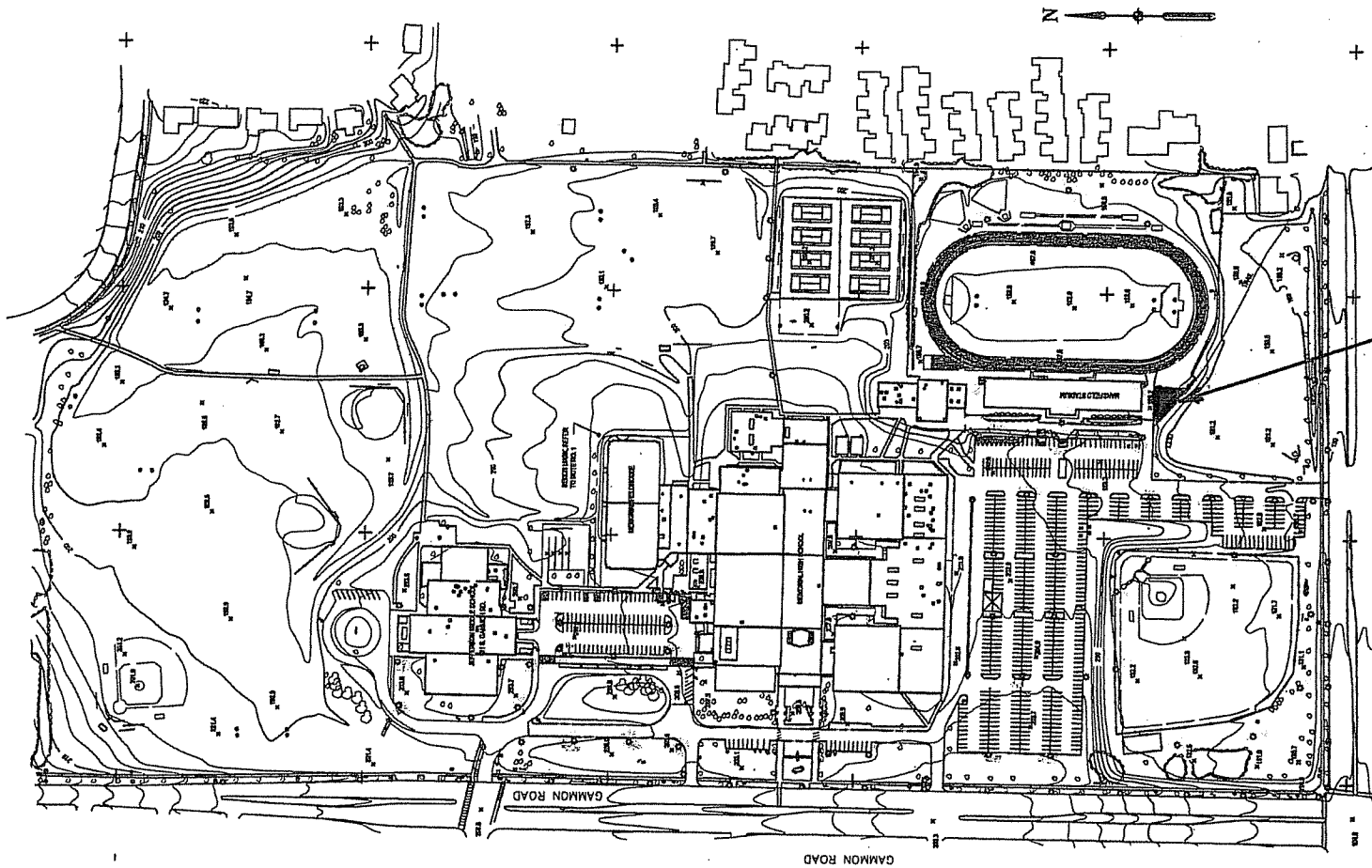


NO.	DATE	REVISIONS	BY	CHECKED
1	05.31.07	REVISED PERMIT/CONSTRUCTION	JA	JMB
0	03.30.07	PERMIT/CONSTRUCTION	JA	JMB

SCALE: AS SHOWN DESIGNED BY: JMB DRAWN BY: JMB



CINGULAR WIRELESS
LANDSCAPING PLAN & DETAILS
DRAWING NUMBER: W12024-24
REV: 1



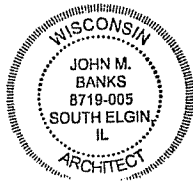
PROPOSED CINGULAR
LEASE AREA WITH
FENCE, TOWER, AND
EQUIPMENT SHELTER

Stadium/
Athletic Field Lights

Parking and
Auxillary Lights

NOTES

1. INFORMATION FOR THIS SURVEY AND MAP WAS REFERENCED TO CITY OF MADISON ORIGINAL CORNER SURVEY IN CITY OF MADISON. DATUM = HALLS. BENCH MARK IS TOP OF MONUMENT AT SOUTHWEST CORNER OF 1868 RESIDENCE ACROSS.
2. CONTOUR INTERVAL IS TWO (2) FEET.
3. TOPOGRAPHIC MAP WAS DEVELOPED BY AERIAL PHOTOGRAPHY. BASED ON AERIAL PHOTOGRAPHY TAKEN ON APRIL 15, 1982. PHOTO CONTROL BY NCS ON REFERENCE TO THE CITY OF MADISON.
4. GRID SYSTEM IS REFERENCED TO THE TISSOTEREN 8250 PLANE COORDINATE SYSTEM SOUTH ZONE, USING CITY OF MADISON BENCHMARK COORDINATE AS FIELD MEASUREMENT.



MADISON METROPOLITAN SCHOOL DISTRICT
BUILDING SERVICES
4711 PFLAZA ROAD, MADISON, WI 53718 VOICE 204-7900 FAX 204-0374

MEMORIAL SITE
SITE PLAN

DATE 11/93 FIGURE NO. SITE 145_S. DWG