Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BUILDING INSPECTION

PERMIT

Please Read Application And Notes, If Any, Attached

Permit Number: 061582

PERMIT ISSUED

NOV 17 2006

CITY OF PORTLAND

This is to certify that ~~LABRECQUE SCOTT P & ARE C JTS/George Atamian~~

has permission to ~~nstall 3 existing antennae wi ew ante e~~

AT ~~1340 OLD RIVERSIDE ST~~ ~~357 C004001~~

provided that the person or persons rm or tion a epting this permit shall comply with all of the provisions of the Statutes of ine and of the C nances of the City of Portland regulating the construction, maintenance and e of buildings and uctures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

ification of inspe on mus e en and w en perm on proc d ore this ilding o rt there s ed or erwi osed-in 4 UR NO REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. _____

Health Dept. _____

Appeal Board _____

Other _____
Department Name

11/3/06

Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No:	Issue Date:	CBL:
06-1601		357 C005001

Location of Construction:	Owner Name:	Owner Address:	Phone:
1340 Riverside St	Labrecque C Paul & Alice A Jts	55 Brook Rd	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	SBA Network Services	318 main Street Southbridge	2072824200
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Radio/Telecommunications Tower	I-M

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Telecommunications Tower	replacing 3 existing antennas with 3 new antennas of similar size on existing tower	$110.00	$110.00	5

FIRE DEPT: ☐ Approved ☐ Denied

N/A

Signature: Greg Cass

INSPECTION:
Use Group: U Type: 2B

11/3/06

Signature

Proposed Project Description:
replacing 3 existing antenas with 3 new antennas of similar size on exisiting tower.

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
dmartin	10/30/2006

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☐ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date: 11/17/06	Date:	Date:

PERMIT ISSUED

NOV 17 2006

CITY OF PORTLAND

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT | ADDRESS | DATE | PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE | DATE | PHONE

General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: old 1340 Riverside ST		
Total Square Footage of Proposed Structure	Square Footage of Lot	
Tax Assessor's Chart, Block & Lot Chart# 357 Block# 3 C Lot# 005	Owner: ~~Exeter~~ Circular Wireless	Telephone:
Lessee/Buyer's Name (If Applicable) Nextel Communications	Applicant name, address & telephone: SBA Network Services 318 Main Street. Southbridge, MA 01550	Cost Of Work: $ 20,000.— Fee: $ 220.— C of O Fee: $

Current Specific use: Telecommunications Tower/Facility
If vacant, what was the previous use? _____
Proposed Specific use: Telecommunications Tower/ Facility

Project description: Replacing 3 existing antennas with 3 new antennas of similar size. Adding a new 6'x10' concrete pad for the installation of new equipment cabinets.

Contractor's name, address & telephone: George Atamian 318 Main Street 508-764-0383 Southbridge MA 01550

Who should we contact when the permit is ready: Rick Aiken or Aaron Collier
Mailing address: Phone: 207-282-4200 603-540-5245

Please submit all of the information outlined in the Commercial Application Checklist.
Failure to do so will result in the automatic denial of your permit.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information visit us on-line at www.portlandmaine.gov, stop by the Building Inspections office, room 315 City Hall or call 874-8703.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature of applicant:	**Date:** 10-20-06

This is not a permit; you may not commence ANY work until the permit is issued.

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
OCT 26 2006
RECEIVED

V# 217420

City of Portland, Maine - Building or Use Permit

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No:	Date Applied For:	CBL:
06-1601	10/30/2006	357 C005001

Location of Construction:	Owner Name:	Owner Address:	Phone:
1340 Riverside St	Labrecque C Paul & Alice A Jts	55 Brook Rd	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	SBA Network Services	318 main Street Southbridge	(207) 282-4200
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Radio/Telecommunications Tower	

Proposed Use:	Proposed Project Description:
replacing 3 existing antennas with 3 new antennas of similar size on existing tower	replacing 3 existing antenas with 3 new antennas of similar size on exisiting tower.

Dept: Zoning **Status:** Approved **Reviewer:** Marge Schmuckal **Approval Date:** 11/01/2006

Note: **Ok to Issue:** ☐

Dept: Building **Status:** Approved with Conditions **Reviewer:** Mike Nugent **Approval Date:** 11/03/2006

Note: **Ok to Issue:** ☑

1) Spoke with applicant. Engineer has to provide written certification that the exsiting tower is capable of withstanding the new loads and will comply with TIA/EIA - 222 referenced in section 3108 of the 2003 IBC, prior to commencement of construction.

2) Final inspection by the engineer and written compliance certifiaction must be provided prior to closure.

Dept: Fire **Status:** Not Applicable **Reviewer:** Cptn Greg Cass **Approval Date:** 11/02/2006

Note: **Ok to Issue:** ☐

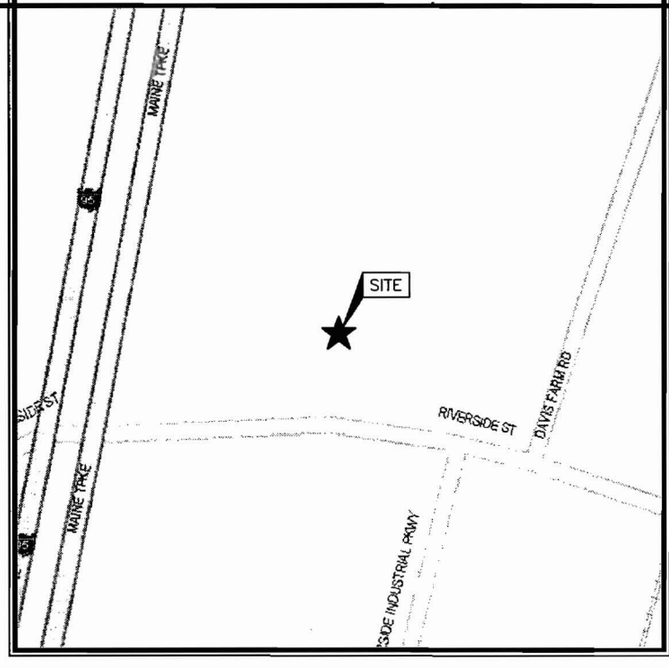
NEXTEL™

NEXTEL COMMUNICATIONS, INC.

~~MORRILL'S CORNER~~
1340 RIVERSIDE ST.
PORTLAND, ME 04101

SITE NUMBER: ME1509 CASCADE: BS73XC055

LOCATION MAP:



CONSULTANTS:

BAY STATE DESIGN ASSOCIATES, Inc.
ARCHITECTS • ENGINEERS

70 TOWER OFFICE PARK
WOBURN, MA 01801

PHONE: 781-932-2467
FAX: 781-932-9771

PROJECT SUMMARY:

SITE NAME:
MORRILL'S CORNER

SITE NUMBER
ME1509

CASCADE NUMBER:
BS73XC055

PROPERTY OWNER:

CENTER OF ANTENNAS:
LATITUDE: N 43.716778°
LONGITUDE: W 70.305722°

APPLICANT
NEXTEL COMMUNICATIONS INC.
9 CROSBY DRIVE
BEDFORD, MA 01730

INDEX:

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF COLLOCATING ON AN EXISTING 180' MONOPOLE. SWAPPING OF (1) EXISTING ANTENNAS WITH (1) CDMA ANTENNA PER SECTOR, INSTALL (3) 1-5/8" COAX CABLES, AND ADDING OUTDOOR CABINETS ON A PROPOSED 6'-0" x 10'-0" CONCRETE PAD.

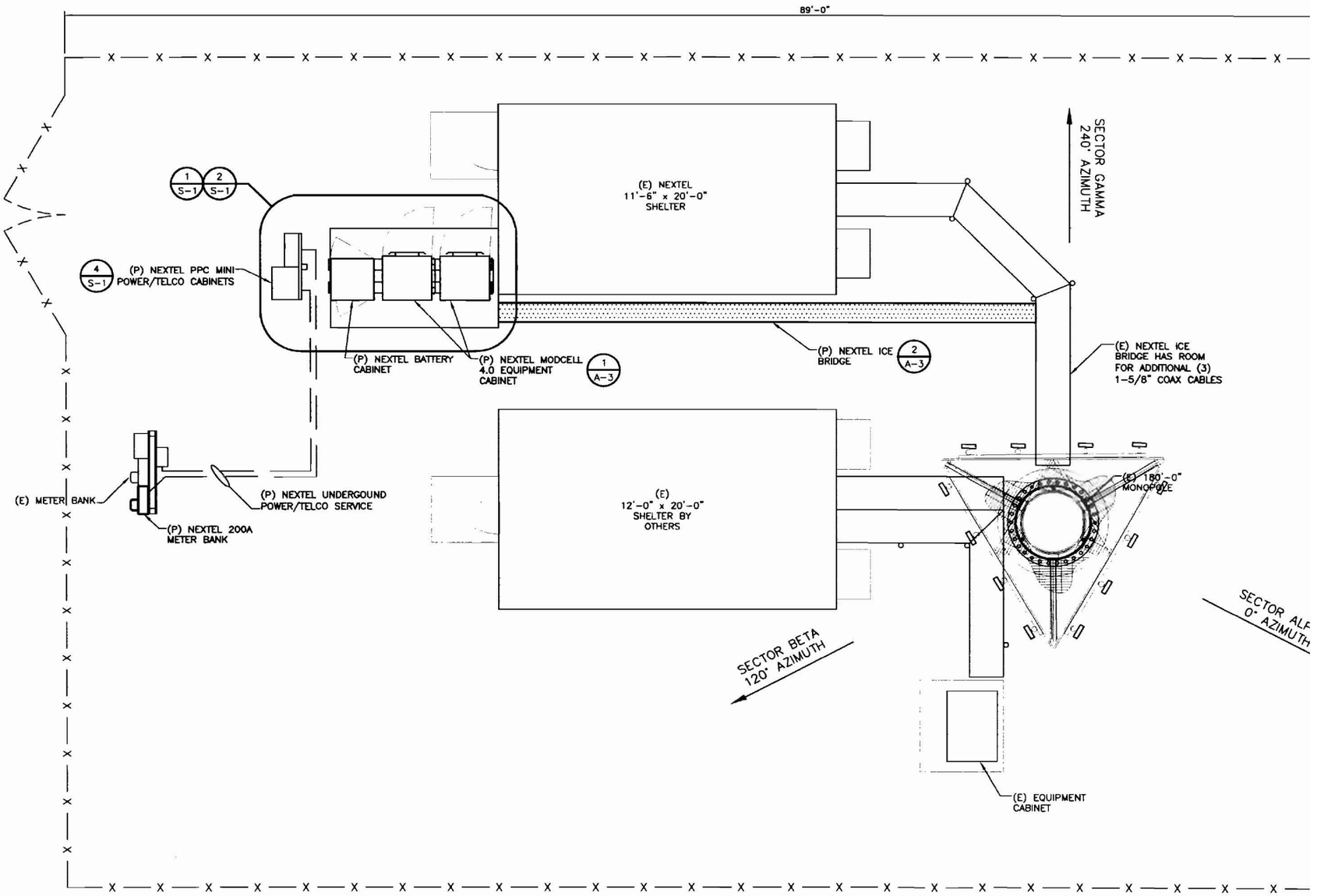
DIRECTIONS

HEAD SOUTH FROM CROSBY DR, TURN RIGHT AT BURLINGTON RD, BEAR RIGHT INTO THE US-3 N ENTRY RAMP TO BILLERICA/LOWELL, CONTINUE ON LOWELL CONN N TOWARD LAWRENCE (I-495 N), TAKE THE I-495 N EXIT 30A-B TO LAWRENCE, CONTINUE ON I-95 N, TAKE THE RIVERSIDE ST. EXIT 48 TO LARRABEE RD. (ME-25)/(US-302), TURN RIGHT AT RIVERSIDE ST AND HEAD TOWARD ROUTE US 302/MUNICIPAL GOLF, ARRIVE AT 1340 RIVERSIDE ST PORTLAND, ME 04103

DO NOT SCALE DRAWINGS

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

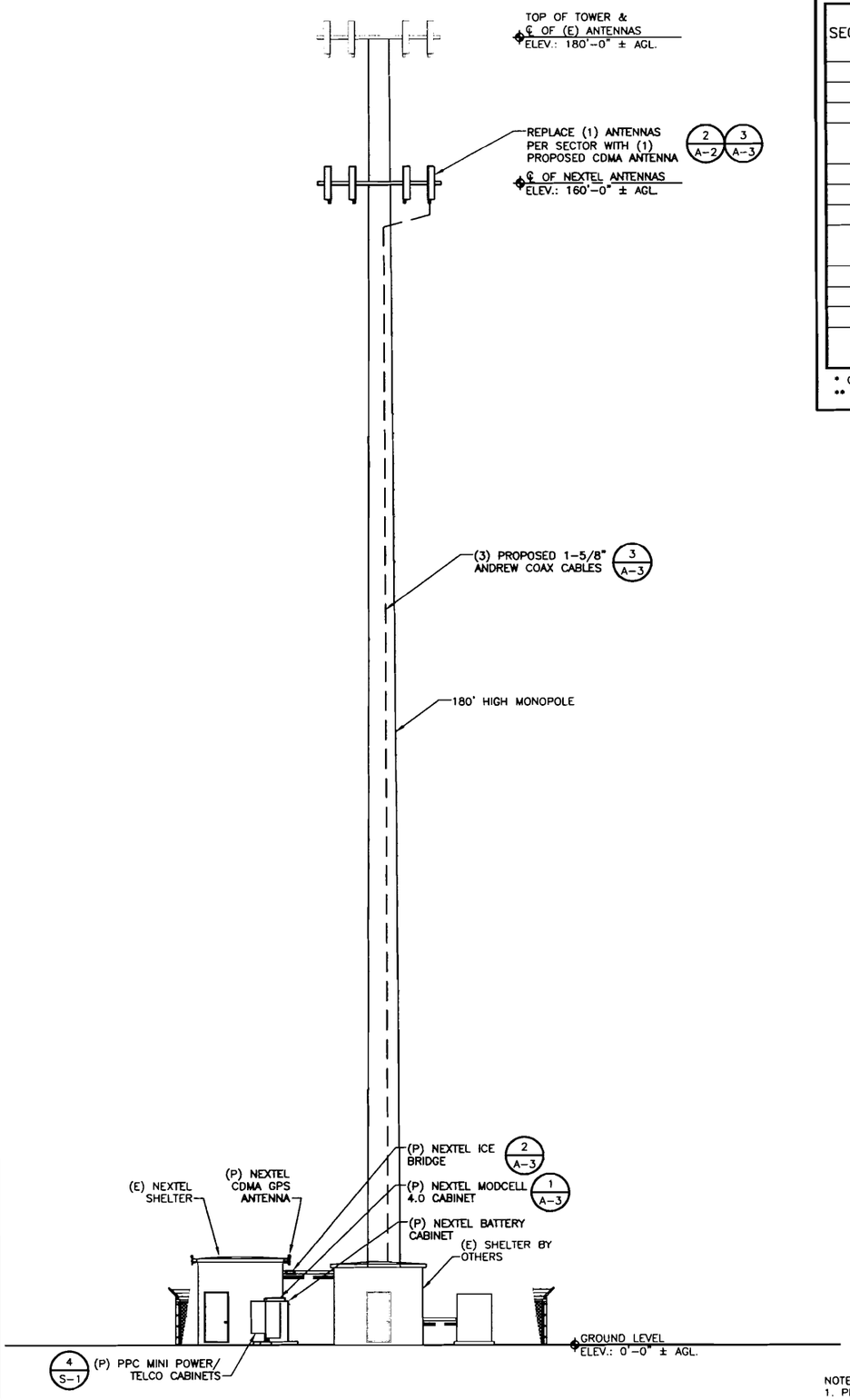
FACILITY IS UNMANNED AI



SITE PLAN

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

1



ELEVATION

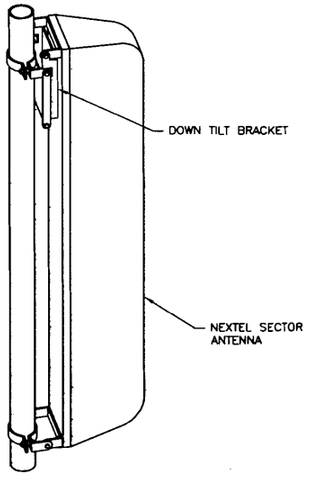
SCALE: 3/32" = 1'-0"

1

NEXTEL RF SYSTEM SCHEDU

SECTOR	ANTENNA	AZIMUTH	DOWN TILT M	DOWN TILT E	RAD CTR. (FT. A.G.L.)	MAKE	MODEL	FEED	COAX SIZE (IN.)	C MANUF
A	IDEN	0	0	0	160	DECIBEL	DB846G90A-XY	BOTTOM	1 5/8"	AN
	IDEN	0	0	0	160	DECIBEL	DB846G90A-XY	BOTTOM	1 5/8"	AN
	IDEN	0	0	0	160	DECIBEL	DB846G90A-XY	BOTTOM	1 5/8"	AN
	CDMA	**0**	**0**	**2**	**160**	**ANDREW**	**DB932DG65T2E-M**	**BOTTOM**	1 5/8"	AN
									1 5/8"	**AN**
B	IDEN	120	0	0	160	DECIBEL	DB846G90A-XY	BOTTOM	1 5/8"	AN
	IDEN	120	0	0	160	DECIBEL	DB846G90A-XY	BOTTOM	1 5/8"	AN
	IDEN	120	0	0	160	DECIBEL	DB846G90A-XY	BOTTOM	1 5/8"	AN
	CDMA	**120**	**0**	**2**	**160**	**ANDREW**	**DB932DG65T2E-M**	**BOTTOM**	1 5/8"	AN
									1 5/8"	**AN**
C	IDEN	240	0	0	160	DECIBEL	DB846G90A-XY	BOTTOM	1 5/8"	AN
	IDEN	240	0	0	160	DECIBEL	DB846G90A-XY	BOTTOM	1 5/8"	AN
	IDEN	240	0	0	160	DECIBEL	DB846G90A-XY	BOTTOM	1 5/8"	AN
	CDMA	**240**	**0**	**2**	**160**	**ANDREW**	**DB932DG65T2E-M**	**BOTTOM**	1 5/8"	AN
									1 5/8"	**AN**

* COAX CABLE LENGTHS ARE ESTIMATES; CONTRACTOR SHALL VERIFY IN FIELD.
** MINIMUM SEPARATION BETWEEN GPS ANTENNAS IS 4'. INSTALL GPS FOR SOUTHERN EXPOSURE AND REGIONAL SNOW DEPTH.



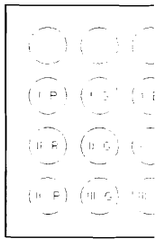
ANTENNA MOUNT

SCALE: N.T.S.

2

COAX PORT AS

(VIEWED FROM INSIDE EQUIP



COLOR KEY
R - RED
G - GREEN
B - BLUE
V - VIOLET
BR - BROWN
W - WHITE

CDMA ANTENNA DATA			
SECTOR	AZIMUTH	MODEL	NUMBER
1	0	DB932DG65T2E-M	1
2	120	DB932DG65T2E-M	1
3	240	DB932DG65T2E-M	1

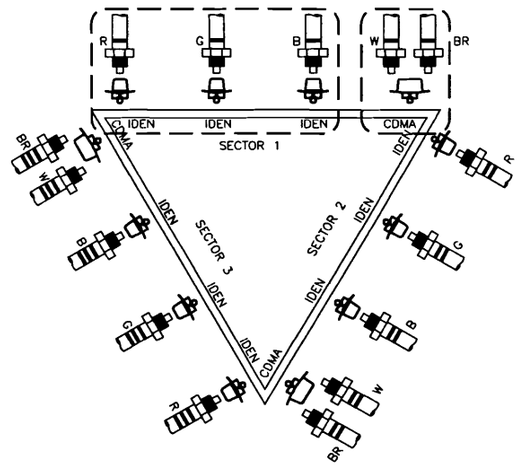
	SITE NAME:
ITEM	DESCRIPT
1	CDMA SECTOR ALPHA ANTENNA
2	CDMA SECTOR BETA ANTENNA
3	CDMA SECTOR GAMA ANTENNA
4	1 5/8" RFS COAX FOR SECTOR
5	ANTENNA CONNECTOR FOR RFS
6	ANTENNA CONNECTOR FOR RFS
7	6' RFS JUMPER CABLES - DIN
8	GROUND KIT 1 5/8" RFS
9	RFS WATHERPROOFING KIT
10	RFS HOSTING CAP 1 5/8"
11	BTS EQUIPMENT MODE

NOTES:
1. PRIOR TO CONSTRUCTION TOWER OWNER MUST VERIFY EXISTING TOWER CAPACITY WITH REGARD TO THE ADDITIONAL LOADS BEING IMPOSED BY THE ADDITION OF PROPOSED ANTENNAS, ANTENNA FRAMING, RF TRANSPARENT SHROUD, AND COAX CABLES.

2. ALL ANTENNAS AND RELATED APPURTENANCE TO BE ORDERED FROM AN APPROVED MANUFACTURER AND TO BE STRUCTURALLY RATED FOR THE REQUIRED CONDITIONS.

MODULAR CELL 4.0 OVERALL DIMENTIONS	
CABINET	DEPTH x WIDTH x
MODULAR CELL 4.0	32"x3E
MODULAR BASE	35.4

MODULAR CELL 4.0 MINIMUM CLEARANCES	
DIRECTION	MINIMUM CLEAR
CABINET REAR	
CABINET SIDES	
ABOVE THE CABINET	
CABINET FRONT	



ANTENNA CONFIGURATION (3)
SCALE: N.T.S.

MODC
SCALE: N.

FENC
CAP

2-1/2"ø U-BOL

5/8"ø BOL

2x2x1/2x2'

4x3x1/4x0'-10" L

2"

DOUBLE NUTS & WASHERS -

3x3x1/4x2'-8" LG

GALV. GRIP STRUT

2x2x1/4x1'-8" LG
W/ 3/4"ø HOLES @ 2 1/2" O.C.

1/2"ø THREADED R
x1'-8" LG
COAX CABLE W/ S
SNAP-IN CABLE HA

NOTE:
ALL STEEL IS GALVANIZE
TO BE FURNISHED W/

ICE E
SCALE: N.

"IVISION 01000 – GENERAL REQUIREMENTS

PART 1 GENERAL

REFER TO NEXTEL COMMUNICATIONS. STANDARD CONSTRUCTION SPECIFICATIONS.
IN CASE OF A CONFLICT, NEXTEL COMMUNICATIONS. STANDARD CONSTRUCTION
SPECIFICATIONS (LATEST EDITION) SHALL BE FOLLOWED.

PART 2 GENERAL NOTES

1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.

2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.

3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) NEXTEL'S REPRESENTATIVE OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK.

4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.

5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS.

6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS / CONTRACT DOCUMENTS.

7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S / VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.

8. THE CONTRACTOR SHALL MAINTAIN A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUM'S OR CLARIFICATIONS AVAILABLE FOR THE USE OF ALL PERSONNEL INVOLVED WITH THE PROJECT.

9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

10. THE CONTRACTOR 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.

11. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.

12. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE ALL UNNECESSARY MATERIAL.

13. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT SECTIONS OF THE STATE BASIC BUILDING CODE, LATEST EDITION, AND ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT. 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 THE ARCHITECT/ENGINEER.
EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT IS NOT LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION.
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 THE ARCHITECT/ENGINEER.

14. THE CONTRACTOR SHALL NOTIFY NEXTEL'S REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL THE CONFLICT IS RESOLVED BY NEXTEL'S REPRESENTATIVE (WIE).

15. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.

16. THE CONTRACTOR SHALL NOTIFY THE RF ENGINEER FOR ANTENNA AZIMUTH VERIFICATION (DURING ANTENNA INSTALLATION) PRIOR TO CONDUCTING SITE SWEEPING.

17. THE CONTRACTOR SHALL SUBMIT, AT THE END OF THE PROJECT, A COMPLETE SET OF AS-BUILT DRAWINGS TO NEXTEL'S REPRESENTATIVE (WIE).

18. THE GENERAL CONTRACTOR SHALL IN ALL INSTANCES CONFORM TO THE SPECIFICATIONS ISSUED BY NEXTEL.

DIVISION 02000 – SITE WORK AND DRAINAGE
EARTHWORK, EXCAVATION AND GRADING

PART 1 GENERAL

1.01 WORK INCLUDED: REFER TO THE SURVEY AND SITE PLAN FOR WORK INCLUDED.

1.02 RELATED WORK

A. CONSTRUCTION OF EQUIPMENT FOUNDATIONS
B. INSTALLATION OF ANTENNA SYSTEM

1.03 DESCRIPTIONS

A. ACCESS ROAD, TURNAROUND AREAS, AND SITES ARE CONSTRUCTED TO PROVIDE A WELL DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR MATERIAL AND EQUIPMENT DELIVERIES AND MAINTENANCE PERSONNEL ACCESS.

1.04 QUALITY ASSURANCE

A. APPLY SOIL STERILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION (USE AS NEEDED).

B. VEGETATION LANDSCAPING, IF INCLUDED WITHIN THE CONTRACT, WILL BE PLACED AND MAINTAINED AS RECOMMENDED BY NURSERY INDUSTRY STANDARDS.

1.05 SEQUENCING

A. CONTRACTOR IS RESPONSIBLE FOR LAYOUT AND CONSTRUCTION STAKING. CONFIRM SURVEY STAKES AND ESTABLISH LINE AND GRADE STAKES PRIOR TO ANY CONSTRUCTION.

B. GRUB THE COMPLETE ROAD AND SITE AREA PRIOR TO FOUNDATION CONSTRUCTION OR PLACEMENT OF BACK FILL OR SUB-BASE MATERIAL.

C. CONSTRUCT TEMPORARY CONSTRUCTION ZONE ALONG ACCESS DRIVE.

D. THE SITE AREA WILL BE BROUGHT TO SUB-BASE COURSE ELEVATION AND THE ACCESS ROAD TO BASE COURSE ELEVATION PRIOR TO FORMING FOUNDATIONS.

E. APPLY SOIL STERILIZER PRIOR TO PLACING BASE MATERIALS.

F. IF REQUIRED, GRADE, SEED, FERTILIZE AND MULCH DISTURBED AREAS IMMEDIATELY AFTER BRINGING THE SITE AND ACCESS ROAD TO BASE COURSE ELEVATION. WATER TO ENSURE GROWTH.

G. REMOVE EXCESS GRAVEL FROM TEMPORARY CONSTRUCTION ZONE.

H. AFTER APPLICATIONS OF FINAL SURFACES, APPLY SOIL STERILIZER TO THE STONE SURFACES. A REQU

1.06 SUBMITTALS

A. BEFORE CONSTRUCTION

1. IF REQUESTED SUBMIT SAMPLES OF MATERIAL FOR APPROVAL.

2. AFTER CONSTRUCTION

1. MANUFACTURER'S DESCRIPTION OF PRODUCT AND WARRANTY STATEMENT ON SOIL STERILIZED.

2. MANUFACTURER'S DESCRIPTION OF PRODUCT ON GRASS SEED AND FERTILIZER, IF REQUIRED.

3. LANDSCAPING WARRANTY STATEMENT, IF REQUIRED.

2.01 MATERIALS

A. ROAD AND SITE MATERIALS: FILL MATERIAL SHALL BE ACCEPTABLE SELECT FILL SHALL BE IN ACCORDANCE WITH LOCAL DEPARTMENT OF HIGHWAY AND PUBLIC TRANSPORTATION STANDARD SPECIFICATION.

B. SOIL STERILIZER SHALL BE EPA REGISTERED OF LIQUID COMPOSITION AND PRE EMERGENCE DESIGN.

C. SOIL STABILIZER FABRIC SHALL BE MIRAFI 600X OR EQUAL– AT ACCESS ROAD AND AT COMPOUND.

D. GRAVEL FILL: WELL GRADED, HARD, DURABLE, NATURAL SAND AND GRAVEL, FREE FROM ICE AND SNOW, ROOTS, SOD RUBBISH, AND OTHER DELETERIOUS OR ORGANIC MATTER. MATERIAL SHALL CONFORM TO THE GRAVEL FILL TO BE IN LIFTS OF 9" MAXIMUM THICKNESS AND COMPACTED TO 90% DENSITY.

E. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PACED IN ANY FILL OR EMBANKMENT.

2.02 EQUIPMENT

A. COMPACTION SHALL BE ACCOMPLISHED BY MECHANICAL MEANS. LARGER AREAS SHALL BE COMPACTED BY SHEEPS FOOT, VIBRATORY OR RUBBER TIED ROLLERS WEIGHING AT LEAST FIVE TONS. SMALLER AREAS SHALL BE COMPACTED BY POWER-DRIVER, HAND HELD TAMPERS.

PART 3 EXCAVATION

3.01 INSPECTIONS: LOCAL BUILDING INSPECTOR SHALL BE TIMELY NOTIFIED NO LESS THAN 48 HOURS. IN ADVANCE OF CONCRETE POURS.

3.02 PREPARATION

A. CLEAR AND REMOVE ALL TREES, BRUSH STUMPS AND DEBRIS FROM SITE AREA AND ACCESS ROAD RIGHT AWAY AS REQUIRED.

B. PRIOR TO OTHER EXCAVATION AND CONSTRUCTION EFFORTS GRUB ORGANIC MATERIAL TO A MINIMUM OF 6" BELOW ORIGINAL GROUND LEVEL.

C. UNLESS OTHERWISE INSTRUCTED BY NEXTEL, INC., REMOVE TREES, BRUSH STUMPS AND DEBRIS FROM THE PROPERTY TO AN AUTHORIZED DISPOSABLE LOCATION.

D. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, ROLL THE SOIL.

E. WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, LINE THE GRUBBED AREAS WITH STABILIZER MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL.

3.03 INSTALLATION

A. THE SITE AND TURNAROUND AREAS SHALL BE AT THE SUB-BASE COURSE ELEVATION PRIOR TO FORMING FOUNDATIONS. GRADE OR FILL THE SITE AND ACCESS ROAD AS REQUIRED TO PRODUCE EVEN DISTRIBUTION OF SPOILS RESULTING FROM FOUNDATION EXCAVATIONS. THE RESULTING GRADE SHALL CORRESPOND WITH SAID SUB-BASE COURSE. ELEVATIONS ARE TO BE CALCULATED FROM FINISHED GRADES OR SLOPES INDICATED.

B. CLEAR EXCESS SPOILS, IF ANY, FROM JOB SITE AND DO NOT SPREAD BEYOND THE LIMITS OF NEXTEL, INC. LEASE PROPERTY UNLESS AUTHORIZED BY PROJECT MANAGER.

C. THE ACCESS ROAD SHALL BE BROUGHT TO BASE COURSE ELEVATION PRIOR TO FOUNDATION CONSTRUCTION.

D. DO NOT CREATE DEPRESSIONS WHERE WATER MAY POND.

E. THE CONTRACT INCLUDES ALL NECESSARY GRADING, BANKING, DITCHING AND COMPLETE SURFACE COURSE. FOR ACCESS ROAD, ALL ROADS OR ROUTES UTILIZED FOR ACCESS TO THE SITE COMMENCING AT THE POINT OF INTERSECTION WITH THE PUBLIC THOROUGHFARE IS INCLUDED IN SCOPE OF WORK UNLESS OTHERWISE INDICATED.

F. WHEN IMPROVING AN EXISTING ACCESS ROAD, GRADE THE EXISTING ROAD TO REMOVE ANY ORGANIC MATTER AND SMOOTH THE SURFACE BEFORE PLACING FILL OR STONE.

G. PLACE FILL OR STONE IN 3: MAXIMUM LIFTS AND COMPACT BEFORE PLACING NEXT LIFT.

H. THE FINISH GRADE, INCLUDING TOP SURFACE COURSE, SHALL EXTEND A MINIMUM OF 12: BEYOND THE SITE FENCE AND SHALL COVER THE AREA AS INDICATED.

I. RIP RAP SHALL BE APPLIED TO THE SIDE SLOPES OF ALL FENCED SITE AREAS, PARKING AREAS AND TO ALL OTHER SLOPES GREATER THAN 2:1.

J. RIP RAP SHALL BE APPLIED TO THE SIDES OF DITCHES OR DRAINAGE SWALES AS INDICATED ON PLANS.

K. RIP RAP ENTIRE DITCH FOR 6'–0" IN ALL DIRECTIONS AT CULVERT OPENINGS.

L. SEED, FERTILIZER AND STRAW COVER SHALL BE APPLIED TO ALL OTHER DISTURBED AREAS AND DITCHES, DRAINAGE, SWALES, NOT OTHERWISE RIP RAPPED.

M. UNDER NO CIRCUMSTANCES SHALL DITCHES, SWALES OR CULVERTS BE PLACED SO THEY DIRECT WATER TOWARDS, OR PERMIT STANDING WATER IMMEDIATELY ADJACENT TO SITE. IF OWNER DESIGNS OR IF DESIGN ELEVATIONS CONFLICT WITH THIS GUIDANCE ADVISE THE OWNER IMMEDIATELY.

N. IF A DITCH LIES WITH SLOPES GREATER THAN TEN PERCENT, MOUND DIVERSIONARY HEADWALLS IN THE DITCH AT CULVERT ENTRANCES. RIP RAP THE UPSTREAM SIDE OF THE HEADWALL AS WELL AS THE DITCH FOR 6'–0" ABOVE THE CULVERT ENTRANCE.

O. SEED AND FERTILIZER SHALL BE APPLIED TO SURFACE CONDITIONS WHICH WILL ENCOURAGE ROOTING. RAKE AREAS TO BE SEEDED TO EVEN THE SURFACE AND TO LOOSEN THE SOIL.

P. SOW SEED IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCER.

Q. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE GROWTH OF SEEDED AND LANDSCAPED AREAS BY WATERING UP TO THE POINT OF RELEASE FROM THE CONTRACT. CONTINUE TO REWORK BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.

3.04 FIELD QUALITY CONTROL

A. COMPACTION SHALL BE 90% MAXIMUM DENSITY IN ACCORDANCE TO ASTM D-1557 FOR SITE WORK AND 95% MAXIMUM DENSITY UNDER EQUIPMENT FOUNDATION AREASW, AREAS OF SETTLEMENT WILL BE EXCAVATED AND REFILLED AT CONTRACTOR'S EXPENSE.

B. THE COMPACTION TEST RESULTS SHALL BE AVAILABLE PRIOR TO THE CONCRETE POUR.

3.05 PROTECTION

A. PROTECT SEEDED AREAS FROM EROSION BY SPREADING STRAW TO A UNIFORM LOOSE DEPTH OF 1"–2", STAKE AND TIE DOWN AS REQUIRED. USE OF EROSION CONTROL MESH OR MULCH NET SHALL BE AN ACCEPTABLE ALTERNATIVE.

B. ALL TREES PLACED IN CONJUNCTION WITH A LANDSCAPE CONTRACT SHALL BE WRAPPED WITH HOSE PROTECTED WIRE AND SECURED TO STAKES EXTENDING 2'–0" INTO THE GROUND ON FOUR SIDES OF THE TREE.

C. ALL EXPOSED AREAS SHALL BE PROTECTED AGAINST WASHOUTS AND SOIL EROSION. STRAW BALES SHALL BE PLACED AT THE INLET APPROACH TO ALL NEW OR EXISTING CULVERTS. REFER TO DETAIL DRAWINGS.

DIVISION 03000 – CONCRETE

03300 CAST-ION-PLACE CONCRETE

PART 1 – GENERAL

1.01 DESCRIPTION

WORK INCLUDES CONSTRUCTION OF CAST-IN-PLACED CONCRETE FOUNDATIONS, INCLUDING FURNISHING AND INSTALLING READY-MIX CONCRETE, REINFORCING, FORMWORK, AND ACCESSORY MATERIALS AS SHOWN ON THE DRAWINGS. CAST-IN-PLACE CONCRETE INCLUDES ALL SITE CONCRETE, INCLUDING FOUNDATIONS, SLABS ON GRADE, EQUIPMENT PADS, AND GUARD POST FOUNDATIONS.

1.02 RELATED WORK

A. COORDINATE UNDER SLAB CONDUITS

B. COORDINATE WITH GROUNDING

1.03 APPLICABLE STANDARDS

A. ACI-301 – SPECIFICATIONS FOR STRUCTURAL CONCRETE BUILDINGS.

B. ACI 347 – GUIDE TO FORMWORK FOR CONCRETE.

C. ASTM C33 – CONCRETE AGGREGATES

D. ASTM C94 – READY-MIXED CONCRETE

E. ASTM C150 – PORTLAND CEMENT

F. ASTM C260 – AIR-ENTRAINING ADMIXTURES FOR CONCRETE.

G. ASTM C309 – LIQUID MEMBRANE FORMING COMPOUNDS FOR CURING CONCRETE.

H. ASTM C494 – CHEMICAL ADMIXTURES FOR CONCRETE.

I. ASTM A615 – DEFORMED STEEL BARS FOR CONCRETE REINFORCEMENT.

J. ASTM A185 – STEEL WELDED WIRE FABRIC FOR CONCRETE REINFORCEMENT

1.04 QUALITY ASSURANCE

CONCRETE MATERIALS AND OPERATIONS SHALL BE TESTED AND INSPECTED BY THE ENGINEER AS DIRECTED BY NEXTEL.

1.05 TESTS

CONCRETE TESTS SHALL BE AS DETAILED BELOW OR AS DIRECTED BY NEXTEL. CONCRETE MATERIALS AND OPERATIONS SHALL BE TESTED AND INSPECTED BY THE ENGINEER AS THE WORK PROGRESSES. FAILURE TO DETECT ANY DEFECTIVE WORK OR MATERIAL SHALL NOT IN ANY WAY PREVENT LATER REJECTION WHEN SUCH DEFECT IS DISCOVERED NOR SHALL IT OBLIGATE THE ENGINEER FOR FINAL ACCEPTANCE.

A. THREE CONCRETE TEST CYLINDERS SHALL BE TAKEN OF THE TOWER PIER FOUNDATION. ONE SHALL BE TAKEN OF THE TOWER PIER FOUNDATION. ONE SHALL BE TESTED @ THREE DAYS, ONE @ TWENTY-EIGHT DAYS. THE THIRD CYLINDER SHALL BE KEPT SEPARATELY. IF REQUIRED TO BE USED IN THE FUTURE.

B. ONE SLUMP TEST SHALL BE TAKEN FOR EACH SET OF TEST CYLINDERS TAKEN. SLUMP SHALL NOT EXCEED 4" UNLESS OTHERWISE NOTED.

PART 2 – PRODUCT

2.01 CONCRETE MATERIALS

CONCRETE SHALL BE COMPOSED OF PORTLAND CEMENT, WATER, FINE AND COARSE AGGREGATES, AND ADMIXTURES AS SPECIFIED BELOW, ALL WELL MIXED AND BROUGHT TO PROPER CONSISTENCY, CLASS I, II, III, OR V.

A. CEMENT: CEMENT SHALL BE TYPE II, GRAY COLOR, LOW-ALKALI PORTLAND CEMENT CONFORMING TO ASTM C150.

B. FINE AND COARSE AGGREGATES: AGGREGATES FOR USE IN CONCRETE SHALL COMPLY WITH ASTM C33.

C. WATER: WATER FOR MIXING AND CURING CONCRETE SHALL BE FREE FROM SEWAGE, OIL, ACID, ALKALI, AND SALTS AND SHALL BE FREE FROM OBJECTIONABLE QUANTITIES OF SILT, ORGANIC MATTER, AND OTHER DELETERIOUS SUBSTANCES.

SPECIFIED BY ACI CODE.

2.02 ADMIXTURES

A. CHEMICAL ADMIXTURE: ASTM C494, TYPE A– WATER REDUCING OR TYPE D – WATER REDUCING AND RETARDING.

2.03 CURING COMPOUND: ASTM C309, TYPE1. CLASS B; TRANSLUCENT.

2.04 ACCESSORIES

A. NONSHRINK GROUT: PREMIXED COMPOUND CONSISTING OF NONMETALLIC AGGREGATE, CEMENT, WATER REDUCING AND PLASTICIZING AGENTS; CAPABLE OF DEVELOPING MINIMUM COMPRESSIVE STRENGTH OF 7,000 PSI IN 28 DAYS.

B. JOINT FILLER: BITUMINOUS TYPE, ASTM D1751 OR NON-BITUMINOUS TYPE ASTM D1752.

C. ANCHOR BOLTS: ASTM A307, UNPRIMED.

2.05 CONCRETE MIX

A. CONCRETE SHALL BE PROPORTIONED PER REQUIREMENTS OF ACI 301 & NEXTEL CONSTRUCTION SPECIFICATIONS FOR DESIGN STRENGTH & WORKABILITY. CONCRETE SHALL BE DELIVERED WITHIN 45 MINUTES OF ADDITION OF WATER TO MIX.

B. THE FOLLOWING STRENGTHS SHALL BE USED:
1. FENCE POST FOUNDATIONS – DESIGN COMPRESSIVE STRENGTH AT 28 DAYS OF 3,000 PSI.
2. EQUIPMENT FOUNDATION – DESIGN COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED. (CONTRACTOR FURNISH 4,000 PSI CONCRETE).
3. CONCRETE STRENGTH FOR MONOPOLE OR TOWER FOUNDATION SHALL BE 1,000 PSI MORE THAN THE MANUFACTURER'S RECOMMENDATIONS, 4,000 PSI MINIMUM.

C. USE ACCELERATING ADMIXTURES IN COLD WEATHER AND SEET RETARDING ADMIXTURES IN HOT WEATHER ONLY WHEN APPROVED BY THE ENGINEER.

D. TOTAL AIR CONTENT SHALL BE 5 PERCENT PLUS OR MINUS 1 PERCENT.

PART 3 – EXECUTION

3.01 INSPECTION

THE CONTRACTOR SHALL VERIFY ANCHORS, SEATS, PENETRATIONS, PLATES, REINFORCEMENT, AND OTHER ITEMS TO CAST INTO CONCRETE ARE ACCURATELY PLACED, HELD SECURELY, AND SHALL NOT CAUSE HARDSHIP IN PLACING CONCRETE.

3.02 PREPARATION

A. THE CONTRACTOR SHALL PREPARE PREVIOUSLY PLACED CONCRETE BY CLEANING WITH STEEL BRUSH AND APPLYING BONDING AGENT. APPLY BONDING AGENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

3.03 PLACING CONCRETE

A. THE ENGINEER SHALL BE NOTIFIED NOT LESS THAN 24 HOURS IN ADVANCE OF CONCRETE PLACEMENT. UNLESS INSPECTION IS WAIVED IN EACH CASE, PLACING OF CONCRETE SHALL BE PERFORMED ONLY IN THE PRESENCE OF THE ENGINEER.

CONCRETE SHALL NOT BE PLACED UNTIL ALL FORM WORK, EMBEDDED PARTS, STEEL REINFORCEMENT, FOUNDATION SURFACES, AND JOINTS INVOLVED IN THE PLACING HAVE BEEN APPROVED, AND UNTIL FACILITIES ACCEPTABLE TO THE NEXTEL REPRESENTATIVE HAVE BEEN PROVIDED AND MADE READY FOR ACCOMPLISHMENT OF THE WORK AS SPECIFIED. CONCRETE MAY NOT BE ORDERED FOR PLACEMENT UNTIL ALL ITEMS HAVE BEEN APPROVED AND NEXTEL HAS PERFORMED A FINAL INSPECTION AND GIVEN APPROVAL TO START PLACEMENT IN WRITING.

B. UNLESS SPECIFIED TO BE BEVELED, EXPOSED EDGES OF FLOATED OR TROWELED SURFACES SHALL BE EDGED WITH A TOOL HAVING A 1/4" CORNER RADIUS.

C. PLACEMENT OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301.

D. THE CONTRACTOR SHALL ENSURE THAT REINFORCEMENT, INSERTS, EMBEDDED PARTS, FORMED JOINTS AND VAPOR BARRIERS ARE NOT DISTURBED DURING CONCRETE PLACEMENT.

E. 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:
#6 AND LARGER.....2 IN.
#5 AND SMALLER & WWF.....1 1/2 IN.
CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND.
SLAB AND WALL.....3/4 IN.
BEAMS AND COLUMNS.....1 1/2 IN.

3.04 SURFACE FINISHES

A. SURFACES AGAINST WHICH BACK FILL OR CONCRETE SHALL BE PLACED REQUIRE NO TREATMENT EXCEPT REPAIR OF DEFECTIVE AREAS.

B. SURFACES THAT WILL BE PERMANENTLY EXPOSED SHALL PRESENT A UNIFORM FINISH PROVIDED BY THE REMOVAL OF FINS AND THE FILLING OF HOLES AND OTHER IRREGULARITIES WITH DRY PACK GROUT, OR BY SACKING WITH UTILITY OR ORDINARY GROUT.

C. SURFACES THAT WOULD NORMALLY BE LEVEL AND WHICH WILL BE PERMANENTLY EXPOSED TO THE WEATHER SHALL BE SLOPED FOR DRAINAGE. UNLESS ENGINEER'S DESIGN DRAWING SPECIFIES A HORIZONTAL SURFACE OR SHOWS THE SLOPE REQUIRED. THE TOPS OF NARROW SURFACES, SUCH AS STAIR TREADS, WALLS, CURBS, AND PARAPETS SHALL BE SLOPED APPROXIMATELY 3/8" /FT OF WIDTH. BROADER SURFACES SUCH AS WALKS, ROADS, PARKING AREAS AND PLATFORMS SHALL BE SLOPED APPROXIMATELY 1/4" /FT.

D. SURFACES THAT WILL BE COVERED BY BACKFILL OR CONCRETE SHALL BE SMOOTH SCREEDED.

E. EXPOSED SLAB SURFACES SHALL BE CONSOLIDATED, SCREEDED, FLOATED, AND "STEEL TROWELED." HAND OR POWER-DRIVEN EQUIPMENT MAY BE USED FOR FLOATINGS WHICH SHALL BE STARTED AS SOON AS THE SCREENED SURFACE HAS ATTAINED A STIFFNESS TO PERMIT FINISHING OPERATIONS. ALL EDGES MUST HAVE A 3/4" CHAMFER. CONCRETE EXPANSION ANCHORS AND EPOXY ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. MANUFACTURER'S MINIMUM CONCRETE EDGE DISTANCE SHALL BE MAINTAINED DURING INSTALLATION.

3.05 PATCHING

THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY UPON REMOVAL OF THE FORMS TO OBSERVE CONCRETE SURFACE CONDITIONS. IMPERFECTIONS SHALL BE PATCHED ACCORDING TO THE ENGINEERS DIRECTION.

3.06 DEFECTIVE CONCRETE

THE CONTRACTOR SHALL MODIFY OR REPLACE CONCRETE NOT CONFORMING TO REQUIRED LEVELS AND LINES, DETAILS, AND ELEVATIONS AS SPECIFIED IN ACI 301.

3.07 PROTECTION

A. IMMEDIATELY AFTER PLACEMENT, THE CONTRACTOR SHALL PROTECT THE CONCRETE FROM PREMATURE DRYING, EXCESSIVELY HOT OR COLD TEMPERATURES, AND MECHANICAL INJURY. FINISHED WORK SHALL BE PROTECTED.

B. CONCRETE SHALL BE MAINTAINED WITH MINIMAL MOISTURE LOSS AT RELATIVELY CONSTANT TEMPERATURE FOR PERIOD NECESSARY FOR HYDRATION OF CEMENT AND HARDENING OF CONCRETE.

C. ALL CONCRETE SHALL BE WATER CURED PER ACCEPTABLE PRACTICES SPECIFIED BY ACI CODE.

DIVISION 05000 – METALS

PART 1 – GENERAL

1.01 WORK INCLUDED

A. THE WORK CONSISTS OF THE FABR MATERIALS TO BE FURNISHED, AND WITH THEREOF, INCLUDES ALL EQUIPMENT, LA ALL STRUCTURAL STEEL WORK, INCLUDIN SPECIFIED HEREIN AND AS SHOWN ON T

1. STEEL FRAMING INCLUDING BEAMS,

2. WELDING AND BOLTING OF ATTACH

1.02 REFERENCE STANDARDS

A. THE WORK SHALL CONFORM TO TH FOLLOWING AGENCIES AS FURTHER CITED

1. ASTM: AMERICAN SOCIETY FOR TES IN "COMPILATION OF ASTM STANDARDS I

2. AWS: AMERICAN WELDING SOCIETY D1.1–95, STRUCTURAL WELDING CODE".

3. AISC: AMERICAN INSTITUTE FOR STE "CODE FOR STANDARD PRACTICE FOR ST "SPECIFICATIONS FOR THE DESIGN, FABR STRUCTURAL STEEL FOR BUILDINGS".

PART 2 – PRODUCTS

2.01 MATERIALS

A. STRUCTURAL STEEL" SHALL COMPL A36 AND A50 FOR STRUCTURAL STEEL.

2.02 WELDING

A. ALL WELDING SHALL BE DONE BYT DOCUMENTS SHALL BE MADE AVAILABLE REVIEW IF REQUESTED.

B. WELDING ELECTRODES FOR MANUAL SHALL CONFORM TO ASTM A–233, E70 GRANULAR FLUX USED IN THE SUBMERGI TO AISC SPECIFICATIONS.

C. FIELD WELDING SHALL BE DONE AS VISUAL INSPECTION IS ACCEPTABLE WHEN

D. STUD WELDING SHALL BE ACCOMPL (CD) WELDING TECHNIQUE USING MIOWES CAPACITOR DISCHARGE STUD WELDER, NE

2.2 PROVIDE STUD FASTENERS OF MA DRAWINGS OR AS RECOMMENDED BY THE LOADINGS REQUIRED.

2.3 FOLLOW MANUFACTURES SPECIFICA PROPERLY SELECT AND INSTALL STUD WE

2.03 BOLTING

A. BOLTS SHALL BE 3/4" ø (MINIMUM DIP GALVANIZED OR ASTM A153. NUTS

B. ALL BOLTS SHALL BE INSTALLED IN CONFORMING TO AISC, USING THE 1/4"

2.04 FABRICATION

A. FABRICATION OF STEEL SHALL CONF STANDARDS AND CODES.

2.05 FINISH

A. ALL STRUCTURAL STEEL SHALL BE FABRICATION IN ACCORDANCE WITH ASTM

B. FOR ELECTRICAL HARDWARE REF. T

2.06 PROTECTION

A. UPON COMPLETION OF ERECTION IN PAINT ANY FIELD CUTS, WELDS, OR GALV PAINT. COLOR TO MATCH THE GALVANIZE

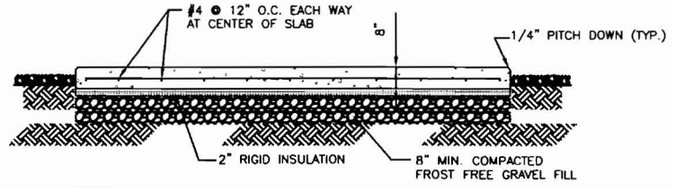
PART 3 – EXECUTION

3.01 ERECTION OF STEEL

A. PROVIDE ALL ERECTION EQUIPMENT, NUTS, WASHERS, DRIFT PINS, AND SIMILA A PART OF THE COMPETED CONSTRUCTIO PROPER ERECTION.

B. ERECT AND ANCHOR ALL STRUCTUR AISC REFERENCE STANDARDS. ALL WORK ESTABLISHED LINES AND ELEVATIONS AND SUITABLE ATTACHMENTS TO THE CONSTRU

C. TEMPORARY BRACING, GUYING AND KEEP THE STRUCTURE SAFE AND ALIGNED CONSTRUCTION, AND TEMPORARY LOADS A ALL BUILDING COMPONENTS.

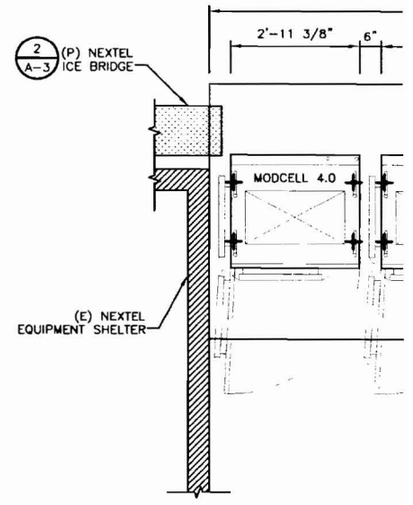


NOTES:

1. REFER TO CONCRETE AND REINFORCING STEEL NOTES ON SHEET A-4.
2. GRAVEL SHALL BE NATURAL OR CRUSHED GRAVEL WITH 100 PERCENT PASSING 1 INCH SIEVE.
3. CONCRETE SLAB TO BE BROOM FINISHED.

CONC. PAD SECTION 3

SCALE: N.T.S.



EQUIPMENT

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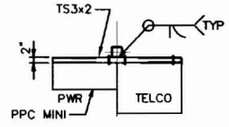
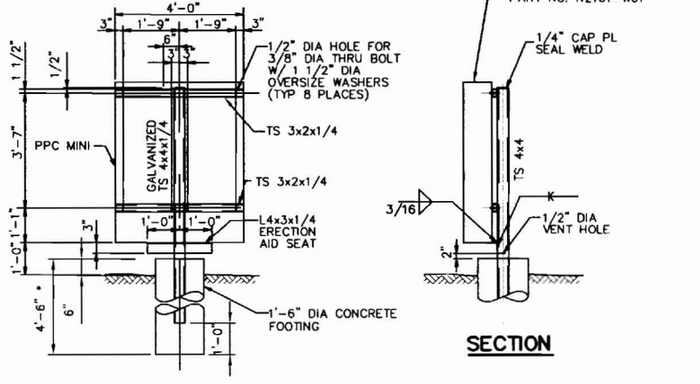


PLAN

* FOOTING DESIGN BASED ON 100 MPH WIND AND UBC CLASS 4 SOIL OR BETTER (UBC TABLE 18-1-A)



SECTION

PPC MINI MOUNTING FRAME 4

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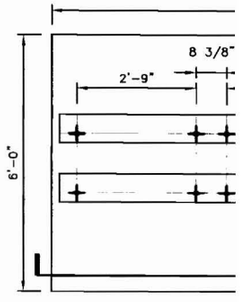

NOTE:

1. ALL BOLT HOLES SH
2. DIMENSIONS SHOWN INFORMATION OF STE
3. CONTRACTOR TO CO THE MANUFACTURERS

ANCHOR HO LOCATIOPN

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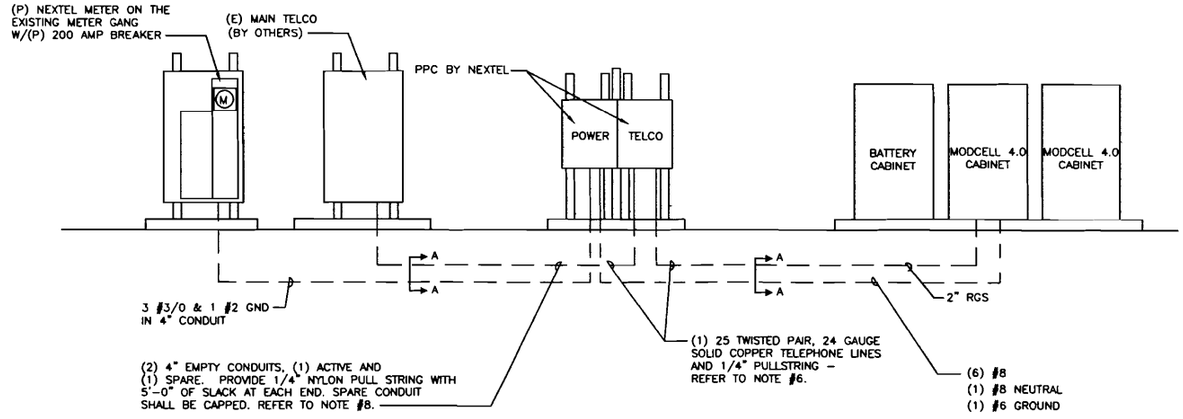


SCHEMATIC ELECTRICAL AND TELEPHONE SERVICES RISER DIAGRAM

SCALE: NONE

ELECTRICAL SPECIFICATIONS

SECTION 16010 – GENERAL PROVISIONS

A. REQUIREMENTS: FURNISH ALL LABOR, MATERIALS, SERVICE, EQUIPMENT, AND APPLIANCES REQUIRED TO COMPLETE THE INSTALLATION OF THE COMPLETE ELECTRICAL SYSTEM IN ACCORDANCE WITH THE SPECIFICATIONS AND CONTRACT DRAWINGS.

B. REQUIREMENTS OF REGULATORY AGENCIES AND STANDARDS: INSTALLATION, MATERIAL, EQUIPMENT AND WORKMANSHIP SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THE NATIONAL ELECTRICAL CODE (NEC) – APPLICABLE STATE ELECTRIC CODES, THE NATIONAL ELECTRICAL SAFETY CODE (NESC), AND THE TERMS AND THE CONDITIONS OF THE AUTHORITIES HAVING LAWFUL JURISDICTION PERTAINING TO THE WORK REQUIRED. ALL MODIFICATIONS REQUIRED BY THESE CODES, RULES, REGULATIONS, AND AUTHORITIES SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL CHARGE TO THE OWNER.

C. UNDERWRITER'S LABORATORIES (UL): ALL MATERIALS, APPLIANCES, EQUIPMENT, OR OR DEVICES SHALL CONFORM TO THE APPLICABLE STANDARDS OF UNDERWRITER'S LABORATORIES, INC. THE LABEL OF, OR LISTING BY. UL, IS REQUIRED.

SECTION 16110 – RACEWAYS, BOXES AND FITTINGS

A. CONDUIT FITTINGS, CONNECTORS AND COUPLINGS, EMT COUPLINGS AND CONNECTORS EITHER STEEL OR MALLEABLE IRON ONLY. "CONCRETE TIGHT" OR "RAIN TIGHT" AND EITHER THE GLAND AND RING COMPRESSION TYPE OR STAINLESS STEEL MULTIPLE POINT LOCKING TYPE. CONNECTORS TO HAVE INSULATED THROATS. EMT FITTINGS USING SET SCREWS OR INDENTATIONS AS A MEANS OF ATTACHMENT ARE NOT PERMITTED.

B. BUSHINGS: INSULATED TYPE, DESIGNED TO PREVENT ABRASION OF WIRES WITHOUT IMPAIRING THE CONTINUITY OF THE CONDUIT GROUNDING SYSTEM, FOR RIGID STEEL CONDUIT, IMC AND RIGID ALUMINUM CONDUIT.

C. CONDUIT INSTALLATIONS: CONDUIT SYSTEMS, EMT, OR RIGID NON-METALLIC CONDUIT UNLESS NOTED. INSTALL CONCEALED CONDUIT AND EMT IN AS DIRECT LINES AS POSSIBLE. INSTALL EXPOSED CONDUITS AND EMT PARALLEL TO OR AT RIGHT ANGLES TO THE LINES OF THE BUILDING. RIGHT ANGLE BENDS IN EXPOSED CONDUIT AND EMT RUNS SHALL BE MADE WITH STANDARD ELBOWS, SCREW JOINTED CONDUIT FITTINGS OR CONDUIT BENT TO RADIUS NO LESS THAN THOSE OF STANDARD ELBOWS.

D. CONDUIT SUPPORTS: PROVIDE SUPPORTS FOR HORIZONTAL CONDUITS AND EMT NOT MORE THAN 8 FEET APART WITH NOT LESS THAN TWO SUPPORTS FOR EACH 10 FOOT STRAIGHT LENGTH AND ONE SUPPORT NEAR EACH ELBOW OR BEND INCLUDING RUNS ABOVE SUSPENDED CEILINGS AND WITHIN 3 FEET OF ALL JUNCTION BOXES, SWITCHES, FITTINGS, ETC. INSTALL ONE HOLE PIPE STRAPS ON CONDUITS 1 INCH OR SMALLER INSTALL INDIVIDUAL PIPE HANGERS FOR CONDUITS LARGER THAN 1 INCH. SPRING STEEL FASTENERS WITH HANGER RODS MAY BE USED IN DRY LOCATIONS IN LIEU OF PIPE STRAPS.

SECTION 16120 – CONDUCTORS

A. WIRES AND CABLES (600 VOLTS): CONFORM TO THE APPLICABLE UL AND ICEA STANDARDS FOR THE USE INTENDED. USE COPPER CONDUCTORS WITH 600 VOLTS INSULATION UNLESS OTHERWISE SPECIFIED OR NOTED ON THE DRAWINGS. USE STRANDED CONDUCTORS FOR NO. 8 OR LARGER WHERE ELSEWHERE SPECIFIED OR NOTED OTHERWISE ON THE DRAWINGS. USE OF ALUMINUM CONDUCTORS WILL NOT BE PERMITTED. INSULATION SHALL BE TYPE THHN/THWN, 75'C, FOR ALL CONDUCTORS, USELESS OTHERWISE SPECIFIED OR NOTED ON THE DRAWINGS.

B. COLOR CODING. PHASE, NEUTRAL, AND GROUND CONDUCTORS COLOR-CODED IN ACCORDANCE WITH NEC. CONNECT ALL CONDUCTORS OF THE SAME COLOR TO THE SAME PHASE CONDUCTOR, COLOR CODING SHALL BE BLACK, RED, BLUE, WHITE (120/208) OR BROWN ORANGE, YELLOW, GRAY (277/480) WITH GREEN FOR ALL GROUND CONDUCTORS.

C. CONNECTORS AND LUGS: FOR COPPER CONDUCTORS NO. 6 AND SMALLER: 3M SCOTCH-LOK OR T & B STA-KON COMPRESSION OR INDENT TYPE CONNECTORS WITH INTEGRAL OR SEPARATE INSULATING CAPS. FOR COPPER CONDUCTORS LARGER THAN NO. 6 SOLDERLESS, INDENT, HEX SCREW OR BOLT TYPE PRESSURE CONNECTORS, PROPERLY TAPED OR INSULATED.

D. SPLICES: (480 VOLTS AND UNDER): : CONDUCTOR LENGTHS SHALL BE CONTINUOUS FROM TERMINATION TO TERMINATION WITHOUT SPLICES UNLESS APPROVED BY THE BUILDING INSPECTOR.

SECTION 16220 – CIRCUIT BREAKERS

A. PROVIDE MOLDED CASE, BOLT-ON , THERMAL MAGNETIC TRIP, SINGLE, TWO OR THREE POLE BRANCH CIRCUIT BREAKERS AS SHOWN ON DRAWINGS. MULTIPLE POLE BREAKERS SHALL BE SINGLE HANDLE, COMMON TRIP. AIC RATING TO MATCH EXISTING OR AS REQUIRED FOR AVAILABLE FAULT CURRENTS.

NOTES TO CONTRACTOR:

1. CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTORS FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE ENGINEER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND PAY ALL FEES AS MAY BE REQUIRED FOR ELECTRICAL WORK AND FOR SCHEDULING OF ALL INSPECTIONS AS REQUIRED WITH LOCAL AUTHORITY.
3. UTILITY SERVICES SHOWN ARE PROPOSED. THE ELECTRIC CONTRACTOR SHALL COORDINATE EXACT TELEPHONE AND ELECTRIC SERVICE CONNECTION POINTS, ROUTING AND ASSOCIATED REQUIREMENTS WITH LOCAL UTILITY COMPANIES & NEXTEL CONSTRUCTION MANAGER.
4. THE CONTRACTOR SHALL PROVIDE TEMPORARY POWER AND LIGHTING AS REQUIRED FOR THE WORK.
5. LOCATION OF EQUIPMENT, CONDUIT AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH FIELD CONDITIONS PRIOR TO ROUGH-IN.
6. THE CONDUIT RUNS AS SHOWN ON THE PLANS ARE APPROXIMATE. EXACT LOCATION AND ROUTING SHALL BE PER EXISTING FIELD CONDITIONS.
7. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR REQUIRED BY NEC.
8. ALL CONDUITS SHALL BE MET WITH BENDS MADE IN ACCORDANCE WITH NEC TABLE 346-10. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 12" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER.
9. ALL CONDUIT TERMINATIONS SHALL BE PROVIDED WITH PLASTIC THROAT INSULATING GROUNDING BUSHINGS.
10. ALL WIRE SHALL BE TYPE THWN, SOLID, ANNEALED COPPER UP TO SIZE #10 AWG (#8 AND LARGER SHALL BE CONCENTRIC STRANDED) 75 DEGREE C, (167 DEGREES F), 98% CONDUCTIVITY, MINIMUM #12.
11. ALL WIRES SHALL BE TAGGED AT ALL PULL BOXES, J-BOXES, EQUIPMENT BOXES AND CABINETS WITH APPROVED PLASTIC TAGS, ACTION CRAFT, BRADY, OR APPROVED EQUAL.
12. ALL NEW MATERIAL SHALL HAVE A U.L. LABEL.
13. CONDUIT ROUGH-IN SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION CONFLICTS. VERIFY WITH MECHANICAL CONTRACTOR AND COMPLY AS REQUIRED.
14. ALL PANEL DIRECTORIES SHALL BE TYPEWRITTEN NOT HAND WRITTEN.
15. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS PER THE SPECIFICATIONS AND NEC. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULLBOXES, AND ALL DISCONNECT SWITCHES, STARTERS, AND EQUIPMENT CABINETS.
16. THE CONTRACTOR SHALL PREPARE AS-BUILT DRAWINGS, DOCUMENT ANY AND ALL WIRING AND EQUIPMENT CONDITIONS AND CHANGES WHILE COMPLETING THIS CONTRACT. SUBMIT AT SUBSTANTIAL COMPLETION.
17. ALL DISCONNECT SWITCHES AND OTHER CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMICOID NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS INSTALLED ON, AND PANEL LOCATIONS FED FROM (NO EXCEPTIONS.)
18. PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS OR RISERS THROUGH BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS WITHOUT CONSTRUCTION MANAGERS APPROVAL. SLEEVES AND/OR PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE PACKED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL OR STRUCTURE. FILL FOR FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE, FIRE AND FUMES. ALL MATERIAL SHALL BE UL APPROVED FOR THIS PURPOSE.

    NOTE: ELECTRICAL CHARACTERISTICS OF ALL EQUIPMENT (NEW AND EXISTING) SHALL BE FIELD VERIFIED WITH THE OWNER'S REPRESENTATIVE AND EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN OF CONDUIT AND WIRE. ALL EQUIPMENT SHALL BE PROPERLY CONNECTED ACCORDING TO THE NAMEPLATE DATA FURNISHED ON THE EQUIPMENT (THE DESIGN OF THESE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN AND SOME EQUIPMENT CHARACTERISTICS MAY NOT BE CORRECT AS SHOWN ON THESE DRAWINGS). LOCATION OF OUTLETS, BOXES, ETC. AND THE TYPE OF CONNECTION (PLUG OR DIRECT) SHALL BE CONFIRMED WITH THE OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
19. ALL UNDERGROUND CONDUIT ROUTING SHALL BE COORDINATED IN FIELD BETWEEN NEXTEL WIE, CONTRACTOR, AND RESPECTIVE UTILITY COMPANIES.
20. ALL CONDUITS ROUTED BELOW GRADE SHALL TRANSITION TO RIGID GALVANIZED ELBOWS WITH RIGID GALVANIZED STEEL CONDUIT ABOVE GRADE
21. CONTRACTOR SHALL PROVIDE ALL DIRECT BURIED CONDUITS WITH 6" WIDE. 6 MIL THICK ALUMINIZED PLASTIC WARNING TAPE IDENTIFYING CONTENTS. TAPE COLORS SHALL BE OF FOR TELEPHONE AND RED FOR ELECTRIC.
22. ELECTRICAL CONTRACTOR SHALL PROVIDE A SECTION OF SEALTITE CONDUIT FOR TELCO CONNECTION TO THE PRIMARY RADIO CABINET. COORDINATE EXACT CONNECTION TYPE WITH LUCENT.
23. ELECTRICAL CONTRACTOR SHALL PROVIDE A SECTION OF SEALTITE CONDUIT FOR POWER TO THE PRIMARY RADIO CABINET. THE CONTRACTOR SHALL PROVIDE AN ADDITIONAL 6'- WIRE AT THE END OF THE SEALTITE.
24. GROUND IN ACCORD W/LOCAL CODE & SHEET E-2.
25. PROVIDE (2) 4" GALVANIZED RIGID STEEL CONDUIT RISER WITH 1/4" NYLON DRAG LINE 90° GRC SWEEP AT POLE (UP TO 20'-0" AFG.) SECURE TO POLE PER UTILITY COMPA REQUIREMENTS. PRIMARY CABLES BY UTILITY COMPANY

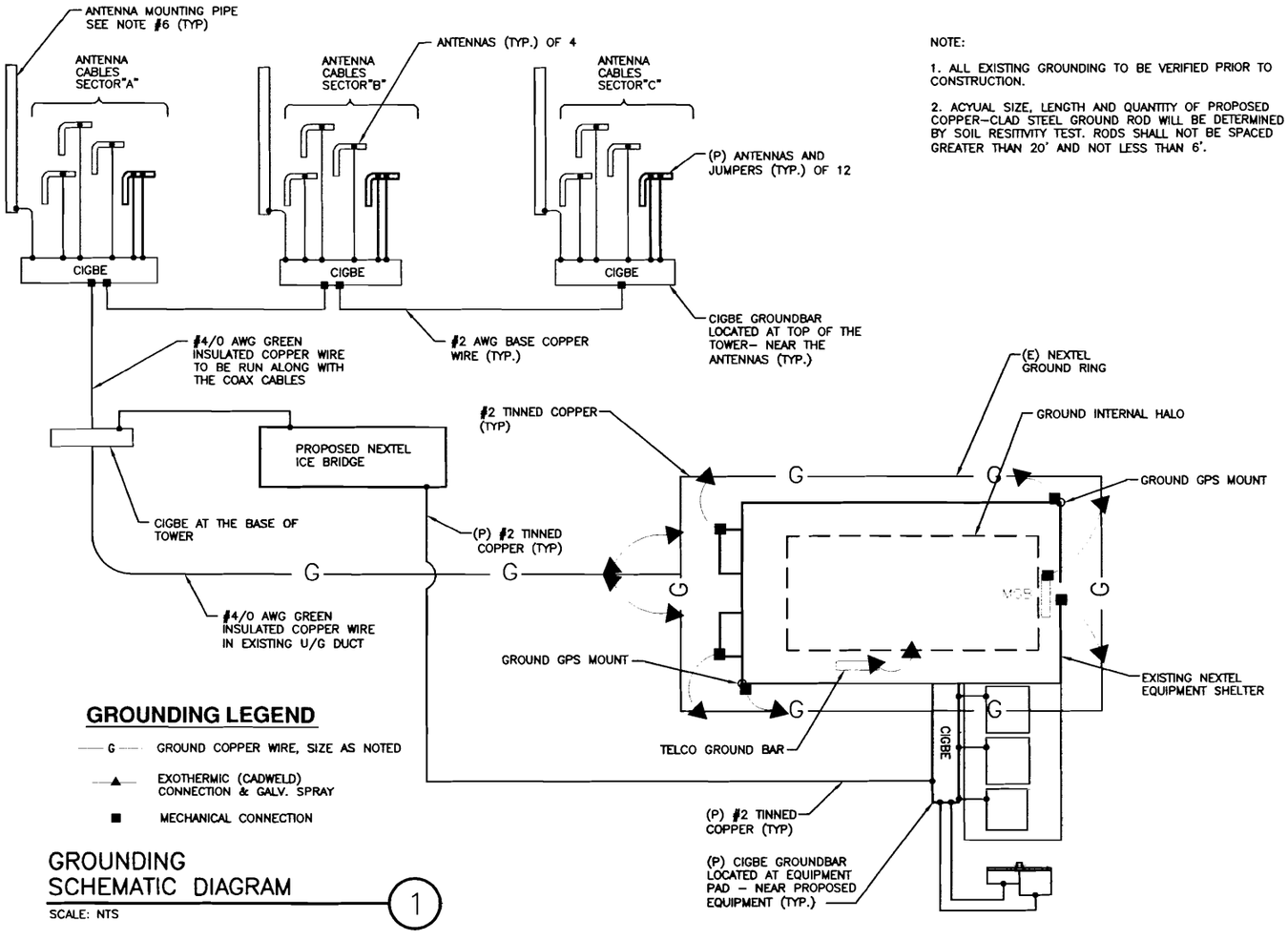
ELECTRICAL LEGEND

SYMBOLS

- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- CONDUIT RUN UNDERGROUND
- CONDUIT RUN ABOVE GROUND
- (M) METER ON METER/BREAKER UNIT
- 5/8" x 10'-0" COPPER CLAD GROUND ROD
- EXOTHERMIC TYPE CONNECTION
- COMPRESSION TYPE CONNECTION
- G — G GROUND RING. #2 AWG SOLID TINNED BARE COPPER GROUND CONDUCTOR 6" BELOW FROST LINE AND 24" OFF CONCRETE PLATFORM
- XXX / XXX — REPRESENTS DETAIL NUMBER / REF. DRAWING NUMBER
- XXX DETAIL NUMBER

ABBRE

ACCA	ANTENNA
AGB	COPPER
AWG	AMERICA
BCW	BARE C
BTS	BASE TR
CIBGE	COAX IS
DWG	DRAWING
EMT	ELECTRIC
GEN	GENERAT
GPS	GLOBAL
GR	GROWTH
IGR	INTERIOR
LAGB	LOWER /
MIGB	MASTER
PCS	PERSONA
PPC	POWER I
PRC	PRIMARY
RGS	RIGID GA
RWY	RACEWAY
TYP	TYPICAL
SSLP	NEXTEL
UAGB	UPPER /
(E)	EXISTING
(P)	PROPOSE



NOTE:

1. ALL EXISTING GROUNDING TO BE VERIFIED PRIOR TO CONSTRUCTION.

2. ACYUAL SIZE, LENGTH AND QUANTITY OF PROPOSED COPPER–CLAD STEEL GROUND ROD WILL BE DETERMINED BY SOIL RESITIVITY TEST. RODS SHALL NOT BE SPACED GREATER THAN 20' AND NOT LESS THAN 6'.

GROUNDING LEGEND

- G — GROUND COPPER WIRE, SIZE AS NOTED
- ▲ — EXOTHERMIC (CADWELD) CONNECTION & GALV. SPRAY
- ■ — MECHANICAL CONNECTION

GROUNDING SCHEMATIC DIAGRAM 1

SCALE: NTS

EQUIPMENT LEGEND

	120/240 VOLT, 1ø, 3 WIRE PANEL
	JUNCTION AND/OR PULL BOX
	DISCONNECT SWITCH (UNFUSED)
	DISCONNECT SWITCH (FUSED)
P	MANUAL MOTOR STARTER COMPLETE WITH THERMAL OVERLOAD PROTECTION. "P" DENOTES EQUIPPED WITH PILOT LIGHT.
P–2	HOMERUN TO PANEL "P", CIRCUIT #2 (VIA 20A–1P C/B). 2 #12 & 1 #12 GND – 3/4"C
P–8 50A;2P	HOMERUN TO PANEL "P", CIRCUIT #8 VIA 50A–2P CIRCUIT BREAKER. REFER TO "BRANCH CIRCUITS SCHEDULE" FOR CONDUCTOR QUANTITIES AND CONDUIT SIZES.
	CONDUIT STUB
	CONDUIT/WIRE TURNING UP
	CONDUIT/WIRE TURNING DOWN
2	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DUPLEX RECEPTACLE. "2" DENOTES CIRCUIT NUMBER.
GFI	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DUPLEX RECEPTACLE EQUIPPED WITH INTEGRAL GROUND FAULT INTERRUPTOR.
S_b	SINGLE POLE TOGGLE SWITCH "a" DENOTES SWITCH CONTROL
	COMBINATION EMERGENCY BATTERY LIGHT/EXIT LITHONIA QUANTUM #12MSW/G120SSB

METER BANK NOTES

1. EXTERIOR STEEL SHALL BE HOT–DIP GALVANIZED AFTER FABRICATION AND WELDING, TO ASTM A123. HARDWARE SHALL BE EITHER A325 STEEL, GALVANIZED TO ASTM A153, OR 18–8 STAINLESS.

2. FOR SOIL INSTALL 12" DIAM. 4'–0" DEEP PIER FILLED WITH 3000 PSI CONCRETE. INSTALL TOP OF PIER FLUSH WITH PROPOSED GRADE, AND PROVIDE CROWN FOR DRAINAGE.

3. FOR EXPOSED LEDGE OR BURIED LEDGE AT LESS THAN 3'–6" BELOW FINISH GRADE, CORE 8" DIAM. HOLE INTO LEDGE 18" DEEP. FILL AROUND PIPE WITH NON–SHRINK GROUT. USE COAL TAR ON BURIED LENGTH OF PIPE, AND BACKFILL TO FINISH GRADE.

4. UTILITY COMPANY WILL PROVIDE AND INSTALL METER.

5. POSITION METER ASSEMBLY WITHIN YARD TO AVOID VANDALISM DAMAGE. PROVIDE 3' MIN CLEARANCE IN FRONT OF METER BANK.

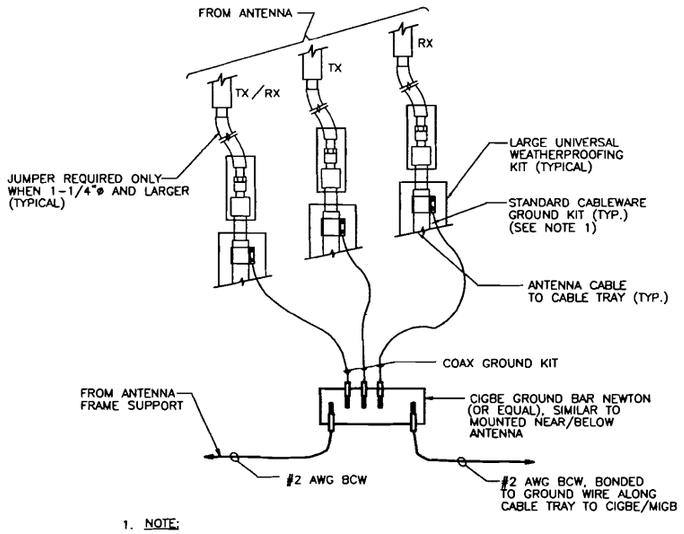
ELECTRIC

1. SUBMITTAL OF BID INDICATES CONTRAC COGNIZANT OF ALL JOB SITE CONDITIONS WORK TO BE PERFORMED UNDER THIS CONTRACT. CONTRACTOR IS RESPONSIBLE ALL FIELD VERIFICATION.
2. THESE PLANS ARE DIAGRAMMATIC ONLY NOT TO BE SCALED.
3. CONTRACTOR SHALL PROVIDE ALL LABO MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC. FOR A COMPLE PROPERLY OPERATIVE SYSTEM ENERGIZ THROUGHOUT AND AS INDICATED ON DI AS SPECIFIED HEREIN AND/OR AS OTH REQUIRED.
4. ALL MATERIALS AND EQUIPMENT SHALL AND IN PERFECT CONDITION WHEN INS AND SHALL BE OF THE BEST GRADE A SAME MANUFACTURER THROUGHOUT FO CLASS OR GROUP OF EQUIPMENT. MAT SHALL BE LISTED AND APPROVED BY U WRITER'S LABORATORY AND SHALL BEA INSPECTION LABEL "J" WHERE SUBJECT APPROVAL. MATERIALS SHALL MEET WIT APPROVAL OF THE DIVISION OF INDUST SAFETY AND ALL GOVERNING BODIES H JURISDICTION. MATERIALS SHALL BE MA FACTURED IN ACCORDANCE WITH APPLI STANDARDS ESTABLISHED BY ANSI, NE NBFU.
5. ALL CONDUIT INSTALLED SHALL BE SUF MOUNTED UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL CARRY OUT HIS W ACCORDANCE WITH ALL GOVERNING STA COUNTY, LOCAL CODES AND O.S.H.A.
7. ELECTRICAL CONTRACTOR SHALL SECUR NECESSARY ELECTRICAL PERMITS, AND ALL REQUIRED FEES.

*8. COMPLETE JOB SHALL BE GUARANTEED PERIOD OF NO LESS THAN ONE YEAR DATE OF JOB ACCEPTANCE BY OWNER. MATERIAL, OR EQUIPMENT FOUND TO B DURING THAT PERIOD SHALL BE CORRE ONCE, UPON WRITTEN NOTIFICATION AT EXPENSE OF THE CONTRACTOR.

9. ALL CONDUIT ONLY (C.O.) SHALL HAVE WIRE OR ROPE.
10. PROVIDE THE OWNER WITH ONE SET OF COMPLETE ELECTRICAL "AS BUILT" DRAW THE COMPLETION OF THE JOB, SHOWIN DIMENSIONS AND CIRCUITS, WITHIN 10 DAYS OF PROJECT COMPLETION
11. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHAL TURNED OVER TO PROJECT MANAGER AT JOB COMPLETION.
12. USE T–TAP CONNECTIONS ON ALL MUL WITH COMMON NEUTRAL CONDUCTOR FO LIGHTING FIXTURE.
13. ALL CONDUCTORS SHALL BE COPPER.

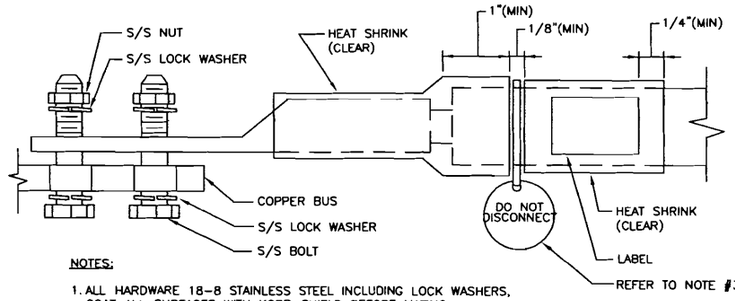
* INDICATES BY NOTICE OF COMPLETION SIG



1. NOTE:
DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE.

CONNECTION OF GROUND WIRES TO GROUNDING BAR 4

SCALE: N.T.S.

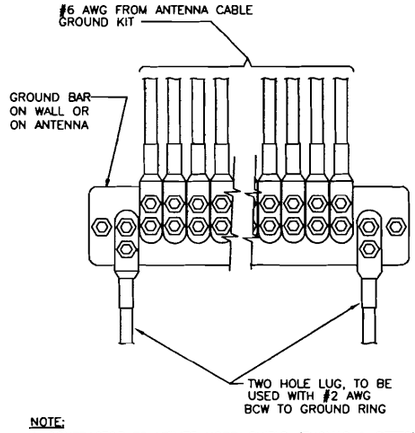


NOTES:

1. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY: INSERT A DRAGON TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH KOPR-SHIELD.

GROUND LUG DETAIL 2

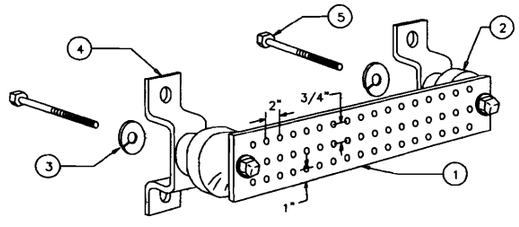
SCALE: N.T.S.



NOTE:
1. CONTRACTOR TO UTILIZE KOPR-SHIELD (THOMAS & BETTS) ON ALL LUG CONNECTIONS.

INSTALLATION OF GROUND WIRE TO GROUND BAR 5

SCALE: N.T.S.



LEGEND

1- COPPER HARGER GROUND BAR, 1/4"X 4"X 20", GBIT 14420 J 2-7 HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION
2- STANDOFF INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4
3- 5/8" LOCKWASHERS, OR EQUAL
4- WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT NO. A-6056 OR EQUAL
5- 5/8-11 X 1" HEX HEAD CAP SCREW BOLT

NOTE:
ALL BOLTS, NUTS, WASHERS, AND LOCK WASHERS SHALL BE 18-8 STAINLESS STEEL.

GROUNDING - STANDARD DETAIL GROUND BAR 3

SCALE: N.T.S.