# METROPCS MASSACHUSETTS, LLC NOTICE OF INTENT TO MODIFY AN EXISTING TELECOMMUNICATIONS FACILITY AT 319 NEW BRITAIN AVENUE, UNIONVILLE, CT

Pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes § 16-50g et. Seq. ("PUESA"), and Sections 16-50j-72(b) and 16-50j-73 of the Regulations of Connecticut State Agencies ("R.C.S.A") adopted pursuant to the PUESA, Metro PCS, Inc., by and through its agent MetroPCS Massachusetts, LLC ("MetroPCS") and as successor in interest to Pocket Communications hereby notifies the Connecticut Siting Council of its intent to modify an existing facility located at 319 New Britain Avenue, Unionville, CT 06085, The telecommunications facility is owned by Town of Farmington and leased to MetroPCS.

#### **MetroPCS' Proposed Wireless Modifications**

MetroPCS as successor in interest to Pocket Communications achieved in interest to install antennas and interest (190) foot high self support monopole telecommunications tower (the "Tower") within a fenced compound. MetroPCS now intends to modify the facility as shown on the enclosed plans prepared by Chappell Engineering Associates, LLC and annexed hereto as Exhibit 1. The modifications will consist of ground work only and entails expanding the existing MetroPCS lease area from 6'x6' to 10'x9', removing the one (1) existing radio cabinet and replacing with one (1) proposed radio cabinet and one (1) proposed battery cabinet. The existing ppc cabinet will remain resulting in a final ground configuration of one (1) radio cabinet, one (1) battery cabinet and one (1) ppc cabinet all within a 10'x9' lease area. MetroPCS will not be modifying the existing antennas and related equipment installed on the tower at this time and therefore; will not affect the structural capacity of the existing tower.

In accordance with R.C.S.A Section 16-50j-73, a copy of this submission is being sent to **The Town of Farmington.** 

#### MetroPCS' Proposed Wireless Modifications Constitutes An "Exempt Modification"

The proposed modification to the Redwood Lane Facility constitutes an exempt modification of an existing facility provided for in R.C.S.A Section 16-50j-72(b)(2) and Council regulations promulgated pursuant thereto.

- 1) The proposed modifications are restricted to ground equipment only and will not result in an increase in the height of the existing tower.
- 2) The proposed modifications will not require expansion of the site boundaries.
- 3) The proposed modifications will not increase noise levels at the facility by six decibels or more.
- 4) MetroPCS' proposed facility will not increase the cumulative radio frequency electromagnetic radiation power density at the Tower site's boundary to or above the standard adopted by the Connecticut Department of Environmental Protection as set

forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. A cumulative General Power Density table for MetroPCS' proposed modified facility is included as Exhibit 2.

For all the foregoing reasons, MetroPCS' respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A Section 16-50j-72(b)(2)

Respectfully submitted,

Marie R. Burbank/860-214-45-38

TRM, Inc.

16 Chestnut Street, Suite 220

Foxborough, MA 02035

On behalf of MetroPCS Massachusetts, LLC

cc: Town of Farmington

Exhibit 1

Site Plan

#### **Power Density Calculations**

Control Number	Site	Carrier	#Channels	ERP/Ch	Ant Ht	Power Density (mW/cm2)	MHz	S	%MPE	Site Total
EM-AT&T-052-020624	Farmington - 319-321 New Britain Ave	Town	2	300	194.8	0.0057	810.24	0.5402	1.05%	
EM-AT&T-052-020624	Farmington - 319-321 New Britain Ave	Town	2	300	187	0.0062	810.24	0.5402	1.14%	
EM-AT&T-052-020624	Farmington - 319-321 New Britain Ave	Emergency	4	500	120	0.0499	933.18	0.6221	8.03%	
EM-AT&T-052-020624	Farmington - 319-321 New Britain Ave	Public Works	4	500	100.4	0.0713	153.24	0.2000	35.67%	
EM-AT&T-052-020624	Farmington - 319-321 New Britain Ave	Sprint	11	250	170	0.0342	1950	1.0000	3.42%	
EM-Clearwire-052-100401	Farmington - 319-321 New Britain Ave	Clearwire	2	153	170	0.0038	2496	1.0000	0.38%	
EM-Clearwire-052-100401	Farmington - 319-321 New Britain Ave	Clearwire	1	211	174	0.0025	11 GHz	1.0000	0.25%	
EM-Pocket-052-081010	Farmington - 319-321 New Britain Ave	metroPCS CDMA	3	727	140	0.0400	2135	1.0000	4.00%	
EM-CING-052-120424	Farmington - 319-321 New Britain Ave	AT&T UMTS	2	1077	148	0.0354	1900	1.0000	3.54%	
EM-CING-052-120424	Farmington - 319-321 New Britain Ave	AT&T UMTS	2	565	148	0.0185	880	0.5867	3.16%	
EM-CING-052-120424	Farmington - 319-321 New Britain Ave	AT&T GSM	1	283	148	0.0046	880	0.5867	0.79%	
EM-CING-052-120424	Farmington - 319-321 New Britain Ave	AT&T GSM	4	646	148	0.0424	1900	1.0000	4.24%	
EM-CING-052-120424	Farmington - 319-321 New Britain Ave	AT&T LTE	1	1615	148	0.0265	734	0.4893	5.42%	
EM-T-Mobile-052-090515	Farmington - 319-321 New Britain Ave	T-Mobile GSM	8	116	160	0.0130	1945	1.0000	1.30%	
EM-T-Mobile-052-090515	Farmington - 319-321 New Britain Ave	T-Mobile UMTS	2	656	160	0.0184	2100	1.0000	1.84%	74.24%
	Farmington - 319-321 New Britain Ave	metroPCS LTE	1	1200	140	0.0220	2130	1.0000	2.20%	76.44%

MetroPCS Massachusetts ID: HFC1527

Document ID: Exempt Modification Request: 319 New Britain Avenue, Unionville, CT 06085

#### Exhibit 2

## Power Density Calculation



# **Unlimit Yourself.**

# HFC1527C FARMINGTON POLICE DEPARTMENT

319 NEW BRITAIN AVENUE UNIONVILLE, CT 06085 HARTFORD COUNTY

SITE TYPE: EQUIPMENT UPGRADE - MONOPOLE

#### SITE INFORMATION:

PROPERTY OWNER: TOWN OF FARMINGTON NEW POLICE/COMMUNITY CENTER

I MONTETTH DRIVE FARMINGTON, CT 06032 TOWN OF FARMINGTON

1 MONTETTH DRIVE FARMINGTON, CT 08032

TOWER OWNER SITE ID:

MetoPCS MASSACHUSETTS, LLC 285 BILLERICA ROAD, THIRD FLOOR

> CHELMSFORD, MA 91824 (978) 244-7000 319 NEW BRITAIN AVENUE

TOWN OF MANCHESTER

SITE ADDRESS:

ZONING JURISDICTION:

POWER COMPANY:

TELEPHONE COMPANY:

CONSTRUCTION MANAGER:

TOWER OWNER:

APPLICANT:

UNIONVILLE, CT 08085
COUNTY: HARTFORD

LATITUDE: N 41.7498°
LONGITUDE: W -72.8727°
ZONING CLASSIFICATION: CR (INDUSTRIAL CR)

TAX ID PARCEL NUMBER: MAP 35 LOT 1-8

ARCHITECT / ENGINEER: CHAPPELL ENGINEERING ASSOCIATES, LLC

R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST
SUITE 101

MARLBOROUGH, MA 01752

CONNECTICUT LIGHT & POWER P.O. BOX 270

HARTFORD, CT 06141-0270 (800) 286-2000

AT&T CONNECTICUT

2147 SUMMER STREET STAMFORD, CT 06905-4623

(203) 708-9992 KELLIE DUNN

SITE ACQUISITION MANAGER:

(978) 244-7200 DAVE BEAN (978) 244-7200 MIKE WILBANKS

OPERATIONS MANAGER: MIKE WILBANK (978) 244-7200

#### VICINITY MAP

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#### DRIVING DIRECTIONS

TAKE 1-495 SOUTH TOWARD MARLBOROUGH/TAUNTON. TAKE EXIT 258 FOR 1-290 WEST TOWARD WORGESTER. TAKE EXIT 7 FOR 1-90/MASS PIKE, FOLLOW SIGNS FOR 1-90 WEST/SPRINGFIELD/IALBANY AND MERGE DITO 1-90 WEST. TAKE EXIT 9 FOR 1-94 WEST TOWARD US-20/HARTFORD/NEW YORK CITY. TAKE EXIT 39 FOWARD CT-4-FARMINGTON, MERGE ONTO CT-508. TAKE SLIGHT LEFT ONTO CT-4 WEST. TURN LEFT ONTO CT-10 SOUTH/MAIN STREET, TURN RIGHT ONTO MEADOW ROAD. CONTINUE ONTO RED OAK HILK ROAD. TURN RIGHT ONTO NEW BRITAIN AVENUE. SITE IS LOCATED ON THE RIGHT HAND SIDE.

#### **APPROVALS**

LANDLORD:	
FIELD CONST. MGR:	
RF ENGINEER:	
SITE ACQUISITION AGENT:	
ZONING MANAGER:	
ERIC\$SON:	

#### SHEET INDEX

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T-1	TITLE SHEET	0
GN-1	GENERAL NOTES	0
A-1	COMPOUND PLAN & ELEVATION	ð
S-1	EQUIPMENT PLANS, SECTIONS & DETAILS	0
E-1	ONE-LINE DIAGRAM, RISER, DETAILS & NOTES	D
E-2	GROUNDING DETAILS	٥
E-5	GROUNDING DETAILS	

#### PROJECT DESCRIPTION

- THIS IS AN UNMANNED AND RESTRICTED ACCESS EQUIPMENT AND WILL BE USED FOR THE TRANSMISSION OF PADIO SIGNAL FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE.
- THIS PACILITY WILL CONSUME NO UNRECOVERABLE ENERGY.
   NO POTABLE WATER SUPPLY IS TO BE PROVIDED AT THIS LOCATION.
- NO POTABLE WATER SUPPLY IS TO BE PROVIDED AT THIS LOCATION.
   NO WASTE WATER WILL BE GENERATED AT THIS LOCATION.
- NO WASTE WATER WILL BE GENERATED AT THIS LOCATION.
   NO SOLID WASTE WILL BE GENERATED AT THIS LOCATION.
- METRO PCS MAINTENANCE CREW (TYPICALLY ONE PERSON) WILL MAKE AN AVERAGE OF ONE TRIP PER MONTH AT ONE HOUR PER VISIT.

#### DO NOT SCALE DRAWINGS

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

# metro PC Unlimit Yourself.

285 BILLERICA ROAD THIRD FLOOR CHELMSFORD, MA 01824 TEL (978) 244-7000 FAX (978) 244-7240

# **ERICSSON**

6300 LEGACY DRIVE PLANO, TX 75024 TEL (972) 583-0000



R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752
(SUB) 481-7400
www.chappoilengineering.com



ENGINEER/LAND SURVEYOR

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

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l	1	12/08/12	REVISED FOR CONSTRUCTION
l	0	12/03/12	ISSUED FOR CONSTRUCTION
I	REV. #	DATE	DESCRIPTION

DESIGNED BY: JMT

1255.064 SITE NAME:

> HFC1527C FARMINGTON POLICE DEPARTMENT

SITE ADDRESS:

319 NEW BRITAIN AVENUE UNIONVILLE, CT 06085

DRAWING TITLE:

TITLE SHEET

DRAWING NO:

T-1

#### GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWBAGS, THE FOLLOWING DEFINITIONS SHALL APPLY: CONTRACTOR METRO PCS SUBCOMPRACTOR SENERAL CONTRACTOR (CONSTRUCTION)
  - OWNER METRO PCS
    OEM ORIGINAL EQUIPMENT WANUFACTURER
- 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 DRAWNINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE
- 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, REDULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
- 4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL STATE AND FEDERAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- 5. DRAWINGS PROMOED HERE ARE NOT TO SE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
- 6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURBISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- 7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH WANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- 8. IF THE SPECIFED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
- 9. SUBCONTRACTOR SHALL DETERIONE ACTUAL ROUTING OF COMBUT, POWER, TI CABLES AND GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL AND NEW TRAYS AS NECESSARY, SUBCONTRACTOR SHALL CONFIRM THE ROUTING BRIDER BITTUTES CONTRACTOR. AND NEW TRAYS AS NECESSARY, SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR AND/OR LANDLORD PRIOR TO CONSTRUCTIO
- 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
- 11. SUBCONTRACTOR SHALL LECALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.
- 12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION AND RETURN DISTURBED AREAS TO ORIGINAL CONDITIONS.
- 13, THE SUBCONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE SUBCONTRACTOR SHALL BE SOCIETY RESPONSIBLE FOR ALL CONSTRUCTION VIEWS, WETHOOS, TECHNOLIES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- 14. SUBCONTRACTOR SHALL NOTEY CHAPPELL ENGINEERING ASSOCIATES, LLC 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS AND POST DOWNS, FINSHING NEW WALLS OR FRAL ELECTRICAL CONNECTIONS FOR ENGINEERING REVIEW.
- 15. CONSTRUCTION SHALL COMPLY WITH ALL METRO PCS STANDARDS AND SPECIFICATIONS.
- 16. SUBCONTRACTOR SHALL VERIEY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK, ALL CHARLISTONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIERED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCES PRIOR TO ORDERING WATERIAL OR PROCEEDING WITH CONSTRUCTION.
- 17. THE EXISTING CELL SITES ARE IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISTRIPT THE EXISTING DORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN
- 18. If the existing cell site is active, all safety precautions viust be taken when working around high levels of electromagnetic radiation. Equipment should be shutdown prior to performing any work that could expose the workers to danger, personal re exposure monitors are to be worn to alert of any dangerous exposure levels.

#### SITE WORK GENERAL 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 EMCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND MHERE REJURED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENCREERS, EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR OR CILLING PIERS AROURD 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 AND 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 LECALLY.
- 5. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
- 6. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND, FROZEN MATERIALS, SMOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- 7. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- 8. ALL EXISTING MACTIVE 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 ENGINEERING, DWINER AND/OR LOCAL UTILITIES.
- 9. THE AREAS OF THE DWINERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRINGWAY, SHALL BE GRADED TO A UNIFORM SLOPE AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
- 10. SUBCONTRACTOR SHALL WARRACE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REDURED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LDCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- 11. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE METRO PCS SPECIFICATION FOR SITE SIGNAGE.

#### CONCRETE AND REINFORCING STEEL NOTES:

- 1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACT 301, ACT 318, ACT 336, 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, A HIGHER STRENGTH (400PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE 24 ACCORDANCE WITH THE ACI 381 CODE
- 3. REMFORCING STEEL SHALL CONFORM TO ASTM A 515, GRADE 80, DEFORMED UNLESS MOTED 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 MUNIMUM CONCRETE COMER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON

#6 AND LARGER \_\_\_\_\_\_ Z IN.
#5 AND SMALLER & WWF \_\_\_\_\_ IX, IN.
CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST ACAINST THE CROUND SLAB AND WALL ..... 

5. A CHAMPER %" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

- 8. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHORS SHALL SE PER MANUFACTURER'S WRITTEN REDOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SCHALL CONFORM TO THE MANUFACTURERS RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS, NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTION APPROVAL WHEN DRILLING HOLES IN CONCRETE, SEPCIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN CROSE TO MANTAIN MANUFACTURER'S IMMINISTRALL LONGS, ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS. STEEL OR HOT DIPPED GALVANIZED, EXPANSION BOLTS SHALL BE PROVIDED BY SIMPSON OR APPROVED EQUAL.
- 7. CONCRETE COUNDER TIES ARE NOT RECUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS CONCRETE CHISMORY HES ARE THE PRIVATE OF SHALL BE PROVIDED BY THE CONCRETE SUPPLIER:

  (A) RESULTS OF CONCRETE CYLINDER TEST PERFORMED AT THE SUPPLIERS PLANT.

  (B) CERTIFICATION OF MINIMUM COMPRESSME STRENGTH FOR THE CONCRETE GRADE SUPPLIED.
- FOR GREATER THAN SO CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.
- 8. As an alternative to Item 7, test cylinders shall be taken initially and thereafter for every 50 yards of concrete from each different ratch plant.
- 9. EQUIPMENT SHALL NOT BE PLACED ON NEW PAOS FOR SEVEN CAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY CYCINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

#### STRUCTURAL STEEL NOTES:

- 7. ALL STEEL WORK SHALL BE PAINTED OR CALVINIZED IN ACCORDANCE WITH THE DRAWINGS AND METRO PCS SPECIFICATIONS UNLESS OTHERWISE NOTED. STRUCTURAL STEEL SHALL BE ASTAILA—36 UNLESS OTHERWISE NOTED ON THE STIE SPECIFIC DRAWINGS. STEEL DESICH, INSTITULATION AND BOLTING SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL
- 2. ALL WELDING SHALL BE PERFORMED USING EFOXX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC TANNUAL OF STEEL CONSTRUCTION, 9TH EDITION, PAINTED SURFACES SHALL BE TOUCHED UP.
- 3. BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS ( $\%^*$ ) AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE ALL BOLTS SHALL BE CALVANZED OR STAINLESS STEEL.
- 4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE % DIA. ASTM A 307 BOLTS (GALV) UNLESS NOTED OTHERWISE.
- 5. CONTRACTOR SHALL SUBJECT SHOP DRAWNESS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL
- 6. ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS

#### SOIL COMPACTION NOTES FOR SLAB ON GRADE:

- 1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION AND TOPSOIL TO EXPOSE NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.
- 2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.
- 3. AS AN ALTERNATE TO DISPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTAL 0 1557 METHOD C.
- 4. COMPACTED SUBBASE SHALL BE UNIFORM AND LEVELED, PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING \$1 SIEVE.
- 5. AS AN ALTERNATE TO ITEMS 2 AND 3, THE SUBGRADE SDLS WITH 5 PASSES OR A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUICH AS BOMAG BPR 30/38) OR HAND-OPERATED SINGLE DRIVEN VIBRATORY ROLLER (SUICH AS BOMAG BW 554 AND SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL-GRADED GRANALAR FILL AND COMPACTED AS STATED ABOVE.

#### COMPACTION EQUIPMENT:

1. HAND OPERATED DOUBLE DRUN, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

#### CONSTRUCTION NOTES:

- 1. FIELD VERIFICATION: SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, METRO PCS ANTENNA PLATFORM LOCATION AND UTILITY TRENCHWORK.
- SUBCONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR.
- 3. CABLE LADDER RACK: SUBCONTRACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY AND/OR ICE BRIDGE, AND CONDUIT AS REQUIRED TO SUPPORT CABLES TO THE NEW BTS LOCATION.

#### ELECTRICAL INSTALLATION NOTES:

- 1. WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCOROR.
- 2. SUBCONTRACTOR SHALL MODEY OR INSTALL CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO THE NEW BTS EQUIPMENT, SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL
- 3. ALL CIRCUITS SHALL BE SEGRECATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND
- 4. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS
- 5. EACH END OF EYERY POWER, GROUNDING, AND T1 CONDUCTOR AND CAELE SHALL BE LABELED WITH COLOR—CODED RESILATION OR ELECTRICAL TAPE (ON BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA, AND MATCH WISTALLATION REDUIREMENTS.
- 6. POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR—CODED INSULATION OR ELECTRICAL TAPE (SM. BRAND, ½ INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR CODES SHALL CONFORM WITH THE NEC AND OSHA.
- 7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY (ABELED WITH ENGRAVED LAMACOID PLASTIC LAGELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WARE COMFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID HUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
- 8, PANELBOARDS (10 NUMBERS) AND INDERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
- 9, ALL TIE WRAPS SHALL BE OUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- 10 DOWER CONTROL AND EDURPHENT CROININ WIRING IN TURING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#34 AWO OR LARGER), 500 Y, OIL RESISTANT THIN OR THINN-2, CLASS 8 STRANDED COPPER CABLE RATED FOR 80 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEMAY SYSTEM USED, UNLESS OTHERWISE
- 11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THEIN OR THAN—2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEMAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- 12. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR \$2 AWG SOUD TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.
- 13. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE HAUST-CONDUCTOR, TYPE TO CASHE (#34 AWG OR LARGER), BOD V. ON RESISTANT THEN OR THAN-2. CLASS B STRANGED COPPER CABLE RATED FOR 90 °C (NET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
- 14. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIREHUTS BY HARGER (OR EQUAL), LUGS AND WIREHUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF
- 15. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, AMSI/IEEE AND NEC.
- 16. NEW RACEWAY OR CABLE TRAY WILL, MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- 17. ELECTRICAL METALLIC TUBING (EAT) OR RIGID MONMETALLIC COMPUTT (LE., RIGID P/C SCHEDULE 40 OR RIGID P/C
- 18. ELECTRICAL METALLIC TURING (EMT), ELECTRICAL NONMETALLIC TUBING (EMT), OR RIGIO NONMETALLIC CONDUIT (RIGIO PYC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- 19. CALVANIZED STEEL INTERNEDIATE METALLIC CONDUIT (MIC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE
- 20, RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 DR RIGID FVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED
- 21. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- 22. COMPRESSION—TYPE AND TUBING FIFTINGS SHALL BE THREADED OR COMPRESSION—TYPE AND APPROVED FOR THE LOCATION USED, SETSCREW FITTINGS ARE NOT ACCEPTABLE.
- 23. CABINETS, BOXES AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEWA.
- 24. CABINETS, BOXES AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- 25. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPE DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEWA 1 (OR BETTER) INDOORS, OR NEWA 3R (OR
- 26. EQUIPMENT CABINETS, TERRINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY—COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA
- 27. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPDXY-COATED, OR NON-CORRODANG; SHALL MEET OR EXCEED UL 514A AND NEWA OS 1; AND RATED NEWA 1 (OR BETTER) INDOORS, OR WEATHER
- 28. Nonhetaluc receptacle, switch, and device boxes shall weet or exceed news os 2; and rated news 1 (or better) indoors, or weather protected (MP or better) outdoors.
- 29. THE SUBCONTRACTOR SHALL NOTBY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- 30. 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. 31. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
- 32, CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

## metroPCS Unlimit Yourself.

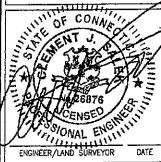
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R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST, SUITE 101 MARLEOROUGH, MA 01752 (508) 481-7400 www.chappellengineering.com



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Į	1	12/06/12	revised for construction
	O	12/03/12	ISSUED FOR CONSTRUCTION

TO ALTER THIS DOCUMENT.

DESIGNED BY: JMT SCAL DRAWN BY: CMC CHECK'D BY: JMT AS SHOWN 1255.064

DESCRIPTION

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REV. # DATE

HFC1527C **FARMINGTON** POLICE DEPARTMENT

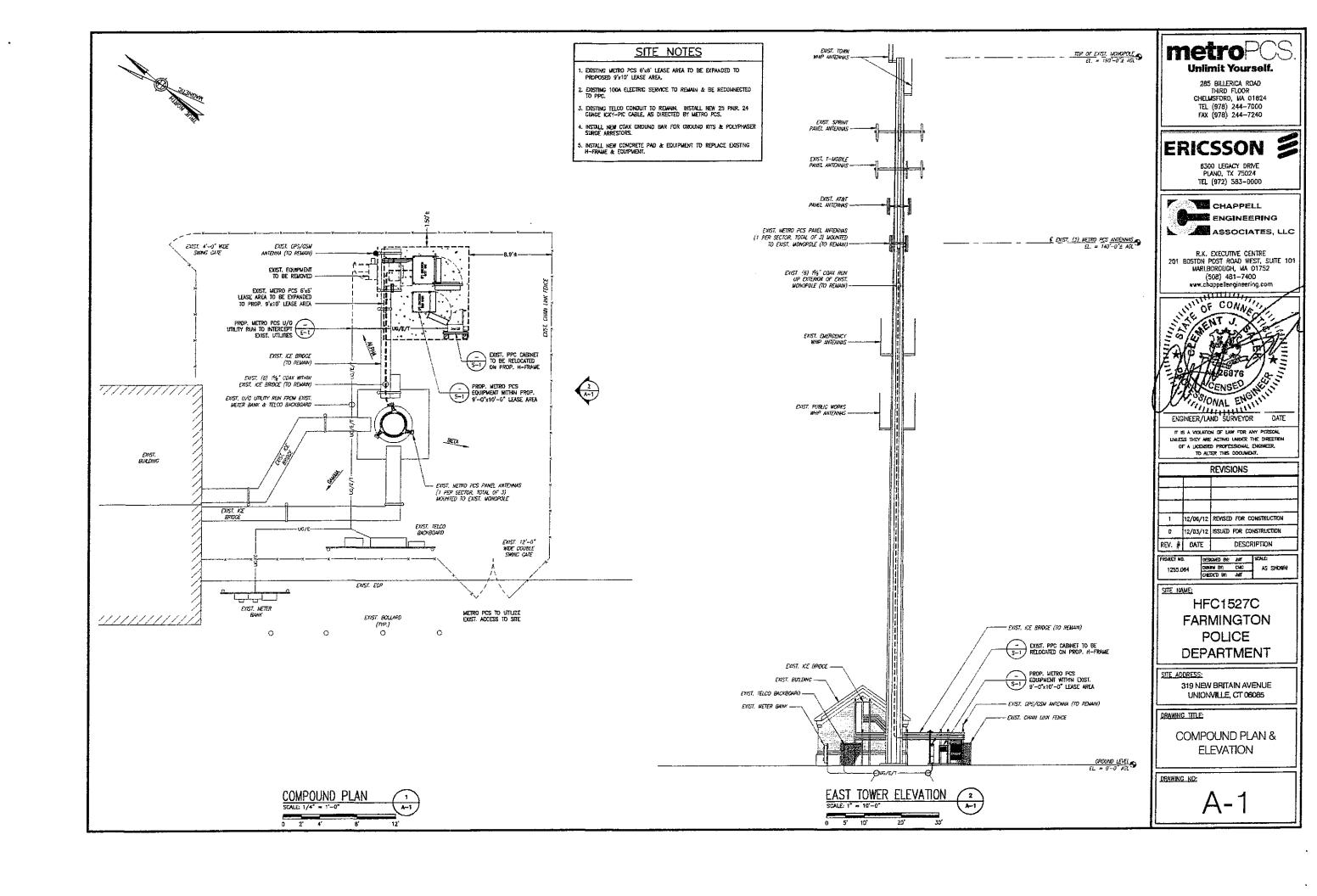
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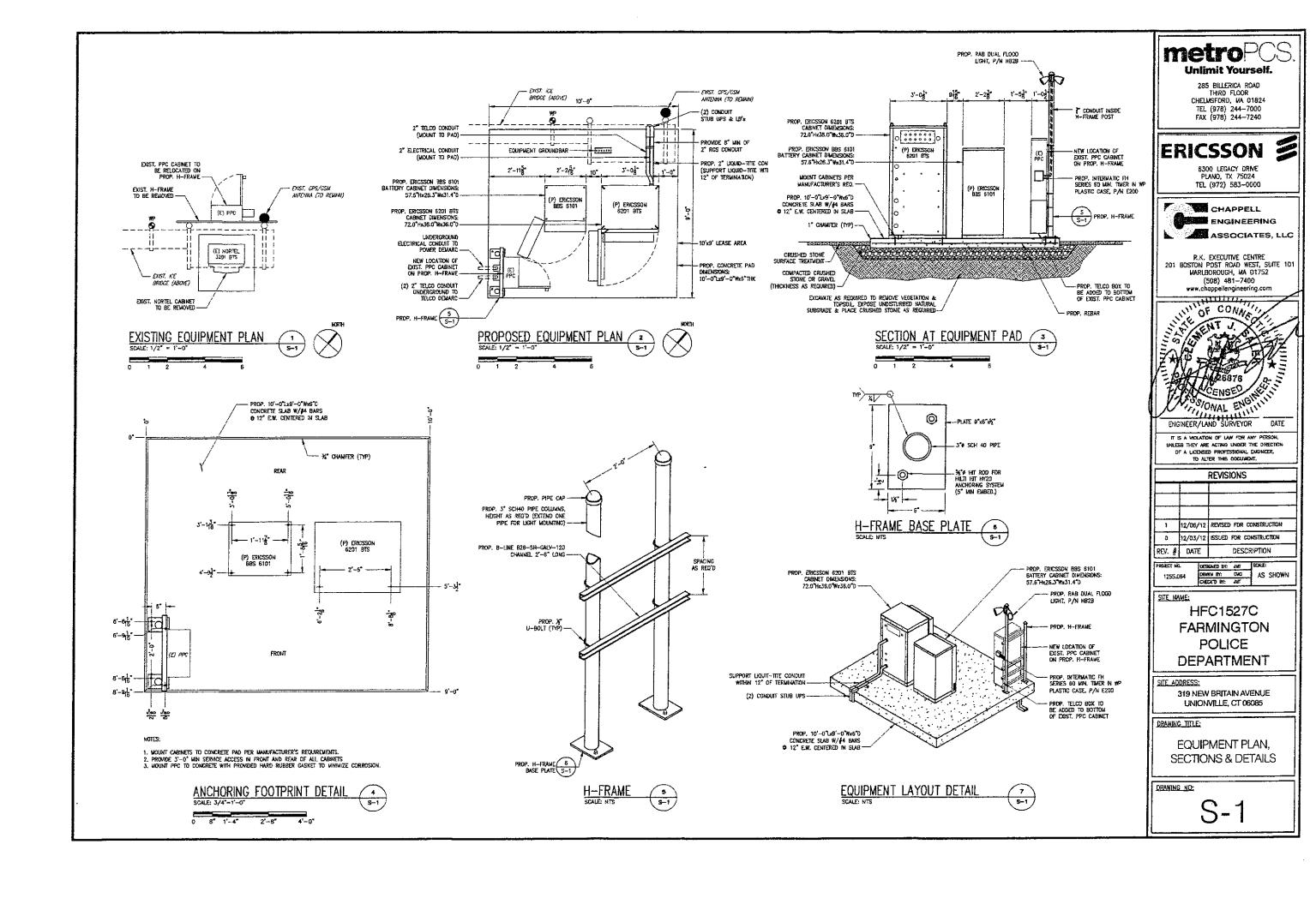
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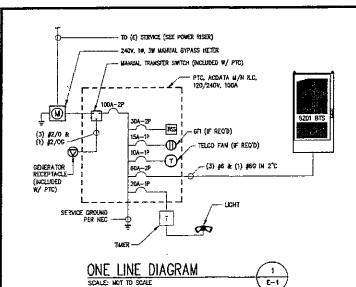
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GENERAL NOTES

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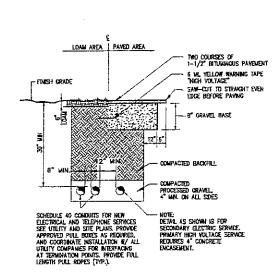


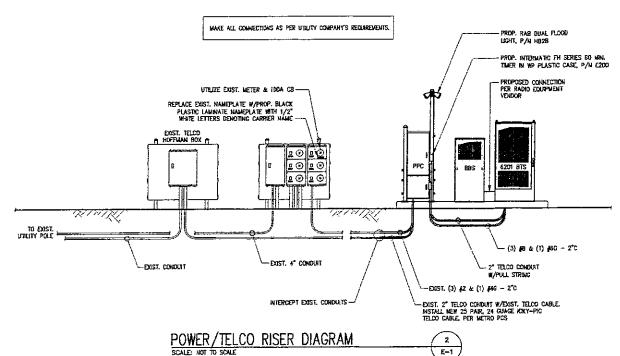


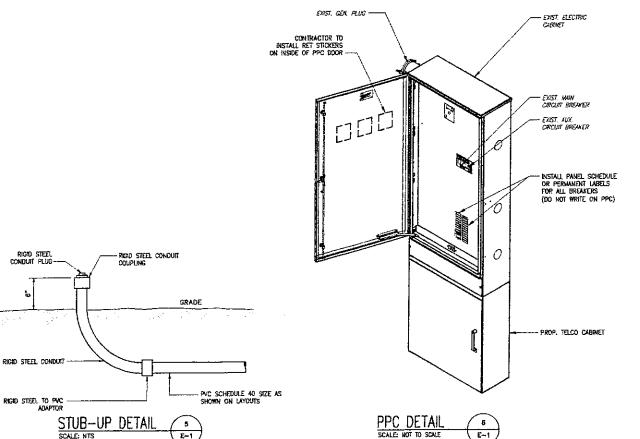
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CKT	DESCRIPTION	AMP	АМР	DESCRIPTION	CKT
1	SURCE SUPPRESSOR	30	50	ERICSSON 6201	4
5	SPARE	-	1	SPARE	6
7	SPARE	-	-	SPARE	8
9	SPARE	-	-	SPARE	10
11	SPARC	-	-	SPARE	12
13	3FAR2	-	-	SPARE	14
15	SPARE	-		SPARE	18
17	SPARE	-	- 1	SPARE	18
19	SPARE	-	20	UGHT & THEER	20
21	SPARE	-	10	TELCO FAN (IF REO'D)	22
23	SPARE	-	15	GFI RECEPTACLE (F REG'D)	24

PANEL SCHEDULE

BURIED CONDUIT DETAIL







### ELECTRICAL AND GROUNDING NOTES:

# ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND ALL APPLICABLE LOCAL CODES.

- CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL RISTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
- 3. SERVICE TO EQUIP. SHALL BE 120/240 VAC, 200 AMP, 16, 80 Hz.
- THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND LINDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.

#### GROUNDING

- 5. COMPRESSION GROWN CONNECTIONS MAY BE REPLACED BY EXOTHERMIC (CADWELD) CONNECTIONS.
- 6. ALL GROUND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC (CADWELD).
- ALL DROWND CONNECTIONS ABOVE GRADE (INTERIOR & EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
- ALL EXOTHERIAC CONNECTIONS TO THE GROUND RODS SHALL START AT THE TOP & HAVE A VERTICAL SEPARATION OF 6" FOR EVERY ADDITIONAL CONNECTION.
- ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
- ALL EXTERIOR GROUND CONDUCTORS SHALL BE \$2 ANG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
- GROUND ROOS SHALL BE COPPER CLAD STEEL 5/8°6 10-F7. LONG, AND SHALL BE DRIVEN VERTICALLY WITH THEIR TOPS 48° SELOW FINAL GRADE.
- 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.
- Use of 90' bends in the protection grounding conductors shall be avoided when 45' bends can be adequately supported.
- MAXIMUM RESISTANCE OF THE COMPLETED GROUND SYSTEM SHALL NOT EXCEED 5 OHMS. TESTING SHALL BE PERFORMED IN ACCORDANCE WITH PROJECT SPECIFICATION FOR FACILITY GROUNDING, USING FALL OF POTENTIAL METIOD.
- ANTENNA CROUND KITS SHALL BE FURNISHED BY METRO FCS AND INSTALLED BY CONTRACTOR.

#### LEGEND:

8 GROUND TEST WELL GROUND ROD DISCONNECT SWITCH (M) CADWELD TYPE CONNECTION COMPRESSION TYPE CONNECTION /XXX\ REPRESENTS DETAIL NUMBER

(XXX)

#### REF. DRAWING NUMBER ABBREVIATIONS:

AMERICAN WIRE GAUGE BARE COPPER WIRE COAK GROUND BAR EXTERNAL COAX ISOLTAED GROUND BAR EXTERNAL CIGBE DWC DRAWING ELECTRICAL METALLIC TUBING EMT WASTER GROUND BAR PCS PERSONAL COMMUNICATION SYSTEM RIGIO (SCH. 40) POLYVINYL CHLORIDE CONDUIT RICID GALVANIZED STEEL

TYPICAL

DRAWING TITLE:

RISER, DETAILS & NOTES

DRAWING NO:

E-1



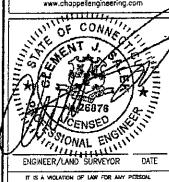
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REV. #	DATE	DESCRIPTION				

CT NO.	DESIGNED BY:	JNT	STALE	
255.064	DRAWN BY:	CHC	AS	SHOWN
	CHECK'D BY:	MI.		

SITE NAME:

PROF

HFC1527C **FARMINGTON** POLICE DEPARTMENT

319 NEW BRITAIN AVENUE

UNIONVILLE, CT 06085

SITE ADDRESS:

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